

**Berliner**  
**Astronomisches Jahrbuch**

für

**1 9 4 5**

170. J a h r g a n g

Herausgegeben vom

**Kopernikus-Institut**  
(Astronomisches Rechen-Institut)

Biblioteka Jagiellońska



1001921062



In Kommission bei  
Ferd. Dümmers Verlag, Bonn u. Berlin SW 68

1943



+62400

**Kopernikus-Institut**  
**(Astronomisches Rechen-Institut)**

Berlin-Dahlem, Altensteinstr. 40

- Direktor: Dr. A. Kopff, Universitätsprofessor
- Hauptobservator: Dr. O. Kohl, Professor
- Observatoren: Dr. A. Kahrstedt, Professor
- Dr. K. Heinemann, Professor
- Dr. habil. F. Gondolatsch, Dozent
- Dr. habil. H. Müller, Dozent
- Dr. U. Baehr
- Dr. habil. E. Rabe, Dozent
- Assistent: Dr. W. Strobel
- Wiss. Mitarbeiter: Dr. H. Nowacki
- Dr. W. Gliese
- Dr. P. Musen
- Rechner: R. Hiller
- K. Henne

**Zentralstelle für Astronomische Telegramme**

Telegramm-Adresse: Astrozent Berlin



4842  
 II crasop.  
 170 (1945)



## Vorwort

Vom Jahrgang 1916 an ist der fundamentale Meridian, auf den alle Angaben des Jahrbuchs bezogen sind, der Meridian von Greenwich.

**Die Zeit ist vom Jahrgang 1925 an in Welt-Zeit, d. i. Bürgerliche Zeit Greenwich, ausgedrückt** (siehe Erläuterungen).

Die Grundlagen des Berliner Astronomischen Jahrbuchs bilden:

Für die Sonne und die großen Planeten:

Die Tafeln von Newcomb und (für Jupiter und Saturn) von Hill, enthalten in:

*Astronomical Papers of the American Ephemeris,*

Vol. VI, Part I—IV: *Tables of the four inner planets,*

Vol. VII, Part I—IV: *Tables of Jupiter, Saturn,*

*Uranus, Neptune.*

Für Pluto die Elemente von E. C. Bower. (Näheres siehe Erläuterungen.)

Als Sonnenhalbmesser in der mittleren Entfernung ist 16' 17.50 angenommen; dagegen liegt der Berechnung der Finsternisse der von Auwers in A. N., Bd. 128 gegebene Wert 15' 59.63 zugrunde.

Für den Mond:

Tables of the Motion of the Moon by Ernest W. Brown.

Der geozentrische Mondhalbmesser  $r_{\text{c}}$  ist aus der Äquatorial-Horizontalparallaxe  $p_{\text{c}}$  gerechnet nach der Formel

$$r_{\text{c}} = 0.272469 p_{\text{c}}^{\text{m}} + 1.50,$$

für die Finsternisse nach  $\sin r_{\text{c}} = 0.272274 \sin p_{\text{c}}$ .

Als Neigung des Mondäquators gegen die Ekliptik ist nach F. Hayn (A. N. Bd. 199, 263) angenommen:  $J = 1^{\circ} 32' 20''$ .

Für die Fixsterne:

Dritter Fundamentalkatalog des Berliner Astronomischen Jahrbuchs (Veröffentlichungen des Astronomischen Rechen-Instituts zu Berlin-Dahlem Nr. 54 und Abhandlungen der Preußischen Akademie der Wissenschaften Jahrgang 1938. Phys.-math. Klasse. Nr. 3).

Die Sterngrößen und Sternspektren sind dem »Henry Draper Catalogue (Harvard Annals, vol. 91—99)« entnommen.



Als Werte der fundamentalen Reduktionsgrößen sind angenommen:

Die Präzessions-Größen nach S. Newcomb (vgl. H. Andoyer, Bull. Astr. Bd. 28, S. 67)	
Die Nutations-Konstante . . . . .	9"21
Die Nutations-Größen nach S. Newcomb (Bull. Astr. Bd. 15, S. 241)	
Die Aberrations-Konstante . . . . .	20"47
Die Sonnen-Parallaxe . . . . .	8"80
Die Abplattung der Erde . . . . .	1:297

Für die Satelliten:

Die Angaben über die 4 älteren Jupitertrabanten beruhen auf den Tafeln von R. A. Sampson (*Tables of the four great Satellites of Jupiter*. London 1910), die Angaben über die 8 älteren Saturnsatelliten auf den von H. und G. Struve sowie von J. Woltjer ermittelten Werten (Näheres s. Erläuterungen).

In allen Ephemeriden der Sonne, der Planeten und der Fixsterne sind die kurzperiodischen, von der Mondlänge abhängigen Nutationsglieder weggelassen; doch bietet das Jahrbuch die Möglichkeit, auch diese weggelassenen Glieder zu berücksichtigen (s. Erläuterungen).

Der Inhalt des Jahrbuchs hat gegen das Vorjahr insofern eine Änderung erfahren, als vom vorliegenden Jahrgang ab die Tafeln der Auf- und Untergangszeiten von Sonne und Mond bis zu 40° südlicher Breite erweitert worden sind.

Bezüglich der Zahlengrundlagen sei auf die im Berliner Jahrbuch für 1916 gegebene Darstellung der »Grundbegriffe der Sphärischen Astronomie« hingewiesen.

Ein Teil der Angaben wurde seitens der American Ephemeris and Nautical Almanac, Washington, des Nautical Almanac Office, London, und des Bureau des Longitudes, Paris, sowie der Deutschen Seewarte, Hamburg, und der Hamburger Sternwarte, Bergedorf, zur Verfügung gestellt.

Die Leitung der Arbeiten am Astronomischen Jahrbuch für 1945 lag in den Händen von Prof. Dr. Kohl; an der Bearbeitung der verschiedenen Teile beteiligten sich außerdem die Herren Dr. Gondolatsch, Dr. Müller, Dr. Baehr, Dr. Rabe und mehrere Hilfsarbeiter.

**Kopernikus-Institut**



# Inhalt

v

	Seite
Vorwort . . . . .	III
Zeit- und Festrechnung . . . . .	VI
Dimensionen der Erde . . . . .	VI
Astronomische Konstanten . . . . .	VII
Elemente der Planetenbahnen . . . . .	VII
Zeichen des Tierkreises und der Himmelskörper . . . . .	VIII
Sonnenehemeride . . . . .	2
Rechtwinklige Sonnenkoordinaten, mittleres Äquinoktium 1945.0 . . . . .	20
Aberration, Parallaxe, Mittlere Länge und Mittlere Anomalie der Sonne . . . . .	29
Mondehemeride . . . . .	30
Mondphasen . . . . .	48
Geozentrische Örter der großen Planeten . . . . .	49
Rechtwinklige Sonnenkoordinaten, mittleres Äquinoktium 1950.0 . . . . .	100
Heliozentrische Örter der großen Planeten, mittleres Äquinoktium 1950.0 . . . . .	109
Mittlere Örter von 1535 Fixsternen . . . . .	2*
Scheinbare Örter von 560 Zeitsternen . . . . .	41*
Scheinbare Örter von 10 nördlichen Polsternen . . . . .	181*
Scheinbare Örter von 10 südlichen Polsternen . . . . .	211*
Koordinaten der scheinbaren Örter von vier polnahen Sternen für 12 <sup>h</sup> Sternzeit Greenwich . . . . .	241*
Formeln für die Reduktion auf den scheinbaren Ort . . . . .	251*
Hilfsgrößen zur Berechnung der Reduktion auf den scheinbaren Ort . . . . .	252*
Übertragung mittlerer Sternörter auf 1945.0 . . . . .	280*
Übertragung mittlerer Polsternörter auf 1945.0 . . . . .	281*
Reduktion von Koordinatendifferenzen scheinbarer Örter auf mittlere für den Jahresanfang . . . . .	282*
Numerische Werte der Funktionen Sinus und Cosinus für in Zeit ausgedrückte Winkel . . . . .	284*
Übertragung von Rektaszensions- und Deklinationsdifferenzen vom mittleren Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0 . . . . .	285*
Hilfsgrößen zur Reduktion vom mittleren Äquinoktium 1950.0 auf das jedes- malige wahre . . . . .	286*
Übertragung von Sternörtern vom mittleren Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0 . . . . .	288*
Sonnen- und Mondfinsternisse . . . . .	292*
Sternbedeckungen . . . . .	300*
Mondbewegung und Lage des Mondäquators . . . . .	306*
Ephemeride des Mondkraters Mösting A. . . . .	307*
Verfinsterungen der Jupitertrabanten . . . . .	312*
Saturn und Saturnsring . . . . .	314*
Erscheinungen der Saturnstrabanten . . . . .	316*
Konstellationen . . . . .	326*
Sonnenaufgang . . . . .	328*
Sonnenuntergang . . . . .	329*
Mondaufgang . . . . .	346*
Monduntergang . . . . .	347*
Hilfstafeln . . . . .	364*
Koordinaten der Sternwarten . . . . .	388*
Normalzeiten der wichtigeren Länder . . . . .	395*
Erläuterungen zu den Angaben und zum Gebrauch des Jahrbuchs . . . . .	396*
Berichtigungen . . . . .	416*
Alphabetisches Sachregister . . . . .	417*



# Zeit- und Festrechnung 1945

Das Jahr 1945 entspricht dem

Jahr 6658 der Julianischen Periode und dem

Jahr 7453—7454 der Byzantinischen Ära.

## Gregorianischer Kalender

Goldene Zahl . . . . .	8
Epakte . . . . .	XVI
Sonnenzirkel . . . . .	22
Sonntagsbuchstabe . . . . .	G
Septuagesima . . . . .	28. Jan.
Aschermittwoch . . . . .	14. Febr.
I. Quatember . . . . .	21. Febr.
Ostersonntag . . . . .	1. April
Himmelfahrt . . . . .	10. Mai
Pfingstsonntag . . . . .	20. Mai
II. Quatember . . . . .	23. Mai
III. Quatember . . . . .	19. Sept.
I. Advent . . . . .	2. Dez.
IV. Quatember . . . . .	19. Dez.

## Dimensionen der Erde

### a) Nach Bessel (1841)

Große Halbachse	$a = 6\,377\,397.155\text{ m}$	$\log a = 6.804\,6434\,637$
Kleine Halbachse	$b = 6\,356\,078.963\text{ m}$	$\log b = 6.803\,1892\,839$
Abplattung	$a = 1:299.152\,8129$	$\log a = 7.524\,1069\,092-10$
Meridianquadrant	$= 10\,000\,855.76\text{ m}$	

Die Maßeinheit der Länge ist das legale Meter.

### b) Nach Hayford (1909)

Große Halbachse	$a = 6\,378\,388\text{ m}$	$\log a = 6.804\,7109\,340$
Kleine Halbachse	$b = 6\,356\,911.946\text{ m}$	$\log b = 6.803\,2461\,957$
Abplattung	$a = 1:297$	$\log a = 7.527\,2435\,507-10$
Meridianquadrant	$= 10\,002\,288.30\text{ m}$	

Die Maßeinheit der Länge ist das internationale Meter.

Ein internationales Meter = 1.000 0133 legales Meter.

Normalwert für die Schwerebeschleunigung im Meeresniveau:

$\gamma_0 = 978.030 (1 + 0.005302 \cdot \sin^2 \varphi - 0.000007 \cdot \sin^2 2\varphi) \text{ cm. sec}^{-2}$ . (Helmert 1901)

$\gamma_0 = 978.0490 (1 + 0.0052884 \cdot \sin^2 \varphi - 0.0000059 \cdot \sin^2 2\varphi) \text{ cm. sec}^{-2}$ . (Cassinis 1930)

Masse der Erde:  $5.974 \cdot 10^{27} \text{ g}$

Masse der Sonne:  $1.983 \cdot 10^{33} \text{ g}$

Radius der Sonne: 695 300 km

Mittlere Entfernung Erde—Sonne: 149 504 200 km

Lichtzeit für die mittlere Entfernung Erde—Sonne: 498<sup>s</sup>.72 (mit Lichtgeschwindigkeit 299 774 km/sec.)



## Astronomische Konstanten

Allgemeine Präzession . . . . .	$\psi = 50''.2564 + 0''.000222 t$
Präzession in Rektaszension . . . . .	$m = 3''.07234 + 0''.0000186 t$
Präzession in Deklination . . . . .	$n = 20''.0468 - 0''.000085 t$
Mittlere Schiefe der Ekliptik . . . . .	$\epsilon = 23^\circ 27' 8.26'' - 0''.4684 t$
Länge d. aufsteig. Knotens d. bewegl. a. d. festen Ekliptik . . . . .	$\Pi = 173^\circ 57' 3.6'' + 3''.862 t$
Winkel zwischen fester u. bewegl. Ekliptik . . . . .	$\pi = 0''.4711 - 0''.000007 t$
Länge des tropischen Jahres . . . . .	$365.24219879 - 0.0000000614 t$
„ „ siderischen „ . . . . .	$365.25636042 + 0.000000011 t$
„ „ anomalistischen „ . . . . .	$365.25964134 + 0.0000000304 t$
„ „ julianischen „ . . . . .	$365.25$
$t = \text{Zeit seit 1900 in julianischen Jahren}$	
Länge des synodischen Monats . . . . .	$29.530588$
„ „ tropischen „ . . . . .	$27.321582$
„ „ siderischen „ . . . . .	$27.321661$
„ „ anomalistischen „ . . . . .	$27.554550$
Länge des mittleren Sonnentages = $24^h 3^m 56.555$ Sternzeit = $1.00273791$ Sterntag	
Länge des mittl. Sterntages = $23^h 56^m 4.091$ mittl. Zeit = $0.99726957$ mittl. Sonnentag	
Äquatoreal-Horizontalparallaxe des Mondes . . . . .	$57' 2''.70$
Gravitationskonstante nach Gauß $k = 0.017202099 = 3548''.18761$	
$\log k = 8.23558144 - 10$ , $\log k' = 3.55000657$	
1 Lichtjahr = $63275$ Astr. Einh. = $0.3068$ Parsek = $9.460 \cdot 10^{12}$ km	
1 Parsek = $206264.806$ Astr. Einh. = $3.2598$ Lichtjahre = $30.84 \cdot 10^{12}$ km	

## Elemente der Planetenbahnen für 1945 Jan. 0, 0<sup>h</sup> Welt-Zeit

	$\Omega$	$i$	$\tilde{\omega}$	$e$
Merkur . . . . .	47.679	7.004	76.600	0.205623
Venus . . . . .	76.185	3.394	130.797	0.006799
Erde . . . . .	—	—	101.995	0.016732
Mars . . . . .	49.133	1.850	335.047	0.093354
Jupiter . . . . .	99.898	1.306	13.446	0.048409
Saturn . . . . .	113.183	2.491	91.980	0.055737
Uranus . . . . .	73.702	0.773	172.217	0.046332
Neptun . . . . .	131.176	1.775	47.368	0.009000
Pluto . . . . .	109.633	17.144	223.175	0.248644

	$a$	$L$	$n_{sid.}$	$P_{sid.}$
Merkur . . . . .	0.387099	118.442	4.09234	0.879693
Venus . . . . .	0.723332	35.211	1.60213	0.2247008
Erde . . . . .	1.000000	99.304	0.98561	1.0142
Mars . . . . .	1.523688	267.119	0.52403	1.3217375
Jupiter . . . . .	5.202561	164.323	0.08309	11.314925
Saturn . . . . .	9.554747	97.119	0.03346	29.16721
Uranus . . . . .	19.21814	77.627	0.01173	84.811
Neptun . . . . .	30.10957	183.402	0.00598	164.281.6
Pluto . . . . .	39.51774	158.330	0.00397	248.157

Merkur bis Mars nach Newcomb, Jupiter bis Neptun nach Leverrier und Gaillet, Pluto nach Bower. Für Pluto sind baryzentrische Elemente bezogen auf Ekliptik und mittleres Äquinoktium 1950.0 gegeben.



## Astronomische Zeichen und Abkürzungen

Bezeichnung der Wochentage	Aspekten
☉ Sonntag	♋ Konjunktion
☾ Montag	☐ Quadratur
♈ Dienstag	♌ Opposition
♉ Mittwoch	Mondphasen
♊ Donnerstag	● Neumond
♋ Freitag	☾ Erstes Viertel
♌ Sonnabend	☉ Vollmond
	☾ Letztes Viertel
Ω Aufsteigender	} Knoten
♁ Absteigender	

## Zeichen

des Tierkreises und der Himmelskörper

♈ Widder . . . . . 0 Grad	☉ Sonne
♉ Stier . . . . . 30 »	☾ Mond
♊ Zwillinge . . . . . 60 »	♁ Merkur
♋ Krebs . . . . . 90 »	♀ Venus
♌ Löwe . . . . . 120 »	♁ Erde
♍ Jungfrau . . . . . 150 »	♂ Mars
♎ Waage . . . . . 180 »	♃ Jupiter
♏ Skorpion . . . . . 210 »	♄ Saturn
♐ Schütze . . . . . 240 »	♅ Uranus
♑ Steinbock . . . . . 270 »	♆ Neptun
♒ Wassermann . . . . . 300 »	
♓ Fische . . . . . 330 »	



**Sonne, Mond, Große Planeten**

**1945**

---



		0 <sup>h</sup> Welt-Zeit					
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer St.-Zt.	Halb- messer	
1945							
Jan.	0	St	<sup>m</sup> 2 52.45 <sup>s</sup> 28.57	<sup>n</sup> 18 40 <sup>m</sup> 2.95 <sup>s</sup> 25.13	<sup>o</sup> -23 7 34.4 <sup>'</sup> 4 27.7	<sup>°</sup> 71.10 16 17.86	
	1	Mo	3 21.02 28.29	18 44 28.08 4 24.84	23 3 6.7 4 55.3	71.06 16 17.87	
	2	Di	3 49.31 27.96	18 48 52.92 4 24.52	22 58 11.4 5 22.8	71.02 16 17.88	
	3	Mi	4 17.27 27.61	18 53 17.44 4 24.17	22 52 48.6 5 50.0	70.98 16 17.87	
	4	Do	4 44.88 27.24	18 57 41.61 4 23.80	22 46 58.6 6 17.2	70.92 16 17.86	
	5	Fr	5 12.12 26.83	19 2 5.41 4 23.39	22 40 41.4 6 44.1	70.86 16 17.85	
	6	Sa	-5 38.95 26.39	19 6 28.80 4 22.95	-22 33 57.3 7 10.9	70.80 16 17.83	
	7	St	6 5.34 25.94	19 10 51.75 4 22.50	22 26 46.4 7 37.5	70.74 16 17.80	
	8	Mo	6 31.28 25.45	19 15 14.25 4 22.00	22 19 8.9 8 3.8	70.68 16 17.77	
	9	Di	6 56.73 24.94	19 19 36.25 4 21.50	22 11 5.1 8 29.9	70.61 16 17.74	
	10	Mi	7 21.67 24.40	19 23 57.75 4 20.95	22 2 35.2 8 55.8	70.53 16 17.70	
	11	Do	7 46.07 23.83	19 28 18.70 4 20.39	21 53 39.4 9 21.4	70.46 16 17.65	
	12	Fr	-8 9.90 23.24	19 32 39.09 4 19.80	-21 44 18.0 9 46.7	70.37 16 17.60	
	13	Sa	8 33.14 22.62	19 36 58.89 4 19.18	21 34 31.3 10 11.8	70.29 16 17.55	
	14	St	8 55.76 21.98	19 41 18.07 4 18.53	21 24 19.5 10 36.5	70.20 16 17.50	
	15	Mo	9 17.74 21.31	19 45 36.60 4 17.87	21 13 43.0 11 1.0	70.11 16 17.44	
	16	Di	9 39.05 20.62	19 49 54.47 4 17.18	21 2 42.0 11 25.2	70.02 16 17.38	
	17	Mi	9 59.67 19.91	19 54 11.65 4 16.46	20 51 16.8 11 49.0	69.92 16 17.31	
	18	Do	-10 19.58 19.17	19 58 28.11 4 15.73	-20 39 27.8 12 12.4	69.83 16 17.24	
	19	Fr	10 38.75 18.42	20 2 43.84 4 14.98	20 27 15.4 12 35.6	69.73 16 17.16	
	20	Sa	10 57.17 17.66	20 6 58.82 4 14.22	20 14 39.8 12 58.4	69.63 16 17.09	
	21	St	11 14.83 16.88	20 11 13.04 4 13.43	20 1 41.4 13 20.8	69.53 16 17.01	
	22	Mo	11 31.71 16.09	20 15 26.47 4 12.65	19 48 20.6 13 42.9	69.42 16 16.93	
	23	Di	11 47.80 15.30	20 19 39.12 4 11.85	19 34 37.7 14 4.6	69.32 16 16.83	
	24	Mi	-12 3.10 14.49	20 23 50.97 4 11.05	-19 20 33.1 14 25.9	69.21 16 16.73	
	25	Do	12 17.59 13.68	20 28 2.02 4 10.24	19 6 7.2 14 46.8	69.10 16 16.63	
	26	Fr	12 31.27 12.88	20 32 12.26 4 9.43	18 51 20.4 15 7.5	68.99 16 16.52	
	27	Sa	12 44.15 12.06	20 36 21.69 4 8.62	18 36 12.9 15 27.7	68.87 16 16.41	
	28	St	12 56.21 11.25	20 40 30.31 4 7.81	18 20 45.2 15 47.4	68.76 16 16.28	
	29	Mo	13 7.46 10.44	20 44 38.12 4 6.99	18 4 57.8 16 7.0	68.65 16 16.15	
	30	Di	-13 17.90 9.63	20 48 45.11 4 6.19	-17 48 50.8 16 26.0	68.54 16 16.02	
	31	Mi	13 27.53 8.82	20 52 51.30 4 5.37	17 32 24.8 16 44.7	68.42 16 15.89	
Febr.	1	Do	13 36.35 8.01	20 56 56.67 4 4.57	17 15 40.1 17 2.9	68.31 16 15.75	
	2	Fr	13 44.36 7.21	21 1 1.24 4 3.76	16 58 37.2 17 20.8	68.19 16 15.60	
	3	Sa	13 51.57 6.41	21 5 5.00 4 2.97	16 41 16.4 17 38.3	68.07 16 15.45	
	4	St	13 57.98 5.61	21 9 7.97 4 2.16	16 23 38.1 17 55.5	67.96 16 15.29	
	5	Mo	-14 3.59 4.81	21 13 10.13 4 1.37	-16 5 42.6 18 12.1	67.84 16 15.12	
	6	Di	14 8.40 4.03	21 17 11.50 4 0.58	15 47 30.5 18 28.4	67.73 16 14.95	
	7	Mi	14 12.43 3.25	21 21 12.08 3 59.80	15 29 2.1 18 44.2	67.62 16 14.78	
	8	Do	14 15.68 2.46	21 25 11.88 3 59.02	15 10 17.9 18 59.7	67.50 16 14.61	
	9	Fr	14 18.14 1.69	21 29 10.90 3 58.25	14 51 18.2 19 14.8	67.39 16 14.43	
	10	Sa	-14 19.83	21 33 9.15	-14 32 3.4	67.28 16 14.25	



Tag	0 <sup>h</sup> Welt-Zeit							Aufgang	Untergang		
	Julian. Zeit	Sternzeit	Nutation in A.R.		Mittleres Äquinoktium 1945.0		R				
			langp. Gl.	kurzsp. Gl.	Länge	Breite		in { +50° Breite 0 <sup>h</sup> Länge			
1945	2431										
Jan. 0	455.5	<sup>h</sup> 6 <sup>m</sup> 37 <sup>s</sup> 10.502	in 0.001	—981 +11	279 12 38.5	61 8.0	—7	0.983 2655	90	<sup>h</sup> 7 <sup>m</sup> 59	<sup>h</sup> 16 <sup>m</sup> 8
1	456.5	6 41 7.059	978 +14	280 13 46.5	61 8.2	+4	0.983 2565	28	7 59	16 9	
2	457.5	6 45 3.617	976 +14	281 14 54.7	61 8.5	+15	0.983 2537	34	7 59	16 10	
3	458.5	6 49 0.175	973 +12	282 16 3.2	61 8.6	+25	0.983 2571	92	7 59	16 11	
4	459.5	6 52 56.733	971 + 8	283 17 11.8	61 8.8	+33	0.983 2663	148	7 58	16 12	
5	460.5	6 56 53.291	969 + 3	284 18 20.6	61 9.0	+39	0.983 2811	204	7 58	16 13	
6	461.5	7 0 49.848	—966 — 3	285 19 29.6	61 9.2	+41	0.983 3015	255	7 58	16 14	
7	462.5	7 4 46.406	964 — 8	286 20 38.8	61 9.2	+41	0.983 3270	306	7 58	16 15	
8	463.5	7 8 42.963	962 —12	287 21 48.0	61 9.3	+38	0.983 3576	353	7 57	16 17	
9	464.5	7 12 39.521	960 —14	288 22 57.3	61 9.3	+32	0.983 3929	399	7 57	16 18	
10	465.5	7 16 36.078	958 —15	289 24 6.6	61 9.2	+24	0.983 4328	442	7 56	16 19	
11	466.5	7 20 32.635	956 —12	290 25 15.8	61 9.2	+13	0.983 4770	482	7 56	16 21	
12	467.5	7 24 29.193	—954 — 8	291 26 25.0	61 8.9	+1	0.983 5252	520	7 55	16 22	
13	468.5	7 28 25.750	952 — 2	292 27 33.9	61 8.6	—13	0.983 5772	556	7 55	16 23	
14	469.5	7 32 22.307	950 + 4	293 28 42.5	61 8.2	—27	0.983 6328	592	7 54	16 25	
15	470.5	7 36 18.864	948 + 9	294 29 50.7	61 7.6	—40	0.983 6920	627	7 53	16 26	
16	471.5	7 40 15.421	947 +10	295 30 58.3	61 7.1	—53	0.983 7547	663	7 52	16 28	
17	472.5	7 44 11.978	945 +10	296 32 5.4	61 6.3	—65	0.983 8210	700	7 52	16 29	
18	473.5	7 48 8.535	—944 + 7	297 33 11.7	61 5.4	—74	0.983 8910	741	7 51	16 31	
19	474.5	7 52 5.092	942 + 2	298 34 17.1	61 4.6	—80	0.983 9651	784	7 50	16 32	
20	475.5	7 56 1.648	941 — 3	299 35 21.7	61 3.6	—83	0.984 0435	828	7 50	16 34	
21	476.5	7 59 58.205	940 — 8	300 36 25.3	61 2.6	—82	0.984 1263	876	7 48	16 36	
22	477.5	8 3 54.761	939 —10	301 37 27.9	61 1.6	—78	0.984 2139	928	7 47	16 37	
23	478.5	8 7 51.318	938 — 9	302 38 29.5	61 0.6	—71	0.984 3067	982	7 46	16 39	
24	479.5	8 11 47.874	—937 — 6	303 39 30.1	60 59.5	—62	0.984 4049	1038	7 45	16 40	
25	480.5	8 15 44.430	936 — 1	304 40 29.6	60 58.5	—51	0.984 5087	1096	7 43	16 42	
26	481.5	8 19 40.986	935 + 5	305 41 28.1	60 57.5	—38	0.984 6183	1155	7 42	16 44	
27	482.5	8 23 37.542	935 + 9	306 42 25.6	60 56.6	—24	0.984 7338	1214	7 41	16 45	
28	483.5	8 27 34.098	934 +13	307 43 22.2	60 55.6	—11	0.984 8552	1274	7 40	16 47	
29	484.5	8 31 30.654	933 +14	308 44 17.8	60 54.7	+1	0.984 9826	1332	7 38	16 49	
30	485.5	8 35 27.210	—933 +13	309 45 12.5	60 53.8	+12	0.985 1158	1389	7 37	16 50	
31	486.5	8 39 23.766	933 + 9	310 46 6.3	60 52.9	+21	0.985 2547	1445	7 36	16 52	
Febr. 1	487.5	8 43 20.321	933 + 5	311 46 59.2	60 52.0	+27	0.985 3992	1498	7 34	16 54	
2	488.5	8 47 16.877	933 — 1	312 47 51.2	60 51.2	+30	0.985 5490	1549	7 33	16 55	
3	489.5	8 51 13.432	933 — 6	313 48 42.4	60 50.2	+31	0.985 7039	1598	7 31	16 57	
4	490.5	8 55 9.987	933 —11	314 49 32.6	60 49.4	+29	0.985 8637	1644	7 30	16 59	
5	491.5	8 59 6.543	—933 —14	315 50 22.0	60 48.4	+25	0.986 0281	1688	7 28	17 1	
6	492.5	9 3 3.098	933 —15	316 51 10.4	60 47.5	+18	0.986 1969	1728	7 27	17 2	
7	493.5	9 6 59.653	933 —14	317 51 57.9	60 46.5	+9	0.986 3697	1765	7 25	17 4	
8	494.5	9 10 56.208	934 —10	318 52 44.4	60 45.5	—2	0.986 5462	1800	7 24	17 6	
9	495.5	9 14 52.762	935 — 5	319 53 29.9	60 44.4	—15	0.986 7262	1831	7 22	17 7	
10	496.5	9 18 49.317	—935 + 1	320 54 14.3		—28	0.986 9093		7 20	17 9	



Tag	Wochentag	0 <sup>h</sup> Welt-Zeit								
		Zeitgleichung Wahre Zeit minus Mittlere Zeit		Scheinbare Rektaszension		Scheinbare Deklination		Halbe Durch- gangs- Dauer St.-Zt.	Halb- messer	
1945										
Febr.	10	Sa	-14 <sup>m</sup> 19.83 <sup>s</sup>	0.92	21 <sup>h</sup> 33 <sup>m</sup> 9.15 <sup>s</sup>	3 <sup>m</sup> 57.47 <sup>s</sup>	-14 <sup>o</sup> 32' 3.4"	19 <sup>m</sup> 29.4	67.28	16' 14.25"
	11	St	14 20.75	0.15	21 37 6.62	3 56.71	14 12 34.0	19 43.6	67.17	16 14.07
	12	Mo	14 20.90	0.61	21 41 3.33	3 55.95	13 52 50.4	19 57.3	67.06	16 13.89
	13	Di	14 20.29	1.36	21 44 59.28	3 55.19	13 32 53.1	20 10.7	66.95	16 13.70
	14	Mi	14 18.93	2.11	21 48 54.47	3 54.44	13 12 42.4	20 23.6	66.84	16 13.50
	15	Do	14 16.82	2.86	21 52 48.91	3 53.69	12 52 18.8	20 36.0	66.74	16 13.32
	16	Fr	-14 13.96	3.60	21 56 42.60	3 52.96	-12 31 42.8	20 48.0	66.63	16 13.12
	17	Sa	14 10.36	4.32	22 0 35.56	3 52.23	12 10 54.8	20 59.6	66.53	16 12.92
	18	St	14 6.04	5.04	22 4 27.79	3 51.52	11 49 55.2	21 10.8	66.43	16 12.72
	19	Mo	14 1.00	5.74	22 8 19.31	3 50.81	11 28 44.4	21 21.5	66.33	16 12.52
	20	Di	13 55.26	6.42	22 12 10.12	3 50.13	11 7 22.9	21 31.8	66.23	16 12.31
	21	Mi	13 48.84	7.10	22 16 0.25	3 49.46	10 45 51.1	21 41.7	66.13	16 12.10
	22	Do	-13 41.74	7.74	22 19 49.71	3 48.81	-10 24 9.4	21 51.2	66.04	16 11.89
	23	Fr	13 34.00	8.38	22 23 38.52	3 48.17	10 2 18.2	22 0.4	65.95	16 11.67
	24	Sa	13 25.62	9.00	22 27 26.69	3 47.56	9 40 17.8	22 9.0	65.86	16 11.46
	25	St	13 16.62	9.59	22 31 14.25	3 46.96	9 18 8.8	22 17.3	65.78	16 11.24
	26	Mo	13 7.03	10.16	22 35 1.21	3 46.39	8 55 51.5	22 25.2	65.69	16 11.01
	27	Di	12 56.87	10.72	22 38 47.60	3 45.84	8 33 26.3	22 32.8	65.61	16 10.77
	28	Mi	-12 46.15	11.25	22 42 33.44	3 45.30	- 8 10 53.5	22 40.0	65.53	16 10.54
März	1	Do	12 34.90	11.76	22 46 18.74	3 44.79	7 48 13.5	22 46.7	65.45	16 10.30
	2	Fr	12 23.14	12.25	22 50 3.53	3 44.30	7 25 26.8	22 53.1	65.38	16 10.06
	3	Sa	12 10.89	12.72	22 53 47.83	3 43.83	7 2 33.7	22 59.1	65.31	16 9.81
	4	St	11 58.17	13.18	22 57 31.66	3 43.38	6 39 34.6	23 4.8	65.24	16 9.56
	5	Mo	11 44.99	13.60	23 1 15.04	3 42.95	6 16 29.8	23 10.0	65.17	16 9.30
	6	Di	-11 31.39	14.01	23 4 57.99	3 42.54	- 5 53 19.8	23 14.9	65.10	16 9.05
	7	Mi	11 17.38	14.40	23 8 40.53	3 42.16	5 30 4.9	23 19.4	65.04	16 8.79
	8	Do	11 2.98	14.77	23 12 22.69	3 41.78	5 6 45.5	23 23.6	64.99	16 8.53
	9	Fr	10 48.21	15.12	23 16 4.47	3 41.44	4 43 21.9	23 27.3	64.93	16 8.27
	10	Sa	10 33.09	15.45	23 19 45.91	3 41.10	4 19 54.6	23 30.6	64.88	16 8.01
	11	St	10 17.64	15.76	23 23 27.01	3 40.79	3 56 24.0	23 33.7	64.83	16 7.74
	12	Mo	-10 1.88	16.06	23 27 7.80	3 40.49	- 3 32 50.3	23 36.3	64.78	16 7.48
	13	Di	9 45.82	16.34	23 30 48.29	3 40.21	3 9 14.0	23 38.4	64.74	16 7.21
	14	Mi	9 29.48	16.61	23 34 28.50	3 39.95	2 45 35.6	23 40.3	64.70	16 6.95
	15	Do	9 12.87	16.86	23 38 8.45	3 39.69	2 21 55.3	23 41.7	64.66	16 6.68
	16	Fr	8 56.01	17.10	23 41 48.14	3 39.45	1 58 13.6	23 42.6	64.62	16 6.42
	17	Sa	8 38.91	17.31	23 45 27.59	3 39.24	1 34 31.0	23 43.2	64.59	16 6.15
	18	St	- 8 21.60	17.52	23 49 6.83	3 39.03	- 1 10 47.8	23 43.4	64.56	16 5.89
	19	Mo	8 4.08	17.70	23 52 45.86	3 38.86	0 47 4.4	23 43.3	64.53	16 5.62
	20	Di	7 46.38	17.86	23 56 24.72	3 38.69	- 0 23 21.1	23 42.8	64.51	16 5.36
	21	Mi	7 28.52	18.01	0 0 3.41	3 38.54	+ 0 0 21.7	23 41.7	64.49	16 5.09
	22	Do	7 10.51	18.13	0 3 41.95	3 38.43	0 24 3.4	23 40.5	64.48	16 4.83
	23	Fr	- 6 52.38		0 7 20.38		+ 0 47 43.9		64.47	16 4.56



Tag	0 <sup>h</sup> Welt-Zeit							Aufgang	Untergang
	Julian Zeit	Sternzeit	Nutation in AR.		Mittleres Äquinoktium 1945.0		R		
			langp. Gl.	kurzp. Gl.	Länge	Breite		in { +50° Breite 0 <sup>h</sup> Länge	
1945	2431								
Febr. 10	496.5	<sup>h</sup> 9 <sup>m</sup> 18 <sup>s</sup> 49.317	- 935 + 1	320 54 14.3	60 43.3	-28	0.986 9093	1859	<sup>h</sup> 7 <sup>m</sup> 20 <sup>h</sup> 17 <sup>m</sup> 9
11	497.5	9 22 45.871	936 + 7	321 54 57.6	60 42.0	-41	0.987 0952	1884	7 18 17 11
12	498.5	9 26 42.426	937 +10	322 55 39.6	60 40.7	-54	0.987 2836	1907	7 17 17 13
13	499.5	9 30 38.980	938 +11	323 56 20.3	60 39.2	-66	0.987 4743	1929	7 15 17 14
14	500.5	9 34 35.535	939 + 8	324 56 59.5	60 37.7	-76	0.987 6672	1951	7 13 17 16
15	501.5	9 38 32.089	940 + 4	325 57 37.2	60 36.1	-83	0.987 8623	1975	7 12 17 18
16	502.5	9 42 28.643	- 941 - 1	326 58 13.3	60 34.3	-86	0.988 0598	2000	7 10 17 20
17	503.5	9 46 25.197	943 - 6	327 58 47.6	60 32.5	-86	0.988 2598	2028	7 8 17 21
18	504.5	9 50 21.751	944 - 9	328 59 20.1	60 30.7	-83	0.988 4626	2057	7 6 17 23
19	505.5	9 54 18.305	946 - 9	329 59 50.8	60 28.7	-78	0.988 6683	2090	7 4 17 25
20	506.5	9 58 14.858	947 - 6	331 0 19.5	60 26.9	-69	0.988 8773	2126	7 2 17 26
21	507.5	10 2 11.412	949 - 2	332 0 46.4	60 25.0	-59	0.989 0899	2162	7 0 17 28
22	508.5	10 6 7.966	- 951 + 4	333 1 11.4	60 23.1	-46	0.989 3061	2202	6 58 17 30
23	509.5	10 10 4.519	953 + 9	334 1 34.5	60 21.3	-33	0.989 5263	2243	6 56 17 32
24	510.5	10 14 1.073	955 +13	335 1 55.8	60 19.4	-19	0.989 7506	2284	6 54 17 33
25	511.5	10 17 57.626	957 +14	336 2 15.2	60 17.6	- 7	0.989 9790	2325	6 52 17 35
26	512.5	10 21 54.179	959 +14	337 2 32.8	60 15.8	+ 4	0.990 2115	2367	6 50 17 37
27	513.5	10 25 50.732	961 +11	338 2 48.6	60 14.0	+14	0.990 4482	2407	6 48 17 38
28	514.5	10 29 47.286	- 963 + 6	339 3 2.6	60 12.4	+21	0.990 6889	2448	6 46 17 40
März 1	515.5	10 33 43.839	965 + 1	340 3 15.0	60 11.7	+25	0.990 9337	2486	6 44 17 42
2	516.5	10 37 40.392	968 - 4	341 3 26.7	60 9.0	+27	0.991 1823	2521	6 42 17 43
3	517.5	10 41 36.945	970 - 9	342 3 35.7	60 6.4	+27	0.991 4344	2556	6 40 17 45
4	518.5	10 45 33.498	973 -13	343 3 42.1	60 5.7	+23	0.991 6900	2588	6 38 17 47
5	519.5	10 49 30.050	975 -15	344 3 47.8	60 4.2	+16	0.991 9488	2616	6 36 17 48
6	520.5	10 53 26.603	- 978 -15	345 3 52.0	60 2.5	+ 8	0.992 2104	2642	6 34 17 50
7	521.5	10 57 23.156	980 -12	346 3 54.5	60 1.0	- 2	0.992 4746	2666	6 32 17 51
8	522.5	11 1 19.709	983 - 8	347 3 55.5	59 59.3	-14	0.992 7412	2684	6 30 17 53
9	523.5	11 5 16.261	985 - 2	348 3 54.8	59 57.8	-27	0.993 0096	2700	6 28 17 55
10	524.5	11 9 12.814	988 + 4	349 3 52.6	59 56.0	-40	0.993 2796	2711	6 26 17 56
11	525.5	11 13 9.367	991 + 8	350 3 48.6	59 54.4	-53	0.993 5507	2718	6 23 17 58
12	526.5	11 17 5.919	- 994 +10	351 3 43.0	59 52.5	-65	0.993 8225	2723	6 21 18 0
13	527.5	11 21 2.472	996 + 9	352 3 35.5	59 50.7	-74	0.994 0948	2725	6 19 18 1
14	528.5	11 24 59.024	999 + 5	353 3 26.2	59 49.7	-81	0.994 3673	2726	6 17 18 3
15	529.5	11 28 55.577	1002 0	354 3 15.9	59 45.7	-85	0.994 6399	2725	6 15 18 4
16	530.5	11 32 52.129	1005 - 5	355 3 1.6	59 44.6	-86	0.994 9124	2725	6 13 18 6
17	531.5	11 36 48.682	1008 - 9	356 2 46.2	59 42.3	-84	0.995 1849	2728	6 10 18 8
18	532.5	11 40 45.234	-1011 -10	357 2 28.5	59 40.1	-79	0.995 4577	2731	6 8 18 9
19	533.5	11 44 41.787	1014 - 7	358 2 8.6	59 37.7	-70	0.995 7308	2737	6 6 18 11
20	534.5	11 48 38.339	1017 - 3	359 1 46.3	59 35.5	-59	0.996 0045	2746	6 4 18 12
21	535.5	11 52 34.892	1019 + 3	0 1 21.8	59 33.1	-47	0.996 2791	2758	6 2 18 14
22	536.5	11 56 31.444	1022 + 9	1 0 54.9	59 30.9	-34	0.996 5549	2771	6 0 18 16
23	537.5	12 0 27.997	-1025 +13	2 0 25.8		-21	0.996 8320		5 57 18 17



		0 <sup>h</sup> Welt-Zeit					
Tag	Wochentag	Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durchgangs- Dauer St.-Zt.	Halb- messer	
1945							
März	23 Fr	-6 <sup>m</sup> 52.38 <sup>s</sup> 18.22	0 <sup>h</sup> 7 <sup>m</sup> 20.38 <sup>s</sup> 3 38.33	+ 0 <sup>o</sup> 47' 43.9" 23 38.9	64.47	16' 4.56	
	24 Sa	6 34.16 18.30	0 10 58.71 3 38.25	1 11 22.8 23 36.9	64.46	16 4.29	
	25 St	6 15.86 18.35	0 14 36.96 3 38.21	1 34 59.7 23 34.6	64.45	16 4.02	
	26 Mo	5 57.51 18.38	0 18 15.17 3 38.17	1 58 34.3 23 31.9	64.44	16 3.75	
	27 Di	5 39.13 18.38	0 21 53.34 3 38.17	2 22 6.2 23 28.8	64.44	16 3.47	
	28 Mi	5 20.75 18.37	0 25 31.51 3 38.18	2 45 35.0 23 25.5	64.44	16 3.19	
	29 Do	-5 2.38 18.33	0 29 9.69 3 38.22	+ 3 9 0.5 23 21.9	64.44	16 2.92	
	30 Fr	4 44.05 18.27	0 32 47.91 3 38.29	3 32 22.4 23 17.9	64.45	16 2.64	
	31 Sa	4 25.78 18.18	0 36 26.20 3 38.37	3 55 40.3 23 13.5	64.46	16 2.36	
April	1 St	4 7.60 18.08	0 40 4.57 3 38.47	4 18 53.8 23 8.8	64.48	16 2.08	
	2 Mo	3 49.52 17.96	0 43 43.04 3 38.60	4 42 2.6 23 3.8	64.50	16 1.80	
	3 Di	3 31.56 17.80	0 47 21.64 3 38.75	5 5 6.4 22 58.5	64.52	16 1.52	
	4 Mi	-3 13.76 17.63	0 51 0.39 3 38.93	+ 5 28 4.9 22 52.9	64.54	16 1.23	
	5 Do	2 56.13 17.44	0 54 39.32 3 39.11	5 50 57.8 22 46.9	64.56	16 0.95	
	6 Fr	2 38.69 17.23	0 58 18.43 3 39.32	6 13 44.7 22 40.5	64.59	16 0.67	
	7 Sa	2 21.46 17.01	1 1 57.75 3 39.54	6 36 25.2 22 33.9	64.62	16 0.39	
	8 St	2 4.45 16.76	1 5 37.29 3 39.80	6 58 59.1 22 26.9	64.65	16 0.11	
	9 Mo	1 47.69 16.50	1 9 17.09 3 40.05	7 21 26.0 22 19.5	64.68	15 59.83	
	10 Di	-1 31.19 16.23	1 12 57.14 3 40.32	+ 7 43 45.5 22 11.9	64.72	15 59.55	
	11 Mi	1 14.96 15.95	1 16 37.46 3 40.60	8 5 57.4 22 3.7	64.76	15 59.27	
	12 Do	0 59.01 15.64	1 20 18.06 3 40.91	8 28 1.1 21 55.3	64.80	15 59.00	
	13 Fr	0 43.37 15.34	1 23 58.97 3 41.22	8 49 56.4 21 46.5	64.84	15 58.73	
	14 Sa	0 28.03 15.02	1 27 40.19 3 41.53	9 11 42.9 21 37.3	64.89	15 58.46	
	15 St	-0 13.01 14.69	1 31 21.72 3 41.86	9 33 20.2 21 27.8	64.94	15 58.20	
	16 Mo	+0 1.68 14.34	1 35 3.58 3 42.21	+ 9 54 48.0 21 17.9	64.99	15 57.94	
	17 Di	0 16.02 13.99	1 38 45.79 3 42.57	10 16 5.9 21 7.6	65.04	15 57.67	
	18 Mi	0 30.01 13.62	1 42 28.36 3 42.93	10 37 13.5 20 57.0	65.10	15 57.41	
	19 Do	0 43.63 13.23	1 46 11.29 3 43.32	10 58 10.5 20 46.1	65.16	15 57.15	
	20 Fr	0 56.86 12.84	1 49 54.61 3 43.72	11 18 56.6 20 34.7	65.22	15 56.90	
	21 Sa	1 9.79 12.42	1 53 38.33 3 44.13	11 39 31.3 20 23.2	65.28	15 56.65	
	22 St	+1 22.12 12.00	1 57 22.46 3 44.56	+11 59 54.5 20 11.3	65.35	15 56.39	
	23 Mo	1 34.12 11.55	2 1 7.02 3 45.01	12 20 5.8 19 59.1	65.41	15 56.14	
	24 Di	1 45.67 11.10	2 4 52.03 3 45.45	12 40 4.9 19 46.4	65.48	15 55.89	
	25 Mi	1 56.77 10.62	2 8 37.48 3 45.93	12 59 51.3 19 33.6	65.55	15 55.64	
	26 Do	2 7.39 10.15	2 12 23.41 3 46.41	13 19 24.9 19 20.5	65.62	15 55.39	
	27 Fr	2 17.54 9.64	2 16 9.82 3 46.91	13 38 45.4 19 7.0	65.69	15 55.14	
	28 Sa	+2 27.18 9.14	2 19 56.73 3 47.42	+13 57 52.4 18 53.2	65.76	15 54.89	
	29 St	2 36.32 8.62	2 23 44.15 3 47.94	14 16 45.6 18 39.0	65.84	15 54.65	
	30 Mo	2 44.94 8.08	2 27 32.09 3 48.47	14 35 24.6 18 24.7	65.91	15 54.40	
Mai	1 Di	2 53.02 7.54	2 31 20.56 3 49.01	14 53 49.3 18 10.0	65.99	15 54.15	
	2 Mi	3 0.56 6.98	2 35 9.57 3 49.57	15 11 59.3 17 55.0	66.06	15 53.91	
	3 Do	+3 7.54	2 38 59.14	+15 29 54.3	66.14	15 53.67	



Tag	0 <sup>h</sup> Welt-Zeit							Aufgang	Untergang
	Julian. Zeit	Sternzeit	Nutation in A.R.		Mittleres Äquinoktium 1945.0		R		
			langp. Gl.	kurzp. Gl.	Länge	Breite		in (+50° Breite 0 <sup>h</sup> Länge	
1945	2431								
		<sup>h</sup> <sup>m</sup> <sup>s</sup>	in 0.001		<sup>o</sup> <sup>'</sup> <sup>"</sup>	in 0.01		<sup>h</sup> <sup>m</sup>	<sup>h</sup> <sup>m</sup>
März 23	537.5	12 0 27.997	-1025 +13		2 0 25.8	-21	0.996 8320	2785 5 57	18 17
24	538.5	12 4 24.549	1028 +15		2 59 54.3	-9	0.997 1105	2800 5 55	18 19
25	539.5	12 8 21.102	1031 +15		3 59 20.6	+2	0.997 3905	2817 5 53	18 20
26	540.5	12 12 17.654	1034 +12		4 58 44.7	+11	0.997 6722	2833 5 51	18 22
27	541.5	12 16 14.207	1037 + 8		5 58 6.6	+18	0.997 9555	2851 5 49	18 23
28	542.5	12 20 10.759	1040 + 3		6 57 26.4	+23	0.998 2406	2867 5 47	18 25
29	543.5	12 24 7.312	-1042 - 2		7 56 44.1	+24	0.998 5273	2883 5 44	18 26
30	544.5	12 28 3.864	1045 - 7		8 55 59.7	+24	0.998 8156	2897 5 42	18 28
31	545.5	12 32 0.417	1048 -12		9 55 13.4	+21	0.999 1053	2910 5 40	18 30
April 1	546.5	12 35 56.970	1051 -14		10 54 25.1	+15	0.999 3963	2922 5 38	18 31
2	547.5	12 39 53.522	1053 -15		11 53 35.0	+6	0.999 6885	2930 5 36	18 33
3	548.5	12 43 50.075	1056 -13		12 52 42.9	-4	0.999 9815	2937 5 34	18 34
4	549.5	12 47 46.628	-1059 - 9		13 51 49.1	-16	1.000 2752	2940 5 31	18 36
5	550.5	12 51 43.181	1061 - 4		14 50 53.5	-28	1.000 5692	2940 5 29	18 37
6	551.5	12 55 39.733	1064 + 2		15 49 56.1	-42	1.000 8632	2936 5 27	18 39
7	552.5	12 59 36.286	1066 + 6		16 48 57.0	-55	1.001 1568	2928 5 25	18 41
8	553.5	13 3 32.839	1068 + 9		17 47 56.2	-67	1.001 4496	2916 5 23	18 42
9	554.5	13 7 29.392	1071 + 8		18 46 53.6	-77	1.001 7412	2899 5 21	18 44
10	555.5	13 11 25.945	-1073 + 6		19 45 49.2	-85	1.002 0311	2880 5 19	18 45
11	556.5	13 15 22.499	1075 + 1		20 44 43.0	-89	1.002 3191	2858 5 16	18 47
12	557.5	13 19 19.052	1078 - 5		21 43 35.0	-90	1.002 6049	2834 5 14	18 48
13	558.5	13 23 15.605	1080 - 9		22 42 24.9	-88	1.002 8883	2807 5 12	18 50
14	559.5	13 27 12.158	1082 -11		23 41 12.9	-84	1.003 1690	2783 5 10	18 52
15	560.5	13 31 8.712	1084 - 9		24 39 58.7	-76	1.003 4473	2759 5 8	18 53
16	561.5	13 35 5.265	-1086 - 5		25 38 42.4	-65	1.003 7232	2738 5 6	18 55
17	562.5	13 39 1.819	1087 + 1		26 37 23.9	-53	1.003 9970	2718 5 4	18 56
18	563.5	13 42 58.372	1089 + 7		27 36 3.1	-42	1.004 2688	2701 5 2	18 58
19	564.5	13 46 54.926	1091 +12		28 34 40.2	-29	1.004 5389	2686 5 0	18 59
20	565.5	13 50 51.480	1092 +16		29 33 15.0	-16	1.004 8075	2673 4 58	19 1
21	566.5	13 54 48.034	1094 +16		30 31 47.6	-5	1.005 0748	2662 4 56	19 3
22	567.5	13 58 44.588	-1095 +14		31 30 18.0	+3	1.005 3410	2652 4 54	19 4
23	568.5	14 2 41.142	1097 +10		32 28 46.3	+10	1.005 6062	2643 4 52	19 6
24	569.5	14 6 37.696	1098 + 5		33 27 12.6	+15	1.005 8705	2634 4 50	19 7
25	570.5	14 10 34.250	1099 0		34 25 36.8	+16	1.005 1339	2627 4 48	19 9
26	571.5	14 14 30.804	1100 - 6		35 23 59.1	+15	1.006 3966	2619 4 46	19 10
27	572.5	14 18 27.358	1101 -10		36 22 19.4	+12	1.006 6585	2611 4 45	19 12
28	573.5	14 22 23.913	-1102 -13		37 20 38.0	+6	1.006 9196	2602 4 43	19 13
29	574.5	14 26 20.467	1103 -14		38 18 54.7	-3	1.007 1798	2593 4 41	19 15
30	575.5	14 30 17.022	1104 -12		39 17 9.7	-13	1.007 4391	2581 4 39	19 17
Mai 1	576.5	14 34 13.576	1105 - 9		40 15 23.1	-25	1.007 6972	2568 4 37	19 18
2	577.5	14 38 10.131	1105 - 5		41 13 34.8	-39	1.007 9540	2553 4 35	19 20
3	578.5	14 42 6.686	-1106 0		42 11 45.1	-52	1.008 2093	2543 4 34	19 21



Tag	Wochentag	0 <sup>h</sup> Welt-Zeit					
		Zeitgleichung Wahre Zeit minus Mittlere Zeit		Scheinbare Rektaszension		Scheinbare Deklination	
1945							
Mai	3 Do	+3 <sup>m</sup> 7.54 <sup>s</sup> 6.43	2 <sup>h</sup> 38 <sup>m</sup> 59.14 <sup>s</sup> 3 <sup>m</sup> 50.13 <sup>s</sup>	+15 <sup>o</sup> 29' 54.3" 17' 39.8"	66.14	15 53.67	
	4 Fr	3 13.97 5.85	2 42 49.27 3 50.71	15 47 34.1 17 24.2	66.22	15 53.43	
	5 Sa	3 19.82 5.27	2 46 39.98 3 51.28	16 4 58.3 17 8.2	66.30	15 53.20	
	6 So	3 25.09 4.69	2 50 31.26 3 51.86	16 22 6.5 16 52.1	66.39	15 52.96	
	7 Mo	3 29.78 4.11	2 54 23.12 3 52.45	16 38 58.6 16 35.6	66.47	15 52.73	
	8 Di	3 33.89 3.52	2 58 15.57 3 53.03	16 55 34.2 16 18.8	66.55	15 52.50	
	9 Mi	+3 37.41 2.94	3 2 8.60 3 53.62	+17 11 53.0 16 1.6	66.63	15 52.27	
	10 Do	3 40.35 2.35	3 6 2.22 3 54.20	17 27 54.6 15 44.2	66.71	15 52.05	
	11 Fr	3 42.70 1.78	3 9 56.42 3 54.79	17 43 38.8 15 26.4	66.79	15 51.83	
	12 Sa	3 44.48 1.20	3 13 51.21 3 55.35	17 59 5.2 15 8.3	66.88	15 51.62	
	13 So	3 45.68 0.63	3 17 46.56 3 55.92	18 14 13.5 14 50.0	66.96	15 51.42	
	14 Mo	3 46.31 0.07	3 21 42.48 3 56.49	18 29 3.5 14 31.2	67.04	15 51.21	
	15 Di	+3 46.38 0.48	3 25 38.97 3 57.04	+18 43 34.7 14 12.2	67.12	15 51.01	
	16 Mi	3 45.90 1.04	3 29 36.01 3 57.59	18 57 46.9 13 52.9	67.20	15 50.81	
	17 Do	3 44.86 1.58	3 33 33.60 3 58.14	19 11 39.8 13 33.4	67.28	15 50.62	
	18 Fr	3 43.28 2.12	3 37 31.74 3 58.67	19 25 13.2 13 13.5	67.36	15 50.43	
	19 Sa	3 41.16 2.65	3 41 30.41 3 59.21	19 38 26.7 12 53.4	67.44	15 50.25	
	20 So	3 38.51 3.18	3 45 29.62 3 59.74	19 51 20.1 12 33.0	67.52	15 50.07	
	21 Mo	+3 35.33 3.71	3 49 29.36 4 0.27	+20 3 53.1 12 12.4	67.60	15 49.89	
	22 Di	3 31.62 4.23	3 53 29.63 4 0.78	20 16 5.5 11 51.6	67.67	15 49.71	
	23 Mi	3 27.39 4.73	3 57 30.41 4 1.29	20 27 57.1 11 30.5	67.75	15 49.54	
	24 Do	3 22.66 5.24	4 1 31.70 4 1.79	20 39 27.6 11 9.1	67.82	15 49.37	
	25 Fr	3 17.42 5.73	4 5 33.49 4 2.29	20 50 36.7 10 47.7	67.89	15 49.21	
	26 Sa	3 11.69 6.22	4 9 35.78 4 2.78	21 1 24.4 10 25.9	67.96	15 49.05	
	27 So	+3 5.47 6.70	4 13 38.56 4 3.26	+21 11 50.3 10 4.0	68.03	15 48.88	
	28 Mo	2 58.77 7.18	4 17 41.82 4 3.73	21 21 54.3 9 41.8	68.10	15 48.72	
	29 Di	2 51.59 7.63	4 21 45.55 4 4.19	21 31 36.1 9 19.5	68.17	15 48.57	
30 Mi	2 43.96 8.08	4 25 49.74 4 4.64	21 40 55.6 8 57.0	68.23	15 48.41		
31 Do	2 35.88 8.52	4 29 54.38 4 5.07	21 49 52.6 8 34.3	68.29	15 48.26		
Juni	1 Fr	2 27.36 8.95	4 33 59.45 4 5.51	21 58 26.9 8 11.4	68.35	15 48.11	
	2 Sa	+2 18.41 9.36	4 38 4.96 4 5.92	+22 6 38.3 7 48.3	68.40	15 47.96	
	3 So	2 9.05 9.76	4 42 10.88 4 6.32	22 14 26.6 7 25.2	68.45	15 47.82	
	4 Mo	1 59.29 10.14	4 46 17.20 4 6.69	22 21 51.8 7 1.8	68.50	15 47.68	
	5 Di	1 49.15 10.50	4 50 23.89 4 7.06	22 28 53.6 6 38.3	68.55	15 47.55	
	6 Mi	1 38.65 10.85	4 54 30.95 4 7.40	22 35 31.9 6 14.5	68.60	15 47.42	
	7 Do	1 27.80 11.16	4 58 38.35 4 7.72	22 41 46.4 5 50.7	68.65	15 47.30	
	8 Fr	+1 16.64 11.45	5 2 46.07 4 8.01	+22 47 37.1 5 26.8	68.69	15 47.18	
	9 Sa	1 5.19 11.73	5 6 54.08 4 8.28	22 53 3.9 5 2.7	68.73	15 47.06	
	10 So	0 53.46 11.96	5 11 2.36 4 8.53	22 58 6.6 4 38.4	68.76	15 46.96	
	11 Mo	0 41.50 12.18	5 15 10.89 4 8.74	23 2 45.0 4 14.1	68.79	15 46.85	
	12 Di	0 29.32 12.37	5 19 19.63 4 8.92	23 6 59.1 3 49.6	68.82	15 46.75	
	13 Mi	+0 16.95	5 23 28.55	+23 10 48.7	68.85	15 46.66	



Tag	0 <sup>h</sup> Welt-Zeit							Aufgang	Untergang
	Julian. Zeit	Sternzeit	Nutation in AR.		Mittleres Äquinoktium 1945.0		R		
			langp. Gl.	kurzsp. Gl.	Länge	Breite		in ( +50° Breite 0 <sup>h</sup> Länge	
1945	2431								
Mai		<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>s</sup> in 0.001	<sup>o</sup> <sup>'</sup> <sup>"</sup>	<sup>o</sup> <sup>'</sup> <sup>"</sup>	<sup>o</sup> <sup>'</sup> <sup>"</sup>		<sup>h</sup> <sup>m</sup>	<sup>h</sup> <sup>m</sup>
3	578.5	14 42 6.686	-1106 0	42 11 45.1	58 8.8	- 52	1.008 2093	2536 4 34	19 21
4	579.5	14 46 3.241	1106 + 5	43 9 53.9	58 7.3	- 65	1.008 4629	2514 4 32	19 23
5	580.5	14 49 59.796	1106 + 8	44 8 1.2	58 6.0	- 77	1.008 7143	2489 4 30	19 24
6	581.5	14 53 56.351	1107 + 8	45 6 7.2	58 4.6	- 88	1.008 9632	2459 4 29	19 26
7	582.5	14 57 52.906	1107 + 6	46 4 11.8	58 3.3	- 96	1.009 2091	2426 4 27	19 27
8	583.5	15 1 49.462	1107 + 2	47 2 15.1	58 1.9	-101	1.009 4517	2388 4 25	19 29
9	584.5	15 5 46.017	-1107 - 4	48 0 17.0	58 0.5	-103	1.009 6905	2348 4 24	19 30
10	585.5	15 9 42.573	1107 - 9	48 58 17.5	57 59.1	-102	1.009 9253	2304 4 22	19 32
11	586.5	15 13 39.128	1107 -12	49 56 16.6	57 57.6	- 97	1.010 1557	2259 4 21	19 33
12	587.5	15 17 35.684	1107 -12	50 54 14.2	57 56.0	- 89	1.010 3816	2212 4 19	19 34
13	588.5	15 21 32.239	1106 - 8	51 52 10.2	57 54.5	- 79	1.010 6028	2166 4 18	19 36
14	589.5	15 25 28.795	1106 - 3	52 50 4.7	57 52.7	- 68	1.010 8194	2121 4 16	19 37
15	590.5	15 29 25.351	-1105 + 4	53 47 57.4	57 51.1	- 55	1.011 0315	2077 4 15	19 39
16	591.5	15 33 21.907	1105 +10	54 45 48.5	57 49.4	- 42	1.011 2392	2036 4 13	19 40
17	592.5	15 37 18.463	1104 +15	55 43 37.9	57 47.8	- 29	1.011 4428	1998 4 12	19 42
18	593.5	15 41 15.019	1103 +17	56 41 25.7	57 46.0	- 17	1.011 6426	1961 4 11	19 43
19	594.5	15 45 11.575	1102 +16	57 39 11.7	57 44.4	- 7	1.011 8387	1928 4 9	19 44
20	595.5	15 49 8.132	1101 +13	58 36 56.1	57 42.8	0	1.012 0315	1895 4 8	19 46
21	596.5	15 53 4.688	-1100 + 8	59 34 38.9	57 41.2	+ 5	1.012 2210	1864 4 7	19 47
22	597.5	15 57 1.244	1099 + 2	60 32 20.1	57 39.7	+ 7	1.012 4074	1835 4 6	19 48
23	598.5	16 0 57.801	1098 - 4	61 29 59.8	57 38.2	+ 7	1.012 5909	1806 4 5	19 49
24	599.5	16 4 54.358	1097 - 8	62 27 38.0	57 36.9	+ 4	1.012 7715	1780 4 3	19 51
25	600.5	16 8 50.914	1096 -12	63 25 14.9	57 35.5	- 2	1.012 9495	1753 4 2	19 52
26	601.5	16 12 47.471	1094 -13	64 22 50.4	57 34.3	- 10	1.013 1248	1727 4 1	19 53
27	602.5	16 16 44.028	-1093 -12	65 20 24.7	57 33.1	- 20	1.013 2975	1701 4 0	19 54
28	603.5	16 20 40.584	1091 -10	66 17 57.8	57 32.0	- 32	1.013 4676	1675 3 59	19 56
29	604.5	16 24 37.141	1090 - 6	67 15 29.8	57 31.0	- 44	1.013 6351	1647 3 59	19 57
30	605.5	16 28 33.698	1088 0	68 13 0.8	57 30.1	- 58	1.013 7998	1619 3 58	19 58
31	606.5	16 32 30.255	1087 + 4	69 10 30.9	57 29.2	- 72	1.013 9617	1588 3 57	19 59
Juni									
1	607.5	16 36 26.812	1085 + 8	70 8 0.1	57 28.4	- 84	1.014 1205	1555 3 56	20 0
2	608.5	16 40 23.369	-1083 + 9	71 5 28.5	57 27.7	- 95	1.014 2760	1519 3 55	20 1
3	609.5	16 44 19.927	1081 + 8	72 2 56.2	57 27.1	-103	1.014 4279	1478 3 55	20 2
4	610.5	16 48 16.484	1080 + 3	73 0 23.3	57 26.4	-109	1.014 5757	1434 3 54	20 3
5	611.5	16 52 13.041	1078 - 2	73 57 49.7	57 25.8	-112	1.014 7191	1387 3 53	20 4
6	612.5	16 56 9.598	1076 - 8	74 55 15.5	57 25.1	-111	1.014 8578	1336 3 53	20 5
7	613.5	17 0 6.156	1074 -11	75 52 40.6	57 24.6	-107	1.014 9914	1282 3 52	20 5
8	614.5	17 4 2.713	-1072 -13	76 50 5.2	57 23.9	- 99	1.015 1196	1224 3 52	20 6
9	615.5	17 7 59.271	1070 -11	77 47 29.1	57 23.1	- 88	1.015 2420	1166 3 52	20 7
10	616.5	17 11 55.828	1068 - 5	78 44 52.2	57 22.4	- 77	1.015 3586	1106 3 51	20 8
11	617.5	17 15 52.386	1065 + 1	79 42 14.6	57 21.7	- 63	1.015 4692	1047 3 51	20 8
12	618.5	17 19 48.943	1063 + 7	80 39 36.3	57 20.8	- 49	1.015 5739	989 3 51	20 9
13	619.5	17 23 45.501	-1061 +13	81 36 57.1		+ 35	1.015 6728	3 50	20 10



Tag	Wochentag	0 <sup>h</sup> Welt-Zeit						
		Zeitgleichung Wahre Zeit minus Mittlere Zeit	Scheinbare Rektaszension	Scheinbare Deklination	Halbe Durch- gangs- Dauer St.-Zt.	Halb- messer		
1945								
Juni	13	Mi	+ <sup>m</sup> 0 16.95 <sup>s</sup> <sub>12.54</sub>	5 <sup>h</sup> 23 <sup>m</sup> 28.55 <sup>s</sup> + <sup>m</sup> 9.09	+23° 10' 48.7"	3 25.1	68.85	15 46.66
	14	Do	+ <sup>m</sup> 0 4.41 <sup>s</sup> <sub>12.67</sub>	5 27 37.64 + 9.23	23 14 13.8	3 0.5	68.88	15 46.57
	15	Fr	- <sup>m</sup> 0 8.26 <sup>s</sup> <sub>12.78</sub>	5 31 46.87 + 9.34	23 17 14.3	2 35.8	68.89	15 46.49
	16	Sa	0 21.04 <sup>s</sup> <sub>12.87</sub>	5 35 56.21 + 9.43	23 19 50.1	2 11.1	68.91	15 46.42
	17	St	0 33.91 <sup>s</sup> <sub>12.94</sub>	5 40 5.64 + 9.50	23 22 1.2	1 46.3	68.92	15 46.35
	18	Mo	0 46.85 <sup>s</sup> <sub>12.98</sub>	5 44 15.14 + 9.54	23 23 47.5	1 21.5	68.93	15 46.28
	19	Di	- <sup>m</sup> 0 59.83 <sup>s</sup> <sub>13.00</sub>	5 48 24.68 + 9.55	+23 25 9.0	0 56.7	68.94	15 46.21
	20	Mi	1 12.83 <sup>s</sup> <sub>12.99</sub>	5 52 34.23 + 9.56	23 26 5.7	0 31.8	68.94	15 46.15
	21	Do	1 25.82 <sup>s</sup> <sub>12.97</sub>	5 56 43.79 + 9.52	23 26 37.5	0 7.0	68.94	15 46.10
	22	Fr	1 38.79 <sup>s</sup> <sub>12.92</sub>	6 0 53.31 + 9.48	23 26 44.5	0 17.7	68.94	15 46.05
	23	Sa	1 51.71 <sup>s</sup> <sub>12.86</sub>	6 5 2.79 + 9.41	23 26 26.8	0 42.6	68.93	15 46.00
	24	St	2 4.57 <sup>s</sup> <sub>12.76</sub>	6 9 12.20 + 9.33	23 25 44.2	1 7.3	68.92	15 45.95
	25	Mo	- <sup>m</sup> 2 17.33 <sup>s</sup> <sub>12.66</sub>	6 13 21.53 + 9.21	+23 24 36.9	1 32.0	68.91	15 45.91
	26	Di	2 29.99 <sup>s</sup> <sub>12.53</sub>	6 17 30.74 + 9.09	23 23 4.9	1 56.7	68.89	15 45.87
	27	Mi	2 42.52 <sup>s</sup> <sub>12.39</sub>	6 21 39.83 + 8.94	23 21 8.2	2 21.3	68.87	15 45.83
	28	Do	2 54.91 <sup>s</sup> <sub>12.22</sub>	6 25 48.77 + 8.78	23 18 46.9	2 45.8	68.85	15 45.80
	29	Fr	3 7.13 <sup>s</sup> <sub>12.04</sub>	6 29 57.55 + 8.60	23 16 1.1	3 10.3	68.82	15 45.77
	30	Sa	3 19.17 <sup>s</sup> <sub>11.84</sub>	6 34 6.15 + 8.40	23 12 50.8	3 34.7	68.80	15 45.75
Juli	1	St	- <sup>m</sup> 3 31.01 <sup>s</sup> <sub>11.62</sub>	6 38 14.55 + 8.17	+23 9 16.1	3 58.9	68.77	15 45.73
	2	Mo	3 42.63 <sup>s</sup> <sub>11.37</sub>	6 42 22.72 + 7.93	23 5 17.2	4 23.2	68.73	15 45.71
	3	Di	3 54.00 <sup>s</sup> <sub>11.12</sub>	6 46 30.65 + 7.68	23 0 54.0	4 47.2	68.69	15 45.70
	4	Mi	4 5.12 <sup>s</sup> <sub>10.84</sub>	6 50 38.33 + 7.39	22 56 6.8	5 11.2	68.65	15 45.69
	5	Do	4 15.96 <sup>s</sup> <sub>10.52</sub>	6 54 45.72 + 7.09	22 50 55.6	5 35.1	68.61	15 45.68
	6	Fr	4 26.48 <sup>s</sup> <sub>10.20</sub>	6 58 52.81 + 6.75	22 45 20.5	5 58.8	68.57	15 45.68
	7	Sa	- <sup>m</sup> 4 36.68 <sup>s</sup> <sub>9.85</sub>	7 2 59.56 + 6.41	+22 39 21.7	6 22.4	68.51	15 45.69
	8	St	4 46.53 <sup>s</sup> <sub>9.48</sub>	7 7 5.97 + 6.04	22 32 59.3	6 45.9	68.46	15 45.70
	9	Mo	4 56.01 <sup>s</sup> <sub>9.08</sub>	7 11 12.01 + 5.64	22 26 13.4	7 9.1	68.40	15 45.72
	10	Di	5 5.09 <sup>s</sup> <sub>8.66</sub>	7 15 17.65 + 5.21	22 19 4.3	7 32.2	68.34	15 45.74
	11	Mi	5 13.75 <sup>s</sup> <sub>8.22</sub>	7 19 22.86 + 4.78	22 11 32.1	7 55.2	68.28	15 45.77
	12	Do	5 21.97 <sup>s</sup> <sub>7.76</sub>	7 23 27.64 + 4.32	22 3 36.9	8 17.8	68.22	15 45.80
	13	Fr	- <sup>m</sup> 5 29.73 <sup>s</sup> <sub>7.28</sub>	7 27 31.96 + 3.84	+21 55 19.1	8 40.5	68.16	15 45.84
	14	Sa	5 37.01 <sup>s</sup> <sub>6.79</sub>	7 31 35.80 + 3.34	21 46 38.6	9 2.8	68.10	15 45.88
	15	St	5 43.80 <sup>s</sup> <sub>6.27</sub>	7 35 39.14 + 2.83	21 37 35.8	9 25.0	68.03	15 45.94
	16	Mo	5 50.07 <sup>s</sup> <sub>5.75</sub>	7 39 41.97 + 2.31	21 28 10.8	9 46.8	67.96	15 46.00
	17	Di	5 55.82 <sup>s</sup> <sub>5.22</sub>	7 43 44.28 + 1.77	21 18 24.0	10 8.5	67.88	15 46.06
	18	Mi	6 1.04 <sup>s</sup> <sub>4.66</sub>	7 47 46.05 + 1.22	21 8 15.5	10 29.9	67.81	15 46.12
	19	Do	- <sup>m</sup> 6 5.70 <sup>s</sup> <sub>4.11</sub>	7 51 47.27 + 0.67	+20 57 45.6	10 51.2	67.74	15 46.18
	20	Fr	6 9.81 <sup>s</sup> <sub>3.55</sub>	7 55 47.94 + 0.10	20 46 54.4	11 12.2	67.66	15 46.26
	21	Sa	6 13.36 <sup>s</sup> <sub>2.97</sub>	7 59 48.04 + 0.52	20 35 42.2	11 32.9	67.58	15 46.34
	22	St	6 16.33 <sup>s</sup> <sub>2.39</sub>	8 3 47.56 + 0.95	20 24 9.3	11 53.4	67.50	15 46.41
	23	Mo	6 18.72 <sup>s</sup> <sub>1.80</sub>	8 7 46.51 + 0.36	20 12 15.9	12 13.6	67.42	15 46.49
	24	Di	- <sup>m</sup> 6 20.52 <sup>s</sup>	8 11 44.87	+20 0 2.3		67.34	15 46.58



Tag	0 <sup>h</sup> Welt-Zeit							Aufgang in (+5° Breite 0 <sup>h</sup> Länge	Untergang
	Julian. Zeit	Sternzeit	Nutation in AR. langp. kurzp. Gl. Gl.	Mittleres Äquinoktium 1945.0		R			
				Länge	Breite				
1945	2431								
<b>Juni</b>		<sup>h</sup> <sup>m</sup> <sup>s</sup>	in 0.00r	<sup>o</sup> ' "	<sup>o</sup> ' "	in 0.01		<sup>h</sup> <sup>m</sup> <sup>s</sup>	
13	619.5	17 23 45.501	-1061+13	81 36 57.1	57 19.9	- 35	I.015 6728	932 3 50 20 10	
14	620.5	17 27 42.058	1059+16	82 34 17.0	57 19.1	- 22	I.015 7660	877 3 50 20 10	
15	621.5	17 31 38.616	1057+16	83 31 36.1	57 18.2	- 11	I.015 8537	825 3 50 20 11	
16	622.5	17 35 35.173	1055+14	84 28 54.3	57 17.4	- 3	I.015 9362	776 3 50 20 11	
17	623.5	17 39 31.731	1052+9	85 26 11.7	57 16.5	+ 3	I.016 0138	730 3 50 20 12	
18	624.5	17 43 28.288	1050+4	86 23 28.2	57 15.8	+ 7	I.016 0868	684 3 50 20 12	
19	625.5	17 47 24.846	-1048-2	87 20 44.0	57 15.0	+ 8	I.016 1552	640 3 50 20 12	
20	626.5	17 51 21.404	1046-.7	88 17 59.0	57 14.4	+ 6	I.016 2192	600 3 50 20 13	
21	627.5	17 55 17.961	1043-11	89 15 13.4	57 13.7	+ 2	I.016 2792	560 3 50 20 13	
22	628.5	17 59 14.519	1041-13	90 12 27.1	57 13.2	- 5	I.016 3352	523 3 51 20 13	
23	629.5	18 3 11.077	1039-13	91 9 40.3	57 12.6	- 14	I.016 3875	486 3 51 20 13	
24	630.5	18 7 7.634	1037-11	92 6 52.9	57 12.3	- 25	I.016 4361	451 3 51 20 13	
25	631.5	18 11 4.192	-1034-6	93 4 5.2	57 11.9	- 37	I.016 4812	418 3 52 20 13	
26	632.5	18 15 0.749	1032-1	94 1 17.1	57 11.6	- 50	I.016 5230	384 3 52 20 13	
27	633.5	18 18 57.307	1030+4	94 58 28.7	57 11.5	- 63	I.016 5614	350 3 52 20 13	
28	634.5	18 22 53.865	1028+8	95 55 40.2	57 11.5	- 77	I.016 5964	315 3 53 20 13	
29	635.5	18 26 50.422	1025+10	96 52 51.7	57 11.4	- 88	I.016 6279	278 3 53 20 13	
30	636.5	18 30 46.980	1023+9	97 50 3.1	57 11.6	- 97	I.016 6557	238 3 54 20 13	
<b>Juli</b>									
1	637.5	18 34 43.537	-1021+6	98 47 14.7	57 11.8	-103	I.016 6795	196 3 55 20 13	
2	638.5	18 38 40.095	1019 0	99 44 26.5	57 12.0	-106	I.016 6991	151 3 55 20 12	
3	639.5	18 42 36.652	1017-5	100 41 38.5	57 12.2	-106	I.016 7142	103 3 56 20 12	
4	640.5	18 46 33.210	1015-10	101 38 50.7	57 12.6	-102	I.016 7245	50 3 57 20 12	
5	641.5	18 50 29.767	1013-12	102 36 3.3	57 12.9	- 95	I.016 7295	5 3 57 20 11	
6	642.5	18 54 26.324	1011-12	103 33 16.2	57 13.1	- 85	I.016 7290	63 3 58 20 11	
7	643.5	18 58 22.882	-1009-8	104 30 29.3	57 13.4	- 73	I.016 7227	123 3 59 20 10	
8	644.5	19 2 19.439	1007-2	105 27 42.7	57 13.7	- 60	I.016 7104	186 4 0 20 9	
9	645.5	19 6 15.996	1005+4	106 24 56.4	57 13.8	- 46	I.016 6918	248 4 1 20 9	
10	646.5	19 10 12.553	1003+10	107 22 10.2	57 14.0	- 31	I.016 6670	310 4 2 20 8	
11	647.5	19 14 9.111	1001+14	108 19 24.2	57 14.1	- 17	I.016 6360	371 4 3 20 7	
12	648.5	19 18 5.668	1000+16	109 16 38.3	57 14.2	- 4	I.016 5989	430 4 4 20 7	
13	649.5	19 22 2.225	-998+14	110 13 52.5	57 14.3	+ 6	I.016 5559	488 4 5 20 6	
14	650.5	19 25 58.782	996+11	111 11 6.8	57 14.4	+ 13	I.016 5071	542 4 6 20 5	
15	651.5	19 29 55.339	995+6	112 8 21.2	57 14.5	+ 18	I.016 4529	595 4 7 20 4	
16	652.5	19 33 51.896	993 0	113 5 35.7	57 14.7	+ 20	I.016 3934	644 4 8 20 3	
17	653.5	19 37 48.453	992-6	114 2 50.4	57 14.8	+ 20	I.016 3290	692 4 9 20 2	
18	654.5	19 41 45.009	990-10	115 0 5.2	57 14.9	+ 17	I.016 2598	737 4 10 20 1	
19	655.5	19 45 41.566	-989-13	115 57 20.1	57 15.2	+ 11.	I.016 1861	779 4 11 20 0	
20	656.5	19 49 38.123	988-14	116 54 35.3	57 15.5	+ 3	I.016 1082	820 4 13 19 59	
21	657.5	19 53 34.679	986-12	117 51 50.8	57 15.9	- 7	I.016 0262	858 4 14 19 58	
22	658.5	19 57 31.236	985-8	118 49 6.7	57 16.2	- 18	I.015 9404	893 4 15 19 57	
23	659.5	20 1 27.792	984-3	119 46 22.9	57 16.6	- 30	I.015 8511	926 4 16 19 56	
24	660.5	20 5 24.348	-983+2	120 43 39.5		- 43	I.015 7585	4 18 19 54	



Tag	Wochentag	0 <sup>h</sup> Welt-Zeit								
		Zeitgleichung Wahre Zeit minus Mittlere Zeit		Scheinbare Rektaszension		Scheinbare Deklination		Halbe Durch- gangs- Dauer St.-Zt.	Halb- messer	
1945										
Juli	24	Di	-6 <sup>m</sup> 20.52 <sup>s</sup>	1.22	8 <sup>h</sup> 11 <sup>m</sup> 44.87 <sup>s</sup>	3 <sup>m</sup> 57.78 <sup>s</sup>	+20 <sup>o</sup> 0 <sup>'</sup> 2.3 <sup>"</sup>	12 <sup>'</sup> 33.7 <sup>"</sup>	67.34	15 46.59
	25	Mi	6 21.74	0.64	8 15 42.65	3 57.19	19 47 28.6	12 53.3	67.26	15 46.67
	26	Do	6 22.38	0.04	8 19 39.84	3 56.60	19 34 35.3	13 12.9	67.17	15 46.76
	27	Fr	6 22.42	0.54	8 23 36.44	3 56.02	19 21 22.4	13 32.1	67.09	15 46.86
	28	Sa	6 21.88	1.13	8 27 32.46	3 55.42	19 7 50.3	13 51.0	67.00	15 46.96
	29	St	6 20.75	1.71	8 31 27.88	3 54.84	18 53 59.3	14 9.7	66.91	15 47.06
	30	Mo	-6 19.04	2.30	8 35 22.72	3 54.26	+18 39 49.6	14 28.1	66.83	15 47.16
	31	Di	6 16.74	2.88	8 39 16.98	3 53.68	18 25 21.5	14 46.4	66.74	15 47.27
Aug.	1	Mi	6 13.86	3.47	8 43 10.66	3 53.08	18 10 35.1	15 4.2	66.65	15 47.38
	2	Do	6 10.39	4.05	8 47 3.74	3 52.51	17 55 30.9	15 21.8	66.57	15 47.50
	3	Fr	6 6.34	4.64	8 50 56.25	3 51.92	17 40 9.1	15 39.1	66.48	15 47.61
	4	Sa	6 1.70	5.22	8 54 48.17	3 51.33	17 24 30.0	15 56.2	66.39	15 47.74
	5	St	-5 56.48	5.82	8 58 39.50	3 50.74	+17 8 33.8	16 12.9	66.31	15 47.87
	6	Mo	5 50.66	6.40	9 2 30.24	3 50.15	16 52 20.9	16 29.3	66.22	15 48.01
	7	Di	5 44.26	6.99	9 6 20.39	3 49.57	16 35 51.6	16 45.4	66.13	15 48.14
	8	Mi	5 37.27	7.58	9 10 9.96	3 48.97	16 19 6.2	17 1.2	66.05	15 48.29
	9	Do	5 29.69	8.16	9 13 58.93	3 48.39	16 2 5.0	17 16.7	65.96	15 48.44
	10	Fr	5 21.53	8.75	9 17 47.32	3 47.81	15 44 48.3	17 31.8	65.88	15 48.59
	11	Sa	-5 12.78	9.33	9 21 35.13	3 47.22	+15 27 16.5	17 46.7	65.80	15 48.75
	12	St	5 3.45	9.91	9 25 22.35	3 46.64	15 9 29.8	18 1.2	65.72	15 48.92
	13	Mo	4 53.54	10.48	9 29 8.99	3 46.08	14 51 28.6	18 15.4	65.64	15 49.09
	14	Di	4 43.06	11.04	9 32 55.07	3 45.52	14 33 13.2	18 29.2	65.56	15 49.26
	15	Mi	4 32.02	11.59	9 36 40.59	3 44.96	14 14 44.0	18 42.8	65.48	15 49.43
	16	Do	4 20.43	12.14	9 40 25.55	3 44.42	13 56 1.2	18 56.0	65.40	15 49.62
	17	Fr	-4 8.29	12.67	9 44 9.97	3 43.88	+13 37 5.2	19 8.9	65.32	15 49.80
	18	Sa	3 55.62	13.20	9 47 53.85	3 43.36	13 17 56.3	19 21.5	65.25	15 49.98
	19	St	3 42.42	13.70	9 51 37.21	3 42.85	12 58 34.8	19 33.8	65.17	15 50.18
	20	Mo	3 28.72	14.20	9 55 20.06	3 42.36	12 39 1.0	19 45.7	65.10	15 50.37
	21	Di	3 14.52	14.68	9 59 2.42	3 41.87	12 19 15.3	19 57.4	65.03	15 50.57
	22	Mi	2 59.84	15.14	10 2 44.29	3 41.41	11 59 17.9	20 8.7	64.96	15 50.77
	23	Do	-2 44.70	15.59	10 6 25.70	3 40.97	+11 39 9.2	20 19.7	64.90	15 50.96
	24	Fr	2 29.11	16.01	10 10 6.67	3 40.54	11 18 49.5	20 30.5	64.83	15 51.16
	25	Sa	2 13.10	16.42	10 13 47.21	3 40.13	10 58 19.0	20 40.9	64.77	15 51.37
	26	St	1 56.68	16.82	10 17 27.34	3 39.74	10 37 38.1	20 51.0	64.71	15 51.57
	27	Mo	1 39.86	17.18	10 21 7.08	3 39.37	10 16 47.1	21 0.9	64.65	15 51.78
	28	Di	1 22.68	17.54	10 24 46.45	3 39.01	9 55 46.2	21 10.5	64.60	15 51.98
	29	Mi	-1 5.14	17.88	10 28 25.46	3 38.68	+ 9 34 35.7	21 19.7	64.54	15 52.20
	30	Do	0 47.26	18.19	10 32 4.14	3 38.36	9 13 16.0	21 28.6	64.49	15 52.41
	31	Fr	0 29.07	18.50	10 35 42.50	3 38.05	8 51 47.4	21 37.2	64.44	15 52.62
Sept.	1	Sa	0 10.57	18.80	10 39 20.55	3 37.76	8 30 10.2	21 45.5	64.39	15 52.84
	2	St	+0 8.23	19.06	10 42 58.31	3 37.49	8 8 24.7	21 53.5	64.35	15 53.06
	3	Mo	+0 27.29		10 46 35.80		+ 7 46 31.2		64.31	15 53.29



Tag	0 <sup>h</sup> Welt-Zeit							Auf- gang in (+50° Breite 0 <sup>h</sup> Länge	Unter- gang
	Julian. Zeit	Sternzeit	Nutation in AR.		Mittleres Äquinoktium 1945.0		R		
			langp. Gl.	kurzsp. Gl.	Länge	Breite			
1945	2431								
		<sup>h</sup> <sup>m</sup> <sup>s</sup>	in 0.001	in 0.001	in 0.001			<sup>h</sup> <sup>m</sup>	<sup>h</sup> <sup>m</sup>
Juli 24	660.5	20 5 24.348	983 + 2	120 43 39.5	57 17.3	-43	1.015 7585	958 4 18	19 54
25	661.5	20 9 20.905	982 + 7	121 40 56.8	57 17.9	-56	1.015 6627	988 4 19	19 53
26	662.5	20 13 17.461	981 +10	122 38 14.7	57 18.6	-67	1.015 5639	1019 4 20	19 52
27	663.5	20 17 14.017	981 +10	123 35 33.3	57 19.5	-77	1.015 4620	1050 4 22	19 50
28	664.5	20 21 10.573	980 + 8	124 32 52.8	57 20.4	-83	1.015 3570	1082 4 23	19 49
29	665.5	20 25 7.129	979 + 3	125 30 13.2	57 21.5	-87	1.015 2488	1117 4 24	19 48
30	666.5	20 29 3.685	979 - 3	126 27 34.7	57 22.6	-88	1.015 1371	1154 4 26	19 46
31	667.5	20 33 0.241	978 - 8	127 24 57.3	57 23.7	-85	1.015 0217	1194 4 27	19 45
Aug. 1	668.5	20 36 56.797	978 -11	128 22 21.0	57 24.8	-78	1.014 9023	1237 4 29	19 43
2	669.5	20 40 53.352	978 -11	129 19 45.8	57 26.1	-69	1.014 7786	1284 4 30	19 42
3	670.5	20 44 49.908	977 - 9	130 17 11.9	57 27.3	-59	1.014 6502	1332 4 31	19 40
4	671.5	20 48 46.463	977 - 4	131 14 39.2	57 28.5	-46	1.014 5170	1384 4 33	19 39
5	672.5	20 52 43.019	977 + 3	132 12 7.7	57 29.7	-32	1.014 3786	1436 4 34	19 37
6	673.5	20 56 39.574	977 + 9	133 9 37.4	57 30.8	-17	1.014 2350	1490 4 36	19 35
7	674.5	21 0 36.129	977 +13	134 7 8.2	57 31.9	- 3	1.014 0860	1545 4 37	19 34
8	675.5	21 4 32.684	978 +15	135 4 40.1	57 32.9	+ 9	1.013 9315	1599 4 38	19 32
9	676.5	21 8 29.240	978 +15	136 2 13.0	57 34.1	+20	1.013 7716	1652 4 40	19 30
10	677.5	21 12 25.795	978 +12	136 59 47.1	57 35.0	+29	1.013 6064	1704 4 41	19 28
11	678.5	21 16 22.350	979 + 7	137 57 22.1	57 36.0	+35	1.013 4360	1753 4 43	19 27
12	679.5	21 20 18.904	979 + 1	138 54 58.1	57 37.0	+38	1.013 2607	1800 4 44	19 25
13	680.5	21 24 15.459	980 - 4	139 52 35.1	57 38.0	+39	1.013 0807	1845 4 46	19 23
14	681.5	21 28 12.014	981 - 9	140 50 13.1	57 39.0	+36	1.012 8962	1886 4 47	19 21
15	682.5	21 32 8.568	981 -13	141 47 52.1	57 40.0	+31	1.012 7076	1926 4 49	19 19
16	683.5	21 36 5.123	982 -14	142 45 32.1	57 41.1	+25	1.012 5150	1963 4 50	19 17
17	684.5	21 40 1.677	983 -13	143 43 13.2	57 42.1	+15	1.012 3187	1996 4 52	19 15
18	685.5	21 43 58.232	984 -10	144 40 55.3	57 43.2	+ 4	1.012 1191	2027 4 53	19 13
19	686.5	21 47 54.786	985 - 6	145 38 38.5	57 44.3	- 7	1.011 9164	2055 4 55	19 11
20	687.5	21 51 51.340	987 0	146 36 22.8	57 45.5	-19	1.011 7109	2079 4 56	19 9
21	688.5	21 55 47.894	988 + 5	147 34 8.3	57 46.7	-30	1.011 5030	2101 4 58	19 7
22	689.5	21 59 44.448	989 + 9	148 31 55.0	57 48.1	-41	1.011 2929	2120 4 59	19 6
23	690.5	22 3 41.002	991 +10	149 29 43.1	57 49.5	-51	1.011 0809	2137 5 1	19 4
24	691.5	22 7 37.556	992 + 9	150 27 32.6	57 51.0	-58	1.010 8672	2154 5 2	19 2
25	692.5	22 11 34.110	994 + 5	151 25 23.6	57 52.6	-63	1.010 6518	2172 5 4	18 59
26	693.5	22 15 30.663	995 - 1	152 23 16.2	57 54.3	-63	1.010 4346	2189 5 5	18 57
27	694.5	22 19 27.217	997 - 6	153 21 10.5	57 56.1	-61	1.010 2157	2209 5 7	18 55
28	695.5	22 23 23.771	999 -10	154 19 6.6	57 58.0	-55	1.009 9948	2231 5 8	18 53
29	696.5	22 27 20.324	1001 -11	155 17 4.6	57 59.9	-47	1.009 7717	2256 5 10	18 51
30	697.5	22 31 16.878	1002 - 9	156 15 4.5	58 1.8	-35	1.009 5461	2283 5 11	18 49
31	698.5	22 35 13.431	1004 - 5	157 13 6.3	58 3.7	-22	1.009 3178	2314 5 13	18 47
Sept. 1	699.5	22 39 9.984	1006 + 2	158 11 10.0	58 5.6	- 9	1.009 0864	2347 5 14	18 45
2	700.5	22 43 6.538	1009 + 8	159 9 15.6	58 7.6	+ 6	1.008 8517	2381 5 16	18 43
3	701.5	22 47 3.091	1011 +12	160 7 23.2		+20	1.008 6136	5 17	18 41



Tag	Wochentag	0 <sup>b</sup> Welt-Zeit								
		Zeitgleichung Wahre Zeit minus Mittlere Zeit		Scheinbare Rektaszension		Scheinbare Deklination		Halbe Durch- gangs- Dauer St.-Zt.	Halb- messer	
1945										
Sept.	3	Mo	+ 0 <sup>m</sup> 27.29 <sup>s</sup>	19.33	10 <sup>h</sup> 46 <sup>m</sup> 35.80 <sup>s</sup>	3 <sup>m</sup> 37.22 <sup>s</sup>	+7 <sup>o</sup> 46' 31.2''	22' 1.1''	64.31	15 53.29
	4	Di	0 46.62	19.58	10 50 13.02	3 36.98	7 24 30.1	22 8.4	64.27	15 53.52
	5	Do	1 6.20	19.81	10 53 50.00	3 36.74	7 2 21.7	22 15.4	64.23	15 53.75
	6	Mi	1 26.01	20.03	10 57 26.74	3 36.52	6 40 6.3	22 22.0	64.19	15 53.98
	7	Fr	1 46.04	20.23	11 1 3.26	3 36.32	6 17 44.3	22 28.2	64.16	15 54.23
	8	Sa	2 6.27	20.43	11 4 39.58	3 36.13	5 55 16.1	22 34.2	64.13	15 54.47
	9	St	+ 2 26.70	20.60	11 8 15.71	3 35.95	+5 32 41.9	22 39.7	64.11	15 54.71
	10	Mo	2 47.30	20.75	11 11 51.66	3 35.80	5 10 2.2	22 44.9	64.08	15 54.96
	11	Di	3 8.05	20.90	11 15 27.46	3 35.66	4 47 17.3	22 49.8	64.06	15 55.22
	12	Mi	3 28.95	21.02	11 19 3.12	3 35.53	4 24 27.5	22 54.4	64.05	15 55.47
	13	Do	3 49.97	21.11	11 22 38.65	3 35.44	4 1 33.1	22 58.6	64.04	15 55.73
	14	Fr	4 11.08	21.21	11 26 14.09	3 35.35	3 38 34.5	23 2.4	64.03	15 55.99
	15	Sa	+ 4 32.29	21.27	11 29 49.44	3 35.28	+3 15 32.1	23 5.9	64.02	15 56.25
	16	St	4 53.56	21.32	11 33 24.72	3 35.24	2 52 26.2	23 9.1	64.01	15 56.52
	17	Mo	5 14.88	21.34	11 36 59.96	3 35.21	2 29 17.1	23 11.9	64.01	15 56.78
	18	Di	5 36.22	21.34	11 40 35.17	3 35.21	2 6 5.2	23 14.4	64.01	15 57.04
	19	Mi	5 57.56	21.33	11 44 10.38	3 35.22	1 42 50.8	23 16.7	64.01	15 57.31
	20	Do	6 18.89	21.28	11 47 45.60	3 35.27	1 19 34.1	23 18.4	64.01	15 57.57
	21	Fr	+ 6 40.17	21.21	11 51 20.87	3 35.34	+0 56 15.7	23 20.0	64.02	15 57.84
	22	Sa	7 1.38	21.12	11 54 56.21	3 35.44	0 32 55.7	23 21.3	64.04	15 58.11
	23	St	7 22.50	21.00	11 58 31.65	3 35.55	+0 9 34.4	23 22.3	64.06	15 58.38
	24	Mo	7 43.50	20.86	12 2 7.20	3 35.70	-0 13 47.9	23 22.8	64.08	15 58.64
	25	Di	8 4.36	20.69	12 5 42.90	3 35.86	0 37 10.7	23 23.1	64.10	15 58.91
	26	Mi	8 25.05	20.49	12 9 18.76	3 36.05	1 0 33.8	23 23.1	64.12	15 59.18
	27	Do	+ 8 45.54	20.29	12 12 54.81	3 36.27	-1 23 56.9	23 22.8	64.15	15 59.45
	28	Fr	9 5.83	20.05	12 16 31.08	3 36.50	1 47 19.7	23 22.1	64.18	15 59.71
	29	Sa	9 25.88	19.80	12 20 7.58	3 36.76	2 10 41.8	23 21.1	64.21	15 59.97
	30	St	9 45.68	19.52	12 23 44.34	3 37.03	2 34 2.9	23 19.7	64.24	16 0.24
Okt.	1	Mo	10 5.20	19.23	12 27 21.37	3 37.32	2 57 22.6	23 18.0	64.28	16 0.51
	2	Di	10 24.43	18.93	12 30 58.69	3 37.63	3 20 40.6	23 15.8	64.33	16 0.78
	3	Mi	+10 43.36	18.60	12 34 36.32	3 37.95	-3 43 56.4	23 13.4	64.37	16 1.05
	4	Do	11 1.96	18.25	12 38 14.27	3 38.30	4 7 9.8	23 10.5	64.42	16 1.32
	5	Fr	11 20.21	17.89	12 41 52.57	3 38.66	4 30 20.3	23 7.3	64.47	16 1.59
	6	Sa	11 38.10	17.52	12 45 31.23	3 39.04	4 53 27.6	23 3.7	64.53	16 1.87
	7	St	11 55.62	17.12	12 49 10.27	3 39.43	5 16 31.3	22 59.7	64.59	16 2.15
	8	Mo	12 12.74	16.71	12 52 49.70	3 39.84	5 39 31.0	22 55.3	64.65	16 2.43
	9	Di	+12 29.45	16.29	12 56 29.54	3 40.27	-6 2 26.3	22 50.6	64.71	16 2.71
	10	Mi	12 45.74	15.84	13 0 9.81	3 40.71	6 25 16.9	22 45.4	64.77	16 2.99
	11	Do	13 1.58	15.37	13 3 50.52	3 41.18	6 48 2.3	22 39.8	64.84	16 3.27
	12	Fr	13 16.95	14.90	13 7 31.70	3 41.65	7 10 42.1	22 33.9	64.91	16 3.55
	13	Sa	13 31.85	14.40	13 11 13.35	3 42.15	7 33 16.0	22 27.5	64.99	16 3.83
	14	St	+13 46.25		13 14 55.50		-7 55 43.5		65.06	16 4.11



Tag	0 <sup>h</sup> Welt-Zeit							Aufgang in $\left  \begin{matrix} +50^\circ \\ 0^\circ \end{matrix} \right.$ Breite	Untergang 0 <sup>h</sup> Länge		
	Julian. Zeit	Sternzeit	Nutation in AR.		Mittleres Äquinoktium 1945.0		R				
			langp. Gl.	kurzp. Gl.	Länge	Breite					
1945	2431										
Sept. 3	701.5	<sup>h</sup> 22 <sup>m</sup> 47 <sup>s</sup> 3.091	in 0.001	1011 +12	160 7 23.2	58 9.4	+20	1.008 6136	2417	<sup>h</sup> 5 <sup>m</sup> 17	<sup>h</sup> 18 <sup>m</sup> 41
4	702.5	22 50 59.644	1013 +15	161 5 32.6	58 11.3	+33	1.008 3719	2454	5 19	18 39	
5	703.5	22 54 56.197	1015 +15	162 3 43.9	58 13.1	+44	1.008 1265	2491	5 20	18 36	
6	704.5	22 58 52.750	1017 +13	163 1 57.0	58 14.9	+53	1.007 8774	2527	5 22	18 34	
7	705.5	23 2 49.303	1020 + 9	164 0 11.9	58 16.6	+58	1.007 6247	2563	5 23	18 32	
8	706.5	23 6 45.856	1022 + 3	164 58 28.5	58 18.3	+62	1.007 3684	2596	5 25	18 30	
9	707.5	23 10 42.409	-1024 - 2	165 56 46.8	58 20.0	+63	1.007 1088	2629	5 26	18 28	
10	708.5	23 14 38.962	1027 - 7	166 55 6.8	58 21.7	+62	1.006 8459	2660	5 28	18 25	
11	709.5	23 18 35.515	1029 -11	167 53 28.5	58 23.2	+57	1.006 5799	2687	5 29	18 23	
12	710.5	23 22 32.068	1032 -14	168 51 51.7	58 24.9	+51	1.006 3112	2713	5 31	18 21	
13	711.5	23 26 28.621	1035 -14	169 50 16.6	58 26.5	+43	1.006 0399	2734	5 32	18 19	
14	712.5	23 30 25.173	1037 -12	170 48 43.1	58 28.2	+32	1.005 7665	2754	5 34	18 17	
15	713.5	23 34 21.726	-1040 - 8	171 47 11.3	58 29.7	+21	1.005 4911	2771	5 35	18 15	
16	714.5	23 38 18.279	1042 - 3	172 45 41.0	58 31.3	+ 9	1.005 2140	2783	5 37	18 12	
17	715.5	23 42 14.831	1045 + 3	173 44 12.3	58 33.0	- 2	1.004 9357	2793	5 38	18 10	
18	716.5	23 46 11.384	1048 + 7	174 42 45.3	58 34.7	-13	1.004 6564	2798	5 40	18 8	
19	717.5	23 50 7.937	1051 + 9	175 41 20.0	58 36.5	-22	1.004 3766	2801	5 41	18 6	
20	718.5	23 54 4.489	1053 + 9	176 39 56.5	58 38.2	-29	1.004 0965	2799	5 43	18 4	
21	719.5	23 58 1.042	-1056 + 5	177 38 34.7	58 40.1	-34	1.003 8166	2796	5 44	18 1	
22	720.5	0 1 57.595	1059 0	178 37 14.8	58 42.1	-35	1.003 5370	2791	5 46	17 59	
23	721.5	0 5 54.147	1061 - 5	179 35 56.9	58 44.1	-34	1.003 2579	2787	5 47	17 57	
24	722.5	0 9 50.700	1064 - 9	180 34 41.0	58 46.3	-29	1.002 9792	2782	5 49	17 55	
25	723.5	0 13 47.252	1067 -11	181 33 27.3	58 48.5	-22	1.002 7010	2779	5 50	17 53	
26	724.5	0 17 43.805	1070 -10	182 32 15.8	58 50.8	-11	1.002 4231	2780	5 52	17 50	
27	725.5	0 21 40.358	-1072 - 6	183 31 6.6	58 53.1	+ 2	1.002 1451	2782	5 53	17 48	
28	726.5	0 25 36.910	1075 0	184 29 59.7	58 55.4	+15	1.001 8669	2786	5 55	17 46	
29	727.5	0 29 33.463	1078 + 7	185 28 55.1	58 57.7	+30	1.001 5883	2793	5 56	17 44	
30	728.5	0 33 30.016	1080 +12	186 27 52.8	59 0.0	+44	1.001 3090	2803	5 58	17 42	
Okt. 1	729.5	0 37 26.569	1083 +16	187 26 52.8	59 2.3	+56	1.001 0287	2813	5 59	17 40	
2	730.5	0 41 23.121	1086 +17	188 25 55.1	59 4.5	+68	1.000 7474	2825	6 1	17 37	
3	731.5	0 45 19.674	-1088 +14	189 24 59.6	59 6.8	+77	1.000 4649	2838	6 2	17 35	
4	732.5	0 49 16.227	1091 +11	190 24 6.4	59 8.8	+83	1.000 1811	2852	6 4	17 33	
5	733.5	0 53 12.780	1093 + 5	191 23 15.2	59 11.0	+87	0.999 8959	2864	6 5	17 31	
6	734.5	0 57 9.333	1096 0	192 22 26.2	59 13.0	+87	0.999 6095	2876	6 7	17 29	
7	735.5	1 1 5.885	1098 - 6	193 21 39.2	59 15.1	+86	0.999 3219	2887	6 8	17 27	
8	736.5	1 5 2.438	1101 -10	194 20 54.3	59 16.9	+82	0.999 0332	2896	6 10	17 24	
9	737.5	1 8 58.991	-1103 -12	195 20 11.2	59 18.9	+75	0.998 7436	2903	6 12	17 22	
10	738.5	1 12 55.545	1105 -13	196 19 30.1	59 20.8	+67	0.998 4533	2909	6 13	17 20	
11	739.5	1 16 52.098	1108 -12	197 18 50.9	59 22.6	+57	0.998 1624	2912	6 15	17 18	
12	740.5	1 20 48.651	1110 - 9	198 18 13.5	59 24.4	+46	0.997 8712	2912	6 16	17 16	
13	741.5	1 24 45.204	1112 - 5	199 17 37.9	59 26.2	+34	0.997 5800	2909	6 18	17 14	
14	742.5	1 28 41.757	-1114 0	200 17 4.1		+22	0.997 2891		6 20	17 12	



Tag		Wochentag	0 <sup>h</sup> Welt-Zeit							
			Zeitgleichung Wahre Zeit <i>minus</i> Mittlere Zeit		Scheinbare Rektaszension		Scheinbare Deklination		Halbe Durch- gangs- Dauer St.-Zt.	Halb- messer
1945										
Okt.	14	St	+13 <sup>m</sup> 46.25 <sup>s</sup>	13.89	13 <sup>h</sup> 14 <sup>m</sup> 55.50 <sup>s</sup>	3 <sup>m</sup> 42.67 <sup>s</sup>	— 7° 55' 43.5"	22' 20.9"	65.06	16' 4.11"
	15	Mo	14 0.14	13.36	13 18 38.17	3 43.19	8 18 4.4	22 13.7	65.14	16 4.39
	16	Di	14 13.50	12.81	13 22 21.36	3 43.75	8 40 18.1	22 6.3	65.23	16 4.67
	17	Mi	14 26.31	12.24	13 26 5.11	3 44.31	9 2 24.4	21 58.4	65.31	16 4.95
	18	Do	14 38.55	11.66	13 29 49.42	3 44.90	9 24 22.8	21 50.1	65.40	16 5.23
	19	Fr	14 50.21	11.05	13 33 34.32	3 45.50	9 46 12.9	21 41.5	65.49	16 5.51
	20	Sa	+15 1.26	10.42	13 37 19.82	3 46.14	—10 7 54.4	21 32.6	65.58	16 5.78
	21	St	15 11.68	9.77	13 41 5.96	3 46.78	10 29 27.0	21 23.2	65.68	16 6.05
	22	Mo	15 21.45	9.10	13 44 52.74	3 47.45	10 50 50.2	21 13.5	65.77	16 6.32
	23	Di	15 30.55	8.41	13 48 40.19	3 48.15	11 12 3.7	21 3.5	65.87	16 6.58
	24	Mi	15 38.96	7.70	13 52 28.34	3 48.85	11 33 7.2	20 53.1	65.97	16 6.85
	25	Do	15 46.66	6.98	13 56 17.19	3 49.57	11 54 0.3	20 42.2	66.07	16 7.11
	26	Fr	+15 53.64	6.23	14 0 6.76	3 50.32	—12 14 42.5	20 31.0	66.17	16 7.36
	27	Sa	15 59.87	5.48	14 3 57.08	3 51.08	12 35 13.5	20 19.5	66.28	16 7.62
	28	St	16 5.35	4.71	14 7 48.16	3 51.84	12 55 33.0	20 7.5	66.38	16 7.87
	29	Mo	16 10.06	3.94	14 11 40.00	3 52.62	13 15 40.5	19 55.1	66.49	16 8.12
	30	Di	16 14.00	3.14	14 15 32.62	3 53.41	13 35 35.6	19 42.4	66.60	16 8.38
	31	Mi	16 17.14	2.35	14 19 26.03	3 54.21	13 55 18.0	19 29.1	66.71	16 8.62
Nov.	1	Do	+16 19.49	1.54	14 23 20.24	3 55.01	—14 14 47.1	19 15.5	66.83	16 8.87
	2	Fr	16 21.03	0.74	14 27 15.25	3 55.82	14 34 2.6	19 1.4	66.94	16 9.12
	3	Sa	16 21.77	0.09	14 31 11.07	3 56.64	14 53 4.0	18 47.0	67.05	16 9.36
	4	St	16 21.68	0.90	14 35 7.71	3 57.46	15 11 51.0	18 32.0	67.17	16 9.60
	5	Mo	16 20.78	1.72	14 39 5.17	3 58.28	15 30 23.0	18 16.7	67.29	16 9.85
	6	Di	16 19.06	2.56	14 43 3.45	3 59.12	15 48 39.7	18 0.9	67.40	16 10.09
	7	Mi	+16 16.50	3.39	14 47 2.57	3 59.94	—16 6 40.6	17 44.8	67.52	16 10.33
	8	Do	16 13.11	4.22	14 51 2.51	4 0.77	16 24 25.4	17 28.2	67.64	16 10.57
	9	Fr	16 8.89	5.05	14 55 3.28	4 1.61	16 41 53.6	17 11.2	67.76	16 10.81
	10	Sa	16 3.84	5.89	14 59 4.89	4 2.44	16 59 4.8	16 53.7	67.88	16 11.05
	11	St	15 57.95	6.72	15 3 7.33	4 3.27	17 15 58.5	16 35.9	68.00	16 11.28
	12	Mo	15 51.23	7.54	15 7 10.60	4 4.11	17 32 34.4	16 17.6	68.12	16 11.51
	13	Di	+15 43.69	8.38	15 11 14.71	4 4.93	—17 48 52.0	15 59.0	68.24	16 11.74
	14	Mi	15 35.31	9.20	15 15 19.64	4 5.76	18 4 51.0	15 39.9	68.36	16 11.97
	15	Do	15 26.11	10.04	15 19 25.40	4 6.59	18 20 30.9	15 20.5	68.48	16 12.19
	16	Fr	15 16.07	10.85	15 23 31.99	4 7.41	18 35 51.4	15 0.6	68.60	16 12.41
	17	Sa	15 5.22	11.68	15 27 39.40	4 8.23	18 50 52.0	14 40.5	68.71	16 12.62
	18	St	14 53.54	12.50	15 31 47.63	4 9.06	19 5 32.5	14 20.0	68.83	16 12.83
	19	Mo	+14 41.04	13.32	15 35 56.69	4 9.88	—19 19 52.5	13 59.0	68.94	16 13.04
	20	Di	14 27.72	14.14	15 40 6.57	4 10.69	19 33 51.5	13 37.8	69.06	16 13.24
	21	Mi	14 13.58	14.95	15 44 17.26	4 11.51	19 47 29.3	13 16.3	69.17	16 13.43
	22	Do	13 58.63	15.77	15 48 28.77	4 12.33	20 0 45.6	12 54.3	69.28	16 13.62
	23	Fr	13 42.86	16.57	15 52 41.10	4 13.12	20 13 39.9	12 32.1	69.39	16 13.81
	24	Sa	+13 26.29		15 56 54.22		—20 26 12.0		69.50	16 14.00



Tag	0 <sup>h</sup> Welt-Zeit							Aufgang in (+50° Breite 0 <sup>h</sup> Länge	Untergang in (+50° Breite 0 <sup>h</sup> Länge
	Julian. Zeit	Sternzeit	Nutation in AR.		Mittleres Äquinoktium 1945.0		R		
			langp. Gl.	kurzp. Gl.	Länge	Breite			
1945	2431								
		<sup>h</sup> <sup>m</sup> <sup>s</sup>	in o.oor		<sup>o</sup> <sup>'</sup> <sup>"</sup>		in o.oor		<sup>h</sup> <sup>m</sup> <sup>s</sup> <sup>h</sup> <sup>m</sup>
Okt. 14	742.5	1 28 41.757	-1114 0	200 17 4.1	59 27.9	+ 22	0.997 2891	2903	6 20 17 12
15	743.5	1 32 38.311	1116 + 5	201 16 32.0	59 29.7	+ 11	0.996 9988	2894	6 21 17 10
16	744.5	1 36 34.864	1118 + 8	202 16 1.7	59 31.4	+ 2	0.996 7094	2880	6 23 17 8
17	745.5	1 40 31.417	1120 + 8	203 15 33.1	59 33.2	- 6	0.996 4214	2863	6 24 17 6
18	746.5	1 44 27.971	1122 + 6	204 15 6.3	59 34.9	- 11	0.996 1351	2841	6 26 17 4
19	747.5	1 48 24.525	1123 + 1	205 14 41.2	59 36.8	- 13	0.995 8510	2816	6 28 17 2
20	748.5	1 52 21.078	-1125 - 4	206 14 18.0	59 38.7	- 11	0.995 5694	2789	6 29 17 0
21	749.5	1 56 17.632	1127 - 9	207 13 56.7	59 40.7	- 7	0.995 2905	2759	6 31 16 58
22	750.5	2 0 14.186	1128 - 12	208 13 37.4	59 42.7	0	0.995 0146	2730	6 33 16 56
23	751.5	2 4 10.740	1130 - 12	209 13 20.1	59 44.8	+ 11	0.994 7416	2700	6 34 16 54
24	752.5	2 8 7.294	1131 - 8	210 13 4.9	59 47.0	+ 23	0.994 4716	2672	6 36 16 52
25	753.5	2 12 3.848	1132 - 3	211 12 51.9	59 49.2	+ 37	0.994 2044	2646	6 38 16 50
26	754.5	2 16 0.402	-1133 + 5	212 12 41.1	59 51.4	+ 52	0.993 9398	2623	6 39 16 48
27	755.5	2 19 56.957	1134 + 11	213 12 32.5	59 53.7	+ 65	0.993 6775	2601	6 41 16 47
28	756.5	2 23 53.511	1135 + 16	214 12 26.2	59 55.9	+ 78	0.993 4174	2583	6 43 16 45
29	757.5	2 27 50.066	1136 + 17	215 12 22.1	59 58.1	+ 91	0.993 1591	2565	6 44 16 43
30	758.5	2 31 46.620	1137 + 16	216 12 20.2	60 0.2	+ 100	0.992 9026	2551	6 46 16 41
31	759.5	2 35 43.175	1138 + 13	217 12 20.4	60 2.4	+ 107	0.992 6475	2537	6 47 16 39
Nov. 1	760.5	2 39 39.730	-1138 + 8	218 12 22.8	60 4.4	+ 110	0.992 3938	2524	6 49 16 38
2	761.5	2 43 36.284	1139 + 2	219 12 27.2	60 6.4	+ 111	0.992 1414	2511	6 51 16 36
3	762.5	2 47 32.839	1139 - 4	220 12 33.6	60 8.3	+ 109	0.991 8903	2500	6 52 16 34
4	763.5	2 51 29.394	1140 - 8	221 12 41.9	60 10.2	+ 105	0.991 6403	2486	6 54 16 33
5	764.5	2 55 25.950	1140 - 11	222 12 52.1	60 12.0	+ 99	0.991 3917	2474	6 56 16 31
6	765.5	2 59 22.505	1140 - 12	223 13 4.1	60 13.7	+ 90	0.991 1443	2459	6 57 16 29
7	766.5	3 3 19.060	-1140 - 12	224 13 17.8	60 15.4	+ 80	0.990 8984	2444	6 59 16 28
8	767.5	3 7 15.615	1140 - 9	225 13 33.2	60 17.0	+ 68	0.990 6540	2426	7 1 16 26
9	768.5	3 11 12.171	1140 - 5	226 13 50.2	60 18.6	+ 56	0.990 4114	2407	7 2 16 25
10	769.5	3 15 8.727	1139 - 1	227 14 8.8	60 20.0	+ 43	0.990 1707	2386	7 4 16 23
11	770.5	3 19 5.282	1139 + 4	228 14 28.8	60 21.5	+ 32	0.989 9321	2361	7 6 16 22
12	771.5	3 23 1.838	1139 + 7	229 14 50.3	60 22.9	+ 21	0.989 6960	2334	7 7 16 20
13	772.5	3 26 58.394	-1138 + 8	230 15 13.2	60 24.2	+ 13	0.989 4626	2302	7 9 16 19
14	773.5	3 30 54.950	1137 + 6	231 15 37.4	60 25.5	+ 7	0.989 2324	2266	7 11 16 18
15	774.5	3 34 51.506	1137 + 2	232 16 2.9	60 26.9	+ 4	0.989 0058	2227	7 12 16 16
16	775.5	3 38 48.062	1136 - 3	233 16 29.8	60 28.2	+ 4	0.988 7831	2184	7 14 16 15
17	776.5	3 42 44.619	1135 - 9	234 16 58.0	60 29.5	+ 8	0.988 5647	2138	7 16 16 14
18	777.5	3 46 41.175	1134 - 13	235 17 27.5	60 31.0	+ 15	0.988 3509	2088	7 17 16 13
19	778.5	3 50 37.732	-1133 - 14	236 17 58.5	60 32.4	+ 25	0.988 1421	2038	7 19 16 12
20	779.5	3 54 34.288	1131 - 12	237 18 30.9	60 33.9	+ 37	0.987 9383	1985	7 20 16 11
21	780.5	3 58 30.845	1130 - 6	238 19 4.8	60 35.4	+ 51	0.987 7398	1934	7 22 16 10
22	781.5	4 2 27.402	1129 + 1	239 19 40.2	60 37.1	+ 64	0.987 5464	1883	7 23 16 9
23	782.5	4 6 23.959	1127 + 8	240 20 17.3	60 38.7	+ 78	0.987 3581	1835	7 25 16 8
24	783.5	4 10 20.516	-1126 + 14	241 20 56.0		+ 92	0.987 1746		7 26 16 7



Tag	Wochentag	0 <sup>h</sup> Welt-Zeit							
		Zeitgleichung Wahre Zeit <i>minus</i> Mittlere Zeit		Scheinbare Rektaszension		Scheinbare Deklination		Halbe Durch- gangs- Dauer St.-Zt.	Halb- messer
1945									
Nov. 24	Sa	+13 <sup>m</sup> 26.29	17.36 <sup>a</sup>	15 <sup>h</sup> 56 <sup>m</sup> 54.22 <sup>a</sup>	4 <sup>m</sup> 13.92 <sup>a</sup>	-20 <sup>o</sup> 26' 12.0"	12' 9.5"	69.50	16' 14.00"
25	St	13 8.93	18.14	16 1 8.14	4 14.70	20 38 21.5	11 46.5	69.61	16 14.17
26	Mo	12 50.79	18.91	16 5 22.84	4 15.47	20 50 8.0	11 23.4	69.71	16 14.34
27	Di	12 31.88	19.66	16 9 38.31	4 16.22	21 1 31.4	10 59.7	69.81	16 14.51
28	Mi	12 12.22	20.39	16 13 54.53	4 16.94	21 12 31.1	10 35.7	69.91	16 14.68
29	Do	11 51.83	21.10	16 18 11.47	4 17.66	21 23 6.8	10 11.6	70.01	16 14.84
30	Fr	+11 30.73	21.80	16 22 29.13	4 18.35	-21 33 18.4	9 47.0	70.10	16 14.99
Dez. 1	Sa	11 8.93	22.46	16 26 47.48	4 19.02	21 43 5.4	9 22.1	70.20	16 15.14
2	St	10 46.47	23.11	16 31 6.50	4 19.67	21 52 27.5	8 57.0	70.28	16 15.30
3	Mo	10 23.36	23.73	16 35 26.17	4 20.29	22 1 24.5	8 31.5	70.36	16 15.45
4	Di	9 59.63	24.32	16 39 46.46	4 20.88	22 9 56.0	8 5.8	70.44	16 15.59
5	Mi	9 35.31	24.88	16 44 7.34	4 21.44	22 18 1.8	7 39.9	70.52	16 15.73
6	Do	+ 9 10.43	25.42	16 48 28.78	4 21.98	-22 25 41.7	7 13.6	70.60	16 15.86
7	Fr	8 45.01	25.93	16 52 50.76	4 22.48	22 32 55.3	6 47.2	70.67	16 16.00
8	Sa	8 19.08	26.40	16 57 13.24	4 22.96	22 39 42.5	6 20.4	70.74	16 16.13
9	St	7 52.68	26.85	17 1 36.20	4 23.41	22 46 2.9	5 53.6	70.81	16 16.26
10	Mo	7 25.83	27.26	17 5 59.61	4 23.81	22 51 56.5	5 26.4	70.87	16 16.39
11	Di	6 58.57	27.64	17 10 23.42	4 24.20	22 57 22.9	4 59.2	70.92	16 16.51
12	Mi	+ 6 30.93	27.98	17 14 47.62	4 24.54	-23 2 22.1	4 31.7	70.97	16 16.63
13	Do	6 2.95	28.30	17 19 12.16	4 24.86	23 6 53.8	4 4.1	71.02	16 16.74
14	Fr	5 34.65	28.59	17 23 37.02	4 25.15	23 10 57.9	3 36.4	71.06	16 16.85
15	Sa	5 6.06	28.84	17 28 2.17	4 25.40	23 14 34.3	3 8.5	71.10	16 16.95
16	St	4 37.22	29.07	17 32 27.57	4 25.62	23 17 42.8	2 40.6	71.14	16 17.04
17	Mo	4 8.15	29.26	17 36 53.19	4 25.82	23 20 23.4	2 12.6	71.17	16 17.13
18	Di	+ 3 38.89	29.43	17 41 19.01	4 25.99	-23 22 36.0	1 44.5	71.20	16 17.22
19	Mi	3 9.46	29.58	17 45 45.00	4 26.14	23 24 20.5	1 16.4	71.22	16 17.30
20	Do	2 39.88	29.68	17 50 11.14	4 26.24	23 25 36.9	0 48.2	71.23	16 17.37
21	Fr	2 10.20	29.77	17 54 37.38	4 26.33	23 26 25.1	0 19.9	71.24	16 17.44
22	Sa	1 40.43	29.82	17 59 3.71	4 26.38	23 26 45.0	0 8.2	71.25	16 17.50
23	St	1 10.61	29.85	18 3 30.09	4 26.40	23 26 36.8	0 36.5	71.26	16 17.55
24	Mo	+ 0 40.76	29.84	18 7 56.49	4 26.40	-23 26 0.3	1 4.7	71.26	16 17.60
25	Di	+ 0 10.92	29.79	18 12 22.89	4 26.35	23 24 55.6	1 32.9	71.25	16 17.64
26	Mi	- 0 18.87	29.71	18 16 49.24	4 26.27	23 23 22.7	2 1.1	71.24	16 17.67
27	Do	0 48.58	29.60	18 21 15.51	4 26.16	23 21 21.6	2 29.2	71.22	16 17.70
28	Fr	1 18.18	29.46	18 25 41.67	4 26.01	23 18 52.4	2 57.3	71.20	16 17.73
29	Sa	1 47.64	29.27	18 30 7.68	4 25.83	23 15 55.1	3 25.3	71.17	16 17.75
30	St	- 2 16.91	29.06	18 34 33.51	4 25.62	-23 12 29.8	3 53.1	71.14	16 17.77
31	Mo	2 45.97	28.80	18 38 59.13	4 25.36	23 8 36.7	4 21.0	71.11	16 17.78
32	Di	- 3 14.77		18 43 24.49		-23 4 15.7		71.07	16 17.79



Tag	0 <sup>h</sup> Welt-Zeit						Aufgang in { +50° Breite 0 <sup>h</sup> Länge	Untergang	
	Julian. Zeit	Sternzeit	Nutation in A.R.		Mittleres Äquinoktium 1945.0				R
			langp. Gl.	kurzp. Gl.	Länge	Breite			
1945	2431								
		<sup>h</sup> <sup>m</sup> <sup>s</sup>	in 0.001	°	'	"	in 0.01	<sup>h</sup> <sup>m</sup>	
Nov. 24	783.5	4 10 20.516	-1126 +14	241 20 56.0	60 40.4	+ 92	0.987 1746	1789 7 26 16 7	
25	784.5	4 14 17.073	1124 +18	242 21 36.4	60 41.9	+103	0.986 9957	1745 7 28 16 6	
26	785.5	4 18 13.630	1122 +18	243 22 18.3	60 43.6	+113	0.986 8212	1705 7 29 16 5	
27	786.5	4 22 10.187	1120 +15	244 23 1.9	60 45.2	+120	0.986 6507	1665 7 31 16 4	
28	787.5	4 26 6.744	1118 +10	245 23 47.1	60 46.7	+125	0.986 4842	1628 7 32 16 3	
29	788.5	4 30 3.302	1116 + 4	246 24 33.8	60 48.2	+127	0.986 3214	1593 7 34 16 3	
30	789.5	4 33 59.859	-1114 - 2	247 25 22.0	60 49.5	+125	0.986 1621	1559 7 35 16 2	
Dez. 1	790.5	4 37 56.417	1112 - 7	248 26 11.5	60 50.9	+121	0.986 0062	1526 7 36 16 1	
2	791.5	4 41 52.974	1110 -10	249 27 2.4	60 52.2	+114	0.985 8536	1493 7 38 16 1	
3	792.5	4 45 49.532	1108 -12	250 27 54.6	60 53.4	+105	0.985 7043	1462 7 39 16 0	
4	793.5	4 49 46.090	1105 -11	251 28 48.0	60 54.5	+ 94	0.985 5581	1430 7 40 16 0	
5	794.5	4 53 42.647	1103 - 9	252 29 42.5	60 55.5	+ 83	0.985 4151	1398 7 41 15 59	
6	795.5	4 57 39.205	-1100 - 6	253 30 38.0	60 56.5	+ 70	0.985 2753	1366 7 43 15 59	
7	796.5	5 1 35.763	1098 - 1	254 31 34.5	60 57.4	+ 56	0.985 1387	1332 7 44 15 59	
8	797.5	5 5 32.321	1095 + 3	255 32 31.9	60 58.1	+ 44	0.985 0055	1297 7 45 15 59	
9	798.5	5 9 28.879	1093 + 7	256 33 30.0	60 58.8	+ 33	0.984 8758	1260 7 46 15 58	
10	799.5	5 13 25.437	1090 + 9	257 34 28.8	60 59.4	+ 23	0.984 7498	1221 7 47 15 58	
11	800.5	5 17 21.995	1087 + 8	258 35 28.2	61 0.1	+ 15	0.984 6277	1178 7 48 15 58	
12	801.5	5 21 18.553	-1085 + 4	259 36 28.3	61 0.5	+ 10	0.984 5099	1132 7 49 15 58	
13	802.5	5 25 15.111	1082 - 1	260 37 28.8	61 0.9	+ 10	0.984 3967	1083 7 50 15 58	
14	803.5	5 29 11.670	1079 - 7	261 38 29.7	61 1.4	+ 12	0.984 2884	1030 7 51 15 58	
15	804.5	5 33 8.228	1076 -12	262 39 31.1	61 1.9	+ 17	0.984 1854	973 7 52 15 58	
16	805.5	5 37 4.786	1073 -15	263 40 33.0	61 2.3	+ 25	0.984 0881	914 7 53 15 59	
17	806.5	5 41 1.344	1070 -14	264 41 35.3	61 2.7	+ 36	0.983 9967	852 7 53 15 59	
18	807.5	5 44 57.903	-1067 - 9	265 42 38.0	61 3.3	+ 49	0.983 9115	787 7 54 15 59	
19	808.5	5 48 54.461	1064 - 3	266 43 41.3	61 3.8	+ 63	0.983 8328	723 7 55 15 59	
20	809.5	5 52 51.019	1061 + 5	267 44 45.1	61 4.4	+ 77	0.983 7605	658 7 55 16 0	
21	810.5	5 56 47.577	1059 +12	268 45 49.5	61 5.0	+ 90	0.983 6947	595 7 56 16 0	
22	811.5	6 0 44.136	1056 +16	269 46 54.5	61 5.7	+102	0.983 6352	533 7 56 16 1	
23	812.5	6 4 40.694	1053 +18	270 48 0.2	61 6.3	+112	0.983 5819	475 7 57 16 1	
24	813.5	6 8 37.252	-1050 +16	271 49 6.5	61 7.0	+120	0.983 5344	419 7 57 16 2	
25	814.5	6 12 33.811	1047 +12	272 50 13.5	61 7.6	+124	0.983 4925	365 7 58 16 3	
26	815.5	6 16 30.369	1044 + 6	273 51 21.1	61 8.1	+125	0.983 4560	314 7 58 16 3	
27	816.5	6 20 26.927	1041 0	274 52 29.2	61 8.7	+124	0.983 4246	264 7 58 16 4	
28	817.5	6 24 23.486	1038 - 5	275 53 37.9	61 9.1	+121	0.983 3982	218 7 59 16 5	
29	818.5	6 28 20.044	1035 - 9	276 54 47.0	61 9.6	+114	0.983 3764	173 7 59 16 6	
30	819.5	6 32 16.602	-1032 -12	277 55 56.6	61 9.9	+105	0.983 3591	130 7 59 16 6	
31	820.5	6 36 13.160	1029 -12	278 57 6.5	61 10.2	+ 94	0.983 3461	89 7 59 16 7	
32	821.5	6 40 9.718	-1027 -10	279 58 16.7		+ 82	0.983 3372	7 59 16 8	



## Sonnenkoordinaten 1945

Welt-Zeit		Mittleres Äquinoktium 1945.0											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Jan.	0	+0.157 386	+17 233	- 48	+3	-0.890 448	+ 2 716	+275	-5	-0.386 189	+1 179	+120	-1
	1	0.174 619	17 180	53	+2	0.887 732	2 991	275	-2	0.385 010	1 298	119	-3
	2	0.191 799	17 120	60	-5	0.884 741	3 266	275	+3	0.383 712	1 417	119	-3
	3	0.208 919	17 057	63	+3	0.881 475	3 540	274	+4	0.382 295	1 535	118	-4
	4	0.225 976	16 989	68	+4	0.877 935	3 813	273	+3	0.380 760	1 654	119	+3
	5	0.242 965	16 914	75	-4	0.874 122	4 085	272	+2	0.379 106	1 772	118	+3
	6	+0.259 879	+16 834	- 80	-3	-0.870 037	+ 4 356	+271	+3	-0.377 334	+1 889	+117	+2
	7	0.276 713	16 750	84	+3	0.865 681	4 626	270	+4	0.375 445	2 006	117	+3
	8	0.293 463	16 660	90	+4	0.861 055	4 895	269	+4	0.373 439	2 123	117	+5
	9	0.310 123	16 565	95	+2	0.856 160	5 162	267	+1	0.371 316	2 238	115	0
	10	0.326 688	16 463	102	-3	0.850 998	5 428	266	+4	0.369 078	2 354	116	+5
	11	0.343 151	16 358	105	+3	0.845 570	5 693	265	+5	0.366 724	2 468	114	+1
	12	+0.359 509	+16 246	-112	-2	-0.839 877	+ 5 956	+263	+1	-0.364 256	+2 583	+115	+5
	13	0.375 755	16 129	117	-4	0.833 921	6 216	260	-3	0.361 673	2 695	112	-2
	14	0.391 884	16 006	123	-5	0.827 705	6 475	259	0	0.358 978	2 807	112	-1
	15	0.407 890	15 878	128	-3	0.821 230	6 732	257	+1	0.356 171	2 919	112	+5
	16	0.423 768	15 746	132	+1	0.814 498	6 986	254	0	0.353 252	3 030	111	+5
	17	0.439 514	15 607	139	-4	0.807 512	7 237	251	-1	0.350 222	3 138	108	-4
	18	+0.455 121	+15 464	-143	-2	-0.800 275	+ 7 487	+250	+5	-0.347 084	+3 247	+109	+1
	19	0.470 585	15 316	148	0	0.792 788	7 732	245	-2	0.343 837	3 353	106	-4
	20	0.485 901	15 164	152	+3	0.785 056	7 976	244	+3	0.340 484	3 459	106	+1
	21	0.501 065	15 006	158	-1	0.777 080	8 216	240	+3	0.337 025	3 564	105	+3
	22	0.516 071	14 846	160	+4	0.768 864	8 454	238	+5	0.333 461	3 667	103	-2
	23	0.530 917	14 679	167	-5	0.760 410	8 689	235	+3	0.329 794	3 768	101	-4
	24	+0.545 596	+14 510	-169	+1	-0.751 721	+ 8 920	+231	-4	-0.326 026	+3 869	+101	+3
	25	0.560 106	14 336	174	-3	0.742 801	9 148	228	-4	0.322 157	3 969	100	+4
	26	0.574 442	14 158	178	-4	0.733 653	9 375	227	+3	0.318 188	4 066	97	0
	27	0.588 600	13 976	182	-3	0.724 278	9 598	223	0	0.314 122	4 164	98	+4
	28	0.602 576	13 791	185	-1	0.714 680	9 818	220	-2	0.309 958	4 258	94	-3
	29	0.616 367	13 600	191	-5	0.704 862	10 035	217	-3	0.305 700	4 353	95	+3
30	+0.629 967	+13 407	-193	+2	-0.694 827	+10 250	+215	-1	-0.301 347	+4 446	+ 93	+3	
Febr.	31	0.643 374	13 210	197	+4	0.684 577	10 461	211	-3	0.296 901	4 537	91	+1
1	0.656 584	13 008	202	-2	0.674 116	10 669	208	-2	0.292 364	4 628	91	+4	
2	0.669 592	12 802	206	-3	0.663 447	10 875	206	+3	0.287 736	4 716	88	-1	
3	0.682 394	12 593	209	+3	0.652 572	11 077	202	+1	0.283 020	4 804	88	+4	
4	0.694 987	12 380	213	+2	0.641 495	11 275	198	-2	0.278 216	4 890	86	+2	
5	+0.707 367	+12 162	-218	-1	-0.630 220	+11 472	+197	+5	-0.273 326	+4 975	+ 85	+3	
6	0.719 529	11 942	220	+3	0.618 748	11 663	191	-4	0.268 351	5 058	83	+1	
7	0.731 471	11 716	226	-3	0.607 085	11 852	189	-1	0.263 293	5 139	81	-2	
8	0.743 187	11 488	228	+3	0.595 233	12 036	184	-4	0.258 154	5 220	81	+4	
9	0.754 675	+11 256	-232	+1	0.583 197	+12 218	+182	+3	0.252 934	+5 298	+ 78	0	
10	+0.765 931	+11 027	-237	-5	-0.570 979	+12 397	+177	+1	-0.247 636	+5 377	+ 77	+3	

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1945.0												
		X			$\Delta X^*$	Y			$\Delta Y^*$	Z			$\Delta Z^*$	
1945														
Febr.	10	+0.765 931	+11 019	-237	-5	-0.570 979	+12 395	+177	+1	-0.247 636	+5 375	+77	+3	
	11	0.776 950	10 779	240	-3	0.558 584	12 569	174	+2	0.242 261	5 451	76	+3	
	12	0.787 729	10 536	243	-1	0.546 015	12 737	168	-4	0.236 810	5 523	72	-4	
	13	0.798 265	10 289	247	-3	0.533 278	12 902	165	0	0.231 287	5 595	72	+3	
	14	0.808 554	10 038	251	-4	0.520 376	13 063	161	+1	0.225 692	5 665	70	+4	
	15	0.818 592	9 786	252	+3	0.507 313	13 218	155	-3	0.220 027	5 733	68	+2	
	16	+0.828 378	+ 9 530	-256	+1	-0.494 095	+13 369	+151	-1	-0.214 294	+5 798	+65	-2	
	17	0.837 908	9 271	259	-1	0.480 726	13 516	147	+1	0.208 496	5 862	64	+1	
	18	0.847 179	9 011	260	+2	0.467 210	13 658	142	+1	0.202 634	5 924	62	+2	
	19	0.856 190	8 747	264	-3	0.453 552	13 795	137	-1	0.196 710	5 983	59	-1	
	20	0.864 937	8 482	265	0	0.439 757	13 929	134	+4	0.190 727	6 042	59	+4	
	21	0.873 419	8 215	267	+1	0.425 828	14 057	128	0	0.184 685	6 097	55	-2	
	22	+0.881 634	+ 7 945	-270	-3	-0.411 771	+14 182	+125	+3	-0.178 588	+6 151	+54	+1	
	23	0.889 579	7 674	271	0	0.397 589	14 302	120	-2	0.172 437	6 204	53	+4	
	24	0.897 253	7 401	273	+2	0.383 287	14 417	115	-5	0.166 233	6 253	49	-3	
	25	0.904 654	7 127	274	+4	0.368 870	14 529	112	-3	0.159 980	6 302	49	+1	
	26	0.911 781	6 849	278	-2	0.354 341	14 636	107	-4	0.153 678	6 348	46	-1	
	27	0.918 630	6 572	277	+4	0.339 705	14 739	103	-4	0.147 330	6 393	45	+1	
	28	+0.925 202	+ 6 291	-281	-3	-0.324 966	+14 838	+ 99	-2	-0.140 937	+6 435	+42	-1	
	März	1	0.931 493	6 010	281	+1	0.310 128	14 932	94	-3	0.134 502	6 476	41	+2
		2	0.937 503	5 726	284	-4	0.295 196	15 022	90	-2	0.128 026	6 516	40	+4
		3	0.943 229	5 441	285	-4	0.280 174	15 108	86	+1	0.121 510	6 552	36	-4
		4	0.948 670	5 154	287	-5	0.265 066	15 189	81	+1	0.114 958	6 587	35	-3
		5	0.953 824	4 866	288	-2	0.249 877	15 266	77	+3	0.108 371	6 620	33	0
		6	+0.958 690	+ 4 576	-290	-2	-0.234 611	+15 339	+ 73	+5	-0.101 751	+6 652	+32	+5
		7	0.963 266	4 286	290	+3	0.219 272	15 406	67	-1	0.095 099	6 681	29	+3
		8	0.967 552	3 992	294	-4	0.203 866	15 470	64	+2	0.088 418	6 709	28	+4
9		0.971 544	3 699	293	+4	0.188 396	15 527	57	-4	0.081 709	6 734	25	-2	
10		0.975 243	3 404	295	+3	0.172 869	15 582	55	+4	0.074 975	6 757	23	-4	
11		0.978 647	3 107	297	0	0.157 287	15 630	48	-1	0.068 218	6 778	21	-4	
12		+0.981 754	+ 2 810	-297	+3	-0.141 657	+15 674	+ 44	+1	-0.061 440	+6 797	+19	-1	
13		0.984 564	2 512	298	+3	0.125 983	15 713	39	0	0.054 643	6 814	17	+1	
14		0.987 076	2 213	299	+2	0.110 270	15 745	32	-4	0.047 829	6 829	15	+4	
15		0.989 289	1 913	300	0	0.094 525	15 774	29	+4	0.041 000	6 841	12	+1	
16	0.991 202	1 614	299	+3	0.078 751	15 797	23	+5	0.034 159	6 852	11	+3		
17	0.992 816	1 315	299	+3	0.062 954	15 815	18	+5	0.027 307	6 859	7	-4		
18	+0.994 131	+ 1 015	-300	-3	-0.047 139	+15 828	+ 13	+3	-0.020 448	+6 865	+ 6	-3		
19	0.995 146	716	299	-4	0.031 311	15 836	8	0	0.013 583	6 868	3	-3		
20	0.995 862	417	299	-4	-0.015 475	15 838	+ 2	-3	-0.006 715	6 870	+ 2	+2		
21	0.996 279	+ 120	297	0	+0.000 363	15 837	- 1	+4	+0.000 155	6 869	- 1	+1		
22	0.996 399	- 179	299	-5	0.016 200	+15 831	6	+3	0.007 024	+6 867	2	+3		
23	+0.996 220	-296	+4	+4	+0.032 031	- 11	-1	+0.013 891	- 5	-3				

 \*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



O <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1945.0											
		X			$\Delta X^*$	Y			$\Delta Y^*$	Z			$\Delta Z^*$
1945													
März	23	+0.996 220	-475	-296	+4	+0.032 031	+15 820	-11	-1	+0.013 891	+6 862	-5	-3
	24	0.995 745	771	296	+4	0.047 851	15 804	16	-2	0.020 753	6 855	7	-5
	25	0.994 974	1 067	296	+2	0.063 655	15 785	19	+3	0.027 608	6 846	9	-4
	26	0.993 907	1 361	294	+4	0.079 440	15 761	24	+1	0.034 454	6 836	10	-2
	27	0.992 546	1 656	295	-2	0.095 201	15 732	29	-4	0.041 290	6 823	13	-4
	28	0.990 890	1 949	293	+3	0.110 933	15 699	33	-5	0.048 113	6 809	14	-3
	29	+0.988 941	-2 241	-292	+3	+0.126 632	+15 661	-38	-5	+0.054 922	+6 792	-17	-4
	30	0.986 700	2 533	292	-1	0.142 293	15 620	41	0	0.061 714	6 774	18	0
	31	0.984 167	2 824	291	-1	0.157 913	15 574	46	0	0.068 488	6 754	20	+1
	April	1	0.981 343	3 114	290	-1	0.173 487	15 523	51	-3	0.075 242	6 732	22
2		0.978 229	3 402	288	+3	0.189 010	15 469	54	+2	0.081 974	6 709	23	+3
3		0.974 827	3 691	289	-4	0.204 479	15 409	60	-1	0.088 683	6 682	27	-3
4		+0.971 136	-3 977	-286	+1	+0.219 888	+15 346	-63	+4	+0.095 365	+6 655	-27	+1
5		0.967 159	4 264	287	-5	0.235 234	15 278	68	+3	0.102 020	6 625	30	-1
6		0.962 895	4 548	284	+1	0.250 512	15 206	72	+2	0.108 645	6 594	31	+3
7		0.958 347	4 832	284	-1	0.265 718	15 128	78	-3	0.115 239	6 561	33	+3
8		0.953 515	5 113	281	+4	0.280 846	15 047	81	+2	0.121 800	6 525	36	-2
9		0.948 402	5 395	282	-4	0.295 893	14 960	87	0	0.128 325	6 488	37	+1
10		+0.943 007	-5 674	-279	-2	+0.310 853	+14 870	-90	+4	+0.134 813	+6 449	-39	0
Mai	11	0.937 333	5 951	277	+1	0.325 723	14 773	97	-2	0.141 262	6 407	42	-3
	12	0.931 382	6 226	275	+1	0.340 496	14 673	100	+4	0.147 669	6 364	43	-1
	13	0.925 156	6 499	273	-1	0.355 169	14 568	105	+4	0.154 033	6 318	46	-2
	14	0.918 657	6 770	271	-5	0.369 737	14 459	109	+4	0.160 351	6 271	47	+2
	15	0.911 887	7 038	268	-4	0.384 196	14 344	115	-1	0.166 622	6 222	49	+2
	16	+0.904 849	-7 304	-266	-4	+0.398 540	+14 226	-118	+3	+0.172 844	+6 171	-51	-1
	17	0.897 545	7 565	261	+4	0.412 766	14 104	122	+4	0.179 015	6 117	54	-5
	18	0.889 980	7 826	261	-4	0.426 870	13 978	126	+3	0.185 132	6 063	54	0
	19	0.882 154	8 082	256	+2	0.440 848	13 848	130	-1	0.191 195	6 006	57	-2
	20	0.874 072	8 336	254	0	0.454 696	13 713	135	-4	0.197 201	5 949	57	+3
21	0.865 736	8 588	252	-3	0.468 409	13 577	136	+4	0.203 150	5 888	61	-5	
22	+0.857 148	-8 835	-247	+3	+0.481 986	+13 435	-142	-2	+0.209 038	+5 827	-61	0	
23	0.848 313	9 081	246	-4	0.495 421	13 291	144	+3	0.214 865	5 765	62	+3	
24	0.839 232	9 324	243	-5	0.508 712	13 143	148	+4	0.220 630	5 700	65	-1	
25	0.829 908	9 564	240	-3	0.521 855	12 992	151	+4	0.226 330	5 635	65	+2	
26	0.820 344	9 800	236	+5	0.534 847	12 837	155	+2	0.231 965	5 567	68	-3	
27	0.810 544	10 033	233	+4	0.547 684	12 679	158	0	0.237 532	5 498	69	-1	
28	+0.800 511	-10 265	-232	-5	+0.560 363	+12 517	-162	-2	+0.243 030	+5 429	-69	+4	
29	0.790 246	10 493	228	-5	0.572 880	12 353	164	0	0.248 459	5 357	72	-3	
30	0.779 753	10 718	225	-3	0.585 233	12 184	169	-5	0.253 816	5 283	74	-5	
Mai	1	0.769 035	10 941	223	-4	0.597 417	12 013	171	+1	0.259 099	5 210	73	+3
	2	0.758 094	11 159	218	+4	0.609 430	11 839	174	+1	0.264 309	+5 133	77	-4
	3	+0.746 935	-11 159	-216	+2	+0.621 269	+11 839	-179	-4	+0.269 442	-5 133	-76	+2

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1945.0											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Mai	3	+0.746 935	-11 375	-216	+2	+0.621 269	+11 660	-179	-4	+0.269 442	+5 057	-76	+2
	4	0.735 560	11 588	213	0	0.632 929	11 479	181	+2	0.274 499	4 978	79	-3
	5	0.723 972	11 798	210	-3	0.644 408	11 295	184	+5	0.279 477	4 898	80	-3
	6	0.712 174	12 005	207	-4	0.655 703	11 107	188	+1	0.284 375	4 816	82	-4
	7	0.700 169	12 208	203	-3	0.666 810	10 915	192	-3	0.289 191	4 734	82	+1
	8	0.687 961	12 408	200	-2	0.677 725	10 720	195	-3	0.293 925	4 649	85	-2
	9	+0.675 553	-12 604	-196	+1	+0.688 445	+10 522	-198	0	+0.298 574	+4 563	-86	0
	10	0.662 949	12 796	192	+3	0.698 967	10 321	201	0	0.303 137	4 477	86	+4
	11	0.650 153	12 984	188	+4	0.709 288	10 115	206	-5	0.307 614	4 387	90	-2
	12	0.637 169	13 167	183	+4	0.719 403	9 908	207	+3	0.312 001	4 298	89	+4
	13	0.624 002	13 348	181	-5	0.729 311	9 698	210	+3	0.316 299	4 206	92	0
	14	0.610 654	13 523	175	-1	0.739 009	9 484	214	-2	0.320 505	4 114	92	+4
	15	+0.597 131	-13 693	-170	+2	+0.748 493	+9 268	-216	-3	+0.324 619	+4 021	-93	+3
	16	0.583 438	13 860	167	-4	0.757 761	9 049	219	-3	0.328 640	3 925	96	-5
	17	0.569 578	14 022	162	-3	0.766 810	8 830	219	+4	0.332 565	3 830	95	+1
	18	0.555 556	14 180	158	-2	0.775 640	8 606	224	-3	0.336 395	3 733	97	0
	19	0.541 376	14 333	153	+2	0.784 246	8 382	224	+2	0.340 128	3 636	97	+1
	20	0.527 043	14 481	148	+3	0.792 628	8 155	227	+2	0.343 764	3 537	99	-2
	21	+0.512 562	-14 627	-146	-4	+0.800 783	+7 927	-228	+3	+0.347 301	+3 438	-99	-1
	22	0.497 935	14 767	140	-1	0.808 710	7 696	231	0	0.350 739	3 338	100	-1
23	0.483 168	14 904	137	-3	0.816 406	7 464	232	+1	0.354 077	3 237	101	-3	
24	0.468 264	15 035	131	+2	0.823 870	7 230	234	0	0.357 314	3 135	102	-3	
25	0.453 229	15 164	129	-4	0.831 100	6 994	236	-1	0.360 449	3 033	102	0	
26	0.438 065	15 287	123	+2	0.838 094	6 757	237	0	0.363 482	2 930	103	0	
27	+0.422 778	-15 407	-120	-1	+0.844 851	+6 518	-239	-2	+0.366 412	+2 826	-104	-1	
28	0.407 371	15 522	115	+2	0.851 369	6 277	241	-3	0.369 238	2 722	104	+1	
29	0.391 849	15 634	112	-2	0.857 646	6 035	242	+1	0.371 960	2 616	106	-2	
30	0.376 215	15 740	106	+3	0.863 681	5 791	244	-1	0.374 576	2 511	105	+4	
31	0.360 475	15 844	104	-5	0.869 472	5 546	245	-1	0.377 087	2 405	106	+2	
Juni	1	0.344 631	15 943	99	-1	0.875 018	5 298	248	-4	0.379 492	2 297	108	-3
	2	+0.328 688	-16 037	-94	+3	+0.880 316	+5 050	-248	+3	+0.381 789	+2 190	-107	+1
	3	0.312 651	16 127	90	+2	0.885 366	4 800	250	+3	0.383 979	2 081	109	-1
	4	0.296 524	16 213	86	0	0.890 166	4 547	253	-3	0.386 060	1 972	109	+1
	5	0.280 311	16 294	81	-1	0.894 713	4 294	253	+1	0.388 032	1 863	109	+2
	6	0.264 017	16 371	77	-3	0.899 007	4 039	255	0	0.389 895	1 752	111	-4
	7	0.247 646	16 442	71	+1	0.903 046	3 782	257	0	0.391 647	1 640	112	-5
	8	+0.231 204	-16 509	-67	-1	+0.906 828	+3 525	-257	+4	+0.393 287	+1 529	-111	+4
	9	0.214 695	16 571	62	-1	0.910 353	3 266	259	0	0.394 816	1 417	112	+5
	10	0.198 124	16 627	56	+4	0.913 619	3 005	261	-5	0.396 233	1 305	112	+4
	11	0.181 497	16 678	51	+5	0.916 624	2 746	259	+3	0.397 538	1 191	114	-2
	12	0.164 819	16 724	46	+2	0.919 370	2 483	263	-5	0.398 729	1 078	113	0
	13	+0.148 095	-16 742	-42	-2	+0.921 853	+2 261	-261	+4	+0.399 807	-114	114	0

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1945.0											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Juni	13	+0.148 095	-16 766	-42	-2	+0.921 853	+2 222	-261	+4	+0.399 807	+ 964	-114	0
	14	0.131 329	16 801	35	+4	0.924 075	1 961	261	+4	0.400 771	851	113	+4
	15	0.114 528	16 832	31	0	0.926 036	1 697	264	-5	0.401 622	737	114	+2
	16	0.097 696	16 859	27	-5	0.927 733	1 436	261	+4	0.402 359	623	114	0
	17	0.080 837	16 880	21	0	0.929 169	1 173	263	0	0.402 982	509	114	-1
	18	0.063 957	16 896	16	+1	0.930 342	911	262	+3	0.403 491	395	114	0
	19	+0.047 061	-16 909	-13	-4	+0.931 253	+ 649	-262	+3	+0.403 886	+ 281	-114	+1
	20	0.030 152	16 915	6	+3	0.931 902	386	263	-2	0.404 167	168	113	+3
	21	+0.013 237	16 918	-3	-1	0.932 288	+ 125	261	+4	0.404 335	+ 53	115	-2
	22	-0.003 681	16 916	+ 2	-1	0.932 413	- 137	262	-2	0.404 388	- 60	113	+4
	23	0.020 597	16 909	7	-1	0.932 276	399	262	-4	0.404 328	173	113	+3
	24	0.037 506	16 899	10	-4	0.931 877	660	261	-2	0.404 155	287	114	-2
25	-0.054 405	-16 883	+ 16	+2	+0.931 217	- 921	-261	-1	+0.403 868	- 400	-113	-1	
26	0.071 288	16 863	20	+2	0.930 296	1 181	260	+1	0.403 468	513	113	-2	
27	0.088 151	16 839	24	+2	0.929 115	1 442	261	-3	0.402 955	626	113	-2	
28	0.104 990	16 810	29	+4	0.927 673	1 702	260	-1	0.402 329	739	113	-2	
29	0.121 800	16 777	33	0	0.925 971	1 962	260	+1	0.401 590	851	112	+1	
30	0.138 577	16 740	37	-2	0.924 009	2 221	259	+4	0.400 739	964	113	-1	
Juli	1	-0.155 317	-16 698	+ 42	+2	+0.921 788	-2 480	-259	+2	+0.399 775	-1 076	-112	+3
	2	0.172 015	16 651	47	+5	0.919 308	2 739	259	-2	0.398 699	1 188	112	+3
	3	0.188 666	16 599	52	+4	0.916 569	2 998	259	-5	0.397 511	1 300	112	+2
	4	0.205 265	16 543	56	-1	0.913 571	3 256	258	-3	0.396 211	1 411	111	+3
	5	0.221 808	16 483	60	-4	0.910 315	3 513	257	-2	0.394 800	1 523	112	-4
	6	0.238 291	16 416	67	+4	0.906 802	3 770	257	-5	0.393 277	1 635	112	-5
	7	-0.254 707	-16 345	+ 71	+3	+0.903 032	-4 026	-256	-4	+0.391 642	-1 745	-110	0
	8	0.271 052	16 269	76	+3	0.899 006	4 281	255	-2	0.389 897	1 856	111	-2
	9	0.287 321	16 187	82	+4	0.894 725	4 534	253	+2	0.388 041	1 966	110	+1
	10	0.303 508	16 102	85	-2	0.890 191	4 786	252	+1	0.386 075	2 075	109	+4
	11	0.319 610	16 010	92	+2	0.885 405	5 037	251	0	0.384 000	2 183	108	+4
	12	0.335 620	15 915	95	-3	0.880 368	5 285	248	+3	0.381 817	2 292	109	-4
13	-0.351 535	-15 815	+100	-1	+0.875 083	-5 533	-248	-2	+0.379 525	-2 399	-107	-2	
14	0.367 350	15 709	106	+5	0.869 550	5 778	245	+1	0.377 126	2 506	107	-3	
15	0.383 059	15 600	109	+1	0.863 772	6 021	243	+2	0.374 620	2 611	105	0	
16	0.398 659	15 486	114	+3	0.857 751	6 263	242	-3	0.372 009	2 716	105	-4	
17	0.414 145	15 368	118	+1	0.851 488	6 502	239	0	0.369 293	2 821	105	-5	
18	0.429 513	15 246	122	+2	0.844 986	6 740	238	-4	0.366 472	2 923	102	+3	
19	-0.444 759	-15 119	+127	+4	+0.838 246	-6 975	-235	-2	+0.363 549	-3 026	-103	0	
20	0.459 878	14 989	130	+1	0.831 271	7 209	234	-3	0.360 523	3 126	100	+3	
21	0.474 867	14 854	135	+5	0.824 062	7 439	230	+4	0.357 397	3 228	102	-4	
22	0.489 721	14 715	139	+4	0.816 623	7 669	230	-2	0.354 169	3 326	98	+4	
23	0.504 436	14 574	141	-3	0.808 954	-7 895	-226	+2	0.350 843	-3 425	99	-2	
24	-0.519 010	-14 427	+147	+4	+0.801 059	-8 121	-223	-2	+0.347 418	-3 523	-98	-2	

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup>		Mittleres Äquinoktium 1945.0												
Welt-Zeit	X	ΔX*)	Y	ΔY*)	Z	ΔZ*)								
1945														
Juli	24	-0.519 010	-14 427	+147	+4	+0.801 059	- 8 120	-225	-2	+0.347 418	-3 523	-98	-2	
	25	0.533 437	14 277	150	+2	0.792 939	8 343	223	-4	0.343 895	3 618	95	+4	
	26	0.547 714	14 124	153	-4	0.784 596	8 563	220	-1	0.340 277	3 715	97	-4	
	27	0.561 838	13 967	157	-5	0.776 033	8 782	219	-5	0.336 562	3 809	94	+2	
	28	0.575 805	13 806	161	-3	0.767 251	8 999	217	-3	0.332 753	3 903	94	+1	
	29	0.589 611	13 641	165	+1	0.758 252	9 212	213	+3	0.328 850	3 995	92	+3	
	30	-0.603 252	-13 471	+170	+5	+0.749 040	- 9 425	-213	-4	+0.324 855	-4 088	-93	-4	
	31	0.616 723	13 299	172	-3	0.739 615	9 635	210	-3	0.320 767	4 178	90	+2	
	Aug.	1	0.630 022	13 122	177	-1	0.729 980	9 843	208	-4	0.316 589	4 268	90	-2
		2	0.643 144	12 941	181	-1	0.720 137	10 048	205	-1	0.312 321	4 358	90	-5
3		0.656 085	12 756	185	+1	0.710 089	10 251	203	-1	0.307 963	4 445	87	+3	
4		0.668 841	12 566	190	+4	0.699 838	10 450	199	+2	0.303 518	4 531	86	+3	
5		-0.681 407	-12 373	+193	0	+0.689 388	-10 648	-198	-2	+0.298 987	-4 617	-86	-3	
6		0.693 780	12 176	197	-1	0.678 740	10 841	193	+3	0.294 370	4 702	85	-4	
7		0.705 956	11 975	201	+1	0.667 899	11 032	191	-1	0.289 668	4 784	82	+4	
8		0.717 931	11 769	206	+4	0.656 867	11 220	188	-5	0.284 884	4 865	81	+3	
9		0.729 700	11 561	208	-2	0.645 647	11 404	184	-1	0.280 019	4 945	80	-2	
10		0.741 261	11 349	212	-3	0.634 243	11 584	180	0	0.275 074	5 024	79	-5	
11	-0.752 610	-11 134	+215	-3	+0.622 659	-11 762	-178	-5	+0.270 050	-5 101	-77	-3		
12	0.763 744	10 914	220	+4	0.610 897	11 935	173	0	0.264 949	5 176	75	-1		
13	0.774 658	10 693	221	-4	0.598 962	12 105	170	-3	0.259 773	5 251	75	-4		
14	0.785 351	10 468	225	-3	0.586 857	12 272	167	-5	0.254 522	5 322	71	+3		
15	0.795 819	10 240	228	-3	0.574 585	12 434	162	-1	0.249 200	5 393	71	-2		
16	0.806 059	10 010	230	-4	0.562 151	12 594	160	-5	0.243 807	5 463	70	-2		
17	-0.816 069	- 9 776	+234	+1	+0.549 557	-12 749	-155	-1	+0.238 344	-5 530	-67	+4		
18	0.825 845	9 540	236	+2	0.536 808	12 901	152	0	0.232 814	5 595	65	+5		
19	0.835 385	9 301	239	+3	0.523 907	13 049	148	+2	0.227 219	5 660	65	-2		
20	0.844 686	9 060	241	0	0.510 858	13 193	144	+2	0.221 559	5 723	63	-2		
21	0.853 746	8 817	243	-4	0.497 665	13 335	142	-4	0.215 836	5 784	61	+2		
22	0.862 563	8 572	245	-3	0.484 330	13 471	136	+3	0.210 052	5 843	59	+4		
23	-0.871 135	- 8 323	+249	+4	+0.470 859	-13 606	-135	-4	+0.204 209	-5 901	-58	+2		
24	0.879 458	8 073	250	+1	0.457 253	13 736	130	0	0.198 308	5 958	57	+1		
25	0.887 531	7 820	253	+1	0.443 517	13 863	127	-2	0.192 350	6 012	54	+4		
26	0.895 351	7 565	255	-2	0.429 654	13 987	124	-3	0.186 338	6 066	54	-1		
27	0.902 916	7 308	257	-5	0.415 667	14 106	119	+3	0.180 272	6 118	52	+1		
28	0.910 224	7 048	260	-4	0.401 561	14 223	117	-3	0.174 154	6 168	50	+4		
29	-0.917 272	- 6 786	+262	-3	+0.387 338	-14 335	-112	-1	+0.167 986	-6 216	-48	+4		
30	0.924 058	6 520	266	+1	0.373 003	14 444	109	-4	0.161 770	6 264	48	-2		
31	0.930 578	6 254	266	-4	0.358 559	14 549	105	-5	0.155 506	6 309	45	0		
Sept.	1	0.936 832	5 983	271	+5	0.344 010	14 650	101	-5	0.149 197	6 353	44	0	
	2	0.942 815	5 711	272	+4	0.329 360	-14 746	96	-1	0.142 844	-6 394	41	+1	
	3	-0.948 526	- 5 441	+274	+3	+0.314 614	-14 835	-92	0	+0.136 450	-6 431	-41	-5	

\*) ΔX, ΔY, ΔZ sind in Einheiten der 7. Dezimale gegeben.



## Sonnenkoordinaten 1945

0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1945.0											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Sept.	3	-0.948 526	-5 437	+274	+3	+0.314 614	-14 838	-92	0	+0.136 450	-6 435	-41	-5
	4	0.953 963	5 160	277	+5	0.299 776	14 926	88	-1	0.130 015	6 473	38	0
	5	0.959 123	4 882	278	+2	0.284 850	15 008	82	+4	0.123 542	6 508	35	+3
	6	0.964 005	4 602	280	+1	0.269 842	15 087	79	-3	0.117 034	6 543	35	-5
	7	0.968 607	4 320	282	0	0.254 755	15 161	74	-4	0.110 491	6 576	33	-5
	8	0.972 927	4 038	282	-4	0.239 594	15 231	70	-4	0.103 915	6 605	29	+3
	9	-0.976 965	-3 753	+285	+3	+0.224 363	-15 295	-64	+1	+0.097 310	-6 634	-29	-1
	10	0.980 718	3 467	286	+5	0.209 068	15 355	60	+2	0.090 676	6 659	25	+4
	11	0.984 185	3 180	287	+3	0.193 713	15 410	55	+3	0.084 017	6 684	25	-2
	12	0.987 365	2 893	287	-1	0.178 303	15 461	51	+2	0.077 333	6 706	22	+1
	13	0.990 258	2 604	289	+2	0.162 842	15 507	46	+1	0.070 627	6 726	20	+1
	14	0.992 862	2 315	289	-2	0.147 335	15 548	41	0	0.063 901	6 744	18	+1
	15	-0.995 177	-2 025	+290	-2	+0.131 787	-15 586	-38	-5	+0.057 157	-6 760	-16	0
	16	0.997 202	1 745	290	-4	0.116 201	15 618	32	-1	0.050 397	6 774	14	-1
	17	0.998 937	1 435	290	-3	0.100 583	15 646	28	0	0.043 623	6 786	12	-1
	18	1.000 382	1 153	292	+5	0.084 937	15 669	23	0	0.036 837	6 797	11	-3
	19	1.001 535	862	291	+2	0.069 268	15 689	20	-4	0.030 040	6 804	7	+2
	20	1.002 397	570	292	+2	0.053 579	15 703	14	+1	0.023 236	6 811	7	-3
	21	-1.002 967	-279	+291	-3	+0.037 876	-15 715	-12	-5	+0.016 425	-6 816	-5	-1
	22	1.003 246	+13	292	-3	0.022 161	15 721	6	+2	0.009 609	6 818	2	+4
23	1.003 233	305	292	-3	+0.006 440	15 723	-2	+5	+0.002 791	6 819	-1	+4	
24	1.002 928	597	292	-2	-0.009 283	15 721	+2	+2	-0.004 028	6 818	+1	+5	
25	1.002 331	891	294	+4	0.025 004	15 715	6	-2	0.010 846	6 815	3	+5	
26	1.001 440	1 184	293	0	0.040 719	15 705	10	-4	0.017 661	6 810	5	+3	
27	-1.000 256	+1 477	+293	-1	-0.056 424	-15 690	+15	-3	-0.024 471	-6 804	+6	-2	
28	0.998 779	1 772	295	+4	0.072 114	15 670	20	0	0.031 275	6 796	8	-2	
29	0.997 007	2 065	293	-3	0.087 784	15 646	24	-3	0.038 071	6 785	11	+4	
30	0.994 942	2 359	294	-1	0.103 430	15 617	29	-1	0.044 856	6 772	13	+5	
Okt.	1	0.992 583	2 653	294	-1	0.119 047	15 583	34	+2	0.051 628	6 758	14	+2
	2	0.989 930	2 946	293	-1	0.134 630	15 543	40	+5	0.058 386	6 740	18	+5
	3	-0.986 984	+3 240	+294	+5	-0.150 173	-15 500	+43	-3	-0.065 126	-6 722	+18	-3
	4	0.983 744	3 532	292	-1	0.165 673	15 452	48	-3	0.071 848	6 701	21	-4
	5	0.980 212	3 824	292	-1	0.181 125	15 398	54	+3	0.078 549	6 678	23	-4
	6	0.976 388	4 114	290	-4	0.196 523	15 339	59	+4	0.085 227	6 653	25	-5
	7	0.972 274	4 404	290	0	0.211 862	15 276	63	+3	0.091 880	6 626	27	-1
	8	0.967 870	4 692	288	-1	0.227 138	15 207	69	+5	0.098 506	6 595	31	+5
	9	-0.963 178	+4 980	+288	+3	-0.242 345	-15 135	+72	-1	-0.105 101	-6 565	+30	-4
	10	0.958 198	5 265	285	-3	0.257 480	15 057	78	+3	0.111 666	6 531	34	+4
	11	0.952 933	5 549	284	-1	0.272 537	14 974	83	+2	0.118 197	6 495	36	+5
	12	0.947 384	5 832	283	+1	0.287 511	14 888	86	-3	0.124 692	6 457	38	+4
	13	0.941 552	+6 112	280	-3	0.302 399	-14 796	92	+3	0.131 149	-6 418	39	+1
	14	-0.935 440	+278	-3	-0.317 195	-14 796	+96	+3	-0.137 567	+42	+4		

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7 Dezimale gegeben.



0 <sup>h</sup>		Mittleres Äquinoktium 1945.0											
Welt-Zeit	X	ΔX*)	Y	ΔY*)	Z	ΔZ*)							
1945													
Okt.	14	-0.935 440	+ 6 390	+278	-3	-0.317 195	-14 700	+ 96	+3	-0.137 567	-6 376	+ 42	+4
	15	0.929 050	6 668	278	+5	0.331 895	14 600	100	+1	0.143 943	6 332	44	+4
	16	0.922 382	6 942	274	-1	0.346 495	14 494	106	+5	0.150 275	6 287	45	0
	17	0.915 440	7 214	272	-1	0.360 989	14 386	108	-3	0.156 562	6 239	48	+1
	18	0.908 226	7 485	271	+3	0.375 375	14 274	112	-4	0.162 801	6 191	48	-4
	19	0.900 741	7 752	267	-2	0.389 649	14 156	118	+3	0.168 992	6 139	52	+2
	20	-0.892 989	+ 8 019	+267	+3	-0.403 805	-14 036	+120	-2	-0.175 131	-6 087	+ 52	-4
	21	0.884 970	8 282	263	-1	0.417 841	13 911	125	+3	0.181 218	6 033	54	-5
	22	0.876 688	8 544	262	+3	0.431 752	13 782	129	+3	0.187 251	5 977	56	-2
	23	0.868 144	8 805	261	+5	0.445 534	13 650	132	-1	0.193 228	5 919	58	-2
	24	0.859 339	9 062	257	-3	0.459 184	13 513	137	0	0.199 147	5 860	59	-4
	25	0.850 277	9 317	255	-3	0.472 697	13 373	140	-2	0.205 007	5 800	60	-4
	26	-0.840 960	+ 9 572	+255	+4	-0.486 070	-13 228	+145	+1	-0.210 807	-5 736	+ 64	+5
	27	0.831 388	9 823	251	-1	0.499 298	13 078	150	+4	0.216 543	5 671	65	+5
	28	0.821 565	10 071	248	-3	0.512 376	12 926	152	-2	0.222 214	5 605	66	-1
	29	0.811 494	10 318	247	+4	0.525 302	12 767	159	+5	0.227 819	5 537	68	-1
	30	0.801 176	10 562	244	+4	0.538 069	12 605	162	+1	0.233 356	5 467	70	+1
	31	0.790 614	10 802	240	-1	0.550 674	12 440	165	-4	0.238 823	5 394	73	+4
	Nov.	1	-0.779 812	+11 040	+238	+2	-0.563 114	-12 268	+172	+4	-0.244 217	-5 321	+ 73
2		0.768 772	11 274	234	0	0.575 382	12 095	173	-4	0.249 538	5 246	75	-2
3		0.757 498	11 506	232	+2	0.587 477	11 915	180	+3	0.254 784	5 168	78	+4
4		0.745 992	11 733	227	-4	0.599 392	11 733	182	-2	0.259 952	5 089	79	+4
5		0.734 259	11 957	224	-4	0.611 125	11 547	186	-2	0.265 041	5 008	81	+3
6		0.722 302	12 177	220	-4	0.622 672	11 356	191	+4	0.270 049	4 925	83	+2
7		-0.710 125	+12 394	+217	-1	-0.634 028	-11 162	+194	+4	-0.274 974	-4 842	+ 83	-4
8		0.697 731	12 606	212	-1	0.645 190	10 964	198	+4	0.279 816	4 756	86	0
9		0.685 125	12 816	210	+4	0.656 154	10 763	201	+1	0.284 572	4 669	87	+2
10		0.672 309	13 020	204	-4	0.666 917	10 558	205	+2	0.289 241	4 579	90	+5
11		0.659 289	13 220	200	-4	0.677 475	10 351	207	-3	0.293 820	4 490	89	-2
12		0.646 069	13 416	196	-1	0.687 826	10 139	212	+3	0.298 310	4 398	92	+3
13		-0.632 653	+13 609	+193	+4	-0.697 965	-9 925	+214	0	-0.302 708	-4 305	+ 93	+4
14		0.619 044	13 796	187	-1	0.707 890	9 709	216	-2	0.307 013	4 210	95	+5
15	0.605 248	13 980	184	+1	0.717 599	9 488	221	+5	0.311 223	4 115	95	-2	
16	0.591 268	14 158	178	-4	0.727 087	9 266	222	+1	0.315 338	4 019	96	-4	
17	0.577 110	14 334	176	+3	0.736 353	9 041	225	0	0.319 357	3 921	98	+2	
18	0.562 776	14 505	171	0	0.745 394	8 814	227	-1	0.323 278	3 822	99	+5	
19	-0.548 271	+14 671	+166	-4	-0.754 208	-8 583	+231	+3	-0.327 100	-3 722	+100	+4	
20	0.533 600	14 834	163	+1	0.762 791	8 351	232	-1	0.330 822	3 621	101	+4	
21	0.518 766	14 994	160	+5	0.771 142	8 116	235	-2	0.334 443	3 519	102	+3	
22	0.503 772	15 148	154	-3	0.779 258	7 878	238	-1	0.337 962	3 416	103	+2	
23	0.488 624	+15 298	150	-3	0.787 136	-7 638	240	-3	0.341 378	-3 312	104	+1	
24	-0.473 326	+14 8	+148	+4	-0.794 774	-7 388	+244	+1	-0.344 690	-3 206	+106	+3	

\*) ΔX, ΔY, ΔZ sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1945.0												
		X			$\Delta X^*$	Y			$\Delta Y^*$	Z		$\Delta Z^*$		
1945														
Nov.	24	-0.473 326	+15 446	+148.	+4	-0.794 774	-7 394	+244	+1	-0.344 690	-3 206	+106	+3	
	25	0.457 880	15 587	141	-4	0.802 168	7 149	245	-4	0.347 896	3 100	106	0	
	26	0.442 293	15 725	138	-1	0.809 317	6 901	248	-4	0.350 996	2 992	108	-1	
	27	0.426 568	15 857	132	-3	0.816 218	6 649	252	+2	0.353 988	2 884	108	-4	
	28	0.410 711	15 986	129	+4	0.822 867	6 396	253	-2	0.356 872	2 774	110	0	
	29	0.394 725	16 109	123	+1	0.829 263	6 140	256	0	0.359 646	2 663	111	+2	
	30	-0.378 616	+16 227	+118	+2	-0.835 403	-5 882	+258	+1	-0.362 309	-2 551	+112	+2	
	Dez.	1	0.362 389	16 341	114	+5	0.841 285	5 621	261	+2	0.364 860	2 438	113	0
		2	0.346 048	16 448	107	-2	0.846 906	5 359	262	-1	0.367 298	2 325	113	-3
		3	0.329 600	16 551	103	+3	0.852 265	5 095	264	-1	0.369 623	2 210	115	+1
4		0.313 049	16 649	98	+5	0.857 360	4 828	267	+4	0.371 833	2 095	115	0	
5		0.296 400	16 741	92	0	0.862 188	4 560	268	0	0.373 928	1 978	117	+2	
6		-0.279 659	+16 827	+ 86	-4	-0.866 748	-4 291	+269	-3	-0.375 906	-1 862	+116	-2	
7		0.262 832	16 908	81	-1	0.871 039	4 020	271	-1	0.377 768	1 744	118	+2	
8		0.245 924	16 984	76	+3	0.875 059	3 748	272	+1	0.379 512	1 626	118	+1	
9		0.228 940	17 054	70	0	0.878 807	3 474	274	+5	0.381 138	1 507	119	+2	
10		0.211 886	17 118	64	-1	0.882 281	3 200	274	+2	0.382 645	1 388	119	0	
11		0.194 768	17 178	60	+3	0.885 481	2 924	276	+5	0.384 033	1 269	119	-3	
12		-0.177 590	+17 230	+ 52	-4	-0.888 405	-2 649	+275	-1	-0.385 302	-1 149	+120	+1	
13		0.160 360	17 279	49	+2	0.891 054	2 373	276	0	0.386 451	1 029	120	+2	
14	0.143 081	17 321	42	-1	0.893 427	2 095	278	+4	0.387 480	908	121	+3		
15	0.125 760	17 359	38	+2	0.895 522	1 819	276	-2	0.388 388	788	120	-2		
16	0.108 401	17 391	32	0	0.897 341	1 541	278	+3	0.389 176	668	120	-5		
17	0.091 010	17 418	27	+1	0.898 882	1 263	278	+3	0.389 844	547	121	-2		
18	-0.073 592	+17 441	+ 23	+3	-0.900 145	- 985	+278	+1	-0.390 391	- 427	+120	-3		
19	0.056 151	17 458	17	-1	0.901 130	707	278	0	0.390 818	306	121	+1		
20	0.038 693	17 470	12	-3	0.901 837	428	279	+2	0.391 124	185	121	+2		
21	0.021 223	17 477	7	-3	0.902 265	- 149	279	0	0.391 309	- 64	121	+2		
22	-0.003 746	17 480	+ 3	+1	0.902 414	+ 130	279	-3	0.391 373	+ 57	121	0		
23	+0.013 734	17 477	- 3	-2	0.902 284	410	280	-1	0.391 316	178	121	+1		
24	+0.031 211	+17 468	- 9	-5	-0.901 874	+ 690	+280	0	-0.391 138	+ 300	+122	+3		
25	0.048 679	17 455	13	+1	0.901 184	970	280	-3	0.390 838	420	120	-3		
26	0.066 134	17 436	19	-1	0.900 214	1 250	280	-4	0.390 418	542	122	+4		
27	0.083 570	17 411	25	-3	0.898 964	1 529	279	-4	0.389 876	664	122	+4		
28	0.100 981	17 381	30	-1	0.897 435	1 810	281	+5	0.389 212	784	120	-2		
29	0.118 362	17 346	35	+1	0.895 625	2 090	280	+3	0.388 428	906	122	+4		
30	+0.135 708	+17 304	- 42	-3	-0.893 535	+2 368	+278	-2	-0.387 522	+1 027	+121	+2		
31	0.153 012	+17 258	46	+1	0.891 167	2 647	279	+2	0.386 495	1 147	120	-2		
32	+0.170 270	- 54	- 54	-4	-0.888 520		+278	+2	-0.385 348		+121	+1		

\*  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.

Frühlingsäquinoktium 20. März 23<sup>h</sup> 38<sup>m</sup>  
Sommersolstitium 21. Juni 18 52

Herbstäquinoktium 23. Sept. 9<sup>h</sup> 50<sup>m</sup>  
Wintersolstitium 22. Dez. 5 4

Erdnähe 1. Jan. 23<sup>h</sup>  
Erdferne 5. Juli 10



Tag	0 <sup>h</sup> Welt-Zeit				
	Aberration	Parallaxe	Mittlere Länge $L_{\odot}$	Mittlere Anomalie $M_{\odot}$	
1945					
Jan.	—1	20.82	8.95	278.3179	356.32
	+9	20.82	8.95	288.1743	6.18
	19	20.80	8.94	298.0308	16.04
Febr.	29	20.78	8.93	307.8873	25.89
	8	20.75	8.92	317.7438	35.75
	18	20.71	8.90	327.6002	45.60
März	28	20.66	8.88	337.4567	55.46
	10	20.61	8.86	347.3132	65.32
	20	20.55	8.84	357.1697	75.17
April	30	20.49	8.81	7.0261	85.03
	9	20.43	8.78	16.8826	94.88
	19	20.38	8.76	26.7391	104.74
Mai	29	20.32	8.74	36.5956	114.60
	9	20.27	8.72	46.4520	124.45
	19	20.23	8.70	56.3085	134.31
Juni	29	20.19	8.68	66.1650	144.16
	8	20.17	8.67	76.0214	154.02
	18	20.15	8.66	85.8779	163.88
Juli	28	20.14	8.66	95.7344	173.73
	8	20.13	8.66	105.5909	183.59
	18	20.14	8.66	115.4473	193.44
Aug.	28	20.16	8.67	125.3038	203.30
	7	20.19	8.68	135.1603	213.16
	17	20.22	8.69	145.0168	223.01
Sept.	27	20.26	8.71	154.8732	232.87
	6	20.31	8.73	164.7297	242.72
	16	20.36	8.75	174.5862	252.58
Okt.	26	20.42	8.78	184.4427	262.44
	6	20.48	8.80	194.2991	272.29
	16	20.54	8.83	204.1556	282.15
Nov.	26	20.59	8.85	214.0121	292.00
	5	20.65	8.88	223.8685	301.86
	15	20.70	8.90	233.7250	311.72
Dez.	25	20.74	8.92	243.5815	321.57
	5	20.77	8.93	253.4380	331.43
	15	20.80	8.94	263.2944	341.28
	25	20.81	8.95	273.1509	351.14
	35	20.82	8.95	283.0074	1.00



0<sup>h</sup> Welt-Zeit

Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Jan. 0	<sup>h</sup> 7 <sup>m</sup> 52 <sup>a</sup> 50 <sup>m</sup> 54 <sup>a</sup> 25	+21° 38.2' 1" 48.2"	56' 34.4" 37.5"	15' 26.4" 10.2"	116.067	+0.708	15.4
1	8 47 15 51 40	+19 50.0 2 43.6	55 56.9 34.8	15 16.2 9.5	128.865	+1.852	16.4
2	9 38 55 48 56	+17 6.4 3 26.1	55 22.1 29.8	15 6.7 8.1	141.382	+2.882	17.4
3	10 27 51 46 34	+13 40.3 3 56.3	54 52.3 22.4	14 58.6 6.2	153.650	+3.758	18.4
4	11 14 25 44 53	+ 9 44.0 4 15.9	54 29.9 13.5	14 52.4 3.6	165.721	+4.452	19.4
5	11 59 18 43 56	+ 5 28.1 4 26.5	54 16.4 3.3	14 48.8 0.9	177.657	+4.945	20.4
6	12 43 14 43 51	+ 1 1.6 4 28.9	54 13.1 7.3	14 47.9 2.0	189.530	+5.223	21.4
7	13 27 5 44 37	- 3 27.3 4 23.3	54 20.4 17.8	14 49.9 4.8	201.419	+5.280	22.4
8	14 11 42 46 15	- 7 50.6 4 9.0	54 38.2 27.5	14 54.7 7.5	213.402	+5.108	23.4
9	14 57 57 48 36	-11 59.6 3 44.0	55 5.7 35.7	15 2.2 9.7	225.555	+4.708	24.4
10	15 46 33 51 34	-15 43.6 3 6.4	55 41.4 41.7	15 11.9 11.4	237.949	+4.083	25.4
11	16 38 7 54 43	-18 50.0 2 14.5	56 23.1 44.7	15 23.3 12.2	250.637	+3.246	26.4
12	17 32 50 57 32	-21 4.5 1 8.2	57 7.8 44.2	15 35.5 12.0	263.658	+2.221	27.4
13	18 30 22 59 26	-22 12.7 0 9.4	57 52.0 40.2	15 47.5 11.0	277.027	+1.049	28.4
14	19 29 48 60 0	-22 3.3 1 31.6	58 32.2 32.8	15 58.5 8.9	290.729	-0.211	29.4
15	20 29 48 59 14	-20 31.7 2 49.9	59 5.0 23.2	16 7.4 6.3	304.727	-1.485	0.8
16	21 29 2 57 34	-17 41.8 3 56.0	59 28.2 12.5	16 13.7 3.4	318.955	-2.687	1.8
17	22 26 36 55 36	-13 45.8 4 45.0	59 40.7 2.0	16 17.1 0.6	333.333	-3.731	2.8
18	23 22 12 53 55	- 9 0.8 5 14.2	59 42.7 7.0	16 17.7 1.9	347.773	-4.543	3.8
19	0 16 7 52 52	- 3 46.6 5 24.1	59 35.7 14.0	16 15.8 3.8	2.193	-5.067	4.8
20	1 8 59 52 37	+ 1 37.5 5 15.8	59 21.7 19.0	16 12.0 5.2	16.522	-5.273	5.8
21	2 1 36 53 6	+ 6 53.3 4 50.7	59 2.7 22.4	16 6.8 6.1	30.709	-5.154	6.8
22	2 54 42 54 10	+11 44.0 4 9.9	58 40.3 24.5	16 0.7 6.7	44.717	-4.730	7.8
23	3 48 52 55 27	+15 53.9 3 15.4	58 15.8 26.2	15 54.0 7.1	58.530	-4.036	8.8
24	4 44 19 56 31	+19 9.3 2 9.7	57 49.6 27.4	15 46.9 7.5	72.136	-3.125	9.8
25	5 40 50 56 54	+21 19.0 0 57.2	57 22.2 28.5	15 39.4 7.8	85.535	-2.054	10.8
26	6 37 44 56 17	+22 16.2 0 16.7	56 53.7 29.4	15 31.6 8.0	98.725	-0.891	11.8
27	7 34 1 54 43	+21 59.5 1 25.9	56 24.3 29.5	15 23.6 8.0	111.705	+0.300	12.8
28	8 28 44 52 27	+20 33.6 2 25.7	55 54.8 28.6	15 15.6 7.8	124.477	+1.455	13.8
29	9 21 11 49 55	+18 7.9 3 13.5	55 26.2 26.5	15 7.8 7.2	137.043	+2.519	14.8
30	10 11 6 47 33	+14 54.4 3 48.8	54 59.7 22.6	15 0.6 6.2	149.414	+3.446	15.8
31	10 58 39 45 36	+11 5.6 4 12.2	54 37.1 17.1	14 54.4 4.7	161.605	+4.200	16.8
Febr. 1	11 44 15 44 19	+ 6 53.4 4 25.3	54 20.0 10.0	14 49.7 2.7	173.646	+4.757	17.8
2	12 28 34 43 45	+ 2 28.1 4 29.2	54 10.0 1.5	14 47.0 0.4	185.576	+5.102	18.8
3	13 12 19 44 1	- 2 1.1 4 25.0	54 8.5 8.2	14 46.6 2.3	197.447	+5.226	19.8
4	13 56 20 45 5	- 6 26.1 4 12.4	54 16.7 18.4	14 48.9 5.0	209.321	+5.127	20.8
5	14 41 25 46 56	-10 38.5 3 50.7	54 35.1 28.7	14 53.9 7.8	221.270	+4.805	21.8
6	15 28 21 49 29	-14 29.2 3 18.3	55 3.8 38.3	15 1.7 10.4	233.373	+4.268	22.8
7	16 17 50 52 30	-17 47.5 2 33.5	55 42.1 46.3	15 12.1 12.6	245.711	+3.526	23.8
8	17 10 20 55 38	-20 21.0 1 35.0	56 28.4 51.9	15 24.7 14.2	258.359	+2.595	24.8
9	18 5 58 58 16	-21 56.0 0 23.3	57 20.3 53.6	15 38.9 14.6	271.383	+1.506	25.8
10	19 4 14	-22 19.3	58 13.9	15 53.5	284.827	+0.301	26.8



Tag	Obere Kulmination in Greenwich							0 <sup>h</sup> Länge, + 50° Breite				
	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	
1945												
Jan. 0	7 55 52	144	+21 33.9	- 3.5	56.5	1 18.5	2.23	18 10	2.7	9 24	1.8	
1	8 52 3	137	+19 37.3	- 6.2	55.9	2 10.6	2.11	19 16	2.8	10 2	1.4	
2	9 45 10	129	+16 42.7	- 8.3	55.3	2 59.6	1.98	20 23	2.8	10 32	1.1	
3	10 35 17	122	+13 5.0	- 9.8	54.8	3 45.7	1.86	21 28	2.7	10 56	1.0	
4	11 22 55	117	+ 8 57.3	-10.8	54.4	4 29.2	1.77	22 33	2.7	11 18	0.9	
5	12 8 50	113	+ 4 31.1	-11.3	54.2	5 11.1	1.72	23 37	2.7	11 37	0.8	
6	12 53 56	113	- 0 4.2	-11.5	54.2	5 52.1	1.71	- -	-	11 56	0.8	
7	13 39 10	114	- 4 40.1	-11.4	54.4	6 33.3	1.73	0 41	2.7	12 15	0.8	
8	14 25 29	118	- 9 7.9	-10.9	54.8	7 15.6	1.80	1 46	2.7	12 36	0.9	
9	15 13 51	124	-13 17.6	- 9.9	55.3	7 59.9	1.90	2 52	2.8	12 59	1.1	
10	16 5 4	132	-16 56.9	- 8.3	55.9	8 47.0	2.03	4 0	2.8	13 27	1.3	
11	16 59 41	141	-19 51.0	- 6.1	56.7	9 37.6	2.18	5 9	2.8	14 2	1.6	
12	17 57 45	149	-21 43.3	- 3.2	57.5	10 31.5	2.31	6 15	2.7	14 46	2.1	
13	18 58 37	155	-22 18.4	+ 0.3	58.2	11 28.3	2.41	7 17	2.4	15 40	2.5	
14	20 0 56	156	-21 26.0	+ 4.0	58.8	12 26.5	2.43	8 11	2.1	16 46	2.9	
15	21 3 4	154	-19 5.8	+ 7.6	59.3	13 24.6	2.39	8 56	1.7	18 0	3.2	
16	22 3 41	149	-15 27.6	+10.5	59.6	14 21.1	2.31	9 33	1.4	19 19	3.3	
17	23 2 10	143	-10 49.1	+12.6	59.7	15 15.5	2.22	10 3	1.2	20 39	3.3	
18	23 58 35	139	- 5 31.7	+13.7	59.6	16 7.8	2.15	10 30	1.0	21 59	3.3	
19	0 53 35	136	+ 0 2.8	+14.0	59.4	16 58.7	2.10	10 53	1.0	23 18	3.3	
20	1 48 1	136	+ 5 33.8	+13.5	59.1	17 49.1	2.10	11 17	1.0	- -	-	
21	2 42 49	138	+10 42.3	+12.2	58.8	18 39.8	2.13	11 41	1.1	0 36	3.2	
22	3 38 40	141	+15 11.1	+10.1	58.3	19 31.6	2.19	12 8	1.2	1 53	3.2	
23	4 35 57	145	+18 44.0	+ 7.5	57.9	20 24.7	2.24	12 39	1.4	3 9	3.1	
24	5 34 30	147	+21 8.1	+ 4.4	57.4	21 19.2	2.29	13 17	1.7	4 22	2.9	
25	6 33 33	147	+22 14.5	+ 1.1	56.9	22 14.2	2.29	14 2	2.0	5 29	2.6	
26	7 32 2	144	+22 1.3	- 2.2	56.4	23 8.6	2.24	14 55	2.4	6 28	2.3	
27	- - -	-	- - -	-	-	- - -	-	15 55	2.6	7 18	1.9	
28	8 28 47	139	+20 33.5	- 5.1	55.9	0 1.2	2.15	17 0	2.7	7 59	1.5	
29	9 23 1	132	+18 1.7	- 7.5	55.4	0 51.4	2.03	18 7	2.8	8 32	1.2	
30	10 14 26	125	+14 39.7	- 9.3	55.0	1 38.7	1.92	19 13	2.7	8 58	1.0	
31	11 3 16	119	+10 41.4	-10.5	54.6	2 23.5	1.82	20 19	2.7	9 21	0.9	
Febr. 1	11 50 2	115	+ 6 19.7	-11.2	54.3	3 6.2	1.75	21 24	2.7	9 41	0.8	
2	12 35 30	113	+ 1 45.6	-11.5	54.2	3 47.6	1.71	22 27	2.7	10 0	0.8	
3	13 20 29	113	- 2 51.1	-11.5	54.2	4 28.5	1.71	23 31	2.7	10 19	0.8	
4	14 5 55	115	- 7 21.8	-11.0	54.3	5 9.9	1.75	- -	-	10 39	0.9	
5	14 52 42	119	-11 37.4	-10.2	54.7	5 52.6	1.82	0 36	2.7	11 0	1.0	
6	15 41 44	126	-15 27.7	- 8.9	55.2	6 37.6	1.93	1 42	2.8	11 25	1.2	
7	16 33 44	134	-18 40.4	- 7.1	55.9	7 25.5	2.07	2 49	2.8	11 56	1.4	
8	17 29 11	143	-21 1.1	- 4.6	56.8	8 16.9	2.21	3 56	2.7	12 34	1.8	
9	18 28 1	150	-22 14.0	- 1.4	57.7	9 11.6	2.34	4 59	2.5	13 23	2.3	
10	19 29 27	156	-22 5.1	+ 2.2	58.6	10 9.0	2.43	5 57	2.2	14 23	2.7	



Tag	0 <sup>h</sup> Welt-Zeit						
	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Febr. 10	<sup>h</sup> 19 <sup>m</sup> 4 <sup>s</sup> 14 <sup>m</sup> 59 <sup>s</sup> 56 <sup>a</sup>	-22° 19.3' 0" 57.6"	58' 13.9" 51.0"	15' 53.5" 13.9"	284.827	+0.301	26.8
11	20 4 10 60 18	-21 21.7 2 20.6	59 4.9 43.5	16 7.4 11.8	298.706	-0.957	27.8
12	21 4 28 59 28	-19 1.1 3 36.7	59 48.4 31.5	16 19.2 8.6	312.992	-2.190	28.8
13	22 3 56 57 56	-15 24.4 4 37.6	60 19.9 16.4	16 27.8 4.5	327.615	-3.306	0.3
14	23 1 52 56 17	-10 46.8 5 17.9	60 36.3 0.3	16 32.3 0.1	342.460	-4.216	1.3
15	23 58 9 54 56	- 5 28.9 5 35.3	60 36.6 14.6	16 32.4 4.0	357.388	-4.844	2.3
16	0 53 5 54 15	+ 0 6.4 5 30.8	60 22.0 26.5	16 28.4 7.2	12.253	-5.142	3.3
17	1 47 20 54 11	+ 5 37.2 5 6.4	59 55.5 34.7	16 21.2 9.5	26.928	-5.099	4.3
18	2 41 31 54 42	+10 43.6 4 24.9	59 20.8 39.0	16 11.7 10.6	41.321	-4.733	5.3
19	3 36 13 55 27	+15 8.5 3 29.6	58 41.8 40.2	16 1.1 11.0	55.381	-4.088	6.3
20	4 31 40 56 9	+18 38.1 2 24.2	58 1.6 39.0	15 50.1 10.6	69.097	-3.222	7.3
21	5 27 49 56 19	+21 2.3 1 12.7	57 22.6 36.4	15 39.5 9.9	82.487	-2.198	8.3
22	6 24 8 55 45	+22 15.0 0 0.1	56 46.2 33.4	15 29.6 9.1	95.583	-1.080	9.3
23	7 19 53 54 22	+22 14.9 1 9.2	56 12.8 29.9	15 20.5 8.2	108.427	+0.071	10.3
24	8 14 15 52 23	+21 5.7 2 10.3	55 42.9 26.6	15 12.3 7.2	121.059	+1.197	11.3
25	9 6 38 50 7	+18 55.4 3 11.1	55 16.3 23.3	15 5.1 6.3	133.513	+2.247	12.3
26	9 56 45 47 52	+15 54.3 3 40.2	54 53.0 19.7	14 58.8 5.4	145.815	+3.176	13.3
27	10 44 37 45 59	+12 14.1 4 7.6	54 33.3 15.7	14 53.4 4.3	157.987	+3.947	14.3
28	11 30 36 44 37	+ 8 6.5 4 24.2	54 17.6 10.9	14 49.1 3.0	170.048	+4.533	15.3
März 1	12 15 13 43 53	+ 3 42.3 4 30.9	54 6.7 5.3	14 46.1 1.4	182.016	+4.912	16.3
2	12 59 6 43 49	- 0 48.6 4 28.5	54 1.4 1.5	14 44.7 0.4	193.916	+5.076	17.3
3	13 42 55 44 30	- 5 17.1 4 17.3	54 2.9 9.4	14 45.1 2.6	205.779	+5.019	18.3
4	14 27 25 45 52	- 9 34.4 3 57.0	54 12.3 18.1	14 47.7 4.9	217.650	+4.746	19.3
5	15 13 17 47 53	-13 31.4 3 27.3	54 30.4 27.5	14 52.6 7.5	229.584	+4.266	20.3
6	16 1 10 50 26	-16 58.7 2 46.6	54 57.9 36.9	15 0.1 10.0	241.647	+3.591	21.3
7	16 51 36 53 14	-19 45.3 1 54.3	55 34.8 45.8	15 10.1 12.5	253.917	+2.740	22.3
8	17 44 50 55 53	-21 39.6 0 50.0	56 20.6 53.0	15 22.6 14.4	266.474	+1.739	23.3
9	18 40 43 57 59	-22 29.6 0 24.7	57 13.6 57.3	15 37.0 15.7	279.398	+0.622	24.3
10	19 38 42 59 8	-22 4.9 1 45.1	58 10.9 57.7	15 52.7 15.7	292.759	-0.565	25.3
11	20 37 50 59 17	-20 19.8 3 4.6	59 8.6 52.6	16 8.4 14.3	306.600	-1.758	26.3
12	21 37 7 58 37	-17 15.2 4 15.2	60 1.2 42.1	16 22.7 11.5	320.925	-2.880	27.3
13	22 35 44 57 36	-13 0.0 5 9.1	60 43.3 26.3	16 34.2 7.2	335.685	-3.844	28.3
14	23 33 20 56 39	- 7 50.9 5 41.1	61 9.6 7.4	16 41.4 2.0	350.771	-4.561	29.3
15	0 29 59 56 6	- 2 9.8 5 48.4	61 17.0 12.0	16 43.4 3.3	6.024	-4.962	0.8
16	1 26 5 56 5	+ 3 38.6 5 31.4	61 5.0 29.2	16 40.1 8.0	21.256	-5.012	1.8
17	2 22 10 56 30	+ 9 10.0 4 52.6	60 35.8 42.1	16 32.1 11.4	36.290	-4.713	2.8
18	3 18 40 57 5	+14 2.6 3 56.0	59 53.7 49.6	16 20.7 13.5	50.985	-4.107	3.8
19	4 15 45 57 31	+17 58.6 2 47.3	59 4.1 52.2	16 7.2 14.3	65.257	-3.258	4.8
20	5 13 16 57 24	+20 45.9 1 31.8	58 11.9 50.9	15 52.9 13.8	79.078	-2.240	5.8
21	6 10 40 56 30	+22 17.7 0 16.0	57 21.0 46.7	15 39.1 12.7	92.467	-1.127	6.8
22	7 7 10 54 51	+22 33.7 0 55.5	56 34.3 40.8	15 26.4 11.2	105.473	+0.013	7.8
23	8 2 1	+21 38.2	55 53.5	15 15.2	118.159	+1.124	8.8



Tag	Obere Kulmination in Greenwich							0 <sup>b</sup> Länge, + 50° Breite				
	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	
1945												
Febr. 10	19 <sup>h</sup> 29 <sup>m</sup> 27 <sup>s</sup>	156 <sup>s</sup>	-22° 5.1'	+ 2.2	58.6	10 <sup>h</sup> 9.0 <sup>m</sup>	2.43 <sup>m</sup>	5 57 <sup>h m</sup>	2.2 <sup>m</sup>	14 23 <sup>h m</sup>	2.7 <sup>m</sup>	
11	20 32 9	157	-20 26.6	+ 6.0	59.4	11 7.6	2.45	6 46	1.9	15 34	3.1	
12	21 34 36	155	-17 20.6	+ 9.4	60.1	12 5.9	2.41	7 28	1.6	16 52	3.3	
13	22 35 39	150	-12 59.8	+12.1	60.5	13 2.8	2.33	8 2	1.3	18 15	3.4	
14	23 34 48	146	- 7 45.3	+13.9	60.6	13 57.9	2.25	8 30	1.1	19 38	3.5	
15	0 32 16	142	- 2 2.0	+14.5	60.5	14 51.3	2.20	8 56	1.0	21 0	3.4	
16	1 28 40	140	+ 3 45.0	+14.2	60.1	15 43.6	2.17	9 20	1.0	22 22	3.4	
17	2 24 46	141	+ 9 12.7	+13.0	59.5	16 35.6	2.17	9 45	1.1	23 41	3.3	
18	3 21 15	142	+14 1.3	+11.0	58.9	17 28.0	2.20	10 11	1.2	—	—	
19	4 18 33	144	+17 54.4	+ 8.4	58.2	18 21.2	2.23	10 41	1.4	0 59	3.2	
20	5 16 41	146	+20 39.3	+ 5.3	57.5	19 15.3	2.26	11 17	1.6	2 14	3.0	
21	6 15 8	146	+22 8.2	+ 2.1	56.9	20 9.6	2.26	11 59	1.9	3 23	2.7	
22	7 13 6	143	+22 18.7	- 1.2	56.3	21 3.5	2.22	12 49	2.2	4 24	2.4	
23	8 9 39	139	+21 14.2	- 4.1	55.8	21 56.0	2.14	13 47	2.5	5 16	2.0	
24	9 4 1	133	+19 3.4	- 6.7	55.3	22 46.3	2.04	14 49	2.7	5 59	1.6	
25	9 55 52	126	+15 57.9	- 8.7	54.9	23 34.0	1.94	15 55	2.7	6 33	1.3	
26	— — —	—	— — —	—	—	— — —	—	17 1	2.8	7 1	1.1	
27	10 45 15	121	+12 11.0	-10.1	54.6	0 19.4	1.84	18 7	2.7	7 25	0.9	
28	11 32 34	116	+ 7 55.3	-11.1	54.3	1 2.6	1.77	19 12	2.7	7 46	0.8	
März 1	12 18 25	113	+ 3 22.8	-11.6	54.1	1 44.4	1.72	20 16	2.7	8 5	0.8	
2	13 3 31	112	- 1 16.0	-11.6	54.0	2 25.4	1.70	21 20	2.7	8 23	0.8	
3	13 48 38	113	- 5 51.2	-11.3	54.1	3 6.5	1.72	22 25	2.7	8 42	0.8	
4	14 34 35	117	-10 13.5	-10.5	54.2	3 48.4	1.77	23 30	2.7	9 3	0.9	
5	15 22 9	122	-14 13.2	- 9.4	54.6	4 31.9	1.86	— —	—	9 26	1.1	
6	16 12 4	128	-17 39.3	- 7.7	55.1	5 17.8	1.97	0 35	2.7	9 54	1.3	
7	17 4 53	136	-20 19.9	- 5.5	55.8	6 6.5	2.10	1 41	2.7	10 28	1.6	
8	18 0 48	144	-22 1.3	- 2.8	56.6	6 58.3	2.22	2 44	2.5	11 10	2.0	
9	18 59 34	150	-22 30.1	+ 0.5	57.5	7 53.0	2.33	3 43	2.3	12 3	2.5	
10	20 0 22	154	-21 35.7	+ 4.1	58.5	8 49.7	2.39	4 35	2.0	13 8	2.9	
11	21 2 3	154	-19 13.8	+ 7.7	59.5	9 47.3	2.40	5 19	1.7	14 22	3.2	
12	22 3 28	152	-15 28.8	+10.9	60.4	10 44.6	2.37	5 56	1.4	15 42	3.4	
13	23 3 54	150	-10 35.0	+13.3	61.0	11 40.9	2.32	6 27	1.2	17 6	3.5	
14	0 3 10	147	- 4 54.3	+14.8	61.3	12 36.1	2.28	6 54	1.1	18 31	3.5	
15	1 1 35	145	+ 1 7.0	+15.1	61.2	13 30.4	2.25	7 20	1.0	19 56	3.5	
16	1 59 43	145	+ 7 1.1	+14.2	60.8	14 24.5	2.25	7 45	1.1	21 20	3.5	
17	2 58. 9	147	+12 22.4	+12.4	60.2	15 18.8	2.28	8 11	1.2	22 42	3.4	
18	3 57 13	148	+16 49.3	+ 9.7	59.3	16 13.8	2.30	8 40	1.3	—	—	
19	4 56 51	150	+20 5.7	+ 6.6	58.4	17 9.3	2.32	9 15	1.6	0 1	3.2	
20	5 56 34	149	+22 2.2	+ 3.1	57.6	18 5.0	2.31	9 55	1.9	1 14	2.9	
21	6 55 30	146	+22 36.5	- 0.2	56.7	18 59.8	2.26	10 44	2.2	2 20	2.5	
22	7 52 45	140	+21 52.5	- 3.4	56.0	19 53.0	2.17	11 40	2.4	3 15	2.1	
23	8 47 38	134	+19 59.2	- 6.0	55.4	20 43.8	2.06	12 41	2.6	4 1	1.7	



Tag	0 <sup>a</sup> Welt-Zeit						
	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
März 23	<sup>h</sup> 8 <sup>m</sup> 2 <sup>s</sup> 1 <sup>m</sup> 52 <sup>s</sup> 39	+21° 38.2' 0" <sup>m</sup> 58.5	55' 53.5" 34.4	15' 15.2" 9.4	118.159	+1.124	8.8
24	8 54 40 <sup>m</sup> 50 <sup>s</sup> 15	+19 39.7 2 51.1	55 19.1 27.9	15 5.8 7.5	130.592	+2.158	9.8
25	9 44 55 47 58	+16 48.6 3 32.4	54 51.2 21.6	14 58.3 5.9	142.834	+3.073	10.8
26	10 32 53 46 2	+13 16.2 4 2.6	54 29.6 15.9	14 52.4 4.4	154.938	+3.836	11.8
27	11 18 55 44 39	+ 9 13.6 4 22.5	54 13.7 10.5	14 48.0 2.8	166.943	+4.420	12.8
28	12 3 34 43 52	+ 4 51.1 4 32.3	54 3.2 5.4	14 45.2 1.5	178.883	+4.806	13.8
29	12 47 26 43 45	+ 0 18.8 4 32.7	53 57.8 0.1	14 43.7 0.0	190.782	+4.979	14.8
30	13 31 11 44 16	- 4 13.9 4 23.8	53 57.7 5.5	14 43.7 1.5	202.660	+4.936	15.8
31	14 15 27 45 26	- 8 37.7 4 5.5	54 3.2 11.5	14 45.2 3.1	214.541	+4.678	16.8
April 1	15 0 53 47 9	-12 43.2 3 37.3	54 14.7 18.3	14 48.3 5.0	226.453	+4.214	17.8
2	15 48 2 49 20	-16 20.5 2 58.6	54 33.0 25.7	14 53.3 7.0	238.432	+3.561	18.8
3	16 37 22 51 42	-19 19.1 2 9.2	54 58.7 33.5	15 0.3 9.1	250.529	+2.741	19.8
4	17 29 4 54 1	-21 28.3 1 9.1	55 32.2 41.3	15 9.4 11.3	262.804	+1.781	20.8
5	18 23 5 55 55	-22 37.4 0 0.0	56 13.5 48.5	15 20.7 13.2	275.327	+0.715	21.8
6	19 19 0 57 6	-22 37.4 1 15.4	57 2.0 53.7	15 33.9 14.6	288.174	-0.414	22.8
7	20 16 6 57 31	-21 22.0 2 31.9	57 55.7 56.2	15 48.5 15.3	301.418	-1.556	23.8
8	21 13 37 57 17	-18 50.1 3 43.9	58 51.9 54.3	16 3.8 14.8	315.116	-2.647	24.8
9	22 10 54 56 46	-15 6.2 4 44.9	59 46.2 47.1	16 18.6 12.9	329.297	-3.613	25.8
10	23 7 40 56 18	-10 21.3 5 29.3	60 33.3 34.4	16 31.5 9.3	343.940	-4.375	26.8
11	0 3 58 56 13	- 4 52.0 5 52.1	61 7.7 16.9	16 40.8 4.6	358.969	-4.858	27.8
12	1 0 11 56 40	+ 1 0.1 5 50.1	61 24.6 3.3	16 45.4 0.9	14.243	-5.006	28.8
13	1 56 51 57 32	+ 6 50.2 5 22.7	61 21.3 22.9	16 44.5 6.2	29.580	-4.795	0.5
14	2 54 23 58 37	+12 12.9 4 32.1	60 58.4 39.6	16 38.3 10.8	44.783	-4.246	1.5
15	3 53 0 59 27	+16 45.0 3 23.3	60 18.8 51.0	16 27.5 13.9	59.684	-3.416	2.5
16	4 52 27 59 35	+20 8.3 2 3.5	59 27.8 56.8	16 13.6 15.5	74.161	-2.383	3.5
17	5 52 2 58 42	+22 11.8 0 40.9	58 31.0 57.3	15 58.1 15.6	88.157	-1.236	4.5
18	6 50 44 56 47	+22 52.7 0 37.2	57 33.7 53.8	15 42.5 14.6	101.670	-0.955	5.5
19	7 47 31 54 11	+22 15.5 1 45.6	56 39.9 47.3	15 27.9 12.9	114.740	+1.092	6.5
20	8 41 42 51 19	+20 29.9 2 42.0	55 52.6 39.3	15 15.0 10.7	127.433	+2.152	7.5
21	9 33 1 48 37	+17 47.9 3 25.8	55 13.3 30.8	15 4.3 8.4	139.823	+3.083	8.5
22	10 21 38 46 22	+14 22.1 3 58.3	54 42.5 22.2	14 55.9 6.1	151.989	+3.856	9.5
23	11 8 0 44 44	+10 23.8 4 20.1	54 20.3 14.3	14 49.8 3.9	164.000	+4.447	10.5
24	11 52 44 43 49	+ 6 3.7 4 32.6	54 6.0 7.1	14 45.9 1.9	175.918	+4.838	11.5
25	12 36 33 43 35	+ 1 31.1 4 35.9	53 58.9 0.6	14 44.0 0.2	187.793	+5.018	12.5
26	13 20 8 44 3	- 3 4.8 4 30.0	53 58.3 5.0	14 43.8 1.4	199.661	+4.980	13.5
27	14 4 11 45 12	- 7 34.8 4 14.6	54 3.3 10.3	14 45.2 2.8	211.554	+4.726	14.5
28	14 49 23 46 52	-11 49.4 3 48.8	54 13.6 15.1	14 48.0 4.1	223.495	+4.264	15.5
29	15 36 15 48 58	-15 38.2 3 12.2	54 28.7 20.0	14 52.1 5.5	235.507	+3.609	16.5
30	16 25 13 51 13	-18 50.4 2 24.2	54 48.7 25.1	14 57.6 6.8	247.616	+2.784	17.5
Mai 1	17 16 26 53 21	-21 14.6 1 25.7	55 13.8 30.3	15 4.4 8.3	259.852	+1.820	18.5
2	18 9 47 54 59	-22 40.3 0 18.6	55 44.1 35.6	15 12.7 9.7	272.256	+0.755	19.5
3	19 4 46	-22 58.9	56 19.7	15 22.4	284.877	-0.368	20.5



Tag	Obere Kulmination in Greenwich							0 <sup>h</sup> Länge, + 50° Breite				
	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	
1945												
März 23	8 <sup>h</sup> 47 <sup>m</sup> 38 <sup>s</sup>	134	+19 59.2	- 6.0	55.4	20 43.8	2.06	12 41	2.6	4 1	1.7	
24	9 39 52	127	+17 8.3	- 8.1	54.9	21 31.9	1.95	13 46	2.7	4 37	1.4	
25	10 29 32	121	+13 32.5	- 9.8	54.5	22 17.5	1.85	14 52	2.7	5 6	1.1	
26	11 17 4	117	+ 9 24.0	-10.9	54.2	23 1.0	1.77	15 58	2.7	5 30	0.9	
27	12 3 3	113	+ 4 54.3	-11.5	54.1	23 42.9	1.72	17 3	2.7	5 52	0.8	
28	— — —	—	— — —	—	—	— — —	—	18 7	2.7	6 11	0.8	
29	12 48 10	112	+ 0 14.3	-11.7	54.0	0 24.0	1.70	19 12	2.7	6 29	0.8	
30	13 33 10	113	- 4 26.0	-11.5	54.0	1 4.9	1.71	20 16	2.7	6 48	0.8	
31	14 18 46	115	- 8 56.6	-10.9	54.1	1 46.5	1.75	21 21	2.7	7 7	0.9	
April 1	15 5 41	120	-13 7.2	- 9.9	54.3	2 29.3	1.82	22 27	2.7	7 29	1.0	
2	15 54 33	125	-16 47.1	- 8.4	54.6	3 14.1	1.92	23 32	2.7	7 54	1.2	
3	16 45 52	132	-19 44.5	- 6.3	55.1	4 1.4	2.02	— —	—	8 25	1.4	
4	17 39 49	138	-21 47.5	- 3.8	55.7	4 51.2	2.13	0 35	2.6	9 4	1.8	
5	18 36 17	144	-22 44.0	- 0.8	56.4	5 43.6	2.23	1 35	2.4	9 52	2.2	
6	19 34 41	148	-22 24.2	+ 2.5	57.3	6 37.9	2.29	2 29	2.1	10 50	2.6	
7	20 34 12	149	-20 42.3	+ 6.0	58.2	7 33.4	2.32	3 14	1.8	11 58	3.0	
8	21 33 54	149	-17 38.8	+ 9.3	59.2	8 29.0	2.31	3 53	1.5	13 14	3.3	
9	22 33 12	147	-13 21.1	+12.1	60.1	9 24.2	2.29	4 25	1.3	14 34	3.4	
10	23 31 54	146	- 8 4.0	+14.2	60.8	10 18.8	2.26	4 53	1.1	15 57	3.5	
11	0 30 13	146	- 2 8.8	+15.2	61.3	11 13.0	2.26	5 18	1.0	17 22	3.5	
12	1 28 43	147	+ 3 58.8	+15.2	61.4	12 7.4	2.28	5 43	1.0	18 48	3.6	
13	2 27 59	150	+ 9 50.5	+13.9	61.2	13 2.6	2.32	6 8	1.1	20 13	3.5	
14	3 28 24	153	+14 58.9	+11.6	60.6	13 58.9	2.37	6 36	1.3	21 37	3.4	
15	4 29 57	155	+19 0.5	+ 8.4	59.8	14 56.3	2.41	7 9	1.5	22 56	3.2	
16	5 31 59	155	+21 39.4	+ 4.8	58.8	15 54.3	2.41	7 48	1.8	— —	—	
17	6 33 26	152	+22 49.0	+ 1.1	57.8	16 51.6	2.36	8 35	2.1	0 9	2.8	
18	7 33 3	146	+22 32.1	- 2.4	56.9	17 47.1	2.26	9 30	2.4	1 10	2.3	
19	8 29 54	138	+20 58.7	- 5.3	56.0	18 39.9	2.13	10 31	2.6	2 0	1.9	
20	9 23 36	130	+18 22.1	- 7.6	55.3	19 29.5	2.00	11 36	2.7	2 40	1.5	
21	10 14 14	123	+14 56.5	- 9.4	54.8	20 16.1	1.88	12 43	2.8	3 11	1.2	
22	11 2 19	118	+10 55.0	-10.6	54.4	21 0.1	1.79	13 49	2.7	3 37	1.0	
23	11 48 31	114	+ 6 29.3	-11.4	54.1	21 42.3	1.73	14 54	2.7	3 59	0.9	
24	12 33 37	112	+ 1 49.6	-11.8	54.0	22 23.3	1.70	15 59	2.7	4 18	0.8	
25	13 18 26	112	- 2 54.1	-11.8	54.0	23 4.1	1.70	17 3	2.7	4 36	0.8	
26	14 3 44	114	- 7 32.1	-11.3	54.1	23 45.3	1.74	18 8	2.7	4 54	0.8	
27	— — —	—	— — —	—	—	— — —	—	19 13	2.7	5 13	0.8	
28	14 50 16	118	-11 54.1	-10.4	54.2	0 27.8	1.80	20 19	2.8	5 34	0.9	
29	15 38 39	124	-15 48.8	- 9.0	54.5	1 12.1	1.89	21 25	2.7	5 58	1.1	
30	16 29 21	130	-19 4.2	- 7.1	54.8	1 58.7	2.00	22 30	2.6	6 27	1.3	
Mai 1	17 22 33	136	-21 27.8	- 4.7	55.3	2 47.9	2.10	23 31	2.4	7 2	1.7	
2	18 18 4	141	-22 47.7	- 1.9	55.8	3 39.3	2.18	— —	—	7 46	2.0	
3	19 15 18	145	-22 54.3	+ 1.3	56.5	4 32.4	2.24	0 26	2.1	8 40	2.4	



Tag	0 <sup>b</sup> Welt-Zeit						
	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Mai							
3	19 <sup>h</sup> 4 <sup>m</sup> 46 <sup>s</sup> 55 <sup>m</sup> 56 <sup>n</sup>	-22° 58.9' 0" 54.0'	56' 19.7" 40.8"	15' 22.4" 11.1"	284.877°	-0.368°	20.5 <sup>d</sup>
4	20 0 42 56 5	-22 4.9 2 7.6	57 0.5 45.1	15 33.5 12.3	297.769	-1.498	21.5
5	20 56 47 55 42	-19 57.3 3 17.4	57 45.6 47.5	15 45.8 12.9	310.991	-2.577	22.5
6	21 52 29 55 3	-16 39.9 4 18.5	58 33.1 47.3	15 58.7 12.9	324.591	-3.543	23.5
7	22 47 32 54 34	-12 21.4 5 7.0	59 20.4 43.1	16 11.6 11.7	338.600	-4.328	24.5
8	23 42 6 54 32	- 7 14.4 5 38.8	60 3.5 34.3	16 23.3 9.4	353.015	-4.865	25.5
9	0 36 38 55 11	- 1 35.6 5 50.0	60 37.8 20.9	16 32.7 5.7	7.785	-5.097	26.5
10	1 31 49 56 27	+ 4 14.4 5 38.1	60 58.7 4.2	16 38.4 1.1	22.811	-4.985	27.5
11	2 28 16 58 11	+ 9 52.5 5 1.5	61 2.9 14.1	16 39.5 3.8	37.949	-4.527	28.5
12	3 26 27 59 53	+14 54.0 4 1.8	60 48.8 31.0	16 35.7 8.5	53.031	-3.755	0.2
13	4 26 20 60 59	+18 55.8 2 44.5	60 17.8 44.6	16 27.2 12.1	67.893	-2.737	1.2
14	5 27 19 60 53	+21 40.3 1 17.8	59 33.2 53.0	16 15.1 14.5	82.406	-1.560	2.2
15	6 28 12 59 24	+22 58.1 0 8.1	58 40.2 56.4	16 0.6 15.3	96.488	-0.318	3.2
16	7 27 36 56 46	+22 50.0 1 25.3	57 43.8 54.8	15 45.3 14.9	110.109	+0.904	4.2
17	8 24 22 53 32	+21 24.7 2 29.1	56 49.0 49.6	15 30.4 13.6	123.282	+2.040	5.2
18	9 17 54 50 17	+18 55.6 3 18.2	55 59.4 41.9	15 16.8 11.4	136.057	+3.040	6.2
19	10 8 11 47 29	+15 37.4 3 53.9	55 17.5 22.7	15 5.4 8.9	148.499	+3.868	7.2
20	10 55 40 45 21	+11 43.5 4 18.0	54 44.8 23.1	14 56.5 6.3	160.685	+4.503	8.2
21	11 41 1 44 1	+ 7 25.5 4 32.1	54 21.7 13.5	14 50.2 3.7	172.694	+4.929	9.2
22	12 25 2 43 30	+ 2 53.4 4 37.6	54 8.2 4.5	14 46.5 1.2	184.597	+5.138	10.2
23	13 8 32 43 48	- 1 44.2 4 34.4	54 3.7 3.4	14 45.3 0.9	196.461	+5.127	11.2
24	13 52 20 44 49	- 6 18.6 4 22.2	54 7.1 10.2	14 46.2 2.8	208.342	+4.895	12.2
25	14 37 9 46 31	-10 40.8 3 59.8	54 17.3 15.9	14 49.0 4.4	220.283	+4.449	13.2
26	15 23 40 48 41	-14 40.6 3 26.4	54 33.2 20.4	14 53.4 5.5	232.321	+3.802	14.2
27	16 12 21 51 6	-18 7.0 2 41.0	54 53.6 24.0	14 58.9 6.5	244.483	+2.976	15.2
28	17 3 27 53 22	-20 48.0 1 43.8	55 17.6 26.8	15 5.4 7.4	256.792	+2.000	16.2
29	17 56 49 55 8	-22 31.8 0 36.9	55 44.4 29.2	15 12.8 7.9	269.266	+0.914	17.2
30	18 51 57 56 3	-23 8.7 0 36.1	56 13.6 31.3	15 20.7 8.5	281.927	-0.235	18.2
31	19 48 0 56 1	-22 32.6 1 49.9	56 44.9 33.2	15 29.2 9.1	294.797	-1.393	19.2
Juni							
1	20 44 1 55 17	-20 42.7 2 59.3	57 18.1 34.5	15 38.3 9.4	307.901	-2.500	20.2
2	21 39 18 54 13	-17 43.4 4 0.0	57 52.6 35.2	15 47.7 9.6	321.266	-3.494	21.2
3	22 33 31 53 15	-13 43.4 4 48.5	58 27.8 34.2	15 57.3 9.3	334.913	-4.313	22.2
4	23 26 46 52 48	- 8 54.9 5 22.2	59 2.0 31.3	16 6.6 8.5	348.854	-4.898	23.2
5	0 19 34 53 5	- 3 32.7 5 39.0	59 33.3 25.3	16 15.1 6.9	3.080	-5.198	24.2
6	1 12 39 54 11	+ 2 6.3 5 36.6	59 58.6 16.4	16 22.0 4.5	17.556	-5.177	25.2
7	2 6 50 55 59	+ 7 42.9 5 12.8	60 15.0 4.4	16 26.5 1.2	32.216	-4.821	26.2
8	3 2 49 58 11	+12 55.7 4 26.6	60 19.4 9.2	16 27.7 2.5	46.965	-4.146	27.2
9	4 1 0 60 12	+17 22.3 3 19.6	60 10.2 23.1	16 25.2 6.3	61.685	-3.198	28.2
10	5 1 12 61 17	+20 41.9 1 57.5	59 47.1 35.3	16 18.9 9.7	76.258	-2.049	29.2
11	6 2 29 60 56	+22 39.4 0 29.1	59 11.8 44.4	16 9.2 12.0	90.573	-0.788	0.8
12	7 3 25 59 3	+23 8.5 0 55.5	58 27.4 49.3	15 57.2 13.5	104.551	+0.493	1.8
13	8 2 28	+22 13.0	57 38.1	15 43.7	118.145	+1.713	2.8



Tag	Obere Kulmination in Greenwich							o <sup>h</sup> Länge, + 50° Breite				
	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	
1945												
Mai	<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>s</sup>	<sup>o</sup> <sup>'</sup>	<sup>'</sup>	<sup>'</sup>	<sup>h</sup> <sup>m</sup>	<sup>m</sup>	<sup>h</sup> <sup>m</sup>	<sup>m</sup>	<sup>h</sup> <sup>m</sup>	<sup>m</sup>	
3	19 15 18	145	-22 54.3	+ 1.3	56.5	4 32.4	2.24	0 26	2.1	8 40	2.4	
4	20 13 25	146	-21 42.3	+ 4.7	57.2	5 26.5	2.26	1 13	1.8	9 44	2.8	
5	21 11 34	145	-19 11.6	+ 7.9	58.0	6 20.5	2.24	1 53	1.5	10 55	3.1	
6	22 9 8	143	-15 28.0	+10.7	58.8	7 14.0	2.21	2 26	1.3	12 11	3.2	
7	23 6 1	142	-10 42.3	+13.0	59.6	8 6.8	2.19	2 54	1.1	13 31	3.4	
8	0 2 29	141	- 5 10.2	+14.5	60.3	8 59.2	2.18	3 19	1.0	14 52	3.4	
9	0 59 12	143	+ 0 48.1	+15.2	60.8	9 51.8	2.21	3 43	1.0	16 16	3.5	
10	1 56 56	146	+ 6 48.9	+14.7	61.0	10 45.5	2.27	4 7	1.0	17 40	3.5	
11	2 56 22	151	+12 25.3	+13.1	61.0	11 40.8	2.35	4 33	1.2	19 5	3.5	
12	3 57 47	156	+17 10.0	+10.4	60.6	12 38.1	2.43	5 3	1.4	20 29	3.4	
13	5 0 52	159	+20 39.4	+ 6.9	59.9	13 37.1	2.48	5 38	1.7	21 47	3.1	
14	6 4 29	158	+22 38.2	+ 3.0	59.0	14 36.6	2.47	6 22	2.0	22 56	2.6	
15	7 7 1	154	+23 2.3	- 0.9	58.1	15 35.0	2.39	7 15	2.4	23 53	2.1	
16	8 7 0	146	+21 58.9	- 4.3	57.1	16 30.9	2.26	8 16	2.6	—	—	
17	9 3 29	137	+19 42.2	- 7.0	56.2	17 23.3	2.11	9 22	2.8	0 39	1.7	
18	9 56 19	128	+16 29.1	- 9.0	55.4	18 12.1	1.96	10 29	2.8	1 14	1.3	
19	10 45 54	120	+12 35.0	-10.4	54.9	18 57.6	1.84	11 37	2.8	1 42	1.1	
20	11 32 58	115	+ 8 13.3	-11.3	54.4	19 40.6	1.75	12 43	2.7	2 5	0.9	
21	12 18 25	112	+ 3 35.1	-11.8	54.2	20 22.0	1.70	13 49	2.7	2 25	0.8	
22	13 3 11	112	- 1 10.0	+11.9	54.1	21 2.7	1.69	14 53	2.7	2 43	0.7	
23	13 48 9	113	- 5 53.0	-11.6	54.1	21 43.6	1.72	15 57	2.7	3 1	0.7	
24	14 34 10	117	-10 24.1	-10.9	54.3	22 25.6	1.78	17 3	2.7	3 19	0.8	
25	15 22 0	122	-14 32.7	- 9.7	54.5	23 9.3	1.87	18 9	2.8	3 39	0.9	
26	16 12 12	129	-18 6.4	- 8.0	54.9	23 55.5	1.98	19 16	2.8	4 2	1.0	
27	— — —	—	— — —	—	—	— — —	—	20 22	2.7	4 29	1.3	
28	17 5 3	135	-20 52.1	- 5.7	55.3	0 44.2	2.09	21 25	2.5	5 2	1.6	
29	18 0 26	141	-22 36.4	- 2.9	55.8	1 35.6	2.18	22 23	2.3	5 43	1.9	
30	18 57 43	145	-23 8.4	+ 0.3	56.3	2 28.8	2.24	23 14	1.9	6 35	2.3	
31	19 55 54	146	-22 21.6	+ 3.6	56.8	3 22.9	2.26	23 56	1.6	7 35	2.7	
Juni												
1	20 53 57	144	-20 15.6	+ 6.8	57.4	4 16.8	2.23	— —	—	8 44	3.0	
2	21 51 4	141	-16 56.5	+ 9.7	58.0	5 9.8	2.18	0 30	1.3	9 58	3.1	
3	22 46 58	138	-12 34.9	+12.0	58.6	6 1.7	2.14	0 59	1.1	11 15	3.2	
4	23 41 55	137	- 7 25.4	+13.7	59.2	6 52.5	2.11	1 24	1.0	12 34	3.3	
5	0 36 34	137	- 1 44.6	+14.6	59.7	7 43.1	2.11	1 47	1.0	13 53	3.3	
6	1 31 50	140	+ 4 7.9	+14.6	60.1	8 34.3	2.16	2 10	1.0	15 14	3.4	
7	2 28 37	145	+ 9 50.2	+13.7	60.3	9 27.0	2.24	2 33	1.0	16 37	3.4	
8	3 27 40	151	+14 57.8	+11.8	60.3	10 21.9	2.34	3 0	1.2	18 0	3.4	
9	4 29 11	157	+19 5.9	+ 8.8	60.0	11 19.3	2.44	3 31	1.5	19 21	3.2	
10	5 32 35	160	+21 53.1	+ 5.1	59.5	12 18.6	2.49	4 11	1.8	20 35	2.9	
11	6 36 25	159	+23 6.4	+ 1.0	58.8	13 18.4	2.47	4 59	2.2	21 40	2.4	
12	7 38 52	153	+22 45.0	- 2.8	58.0	14 16.7	2.38	5 57	2.6	22 32	1.9	
13	8 38 21	144	+20 59.1	- 6.0	57.1	15 12.1	2.23	7 2	2.8	23 12	1.5	



0<sup>h</sup> Welt-Zeit

Tag	0 <sup>h</sup> Welt-Zeit						
	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Juni 13	8 <sup>h</sup> 2 <sup>m</sup> 28 <sup>s</sup> 56 <sup>m</sup> 2 <sup>a</sup>	+22° 13.0' 2 <sup>o</sup> 8.5'	57 38.1 <sup>''</sup> 50.0 <sup>''</sup>	15 43.7 <sup>''</sup> 13.6 <sup>''</sup>	118.145 <sup>o</sup>	+1.713 <sup>o</sup>	2.8 <sup>d</sup>
14	8 58 30 52 35	+20 4.5 3 5.8	56 48.1 46.8	15 30.1 12.7	131.345	+2.805	3.8
15	9 51 5 49 19	+16 58.7 3 47.4	56 1.3 40.5	15 17.4 11.1	144.172	+3.725	4.8
16	10 40 24 46 38	+13 11.3 4 15.3	55 20.8 32.1	15 6.3 8.7	156.671	+4.442	5.8
17	11 27 2 44 45	+ 8 56.0 4 31.7	54 48.7 22.5	14 57.6 6.2	168.995	+4.940	6.8
18	12 11 47 43 45	+ 4 24.3 4 38.7	54 26.2 12.3	14 51.4 3.3	180.946	+5.213	7.8
19	12 55 32 43 37	— 0 14.4 4 37.2	54 13.9 2.3	14 48.1 0.6	192.869	+5.257	8.8
20	13 39 9 44 22	— 4 51.6 4 27.5	54 11.6 7.2	14 47.5 1.9	204.748	+5.077	9.8
21	14 23 31 45 52	— 9 19.1 4 8.5	54 18.8 15.3	14 49.4 4.2	216.655	+4.679	10.8
22	15 9 23 48 1	—13 27.6 3 39.1	54 34.1 22.2	14 53.6 6.0	228.651	+4.074	11.8
23	15 57 24 50 35	—17 6.7 2 57.8	54 56.3 27.2	14 59.6 7.5	240.788	+3.279	12.8
24	16 47 59 53 13	—20 4.5 2 3.8	55 23.5 30.4	15 7.1 8.2	253.110	+2.321	13.8
25	17 41 12 55 24	—22 8.3 0 58.3	55 53.9 31.8	15 15.3 8.7	265.645	+1.236	14.8
26	18 36 36 56 45	—23 6.6 0 15.5	56 25.7 31.7	15 24.0 8.6	278.411	+0.068	15.8
27	19 33 21 56 59	—22 51.1 1 32.2	56 57.4 30.3	15 32.6 8.3	291.416	—1.124	16.8
28	20 30 20 56 14	—21 18.9 2 45.0	57 27.7 28.1	15 40.9 7.0	304.657	—2.279	17.8
29	21 26 34 54 53	—18 33.9 3 48.5	57 55.8 25.3	15 48.5 7.6	318.125	—3.327	18.8
30	22 21 27 53 26	—14 45.4 4 38.6	58 21.1 22.4	15 55.5 6.0	331.805	—4.202	19.8
Juli 1	23 14 53 52 23	—10 6.8 5 13.3	58 43.5 19.0	16 1.5 5.2	345.676	—4.846	20.8
2	0 7 16 52 2	— 4 53.5 5 31.2	59 2.5 15.1	16 6.7 4.1	359.715	—5.210	21.8
3	0 59 18 52 31	+ 0 37.7 5 31.6	59 17.6 16.3	16 10.8 2.8	13.891	—5.264	22.8
4	1 51 49 53 52	+ 6 9.3 5 13.6	59 27.9 4.3	16 13.6 1.2	28.167	—4.995	23.8
5	2 45 41 55 51	+11 22.9 4 36.2	59 32.2 3.1	16 14.8 0.8	42.497	—4.416	24.8
6	3 41 32 58 3	+15 59.1 3 39.5	59 29.1 11.5	16 14.0 3.2	56.827	—3.563	25.8
7	4 39 35 59 49	+19 38.6 2 26.4	59 17.6 20.5	16 10.8 5.5	71.092	—2.491	26.8
8	5 39 24 60 31	+22 5.0 1 2.6	58 57.1 28.8	16 5.3 7.9	85.228	—1.277	27.8
9	6 39 55 59 42	+23 7.6 0 23.2	58 28.3 35.8	15 57.4 9.7	99.169	—0.002	28.8
10	7 39 37 57 31	+22 44.4 1 41.9	57 52.5 40.1	15 47.7 11.0	112.860	+1.250	0.4
11	8 37 8 54 26	+21 2.5 2 47.2	57 12.4 41.7	15 36.7 11.3	126.260	+2.405	1.4
12	9 31 34 51 8	+18 15.3 3 36.5	56 30.7 40.0	15 25.4 10.9	139.350	+3.406	2.4
13	10 22 42 48 10	+14 38.8 4 10.2	55 50.7 35.6	15 14.5 9.7	152.129	+4.210	3.4
14	11 10 52 45 51	+10 28.6 4 30.6	55 15.1 28.6	15 4.8 7.8	164.621	+4.794	4.4
15	11 56 43 44 21	+ 5 58.0 4 39.8	54 46.5 20.0	14 57.0 5.5	176.865	+5.146	5.4
16	12 41 4 43 44	+ 1 18.2 4 39.9	54 26.5 10.2	14 51.5 2.8	188.919	+5.264	6.4
17	13 24 48 43 59	— 3 21.7 4 31.6	54 16.3 0.1	14 48.7 0.1	200.851	+5.154	7.4
18	14 8 47 45 7	— 7 53.3 4 15.0	54 16.4 10.3	14 48.8 2.8	212.735	+4.823	8.4
19	14 53 54 46 59	—12 8.3 3 49.1	54 26.7 19.9	14 51.6 5.4	224.648	+4.285	9.4
20	15 40 53 49 27	—15 57.4 3 12.2	54 46.6 28.1	14 57.0 7.7	236.668	+3.555	10.4
21	16 30 20 52 15	—19 9.6 2 23.4	55 14.7 34.6	15 4.7 9.4	248.864	+2.655	11.4
22	17 22 35 54 53	—21 33.0 1 21.8	55 49.3 38.5	15 14.1 10.5	261.300	+1.614	12.4
23	18 17 28 56 53	—22 54.8 0 9.7	56 27.8 39.8	15 24.6 10.8	274.021	+0.471	13.4
24	19 14 21	—23 4.5	57 7.6	15 35.4	287.056	—0.723	14.4



Tag	Obere Kulmination in Greenwich							o <sup>h</sup> Länge, + 50° Breite				
	A.R.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	
1945												
Juni 13	8 <sup>h</sup> 38 <sup>m</sup> 21 <sup>s</sup>	144	+20 59.1	- 6.0	57.1	15 12.1	2.23	7 2	2.8	23 12	1.5	
14	9 34 5	134	+18 5.5	- 8.4	56.3	16 3.7	2.07	8 11	2.9	23 44	1.2	
15	10 26 3	126	+14 22.4	-10.1	55.5	16 51.6	1.92	9 21	2.9	— —	—	
16	11 14 50	119	+10 6.1	-11.2	54.9	17 36.3	1.81	10 29	2.8	0 9	1.0	
17	12 1 18	114	+ 5 29.7	-11.8	54.5	18 18.8	1.73	11 36	2.7	0 31	0.8	
18	12 46 27	112	+ 0 43.9	-12.0	54.3	18 59.9	1.70	12 41	2.7	0 49	0.8	
19	13 31 16	112	- 4 2.1	-11.8	54.2	19 40.6	1.70	13 45	2.7	1 7	0.7	
20	14 16 43	115	- 8 39.5	-11.3	54.3	20 22.0	1.75	14 50	2.7	1 25	0.8	
21	15 3 42	120	-12 58.7	-10.3	54.5	21 4.9	1.83	15 56	2.8	1 44	0.8	
22	15 52 58	126	-16 48.4	- 8.8	54.9	21 50.1	1.94	17 2	2.8	2 5	1.0	
23	16 45 2	134	-19 55.7	- 6.7	55.4	22 38.1	2.06	18 10	2.8	2 30	1.2	
24	17 40 2	141	-22 6.3	- 4.1	55.9	23 29.0	2.18	19 15	2.6	3 1	1.4	
25	— — —	—	— — —	—	—	— — —	—	20 16	2.4	3 40	1.8	
26	18 37 29	146	-23 7.0	- 0.9	56.4	0 22.4	2.26	21 10	2.1	4 28	2.2	
27	19 36 25	148	-22 48.1	+ 2.5	57.0	1 17.2	2.30	21 56	1.7	5 26	2.6	
28	20 35 33	147	+21 6.7	+ 5.9	57.5	2 12.3	2.28	22 33	1.4	6 34	2.9	
29	21 33 45	144	-18 7.6	+ 8.9	58.0	3 6.4	2.22	23 4	1.2	7 48	3.1	
30	22 30 24	140	-14 2.2	+11.4	58.4	3 59.0	2.16	23 30	1.0	9 4	3.2	
Juli 1	23 25 30	136	- 9 6.0	+13.1	58.8	4 50.0	2.10	23 53	0.9	10 22	3.3	
2	0 19 33	135	- 3 36.3	+14.2	59.1	5 39.9	2.07	— —	—	11 40	3.3	
3	1 13 25	135	+ 2 8.1	+14.4	59.3	6 29.7	2.08	0 15	0.9	12 59	3.3	
4	2 8 7	139	+ 7 48.0	+13.8	59.5	7 20.4	2.14	0 37	1.0	14 19	3.3	
5	3 4 33	144	+13 2.6	+12.3	59.5	8 12.7	2.23	1 2	1.1	15 40	3.3	
6	4 3 21	150	+17 30.2	+ 9.9	59.4	9 7.4	2.33	1 30	1.3	16 59	3.2	
7	5 4 31	155	+20 49.8	+ 6.6	59.2	10 4.5	2.42	2 5	1.6	18 15	3.0	
8	6 7 16	158	+22 44.6	+ 2.9	58.7	11 3.1	2.46	2 48	2.0	19 24	2.6	
9	7 10 2	155	+23 6.5	- 1.0	58.2	12 1.8	2.42	3 41	2.4	20 21	2.1	
10	8 11 4	149	+21 58.3	- 4.6	57.5	12 58.7	2.31	4 43	2.7	21 7	1.7	
11	9 9 1	140	+19 32.8	- 7.4	56.8	13 52.6	2.17	5 51	2.9	21 42	1.3	
12	10 3 18	131	+16 7.4	- 9.6	56.1	14 42.8	2.02	7 2	2.9	22 11	1.1	
13	10 54 6	123	+12 0.2	-10.9	55.5	15 29.5	1.88	8 12	2.9	22 34	0.9	
14	11 42 4	117	+ 7 27.2	-11.7	54.9	16 13.4	1.78	9 20	2.8	22 54	0.8	
15	12 28 5	113	+ 2 41.1	-12.0	54.5	16 55.4	1.72	10 26	2.7	23 12	0.7	
16	13 13 9	112	- 2 7.6	-12.0	54.3	17 36.4	1.70	11 31	2.7	23 30	0.7	
17	13 58 15	113	- 6 49.9	-11.5	54.3	18 17.4	1.72	12 36	2.7	23 48	0.8	
18	14 44 21	117	-11 16.9	-10.7	54.4	18 59.5	1.78	13 41	2.7	— —	—	
19	15 32 21	123	-15 18.9	- 9.4	54.7	19 43.4	1.88	14 47	2.8	0 8	0.9	
20	16 22 57	130	-18 44.3	- 7.6	55.2	20 29.9	2.00	15 54	2.8	0 32	1.1	
21	17 16 37	138	-21 19.8	- 5.2	55.8	21 19.5	2.13	17 0	2.7	0 59	1.3	
22	18 13 16	145	-22 51.1	- 2.3	56.4	22 12.1	2.24	18 3	2.5	1 35	1.7	
23	19 12 14	149	-23 5.5	+ 1.1	57.1	23 7.0	2.32	19 2	2.2	2 19	2.1	
24	— — —	—	— — —	—	—	— — —	—	19 51	1.9	3 14	2.5	



0<sup>h</sup> Welt-Zeit.

Tag	0 <sup>h</sup> Welt-Zeit.						
	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Juli 24	<sup>h</sup> 19 <sup>m</sup> 14 <sup>s</sup> 21 <sup>m</sup> 57 <sup>s</sup> 51	—23 4.5 <sup>o</sup> 1 8.8	57 7.6 <sup>''</sup> 38.3	15 35.4 <sup>''</sup> 10.4	287.056 <sup>o</sup>	—0.723 <sup>o</sup>	14.4 <sup>d</sup>
25	20 12 12 57 37	—21 55.7 <sup>o</sup> 2 26.6	57 45.9 <sup>''</sup> 34.0	15 45.8 <sup>''</sup> 9.3	300.411 <sup>o</sup>	—1.904 <sup>o</sup>	15.4
26	21 9 49 56 29	—19 29.1 <sup>o</sup> 3 36.6	58 19.9 <sup>''</sup> 27.7	15 55.1 <sup>''</sup> 7.6	314.068 <sup>o</sup>	—3.003 <sup>o</sup>	16.4
27	22 6 18 54 56	—15 52.5 <sup>o</sup> 4 33.0	58 47.6 <sup>''</sup> 20.3	16 2.7 <sup>''</sup> 5.5	327.085 <sup>o</sup>	—3.944 <sup>o</sup>	17.4
28	23 1 14 53 31	—11 19.5 <sup>o</sup> 5 12.1	59 7.9 <sup>''</sup> 12.3	16 8.2 <sup>''</sup> 3.4	342.105 <sup>o</sup>	—4.659 <sup>o</sup>	18.4
29	23 54 45 52 37	— 6 7.4 <sup>o</sup> 5 32.7	59 20.2 <sup>''</sup> 5.0	16 11.6 <sup>''</sup> 1.3	356.355 <sup>o</sup>	—5.094 <sup>o</sup>	19.4
30	0 47 22 52 30	— 0 34.7 <sup>o</sup> 5 34.4	59 25.2 <sup>''</sup> 1.6	16 12.9 <sup>''</sup> 0.4	10.662 <sup>o</sup>	—5.215 <sup>o</sup>	20.4
31	1 39 52 53 11	+ 4 59.7 <sup>o</sup> 5 17.7	59 23.6 <sup>''</sup> 7.2	16 12.5 <sup>''</sup> 2.0	24.962 <sup>o</sup>	—5.014 <sup>o</sup>	21.4
Aug. 1	2 33 3 54 36	+10 17.4 <sup>o</sup> 4 42.7	59 16.4 <sup>''</sup> 11.9	16 10.5 <sup>''</sup> 3.2	39.200 <sup>o</sup>	—4.506 <sup>o</sup>	22.4
2	3 27 39 56 24	+15 0.1 <sup>o</sup> 3 50.7	59 4.5 <sup>''</sup> 16.1	16 7.3 <sup>''</sup> 4.4	53.338 <sup>o</sup>	—3.728 <sup>o</sup>	23.4
3	4 24 3 58 7	+18 50.8 <sup>o</sup> 2 43.4	58 48.4 <sup>''</sup> 20.2	16 2.9 <sup>''</sup> 5.5	67.347 <sup>o</sup>	—2.733 <sup>o</sup>	24.4
4	5 22 10 59 8	+21 34.2 <sup>o</sup> 1 25.2	58 28.2 <sup>''</sup> 24.2	15 57.4 <sup>''</sup> 6.6	81.207 <sup>o</sup>	—1.587 <sup>o</sup>	25.4
5	6 21 18 58 59	+22 59.4 <sup>o</sup> 0 2.5	58 4.0 <sup>''</sup> 27.7	15 50.8 <sup>''</sup> 7.6	94.901 <sup>o</sup>	—0.365 <sup>o</sup>	26.4
6	7 20 17 57 32	+23 1.9 <sup>o</sup> 1 17.0	57 36.3 <sup>''</sup> 30.9	15 43.2 <sup>''</sup> 8.4	108.412 <sup>o</sup>	+0.860 <sup>o</sup>	27.4
7	8 17 49 55 4.	+21 44.9 <sup>o</sup> 2 26.5	57 5.4 <sup>''</sup> 32.8	15 34.8 <sup>''</sup> 8.9	121.721 <sup>o</sup>	+2.017 <sup>o</sup>	28.4
8	9 12 53 52 8	+19 18.4 <sup>o</sup> 3 21.8	56 32.6 <sup>''</sup> 33.3	15 25.9 <sup>''</sup> 8.7	134.812 <sup>o</sup>	+3.047 <sup>o</sup>	0.0
9	10 5 1 49 14	+15 56.6 <sup>o</sup> 4 1.8	55 59.3 <sup>''</sup> 32.0	15 16.8 <sup>''</sup> 9.7	147.671 <sup>o</sup>	+3.900 <sup>o</sup>	1.0
10	10 54 15 46 48	+11 54.8 <sup>o</sup> 4 27.4	55 27.3 <sup>''</sup> 28.6	15 8.1 <sup>''</sup> 7.8	160.295 <sup>o</sup>	+4.545 <sup>o</sup>	2.0
11	11 41 3 45 2	+ 7 27.4 <sup>o</sup> 4 40.4	54 58.7 <sup>''</sup> 23.1	15 0.3 <sup>''</sup> 6.3	172.690 <sup>o</sup>	+4.961 <sup>o</sup>	3.0
12	12 26 5 44 2	+ 2 47.0 <sup>o</sup> 4 42.9	54 35.6 <sup>''</sup> 16.0	14 54.0 <sup>''</sup> 4.4	184.879 <sup>o</sup>	+5.144 <sup>o</sup>	4.0
13	13 10 7 43 53	— 1 55.9 <sup>o</sup> 4 36.3	54 19.6 <sup>''</sup> 7.4	14 49.6 <sup>''</sup> 2.0	196.902 <sup>o</sup>	+5.097 <sup>o</sup>	5.0
14	13 54 0 44 32	— 6 32.2 <sup>o</sup> 4 21.1	54 12.2 <sup>''</sup> 2.4	14 47.6 <sup>''</sup> 0.7	208.809 <sup>o</sup>	+4.828 <sup>o</sup>	6.0
15	14 38 32 45 57	—10 53.3 <sup>o</sup> 3 57.3	54 14.6 <sup>''</sup> 12.6	14 48.3 <sup>''</sup> 3.4	220.669 <sup>o</sup>	+4.354 <sup>o</sup>	7.0
16	15 24 29 48 4	—14 50.6 <sup>o</sup> 3 23.9	54 27.2 <sup>''</sup> 22.8	14 51.7 <sup>''</sup> 6.2	232.556 <sup>o</sup>	+3.692 <sup>o</sup>	8.0
17	16 12 33 50 38	—18 14.5 <sup>o</sup> 2 39.8	54 50.0 <sup>''</sup> 32.3	14 57.9 <sup>''</sup> 8.8	244.552 <sup>o</sup>	+2.862 <sup>o</sup>	9.0
18	17 3 11 53 22	—20 54.3 <sup>o</sup> 1 43.8	55 22.3 <sup>''</sup> 40.4	15 6.7 <sup>''</sup> 11.0	256.742 <sup>o</sup>	+1.890 <sup>o</sup>	10.0
19	17 56 33 55 48	—22 38.1 <sup>o</sup> 0 36.4	56 2.7 <sup>''</sup> 46.1	15 17.7 <sup>''</sup> 12.6	269.205 <sup>o</sup>	+0.809 <sup>o</sup>	11.0
20	18 52 21 57 29	—23 14.5 <sup>o</sup> 0 39.9	56 48.8 <sup>''</sup> 48.8	15 30.3 <sup>''</sup> 13.3	282.010 <sup>o</sup>	—0.339 <sup>o</sup>	12.0
21	19 49 50 58 5	—22 34.6 <sup>o</sup> 1 59.7	57 37.6 <sup>''</sup> 47.5	15 43.6 <sup>''</sup> 12.9	295.207 <sup>o</sup>	—1.502 <sup>o</sup>	13.0
22	20 47 55 57 40	—20 34.9 <sup>o</sup> 3 16.1	58 25.1 <sup>''</sup> 42.3	15 56.5 <sup>''</sup> 11.6	308.814 <sup>o</sup>	—2.614 <sup>o</sup>	14.0
23	21 45 35 56 34	—17 18.8 <sup>o</sup> 4 21.8	59 7.4 <sup>''</sup> 33.3	16 8.1 <sup>''</sup> 9.0	322.817 <sup>o</sup>	—3.599 <sup>o</sup>	15.0
24	22 42 9 55 17	—12 57.0 <sup>o</sup> 5 10.7	59 40.7 <sup>''</sup> 21.4	16 17.1 <sup>''</sup> 5.9	337.157 <sup>o</sup>	—4.381 <sup>o</sup>	16.0
25	23 37 26 54 16	— 7 46.3 <sup>o</sup> 5 39.4	60 2.1 <sup>''</sup> 8.4	16 23.0 <sup>''</sup> 2.2	351.738 <sup>o</sup>	—4.893 <sup>o</sup>	17.0
26	0 31 42 53 51	— 2 6.9 <sup>o</sup> 5 46.4	60 10.5 <sup>''</sup> 4.3	16 25.2 <sup>''</sup> 1.1	6.440 <sup>o</sup>	—5.088 <sup>o</sup>	18.0
27	1 25 33 54 8	+ 3 39.5 <sup>o</sup> 5 32.1	60 6.2 <sup>''</sup> 15.2	16 24.1 <sup>''</sup> 4.2	21.137 <sup>o</sup>	—4.949 <sup>o</sup>	19.0
28	2 19 41 55 3	+ 9 11.6 <sup>o</sup> 4 57.7	59 51.0 <sup>''</sup> 23.3	16 19.9 <sup>''</sup> 6.3	35.716 <sup>o</sup>	—4.489 <sup>o</sup>	20.0
29	3 14 44 56 24	+14 9.3 <sup>o</sup> 4 5.6	59 27.7 <sup>''</sup> 28.7	16 13.6 <sup>''</sup> 7.8	50.095 <sup>o</sup>	—3.751 <sup>o</sup>	21.0
30	4 11 8 57 43	+18 14.9 <sup>o</sup> 2 58.8	58 59.0 <sup>''</sup> 31.6	16 5.8 <sup>''</sup> 8.6	64.223 <sup>o</sup>	—2.794 <sup>o</sup>	22.0
31	5 8 51 58 29	+21 13.7 <sup>o</sup> 1 41.9	58 27.4 <sup>''</sup> 32.7	15 57.2 <sup>''</sup> 8.9	78.086 <sup>o</sup>	—1.690 <sup>o</sup>	23.0
Sept. 1	6 7 20 58 21	+22 55.6 <sup>o</sup> 0 20.6	57 54.7 <sup>''</sup> 32.6	15 48.3 <sup>''</sup> 8.9	91.690 <sup>o</sup>	—0.509 <sup>o</sup>	24.0
2	7 5 41 57 5	+23 16.2 <sup>o</sup> 0 58.3	57 22.1 <sup>''</sup> 31.8	15 39.4 <sup>''</sup> 8.7	105.052 <sup>o</sup>	+0.678 <sup>o</sup>	25.0
3	8 2 46	+22 17.9 <sup>o</sup>	56 50.3 <sup>''</sup>	15 30.7 <sup>''</sup>	118.195 <sup>o</sup>	+1.807 <sup>o</sup>	26.0



Tag	Obere Kulmination in Greenwich						0 <sup>h</sup> Länge, + 50° Breite				
	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge
1945											
Juli 24	h m s	s	o ' "	' "	' "	h m	m	h m	m	h m	m
25	20 12 19	150	-21 55.5	+ 4.7	57.8	0 3.0	2.34	20 32	1.6	4 19	2.9
26	21 12 9	148	-19 21.5	+ 8.1	58.4	0 58.7	2.30	21 6	1.3	5 32	3.1
27	22 10 41	144	-15 32.8	+10.9	58.8	1 53.1	2.23	21 34	1.1	6 50	3.3
28	23 7 28	140	-10 45.2	+12.9	59.2	2 45.8	2.16	21 58	1.0	8 10	3.3
29	0 2 43	137	- 5 18.1	+14.2	59.4	3 37.0	2.11	22 20	0.9	9 29	3.3
30	0 57 6	136	+ 0 27.8	+14.5	59.4	4 27.3	2.09	22 43	1.0	10 48	3.3
31	1 51 30	137	+ 6 11.9	+14.0	59.4	5 17.6	2.11	23 6	1.0	12 8	3.3
Aug. 1	2 46 53	140	+11 33.8	+12.7	59.2	6 8.9	2.17	23 33	1.2	13 27	3.3
2	3 43 59	145	+16 13.8	+10.5	59.0	7 1.9	2.25	— —	—	14 46	3.2
3	4 43 8	150	+19 53.0	+ 7.6	58.7	7 57.0	2.33	0 4	1.5	16 2	3.1
4	5 44 1	154	+22 15.3	+ 4.2	58.3	8 53.8	2.39	0 43	1.8	17 12	2.7
5	6 45 37	154	+23 10.4	+ 0.4	57.9	9 51.3	2.39	1 31	2.2	18 12	2.3
6	7 46 25	150	+22 36.6	- 3.2	57.4	10 48.0	2.33	2 29	2.6	19 1	1.8
7	8 45 2	143	+20 41.3	- 6.3	56.8	11 42.5	2.21	3 35	2.8	19 40	1.5
8	9 40 33	135	+17 38.7	- 8.8	56.3	12 33.9	2.07	4 44	2.9	20 11	1.2
9	10 32 47	127	+13 45.9	-10.5	55.7	13 22.1	1.94	5 54	2.9	20 36	1.0
10	11 22 3	120	+ 9 19.7	-11.6	55.2	14 7.3	1.83	7 4	2.9	20 58	0.8
11	12 9 3	115	+ 4 34.9	-12.1	54.7	14 50.2	1.75	8 11	2.8	21 16	0.8
12	12 54 38	113	- 0 16.4	-12.1	54.4	15 31.8	1.71	9 17	2.7	21 34	0.7
13	13 39 43	113	- 5 3.8	-11.8	54.2	16 12.8	1.71	10 23	2.7	21 52	0.8
14	14 25 15	115	- 9 38.2	-11.0	54.2	16 54.3	1.75	11 28	2.7	22 11	0.8
15	15 12 5	119	-13 50.3	- 9.9	54.4	17 37.0	1.82	12 33	2.7	22 33	1.0
16	16 1 3	126	-17 30.2	- 8.3	54.7	18 21.9	1.92	13 39	2.7	22 58	1.2
17	16 52 45	133	-20 26.2	- 6.2	55.3	19 9.6	2.05	14 44	2.7	23 30	1.5
18	17 47 29	141	-22 25.2	- 3.6	55.9	20 0.2	2.17	15 48	2.6	— —	—
19	18 45 1	147	-23 13.9	- 0.4	56.7	20 53.7	2.28	16 49	2.4	0 9	1.9
20	19 44 34	150	-22 41.6	+ 3.1	57.6	21 49.1	2.34	17 42	2.0	0 59	2.3
21	20 44 54	151	-20 43.0	+ 6.7	58.4	22 45.4	2.34	18 27	1.7	1 59	2.7
22	21 44 50	149	-17 21.8	+10.0	59.1	23 41.2	2.31	19 3	1.4	3 10	3.1
23	— — —	—	— — —	—	—	— — —	—	19 34	1.2	4 28	3.3
24	22 43 32	145	-12 49.8	+12.6	59.7	0 35.8	2.25	20 0	1.0	5 48	3.4
25	23 40 49	142	- 7 25.9	+14.3	60.0	1 29.0	2.19	20 24	1.0	7 11	3.4
26	0 36 59	140	- 1 32.9	+15.0	60.2	2 21.1	2.16	20 47	1.0	8 33	3.4
27	1 32 46	140	+ 4 25.2	+14.7	60.1	3 12.8	2.16	21 10	1.0	9 54	3.4
28	2 28 58	142	+10 5.1	+13.5	59.8	4 4.9	2.19	21 36	1.2	11 16	3.4
29	3 26 18	145	+15 5.0	+11.4	59.4	4 58.1	2.25	22 6	1.4	12 36	3.3
30	4 25 10	149	+19 5.4	+ 8.5	58.9	5 52.9	2.31	22 42	1.7	13 53	3.1
31	5 25 25	152	+21 50.8	+ 5.2	58.3	6 49.1	2.36	23 27	2.1	15 5	2.8
Sept. 1	6 26 17	152	+23 11.2	+ 1.5	57.7	7 45.8	2.36	— —	—	16 7	2.4
2	7 26 34	149	+23 3.9	- 2.1	57.2	8 42.0	2.31	0 21	2.4	16 59	1.9
3	8 25 3	143	+21 34.2	- 5.3	56.6	9 36.4	2.21	1 24	2.7	17 40	1.5



0<sup>b</sup> Welt-Zeit

Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Sept. 3	<sup>h</sup> 8 <sup>m</sup> 2 <sup>s</sup> 46 <sup>m</sup> <sup>s</sup> 54 55	+22° 17.9' 2" 8.9	56 50.3 30.7	15 30.7 8.4	118.195	+1.807	26.0
4	8 57 41 52 15	+20 9.0 3 7.3	56 19.6 29.4	15 22.3 8.0	131.139	+2.823	27.0
5	9 49 56 49 34	+17 1.7 3 51.6	55 50.2 27.4	15 14.3 7.4	143.895	+3.679	28.0
6	10 39 30 47 11	+13 10.1 4 21.9	55 22.8 25.0	15 6.9 6.9	156.473	+4.342	29.0
7	11 26 41 45 23	+ 8 48.2 4 39.4	54 57.8 21.6	15 0.0 5.8	168.877	+4.787	0.4
8	12 12 4 44 15	+ 4 8.8 4 45.4	54 36.2 17.0	14 54.2 4.7	181.113	+5.004	1.4
9	12 56 19 43 53	- 0 36.6 4 41.4	54 19.2 11.2	14 49.5 3.0	193.196	+4.992	2.4
10	13 40 12 44 13	- 5 18.0 4 28.2	54 8.0 4.0	14 46.5 1.1	205.150	+4.760	3.4
11	14 24 25 45 17	- 9 46.2 4 5.9	54 4.0 4.4	14 45.4 1.2	217.013	+4.323	4.4
12	15 9 42 46 57	-13 52.1 3 34.5	54 8.4 13.7	14 46.6 3.7	228.835	+3.702	5.4
13	15 56 39 49 9	-17 26.6 2 53.5	54 22.1 23.5	14 50.3 6.4	240.682	+2.918	6.4
14	16 45 48 51 34	-20 20.1 2 1.9	54 45.6 33.4	14 56.7 9.1	252.631	+2.000	7.4
15	17 37 22 53 57	-22 22.0 1 0.0	55 19.0 42.5	15 5.8 11.6	264.769	+0.977	8.4
16	18 31 19 55 51	-23 22.0 0 11.2	56 1.5 50.1	15 17.4 13.7	277.182	-0.115	9.4
17	19 27 10 56 59	-23 10.8 1 28.3	56 51.6 54.9	15 31.1 14.9	289.957	-1.231	10.4
18	20 24 9 57 17	-21 42.5 2 45.9	57 46.5 55.9	15 46.0 15.2	303.165	-2.317	11.4
19	21 21 26 56 51	-18 56.6 3 58.0	58 42.4 52.0	16 1.2 14.2	316.848	-3.308	12.4
20	22 18 17 56 6	-14 58.6 4 57.5	59 34.4 42.8	16 15.4 11.7	331.010	-4.131	13.4
21	23 14 23 55 28	-10 1.1 5 38.9	60 17.2 29.1	16 27.1 7.9	345.601	-4.712	14.4
22	0 9 51 55 14	- 4 22.2 5 58.2	60 46.3 12.1	16 35.0 3.3	0.516	-4.988	15.4
23	1 5 5 55 35	+ 1 36.0 5 53.2	60 58.4 5.5	16 38.3 1.5	15.606	-4.922	16.4
24	2 0 40 56 31	+ 7 29.2 5 23.9	60 52.9 21.6	16 36.8 5.9	30.699	-4.514	17.4
25	2 57 11 57 47	+12 53.1 4 32.9	60 31.3 34.1	16 30.9 9.3	45.634	-3.801	18.4
26	3 54 58 58 57	+17 26.0 3 24.0	59 57.2 42.1	16 21.6 11.4	60.287	-2.847	19.4
27	4 53 55 59 33	+20 50.0 2 3.7	59 15.1 45.7	16 10.2 12.5	74.582	-1.733	20.4
28	5 53 28 59 7	+22 53.7 0 39.1	58 29.4 45.8	15 57.7 12.5	88.493	-0.543	21.4
29	6 52 35 57 36	+23 32.8 0 42.5	57 43.6 43.3	15 45.2 11.8	102.034	+0.648	22.4
30	7 50 11 55 14	+22 50.3 1 55.3	57 0.3 39.3	15 33.4 10.7	115.242	+1.774	23.4
Okt. 1	8 45 25 52 24	+20 55.0 2 55.6	56 21.0 34.7	15 22.7 9.4	128.163	+2.782	24.4
2	9 37 49 49 37	+17 59.4 3 42.3	55 46.3 29.7	15 13.3 8.1	140.846	+3.632	25.4
3	10 27 26 47 13	+14 17.1 4 15.6	55 16.6 25.0	15 5.2 6.8	153.332	+4.292	26.4
4	11 14 39 45 22	+10 1.5 4 36.7	54 51.6 20.4	14 58.4 5.6	165.656	+4.741	27.4
5	12 0 1 44 12	+ 5 24.8 4 46.3	54 31.2 15.9	14 52.8 4.3	177.842	+4.967	28.4
6	12 44 13 43 46	+ 0 38.5 4 45.6	54 15.3 11.2	14 48.5 3.1	189.909	+4.967	29.4
7	13 27 59 44 0	- 4 7.1 4 35.3	54 4.1 6.0	14 45.4 1.6	201.875	+4.746	0.8
8	14 11 59 44 54	- 8 42.4 4 15.3	53 58.1 0.2	14 43.8 0.1	213.757	+4.320	1.8
9	14 56 53 46 22	-12 57.7 3 45.8	53 57.9 6.5	14 43.7 1.8	225.585	+3.707	2.8
10	15 43 15 48 15	-16 43.5 3 6.6	54 4.4 14.1	14 45.5 3.8	237.395	+2.934	3.8
11	16 31 30 50 22	-19 50.1 2 17.6	54 18.5 22.4	14 49.3 6.2	249.236	+2.029	4.8
12	17 21 52 52 25	-22 7.7 1 18.9	54 40.9 31.4	14 55.5 8.5	261.172	+1.027	5.8
13	18 14 17 54 8	-23 26.6 0 12.1	55 12.3 40.3	15 4.0 11.0	273.276	-0.037	6.8
14	19 8 25	-23 38.7	55 52.6	15 15.0	285.632	-1.123	7.8



Tag	Obere Kulmination in Greenwich							o <sup>h</sup> Länge, + 50° Breite				
	AR.	Ände- rung für i <sup>h</sup> westl. Länge	Dekl.	Ände- rung für i <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für i <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für i <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für i <sup>h</sup> westl. Länge	
1945												
Sept. 3	8 <sup>h</sup> 25 <sup>m</sup> 3 <sup>s</sup>	143 <sup>s</sup>	+21° 34.2'	- 5.3'	56.6'	9 <sup>h</sup> 36.4 <sup>m</sup>	2.21 <sup>m</sup>	1 <sup>h</sup> 24 <sup>m</sup>	2.7 <sup>m</sup>	17 <sup>h</sup> 40 <sup>m</sup>	1.5 <sup>m</sup>	
4	9 20 49	135	+18 53.7	- 8.0	56.1	10 28.1	2.09	2 31	2.9	18 13	1.2	
5	10 13 33	128	+15 17.5	- 9.9	55.6	11 16.8	1.97	3 41	2.9	18 40	1.0	
6	11 3 26	122	+11 1.7	-11.3	55.2	12 2.6	1.86	4 50	2.9	19 2	0.9	
7	11 51 0	117	+ 6 21.0	-12.0	54.8	12 46.1	1.77	5 58	2.8	19 21	0.8	
8	12 36 59	114	+ 1 28.7	-12.3	54.4	13 28.0	1.72	7 5	2.8	19 39	0.7	
9	13 22 12	113	- 3 23.7	-12.0	54.2	14 9.2	1.71	8 10	2.7	19 57	0.7	
10	14 7 27	114	- 8 6.0	-11.4	54.1	14 50.4	1.73	9 16	2.7	20 15	0.8	
11	14 53 34	117	-12 28.5	-10.4	54.1	15 32.4	1.78	10 21	2.7	20 35	0.9	
12	15 41 18	122	-16 21.5	- 8.9	54.3	16 16.1	1.86	11 26	2.7	20 58	1.1	
13	16 31 17	128	-19 34.6	- 7.1	54.6	17 2.0	1.97	12 32	2.7	21 27	1.3	
14	17 23 54	135	-21 56.2	- 4.7	55.2	17 50.5	2.08	13 36	2.6	22 2	1.7	
15	18 19 12	141	-23 14.6	- 1.8	55.9	18 41.8	2.19	14 36	2.4	22 46	2.1	
16	19 16 47	146	-23 18.5	+ 1.5	56.7	19 35.3	2.26	15 32	2.1	23 40	2.5	
17	20 15 49	149	-22 0.3	+ 5.0	57.6	20 30.2	2.30	16 19	1.8	—	—	
18	21 15 18	149	-19 18.0	+ 8.5	58.6	21 25.6	2.30	16 59	1.5	0 46	2.9	
19	22 14 23	147	-15 17.1	+11.5	59.5	22 20.6	2.27	17 32	1.3	2 0	3.2	
20	23 12 38	145	-10 11.2	+13.8	60.3	23 14.7	2.24	18 0	1.1	3 20	3.4	
21	— — —	—	— — —	—	—	— — —	—	18 25	1.0	4 42	3.5	
22	0 10 10	143	- 4 20.2	+15.2	60.8	0 8.2	2.22	18 48	1.0	6 6	3.5	
23	1 7 26	143	+ 1 51.3	+15.5	61.0	1 1.4	2.22	19 11	1.0	7 31	3.5	
24	2 5 8	145	+ 7 56.4	+14.7	60.9	1 55.0	2.25	19 36	1.1	8 55	3.5	
25	3 3 56	149	+13 28.3	+12.8	60.5	2 49.7	2.31	20 5	1.3	10 19	3.4	
26	4 4 9	152	+18 2.9	+10.0	59.9	3 45.8	2.37	20 40	1.6	11 41	3.3	
27	5 5 37	155	+21 20.9	+ 6.5	59.1	4 43.2	2.41	21 23	2.0	12 57	3.0	
28	6 7 32	154	+23 10.6	+ 2.7	58.3	5 41.0	2.40	22 15	2.3	14 4	2.5	
29	7 8 42	151	+23 28.9	- 1.1	57.5	6 38.1	2.34	23 16	2.6	14 59	2.1	
30	8 7 51	145	+22 21.3	- 4.5	56.8	7 33.1	2.24	— —	—	15 43	1.6	
Okt. 1	9 4 8	137	+19 59.6	- 7.2	56.1	8 25.3	2.11	0 22	2.8	16 18	1.3	
2	9 57 14	129	+16 38.6	- 9.4	55.6	9 14.3	1.98	1 30	2.9	16 45	1.0	
3	10 47 23	122	+12 33.8	-10.9	55.1	10 0.4	1.87	2 39	2.9	17 8	0.9	
4	11 35 7	117	+ 7 59.6	-11.9	54.7	10 44.1	1.78	3 48	2.8	17 27	0.8	
5	12-21 10	114	+ 3 9.0	-12.3	54.4	11 26.1	1.72	4 55	2.8	17 45	0.7	
6	13 6 20	112	- 1 46.4	-12.3	54.2	12 7.2	1.70	6 0	2.7	18 2	0.7	
7	13 51 23	113	- 6 35.9	-11.8	54.0	12 48.2	1.72	7 6	2.7	18 20	0.8	
8	14 37 5	116	-11 9.0	-10.9	54.0	13 29.8	1.76	8 11	2.7	18 39	0.9	
9	15 24 8	120	-15 15.6	- 9.6	54.0	14 12.8	1.83	9 17	2.7	19 1	1.0	
10	16 13 5	125	-18 45.1	- 7.8	54.2	14 57.7	1.92	10 22	2.7	19 27	1.2	
11	17 4 18	131	-21 26.5	- 5.6	54.5	15 44.8	2.01	11 26	2.6	19 58	1.5	
12	17 57 51	137	-23 8.9	- 2.9	55.0	16 34.3	2.11	12 28	2.5	20 38	1.9	
13	18 53 28	141	-23 42.4	+ 0.2	55.7	17 25.9	2.18	13 25	2.2	21 28	2.3	
14	19 50 30	144	-22 59.4	+ 3.4	56.5	18 18.8	2.22	14 14	1.9	22 27	2.7	



0<sup>a</sup> Welt-Zeit

Tag	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Okt. 14	<sup>h</sup> 19 <sup>m</sup> 8 <sup>s</sup> 25 <sup>m</sup> 55 <sup>m</sup> 14	—23 38.7 <sup>o</sup> 1 <sup>'</sup> 0.3	55 52.6 <sup>"</sup> 48.5	15 15.0 <sup>"</sup> 13.2	285.632	—1.123	7.8
15	20 3 39 55 40	—22 38.4 2 14.8	56 41.1 55.0	15 28.2 15.0	298.326	—2.183	8.8
16	20 59 19 55 32	—20 23.6 3 26.5	57 36.1 58.3	15 43.2 15.9	311.438	—3.164	9.8
17	21 54 51 55 8	—16 57.1 4 30.7	58 34.4 57.4	15 59.1 15.6	325.028	—4.003	10.8
18	22 49 59 54 51	—12 26.4 5 21.7	59 31.8 51.1	16 14.7 13.9	339.125	—4.634	11.8
19	23 44 50 55 0	—7 4.7 5 54.7	60 22.9 38.9	16 28.6 10.6	353.706	—4.989	12.8
20	0 39 50 55 44	—1 10.0 6 5.3	61 1.8 21.7	16 39.2 5.9	8.689	—5.018	13.8
21	1 35 34 57 6	+ 4 55.3 5 50.1	61 23.5 1.6	16 45.1 0.5	23.933	—4.694	14.8
22	2 32 40 58 53	+10 45.4 5 8.4	61 25.1 18.4	16 45.6 5.0	39.256	—4.033	15.8
23	3 31 33 60 37	+15 53.8 4 2.9	61 6.7 35.6	16 40.6 9.7	54.470	—3.088	16.8
24	4 32 10 61 39	+19 56.7 2 40.0	60 31.1 47.8	16 30.9 13.1	69.409	—1.944	17.8
25	5 33 49 61 28	+22 36.7 1 8.7	59 43.3 54.4	16 17.8 14.8	83.961	—0.698	18.8
26	6 35 17 59 49	+23 45.4 0 20.7	58 48.9 55.8	16 3.0 15.2	98.068	+0.556	19.8
27	7 35 6 57 4	+23 24.7 1 40.2	57 53.1 53.1	15 47.8 14.4	111.725	+1.741	20.8
28	8 32 10 53 43	+21 44.5 2 45.3	57 0.0 47.6	15 33.4 13.0	124.964	+2.795	21.8
29	9 25 53 50 26	+18 59.2 3 35.1	56 12.4 40.6	15 20.4 11.1	137.840	+3.677	22.8
30	10 16 19 47 37	+15 24.1 4 10.5	55 31.8 33.0	15 9.3 9.0	150.415	+4.359	23.8
31	11 3 56 45 27	+11 13.6 4 33.6	54 58.8 25.4	15 0.3 6.9	162.753	+4.823	24.8
Nov. 1	11 49 23 44 7	+ 6 40.0 4 45.8	54 33.4 18.5	14 53.4 5.0	174.911	+5.060	25.8
2	12 33 30 43 32	+ 1 54.2 4 48.0	54 14.9 12.0	14 48.4 3.3	186.938	+5.071	26.8
3	13 17 2 43 42	— 2 53.8 4 40.7	54 2.9 6.2	14 45.1 1.7	198.872	+4.859	27.8
4	14 0 44 44 35	— 7 34.5 4 24.0	53 56.7 0.9	14 43.4 0.2	210.746	+4.437	28.8
5	14 45 19 46 0	—11 58.5 3 57.2	53 55.8 4.3	14 43.2 1.1	222.588	+3.824	0.0
6	15 31 19 47 52	—15 55.7 3 20.2	54 0.1 9.6	14 44.3 2.7	234.422	+3.044	1.0
7	16 19 11 49 54	—19 15.9 2 32.8	54 9.7 15.2	14 47.0 4.1	246.279	+2.129	2.0
8	17 9 5 51 50	—21 48.7 1 35.8	54 24.9 21.3	14 51.1 5.8	258.193	+1.114	3.0
9	18 0 55 53 20	—23 24.5 0 30.8	54 46.2 28.1	14 56.9 7.6	270.208	+0.037	4.0
10	18 54 15 54 12	—23 55.3 0 39.3	55 14.3 35.1	15 4.5 9.6	282.379	—1.056	5.0
11	19 48 27 54 22	—23 16.0 1 50.8	55 49.4 42.1	15 14.1 11.5	294.768	—2.122	6.0
12	20 42 49 53 59	—21 25.2 2 59.7	56 31.5 48.4	15 25.6 13.2	307.444	—3.110	7.0
13	21 36 48 53 25	—18 25.5 4 2.3	57 19.9 52.8	15 38.8 14.4	320.475	—3.966	8.0
14	22 30 13 52 59	—14 23.2 4 55.2	58 12.7 54.3	15 53.2 14.8	333.922	—4.634	9.0
15	23 23 12 53 3	— 9 28.0 5 34.7	59 7.0 51.5	16 8.0 14.0	347.822	—5.057	10.0
16	0 16 15 53 51	— 3 53.3 5 57.1	59 58.5 43.4	16 22.0 11.8	2.179	—5.183	11.0
17	1 10 6 55 28	+ 2 3.8 5 57.8	60 41.9 29.8	16 33.8 8.1	16.948	—4.975	12.0
18	2 5 34 57 47	+ 8 1.6 5 33.5	61 11.7 11.9	16 41.9 3.3	32.027	—4.422	13.0
19	3 3 21 60 24	+13 35.1 4 42.1	61 23.6 8.3	16 45.2 2.3	47.272	—3.551	14.0
20	4 3 45 62 38	+18 17.2 3 26.3	61 15.3 27.7	16 42.9 7.5	62.506	—2.427	15.0
21	5 6 23 63 37	+21 43.5 1 53.5	60 47.6 43.4	16 35.4 11.9	77.560	—1.145	16.0
22	6 10 0 62 49	+23 37.0 0 15.9	60 4.2 54.0	16 23.5 14.7	92.291	+0.191	17.0
23	7 12 49 60 16	+23 52.9 1 14.7	59 10.2 58.6	16 8.8 15.9	106.603	+1.479	18.0
24	8 13 5	+22 38.2	58 11.6	15 52.9	120.455	+2.639	19.0



Tag	Obere Kulmination in Greenwich							0 <sup>h</sup> Länge, + 50° Breite				
	AR.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallax	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	
1945												
Okt. 14	19 <sup>h</sup> 50 <sup>m</sup> 30 <sup>s</sup>	144	-22 59.4	+ 3.4	56.5	18 18.8	2.22	14 14	1.9	22 27	2.7	
15	20 48 12	144	-20 56.4	+ 6.8	57.4	19 12.4	2.24	14 56	1.6	23 35	3.0	
16	21 45 51	144	-17 35.3	+ 9.9	58.4	20 6.0	2.22	15 30	1.3	—	—	
17	22 43 5	143	-13 3.6	+12.6	59.4	20 59.1	2.20	15 59	1.1	0 51	3.2	
18	23 39 58	142	-7 35.0	+14.6	60.3	21 51.9	2.20	16 24	1.0	2 11	3.4	
19	0 36 57	143	-1 29.0	+15.7	61.0	22 44.8	2.21	16 47	1.0	3 33	3.5	
20	1 34 43	146	+ 4 49.9	+15.7	61.4	23 38.5	2.26	17 10	1.0	4 57	3.5	
21	— — —	—	—	—	—	—	—	17 34	1.1	6 23	3.6	
22	2 34 1	151	+10 53.2	+14.4	61.4	0 33.7	2.34	18 2	1.3	7 50	3.6	
23	3 35 20	156	+16 11.3	+11.9	61.1	1 30.9	2.43	18 34	1.5	9 17	3.5	
24	4 38 34	160	+20 17.5	+ 8.5	60.4	2 30.0	2.49	19 15	1.9	10 39	3.3	
25	5 42 51	161	+22 52.4	+ 4.4	59.6	3 30.2	2.51	20 5	2.3	11 53	2.8	
26	6 46 39	158	+23 48.1	+ 0.3	58.6	4 29.9	2.45	21 5	2.6	12 55	2.3	
27	7 48 21	150	+23 8.4	- 3.5	57.7	5 27.5	2.34	22 11	2.8	13 44	1.8	
28	8 46 44	141	+21 6.4	- 6.6	56.8	6 21.8	2.18	23 20	2.9	14 22	1.4	
29	9 41 22	132	+17 59.2	- 8.9	56.0	7 12.3	2.03	—	—	14 51	1.1	
30	10 32 27	124	+14 4.0	-10.6	55.3	7 59.4	1.90	0 30	2.9	15 15	0.9	
31	11 20 40	118	+ 9 36.2	-11.7	54.8	8 43.5	1.79	1 39	2.8	15 35	0.8	
Nov. 1	12 6 50	113	+ 4 48.6	-12.2	54.4	9 25.6	1.72	2 46	2.8	15 53	0.7	
2	12 51 52	112	- 0 7.4	-12.4	54.2	10 6.6	1.70	3 51	2.7	16 10	0.7	
3	13 36 37	112	- 5 1.4	-12.1	54.0	10 47.3	1.70	4 57	2.7	16 27	0.7	
4	14 21 54	115	- 9 43.4	-11.3	53.9	11 28.5	1.74	6 2	2.7	16 45	0.8	
5	15 8 27	118	-14 2.9	-10.2	54.0	12 11.0	1.81	7 8	2.7	17 5	0.9	
6	15 56 50	124	-17 48.8	- 8.6	54.1	12 55.3	1.89	8 14	2.7	17 29	1.1	
7	16 47 25	129	-20 49.6	- 6.4	54.3	13 41.8	1.98	9 19	2.7	17 59	1.4	
8	17 40 12	135	-22 54.0	- 3.9	54.6	14 30.6	2.07	10 22	2.5	18 36	1.7	
9	18 34 54	139	-23 52.1	- 0.9	55.1	15 21.2	2.14	11 21	2.3	19 21	2.1	
10	19 30 49	141	-23 36.6	+ 2.2	55.6	16 13.0	2.17	12 12	2.0	20 16	2.5	
11	20 27 10	141	-22 4.4	+ 5.4	56.3	17 5.3	2.18	12 55	1.7	21 20	2.8	
12	21 23 15	140	-19 17.0	+ 8.5	57.1	17 57.3	2.15	13 31	1.4	22 31	3.0	
13	22 18 43	138	-15 20.4	+11.2	58.0	18 48.7	2.13	14 1	1.1	23 47	3.2	
14	23 13 38	137	-10 24.8	+13.4	59.0	19 39.5	2.11	14 26	1.0	—	—	
15	0 8 30	138	- 4 43.9	+14.9	59.9	20 30.3	2.12	14 49	0.9	1 5	3.3	
16	1 4 7	141	+ 1 24.1	+15.6	60.6	21 21.8	2.18	15 10	0.9	2 26	3.4	
17	2 1 27	146	+ 7 36.1	+15.2	61.2	22 15.1	2.27	15 33	1.0	3 49	3.5	
18	3 1 20	153	+13 24.4	+13.6	61.4	23 10.8	2.38	15 58	1.1	5 14	3.6	
19	— — —	—	—	—	—	—	—	16 27	1.4	6 41	3.6	
20	4 4 9	161	+18 18.9	+10.7	61.3	0 9.5	2.51	17 4	1.7	8 8	3.5	
21	5 9 30	165	+21 51.3	+ 6.8	60.8	1 10.8	2.59	17 50	2.2	9 29	3.2	
22	6 15 52	166	+23 42.6	+ 2.4	60.0	2 13.0	2.59	18 47	2.6	10 40	2.7	
23	7 21 7	160	+23 47.8	- 1.9	59.0	3 14.2	2.49	19 54	2.9	11 38	2.1	
24	8 23 17	150	+22 16.8	- 5.6	58.0	4 12.2	2.34	21 5	3.0	12 22	1.6	



Tag	0 <sup>a</sup> Welt-Zeit						
	Scheinbare Rektaszension	Scheinbare Deklination	Parallaxe	Halbmesser	Länge	Breite	Alter
1945							
Nov. 24	<sup>h</sup> 8 <sup>m</sup> 13 <sup>s</sup> 5 <sup>m</sup> 56 <sup>s</sup> 37	+22° 38.2' 0" 30.1'	58' 11.6" 57.9	15' 52.9" 15.8	120.455	+2.639	19.0 <sup>d</sup>
25	9 9 42 52 42	+20 8.1 3 27.1	57 13.7 53.4	15 37.1 14.6	133.849	+3.616	20.0
26	10 2 24 49 10	+16 41.0 + 7.0	56 20.3 45.9	15 22.5 12.5	146.824	+4.374	21.0
27	10 51 34 46 24	+12 34.0 + 32.3	55 34.4 37.1	15 10.0 10.1	159.436	+4.897	22.0
28	11 37 58 44 31	+ 8 1.7 + 45.9	54 57.3 27.7	14 59.9 7.5	171.758	+5.181	23.0
29	12 22 29 43 32	+ 3 15.8 + 49.7	54 29.6 18.4	14 52.4 5.0	183.860	+5.228	24.0
30	13 6 1 43 28	- 1 33.9 + 44.4	54 11.2 10.0	14 47.4 2.8	195.811	+5.046	25.0
Dez. 1	13 49 29 44 10	- 6 18.3 + 30.5	54 1.2 2.3	14 44.6 0.6	207.674	+4.649	26.0
2	14 33 39 45 33	-10 48.8 + 6.9	53 58.9 4.2	14 44.0 1.2	219.593	+4.055	27.0
3	15 19 12 47 29	-14 55.7 3 33.2	54 3.1 9.7	14 45.2 2.6	231.341	+3.285	28.0
4	16 6 41 49 40	-18 28.9 2 48.5	54 12.8 14.5	14 47.8 3.9	243.228	+2.369	29.0
5	16 56 21 51 46	-21 17.4 1 53.1	54 27.3 18.6	14 51.7 5.1	255.195	+1.341	0.2
6	17 48 7 53 26	-23 10.5 0 48.5	54 45.9 22.3	14 56.8 6.1	267.270	+0.243	1.2
7	18 41 33 54 19	-23 59.0 0 21.7	55 8.2 26.3	15 2.9 7.1	279.483	-0.879	2.2
8	19 35 52 54 21	-23 37.3 1 33.4	55 34.5 30.1	15 10.0 8.3	291.864	-1.977	3.2
9	20 30 13 53 39	-22 3.9 2 41.9	56 4.6 34.2	15 18.3 9.3	304.446	-2.998	4.2
10	21 23 52 52 37	-19 22.0 3 43.3	56 38.8 38.1	15 27.6 10.4	317.267	-3.890	5.2
11	22 16 29 51 41	-15 38.7 4 34.8	57 16.9 41.3	15 38.0 11.2	330.365	-4.599	6.2
12	23 8 10 51 12	-11 3.9 5 14.2	57 58.2 42.9	15 49.2 11.7	343.777	-5.078	7.2
13	23 59 22 51 28	- 5 49.7 5 39.5	58 41.1 42.0	16 0.9 11.4	357.527	-5.283	8.2
14	0 50 50 52 42	- 0 10.2 5 48.0	59 23.1 37.6	16 12.3 10.3	11.624	-5.180	9.2
15	1 43 32 54 51	+ 5 37.8 5 36.5	60 0.7 28.9	16 22.6 7.9	26.047	-4.752	10.2
16	2 38 23 57 43	+11 14.3 5 1.6	60 29.6 16.3	16 30.5 4.4	40.742	-4.010	11.2
17	3 36 6 60 47	+16 15.9 4 1.7	60 45.9 0.4	16 34.9 0.1	55.618	-2.989	12.2
18	4 36 53 63 13	+20 17.6 2 39.3	60 46.3 16.6	16 35.0 4.5	70.555	-1.761	13.2
19	5 40 6 64 4	+22 56.9 1 2.8	60 29.7 32.4	16 30.5 8.9	85.420	-0.418	14.2
20	6 44 10 62 52	+23 59.7 0 35.4	59 57.3 44.9	16 21.6 12.2	100.079	+0.934	15.2
21	7 47 2 59 51	+23 24.3 2 3.0	59 12.4 52.5	16 9.4 14.3	114.424	+2.199	16.2
22	8 46 53 55 54	+21 21.3 3 12.0	58 19.9 55.2	15 55.1 15.0	128.378	+3.297	17.2
23	9 42 47 51 53	+18 9.3 4 1.0	57 24.7 53.1	15 40.1 14.5	141.909	+4.174	18.2
24	10 34 40 48 25	+14 8.3 + 31.8	56 31.6 47.5	15 25.6 12.9	155.017	+4.803	19.2
25	11 23 5 45 50	+ 9 36.5 + 48.2	55 44.1 39.2	15 12.7 10.7	167.738	+5.175	20.2
26	12 8 55 44 15	+ 4 48.3 + 53.3	55 4.9 29.5	15 2.0 8.1	180.129	+5.294	21.2
27	12 53 10 43 37	- 0 5.0 + 48.9	54 35.4 19.3	14 53.9 5.2	192.260	+5.172	22.2
28	13 36 47 43 55	- 4 53.9 + 36.2	54 16.1 9.1	14 48.7 2.5	204.210	+4.828	23.2
29	14 20 42 45 2	- 9 30.1 + 14.9	54 7.0 0.4	14 46.2 0.1	216.057	+4.280	24.2
30	15 5 44 46 49	-13 45.0 3 44.4	54 7.4 8.7	14 46.3 2.4	227.876	+3.553	25.2
31	15 52 33 49 4	-17 29.4 3 3.2	54 16.1 15.6	14 48.7 4.2	239.734	+2.670	26.2
32	16 41 37	-20 32.6	54 31.7	14 52.9	251.689	+1.665	27.2



Tag	Obere Kulmination in Greenwich							0 <sup>h</sup> Länge, + 50° Breite			
	A.R.	Ände- rung für 1 <sup>h</sup> westl. Länge	Dekl.	Ände- rung für 1 <sup>h</sup> westl. Länge	Parallaxe	Zeit des Durch- gangs	Ände- rung für 1 <sup>h</sup> westl. Länge	Auf- gang	Ände- rung für 1 <sup>h</sup> westl. Länge	Unter- gang	Ände- rung für 1 <sup>h</sup> westl. Länge
1945											
Nov. 24	<sup>h</sup> 8 <sup>m</sup> 23 <sup>s</sup> 17	150	+22 16.8	- 5.6	58.0	<sup>h</sup> 4 <sup>m</sup> 12.2	2.34	<sup>h</sup> 21 <sup>m</sup> 5	3.0	<sup>h</sup> 12 <sup>m</sup> 22	1.6
25	9 21 14	139	+19 28.2	- 8.3	57.0	5 6.1	2.15	22 16	3.0	12 55	1.2
26	10 14 51	129	+15 43.0	-10.3	56.1	5 55.7	1.98	23 27	2.9	13 21	1.0
27	11 4 45	121	+11 20.1	-11.5	55.4	6 41.5	1.84	— —	—	13 42	0.8
28	11 51 52	115	+ 6 34.4	-12.2	54.8	7 24.5	1.75	0 35	2.8	14 0	0.7
29	12 37 14	112	+ 1 38.0	-12.4	54.4	8 5.9	1.70	1 42	2.7	14 17	0.7
30	13 21 53	112	- 3 18.9	-12.2	54.1	8 46.4	1.69	2 47	2.7	14 34	0.7
Dez. 1	14 6 45	113	- 8 7.0	-11.7	54.0	9 27.3	1.72	3 53	2.7	14 52	0.8
2	14 52 43	117	-12 36.7	-10.7	54.0	10 9.2	1.78	4 58	2.7	15 11	0.9
3	15 40 28	122	-16 37.2	- 9.3	54.1	10 52.9	1.87	6 4	2.8	15 34	1.0
4	16 30 31	128	-19 57.0	- 7.4	54.3	11 38.8	1.97	7 11	2.7	16 0	1.3
5	17 22 58	134	-22 23.6	- 4.8	54.6	12 27.2	2.06	8 15	2.6	16 35	1.6
6	18 17 34	139	-23 45.8	- 1.9	55.0	13 17.7	2.14	9 16	2.4	17 18	2.0
7	19 13 33	141	-23 54.9	+ 1.2	55.4	14 9.6	2.18	10 10	2.1	18 10	2.4
8	20 9 57	141	-22 47.1	+ 4.4	55.9	15 2.0	2.18	10 56	1.7	19 12	2.7
9	21 5 51	139	-20 24.0	+ 7.5	56.4	15 53.8	2.14	11 34	1.4	20 20	2.9
10	22 0 41	136	-16 52.2	+10.1	57.1	16 44.5	2.09	12 5	1.2	21 33	3.1
11	22 54 23	133	-12 22.0	+12.3	57.8	17 34.1	2.05	12 31	1.0	22 48	3.2
12	23 47 23	132	- 7 6.1	+13.9	58.5	18 23.1	2.03	12 53	0.9	— —	—
13	0 40 29	134	- 1 19.4	+14.9	59.2	19 12.1	2.06	13 14	0.9	0 6	3.3
14	1 34 43	138	+ 4 40.5	+15.0	59.9	20 2.2	2.13	13 35	0.9	1 24	3.3
15	2 31 10	145	+10 32.4	+14.2	60.4	20 54.6	2.24	13 58	1.0	2 45	3.4
16	3 30 45	153	+15 50.8	+12.2	60.8	21 50.1	2.39	14 23	1.2	4 9	3.5
17	4 33 49	162	+20 7.5	+ 9.0	60.8	22 49.1	2.52	14 55	1.5	5 34	3.5
18	5 39 42	167	+22 56.2	+ 4.9	60.5	23 50.8	2.61	15 35	1.9	6 58	3.4
19	— — —	—	— — —	—	—	— — —	—	16 27	2.4	8 15	3.0
20	6 46 32	166	+24 0.1	+ 0.4	59.9	0 53.5	2.60	17 30	2.8	9 21	2.5
21	7 51 56	160	+23 17.5	- 3.8	59.1	1 54.8	2.49	18 41	3.0	10 13	1.9
22	8 53 48	149	+21 1.6	- 7.3	58.2	2 52.6	2.32	19 56	3.1	10 52	1.4
23	9 51 11	138	+17 34.3	- 9.8	57.3	3 45.9	2.13	21 9	3.0	11 22	1.1
24	10 44 8	128	+13 18.4	-11.4	56.4	4 34.8	1.96	22 20	2.9	11 46	0.9
25	11 33 27	120	+ 8 33.4	-12.3	55.6	5 20.0	1.82	23 29	2.8	12 6	0.8
26	12 20 10	115	+ 3 34.5	-12.6	54.9	6 2.7	1.74	— —	—	12 24	0.7
27	13 5 25	112	- 1 26.8	-12.5	54.5	6 43.9	1.70	0 35	2.8	12 41	0.7
28	13 50 17	112	- 6 20.9	-12.0	54.2	7 24.7	1.71	1 41	2.7	12 58	0.7
29	14 35 44	115	-10 58.9	-11.1	54.1	8 6.1	1.75	2 46	2.7	13 16	0.8
30	15 22 42	120	-15 11.5	- 9.8	54.2	8 49.0	1.83	3 52	2.8	13 37	1.0
31	16 11 50	126	-18 48.0	- 8.1	54.4	9 34.0	1.93	4 58	2.8	14 3	1.2
32	17 3 33	133	-21 36.3	- 5.8	54.7	10 21.7	2.04	6 4	2.7	14 34	1.5



## Phasen des Mondes

1945	Welt-Zeit			1945	Welt-Zeit		
		<sup>h</sup> <sup>m</sup>			<sup>h</sup> <sup>m</sup>		
Jan.	6	12 47	Letztes Viertel	Juli	2	18 13	Letztes Viertel
	14	5 6	Neumond		9	13 35	Neumond
	20	23 48	Erstes Viertel		17	7 1	Erstes Viertel
Febr.	28	6 41	Vollmond	25	2 25	Vollmond	
	5	9 55	Letztes Viertel	31	22 30	Letztes Viertel	
	12	17 33	Neumond	Aug.	8	0 32	Neumond
März	19	8 38	Erstes Viertel	16	0 27	Erstes Viertel	
	27	0 7	Vollmond	23	12 3	Vollmond	
	7	4 30	Letztes Viertel	30	3 44	Letztes Viertel	
April	14	3 51	Neumond	Sept.	6	13 43	Neumond
	20	19 11	Erstes Viertel	14	17 38	Erstes Viertel	
	28	17 44	Vollmond	21	20 46	Vollmond	
Mai	5	19 18	Letztes Viertel	28	11 24	Letztes Viertel	
	12	12 29	Neumond	Okt.	6	5 22	Neumond
	19	7 46	Erstes Viertel	14	9 38	Erstes Viertel	
Juni	27	10 33	Vollmond	21	5 32	Vollmond	
	5	6 2	Letztes Viertel	27	22 30	Letztes Viertel	
	11	20 21	Neumond	Nov.	4	23 11	Neumond
Juli	18	22 12	Erstes Viertel	12	23 34	Erstes Viertel	
	27	1 49	Vollmond	19	15 13	Vollmond	
	3	13 15	Letztes Viertel	26	13 28	Letztes Viertel	
Aug.	10	4 26	Neumond	Dez.	4	18 6	Neumond
	17	14 5	Erstes Viertel	12	11 5	Erstes Viertel	
	25	15 8	Vollmond	19	2 17	Vollmond	
				26	8 0	Letztes Viertel	

## Mond in Erdnähe

1945	Welt-Zeit	
	<sup>h</sup>	
Jan.	17	
Febr.	14	
März	14	21
April	12	8
Mai	10	18
Juni	7	20
Juli	5	2
Juli	30	6
Aug.	26	4
Sept.	23	4
Okt.	21	14
Nov.	19	2
Dez.	17	13

## Mond in Erdferne

1945	Welt-Zeit	
	<sup>h</sup>	
Jan.	5	20
Febr.	2	16
März	2	7
März	29	12
April	25	15
Mai	23	1
Juni	19	17
Juli	17	12
Aug.	14	6
Sept.	11	0
Okt.	8	13
Nov.	4	16
Dez.	1	20
Dez.	29	11



Tag	0 <sup>b</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Jan.	<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>°</sup> <sup>'</sup> <sup>"</sup>		<sup>h</sup> <sup>m</sup>
0	17 30 56.66 <sup>m</sup> 24.49 <sup>s</sup>	-20 8 11.2	1 15.6	10 51.3
1	17 29 32.17 <sup>o</sup> 42.36	20 9 26.8	3 13.0	10 46.3
2	17 28 49.81 <sup>o</sup> 2.19	20 12 39.8	4 57.4	10 41.9
3	17 28 47.32 <sup>o</sup> 34.69	20 17 37.2	6 27.4	10 38.2
4	17 29 22.01 <sup>i</sup> 9.00	20 24 4.6	7 42.5	10 35.1
5	17 30 31.01 <sup>i</sup> 40.43	20 31 47.1	8 43.2	10 32.6
6	17 32 11.44 <sup>2</sup> 9.03	-20 40 30.3	9 29.6	10 30.5
7	17 34 20.47 <sup>2</sup> 34.98	20 49 59.9	10 3.1	10 28.9
8	17 36 55.45 <sup>2</sup> 58.42	21 0 3.0	10 24.2	10 27.7
9	17 39 53.87 <sup>3</sup> 19.60	21 10 27.2	10 34.2	10 26.9
10	17 43 13.47 <sup>3</sup> 38.70	21 21 1.4	10 34.2	10 26.5
11	17 46 52.17 <sup>3</sup> 55.91	21 31 35.6	10 24.9	10 26.3
12	17 50 48.08 <sup>4</sup> 11.45	-21 42 0.5	10 7.7	10 26.4
13	17 54 59.53 <sup>4</sup> 25.46	21 52 8.2	9 43.1	10 26.7
14	17 59 24.99 <sup>4</sup> 38.13	22 1 51.3	9 12.2	10 27.3
15	18 4 3.12 <sup>4</sup> 49.59	22 11 3.5	8 35.4	10 28.1
16	18 8 52.71 <sup>4</sup> 59.96	22 19 38.9	7 53.6	10 29.1
17	18 13 52.67 <sup>5</sup> 9.37	22 27 32.5	7 7.4	10 30.2
18	18 19 2.04 <sup>5</sup> 17.93	-22 34 39.9	6 17.0	10 31.5
19	18 24 19.97 <sup>5</sup> 25.71	22 40 56.9	5 23.1	10 32.9
20	18 29 45.68 <sup>5</sup> 32.79	22 46 20.0	4 26.0	10 34.4
21	18 35 18.47 <sup>5</sup> 39.26	22 50 46.0	3 26.2	10 36.1
22	18 40 57.73 <sup>5</sup> 45.17	22 54 12.2	2 23.8	10 37.8
23	18 46 42.90 <sup>5</sup> 50.57	22 56 36.0	1 19.1	10 39.7
24	18 52 33.47 <sup>5</sup> 55.52	-22 57 55.1	0 12.4	10 41.7
25	18 58 28.99 <sup>6</sup> 0.07	22 58 7.5	0 56.1	10 43.7
26	19 4 29.06 <sup>6</sup> 4.22	22 57 11.4	2 6.4	10 45.7
27	19 10 33.28 <sup>6</sup> 8.05	22 55 5.0	3 17.9	10 47.9
28	19 16 41.33 <sup>6</sup> 11.56	22 51 47.1	4 30.9	10 50.1
29	19 22 52.89 <sup>6</sup> 14.80	22 47 16.2	5 45.0	10 52.4
30	19 29 7.69 <sup>6</sup> 17.76	-22 41 31.2	7 0.4	10 54.7
31	19 35 25.45 <sup>6</sup> 20.49	22 34 30.8	8 16.6	10 57.1
Febr.	1 19 41 45.94 <sup>6</sup> 23.01	22 26 14.2	9 33.8	10 59.5
2	19 48 8.95 <sup>6</sup> 25.32	22 16 40.4	10 51.7	11 2.0
3	19 54 34.27 <sup>6</sup> 27.46	22 5 48.7	12 10.5	11 4.5
4	20 1 1.73 <sup>6</sup> 29.42	21 53 38.2	13 29.9	11 7.0
5	20 7 31.15 <sup>6</sup> 31.25	-21 40 8.3	14 49.9	11 9.6
6	20 14 2.40 <sup>6</sup> 32.93	21 25 18.4	16 10.5	11 12.2
7	20 20 35.33 <sup>6</sup> 34.49	21 9 7.9	17 31.6	11 14.8
8	20 27 9.82 <sup>6</sup> 35.94	20 51 36.3	18 53.1	11 17.5
9	20 33 45.76 <sup>6</sup> 37.29	20 32 43.2	20 15.1	11 20.1
10	20 40 23.05	-20 12 28.1		11 22.8



Tag	0 <sup>h</sup> Welt-Zeit			Δ	Obere Kulmination in Greenwich	
	Scheinbare Rektaszension	Scheinbare Deklination				
1945						
Febr.	10	<sup>h</sup> 20 <sup>m</sup> 40 <sup>s</sup> 23.05 <sup>m</sup> 6 <sup>s</sup> 38.56	— 20 12 28.1 21 37.4	I.353 004 5 613	II 22.8	
	11	20 47 1.61 6 39.74	19 50 50.7 23 0.1	I.358 617 5 155	II 25.6	
	12	20 53 41.35 6 40.86	19 27 50.6 24 23.0	I.363 772 4 690	II 28.3	
	13	21 0 22.21 6 41.94	19 3 27.6 25 46.1	I.368 462 4 218	II 31.0	
	14	21 7 4.15 6 42.95	18 37 41.5 27 9.5	I.372 680 3 736	II 33.8	
	15	21 13 47.10 6 43.94	18 10 32.0 28 33.1	I.376 416 3 243	II 36.6	
	16	21 20 31.04 6 44.90	— 17 41 58.9 29 56.7	I.379 659 2 738	II 39.4	
	17	21 27 15.94 6 45.84	17 12 2.2 31 20.4	I.382 397 2 218	II 42.2	
	18	21 34 1.78 6 46.78	16 40 41.8 32 44.0	I.384 615 1 683	II 45.1	
	19	21 40 48.56 6 47.69	16 7 57.8 34 7.7	I.386 298 1 128	II 47.9	
	20	21 47 36.25 6 48.62	15 33 50.1 35 31.2	I.387 426 554	II 50.8	
	21	21 54 24.87 6 49.55	14 58 18.9 36 54.4	I.387 980 43	II 53.6	
	22	22 1 14.42 6 50.49	— 14 21 24.5 38 17.3	I.387 937 667	II 56.5	
	23	22 8 4.91 6 51.42	13 43 7.2 39 39.8	I.387 270 1 317	II 59.5	
	24	22 14 56.33 6 52.37	13 3 27.4 41 1.4	I.385 953 1 999	12 2.4	
	25	22 21 48.70 6 53.30	12 22 26.0 42 22.3	I.383 954 2 714	12 5.3	
	26	22 28 42.00 6 54.23	11 40 3.7 43 42.2	I.381 240 3 465	12 8.3	
	27	22 35 36.23 6 55.11	10 56 21.5 45 0.7	I.377 775 4 254	12 11.3	
	März	28	22 42 31.34 6 55.96	— 10 11 20.8 46 17.4	I.373 521 5 085	12 14.3
		1	22 49 27.30 6 56.73	9 25 3.4 47 32.1	I.368 436 5 960	12 17.3
		2	22 56 24.03 6 57.38	8 37 31.3 48 44.3	I.362 476 6 880	12 20.3
		3	23 3 21.41 6 57.91	7 48 47.0 49 53.3	I.355 596 7 847	12 23.3
		4	23 10 19.32 6 58.22	6 58 53.7 50 58.7	I.347 749 8 862	12 26.3
		5	23 17 17.54 6 58.30	6 7 55.0 51 59.6	I.338 887 9 925	12 29.4
		6	23 24 15.84 6 58.05	— 5 15 55.4 52 55.3	I.328 962 11 034	12 32.4
		7	23 31 13.89 6 57.41	4 23 0.1 53 44.8	I.317 928 12 186	12 35.4
		8	23 38 11.30 6 56.27	3 29 15.3 54 27.3	I.305 742 13 378	12 38.5
9		23 45 7.57 6 54.55	2 34 48.0 55 1.3	I.292 364 14 603	12 41.4	
10		23 52 2.12 6 52.12	1 39 46.7 55 26.0	I.277 761 15 852	12 44.4	
11		23 58 54.24 6 48.89	— 0 44 20.7 55 40.1	I.261 909 17 114	12 47.3	
12		0 5 43.13 6 44.70	+ 0 11 19.4 55 42.4	I.244 795 18 375	12 50.1	
13		0 12 27.83 6 39.45	1 7 1.8 55 31.7	I.226 420 19 620	12 52.9	
14		0 19 7.28 6 33.00	2 2 33.5 55 6.9	I.206 800 20 830	12 55.5	
15		0 25 40.28 6 25.25	2 57 40.4 54 27.2	I.185 970 21 988	12 58.1	
16		0 32 5.53 6 16.09	3 52 7.6 53 31.9	I.163 982 23 072	13 0.5	
17		0 38 21.62 6 5.44	4 45 39.5 52 20.5	I.140 910 24 061	13 2.7	
18		0 44 27.06 5 53.24	+ 5 38 0.0 50 52.8	I.116 849 24 937	13 4.8	
19		0 50 20.30 5 39.48	6 28 52.8 49 9.1	I.091 912 25 685	13 6.6	
20		0 55 59.78 5 24.13	7 18 1.9 47 9.7	I.066 227 26 288	13 8.2	
21		1 1 23.91 5 7.24	8 5 11.6 44 55.1	I.039 939 26 736	13 9.5	
22		1 6 31.15 4 48.85	8 50 6.7 42 26.6	I.013 203 27 024	13 10.5	
23		1 11 20.00	+ 9 32 33.3	0.986 179	13 11.2	



Tag	0 <sup>a</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
März	<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>o</sup> <sup>'</sup> <sup>"</sup>		<sup>h</sup> <sup>m</sup>
23	I 11 20.00 4 29.04	+ 9 32 33.3 39 44.8	0.986 179 27 146	I3 11.2
24	I 15 49.04 4 7.92	10 12 18.1 36 50.9	0.959 033 27 106	I3 11.5
25	I 19 56.96 3 45.61	10 49 9.0 33 46.2	0.931 927 26 904	I3 11.5
26	I 23 42.57 3 22.24	11 22 55.2 30 31.6	0.905 023 26 548	I3 11.2
27	I 27 4.81 2 57.95	11 53 26.8 27 8.1	0.878 475 26 047	I3 10.4
28	I 30 2.76 2 32.92	12 20 34.9 23 37.1	0.852 428 25 409	I3 9.1
29	I 32 35.68 2 7.34	+12 44 12.0 19 59.3	0.827 019 24 644	I3 7.5
30	I 34 43.02 1 41.41	13 4 11.3 16 15.9	0.802 375 23 764	I3 5.5
31	I 36 24.43 1 15.36	13 20 27.2 12 27.8	0.778 611 22 777	I3 3.0
April				
1	I 37 39.79 0 49.42	13 32 55.0 8 36.3	0.755 834 21 696	I3 0.1
2	I 38 29.21 0 23.85	13 41 31.3 4 43.0	0.734 138 20 528	I2 56.7
3	I 38 53.06 0 1.01	13 46 14.3 0 49.2	0.713 610 19 285	I2 53.0
4	I 38 52.05 0 24.88	+13 47 3.5 3 2.8	0.694 325 17 975	I2 48.8
5	I 38 27.17 0 47.46	13 44 0.7 6 51.0	0.676 350 16 608	I2 44.3
6	I 37 39.71 1 8.39	13 37 9.7 10 32.8	0.659 742 15 194	I2 39.4
7	I 36 31.32 1 27.36	13 26 36.9 14 5.4	0.644 548 13 739	I2 34.1
8	I 35 3.96 1 44.06	13 12 31.5 17 25.2	0.630 809 12 257	I2 28.6
9	I 33 19.90 1 58.23	12 55 6.3 20 29.5	0.618 552 10 756	I2 22.8
10	I 31 21.67 2 9.66	+12 34 36.8 23 15.2	0.607 796 9 244	I2 16.8
11	I 29 12.01 2 18.15	12 11 21.6 25 39.0	0.598 552 7 734	I2 10.7
12	I 26 53.86 2 23.65	11 45 42.6 27 38.4	0.590 818 6 236	I2 4.4
13	I 24 30.21 2 26.11	11 18 4.2 29 11.2	0.584 582 4 757	II 58.1
14	I 22 4.10 2 25.60	10 48 53.0 30 16.5	0.579 825 3 310	II 51.7
15	I 19 38.50 2 22.22	10 18 36.5 30 53.2	0.576 515 1 900	II 45.4
16	I 17 16.28 2 16.18	+ 9 47 43.3 31 1.8	0.574 615 537	II 39.2
17	I 15 0.10 2 7.72	9 16 41.5 30 43.1	0.574 078 773	II 33.0
18	I 12 52.38 1 57.11	8 45 58.4 29 58.7	0.574 851 2 024	II 27.1
19	I 10 55.27 1 44.68	8 15 59.7 28 51.0	0.576 875 3 212	II 21.3
20	I 9 10.59 1 30.71	7 47 8.7 27 22.4	0.580 087 4 335	II 15.7
21	I 7 39.88 1 15.53	7 19 46.3 25 35.9	0.584 422 5 392	II 10.4
22	I 6 24.35 0 59.44	+ 6 54 10.4 23 34.6	0.589 814 6 382	II 5.4
23	I 5 24.91 0 42.70	6 30 35.8 20 21.1	0.596 196 7 395	II 0.6
24	I 4 42.21 0 25.57	6 9 14.7 18 58.7	0.603 501 8 163	IO 56.1
25	I 4 16.64 0 8.27	5 50 16.0 16 29.6	0.611 664 8 959	IO 51.8
26	I 4 8.37 0 9.03	5 33 46.4 13 56.1	0.620 623 9 697	IO 47.9
27	I 4 17.40 0 26.18	5 19 50.3 11 20.5	0.630 320 10 379	IO 44.2
28	I 4 43.58 0 43.06	+ 5 8 29.8 8 44.4	0.640 699 11 007	IO 40.9
29	I 5 26.64 0 59.56	4 59 45.4 6 9.3	0.651 706 11 587	IO 37.8
30	I 6 26.20 1 15.63	4 53 36.1 3 36.2	0.663 293 12 123	IO 34.9
Mai				
1	I 7 41.83 1 31.21	4 49 59.9 1 6.2	0.675 416 12 617	IO 32.4
2	I 9 13.04 1 46.28	4 48 53.7 1 20.0	0.688 033 13 073	IO 30.1
3	I 10 59.32	+ 4 50 13.7	0.701 106	IO 28.0



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Mai	<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>°</sup> <sup>'</sup> <sup>"</sup>		<sup>h</sup> <sup>m</sup>
3	I 10 59.32 <sub>2</sub> 0.84	+ 4 50 13.7 3 42.0	0.701 106 13 495	IO 28.0
4	I 13 0.16 2 14.87	4 53 55.7 5 59.3	0.714 601 13 885	IO 26.2
5	I 15 15.03 2 28.38	4 59 55.0 8 11.6	0.728 486 14 246	IO 24.6
6	I 17 43.41 2 41.40	5 8 6.6 10 18.9	0.742 732 14 582	IO 23.2
7	I 20 24.81 2 53.95	5 18 25.5 12 20.9	0.757 314 14 893	IO 22.1
8	I 23 18.76 3 6.06	5 30 46.4 14 17.7	0.772 207 15 184	IO 21.1
9	I 26 24.82 3 17.76	+ 5 45 4.1 16 9.3	0.787 391 15 454	IO 20.4
10	I 29 42.58 3 29.09	6 1 13.4 17 55.9	0.802 845 15 707	IO 19.8
11	I 33 11.67 3 40.09	6 19 9.3 19 37.3	0.818 552 15 942	IO 19.4
12	I 36 51.76 3 50.81	6 38 46.6 21 13.9	0.834 494 16 162	IO 19.2
13	I 40 42.57 4 1.26	7 0 0.5 22 45.6	0.850 656 16 367	IO 19.2
14	I 44 43.83 4 11.52	7 22 46.1 24 12.6	0.867 023 16 557	IO 19.3
15	I 48 55.35 4 21.60	+ 7 46 58.7 25 35.0	0.883 580 16 732	IO 19.7
16	I 53 16.95 4 31.57	8 12 33.7 26 52.8	0.900 312 16 894	IO 20.2
17	I 57 48.52 4 41.45	8 39 26.5 28 5.9	0.917 206 17 039	IO 20.8
18	2 2 29.97 4 51.28	9 7 32.4 29 14.9	0.934 245 17 169	IO 21.6
19	2 7 21.25 5 1.10	9 36 47.3 30 19.2	0.951 414 17 281	IO 22.6
20	2 12 22.35 5 10.96	10 7 6.5 31 19.2	0.968 695 17 375	IO 23.8
21	2 17 33.31 5 20.88	+10 38 25.7 32 14.6	0.986 070 17 447	IO 25.1
22	2 22 54.19 5 30.89	11 10 40.3 33 5.3	1.003 517 17 497	IO 26.5
23	2 28 25.08 5 41.03	11 43 45.6 33 51.4	1.021 014 17 521	IO 28.2
24	2 34 6.11 5 51.35	12 17 37.0 34 32.6	1.038 535 17 517	IO 30.0
25	2 39 57.46 6 1.82	12 52 9.6 35 8.7	1.056 052 17 479	IO 32.0
26	2 45 59.28 6 12.51	13 27 18.3 35 39.4	1.073 531 17 404	IO 34.2
27	2 52 11.79 6 23.43	+14 2 57.7 36 4.4	1.090 935 17 290	IO 36.5
28	2 58 35.22 6 34.57	14 39 2.1 36 23.5	1.108 225 17 128	IO 39.1
29	3 5 9.79 6 45.95	15 15 25.6 36 36.0	1.125 353 16 916	IO 41.8
30	3 11 55.74 6 57.56	15 52 1.6 36 41.6	1.142 269 16 645	IO 44.7
31	3 18 53.30 7 9.40	16 28 43.2 36 39.8	1.158 914 16 311	IO 47.8
Juni	1 3 26 2.70 7 21.42	17 5 23.0 36 29.8	1.175 225 15 908	IO 51.1
2	3 33 24.12 7 33.59	+17 41 52.8 36 11.2	1.191 133 15 427	IO 54.6
3	3 40 57.71 7 45.84	18 18 4.0 35 43.1	1.206 560 14 865	IO 58.3
4	3 48 43.55 7 58.13	18 53 47.1 35 5.2	1.221 425 14 216	II 2.3
5	3 56 41.68 8 10.31	19 28 52.3 34 16.5	1.235 641 13 473	II 6.4
6	4 4 51.99 8 22.30	20 3 8.8 33 16.6	1.249 114 12 636	II 10.8
7	4 13 14.29 8 33.97	20 36 25.4 32 5.0	1.261 750 11 701	II 15.3
8	4 21 48.26 8 45.14	+21 8 30.4 30 41.2	1.273 451 10 670	II 20.0
9	4 30 33.40 8 55.66	21 39 11.6 29 5.2	1.284 121 9 546	II 24.9
10	4 39 29.06 9 5.36	22 8 16.8 27 17.1	1.293 667 8 337	II 30.0
11	4 48 34.42 9 14.05	22 35 33.9 25 17.1	1.302 004 7 050	II 35.3
12	4 57 48.47 9 21.58	23 0 51.0 23 6.0	1.309 054 5 698	II 40.6
13	5 7 10.05	+23 23 57.0	1.314 752	II 46.1



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Juni 13	5 <sup>h</sup> 7 <sup>m</sup> 10.05 <sup>s</sup> 9 <sup>m</sup> 27.79 <sup>s</sup>	+23 23 57.0 <sup>o</sup> 20' 44.6 <sup>"</sup>	I.314 752 4 297	11 46.1 <sup>h</sup>
14	5 16 37.84 9 32.54	23 44 41.6 18 14.3	I.319 049 2 863	11 51.7
15	5 26 10.38 9 35.75	24 2 55.9 15 36.5	I.321 912 1 416	11 57.3
16	5 35 46.13 9 37.36	24 18 32.4 12 52.9	I.323 328 27	12 3.0
17	5 45 23.49 9 37.35	24 31 25.3 10 5.4	I.323 301 1 447	12 8.7
18	5 55 0.84 9 35.75	24 41 30.7 7 15.9	I.321 854 2 825	12 14.4
19	6 4 36.59 9 32.61	+24 48 46.6 4 26.0	I.319 029 4 148	12 20.1
20	6 14 9.20 9 28.04	24 53 12.6 1 37.7	I.314 881 5 405	12 25.7
21	6 23 37.24 9 22.14	24 54 50.3 1 7.6	I.309 476 6 582	12 31.2
22	6 32 59.38 9 15.07	24 53 42.7 3 48.5	I.302 894 7 677	12 36.6
23	6 42 14.45 9 6.95	24 49 54.2 6 23.9	I.295 217 8 683	12 41.7
24	6 51 21.40 8 57.93	24 43 30.3 8 52.9	I.286 534 9 600	12 46.9
25	7 0 19.33 8 48.18	+24 34 37.4 11 14.7	I.276 934 10 429	12 51.9
26	7 9 7.51 8 37.81	24 23 22.7 13 29.0	I.266 505 11 172	12 56.7
27	7 17 45.32 8 26.95	24 9 53.7 15 35.4	I.255 333 11 834	13 1.3
28	7 26 12.27 8 15.73	23 54 18.3 17 33.6	I.243 499 12 418	13 5.7
29	7 34 28.00 8 4.22	23 36 44.7 19 23.9	I.231 081 12 931	13 9.9
30	7 42 32.22 7 52.54	23 17 20.8 21 6.1	I.218 150 13 377	13 13.9
Juli 1	7 50 24.76 7 40.73	+22 56 14.7 22 40.5	I.204 773 13 764	13 17.8
2	7 58 5.49 7 28.87	22 33 34.2 24 7.1	I.191 009 14 096	13 21.4
3	8 5 34.36 7 16.99	22 9 27.1 25 26.2	I.176 913 14 379	13 24.9
4	8 12 51.35 7 5.15	21 44 0.9 26 38.2	I.162 534 14 617	13 28.1
5	8 19 56.50 6 53.34	21 17 22.7 27 43.2	I.147 917 14 817	13 31.1
6	8 26 49.84 6 41.62	20 49 39.5 28 41.5	I.133 100 14 982	13 34.0
7	8 33 31.46 6 29.96	+20 20 58.0 29 33.4	I.118 118 15 115	13 36.6
8	8 40 1.42 6 18.41	19 51 24.6 30 18.9	I.103 003 15 221	13 39.1
9	8 46 19.83 6 6.92	19 21 5.7 30 58.5	I.087 782 15 304	13 41.3
10	8 52 26.75 5 55.51	18 50 7.2 31 32.3	I.072 478 15 364	13 43.4
11	8 58 22.26 5 44.18	18 18 34.9 32 0.4	I.057 114 15 405	13 45.3
12	9 4 6.44 5 32.89	17 46 34.5 32 23.1	I.041 709 15 429	13 47.0
13	9 9 39.33 5 21.65	+17 14 11.4 32 40.3	I.026 280 15 437	13 48.5
14	9 15 0.98 5 10.41	16 41 31.1 32 52.4	I.010 843 15 432	13 49.8
15	9 20 11.39 4 59.19	16 8 38.7 32 59.2	0.995 411 15 413	13 50.9
16	9 25 10.58 4 47.92	15 35 39.5 33 1.0	0.979 998 15 383	13 51.8
17	9 29 58.50 4 36.60	15 2 38.5 32 57.7	0.964 615 15 341	13 52.6
18	9 34 35.10 4 25.20	14 29 40.8 32 49.2	0.949 274 15 288	13 53.1
19	9 39 0.30 4 13.68	+13 56 51.6 32 35.6	0.933 986 15 224	13 53.5
20	9 43 13.98 4 2.01	13 24 16.0 32 16.9	0.918 762 15 150	13 53.7
21	9 47 15.99 3 50.17	12 51 59.1 31 52.8	0.903 612 15 064	13 53.6
22	9 51 6.16 3 38.10	12 20 6.3 31 23.4	0.888 548 14 966	13 53.4
23	9 54 44.26 3 25.77	11 48 42.9 30 48.3	0.873 582 14 856	13 53.0
24	9 58 10.03	+11 17 54.6	0.858 726	13 52.4



Tag	0 <sup>a</sup> Welt-Zeit			Obere Kulmination in Greenwich		
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$			
1945						
Juli	24	<sup>h</sup> 9 <sup>m</sup> 58 <sup>s</sup> 10.03 <sub>3 13.17</sub>	+11 <sup>°</sup> 17' 54.6" <sub>30 7.7</sub>	0.858 726 <sub>14 731</sub>	<sup>h</sup> 13 <sup>m</sup> 52.4	
	25	10 1 23.20 <sub>3 0.23</sub>	10 47 46.9 <sub>29 20.9</sub>	0.843 995 <sub>14 592</sub>	13 51.5	
	26	10 4 23.43 <sub>2 46.93</sub>	10 18 26.0 <sub>28 28.1</sub>	0.829 403 <sub>14 435</sub>	13 50.5	
	27	10 7 10.36 <sub>2 33.23</sub>	9 49 57.9 <sub>27 28.8</sub>	0.814 968 <sub>14 261</sub>	13 49.2	
	28	10 9 43.59 <sub>2 19.09</sub>	9 22 29.1 <sub>26 22.9</sub>	0.800 707 <sub>14 066</sub>	13 47.7	
	29	10 12 2.68 <sub>2 4.48</sub>	8 56 6.2 <sub>25 9.8</sub>	0.786 641 <sub>13 847</sub>	13 45.9	
	30	10 14 7.16 <sub>1 49.39</sub>	+ 8 30 56.4 <sub>23 49.5</sub>	0.772 794 <sub>13 602</sub>	13 43.9	
	31	10 15 56.55 <sub>1 33.78</sub>	8 7 6.9 <sub>22 21.5</sub>	0.759 192 <sub>13 329</sub>	13 41.6	
	Aug.	1	10 17 30.33 <sub>1 17.61</sub>	7 44 45.4 <sub>20 45.4</sub>	0.745 863 <sub>13 023</sub>	13 39.1
		2	10 18 47.94 <sub>1 0.92</sub>	7 24 0.0 <sub>19 1.1</sub>	0.732 840 <sub>12 681</sub>	13 36.3
		3	10 19 48.86 <sub>0 43.69</sub>	7 4 58.9 <sub>17 8.1</sub>	0.720 159 <sub>12 297</sub>	13 33.2
4		10 20 32.55 <sub>0 25.96</sub>	6 47 50.8 <sub>15 6.4</sub>	0.707 862 <sub>11 869</sub>	13 29.8	
5		10 20 58.51 <sub>0 7.77</sub>	+ 6 32 44.4 <sub>12 55.9</sub>	0.695 993 <sub>11 390</sub>	13 26.2	
6		10 21 6.28 <sub>0 10.79</sub>	6 19 48.5 <sub>10 36.4</sub>	0.684 603 <sub>10 855</sub>	13 22.2	
7		10 20 55.49 <sub>0 29.66</sub>	6 9 12.1 <sub>8 8.5</sub>	0.673 748 <sub>10 260</sub>	13 17.9	
8		10 20 25.83 <sub>0 48.66</sub>	6 1 3.6 <sub>5 32.2</sub>	0.663 488 <sub>9 597</sub>	13 13.3	
9		10 19 37.17 <sub>1 7.63</sub>	5 55 31.4 <sub>2 48.6</sub>	0.653 891 <sub>8 862</sub>	13 8.4	
10		10 18 29.54 <sub>1 26.35</sub>	5 52 42.8 <sub>0 1.4</sub>	0.645 029 <sub>8 051</sub>	13 3.2	
11		10 17 3.19 <sub>1 44.53</sub>	+ 5 52 44.2 <sub>2 56.3</sub>	0.636 978 <sub>7 155</sub>	12 57.7	
12	10 15 18.66 <sub>2 1.90</sub>	5 55 40.5 <sub>5 54.1</sub>	0.629 823 <sub>6 173</sub>	12 51.8		
13	10 13 16.76 <sub>2 18.08</sub>	6 1 34.6 <sub>8 52.6</sub>	0.623 650 <sub>5 102</sub>	12 45.7		
14	10 10 58.68 <sub>2 32.70</sub>	6 10 27.2 <sub>11 49.2</sub>	0.618 548 <sub>3 939</sub>	12 39.4		
15	10 8 25.98 <sub>2 45.34</sub>	6 22 16.4 <sub>14 40.4</sub>	0.614 609 <sub>2 682</sub>	12 32.8		
16	10 5 40.64 <sub>2 55.62</sub>	6 36 56.8 <sub>17 23.0</sub>	0.611 927 <sub>1 335</sub>	12 26.0		
17	10 2 45.02 <sub>3 3.09</sub>	+ 6 54 19.8 <sub>19 53.4</sub>	0.610 592 <sub>100</sub>	12 19.2		
18	9 59 41.93 <sub>3 7.41</sub>	7 14 13.2 <sub>22 7.8</sub>	0.610 692 <sub>1 616</sub>	12 12.2		
19	9 56 34.52 <sub>3 8.27</sub>	7 36 21.0 <sub>24 3.1</sub>	0.612 308 <sub>3 206</sub>	12 5.1		
20	9 53 26.25 <sub>3 5.42</sub>	8 0 24.1 <sub>25 35.9</sub>	0.615 514 <sub>4 861</sub>	11 58.1		
21	9 50 20.83 <sub>2 58.72</sub>	8 26 0.0 <sub>26 44.0</sub>	0.620 375 <sub>6 567</sub>	11 51.1		
22	9 47 22.11 <sub>2 48.13</sub>	8 52 44.0 <sub>27 25.5</sub>	0.626 942 <sub>8 310</sub>	11 44.3		
23	9 44 33.98 <sub>2 33.74</sub>	+ 9 20 9.5 <sub>27 39.4</sub>	0.635 252 <sub>10 076</sub>	11 37.7		
24	9 42 0.24 <sub>2 15.70</sub>	9 47 48.9 <sub>27 25.6</sub>	0.645 328 <sub>11 847</sub>	11 31.4		
25	9 39 44.54 <sub>1 54.32</sub>	10 15 14.5 <sub>26 44.2</sub>	0.657 175 <sub>13 606</sub>	11 25.3		
26	9 37 50.22 <sub>1 29.93</sub>	10 41 58.7 <sub>25 36.8</sub>	0.670 781 <sub>15 337</sub>	11 19.7		
27	9 36 20.29 <sub>1 2.98</sub>	11 7 35.5 <sub>24 4.9</sub>	0.686 118 <sub>17 022</sub>	11 14.5		
28	9 35 17.31 <sub>0 33.92</sub>	11 31 40.4 <sub>22 10.4</sub>	0.703 140 <sub>18 642</sub>	11 9.8		
29	9 34 43.39 <sub>0 3.24</sub>	+11 53 50.8 <sub>19 55.7</sub>	0.721 782 <sub>20 183</sub>	11 5.5		
30	9 34 40.15 <sub>0 28.57</sub>	12 13 46.5 <sub>17 22.9</sub>	0.741 965 <sub>21 627</sub>	11 1.7		
31	9 35 8.72 <sub>1 1.03</sub>	12 31 9.4 <sub>14 34.5</sub>	0.763 592 <sub>22 957</sub>	10 58.5		
Sept.	1	9 36 9.75 <sub>1 33.67</sub>	12 45 43.9 <sub>11 32.7</sub>	0.786 549 <sub>24 161</sub>	10 55.8	
	2	9 37 43.42 <sub>2 6.05</sub>	12 57 16.6 <sub>8 19.9</sub>	0.810 710 <sub>25 221</sub>	10 53.7	
	3	9 39 49.47	+13 5 36.5	0.835 931	10 52.1	



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Sept. 3	<sup>h</sup> 9 39 49.47 <sup>m</sup> 37.77	+13° 5' 36.5"	0.835 931	<sup>h</sup> 10 52.1
4	9 42 27.24 <sup>m</sup> 8.46	13 10 34.7 <sup>s</sup> 29.7	0.862 056	10 51.0
5	9 45 35.70 <sup>m</sup> 37.76	13 12 4.4 <sup>s</sup> 3.1	0.888 917	10 50.5
6	9 49 13.46 <sup>m</sup> 5.42	13 10 1.3 <sup>s</sup> 38.4	0.916 335	10 50.4
7	9 53 18.88 <sup>m</sup> 31.16	13 4 22.9 <sup>s</sup> 13.6	0.944 125	10 50.7
8	9 57 50.04 <sup>m</sup> 54.79	12 55 9.3 <sup>s</sup> 46.6	0.972 097	10 51.5
9	10 2 44.83 <sup>m</sup> 16.14	+12 42 22.7 <sup>s</sup> 15.2	1.000 058	10 52.5
10	10 8 0.97 <sup>m</sup> 35.15	12 26 7.5 <sup>s</sup> 37.4	1.027 822	10 54.1
11	10 13 36.12 <sup>m</sup> 51.75	12 6 30.1 <sup>s</sup> 50.9	1.055 209	10 55.9
12	10 19 27.87 <sup>m</sup> 5.99	11 43 39.2 <sup>s</sup> 54.5	1.082 049	10 57.9
13	10 25 33.86 <sup>m</sup> 17.91	11 17 44.7 <sup>s</sup> 46.2	1.108 190	11 0.2
14	10 31 51.77 <sup>m</sup> 27.64	10 48 58.5 <sup>s</sup> 25.4	1.133 496	11 2.6
15	10 38 19.41 <sup>m</sup> 35.33	+10 17 33.1 <sup>s</sup> 51.0	1.157 853	11 5.2
16	10 44 54.74 <sup>m</sup> 41.14	9 43 42.1 <sup>s</sup> 2.7	1.181 168	11 7.9
17	10 51 35.88 <sup>m</sup> 45.30	9 7 39.4 <sup>s</sup> 0.5	1.203 368	11 10.7
18	10 58 21.18 <sup>m</sup> 47.98	8 29 38.9 <sup>s</sup> 44.4	1.224 401	11 13.5
19	11 5 9.16 <sup>m</sup> 49.41	7 49 54.5 <sup>s</sup> 15.0	1.244 236	11 16.4
20	11 11 58.57 <sup>m</sup> 49.76	7 8 39.5 <sup>s</sup> 32.9	1.262 857	11 19.3
21	11 18 48.33 <sup>m</sup> 49.23	+ 6 26 6.6 <sup>s</sup> 38.8	1.280 262	11 22.1
22	11 25 37.56 <sup>m</sup> 47.99	5 42 27.8 <sup>s</sup> 33.6	1.296 463	11 25.0
23	11 32 25.55 <sup>m</sup> 46.18	4 57 54.2 <sup>s</sup> 18.2	1.311 481	11 27.9
24	11 39 11.73 <sup>m</sup> 43.95	4 12 36.0 <sup>s</sup> 53.4	1.325 343	11 30.7
25	11 45 55.68 <sup>m</sup> 41.39	3 26 42.6 <sup>s</sup> 20.2	1.338 084	11 33.5
26	11 52 37.07 <sup>m</sup> 38.61	2 40 22.4 <sup>s</sup> 39.2	1.349 740	11 36.2
27	11 59 15.68 <sup>m</sup> 35.69	+ 1 53 43.2 <sup>s</sup> 51.3	1.360 352	11 38.9
28	12 5 51.37 <sup>m</sup> 32.70	1 6 51.9 <sup>s</sup> 57.3	1.369 961	11 41.5
29	12 12 24.07 <sup>m</sup> 29.69	+ 0 19 54.6 <sup>s</sup> 57.7	1.378 606	11 44.1
30	12 18 53.76 <sup>m</sup> 26.71	- 0 27 3.1 <sup>s</sup> 53.2	1.386 328	11 46.6
Okt. 1	12 25 20.47 <sup>m</sup> 23.80	1 13 56.3 <sup>s</sup> 44.3	1.393 167	11 49.1
2	12 31 44.27 <sup>m</sup> 20.99	2 0 40.6 <sup>s</sup> 31.3	1.399 159	11 51.5
3	12 38 5.26 <sup>m</sup> 18.27	- 2 47 11.9 <sup>s</sup> 14.9	1.404 341	11 54.0
4	12 44 23.53 <sup>m</sup> 15.71	3 33 26.8 <sup>s</sup> 55.4	1.408 745	11 56.3
5	12 50 39.24 <sup>m</sup> 13.28	4 19 22.2 <sup>s</sup> 32.9	1.412 404	11 58.6
6	12 56 52.52 <sup>m</sup> 11.01	5 4 55.1 <sup>s</sup> 7.8	1.415 346	12 0.8
7	13 3 3.53 <sup>m</sup> 8.89	5 50 2.9 <sup>s</sup> 40.6	1.417 599	12 3.1
8	13 9 12.42 <sup>m</sup> 6.94	6 34 43.5 <sup>s</sup> 11.1	1.419 187	12 5.3
9	13 15 19.36 <sup>m</sup> 5.15	- 7 18 54.6 <sup>s</sup> 39.6	1.420 132	12 7.4
10	13 21 24.51 <sup>m</sup> 3.52	8 2 34.2 <sup>s</sup> 6.5	1.420 456	12 9.5
11	13 27 28.03 <sup>m</sup> 2.04	8 45 40.7 <sup>s</sup> 31.6	1.420 178	12 11.7
12	13 33 30.07 <sup>m</sup> 0.71	9 28 12.3 <sup>s</sup> 55.3	1.419 313	12 13.7
13	13 39 30.78 <sup>m</sup> 59.55	10 10 7.6 <sup>s</sup> 17.3	1.417 878	12 15.8
14	13 45 30.33	-10 51 24.9	1.415 885	12 17.9



Tag	0 <sup>h</sup> Welt-Zeit			Δ	Obere Kulmination in Greenwich
	Scheinbare Rektaszension		Scheinbare Deklination		
1945					
Okt. 14	<sup>h</sup> 13 45 <sup>m</sup> 30.33 <sup>s</sup> 5 58.51	—10° 51' 24.9"	<sup>h</sup> 40 38.1	1.415 885	<sup>h</sup> 12 17.9
15	13 51 28.84 5 57.62	11 32 3.0	39 57.5	1.413 346	12 19.9
16	13 57 26.46 5 56.85	12 12 0.5	39 15.7	1.410 271	12 21.9
17	14 3 23.31 5 56.20	12 51 16.2	38 32.5	1.406 669	12 23.9
18	14 9 19.51 5 55.66	13 29 48.7	37 48.2	1.402 548	12 25.9
19	14 15 15.17 5 55.22	14 7 36.9	37 2.7	1.397 914	12 27.9
20	14 21 10.39 5 54.88	—14 44 39.6	36 15.9	1.392 772	12 29.9
21	14 27 5.27 5 54.62	15 20 55.5	35 28.0	1.387 125	12 31.8
22	14 32 59.89 5 54.41	15 56 23.5	34 38.9	1.380 976	12 33.8
23	14 38 54.30 5 54.27	16 31 2.4	33 48.5	1.374 326	12 35.8
24	14 44 48.57 5 54.16	17 4 50.9	32 57.0	1.367 176	12 37.7
25	14 50 42.73 5 54.07	17 37 47.9	32 4.2	1.359 526	12 39.7
26	14 56 36.80 5 53.99	—18 9 52.1	31 10.0	1.351 374	12 41.6
27	15 2 30.79 5 53.88	18 41 2.1	30 14.7	1.342 716	12 43.6
28	15 8 24.67 5 53.73	19 11 16.8	29 17.8	1.333 551	12 45.6
29	15 14 18.40 5 53.52	19 40 34.6	28 19.7	1.323 874	12 47.5
30	15 20 11.92 5 53.22	20 8 54.3	27 20.0	1.313 680	12 49.4
31	15 26 5.14 5 52.79	20 36 14.3	26 18.9	1.302 965	12 51.4
Nov. 1	15 31 57.93 5 52.21	—21 2 33.2	25 16.3	1.291 723	12 53.3
2	15 37 50.14 5 51.43	21 27 49.5	24 12.0	1.279 948	12 55.3
3	15 43 41.57 5 50.42	21 52 1.5	23 6.2	1.267 633	12 57.2
4	15 49 31.99 5 49.14	22 15 7.7	21 58.7	1.254 773	12 59.1
5	15 55 21.13 5 47.52	22 37 6.4	20 49.5	1.241 360	13 0.9
6	16 1 8.65 5 45.53	22 57 55.9	19 38.5	1.227 388	13 2.8
7	16 6 54.18 5 43.08	—23 17 34.4	18 25.9	1.212 851	13 4.6
8	16 12 37.26 5 40.11	23 36 0.3	17 11.4	1.197 743	13 6.3
9	16 18 17.37 5 36.54	23 53 11.7	15 55.1	1.182 058	13 8.0
10	16 23 53.91 5 32.28	24 9 6.8	14 36.8	1.165 793	13 9.6
11	16 29 26.19 5 27.23	24 23 43.6	13 16.8	1.148 946	13 11.2
12	16 34 53.42 5 21.28	24 37 0.4	11 54.9	1.131 516	13 12.7
13	16 40 14.70 5 14.30	—24 48 55.3	10 31.1	1.113 504	13 14.0
14	16 45 29.00 5 6.13	24 59 26.4	9 5.3	1.094 915	13 15.2
15	16 50 35.13 4 56.63	25 8 31.7	7 37.6	1.075 758	13 16.3
16	16 55 31.76 4 45.63	25 16 9.3	6 8.1	1.056 047	13 17.2
17	17 0 17.39 4 32.92	25 22 17.4	4 36.5	1.035 801	13 17.9
18	17 4 50.31 4 18.29	25 26 53.9	3 3.1	1.015 047	13 18.4
19	17 9 8.60 4 1.51	—25 29 57.0	1 27.7	0.993 821	13 18.6
20	17 13 10.11 3 42.34	25 31 24.7	0 9.8	0.972 169	13 18.5
21	17 16 52.45 3 20.53	25 31 14.9	1 49.3	0.950 150	13 18.1
22	17 20 12.98 2 55.82	25 29 25.6	3 31.4	0.927 838	13 17.3
23	17 23 8.80 2 27.98	25 25 54.2	5 15.7	0.905 325	13 16.0
24	17 25 36.78	—25 20 38.5		0.882 723	13 14.2



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Nov. 24	<sup>h</sup> 17 <sup>m</sup> 25 <sup>s</sup> 36.78 <sub>1 56.82</sub>	<sup>o</sup> -25 <sup>'</sup> 20 <sup>"</sup> 38.5 <sub>7 2.9</sub>	0.882 723 <sub>22 556</sub>	<sup>h</sup> 13 <sup>m</sup> 14.2
25	17 27 33.60 <sub>1 22.22</sub>	25 13 35.6 <sub>8 53.3</sub>	0.860 167 <sub>22 346</sub>	13 11.9
26	17 28 55.82 <sub>0 44.18</sub>	25 4 42.3 <sub>10 46.8</sub>	0.837 821 <sub>21 946</sub>	13 9.0
27	17 29 40.00 <sub>0 2.86</sub>	24 53 55.5 <sub>12 43.9</sub>	0.815 875 <sub>21 324</sub>	13 5.5
28	17 29 42.86 <sub>0 41.34</sub>	24 41 11.6 <sub>14 44.7</sub>	0.794 551 <sub>20 448</sub>	13 1.2
29	17 29 1.52 <sub>1 27.72</sub>	24 26 26.9 <sub>16 48.3</sub>	0.774 103 <sub>19 289</sub>	12 56.1
30	17 27 33.80 <sub>2 15.20</sub>	-24 9 38.6 <sub>18 53.6</sub>	0.754 814 <sub>17 822</sub>	12 50.4
Dez. 1	17 25 18.60 <sub>3 2.31</sub>	23 50 45.0 <sub>20 58.1</sub>	0.736 992 <sub>16 031</sub>	12 43.8
2	17 22 16.29 <sub>3 47.23</sub>	23 29 46.9 <sub>22 57.6</sub>	0.720 961 <sub>13 910</sub>	12 36.4
3	17 18 29.06 <sub>4 27.78</sub>	23 6 49.3 <sub>24 46.4</sub>	0.707 051 <sub>11 469</sub>	12 28.4
4	17 14 1.28 <sub>5 1.70</sub>	22 42 2.9 <sub>26 17.1</sub>	0.695 582 <sub>8 741</sub>	12 19.7
5	17 8 59.58 <sub>5 26.84</sub>	22 15 45.8 <sub>27 21.1</sub>	0.686 841 <sub>5 775</sub>	12 10.6
6	17 3 32.74 <sub>5 41.50</sub>	-21 48 24.7 <sub>27 49.7</sub>	0.681 066 <sub>2 642</sub>	12 1.1
7	16 57 51.24 <sub>5 44.63</sub>	21 20 35.0 <sub>27 36.3</sub>	0.678 424 <sub>572</sub>	11 51.5
8	16 52 6.61 <sub>5 36.12</sub>	20 52 58.7 <sub>26 36.6</sub>	0.678 996 <sub>3 774</sub>	11 41.9
9	16 46 30.49 <sub>5 16.69</sub>	20 26 22.1 <sub>24 50.6</sub>	0.682 770 <sub>6 872</sub>	11 32.6
10	16 41 13.80 <sub>4 47.86</sub>	20 1 31.5 <sub>22 22.4</sub>	0.689 642 <sub>9 782</sub>	11 23.6
11	16 36 25.94 <sub>4 11.66</sub>	19 39 9.1 <sub>19 20.0</sub>	0.699 424 <sub>12 439</sub>	11 15.2
12	16 32 14.28 <sub>3 30.29</sub>	-19 19 49.1 <sub>15 53.0</sub>	0.711 863 <sub>14 794</sub>	11 7.4
13	16 28 43.99 <sub>2 45.94</sub>	19 3 56.1 <sub>12 12.5</sub>	0.726 657 <sub>16 822</sub>	11 0.3
14	16 25 58.05 <sub>2 0.51</sub>	18 51 43.6 <sub>8 28.5</sub>	0.743 479 <sub>18 516</sub>	10 54.0
15	16 23 57.54 <sub>1 15.53</sub>	18 43 15.1 <sub>4 49.7</sub>	0.761 995 <sub>19 883</sub>	10 48.4
16	16 22 42.01 <sub>0 32.17</sub>	18 38 25.4 <sub>1 23.0</sub>	0.781 878 <sub>20 944</sub>	10 43.5
17	16 22 9.84 <sub>0 8.80</sub>	18 37 2.4 <sub>1 46.8</sub>	0.802 822 <sub>21 726</sub>	10 39.4
18	16 22 18.64 <sub>0 46.94</sub>	-18 38 49.2 <sub>4 37.2</sub>	0.824 548 <sub>22 257</sub>	10 35.9
19	16 23 5.58 <sub>1 21.99</sub>	18 43 26.4 <sub>7 6.5</sub>	0.846 805 <sub>22 571</sub>	10 33.0
20	16 24 27.57 <sub>1 53.94</sub>	18 50 32.9 <sub>9 14.5</sub>	0.869 376 <sub>22 699</sub>	10 30.7
21	16 26 21.51 <sub>2 22.88</sub>	18 59 47.4 <sub>11 1.8</sub>	0.892 075 <sub>22 669</sub>	10 28.8
22	16 28 44.39 <sub>2 48.96</sub>	19 10 49.2 <sub>12 29.7</sub>	0.914 744 <sub>22 510</sub>	10 27.5
23	16 31 33.35 <sub>3 12.39</sub>	19 23 18.9 <sub>13 39.3</sub>	0.937 254 <sub>22 242</sub>	10 26.5
24	16 34 45.74 <sub>3 33.42</sub>	-19 36 58.2 <sub>14 32.4</sub>	0.959 496 <sub>21 888</sub>	10 25.9
25	16 38 19.16 <sub>3 52.27</sub>	19 51 30.6 <sub>15 10.6</sub>	0.981 384 <sub>21 465</sub>	10 25.7
26	16 42 11.43 <sub>4 9.17</sub>	20 6 41.2 <sub>15 35.2</sub>	1.002 849 <sub>20 987</sub>	10 25.7
27	16 46 20.60 <sub>4 24.33</sub>	20 22 16.4 <sub>15 47.9</sub>	1.023 836 <sub>20 468</sub>	10 26.1
28	16 50 44.93 <sub>4 37.95</sub>	20 38 4.3 <sub>15 49.9</sub>	1.044 304 <sub>19 918</sub>	10 26.6
29	16 55 22.88 <sub>4 50.22</sub>	20 53 54.2 <sub>15 42.6</sub>	1.064 222 <sub>19 344</sub>	10 27.4
30	17 0 13.10 <sub>5 1.28</sub>	-21 9 36.8 <sub>15 26.8</sub>	1.083 566 <sub>18 756</sub>	10 28.4
31	17 5 14.38 <sub>5 11.27</sub>	21 25 3.6 <sub>15 3.7</sub>	1.102 322 <sub>18 156</sub>	10 29.5
32	17 10 25.65	-21 40 7.3	1.120 478	10 30.9



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Jan.				
0	21 <sup>h</sup> 44 <sup>m</sup> 59.32 <sup>s</sup> 4 <sup>m</sup> 27.58 <sup>"</sup>	-15° 23' 28.7" 25' 31.9"	0.939 872 7 011	15 <sup>h</sup> 8.1 <sup>m</sup>
1	21 49 26.90 4 25.84	14 57 56.8 25 52.6	0.932 861 7 027	15 8.6
2	21 53 52.74 4 24.11	14 32 4.2 26 12.5	0.925 834 7 044	15 9.1
3	21 58 16.85 4 22.39	14 5 51.7 26 31.6	0.918 790 7 060	15 9.6
4	22 2 39.24 4 20.69	13 39 20.1 26 50.0	0.911 730 7 077	15 10.0
5	22 6 59.93 4 18.99	13 12 30.1 27 7.4	0.904 653 7 092	15 10.4
6	22 11 18.92 4 17.30	-12 45 22.7 27 24.2	0.897 561 7 109	15 10.7
7	22 15 36.22 4 15.63	12 17 58.5 27 40.2	0.890 452 7 124	15 11.0
8	22 19 51.85 4 13.96	11 50 18.3 27 55.3	0.883 328 7 140	15 11.3
9	22 24 5.81 4 12.32	11 22 23.0 28 9.6	0.876 188 7 156	15 11.6
10	22 28 18.13 4 10.68	10 54 13.4 28 23.3	0.869 032 7 171	15 11.9
11	22 32 28.81 4 9.05	10 25 50.1 28 36.2	0.861 861 7 187	15 12.1
12	22 36 37.86 4 7.44	- 9 57 13.9 28 48.2	0.854 674 7 203	15 12.3
13	22 40 45.30 4 5.83	9 28 25.7 28 59.4	0.847 471 7 218	15 12.4
14	22 44 51.13 4 4.22	8 59 26.3 29 9.9	0.840 253 7 234	15 12.6
15	22 48 55.35 4 2.63	8 30 16.4 29 19.6	0.833 019 7 249	15 12.7
16	22 52 57.98 4 1.03	8 0 56.8 29 28.5	0.825 770 7 264	15 12.8
17	22 56 59.01 3 59.44	7 31 28.3 29 36.6	0.818 506 7 280	15 12.8
18	23 0 58.45 3 57.86	- 7 1 51.7 29 43.9	0.811 226 7 294	15 12.8
19	23 4 56.31 3 56.26	6 32 7.8 29 50.3	0.803 932 7 308	15 12.8
20	23 8 52.57 3 54.67	6 2 17.5 29 56.0	0.796 624 7 323	15 12.8
21	23 12 47.24 3 53.08	5 32 21.5 30 1.0	0.789 301 7 335	15 12.8
22	23 16 40.32 3 51.49	5 2 20.5 30 5.1	0.781 966 7 347	15 12.7
23	23 20 31.81 3 49.90	4 32 15.4 30 8.5	0.774 619 7 360	15 12.6
24	23 24 21.71 3 48.30	- 4 2 6.9 30 10.9	0.767 259 7 370	15 12.5
25	23 28 10.01 3 46.71	3 31 56.0 30 12.8	0.759 889 7 380	15 12.3
26	23 31 56.72 3 45.11	3 1 43.2 30 13.9	0.752 509 7 389	15 12.1
27	23 35 41.83 3 43.50	2 31 29.3 30 14.1	0.745 120 7 398	15 11.9
28	23 39 25.33 3 41.90	2 1 15.2 30 13.7	0.737 722 7 406	15 11.7
29	23 43 7.23 3 40.28	1 31 1.5 30 12.6	0.730 316 7 412	15 11.4
30	23 46 47.51 3 38.67	- 1 0 48.9 30 10.6	0.722 904 7 418	15 11.1
31	23 50 26.18 3 37.03	0 30 38.3 30 7.9	0.715 486 7 424	15 10.8
Febr.				
1	23 54 3.21 3 35.39	- 0 0 30.4 30 4.5	0.708 062 7 429	15 10.5
2	23 57 38.60 3 33.73	+ 0 29 34.1 30 0.4	0.700 633 7 433	15 10.1
3	0 1 12.33 3 32.06	0 59 34.5 29 55.7	0.693 200 7 436	15 9.7
4	0 4 44.39 3 30.36	1 29 30.2 29 50.2	0.685 764 7 439	15 9.3
5	0 8 14.75 3 28.65	+ 1 59 20.4 29 43.9	0.678 325 7 441	15 8.9
6	0 11 43.40 3 26.90	2 29 4.3 29 36.9	0.670 884 7 442	15 8.4
7	0 15 10.30 3 25.12	2 58 41.2 29 29.2	0.663 442 7 443	15 7.9
8	0 18 35.42 3 23.31	3 28 10.4 29 20.7	0.655 999 7 443	15 7.3
9	0 21 58.73 3 21.46	3 57 31.1 29 11.7	0.648 556 7 443	15 6.7
10	0 25 20.19	+ 4 26 42.8	0.641 113	15 6.1



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Febr. 10	<sup>h</sup> 0 25 20.19 <sup>m</sup> 3 19.57	+ 4 26' 42.8" <sup>s</sup> 29 1.8	0.641 113 7 440	<sup>h</sup> 15 <sup>m</sup> 6.1
11	0 28 39.76 3 17.63	4 55 44.6 28 51.1	0.633 673 7 439	15 5.5
12	0 31 57.39 3 15.62	5 24 35.7 28 39.7	0.626 234 7 437	15 4.8
13	0 35 13.01 3 13.56	5 53 15.4 28 27.5	0.618 797 7 433	15 4.1
14	0 38 26.57 3 11.44	6 21 42.9 28 14.6	0.611 364 7 428	15 3.4
15	0 41 38.01 3 9.23	6 49 57.5 28 0.7	0.603 936 7 422	15 2.6
16	0 44 47.24 3 6.94	+ 7 17 58.2 27 46.2	0.596 514 7 416	15 1.8
17	0 47 54.18 3 4.55	7 45 44.4 27 30.7	0.589 098 7 407	15 0.9
18	0 50 58.73 3 2.10	8 13 15.1 27 14.3	0.581 691 7 397	15 0.0
19	0 54 0.83 2 59.54	8 40 29.4 26 57.1	0.574 294 7 385	14 59.1
20	0 57 0.37 2 56.87	9 7 26.5 26 39.1	0.566 909 7 372	14 58.1
21	0 59 57.24 2 54.09	9 34 5.6 26 20.1	0.559 537 7 357	14 57.1
22	I 2 51.33 2 51.21	+10 0 25.7 26 0.2	0.552 180 7 339	14 56.0
23	I 5 42.54 2 48.21	10 26 25.9 25 39.4	0.544 841 7 320	14 54.9
24	I 8 30.75 2 45.08	10 52 5.3 25 17.7	0.537 521 7 297	14 53.8
25	I 11 15.83 2 41.83	11 17 23.0 24 55.2	0.530 224 7 274	14 52.6
26	I 13 57.66 2 38.44	11 42 18.2 24 31.5	0.522 950 7 247	14 51.3
27	I 16 36.10 2 34.92	12 6 49.7 24 7.0	0.515 793 7 218	14 49.9
28	I 19 11.02 2 31.24	+12 30 56.7 23 41.5	0.508 485 7 186	14 48.5
März 1	I 21 42.26 2 27.40	12 54 38.2 23 14.8	0.501 299 7 153	14 47.1
2	I 24 9.66 2 23.41	13 17 53.0 22 47.3	0.494 146 7 115	14 45.6
3	I 26 33.07 2 19.25	13 40 40.3 22 18.6	0.487 031 7 076	14 44.0
4	I 28 52.32 2 14.89	14 2 58.9 21 48.8	0.479 955 7 033	14 42.3
5	I 31 7.21 2 10.37	14 24 47.7 21 17.8	0.472 922 6 988	14 40.5
6	I 33 17.58 2 5.65	+14 46 5.5 20 45.7	0.465 934 6 939	14 38.7
7	I 35 23.23 2 0.72	15 6 51.2 20 12.2	0.458 995 6 887	14 36.8
8	I 37 23.95 1 55.58	15 27 3.4 19 37.4	0.452 108 6 832	14 34.9
9	I 39 19.53 1 50.25	15 46 40.8 19 1.3	0.445 276 6 772	14 32.8
10	I 41 9.78 1 44.67	16 5 42.1 18 23.8	0.438 504 6 711	14 30.6
11	I 42 54.45 1 38.86	16 24 5.9 17 44.9	0.431 793 6 644	14 28.4
12	I 44 33.31 1 32.82	+16 41 50.8 17 4.1	0.425 149 6 573	14 26.0
13	I 46 6.13 1 26.52	16 58 54.9 16 21.7	0.418 576 6 499	14 23.6
14	I 47 32.65 1 19.97	17 15 16.6 15 37.4	0.412 077 6 420	14 21.0
15	I 48 52.62 1 13.15	17 30 54.0 14 51.3	0.405 657 6 336	14 18.3
16	I 50 5.77 1 6.08	17 45 45.3 14 3.3	0.399 321 6 246	14 15.5
17	I 51 11.85 0 58.73	17 59 48.6 13 12.8	0.393 075 6 151	14 12.6
18	I 52 10.58 0 51.13	+18 13 1.4 12 20.2	0.386 924 6 050	14 9.6
19	I 53 1.71 0 43.26	18 25 21.6 11 25.3	0.380 874 5 943	14 6.5
20	I 53 44.97 0 35.17	18 36 46.9 10 27.9	0.374 931 5 828	14 3.2
21	I 54 20.14 0 26.84	18 47 14.8 9 28.0	0.369 103 5 707	13 59.7
22	I 54 46.98 0 18.30	18 56 42.8 8 25.2	0.363 396 5 578	13 56.2
23	I 55 5.28	+19 5 8.0	0.357 818	13 52.5



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
März	<sup>h</sup> <sup>m</sup> <sup>s</sup> I 55 5.28	<sup>°</sup> <sup>'</sup> <sup>"</sup> +19 5 8.0	<sup>"</sup> 7 20.1	<sup>h</sup> <sup>m</sup> I3 52.5
23	<sup>o</sup> <sup>m</sup> <sup>s</sup> 0 9.58			
24	I 55 14.86	19 12 28.1	6 12.4	I3 48.6
25	I 55 15.59	19 18 40.5	5 1.8	I3 44.6
26	I 55 7.33	19 23 42.3	3 48.5	I3 40.4
27	I 54 49.97	19 27 30.8	2 32.6	I3 36.1
28	I 54 23.48	19 30 3.4	1 14.5	I3 31.7
29	I 53 47.86	+19 31 17.9	0 6.5	I3 27.1
30	I 53 3.15	19 31 11.4	1 29.5	I3 22.3
31	I 52 9.46	19 29 41.9	2 54.4	I3 17.4
April	I 51 6.97	19 26 47.5	4 21.1	I3 12.4
1	I 49 55.90	19 22 26.4	5 48.9	I3 7.2
2	I 48 36.55	19 16 37.5	7 17.8	I3 1.9
3	I 47 9.30	+19 9 19.7	8 47.1	I2 56.4
4	I 45 34.59	19 0 32.6	10 15.9	I2 50.9
5	I 43 52.91	18 50 16.7	11 44.1	I2 45.2
6	I 42 4.87	18 38 32.6	13 10.7	I2 39.4
7	I 40 11.10	18 25 21.9	14 35.1	I2 33.5
8	I 38 12.30	18 10 46.8	15 56.7	I2 27.6
9	I 36 9.23	+17 54 50.1	17 14.5	I2 21.6
10	I 34 2.68	17 37 35.6	18 27.8	I2 15.6
11	I 31 53.50	17 19 7.8	19 36.3	I2 9.5
12	I 29 42.56	16 59 31.5	20 38.6	I2 3.4
13	I 27 30.74	16 38 52.9	21 34.5	II 57.2
14	I 25 18.92	16 17 18.4	22 23.6	II 51.1
15	I 23 8.02	+15 54 54.8	23 5.0	II 45.1
16	I 20 58.93	15 31 49.8	23 38.5	II 39.0
17	I 18 52.51	15 8 11.3	24 3.5	II 33.0
18	I 16 49.61	14 44 7.8	24 20.4	II 27.1
19	I 14 51.03	14 19 47.4	24 28.5	II 21.2
20	I 12 57.52	13 55 18.9	24 28.2	II 15.4
21	I 11 9.78	+13 30 50.7	24 20.0	II 9.8
22	I 9 28.44	13 6 30.7	24 3.6	II 4.2
23	I 7 54.06	12 42 27.1	23 39.7	IO 58.8
24	I 6 27.15	12 18 47.4	23 9.1	IO 53.5
25	I 5 8.11	11 55 38.3	22 31.7	IO 48.3
26	I 3 57.29	11 33 6.6	21 48.6	IO 43.3
27	I 2 54.99	+11 11 18.0	21 0.1	IO 38.4
28	I 2 1.41	10 50 17.9	20 7.1	IO 33.6
29	I 1 16.72	10 30 10.8	19 10.3	IO 29.0
30	I 0 41.00	10 11 0.5	18 10.0	IO 24.5
Mai	I 0 14.28	9 52 50.5	17 6.9	IO 20.2
1	0 59 56.57	+ 9 35 43.6		IO 16.1



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Mai	3	0 <sup>h</sup> 59 <sup>m</sup> 56. <sup>s</sup> 57 0 <sup>m</sup> 8. <sup>s</sup> 76	+ 9 <sup>o</sup> 35 <sup>'</sup> 43. <sup>"</sup> 6 16 <sup>'</sup> 1. <sup>"</sup> 8	0.327 412 4 743 10 16.1
	4	0 59 47.81 0 0.10	9 19 41.8 14 55.1	0.332 155 4 935 10 12.1
	5	0 59 47.91 0 8.82	9 4 46.7 13 47.2	0.337 090 5 118 10 8.2
	6	0 59 56.73 0 17.39	8 50 59.5 12 38.8	0.342 208 5 292 10 4.5
	7	1 0 14.12 0 25.77	8 38 20.7 11 30.3	0.347 500 5 458 10 0.9
	8	1 0 39.89 0 33.97	8 26 50.4 10 21.7	0.352 958 5 615 9 57.4
	9	1 1 13.86 0 41.92	+ 8 16 28.7 9 13.9	0.358 573 5 764 9 54.1
	10	1 1 55.78 0 49.65	8 7 14.8 8 6.8	0.364 337 5 907 9 50.9
	11	1 2 45.43 0 57.16	7 59 8.0 7 0.7	0.370 244 6 041 9 47.9
	12	1 3 42.59 1 4.42	7 52 7.3 5 55.8	0.376 285 6 169 9 44.9
	13	1 4 47.01 1 11.44	7 46 11.5 4 52.3	0.382 454 6 290 9 42.1
	14	1 5 58.45 1 18.24	7 41 19.2 3 50.1	0.388 744 6 406 9 39.4
	15	1 7 16.69 1 24.80	+ 7 37 29.1 2 49.8	0.395 150 6 516 9 36.8
	16	1 8 41.49 1 31.12	7 34 39.3 1 50.9	0.401 666 6 619 9 34.3
	17	1 10 12.61 1 37.24	7 32 48.4 0 53.7	0.408 285 6 719 9 32.0
	18	1 11 49.85 1 43.15	7 31 54.7 0 1.7	0.415 004 6 812 9 29.7
	19	1 13 33.00 1 48.85	7 31 56.4 0 55.5	0.421 816 6 901 9 27.5
	20	1 15 21.85 1 54.33	7 32 51.9 1 47.3	0.428 717 6 985 9 25.4
	21	1 17 16.18 1 59.65	+ 7 34 39.2 2 37.4	0.435 702 7 065 9 23.4
	22	1 19 15.83 2 4.75	7 37 16.6 3 25.8	0.442 767 7 140 9 21.5
	23	1 21 20.58 2 9.69	7 40 42.4 4 12.2	0.449 907 7 210 9 19.7
	24	1 23 30.27 2 14.45	7 44 54.6 4 57.0	0.457 117 7 277 9 17.9
	25	1 25 44.72 2 19.03	7 49 51.6 5 39.9	0.464 394 7 340 9 16.3
	26	1 28 3.75 2 23.46	7 55 31.5 6 21.1	0.471 734 7 399 9 14.7
	27	1 30 27.21 2 27.75	+ 8 1 52.6 7 0.6	0.479 133 7 454 9 13.1
	28	1 32 54.96 2 31.87	8 8 53.2 7 38.1	0.486 587 7 506 9 11.7
	29	1 35 26.83 2 35.85	8 16 31.3 8 14.2	0.494 093 7 555 9 10.3
	30	1 38 2.68 2 39.71	8 24 45.5 8 48.5	0.501 648 7 600 9 9.0
	31	1 40 42.39 2 43.43	8 33 34.0 9 21.1	0.509 248 7 641 9 7.7
Juni	1	1 43 25.82 2 47.03	8 42 55.1 9 52.1	0.516 889 7 681 9 6.5
	2	1 46 12.85 2 50.50	+ 8 52 47.2 10 21.4	0.524 570 7 716 9 5.4
	3	1 49 3.35 2 53.85	9 3 8.6 10 49.2	0.532 286 7 749 9 4.3
	4	1 51 57.20 2 57.11	9 13 57.8 11 15.3	0.540 035 7 779 9 3.3
	5	1 54 54.31 3 0.25	9 25 13.1 11 39.9	0.547 814 7 807 9 2.3
	6	1 57 54.56 3 3.29	9 36 53.0 12 3.0	0.555 621 7 833 9 1.4
	7	2 0 57.85 3 6.23	9 48 56.0 12 24.5	0.563 454 7 856 9 0.5
	8	2 4 4.08 3 9.08	+10 1 20.5 12 44.6	0.571 310 7 877 8 59.7
	9	2 7 13.16 3 11.85	10 14 5.1 13 3.2	0.579 187 7 897 8 58.9
	10	2 10 25.01 3 14.54	10 27 8.3 13 20.4	0.587 084 7 914 8 58.2
	11	2 13 39.55 3 17.15	10 40 28.7 13 36.1	0.594 998 7 931 8 57.5
	12	2 16 56.70 3 19.70	10 54 4.8 13 50.8	0.602 929 7 946 8 56.9
	13	2 20 16.40	+11 7 55.6	0.610 875 8 56.3



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Juni 13	<sup>h</sup> 2 20 16.40 <sup>m</sup> 3 22.19 <sup>s</sup>	+11° 7' 55.6" <sup>14</sup> 3.9	0.610 875 <sup>7</sup> 960	<sup>h</sup> 8 56.3
14	2 23 38.59 <sup>3</sup> 24.62	11 21 59.5 <sup>14</sup> 16.0	0.618 835 <sup>7</sup> 972	8 55.7
15	2 27 3.21 <sup>3</sup> 27.00	11 36 15.5 <sup>14</sup> 26.6	0.626 807 <sup>7</sup> 983	8 55.2
16	2 30 30.21 <sup>3</sup> 29.33	11 50 42.1 <sup>14</sup> 36.2	0.634 790 <sup>7</sup> 993	8 54.7
17	2 33 59.54 <sup>3</sup> 31.63	12 5 18.3 <sup>14</sup> 44.6	0.642 783 <sup>8</sup> 002	8 54.3
18	2 37 31.17 <sup>3</sup> 33.87	12 20 2.9 <sup>14</sup> 51.8	0.650 785 <sup>8</sup> 010	8 53.9
19	2 41 5.04 <sup>3</sup> 36.10	+12 34 54.7 <sup>14</sup> 57.9	0.658 795 <sup>8</sup> 016	8 53.5
20	2 44 41.14 <sup>3</sup> 38.27	12 49 52.6 <sup>15</sup> 2.9	0.666 811 <sup>8</sup> 021	8 53.2
21	2 48 19.41 <sup>3</sup> 40.42	13 4 55.5 <sup>15</sup> 6.8	0.674 832 <sup>8</sup> 025	8 52.9
22	2 51 59.83 <sup>3</sup> 42.53	13 20 2.3 <sup>15</sup> 9.7	0.682 857 <sup>8</sup> 028	8 52.7
23	2 55 42.36 <sup>3</sup> 44.63	13 35 12.0 <sup>15</sup> 11.4	0.690 885 <sup>8</sup> 030	8 52.5
24	2 59 26.99 <sup>3</sup> 46.68	13 50 23.4 <sup>15</sup> 12.1	0.698 915 <sup>8</sup> 030	8 52.3
25	3 3 13.67 <sup>3</sup> 48.72	+14 5 35.5 <sup>15</sup> 11.9	0.706 945 <sup>8</sup> 030	8 52.1
26	3 7 2.39 <sup>3</sup> 50.74	14 20 47.4 <sup>15</sup> 10.5	0.714 975 <sup>8</sup> 028	8 52.0
27	3 10 53.13 <sup>3</sup> 52.72	14 35 57.9 <sup>15</sup> 8.3	0.723 003 <sup>8</sup> 024	8 51.9
28	3 14 45.85 <sup>3</sup> 54.69	14 51 6.2 <sup>15</sup> 4.8	0.731 027 <sup>8</sup> 020	8 51.8
29	3 18 40.54 <sup>3</sup> 56.63	15 6 11.0 <sup>15</sup> 0.6	0.739 047 <sup>8</sup> 015	8 51.8
30	3 22 37.17 <sup>3</sup> 58.55	15 21 11.6 <sup>14</sup> 55.2	0.747 062 <sup>8</sup> 008	8 51.8
Juli 1	3 26 35.72 <sup>4</sup> 0.44	+15 36 6.8 <sup>14</sup> 49.0	0.755 070 <sup>8</sup> 000	8 51.9
2	3 30 36.16 <sup>4</sup> 2.32	15 50 55.8 <sup>14</sup> 41.6	0.763 070 <sup>7</sup> 990	8 52.0
3	3 34 38.48 <sup>4</sup> 4.15	16 5 37.4 <sup>14</sup> 33.5	0.771 060 <sup>7</sup> 980	8 52.1
4	3 38 42.63 <sup>4</sup> 5.97	16 20 10.9 <sup>14</sup> 24.3	0.779 040 <sup>7</sup> 969	8 52.2
5	3 42 48.60 <sup>4</sup> 7.76	16 34 35.2 <sup>14</sup> 14.2	0.787 009 <sup>7</sup> 957	8 52.4
6	3 46 56.36 <sup>4</sup> 9.52	16 48 49.4 <sup>14</sup> 3.1	0.794 966 <sup>7</sup> 943	8 52.6
7	3 51 5.88 <sup>4</sup> 11.26	+17 2 52.5 <sup>13</sup> 51.1	0.802 909 <sup>7</sup> 930	8 52.8
8	3 55 17.14 <sup>4</sup> 12.97	17 16 43.6 <sup>13</sup> 38.2	0.810 839 <sup>7</sup> 915	8 53.1
9	3 59 30.11 <sup>4</sup> 14.65	17 30 21.8 <sup>13</sup> 24.4	0.818 754 <sup>7</sup> 901	8 53.4
10	4 3 44.76 <sup>4</sup> 16.31	17 43 46.2 <sup>13</sup> 9.9	0.826 655 <sup>7</sup> 885	8 53.7
11	4 8 1.07 <sup>4</sup> 17.95	17 56 56.1 <sup>12</sup> 54.3	0.834 540 <sup>7</sup> 869	8 54.0
12	4 12 19.02 <sup>4</sup> 19.57	18 9 50.4 <sup>12</sup> 38.0	0.842 409 <sup>7</sup> 854	8 54.4
13	4 16 38.59 <sup>4</sup> 21.15	+18 22 28.4 <sup>12</sup> 21.0	0.850 263 <sup>7</sup> 836	8 54.8
14	4 20 59.74 <sup>4</sup> 22.73	18 34 49.4 <sup>12</sup> 3.0	0.858 099 <sup>7</sup> 820	8 55.2
15	4 25 22.47 <sup>4</sup> 24.27	18 46 52.4 <sup>11</sup> 44.4	0.865 919 <sup>7</sup> 803	8 55.6
16	4 29 46.74 <sup>4</sup> 25.80	18 58 36.8 <sup>11</sup> 24.8	0.873 722 <sup>7</sup> 785	8 56.1
17	4 34 12.54 <sup>4</sup> 27.30	19 10 1.6 <sup>11</sup> 4.7	0.881 507 <sup>7</sup> 767	8 56.6
18	4 38 39.84 <sup>4</sup> 28.78	19 21 6.3 <sup>10</sup> 43.7	0.889 274 <sup>7</sup> 749	8 57.1
19	4 43 8.62 <sup>4</sup> 30.24	+19 31 50.0 <sup>10</sup> 22.1	0.897 023 <sup>7</sup> 730	8 57.7
20	4 47 38.86 <sup>4</sup> 31.66	19 42 12.1 <sup>9</sup> 59.8	0.904 753 <sup>7</sup> 710	8 58.2
21	4 52 10.52 <sup>4</sup> 33.07	19 52 11.9 <sup>9</sup> 36.7	0.912 463 <sup>7</sup> 691	8 58.8
22	4 56 43.59 <sup>4</sup> 34.45	20 1 48.6 <sup>9</sup> 12.9	0.920 154 <sup>7</sup> 670	8 59.4
23	5 1 18.04 <sup>4</sup> 35.80	20 11 1.5 <sup>8</sup> 48.6	0.927 824 <sup>7</sup> 650	9 0.1
24	5 5 53.84	+20 19 50.1	0.935 474	9 0.7



Tag	0 <sup>h</sup> Welt-Zeit			Obers Kullmination in Greenwich		
	Scheinbare Rektaszension	Scheinbare Deklination	Δ			
1945						
Juli	24	5 <sup>h</sup> 5 <sup>m</sup> 53.84 <sup>s</sup> 4 <sup>m</sup> 37.13 <sup>s</sup>	+20° 19' 50.1" 8' 23.4"	0.935 474 7 628	9 0.7	
	25	5 10 30.97 4 38.42	20 28 13.5 7 57.9	0.943 102 7 606	9 1.4	
	26	5 15 9.39 4 39.69	20 36 11.4 7 31.5	0.950 708 7 583	9 2.1	
	27	5 19 49.08 4 40.91	20 43 42.9 7 4.7	0.958 291 7 559	9 2.9	
	28	5 24 29.99 4 42.11	20 50 47.6 6 37.1	0.965 850 7 535	9 3.6	
	29	5 29 12.10 4 43.26	20 57 24.7 6 9.1	0.973 385 7 510	9 4.4	
	30	5 33 55.36 4 44.39	+21 3 33.8 5 40.5	0.980 895 7 484	9 5.2	
	31	5 38 39.75 4 45.46	21 9 14.3 5 11.4	0.988 379 7 457	9 6.0	
	Aug.	1	5 43 25.21 4 46.48	21 14 25.7 4 41.7	0.995 836 7 430	9 6.8
		2	5 48 11.69 4 47.47	21 19 7.4 4 11.6	1.003 266 7 402	9 7.6
3		5 52 59.16 4 48.41	21 23 19.0 3 41.0	1.010 668 7 374	9 8.5	
4		5 57 47.57 4 49.29	21 27 0.0 3 9.8	1.018 042 7 344	9 9.3	
5		6 2 36.86 4 50.14	+21 30 9.8 2 38.4	1.025 386 7 315	9 10.2	
6		6 7 27.00 4 50.92	21 32 48.2 2 6.6	1.032 701 7 285	9 11.1	
7		6 12 17.92 4 51.67	21 34 54.8 1 34.3	1.039 986 7 255	9 12.0	
8		6 17 9.59 4 52.35	21 36 29.1 1 1.7	1.047 241 7 225	9 13.0	
9		6 22 1.94 4 52.99	21 37 30.8 0 28.9	1.054 466 7 194	9 13.9	
10		6 26 54.93 4 53.58	21 37 59.7 0 4.3	1.061 660 7 164	9 14.8	
11	6 31 48.51 4 54.13	+21 37 55.4 0 37.7	1.068 824 7 133	9 15.8		
12	6 36 42.64 4 54.62	21 37 17.7 1 11.3	1.075 957 7 103	9 16.8		
13	6 41 37.26 4 55.06	21 36 6.4 1 45.2	1.083 060 7 071	9 17.7		
14	6 46 32.32 4 55.47	21 34 21.2 2 19.2	1.090 131 7 041	9 18.7		
15	6 51 27.79 4 55.82	21 32 2.0 2 53.4	1.097 172 7 010	9 19.7		
16	6 56 23.61 4 56.12	21 29 8.6 3 27.6	1.104 182 6 979	9 20.7		
17	7 1 19.73 4 56.39	+21 25 41.0 4 2.1	1.111 161 6 947	9 21.7		
18	7 6 16.12 4 56.60	21 21 38.9 4 36.6	1.118 108 6 915	9 22.7		
19	7 11 12.72 4 56.77	21 17 2.3 5 11.0	1.125 023 6 884	9 23.7		
20	7 16 9.49 4 56.89	21 11 51.3 5 45.6	1.131 907 6 851	9 24.7		
21	7 21 6.38 4 56.98	21 6 5.7 6 20.2	1.138 758 6 820	9 25.7		
22	7 26 3.36 4 57.03	20 59 45.5 6 54.7	1.145 578 6 787	9 26.7		
23	7 31 0.39 4 57.03	+20 52 50.8 7 29.1	1.152 365 6 754	9 27.7		
24	7 35 57.42 4 56.99	20 45 21.7 8 3.6	1.159 119 6 720	9 28.7		
25	7 40 54.41 4 56.91	20 37 18.1 8 37.9	1.165 839 6 686	9 29.7		
26	7 45 51.32 4 56.80	20 28 40.2 9 12.0	1.172 525 6 652	9 30.7		
27	7 50 48.12 4 56.64	20 19 28.2 9 46.1	1.179 177 6 617	9 31.7		
28	7 55 44.76 4 56.44	20 9 42.1 10 20.0	1.185 794 6 580	9 32.7		
29	8 0 41.20 4 56.20	+19 59 22.1 10 53.7	1.192 374 6 545	9 33.7		
30	8 5 37.40 4 55.93	19 48 28.4 11 27.1	1.198 919 6 507	9 34.7		
31	8 10 33.33 4 55.63	19 37 1.3 12 0.3	1.205 426 6 470	9 35.7		
Sept.	1	8 15 28.96 4 55.27	19 25 1.0 12 33.2	1.211 896 6 432	9 36.7	
	2	8 20 24.23 4 54.88	19 12 27.8 13 5.9	1.218 328 6 393	9 37.7	
	3	8 25 19.11	+18 59 21.9	1.224 721	9 38.7	



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Sept.	<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>h</sup> <sup>m</sup> <sup>s</sup>		<sup>h</sup> <sup>m</sup>
3	8 25 19.11 4 54.48	+18 59 21.9 13 38.2	I.224 721 6 355	9 38.7
4	8 30 13.59 4 54.02	18 45 43.7 14 10.2	I.231 076 6 317	9 39.6
5	8 35 7.61 4 53.55	18 31 33.5 14 41.8	I.237 393 6 278	9 40.6
6	8 40 1.16 4 53.04	18 16 51.7 15 13.0	I.243 671 6 238	9 41.5
7	8 44 54.20 4 52.51	18 1 38.7 15 43.8	I.249 909 6 200	9 42.5
8	8 49 46.71 4 51.97	17 45 54.9 16 14.2	I.256 109 6 161	9 43.4
9	8 54 38.68 4 51.39	+17 29 40.7 16 44.2	I.262 270 6 121	9 44.3
10	8 59 30.07 4 50.81	17 12 56.5 17 13.7	I.268 391 6 083	9 45.2
11	9 4 20.88 4 50.21	16 55 42.8 17 42.8	I.274 474 6 043	9 46.1
12	9 9 11.09 4 49.59	16 38 0.0 18 11.3	I.280 517 6 004	9 47.0
13	9 14 0.68 4 48.96	16 19 48.7 18 39.4	I.286 521 5 966	9 47.9
14	9 18 49.64 4 48.33	16 1 9.3 19 7.0	I.292 487 5 927	9 48.8
15	9 23 37.97 4 47.69	+15 42 2.3 19 34.0	I.298 414 5 887	9 49.6
16	9 28 25.66 4 47.05	15 22 28.3 20 0.5	I.304 301 5 849	9 50.5
17	9 33 12.71 4 46.40	15 2 27.8 20 26.6	I.310 150 5 809	9 51.3
18	9 37 59.11 4 45.76	14 42 1.2 20 51.9	I.315 959 5 771	9 52.1
19	9 42 44.87 4 45.12	14 21 9.3 21 16.9	I.321 730 5 731	9 53.0
20	9 47 29.99 4 44.48	13 59 52.4 21 41.2	I.327 461 5 693	9 53.8
21	9 52 14.47 4 43.86	+13 38 11.2 22 4.9	I.333 154 5 653	9 54.6
22	9 56 58.33 4 43.23	13 16 6.3 22 28.1	I.338 807 5 614	9 55.3
23	10 1 41.56 4 42.62	12 53 38.2 22 50.8	I.344 421 5 574	9 56.1
24	10 6 24.18 4 42.02	12 30 47.4 23 12.7	I.349 995 5 533	9 56.9
25	10 11 6.20 4 41.44	12 7 34.7 23 34.2	I.355 528 5 492	9 57.6
26	10 15 47.64 4 40.86	11 44 0.5 23 54.9	I.361 020 5 451	9 58.4
27	10 20 28.50 4 40.29	+11 20 5.6 24 15.0	I.366 471 5 409	9 59.1
28	10 25 8.79 4 39.74	10 55 50.6 24 34.6	I.371 880 5 366	9 59.8
29	10 29 48.53 4 39.20	10 31 16.0 24 53.5	I.377 246 5 324	10 0.6
30	10 34 27.73 4 38.68	10 6 22.5 25 11.6	I.382 570 5 281	10 1.3
Okt.	1 10 39 6.41 4 38.17	9 41 10.9 25 29.2	I.387 851 5 237	10 2.0
2	10 43 44.58 4 37.68	9 15 41.7 25 46.0	I.393 088 5 194	10 2.7
3	10 48 22.26 4 37.21	+ 8 49 55.7 26 2.2	I.398 282 5 151	10 3.3
4	10 52 59.47 4 36.76	8 23 53.5 26 17.7	I.403 433 5 106	10 4.0
5	10 57 36.23 4 36.34	7 57 35.8 26 32.6	I.408 539 5 063	10 4.7
6	11 2 12.57 4 35.93	7 31 3.2 26 46.7	I.413 602 5 019	10 5.3
7	11 6 48.50 4 35.55	7 4 16.5 27 0.1	I.418 621 4 976	10 6.0
8	11 11 24.05 4 35.19	6 37 16.4 27 12.8	I.423 597 4 932	10 6.6
9	11 15 59.24 4 34.87	+ 6 10 3.6 27 24.9	I.428 529 4 889	10 7.3
10	11 20 34.11 4 34.56	5 42 38.7 27 36.2	I.433 418 4 845	10 7.9
11	11 25 8.67 4 34.29	5 15 2.5 27 46.8	I.438 263 4 801	10 8.5
12	11 29 42.96 4 34.05	4 47 15.7 27 56.8	I.443 064 4 759	10 9.2
13	11 34 17.01 4 33.85	4 19 18.9 28 5.9	I.447 823 4 716	10 9.8
14	11 38 50.86	+ 3 51 13.0	I.452 539	10 10.4



Tag	0 <sup>a</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Okt. 14	11 <sup>h</sup> 38 <sup>m</sup> 50.86 <sup>s</sup> 4 33.66	+ 3° 51' 13.0" 28' 14.5"	1.452 539 4 673	10 <sup>h</sup> 10.4 <sup>m</sup>
15	11 43 24.52 4 33.52	3 22 58.5 28 22.3	1.457 212 4 630	10 11.0
16	11 47 58.04 4 33.41	2 54 36.2 28 29.4	1.461 842 4 588	10 11.7
17	11 52 31.45 4 33.34	2 26 6.8 28 35.8	1.466 430 4 546	10 12.3
18	11 57 4.79 4 33.29	1 57 31.0 28 41.5	1.470 976 4 504	10 12.9
19	12 1 38.08 4 33.30	1 28 49.5 28 46.5	1.475 480 4 461	10 13.5
20	12 6 11.38 4 33.33	+ 1 0 3.0 28 50.7	1.479 941 4 420	10 14.1
21	12 10 44.71 4 33.41	0 31 12.3 28 54.4	1.484 361 4 377	10 14.7
22	12 15 18.12 4 33.53	+ 0 2 17.9 28 57.2	1.488 738 4 335	10 15.3
23	12 19 51.65 4 33.68	- 0 26 39.3 28 59.4	1.493 073 4 293	10 16.0
24	12 24 25.33 4 33.87	0 55 38.7 29 0.9	1.497 366 4 250	10 16.6
25	12 28 59.20 4 34.10	1 24 39.6 29 1.5	1.501 616 4 206	10 17.2
26	12 33 33.30 4 34.36	- 1 53 41.1 29 1.5	1.505 822 4 163	10 17.8
27	12 38 7.66 4 34.66	2 22 42.6 29 0.8	1.509 985 4 119	10 18.4
28	12 42 42.32 4 35.01	2 51 43.4 28 59.3	1.514 104 4 074	10 19.1
29	12 47 17.33 4 35.37	3 20 42.7 28 56.9	1.518 178 4 030	10 19.7
30	12 51 52.70 4 35.79	3 49 39.6 28 54.0	1.522 208 3 985	10 20.4
31	12 56 28.49 4 36.22	4 18 33.6 28 50.1	1.526 193 3 941	10 21.0
Nov. 1	13 1 4.71 4 36.70	- 4 47 23.7 28 45.5	1.530 134 3 896	10 21.7
2	13 5 41.41 4 37.22	5 16 9.2 28 40.1	1.534 030 3 851	10 22.4
3	13 10 18.63 4 37.76	5 44 49.3 28 34.1	1.537 881 3 806	10 23.1
4	13 14 56.39 4 38.34	6 13 23.4 28 27.1	1.541 687 3 761	10 23.8
5	13 19 34.73 4 38.95	6 41 59.5 28 19.4	1.545 448 3 717	10 24.5
6	13 24 13.68 4 39.61	7 10 9.9 28 11.0	1.549 165 3 672	10 25.2
7	13 28 53.29 4 40.29	- 7 38 20.9 28 1.7	1.552 837 3 628	10 25.9
8	13 33 33.58 4 41.00	8 6 22.6 27 51.6	1.556 465 3 584	10 26.6
9	13 38 14.58 4 41.75	8 34 14.2 27 40.8	1.560 049 3 539	10 27.4
10	13 42 56.33 4 42.53	9 1 55.0 27 29.1	1.563 588 3 496	10 28.1
11	13 47 38.86 4 43.34	9 29 24.1 27 16.6	1.567 084 3 453	10 28.9
12	13 52 22.20 4 44.18	9 56 40.7 27 3.5	1.570 537 3 409	10 29.7
13	13 57 6.38 4 45.06	- 10 23 44.2 26 49.4	1.573 946 3 367	10 30.5
14	14 1 51.44 4 45.96	10 50 33.6 26 34.6	1.577 313 3 324	10 31.3
15	14 6 37.40 4 46.90	11 17 8.2 26 19.1	1.580 637 3 282	10 32.1
16	14 11 24.30 4 47.86	11 43 27.3 26 2.6	1.583 919 3 240	10 33.0
17	14 16 12.16 4 48.85	12 9 29.9 25 45.4	1.587 159 3 198	10 33.8
18	14 21 1.01 4 49.87	12 35 15.3 25 27.5	1.590 357 3 158	10 34.7
19	14 25 50.88 4 50.92	- 13 0 42.8 25 8.6	1.593 515 3 115	10 35.6
20	14 30 41.80 4 51.99	13 25 51.4 24 49.2	1.596 630 3 074	10 36.5
21	14 35 33.79 4 53.09	13 50 40.6 24 28.9	1.599 704 3 033	10 37.5
22	14 40 26.88 4 54.21	14 15 9.5 24 7.7	1.602 737 2 991	10 38.4
23	14 45 21.09 4 55.34	14 39 17.2 23 45.9	1.605 728 2 949	10 39.4
24	14 50 16.43	- 15 3 3.1	1.608 677	10 40.4



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Nov. 24	<sup>h</sup> 14 <sup>m</sup> 50 <sup>s</sup> 16.43 <sup>m</sup> 4 <sup>s</sup> 56.49	—15° 3' 3.1" <sub>23 23.1</sub>	1.608 677 <sub>2 907</sub>	<sup>h</sup> 10 <sup>m</sup> 40.4
25	14 55 12.92 <sub>4 57.67</sub>	15 26 26.2 <sub>22 59.6</sub>	1.611 584 <sub>2 865</sub>	10 41.4
26	15 0 10.59 <sub>4 58.84</sub>	15 49 25.8 <sub>22 35.3</sub>	1.614 449 <sub>2 821</sub>	10 42.4
27	15 5 9.43 <sub>5 0.04</sub>	16 12 1.1 <sub>22 10.1</sub>	1.617 270 <sub>2 779</sub>	10 43.5
28	15 10 9.47 <sub>5 1.23</sub>	16 34 11.2 <sub>21 44.3</sub>	1.620 049 <sub>2 736</sub>	10 44.5
29	15 15 10.70 <sub>5 2.43</sub>	16 55 55.5 <sub>21 17.5</sub>	1.622 785 <sub>2 694</sub>	10 45.6
30	15 20 13.13 <sub>5 3.64</sub>	—17 17 13.0 <sub>20 50.1</sub>	1.625 479 <sub>2 650</sub>	10 46.7
Dez. 1	15 25 16.77 <sub>5 4.84</sub>	17 38 3.1 <sub>20 21.8</sub>	1.628 129 <sub>2 607</sub>	10 47.8
2	15 30 21.61 <sub>5 6.05</sub>	17 58 24.9 <sub>19 52.7</sub>	1.630 736 <sub>2 564</sub>	10 49.0
3	15 35 27.66 <sub>5 7.25</sub>	18 18 17.6 <sub>19 22.9</sub>	1.633 300 <sub>2 521</sub>	10 50.2
4	15 40 34.91 <sub>5 8.43</sub>	18 37 40.5 <sub>18 52.3</sub>	1.635 821 <sub>2 478</sub>	10 51.4
5	15 45 43.34 <sub>5 9.62</sub>	18 56 32.8 <sub>18 21.0</sub>	1.638 299 <sub>2 435</sub>	10 52.6
6	15 50 52.96 <sub>5 10.79</sub>	—19 14 53.8 <sub>17 48.8</sub>	1.640 734 <sub>2 392</sub>	10 53.8
7	15 56 3.75 <sub>5 11.95</sub>	19 32 42.6 <sub>17 16.1</sub>	1.643 126 <sub>2 351</sub>	10 55.0
8	16 1 15.70 <sub>5 13.10</sub>	19 49 58.7 <sub>16 42.6</sub>	1.645 477 <sub>2 308</sub>	10 56.3
9	16 6 28.80 <sub>5 14.20</sub>	20 6 41.3 <sub>16 8.4</sub>	1.647 785 <sub>2 266</sub>	10 57.6
10	16 11 43.00 <sub>5 15.30</sub>	20 22 49.7 <sub>15 33.5</sub>	1.650 051 <sub>2 225</sub>	10 58.9
11	16 16 58.30 <sub>5 16.38</sub>	20 38 23.2 <sub>14 58.0</sub>	1.652 276 <sub>2 183</sub>	II 0.2
12	16 22 14.68 <sub>5 17.42</sub>	—20 53 21.2 <sub>14 21.7</sub>	1.654 459 <sub>2 143</sub>	II 1.5
13	16 27 32.10 <sub>5 18.44</sub>	21 7 42.9 <sub>13 44.9</sub>	1.656 602 <sub>2 102</sub>	II 2.9
14	16 32 50.54 <sub>5 19.44</sub>	21 21 27.8 <sub>13 7.5</sub>	1.658 704 <sub>2 062</sub>	II 4.3
15	16 38 9.98 <sub>5 20.39</sub>	21 34 35.3 <sub>12 29.5</sub>	1.660 766 <sub>2 022</sub>	II 5.7
16	16 43 30.37 <sub>5 21.32</sub>	21 47 4.8 <sub>11 51.0</sub>	1.662 788 <sub>1 983</sub>	II 7.1
17	16 48 51.69 <sub>5 22.20</sub>	21 58 55.8 <sub>11 11.9</sub>	1.664 771 <sub>1 944</sub>	II 8.5
18	16 54 13.89 <sub>5 23.06</sub>	—22 10 7.7 <sub>10 32.4</sub>	1.666 715 <sub>1 905</sub>	II 9.9
19	16 59 36.95 <sub>5 23.86</sub>	22 20 40.1 <sub>9 52.3</sub>	1.668 620 <sub>1 865</sub>	II 11.4
20	17 5 0.81 <sub>5 24.63</sub>	22 30 32.4 <sub>9 11.7</sub>	1.670 485 <sub>1 827</sub>	II 12.8
21	17 10 25.44 <sub>5 25.35</sub>	22 39 44.1 <sub>8 30.8</sub>	1.672 312 <sub>1 788</sub>	II 14.3
22	17 15 50.79 <sub>5 26.02</sub>	22 48 14.9 <sub>7 49.4</sub>	1.674 100 <sub>1 749</sub>	II 15.8
23	17 21 16.81 <sub>5 26.64</sub>	22 56 4.3 <sub>7 7.7</sub>	1.675 849 <sub>1 709</sub>	II 17.3
24	17 26 43.45 <sub>5 27.22</sub>	—23 3 12.0 <sub>6 25.6</sub>	1.677 558 <sub>1 669</sub>	II 18.8
25	17 32 10.67 <sub>5 27.73</sub>	23 9 37.6 <sub>5 43.1</sub>	1.679 227 <sub>1 629</sub>	II 20.3
26	17 37 38.40 <sub>5 28.19</sub>	23 15 20.7 <sub>5 0.5</sub>	1.680 856 <sub>1 590</sub>	II 21.9
27	17 43 6.59 <sub>5 28.59</sub>	23 20 21.2 <sub>4 17.4</sub>	1.682 446 <sub>1 549</sub>	II 23.4
28	17 48 35.18 <sub>5 28.92</sub>	23 24 38.6 <sub>3 34.2</sub>	1.683 995 <sub>1 509</sub>	II 24.9
29	17 54 4.10 <sub>5 29.20</sub>	23 28 12.8 <sub>2 50.8</sub>	1.685 504 <sub>1 469</sub>	II 26.5
30	17 59 33.30 <sub>5 29.41</sub>	—23 31 3.6 <sub>2 7.2</sub>	1.686 973 <sub>1 428</sub>	II 28.0
31	18 5 2.71 <sub>5 29.57</sub>	23 33 10.8 <sub>1 23.4</sub>	1.688 401 <sub>1 387</sub>	II 29.6
32	18 10 32.28	—23 34 34.2	1.689 788	II 31.1



Tag	0 <sup>h</sup> Welt-Zeit			Obers Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Jan.	<sup>h</sup> <sup>m</sup> <sup>s</sup> <sup>m</sup> <sup>s</sup>	<sup>°</sup> <sup>'</sup> <sup>"</sup> <sup>'</sup> <sup>"</sup>		<sup>h</sup> <sup>m</sup>
0	17 41 6.27 3 14.36	-23 54 1.8 1 55.4	2.420 347 3 168	II 3.6
1	17 44 20.63 3 14.65	23 55 57.2 1 40.5	2.417 179 3 192	II 2.9
2	17 47 35.28 3 14.93	23 57 37.7 1 25.4	2.413 987 3 216	II 2.2
3	17 50 50.21 3 15.19	23 59 3.1 1 10.4	2.410 771 3 241	II 1.5
4	17 54 5.40 3 15.43	24 0 13.5 0 55.2	2.407 530 3 265	II 0.8
5	17 57 20.83 3 15.67	24 1 8.7 0 39.9	2.404 265 3 288	II 0.1
6	18 0 36.50 3 15.90	-24 1 48.6 0 24.8	2.400 977 3 312	IO 59.5
7	18 3 52.40 3 16.10	24 2 13.4 0 9.4	2.397 665 3 335	IO 58.8
8	18 7 8.50 3 16.29	24 2 22.8 0 6.0	2.394 330 3 359	IO 58.1
9	18 10 24.79 3 16.47	24 2 16.8 0 21.3	2.390 971 3 381	IO 57.4
10	18 13 41.26 3 16.63	24 1 55.5 0 36.8	2.387 590 3 404	IO 56.8
11	18 16 57.89 3 16.78	24 1 18.7 0 52.3	2.384 186 3 426	IO 56.1
12	18 20 14.67 3 16.90	-24 0 26.4 1 7.7	2.380 760 3 449	IO 55.5
13	18 23 31.57 3 17.02	23 59 18.7 1 23.2	2.377 311 3 470	IO 54.8
14	18 26 48.59 3 17.12	23 57 55.5 1 38.8	2.373 841 3 492	IO 54.1
15	18 30 5.71 3 17.19	23 56 16.7 1 54.3	2.370 349 3 512	IO 53.5
16	18 33 22.90 3 17.26	23 54 22.4 2 9.8	2.366 837 3 532	IO 52.8
17	18 36 40.16 3 17.30	23 52 12.6 2 25.4	2.363 305 3 551	IO 52.2
18	18 39 57.46 3 17.34	-23 49 47.2 2 40.9	2.359 754 3 570	IO 51.5
19	18 43 14.80 3 17.35	23 47 6.3 2 56.5	2.356 184 3 588	IO 50.9
20	18 46 32.15 3 17.35	23 44 9.8 3 12.0	2.352 596 3 604	IO 50.2
21	18 49 49.50 3 17.34	23 40 57.8 3 27.4	2.348 992 3 621	IO 49.6
22	18 53 6.84 3 17.31	23 37 30.4 3 43.0	2.345 371 3 636	IO 48.9
23	18 56 24.15 3 17.28	23 33 47.4 3 58.4	2.341 735 3 650	IO 48.2
24	18 59 41.43 3 17.22	-23 29 49.0 4 13.8	2.338 085 3 665	IO 47.6
25	19 2 58.65 3 17.17	23 25 35.2 4 29.2	2.334 420 3 678	IO 46.9
26	19 6 15.82 3 17.09	23 21 6.0 4 44.5	2.330 742 3 692	IO 46.3
27	19 9 32.91 3 17.00	23 16 21.5 4 59.8	2.327 050 3 704	IO 45.6
28	19 12 49.91 3 16.91	23 11 21.7 5 15.0	2.323 346 3 716	IO 45.0
29	19 16 6.82 3 16.80	23 6 6.7 5 30.2	2.319 630 3 728	IO 44.3
30	19 19 23.62 3 16.68	-23 0 36.5 5 45.4	2.315 902 3 740	IO 43.6
31	19 22 40.30 3 16.55	22 54 51.1 6 0.4	2.312 162 3 751	IO 43.0
Febr.				
1	19 25 56.85 3 16.41	22 48 50.7 6 15.4	2.308 411 3 763	IO 42.3
2	19 29 13.26 3 16.26	22 42 35.3 6 30.3	2.304 648 3 774	IO 41.6
3	19 32 29.52 3 16.09	22 36 5.0 6 45.2	2.300 874 3 785	IO 41.0
4	19 35 45.61 3 15.91	22 29 19.8 6 59.9	2.297 089 3 796	IO 40.3
5	19 39 1.52 3 15.72	-22 22 19.9 7 14.6	2.293 293 3 807	IO 39.6
6	19 42 17.24 3 15.52	22 15 5.3 7 29.2	2.289 486 3 817	IO 38.9
7	19 45 32.76 3 15.31	22 7 36.1 7 43.8	2.285 669 3 828	IO 38.3
8	19 48 48.07 3 15.09	21 59 52.3 7 58.1	2.281 841 3 838	IO 37.6
9	19 52 3.16 3 14.85	21 51 54.2 8 12.4	2.278 003 3 848	IO 36.9
10	19 55 18.01 3 14.85	-21 43 41.8	2.274 155	IO 36.2



Tag	0 <sup>a</sup> Welt-Zeit				Obere Kulmination in Greenwich				
	Scheinbare Rektaszension		Scheinbare Deklination			$\Delta$			
1945									
Febr.	10	19 <sup>h</sup> 55 <sup>m</sup> 18.01 <sup>s</sup>	3 <sup>m</sup> 14.61 <sup>s</sup>	-21° 43' 41.8"	8' 26.6"	2.274 155	3 858	10 <sup>h</sup> 36.2 <sup>m</sup>	
	11	19 58 32.62	3 14.34	21 35 15.2	8 40.7	2.270 297	3 868	10 35.5	
	12	20 1 46.96	3 14.07	21 26 34.5	8 54.7	2.266 429	3 877	10 34.8	
	13	20 5 1.03	3 13.79	21 17 39.8	9 8.5	2.262 552	3 885	10 34.0	
	14	20 8 14.82	3 13.50	21 8 31.3	9 22.2	2.258 667	3 894	10 33.3	
	15	20 11 28.32	3 13.19	20 59 9.1	9 35.8	2.254 773	3 901	10 32.6	
	16	20 14 41.51	3 12.88	-20 49 33.3	9 49.2	2.250 872	3 908	10 31.9	
	17	20 17 54.39	3 12.56	20 39 44.1	10 2.6	2.246 964	3 914	10 31.2	
	18	20 21 6.95	3 12.23	20 29 41.5	10 15.8	2.243 050	3 919	10 30.4	
	19	20 24 19.18	3 11.89	20 19 25.7	10 28.8	2.239 131	3 924	10 29.7	
	20	20 27 31.07	3 11.56	20 8 56.9	10 41.8	2.235 207	3 928	10 28.9	
	21	20 30 42.63	3 11.21	19 58 15.1	10 54.5	2.231 279	3 931	10 28.2	
	22	20 33 53.84	3 10.87	-19 47 20.6	11 7.1	2.227 348	3 934	10 27.4	
	23	20 37 4.71	3 10.52	19 36 13.5	11 19.6	2.223 414	3 937	10 26.7	
	24	20 40 15.23	3 10.16	19 24 53.9	11 32.0	2.219 477	3 939	10 25.9	
	25	20 43 25.39	3 9.80	19 13 21.9	11 44.1	2.215 538	3 941	10 25.1	
	26	20 46 35.19	3 9.45	19 1 37.8	11 56.1	2.211 597	3 943	10 24.3	
	27	20 49 44.64	3 9.08	18 49 41.7	12 8.1	2.207 654	3 945	10 23.6	
	28	20 52 53.72	3 8.71	-18 37 33.6	12 19.7	2.203 709	3 946	10 22.8	
	März	1	20 56 2.43	3 8.35	18 25 13.9	12 31.3	2.199 763	3 947	10 22.0
		2	20 59 10.78	3 7.98	18 12 42.6	12 42.7	2.195 816	3 949	10 21.2
3		21 2 18.76	3 7.61	17 59 59.9	12 54.0	2.191 867	3 950	10 20.3	
4		21 5 26.37	3 7.23	17 47 5.9	13 5.0	2.187 917	3 951	10 19.5	
5		21 8 33.60	3 6.86	17 34 0.9	13 15.9	2.183 966	3 953	10 18.7	
6		21 11 40.46	3 6.48	-17 20 45.0	13 26.7	2.180 013	3 954	10 17.9	
7		21 14 46.94	3 6.10	17 7 18.3	13 37.2	2.176 059	3 955	10 17.0	
8		21 17 53.04	3 5.72	16 53 41.1	13 47.7	2.172 104	3 956	10 16.2	
9		21 20 58.76	3 5.34	16 39 53.4	13 57.8	2.168 148	3 958	10 15.3	
10		21 24 4.10	3 4.95	16 25 55.6	14 7.8	2.164 190	3 959	10 14.5	
11		21 27 9.05	3 4.57	16 11 47.8	14 17.6	2.160 231	3 961	10 13.6	
12		21 30 13.62	3 4.17	-15 57 30.2	14 27.3	2.156 270	3 962	10 12.8	
13		21 33 17.79	3 3.78	15 43 2.9	14 36.8	2.152 308	3 962	10 11.9	
14	21 36 21.57	3 3.39	15 28 26.1	14 46.0	2.148 346	3 963	10 11.0		
15	21 39 24.96	3 3.00	15 13 40.1	14 55.0	2.144 383	3 964	10 10.1		
16	21 42 27.96	3 2.60	14 58 45.1	15 3.9	2.140 419	3 963	10 9.2		
17	21 45 30.56	3 2.20	14 43 41.2	15 12.6	2.136 456	3 963	10 8.3		
18	21 48 32.76	3 1.81	-14 28 28.6	15 21.1	2.132 493	3 961	10 7.4		
19	21 51 34.57	3 1.42	14 13 7.5	15 29.3	2.128 532	3 959	10 6.5		
20	21 54 35.99	3 1.04	13 57 38.2	15 37.5	2.124 573	3 957	10 5.6		
21	21 57 37.03	3 0.65	13 42 0.7	15 45.3	2.120 616	3 954	10 4.6		
22	22 0 37.68	3 0.27	13 26 15.4	15 53.0	2.116 662	3 951	10 3.7		
23	22 3 37.95		-13 10 22.4		2.112 711		10 2.8		



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich	
	Scheinbare Rektaszension	Scheinbare Deklination	Δ		
1945					
März	23	<sup>h</sup> 22 <sup>m</sup> 3 <sup>s</sup> 37.95 <sup>m</sup> 2 59.89	-13 <sup>°</sup> 10' 22.4" 16' 0.6"	2.112 711 3 948	<sup>h</sup> 10 <sup>m</sup> 2.8
	24	22 6 37.84 2 59.53	12 54 21.8 16 8.0	2.108 763 3 944	10 1.8
	25	22 9 37.37 2 59.17	12 38 13.8 16 15.1	2.104 819 3 940	10 0.9
	26	22 12 36.54 2 58.80	12 21 58.7 16 22.0	2.100 879 3 937	9 59.9
	27	22 15 35.34 2 58.45	12 5 36.7 16 28.8	2.096 942 3 932	9 59.0
	28	22 18 33.79 2 58.10	11 49 7.9 16 35.5	2.093 010 3 929	9 58.0
	29	22 21 31.89 2 57.76	-11 32 32.4 16 41.8	2.089 081 3 926	9 57.0
	30	22 24 29.65 2 57.43	11 15 50.6 16 48.1	2.085 155 3 921	9 56.0
	31	22 27 27.08 2 57.09	10 59 2.5 16 54.1	2.081 234 3 918	9 55.0
	April	1	22 30 24.17 2 56.77	10 42 8.4 16 59.9	2.077 316 3 915
2		22 33 20.94 2 56.44	10 25 8.5 17 5.5	2.073 401 3 912	9 53.0
3		22 36 17.38 2 56.14	10 8 3.0 17 11.1	2.069 489 3 909	9 52.0
4		22 39 13.52 2 55.82	- 9 50 51.9 17 16.3	2.065 580 3 906	9 51.0
5		22 42 9.34 2 55.52	9 33 35.6 17 21.4	2.061 674 3 903	9 50.0
6		22 45 4.86 2 55.22	9 16 14.2 17 26.2	2.057 771 3 900	9 49.0
7		22 48 0.08 2 54.92	8 58 48.0 17 31.0	2.053 869 3 902	9 48.0
8		22 50 55.00 2 54.63	8 41 17.0 17 35.4	2.049 969 3 898	9 47.0
9		22 53 49.63 2 54.35	8 23 41.6 17 39.6	2.046 071 3 896	9 45.9
10		22 56 43.98 2 54.06	- 8 6 2.0 17 43.8	2.042 175 3 895	9 44.9
11	22 59 38.04 2 53.77	7 48 18.2 17 47.6	2.038 280 3 894	9 43.8	
12	23 2 31.81 2 53.50	7 30 30.6 17 51.2	2.034 386 3 892	9 42.8	
13	23 5 25.31 2 53.22	7 12 39.4 17 54.6	2.030 494 3 890	9 41.7	
14	23 8 18.53 2 52.96	6 54 44.8 17 57.9	2.026 604 3 889	9 40.7	
15	23 11 11.49 2 52.70	6 36 46.9 18 0.9	2.022 715 3 886	9 39.6	
16	23 14 4.19 2 52.43	- 6 18 46.0 18 3.7	2.018 829 3 883	9 38.5	
17	23 16 56.62 2 52.19	6 0 42.3 18 6.3	2.014 946 3 880	9 37.5	
18	23 19 48.81 2 51.95	5 42 36.0 18 8.8	2.011 066 3 877	9 36.4	
19	23 22 40.76 2 51.71	5 24 27.2 18 11.0	2.007 189 3 873	9 35.3	
20	23 25 32.47 2 51.48	5 6 16.2 18 13.1	2.003 316 3 870	9 34.2	
21	23 28 23.95 2 51.27	4 48 3.1 18 15.0	1.999 446 3 866	9 33.2	
22	23 31 15.22 2 51.06	- 4 29 48.1 18 16.7	1.995 580 3 863	9 32.1	
23	23 34 6.28 2 50.86	4 11 31.4 18 18.2	1.991 717 3 859	9 31.0	
24	23 36 57.14 2 50.66	3 53 13.2 18 19.5	1.987 858 3 856	9 29.9	
25	23 39 47.80 2 50.48	3 34 53.7 18 20.7	1.984 002 3 853	9 28.8	
26	23 42 38.28 2 50.31	3 16 33.0 18 21.7	1.980 149 3 849	9 27.7	
27	23 45 28.59 2 50.14	2 58 11.3 18 22.5	1.976 300 3 847	9 26.6	
28	23 48 18.73 2 49.98	- 2 39 48.8 18 23.1	1.972 453 3 845	9 25.5	
29	23 51 8.71 2 49.82	2 21 25.7 18 23.5	1.968 608 3 842	9 24.4	
30	23 53 58.53 2 49.69	2 3 2.2 18 23.8	1.964 766 3 841	9 23.3	
Mai	1	23 56 48.22 2 49.55	1 44 38.4 18 23.9	1.960 925 3 839	9 22.1
	2	23 59 37.77 2 49.41	1 26 14.5 18 23.8	1.957 086 3 839	9 21.0
	3	0 2 27.18	- 1 7 50.7	1.953 247	9 19.9



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kul- mination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Mai				
3	<sup>h</sup> 0 <sup>m</sup> 2 <sup>s</sup> 27.18 <sup>m</sup> 2 <sup>s</sup> 49.30	— 1° 7' 50.7" 18' 23.5"	1.953 247 3 838	<sup>h</sup> 9 <sup>m</sup> 19.9
4	0 5 16.48 2 49.18	0 49 27.2 18 23.1	1.949 409 3 838	9 18.8
5	0 8 5.66 2 49.07	0 31 4.1 18 22.4	1.945 571 3 839	9 17.7
6	0 10 54.73 2 48.97	— 0 12 41.7 18 21.6	1.941 732 3 840	9 16.5
7	0 13 43.70 2 48.86	+ 0 5 39.9 18 20.5	1.937 892 3 841	9 15.4
8	0 16 32.56 2 48.77	0 24 0.4 18 19.3	1.934 051 3 843	9 14.3
9	0 19 21.33 2 48.68	+ 0 42 19.7 18 17.9	1.930 208 3 845	9 13.2
10	0 22 10.01 2 48.59	1 0 37.6 18 16.3	1.926 363 3 848	9 12.0
11	0 24 58.60 2 48.51	1 18 53.9 18 14.5	1.922 515 3 850	9 10.9
12	0 27 47.11 2 48.42	1 37 8.4 18 12.4	1.918 665 3 852	9 9.8
13	0 30 35.53 2 48.35	1 55 20.8 18 10.3	1.914 813 3 854	9 8.6
14	0 33 23.88 2 48.28	2 13 31.1 18 7.9	1.910 959 3 856	9 7.5
15	0 36 12.16 2 48.22	+ 2 31 39.0 18 5.4	1.907 103 3 858	9 6.4
16	0 39 0.38 2 48.16	2 49 44.4 18 2.6	1.903 245 3 860	9 5.2
17	0 41 48.54 2 48.11	3 7 47.0 17 59.7	1.899 385 3 861	9 4.1
18	0 44 36.65 2 48.07	3 25 46.7 17 56.6	1.895 524 3 863	9 2.9
19	0 47 24.72 2 48.04	3 43 43.3 17 53.4	1.891 661 3 865	9 1.8
20	0 50 12.76 2 48.00	4 1 36.7 17 50.0	1.887 796 3 867	9 0.7
21	0 53 0.76 2 47.99	+ 4 19 26.7 17 46.5	1.883 929 3 869	8 59.5
22	0 55 48.75 2 47.96	4 37 13.2 17 42.8	1.880 060 3 872	8 58.4
23	0 58 36.71 2 47.96	4 54 56.0 17 38.8	1.876 188 3 874	8 57.2
24	1 1 24.67 2 47.97	5 12 34.8 17 34.9	1.872 314 3 877	8 56.1
25	1 4 12.64 2 47.96	5 30 9.7 17 30.7	1.868 437 3 880	8 54.9
26	1 7 0.60 2 47.98	5 47 40.4 17 26.4	1.864 557 3 884	8 53.8
27	1 9 48.58 2 48.01	+ 6 5 6.8 17 21.8	1.860 673 3 888	8 52.6
28	1 12 36.59 2 48.02	6 22 28.6 17 17.2	1.856 785 3 893	8 51.5
29	1 15 24.61 2 48.06	6 39 45.8 17 12.5	1.852 892 3 898	8 50.4
30	1 18 12.67 2 48.09	6 56 58.3 17 7.5	1.848 994 3 904	8 49.2
31	1 21 0.76 2 48.13	7 14 5.8 17 2.4	1.845 090 3 910	8 48.1
Juni				
1	1 23 48.89 2 48.18	7 31 8.2 16 57.1	1.841 180 3 917	8 47.0
2	1 26 37.07 2 48.22	+ 7 48 5.3 16 51.8	1.837 263 3 925	8 45.8
3	1 29 25.29 2 48.28	8 4 57.1 16 46.2	1.833 338 3 934	8 44.7
4	1 32 13.57 2 48.33	8 21 43.3 16 40.4	1.829 404 3 942	8 43.5
5	1 35 1.90 2 48.38	8 38 23.7 16 34.6	1.825 462 3 951	8 42.4
6	1 37 50.28 2 48.43	8 54 58.3 16 28.5	1.821 511 3 962	8 41.3
7	1 40 38.71 2 48.50	9 11 26.8 16 22.2	1.817 549 3 971	8 40.1
8	1 43 27.21 2 48.54	+ 9 27 49.0 16 15.9	1.813 578 3 982	8 39.0
9	1 46 15.75 2 48.60	9 44 4.9 16 9.3	1.809 596 3 993	8 37.9
10	1 49 4.35 2 48.66	10 0 14.2 16 2.6	1.805 603 4 003	8 36.7
11	1 51 53.01 2 48.72	10 16 16.8 15 55.7	1.801 600 4 014	8 35.6
12	1 54 41.73 2 48.77	10 32 12.5 15 48.7	1.797 586 4 025	8 34.5
13	1 57 30.50	+ 10 48 1.2	1.793 561	8 33.4



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich	
	Scheinbare Rektaszension	Scheinbare Deklination	Δ		
1945					
Juni	13	<sup>h</sup> 1 57 30.50 <sup>m</sup> 2 48.83	+10 48 1.2 15 41.5	I.793 561 4 035 8 33.4	
	14	2 0 19.33 2 48.90	11 3 42.7 15 34.3	I.789 526 4 046 8 32.2	
	15	2 3 8.23 2 48.95	11 19 17.0 15 26.8	I.785 480 4 057 8 31.1	
	16	2 5 57.18 2 49.03	11 34 43.8 15 19.2	I.781 423 4 068 8 30.0	
	17	2 8 46.21 2 49.09	11 50 3.0 15 11.5	I.777 355 4 078 8 28.8	
	18	2 11 35.30 2 49.17	12 5 14.5 15 3.7	I.773 277 4 090 8 27.7	
	19	2 14 24.47 2 49.24	+12 20 18.2 14 55.8	I.769 187 4 102 8 26.6	
	20	2 17 13.71 2 49.31	12 35 14.0 14 47.8	I.765 085 4 114 8 25.5	
	21	2 20 3.02 2 49.39	12 50 1.8 14 39.5	I.760 971 4 125 8 24.4	
	22	2 22 52.41 2 49.47	13 4 41.3 14 31.2	I.756 846 4 138 8 23.2	
	23	2 25 41.88 2 49.55	13 19 12.5 14 22.9	I.752 708 4 151 8 22.1	
	24	2 28 31.43 2 49.64	13 33 35.4 14 14.3	I.748 557 4 164 8 21.0	
	25	2 31 21.07 2 49.72	+13 47 49.7 14 5.8	I.744 393 4 178 8 19.9	
	26	2 34 10.79 2 49.80	14 1 55.5 13 57.0	I.740 215 4 192 8 18.8	
	27	2 37 0.59 2 49.88	14 15 52.5 13 48.2	I.736 023 4 208 8 17.7	
	28	2 39 50.47 2 49.97	14 29 40.7 13 39.2	I.731 815 4 223 8 16.6	
	29	2 42 40.44 2 50.05	14 43 19.9 13 30.2	I.727 592 4 240 8 15.4	
	30	2 45 30.49 2 50.13	14 56 50.1 13 21.0	I.723 352 4 257 8 14.3	
	Juli	1	2 48 20.62 2 50.21	+15 10 11.1 13 11.8	I.719 095 4 275 8 13.2
		2	2 51 10.83 2 50.28	15 23 22.9 13 2.4	I.714 820 4 293 8 12.1
		3	2 54 1.11 2 50.34	15 36 25.3 12 52.9	I.710 527 4 312 8 11.0
		4	2 56 51.45 2 50.41	15 49 18.2 12 43.4	I.706 215 4 332 8 9.9
		5	2 59 41.86 2 50.47	16 2 1.6 12 33.6	I.701 883 4 352 8 8.8
		6	3 2 32.33 2 50.51	16 14 35.2 12 23.8	I.697 531 4 372 8 7.7
		7	3 5 22.84 2 50.55	+16 26 59.0 12 13.9	I.693 159 4 393 8 6.6
		8	3 8 13.39 2 50.59	16 39 12.9 12 3.8	I.688 766 4 413 8 5.5
		9	3 11 3.98 2 50.62	16 51 16.7 11 53.7	I.684 353 4 435 8 4.4
		10	3 13 54.60 2 50.64	17 3 10.4 11 43.5	I.679 918 4 455 8 3.3
		11	3 16 45.24 2 50.66	17 14 53.9 11 33.2	I.675 463 4 476 8 2.2
		12	3 19 35.90 2 50.67	17 26 27.1 11 22.8	I.670 987 4 497 8 1.1
13		3 22 26.57 2 50.68	+17 37 49.9 11 12.4	I.666 490 4 519 8 0.0	
14		3 25 17.25 2 50.67	17 49 2.3 11 1.8	I.661 971 4 539 7 58.9	
15		3 28 7.92 2 50.67	18 0 4.1 10 51.2	I.657 432 4 560 7 57.9	
16		3 30 58.59 2 50.66	18 10 55.3 10 40.6	I.652 872 4 581 7 56.8	
17		3 33 49.25 2 50.65	18 21 35.9 10 29.8	I.648 291 4 603 7 55.7	
18		3 36 39.90 2 50.63	18 32 5.7 10 19.1	I.643 688 4 624 7 54.6	
19		3 39 30.53 2 50.61	+18 42 24.8 10 8.3	I.639 064 4 646 7 53.5	
20		3 42 21.14 2 50.57	18 52 33.1 9 57.5	I.634 418 4 669 7 52.4	
21		3 45 11.71 2 50.54	19 2 30.6 9 46.5	I.629 749 4 690 7 51.3	
22		3 48 2.25 2 50.50	19 12 17.1 9 35.6	I.625 059 4 714 7 50.2	
23		3 50 52.75 2 50.45	19 21 52.7 9 24.7	I.620 345 4 737 7 49.1	
24		3 53 43.20	+19 31 17.4	I.615 608 7 48.0	



Tag	0 <sup>h</sup> Welt-Zeit			Obers Kul- mination in Greenwich	
	Scheinbare Rektaszension	Scheinbare Deklination	Δ		
1945					
Juli	24	<sup>h</sup> 3 53 43.20 <sup>m</sup> 2 50.40	+19 31 17.4 9 13.6	1.615 608 4 761 7 48.0	
	25	3 56 33.60 2 50.34	19 40 31.0 9 2.6	1.610 847 4 784 7 46.9	
	26	3 59 23.94 2 50.27	19 49 33.6 8 51.5	1.606 063 4 810 7 45.8	
	27	4 2 14.21 2 50.20	19 58 25.1 8 40.5	1.601 253 4 835 7 44.7	
	28	4 5 4.41 2 50.12	20 7 5.6 8 29.3	1.596 418 4 862 7 43.5	
	29	4 7 54.53 2 50.02	20 15 34.9 8 18.2	1.591 556 4 888 7 42.4	
	30	4 10 44.55 2 49.91	+20 23 53.1 8 7.1	1.586 668 4 916 7 41.3	
	31	4 13 34.46 2 49.80	20 32 0.2 7 55.8	1.581 752 4 944 7 40.2	
	Aug.	1	4 16 24.26 2 49.67	20 39 56.0 7 44.6	1.576 808 4 972 7 39.1
		2	4 19 13.93 2 49.52	20 47 40.6 7 33.4	1.571 836 5 001 7 38.0
3		4 22 3.45 2 49.36	20 55 14.0 7 22.2	1.566 835 5 030 7 36.9	
4		4 24 52.81 2 49.19	21 2 36.2 7 10.8	1.561 805 5 060 7 35.7	
5		4 27 42.00 2 49.01	+21 9 47.0 6 59.5	1.556 745 5 089 7 34.6	
6		4 30 31.01 2 48.80	21 16 46.5 6 48.3	1.551 656 5 118 7 33.5	
7		4 33 19.81 2 48.58	21 23 34.8 6 37.0	1.546 538 5 148 7 32.4	
8		4 36 8.39 2 48.36	21 30 11.8 6 25.7	1.541 390 5 177 7 31.2	
9		4 38 56.75 2 48.12	21 36 37.5 6 14.4	1.536 213 5 207 7 30.1	
10		4 41 44.87 2 47.86	21 42 51.9 6 3.2	1.531 006 5 236 7 29.0	
11		4 44 32.73 2 47.59	+21 48 55.1 5 51.9	1.525 770 5 265 7 27.8	
12		4 47 20.32 2 47.32	21 54 47.0 5 40.8	1.520 505 5 294 7 26.7	
13		4 50 7.64 2 47.03	22 0 27.8 5 29.6	1.515 211 5 323 7 25.5	
14		4 52 54.67 2 46.72	22 5 57.4 5 18.5	1.509 888 5 352 7 24.3	
15		4 55 41.39 2 46.41	22 11 15.9 5 7.4	1.504 536 5 382 7 23.2	
16		4 58 27.80 2 46.09	22 16 23.3 4 56.4	1.499 154 5 410 7 22.0	
17		5 1 13.89 2 45.75	+22 21 19.7 4 45.4	1.493 744 5 440 7 20.8	
18	5 3 59.64 2 45.40	22 26 5.1 4 34.5	1.488 304 5 469 7 19.7		
19	5 6 45.04 2 45.05	22 30 39.6 4 23.7	1.482 835 5 499 7 18.5		
20	5 9 30.09 2 44.67	22 35 3.3 4 12.9	1.477 336 5 528 7 17.3		
21	5 12 14.76 2 44.29	22 39 16.2 4 2.1	1.471 808 5 558 7 16.1		
22	5 14 59.05 2 43.90	22 43 18.3 3 51.5	1.466 250 5 589 7 14.9		
23	5 17 42.95 2 43.51	+22 47 9.8 3 41.0	1.460 661 5 619 7 13.7		
24	5 20 26.46 2 43.09	22 50 50.8 3 30.4	1.455 042 5 650 7 12.5		
25	5 23 9.55 2 42.66	22 54 21.2 3 20.0	1.449 392 5 682 7 11.2		
26	5 25 52.21 2 42.21	22 57 41.2 3 9.7	1.443 710 5 714 7 10.0		
27	5 28 34.42 2 41.75	23 0 50.9 2 59.5	1.437 996 5 746 7 8.8		
28	5 31 16.17 2 41.27	23 3 50.4 2 49.2	1.432 250 5 780 7 7.5		
29	5 33 57.44 2 40.78	+23 6 39.6 2 39.2	1.426 470 5 813 7 6.3		
30	5 36 38.22 2 40.27	23 9 18.8 2 29.2	1.420 657 5 846 7 5.0		
31	5 39 18.49 2 39.73	23 11 48.0 2 19.3	1.414 811 5 880 7 3.7		
Sept.	1	5 41 58.22 2 39.18	23 14 7.3 2 9.5	1.408 931 5 914 7 2.4	
	2	5 44 37.40 2 38.60	23 16 16.8 1 59.8	1.403 017 5 947 7 1.1	
	3	5 47 16.00	+23 18 16.6	1.397 070 6 59.8	



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Sept.	<sup>h</sup> <sup>m</sup> <sup>s</sup> 5 47 16.00 <sup>m</sup> <sup>s</sup> 2 38.02	<sup>°</sup> <sup>'</sup> <sup>"</sup> +23 18 16.6 <sup>'</sup> <sup>"</sup> 1 50.2	I.397 070 5 980	<sup>h</sup> <sup>m</sup> 6 59.8
4	5 49 54.02 2 37.40	23 20 6.8 1 40.7	I.391 090 6 014	6 58.5
5	5 52 31.42 2 36.78	23 21 47.5 1 31.4	I.385 076 6 046	6 57.2
6	5 55 8.20 2 36.14	23 23 18.9 1 22.1	I.379 030 6 079	6 55.9
7	5 57 44.34 2 35.47	23 24 41.0 1 13.0	I.372 951 6 111	6 54.5
8	6 0 19.81 2 34.80	23 25 54.0 1 4.1	I.366 840 6 143	6 53.2
9	6 2 54.61 2 34.10	+23 26 58.1 0 55.2	I.360 697 6 174	6 51.8
10	6 5 28.71 2 33.39	23 27 53.3 0 46.5	I.354 523 6 206	6 50.4
11	6 8 2.10 2 32.67	23 28 39.8 0 38.0	I.348 317 6 237	6 49.0
12	6 10 34.77 2 31.93	23 29 17.8 0 29.6	I.342 080 6 268	6 47.6
13	6 13 6.70 2 31.17	23 29 47.4 0 21.4	I.335 812 6 297	6 46.2
14	6 15 37.87 2 30.40	23 30 8.8 0 13.3	I.329 515 6 328	6 44.8
15	6 18 8.27 2 29.63	+23 30 22.1 0 5.3	I.323 187 6 358	6 43.4
16	6 20 37.90 2 28.82	23 30 27.4 0 2.3	I.316 829 6 387	6 41.9
17	6 23 6.72 2 28.02	23 30 25.1 0 10.0	I.310 442 6 417	6 40.5
18	6 25 34.74 2 27.19	23 30 15.1 0 17.4	I.304 025 6 446	6 39.0
19	6 28 1.93 2 26.36	23 29 57.7 0 24.6	I.297 579 6 475	6 37.5
20	6 30 28.29 2 25.50	23 29 33.1 0 31.6	I.291 104 6 504	6 36.0
21	6 32 53.79 2 24.64	+23 29 1.5 0 38.6	I.284 600 6 534	6 34.5
22	6 35 18.43 2 23.76	23 28 22.9 0 45.3	I.278 066 6 563	6 32.9
23	6 37 42.19 2 22.85	23 27 37.6 0 51.8	I.271 593 6 593	6 31.4
24	6 40 5.04 2 21.94	23 26 45.8 0 58.1	I.264 910 6 622	6 29.8
25	6 42 26.98 2 21.00	23 25 47.7 1 4.2	I.258 288 6 653	6 28.2
26	6 44 47.98 2 20.04	23 24 43.5 1 10.2	I.251 635 6 682	6 26.6
27	6 47 8.02 2 19.06	+23 23 33.3 1 15.9	I.244 953 6 712	6 25.0
28	6 49 27.08 2 18.05	23 22 17.4 1 21.5	I.238 241 6 741	6 23.4
29	6 51 45.13 2 17.02	23 20 55.9 1 26.8	I.231 500 6 770	6 21.8
30	6 54 2.15 2 15.97	23 19 29.1 1 32.0	I.224 730 6 798	6 20.1
Okt.	1 6 56 18.12 2 14.89	23 17 57.1 1 36.8	I.217 932 6 827	6 18.4
2	6 58 33.01 2 13.79	23 16 20.3 1 41.5	I.211 105 6 853	6 16.7
3	7 0 46.80 2 12.66	+23 14 38.8 1 46.0	I.204 252 6 880	6 15.0
4	7 2 59.46 2 11.52	23 12 52.8 1 50.2	I.197 372 6 906	6 13.3
5	7 5 10.98 2 10.36	23 11 2.6 1 54.3	I.190 466 6 931	6 11.5
6	7 7 21.34 2 9.16	23 9 8.3 1 58.0	I.183 535 6 955	6 9.7
7	7 9 30.50 2 7.96	23 7 10.3 2 1.5	I.176 580 6 978	6 7.9
8	7 11 38.46 2 6.72	23 5 8.8 2 4.8	I.169 602 7 001	6 6.1
9	7 13 45.18 2 5.47	+23 3 4.0 2 7.9	I.162 601 7 022	6 4.3
10	7 15 50.65 2 4.20	23 0 56.1 2 10.6	I.155 579 7 043	6 2.5
11	7 17 54.85 2 2.91	22 58 45.5 2 13.2	I.148 536 7 063	6 0.6
12	7 19 57.76 2 1.59	22 56 32.3 2 15.5	I.141 473 7 081	5 58.7
13	7 21 59.35 2 0.26	22 54 16.8 2 17.4	I.134 392 7 099	5 56.8
14	7 23 59.61	+22 51 59.4	I.127 293	5 54.8



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Okt. 14	<sup>h</sup> 7 <sup>m</sup> 23 <sup>s</sup> 59.61 <sup>m</sup> 58.90	+22 51 59.4 <sup>2</sup> 19.3	I.127 293 7 117	<sup>h</sup> 5 <sup>m</sup> 54.8
15	7 25 58.51 I 57.53	22 49 40.1 2 20.8	I.120 176 7 133	5 52.9
16	7 27 56.04 I 56.13	22 47 19.3 2 22.1	I.113 043 7 149	5 50.9
17	7 29 52.17 I 54.72	22 44 57.2 2 23.0	I.105 894 7 163	5 48.9
18	7 31 46.89 I 53.28	22 42 34.2 2 23.8	I.098 731 7 177	5 46.8
19	7 33 40.17 I 51.83	22 40 10.4 2 24.2	I.091 554 7 191	5 44.8
20	7 35 32.00 I 50.34	+22 37 46.2 2 24.4	I.084 363 7 204	5 42.7
21	7 37 22.34 I 48.84	22 35 21.8 2 24.3	I.077 159 7 216	5 40.6
22	7 39 11.18 I 47.30	22 32 57.5 2 23.9	I.069 943 7 228	5 38.5
23	7 40 58.48 I 45.74	22 30 33.6 2 23.3	I.062 715 7 239	5 36.3
24	7 42 44.22 I 44.13	22 28 10.3 2 22.3	I.055 476 7 249	5 34.1
25	7 44 28.35 I 42.49	22 25 48.0 2 21.1	I.048 227 7 259	5 31.9
26	7 46 10.84 I 40.84	+22 23 26.9 2 19.6	I.040 968 7 267	5 29.7
27	7 47 51.68 I 39.13	22 21 7.3 2 17.6	I.033 701 7 274	5 27.4
28	7 49 30.81 I 37.38	22 18 49.7 2 15.5	I.026 427 7 280	5 25.1
29	7 51 8.19 I 35.61	22 16 34.2 2 13.1	I.019 147 7 285	5 22.8
30	7 52 43.80 I 33.79	22 14 21.1 2 10.2	I.011 862 7 287	5 20.4
31	7 54 17.59 I 31.93	22 12 10.9 2 7.1	I.004 575 7 288	5 18.0
Nov. 1	7 55 49.52 I 30.04	+22 10 3.8 2 3.7	0.997 287 7 288	5 15.6
2	7 57 19.56 I 28.12	22 8 0.1 2 0.0	0.989 999 7 285	5 13.2
3	7 58 47.68 I 26.15	22 6 0.1 1 55.9	0.982 714 7 281	5 10.7
4	8 0 13.83 I 24.15	22 4 4.2 1 51.5	0.975 433 7 275	5 8.2
5	8 1 37.98 I 22.11	22 2 12.7 1 46.8	0.968 158 7 267	5 5.7
6	8 3 0.09 I 20.03	22 0 25.9 1 41.8	0.960 891 7 257	5 3.1
7	8 4 20.12 I 17.92	+21 58 44.1 1 36.4	0.953 634 7 245	5 0.5
8	8 5 38.04 I 15.77	21 57 7.7 1 30.8	0.946 389 7 231	4 57.8
9	8 6 53.81 I 13.57	21 55 36.9 1 24.8	0.939 158 7 214	4 55.1
10	8 8 7.38 I 11.35	21 54 12.1 1 18.5	0.931 944 7 196	4 52.4
11	8 9 18.73 I 9.09	21 52 53.6 1 11.9	0.924 748 7 175	4 49.7
12	8 10 27.82 I 6.79	21 51 41.7 1 5.0	0.917 573 7 153	4 46.9
13	8 11 34.61 I 4.44	+21 50 36.7 0 57.7	0.910 420 7 128	4 44.0
14	8 12 39.05 I 2.07	21 49 39.0 0 50.3	0.903 292 7 101	4 41.2
15	8 13 41.12 0 59.66	21 48 48.7 0 42.4	0.896 191 7 073	4 38.3
16	8 14 40.78 0 57.19	21 48 6.3 0 34.4	0.889 118 7 041	4 35.3
17	8 15 37.97 0 54.69	21 47 31.9 0 26.0	0.882 077 7 009	4 32.3
18	8 16 32.66 0 52.15	21 47 5.9 0 17.3	0.875 068 6 973	4 29.3
19	8 17 24.81 0 49.56	+21 46 48.6 0 8.3	0.868 095 6 936	4 26.2
20	8 18 14.37 0 46.91	21 46 40.3 0 1.0	0.861 159 6 897	4 23.1
21	8 19 1.28 0 44.22	21 46 41.3 0 10.5	0.854 262 6 855	4 19.9
22	8 19 45.50 0 41.47	21 46 51.8 0 20.4	0.847 407 6 811	4 16.7
23	8 20 26.97 0 38.66	21 47 12.2 0 30.4	0.840 596 6 763	4 13.5
24	8 21 5.63	+21 47 42.6	0.833 833	4 10.2



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Nov. 24	<sup>h</sup> 8 <sup>m</sup> 21 <sup>s</sup> 5.63 <sub>o</sub> <sup>m</sup> 35.80	+21 47 42.6 <sub>o</sub> 40.8	0.833 833 6 714	<sup>h</sup> 4 <sup>m</sup> 10.2
25	8 21 41.43 <sub>o</sub> 32.88	21 48 23.4 <sub>o</sub> 51.4	0.827 119 6 661	4 6.8
26	8 22 14.31 <sub>o</sub> 29.91	21 49 14.8 <sub>1</sub> 2.3	0.820 458 6 604	4 3.4
27	8 22 44.22 <sub>o</sub> 26.88	21 50 17.1 <sub>1</sub> 13.4	0.813 854 6 544	4 0.0
28	8 23 11.10 <sub>o</sub> 23.81	21 51 30.5 <sub>1</sub> 24.8	0.807 310 6 481	3 56.5
29	8 23 34.91 <sub>o</sub> 20.67	21 52 55.3 <sub>1</sub> 36.2	0.800 829 6 414	3 53.0
30	8 23 55.58 <sub>o</sub> 17.50	+21 54 31.5 <sub>1</sub> 47.8	0.794 415 6 343	3 49.4
Dez. 1	8 24 13.08 <sub>o</sub> 14.27	21 56 19.3 <sub>1</sub> 59.7	0.788 072 6 269	3 45.7
2	8 24 27.35 <sub>o</sub> 10.99	21 58 19.0 <sub>2</sub> 11.6	0.781 803 6 190	3 42.0
3	8 24 38.34 <sub>o</sub> 7.68	22 0 30.6 <sub>2</sub> 23.6	0.775 613 6 107	3 38.2
4	8 24 46.02 <sub>o</sub> 4.33	22 2 54.2 <sub>2</sub> 35.7	0.769 506 6 021	3 34.4
5	8 24 50.35 <sub>o</sub> 0.93	22 5 29.9 <sub>2</sub> 47.9	0.763 485 5 930	3 30.6
6	8 24 51.28 <sub>o</sub> 2.49	+22 8 17.8 <sub>2</sub> 59.9	0.757 555 5 835	3 26.6
7	8 24 48.79 <sub>o</sub> 5.94	22 11 17.7 <sub>3</sub> 12.1	0.751 720 5 736	3 22.6
8	8 24 42.85 <sub>o</sub> 9.43	22 14 29.8 <sub>3</sub> 24.2	0.745 984 5 633	3 18.6
9	8 24 33.42 <sub>o</sub> 12.94	22 17 54.0 <sub>3</sub> 36.1	0.740 351 5 525	3 14.5
10	8 24 20.48 <sub>o</sub> 16.45	22 21 30.1 <sub>3</sub> 47.9	0.734 826 5 414	3 10.4
11	8 24 4.03 <sub>o</sub> 20.00	22 25 18.0 <sub>3</sub> 59.5	0.729 412 5 298	3 6.2
12	8 23 44.03 <sub>o</sub> 23.54	+22 29 17.5 <sub>4</sub> 11.1	0.724 114 5 178	3 1.9
13	8 23 20.49 <sub>o</sub> 27.09	22 33 28.6 <sub>4</sub> 22.2	0.718 936 5 054	2 57.6
14	8 22 53.40 <sub>o</sub> 30.65	22 37 50.8 <sub>4</sub> 33.1	0.713 882 4 926	2 53.2
15	8 22 22.75 <sub>o</sub> 34.21	22 42 23.9 <sub>4</sub> 43.7	0.708 956 4 793	2 48.7
16	8 21 48.54 <sub>o</sub> 37.75	22 47 7.6 <sub>4</sub> 54.0	0.704 163 4 658	2 44.2
17	8 21 10.79 <sub>o</sub> 41.30	22 52 1.6 <sub>5</sub> 3.9	0.699 505 4 517	2 39.6
18	8 20 29.49 <sub>o</sub> 44.83	+22 57 5.5 <sub>5</sub> 13.3	0.694 988 4 374	2 35.0
19	8 19 44.66 <sub>o</sub> 48.35	23 2 18.8 <sub>5</sub> 22.3	0.690 614 4 225	2 30.3
20	8 18 56.31 <sub>o</sub> 51.83	23 7 41.1 <sub>5</sub> 30.6	0.686 389 4 073	2 25.6
21	8 18 4.48 <sub>o</sub> 55.30	23 13 11.7 <sub>5</sub> 38.7	0.682 316 3 916	2 20.8
22	8 17 9.18 <sub>o</sub> 58.73	23 18 50.4 <sub>5</sub> 46.0	0.678 400 3 755	2 16.0
23	8 16 10.45 <sub>1</sub> 2 11	23 24 36.4 <sub>5</sub> 52.7	0.674 645 3 589	2 11.1
24	8 15 8.34 <sub>1</sub> 5.43	+23 30 29.1 <sub>5</sub> 58.7	0.671 056 3 419	2 6.1
25	8 14 2.91 <sub>1</sub> 8.69	23 36 27.8 <sub>6</sub> 4.0	0.667 637 3 244	2 1.1
26	8 12 54.22 <sub>1</sub> 11.86	23 42 31.8 <sub>6</sub> 8.5	0.664 393 3 065	1 56.0
27	8 11 42.36 <sub>1</sub> 14.96	23 48 40.3 <sub>6</sub> 12.3	0.661 328 2 882	1 50.9
28	8 10 27.40 <sub>1</sub> 17.94	23 54 52.6 <sub>6</sub> 15.2	0.658 446 2 694	1 45.7
29	8 9 9.46 <sub>1</sub> 20.82	24 1 7.8 <sub>6</sub> 17.3	0.655 752 2 502	1 40.5
30	8 7 48.64 <sub>1</sub> 23.57	+24 7 25.1 <sub>6</sub> 18.4	0.653 250 2 306	1 35.2
31	8 6 25.07 <sub>1</sub> 26.19	24 13 43.5 <sub>6</sub> 18.7	0.650 944 2 107	1 29.9
32	8 4 58.88	+24 20 2.2	0.648 837	1 24.5



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Grönwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Jan. 0	<sup>h</sup> 11 <sup>m</sup> 51 <sup>s</sup> 57.96 8.61	+2° 15' 26.0" 0' 37.8"	5.137 388 15 627	<sup>h</sup> 5 <sup>m</sup> 14.0
1	11 52 6.57 7.94	2 14 48.2 0 33.2	5.121 761 15 567	5 10.2
2	11 52 14.51 7.25	2 14 15.0 0 28.8	5.106 194 15 504	5 6.4
3	11 52 21.76 6.56	2 13 46.2 0 24.4	5.090 690 15 434	5 2.6
4	11 52 28.32 5.87	2 13 21.8 0 19.8	5.075 256 15 360	4 58.7
5	11 52 34.19 5.17	2 13 2.0 0 15.2	5.059 896 15 283	4 54.9
6	11 52 39.36 4.48	+2 12 46.8 0 10.7	5.044 613 15 199	4 51.1
7	11 52 43.84 3.78	2 12 36.1 0 6.1	5.029 414 15 110	4 47.2
8	11 52 47.62 3.06	2 12 30.0 0 1.6	5.014 304 15 019	4 43.3
9	11 52 50.68 2.36	2 12 28.4 0 3.1	4.999 285 14 919	4 39.4
10	11 52 53.04 1.65	2 12 31.5 0 7.6	4.984 366 14 816	4 35.5
11	11 52 54.69 0.94	2 12 39.1 0 12.2	4.969 550 14 707	4 31.6
12	11 52 55.63 0.23	+2 12 51.3 0 16.9	4.954 843 14 592	4 27.7
13	11 52 55.86 0.48	2 13 8.2 0 21.4	4.940 251 14 473	4 23.8
14	11 52 55.38 1.20	2 13 29.6 0 26.0	4.925 778 14 349	4 19.8
15	11 52 54.18 1.91	2 13 55.6 0 30.7	4.911 429 14 219	4 15.9
16	11 52 52.27 2.63	2 14 26.3 0 35.2	4.897 210 14 083	4 11.9
17	11 52 49.64 3.33	2 15 1.5 0 39.8	4.883 127 13 942	4 7.9
18	11 52 46.31 4.04	+2 15 41.3 0 44.3	4.869 185 13 797	4 3.9
19	11 52 42.27 4.74	2 16 25.6 0 48.9	4.855 388 13 646	3 59.9
20	11 52 37.53 5.45	2 17 14.5 0 53.3	4.841 742 13 491	3 55.9
21	11 52 32.08 6.15	2 18 7.8 0 57.8	4.828 251 13 330	3 51.9
22	11 52 25.93 6.84	2 19 5.6 I 2.2	4.814 921 13 166	3 47.9
23	11 52 19.09 7.53	2 20 7.8 I 6.6	4.801 755 12 996	3 43.8
24	11 52 11.56 8.23	+2 21 14.4 I 10.9	4.788 759 12 824	3 39.8
25	11 52 3.33 8.90	2 22 25.3 I 15.3	4.775 935 12 644	3 35.7
26	11 51 54.43 9.59	2 23 40.6 I 19.6	4.763 291 12 462	3 31.6
27	11 51 44.84 10.26	2 25 0.2 I 23.8	4.750 829 12 275	3 27.5
28	11 51 34.58 10.93	2 26 24.0 I 28.1	4.738 554 12 084	3 23.4
29	11 51 23.65 11.60	2 27 52.1 I 32.2	4.726 470 11 888	3 19.3
30	11 51 12.05 12.26	+2 29 24.3 I 36.3	4.714 582 11 688	3 15.2
31	11 50 59.79 12.92	2 31 0.6 I 40.4	4.702 894 11 484	3 11.1
Febr. 1	11 50 46.87 13.56	2 32 41.0 I 44.4	4.691 410 11 274	3 6.9
2	11 50 33.31 14.20	2 34 25.4 I 48.4	4.680 136 11 060	3 2.7
3	11 50 19.11 14.85	2 36 13.8 I 52.4	4.669 076 10 843	2 58.6
4	11 50 4.26 15.46	2 38 6.2 I 56.2	4.658 233 10 620	2 54.4
5	11 49 48.80 16.09	+2 40 2.4 I 59.9	4.647 613 10 393	2 50.2
6	11 49 32.71 16.70	2 42 2.3 2 3.7	4.637 220 10 161	2 46.0
7	11 49 16.01 17.30	2 44 6.0 2 7.3	4.627 059 9 926	2 41.8
8	11 48 58.71 17.89	2 46 13.3 2 11.0	4.617 133 9 685	2 37.6
9	11 48 40.82 18.47	2 48 24.3 2 14.4	4.607 448 9 440	2 33.4
10	11 48 22.35	+2 50 38.7	4.598 008	2 29.1



Tag	0 <sup>h</sup> Welt-Zeit			Bibl. Jah.	Δ	Obere Kulmination in Greenwich		
	Scheinbare Rektaszension	Scheinbare Deklination						
1945								
Febr.	10	II 48 <sup>h</sup> 22.35 <sup>m</sup> 19.04 <sup>s</sup>	+2 50 38.7 <sup>°</sup> 2 17.8 <sup>'</sup>		4.598 008	9 191	2 29.1	
	11	II 48 3.31 19.59	2 52 56.5 2 21.2		4.588 817	8 939	2 24.9	
	12	II 47 43.72 20.15	2 55 17.7 2 24.4		4.579 878	8 681	2 20.6	
	13	II 47 23.57 20.67	2 57 42.1 2 27.5		4.571 197	8 419	2 16.3	
	14	II 47 2.90 21.18	3 0 9.6 2 30.6		4.562 778	8 154	2 12.1	
	15	II 46 41.72 21.69	3 2 40.2 2 33.5		4.554 624	7 886	2 7.8	
	16	II 46 20.03 22.18	+3 5 13.7 2 36.3		4.546 738	7 614	2 3.5	
	17	II 45 57.85 22.64	3 7 50.0 2 39.1		4.539 124	7 340	I 59.2	
	18	II 45 35.21 23.10	3 10 29.1 2 41.6		4.531 784	7 062	I 54.9	
	19	II 45 12.11 23.53	3 13 10.7 2 44.1		4.524 722	6 781	I 50.6	
	20	II 44 48.58 23.96	3 15 54.8 2 46.5		4.517 941	6 500	I 46.2	
	21	II 44 24.62 24.36	3 18 41.3 2 48.7		4.511 441	6 213	I 41.9	
	22	II 44 0.26 24.75	+3 21 30.0 2 50.9		4.505 228	5 927	I 37.6	
	23	II 43 35.51 25.12	3 24 20.9 2 52.9		4.499 301	5 637	I 33.2	
	24	II 43 10.39 25.48	3 27 13.8 2 54.8		4.493 664	5 345	I 28.9	
	25	II 42 44.91 25.82	3 30 8.6 2 56.6		4.488 319	5 051	I 24.5	
	26	II 42 19.09 26.14	3 33 5.2 2 58.2		4.483 268	4 755	I 20.2	
	27	II 41 52.95 26.44	3 36 3.4 2 59.8		4.478 513	4 459	I 15.8	
	28	II 41 26.51 26.73	+3 39 3.2 3 1.2		4.474 054	4 159	I 11.4	
	März	1	II 40 59.78 27.00	3 42 4.4 3 2.5		4.469 895	3 857	I 7.1
		2	II 40 32.78 27.25	3 45 6.9 3 3.6		4.466 038	3 555	I 2.7
		3	II 40 5.53 27.48	3 48 10.5 3 4.7		4.462 483	3 250	0 58.3
		4	II 39 38.05 27.69	3 51 15.2 3 5.6		4.459 233	2 945	0 53.9
5		II 39 10.36 27.89	3 54 20.8 3 6.4		4.456 288	2 638	0 49.5	
6		II 38 42.47 28.05	+3 57 27.2 3 7.0		4.453 650	2 329	0 45.1	
7		II 38 14.42 28.22	4 0 34.2 3 7.6		4.451 321	2 019	0 40.7	
8		II 37 46.20 28.35	4 3 41.8 3 7.9		4.449 302	1 708	0 36.3	
9		II 37 17.85 28.46	4 6 49.7 3 8.2		4.447 594	1 396	0 31.9	
10		II 36 49.39 28.55	4 9 57.9 3 8.3		4.446 198	1 085	0 27.5	
11		II 36 20.84 28.63	4 13 6.2 3 8.2		4.445 113	770	0 23.1	
12		II 35 52.21 28.68	+4 16 14.4 3 8.1		4.444 343	456	0 18.7	
13		II 35 23.53 28.70	4 19 22.5 3 7.8		4.443 887	143	0 14.3	
14		II 34 54.83 28.71	4 22 30.3 3 7.3		4.443 744	171	0 9.9	
15		II 34 26.12 28.70	4 25 37.6 3 6.8		4.443 915	484	0 5.5	
16	II 33 57.42 28.65	4 28 44.4 3 6.0		4.444 399	798	0 1.1		
17	II 33 28.77 28.60	4 31 50.4 3 5.2		4.445 197	1 110	(23 56.7) (23 52.3)		
18	II 33 0.17 28.52	+4 34 55.6 3 4.1		4.446 307	1 420	23 47.9		
19	II 32 31.65 28.41	4 37 59.7 3 2.9		4.447 727	1 730	23 43.5		
20	II 32 3.24 28.30	4 41 2.6 3 1.7		4.449 457	2 038	23 39.1		
21	II 31 34.94 28.15	4 44 4.3 3 0.3		4.451 495	2 345	23 34.7		
22	II 31 6.79 27.98	4 47 4.6 2 58.8		4.453 840	2 650	23 30.3		
23	II 30 38.81	+4 50 3.4		4.456 490		23 25.9		



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kul- mination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
März	<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>°</sup> <sup>'</sup> <sup>"</sup>		<sup>h</sup> <sup>m</sup>
23	II 30 38.81 27.81	+4 50 3.4 2 57.2	4.456 490 2 953	23 25.9
24	II 30 11.00 27.61	4 53 0.6 2 55.3	4.459 443 3 254	23 21.5
25	II 29 43.39 27.40	4 55 55.9 2 53.5	4.462 697 3 553	23 17.1
26	II 29 15.99 27.15	4 58 49.4 2 51.5	4.466 250 3 852	23 12.7
27	II 28 48.84 26.91	5 1 40.9 2 49.4	4.470 102 4 147	23 8.3
28	II 28 21.93 26.63	5 4 30.3 2 47.3	4.474 249 4 440	23 4.0
29	II 27 55.30 26.34	+5 7 17.6 2 44.9	4.478 689 4 731	22 59.6
30	II 27 28.96 26.04	5 10 2.5 2 42.4	4.483 420 5 021	22 55.2
31	II 27 2.92 25.72	5 12 44.9 2 39.9	4.488 441 5 307	22 50.9
April				
1	II 26 37.20 25.37	5 15 24.8 2 37.4	4.493 748 5 590	22 46.5
2	II 26 11.83 25.03	5 18 2.2 2 34.7	4.499 338 5 873	22 42.2
3	II 25 46.80 24.65	5 20 36.9 2 31.8	4.505 211 6 153	22 37.8
4	II 25 22.15 24.26	+5 23 8.7 2 28.9	4.511 364 6 430	22 33.5
5	II 24 57.89 23.86	5 25 37.6 2 25.9	4.517 794 6 703	22 29.2
6	II 24 34.03 23.44	5 28 3.5 2 22.9	4.524 497 6 975	22 24.9
7	II 24 10.59 23.02	5 30 26.4 2 19.7	4.531 472 7 244	22 20.5
8	II 23 47.57 22.56	5 32 46.1 2 16.4	4.538 716 7 509	22 16.2
9	II 23 25.01 22.09	5 35 2.5 2 13.2	4.546 225 7 772	22 11.9
10	II 23 2.92 21.62	+5 37 15.7 2 9.7	4.553 997 8 030	22 7.6
11	II 22 41.30 21.12	5 39 25.4 2 6.2	4.562 027 8 286	22 3.4
12	II 22 20.18 20.62	5 41 31.6 2 2.6	4.570 313 8 538	21 59.1
13	II 21 59.56 20.10	5 43 34.2 1 59.0	4.578 851 8 786	21 54.8
14	II 21 39.46 19.56	5 45 33.2 1 55.2	4.587 637 9 029	21 50.6
15	II 21 19.90 19.02	5 47 28.4 1 51.5	4.596 666 9 268	21 46.3
16	II 21 0.88 18.46	+5 49 19.9 1 47.7	4.605 934 9 503	21 42.1
17	II 20 42.42 17.90	5 51 7.6 1 43.7	4.615 437 9 734	21 37.9
18	II 20 24.52 17.32	5 52 51.3 1 39.8	4.625 171 9 959	21 33.6
19	II 20 7.20 16.74	5 54 31.1 1 35.8	4.635 130 10 182	21 29.4
20	II 19 50.46 16.15	5 56 6.9 1 31.8	4.645 312 10 398	21 25.2
21	II 19 34.31 15.55	5 57 38.7 1 27.7	4.655 710 10 611	21 21.0
22	II 19 18.76 14.94	+5 59 6.4 1 23.6	4.666 321 10 819	21 16.9
23	II 19 3.82 14.33	6 0 30.0 1 19.6	4.677 140 11 024	21 12.7
24	II 18 49.49 13.71	6 1 49.6 1 15.3	4.688 164 11 224	21 8.5
25	II 18 35.78 13.09	6 3 4.9 1 11.1	4.699 388 11 419	21 4.4
26	II 18 22.69 12.46	6 4 16.0 1 7.0	4.710 807 11 610	21 0.2
27	II 18 10.23 11.82	6 5 23.0 1 2.7	4.722 417 11 796	20 56.1
28	II 17 58.41 11.18	+6 6 25.7 0 58.4	4.734 213 11 981	20 52.0
29	II 17 47.23 10.53	6 7 24.1 0 54.2	4.746 194 12 158	20 47.9
30	II 17 36.70 9.89	6 8 18.3 0 50.0	4.758 352 12 334	20 43.8
Mai				
1	II 17 26.81 9.24	6 9 8.3 0 45.6	4.770 686 12 503	20 39.7
2	II 17 17.57 8.58	6 9 53.9 0 41.3	4.783 189 12 669	20 35.6
3	II 17 8.99	+6 10 35.2	4.795 858	20 31.5



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich	
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$		
1945					
Mai	3	<sup>h</sup> 17 <sup>m</sup> 8.99 <sup>s</sup> 7.92	+6 <sup>o</sup> 10 <sup>'</sup> 35.2 <sup>"</sup> 37.0	4.795 858 <sub>12 832</sub>	<sup>h</sup> 20 <sup>m</sup> 31.5
	4	17 1.07 7.26	6 11 12.2 32.7	4.808 690 <sub>12 989</sub>	20 27.5
	5	16 53.81 6.59	6 11 44.9 28.3	4.821 679 <sub>13 142</sub>	20 23.5
	6	16 47.22 5.92	6 12 13.2 24.0	4.834 821 <sub>13 292</sub>	20 19.4
	7	16 41.30 5.25	6 12 37.2 19.6	4.848 113 <sub>13 436</sub>	20 15.4
	8	16 36.05 4.58	6 12 56.8 15.3	4.861 549 <sub>13 577</sub>	20 11.4
	9	16 31.47 3.90	+6 13 12.1 10.8	4.875 126 <sub>13 712</sub>	20 7.4
	10	16 27.57 3.22	6 13 22.9 6.5	4.888 838 <sub>13 842</sub>	20 3.4
	11	16 24.35 2.54	6 13 29.4 2.2	4.902 680 <sub>13 969</sub>	19 59.4
	12	16 21.81 1.86	6 13 31.6 2.2	4.916 649 <sub>14 091</sub>	19 55.5
	13	16 19.95 1.18	6 13 29.4 6.6	4.930 740 <sub>14 205</sub>	19 51.5
	14	16 18.77 0.50	6 13 22.8 10.9	4.944 945 <sub>14 316</sub>	19 47.6
	15	16 18.27 0.17	+6 13 11.9 15.2	4.959 261 <sub>14 423</sub>	19 43.6
	16	16 18.44 0.85	6 12 56.7 19.6	4.973 684 <sub>14 524</sub>	19 39.7
	17	16 19.29 1.53	6 12 37.1 23.9	4.988 208 <sub>14 621</sub>	19 35.8
	18	16 20.82 2.20	6 12 13.2 28.2	5.002 829 <sub>14 712</sub>	19 31.9
	19	16 23.02 2.86	6 11 45.0 32.4	5.017 541 <sub>14 799</sub>	19 28.0
	20	16 25.88 3.54	6 11 12.6 36.7	5.032 340 <sub>14 884</sub>	19 24.2
	21	16 29.42 4.19	+6 10 35.9 40.8	5.047 224 <sub>14 960</sub>	19 20.3
	22	16 33.61 4.85	6 9 55.1 45.1	5.062 184 <sub>15 035</sub>	19 16.4
23	16 38.46 5.51	6 9 10.0 49.2	5.077 219 <sub>15 106</sub>	19 12.6	
24	16 43.97 6.17	6 8 20.8 53.3	5.092 325 <sub>15 171</sub>	19 8.8	
25	16 50.14 6.81	6 7 27.5 57.5	5.107 496 <sub>15 233</sub>	19 4.9	
26	16 56.95 7.45	6 6 30.0 1.5	5.122 729 <sub>15 290</sub>	19 1.1	
27	17 4.40 8.10	+6 5 28.5 5.6	5.138 019 <sub>15 345</sub>	18 57.3	
28	17 12.50 8.73	6 4 22.9 9.6	5.153 364 <sub>15 394</sub>	18 53.5	
29	17 21.23 9.37	6 3 13.3 13.6	5.168 758 <sub>15 440</sub>	18 49.8	
30	17 30.60 9.99	6 1 59.7 17.6	5.184 198 <sub>15 483</sub>	18 46.0	
31	17 40.59 10.62	6 0 42.1 21.6	5.199 681 <sub>15 522</sub>	18 42.2	
Juni	1	17 51.21 11.24	5 59 20.5 25.4	5.215 203 <sub>15 557</sub>	18 38.5
	2	18 2.45 11.86	+5 57 55.1 29.3	5.230 760 <sub>15 587</sub>	18 34.8
	3	18 14.31 12.47	5 56 25.8 33.2	5.246 347 <sub>15 615</sub>	18 31.0
	4	18 26.78 13.08	5 54 52.6 37.0	5.261 962 <sub>15 638</sub>	18 27.3
	5	18 39.86 13.69	5 53 15.6 40.9	5.277 600 <sub>15 657</sub>	18 23.6
	6	18 53.55 14.29	5 51 34.7 44.6	5.293 257 <sub>15 673</sub>	18 19.9
	7	19 7.84 14.89	5 49 50.1 48.4	5.308 930 <sub>15 684</sub>	18 16.2
	8	19 22.73 15.48	+5 48 1.7 52.1	5.324 614 <sub>15 690</sub>	18 12.5
	9	19 38.21 16.07	5 46 9.6 55.8	5.340 304 <sub>15 693</sub>	18 8.9
	10	19 54.28 16.65	5 44 13.8 59.5	5.355 997 <sub>15 692</sub>	18 5.2
	11	20 10.93 17.24	5 42 14.3 3.1	5.371 689 <sub>15 686</sub>	18 1.6
	12	20 28.17 17.80	5 40 11.2 2 6.7	5.387 375 <sub>15 676</sub>	17 57.9
	13	20 45.97	+5 38 4.5	5.403 051	17 54.3



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Juni 13	<sup>h</sup> <sup>m</sup> <sup>s</sup> II 20 45.97 18.37	<sup>°</sup> <sup>'</sup> <sup>"</sup> +5 38 4.5 2 10.2	5.403 951 15 663	<sup>h</sup> <sup>m</sup> 17 54.3
14	II 21 4.34 18.93	5 35 54.3 2 13.8	5.418 714 15 646	17 50.7
15	II 21 23.27 19.49	5 33 40.5 2 17.3	5.434 360 15 623	17 47.1
16	II 21 42.76 20.03	5 31 23.2 2 20.7	5.449 983 15 599	17 43.5
17	II 22 2:79 20.57	5 29 2.5 2 24.1	5.465 582 15 571	17 39.9
18	II 22 23.36 21.10	5 26 38.4 2 27.5	5.481 153 15 539	17 36.3
19	II 22 44.46 21.63	+5 24 10.9 2 30.8	5.496 692 15 504	17 32.7
20	II 23 6.09 22.16	5 21 40.1 2 34.0	5.512 196 15 465	17 29.1
21	II 23 28.25 22.67	5 19 6.1 2 37.3	5.527 661 15 424	17 25.6
22	II 23 50.92 23.17	5 16 28.8 2 40.6	5.543 085 15 379	17 22.0
23	II 24 14.09 23.68	5 13 48.2 2 43.7	5.558 464 15 332	17 18.5
24	II 24 37.77 24.17	5 11 4.5 2 46.9	5.573 796 15 280	17 15.0
25	II 25 1.94 24.67	+5 8 17.6 2 49.9	5.589 076 15 228	17 11.4
26	II 25 26.61 25.15	5 5 27.7 2 53.0	5.604 304 15 172	17 7.9
27	II 25 51.76 25.63	5 2 34.7 2 56.0	5.619 476 15 111	17 4.4
28	II 26 17.39 26.10	4 59 38.7 2 59.0	5.634 587 15 051	17 0.9
29	II 26 43.49 26.57	4 56 39.7 3 1.9	5.649 638 14 985	16 57.4
30	II 27 10.06 27.03	4 53 37.8 3 4.9	5.664 623 14 919	16 53.9
Juli 1	II 27 37.09 27.50	+4 50 32.9 3 7.8	5.679 542 14 848	16 50.4
2	II 28 4.59 27.94	4 47 25.1 3 10.6	5.694 390 14 775	16 47.0
3	II 28 32.53 28.39	4 44 14.5 3 13.4	5.709 165 14 699	16 43.5
4	II 29 0.92 28.84	4 41 1.1 3 16.3	5.723 864 14 619	16 40.1
5	II 29 29.76 29.28	4 37 44.8 3 19.0	5.738 483 14 537	16 36.6
6	II 29 59.04 29.71	4 34 25.8 3 21.7	5.753 020 14 451	16 33.2
7	II 30 28.75 30.13	+4 31 4.1 3 24.5	5.767 471 14 362	16 29.7
8	II 30 58.88 30.55	4 27 39.6 3 27.1	5.781 833 14 271	16 26.3
9	II 31 29.43 30.97	4 24 12.5 3 29.7	5.796 104 14 175	16 22.9
10	II 32 0.40 31.38	4 20 42.8 3 32.4	5.810 279 14 077	16 19.5
11	II 32 31.78 31.78	4 17 10.4 3 34.9	5.824 356 13 976	16 16.1
12	II 33 3.56 32.18	4 13 35.5 3 37.3	5.838 332 13 872	16 12.7
13	II 33 35.74 32.57	+4 9 58.2 3 39.9	5.852 204 13 766	16 9.3
14	II 34 8.31 32.95	4 6 18.3 3 42.3	5.865 970 13 655	16 5.9
15	II 34 41.26 33.33	4 2 36.0 3 44.7	5.879 625 13 544	16 2.5
16	II 35 14.59 33.70	3 58 51.3 3 47.0	5.893 169 13 430	15 59.1
17	II 35 48.29 34.07	3 55 4.3 3 49.3	5.906 599 13 314	15 55.8
18	II 36 22.36 34.42	3 51 15.0 3 51.7	5.919 913 13 196	15 52.4
19	II 36 56.78 34.77	+3 47 23.3 3 53.9	5.933 109 13 075	15 49.0
20	II 37 31.55 35.13	3 43 29.4 3 56.0	5.946 184 12 951	15 45.7
21	II 38 6.68 35.46	3 39 33.4 3 58.2	5.959 135 12 827	15 42.3
22	II 38 42.14 35.80	3 35 35.2 4 0.4	5.971 962 12 699	15 39.0
23	II 39 17.94 36.13	3 31 34.8 4 2.4	5.984 661 12 572	15 35.7
24	II 39 54.07	+3 27 32.4	5.997 233	15 32.3



Tag		0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich	
		Scheinbare Rektaszension	Scheinbare Deklination	Δ		
1945						
Juli	24	h m s II 39 54.07 36.46	° ' " +3 27 32.4 4 4.5	5.997 233 12 441	h m 15 32.3	
	25	II 40 30.53 36.77	3 23 27.9 4 6.6	6.009 674 12 308	15 29.0	
	26	II 41 7.30 37.10	3 19 21.3 4 8.5	6.021 982 12 174	15 25.7	
	27	II 41 44.40 37.40	3 15 12.8 4 10.5	6.034 156 12 037	15 22.4	
	28	II 42 21.80 37.71	3 11 2.3 4 12.4	6.046 193 11 900	15 19.1	
	29	II 42 59.51 38.01	3 6 49.9 4 14.3	6.058 093 11 760	15 15.8	
	30	II 43 37.52 38.31	+3 2 35.6 4 16.1	6.069 853 11 618	15 12.5	
	31	II 44 15.83 38.61	2 58 19.5 4 18.0	6.081 471 11 473	15 9.2	
	Aug.	1	II 44 54.44 38.89	2 54 1.5 4 19.9	6.092 944 11 327	15 5.9
		2	II 45 33.33 39.18	2 49 41.6 4 21.6	6.104 271 11 178	15 2.6
3		II 46 12.51 39.46	2 45 20.0 4 23.3	6.115 449 11 026	14 59.3	
4		II 46 51.97 39.73	2 40 56.7 4 25.1	6.126 475 10 872	14 56.0	
5		II 47 31.70 40.00	+2 36 31.6 4 26.8	6.137 347 10 718	14 52.8	
6		II 48 11.70 40.27	2 32 4.8 4 28.4	6.148 065 10 560	14 49.5	
7		II 48 51.97 40.53	2 27 36.4 4 30.0	6.158 625 10 400	14 46.2	
8		II 49 32.50 40.78	2 23 6.4 4 31.6	6.169 025 10 238	14 43.0	
9		II 50 13.28 41.03	2 18 34.8 4 33.2	6.179 263 10 074	14 39.7	
10		II 50 54.31 41.27	2 14 1.6 4 34.6	6.189 337 9 908	14 36.5	
11	II 51 35.58 41.51	+2 9 27.0 4 36.1	6.199 245 9 742	14 33.2		
12	II 52 17.09 41.75	2 4 50.9 4 37.5	6.208 987 9 572	14 30.0		
13	II 52 58.84 41.97	2 0 13.4 4 39.0	6.218 559 9 403	14 26.8		
14	II 53 40.81 42.19	1 55 34.4 4 40.2	6.227 962 9 230	14 23.5		
15	II 54 23.00 42.41	1 50 54.2 4 41.6	6.237 192 9 056	14 20.3		
16	II 55 5.41 42.62	1 46 12.6 4 42.9	6.246 248 8 883	14 17.1		
17	II 55 48.03 42.83	+1 41 29.7 4 44.1	6.255 131 8 707	14 13.9		
18	II 56 30.86 43.03	1 36 45.6 4 45.3	6.263 838 8 529	14 10.6		
19	II 57 13.89 43.23	1 32 0.3 4 46.6	6.272 367 8 351	14 7.4		
20	II 57 57.12 43.42	1 27 13.7 4 47.6	6.280 718 8 172	14 4.2		
21	II 58 40.54 43.61	1 22 26.1 4 48.7	6.288 890 7 991	14 1.0		
22	II 59 24.15 43.79	1 17 37.4 4 49.8	6.296 881 7 812	13 57.8		
23	12 0 7.94 43.97	+1 12 47.6 4 50.9	6.304 693 7 627	13 54.6		
24	12 0 51.91 44.15	1 7 56.7 4 51.9	6.312 320 7 445	13 51.4		
25	12 1 36.06 44.33	1 3 4.8 4 52.9	6.319 765 7 260	13 48.2		
26	12 2 20.39 44.49	0 58 11.9 4 53.8	6.327 025 7 075	13 45.0		
27	12 3 4.88 44.66	0 53 18.1 4 54.8	6.334 100 6 887	13 41.8		
28	12 3 49.54 44.82	0 48 23.3 4 55.7	6.340 987 6 699	13 38.6		
29	12 4 34.36 44.98	+0 43 27.6 4 56.6	6.347 686 6 509	13 35.4		
30	12 5 19.34 45.14	0 38 31.0 4 57.4	6.354 195 6 317	13 32.2		
31	12 6 4.48 45.29	0 33 33.6 4 58.3	6.360 512 6 125	13 29.1		
Sept.	1	12 6 49.77 45.43	0 28 35.3 4 59.0	6.366 637 5 931	13 25.9	
	2	12 7 35.20 45.58	0 23 36.3 4 59.8	6.372 568 5 734	13 22.7	
	3	12 8 20.78	+0 18 36.5	6.378 302	13 19.5	



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Sept.	<sup>h</sup> <sup>m</sup> <sup>s</sup>	<sup>°</sup> <sup>'</sup> <sup>"</sup>		<sup>h</sup> <sup>m</sup>
3	12 8 20.78 45.71	+0 18 36.5 5 0.5	6.378 302 5 537	13 19.5
4	12 9 6.49 45.84	0 13 36.0 5 1.2	6.383 839 5 339	13 16.4
5	12 9 52.33 45.98	0 8 34.8 5 1.8	6.389 178 5 139	13 13.2
6	12 10 38.31 46.09	+0 3 33.0 5 2.4	6.394 317 4 940	13 10.0
7	12 11 24.40 46.21	-0 1 29.4 5 3.1	6.399 257 4 736	13 6.8
8	12 12 10.61 46.33	0 6 32.5 5 3.5	6.403 993 4 534	13 3.7
9	12 12 56.94 46.44	-0 11 36.0 5 4.1	6.408 527 4 332	13 0.5
10	12 13 43.38 46.53	0 16 40.1 5 4.6	6.412 859 4 127	12 57.4
11	12 14 29.91 46.64	0 21 44.7 5 4.9	6.416 986 3 921	12 54.2
12	12 15 16.55 46.73	0 26 49.6 5 5.4	6.420 907 3 717	12 51.0
13	12 16 3.28 46.82	0 31 55.0 5 5.7	6.424 624 3 511	12 47.9
14	12 16 50.10 46.91	0 37 0.7 5 6.1	6.428 135 3 304	12 44.7
15	12 17 37.01 46.98	-0 42 6.8 5 6.3	6.431 439 3 098	12 41.6
16	12 18 23.99 47.07	0 47 13.1 5 6.6	6.434 537 2 890	12 38.4
17	12 19 11.06 47.14	0 52 19.7 5 6.9	6.437 427 2 684	12 35.3
18	12 19 58.20 47.20	0 57 26.6 5 7.0	6.440 111 2 475	12 32.1
19	12 20 45.40 47.27	1 2 33.6 5 7.2	6.442 586 2 269	12 29.0
20	12 21 32.67 47.33	1 7 40.8 5 7.3	6.444 855 2 059	12 25.8
21	12 22 20.00 47.38	-1 12 48.1 5 7.4	6.446 914 1 852	12 22.7
22	12 23 7.38 47.44	1 17 55.5 5 7.5	6.448 766 1 642	12 19.5
23	12 23 54.82 47.49	1 23 3.0 5 7.5	6.450 408 1 435	12 16.4
24	12 24 42.31 47.54	1 28 10.5 5 7.5	6.451 843 1 224	12 13.3
25	12 25 29.85 47.58	1 33 18.0 5 7.6	6.453 067 1 014	12 10.1
26	12 26 17.43 47.62	1 38 25.6 5 7.5	6.454 081 803	12 7.0
27	12 27 5.05 47.66	-1 43 33.1 5 7.4	6.454 884 592	12 3.8
28	12 27 52.71 47.69	1 48 40.5 5 7.3	6.455 476 379	12 0.7
29	12 28 40.40 47.72	1 53 47.8 5 7.2	6.455 855 167	11 57.5
30	12 29 28.12 47.74	1 58 55.0 5 7.1	6.456 022 47	11 54.4
Okt.				
1	12 30 15.86 47.76	2 4 2.1 5 6.8	6.455 975 261	11 51.3
2	12 31 3.62 47.77	2 9 8.9 5 6.6	6.455 714 476	11 48.1
3	12 31 51.39 47.78	-2 14 15.5 5 6.3	6.455 238 690	11 45.0
4	12 32 39.17 47.78	2 19 21.8 5 6.0	6.454 548 905	11 41.8
5	12 33 26.95 47.79	2 24 27.8 5 5.7	6.453 643 1 120	11 38.7
6	12 34 14.74 47.77	2 29 33.5 5 5.3	6.452 523 1 335	11 35.6
7	12 35 2.51 47.77	2 34 38.8 5 4.9	6.451 188 1 551	11 32.4
8	12 35 50.28 47.75	2 39 43.7 5 4.4	6.449 637 1 765	11 29.3
9	12 36 38.03 47.73	-2 44 48.1 5 4.0	6.447 872 1 980	11 26.2
10	12 37 25.76 47.70	2 49 52.1 5 3.4	6.445 892 2 194	11 23.0
11	12 38 13.46 47.67	2 54 55.5 5 2.8	6.443 698 2 408	11 19.9
12	12 39 1.13 47.63	2 59 58.3 5 2.3	6.441 290 2 621	11 16.7
13	12 39 48.76 47.60	3 5 0.6 5 1.6	6.438 669 2 836	11 13.6
14	12 40 36.36	-3 10 2.2	6.435 833	11 10.4



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Okt. 14	12 <sup>h</sup> 40 <sup>m</sup> 36.36 <sup>s</sup> 47.55	-3° 10' 2.2" 5' 0.9"	6.435 833 3 047	11 10.4
15	12 41 23.91 47.50	3 15 3.1 5 0.2	6.432 786 3 259	11 7.3
16	12 42 11.41 47.44	3 20 3.3 4 59.5	6.429 527 3 470	11 4.1
17	12 42 58.85 47.39	3 25 2.8 4 58.7	6.426 057 3 681	11 1.0
18	12 43 46.24 47.33	3 30 1.5 4 57.9	6.422 376 3 891	10 57.9
19	12 44 33.57 47.26	3 34 59.4 4 57.1	6.418 485 4 099	10 54.7
20	12 45 20.83 47.18	-3 39 56.5 4 56.2	6.414 386 4 309	10 51.6
21	12 46 8.01 47.12	3 44 52.7 4 55.3	6.410 077 4 518	10 48.4
22	12 46 55.13 47.04	3 49 48.0 4 54.4	6.405 559 4 724	10 45.3
23	12 47 42.17 46.95	3 54 42.4 4 53.5	6.400 835 4 932	10 42.1
24	12 48 29.12 46.87	3 59 35.9 4 52.5	6.395 903 5 140	10 39.0
25	12 49 15.99 46.77	4 4 28.4 4 51.5	6.390 763 5 346	10 35.8
26	12 50 2.76 46.68	-4 9 19.9 4 50.4	6.385 417 5 553	10 32.7
27	12 50 49.44 46.58	4 14 10.3 4 49.4	6.379 864 5 760	10 29.5
28	12 51 36.02 46.48	4 18 59.7 4 48.3	6.374 104 5 965	10 26.3
29	12 52 22.50 46.36	4 23 48.0 4 47.1	6.368 139 6 171	10 23.2
30	12 53 8.86 46.24	4 28 35.1 4 46.0	6.361 968 6 377	10 20.0
31	12 53 55.10 46.13	4 33 21.1 4 44.7	6.355 591 6 579	10 16.8
Nov. 1	12 54 41.23 45.99	-4 38 5.8 4 43.5	6.349 012 6 784	10 13.7
2	12 55 27.22 45.86	4 42 49.3 4 42.2	6.342 228 6 986	10 10.5
3	12 56 13.08 45.71	4 47 31.5 4 40.9	6.335 242 7 188	10 7.3
4	12 56 58.79 45.57	4 52 12.4 4 39.5	6.328 054 7 387	10 4.1
5	12 57 44.36 45.42	4 56 51.9 4 38.1	6.320 667 7 588	10 1.0
6	12 58 29.78 45.26	5 1 30.0 4 36.7	6.313 079 7 785	9 57.8
7	12 59 15.04 45.10	-5 6 6.7 4 35.2	6.305 294 7 982	9 54.6
8	13 0 0.14 44.93	5 10 41.9 4 33.6	6.297 312 8 177	9 51.4
9	13 0 45.07 44.75	5 15 15.5 4 32.1	6.289 135 8 371	9 48.2
10	13 1 29.82 44.57	5 19 47.6 4 30.5	6.280 764 8 563	9 45.1
11	13 2 14.39 44.38	5 24 18.1 4 28.9	6.272 201 8 752	9 41.9
12	13 2 58.77 44.19	5 28 47.0 4 27.2	6.263 449 8 943	9 38.7
13	13 3 42.96 44.00	-5 33 14.2 4 25.6	6.254 506 9 129	9 35.5
14	13 4 26.96 43.79	5 37 39.8 4 23.8	6.245 377 9 315	9 32.3
15	13 5 10.75 43.58	5 42 3.6 4 22.0	6.236 062 9 498	9 29.0
16	13 5 54.33 43.37	5 46 25.6 4 20.3	6.226 564 9 680	9 25.8
17	13 6 37.70 43.15	5 50 45.9 4 18.4	6.216 884 9 860	9 22.6
18	13 7 20.85 42.93	5 55 4.3 4 16.6	6.207 024 10 038	9 19.4
19	13 8 3.78 42.70	-5 59 20.9 4 14.7	6.196 986 10 216	9 16.2
20	13 8 46.48 42.47	6 3 35.6 4 12.8	6.186 770 10 392	9 13.0
21	13 9 28.95 42.23	6 7 48.4 4 10.9	6.176 378 10 565	9 9.7
22	13 10 11.18 41.98	6 11 59.3 4 8.9	6.165 813 10 739	9 6.5
23	13 10 53.16 41.73	6 16 8.2 4 6.9	6.155 074 10 909	9 3.3
24	13 11 34.89	-6 20 15.1	6.144 165	9 0.0



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Nov. 24	<sup>h</sup> 13 <sup>m</sup> 11 <sup>s</sup> 34.89 41.48	-6° 20' 15.1" <sup>4</sup> 4.9	6.144 165 <sup>11</sup> 080	<sup>h</sup> 9 <sup>m</sup> 0.0
25	13 12 16.37 41.21	6 24 20.0 <sup>4</sup> 2.8	6.133 085 <sup>11</sup> 248	8 56.8
26	13 12 57.58 40.94	6 28 22.8 <sup>4</sup> 0.7	6.121 837 <sup>11</sup> 415	8 53.5
27	13 13 38.52 40.67	6 32 23.5 <sup>3</sup> 58.6	6.110 422 <sup>11</sup> 580	8 50.3
28	13 14 19.19 40.38	6 36 22.1 <sup>3</sup> 56.4	6.098 842 <sup>11</sup> 744	8 47.0
29	13 14 59.57 40.09	6 40 18.5 <sup>3</sup> 54.2	6.087 098 <sup>11</sup> 904	8 43.8
30	13 15 39.66 39.79	-6 44 12.7 <sup>3</sup> 51.9	6.075 194 <sup>12</sup> 063	8 40.5
Dez. 1	13 16 19.45 39.48	6 48 4.6 <sup>3</sup> 49.6	6.063 131 <sup>12</sup> 220	8 37.2
2	13 16 58.93 39.18	6 51 54.2 <sup>3</sup> 47.3	6.050 911 <sup>12</sup> 374	8 33.9
3	13 17 38.11 38.85	6 55 41.5 <sup>3</sup> 44.9	6.038 537 <sup>12</sup> 527	8 30.6
4	13 18 16.96 38.53	6 59 26.4 <sup>3</sup> 42.5	6.026 010 <sup>12</sup> 676	8 27.4
5	13 18 55.49 38.20	7 3 8.9 <sup>3</sup> 40.1	6.013 334 <sup>12</sup> 822	8 24.1
6	13 19 33.69 37.85	-7 6 49.0 <sup>3</sup> 37.6	6.000 512 <sup>12</sup> 967	8 20.8
7	13 20 11.54 37.51	7 10 26.6 <sup>3</sup> 35.1	5.987 545 <sup>13</sup> 109	8 17.5
8	13 20 49.05 37.15	7 14 1.7 <sup>3</sup> 32.5	5.974 436 <sup>13</sup> 247	8 14.1
9	13 21 26.20 36.79	7 17 34.2 <sup>3</sup> 29.9	5.961 189 <sup>13</sup> 383	8 10.8
10	13 22 2.99 36.42	7 21 4.1 <sup>3</sup> 27.3	5.947 806 <sup>13</sup> 516	8 7.5
11	13 22 39.41 36.05	7 24 31.4 <sup>3</sup> 24.6	5.934 290 <sup>13</sup> 645	8 4.2
12	13 23 15.46 35.66	-7 27 56.0 <sup>3</sup> 22.0	5.920 645 <sup>13</sup> 773	8 0.8
13	13 23 51.12 35.28	7 31 18.0 <sup>3</sup> 19.2	5.906 872 <sup>13</sup> 896	7 57.5
14	13 24 26.40 34.89	7 34 37.2 <sup>3</sup> 16.5	5.892 976 <sup>14</sup> 017	7 54.1
15	13 25 1.29 34.49	7 37 53.7 <sup>3</sup> 13.7	5.878 959 <sup>14</sup> 135	7 50.8
16	13 25 35.78 34.08	7 41 7.4 <sup>3</sup> 10.9	5.864 824 <sup>14</sup> 251	7 47.4
17	13 26 9.86 33.67	7 44 18.3 <sup>3</sup> 8.1	5.850 573 <sup>14</sup> 363	7 44.0
18	13 26 43.53 33.25	-7 47 26.4 <sup>3</sup> 5.3	5.836 210 <sup>14</sup> 472	7 40.7
19	13 27 16.78 32.83	7 50 31.7 <sup>3</sup> 2.3	5.821 738 <sup>14</sup> 580	7 37.3
20	13 27 49.61 32.40	7 53 34.0 <sup>2</sup> 59.5	5.807 158 <sup>14</sup> 684	7 33.9
21	13 28 22.01 31.96	7 56 33.5 <sup>2</sup> 56.5	5.792 474 <sup>14</sup> 786	7 30.5
22	13 28 53.97 31.51	7 59 30.0 <sup>2</sup> 53.5	5.777 688 <sup>14</sup> 885	7 27.1
23	13 29 25.48 31.07	8 2 23.5 <sup>2</sup> 50.5	5.762 803 <sup>14</sup> 981	7 23.7
24	13 29 56.55 30.60	-8 5 14.0 <sup>2</sup> 47.5	5.747 822 <sup>15</sup> 075	7 20.3
25	13 30 27.15 30.13	8 8 1.5 <sup>2</sup> 44.4	5.732 747 <sup>15</sup> 163	7 16.9
26	13 30 57.28 29.66	8 10 45.9 <sup>2</sup> 41.2	5.717 584 <sup>15</sup> 252	7 13.4
27	13 31 26.94 29.17	8 13 27.1 <sup>2</sup> 38.2	5.702 332 <sup>15</sup> 335	7 10.0
28	13 31 56.11 28.68	8 16 5.3 <sup>2</sup> 34.9	5.686 997 <sup>15</sup> 415	7 6.5
29	13 32 24.79 28.18	8 18 40.2 <sup>2</sup> 31.8	5.671 582 <sup>15</sup> 491	7 3.1
30	13 32 52.97 27.68	-8 21 12.0 <sup>2</sup> 28.4	5.656 091 <sup>15</sup> 564	6 59.6
31	13 33 20.65 27.16	8 23 40.4 <sup>2</sup> 25.2	5.640 527 <sup>15</sup> 632	6 56.1
32	13 33 47.81	-8 26 5.6	5.624 895	6 52.6



Tag	0 <sup>h</sup> Welt-Zeit			Obers Kullmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Jan. 0	<sup>h</sup> 6 <sup>m</sup> 30 <sup>s</sup> 59.32 <sub>21.36</sub>	+22 29 33.7 <sub>22.4</sub>	8.04 752 <sub>80</sub>	<sup>h</sup> 23 <sup>m</sup> 49.5
1	6 30 37.96 <sub>21.33</sub>	22 29 56.1 <sub>22.3</sub>	8.04 832 <sub>111</sub>	23 45.3
2	6 30 16.63 <sub>21.28</sub>	22 30 18.4 <sub>22.2</sub>	8.04 943 <sub>143</sub>	23 41.0
3	6 29 55.35 <sub>21.23</sub>	22 30 40.6 <sub>22.1</sub>	8.05 886 <sub>175</sub>	23 36.7
4	6 29 34.12 <sub>21.16</sub>	22 31 2.7 <sub>21.9</sub>	8.05 261 <sub>207</sub>	23 32.4
5	6 29 12.96 <sub>21.07</sub>	22 31 24.6 <sub>21.8</sub>	8.05 468 <sub>238</sub>	23 28.1
6	6 28 51.89 <sub>20.98</sub>	+22 31 46.4 <sub>21.7</sub>	8.05 706 <sub>269</sub>	23 23.8
7	6 28 30.91 <sub>20.88</sub>	22 32 8.1 <sub>21.5</sub>	8.05 975 <sub>301</sub>	23 19.6
8	6 28 10.03 <sub>20.76</sub>	22 32 29.6 <sub>21.4</sub>	8.06 276 <sub>333</sub>	23 15.3
9	6 27 49.27 <sub>20.63</sub>	22 32 51.0 <sub>21.2</sub>	8.06 609 <sub>363</sub>	23 11.0
10	6 27 28.64 <sub>20.49</sub>	22 33 12.2 <sub>21.0</sub>	8.06 972 <sub>395</sub>	23 6.7
11	6 27 8.15 <sub>20.33</sub>	22 33 33.2 <sub>20.9</sub>	8.07 367 <sub>426</sub>	23 2.5
12	6 26 47.82 <sub>20.16</sub>	+22 33 54.1 <sub>20.7</sub>	8.07 793 <sub>456</sub>	22 58.2
13	6 26 27.66 <sub>19.98</sub>	22 34 14.8 <sub>20.5</sub>	8.08 249 <sub>487</sub>	22 53.9
14	6 26 7.68 <sub>19.79</sub>	22 34 35.3 <sub>20.3</sub>	8.08 736 <sub>518</sub>	22 49.7
15	6 25 47.89 <sub>19.59</sub>	22 34 55.6 <sub>20.1</sub>	8.09 254 <sub>548</sub>	22 45.4
16	6 25 28.30 <sub>19.37</sub>	22 35 15.7 <sub>19.9</sub>	8.09 802 <sub>577</sub>	22 41.2
17	6 25 8.93 <sub>19.15</sub>	22 35 35.6 <sub>19.8</sub>	8.10 379 <sub>608</sub>	22 36.9
18	6 24 49.78 <sub>18.91</sub>	+22 35 55.4 <sub>19.5</sub>	8.10 987 <sub>636</sub>	22 32.7
19	6 24 30.87 <sub>18.65</sub>	22 36 14.9 <sub>19.4</sub>	8.11 623 <sub>666</sub>	22 28.4
20	6 24 12.22 <sub>18.40</sub>	22 36 34.3 <sub>19.1</sub>	8.12 289 <sub>695</sub>	22 24.2
21	6 23 53.82 <sub>18.12</sub>	22 36 53.4 <sub>18.9</sub>	8.12 984 <sub>723</sub>	22 20.0
22	6 23 35.70 <sub>17.85</sub>	22 37 12.3 <sub>18.7</sub>	8.13 707 <sub>751</sub>	22 15.8
23	6 23 17.85 <sub>17.56</sub>	22 37 31.0 <sub>18.4</sub>	8.14 458 <sub>779</sub>	22 11.5
24	6 23 0.29 <sub>17.26</sub>	+22 37 49.4 <sub>18.3</sub>	8.15 237 <sub>807</sub>	22 7.3
25	6 22 43.03 <sub>16.95</sub>	22 38 7.7 <sub>18.0</sub>	8.16 044 <sub>834</sub>	22 3.1
26	6 22 26.08 <sub>16.64</sub>	22 38 25.7 <sub>17.9</sub>	8.16 878 <sub>860</sub>	21 58.9
27	6 22 9.44 <sub>16.31</sub>	22 38 43.6 <sub>17.6</sub>	8.17 738 <sub>887</sub>	21 54.7
28	6 21 53.13 <sub>15.99</sub>	22 39 1.2 <sub>17.4</sub>	8.18 625 <sub>913</sub>	21 50.5
29	6 21 37.14 <sub>15.64</sub>	22 39 18.6 <sub>17.2</sub>	8.19 538 <sub>939</sub>	21 46.3
30	6 21 21.50 <sub>15.29</sub>	+22 39 35.8 <sub>17.0</sub>	8.20 477 <sub>964</sub>	21 42.1
31	6 21 6.21 <sub>14.94</sub>	22 39 52.8 <sub>16.8</sub>	8.21 441 <sub>990</sub>	21 37.9
Febr. 1	6 20 51.27 <sub>14.58</sub>	22 40 9.6 <sub>16.5</sub>	8.22 431 <sub>1014</sub>	21 33.7
2	6 20 36.69 <sub>14.20</sub>	22 40 26.1 <sub>16.3</sub>	8.23 445 <sub>1038</sub>	21 29.6
3	6 20 22.49 <sub>13.83</sub>	22 40 42.4 <sub>16.1</sub>	8.24 483 <sub>1063</sub>	21 25.4
4	6 20 8.66 <sub>13.44</sub>	22 40 58.5 <sub>15.9</sub>	8.25 546 <sub>1086</sub>	21 21.3
5	6 19 55.22 <sub>13.04</sub>	+22 41 14.4 <sub>15.6</sub>	8.26 632 <sub>1110</sub>	21 17.1
6	6 19 42.18 <sub>12.65</sub>	22 41 30.0 <sub>15.5</sub>	8.27 742 <sub>1132</sub>	21 13.0
7	6 19 29.53 <sub>12.24</sub>	22 41 45.5 <sub>15.2</sub>	8.28 874 <sub>1155</sub>	21 8.8
8	6 19 17.29 <sub>11.83</sub>	22 42 0.7 <sub>15.1</sub>	8.30 029 <sub>1177</sub>	21 4.7
9	6 19 5.46 <sub>11.41</sub>	22 42 15.8 <sub>14.8</sub>	8.31 206 <sub>1199</sub>	21 0.6
10	6 18 54.05	+22 42 30.6	8.32 405	20 56.5



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Febr. 10	<sup>h</sup> 6 <sup>m</sup> 18 <sup>s</sup> 54.05 <sub>10.98</sub>	+22 42 30.6 <sub>14.6</sub>	8.32 405 <sub>1 219</sub>	<sup>h</sup> 20 <sup>m</sup> 56.5
11	6 18 43.07 <sub>10.55</sub>	22 42 45.2 <sub>14.3</sub>	8.33 624 <sub>1 241</sub>	20 52.4
12	6 18 32.52 <sub>10.11</sub>	22 42 59.5 <sub>14.2</sub>	8.34 865 <sub>1 261</sub>	20 48.3
13	6 18 22.41 <sub>9.67</sub>	22 43 13.7 <sub>14.0</sub>	8.36 126 <sub>1 280</sub>	20 44.2
14	6 18 12.74 <sub>9.22</sub>	22 43 27.7 <sub>13.8</sub>	8.37 406 <sub>1 300</sub>	20 40.1
15	6 18 3.52 <sub>8.76</sub>	22 43 41.5 <sub>13.5</sub>	8.38 706 <sub>1 318</sub>	20 36.0
16	6 17 54.76 <sub>8.31</sub>	+22 43 55.0 <sub>13.4</sub>	8.40 024 <sub>1 337</sub>	20 32.0
17	6 17 46.45 <sub>7.85</sub>	22 44 8.4 <sub>13.2</sub>	8.41 361 <sub>1 354</sub>	20 27.9
18	6 17 38.60 <sub>7.38</sub>	22 44 21.6 <sub>13.0</sub>	8.42 715 <sub>1 372</sub>	20 23.8
19	6 17 31.22 <sub>6.91</sub>	22 44 34.6 <sub>12.7</sub>	8.44 087 <sub>1 388</sub>	20 19.8
20	6 17 24.31 <sub>6.45</sub>	22 44 47.3 <sub>12.6</sub>	8.45 475 <sub>1 404</sub>	20 15.7
21	6 17 17.86 <sub>5.97</sub>	22 44 59.9 <sub>12.3</sub>	8.46 879 <sub>1 420</sub>	20 11.7
22	6 17 11.89 <sub>5.50</sub>	+22 45 12.2 <sub>12.2</sub>	8.48 299 <sub>1 435</sub>	20 7.7
23	6 17 6.39 <sub>5.03</sub>	22 45 24.4 <sub>12.0</sub>	8.49 734 <sub>1 450</sub>	20 3.7
24	6 17 1.36 <sub>4.54</sub>	22 45 36.4 <sub>11.8</sub>	8.51 184 <sub>1 463</sub>	19 59.7
25	6 16 56.82 <sub>4.07</sub>	22 45 48.2 <sub>11.6</sub>	8.52 647 <sub>1 478</sub>	19 55.7
26	6 16 52.75 <sub>3.59</sub>	22 45 59.8 <sub>11.3</sub>	8.54 125 <sub>1 491</sub>	19 51.7
27	6 16 49.16 <sub>3.11</sub>	22 46 11.1 <sub>11.2</sub>	8.55 616 <sub>1 503</sub>	19 47.7
28	6 16 46.05 <sub>2.63</sub>	+22 46 22.3 <sub>10.9</sub>	8.57 119 <sub>1 516</sub>	19 43.7
März 1	6 16 43.42 <sub>2.14</sub>	22 46 33.2 <sub>10.8</sub>	8.58 635 <sub>1 528</sub>	19 39.7
2	6 16 41.28 <sub>1.65</sub>	22 46 44.0 <sub>10.5</sub>	8.60 163 <sub>1 539</sub>	19 35.8
3	6 16 39.63 <sub>1.18</sub>	22 46 54.5 <sub>10.4</sub>	8.61 702 <sub>1 550</sub>	19 31.8
4	6 16 38.45 <sub>0.68</sub>	22 47 4.9 <sub>10.1</sub>	8.63 252 <sub>1 560</sub>	19 27.9
5	6 16 37.77 <sub>0.20</sub>	22 47 15.0 <sub>9.9</sub>	8.64 812 <sub>1 570</sub>	19 23.9
6	6 16 37.57 <sub>0.29</sub>	+22 47 24.9 <sub>9.7</sub>	8.66 382 <sub>1 580</sub>	19 20.0
7	6 16 37.86 <sub>0.78</sub>	22 47 34.6 <sub>9.6</sub>	8.67 962 <sub>1 589</sub>	19 16.1
8	6 16 38.64 <sub>1.26</sub>	22 47 44.2 <sub>9.3</sub>	8.69 551 <sub>1 597</sub>	19 12.2
9	6 16 39.90 <sub>1.75</sub>	22 47 53.5 <sub>9.1</sub>	8.71 148 <sub>1 605</sub>	19 8.3
10	6 16 41.65 <sub>2.24</sub>	22 48 2.6 <sub>8.8</sub>	8.72 753 <sub>1 612</sub>	19 4.4
11	6 16 43.89 <sub>2.73</sub>	22 48 11.4 <sub>8.7</sub>	8.74 365 <sub>1 619</sub>	19 0.5
12	6 16 46.62 <sub>3.22</sub>	+22 48 20.1 <sub>8.4</sub>	8.75 984 <sub>1 626</sub>	18 56.6
13	6 16 49.84 <sub>3.70</sub>	22 48 28.5 <sub>8.3</sub>	8.77 610 <sub>1 632</sub>	18 52.7
14	6 16 53.54 <sub>4.19</sub>	22 48 36.8 <sub>8.0</sub>	8.79 242 <sub>1 638</sub>	18 48.9
15	6 16 57.73 <sub>4.68</sub>	22 48 44.8 <sub>7.7</sub>	8.80 880 <sub>1 642</sub>	18 45.0
16	6 17 2.41 <sub>5.16</sub>	22 48 52.5 <sub>7.6</sub>	8.82 522 <sub>1 646</sub>	18 41.2
17	6 17 7.57 <sub>5.64</sub>	22 49 0.1 <sub>7.3</sub>	8.84 168 <sub>1 650</sub>	18 37.3
18	6 17 13.21 <sub>6.11</sub>	+22 49 7.4 <sub>7.1</sub>	8.85 818 <sub>1 653</sub>	18 33.5
19	6 17 19.32 <sub>6.60</sub>	22 49 14.5 <sub>6.8</sub>	8.87 471 <sub>1 656</sub>	18 29.7
20	6 17 25.92 <sub>7.06</sub>	22 49 21.3 <sub>6.6</sub>	8.89 127 <sub>1 659</sub>	18 25.9
21	6 17 32.98 <sub>7.54</sub>	22 49 27.9 <sub>6.3</sub>	8.90 786 <sub>1 660</sub>	18 22.0
22	6 17 40.52 <sub>8.01</sub>	22 49 34.2 <sub>6.1</sub>	8.92 446 <sub>1 661</sub>	18 18.2
23	6 17 48.53	+22 49 40.3	8.94 107	18 14.4



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
März	23	6 <sup>h</sup> 17 <sup>m</sup> 48. <sup>s</sup> 53 8.47	+22 49 40.3 5.9	8.94 107 1 662 18 14.4
	24	6 17 57.00 8.93	22 49 46.2 5.5	8.95 769 1 663 18 10.7
	25	6 18 5.93 9.38	22 49 51.7 5.3	8.97 432 1 663 18 6.9
	26	6 18 15.31 9.84	22 49 57.0 5.0	8.99 095 1 662 18 3.1
	27	6 18 25.15 10.30	22 50 2.0 4.8	9.00 757 1 661 17 59.3
	28	6 18 35.45 10.75	22 50 6.8 4.5	9.02 418 1 660 17 55.6
	29	6 18 46.20 11.19	+22 50 11.3 4.1	9.04 078 1 659 17 51.9
	30	6 18 57.39 11.63	22 50 15.4 3.9	9.05 737 1 656 17 48.1
	31	6 19 9.02 12.07	22 50 19.3 3.6	9.07 393 1 653 17 44.4
	April	1	6 19 21.09 12.50	22 50 22.9 3.2
2		6 19 33.59 12.94	22 50 26.1 3.0	9.10 697 1 647 17 36.9
3		6 19 46.53 13.37	22 50 29.1 2.6	9.12 344 1 644 17 33.2
4		6 19 59.90 13.80	+22 50 31.7 2.4	9.13 988 1 639 17 29.5
5		6 20 13.70 14.22	22 50 34.1 2.0	9.15 627 1 635 17 25.8
6		6 20 27.92 14.63	22 50 36.1 1.6	9.17 262 1 629 17 22.1
7		6 20 42.55 15.06	22 50 37.7 1.3	9.18 891 1 624 17 18.4
8		6 20 57.61 15.47	22 50 39.0 1.0	9.20 515 1 619 17 14.8
9		6 21 13.08 15.88	22 50 40.0 0.7	9.22 134 1 612 17 11.1
10		6 21 28.96 16.28	+22 50 40.7 0.3	9.23 746 1 605 17 7.4
11		6 21 45.24 16.69	22 50 41.0 0.1	9.25 351 1 598 17 3.8
12		6 22 1.93 17.08	22 50 40.9 0.5	9.26 949 1 590 17 0.1
13		6 22 19.01 17.48	22 50 40.4 0.8	9.28 539 1 583 16 56.5
14		6 22 36.49 17.87	22 50 39.6 1.1	9.30 122 1 573 16 52.9
15		6 22 54.36 18.25	22 50 38.5 1.6	9.31 695 1 565 16 49.2
16		6 23 12.61 18.63	+22 50 36.9 1.9	9.33 260 1 556 16 45.6
17		6 23 31.24 19.01	22 50 35.0 2.4	9.34 816 1 546 16 42.0
18		6 23 50.25 19.37	22 50 32.6 2.7	9.36 362 1 536 16 38.4
19		6 24 9.62 19.73	22 50 29.9 3.2	9.37 898 1 525 16 34.8
20		6 24 29.35 20.10	22 50 26.7 3.6	9.39 423 1 515 16 31.1
21	6 24 49.45 20.45	22 50 23.1 4.0	9.40 938 1 504 16 27.5	
22	6 25 9.90 20.80	+22 50 19.1 4.4	9.42 442 1 493 16 24.0	
23	6 25 30.70 21.14	22 50 14.7 4.9	9.43 935 1 480 16 20.4	
24	6 25 51.84 21.48	22 50 9.8 5.3	9.45 415 1 469 16 16.8	
25	6 26 13.32 21.82	22 50 4.5 5.8	9.46 884 1 457 16 13.2	
26	6 26 35.14 22.15	22 49 58.7 6.2	9.48 341 1 444 16 9.7	
27	6 26 57.29 22.47	22 49 52.5 6.7	9.49 785 1 431 16 6.1	
28	6 27 19.76 22.79	+22 49 45.8 7.1	9.51 216 1 418 16 2.5	
29	6 27 42.55 23.11	22 49 38.7 7.6	9.52 634 1 405 15 59.0	
30	6 28 5.66 23.42	22 49 31.1 8.0	9.54 039 1 391 15 55.4	
Mai	1	6 28 29.08 23.73	22 49 23.1 8.6	9.55 430 1 377 15 51.9
	2	6 28 52.81 24.04	22 49 14.5 9.0	9.56 807 1 363 15 48.4
	3	6 29 16.85	+22 49 5.5	9.58 170 15 44.9



Tag	0 <sup>h</sup> Welt-Zeit			Obero Kul- mination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Mai 3	<sup>h</sup> 6 29 <sup>m</sup> 16.85 <sup>s</sup> 24.33	+22 49 5.5 9.6	9.58 170 1 348	<sup>h</sup> 15 44.9
4	6 29 41.18 24.63	22 48 55.9 10.0	9.59 518 1 334	15 41.3
5	6 30 5.81 24.92	22 48 45.9 10.5	9.60 852 1 318	15 37.8
6	6 30 30.73 25.21	22 48 35.4 11.0	9.62 170 1 303	15 34.3
7	6 30 55.94 25.49	22 48 24.4 11.5	9.63 473 1 287	15 30.8
8	6 31 21.43 25.76	22 48 12.9 12.1	9.64 760 1 271	15 27.3
9	6 31 47.19 26.04	+22 48 0.8 12.5	9.66 031 1 254	15 23.8
10	6 32 13.23 26.31	22 47 48.3 13.1	9.67 285 1 238	15 20.3
11	6 32 39.54 26.57	22 47 35.2 13.6	9.68 523 1 221	15 16.8
12	6 33 6.11 26.82	22 47 21.6 14.2	9.69 744 1 204	15 13.3
13	6 33 32.93 27.08	22 47 7.4 14.7	9.70 948 1 186	15 9.8
14	6 34 0.01 27.33	22 46 52.7 15.2	9.72 134 1 168	15 6.3
15	6 34 27.34 27.57	+22 46 37.5 15.7	9.73 302 1 150	15 2.9
16	6 34 54.91 27.80	22 46 21.8 16.3	9.74 452 1 133	14 59.4
17	6 35 22.71 28.03	22 46 5.5 16.9	9.75 585 1 113	14 55.9
18	6 35 50.74 28.26	22 45 48.6 17.4	9.76 698 1 095	14 52.4
19	6 36 19.00 28.48	22 45 31.2 18.0	9.77 793 1 077	14 49.0
20	6 36 47.48 28.70	22 45 13.2 18.5	9.78 870 1 057	14 45.5
21	6 37 16.18 28.90	+22 44 54.7 19.1	9.79 927 1 038	14 42.1
22	6 37 45.08 29.11	22 44 35.6 19.7	9.80 965 1 019	14 38.6
23	6 38 14.19 29.31	22 44 15.9 20.2	9.81 984 999	14 35.2
24	6 38 43.50 29.50	22 43 55.7 20.8	9.82 983 980	14 31.7
25	6 39 13.00 29.70	22 43 34.9 21.4	9.83 963 959	14 28.3
26	6 39 42.70 29.88	22 43 13.5 21.9	9.84 922 940	14 24.8
27	6 40 12.58 30.06	+22 42 51.6 22.6	9.85 862 920	14 21.4
28	6 40 42.64 30.24	22 42 29.0 23.1	9.86 782 899	14 18.0
29	6 41 12.88 30.42	22 42 5.9 23.7	9.87 681 879	14 14.5
30	6 41 43.30 30.59	22 41 42.2 24.2	9.88 560 858	14 11.1
31	6 42 13.89 30.74	22 41 18.0 24.9	9.89 418 838	14 7.7
Juni 1	6 42 44.63 30.91	22 40 53.1 25.4	9.90 256 816	14 4.3
2	6 43 15.54 31.06	+22 40 27.7 26.0	9.91 072 795	14 0.9
3	6 43 46.60 31.22	22 40 1.7 26.6	9.91 867 774	13 57.4
4	6 44 17.82 31.36	22 39 35.1 27.1	9.92 641 753	13 54.0
5	6 44 49.18 31.51	22 39 8.0 27.8	9.93 394 731	13 50.6
6	6 45 20.69 31.65	22 38 40.2 28.3	9.94 125 709	13 47.2
7	6 45 52.34 31.77	22 38 11.9 28.9	9.94 834 687	13 43.8
8	6 46 24.11 31.91	+22 37 43.0 29.5	9.95 521 665	13 40.4
9	6 46 56.02 32.03	22 37 13.5 30.1	9.96 186 643	13 37.0
10	6 47 28.05 32.15	22 36 43.4 30.7	9.96 829 620	13 33.6
11	6 48 0.20 32.26	22 36 12.7 31.2	9.97 449 598	13 30.2
12	6 48 32.46 32.37	22 35 41.5 31.8	9.98 047 575	13 26.8
13	6 49 4.83	+22 35 9.7	9.98 622	13 23.4



Tag	0 <sup>h</sup> Welt-Zeit			Obers Kull- mination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Juni	h m s	° ' "		h m
13	6 49 4.83 32.47	+22 35 9.7 32.4	9.98 622 552	13 23.4
14	6 49 37.30 32.57	22 34 37.3 33.0	9.99 174 529	13 20.0
15	6 50 9.87 32.66	22 34 4.3 33.5	9.99 703 506	13 16.6
16	6 50 42.53 32.74	22 33 30.8 34.1	10.00 209 484	13 13.3
17	6 51 15.27 32.83	22 32 56.7 34.7	10.00 693 460	13 9.9
18	6 51 48.10 32.91	22 32 22.0 35.3	10.01 153 437	13 6.5
19	6 52 21.01 32.98	+22 31 46.7 35.8	10.01 590 414	13 3.1
20	6 52 53.99 33.05	22 31 10.9 36.4	10.02 004 391	12 59.7
21	6 53 27.04 33.11	22 30 34.5 36.9	10.02 395 368	12 56.3
22	6 54 0.15 33.17	22 29 57.6 37.4	10.02 763 344	12 52.9
23	6 54 33.32 33.23	22 29 20.2 38.0	10.03 107 321	12 49.6
24	6 55 6.55 33.27	22 28 42.2 38.6	10.03 428 298	12 46.2
25	6 55 39.82 33.33	+22 28 3.6 39.1	10.03 726 274	12 42.8
26	6 56 13.15 33.37	22 27 24.5 39.6	10.04 000 251	12 39.4
27	6 56 46.52 33.40	22 26 44.9 40.1	10.04 251 228	12 36.0
28	6 57 19.92 33.44	22 26 4.8 40.6	10.04 479 204	12 32.7
29	6 57 53.36 33.47	22 25 24.2 41.2	10.04 683 180	12 29.3
30	6 58 26.83 33.50	22 24 43.0 41.7	10.04 863 157	12 25.9
Juli				
1	6 59 0.33 33.52	+22 24 1.3 42.2	10.05 020 133	12 22.5
2	6 59 33.85 33.54	22 23 19.1 42.7	10.05 153 110	12 19.2
3	7 0 7.39 33.55	22 22 36.4 43.2	10.05 263 85	12 15.8
4	7 0 40.94 33.56	22 21 53.2 43.6	10.05 348 62	12 12.4
5	7 1 14.50 33.57	22 21 9.6 44.2	10.05 410 38	12 9.0
6	7 1 48.07 33.56	22 20 25.4 44.6	10.05 448 14	12 5.6
7	7 2 21.63 33.56	+22 19 40.8 45.1	10.05 462 10	12 2.3
8	7 2 55.19 33.55	22 18 55.7 45.6	10.05 452 34	11 58.9
9	7 3 28.74 33.54	22 18 10.1 46.0	10.05 418 58	11 55.5
10	7 4 2.28 33.51	22 17 24.1 46.4	10.05 360 82	11 52.1
11	7 4 35.79 33.48	22 16 37.7 46.9	10.05 278 106	11 48.8
12	7 5 9.27 33.46	22 15 50.8 47.3	10.05 172 129	11 45.4
13	7 5 42.73 33.42	+22 15 3.5 47.7	10.05 043 154	11 42.0
14	7 6 16.15 33.38	22 14 15.8 48.1	10.04 889 177	11 38.7
15	7 6 49.53 33.34	22 13 27.7 48.5	10.04 712 201	11 35.3
16	7 7 22.87 33.28	22 12 39.2 48.9	10.04 511 225	11 31.9
17	7 7 56.15 33.23	22 11 50.3 49.3	10.04 286 249	11 28.5
18	7 8 29.38 33.18	22 11 1.0 49.7	10.04 037 272	11 25.1
19	7 9 2.56 33.11	+22 10 11.3 50.0	10.03 765 295	11 21.8
20	7 9 35.67 33.04	22 9 21.3 50.4	10.03 470 319	11 18.4
21	7 10 8.71 32.97	22 8 30.9 50.7	10.03 151 342	11 15.0
22	7 10 41.68 32.90	22 7 40.2 51.0	10.02 809 365	11 11.6
23	7 11 14.58 32.82	22 6 49.2 51.3	10.02 444 388	11 8.2
24	7 11 47.40	+22 5 57.9	10.02 056	11 4.8



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich		
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$			
1945						
Juli	24	<sup>h</sup> 7 <sup>m</sup> 11 <sup>s</sup> 47.40 32.73	+22 5 57.9 51.6	10.02 056 412	<sup>h</sup> 11 <sup>m</sup> 4.8	
	25	7 12 20.13 32.65	22 5 6.3 52.0	10.01 644 434	11 1.4	
	26	7 12 52.78 32.55	22 4 14.3 52.2	10.01 210 458	10 58.0	
	27	7 13 25.33 32.47	22 3 22.1 52.5	10.00 752 480	10 54.6	
	28	7 13 57.80 32.36	22 2 29.6 52.7	10.00 272 503	10 51.2	
	29	7 14 30.16 32.25	22 1 36.9 53.0	9.99 769 526	10 47.8	
	30	7 15 2.41 32.15	+22 0 43.9 53.3	9.99 243 549	10 44.5	
	31	7 15 34.56 32.04	21 59 50.6 53.4	9.98 694 571	10 41.1	
	Aug.	1	7 16 6.60 31.92	21 58 57.2 53.7	9.98 123 593	10 37.7
		2	7 16 38.52 31.80	21 58 3.5 53.8	9.97 530 616	10 34.3
3		7 17 10.32 31.67	21 57 9.7 54.1	9.96 914 639	10 30.8	
4		7 17 41.99 31.54	21 56 15.6 54.2	9.96 275 661	10 27.4	
5		7 18 13.53 31.41	+21 55 21.4 54.3	9.95 614 684	10 24.0	
6		7 18 44.94 31.26	21 54 27.1 54.5	9.94 930 705	10 20.6	
7		7 19 16.20 31.11	21 53 32.6 54.6	9.94 225 727	10 17.2	
8		7 19 47.31 30.97	21 52 38.0 54.7	9.93 498 749	10 13.8	
9		7 20 18.28 30.80	21 51 43.3 54.9	9.92 749 771	10 10.4	
10		7 20 49.08 30.65	21 50 48.4 54.9	9.91 978 793	10 6.9	
11	7 21 19.73 30.48	+21 49 53.5 54.9	9.91 185 813	10 3.5		
12	7 21 50.21 30.30	21 48 58.6 55.1	9.90 372 835	10 0.1		
13	7 22 20.51 30.13	21 48 3.5 55.0	9.89 537 856	9 56.7		
14	7 22 50.64 29.95	21 47 8.5 55.1	9.88 681 876	9 53.2		
15	7 23 20.59 29.77	21 46 13.4 55.1	9.87 805 897	9 49.8		
16	7 23 50.36 29.58	21 45 18.3 55.0	9.86 908 918	9 46.4		
17	7 24 19.94 29.38	+21 44 23.3 55.0	9.85 990 937	9 42.9		
18	7 24 49.32 29.19	21 43 28.3 55.0	9.85 053 958	9 39.5		
19	7 25 18.51 28.98	21 42 33.3 54.9	9.84 095 977	9 36.0		
20	7 25 47.49 28.78	21 41 38.4 54.8	9.83 118 997	9 32.6		
21	7 26 16.27 28.57	21 40 43.6 54.7	9.82 121 1 016	9 29.1		
22	7 26 44.84 28.35	21 39 48.9 54.6	9.81 105 1 035	9 25.7		
23	7 27 13.19 28.14	+21 38 54.3 54.5	9.80 070 1 055	9 22.2		
24	7 27 41.33 27.92	21 37 59.8 54.3	9.79 015 1 073	9 18.7		
25	7 28 9.25 27.69	21 37 5.5 54.2	9.77 942 1 092	9 15.2		
26	7 28 36.94 27.45	21 36 11.3 54.0	9.76 850 1 110	9 11.8		
27	7 29 4.39 27.23	21 35 17.3 53.8	9.75 740 1 128	9 8.3		
28	7 29 31.62 26.99	21 34 23.5 53.6	9.74 612 1 147	9 4.8		
29	7 29 58.61 26.74	+21 33 29.9 53.3	9.73 465 1 164	9 1.3		
30	7 30 25.35 26.49	21 32 36.6 53.1	9.72 301 1 182	8 57.8		
31	7 30 51.84 26.24	21 31 43.5 52.8	9.71 119 1 200	8 54.3		
Sept.	1	7 31 18.08 25.98	21 30 50.7 52.5	9.69 919 1 217	8 50.8	
	2	7 31 44.06 25.71	21 29 58.2 52.3	9.68 702 1 234	8 47.3	
	3	7 32 9.77	+21 29 5.9	9.67 468	8 43.8	



Tag	0 <sup>h</sup> Welt-Zeit			Δ	Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination			
1945					
Sept.	h m s	° ' "			h m
3	7 32 9.77 25.45	+21 29 5.9 51.9	9.67 468	1 250	8 43.8
4	7 32 35.22 25.17	21 28 14.0 51.5	9.66 218	1 267	8 40.3
5	7 33 0.39 24.89	21 27 22.5 51.1	9.64 951	1 283	8 36.8
6	7 33 25.28 24.61	21 26 31.4 50.8	9.63 668	1 299	8 33.3
7	7 33 49.89 24.32	21 25 40.6 50.4	9.62 369	1 315	8 29.8
8	7 34 14.21 24.02	21 24 50.2 50.0	9.61 054	1 330	8 26.2
9	7 34 38.23 23.73	+21 24 0.2 49.5	9.59 724	1 345	8 22.7
10	7 35 1.06 23.42	21 23 10.7 49.1	9.58 379	1 360	8 19.2
11	7 35 25.38 23.12	21 22 21.6 48.5	9.57 019	1 374	8 15.6
12	7 35 48.50 22.80	21 21 33.1 48.1	9.55 645	1 388	8 12.1
13	7 36 11.30 22.49	21 20 45.0 47.5	9.54 257	1 401	8 8.5
14	7 36 33.79 22.17	21 19 57.5 47.0	9.52 856	1 415	8 4.9
15	7 36 55.96 21.84	+21 19 10.5 46.5	9.51 441	1 428	8 1.4
16	7 37 17.80 21.52	21 18 24.0 45.8	9.50 013	1 441	7 57.8
17	7 37 39.32 21.18	21 17 38.2 45.3	9.48 572	1 453	7 54.2
18	7 38 0.50 20.85	21 16 52.9 44.7	9.47 119	1 465	7 50.6
19	7 38 21.35 20.51	21 16 8.2 44.0	9.45 654	1 476	7 47.1
20	7 38 41.86 20.17	21 15 24.2 43.4	9.44 178	1 488	7 43.5
21	7 39 2.03 19.82	+21 14 40.8 42.7	9.42 690	1 499	7 39.9
22	7 39 21.85 19.47	21 13 58.1 42.0	9.41 191	1 510	7 36.3
23	7 39 41.32 19.11	21 13 16.1 41.4	9.39 681	1 520	7 32.7
24	7 40 0.43 18.76	21 12 34.7 40.6	9.38 161	1 531	7 29.0
25	7 40 19.19 18.39	21 11 54.1 39.8	9.36 630	1 540	7 25.4
26	7 40 37.58 18.03	21 11 14.3 39.1	9.35 090	1 550	7 21.8
27	7 40 55.61 17.65	+21 10 35.2 38.3	9.33 540	1 558	7 18.1
28	7 41 13.26 17.28	21 9 56.9 37.5	9.31 982	1 568	7 14.5
29	7 41 30.54 16.90	21 9 19.4 36.7	9.30 414	1 576	7 10.9
30	7 41 47.44 16.51	21 8 42.7 35.9	9.28 838	1 584	7 7.2
Okt.	h m s	° ' "			h m
1	7 42 3.95 16.12	21 8 6.8 35.1	9.27 254	1 592	7 3.5
2	7 42 20.07 15.72	21 7 31.7 34.1	9.25 662	1 598	6 59.9
3	7 42 35.79 15.32	+21 6 57.6 33.2	9.24 064	1 606	6 56.2
4	7 42 51.11 14.92	21 6 24.4 32.4	9.22 458	1 612	6 52.5
5	7 43 6.03 14.52	21 5 52.0 31.5	9.20 846	1 618	6 48.8
6	7 43 20.55 14.11	21 5 20.5 30.5	9.19 228	1 623	6 45.1
7	7 43 34.66 13.69	21 4 50.0 29.5	9.17 605	1 628	6 41.4
8	7 43 48.35 13.27	21 4 20.5 28.6	9.15 977	1 633	6 37.7
9	7 44 1.62 12.84	+21 3 51.9 27.6	9.14 344	1 637	6 34.0
10	7 44 14.46 12.43	21 3 24.3 26.5	9.12 707	1 641	6 30.3
11	7 44 26.89 12.00	21 2 57.8 25.6	9.11 066	1 644	6 26.6
12	7 44 38.89 11.56	21 2 32.2 24.5	9.09 422	1 647	6 22.8
13	7 44 50.45 11.14	21 2 7.7 23.5	9.07 775	1 649	6 19.1
14	7 45 1.59	+21 1 44.2	9.06 126		6 15.4







Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Nov. 24	<sup>h</sup> 7 46 <sup>m</sup> 2.39 <sup>s</sup> 8.26	+21 2 28.7 26.3	8.42 308 <sub>1 316</sub>	<sup>h</sup> 3 35.1
25	7 45 54.13 8.71	21 2 55.0 27.3	8.40 992 <sub>1 298</sub>	3 31.0
26	7 45 45.42 9.14	21 3 22.3 28.5	8.39 694 <sub>1 279</sub>	3 26.9
27	7 45 36.28 9.57	21 3 50.8 29.5	8.38 415 <sub>1 259</sub>	3 22.9
28	7 45 26.71 <sub>10.01</sub>	21 4 20.3 30.7	8.37 156 <sub>1 239</sub>	3 18.8
29	7 45 16.70 <sub>10.43</sub>	21 4 51.0 31.6	8.35 917 <sub>1 220</sub>	3 14.7
30	7 45 6.27 <sub>10.86</sub>	+21 5 22.6 32.7	8.34 697 <sub>1 198</sub>	3 10.6
Dez. 1	7 44 55.41 <sub>11.27</sub>	21 5 55.3 33.8	8.33 499 <sub>1 177</sub>	3 6.5
2	7 44 44.14 <sub>11.68</sub>	21 6 29.1 34.7	8.32 322 <sub>1 155</sub>	3 2.3
3	7 44 32.46 <sub>12.08</sub>	21 7 3.8 35.7	8.31 167 <sub>1 133</sub>	2 58.2
4	7 44 20.38 <sub>12.48</sub>	21 7 39.5 36.6	8.30 034 <sub>1 110</sub>	2 54.1
5	7 44 7.90 <sub>12.87</sub>	21 8 16.1 37.7	8.28 924 <sub>1 088</sub>	2 49.9
6	7 43 55.03 <sub>13.26</sub>	+21 8 53.8 38.5	8.27 836 <sub>1 063</sub>	2 45.8
7	7 43 41.77 <sub>13.64</sub>	21 9 32.3 39.4	8.26 773 <sub>1 040</sub>	2 41.6
8	7 43 28.13 <sub>14.00</sub>	21 10 11.7 40.3	8.25 733 <sub>1 015</sub>	2 37.5
9	7 43 14.13 <sub>14.37</sub>	21 10 52.0 41.1	8.24 718 <sub>990</sub>	2 33.3
10	7 42 59.76 <sub>14.72</sub>	21 11 33.1 41.9	8.23 728 <sub>965</sub>	2 29.1
11	7 42 45.04 <sub>15.06</sub>	21 12 15.0 42.7	8.22 763 <sub>939</sub>	2 25.0
12	7 42 29.98 <sub>15.41</sub>	+21 12 57.7 43.6	8.21 824 <sub>914</sub>	2 20.8
13	7 42 14.57 <sub>15.73</sub>	21 13 41.3 44.2	8.20 910 <sub>887</sub>	2 16.6
14	7 41 58.84 <sub>16.05</sub>	21 14 25.5 45.0	8.20 023 <sub>860</sub>	2 12.4
15	7 41 42.79 <sub>16.37</sub>	21 15 10.5 45.6	8.19 163 <sub>834</sub>	2 8.2
16	7 41 26.42 <sub>16.67</sub>	21 15 56.1 46.3	8.18 329 <sub>807</sub>	2 4.0
17	7 41 9.75 <sub>16.96</sub>	21 16 42.4 46.9	8.17 522 <sub>779</sub>	1 59.8
18	7 40 52.79 <sub>17.25</sub>	+21 17 29.3 47.5	8.16 743 <sub>752</sub>	1 55.6
19	7 40 35.54 <sub>17.52</sub>	21 18 16.8 48.1	8.15 991 <sub>723</sub>	1 51.4
20	7 40 18.02 <sub>17.79</sub>	21 19 4.9 48.6	8.15 268 <sub>695</sub>	1 47.1
21	7 40 0.23 <sub>18.05</sub>	21 19 53.5 49.1	8.14 573 <sub>667</sub>	1 42.9
22	7 39 42.18 <sub>18.30</sub>	21 20 42.6 49.7	8.13 906 <sub>638</sub>	1 38.7
23	7 39 23.88 <sub>18.54</sub>	21 21 32.3 50.1	8.13 268 <sub>609</sub>	1 34.4
24	7 39 5.34 <sub>18.77</sub>	+21 22 22.4 50.5	8.12 659 <sub>579</sub>	1 30.2
25	7 38 46.57 <sub>19.00</sub>	21 23 12.0 50.9	8.12 080 <sub>549</sub>	1 26.0
26	7 38 27.57 <sub>19.20</sub>	21 24 3.8 51.3	8.11 531 <sub>520</sub>	1 21.7
27	7 38 8.37 <sub>19.40</sub>	21 24 55.1 51.6	8.11 011 <sub>490</sub>	1 17.5
28	7 37 48.97 <sub>19.59</sub>	21 25 46.7 52.0	8.10 521 <sub>459</sub>	1 13.2
29	7 37 29.38 <sub>19.77</sub>	21 26 38.7 52.2	8.10 062 <sub>428</sub>	1 8.9
30	7 37 9.61 <sub>19.93</sub>	+21 27 30.9 52.5	8.09 634 <sub>398</sub>	1 4.7
31	7 36 49.68 <sub>20.08</sub>	21 28 23.4 52.7	8.09 236 <sub>367</sub>	1 0.4
32	7 36 29.60	+21 29 16.1	8.08 869	0 56.2



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	$\Delta$	
1945				
Jan. —3	<sup>h</sup> <sup>m</sup> <sup>s</sup> 4 33 56.97 36.66	<sup>°</sup> <sup>'</sup> <sup>"</sup> +21 56 18.4 12.8	18.40 004 3 192	<sup>h</sup> <sup>m</sup> 22 4.8
+1	33 20.31 34.59	55 5.6 9.1	43 196 3 624	21 48.5
5	32 45.72 32.28	53 56.5 4.7	46 820 4 033	21 32.2
9	32 13.44 29.70	52 51.8 59.5	50 853 4 427	21 16.0
13	31 43.74 26.94	51 52.3 54.2	55 280 4 795	20 59.7
17	4 31 16.80 23.96	+21 50 58.1 48.1	18.60 075 5 131	20 43.6
21	30 52.84 20.84	50 10.0 41.5	65 206 5 437	20 27.5
25	30 32.00 17.59	49 28.5 34.7	70 643 5 715	20 11.4
29	30 14.41 14.22	48 53.8 27.9	76 358 5 964	19 55.4
Febr. 2	30 0.19 10.78	48 25.9 20.3	82 322 6 180	19 39.4
6	4 29 49.41 7.24	+21 48 5.6 12.8	18.88 502 6 367	19 23.6
10	29 42.17 3.63	47 52.8 5.0	18.94 869 6 520	19 7.7
14	29 38.54 0.02	47 47.8 2.8	19.01 389 6 637	18 51.9
18	29 38.56 3.67	47 50.6 10.6	08 026 6 718	18 36.2
22	29 42.23 7.30	48 1.2 18.4	14 744 6 767	18 20.6
26	4 29 49.53 10.89	+21 48 19.6 26.1	19.21 511 6 783	18 5.0
März 2	30 0.42 14.45	48 45.7 33.5	28 294 6 771	17 49.4
6	30 14.87 17.95	49 19.2 40.8	35 065 6 724	17 34.0
10	30 32.82 21.39	50 0.0 48.2	41 789 6 647	17 18.5
14	30 54.21 24.76	50 48.2 55.0	48 436 6 537	17 3.2
18	4 31 18.97 28.01	+21 51 43.2 1.7	19.54 973 6 396	16 47.9
22	31 46.98 31.15	52 44.9 7.7	61 369 6 229	16 32.6
26	32 18.13 34.13	53 52.6 13.5	67 598 6 032	16 17.4
30	32 52.26 37.00	55 6.1 19.1	73 630 5 815	16 2.3
April 3	33 29.26 39.74	56 25.2 24.0	79 445 5 571	15 47.2
7	4 34 9.00 42.35	+21 57 49.2 28.8	19.85 016 5 306	15 32.1
11	34 51.35 44.81	+21 59 18.0 32.8	90 322 5 016	15 17.1
15	35 36.16 47.09	+22 0 50.8 36.7	19.95 338 4 705	15 2.1
19	36 23.25 49.19	2 27.5 39.9	20.00 043 4 374	14 47.2
23	37 12.44 51.13	4 7.4 42.7	04 417 4 030	14 32.3
27	4 38 3.57 52.89	+22 5 50.1 45.0	20.08 447 3 672	14 17.4
Mai 1	38 56.46 54.50	7 35.1 47.0	12 119 3 302	14 2.5
5	39 50.96 55.93	9 22.1 48.5	15 421 2 915	13 47.7
9	40 46.89 57.19	11 10.6 49.6	18 336 2 518	13 32.9
13	41 44.08 58.25	13 0.2 50.3	20 854 2 110	13 18.2
17	4 42 42.33 59.11	+22 14 50.5 50.5	20.22 964 1 696	13 3.4
21	43 41.44 59.78	16 41.0 50.3	24 660 1 278	12 48.6
25	44 41.22 60.29	18 31.3 49.7	25 938 856	12 33.9
29	45 41.51 60.62	20 21.0 48.9	26 794 432	12 19.2
Juni 2	46 42.13 60.76	22 9.9 47.8	27 226 8	12 4.5
6	4 47 42.89 60.74	+22 23 57.7 46.1	20.27 234 421	11 49.7
10	48 43.63 60.50	25 43.8 44.4	26 813 849	11 35.0
14	49 44.13 60.07	27 28.2 42.2	25 964 1 269	11 20.3
18	50 44.20 59.46	29 10.4 39.8	24 695 1 686	11 5.6
22	51 43.66 58.67	30 50.2 37.1	23 009 2 093	10 50.8
26	52 42.33 57.72	32 27.3 34.1	20 916 2 493	10 36.1
30	4 53 40.05	+22 34 1.4	20.18 423	10 21.3



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich			
	Scheinbare Rektaszension	Scheinbare Deklination	Δ				
1945							
Juni	30	4 <sup>h</sup> 53 <sup>m</sup> 40. <sup>s</sup> 05	56. <sup>s</sup> 60	+22 34 1.4	20.18 423	2 885	10 21.3
Juli	4	54 36.65	55.29	35 32.6	15 538	3 266	10 6.5
	8	55 31.94	53.81	37 0.6	12 272	3 641	9 51.7
	12	56 25.75	52.12	38 25.1	08 631	3 996	9 36.8
	16	57 17.87	50.28	39 45.8	04 635	4 338	9 22.0
	20	4 58 8.15	48.27	+22 41 2.9	20.00 297	4 658	9 7.1
	24	58 56.42	46.14	42 16.1	19.95 639	4 964	8 52.2
	28	4 59 42.56	43.84	43 25.2	90 675	5 250	8 37.2
Aug.	1	5 0 26.40	41.39	44 30.2	85 425	5 521	8 22.2
	5	1 7.79	38.77	45 30.9	79 904	5 769	8 7.1
	9	5 1 46.56	36.00	+22 46 27.5	19.74 135	5 992	7 52.1
	13	2 22.56	33.11	47 19.7	68 143	6 190	7 36.9
	17	2 55.67	30.11	48 7.6	61 953	6 361	7 21.7
	21	3 25.78	27.00	48 50.7	55 592	6 508	7 6.5
	25	3 52.78	23.79	49 29.4	49 084	6 630	6 51.2
	29	5 4 16.57	20.48	+22 50 3.6	19.42 454	6 722	6 35.9
Sept.	2	4 37.05	17.08	50 33.1	35 732	6 790	6 20.5
	6	4 54.13	13.58	50 58.1	28 942	6 824	6 5.0
	10	5 7.71	10.06	51 18.4	22 118	6 828	5 49.5
	14	5 17.77	6.49	51 34.1	15 290	6 796	5 34.0
	18	5 5 24.26	2.91	+22 51 44.9	19.08 494	6 736	5 18.4
	22	5 27.17	0.66	51 51.0	19.01 758	6 649	5 2.7
	26	5 26.51	4.24	51 52.8	18.95 109	6 528	4 46.9
	30	5 22.27	7.81	51 49.9	88 581	6 378	4 31.1
Okt.	4	5 14.46	11.32	51 42.0	82 203	6 193	4 15.3
	8	5 5 3.14	14.77	+22 51 29.6	18.76 010	5 974	3 59.4
	12	4 48.37	18.11	51 12.7	70 036	5 729	3 43.4
	16	4 30.26	21.31	50 51.2	64 307	5 452	3 27.3
	20	4 8.95	24.39	50 25.3	58 855	5 147	3 11.3
	24	3 44.56	27.32	49 55.3	53 708	4 819	2 55.1
	28	5 3 17.24	30.09	+22 49 20.9	18.48 889	4 463	2 39.0
Nov.	1	2 47.15	32.67	48 42.6	44 426	4 078	2 22.7
	5	2 14.48	35.01	48 0.1	40 348	3 673	2 6.5
	9	1 39.47	37.12	47 14.0	36 675	3 245	1 50.1
	13	1 2.35	38.93	46 24.5	33 430	2 797	1 33.8
	17	5 0 23.42	40.50	+22 45 32.0	18.30 633	2 340	1 17.4
	21	4 59 42.92	41.79	44 36.4	28 293	1 867	1 1.0
	25	59 1.13	42.82	43 38.3	26 426	1 382	0 44.6
	29	58 18.31	43.52	42 38.3	25 044	888	0 28.2
Dez.	3	57 34.79	43.90	41 36.2	24 156	386	0 11.7
	7	4 56 50.89	43.96	+22 40 32.8	18.23 770	119	23 51.1
	11	56 6.93	43.70	39 28.5	23 889	622	23 34.7
	15	55 23.23	43.12	38 23.9	24 511	1 117	23 18.2
	19	54 40.11	42.23	37 19.4	25 628	1 608	23 1.8
	23	53 57.88	41.07	36 15.6	27 236	2 091	22 45.4
	27	53 16.81	39.62	35 12.9	29 327	2 565	22 29.0
	31	4 52 37.19		+22 34 11.9	18.31 892		22 12.6



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich		
	Scheinbare Rektaszension	Scheinbare Deklination	Δ			
1945						
Jan.	-3	<sup>h</sup> 12 <sup>m</sup> 25 <sup>s</sup> 45.96 4.77	-1° 14' 2.1" <sup>s</sup> 16.2	30.25 995 6 938	<sup>h</sup> 5 <sup>m</sup> 59.4	
	+1	25 50.73 2.74	14 18.3 0 3.2	19 057 6 907	5 43.8	
	5	25 53.47 0.72	14 21.5 0 9.9	12 150 6 843	5 28.1	
	9	25 54.19 1.30	14 11.6 0 22.8	30.05 307 6 742	5 12.4	
	13	25 52.89 3.32	13 48.8 0 35.6	29.98 565 6 609	4 56.6	
	17	12 25 49.57 5.29	-1 13 13.2 0 48.1	29.91 956 6 438	4 40.9	
	21	25 44.28 7.21	12 25.1 1 0.3	85 518 6 237	4 25.0	
	25	25 37.07 9.08	11 24.8 1 11.9	79 281 6 003	4 9.2	
	29	25 27.99 10.88	10 12.9 1 23.1	73 278 5 741	3 53.3	
	Febr.	2	25 17.11 12.60	8 49.8 1 33.6	67 537 5 451	3 37.4
6		12 25 4.51 14.25	-1 7 16.2 1 43.8	29.62 086 5 131	3 21.5	
10		24 50.26 15.81	5 32.4 1 53.2	56 955 4 788	3 5.5	
14		24 34.45 17.25	3 39.2 2 1.9	52 167 4 413	2 49.5	
18		24 17.20 18.58	-1 1 37.3 2 9.7	47 754 4 019	2 33.5	
22		23 58.62 19.76	-0 59 27.6 2 16.7	43 735 3 608	2 17.5	
26		12 23 38.86 20.82	-0 57 10.9 2 22.7	29.40 127 3 177	2 1.4	
März		2	23 18.04 21.77	54 48.2 2 27.9	36 950 2 735	1 45.3
		6	22 56.27 22.56	52 20.3 2 32.2	34 215 2 278	1 29.2
		10	22 33.71 23.22	49 48.1 2 35.7	31 937 1 807	1 13.1
	14	22 10.49 23.71	47 12.4 2 37.9	30 130 1 328	0 57.1	
	18	12 21 46.78 24.05	-0 44 34.5 2 39.2	29.28 802 842	0 40.9	
	22	21 22.73 24.23	41 55.3 2 39.4	27 960 358	0 24.8	
	26	20 58.50 24.26	39 15.9 2 38.6	27 602 126	0 8.7	
	April	30	20 34.24 24.14	36 37.3 2 36.9	27 728 607	23 48.5
		3	20 10.10 23.87	34 0.4 2 34.3	28 335 1 085	23 32.4
		7	12 19 46.23 23.47	-0 31 26.1 2 30.6	29.29 420 1 556	23 16.2
11		19 22.76 22.90	28 55.5 2 26.3	30 976 2 022	23 0.1	
15		18 59.86 22.19	26 29.2 2 20.8	32 998 2 474	22 44.0	
19		18 37.67 21.34	24 8.4 2 14.4	35 472 2 909	22 27.9	
23		18 16.33 20.37	21 54.0 2 7.2	38 381 3 326	22 11.9	
27		12 17 55.96 19.28	-0 19 46.8 1 59.5	29.41 707 3 725	21 55.8	
Mai		1	17 36.68 18.08	17 47.3 1 51.0	45 432 4 108	21 39.8
		5	17 18.60 16.78	15 56.3 1 41.8	49 540 4 470	21 23.7
	9	17 1.82 15.37	14 14.5 1 32.0	54 010 4 812	21 7.7	
	13	16 46.45 13.86	12 42.5 1 21.8	58 822 5 126	20 51.8	
	17	12 16 32.59 12.27	-0 11 20.7 1 10.8	29.63 948 5 412	20 35.8	
	21	16 20.32 10.62	10 9.9 0 59.7	69 360 5 673	20 19.9	
	25	16 9.70 8.91	9 10.2 0 48.1	75 033 5 904	20 4.0	
	29	16 0.79 7.15	8 22.1 0 36.4	80 937 6 111	19 48.1	
	Juni	2	15 53.64 5.35	7 45.7 0 24.4	87 048 6 289	19 32.3
		6	12 15 48.29 3.51	-0 7 21.3 0 12.1	29.93 337 6 440	19 16.5
10		15 44.78 1.61	7 9.2 0 0.2	29.99 777 6 558	19 0.7	
14		15 43.17 0.27	7 9.4 0 12.7	30.06 335 6 644	18 44.9	
18		15 43.44 2.18	7 22.1 0 25.0	12 979 6 698	18 29.2	
22		15 45.62 4.06	7 47.1 0 37.3	19 677 6 725	18 13.5	
26		15 49.68 5.93	8 24.4 0 49.4	26 402 6 724	17 57.9	
30		12 15 55.61	-0 9 13.8	30.33 126	17 42.3	



Tag	0 <sup>h</sup> Welt-Zeit			Obere Kulmination in Greenwich
	Scheinbare Rektaszension	Scheinbare Deklination	Δ	
1945				
Juni 30	12 <sup>h</sup> 15 <sup>m</sup> 55.61 <sup>s</sup> 7.81 <sup>"</sup>	— 0° 9' 13.8" 1.4 <sup>"</sup>	30.33 126 6 692	17 <sup>h</sup> 42.3 <sup>m</sup>
Juli 4	16 3.42 9.66	10 15.2 1 13.4	39 818 6 633	17 26.7
8	16 13.08 11.48	11 28.6 1 24.9	46 451 6 543	17 11.1
12	16 24.56 13.28	12 53.5 1 36.3	52 994 6 421	16 55.6
16	16 37.84 15.00	14 29.8 1 47.1	59 415 6 272	16 40.1
20	12 16 52.84 16.68	— 0 16 16.9 1 57.8	30.65 687 6 098	16 24.6
24	17 9.52 18.30	18 14.7 2 7.8	71 785 5 898	16 9.2
28	17 27.82 19.86	20 22.5 2 17.4	77 683 5 672	15 53.7
Aug. 1	17 47.68 21.35	22 39.9 2 26.6	83 355 5 427	15 38.3
5	18 9.03 22.79	25 6.5 2 35.4	88 782 5 154	15 23.0
9	12 18 31.82 24.15	— 0 27 41.9 2 43.6	30.93 936 4 855	15 7.6
13	18 55.97 25.40	30 25.5 2 51.1	30.98 791 4 537	14 52.3
17	19 21.37 26.57	33 16.6 2 58.2	31.03 328 4 202	14 37.0
21	19 47.94 27.65	36 14.8 3 4.4	07 530 3 847	14 21.7
25	20 15.59 28.63	39 19.2 3 10.0	11 377 3 477	14 6.4
29	12 20 44.22 29.54	— 0 42 29.2 3 15.1	31.14 854 3 094	13 51.2
Sept. 2	21 13.76 30.34	45 44.3 3 19.5	17 948 2 692	13 36.0
6	21 44.10 31.03	49 3.8 3 23.4	20 640 2 279	13 20.7
10	22 15.13 31.61	52 27.2 3 26.3	22 919 1 850	13 5.5
14	22 46.74 32.09	55 53.5 3 28.4	24 769 1 418	12 50.3
18	12 23 18.83 32.43	— 0 59 21.9 3 29.9	31.26 187 980	12 35.1
22	23 51.26 32.69	— 1 2 51.8 3 30.6	27 167 535	12 19.9
26	24 23.95 32.82	6 22.4 3 30.7	27 702 89	12 4.8
30	24 56.77 32.86	9 53.1 3 30.0	27 791 365	11 49.6
Okt. 4	25 29.63 32.76	13 23.1 3 28.5	27 426 818	11 34.4
8	12 26 2.39 32.56	— 1 16 51.6 3 26.5	31.26 608 1 269	11 19.2
12	26 34.95 32.21	20 18.1 3 23.3	25 339 1 716	11 4.0
16	27 7.16 31.76	23 41.4 3 19.4	23 623 2 152	10 48.8
20	27 38.92 31.19	27 0.8 3 14.9	21 471 2 583	10 33.6
24	28 10.11 30.52	30 15.7 3 9.9	18 888 3 003	10 18.4
28	12 28 40.63 29.73	— 1 33 25.6 3 3.9	31.15 885 3 415	10 3.2
Nov. 1	29 10.36 28.83	36 29.5 2 57.4	12 470 3 813	9 48.0
5	29 39.19 27.81	39 26.9 2 49.9	08 657 4 196	9 32.7
9	30 7.00 26.67	42 16.8 2 41.9	31.04 461 4 559	9 17.4
13	30 33.67 25.44	44 58.7 2 33.2	30.99 902 4 901	9 2.1
17	12 30 59.11 24.09	— 1 47 31.9 2 24.1	30.95 001 5 222	8 46.8
21	31 23.20 22.68	49 56.0 2 14.2	89 779 5 519	8 31.5
25	31 45.88 21.18	52 10.2 2 3.9	84 260 5 796	8 16.2
29	32 7.06 19.57	54 14.1 1 53.2	78 464 6 045	8 0.8
Dez. 3	32 26.63 17.88	56 7.3 1 41.7	72 419 6 268	7 45.4
7	12 32 44.51 16.10	— 1 57 49.0 1 30.0	30.66 151 6 461	7 29.9
11	33 0.61 14.29	— 1 59 19.0 1 17.9	59 690 6 619	7 14.5
15	33 14.90 12.40	— 2 0 36.9 1 5.4	53 071 6 747	6 59.0
19	33 27.30 10.48	1 42.3 0 52.9	46 324 6 844	6 43.5
23	33 37.78 8.51	2 35.2 0 40.0	39 480 6 911	6 27.9
27	33 46.29 6.52	3 15.2 0 27.1	32 569 6 944	6 12.3
31	12 33 52.81	— 2 3 42.3	30.25 625	5 56.7



Tag	0 <sup>h</sup> Welt-Zeit						Obere Kul- mination in Greenwich	
	Rektaszension 1950.0	Fixstern- aberra- tion	Deklination 1950.0	Fixstern- aberra- tion	$\Delta$	Licht- zeit		
1945								
Jan. —3	8 <sup>h</sup> 56 <sup>m</sup> 14.84 <sup>s</sup> 18.35 <sup>"</sup>	+1.17	+23° 31' 59.9" 113.3	—5.9	36.80 094	3 902	0.2123	2 30
+1	55 56.49 19.40	1.22	33 53.2 114.8	6.0	76 192	3 473	2121	2 14
5	55 37.09 20.31	1.28	35 48.0 115.6	6.0	72 719	3 028	2119	1 58
9	55 16.78 21.12	1.32	37 43.6 115.9	6.0	69 691	2 567	2117	1 42
13	54 55.66 21.78	1.36	39 39.5 115.3	6.0	67 124	2 090	2115	1 26
17	8 54 33.88 22.30	+1.39	+23 41 34.8 114.3	—6.0	36.65 034	1 605	0.2114	1 10
21	54 11.58 22.66	1.41	43 29.1 112.5	5.9	63 429	1 116	2113	0 54
25	53 48.92 22.88	1.43	45 21.6 110.2	5.8	62 313	624	2113	0 38
29	53 26.04 22.97	1.43	47 11.8 107.2	5.6	61 689	132	2112	0 22
Febr. 2	53 3.07 22.92	1.44	48 59.0 103.8	5.5	61 557	359	2112	0 6
6	8 52 40.15 22.72	+1.43	+23 50 42.8 99.8	—5.3	36.61 916	848	0.2112	23 45
10	52 17.43 22.38	1.41	52 22.6 95.2	5.0	62 764	1 332	2113	23 29
14	51 55.05 21.88	1.39	53 57.8 90.3	4.8	64 096	1 805	2114	23 13
18	51 33.17 21.25	1.36	55 28.1 84.7	4.5	65 901	2 265	2115	22 57
22	51 11.92 20.48	1.33	56 52.8 78.8	4.2	68 166	2 708	2116	22 41
26	8 50 51.44 19.59	+1.28	+23 58 11.6 72.6	—3.9	36.70 874	3 134	0.2117	22 25
März 2	50 31.85 18.60	1.23	+23 59 24.2 66.2	3.5	74 008	3 542	2119	22 9
6	50 13.25 17.49	1.18	+24 0 30.4 59.3	3.2	77 550	3 932	2121	21 53
10	49 55.76 16.27	1.12	1 29.7 52.3	2.8	81 482	4 300	2124	21 37
14	49 39.49 14.93	1.05	2 22.0 45.0	2.4	85 782	4 643	2126	21 21
18	8 49 24.56 13.51	+0.98	+24 3 7.0 37.6	—2.1	36.90 425	4 958	0.2129	21 5
22	49 11.05 12.02	0.90	3 44.6 30.1	1.7	36.95 383	5 244	2132	20 49
26	48 59.03 10.46	0.82	4 14.7 22.5	1.3	37.00 627	5 501	2135	20 33
30	48 48.57 8.84	0.74	4 37.2 15.0	0.9	06 128	5 731	2138	20 17
April 3	48 39.73 7.17	0.65	4 52.2 7.4	0.5	11 859	5 934	2141	20 1
7	8 48 32.56 5.46	+0.56	+24 4 59.6 0.2	—0.1	37.17 793	6 105	0.2145	19 45
11	48 27.10 3.69	0.47	4 59.4 7.7	+0.4	23 898	6 246	2148	19 29
15	48 23.41 1.90	0.37	4 51.7 15.0	0.8	30 144	6 351	2152	19 13
19	48 21.51 0.11	0.28	4 36.7 22.2	1.2	36 495	6 425	2155	18 58
23	48 21.40 1.68	0.18	4 14.5 29.3	1.5	42 920	6 466	2159	18 42
27	8 48 23.08 3.47	+0.08	+24 3 45.2 36.1	+1.9	37.49 386	6 479	0.2163	18 26
Mai 1	48 26.55 5.25	—0.02	3 9.1 42.7	2.3	55 865	6 461	2166	18 11
5	48 31.80 7.01	0.11	2 26.4 49.1	2.6	62 326	6 415	2170	17 56
9	48 38.81 8.76	0.21	1 37.3 55.2	3.0	68 741	6 336	2174	17 40
13	48 47.57 10.48	0.30	+24 0 42.1 61.1	3.3	75 077	6 227	2178	17 25
17	8 48 58.05 12.15	—0.40	+23 59 41.0 66.7	+3.6	37.81 304	6 087	0.2181	17 9
21	49 10.20 13.76	0.49	58 34.3 71.8	3.9	87 391	5 920	2185	16 54
25	49 23.96 15.31	0.58	57 22.5 76.8	4.2	93 311	5 728	2188	16 38
29	49 39.27 16.82	0.66	56 5.7 81.3	4.5	37.99 039	5 512	2191	16 23
Juni 2	49 56.09 18.27	0.74	54 44.4 85.5	4.7	38.04 551	5 272	2195	16 7
6	8 50 14.36 19.65	—0.82	+23 53 18.9 89.4	+4.9	38.09 823	5 007	0.2198	15 52
10	50 34.01 20.96	0.90	51 49.5 92.8	5.1	14 830	4 718	2201	15 36
14	50 54.97 22.18	0.97	50 16.7 96.0	5.3	19 548	4 406	2203	15 20
18	51 17.15 23.32	1.04	48 40.7 98.6	5.5	23 954	4 077	2206	15 5
22	51 40.47 24.37	1.10	47 2.1 100.9	5.6	28 031	3 731	2208	14 49
26	8 52 4.84 25.33	—1.15	+23 45 21.2 102.7	+5.7	38.31 762	3 370	0.2210	14 34
30	52 30.17 26.22	1.21	43 38.5 104.2	5.8	35 132	2 994	2212	14 19
Juli 4	8 52 56.39	—1.25	+23 41 54.3	+5.9	38.38 126		0.2214	14 4



Tag	0 <sup>h</sup> Welt-Zeit						Obers Kul- mination in Greenwich
	Rektaszension 1950.0	Fixstern- aberra- tion	Deklination 1950.0	Fixstern- aberra- tion	Δ	Licht- zeit	
1945							
Juni 30	8 <sup>h</sup> 52 <sup>m</sup> 30.17 <sup>s</sup> 26.22	-1.21	+23 43 38.5 104.2	+5.8	38.35 132 2 994	0.2212	14 19
Juli 4	52 56.39 27.02	1.25	41 54.3 105.4	5.9	38 126 2 603	2214	14 4
8	53 23.41 27.71	1.30	40 8.9 106.0	6.0	40 729 2 197	2215	13 48
12	53 51.12 28.30	1.33	38 22.9 106.2	6.0	42 926 1 781	2217	13 33
16	54 19.42 28.79	1.36	36 36.7 106.0	6.0	44 707 1 357	2218	13 18
20	8 54 48.21 29.18	-1.39	+23 34 50.7 105.3	+6.0	38.46 064 928	0.2219	13 3
24	55 17.39 29.47	1.41	33 5.4 104.3	5.9	46 992 494	2219	12 47
28	55 46.86 29.66	1.42	31 21.1 102.8	5.8	47 486 57	2219	12 32
Aug. 1	56 16.52 29.75	1.43	29 38.3 100.8	5.7	47 543 384	2219	12 17
5	56 46.27 29.74	1.43	27 57.5 98.6	5.6	47 159 827	2219	12 2
9	8 57 16.01 29.61	-1.43	+23 26 18.9 95.8	+5.5	38.46 332 1 270	0.2219	11 46
13	57 45.62 29.38	1.42	24 43.1 92.6	5.3	45 062 1 707	2218	11 31
17	58 15.00 29.04	1.40	23 10.5 89.0	5.1	43 355 2 138	2217	11 16
21	58 44.04 28.60	1.38	21 41.5 85.0	4.9	41 217 2 560	2216	11 1
25	59 12.64 28.06	1.35	20 16.5 80.6	4.7	38 657 2 975	2214	10 45
29	8 59 40.70 27.44	-1.31	+23 18 55.9 75.8	+4.4	38.35 682 3 382	0.2213	10 30
Sept. 2	9 0 8.14 26.70	1.27	17 40.1 70.7	4.1	32 300 3 778	2211	10 15
6	0 34.84 25.86	1.23	16 29.4 65.2	3.8	28 522 4 160	2208	10 0
10	1 0.70 24.92	1.18	15 24.2 59.3	3.5	24 362 4 526	2206	9 44
14	1 25.62 23.88	1.12	14 24.9 53.1	3.2	19 836 4 872	2203	9 29
18	9 1 49.50 22.76	-1.06	+23 13 31.8 46.6	+2.8	38.14 964 5 197	0.2201	9 14
22	2 12.26 21.57	1.00	12 45.2 39.9	2.4	09 767 5 504	2198	8 59
26	2 33.83 20.28	0.93	12 5.3 32.9	2.1	38.04 263 5 791	2194	8 43
30	2 54.11 18.92	0.85	11 32.4 25.5	1.7	37.98 472 6 056	2191	8 28
Okt. 4	3 13.03 17.46	0.77	11 6.9 18.1	1.2	92 416 6 295	2188	8 13
8	9 3 30.49 15.95	-0.69	+23 10 48.8 10.4	+0.8	37.86 121 6 506	0.2184	7 57
12	3 46.44 14.35	0.60	10 38.4 2.7	+0.4	79 615 6 687	2180	7 42
16	4 0.79 12.72	0.52	10 35.7 5.3	0.0	72 928 6 840	2176	7 26
20	4 13.51 11.03	0.42	10 41.0 13.2	-0.5	66 088 6 962	2172	7 11
24	4 24.54 9.31	0.33	10 54.2 21.2	0.9	59 126 7 056	2168	6 55
28	9 4 33.85 7.54	-0.23	+23 11 15.4 29.1	-1.3	37.52 070 7 121	0.2164	6 40
Nov. 1	4 41.39 5.72	0.14	11 44.5 37.0	1.8	44 949 7 151	2160	6 24
5	4 47.11 3.89	-0.04	12 21.5 44.9	2.2	37 798 7 148	2156	6 9
9	4 51.00 2.05	+0.06	13 6.4 52.6	2.6	30 650 7 109	2152	5 53
13	4 53.05 0.20	0.16	13 59.0 60.0	3.0	23 541 7 036	2148	5 37
17	9 4 53.25 1.63	+0.26	+23 14 59.0 67.1	-3.4	37.16 505 6 930	0.2144	5 21
21	4 51.62 3.44	0.36	16 6.1 74.1	3.7	09 575 6 794	2140	5 5
25	4 48.18 5.24	0.46	17 20.2 80.7	4.1	37.02 781 6 627	2136	4 50
29	4 42.94 7.02	0.55	18 40.9 86.9	4.4	36.96 154 6 426	2132	4 34
Dez. 3	4 35.92 8.74	0.64	20 7.8 92.7	4.7	89 728 6 190	2128	4 18
7	9 4 27.18 10.41	+0.73	+23 21 40.5 98.1	-5.0	36.83 538 5 924	0.2125	4 2
11	4 16.77 12.01	0.82	23 18.6 102.9	5.3	77 614 5 627	2121	3 46
15	4 4.76 13.52	0.90	25 1.5 107.1	5.5	71 987 5 304	2118	3 30
19	3 51.24 14.95	0.98	26 48.6 110.8	5.7	66 683 4 957	2115	3 14
23	3 36.29 16.30	1.05	28 39.4 114.0	5.9	61 726 4 586	2112	2 58
27	9 3 19.99 17.56	+1.12	+23 30 33.4 116.4	-6.0	36.57 140 4 190	0.2110	2 42
31	3 2.43 18.69	1.18	32 29.8 118.4	6.1	52 950 3 773	2107	2 26
35	9 2 43.74	+1.24	+23 34 28.2	-6.2	36.40 177	0.2105	2 10



0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1950											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Jan.	0	+0.158 569	+17 229	- 49	0	-0.890 272	+ 2 736	+276	+1	-0.386 112	+1 187	+119	-4
	1	0.175 798	17 175	54	+1	0.887 536	3 010	274	-4	0.384 925	1 306	119	-2
	2	0.192 973	17 117	58	+4	0.884 526	3 285	275	+3	0.383 619	1 425	119	+1
	3	0.210 090	17 052	65	-1	0.881 241	3 559	274	+5	0.382 194	1 544	119	+4
	4	0.227 142	16 983	69	+3	0.877 682	3 832	273	+5	0.380 650	1 663	119	+4
	5	0.244 125	16 909	74	+4	0.873 850	4 104	272	+4	0.378 987	1 780	117	-4
	6	+0.261 034	+16 829	- 80	+1	-0.869 746	+ 4 375	+271	+4	-0.377 207	+1 897	+117	-3
	7	0.277 863	16 744	85	-1	0.865 371	4 645	270	+3	0.375 310	2 014	117	0
	8	0.294 607	16 653	91	-2	0.860 726	4 913	268	0	0.373 296	2 131	117	+4
	9	0.311 260	16 558	95	+1	0.855 813	5 181	268	+3	0.371 165	2 246	115	0
	10	0.327 818	16 456	102	-3	0.850 632	5 447	266	+1	0.368 919	2 362	116	+5
	11	0.344 274	16 350	106	+1	0.845 185	5 710	263	-4	0.366 557	2 476	114	+1
	12	+0.360 624	+16 238	-112	+1	-0.839 475	+ 5 974	+264	+5	-0.364 081	+2 591	+115	+4
	13	0.376 862	16 121	117	-1	0.833 501	6 234	260	+2	0.361 490	2 703	112	-4
	14	0.392 983	15 997	124	-5	0.827 267	6 493	259	+5	0.358 787	2 815	112	-4
	15	0.408 980	15 870	127	+1	0.820 774	6 750	257	+5	0.355 972	2 927	112	-1
	16	0.424 850	15 736	134	-4	0.814 024	7 004	254	+1	0.353 045	3 036	109	-4
17	0.440 586	15 597	139	-2	0.807 020	7 255	251	-4	0.350 009	3 146	110	+4	
18	+0.456 183	+15 455	-142	+4	-0.799 765	+ 7 503	+248	-3	-0.346 863	+3 254	+108	+5	
19	0.471 638	15 306	149	-4	0.792 262	7 750	247	+3	0.343 609	3 361	107	+5	
20	0.486 944	15 153	153	-4	0.784 512	7 993	243	-1	0.340 248	3 467	106	+4	
21	0.502 097	14 995	158	-4	0.776 519	8 233	240	-2	0.336 781	3 571	104	0	
22	0.517 092	14 834	161	+2	0.768 286	8 470	237	-3	0.333 210	3 674	103	-2	
23	0.531 926	14 668	166	0	0.759 816	8 705	235	+1	0.329 536	3 776	102	-2	
24	+0.546 594	+14 498	-170	+1	-0.751 111	+ 8 936	+231	-2	-0.325 760	+3 876	+100	-4	
25	0.561 092	14 324	174	-1	0.742 175	9 165	229	0	0.321 884	3 975	99	-2	
26	0.575 416	14 145	179	-4	0.733 010	9 390	225	-2	0.317 909	4 074	99	+3	
27	0.589 561	13 964	181	+2	0.723 620	9 614	224	+3	0.313 835	4 170	96	-4	
28	0.603 525	13 777	187	-3	0.714 006	9 833	219	-3	0.309 665	4 265	95	-3	
29	0.617 302	13 588	189	+2	0.704 173	10 050	217	0	0.305 400	4 360	95	0	
30	+0.630 890	+13 393	-195	-4	-0.694 123	+10 265	+215	+4	-0.301 040	+4 452	+ 92	-4	
31	0.644 283	13 196	197	+2	0.683 858	10 476	211	+2	0.296 588	4 544	92	-1	
Febr.	1	0.657 479	12 993	203	-3	0.673 382	10 684	208	0	0.292 044	4 633	89	-4
	2	0.670 472	12 789	204	+4	0.662 698	10 889	205	0	0.287 411	4 723	90	+4
	3	0.683 261	12 578	211	-5	0.651 809	11 091	202	+1	0.282 688	4 810	87	+1
	4	0.695 839	12 364	214	-3	0.640 718	11 289	198	-1	0.277 878	4 896	86	+1
	5	+0.708 203	+12 148	-216	+4	-0.629 429	+11 485	+196	+5	-0.272 982	+4 981	+ 85	+2
	6	0.720 351	11 926	222	-4	0.617 944	11 677	192	+1	0.268 001	5 063	82	-1
	7	0.732 277	11 700	226	-5	0.606 267	11 864	187	-3	0.262 938	5 146	83	+4
	8	0.743 977	11 472	228	+3	0.594 403	12 050	186	+5	0.257 792	5 225	79	-3
	9	0.755 449	+11 239	233	+1	0.582 353	+12 230	180	0	0.252 567	+5 304	+ 79	-1
	10	+0.766 688	+11 013	-236	+3	-0.570 123	+12 413	+178	+4	-0.247 263	+5 383	+ 76	-4

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup>		Mittleres Äquinoktium 1950.0										
Welt-Zeit	X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945												
Febr. 10	+0.766 688	+11 003	-236	+3	-0.570 123	+12 408	+178	+4	-0.247 263	+5 380	+76	-4
11	0.777 691	10 763	240	0	0.557 715	12 580	172	-2	0.241 883	5 455	75	0
12	0.788 454	10 518	245	-5	0.545 135	12 749	169	+3	0.236 428	5 529	74	+5
13	0.798 972	10 272	246	+4	0.532 386	12 914	165	+4	0.230 899	5 600	71	+3
14	0.809 244	10 022	250	+1	0.519 472	13 074	160	0	0.225 299	5 670	70	+4
15	0.819 266	9 768	254	-5	0.506 398	13 229	155	-2	0.219 629	5 737	67	+1
16	+0.829 034	+ 9 512	-256	-3	-0.493 169	+13 380	+151	-1	-0.213 892	+5 803	+66	+4
17	0.838 546	9 253	259	-3	0.479 789	13 526	146	-2	0.208 089	5 867	64	+3
18	0.847 799	8 992	261	+1	0.466 263	13 668	142	+1	0.202 222	5 928	61	-1
19	0.856 791	8 729	263	+4	0.452 595	13 805	137	0	0.196 294	5 988	60	0
20	0.865 520	8 464	265	+4	0.438 790	13 938	133	+3	0.190 306	6 045	57	-2
21	0.873 984	8 196	268	0	0.424 852	14 067	129	+3	0.184 261	6 102	57	+3
22	+0.882 180	+ 7 926	-270	-1	-0.410 785	+14 190	+123	-2	-0.178 159	+6 155	+53	-4
23	0.890 106	7 656	270	+4	0.396 595	14 310	120	+2	0.172 004	6 207	52	-3
24	0.897 762	7 382	274	-4	0.382 285	14 426	116	+4	0.165 797	6 257	50	-3
25	0.905 144	7 107	275	-4	0.367 859	14 537	111	-1	0.159 540	6 305	48	-3
26	0.912 251	6 830	277	-3	0.353 322	14 643	106	-2	0.153 235	6 351	46	0
27	0.919 081	6 552	278	-1	0.338 679	14 747	104	+4	0.146 884	6 396	45	+5
28	+0.925 633	+ 6 271	-281	-4	-0.323 932	+14 845	+ 98	-1	-0.140 488	+6 439	+43	+5
März 1	0.931 904	5 990	281	+3	0.309 087	14 939	94	-2	0.134 049	6 479	40	-1
2	0.937 894	5 706	284	0	0.294 148	15 028	89	-4	0.127 570	6 518	39	0
3	0.943 600	5 421	285	0	0.279 120	15 114	86	+3	0.121 052	6 555	37	0
4	0.949 021	5 134	287	-2	0.264 006	15 195	81	+4	0.114 497	6 589	34	-3
5	0.954 155	4 846	288	0	0.248 811	15 272	77	+3	0.107 908	6 623	34	+5
6	+0.959 001	+ 4 556	-290	-3	-0.233 539	+15 343	+ 71	0	-0.101 285	+6 654	+31	+4
7	0.963 557	4 265	291	-2	0.218 196	15 411	68	+5	0.094 631	6 684	30	+4
8	0.967 822	3 972	293	-4	0.202 785	15 474	63	+5	0.087 947	6 710	26	-4
9	0.971 794	3 678	294	-1	0.187 311	15 532	58	+4	0.081 237	6 735	25	-1
10	0.975 472	3 383	295	+2	0.171 779	15 586	54	+3	0.074 502	6 759	24	+5
11	0.978 855	3 087	296	+2	0.156 193	15 633	47	-4	0.067 743	6 780	21	+1
12	+0.981 942	+ 2 789	-298	-3	-0.140 560	+15 677	+ 44	+3	-0.060 963	+6 798	+18	-1
13	0.984 731	2 491	298	-1	0.124 883	15 716	39	+3	0.054 165	6 816	18	+5
14	0.987 222	2 192	299	-1	0.109 167	15 748	32	-3	0.047 349	6 830	14	0
15	0.989 414	1 892	300	-2	0.093 419	15 776	28	-1	0.040 519	6 842	12	-2
16	0.991 306	1 593	299	+2	0.077 643	15 799	23	+2	0.033 677	6 852	10	-1
17	0.992 899	1 294	299	+2	0.061 844	15 816	17	0	0.026 825	6 860	8	0
18	+0.994 193	+ 994	-300	-4	-0.046 028	+15 829	+ 13	+2	-0.019 965	+6 865	+ 5	-3
19	0.995 187	694	300	-5	0.030 199	15 836	7	0	0.013 100	6 869	4	+2
20	0.995 881	397	297	+4	-0.014 363	15 840	+ 4	+5	-0.006 231	6 870	+ 1	0
21	0.996 278	98	299	-2	+0.001 477	15 837	- 3	-3	+0.000 639	6 869	- 1	+1
22	0.996 376	- 199	297	+2	0.017 314	+15 830	7	-3	0.007 508	+6 867	2	+4
23	+0.996 177	-297	+1	+0.033 144	-10	+1	+0.014 375	-6	-3			

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1950.0											
		X			Y			Z					
		$\Delta X^*)$			$\Delta Y^*)$			$\Delta Z^*)$					
1945													
März	23	+0.996 177	- 496	-297	+1	+0.033 144	+15 820	- 10	+1	+0.014 375	+6 861	- 6	-3
	24	0.995 681	792	296	+1	0.048 964	15 803	17	-5	0.021 236	6 855	6	+3
	25	0.994 889	1 088,	296	-1	0.064 767	15 784	19	+1	0.028 091	6 846	9	0
	26	0.993 801	1 382	294	+2	0.080 551	15 759	25	-3	0.034 937	6 835	11	-3
	27	0.992 419	1 677	295	-4	0.096 310	15 730	29	-3	0.041 772	6 822	13	-2
	28	0.990 742	1 970	293	+2	0.112 040	15 697	33	-3	0.048 594	6 808	14	+1
	29	+0.988 772	- 2 262	-292	+4	+0.127 737	+15 659	- 38	-5	+0.055 402	+6 791	-17	0
	30	0.986 510	2 554	292	+2	0.143 396	15 617	42	-5	0.062 193	6 773	18	+3
	31	0.983 956	2 844	290	+4	0.159 013	15 570	47	-4	0.068 966	6 753	20	+2
April	1	0.981 112	3 134	290	-3	0.174 583	15 520	50	+2	0.075 719	6 731	22	-1
	2	0.977 978	3 424	290	-5	0.190 103	15 465	55	+2	0.082 450	6 706	25	-5
	3	0.974 554	3 711	287	+3	0.205 568	15 405	60	+1	0.089 156	6 681	25	+2
	4	+0.970 843	- 3 998	-287	+3	+0.220 973	+15 342	- 63	+4	+0.095 837	+6 653	-28	-2
	5	0.966 845	4 283	285	+3	0.236 315	15 273	69	-1	0.102 490	6 623	30	-3
	6	0.962 562	4 569	286	-3	0.251 588	15 200	73	0	0.109 113	6 592	31	0
	7	0.957 993	4 851	282	+3	0.266 788	15 124	76	+4	0.115 705	6 558	34	-2
	8	0.953 142	5 134	283	-3	0.281 912	15 041	83	-5	0.122 263	6 523	35	0
	9	0.948 008	5 415	281	-1	0.296 953	14 954	87	-4	0.128 786	6 485	38	-2
	10	+0.942 593	- 5 693	-278	+2	+0.311 907	+14 863	- 91	-1	+0.135 271	+6 446	-39	+1
	11	0.936 900	5 971	278	-2	0.326 770	14 767	96	0	0.141 717	6 404	42	0
	12	0.930 929	6 245	274	+2	0.341 537	14 666	101	-1	0.148 121	6 361	43	+3
	13	0.924 684	6 519	274	-5	0.356 203	14 561	105	0	0.154 482	6 315	46	+2
	14	0.918 165	6 789	270	-3	0.370 764	14 451	110	-3	0.160 797	6 268	47	+4
	15	0.911 376	7 057	268	-4	0.385 215	14 336	115	-4	0.167 065	6 218	50	+1
16	+0.904 319	- 7 322	-265	-4	+0.399 551	+14 218	-118	+1	+0.173 283	+6 167	-51	+4	
17	0.896 997	7 585	263	-5	0.413 769	14 096	122	+1	0.179 450	6 114	53	+4	
18	0.889 412	7 844	259	0	0.427 865	13 968	128	-5	0.185 564	6 059	55	+3	
19	0.881 568	8 101	257	0	0.441 833	13 839	129	+3	0.191 623	6 003	56	+2	
20	0.873 467	8 354	253	+4	0.455 672	13 705	134	0	0.197 626	5 944	59	-2	
21	0.865 113	8 605	251	-1	0.469 377	13 566	139	-5	0.203 570	5 884	60	0	
22	+0.856 508	- 8 854	-249	-5	+0.482 943	+13 426	-140	+3	+0.209 454	+5 823	-61	+3	
23	0.847 654	9 099	245	0	0.496 369	13 281	145	-1	0.215 277	5 761	62	+3	
24	0.838 555	9 341	242	+2	0.509 650	13 132	149	-2	0.221 038	5 695	66	-5	
25	0.829 214	9 580	239	0	0.522 782	12 982	150	+4	0.226 733	5 630	65	+2	
26	0.819 634	9 818	238	-5	0.535 764	12 825	157	-5	0.232 363	5 563	67	+1	
27	0.809 816	10 050	232	+4	0.548 589	12 668	157	+3	0.237 926	5 493	70	-5	
28	+0.799 766	-10 282	-232	-4	+0.561 257	+12 506	-162	-1	+0.243 419	+5 423	-70	+1	
29	0.789 484	10 509	227	0	0.573 763	12 340	166	-4	0.248 842	5 352	71	+4	
30	0.778 975	10 734	225	-2	0.586 103	12 173	167	+4	0.254 194	5 279	73	+1	
Mai	1	0.768 241	10 957	223	-5	0.598 276	12 001	172	0	0.259 473	5 204	75	-3
	2	0.757 284	11 174	217	+4	0.610 277	11 826	175	-2	0.264 677	+5 128	76	-3
	3	+0.746 110	-217	-217	-5	+0.622 103	+11 648	-178	-2	+0.269 805	-77	-77	-1

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



Welt-Zeit		Mittleres Äquinoktium 1950.0											
		X			$\Delta X^*$	Y			$\Delta Y^*$	Z			$\Delta Z^*$
1945													
Mai	3	+0.746 110	-11 391	-217	-5	+0.622 103	+11 648	-178	-2	+0.269 805	+5 051	-77	-1
	4	0.734 719	11 604	213	-1	0.633 751	11 466	182	-3	0.274 856	4 972	79	-1
	5	0.723 115	11 813	209	+3	0.645 217	11 281	185	0	0.279 828	4 892	80	+2
	6	0.711 302	12 019	206	+2	0.656 498	11 094	187	+4	0.284 720	4 811	81	+4
	7	0.699 283	12 223	204	-4	0.667 592	10 901	193	-4	0.289 531	4 728	83	+1
	8	0.687 060	12 422	199	+2	0.678 493	10 706	195	0	0.294 259	4 643	85	-2
	9	+0.674 638	-12 617	-195	+2	+0.689 199	+10 508	-198	+4	+0.298 902	+4 557	-86	0
	10	0.662 021	12 810	193	-5	0.699 707	10 307	201	+3	0.303 459	4 470	87	+3
	11	0.649 211	12 998	188	-1	0.710 014	10 101	206	-5	0.307 929	4 382	88	+4
	12	0.636 213	13 181	183	+4	0.720 115	9 893	208	-2	0.312 311	4 291	91	-3
	13	0.623 032	13 360	179	+4	0.730 008	9 683	210	+1	0.316 602	4 200	91	-1
	14	0.609 672	13 535	175	-1	0.739 691	9 468	215	-4	0.320 802	4 107	93	-2
	15	+0.596 137	-13 706	-171	-4	+0.749 159	+9 253	-215	+4	+0.324 909	+4 014	-93	+2
	16	0.582 431	14 872	166	-3	0.758 412	9 034	219	+1	0.328 923	3 919	95	-3
	17	0.568 559	15 034	162	-2	0.767 446	8 814	220	+3	0.332 842	3 823	96	-4
	18	0.554 525	14 191	157	+2	0.776 260	8 591	223	-1	0.336 665	3 726	97	-3
	19	0.540 334	14 344	153	+2	0.784 851	8 366	225	-4	0.340 391	3 629	97	-1
	20	0.525 990	14 492	148	+2	0.793 217	8 139	227	-4	0.344 020	3 530	99	-4
	21	+0.511 498	-14 638	-146	-4	+0.801 356	+7 910	-229	-5	+0.347 550	+3 431	-99	-3
	22	0.496 860	14 777	139	+4	0.809 266	7 679	231	-2	0.350 981	3 330	101	-4
23	0.482 083	14 913	136	0	0.816 945	7 448	231	+4	0.354 311	3 230	100	+2	
24	0.467 170	15 046	133	-4	0.824 393	7 213	235	-3	0.357 541	3 128	102	-1	
25	0.452 124	15 172	126	+4	0.831 606	6 977	236	-2	0.360 669	3 026	102	-1	
26	0.436 952	15 296	124	-3	0.838 583	6 740	237	-1	0.363 695	2 922	104	-4	
27	+0.421 656	-15 416	-120	-5	+0.845 323	+6 500	-240	-4	+0.366 617	+2 819	-103	0	
28	0.406 240	15 531	115	+1	0.851 823	6 260	240	+3	0.369 436	2 714	105	-3	
29	0.390 709	15 641	110	+4	0.858 083	6 018	242	+3	0.372 150	2 609	105	-1	
30	0.375 068	15 749	108	-1	0.864 101	5 773	245	-3	0.374 759	2 503	106	-1	
31	0.359 319	15 850	101	+4	0.869 874	5 528	245	+1	0.377 262	2 397	106	+1	
Juni	1	0.343 469	15 950	100	-5	0.875 402	5 281	247	+1	0.379 659	2 290	107	-1
	2	+0.327 519	-16 044	-94	-1	+0.880 683	+5 032	-249	-1	+0.381 949	+2 182	-108	-5
	3	0.311 475	16 133	89	+1	0.885 715	4 781	251	0	0.384 131	2 073	109	-5
	4	0.295 342	16 220	87	-5	0.890 496	4 530	251	+4	0.386 204	1 964	109	-1
	5	0.279 122	16 299	79	+4	0.895 026	4 275	255	-3	0.388 168	1 855	109	+1
	6	0.262 823	16 376	77	-5	0.899 301	4 021	254	+4	0.390 023	1 744	111	-4
	7	0.246 447	16 448	72	-5	0.903 322	3 764	257	+1	0.391 767	1 632	112	-5
	8	+0.229 999	-16 513	-65	+3	+0.907 086	+3 506	-258	+1	+0.393 399	+1 522	-110	+4
	9	0.213 486	16 575	62	-4	0.910 592	3 247	259	+2	0.394 921	1 408	114	-5
	10	0.196 911	16 631	56	-2	0.913 839	2 987	260	+2	0.396 329	1 297	111	+4
	11	0.180 280	16 682	51	-1	0.916 826	2 727	260	+4	0.397 626	1 183	114	-3
	12	0.163 598	-16 728	46	0	0.919 553	+2 465	262	0	0.398 809	+1 070	113	-2
	13	+0.146 870	-16 768	-40	+3	+0.922 018	+2 202	-262	+2	+0.399 879	-114	-114	-3

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



0 <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1950.0												
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$	
1945														
Juni	13	+0.146 870	-16 768	- 40	+3	+0.922 018	+2 203	-262	+2	+0.399 879	+ 956	-114	-3	
	14	0.130 102	16 804	36	0	0.924 221	1 942	261	+4	0.400 835	843	113	-1	
	15	0.113 298	16 835	31	0	0.926 163	1 679	263	-2	0.401 678	728	115	-5	
	16	0.096 463	16 860	25	+3	0.927 842	1 417	262	-1	0.402 406	615	113	+2	
	17	0.079 603	16 882	22	-1	0.929 259	1 154	263	-4	0.403 021	501	114	-1	
	18	0.062 721	16 897	15	+4	0.930 413	892	262	+1	0.403 522	387	114	-2	
	19	+0.045 824	-16 909	- 12	-3	+0.931 305	+ 630	-262	+2	+0.403 909	+ 273	-114	-3	
	20	0.028 915	16 916	7	-4	0.931 935	368	262	-2	0.404 182	159	114	-3	
	21	+0.011 999	16 919	- 3	-3	0.932 303	+ 105	263	-5	0.404 341	+ 45	114	-1	
	22	-0.004 920	16 915	+ 4	+5	0.932 408	- 156	261	0	0.404 386	- 68	113	+3	
	23	0.021 835	16 909	6	-3	0.932 252	418	262	-1	0.404 318	182	114	0	
	24	0.038 744	16 898	11	-1	0.931 834	679	261	+2	0.404 136	295	113	+3	
	25	-0.055 642	-16 881	+ 17	+4	+0.931 155	- 939	-260	+4	+0.403 841	- 408	-113	+2	
	26	0.072 523	16 862	19	-3	0.930 216	1 200	261	-3	0.403 433	521	113	-1	
	27	0.089 385	16 837	25	+4	0.929 016	1 461	261	-5	0.402 912	634	113	-3	
	28	0.106 222	16 808	29	+4	0.927 555	1 721	260	-1	0.402 278	747	113	-5	
	29	0.123 030	16 774	34	+3	0.925 834	1 980	259	+3	0.401 531	860	113	-4	
	30	0.139 804	16 737	37	-3	0.923 854	2 246	260	-1	0.400 671	971	111	+3	
	Juli	1	-0.156 541	-16 694	+ 43	0	+0.921 614	-2 499	-259	0	+0.399 700	-1 085	-114	-5
		2	0.173 235	16 648	46	-4	0.919 115	2 758	259	-1	0.398 615	1 196	111	+4
		3	0.189 883	16 595	53	+2	0.916 357	3 016	258	0	0.397 419	1 308	112	+2
		4	0.206 478	16 539	56	-3	0.913 341	3 275	259	-3	0.396 111	1 419	111	+3
		5	0.223 017	16 478	61	-3	0.910 066	3 531	256	+3	0.394 692	1 532	113	-5
		6	0.239 495	16 411	67	+2	0.906 535	3 789	258	-4	0.393 160	1 642	110	+4
		7	-0.255 906	-16 340	+ 71	+1	+0.902 746	-4 044	-255	+3	+0.391 518	-1 753	-111	0
		8	0.272 246	16 263	77	+5	0.898 702	4 298	254	+3	0.389 765	1 864	111	-2
		9	0.288 509	16 181	82	+3	0.894 404	4 553	255	-5	0.387 901	1 973	109	+2
		10	0.304 690	16 096	85	-3	0.889 851	4 804	251	+3	0.385 928	2 083	110	-4
		11	0.320 786	16 003	93	+5	0.885 047	5 054	250	+2	0.383 845	2 192	109	-2
		12	0.336 789	15 908	95	-3	0.879 993	5 304	250	-4	0.381 653	2 299	107	+2
13		-0.352 697	-15 807	+101	-1	+0.874 689	-5 550	-246	+3	+0.379 354	-2 407	-108	-3	
14		0.368 504	15 702	105	-1	0.869 139	5 795	245	-1	0.376 947	2 513	106	-1	
15	0.384 206	15 592	110	+2	0.863 344	6 039	244	-5	0.374 434	2 619	106	-4		
16	0.399 798	15 478	114	+4	0.857 305	6 280	241	-4	0.371 815	2 724	105	-4		
17	0.415 276	15 359	119	+5	0.851 025	6 520	240	-4	0.369 091	2 828	104	0		
18	0.430 635	15 237	122	+2	0.844 505	6 757	237	0	0.366 263	2 930	102	+3		
19	-0.445 872	-15 110	+127	+4	+0.837 748	-6 992	-235	+2	+0.363 333	-3 033	-103	-4		
20	0.460 982	14 979	131	+4	0.830 756	7 225	233	+2	0.360 300	3 134	101	-4		
21	0.475 961	14 844	135	+4	0.823 531	7 456	231	+2	0.357 166	3 235	101	-4		
22	0.490 805	14 705	139	+2	0.816 075	7 685	229	-1	0.353 931	3 333	98	+2		
23	0.505 510	14 563	142	-3	0.808 390	-7 912	227	-1	0.350 598	-3 433	100	-5		
24	-0.520 073	-14 416	+146	-1	+0.800 478	-8 144	-224	+2	+0.347 165	-3 533	-96	+4		

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



O <sup>a</sup> Welt-Zeit		Mittleres Äquinoktium 1950.0											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Juli	24	-0.520 073	-14.417	+146	-1	+0.800 478	- 8 136	-224	+2	+0.347 165	-3 529	-96	+4
	25	0.534 490	14 266	151	+4	0.792 342	8 359	223	-1	0.343 636	3 626	97	0
	26	0.548 756	14 113	153	-1	0.783 983	8 579	220	+3	0.340 010	3 721	95	+2
	27	0.562 869	13 955	158	+2	0.775 404	8 797	218	+1	0.336 289	3 816	95	0
	28	0.576 824	13 794	161	+1	0.766 607	9 014	217	-3	0.332 473	3 909	93	+1
	29	0.590 618	13 628	166	+5	0.757 593	9 228	214	-1	0.328 564	4 003	94	-4
	30	-0.604 246	-13 459	+169	+1	+0.748 365	- 9 440	-212	-1	+0.324 561	-4 094	-91	+3
	31	0.617 705	13 286	173	-2	0.738 925	9 650	210	0	0.320 467	4 184	90	+3
Aug.	1	0.630 991	13 109	177	-2	0.729 275	9 857	207	0	0.316 283	4 275	91	-5
	2	0.644 100	12 928	181	-1	0.719 418	10 063	206	-3	0.312 008	4 364	89	-2
	3	0.657 028	12 742	186	+5	0.709 355	10 265	202	+2	0.307 644	4 451	87	+3
	4	0.669 770	12 552	190	+4	0.699 090	10 464	199	+3	0.303 193	4 538	87	+1
	5	-0.682 322	-12 359	+193	-1	+0.688 626	-10 661	-197	-1	+0.298 655	-4 623	-85	+4
	6	0.694 681	12 162	197	-1	0.677 965	10 855	194	-5	0.294 032	4 707	84	+3
	7	0.706 843	11 960	202	+5	0.667 110	11 046	191	-5	0.289 325	4 790	83	+2
	8	0.718 803	11 754	206	+5	0.656 064	11 233	187	-2	0.284 535	4 871	81	+3
	9	0.730 557	11 546	208	-2	0.644 831	11 417	184	0	0.279 664	4 951	80	+1
	10	0.742 103	11 334	212	-1	0.633 414	11 597	180	+2	0.274 713	5 029	78	+2
	11	-0.753 437	-11 117	+217	+3	+0.621 817	-11 774	-177	0	+0.269 684	-5 106	-77	-2
	12	0.764 554	10 899	218	-4	0.610 043	11 947	173	+1	0.264 578	5 182	76	-4
	13	0.775 453	10 677	222	-3	0.598 096	12 117	170	-4	0.259 396	5 255	73	0
	14	0.786 130	10 452	225	-1	0.585 979	12 284	167	-5	0.254 141	5 328	73	-4
	15	0.796 582	10 223	229	+2	0.573 695	12 446	162	+2	0.248 813	5 398	70	0
	16	0.806 805	9 993	230	-4	0.561 249	12 604	158	+4	0.243 415	5 467	69	0
	17	-0.816 798	- 9 759	+234	-2	+0.548 645	-12 760	-156	-4	+0.237 948	-5 535	-68	-3
	18	0.826 557	9 523	236	-1	0.535 885	12 912	152	-2	0.232 413	5 600	65	+1
	19	0.836 080	9 284	239	+1	0.522 973	13 059	147	+3	0.226 813	5 665	65	-2
	20	0.845 364	9 043	241	+1	0.509 914	13 204	145	-1	0.221 148	5 727	62	+3
	21	0.854 407	8 799	244	+3	0.496 710	13 344	140	+2	0.215 421	5 788	61	+3
	22	0.863 206	8 553	246	+1	0.483 366	13 481	137	+1	0.209 633	5 847	59	+2
	23	-0.871 759	- 8 306	+247	-3	+0.469 885	-13 615	-134	-2	+0.203 786	-5 905	-58	-2
	24	0.880 065	8 054	252	+5	0.456 270	13 745	130	-1	0.197 881	5 962	57	-3
	25	0.888 119	7 802	252	-3	0.442 525	13 872	127	-3	0.191 919	6 016	54	+1
	26	0.895 921	7 547	255	-2	0.428 653	13 995	123	-1	0.185 903	6 070	54	-2
	27	0.903 468	7 289	258	+1	0.414 658	14 115	120	0	0.179 833	6 121	51	+3
	28	0.910 757	7 029	260	-1	0.400 543	14 230	115	+3	0.173 712	6 171	50	0
	29	-0.917 786	- 6 767	+262	-1	+0.386 313	-14 343	-113	-4	+0.167 541	-6 220	-49	-4
	30	0.924 553	6 501	266	+4	0.371 970	14 452	109	-3	0.161 321	6 267	47	-3
	31	0.931 054	6 234	267	+1	0.357 518	14 556	104	+3	0.155 054	6 312	45	-2
Sept.	1	0.937 288	5 963	271	+3	0.342 962	14 656	100	+4	0.148 742	6 356	44	-3
	2	0.943 251	5 692	271	-3	0.328 306	-14 752	96	+1	0.142 386	-6 397	41	-1
	3	-0.948 943	+275	+2	+0.313 554	- 92	-1	+0.135 989	-41	-4			

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



O <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1950.0											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Sept.	3	-0.948 943	-5 417	+275	+2	+0.313 554	-14 844	-92	-1	+0.135 989	-6 438	-41	-4
	4	0.954 360	5 140	277	+1	0.298 710	14 932	88	-3	0.129 551	6 475	37	+4
	5	0.959 500	4 863	277	-4	0.283 778	15 014	82	+4	0.123 076	6 511	36	+2
	6	0.964 363	4 582	281	+4	0.268 764	15 092	78	+3	0.116 565	6 545	34	0
	7	0.968 945	4 300	282	+4	0.253 672	15 166	74	0	0.110 020	6 577	32	-2
	8	0.973 245	4 017	283	+1	0.238 506	15 235	69	+2	0.103 443	6 608	31	-5
	9	-0.977 262	-3 733	+284	0	+0.223 271	-15 299	-64	+2	+0.096 835	-6 635	-27	+2
	10	0.980 995	3 446	287	+5	0.207 972	15 359	60	+2	0.090 200	6 661	26	-1
	11	0.984 441	3 160	286	-3	0.192 613	15 413	54	+4	0.083 539	6 686	25	-4
	12	0.987 601	2 872	288	-2	0.177 200	15 465	52	-3	0.076 853	6 707	21	+3
	13	0.990 473	2 584	288	-3	0.161 735	15 510	45	+4	0.070 146	6 727	20	-1
	14	0.993 057	2 295	289	-1	0.146 225	15 551	41	+4	0.063 419	6 745	18	-3
	15	-0.995 352	-2 004	+291	+5	+0.130 674	-15 587	-36	+3	+0.056 674	-6 762	-17	-5
	16	0.997 356	1 714	290	0	0.115 087	15 620	33	-5	0.049 912	6 774	12	+4
	17	0.999 070	1 424	290	-2	0.099 467	15 648	28	-3	0.043 138	6 787	13	-5
	18	1.000 494	1 132	292	+4	0.083 819	15 671	23	+1	0.036 351	6 797	10	-4
	19	1.001 626	841	291	-1	0.068 148	15 689	18	+4	0.029 554	6 805	8	-4
	20	1.002 467	550	291	-2	0.052 459	15 704	15	-1	0.022 749	6 811	6	-3
	21	-1.003 017	-258	+292	+1	+0.036 755	-15 715	-11	-3	+0.015 938	-6 816	-5	-4
	22	1.003 275	+34	292	0	0.021 040	15 721	6	+1	0.009 122	6 818	2	0
23	1.003 241	326	292	-1	+0.005 319	15 723	-2	+4	+0.002 304	6 819	-1	0	
24	1.002 915	618	292	-1	-0.010 404	15 720	+3	+5	-0.004 515	6 818	+1	+2	
25	1.002 297	912	294	+4	0.026 124	15 714	6	-2	0.011 333	6 814	4	+5	
26	1.001 385	1 205	293	-2	0.041 838	15 704	10	-4	0.018 147	6 810	4	-2	
27	-1.000 180	+1 498	+293	-4	-0.057 542	-15 688	+16	0	-0.024 957	-6 803	+7	-1	
28	0.998 682	1 792	294	-1	0.073 230	15 668	20	0	0.031 760	6 795	8	-4	
29	0.996 890	2 086	294	0	0.088 898	15 644	24	-3	0.038 555	6 784	11	0	
30	0.994 804	2 380	294	0	0.104 542	15 614	30	+2	0.045 339	6 771	13	+1	
Okt.	1	0.992 424	2 673	293	-2	0.120 156	15 580	34	+1	0.052 110	6 756	15	0
	2	0.989 751	2 968	295	+5	0.135 736	15 540	40	+4	0.058 866	6 740	16	-4
	3	-0.986 783	+3 260	+292	-3	-0.151 276	-15 497	+43	-1	-0.065 606	-6 720	+20	+2
	4	0.983 523	3 552	292	-3	0.166 773	15 447	50	+5	0.072 326	6 700	20	-3
	5	0.979 971	3 844	292	+2	0.182 220	15 394	53	+1	0.079 026	6 676	24	+4
	6	0.976 127	4 135	291	+3	0.197 614	15 334	60	+5	0.085 702	6 650	26	+2
	7	0.971 992	4 424	289	+1	0.212 948	15 271	63	0	0.092 352	6 624	26	-4
	8	0.967 568	4 713	289	+3	0.228 219	15 202	69	+1	0.098 976	6 593	31	+3
	9	-0.962 855	+4 999	+286	-1	-0.243 421	-15 129	+73	-2	-0.105 569	-6 562	+31	-3
	10	0.957 856	5 286	287	+4	0.258 550	15 051	78	-2	0.112 131	6 528	34	-1
	11	0.952 570	5 569	283	-4	0.273 601	14 969	82	-4	0.118 659	6 493	35	-4
	12	0.947 001	5 851	282	-3	0.288 570	14 881	88	+3	0.125 152	6 454	39	+2
13	0.941 150	+6 132	281	0	0.303 451	-14 789	92	+4	0.131 606	-6 415	39	-3	
14	-0.935 018	+278	+278	-3	-0.318 240	+96	+2	-0.138 021	+47	0	0		

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



Welt-Zeit		Mittleres Äquinoktium 1950.0											
		X			Y			Z					
0 <sup>h</sup>		$\Delta X^*)$			$\Delta Y^*)$			$\Delta Z^*)$					
1945													
Okt.	14	-0.935 018	+ 6 410	+278	-3	-0.318 240	-14 693	+ 96	+2	-0.138 021	-6 373	+ 42	0
	15	0.928 608	6 687	277	0	0.332 933	14 592	101	+2	0.144 394	6 329	44	+1
	16	0.921 921	6 961	274	-2	0.347 525	14 487	105	+1	0.150 723	6 284	45	0
	17	0.914 960	7 233	272	0	0.362 012	14 378	109	0	0.157 007	6 236	48	+5
	18	0.907 727	7 504	271	+5	0.376 390	14 265	113	0	0.163 243	6 186	50	+5
	19	0.900 223	7 771	267	0	0.390 655	14 148	117	+1	0.169 429	6 136	50	-3
	20	-0.892 452	+ 8 037	+266	+3	-0.404 803	-14 026	+122	+2	-0.175 565	-6 083	+ 53	-1
	21	0.884 415	8 301	264	+5	0.418 829	13 902	124	-3	0.181 648	6 029	54	-3
	22	0.876 114	8 563	262	+4	0.432 731	13 773	129	0	0.187 677	5 973	56	0
	23	0.867 551	8 822	259	-1	0.446 504	13 640	133	+1	0.193 650	5 915	58	+2
	24	0.858 729	9 080	258	+2	0.460 144	13 503	137	+1	0.199 565	5 855	60	+2
	25	0.849 649	9 336	256	+1	0.473 647	13 362	141	0	0.205 420	5 795	60	-4
	26	-0.840 313	+ 9 589	+253	-4	-0.487 009	-13 217	+145	-3	-0.211 215	-5 731	+ 64	+1
	27	0.830 724	9 840	251	-3	0.500 226	13 068	149	-3	0.216 946	5 667	64	-3
	28	0.820 884	10 089	249	-2	0.513 294	12 914	154	+1	0.222 613	5 600	67	-1
	29	0.810 795	10 335	246	-3	0.526 208	12 756	158	+1	0.228 213	5 532	68	-2
	30	0.800 460	10 578	243	-4	0.538 964	12 594	162	+2	0.233 745	5 462	70	0
	31	0.789 882	10 819	241	-1	0.551 558	12 427	167	+5	0.239 207	5 389	73	+5
	Nov.												
	1	-0.779 063	+11 056	+237	-3	-0.563 985	-12 256	+171	+4	-0.244 596	-5 316	+ 73	+1
	2	0.768 007	11 290	234	-2	0.576 241	12 082	174	0	0.249 912	5 239	77	+5
	3	0.756 717	11 521	231	0	0.588 323	11 902	180	+3	0.255 151	5 163	76	-4
	4	0.745 196	11 749	228	+2	0.600 225	11 720	182	-3	0.260 314	5 083	80	+2
	5	0.733 447	11 972	223	-2	0.611 945	11 533	187	-2	0.265 397	5 003	80	-2
	6	0.721 475	12 192	220	+2	0.623 478	11 343	190	-3	0.270 400	4 919	84	+5
	7	-0.709 283	+12 409	+217	+5	-0.634 821	-11 148	+195	+3	-0.275 319	-4 836	+ 83	-2
	8	0.696 874	12 621	212	+3	0.645 969	10 950	198	+2	0.280 155	4 750	86	+2
	9	0.684 253	12 830	209	+4	0.656 919	10 749	201	0	0.284 905	4 662	88	+5
	10	0.671 423	13 034	204	-1	0.667 668	10 544	205	+4	0.289 567	4 573	89	+1
	11	0.658 389	13 234	200	-1	0.678 212	10 335	209	+5	0.294 140	4 483	90	-3
	12	0.645 155	13 430	196	-1	0.688 547	10 124	211	-1	0.298 623	4 392	91	-4
13	-0.631 725	+13 621	+191	-1	-0.698 671	- 9 910	+214	-4	-0.303 015	-4 298	+ 94	+2	
14	0.618 104	13 810	189	+5	0.708 581	9 693	217	-4	0.307 313	4 204	94	0	
15	0.604 294	13 992	182	-4	0.718 274	9 473	220	-3	0.311 517	4 108	96	0	
16	0.590 302	14 171	179	-3	0.727 747	9 250	223	-1	0.315 625	4 012	96	-4	
17	0.576 131	14 345	174	-3	0.736 997	9 025	225	-4	0.319 637	3 914	98	0	
18	0.561 786	14 517	172	+4	0.746 022	8 798	227	-4	0.323 551	3 815	99	+3	
19	-0.547 269	+14 683	+166	-3	-0.754 820	- 8 567	+231	+2	-0.327 366	-3 715	+100	+3	
20	0.532 586	14 845	162	-4	0.763 387	8 334	233	+2	0.331 081	3 614	101	+4	
21	0.517 741	15 004	159	+1	0.771 721	8 099	235	-3	0.334 695	3 511	103	+5	
22	0.502 737	15 158	154	+1	0.779 820	7 862	237	-4	0.338 206	3 409	102	-3	
23	0.487 579	+15 309	151	+5	0.787 682	- 7 620	242	+3	0.341 615	-3 304	105	0	
24	-0.472 270	+14 6	+146	+3	-0.795 302	-7 373	+242	-2	-0.344 919	+105	+105	-4	

$\Delta X, \Delta Y, \Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



O <sup>h</sup> Welt-Zeit		Mittleres Äquinoktium 1950.0											
		X			$\Delta X^*)$	Y			$\Delta Y^*)$	Z			$\Delta Z^*)$
1945													
Nov.	24	-0.472 270	+15 455	+146	+3	-0.795 302	-7 378	+242	-2	-0.344 919	-3 199	+105	-4
	25	0.456 815	15 597	142	+3	0.802 680	7 131	247	+5	0.348 118	3 093	106	-2
	26	0.441 218	15 734	137	+1	0.809 811	6 883	248	0	0.351 211	2 984	109	+3
	27	0.425 484	15 867	133	+1	0.816 694	6 632	251	+1	0.354 195	2 876	108	-4
	28	0.409 617	15 994	127	-4	0.823 326	6 378	254	+5	0.357 071	2 766	110	-3
	29	0.393 623	16 117	123	-2	0.829 704	6 121	257	+5	0.359 837	2 656	110	-3
30	-0.377 506	+16 235	+118	0	-0.835 825	-5 864	+257	-4	-0.362 493	-2 543	+113	+5	
Dez.	1	0.361 271	16 348	113	+1	0.841 689	5 603	261	-1	0.365 036	2 430	113	+2
	2	0.344 923	16 455	107	-1	0.847 292	5 341	262	-1	0.367 466	2 317	113	-2
	3	0.328 468	16 558	103	+5	0.852 633	5 076	265	+2	0.369 783	2 202	115	+2
	4	0.311 910	16 655	97	+4	0.857 709	4 810	266	+2	0.371 985	2 087	115	+2
	5	0.295 255	16 747	92	+3	0.862 519	4 541	269	+4	0.374 072	1 970	117	+5
	6	-0.278 508	+16 833	+ 86	0	-0.867 060	-4 272	+269	-1	-0.376 042	-1 853	+117	+2
	7	0.261 675	16 914	81	0	0.871 332	4 001	271	-2	0.377 895	1 736	117	-2
	8	0.244 761	16 988	74	-3	0.875 333	3 729	272	-1	0.379 631	1 618	118	-1
	9	0.227 773	17 059	71	+4	0.879 062	3 455	274	+4	0.381 249	1 499	119	+3
	10	0.210 714	17 122	63	-1	0.882 517	3 181	274	+1	0.382 748	1 380	119	+3
	11	0.193 592	17 182	60	+5	0.885 698	2 905	276	+5	0.384 128	1 260	120	+4
	12	-0.176 410	+17 234	+ 52	-3	-0.888 603	-2 630	+275	+1	-0.385 388	-1 140	+120	+1
	13	0.159 176	17 282	48	-2	0.891 233	2 353	277	+5	0.386 528	1 021	119	-4
	14	0.141 894	17 324	42	-4	0.893 586	2 076	277	+2	0.387 549	900	121	+1
	15	0.124 570	17 361	37	-3	0.895 662	1 799	277	-1	0.388 449	780	120	0
	16	0.107 209	17 393	32	-1	0.897 461	1 522	277	-2	0.389 229	659	121	+1
	17	0.089 816	17 420	27	0	0.898 983	1 244	278	+3	0.389 888	539	120	-1
	18	-0.072 396	+17 442	+ 22	-1	-0.900 227	-965	+279	+5	-0.390 427	-418	+121	+2
	19	0.054 954	17 458	16	-2	0.901 192	687	278	-1	0.390 845	297	121	+1
	20	0.037 496	17 471	13	+5	0.901 879	409	278	-4	0.391 142	177	120	-3
	21	0.020 025	17 478	7	+1	0.902 288	130	279	-1	0.391 319	56	121	+2
	22	-0.002 547	17 479	+ 1	-3	0.902 418	+ 150	280	+2	0.391 375	+ 66	122	+5
	23	+0.014 932	17 476	- 3	+2	0.902 268	429	279	-1	0.391 309	187	121	+1
	24	+0.032 408	+17 468	- 8	+3	-0.901 839	+ 710	+281	+5	-0.391 122	+ 308	+121	-3
	25	0.049 876	17 454	14	0	0.901 129	989	279	-2	0.390 814	429	121	-4
	26	0.067 330	17 434	20	-5	0.900 140	1 270	281	+2	0.390 385	550	121	-2
	27	0.084 764	17 409	25	-4	0.898 870	1 549	279	-3	0.389 835	672	122	+3
	28	0.102 173	17 379	30	-2	0.897 321	1 829	280	0	0.389 163	793	121	+2
	29	0.119 552	17 342	37	-4	0.895 492	2 109	280	+2	0.388 370	914	121	+2
	30	+0.136 894	+17 302	- 40	+4	-0.893 383	+2 388	+279	+1	-0.387 456	+1 035	+121	+4
	31	0.154 196	+17 254	48	-4	0.890 995	+2 666	278	-2	0.386 421	+1 156	121	+4
	32	+0.171 450	- 53	- 53	-4	-0.888 329		+278	+1	-0.385 265	+120	+1	+1

\*)  $\Delta X$ ,  $\Delta Y$ ,  $\Delta Z$  sind in Einheiten der 7. Dezimale gegeben.



## Mittleres Äquinoktium 1950

$0^h$ Welt-Zeit	$\log r$	Helioz. Länge	Red. auf d. Bahn	Helioz. Breite	$0^h$ Welt-Zeit	$\log r$	Helioz. Länge	Red. auf d. Bahn	Helioz. Breite
<b>MERKUR 1945</b>									
1945					1945				
Jan. 0	9.5276	137.54	0.00	+7.00	Juli 4	9.5889	179.43	-0.21	+5.24
5	9.5618	162.16	-0.16	+6.38	9	9.6179	198.02	-0.18	+3.49
10	9.5948	183.13	-0.21	+4.93	14	9.6407	214.44	-0.10	+1.62
15	9.6227	201.24	-0.17	+3.14	19	9.6568	229.42	+0.01	-0.21
20	9.6442	217.34	-0.08	+1.27	24	9.6661	243.55	+0.11	-1.92
25	9.6591	232.12	+0.03	-0.54	29	9.6690	257.31	+0.18	-3.47
30	9.6672	246.15	+0.13	-2.22	Aug. 3	9.6654	271.14	+0.21	-4.82
Febr. 4	9.6689	259.89	+0.19	-3.74	8	9.6551	285.47	+0.19	-5.93
9	9.6640	273.78	+0.21	-5.05	13	9.6383	300.78	+0.12	-6.70
14	9.6525	288.26	+0.18	-6.10	18	9.6148	317.62	0.00	-7.00
19	9.6344	303.81	+0.10	-6.80	23	9.5850	336.67	-0.13	-6.63
24	9.6096	321.01	-0.02	-6.99	28	9.5512	358.67	-0.21	-5.30
März 1	9.5790	340.55	-0.15	-6.46	Sept. 2	9.5179	24.28	-0.16	-2.80
6	9.5447	3.20	-0.21	-4.93	7	9.4939	53.46	+0.04	+0.70
11	9.5124	29.51	-0.13	-2.20	12	9.4887	84.81	+0.21	+4.23
16	9.4912	59.26	+0.08	+1.40	17	9.5047	115.56	+0.15	+6.49
21	9.4901	90.72	+0.21	+4.79	22	9.5349	143.26	-0.04	+6.97
26	9.5096	121.05	+0.12	+6.71	27	9.5694	167.03	-0.18	+6.12
31	9.5413	148.02	-0.08	+6.89	Okt. 2	9.6014	187.30	-0.21	+4.56
April 5	9.5756	171.08	-0.20	+5.86	7	9.6280	204.90	-0.15	+2.73
10	9.6068	190.78	-0.21	+4.23	12	9.6480	220.66	-0.05	+0.87
15	9.6323	207.98	-0.14	+2.38	17	9.6613	235.24	+0.06	-0.92
20	9.6510	223.47	-0.03	+0.53	22	9.6681	249.16	+0.15	-2.57
25	9.6631	237.89	+0.07	-1.24	27	9.6683	262.90	+0.20	-4.05
30	9.6687	251.74	+0.16	-2.86	Nov. 1	9.6620	276.88	+0.21	-5.31
Mai 5	9.6676	265.50	+0.21	-4.30	6	9.6491	291.55	+0.17	-6.29
10	9.6601	279.57	+0.21	-5.52	11	9.6295	307.40	+0.08	-6.89
15	9.6459	294.42	+0.16	-6.44	16	9.6034	325.05	-0.05	-6.95
20	9.6251	310.55	+0.05	-6.95	21	9.5716	345.21	-0.18	-6.22
25	9.5978	328.61	-0.08	-6.88	26	9.5372	8.62	-0.21	-4.43
30	9.5653	349.33	-0.19	-5.97	Dez. 1	9.5064	35.75	-0.09	-1.46
Juni 4	9.5308	13.42	-0.20	-3.96	6	9.4891	66.08	+0.13	+2.21
9	9.5019	41.23	-0.05	-0.80	11	9.4929	97.54	+0.21	+5.36
14	9.4881	71.97	+0.16	+2.89	16	9.5159	127.28	+0.08	+6.89
19	9.4960	103.33	+0.20	+5.79	21	9.5489	153.39	-0.11	+6.75
24	9.5217	132.47	+0.04	+6.97	26	9.5829	175.65	-0.21	+5.54
29	9.5553	157.84	-0.14	+6.58	31	9.6129	194.73	-0.20	+3.83
Juli 4	9.5889	179.43	-0.21	+5.24					

$$\Omega = 47^{\circ}739$$

$$i = 7^{\circ}004$$

$$m = \frac{1}{6\,000\,000}$$



## Mittleres Äquinoktium 1950.0

$0^h$ Welt-Zeit	Julian. Zeit	$\log r$	Heliozentr. Länge	Red. auf d. Bahn	Heliozentr. Breite	$\log R$	Länge
VENUS 1945				ERDE 1945			
1945				in 0.001			
Jan. —5	2431 450.5	9.86005	26.568	—50	—2.589	9.99274	94.185
+5	460.5	9.85923	42.563	—46	—1.884	9.99268	104.377
15	470.5	9.85842	58.605	—29	—1.030	9.99285	114.567
25	480.5	9.85768	74.695	—3	—0.092	9.99323	124.744
Febr. 4	490.5	9.85707	90.835	+25	+0.856	9.99382	134.897
14	2431 500.5	9.85663	107.022	+44	+1.738	9.99460	145.019
24	510.5	9.85641	123.247	+50	+2.484	9.99554	155.101
März 6	520.5	9.85641	139.497	+40	+3.032	9.99661	165.136
16	530.5	9.85665	155.750	+18	+3.337	9.99778	175.120
26	540.5	9.85710	171.983	—10	+3.377	9.99900	185.048
April 5	2431 550.5	9.85772	188.172	—35	+3.149	0.00025	194.920
15	560.5	9.85848	204.299	—49	+2.674	0.00148	204.735
25	570.5	9.85929	220.353	—48	+1.991	0.00267	214.496
Mai 5	580.5	9.86011	236.331	—32	+1.157	0.00377	224.205
15	590.5	9.86086	252.242	—7	+0.237	0.00476	233.868
25	2431 600.5	9.86150	268.099	+20	—0.698	0.00560	243.490
Juni 4	610.5	9.86197	283.922	+41	—1.578	0.00628	253.078
14	620.5	9.86223	299.730	+50	—2.337	0.00679	262.640
24	630.5	9.86228	315.542	+44	—2.919	0.00709	272.184
Juli 4	640.5	9.86210	331.372	+25	—3.281	0.00720	281.719
14	2431 650.5	9.86171	347.230	—2	—3.394	0.00710	291.254
24	660.5	9.86113	3.123	—28	—3.248	0.00680	300.797
Aug. 3	670.5	9.86042	19.056	—46	—2.853	0.00631	310.358
13	680.5	9.85962	35.031	—50	—2.238	0.00564	319.945
23	690.5	9.85879	51.050	—39	—1.446	0.00480	329.565
Sept. 2	2431 700.5	9.85800	67.118	—16	—0.539	0.00382	339.226
12	710.5	9.85732	83.236	+12	+0.414	0.00272	348.933
22	720.5	9.85679	99.403	+36	+1.336	0.00155	358.691
Okt. 2	730.5	9.85646	115.614	+49	+2.155	0.00032	8.503
12	740.5	9.85636	131.856	+47	+2.802	9.99907	18.372
22	2431 750.5	9.85649	148.111	+29	+3.226	9.99784	28.297
Nov. 1	760.5	9.85685	164.358	+3	+3.392	9.99667	38.277
11	770.5	9.85740	180.571	—24	+3.289	9.99560	48.309
21	780.5	9.85810	196.730	—44	+2.926	9.99466	58.388
Dez. 1	790.5	9.85890	212.819	—50	+2.334	9.99387	68.508
11	2431 800.5	9.85973	228.833	—41	+1.564	9.99327	78.659
21	810.5	9.86052	244.774	—20	+0.675	9.99287	88.834
31	2431 820.5	9.86122	260.654	+8	—0.262	9.99269	99.023

$$\Omega = 76^{\circ}23'$$

$$i = 3^{\circ}39'$$

$$m = \frac{1}{408\,000}$$

$$m = \frac{1}{329\,390}$$



## Mittleres Äquinoktium 1950.0

$O^h$ Welt-Zeit	$\log r$	Helioz. Länge	Red. a. d. Bahn	Helioz. Breite	$\log r$	Helioz. Länge	Red. a. d. Bahn	Helioz. Breite	
<b>MARS 1945</b>				<b>JUPITER 1945</b>					
1945		°	in 0.001	°		°	in 0.0001	°	
Jan. -5	0.17281	254.104	+11	-0.780	0.734477	166.7408	+54	+1.2011	
+5	0.16906	259.615	13	0.938	0.734610	167.5037	52	1.2078	
15	0.16537	265.222	14	1.089	0.734740	168.2661	51	1.2143	
25	0.16179	270.925	15	1.232	0.734866	169.0281	50	1.2207	
Febr. 4	0.15834	276.721	15	1.365	0.734990	169.7896	48	1.2268	
14	0.15508	282.608	+14	-1.486	0.735109	170.5508	+47	+1.2326	
24	0.15204	288.582	13	1.593	0.735224	171.3115	45	1.2382	
März 6	0.14928	294.636	11	1.683	0.735335	172.0718	43	1.2437	
16	0.14682	300.765	9	1.756	0.735443	172.8318	42	1.2489	
26	0.14471	306.959	6	1.808	0.735548	173.5914	40	1.2539	
April 5	0.14299	313.208	+3	-1.840	0.735649	174.3506	+38	+1.2587	
15	0.14167	319.501	0	1.850	0.735745	175.1095	37	1.2633	
25	0.14078	325.827	-3	1.838	0.735838	175.8680	35	1.2676	
Mai 5	0.14034	332.171	7	1.803	0.735928	176.6262	33	1.2717	
15	0.14035	338.522	9	1.746	0.736013	177.3842	32	1.2755	
25	0.14082	344.865	-12	-1.668	0.736096	178.1418	+30	+1.2792	
Juni 4	0.14173	351.188	13	1.569	0.736173	178.8992	28	1.2826	
14	0.14307	357.477	15	1.452	0.736247	179.6563	26	1.2858	
24	0.14482	3.721	15	1.319	0.736318	180.4131	24	1.2888	
Juli 4	0.14695	9.908	15	1.172	0.736385	181.1697	22	1.2915	
14	0.14943	16.030	-14	-1.012	0.736447	181.9261	+21	+1.2941	
24	0.15221	22.077	12	0.843	0.736506	182.6822	19	1.2964	
Aug. 3	0.15526	28.043	10	0.667	0.736562	183.4382	17	1.2984	
13	0.15853	33.922	8	0.487	0.736614	184.1940	15	1.3003	
23	0.16199	39.711	5	0.305	0.736661	184.9496	13	1.3019	
Sept. 2	0.16558	45.405	-2	-0.122	0.736705	185.7051	+11	+1.3033	
12	0.16928	51.005	+1	+0.059	0.736745	186.4604	9	1.3045	
22	0.17303	56.510	4	0.236	0.736781	187.2156	7	1.3054	
Okt. 2	0.17681	61.920	6	0.408	0.736813	187.9706	5	1.3061	
12	0.18057	67.237	9	0.574	0.736841	188.7256	3	1.3066	
22	0.18429	72.463	+11	+0.732	0.736865	189.4804	+1	+1.3069	
Nov. 1	0.18794	77.602	13	0.881	0.736886	190.2352	-1	1.3069	
11	0.19148	82.657	14	1.021	0.736903	190.9900	3	1.3067	
21	0.19490	87.632	15	1.151	0.736916	191.7446	5	1.3063	
Dez. 1	0.19817	92.531	15	1.270	0.736924	192.4993	7	1.3056	
11	0.20128	97.359	+15	+1.379	0.736929	193.2539	-9	+1.3047	
21	0.20421	102.121	14	1.477	0.736931	194.0085	11	1.3036	
31	0.20695	106.821	+14	+1.563	0.736928	194.7631	-12	+1.3023	
		$\Omega = 49^{\circ}172$	$i = 1^{\circ}850$				$\Omega = 99^{\circ}9528$	$i = 1^{\circ}3059$	
		$m = \frac{1}{3.093500}$				$m = \frac{1}{1.04735}$			



## Mittleres Äquinoktium 1950.0

O <sup>h</sup> Welt-Zeit		Julian. Zeit	log r	Heliozentrische Länge	Red. auf die Bahn	Heliozentrische Breite
SATURN 1945						
		<sup>a</sup>		<sup>o</sup>	in <sup>o.0001</sup>	<sup>o</sup>
1944	Dez. 16	2431 440.5	0.955679	96.8897	-146	-0.7004
1945	Jan. 25	480.5	0.955725	98.3822	134	0.6380
	März 6	520.5	0.955787	99.8741	122	0.5751
	April 15	560.5	0.955863	101.3655	-109	-0.5119
	Mai 25	600.5	0.955957	102.8562	96	0.4484
	Juli 4	640.5	0.956060	104.3461	83	0.3846
	Aug. 13	680.5	0.956182	105.8351	-69	-0.3205
	Sept. 22	720.5	0.956318	107.3232	55	0.2563
	Nov. 1	760.5	0.956469	108.8102	42	0.1920
1945	Dez. 11	800.5	0.956636	110.2960	28	0.1276
1946	Jan. 20	2431 840.5	0.956817	111.7805	-14	-0.0631

$$\Omega = 113^{\circ}2251 \quad i = 2^{\circ}4903 \quad m = \frac{1}{3501.6}$$

URANUS 1945						
		<sup>a</sup>		<sup>o</sup>	in <sup>o.001</sup>	<sup>o</sup>
1944	Dez. 16	2431 440.5	1.28535	71.328	0	-0.033
1945	Jan. 25	480.5	1.28518	71.792	0	0.027
	März 6	520.5	1.28500	72.256	0	0.021
	April 15	560.5	1.28483	72.721	0	-0.015
	Mai 25	600.5	1.28466	73.186	0	0.008
	Juli 4	640.5	1.28449	73.652	0	-0.002
	Aug. 13	680.5	1.28432	74.118	0	+0.004
	Sept. 22	720.5	1.28414	74.584	0	0.011
	Nov. 1	760.5	1.28397	75.050	0	0.017
1945	Dez. 11	800.5	1.28380	75.517	0	0.023
1946	Jan. 20	2431 840.5	1.28362	75.984	0	+0.029

$$\Omega = 73^{\circ}745 \quad i = 0^{\circ}773 \quad m = \frac{1}{22869}$$

NEPTUN 1945						
		<sup>a</sup>		<sup>o</sup>	in <sup>o.001</sup>	<sup>o</sup>
1944	Dez. 16	2431 440.5	1.48103	184.545	+13	+1.423
1945	Jan. 25	480.5	1.48104	184.781	13	1.428
	März 6	520.5	1.48106	185.018	13	1.432
	April 15	560.5	1.48107	185.255	+13	+1.436
	Mai 25	600.5	1.48108	185.491	13	1.441
	Juli 4	640.5	1.48109	185.728	13	1.445
	Aug. 13	680.5	1.48110	185.964	+13	+1.449
	Sept. 22	720.5	1.48111	186.201	13	1.453
	Nov. 1	760.5	1.48112	186.438	13	1.457
1945	Dez. 11	800.5	1.48113	186.674	13	1.462
1946	Jan. 20	2431 840.5	1.48114	186.911	+13	+1.466

$$\Omega = 131^{\circ}230 \quad i = 1^{\circ}775 \quad m = \frac{1}{19314}$$

PLUTO 1945						
		<sup>a</sup>		<sup>o</sup>	in <sup>o.001</sup>	<sup>o</sup>
1944	Nov. 6	2431 400.5	1.57583	128.825	+823	+5.788
1945	Jan. 25	480.5	1.57518	129.153	834	5.883
	April 15	560.5	1.57453	129.483	846	5.977
	Juli 4	640.5	1.57387	129.813	+857	+6.072
	Sept. 22	720.5	1.57322	130.145	869	6.166
1945	Dez. 11	800.5	1.57256	130.477	880	6.261
1946	März 1	2431 880.5	1.57190	130.811	+892	+6.356

$$\Omega = 109^{\circ}633 \quad i = 17^{\circ}144 \quad m \approx \frac{1}{3300000}$$



# **Mittlere und Scheinbare Sternörter 1945**

---

**Reduktionsgrößen**



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o.5000r	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o.500r
905	[2 Ceti]	4.62	A o	o <sup>h</sup> o <sup>m</sup> 55.386	+3.0731	+ 16	-17 <sup>o</sup> 38' 31".50	+20.041	- 2
1001	[45 G. Tucanae]	5.64	B 9	o 1 55.132	+3.0481	+ 92	-71 44 34.96	+20.026	- 16
1002	[33 Piscium]	4.68	K o	o . 2 31.172	+3.0708	- 8	- 6 o 54.41	+20.139	+ 97
1003	[9 G. Ceti]	6.06	F o	o 4 1.316	+3.0703	+ 73	-23 24 47.03	+20.000	- 40
1	α Andromedae	2.15	A o p	o 5 32.337	+3.1013	+ 103	+28 47 12.72	+19.878	- 159
2	β Cassiopeiae	2.42	F 5	o 6 13.712	+3.2010	+ 675	+58 50 47.44	+19.858	- 178
3	ε Phoenicis	3.94	K o	o 6 37.557	+3.0456	+ 126	-46 3 2.62	+19.864	- 170
4	[22 Andromedae]	5.08	F o	o 7 27.141	+3.1183	+ 3	+45 45 58.67	+20.035	+ 3
5	[x <sup>2</sup> Sculptoris]	5.56	K o	o 8 46.996	+3.0466	+ 8	-28 6 21.40	+20.053	+ 25
6	[θ Sculptoris]	5.19	F 5	o 8 56.403	+3.0489	+ 129	-35 26 26.69	+20.163	+ 136
7	γ Pegasi	2.87	B 2	o 10 23.999	+3.0894	+ 1	+14 52 40.49	+20.016	- 6
1004	[χ Pegasi]	4.94	M o	o 11 45.137	+3.1045	+ 65	+19 54 3.45	+20.022	+ 5
1005	[σ Andromedae]	4.51	A 2	o 15 26.794	+3.1342	- 56	+36 28 49.94	+19.962	- 35
1006	[Pi o <sup>h</sup> 38 Andr]	5.80	A o	o 15 45.542	+3.1336	+ 47	+31 12 43.36	+20.000	+ 4
9	ι Ceti	3.75	K o	o 16 37.502	+3.0564	- 12	- 9 7 43.03	+19.963	- 27
10	ζ Tucanae	4.34	F 8	o 17 13.130	+3.1272	+2712	-65 11 52.18	+21.159	+1173
1007	[-18° 41 Cetus]	6.88	K o	o 17 15.673	+3.0454	+ 50	-18 o 19.75	+19.995	+ 9
1008	[41 Piscium]	5.58	K o	o 17 45.877	+3.0872	- 4	+ 7 53 5.87	+19.998	+ 15
1009	[ρ Andromedae]	5.20	F 5	o 18 12.985	+3.1601	+ 49	+37 39 50.98	+19.946	- 34
1010	[44 Piscium]	5.99	G 5	o 22 34.898	+3.0760	- 9	+ 1 38 7.13	+19.936	- 10
11	β Hydri	2.90	G o	o 22 53.652	+3.1588	+6906	-77 33 49.79	+20.271	+ 329
112	α Phoenicis	2.44	K o	o 23 34.209	+2.9659	+ 190	-42 36 15.89	+19.553	- 384
1011	[Pi o <sup>h</sup> 78 Cetus]	7.54	M 3	o 25 13.068	+3.0451	+ 30	-11 57 46.34	+19.907	- 15
1012	[48 Piscium]	6.46	K 2	o 25 21.002	+3.1170	+ 11	+16 8 27.99	+19.910	- 11
13	12 Ceti	6.05	K 5	o 27 13.855	+3.0620	+ 6	- 4 15 39.36	+19.898	- 3
14	[49 G. Ceti]	5.23	A 3	o 27 37.745	+2.9994	- 19	-24 5 30.03	+19.919	+ 22
15	[λ <sup>1</sup> Phoenicis]	4.88	A 2	o 28 46.112	+2.8944	+ 145	-49 6 26.63	+19.915	+ 30
16	[x Cassiopeiae]	4.24	B o	o 29 51.262	+3.4084	- 5	+62 37 42.86	+19.876	+ 3
1013	[77 G. Sculptoris]	5.62	K o	o 30 57.927	+2.9677	- 21	-29 51 40.30	+19.828	- 32
1014	[58 G. Phoenicis]	5.55	F 5	o 31 51.094	+2.8543	+ 241	-52 40 36.31	+19.889	+ 40
17	ζ Cassiopeiae	3.72	B 3	o 33 53.599	+3.3422	+ 17	+53 35 40.32	+19.818	- 6
18	π Andromedae	4.47	B 3	o 33 56.163	+3.2045	+ 12	+33 25 0.67	+19.823	o
19	[ε Andromedae]	4.52	G 5	o 35 38.560	+3.1704	- 176	+29 o 48.51	+19.554	- 247
20	δ Andromedae	3.49	K 2	o 36 22.808	+3.2084	+ 104	+30 33 37.03	+19.703	- 88
21	α Cassiopeiae	2.1-2.6	K o	o 37 22.271	+3.4039	+ 60	+56 14 9.90	+19.749	- 28
1015	[μ Phoenicis]	4.65	K o	o 38 43.800	+2.8346	- 26	-46 23 11.57	+19.769	+ 11
1016	[Lac 181 Seul]	7.21	M o	o 39 57.898	+2.9009	- 18	-36 19 25.48	+19.749	+ 10
22	β Ceti	2.24	K o	o 40 49.761	+3.0114	+ 165	-18 17 17.42	+19.765	+ 40
23	[η Phoenicis]	4.53	A o	o 40 53.361	+2.6974	+ 4	-57 45 51.64	+19.746	+ 21
26	[λ <sup>2</sup> Sculptoris]	5.97	K o	o 41 32.699	+2.9001	+ 201	-38 43 27.57	+19.841	+ 127



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o''oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o''oor
25	o Cassiopeiae	<sup>m</sup> 4.70	B 2	<sup>h m s</sup> 0 41 38.930	+3.3432	+ 17	<sup>o ' "</sup> +47 59 1.46	+19.709	— 3
24	21 Cassiopeiae	5.7-6.1	A 2	0 41 58.589	+3.9577	— 53	+74 41 16.28	+19.687	— 20
1017	[70 G. Phoenicis]	6.00	A 5	0 42 21.256	+2.8364	— 79	-42 58 33.21	+19.602	— 100
27	ζ Andromedae	4.30	K 0	0 44 25.061	+3.1802	— 75	+23 58 6.06	+19.591	— 76
1018	[79 G. Ceti]	5.45	B 9	0 45 17.798	+2.9687	+ 17	-22 1 20.41	+19.644	— 9
1019	[96 G. Piscium]	5.82	G 5	0 45 29.712	+3.1468	+ 505	+ 4 59 53.30	+18.508	—1141
28	[8 Piscium]	4.55	K 5	0 45 49.546	+3.1127	+ 55	+ 7 17 9.97	+19.598	— 45
1020	[64 Piscium]	5.23	F 5	0 46 5.025	+3.1528	— 2	+16 38 38.62	+19.441	— 197
31	[λ Hydri]	4.96	K 5	0 46 41.341	+2.0838	+ 355	-75 13 21.33	+19.604	— 24
1021	[ν Andromedae]	4.42	B 3	0 46 46.277	+3.3084	+ 15	+40 46 47.15	+19.610	— 17
29	[Br 82 Cass]	5.45	<sup>F 2</sup> + A 2	0 47 22.066	+3.6386	+ 39	+63 56 54.85	+19.609	— 6
30	[φ <sup>2</sup> Ceti]	5.24	F 5	0 47 22.259	+3.0045	— 157	-10 56 24.44	+19.396	— 220
1022	[20 Ceti]	4.92	K 0	0 50 11.710	+3.0662	+ 3	- 1 26 33.24	+19.551	— 13
34	[λ <sup>2</sup> Tucanae]	5.34	K 0	0 52 57.439	+2.2423	+ 20	-69 49 27.15	+19.473	— 36
32	γ Cassiopeiae	1.6-2.3	B 0 p	0 53 22.194	+3.6197	+ 28	+60 25 9.87	+19.499	— 2
33	μ Andromedae	3.94	A 2	0 53 41.593	+3.3302	+ 127	+38 12 5.36	+19.532	+ 37
1023	[68 Piscium]	5.64	K 0	0 54 51.136	+3.2469	+ 2	+28 41 43.05	+19.464	— 7
35	α Sculptoris	4.39	B 5	0 55 57.417	+2.8904	+ 12	-29 39 15.51	+19.455	+ 7
1024	[98 G. Ceti]	6.70	K 0	0 55 58.526	+3.0385	+ 3	- 6 10 41.70	+19.374	— 73
1025	[101 G. Ceti]	6.58	G 5	0 58 54.880	+2.9776	+ 55	-16 33 35.48	+19.312	— 71
1027	[80 G. Phoenicis]	6.00	K 0	0 59 42.490	+2.5368	— 2	-57 17 53.20	+19.395	+ 29
1026	[σ Sculptoris]	5.52	A 2	0 59 48.897	+2.8646	+ 57	-31 50 51.71	+19.381	+ 17
36	ε Piscium	4.45	K 0	1 0 5.128	+3.1140	— 54	+ 7 35 40.16	+19.387	+ 30
37	[26 Ceti]	6.18	F 0	1 0 59.023	+3.0876	+ 78	+ 1 4 20.93	+19.301	— 36
1028	[72 Piscium]	5.65	F 2	1 2 10.891	+3.1673	+ 4	+14 39 2.76	+19.368	+ 59
1029	[106 G. Ceti]	6.29	G 5	1 3 27.935	+2.9064	— 19	-24 17 9.87	+19.236	— 42
1030	[μ Cassiopeiae]	5.26	G 5	1 4 35.685	+3.9914	+3939	+54 39 4.69	+17.678	—1573
39	[ν Tucanae]	5.32	K 0	1 5 8.236	+2.3772	+ 108	-62 4 7.02	+19.240	+ 2
1031	υ Phoenicis	5.15	A 3	1 5 17.262	+2.7411	+ 35	-41 46 50.62	+19.239	+ 4
40	[η Ceti]	3.60	K 0	1 5 49.335	+3.0179	+ 147	-10 28 23.79	+19.093	— 128
42	β Andromedae	2.37	M 0	1 6 38.664	+3.3595	+ 146	+35 19 46.19	+19.089	— 112
41	[44 H. Cephei]	5.68	A 0	1 7 26.374	+5.1748	+ 325	+79 22 55.27	+19.182	+ 2
1032	[χ Piscium]	4.89	K 0	1 8 29.508	+3.2248	+ 26	+20 44 33.97	+19.149	— 5
43	[τ Piscium]	4.70	K 0	1 8 37.440	+3.3043	+ 53	+29 47 53.49	+19.119	— 32
44	[102 G. Sculpt.]	5.91	A 5	1 10 13.486	+2.7634	+ 68	-38 8 50.89	+19.084	— 24
1033	[ζ Piscium pr]	5.57	A 5	1 10 51.259	+3.1347	+ 95	+ 7 17 6.11	+19.042	— 50
1034	[89 Piscium]	5.28	A 2	1 14 57.536	+3.0947	— 35	+ 3 19 31.42	+18.961	— 19
45	υ Piscium	4.67	A 2	1 16 26.204	+3.2976	+ 16	+26 58 32.00	+18.929	— 9
1035	[ξ Andromedae]	4.99	K 0	1 19 5.446	+3.5323	+ 31	+45 14 28.45	+18.871	+ 11
1036	[109 G. Sculpt.]	5.82	K 5	1 20 57.477	+2.7923	— 5	-31 13 54.00	+18.768	— 37



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in $\alpha''\text{oor}$	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in $\alpha''\text{oor}$
47	$\delta$ Ceti	3.83	K o	$1^{\text{h}} 21^{\text{m}} 16.373$	+2.9987	— 54	$- 8^{\circ} 27' 59.93$	+18.579	— 216
1037	[138 G. Ceti]	6.38	G 5	1 22 0.896	+3.0486	+ 11	- 3 8 3.67	+18.746	— 26
46	[ $\psi$ Cassiopeiae]	4.97	K o	1 22 1.012	+4.2358	+ 126	+67 50 37.59	+18.802	+ 30
48	$\delta$ Cassiopeiae	2.80	A 5	1 22 11.857	+3.9240	+ 396	+59 57 0.73	+18.720	— 46
1038	[9 G. Hydri]	5.82	K 5	1 23 11.291	+2.0742	+ 27	-64 39 18.23	+18.726	— 10
1039	[94 Piscium]	5.63	K o	1 23 43.096	+3.2403	+ 31	+18 57 21.63	+18.663	— 57
1041	[47 Ceti]	5.68	F o	1 24 8.683	+2.9606	+ 12	-13 20 30.76	+18.718	+ 12
1040	[ $\omega$ Andromedae]	4.96	F 5	1 24 21.174	+3.5883	+ 321	+45 7 24.56	+18.599	— 100
49	[ $\gamma$ Phoenicis]	3.40	K 5	1 25 58.731	+2.6053	— 16	-43 35 57.83	+18.450	— 198
1043	[48 Ceti]	5.13	A o	1 26 57.822	+2.8780	+ 40	-21 54 47.80	+18.626	+ 9
1042	[38 Cassiopeiae]	5.95	F 5	1 27 6.025	+4.4608	+ 263	+69 58 57.07	+18.542	— 70
50	$\eta$ Piscium	3.72	G 5	1 28 32.139	+3.2105	+ 18	+15 3 46.46	+18.562	— 3
1044	[8 Phoenicis]	3.96	K o	1 28 57.812	+2.4976	+ 137	-49 21 28.57	+18.713	+162
53	[14 G. Hydri]	6.06	G 5	1 33 15.942	+0.3992	— 74	-78 47 1.43	+18.288	— 118
1045	[ $\nu$ Andromedae]	4.18	G o	1 33 33.530	+3.5213	— 153	+41 7 52.14	+18.017	— 378
51	40 Cassiopeiae	5.50	K o	1 34 4.450	+4.7889	— 36	+72 45 38.63	+18.366	— 10
1046	[ $\pi$ Piscium]	5.63	F o	1 34 10.722	+3.1808	— 46	+11 51 39.46	+18.422	+ 48
52	51 Andromedae	3.77	K o	1 34 36.215	+3.6827	+ 66	+48 21 1.44	+18.249	— 109
54	$\alpha$ Eridani	0.60	B 5	1 35 40.115	+2.2350	+ 127	-57 30 56.11	+18.298	— 23
55	43 Cassiopeiae	5.54	A o p	1 38 14.145	+4.4412	+ 86	+67 45 57.20	+18.225	— 3
56	[ $\nu$ Piscium]	4.68	K o	1 38 33.941	+3.1224	— 17	+ 5 12 36.01	+18.223	+ 7
1047	[+34° 297 Tria.]	5.45	B 8	1 38 52.211	+3.4679	+ 38	+34 58 7.58	+18.176	— 30
58	[129 G. Sculpt.]	5.64	A o	1 39 37.507	+2.6435	— 39	-37 6 33.13	+18.159	— 19
1048	[ $\pi$ Sculptoris]	5.28	K o	1 39 39.654	+2.7069	— 62	-32 36 12.85	+18.162	— 15
1049	[175 G. Ceti]	5.27	G 5	1 39 56.542	+3.0339	— 1	- 3 57 59.52	+18.134	— 32
57	$\varphi$ Persei	4.19	B o p	1 40 11.940	+3.7602	+ 26	+50 24 45.20	+18.145	— 11
59	$\tau$ Ceti	3.65	K o	1 41 30.726	+2.7873	— 1192	-16 13 35.29	+18.967	+859
60	o Piscium	4.50	K o	1 42 29.128	+3.1684	+ 48	+ 8 52 54.12	+18.125	+ 54
61	$\epsilon$ Sculptoris	5.42	F o	1 43 4.201	+2.8100	+ 117	-25 19 36.39	+17.997	— 52
1050	[4 Arietis]	5.73	A o	1 45 11.616	+3.2540	+ 34	+16 40 56.84	+17.938	— 29
1051	[ $\chi$ Ceti]	4.77	F o	1 46 52.915	+2.9466	— 103	-10 57 27.85	+17.812	— 90
1052	[2 Persei]	5.64	B 9	1 48 38.577	+3.8152	+ 12	+50 31 18.86	+17.809	— 23
62	$\zeta$ Ceti	3.92	K o	1 48 44.639	+2.9614	+ 25	-10 36 21.66	+17.795	— 33
64	$\alpha$ Trianguli	3.58	F 5	1 49 56.335	+3.4203	+ 8	+29 18 42.36	+17.549	— 231
63	$\epsilon$ Cassiopeiae	3.44	B 3	1 50 24.754	+4.3142	+ 40	+63 24 1.15	+17.743	— 17
65	$\xi$ Piscium	4.84	K o	1 50 42.306	+3.1062	+ 14	+ 2 55 0.58	+17.777	+ 28
67	$\psi$ Phoenicis	4.41	M 3	1 51 26.551	+2.4053	— 82	-46 34 16.97	+17.640	— 79
66	$\beta$ Arietis	2.72	A 5	1 51 35.765	+3.3144	+ 68	+20 32 24.03	+17.605	— 108
1053	[ $\varphi$ Phoenicis]	5.00	B 9	1 52 5.108	+2.4887	— 38	-42 45 57.98	+17.674	— 18
69	[ $\eta^{\text{a}}$ Hydri]	4.72	K o	1 53 32.310	+1.5203	+ 128	-67 55 2.48	+17.720	+ 87



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in $\alpha''\text{oor}$	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in $\alpha''\text{oor}$
68	$\chi$ Eridani	3.73	G 5	$^{\text{h}} 53^{\text{m}} 49.147$	+2.3351	+734	$^{-\circ} 51^{\circ} 52' 55.24$	+17.922	+301
72	$\alpha$ Hydri	3.02	F 0	$1^{\text{h}} 57^{\text{m}} 2.231$	+1.8908	+375	$-61^{\circ} 50' 12.68$	+17.525	+40
71	$\nu$ Ceti	4.18	M 0	$1^{\text{h}} 57^{\text{m}} 24.769$	+2.8266	+93	$-21^{\circ} 20' 36.75$	+17.453	-16
1054	[4 Persei]	4.99	B 8	$1^{\text{h}} 58^{\text{m}} 37.339$	+3.9946	+37	$+54^{\circ} 13' 21.96$	+17.419	+3
70	$\zeta$ Cassiopeiae	4.06	A 2	$1^{\text{h}} 58^{\text{m}} 41.479$	+5.1187	-104	$+72^{\circ} 9' 23.65$	+17.440	+28
73	$\gamma$ Andromedae <i>pr</i>	2.28	K 0	$2^{\text{h}} 0^{\text{m}} 30.770$	+3.6831	+44	$+42^{\circ} 4' 0.65$	+17.287	-47
1055	[ $\nu$ Fornacis]	4.74	A 0 p	$2^{\text{h}} 2^{\text{m}} 1.500$	+2.6889	+4	$-29^{\circ} 33' 36.16$	+17.277	+9
74	$\alpha$ Arietis	2.23	K 2	$2^{\text{h}} 4^{\text{m}} 4.004$	+3.3822	+138	$+23^{\circ} 12' 11.90$	+17.032	-144
75	$\beta$ Trianguli	3.08	A 5	$2^{\text{h}} 6^{\text{m}} 15.724$	+3.5701	+119	$+34^{\circ} 43' 41.32$	+17.038	-38
1056	[15 Arietis]	5.92	M 0	$2^{\text{h}} 7^{\text{m}} 34.331$	+3.3259	+62	$+19^{\circ} 14' 30.67$	+16.993	-23
77	[Br 299 Andr]	5.40	K 0	$2^{\text{h}} 9^{\text{m}} 55.961$	+3.9903	+366	$+50^{\circ} 48' 41.44$	+16.740	-166
1057	[19 Arietis]	5.99	K 5	$2^{\text{h}} 10^{\text{m}} 3.005$	+3.2726	+66	$+15^{\circ} 1' 22.92$	+16.884	-17
1058	[ $\xi^1$ Ceti]	4.54	G 5	$2^{\text{h}} 10^{\text{m}} 4.845$	+3.1801	-16	$+8^{\circ} 35' 22.93$	+16.897	-2
76	$\zeta$ Cassiopeiae	6.15	F $\frac{5}{A 2}$	$2^{\text{h}} 10^{\text{m}} 8.150$	+4.7062	-23	$+66^{\circ} 16' 4.89$	+16.895	0
78	$\mu$ Fornacis	5.24	A 0	$2^{\text{h}} 10^{\text{m}} 29.157$	+2.6421	+14	$-30^{\circ} 58' 51.67$	+16.892	+12
1060	[135 G. Phoenicis]	5.86	K 0	$2^{\text{h}} 12^{\text{m}} 18.356$	+2.4270	-27	$-41^{\circ} 25' 20.08$	+16.768	-26
1059	[21 Arietis]	5.64	F 5	$2^{\text{h}} 12^{\text{m}} 35.148$	+3.4041	-66	$+24^{\circ} 47' 21.23$	+16.702	-78
79	[ $\gamma$ Trianguli]	4.07	A 0	$2^{\text{h}} 14^{\text{m}} 2.165$	+3.5668	+35	$+33^{\circ} 35' 38.25$	+16.666	-44
80	$\delta$ Ceti	5.70	G 5	$2^{\text{h}} 14^{\text{m}} 14.286$	+2.9928	+60	$-6^{\circ} 40' 28.99$	+16.595	-105
82	[ $\varphi$ Eridani]	3.78	B 8	$2^{\text{h}} 14^{\text{m}} 32.673$	+2.1435	+98	$-51^{\circ} 45' 57.83$	+16.670	-16
1062	[21 G. Fornacis]	6.74	G 5	$2^{\text{h}} 15^{\text{m}} 0.019$	+2.5430	+139	$-36^{\circ} 14' 14.40$	+16.724	+60
81	[ $\theta$ Arietis]	5.69	A 0	$2^{\text{h}} 15^{\text{m}} 3.636$	+3.3375	-9	$+19^{\circ} 38' 51.87$	+16.663	+3
1061	[232 G. Ceti]	5.82	F 8	$2^{\text{h}} 15^{\text{m}} 9.795$	+3.1169	+243	$+1^{\circ} 29' 55.55$	+17.037	+381
1063	[62 Andromedae]	5.12	A 0	$2^{\text{h}} 15^{\text{m}} 43.101$	+3.8711	-57	$+47^{\circ} 7' 38.73$	+16.626	-2
1064	[239 G. Ceti]	5.99	K 0	$2^{\text{h}} 19^{\text{m}} 29.434$	+2.8275	+12	$-17^{\circ} 54' 41.59$	+16.391	-51
83	[ $\kappa$ Fornacis]	5.37	F 5	$2^{\text{h}} 20^{\text{m}} 1.523$	+2.7455	+147	$-24^{\circ} 3' 55.47$	+16.361	-55
1065	[8 Hydri]	4.26	A 2	$2^{\text{h}} 20^{\text{m}} 45.861$	+1.0687	-80	$-68^{\circ} 54' 33.53$	+16.393	+13
1067	[ $\kappa$ Hydri]	6.00	K 0	$2^{\text{h}} 22^{\text{m}} 31.569$	+0.3588	-187	$-73^{\circ} 53' 41.40$	+16.301	+11
1066	[ $\rho$ Ceti]	4.90	A 0	$2^{\text{h}} 23^{\text{m}} 17.461$	+2.8981	-12	$-12^{\circ} 32' 15.35$	+16.247	-3
84	[ $\lambda$ Horologii]	5.47	F 2	$2^{\text{h}} 23^{\text{m}} 21.534$	+1.6776	-95	$-60^{\circ} 33' 27.34$	+16.122	-125
1068	[12 Trianguli]	5.38	F 0	$2^{\text{h}} 24^{\text{m}} 56.049$	+3.5173	-15	$+29^{\circ} 25' 29.84$	+16.082	-83
86	[ $\kappa$ Eridani]	4.44	B 5	$2^{\text{h}} 24^{\text{m}} 58.154$	+2.1994	+21	$-47^{\circ} 56' 59.88$	+16.163	-1
85	$\xi^2$ Ceti	4.34	A 0	$2^{\text{h}} 25^{\text{m}} 13.838$	+3.1900	+25	$+8^{\circ} 12' 52.49$	+16.148	-2
1069	[27 Arietis]	6.41	G 5	$2^{\text{h}} 27^{\text{m}} 51.027$	+3.3282	+22	$+17^{\circ} 27' 41.99$	+15.933	-81
1070	[14 Trianguli]	5.35	K 0	$2^{\text{h}} 28^{\text{m}} 44.222$	+3.6617	+37	$+35^{\circ} 54' 16.39$	+15.985	+19
1071	[ $\sigma$ Ceti]	4.82	F 5	$2^{\text{h}} 29^{\text{m}} 28.729$	+2.8433	-52	$-15^{\circ} 29' 6.52$	+15.810	-117
88	[ $\lambda^1$ Fornacis]	5.88	K 0	$2^{\text{h}} 30^{\text{m}} 49.377$	+2.5014	-19	$-34^{\circ} 53' 27.92$	+15.839	-17
87	36 H. Cassiop.	5.34	K 0	$2^{\text{h}} 32^{\text{m}} 45.192$	+5.6991	-80	$+72^{\circ} 34' 46.73$	+15.773	+23
90	$\mu$ Hydri	5.29	K 0	$2^{\text{h}} 32^{\text{m}} 47.243$	-1.2734	+459	$-79^{\circ} 20' 58.49$	+15.716	-36
1072	[ $\nu$ Ceti]	5.04	G 5	$2^{\text{h}} 32^{\text{m}} 59.045$	+3.1486	-21	$+5^{\circ} 21' 15.37$	+15.718	-21



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.000	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.000
1073	[268 G. Ceti]	<sup>m</sup> 5.92	K 0	<sup>h m s</sup> 2 33 3.652	+3.2903	+1210	+ 6° 37' 31.90"	+17.198	+1463
1074	[80 Ceti]	5.71	K 5	2 33 17.463	+2.9532	— 25	— 8 4 11.42	+15.668	— 55
89	v Arietis	5.36	A 2	2 35 41.223	+3.4069	— 9	+21 43 29.07	+15.579	— 13
91	δ Ceti	4.04	B 2	2 36 39.608	+3.0752	+ 7	+ 0 5 32.44	+15.542	+ 3
1075	[1 Eridani]	4.06	K 0	2 38 29.774	+2.3674	+ 115	—40 5 23.78	+15.412	— 25
95	[ε Hydri]	4.26	B 9	2 38 44.184	+0.9241	+ 171	—68 30 7.75	+15.440	+ 16
1076	[ζ Horologii]	5.26	F 2	2 38 56.908	+1.8678	+ 48	—54 47 5.01	+15.422	+ 10
92	[Br 366 Cass]	5.84	A 2	2 40 3.691	+5.1600	+ 23	+67 35 33.80	+15.319	— 29
94	[35 Arietis]	4.58	B 3	2 40 13.043	+3.5210	+ 5	+27 28 27.75	+15.335	— 5
93	δ Persei	4.22	F 8	2 40 25.787	+4.0980	+ 344	+48 59 50.23	+15.244	— 83
1077	[14 Persei]	5.58	G 5	2 40 29.570	+3.9071	+ 3	+44 3 52.40	+15.319	— 6
97	π Ceti	4.39	B 5	2 41 30.195	+2.8553	— 6	—14 5 26.33	+15.257	— 11
1078	[43 G. Fornacis]	6.87	G 0	2 41 47.870	+2.6678	+ 123	—25 43 40.90	+15.312	+ 61
98	μ Ceti	4.36	F 0	2 41 57.881	+3.2434	+ 190	+ 9 52 58.95	+15.211	— 30
99	[η Persei]	3.95	K 0	2 46 40.037	+4.3764	+ 22	+55 40 7.75	+14.960	— 10
100	41 Arietis	3.68	B 8	2 46 44.373	+3.5317	+ 49	+27 2 6.24	+14.853	— 113
101	β Fornacis	4.50	K 0	2 46 47.289	+2.5112	+ 72	—32 38 9.42	+15.128	+ 163
1079	[σ Arietis]	5.46	B 5	2 48 27.087	+3.3131	+ 22	+14 51 23.81	+14.843	— 23
102	τ <sup>a</sup> Eridani	4.81	K 0	2 48 32.547	+2.7213	— 36	—21 13 47.20	+14.843	— 18
103	τ Persei	4.06	G 0 + A <sub>5</sub>	2 50 20.590	+4.2538	+ 3	+52 32 20.12	+14.752	— 2
104	η Eridani	4.05	K 0	2 53 44.304	+2.9311	+ 53	— 9 6 57.40	+14.339	— 214
1080	[40 G. Eridani]	5.27	A 2	2 53 51.842	+3.0077	— 23	— 3 55 57.60	+14.504	— 41
1081	[47 Arietis]	5.85	F 0	2 54 55.992	+3.4342	+ 165	+20 26 57.75	+14.453	— 28
1082	[24 Persei]	4.97	K 0	2 55 38.688	+3.7171	— 42	+34 57 50.63	+14.447	+ 10
106	δ Eridani <i>pr</i>	3.42	A 2	2 56 10.497	+2.2745	— 46	—40 31 27.02	+14.432	+ 26
1083	[λ Ceti]	4.69	B 5	2 56 45.782	+3.2157	+ 1	+ 8 41 21.70	+14.359	— 10
105	47 H. Cephei	5.72	M 0	2 58 41.186	+7.9883	— 138	+79 12 15.13	+14.261	+ 11
107	α Ceti	2.82	M 0	2 59 24.068	+3.1364	— 6	+ 3 52 30.54	+14.135	— 73
1084	[—18° 516 Erid.]	7.40	F 0	2 59 30.839	+2.7575	— 17	—18 25 22.62	+14.179	— 22
1085	[τ <sup>3</sup> Eridani]	4.16	A 3	2 59 57.952	+2.6453	— 105	—23 50 20.55	+14.126	— 47
108	γ Persei	3.08	F <sub>5</sub> + A <sub>3</sub>	3 0 47.861	+4.3453	+ 1	+53 17 33.72	+14.118	— 2
1086	[58 G. Eridani]	5.66	K 0	3 1 2.969	+2.0504	+ 18	—47 11 22.98	+14.120	+ 14
109	ρ Persei	3.2-4.1	M 3	3 1 38.569	+3.8448	+ 111	+38 37 42.98	+13.964	— 104
113	[θ Hydri]	5.52	B 8	3 2 7.671	+0.1246	+ 65	—72 7 1.79	+14.063	+ 23
110	μ Horologii	5.16	F 0	3 2 18.843	+1.4135	— 101	—59 57 1.50	+13.976	— 52
111	β Persei	2.2-3.5	B 8	3 4 34.845	+3.9041	+ 6	+40 44 43.09	+13.887	+ 3
1087	[63 G. Eridani]	7.16	G 0	3 4 42.686	+2.8340	+ 6	—13 58 6.83	+13.624	— 253
112	[ι Persei]	4.17	G 0	3 5 5.057	+4.3298	+1297	+49 24 17.89	+13.776	— 76
1088	[55 Arietis]	5.60	B 9	3 6 17.786	+3.6098	+ 15	+28 52 6.31	+13.766	— 10
114	δ Arietis	4.53	K 0	3 8 28.727	+3.4311	+ 107	+19 31 12.19	+13.632	— 5



# Mittlere Sternörter 1945.0

7\*

Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Verände- rung 1945.5	Jährl. Eigen- bew. in o <sup>s</sup> .oor	Dekl. 1945.0	Jährl. Verände- rung 1945.5	Jährl. Eigen- bew. in o <sup>s</sup> .oor
116	[94 Ceti]	5.14	F 8	<sup>h</sup> 3 <sup>m</sup> 9 <sup>s</sup> 57.848	+3.0623	+ 131	- 1° 24' 2.04"	+13.483	- 59
118	[38 G. Horologii]	5.72	N o	3 11 9.333	+1.5192	+ 11	-57 31 36.59	+13.483	+ 17
1089	[ζ Arietis]	4.95	A o	3 11 44.076	+3.4490	- 19	+20 50 31.10	+13.355	- 72
1090	79 G. Fornacis	6.85	G o	3 12 30.240	+2.3590	+ 24	-35 45 40.86	+13.389	+ 12
1091	[ζ Eridani]	4.90	A 3	3 13 9.572	+2.9144	- 4	- 9 1 22.29	+13.385	+ 51
115	48 H. Cephei	5.50	F o	3 13 15.850	+7.6092	+ 196	+77 32 8.41	+13.269	- 55
1092	[Lac 1044 Forn]	6.89	A o	3 14 39.796	+2.4585	+ 14	-31 33 10.03	+13.217	- 19
1093	[x Ceti]	4.96	G 5	3 16 28.390	+3.1470	+ 178	+ 3 10 11.23	+13.215	+ 99
1095	[ι Hydri]	5.53	F 2	3 17 17.276	-1.4973	+ 337	-77 35 23.12	+13.132	+ 67
119	[82 G. Eridani]	4.30	G 5	3 17 43.863	+2.3959	+2786	-43 16 44.40	+13.787	+753
1094	[τ Arietis]	5.17	B 3	3 18 2.779	+3.4642	+ 19	+20 57 0.53	+12.987	- 25
1096	[Pi 3 <sup>h</sup> 27 Caml]	5.55	K 2	3 19 52.495	+5.2070	- 13	+64 23 29.62	+12.893	+ 4
120	α Persei	1.90	F 5	3 20 23.030	+4.2836	+ 30	+49 40 1.89	+12.833	- 22
121	o Tauri	3.80	G 5	3 21 50.979	+3.2289	- 45	+ 8 50 12.04	+12.686	- 71
123	[ξ Tauri]	3.75	B 8	3 24 11.068	+3.2518	+ 39	+ 9 32 32.50	+12.567	- 32
122	2 H. Camelopard.	4.44	B 9 p	3 24 35.751	+4.8578	- 2	+59 45 2.29	+12.569	0
124	[σ Persei]	4.55	K o	3 26 41.130	+4.2304	+ 8	+47 48 25.71	+12.452	+ 24
125	5 Tauri	4.28	K o	3 27 49.946	+3.3129	+ 15	+12 44 58.58	+12.352	+ 3
1097	[17 Eridani]	4.80	B 9	3 27 53.149	+2.9770	+ 8	- 5 15 44.78	+12.359	+ 13
126	[x Reticuli]	4.80	F 5	3 28 24.666	+1.0471	+ 549	-63 7 51.16	+12.692	+381
1098	[+34° 674 Pers]	5.80	B 3	3 29 9.430	+3.8204	- 7	+35 16 34.66	+12.261	+ 4
127	ε Eridani	3.81	K o	3 30 20.223	+2.8269	- 660	- 9 38 35.70	+12.197	+ 20
128	[45 G. Horologii]	5.60	K o	3 30 56.155	+1.7877	+ 75	-50 33 52.18	+12.222	+ 87
1099	[τ <sup>b</sup> Eridani]	4.32	B 8	3 31 21.403	+2.6500	+ 30	-21 48 58.44	+12.080	- 25
1100	[20 Eridani]	5.32	A o p	3 33 46.929	+2.7334	+ 17	-17 38 52.72	+11.930	- 5
1101	[10 Tauri]	4.40	G 5	3 34 3.789	+3.0620	- 155	+ 0 13 42.39	+11.435	-480
130	[110 G. Eridani]	4.58	K o	3 35 7.143	+2.1527	- 13	-40 27 14.71	+11.819	- 23
1102	[τ Fornacis]	6.08	A o	3 36 30.286	+2.4959	+ 13	-28 7 18.12	+11.770	+ 27
129	[Grb 716 Caml]	5.32	M o	3 37 21.633	+5.2053	- 27	+63 2 26.30	+11.698	+ 17
1103	[11 Tauri]	6.15	A o	3 37 28.864	+3.5841	+ 8	+25 9 11.45	+11.664	- 10
131	δ Persei	3.10	B 5	3 38 59.886	+4.2720	+ 31	+47 36 48.72	+11.533	- 32
133	[δ Fornacis]	4.93	B 5	3 40 3.548	+2.3862	0	-32 6 46.75	+11.509	+ 19
135	[δ Eridani]	3.72	K o	3 40 36.676	+2.8746	- 63	- 9 56 54.05	+12.197	+746
134	v Persei	3.93	F 5	3 41 26.909	+4.0766	- 8	+42 24 23.70	+11.389	0
136	[17 Tauri]	3.81	B 5 p	3 41 36.243	+3.5631	+ 15	+23 56 31.18	+11.337	- 41
137	[24 Eridani]	5.09	B 8	3 41 42.710	+3.0476	0	- 1 20 6.93	+11.368	- 3
1104	[29 Tauri]	5.36	B 3	3 42 44.889	+3.1881	+ 12	+ 5 52 45.20	+11.292	- 5
141	β Reticuli	3.80	K o	3 43 30.151	+0.7515	+ 481	-64 58 46.56	+11.326	+ 83
139	η Tauri	2.96	B 5 p	3 44 12.591	+3.5668	+ 15	+23 56 11.82	+11.147	- 44
140	τ <sup>o</sup> Eridani	4.33	F 8	3 44 28.813	+2.5813	- 116	-23 24 39.68	+10.648	-524



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\alpha''$ 001	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\alpha''$ 001
138	$\gamma$ Camelopard.	4.67	A o	<sup>h</sup> 3 44 <sup>m</sup> 30.918	+6.3302	+ 38	+71° 9' 56".02	+11.127	- 38
142	[27 Tauri]	3.80	B 8	3 45 53.191	+3.5679	+ 13	+23 53 12.54	+11.026	- 43
143	138 G. Eridani	4.24	K o	3 47 23.663	+2.2451	- 43	-36 21 56.57	+10.916	- 43
146	$\gamma$ Hydri	3.17	M o	3 48 4.127	-0.9300	+130	-74 24 28.56	+11.031	+120
1105	+57° 752 Caml	5.79	A o	3 49 14.417	+4.8708	+106	+57 48 49.34	+10.724	- 98
1106	[Pi 3 <sup>h</sup> 187 Taur]	5.96	F o	3 50 1.059	+3.4313	+100	+17 9 53.21	+10.738	- 27
1107	[145 G. Eridani]	6.55	B 9	3 50 26.565	+2.9382	- 5	- 6 47 46.36	+10.736	+ 1
144	$\zeta$ Persei	2.91	B 1	3 50 40.108	+3.7719	+ 7	+31 43 19.02	+10.708	- 10
1108	[55 G. Horologii]	5.77	K o	3 51 50.976	+1.8591	+ 29	-47 3 16.31	+10.601	- 30
147	$\epsilon$ Persei	2.96	B 1	3 54 9.309	+4.0265	+ 18	+39 51 10.33	+10.432	- 26
148	$\xi$ Persei	4.05	O e 5	3 55 23.364	+3.8935	+ 4	+35 38 4.63	+10.365	- 1
149	$\gamma$ Eridani	3.19	K 5	3 55 27.688	+2.7995	+ 44	-13 39 49.35	+10.254	-108
1109	[17 G. Reticuli]	6.14	F 2	3 57 31.853	+1.2883	+ 33	-57 15 28.00	+10.223	+ 16
150	$\lambda$ Tauri	3.8-4.1	B 3	3 57 37.761	+3.3244	- 4	+12 20 11.08	+10.187	- 11
1110	[8 Reticuli]	4.41	M o	3 57 52.188	+0.9494	+ 8	-61 33 18.30	+10.168	- 13
1111	[35 Eridani]	5.25	B 5	3 58 44.640	+3.0403	+ 14	- 1 42 8.56	+10.102	- 12
151	$\nu$ Tauri	3.94	A o	4 0 13.625	+3.1917	+ 1	+ 5 50 17.52	+10.003	+ 1
1114	[63 G. Hydri]	6.72	A o	4 1 2.243	-0.3523	+ 57	-71 19 10.07	+ 9.984	+ 41
1112	[37 Tauri]	4.50	K o	4 1 26.330	+3.5475	+ 66	+21 55 59.84	+ 9.856	- 54
1113	[ $\lambda$ Persei]	4.33	A o	4 2 28.564	+4.4700	- 10	+50 12 14.34	+ 9.795	- 36
153	174 G. Eridani	5.57	A 5	4 3 21.334	+2.4733	+153	-27 48 3.97	+ 9.870	+105
152	48 Persei	4.03	B 3 p	4 4 39.534	+4.3562	+ 24	+47 34 3.67	+ 9.636	- 27
1115	[43 Tauri]	5.67	G 5	4 5 57.452	+3.4959	+ 76	+19 27 55.53	+ 9.536	- 29
1116	[44 Tauri]	5.55	F o	4 7 28.582	+3.6545	- 22	+26 20 20.72	+ 9.412	- 36
154	$\sigma^1$ Eridani	4.14	F 2	4 9 10.702	+2.9289	+ 6	- 6 58 46.60	+ 9.402	+ 86
1117	[ $\mu$ Persei]	4.28	G o	4 10 50.977	+4.4056	+ 8	+48 16 17.79	+ 9.168	- 18
155	$\alpha$ Horologii	3.83	K o	4 12 10.626	+1.9878	+ 32	-42 25 44.43	+ 8.880	-204
1118	[ $\mu$ Tauri]	4.32	B 3	4 12 32.667	+3.2583	+ 15	+ 8 45 22.05	+ 9.035	- 19
156	$\alpha$ Reticuli	3.36	G 5	4 13 42.659	+0.7728	+ 61	-62 36 39.95	+ 9.018	+ 53
157	[ $\gamma$ Doradus]	4.36	F 5	4 14 34.978	+1.5720	+107	-51 37 28.24	+ 9.089	+192
159	[ $\gamma$ Tauri]	3.86	K o	4 16 39.582	+3.4148	+ 81	+15 29 47.10	+ 8.709	- 23
158	[54 Persei]	5.10	G 5	4 16 49.987	+3.8961	- 20	+34 26 8.66	+ 8.712	- 6
1119	[208 G. Eridani]	6.65	B 9	4 17 39.580	+2.7163	+ 16	-16 34 4.17	+ 8.650	- 4
161	[212 G. Eridani]	5.31	A o	4 18 14.964	+2.6175	+ 19	-20 46 10.55	+ 8.599	- 8
162	$\delta$ Tauri	3.93	K o	4 19 45.548	+3.4605	+ 76	+17 24 54.55	+ 8.460	- 27
1120	[ $\xi$ Eridani]	5.23	A 2	4 20 56.369	+2.9875	- 36	- 3 52 16.51	+ 8.339	- 55
163	[ $\eta$ Reticuli]	5.18	K o	4 21 17.312	+0.6491	+128	-63 30 59.75	+ 8.542	+175
166	[8 Mensae]	5.62	K o p	4 21 38.650	-4.0543	+128	-80 20 40.57	+ 8.411	+ 69
1121	[43 Eridani]	4.06	K 5	4 21 58.122	+2.2533	+ 46	-34 8 36.38	+ 8.367	+ 54
1122	[+69° 258 Caml]	7.02	K o	4 24 3.798	+6.2990	+ 16	+69 15 28.77	+ 8.113	- 30



# Mittlere Sternörter 1945.0

9\*

Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.0001	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.001
164	$\epsilon$ Tauri	3.63	K 0	4 25 <sup>h</sup> 24.068 <sup>m</sup>	+3.5038	+ 77	+19° 3' 36.45"	+8.003	- 34
1123	[Br 615 Taur]	5.50	B 8	4 25 41.368	+3.1010	+ 9	+ 1 15 37.15	+7.995	- 20
165	[1 Camelop. sq]	5.86	B 1	4 27 39.793	+4.7524	0	+53 47 36.77	+7.854	- 1
167	[8 Caeli]	5.16	B 3	4 29 8.918	+1.8377	+ 1	-45 4 15.10	+7.739	+ 2
1124	[57 Persei]	6.07	F 0	4 29 32.284	+4.2221	+ 6	+42 56 54.43	+7.708	+ 4
1125	[ $\rho$ Tauri]	4.75	A 5	4 30 43.410	+3.4050	+ 68	+14 43 49.58	+7.586	- 23
168	$\alpha$ Tauri	1.06	K 5	4 32 45.688	+3.4430	+ 47	+16 24 1.27	+7.256	-188
171	$\alpha$ Doradus	3.47	A 0 p	4 32 48.301	+1.2967	+ 57	-55 9 28.74	+7.447	+ 5
170	[ $\nu^3$ Eridani]	3.88	K 0	4 33 24.639	+2.3327	- 39	-30 40 25.75	+7.382	- 10
169	$\nu$ Eridani	4.12	B 2	4 33 34.114	+2.9982	+ 2	- 3 27 48.44	+7.377	- 2
172	53 Eridani	3.98	K 0	4 35 39.599	+2.7481	- 48	-14 24 36.83	+7.048	-161
1127	[258 G. Eridani]	5.59	K 0	4 37 49.481	+2.4961	- 45	-24 35 19.46	+7.049	+ 18
1126	[Pi 4 <sup>h</sup> 148 Taur]	5.68	A 0	4 37 52.936	+3.7557	+ 28	+28 30 36.70	+6.994	- 32
1129	[ $\alpha$ Caeli]	4.52	F 2	4 38 47.241	+1.9323	-138	-41 58 4.20	+6.876	- 77
174	$\tau$ Tauri	4.33	B 5	4 38 56.398	+3.6014	- 1	+22 51 11.44	+6.925	- 15
1128	[Grb 866 Pers]	5.77	B 8	4 39 10.271	+4.5607	- 2	+49 52 15.14	+6.901	- 19
1130	[ $\beta$ Caeli]	5.08	F 5	4 40 6.647	+2.1212	+ 30	-37 15 2.41	+7.043	+199
173	Grb 848 Caml	6.04	F 0	4 41 23.683	+8.0740	+104	+75 50 41.89	+6.599	-134
1131	[56 Eridani]	5.87	B 5	4 41 26.613	+2.8825	- 3	- 8 36 17.51	+6.734	0
176	[ $\mu$ Eridani]	4.18	B 5	4 42 44.996	+3.0002	+ 9	- 3 21 14.32	+6.617	- 10
175	4 Camelopard.	5.35	A 2	4 43 24.734	+4.9987	+ 65	+56 39 43.07	+6.425	-145
177	[ $\mu$ Mensae]	5.69	B 9	4 43 36.253	-0.5983	+ 20	-71 1 55.80	+6.592	+ 34
1132	[268 G. Eridani]	5.97	A 2	4 44 13.911	+2.3960	+ 1	-28 11 8.80	+6.521	+ 16
1133	[Br 658 Pers]	5.10	K 2	4 46 12.190	+4.0391	- 30	+37 23 35.32	+6.379	+ 39
1134	[ $\pi^3$ Orionis]	3.31	F 8	4 46 51.111	+3.2572	+312	+ 6 52 0.86	+6.305	+ 19
1135	[97 Tauri]	5.12	F 0	4 48 9.200	+3.5103	+ 57	+18 44 52.70	+6.144	- 34
179	[ $\pi^4$ Orionis]	3.78	B 3	4 48 16.446	+3.1957	- 2	+ 5 30 45.56	+6.171	+ 3
178	$\alpha$ Camelopard.	4.38	B 0	4 48 33.975	+5.9644	+ 3	+66 15 8.08	+6.151	+ 9
1136	[ $\sigma^1$ Orionis]	5.19	M 0	4 49 25.077	+3.3942	- 3	+14 9 38.23	+6.017	- 56
180	$\pi^5$ Orionis	3.87	B 3	4 51 23.032	+3.1254	- 3	+ 2 21 7.84	+5.912	+ 3
181	$\iota$ Aurigae	2.90	K 2	4 53 24.448	+3.9075	+ 3	+33 4 51.38	+5.721	- 18
1138	[ $\eta$ Mensae]	5.28	K 0	4 56 45.139	-1.7249	+ 71	-75 1 20.32	+5.521	+ 59
183	$\epsilon$ Aurigae	3.1-3.8	F 5 p	4 58 1.010	+4.3060	+ 4	+43 44 38.62	+5.346	- 6
182	$\beta$ Camelopard.	4.22	G 0 p	4 58 30.915	+5.3374	- 6	+60 21 52.24	+5.295	- 14
1137	[ $\zeta$ Aurigae]	4.9-6.6	K 0 + B 1	4 58 37.712	+4.1943	+ 10	+40 59 51.48	+5.279	- 22
184	$\iota$ Tauri	4.70	A 5	4 59 48.289	+3.5866	+ 47	+21 30 47.54	+5.161	- 40
1139	[26 G. Caeli]	6.00	K 0	5 0 17.820	+2.2703	- 8	-31 51 0.72	+5.243	+ 83
1140	[11 Orionis]	4.65	B 9	5 1 25.404	+3.4287	+ 11	+15 19 45.04	+5.031	- 34
185	$\eta$ Aurigae	3.28	B 3	5 2 39.172	+4.2077	+ 27	+41 9 44.04	+4.894	- 66
186	$\epsilon$ Leporis	3.29	K 5	5 3 7.878	+2.5400	+ 18	-22 26 36.97	+4.852	- 69



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o"oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o"oor
187	[ $\eta^2$ Pictoris]	4.92	K 5	5 3 32.340	+1.5533	+ 55	-49 39 5.76	+4.886	0
189	[ $\zeta$ Doradus]	4.76	F 8	5 4 33.857	+1.0280	- 52	-57 32 50.17	+4.918	+118
188	$\beta$ Eridani	2.92	A 3	5 5 8.626	+2.9497	- 64	- 5 9 21.68	+4.672	- 77
1143	[13 G. Pictoris]	7.10	A 0	5 5 48.047	+1.7816	+ 25	-44 53 33.03	+4.720	+ 25
1141	[+27°732 Tauri pr]	5.97	A 3	5 6 17.688	+3.7675	+ 43	+27 57 44.75	+4.585	- 66
1142	[16 Orionis]	5.42	A 2	5 6 17.939	+3.3009	+ 41	+ 9 45 38.06	+4.648	- 3
190	[ $\lambda$ Eridani]	4.34	B 2	5 6 30.747	+2.8715	+ 1	- 8 49 23.40	+4.631	- 3
192	$\mu$ Aurigae	4.78	A 3	5 9 39.619	+4.1059	- 17	+38 25 16.81	+4.286	- 78
1144	[ $\mu$ Leporis]	3.30	A op	5 10 27.552	+2.6951	+ 28	-16 16 9.38	+4.269	- 28
194	$\beta$ Orionis	0.34	B 8 p	5 11 53.584	+2.8836	+ 2	- 8 15 49.44	+4.174	- 1
193	$\alpha$ Aurigae	0.21	G 0	5 12 37.310	+4.4329	+ 81	+45 56 39.71	+3.688	-423
191	19 H. Camelop.	5.24	F 8	5 13 27.135	+9.8879	-292	+79 10 22.48	+4.194	+159
196	$\theta$ Doradus	4.78	K 0	5 13 47.570	-0.0473	+ 10	-67 14 50.15	+4.049	+ 35
195	[ $\tau$ Orionis]	3.68	B 5	5 14 56.040	+2.9134	- 11	- 6 54 8.55	+3.906	- 8
1145	[ $\lambda$ Aurigae]	4.85	G 0	5 15 16.111	+4.2210	+458	+40 3 8.37	+3.222	-663
197	[0 Columbae]	4.91	K 0	5 15 29.965	+2.1638	+ 69	-34 56 52.57	+3.528	-338
1146	[ $\lambda$ Leporis]	4.29	B 1	5 17 2.383	+2.7643	- 2	-13 13 55.78	+3.731	- 2
198	[12 G. Columbae]	5.75	A 0	5 17 12.093	+2.3924	+ 5	-27 25 26.84	+3.715	- 4
199	[ $\zeta$ Pictoris]	5.52	F 8	5 18 0.997	+1.4710	+ 10	-50 39 51.44	+3.884	+234
1147	[22 Orionis]	4.65	B 3	5 18 57.159	+3.0631	- 2	- 0 26 6.84	+3.567	- 1
201	$\gamma$ Orionis	1.70	B 2	5 22 10.747	+3.2181	- 6	+ 6 18 5.26	+3.276	- 15
202	$\beta$ Tauri	1.78	B 8	5 22 48.751	+3.7930	+ 20	+28 33 46.46	+3.060	-175
1148	[115 Tauri]	5.31	B 3	5 23 57.434	+3.5002	+ 4	+17 54 59.95	+3.113	- 24
203	17 Camelopard.	5.75	K 5	5 24 58.069	+5.6672	- 7	+63 1 27.04	+3.046	- 2
1149	[18 G. Columbae]	5.85	A 2	5 25 19.254	+1.9245	- 8	-40 59 24.35	+3.114	+ 95
204	[ $\beta$ Leporis]	2.96	G 0	5 25 53.254	+2.5712	+ 1	-20 48 7.33	+2.879	- 91
1150	[18 Camelopard.]	6.46	G 0	5 27 50.856	+5.1396	+146	+57 11 5.64	+2.581	-218
1152	[20 G. Pictoris]	5.54	G 5	5 28 38.623	+1.6493	+ 14	-47 6 58.70	+2.606	-127
1151	[ $\chi$ Aurigae]	4.88	B 1	5 29 8.718	+3.9056	0	+32 9 12.11	+2.685	- 3
206	$\delta$ Orionis	2.48	B 0	5 29 11.695	+3.0653	0	- 0 20 17.66	+2.685	+ 1
207	$\alpha$ Leporis	2.69	F 0	5 30 18.177	+2.6464	+ 2	-17 51 36.99	+2.592	+ 4
208	[ $\varphi^1$ Orionis]	4.53	B 0	5 31 47.945	+3.2939	- 1	+ 9 27 14.44	+2.455	- 2
205	Grb 966 Caml	6.36	K 5	5 32 21.389	+8.0260	- 20	+75 0 41.52	+2.431	+ 26
209	$\iota$ Orionis	2.89	O e 5	5 32 44.462	+2.9351	+ 1	- 5 56 39.94	+2.380	+ 4
212	$\beta$ Doradus	4.2-5.7	F 5 v	5 33 8.671	+0.5202	- 11	-62 31 31.86	+2.351	+ 9
210	$\epsilon$ Orionis	1.75	B 0	5 33 25.257	+3.0445	0	- 1 14 7.67	+2.318	+ 1
214	[ $\gamma$ Mensae]	5.06	K 0	5 34 3.076	-2.3758	+307	-76 22 52.68	+2.560	+294
211	$\zeta$ Tauri	3.00	B 3 p	5 34 21.334	+3.5859	+ 1	+21 6 38.90	+2.213	- 22
1153	[35 G. Columbae]	6.75	K 2	5 35 55.478	+2.3898	+ 8	-27 14 29.38	+2.090	- 9
215	$\alpha$ Columbae	2.75	B 5 p	5 37 39.347	+2.1729	+ 2	-34 6 8.20	+1.923	- 26



# Mittlere Sternörter 1945.0

11\*

Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in $\alpha^{\circ}\alpha\alpha\alpha$	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in $\alpha^{\circ}\alpha\alpha\alpha$
216	$\alpha$ Aurigae	5.52	A o	$5^{\text{h}} 41^{\text{m}} 38.190^{\text{s}}$	+4.6485	- 10	$+49^{\circ} 48' 16.49''$	+1.598	- 3
217	[ $\gamma$ Leporis]	3.80	F 8	$5 42 10.164$	+2.5018	-206	$-22 27 54.11$	+1.185	-371
218	[130 Tauri]	5.51	F o	$5 44 13.661$	+3.4984	- 4	$+17 42 36.87$	+1.368	- 8
219	$\zeta$ Leporis	3.67	A 2	$5 44 27.713$	+2.7187	- 12	$-14 50 28.05$	+1.351	- 5
1154	[ $\delta$ Doradus]	4.52	A 5	$5 44 40.367$	+0.1077	- 51	$-65 45 21.92$	+1.346	+ 7
220	$\times$ Orionis	2.20	B o	$5 45 8.799$	+2.8458	+ 2	$- 9 41 15.86$	+1.292	- 4
1155	[142 G. Orionis]	5.95	G 5	$5 45 50.857$	+2.9811	+ 37	$- 4 6 28.92$	+1.033	-202
221	[ $\nu$ Aurigae]	4.18	K o	$5 47 40.546$	+4.1583	- 5	$+39 8 4.15$	+1.081	+ 7
1156	[ $\gamma$ Pictoris]	4.38	K o	$5 48 49.542$	+1.0895	+ 84	$-56 10 46.83$	+0.914	- 63
222	[ $\delta$ Leporis]	3.90	K o	$5 48 57.310$	+2.5807	+167	$-20 52 56.74$	+0.315	-649
223	[ $\beta$ Columbae]	3.22	K o	$5 49 1.144$	+2.1150	+ 39	$-35 47 16.34$	+1.363	+404
1159	[37 G. Pictoris]	4.98	K o	$5 49 38.490$	+1.3577	+ 5	$-52 7 14.88$	+0.825	- 79
1158	[136 Tauri]	4.54	A o	$5 49 52.131$	+3.7715	+ 4	$+27 36 4.16$	+0.869	- 14
1157	[ $\xi$ Aurigae]	4.92	A 2	$5 50 14.055$	+5.0283	- 17	$+55 41 48.24$	+0.871	+ 20
224	$\alpha$ Orionis	0.1-1.2	M o	$5 52 11.579$	+3.2484	+ 19	$+ 7 23 54.59$	+0.692	+ 11
226	[ $\eta$ Leporis]	3.77	F o	$5 53 53.906$	+2.7329	- 29	$-14 10 34.94$	+0.669	+138
225	$\delta$ Aurigae	3.88	K o	$5 54 59.819$	+4.9407	+ 97	$+54 16 58.68$	+0.307	-127
227	$\beta$ Aurigae	2.07	A op	$5 55 29.580$	+4.4015	- 50	$+44 56 38.73$	+0.388	- 3
1160	[ $\gamma$ Columbae]	4.36	B 3	$5 55 35.135$	+2.1275	- 2	$-35 17 17.02$	+0.394	+ 9
1161	[60 Orionis]	5.25	A o	$5 55 59.807$	+3.0850	- 10	$+ 0 32 57.99$	+0.348	+ 1
1162	+33° 1209 Auri	6.80	A 2	$5 56 37.352$	+3.9444	- 9	$+33 8 5.64$	+0.299	+ 6
229	$\eta$ Columbae	4.03	K o	$5 57 27.692$	+1.8365	+ 13	$-42 49 2.38$	+0.203	- 17
1163	[1 Geminorum]	4.30	G 5	$6 0 46.543$	+3.6474	- 4	$+23 16 5.29$	-0.174	-104
230	[66 Orionis]	5.70	K o	$6 2 3.902$	+3.1700	- 4	$+ 4 9 48.12$	-0.190	- 7
231	[1 G. Puppis]	6.22	F 8	$6 2 53.338$	+1.7266	- 88	$-45 2 7.50$	-0.007	+247
1164	[74 G. Columbae]	5.72	A o	$6 3 58.393$	+2.3102	+ 6	$-29 45 4.60$	-0.389	- 40
232	$\nu$ Orionis	4.40	B 2	$6 4 25.824$	+3.4259	+ 3	$+14 46 36.33$	-0.413	- 23
1165	[94 G. Leporis]	5.46	A o	$6 6 39.092$	+2.5231	+ 9	$-22 24 58.64$	-0.619	- 36
233	[36 Camelopard.]	5.39	K o	$6 7 19.103$	+6.0367	+ 12	$+65 43 56.91$	-0.673	- 29
1166	[ $\nu$ Doradus]	5.21	B 9	$6 9 5.481$	-0.3843	- 95	$-68 49 54.26$	-0.772	+ 22
235	[ $\delta$ Pictoris]	4.84	B 1	$6 9 13.525$	+1.1677	- 19	$-54 57 20.26$	-0.794	+ 13
1168	$\times$ Aurigae	4.45	K o	$6 11 52.365$	+3.8233	- 55	$+29 31 12.86$	-1.306	-265
239	[ $\alpha$ Mensae]	5.14	K o	$6 11 52.900$	-1.7859	+304	$-74 44 6.41$	-1.253	-215
1167	[Br 904 Auri sq]	6.42	F o	$6 11 56.595$	+4.0433	- 53	$+36 10 1.54$	-1.039	+ 8
234	22 H. Camelop.	4.73	A o	$6 12 47.308$	+6.6125	+ 8	$+69 20 33.44$	-1.226	-103
1169	[74 Orionis]	5.11	F 5	$6 13 21.248$	+3.3692	+ 54	$+12 17 21.06$	-0.984	+186
238	[ $\times$ Columbae]	4.51	K o	$6 14 35.594$	+2.1339	- 14	$-35 7 15.97$	-1.193	+ 84
237	[2 Lynceis]	4.42	A o	$6 14 46.254$	+5.2941	- 12	$+59 2 0.48$	-1.274	+ 20
1170	[7 Monocerotis]	5.13	B 3	$6 17 3.762$	+2.8903	- 4	$- 7 47 54.18$	-1.492	+ 1
240	$\zeta$ Canis maj.	3.10	B 3	$6 18 12.028$	+2.3034	+ 5	$-30 2 15.79$	-1.587	+ 5



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o.oor	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o.oor
241	$\mu$ Geminorum	3.19	M o	$6^{\text{h}} 19^{\text{m}} 37.951$	+ 3.6298	+ 40	$+22^{\circ} 32' 37.13''$	-1.830	- 112
243	$\beta$ Canis maj.	1.99	B 1	$6 20 16.589$	+ 2.6422	- 4	$-17 55 38.37$	-1.776	- 4
242	$\psi^1$ Aurigae	5.10	K 2	$6 20 39.777$	+ 4.6214	+ 1	$+49 19 5.84$	-1.812	- 4
244	$8 \epsilon$ Monocerotis	4.48	A 5	$6 20 51.162$	+ 3.1795	- 12	$+ 4 37 20.77$	-1.813	+ 11
1171	[23 G. Canis maj.]	5.39	K o	$6 21 36.331$	+ 2.7990	- 35	$-11 29 56.86$	-1.929	- 40
1172	[Grb 1156 Auri]	7.14	G 5	$6 22 26.783$	+ 4.2702	0	$+41 59 31.44$	-1.974	- 11
245	$\alpha$ Carinae	-0.86	F o	$6 22 43.807$	+ 1.3324	+ 24	$-52 39 53.43$	-1.960	+ 25
246	$10$ Monocerotis	4.98	B 3	$6 25 14.535$	+ 2.9627	- 6	$- 4 43 35.76$	-2.201	+ 4
1173	[v Geminorum]	4.06	B 5	$6 25 41.816$	+ 3.5625	- 4	$+20 14 55.34$	-2.263	- 18
1174	[13 Monocerotis]	4.50	A o p	$6 29 55.742$	+ 3.2445	- 2	$+ 7 22 29.52$	-2.619	- 7
1175	[56 G. Monocer.]	5.02	B 3	$6 30 50.318$	+ 3.0451	- 9	$- 1 10 37.16$	-2.715	- 24
247	$8$ Lynceis	6.05	G o	$6 32 40.061$	+ 5.4835	-289	$+61 31 56.07$	-3.130	- 279
249	$\xi^2$ Canis maj.	4.54	A o	$6 32 44.993$	+ 2.5145	+ 6	$-22 55 11.84$	-2.842	+ 14
251	$\gamma$ Geminorum	1.93	A o	$6 34 32.071$	+ 3.4662	+ 30	$+16 26 52.63$	-3.056	- 44
250	$51$ Aurigae	5.71	K o	$6 34 50.898$	+ 4.1574	- 22	$+39 26 28.83$	-3.154	- 115
252	v Puppis	3.18	B 8	$6 36 4.611$	+ 1.8355	- 7	$-43 8 48.04$	-3.145	- 1
248	$23$ H. Camelop.	5.60	F 8	$6 36 53.111$	+10.2486	-308	$+79 37 45.42$	-3.826	- 608
254	$\epsilon$ Geminorum	3.18	G 5	$6 40 32.903$	+ 3.6913	- 5	$+25 11 14.66$	-3.545	- 15
256	$\xi$ Geminorum	3.40	F 5	$6 42 12.129$	+ 3.3673	- 80	$+12 57 23.60$	-3.867	- 195
257	* $\alpha$ Canis maj.	-1.58	A o	$6 42 43.511$	+ 2.6434	-373	$-16 38 21.72$	-4.927	-1211
255	[ $\psi^5$ Aurigae]	5.34	G o	$6 42 46.583$	+ 4.3248	- 1	$+43 38 3.57$	-3.560	+ 162
1176	[ $\psi^6$ Aurigae]	5.28	K o	$6 43 28.109$	+ 4.5743	- 4	$+48 50 59.62$	-3.777	+ 5
1177	$16$ Monocerotis	5.84	B 3	$6 43 32.404$	+ 3.2720	- 7	$+ 8 38 49.22$	-3.795	- 8
264	[ $\zeta$ Mensae]	5.64	A 2	$6 44 39.620$	- 4.9863	- 23	$-80 45 28.96$	-3.818	+ 59
258	$18$ Monocerotis	4.70	K o	$6 44 59.530$	+ 3.1284	- 14	$+ 2 28 26.09$	-3.925	- 13
1178	[31 G. Puppis]	5.25	B 9	$6 45 28.341$	+ 2.0527	- 19	$-37 52 4.58$	-3.968	- 16
1179	[80 G. Monocer.]	5.65	A o	$6 46 30.139$	+ 3.0216	- 11	$- 2 12 30.12$	-4.037	+ 4
262	$\alpha$ Pictoris	3.30	A 5	$6 47 37.623$	+ 0.6156	-108	$-61 52 54.80$	-3.867	+ 269
259	[43 Camelopard.]	5.13	B 5	$6 47 47.058$	+ 6.4708	+ 2	$+68 57 19.49$	-4.149	+ 4
1180	[x Canis maj.]	3.78	B 2 p	$6 47 47.107$	+ 2.2412	- 10	$-32 26 37.67$	-4.146	+ 4
263	[ $\tau$ Puppis]	2.83	K o	$6 48 34.200$	+ 1.4884	+ 26	$-50 32 53.89$	-4.289	- 72
261	$\theta$ Geminorum	3.64	A 2	$6 49 9.900$	+ 3.9546	- 1	$+34 1 46.21$	-4.321	- 52
266	$\theta$ Canis maj.	4.25	K 2	$6 51 38.019$	+ 2.7876	- 95	$-11 58 6.07$	-4.494	- 14
260	$24$ H. Camelop.	4.75	K 5	$6 52 4.494$	+ 8.7558	+210	$+77 3 6.54$	-4.532	- 12
267	[1 Volantis]	5.52	B 8	$6 52 5.076$	- 0.6864	- 10	$-70 53 42.86$	-4.496	+ 20
268	$\epsilon$ Canis maj.	1.63	B 1	$6 56 27.805$	+ 2.3584	+ 4	$-28 53 45.76$	-4.888	+ 2
1181	[101 G. Monoc.]	5.84	A o	$6 57 45.110$	+ 2.8823	- 15	$- 8 19 44.01$	-5.009	- 10
1182	[ $\omega$ Geminorum]	5.21	K o	$6 59 3.746$	+ 3.6558	- 7	$+24 17 44.24$	-5.114	- 3
1183	[ $\sigma$ Canis maj.]	3.68	K 5	$6 59 31.632$	+ 2.3904	- 4	$-27 51 17.64$	-5.148	+ 1
270	[ $\omega^3$ Canis maj.]	3.12	B 5 p	$7 0 43.621$	+ 2.5056	- 1	$-23 45 6.12$	-5.249	+ 2

Nr. 257. Ort des Schwerpunktes. Die Reduktion auf den Hauptstern ist nach den Elementen von Volet, Bull. Astr. II, Bd. 7, 1931:

$$\begin{array}{l}
 1945.0 \quad \Delta \alpha = +0.046 \quad \Delta \delta = +0.68 \\
 1946.0 \quad \quad = +0.030 \quad \quad = +0.94
 \end{array}$$



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Verände- rung 1945-5	Jährl. Eigen- bew. in o''0001	Dekl. 1945.0	Jährl. Verände- rung 1945-5	Jährl. Eigen- bew. in o''001
269	ζ Geminorum	$\frac{m}{3.7-4.1}$	G o p	$7^{\circ} 0' 50.834$	+3.5585	— 7	+20° 39' 9.83	—5.264	— 3
271	γ Canis maj.	4.07	B 5	$7^{\circ} 1' 16.157$	+2.7147	+ 1	—15 33 2.31	—5.306	— 9
1184	[C Puppis]	5.26	A 2	$7^{\circ} 2' 18.071$	+1.9018	— 20	—42 15 18.28	—5.316	+ 67
272	[27 G. Carinae]	5.30	A o	$7^{\circ} 3' 16.762$	+1.1174	— 12	—56 39 56.13	—5.463	+ 2
1185	[2 G. Canis min.]	5.92	K o	$7^{\circ} 4' 51.048$	+3.2431	— 3	+ 7 33 32.86	—5.634	— 36
273	δ Canis maj.	1.98	F 8 p	$7^{\circ} 6' 9.243$	+2.4397	— 3	—26 18 16.74	—5.702	+ 5
1186	[20 Monocerotis]	5.02	K o	$7^{\circ} 7' 29.734$	+2.9803	— 1	— 4 8 59.24	—5.605	+ 215
274	63 Aurigae	5.07	K 2	$7^{\circ} 7' 52.474$	+4.1269	+ 36	+39 24 43.98	—5.854	— 2
1187	[22 δ Monocerot.]	4.09	A o	$7^{\circ} 9' 3.300$	+3.0639	— 3	— 0 24 0.60	—5.944	+ 6
1189	[γ² Volantis]	3.87	K o	$7^{\circ} 9' 13.315$	—0.5071	+ 44	—70 24 35.58	—5.864	+ 98
1188	[51 Geminorum]	5.31	M 3	$7^{\circ} 10' 12.789$	+3.4452	+ 6	+16 15 14.23	—6.091	— 43
275	[1 Puppis]	4.47	F o	$7^{\circ} 10' 59.458$	+1.7101	—142	—46 39 59.94	—6.013	+ 98
1190	[Grb 1281 Lynx]	5.55	G o	$7^{\circ} 11' 45.352$	+4.4562	+ 36	+47 20 23.04	—6.360	— 184
276	[64 Aurigae]	5.75	A 3	$7^{\circ} 14' 12.907$	+4.1720	— 16	+40 58 59.05	—6.369	+ 11
277	λ Geminorum	3.65	A 2	$7^{\circ} 14' 55.956$	+3.4478	— 35	+16 38 28.58	—6.478	— 39
278	π Puppis	2.74	K 5	$7^{\circ} 15' 11.962$	+2.1193	— 8	—36 59 51.19	—6.451	+ 9
279	δ Geminorum	3.52	F o	$7^{\circ} 16' 50.352$	+3.5832	— 19	+22 5 7.19	—6.611	— 14
281	δ Volantis	4.02	F 5	$7^{\circ} 16' 51.804$	—0.0288	— 12	—67 51 23.61	—6.598	— 2
280	19 Lyncis sq	5.61	B 8	$7^{\circ} 18' 23.181$	+4.8960	— 8	+55 23 14.44	—6.760	— 35
1191	[66 Aurigae]	5.28	K o	$7^{\circ} 20' 20.142$	+4.1550	— 5	+40 46 48.72	—6.914	— 29
283	[η Canis maj.]	2.43	B 5 p	$7^{\circ} 21' 55.106$	+2.3732	— 5	—29 11 40.81	—7.009	+ 6
282	ι Geminorum	3.89	K o	$7^{\circ} 22' 18.743$	+3.7265	— 92	+27 54 32.92	—7.136	— 89
1192	[169 G. Can. maj.]	5.82	F o	$7^{\circ} 22' 36.704$	+2.7555	—142	—13 38 32.72	—7.082	— 11
285	β Canis minor.	3.09	B 8	$7^{\circ} 24' 10.087$	+3.2535	— 38	+ 8 24 6.16	—7.238	— 40
284	Grb 1308 Caml	5.80	K o	$7^{\circ} 25' 10.457$	+6.2443	— 22	+68 34 51.51	—7.322	— 40
286	ρ Geminorum	4.18	F o	$7^{\circ} 25' 34.548$	+3.8589	+116	+31 53 44.22	—7.142	+ 172
1193	[6 Canis minor.]	4.85	K o	$7^{\circ} 26' 44.121$	+3.3397	— 1	+12 7 18.99	—7.425	— 17
1194	[σ Puppis]	3.28	K 5	$7^{\circ} 27' 29.073$	+1.9034	— 58	—43 11 20.75	—7.278	+ 190
287	*α Geminorum	$\frac{1.99}{2.85}$	A o	$7^{\circ} 31' 5.520$	+3.8295	—138	+32 0 38.74	—7.864	— 103
288	[108 G. Puppis]	4.52	F 8	$7^{\circ} 31' 41.809$	+2.5677	— 38	—22 10 34.30	—7.774	+ 35
1196	[υ Geminorum]	4.22	K 5	$7^{\circ} 32' 32.116$	+3.6971	— 26	+27 1 10.93	—7.987	— 110
1195	[+46° 1286 Lynx]	5.80	K 5	$7^{\circ} 32' 32.356$	+4.3561	— 29	+46 18 12.59	—7.916	— 39
1197	[125 G. Puppis]	5.66	B 3	$7^{\circ} 34' 15.944$	+2.6372	— 4	—19 34 42.65	—8.012	+ 3
1198	[Q Carinae]	4.92	K 5	$7^{\circ} 34' 18.053$	+1.4838	+ 15	—52 24 37.43	—8.038	— 21
289	25 Monocerotis	5.17	F 5	$7^{\circ} 34' 32.573$	+2.9828	— 51	— 3 59 12.49	—8.022	+ 16
290	[127 G. Puppis]	4.62	B 8	$7^{\circ} 35' 19.890$	+2.2196	— 27	—34 50 37.13	—8.082	+ 18
291	*α Canis min.	0.48	F 5	$7^{\circ} 36' 25.411$	+3.1404	—474	+ 5 22 2.72	—9.218	—1030
292	24 Lyncis	4.96	A 2	$7^{\circ} 38' 21.821$	+5.0771	— 53	+58 50 29.02	—8.397	— 54
293	[26 α Monocer.]	4.07	K o	$7^{\circ} 38' 37.134$	+2.8666	— 51	— 9 25 17.58	—8.387	— 24
294	κ Geminorum	3.70	G 5	$7^{\circ} 41' 7.750$	+3.6222	— 23	+24 31 53.72	—8.616	— 54

Nr. 287. Ort des Schwerpunktes. Die Reduktion auf den Ort des helleren Sterns beträgt nach den Elementen von Rabe, Astron. Nachr. Bd. 216, 1922:

$$\begin{aligned} 1945.0 \quad \Delta \alpha &= +0.006 & \Delta \delta &= +0.85 \\ 1946.0 &= +0.002 & &= +0.78 \end{aligned}$$

Nr. 291. Ort des Schwerpunktes. Die Reduktion auf den Ort des hellen Sterns beträgt nach den Elementen von Jones, Monthly Notices Bd. 88, 1928:

$$\begin{aligned} 1945.0 \quad \Delta \alpha &= -0.001 & \Delta \delta &= -1.20 \\ 1946.0 &= -0.008 & &= -1.19 \end{aligned}$$



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o''oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o''oor
295	β Geminorum	1.21 <sup>m</sup>	K o	7 41 57.161	+3.6713	-475	+28° 9' 38.51"	- 8.680	- 53
297	ζ Volantis	3.89	K o	7 42 30.641	-0.7363	+ 58	-72 28 27.34	- 8.651	+ 18
1200	[81 Geminorum]	5.02	K 2	7 42 56.459	+3.4739	- 54	+18 38 44.83	- 8.767	- 61
1199	[+37° 1769 Lynx]	5.45	M o	7 42 59.261	+4.0032	+ 15	+37 39 8.40	- 8.702	+ 7
1201	[11 Canis minor.]	5.30	A o	7 43 14.582	+3.3027	- 22	+10 54 13.65	- 8.753	- 24
1202	[4 Puppis]	5.11	F o	7 43 24.857	+2.7627	- 10	-14 25 43.87	- 8.738	+ 4
296	π Geminorum	5.29	K 2	7 43 57.789	+3.8687	- 9	+33 33 8.78	- 8.817	- 31
1203	[187 G. Puppis]	5.26	B 2	7 45 51.719	+1.8127	- 13	-46 28 16.00	- 8.930	+ 4
1204	[ξ Puppis]	3.47	G o p	7 46 58.805	+2.5235	- 3	-24 43 14.10	- 9.025	- 3
1206	[61 G. Carinae]	5.82	F 2	7 48 18.392	+0.9907	- 95	-60 8 45.63	- 8.973	+151
1205	[ζ Canis minor.]	5.11	B 8	7 48 50.835	+3.1113	- 15	+ 1 54 31.12	- 9.172	- 5
1207	[φ Geminorum]	4.99	A 2	7 50 7.995	+3.6717	- 28	+26 54 35.20	- 9.302	- 35
301	[213 G. Puppis]	3.76	G 5	7 50 19.478	+2.0620	- 21	-40 25 58.74	- 9.281	0
299	[26 Lynceis]	5.69	K o	7 50 42.792	+4.3688	- 50	+47 42 32.97	- 9.315	- 2
300	Grb 1374 Caml	5.56	K o	7 53 39.148	+7.1864	- 30	+74 4 5.14	- 9.575	- 35
1208	[1 Cancri]	5.96	K o	7 53 52.142	+3.4063	- 23	+15 56 19.24	- 9.601	- 45
1209	[Grb 1384 Lynx]	6.47	K o	7 54 25.126	+4.2147	+ 38	+44 7 34.31	- 9.590	+ 8
303	χ Carinae	3.60	B 3	7 55 22.774	+1.5251	- 41	-52 50 2.25	- 9.642	+ 29
1210	[225 G. Puppis]	4.85	A 2	7 55 28.494	+2.3919	- 6	-30 11 7.92	- 9.672	+ 6
304	[27 Monocerotis]	5.06	K o	7 56 59.248	+2.9970	- 43	- 3 31 41.83	- 9.796	- 1
302	[53 Camelop.]	6.00	A 2 p	7 57 1.276	+5.1240	- 74	+60 28 37.36	- 9.820	- 22
1212	[232 G. Puppis]	4.64	A 2	7 57 24.082	+2.6885	- 6	-18 14 50.05	- 9.876	- 50
1211	[ω Cancri]	5.88	K o	7 57 36.322	+3.6302	+ 8	+25 32 41.76	- 9.842	0
1213	[161 G. Monocer.]	6.30	G o	7 59 43.818	+2.9484	+ 7	- 6 10 57.81	-10.031	- 28
305	χ Geminorum	5.04	K o	8 0 8.570	+3.6848	- 21	+27 57 0.46	-10.081	- 46
306	ζ Puppis	2.27	O d	8 1 38.987	+2.1085	- 30	-39 50 49.90	-10.134	+ 13
307	27 Lynceis	4.87	A 2	8 4 19.720	+4.5135	- 67	+51 40 1.70	-10.359	- 9
308	ρ Puppis	2.88	F 5	8 5 12.048	+2.5554	- 60	-24 8 40.34	-10.364	+ 51
1214	[Pi 7 <sup>h</sup> 308 Lynx]	6.64	F 8	8 6 36.928	+3.9044	+164	+35 37 17.44	-10.758	-237
1215	[3 H. Ursae maj.]	5.48	G 5	8 7 21.901	+5.9744	- 4	+68 38 18.93	-10.571	+ 7
309	γ Velorum	2.22	O a p	8 7 50.207	+1.8492	- 8	-47 10 25.14	-10.605	+ 5
311	20 Puppis	5.05	G 5	8 10 48.229	+2.7576	- 12	-15 37 16.73	-10.836	- 6
310	Br 1147 Caml	5.73	G 5	8 12 41.149	+7.5403	+ 65	+75 55 40.87	-10.955	+ 15
312	β Cancri	3.76	K 2	8 13 32.005	+3.2536	- 34	+ 9 21 23.22	-11.081	- 51
1216	[+4° 1945 Hydra]	6.68	G o + A 2	8 14 24.829	+3.1587	+ 1	+ 4 23 24.43	-11.093	+ 1
313	[289 G. Puppis]	4.43	A 5	8 16 29.703	+2.2456	- 94	-36 29 16.45	-11.154	+ 91
1218	[7 G. Hydrae]	6.32	A 5	8 16 36.849	+2.8740	- 43	- 9 59 34.93	-11.225	+ 29
1217	[χ Cancri]	5.16	F 5	8 16 43.581	+3.6446	- 14	+27 23 50.15	-11.648	-386
314	31 Lynceis	4.43	K 5	8 19 4.616	+4.1082	- 16	+43 21 58.43	-11.536	-104
1219	[294 G. Puppis]	4.94	K o	8 19 12.966	+2.3626	- 13	-32 52 42.05	-11.433	+ 9



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.001	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.001
1220	[20 Cancri]	5.88	F 0	8 <sup>h</sup> 20 <sup>m</sup> 12.982	+3.4353	- 40	+18° 30' 36.89	-11.544	- 30
315	ε Carinae	1.74	K <sub>0</sub> + B	8 21 23.201	+1.2315	- 37	-59 19 54.85	-11.578	+ 18
318	θ Chamael.	4.26	K 0	8 22 19.861	-1.7914	-386	-77 18 27.80	-11.622	+ 39
1221	[302 G. Puppis pr]	5.55	K 5	8 22 41.178	+2.5908	- 22	-23 52 0.08	-11.663	+ 27
316	Br 1197 Hydra	3.95	A 0	8 22 54.731	+2.9979	- 46	- 3 43 32.72	-11.731	- 26
319	[β Volantis]	3.65	K 0	8 25 8.721	+0.6548	- 44	-65 57 10.74	-12.022	-160
1222	[29 Cancri]	5.90	A 2	8 25 33.266	+3.3479	- 13	+14 23 39.34	-11.909	- 16
317	ο Ursae maj.	3.47	G 0	8 25 42.683	+4.9862	-185	+60 54 14.66	-12.016	-111
320	Grb 1450 Lynx	6.05	K 0	8 29 20.787	+3.9006	- 86	+38 12 23.73	-12.331	-173
321	η Cancri	5.52	K 0	8 29 31.807	+3.4694	- 35	+20 37 45.77	-12.220	- 49
322	[Grb 1446 Cam]	6.29	K 0	8 33 38.405	+6.6767	- 51	+73 49 28.44	-12.559	-104
1223	[8 Hydrae]	4.18	A 0	8 34 44.709	+3.1762	- 47	+ 5 53 48.34	-12.541	- 12
323	[Grb 1460 UMa]	6.03	K 0	8 35 13.727	+4.4461	- 39	+52 54 21.70	-12.600	- 37
324	[48 G. Velorum]	4.13	A 5	8 35 42.492	+2.1091	- 17	-42 47 44.73	-12.588	+ 7
1224	[σ Hydrae]	4.54	K 0	8 35 52.991	+3.1361	- 13	+ 3 32 8.63	-12.629	- 21
1225	[34 Lynceis]	5.52	K 0	8 37 13.475	+4.1468	+ 21	+46 1 42.55	-12.614	+ 85
325	[6 Hydrae]	5.15	K 2	8 37 25.062	+2.8423	- 60	-12 16 47.46	-12.717	- 6
1227	ο Velorum	3.68	B 3	8 38 43.038	+1.7197	- 22	-52 43 33.04	-12.777	+ 2
1226	[53 G. Velorum]	4.06	F 5 p	8 38 47.998	+1.9911	- 6	-46 27 7.87	-12.799	+ 4
1228	[γ Cancri]	4.73	A 0	8 40 6.342	+3.4720	- 76	+21 40 3.48	-12.936	- 44
327	α Pyxidis	3.70	B 2	8 41 22.838	+2.4109	- 13	-32 59 13.65	-12.967	+ 9
326	δ Cancri	4.17	K 0	8 41 33.695	+3.4094	- 14	+18 21 27.95	-13.223	-233
1229	[25 G. Pyxidis]	6.13	A 2	8 42 27.586	+2.6849	+ 4	-20 58 1.32	-13.024	+ 25
331	[η Chamael.]	5.62	B 9	8 43 14.816	-2.0268	- 78	-78 45 52.36	-13.077	+ 20
328	ι Cancri	4.20	G 5	8 43 22.364	+3.6307	- 19	+28 57 45.04	-13.154	- 45
1230	[14 Hydrae]	5.19	B 9	8 46 35.868	+3.0149	- 18	- 3 14 15.94	-13.345	- 23
332	[γ Pyxidis]	4.19	K 2	8 48 11.776	+2.5465	-101	-27 30 17.86	-13.344	+ 81
334	ζ Hydrae	3.30	K 0	8 52 29.231	+3.1714	- 69	+ 6 9 21.70	-13.692	+ 10
1231	[80 G. Hydrae]	5.90	K 0	8 52 40.754	+2.7583	+ 23	-18 1 50.74	-13.733	- 19
336	108 G. Carinae	3.98	B 8	8 53 48.150	+1.3607	- 25	-60 26 2.03	-13.743	+ 41
335	ι Ursae maj.	3.12	A 5	8 55 27.083	+4.1084	-443	+48 15 32.50	-14.131	-240
337	α Cancri	4.27	A 3	8 55 28.839	+3.2813	+ 22	+12 4 18.69	-13.925	- 34
1233	[109 G. Carinae]	5.29	B 3	8 55 37.670	+1.4680	- 20	-59 0 58.64	-13.889	+ 12
1232	[64 Cancri]	5.64	G 5	8 56 10.281	+3.6844	- 37	+32 38 0.77	-13.976	- 40
339	Br 1268 Lynx	4.09	F 5	8 57 4.598	+3.8951	-395	+42 0 6.85	-14.250	-257
338	ρ Ursae maj.	4.99	M 0	8 57 36.871	+5.4126	- 45	+67 50 45.29	-14.011	+ 16
1234	[91 G. Velorum]	4.42	F 8	8 58 2.100	+2.2397	- 40	-41 2 19.53	-14.012	+ 39
1235	[92 G. Hydrae]	5.80	K 0	8 59 9.381	+3.0650	- 37	- 0 15 59.60	-14.046	+ 76
341	κ Ursae maj.	3.68	A 0	8 59 52.771	+4.0967	- 35	+47 22 31.95	-14.225	- 58
340	[Grb 1501 UMa]	5.68	A 2	8 59 59.339	+4.3963	- 14	+54 30 7.93	-14.175	- 1



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0''001	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0''001
1236	[93 G. Hydrae]	6.74	A 0	9 <sup>h</sup> 0 <sup>m</sup> 58.957	+2.9905	— 11	— 4 57' 9.47	—14.230	+ 5
343	α Volantis	4.18	A 5	9 1 35.061	+0.9492	+ 11	—66 10 34.20	—14.372	—101
342	[97 G. Velorum]	3.69	K 0	9 2 15.316	+2.0686	— 57	—46 52 40.74	—14.327	— 15
1237	[Pi 8 <sup>h</sup> 245 Lynx]	4.71	G 5	9 3 2.221	+3.8165	— 27	+38 40 24.11	—14.383	— 22
1238	[κ Cancri]	5.14	B 8	9 4 46.159	+3.2494	— 17	+10 53 26.62	—14.476	— 10
345	λ Velorum	2.22	K 5	9 5 58.247	+2.2066	— 25	—43 12 34.72	—14.523	+ 15
1239	[ξ Cancri]	5.22	G 5	9 6 11.984	+3.4494	0	+22 16 8.70	—14.553	— 1
1240	[101 G. Hydrae]	5.81	K 0	9 6 33.203	+2.8767	+ 8	—12 8 2.54	—14.589	— 15
1241	[ε Pyxidis]	5.63	A 3	9 7 36.460	+2.5431	0	—30 8 23.59	—14.681	— 45
1242	[107 G. Hydrae]	5.81	K 0	9 9 27.514	+2.7484	— 39	—19 31 19.25	—14.712	+ 34
346	[36 Lyncis]	5.30	B 8	9 10 12.842	+3.9244	— 27	+43 26 45.01	—14.830	— 39
347	θ Hydrae	3.84	A 0	9 11 30.212	+3.1216	+ 86	+ 2 32 50.48	—15.181	—314
348	β Carinae	1.80	A 0	9 12 36.388	+0.6618	— 280	—69 29 25.39	—14.827	+103
351	[ι Carinae]	2.25	F 0	9 15 37.082	+1.6066	— 23	—59 2 38.11	—15.100	+ 5
350	83 Cancri	6.60	F 5	9 15 54.813	+3.3484	— 87	+17 56 22.52	—15.258	—135
352	α Lyncis	3.30	K 5	9 17 42.593	+3.6551	— 181	+34 37 34.70	—15.213	+ 13
1243	[θ Pyxidis]	4.93	M 0	9 19 3.397	+2.6565	— 7	—25 43 49.66	—15.312	— 10
353	κ Velorum	2.63	B 3	9 20 24.543	+1.8582	— 12	—54 46 30.31	—15.368	+ 10
1244	[κ Leonis]	4.61	K 0	9 21 27.307	+3.4941	— 25	+26 25 12.82	—15.486	— 49
1245	[28 Hydrae]	5.81	K 5	9 22 39.007	+2.9998	— 11	— 4 52 45.52	—15.517	— 14
354	α Hydrae	2.16	K 2	9 24 53.054	+2.9483	— 10	— 8 25 9.52	—15.599	+ 27
356	ε Antliae	4.64	K 2	9 26 58.368	+2.4763	— 22	—35 42 36.18	—15.749	— 10
355	23 Ursae maj.	3.75	F 0	9 27 12.884	+4.7313	+ 155	+63 18 13.79	—15.728	+ 25
1246	[ξ Leonis]	5.12	G 5	9 28 58.958	+3.2336	— 66	+11 32 39.71	—15.935	— 87
358	θ Ursae maj.	3.26	F 8 p	9 29 11.416	+4.0131	—1031	+51 55 45.14	—16.402	—543
361	[N Velorum]	3.4—4.2	K 5	9 29 32.950	+1.8232	— 42	—56 47 27.99	—15.876	+ 2
357	24 Ursae maj.	4.57	G 0	9 29 39.260	+5.3072	— 135	+70 4 25.52	—15.809	+ 75
1247	[160 G. Hydrae]	5.16	K 0	9 30 40.404	+2.7624	— 18	—20 52.17.15	—15.927	+ 11
360	10 Leonis min.	4.62	G 5	9 30 51.590	+3.6755	+ 4	+36 38 34.16	—15.978	— 29
362	[H Carinae]	5.52	K 2	9 31 12.460	+0.4540	— 32	—72 50 12.66	—15.973	— 8
1248	[17 G. Antliae]	5.63	K 0	9 34 47.716	+2.5829	+ 27	—31 55 50.29	—16.178	— 24
1249	[Br 1352 Hydrae]	4.78	K 0	9 35 35.210	+3.1298	— 108	+ 4 53 54.95	—16.250	— 55
1250	[ι Hydrae]	4.10	K 0	9 37 2.832	+3.0641	+ 31	— 0 53 32.05	—16.339	— 69
363	[Grb 1564 UMa]	5.74	K 0	9 37 34.360	+5.1380	— 141	+69 29 21.60	—16.371	— 74
364	[κ Hydrae]	4.96	B 3	9 37 40.093	+2.8762	— 20	—14 4 54.95	—16.325	— 24
365	[ο Leonis]	3.76	F <sub>5</sub> +A <sub>3</sub>	9 38 12.997	+3.2020	— 98	+10 8 36.58	—16.368	— 39
1251	[15 Leonis]	5.73	A 2	9 40 20.062	+3.5169	— 18	+30 13 41.69	—16.546	—109
1252	[ψ Leonis]	5.62	M 0	9 40 44.290	+3.2671	— 1	+14 16 27.54	—16.460	— 4
366	θ Antliae	4.98	F 5 p	9 41 44.865	+2.6745	— 38	—27 31 0.87	—16.476	+ 30
367	ε Leonis	3.12	G 0 p	9 42 43.965	+3.4055	— 35	+24 1 42.41	—16.572	— 17



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o'oor	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o'oor
1253	[+19° 2254 Leo]	6.92 <sup>m</sup>	K o	9 42 <sup>h</sup> 48.781 <sup>m</sup>	+3.3330	+ 16	+18° 56' 16.26"	-16.579	- 19
1254	[1 Carinae]	3.6-4.8	G o	9 43 44.129	+1.6485	- 18	-62 15 12.86	-16.591	+ 13
1255	[Br 1369 U Maj]	5.20	G o	9 45 3.086	+3.8705	+215	+46 16 41.96	-16.766	- 97
368	υ Ursae maj.	3.89	F o	9 47 5.748	+4.2673	-386	+59 17 54.98	-16.924	-157
370	6 Sextantis	6.00	A 2	9 48 27.704	+3.0231	+ 5	- 3 59 5.18	-16.865	- 33
1256	[162 G. Velorum]	5.72	K o	9 49 11.855	+2.3245	- 29	-45 56 9.04	-16.832	+ 35
371	[μ Leonis]	4.10	K o	9 49 38.367	+3.4121	-162	+26 16 0.84	-16.948	- 60
373	[183 G. Hydrae]	5.16	M o	9 52 16.464	+2.8302	- 31	-18 44 53.06	-17.058	- 47
1257	[18 G. Sextantis]	7.03	K o	9 53 23.976	+2.9803	- 20	- 7 23 1.75	-17.070	- 6
372	Grb 1586 U Maj	5.96	K o	9 53 30.663	+5.3659	-183	+73 8 32.63	-17.111	- 43
374	[19 Leonis min.]	5.19	F 5	9 54 19.384	+3.6747	-107	+41' 19 6.54	-17.135	- 30
375	φ Velorum	3.70	B 5	9 54 55.696	+2.1062	- 16	-54 18 18.83	-17.122	+ 11
377	[η Antliae]	5.25	F o	9 56 30.471	+2.5738	- 81	-35 37 37.42	-17.229	- 25
376	[12 Sextantis]	6.63	A 5	9 56 51.907	+3.1118	- 49	+ 3 38 54.52	-17.202	+ 18
378	π Leonis	4.89	M o	9 57 18.480	+3.1704	- 23	+ 8 18 32.07	-17.266	- 27
1258	[20 Leonis min.]	5.60	G 5	9 57 50.724	+3.4592	-414	+32 11 42.18	-17.698	-434
1259	[Pi 9 <sup>h</sup> 229 U Maj]	5.74	F 5	10 0 57.802	+3.9883	- 28	+54 9 31.45	-17.411	- 10
1260	[193 G. Hydrae]	5.80	F o	10 1 48.454	+2.7725	- 71	-24 1 7.08	-17.417	+ 20
1261	[υ <sup>2</sup> Hydrae]	4.72	B 8	10 2 26.696	+2.9216	- 26	-12 47 50.28	-17.457	+ 8
379	η Leonis	3.58	A o p	10 4 20.170	+3.2707	- 4	+17 1 53.91	-17.551	- 6
380	α Leonis	1.34	B 8	10 5 26.679	+3.1951	-169	+12 14 12.45	-17.589	+ 3
381	λ Hydrae	3.83	K o	10 7 54.329	+2.9251	-138	-12 4 53.50	-17.787	- 93
382	191 G. Velorum	4.09	A 2	10 12 25.391	+2.5183	-136	-41 50 55.86	-17.836	+ 40
385	[ω Carinae]	3.56	B 8	10 12 25.979	+1.4291	- 45	-69 45 51.99	-17.874	+ 2
384	ζ Leonis	3.65	F o	10 13 38.066	+3.3367	+ 11	+23 41 31.63	-17.936	- 12
383	λ Ursae maj.	3.52	A 2	10 13 47.258	+3.6185	-152	+43 11 23.34	-17.974	- 45
1262	[32 Ursae maj.]	5.74	A 3	10 14 3.840	+4.3587	-144	+65 23 1.32	-17.954	- 13
1263	[ε Sextantis]	5.40	F o	10 14 53.753	+2.9813	-109	- 7 47 36.78	-17.972	+ 1
1264	[187 G. Carinae]	3.44	K 5	10 15 14.574	+2.0036	- 32	-61 3 25.00	-17.981	+ 5
1265	[59 G. Antliae]	5.62	B 9	10 15 36.141	+2.7498	- 14	-28 42 58.95	-17.990	+ 10
1266	[23 Sextantis]	6.53	B 3	10 18 11.594	+3.0981	- 8	+ 2 34 1.44	-18.103	- 4
386	μ Ursae maj.	3.21	K 5	10 19 3.597	+3.5745	- 75	+41 46 36.76	-18.102	+ 29
1267	[27 Leonis min.]	5.83	A 3	10 19 56.591	+3.4559	- 10	+34 11 11.42	-18.178	- 14
1268	[204 G. Velorum]	4.99	K 5	10 19 57.785	+2.5729	- 28	-41 22 21.55	-18.112	+ 52
387	30 H. Ursae maj.	4.92	A o	10 20 11.365	+4.3273	- 24	+65 50 43.49	-18.198	- 25
388	[25 Sextantis]	6.10	B 9	10 20 39.632	+3.0322	- 37	- 3 47 43.51	-18.190	0
1269	[64 G. Antliae]	5.40	A 3	10 21 4.560	+2.6271	-136	-37 43 48.25	-18.260	- 54
391	I Carinae	4.08	F 5	10 23 18.582	+1.1927	- 30	-73 45 5.02	-18.312	- 26
389	μ Hydrae	4.06	K 5	10 23 25.708	+2.9019	- 89	-16 33 17.69	-18.374	- 83
392	α Antliae	4.42	K 5	10 24 37.919	+2.7457	- 57	-30 47 13.32	-18.318	+ 15



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o''0001	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o''001
390	β Leonis min.	4.41	K o	10 24 42.533	+3.4694	-102	+36 59 22.95	-18.445	-109
393	196 G. Carinae	4.08	F o	10 25 51.292	+2.2019	-20	-58 27 29.16	-18.381	-5
1270	[8 Sextantis]	5.24	B 9	10 26 41.062	+3.0470	-35	-2 27 25.10	-18.424	-19
1271	[+29°2057 LMin]	6.92	K o	10 26 48.891	+3.3650	+7	+28 51 47.64	-18.418	-8
394	36 Ursae maj.	4.84	F 5	10 27 7.228	+3.8399	-218	+56 15 48.01	-18.456	-35
1272	[46 Leonis]	5.74	M o	10 29 15.713	+3.2027	-29	+14 25 12.28	-18.477	+16
396	[ρ Leonis]	3.85	B op	10 29 54.969	+3.1590	-6	+9 35 24.82	-18.521	-6
397	[203 G. Carinae]	3.58	B 5 p	10 30 3.808	+2.1333	-27	-61 24 6.90	-18.511	+9
395	9 H. Draconis	5.04	G 5	10 30 28.517	+5.1025	-96	+75 59 49.93	-18.543	-9
1273	219 G. Velorum	5.14	K o	10 30 37.433	+2.5344	+6	-46 43 10.44	-18.539	-1
399	[44 Hydrae]	5.32	K 2	10 31 23.749	+2.8538	-7	-23 27 40.21	-18.546	+18
398	[37 Ursae maj.]	5.16	F o	10 31 38.002	+3.8654	+78	+57 21 59.84	-18.538	+34
1274	[236 G. Hydrae]	5.85	F 8	10 33 47.929	+2.9870	+175	-11 56 3.77	-19.323	-680
401	[γ Chamaeleon.]	4.10	M o	10 34 50.088	+0.7129	-125	-78 19 20.20	-18.655	+20
1275	[37 Leonis min.]	4.77	G o	10 35 37.796	+3.3768	+2	+32 15 44.97	-18.700	+1
402	[225 G. Velorum]	4.37	G o	10 37 6.730	+2.3880	-21	-55 18 58.96	-18.749	-2
404	33 Sextantis	6.40	K o	10 38 36.267	+3.0520	-94	-1 27 6.89	-18.918	-125
403	[35 H. Ursae maj.]	5.23	K o	10 39 9.531	+4.2975	-8	+69 21 52.49	-18.827	-17
1277	[78 G. Antliae]	5.73	A o	10 40 9.998	+2.7812	-23	-32 25 37.92	-18.838	+1
1276	[P10 <sup>h</sup> 135 U Maj]	5.28	F o	10 40 19.481	+3.5265	-260	+46 29 36.46	-18.918	-74
405	[41 Leonis min.]	5.05	A 2	10 40 25.708	+3.2621	-85	+23 28 36.79	-18.842	+5
406	δ Carinae	3.03	B o	10 40 59.371	+2.1407	-24	-64 6 20.83	-18.852	+12
407	42 Leonis min.	5.37	B 9	10 42 48.653	+3.3360	-21	+30 58 21.12	-18.958	-41
1278	[Br 1493 Leo]	6.29	K o	10 43 13.878	+3.1237	-8	+6 39 48.75	-18.970	-40
1279	[51 Leonis]	5.64	K o	10 43 26.874	+3.2319	+64	+19 10 55.18	-18.981	-45
1280	[250 G. Hydrae]	6.86	K o	10 44 5.744	+2.8514	-121	-25 45 31.59	-18.905	+49
411	[8 <sup>a</sup> Chamaeleon.]	4.62	B 3	10 45 17.420	+0.5671	-153	-80 15 0.07	-18.986	+2
409	53 Leonis	5.27	A o	10 46 22.028	+3.1535	-4	+10 50 12.25	-19.046	-28
410	[ν Hydrae]	3.32	K o	10 46 54.542	+2.9605	+67	-15 54 19.34	-18.838	+195
1281	[41 Sextantis]	5.78	A 2	10 47 32.409	+3.0098	-5	-8 36 21.40	-19.072	-21
412	[46 Leonis min.]	3.92	K o	10 50 14.458	+3.3554	+69	+34 30 42.60	-19.407	-285
414	[ι Antliae]	4.70	K o	10 54 8.999	+2.7962	+67	-36 50 30.01	-19.354	-132
413	[Br 1508 Draco]	6.26	G 5	10 55 36.796	+4.7999	-246	+78 3 55.30	-19.289	-31
1282	[47 Ursae maj.]	5.14	G o	10 56 23.551	+3.3601	-281	+40 43 27.82	-19.227	+49
1283	[α Crateris]	4.20	K o	10 57 5.529	+2.9232	-323	-18 0 19.84	-19.170	+123
415	239 G. Velorum	4.56	A 2	10 57 37.495	+2.7523	+17	-41 55 49.92	-19.309	-4
1284	[58 Leonis]	5.05	K o	10 57 43.206	+3.0985	+8	+3 54 47.63	-19.326	-18
416	β Ursae maj.	2.44	A o	10 58 32.139	+3.6212	+97	+56 40 39.57	-19.300	+27
1285	[29 G. Leonis]	7.13	G 5	10 59 48.857	+3.0523	-14	-3 12 58.59	-19.386	-30
417	α Ursae maj.	1.95	K o	11 0 21.023	+3.7035	-174	+62 2 54.01	-19.440	-71



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor
418	$\chi$ Leonis	4.66	F 0	$11^{\text{h}} 2^{\text{m}} 10.822$	+3.0947	-231	$+ 7^{\circ} 38' 1.46$	-19.458	- 49
419	[ $\chi^1$ Hydrae]	5.06	F 5	$11 2 40.690$	+2.8905	-143	-26 59 46.67	-19.424	- 4
1286	[11 G. Crateris]	6.14	A 3	$11 2 48.253$	+3.0113	+ 10	-10 47 26.70	-19.528	-105
1287	[65 Leonis]	5.66	G 5	$11 4 5.868$	+3.0603	-255	+ 2 15 15.96	-19.540	- 90
1288	[259 G. Carinae]	5.80	B 3	$11 4 50.326$	+2.1659	- 39	-70 34 48.32	-19.467	- 2
1289	[260 G. Carinae]	4.02	F 8p	$11 6 13.944$	+2.5622	- 8	-58 40 36.20	-19.495	- 1
420	$\psi$ Ursae maj.	3.15	K 0	$11 6 34.726$	+3.3733	- 62	+44 47 50.35	-19.532	- 31
421	$\beta$ Crateris	4.52	A 2	$11 8 56.980$	+2.9512	+ 3	-22 31 30.78	-19.651	-103
1290	[275 G. Hydrae]	6.46	M 0	$11 9 35.479$	+2.8915	+ 14	-32 8 5.07	-19.556	+ 4
1291	[9 G. Centauri]	5.67	A 2	$11 10 2.310$	+2.7334	- 98	-48 48 7.03	-19.528	+ 41
422	$\delta$ Leonis	2.58	A 3	$11 11 11.135$	+3.1908	+102	+20 49 31.27	-19.726	-136
423	$\theta$ Leonis	3.41	A 0	$11 11 21.322$	+3.1481	- 43	+15 43 49.80	-19.676	- 82
424	[Grb 1757 U Maj.]	5.97	K 0	$11 13 36.382$	+3.3812	- 94	+49 46 36.28	-19.649	- 15
1292	[ $\phi$ Leonis]	4.58	A 5	$11 13 51.851$	+3.0501	- 75	- 3 21 2.41	-19.681	- 43
425	$\nu$ Ursae maj.	3.71	K 0	$11 15 30.741$	+3.2407	- 23	+33 23 40.82	-19.645	+ 22
1293	[55 Ursae maj.]	4.78	A 2	$11 16 8.375$	+3.2702	- 49	+38 29 15.03	-19.754	- 77
426	$\delta$ Crateris	3.82	K 0	$11 16 35.299$	+2.9997	- 85	-14 28 50.33	-19.485	+200
427	$\sigma$ Leonis	4.13	A 0	$11 18 18.020$	+3.0936	- 64	+ 6 19 51.80	-19.726	- 13
428	$\pi$ Centauri	4.26	B 5	$11 18 29.473$	+2.7367	- 31	-54 11 21.49	-19.719	- 4
429	Grb 1771 U Maj	5.98	A 0	$11 19 36.246$	+3.5658	- 13	+64 37 54.22	-19.704	+ 29
1294	[28 G. Centauri]	6.42	B 3	$11 21 43.765$	+2.8693	- 15	-42 22 0.68	-19.775	- 10
431	[ $\gamma$ Crateris]	4.14	A 5	$11 22 7.867$	+2.9975	- 69	-17 22 54.13	-19.772	- 2
1295	[Pi 11 <sup>h</sup> 63 Leo]	7.15	A 2	$11 22 50.999$	+3.1809	- 23	+27 2 59.00	-19.778	+ 3
1296	[83 Leonis]	6.54	K 0	$11 23 58.267$	+3.0371	-482	+ 3 18 47.09	-19.619	+177
1297	[ $\tau$ Leonis]	5.18	K 0	$11 25 6.503$	+3.0856	+ 12	+ 3 9 33.65	-19.828	- 17
1298	[282 G. Hydrae]	6.79	K 0	$11 26 53.844$	+2.9710	- 12	-27 43 38.22	-19.841	- 7
432	[58 Ursae maj.]	5.88	F 8	$11 27 32.910$	+3.2466	- 53	+43 28 31.16	-19.767	+ 76
433	$\lambda$ Draconis	4.06	M 0	$11 28 9.721$	+3.5632	- 78	+69 38 5.47	-19.870	- 20
434	$\xi$ Hydrae	3.72	G 5	$11 30 17.510$	+2.9512	-161	-31 33 10.81	-19.913	- 38
436	$\lambda$ Centauri	3.34	B 9	$11 33 13.992$	+2.7663	- 53	-62 42 54.89	-19.912	- 5
435	[C <sup>2</sup> Centauri]	5.42	F 0	$11 33 15.135$	+2.9073	+ 28	-47 20 11.26	-19.958	- 51
1299	[ $\theta$ Crateris]	4.81	B 9	$11 33 53.364$	+3.0435	- 43	- 9 29 52.42	-19.909	+ 4
437	$\nu$ Leonis	4.47	K 0	$11 34 7.895$	+3.0720	+ 2	- 0 31 11.74	-19.877	+ 39
438	[ $\pi$ Chamaeleon.]	5.74	F 0	$11 34 58.681$	+2.4751	-318	-75 35 30.25	-19.916	+ 7
439	[ $\omega$ Hydrae]	4.88	B 8	$11 37 28.558$	+2.9804	- 30	-34 26 22.52	-19.943	+ 3
1300	[61 Ursae maj.]	5.46	G 5	$11 38 9.476$	+3.1593	- 12	+34 30 44.55	-20.342	-390
440	$\zeta$ Draconis	5.48	K 0	$11 39 25.329$	+3.3475	- 83	+67 2 57.87	-19.928	+ 34
1301	[ $\zeta$ Crateris]	4.90	G 5	$11 41 58.304$	+3.0414	+ 24	-18 2 41.52	-20.018	- 37
442	[ $\lambda$ Muscae]	3.80	A 5	$11 42 59.903$	+2.8318	-148	-66 25 25.40	-19.958	+ 30
1302	[ $\nu$ Virginis]	4.20	M 0	$11 43 1.929$	+3.0838	- 12	+ 6 50 15.61	-20.175	-187



Nr.	N a m e	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor
441	$\chi$ Ursae maj.	3.85	K o	<sup>h</sup> 11 <sup>m</sup> 43 <sup>a</sup> 9.188	+3.1685	- 138	+48° 5' 3.97"	-19.966	+ 23
443	[65 G. Centauri]	4.22	G o	11 43 50.418	+2.9004	- 42	-60 52 20.84	-20.012	- 19
1303	[Grb 1826 UMa]	6.64	F o	11 44 10.479	+3.2390	- 52	+61 42 28.90	-20.040	- 44
1304	[93 Leonis]	4.54	F 8	11 45 8.987	+3.0947	- 108	+20 31 28.62	-20.012	- 11
1305	[298 G. Hydrae]	5.45	M 3	11 45 58.152	+3.0306	- 20	-26 26 37.70	-20.017	- 11
444	$\beta$ Leonis	2.23	A 2	11 46 15.308	+3.0602	- 343	+14 52 46.38	-20.126	- 119
445	$\beta$ Virginis	3.80	F 8	11 47 49.760	+3.1251	+ 494	+ 2 4 29.02	-20.289	- 275
1306	[12 G. Virginis]	5.81	K o	11 48 13.418	+3.0675	+ 3	- 5 1 38.78	-20.022	- 5
446	[B Centauri]	4.71	K o	11 48 23.158	+2.9972	- 88	-44 52 3.17	-20.046	- 29
1307	[Grb 1830 UMa]	6.46	G 5	11 49 48.865	+3.4582	+3386	+38 6 48.35	-25.828	-5804
447	$\gamma$ Ursae maj.	2.54	A o	11 50 56.780	+3.1561	+ 104	+54 .0 2.08	-20.021	+ 6
1308	[95 Leonis]	5.49	A 2	11 52 50.861	+3.0857	+ 7	+15 57 10.23	-20.037	- 3
1309	[ $\eta$ Crateris]	5.16	A o	11 53 12.543	+3.0575	- 37	-16 50 40.43	-20.045	- 11
1310	[Pir 202 UMa]	6.30	F o	11 55 17.864	+3.0822	- 84	+32 34 51.42	-20.107	- 69
1311	[ $\pi$ Virginis]	4.57	A 3	11 58 3.242	+3.0744	- 2	+ 6 55 15.56	-20.075	- 33
449	[88 G. Centauri]	5.28	F o	12 0 48.163	+3.1068	+ 292	-42 7 33.82	-20.162	- 120
450	$\sigma$ Virginis	4.24	G 5	12 2 24.428	+3.0561	- 149	+ 9 2 18.42	-19.997	+ 45
451	[Grb 1852 Caml]	5.96	K o	12 2 28.992	+3.0526	+ 438	+77 12 47.38	-20.141	- 100
1312	[311 G. Hydrae]	6.26	B 9	12 3 6.588	+3.0819	- 42	-35 23 15.30	-20.037	+ 5
452	$\delta$ Centauri	2.88	B 3p	12 5 29.896	+3.1089	- 33	-50 24 57.95	-20.047	- 10
453	$\epsilon$ Corvi	3.21	K o	12 7 17.494	+3.0858	- 49	-22 18 50.07	-20.023	+ 10
1313	[3 Comae]	6.34	A o	12 7 43.452	+3.0578	- 14	+17 6 54.64	-20.038	- 6
454	[Br 1634 Caml]	5.12	A 5	12 9 38.752	+2.8120	+ 22	+77 55 18.29	-20.006	+ 19
1314	[Br 1636 UMa]	6.26	K o	12 12 0.219	+2.9751	- 25	+53 44 25.99	-20.035	- 19
455	[ $\delta$ Crucis]	3.08	B 3	12 12 12.688	+3.1850	- 44	-58 26 34.47	-20.020	- 6
456	$\delta$ Ursae maj.	3.44	A 2	12 12 42.725	+2.9700	+ 125	+57 20 16.96	-20.009	+ 3
457	[ $\gamma$ Corvi]	2.78	B 8	12 12 58.418	+3.0856	- 111	-17 14 11.99	-19.994	+ 16
458	[2 Canum venat.]	5.92	K 5	12 13 22.438	+3.0068	+ 14	+40 57 58.24	-20.048	- 39
459	$\beta$ Chamaeleontis	4.38	B 5	12 15 4.594	+3.5131	- 133	-79 0 24.80	-19.983	+ 16
1315	[14 Virginis]	7.03	K o	12 16 30.169	+3.0878	0	- 8 36 32.45	-20.018	- 27
460	$\eta$ Virginis	4.00	A o	12 17 5.414	+3.0696	- 42	- 0 21 40.62	-20.009	- 22
1316	[3 Canum venat.]	5.56	K 2	12 17 6.519	+2.9562	- 10	+49 17 21.31	-19.984	+ 3
1317	[16 Virginis]	5.10	K o	12 17 33.299	+3.0471	- 197	+ 3 37 7.29	-20.054	- 70
1318	[12 Comae]	4.78	F 5	12 19 44.537	+3.0158	- 9	+26 9 4.26	-19.982	- 13
1319	[322 G. Hydrae]	6.34	K o	12 22 25.283	+3.1414	+ 3	-27 26 40.43	-19.967	- 20
461	[6 Canum venat.]	5.22	K o	12 23 8.571	+2.9558	- 70	+39 19 24.62	-19.980	- 40
462	$\alpha$ Crucis <i>m</i>	<sup>1.58</sup> 2.09	<sup>B 1</sup> B 1	12 23 31.670	+3.3361	- 39	-62 47 40.69	-19.949	- 12
463	[323 G. Hydrae]	5.68	A o	12 23 57.372	+3.1616	- 6	-32 31 31.00	-19.963	- 30
464	[ $\sigma$ Centauri]	4.16	B 3	12 25 3.303	+3.2442	- 25	-49 55 34.35	-19.944	- 21
1320	[122 G. Centauri]	5.60	B 8	12 25 26.493	+3.1896	- 25	-38 44 12.51	-19.940	- 20



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\sigma^{\text{oor}}$	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\sigma^{\text{oor}}$
466	20 Comae	5.72	A 2	<sup>h</sup> 12 <sup>m</sup> 26 <sup>s</sup> 57.504	+3.0141	+ 17	+21 12' 1.71"	-19.938	- 34
465	8 Corvi	3.11	A 0	12 27 0.862	+3.1044	-146	-16 12 33.95	-20.047	-143
467	[74 Ursae maj.]	5.44	A 5	12 27 23.624	+2.8022	- 87	+58 42 29.34	-19.812	+ 88
468	[γ Crucis]	1.61	M 3	12 28 6.094	+3.3272	+ 39	-56 48 19.32	-20.156	-264
469	[γ Muscae]	4.04	B 5	12 29 9.314	+3.5811	- 92	-71 49 45.58	-19.887	- 6
1321	[35 G. Corvi]	5.76	G 5	12 30 42.865	+3.1112	- 17	-12 31 39.89	-19.813	+ 50
1322	[Pi 12 <sup>a</sup> 122 CVen]	5.43	K 0	12 30 56.492	+2.9550	+ 12	+33 33 4.29	-19.899	- 39
470	β Canum venat.	4.32	G 0	12 31 8.048	+2.8490	-631	+41 39 21.96	-19.571	+287
472	α Draconis	3.88	B 5 p	12 31 8.740	+2.5614	-117	+70 5 28.20	-19.850	+ 8
471	β Corvi	2.84	G 5	12 31 29.589	+3.1517	+ 4	-23 5 34.06	-19.911	- 57
1323	[23 Comae]	4.78	A 0	12 32 6.679	+2.9891	- 51	+22 55 54.52	-19.831	+ 15
473	24 Comae sq	5.18	K 0	12 32 22.264	+3.0092	- 4	+18 40 46.53	-19.823	+ 20
474	α Muscae	2.94	B 3	12 33 52.840	+3.5757	- 65	-68 49 57.50	-19.836	- 13
1324	[25 Virginis]	5.90	A 0	12 33 57.204	+3.0901	- 22	- 5 31 44.31	-19.843	- 20
475	[χ Virginis]	4.78	K 0	12 36 24.266	+3.0966	- 52	- 7 41 35.49	-19.823	- 33
1325	133 G. Centauri	5.84	K 0	12 38 21.023	+3.2949	- 77	-45 50 41.22	-19.709	+ 54
1326	[ρ Virginis]	4.95	A 0	<sup>h</sup> 12 <sup>m</sup> 39 5.998	+3.0367	+ 57	+10 32 18.35	-19.846	- 94
478	76 Ursae maj.	5.92	A 0	12 39 10.135	+2.6212	- 56	+63 0 52.89	-19.772	- 22
479	[330 G. Hydrae]	5.73	K 2	12 41 4.229	+3.1973	- 27	-28 1 20.39	-19.760	- 38
1327	[Y Canum ven.]	4.8-6.0	N 3	12 42 33.001	+2.8200	+ 1	+45 44 26.22	-19.689	+ 10
1328	[32 d <sup>2</sup> Virginis]	5.24	A 5	12 42 50.269	+3.0311	- 73	+ 7 58 25.65	-19.692	+ 2
481	β Crucis	1.50	B 1	12 44 29.516	+3.5046	- 47	-59 23 17.93	-19.679	- 14
1329	[332 G. Hydrae]	6.29	B 9	12 44 57.886	+3.1892	- 31	-24 33 8.24	-19.624	+ 34
1330	[35 Virginis]	6.66	M 0	12 45 3.278	+3.0550	- 5	+ 3 52 21.77	-19.662	- 5
1331	[143 G. Centauri]	5.01	A 0	12 47 41.661	+3.2549	- 25	-33 41 59.07	-19.633	- 23
1332	[31 Comae]	5.07	G 0	12 49 1.247	+2.9222	- 12	+27 50 22.62	-19.601	- 16
1333	[32 Comae]	6.53	K 5	12 49 28.112	+2.9830	- 6	+17 22 21.59	-19.594	- 17
482	150 G. Centauri	4.34	A 5	12 50 22.903	+3.3226	+ 58	-39 52 48.25	-19.585	- 25
1334	[52 G. Corvi]	6.84	A 0	12 51 5.880	+3.1651	- 26	-17 44 22.07	-19.548	- 2
1335	[ψ Virginis]	4.91	M 3	12 51 29.352	+3.1200	- 17	- 9 14 26.20	-19.559	- 20
483	ε Ursae maj.	1.68	A 0 p	12 51 36.899	+2.6398	+134	+56 15 28.99	-19.545	- 9
484	8 Virginis	3.66	M 0	12 52 49.875	+3.0221	-314	+ 3 41 45.43	-19.570	- 57
486	8 Draconis	5.27	F 0	12 53 17.503	+2.3885	- 15	+65 44 11.24	-19.539	- 36
485	α Canum ven. sq	2.90	A 0 p	12 53 27.451	+2.8063	-201	+38 36 53.97	-19.449	+ 50
1336	[44 Virginis]	5.88	A 0	12 56 49.349	+3.0908	- 26	- 3 30 56.24	-19.424	+ 5
487	[8 Muscae]	3.63	K 2	12 58 27.388	+4.1244	+571	-71 15 9.99	-19.424	- 31
488	ε Virginis	2.95	K 0	12 59 26.282	+2.9864	-186	+11 15 15.70	-19.353	+ 19
1337	[14 Canum ven.]	5.11	B 9	13 3 10.254	+2.8054	- 26	+36 5 33.87	-19.270	+ 16
1338	[Grb 1956 CVen]	5.72	K 0	13 3 23.954	+2.6991	- 18	+45 33 44.11	-19.255	+ 25
1339	[39 Comae]	6.04	F 5	13 3 40.369	+2.9236	- 55	+21 26 53.27	-19.320	- 46



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\sigma^{\circ}\sigma'$	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\sigma^{\circ}\sigma'$
489	[ $\xi^a$ Centauri]	4.40	B 3	$13^{\circ} 3' 41.222$	+3.5012	- 32	$-49^{\circ} 36' 43.38$	-19.284	- 11
1340	[177 G. Centauri]	5.96	B 9	$13^{\circ} 4' 21.368$	+3.5637	- 41	$-53^{\circ} 9' 56.89$	-19.290	- 32
490	$\vartheta$ Virginis	4.46	A 0	$13^{\circ} 7' 5.940$	+3.1063	- 23	$-5^{\circ} 14' 44.93$	-19.224	- 35
491	[17 Canum ven.]	6.05	F 0	$13^{\circ} 7' 31.783$	+2.7548	- 64	$+38^{\circ} 47' 26.74$	-19.140	+ 38
1341	[342 G. Hydrae]	6.48	A 3	$13^{\circ} 8' 39.397$	+3.2638	- 41	$-26^{\circ} 15' 35.30$	-19.156	- 6
492	$\beta$ Comae	4.32	G 0	$13^{\circ} 9' 18.452$	+2.7997	-604	$+28^{\circ} 9' 23.16$	-18.256	+ 877
493	[ $\eta$ Muscae]	4.95	B 8	$13^{\circ} 11' 29.655$	+4.0634	- 57	$-67^{\circ} 36' 13.32$	-19.091	- 16
1342	[195 G. Centauri]	5.36	K 0	$13^{\circ} 13' 49.412$	+3.3327	+ 30	$-31^{\circ} 12' 56.08$	-19.063	- 52
1343	[196 G. Centauri]	5.87	A 3 p	$13^{\circ} 14' 1.883$	+3.4775	- 10	$-43^{\circ} 41' 22.40$	-19.019	- 13
1344	[ $\alpha$ Virginis]	5.01	M 0	$13^{\circ} 14' 49.537$	+3.0295	- 5	$+5^{\circ} 45' 32.90$	-18.971	+ 13
494	[20 Canum ven.]	4.66	F 0	$13^{\circ} 15' 4.709$	+2.6902	-110	$+40^{\circ} 51' 42.08$	-18.959	+ 18
1345	[61 Virginis]	4.80	G 5	$13^{\circ} 15' 31.353$	+3.1383	-755	$-18^{\circ} 0' 21.31$	-20.037	-1073
495	$\gamma$ Hydrae	3.33	G 5	$13^{\circ} 15' 55.579$	+3.2621	+ 53	$-22^{\circ} 52' 54.94$	-19.001	- 49
496	$\epsilon$ Centauri	2.91	A 2	$13^{\circ} 17' 29.813$	+3.3723	-281	$-36^{\circ} 25' 21.78$	-18.994	- 87
1346	[23 Canum ven.]	5.69	K 0	$13^{\circ} 17' 51.187$	+2.6884	- 53	$+40^{\circ} 26' 19.26$	-18.907	- 10
1347	[J Centauri]	4.62	B 5	$13^{\circ} 19' 3.579$	+3.8749	- 39	$-60^{\circ} 42' 1.88$	-18.871	- 10
497	$\xi$ Ursae maj. <i>pr</i>	2.40	A 2 p	$13^{\circ} 21' 42.840$	+2.4158	+140	$+55^{\circ} 12' 43.55$	-18.807	- 25
498	$\alpha$ Virginis	1.21	B 2	$13^{\circ} 22' 17.505$	+3.1608	- 26	$-10^{\circ} 52' 29.42$	-18.797	- 33
1348	[68 Virginis]	5.59	K 2	$13^{\circ} 23' 48.555$	+3.1692	- 93	$-12^{\circ} 25' 19.47$	-18.741	- 24
499	Grb 2001 UMin	6.07	K 5	$13^{\circ} 24' 43.712$	+1.5292	+ 39	$+72^{\circ} 40' 36.25$	-18.702	- 13
1349	[70 Virginis]	5.16	G 0	$13^{\circ} 25' 44.330$	+2.9343	-164	$+14^{\circ} 4' 18.98$	-19.236	- 580
1350	[+31 $^{\circ}$ 2493 CVen]	7.12	K 2	$13^{\circ} 25' 46.180$	+2.7748	+ 2	$+31^{\circ} 26' 0.99$	-18.657	- 2
500	69 H. Ursae maj.	5.41	A 0	$13^{\circ} 26' 26.104$	+2.2019	-110	$+60^{\circ} 13' 45.74$	-18.601	+ 33
1351	[78 Virginis]	4.93	A 2 p	$13^{\circ} 31' 20.559$	+3.0403	+ 28	$+3^{\circ} 56' 26.80$	-18.500	- 29
501	$\zeta$ Virginis	3.44	A 2	$13^{\circ} 31' 53.275$	+3.0571	-190	$-0^{\circ} 18' 55.49$	-18.417	+ 36
502	17 H. Can. ven.	4.96	F 0	$13^{\circ} 32' 20.523$	+2.6785	+ 68	$+37^{\circ} 27' 48.98$	-18.449	- 12
1352	[80 Virginis]	5.75	K 0	$13^{\circ} 32' 39.404$	+3.1212	+ 10	$-5^{\circ} 7' 0.51$	-18.353	+ 73
1353	[Grb 2017 CVen]	6.63	A 5	$13^{\circ} 32' 53.690$	+2.5536	- 21	$+44^{\circ} 28' 39.35$	-18.406	+ 12
503	[49 G. Chamael.]	6.44	A 0	$13^{\circ} 34' 26.336$	+5.1260	- 35	$-75^{\circ} 24' 15.43$	-18.378	- 15
505	[Grb 2029 UMin]	5.67	K 0	$13^{\circ} 35' 51.439$	+1.4402	- 89	$+71^{\circ} 31' 18.42$	-18.320	- 6
504	$\epsilon$ Centauri	2.56	B 1	$13^{\circ} 36' 23.319$	+3.8003	- 22	$-53^{\circ} 11' 14.61$	-18.309	- 14
1354	[355 G. Hydrae]	6.42	A 0	$13^{\circ} 38' 28.376$	+3.3109	- 7	$-23^{\circ} 10' 20.03$	-18.218	+ 2
1355	[82 Virginis]	5.16	M 0	$13^{\circ} 38' 43.297$	+3.1492	- 67	$-8^{\circ} 25' 34.33$	-18.177	+ 35
1356	[253 G. Centauri]	6.30	B 2	$13^{\circ} 39' 19.314$	+3.9186	- 24	$-56^{\circ} 29' 27.49$	-18.199	- 10
1357	[83 Virginis]	5.71	G 0	$13^{\circ} 41' 31.468$	+3.2373	+ 9	$-15^{\circ} 54' 11.60$	-18.119	- 12
506	[1 Centauri]	4.36	F 5	$13^{\circ} 42' 33.271$	+3.4092	-363	$-32^{\circ} 45' 58.75$	-18.218	- 150
1358	[3 Bootis]	5.91	F 5	$13^{\circ} 44' 10.070$	+2.7857	- 16	$+25^{\circ} 58' 38.89$	-18.072	- 64
507	$\tau$ Bootis	4.51	F 5	$13^{\circ} 44' 38.853$	+2.8510	-338	$+17^{\circ} 43' 48.60$	-17.955	+ 34
509	$\eta$ Ursae maj.	1.91	B 3	$13^{\circ} 45' 22.490$	+2.3642	-126	$+49^{\circ} 35' 14.00$	-17.975	- 14
508	[ $\mu$ Centauri]	3.32	B 2 p	$13^{\circ} 46' 17.581$	+3.6135	- 19	$-42^{\circ} 12' 1.74$	-17.949	- 24



Nr.	Name	Größe	Spektrum	A.R. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor
510	89 Virginis	5.11 <sup>m</sup>	K o	13 46 <sup>h</sup> 52.668 <sup>m</sup>	+3.2599	- 70	-17 51' 39.57"	-17.945	- 43
1359	[+9° 2814 Bootis]	6.54	A o	13 47 0.170	+2.9803	- 10	+ 8 40 51.65	-17.896	0
511	[10 Draconis]	4.77	M o	13 49 49.461	+1.7519	- 4	+64 59 39.93	-17.794	- 9
513	η Bootis	2.80	G o	13 52 3.893	+2.8567	- 44	+18 40 21.58	-18.056	- 362
512	ζ Centauri	3.06	B 2 p	13 52 5.794	+3.7416	- 55	-47 1 6.08	-17.733	- 42
514	[204 G. Centauri]	4.68	K o	13 53 38.690	+4.3394	- 49	-63 25 4.82	-17.658	- 31
1360	[+32° 2411 CVen]	6.29	F 2	13 53 44.018	+2.6604	-106	+32 18 1.23	-17.579	+ 45
515	[47 Hydrae]	5.17	B 8	13 55 25.609	+3.3667	- 32	-24 42 16.21	-17.581	- 28
1361	[48 Hydrae]	5.80	F o	13 56 54.929	+3.3594	-145	-24 44 34.11	-17.589	- 99
1362	[204 G. Virginis]	6.30	F 5	13 56 58.069	+3.1086	- 20	- 3 16 57.75	-17.555	- 68
517	11 Bootis	6.12	A 3	13 58 40.806	+2.7203	- 63	+27 39 5.33	-17.402	+ 12
516	τ Virginis	4.34	A 2	13 58 50.676	+3.0534	+ 11	+ 1 48 35.62	-17.431	- 24
1363	[9 Apodis]	5.5-6.7	M 3	13 59 54.084	+5.8384	-241	-76 31 57.75	-17.394	- 34
518	β Centauri	0.86	B 1	13 59 55.348	+4.2327	- 25	-60 6 31.03	-17.380	- 20
1364	[307 G. Centauri]	6.44	A o p	14 0 5.742	+3.6538	- 40	-41 9 32.85	-17.384	- 32
1365	[210 G. Virginis]	6.36	K o	14 1 28.022	+3.2479	- 26	-14 42 29.62	-17.316	- 24
521	α Draconis	3.64	A o p	14 2 53.840	+1.6241	- 89	+64 38 17.56	-17.216	+ 13
519	[π Hydrae]	3.48	K o	14 3 13.961	+3.4167	+ 34	-26 25 5.77	-17.357	- 144
1366	[94 Virginis]	6.56	A o	14 3 22.779	+3.1773	+ 1	- 8 37 47.96	-17.189	+ 18
520	θ Centauri	2.26	K o	14 3 26.221	+3.5304	-427	-36 6 0.97	-17.726	- 522
1367	[+39° 2720 CVen]	7.90	K o	14 4 8.111	+2.5226	+ 9	+38 40 44.83	-17.180	- 7
1368	[9 H. Bootis]	5.44	M 3	14 5 43.844	+2.3982	+ 7	+44 6 55.47	-17.130	- 29
522	12 d Bootis	4.82	F 5	14 7 53.386	+2.7362	- 18	+25 21 5.14	-17.066	- 64
524	4 Ursae min.	5.00	K o	14 9 1.718	-0.2371	-108	+77 48 21.27	-16.922	+ 28
523	κ Virginis	4.31	K o	14 9 57.449	+3.2005	+ 5	-10 1 7.07	-16.769	+ 135
525	ι Virginis	4.16	F 5	14 13 7.606	+3.1463	- 7	- 5 44 20.08	-17.182	- 428
526	α Bootis	0.24	K o	14 13 9.079	+2.7364	-775	+19 28 4.73	-18.751	-1998
528	[ι Bootis]	4.87	A 5	14 14 13.058	+2.1243	-163	+51 37 13.09	-16.613	+ 89
527	λ Bootis	4.26	A o	14 14 17.576	+2.2807	-182	+46 20 24.63	-16.540	+ 158
1369	[236 G. Virginis]	5.74	A o p	14 15 35.416	+3.3175	- 46	-18 27 44.18	-16.677	- 42
1370	[A Bootis]	4.83	K o	14 15 40.268	+2.5358	- 3	+35 45 45.04	-16.620	+ 12
1371	[λ Virginis]	4.60	A 2	14 16 7.736	+3.2463	- 12	-13 7 8.06	-16.585	+ 24
529	[υ Centauri]	4.41	B 5	14 16 27.948	+4.1881	- 22	-56 8 3.27	-16.606	- 14
1372	[18 Bootis]	5.31	F o	14 16 36.458	+2.9035	+ 71	+13 15 25.72	-16.620	- 34
1373	[ψ Centauri]	4.17	A o	14 17 12.136	+3.6481	- 58	-37 37 59.91	-16.566	- 10
1374	[2 Librae]	6.30	K o	14 20 27.768	+3.2283	- 8	-11 27 49.77	-16.457	- 63
530	[10 G. Circini]	5.71	A 2 p	14 20 30.692	+4.9696	- 23	-67 56 47.76	-16.404	- 14
1375	[244 G. Virginis]	5.08	A 3	14 21 26.959	+2.9855	- 54	+ 6 4 7.41	-16.339	+ 5
1376	[3 G. Librae]	5.39	K o	14 21 39.948	+3.4231	- 40	-24 33 28.01	-16.359	- 27
1377	[τ <sup>1</sup> Lupi]	4.65	B 3	14 22 35.695	+3.8500	- 14	-44 58 25.29	-16.300	- 15



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor
531	δ Bootis	4.06 <sup>m</sup>	F 8	14 <sup>h</sup> 23 <sup>m</sup> 19.406	+2.0422	— 261	+52° 6' 15".51	—16.650	— 401
1378	[22 Bootis]	5.36	A 5	14 23 53.773	+2.7904	— 52	+19 28 23.71	—16.198	+ 21
532	[52 Hydrae]	5.00	B 8	14 24 56.698	+3.5137	— 18	—29 14 43.83	—16.191	— 26
533	[φ Virginis]	4.99	K 0	14 25 21.911	+3.0915	— 92	— 1 58 56.52	—16.147	— 4
1379	[5 Ursae min.]	4.37	K 2	14 27 36.813	—0.1289	+ 12	+75 56 25.83	—16.007	+ 21
534	ρ Bootis	3.78	K 0	14 29 27.520	+2.5854	— 79	+30 36 43.21	—15.812	+ 117
535	γ Bootis	3.00	F 0	14 29 51.764	+2.4157	— 98	+38 32 52.90	—15.758	+ 149
536	[Grb 2125 Draco]	6.18	F 0	14 30 13.037	+1.6284	— 72	+60 28 2.51	—15.875	+ 14
537	η Centauri	2.65	B <sub>3</sub> <sup>D</sup> +A <sub>2</sub> <sup>P</sup>	14 32 0.259	+3.8090	— 30	—41 55 2.59	—15.827	— 35
1380	[σ Bootis]	4.48	F 0	14 32 17.091	+2.6124	+ 146	+29 58 59.39	—15.650	+ 128
1381	[10 G. Librae]	6.24	F 8	14 34 3.962	+3.1921	— 591	—12 4 21.43	—15.320	+ 361
538	*α Centauri	0.33 1.70	G 0 K 5	14 35 50.918	+4.0768	—4885	—60 36 34.93	—14.873	+ 709
540	[33 Bootis]	5.39	A 0	14 36 47.360	+2.2324	— 68	+44 38 28.23	—15.551	— 20
539	[α Circini]	3.42	F 0	14 38 2.120	+4.8457	— 295	—64 44 13.88	—15.698	— 237
541	[α Lupi]	2.89	B 2	14 38 15.582	+3.9895	— 16	—47 9 11.92	—15.468	— 19
1382	32 Bootis	5.63	G 5	14 39 4.856	+2.8823	— 108	+11 53 47.59	—15.522	— 118
545	μ Virginis	3.95	F 5	14 40 9.474	+3.1619	+ 71	— 5 25 12.67	—15.665	— 322
544	[371 G. Centauri]	4.13	K 0	14 40 17.093	+3.6690	— 52	—34 56 16.91	—15.522	— 186
542	α Apodis	3.81	K 5	14 40 55.735	+7.4387	— 8	—78 48 49.21	—15.319	— 21
1383	[34 Bootis]	4.93	M 0	14 41 0.269	+2.6368	— 10	+26 45 38.64	—15.315	— 19
1384	[+33° 2489 Boot]	6.47	M 0	14 42 55.582	+2.5096	+ 30	+33 1 13.19	—15.269	— 82
546	[30 G. Lupi]	5.20	K 0	14 43 9.567	+4.1945	— 24	—52 9 7.38	—15.255	— 83
547	109 Virginis	3.76	A 0	14 43 27.924	+3.0334	— 74	+ 2 7 24.81	—15.187	— 31
1385	[56 Hydrae]	5.39	G 5	14 44 31.770	+3.5025	+ 32	—25 51 28.81	—15.096	— 1
1386	[Grb 2152 Boot]	5.98	F 0	14 46 57.092	+2.3553	— 220	+38 2 13.19	—14.847	+ 108
1387	[α <sup>1</sup> Librae]	5.33	F 5	14 47 38.366	+3.3184	— 69	—15 46 11.23	—14.989	— 75
548	α <sup>2</sup> Librae	2.90	A 3	14 47 49.852	+3.3190	— 73	—15 48 51.80	—14.974	— 71
549	Grb 2164 Draco	5.67	K 2	14 50 2.412	+1.5226	— 167	+59 31 0.78	—14.640	+ 134
550	β Ursae min.	2.24	K 5	14 50 50.521	—0.1766	— 84	+74 22 49.13	—14.718	+ 9
1388	[+6° 2957 Virgo]	6.69	K 0	14 50 56.338	+2.9686	— 19	+ 6 27 55.78	—14.712	+ 8
1389	[381 G. Centauri]	5.34	A 0	14 52 21.695	+3.6827	+ 21	—33 38 1.29	—14.641	— 5
551	Pi 14 <sup>h</sup> 221 Boot	5.77	A 0	14 53 37.338	+2.8318	— 10	+14 40 3.06	—14.564	— 4
1390	[ξ <sup>2</sup> Librae]	5.63	K 0	14 53 46.753	+3.2554	+ 4	—11 11 20.01	—14.546	+ 4
1391	[33 G. Librae]	6.00	K 5	14 54 14.901	+3.5041	+ 742	—21 10 7.15	—16.262	—1740
1392	[Pi 14 <sup>h</sup> 227 Boot]	6.24	A 0	14 54 34.840	+2.7037	— 10	+21 46 34.63	—14.527	— 25
1393	[Br 1908 Virgo]	5.71	K 0	14 54 43.844	+3.0766	+ 42	+ 0 3 10.64	—14.520	— 27
552	β Lupi	2.81	B 2 p	14 54 55.116	+3.9284	— 37	—42 54 49.32	—14.522	— 41
553	[κ Centauri]	3.35	B 3	14 55 34.396	+3.9027	— 15	—41 53 5.39	—14.469	— 28
554	[2 H. Ursae min.]	4.86	M 3	14 56 42.030	+0.9532	— 138	+66 9 3.86	—14.349	+ 26
1394	[δ Librae]	4.8—5.9	A 0	14 58 1.779	+3.2055	— 44	— 8 18 6.72	—14.301	— 8

Nr. 538. Ort des Schwerpunktes. Die Reduktion auf den Ort des helleren Sternes beträgt nach den Elementen von Finzen, Union Observ. Circular 68, 1926:

$$\begin{array}{rcl}
 1945.0 & \Delta\alpha = & -0.079 \quad \Delta\delta = -3.93 \\
 1946.0 & & = -0.112 \quad = -4.16
 \end{array}$$



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o."oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o."oor
555	β Bootis	3.63	G 5	14 59 52.372	+2.2596	- 40	+40° 36' 23".78	-14.212	- 33
556	α Librae	3.41	M 3	15 0 50.685	+3.5116	- 53	-25 4 1.60	-14.166	- 48
557	ψ Bootis	4.67	K 0	15 2 5.241	+2.5707	-133	+27 9 39.94	-14.051	- 9
1395	[47 Bootis]	5.59	A 0	15 3 36.443	+1.9870	- 68	+48 21 45.80	-13.918	+ 29
1397	[+55° 1730 Boot]	5.21	G 5	15 4 42.292	+1.7133	+ 51	+54 46 2.36	-13.869	+ 9
1396	[45 Bootis]	5.03	F 0	15 4 53.027	+2.6351	+135	+25 4 56.27	-14.040	-174
1398	[x <sup>1</sup> Lupi]	4.14	B 9	15 8 5.900	+4.1696	-100	-48 31 48.68	-13.712	- 51
558	ζ Lupi	3.50	K 0	15 8 19.184	+4.3089	-121	-51 53 29.10	-13.713	- 67
559	[ι Librae]	4.66	A 0 p	15 9 4.841	+3.4198	- 27	-19 35 5.53	-13.640	- 42
1399	[ι Lupi]	4.95	F 0	15 11 14.733	+3.6754	- 2	-31 18 54.59	-13.461	- 2
562	[3 Serpentis]	5.44	K 0	15 12 27.135	+2.9823	- 14	+ 5 8 32.51	-13.379	+ 1
561	[β Circini]	4.16	A 3	15 13 11.383	+4.6952	-126	-58 35 51.06	-13.469	-138
563	δ Bootis	3.54	K 0	15 13 17.026	+2.4188	+ 66	+33 31 8.30	-13.445	-118
560	γ Triang. austr.	3.06	A 0	15 13 44.613	+5.5986	-105	-68 28 42.03	-13.321	- 27
565	ι H. Ursae min.	5.23	G 0	15 13 59.792	+0.6879	+371	+67 33 19.16	-13.671	-391
564	β Librae	2.74	B 8	15 14 2.587	+3.2284	- 66	- 9 10 52.47	-13.299	- 23
1400	[Pi.15 <sup>h</sup> 36 Serp]	5.66	G 5	15 15 56.440	+2.6899	- 9	+20 46 21.90	-13.175	- 23
1401	[+10° 2823 Serp]	6.71	F 8	15 16 3.475	+2.8776	- 63	+10 37 37.89	-13.143	+ 1
1402	[δ Lupi]	3.43	B 2	15 17 45.152	+3.9375	- 13	-40 26 59.36	-13.058	- 27
566	φ <sup>1</sup> Lupi	3.59	K 5	15 18 18.449	+3.8062	- 79	-36 3 47.77	-13.081	- 87
1403	[φ <sup>2</sup> Lupi]	4.69	B 3	15 19 38.006	+3.8328	- 14	-36 39 45.69	-12.930	- 25
1404	[73 G. Librae]	6.78	K 0	15 19 39.551	+3.5852	+ 24	-26 29 36.53	-12.912	- 8
1405	[30 Librae]	6.74	K 2	15 19 57.423	+3.3461	- 2	-14 56 20.80	-12.874	+ 11
569	γ Ursae min.	3.14	A 2	15 20 47.828	-0.0963	- 48	+72 1 47.07	-12.811	+ 19
1406	[8 Serpentis]	6.10	F 0	15 20 53.378	+3.0930	+ 49	- 0 49 38.82	-12.853	- 31
568	μ Bootis pr	4.47	F 0	15 22 24.668	+2.2665	-124	+37 34 8.64	-12.637	+ 83
570	[τ <sup>1</sup> Serpentis]	5.46	M 0	15 23 14.199	+2.7825	- 12	+15 37 12.81	-12.677	- 14
571	ι Draconis	3.47	K 0	15 23 42.078	+1.3344	- 16	+59 9 29.23	-12.620	+ 13
1407	[32 Librae]	5.92	K 0	15 25 8.982	+3.3836	+ 10	-16 31 33.97	-12.569	- 36
567	[x <sup>1</sup> Apodis]	5.65	B 5 p	15 25 28.419	+6.5333	+ 15	-73 12 5.36	-12.543	- 34
572	β Coronae bor.	3.72	F 0 p	15 25 33.580	+2.4736	-138	+29 17 39.29	-12.423	+ 82
1408	[+9° 3055 Serp]	6.46	F 2	15 28 15.069	+2.9131	+ 24	+ 8 45 57.63	-12.323	- 2
573	v <sup>1</sup> Bootis	5.15	K 5	15 28 57.111	+2.1549	+ 7	+41 1 10.79	-12.280	- 7
576	[θ Coronae bor.]	4.17	B 5	15 30 42.599	+2.4190	- 19	+31 32 37.11	-12.168	- 18
1409	[37 Librae]	4.83	K 0	15 31 10.060	+3.2790	+204	- 9 52 38.63	-12.360	-241
574	[ε Triang. austr.]	4.11	K 0	15 31 39.639	+5.4875	+ 45	-66 8 3.61	-12.151	- 69
578	α Coronae bor.	2.31	A 0	15 32 21.451	+2.5402	+ 90	+26 53 55.35	-12.127	- 91
1410	115 G. Lupi	5.47	K 5	15 32 25.434	+4.1083	- 48	-44 12 50.23	-12.074	- 44
577	γ Librae	4.02	K 0	15 32 26.691	+3.3561	+ 43	-14 36 27.17	-12.028	+ 1
579	[ν Librae]	3.78	K 2	15 33 40.754	+3.6423	- 4	-27 57 15.74	-11.944	- 2



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.0001	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.001
1411	[2 G. Normae]	5.48	A o	15 34 43.455	+4.4571	- 39	-52 11 34.90	-11.908	- 40
580	[φ Bootis]	5.41	G 5	15 35 50.972	+2.1546	+ 52	+40 31 53.46	-11.734	+ 56
1412	[Pi 15 <sup>a</sup> 153 Boot]	5.78	F o	15 36 30.379	+1.9211	+ 81	+46 58 41.24	-11.870	- 126
1413	[x Librae]	4.96	K 5	15 38 46.348	+3.4568	- 27	-19 30 7.45	-11.692	- 111
582	α Serpentis	2.75	K o	15 41 33.381	+2.9552	+ 92	+ 6 35 50.59	-11.337	+ 45
583	β Serpentis	3.74	A 2	15 43 38.831	+2.7692	+ 48	+15 35 33.75	-11.280	- 48
587	[12 H. Draconis]	5.13	A 2	15 45 49.251	+0.9140	+ 48	+62 46 8.63	-11.136	- 61
590	ζ Ursae min.	4.34	A 2	15 45 58.551	-2.1465	+ 52	+77 57 52.46	-11.069	- 4
584	x Serpentis	4.28	K 5	15 46 15.722	+2.7008	- 34	+18 18 36.87	-11.131	- 89
585	μ Serpentis	3.63	A o	15 46 44.799	+3.1311	- 58	- 3 15 47.89	-11.034	- 28
586	[χ Lupi]	4.11	B 9	15 47 27.388	+3.8119	- 8	-33 27 40.46	-10.986	- 32
588	ε Serpentis	3.75	A 2	15 48 4.295	+2.9907	+ 85	+ 4 38 31.11	-10.846	+ 63
1414	[x Coronae bor.]	4.77	K o	15 49 9.465	+2.2605	- 10	+35 49 36.94	-11.182	- 353
1415	[λ Librae]	5.06	B 3	15 50 8.190	+3.4830	- 7	-20 0 14.95	-10.785	- 28
589	β Triang. austr.	3.04	F o	15 50 16.530	+5.2841	-282	-63 15 46.83	-11.139	- 393
1416	[χ Herculis]	4.61	G o	15 50 46.305	+2.0738	+393	+42 36 16.17	-10.083	+ 628
591	[γ Serpentis]	3.86	F 5	15 53 54.611	+2.7713	+213	+15 50 23.40	-11.764	-1286
1417	[48 Librae]	4.68	B 3p	15 55 6.302	+3.3597	- 10	-14 7 19.95	-10.410	- 22
593	ε Coronae bor.	4.22	K o	15 55 18.502	+2.4837	- 61	+27 2 9.51	-10.437	- 64
592	[π Scorpil]	3.00	B 2	15 55 31.151	+3.6295	- 6	-25 57 26.21	-10.381	- 25
1418	[144 G. Lupi]	5.07	G 5	15 55 45.052	+4.0869	- 22	-41 35 17.47	-10.349	- 10
595	[Grb 2296 Draco]	4.96	A 5	15 56 28.863	+1.4227	-185	+54 54 16.02	-10.180	+ 106
594	δ Scorpil	2.54	B o	15 57 4.585	+3.5477	- 5	-22 28 0.26	-10.267	- 27
1419	[49 Librae]	5.53	F 8	15 57 14.119	+3.3667	-441	-16 22 22.30	-10.625	- 397
1420	[50 Librae]	5.55	A o	15 57 49.235	+3.2391	- 12	- 8 15 26.18	-10.202	- 18
598	θ Draconis	4.11	F 8	16 0 51.216	+1.1238	-413	+58 42 41.73	- 9.621	+ 335
597	β Scorpil pr	2.90	B 1	16 2 14.067	+3.4886	- 2	-19 39 23.25	- 9.871	- 22
596	[δ Normae]	4.84	A 3p	16 2 35.687	+4.2394	+ 4	-45 1 32.65	- 9.791	+ 31
599	[θ Lupi]	4.33	B 3	16 2 58.394	+3.9391	- 17	-36 39 15.51	- 9.828	- 36
1421	[x Herculis pr]	5.34	G 5	16 5 35.444	+2.7078	- 25	+17 11 31.69	- 9.605	- 11
1422	[+6° 3169 Serp]	6.02	G 5	16 6 28.526	+2.9543	+157	+ 6 32 3.28	-10.249	- 724
1423	[τ Coronae bor.]	4.94	K o	16 6 57.499	+2.1934	- 48	+36 37 46.17	- 9.164	+ 325
601	[φ Herculis]	4.26	B 9p	16 7 2.055	+1.8900	- 28	+45 4 41.44	- 9.448	+ 35
600	[x Normae]	5.09	K o	16 9 7.681	+4.7300	- 11	-54 29 24.85	- 9.345	- 26
602	[δ Triang. austr.]	4.03	G o	16 10 24.795	+5.4589	+ 10	-63 32 51.05	- 9.233	- 15
603	δ Ophiuchi	3.03	M o	16 11 27.608	+3.1440	- 31	- 3 33 15.09	- 9.285	- 146
1424	[δ <sup>1</sup> Apodis]	4.78	M 3	16 12 3.183	+8.9571	- 23	-78 33 40.15	- 9.126	- 37
606	19 Ursae min.	5.51	B 8	16 12 21.734	-1.7127	- 15	+76 1 0.67	- 9.058	+ 13
1425	[17 Herculis]	6.59	K o	16 13 55.870	+2.5581	- 12	+23 15 29.50	- 8.961	- 14
605	ε Ophiuchi	3.34	K o	16 15 24.476	+3.1743	+ 55	- 4 33 35.63	- 8.791	+ 39



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\alpha''\text{oor}$	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\alpha''\text{oor}$
604	$\gamma^2$ Normae	4.14	K o	16 <sup>h</sup> 15 <sup>m</sup> 42.862	+4.4878	-170	-50° 1' 21".37	-8.859	- 54
1426	[55 G. Scorpil sq]	5.69	F 2	16 16 3.635	+3.7952	+ 66	-30 46 29.99	-8.758	+ 21
607	[ $\sigma$ Scorpil]	3.10	B 1	16 17 50.426	+3.6466	- 7	-25 27 45.01	-8.663	- 24
608	$\tau$ Herculis	3.91	B 5	16 18 5.108	+1.8034	- 12	+46 26 36.47	-8.584	+ 37
612	[ $\eta$ Ursae min.]	5.04	F o	16 19 5.048	-1.7554	-230	+75 52 58.13	-8.294	+250
1427	[ $\sigma$ Serpentis]	4.80	F o	16 19 17.044	+3.0382	-106	+ 1 9 24.72	-8.476	+ 50
609	$\gamma$ Herculis	3.79	F o	16 19 29.501	+2.6465	- 35	+19 16 51.69	-8.465	+ 44
1428	[23 Herculis]	6.30	A 2	16 20 49.660	+2.3025	+ 9	+32 27 36.82	-8.414	- 10
1429	[21 Herculis]	5.72	A o	16 21 29.913	+2.9224	- 1	+ 7 4 26.39	-8.332	+ 18
610	[ $\zeta$ Triang. austr.]	4.93	G o	16 22 31.622	+6.4516	+403	-69 57 47.81	-8.160	+104
613	[ $\omega$ Herculis]	4.53	A o p	16 22 52.511	+2.7687	+ 27	+14 9 30.83	-8.299	- 59
614	[Grb 2343 Draco]	5.66	A 2	16 23 12.940	+1.3124	+ 13	+55 19 46.13	-8.197	+ 17
611	$\gamma$ Apodis	3.90	K o	16 24 56.751	+9.1975	-408	-78 46 39.69	-8.138	- 67
616	$\alpha$ Scorpil	1.22	M o + A <sub>3</sub>	16 26 1.850	+3.6790	- 2	-26 18 41.97	-8.010	- 23
1430	[22 G. Ophiuchi]	5.75	G o	16 26 40.134	+3.3910	+ 20	-14 25 53.86	-7.920	+ 16
1431	[N Scorpil]	4.33	B 3	16 27 46.943	+3.9204	- 6	-34 35 10.65	-7.861	- 15
618	$\beta$ Herculis	2.81	K o	16 27 51.209	+2.5789	- 72	+21 36 29.44	-7.857	- 16
619	A Draconis	4.98	B 8 p	16 28 4.765	-0.1178	- 53	+68 53 13.83	-7.791	+ 34
1432	Pi 16 <sup>h</sup> 140 Draco	5.85	A o	16 31 38.664	+0.8471	+ 18	+60 56 17.13	-7.550	- 13
621	$\sigma$ Herculis	4.25	A o	16 32 19.659	+1.9341	- 12	+42 32 58.21	-7.437	+ 43
620	[ $\tau$ Scorpil]	2.91	B o	16 32 27.228	+3.7349	- 5	-28 6 13.17	-7.493	- 25
623	[Grb 2373 U Min]	6.39	G 5	16 32 58.572	-2.5833	-327	+77 33 25.85	-7.157	+274
1433	[12 Ophiuchi]	5.87	K o	16 33 27.916	+3.1513	+302	- 2 12 31.59	-7.702	-315
622	$\zeta$ Ophiuchi	2.70	B o	16 34 7.619	+3.3035	+ 8	-10 27 26.27	-7.309	+ 24
1434	[42 Herculis]	5.14	M o	16 37 15.124	+1.6286	- 48	+49 2 6.60	-7.047	+ 32
624	[Br 2114 Ophi]	5.04	K o	16 38 23.284	+3.4698	- 16	-17 38 14.63	-6.988	- 3
626	$\eta$ Herculis	3.61	K o	16 41 0.502	+2.0567	+ 29	+39 1 33.05	-6.854	- 83
625	$\alpha$ Triang. austr.	1.88	K 2	16 42 49.298	+6.3521	+ 51	-68 55 46.73	-6.651	- 33
627	Grb 2377 Draco	4.88	F o	16 44 14.962	+1.1377	+ 17	+56 52 46.56	-6.439	+ 65
1436	[19 Ophiuchi]	6.04	A 2	16 44 23.189	+3.0239	- 16	+ 2 9 44.06	-6.503	- 12
1435	[ $\eta$ Arae]	3.68	K 5	16 45 1.462	+5.1791	+ 43	-58 56 44.03	-6.467	- 30
1437	[ $-21^\circ$ 4422 Ophi]	7.60	M o	16 46 17.950	+3.5784	- 8	-21 45 26.82	-6.353	- 20
628	$\epsilon$ Scorpil	2.36	K o	16 46 35.778	+3.8860	-490	-34 11 42.68	-6.560	-252
1438	[20 Ophiuchi]	4.73	F 5	16 46 47.269	+3.3189	+ 63	-10 41 14.60	-6.389	- 97
1439	[ $\mu^1$ Scorpil]	3.09	B 3 p	16 48 8.357	+4.0639	- 8	-37 57 17.85	-6.207	- 28
1440	[51 Herculis]	5.20	K o	16 49 28.357	+2.4871	+ 9	+24 44 51.69	-6.061	+ 9
629	49 Herculis	6.41	A o p	16 49 34.470	+2.7313	+ 10	+15 3 54.45	-6.058	+ 3
1441	[53 Herculis]	5.35	F o	16 50 52.766	+2.2746	- 78	+31 47 29.49	-5.972	- 19
1442	[1 Ophiuchi]	4.29	B 8	16 51 24.204	+2.8387	- 35	+10 15 16.08	-5.945	- 37
1443	[51 G. Apodis]	7.00	F 8	16 53 18.500	+8.2494	- 98	-76 7 59.48	-5.893	-149



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o"oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o"oor
1444	24 G. Arae	<sup>m</sup> 5.70	B 9	<sup>h</sup> 16 <sup>m</sup> 54 <sup>a</sup> 2.794	+ 4.6293	— 14	—50° 33' 23.08"	—5.730	— 44
631	ζ Arae	3.06	K 5	16 54 3.584	+ 4.9641	— 20	—55 54 19.99	—5.717	— 33
633	κ Ophiuchi	4.1-5.0	K 0	16 55 3.763	+ 2.8396	—199	+ 9 27 32.82	—5.610	— 8
632	[ε <sup>1</sup> Arae]	4.15	K 2	16 55 11.520	+ 4.7809	0	—53 4 41.17	—5.572	+ 17
1445	[30 Ophiuchi]	5.00	K 0	16 58 9.392	+ 3.1631	— 34	— 4 8 30.28	—5.419	— 78
634	ε Herculis	3.92	A 0	16 58 10.989	+ 2.2952	— 40	+31 0 22.50	—5.311	+ 28
1446	[59 Herculis]	5.27	A 2	16 59 34.401	+ 2.2142	— 4	+33 38 48.07	—5.226	— 4
635	[60 Herculis]	4.91	A 3	17 2 49.533	+ 2.7820	+ 33	+12 48 53.87	—4.955	— 9
1448	[Pi 16 <sup>n</sup> 307 Herc]	6.36	A 0	17 3 24.292	+ 1.8269	0	+43 53 9.58	—4.899	— 1
1447	[80 G. Ophiuchi]	6.20	A 0	17 3 28.530	+ 3.7178	+ 2	—26 26 25.42	—4.910	— 19
1449	85 G. Ophiuchi	6.14	K 0	17 5 3.031	+ 3.4836	+ 2	—17 32 16.48	—4.792	— 35
636	[Grb 2415 Herc]	6.27	A 2	17 5 58.939	+ 1.9567	— 34	+40 35 12.92	—4.712	— 33
1450	[88 G. Ophiuchi]	5.58	F 5	17 6 45.343	+ 3.3169	+ 38	—10 27 10.96	—4.714	— 101
638	[η Scorpil]	3.44	F 2	17 8 12.521	+ 4.2969	+ 22	—43 10 7.19	—4.771	— 283
639	ζ Draconis	3.22	B 5	17 8 37.308	+ 0.1737	— 32	+65 46 56.19	—4.434	+ 21
1451	[97 G. Ophiuchi]	6.39	K 0	17 9 5.956	+ 2.8928	+ 18	+ 7 57 36.83	—4.402	+ 11
641	8 Herculis	3.16	A 2	17 12 46.233	+ 2.4642	— 18	+24 54 9.94	—4.258	— 158
643	π Herculis	3.36	K 5	17 13 7.769	+ 2.0894	— 25	+36 52 12.24	—4.065	+ 4
1452	[139 G. Scorpil]	5.55	F 5	17 13 28.749	+ 3.9027	— 76	—32 36 9.24	—4.091	— 53
1453	[U Ophiuchi]	5.7-6.4	B 8	17 13 44.129	+ 3.0437	— 5	+ 1 16 12.98	—4.033	— 16
642	[ι Apodis]	5.60	B 8	17 15 57.050	+ 6.6916	+ 12	—70 4 6.91	—3.838	— 14
1454	Pi 17 <sup>n</sup> 68 Herc	5.17	M 0	17 17 53.303	+ 2.6437	+ 2	+18 6 44.30	—3.714	— 54
1456	[θ Herculis]	5.36	G 0	17 18 35.933	+ 2.2443	+ 97	+32 32 14.25	—4.642	—1042
644	7 Ophiuchi	3.37	B 3	17 18 37.731	+ 3.6845	— 2	—24 56 47.19	—3.617	— 21
645	β Arae	2.80	K 2	17 20 43.306	+ 4.9868	— 7	—55 28 49.00	—3.439	— 25
1455	[59 G. Apodis]	5.93	M 3	17 21 7.757	+11.2206	+ 25	—80 48 48.81	—3.416	— 41
1457	[44 Ophiuchi]	4.28	F 0	17 23 0.504	+ 3.6639	0	—24 7 35.46	—3.335	— 116
1458	[138 G. Ophiuchi]	6.31	F 5	17 23 6.462	+ 3.1150	+ 48	— 1 36 19.38	—3.163	+ 47
647	[27 H. Ophiuchi]	4.61	F 0	17 23 42.635	+ 3.1831	— 64	— 5 2 22.52	—3.202	— 44
1459	[σ Ophiuchi]	4.44	K 0	17 23 47.006	+ 2.9765	— 1	+ 4 11 11.81	—3.146	+ 6
646	[45 Ophiuchi]	4.37	F 5	17 23 50.351	+ 3.8310	+ 15	—29 49 8.95	—3.287	— 141
650	[77 Herculis]	5.81	A 2	17 25 16.616	+ 1.5899	— 4	+48 18 19.27	—3.030	— 7
648	δ Arae	3.79	B 8	17 26 7.657	+ 5.4160	— 66	—60 38 25.51	—3.036	— 88
649	[ν Scorpil]	2.80	B 3	17 27 1.259	+ 4.0789	0	—37 15 14.04	—2.902	— 31
651	α Arae	2.97	B 3p	17 27 35.147	+ 4.6377	— 28	—49 50 5.29	—2.894	— 72
1460	[λ Herculis]	4.48	K 0	17 28 30.821	+ 2.4244	+ 11	+26 9 3.03	—2.725	+ 18
653	β Draconis	2.99	G 0	17 29 11.249	+ 1.3553	— 21	+52 20 29.01	—2.673	+ 13
652	λ Scorpil	1.71	B 2	17 29 52.237	+ 4.0738	0	—37 3 56.32	—2.652	— 28
655	[v <sup>1</sup> Draconis]	4.98	A 5	17 31 5.395	+ 1.1809	+165	+55 13 16.34	—2.467	+ 54
657	[v <sup>2</sup> Draconis]	4.95	A 5	17 31 10.823	+ 1.1820	+168	+55 12 35.09	—2.460	+ 53



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0 <sup>o</sup> 00'	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0 <sup>o</sup> 00'
1462	[Grb 2444 Herc]	5.82	K o	17 31 <sup>h</sup> 22.424 <sup>m</sup>	+1.9021	— 71	+41° 16' 52.71	— 2.559	— 64
1461	[—11° 4411 Serp]	5.68	B 8	17 31 42.653	+3.3349	— 10	—11 12 22.93	—2.460	+ 6
659	[27 Draconis]	5.21	K o	17 32 10.749	—0.2409	— 29	+68 10 12.67	—2.293	+134
656	α Ophiuchi	2.14	A 5	17 32 22.776	+2.7847	+ 80	+12 35 55.04	—2.634	—226
654	θ Scorpii	2.04	F o	17 33 21.803	+4.3107	+ 15	—42 57 53.48	—2.318	+ 3
658	ξ Serpentis	3.64	A 5	17 34 26.094	+3.4349	— 32	—15 21 56.50	—2.290	— 61
664	ω Draconis	4.87	F 5	17 37 16.115	—0.3516	+ 2	+68 47 0.86	—1.662	+323
663	ι Herculis	3.79	B 3	17 37 54.604	+1.6933	— 9	+46 2 4.89	—1.924	+ 4
660	[κ Scorpii]	2.51	B 2	17 38 40.789	+4.1502	— 5	—39 0 13.33	—1.887	— 28
662	[μ Arae]	5.26	G 5	17 39 46.420	+4.7629	— 21	—51 48 25.13	—1.951	—188
1463	[58 Ophiuchi]	4.89	F 5	17 40 7.922	+3.5951	— 67	—21 39 29.92	—1.781	— 48
661	η Pavonis	3.58	K o	17 40 19.822	+5.8892	— 4	—64 42 1.07	—1.764	— 50
665	β Ophiuchi	2.94	K o	17 40 45.224	+2.9635	— 28	+ 4 35 19.37	—1.520	+159
670	ψ Draconis <i>pr</i>	4.90	F 5	17 42 54.645	—1.0672	+ 38	+72 10 35.03	—1.760	—267
666	[ν <sup>1</sup> Scorpii]	3.14	F 5 p	17 43 44.115	+4.1961	+ 2	—40 6 27.75	—1.422	— 4
1464	[X Sagittarii]	4.4—5.0	F 8 v	17 44 5.764	+3.7762	— 2	—27 48 42.24	—1.396	— 9
667	μ Herculis	3.48	G 5	17 44 18.237	+2.3479	—238	+27 45 6.14	—2.114	—744
668	[γ Ophiuchi]	3.74	A o	17 45 7.985	+3.0081	— 16	+ 2 43 35.21	—1.368	— 71
1465	[+20° 3570 Herc]	5.77	K o	17 46 3.040	+2.5733	+ 9	+20 34 56.27	—1.218	0
669	[G Scorpii]	3.25	K 2	17 46 6.768	+4.0843	+ 51	—37 1 39.75	—1.177	+ 34
1466	[+9° 3485 Ophi]	6.79	K 5	17 47 32.928	+2.8385	— 27	+ 9 51 49.18	—1.138	— 52
675	35 Draconis	5.04	F 5	17 51 54.406	—2.6869	+109	+76. 58 17.43	—0.464	+246
1467	[—7° 4523 Ophi]	6.87	G 5	17 51 58.748	+3.2508	— 35	— 7 43 27.98	—0.756	— 57
671	ξ Draconis	3.90	K o	17 52 34.531	+1.0371	+110	+56 52 50.47	—0.573	+ 76
1468	[89 Herculis]	5.48	F 5 p	17 53 11.935	+2.4199	— 2	+26 3 26.99	—0.587	+ 6
672	θ Herculis	3.99	K o	17 54 21.898	+2.0571	— 1	+37 15 24.10	—0.485	+ 6
676	γ Draconis	2.42	K 5	17 55 19.617	+1.3927	— 13	+51 29 40.67	—0.428	— 20
674	[ξ Herculis]	3.82	K o	17 55 37.555	+2.3312	+ 62	+29 15 9.21	—0.399	— 19
673	ν Ophiuchi	3.50	K o	17 55 59.818	+3.3026	— 6	— 9 46 6.90	—0.467	—120
1469	[93 Herculis]	4.71	K o	17 57 36.427	+2.6705	— 5	+16 45 9.44	—0.218	— 11
677	67 Ophiuchi	3.95	B 5 p	17 57 53.316	+3.0044	— 4	+ 2 55 57.47	—0.193	— 10
1470	[6 Sagittarii]	6.31	K 2	17 58 11.262	+3.4855	— 2	—17 9 23.57	—0.163	— 7
679	γ Sagittarii	3.07	K o	18 2 16.407	+3.8538	— 41	—30 25 35.96	+0.017	—185
1471	[θ Arae]	3.90	B 1 p	18 2 20.869	+4.6696	— 14	—50 5 50.65	+0.191	— 18
678	[66 G. Apodis]	5.69	K 5	18 3 34.136	+8.3953	+ 44	—75 53 48.15	+0.040	—278
680	72 Ophiuchi	3.73	A 3	18 4 44.438	+2.8440	— 43	+ 9 33 16.43	+0.499	+ 82
681	ο Herculis	3.83	A o	18 5 23.717	+2.3399	— 3	+28 45 13.32	+0.482	+ 9
1472	[—13° 4863 Serp]	6.50	K o	18 6 35.910	+3.4049	+ 1	—13 56 42.92	+0.581	+ 1
1473	[ε Telescopii]	4.60	K o	18 7 8.744	+4.4530	— 15	—45 57 57.86	+0.597	— 31
682	μ Sagittarii	4.01	B 8 p	18 10 28.379	+3.5876	+ 1	—21 4 30.24	+0.918	— 1



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o''oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o''o'1
1474	[6 G. Telescopii]	5.54	B 5	18 <sup>h</sup> 12 <sup>m</sup> 29.443	+5.0522	— 22	—56° 2' 34.61	+1.083	— 12
685	36 Draconis	5.03	F 5	18 13 34.712	+0.3448	+ 529	+64 22 42.30	+1.218	+ 31
683	[η Sagittarii]	3.16	M 3	18 13 54.256	+4.0593	— 109	—36 46 48.62	+1.055	—164
684	[Grb 2533 Lyra]	5.42	B 5	18 13 56.011	+1.8657	— 7	+42 8 22.27	+1.215	— 4
1475	[Br 2292 Serp]	6.30	A 5	18 14 22.344	+3.3029	— 1	— 9 46 44.65	+1.194	— 64
687	[δ Sagittarii]	2.84	K 0	18 17 28.351	+3.8410	+ 31	—29 51 12.25	+1.500	— 29
1477	[x Lyrae]	4.34	K 0	18 17 55.940	+2.1022	— 17	+36 2 19.30	+1.611	+ 42
1476	[74 Ophiuchi]	4.92	G 5	18 18 7.212	+2.9948	— 4	+ 3 21 3.43	+1.596	+ 10
686	[ξ Pavonis]	4.25	K 2	18 18 9.523	+5.5281	— 5	—61 31 17.69	+1.595	+ 4
688	η Serpentis	3.42	K 0	18 18 27.740	+3.1038	— 372	— 2 54 52.86	+0.918	—697
689	ε Sagittarii	1.95	A 0	18 20 31.287	+3.9825	— 23	—34 24 45.35	+1.669	—126
690	109 Herculis	3.92	K 0	18 21 21.161	+2.5563	+ 137	+21 44 36.33	+1.625	—242
695	χ Draconis	3.69	F 8	18 22 2.899	—1.0826	+1169	+72 42 34.41	+1.569	—356
691	α Telescopii	3.76	B 3	18 22 53.706	+4.4483	— 16	—46 0 2.73	+1.960	— 42
1478	[+7° 3682 Ophi]	5.69	G 0 +A <sub>3</sub>	18 22 59.944	+2.8857	— 6	+ 7 59 58.69	+2.004	— 6
1479	[+29° 3259 Herc]	5.71	A 2	18 23 51.348	+2.3124	+ 2	+29 47 45.81	+2.063	— 22
692	[λ Sagittarii]	2.94	K 0	18 24 34.540	+3.7022	— 33	—25 27 14.02	+1.965	—183
696	[γ Scuti]	4.73	A 3	18 26 3.704	+3.4190	0	—14 36 9.41	+2.273	— 3
1480	[60 Serpentis]	5.44	K 0	18 26 49.161	+3.1218	+ 18	— 2 1 20.90	+2.309	— 33
1481	[+16° 3529 Herc]	5.67	A 0	18 28 37.546	+2.6675	— 32	+16 53 20.44	+2.472	— 27
697	[θ Coron. austr.]	4.69	G 5	18 29 34.517	+4.2837	+ 25	—42 21 15.10	+2.561	— 21
1482	[α Scuti]	4.06	K 0	18 32 12.782	+3.2644	— 14	— 8 17 3.09	+2.498	—312
1483	[Grb 2603 Lyra]	6.66	A 0	18 32 14.343	+1.6946	— 1	+46 10 29.92	+2.825	+ 14
700	[Grb 2655 Draco]	5.84	K 0	18 32 24.951	—2.8981	— 12	+77 30 20.36	+2.825	+ 2
1484	[+9° 3783 Ophi]	5.40	F 2	18 33 50.315	+2.8610	— 10	+ 9 4 39.75	+2.824	—126
1485	[83 G. Sagittarii]	5.80	A 5	18 34 36.800	+3.5919	— 2	—21 26 42.08	+2.948	— 70
699	α Lyrae	0.14	A 0	18 35 4.504	+2.0310	+ 170	+38 43 52.86	+3.340	+283
701	[Grb 2640 Draco]	6.00	A 3	18 36 2.881	+0.1871	+ 17	+65 26 21.58	+3.221	+ 82
698	ζ Pavonis	4.10	K 0	18 36 37.265	+7.0122	+ 15	—71 28 43.58	+3.033	—160
1486	[δ Scuti]	4.74	F 0	18 39 15.681	+3.2845	+ 3	— 9 6 24.47	+3.419	0
702	[ε Scuti]	5.09	G 5	18 40 31.480	+3.2671	+ 13	— 8 19 52.39	+3.534	+ 6
1487	[φ Sagittarii]	3.30	B 8	18 42 13.212	+3.7478	+ 39	—27 2 56.94	+3.675	+ 1
703	110 Herculis	4.26	F 5	18 43 17.591	+2.5815	— 12	+20 29 32.47	+3.431	—335
1488	[+26° 3349 Lyra]	4.92	K 0	18 43 51.412	+2.4174	+ 12	+26 36 7.47	+3.839	+ 25
1489	[β Scuti]	4.47	G 0	18 44 15.315	+3.1827	— 8	— 4 48 30.00	+3.832	— 17
1491	[111 Herculis]	4.37	A 3	18 44 35.448	+2.6491	+ 48	+18 7 7.99	+3.991	+114
1490	[η <sup>1</sup> Coron. austr.]	5.59	A 2	18 44 52.383	+4.3296	+ 21	—43 44 30.85	+3.890	— 13
1492	[Grb 2671 Draco]	5.76	B 5	18 45 29.294	+1.3403	+ 9	+52 55 36.55	+3.950	— 3
704	λ Pavonis	4.42	B 2	18 47 7.579	+5.5584	— 11	—62 15 11.90	+4.079	— 17
1493	[30 Sagittarii]	6.24	F 0	18 47 32.075	+3.6053	— 21	—22 13 36.84	+4.099	— 31



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o.oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o.oor
705	$\beta$ Lyrae	$\begin{smallmatrix} m & m \\ 3.4 & 4.3 \end{smallmatrix}$	$\begin{smallmatrix} B8p \\ +B2p \end{smallmatrix}$	$\begin{smallmatrix} h & m & s \\ 18 & 48 & 2.863 \end{smallmatrix}$	+2.2145	— 2	$\begin{smallmatrix} o & ' & '' \\ +33 & 17 & 51.67 \end{smallmatrix}$	+4.171	— 2
1494	[50 Draconis]	5.37	A 0	18 48 9.405	—1.9386	— 53	+75 22 12.68	+4.257	+ 78
707	$\circ$ Draconis	4.85	K 0	18 50 23.367	+0.8849	+ 98	+59 19 14.29	+4.397	+ 25
706	$\sigma$ Sagittarii	2.14	B 3	18 51 51.322	+3.7195	+ 10	—26 22 0.70	+4.444	— 55
1495	[114 G. Sagittar.]	5.58	F 5	18 52 20.885	+3.4550	— 24	—16 26 43.06	+4.354	—187
709	$\delta$ Serpentis <i>pr</i>	4.50	A 5	18 53 29.064	+2.9822	+ 29	+ 4 7 50.13	+4.674	+ 36
711	R Lyrae	4.0—4.5	M 3	18 53 39.607	+1.8253	+ 17	+43 52 21.76	+4.734	+ 82
708	$\lambda$ Telescopii	5.03	B 9	18 54 4.007	+4.7998	+ 19	—53 0 45.90	+4.695	+ 8
710	[ $\xi^2$ Sagittarii]	3.61	K 0	18 54 26.921	+3.5784	+ 20	—21 10 50.65	+4.705	— 14
714	[ $\nu$ Draconis]	4.91	K 0	18 55 4.606	—0.7350	+ 95	+71 13 26.86	+4.817	+ 47
713	$\gamma$ Lyrae	3.30	A o p	18 56 53.075	+2.2437	— 7	+32 36 46.58	+4.926	+ 1
712	[ $\varepsilon$ Aquilae]	4.21	K 0	18 57 7.498	+2.7225	— 39	+14 59 31.92	+4.872	— 74
716	$\zeta$ Aquilae	3.02	A 0	19 2 52.858	+2.7569	— 8	+13 46 49.13	+5.338	— 94
717	$\lambda$ Aquilae	3.55	B 9	19 3 19.763	+3.1832	— 17	— 4 57 59.70	+5.383	— 87
1496	[ $\tau$ Sagittarii]	3.42	K 0	19 3 30.423	+3.7452	— 42	—27 45 9.45	+5.236	—250
1497	[21 G. Aquilae]	6.72	B 8	19 3 44.277	+3.1063	+ 10	— 1 25 54.79	+5.496	— 9
1498	[P18 <sup>h</sup> 318 Lyra]	5.46	A 5	19 4 26.687	+2.3805	+ 55	+28 32 27.35	+5.650	+ 87
719	[ $\iota$ Lyrae]	5.13	B 5	19 5 20.238	+2.1403	— 8	+36 0 46.43	+5.639	0
718	$\alpha$ Coron. austr.	4.12	A 2	19 5 43.943	+4.0814	+ 73	—37 59 31.43	+5.573	— 99
720	$\pi$ Sagittarii	3.02	F 2	19 6 29.608	+3.5674	— 1	—21 6 46.22	+5.700	— 37
1499	[42 G. Octantis]	6.78	A 2	19 8 56.155	+8.1513	— 2	—75 53 42.06	+5.932	— 12
1500	[20 Aquilae]	5.37	B 3	19 9 41.676	+3.2537	+ 6	— 8 1 59.03	+5.997	— 7
723	$\delta$ Draconis	3.24	K 0	19 12 32.768	+0.0136	+160	+67 33 53.35	+6.332	+ 93
722	[43 Sagittarii]	5.03	K 0	19 14 25.041	+3.5096	— 9	—19 3 9.18	+6.381	— 16
724	$\theta$ Lyrae	4.46	K 0	19 14 27.448	+2.0819	— 8	+38 2 4.93	+6.401	+ 2
725	$\omega$ Aquilae	5.14	A 5	19 15 14.017	+2.8155	— 4	+11 29 41.57	+6.482	+ 18
726	$\kappa$ Cygni	3.98	K 0	19 15 49.864	+1.3860	+ 61	+53 15 58.64	+6.636	+123
1501	[162 G. Sagittar.]	5.61	B 5	19 16 1.408	+3.9753	+ 3	—35 31 23.56	+6.528	— 2
729	$\tau$ Draconis	4.63	K 0	19 16 37.248	—1.1552	—331	+73 15 14.48	+6.687	+112
727	[ $\nu$ Sagittarii]	4.58	$\begin{smallmatrix} B8p \\ +F2p \end{smallmatrix}$	19 18 34.646	+3.4352	— 2	—16 3 35.59	+6.735	— 6
1502	[ $\beta^1$ Sagittarii]	4.31	B 8	19 18 41.215	+4.3124	+ 1	—44 33 51.44	+6.731	— 19
728	$\alpha$ Sagittarii	4.11	B 8	19 20 4.703	+4.1564	+ 26	—40 43 16.70	+6.746	—118
1503	[31 Aquilae]	5.23	G 5	19 22 20.789	+2.8602	+489	+11 49 30.95	+7.689	+639
730	$\delta$ Aquilae	3.44	F 0	19 22 43.471	+3.0243	+167	+ 3 0 13.18	+7.165	+ 84
1504	[59 G. Telescopii]	5.58	K 2	19 23 23.467	+4.8193	— 2	—54 26 13.69	+7.151	+ 15
731	[186 G. Sagittar.]	5.68	B 9	19 23 28.042	+3.7912	+ 15	—29 51 13.41	+7.097	— 45
1505	[Br 2462 Vulp]	6.04	K 5	19 24 4.212	+2.6237	— 8	+19 46 51.03	+7.144	— 46
1506	[Grb 2844 Cygn]	6.72	G 5	19 24 15.840	+1.8295	— 46	+44 49 15.24	+7.129	— 76
1507	[P19 <sup>h</sup> 156 Draco]	6.46	B 8	19 24 47.020	+1.0839	— 20	+57 54 57.26	+7.257	+ 9
734	Grb 2900 Draco	6.00	A 1	19 25 3.109	—3.6388	+ 40	+79 29 39.73	+7.235	— 31



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o".oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o".oor
1508	[ $\alpha$ Vulpeculae]	4.63	M o	<sup>h</sup> 19 <sup>m</sup> 26 <sup>s</sup> 24.920	+2.4960	— 97	+24 <sup>o</sup> 33' 8.47"	+ 7.278	— 103
1509	[36 Aquilae]	5.22	M o	19 27 47.211	+3.1370	+ 9	— 2 54 17.82	+ 7.487	— 6
733	$\iota$ Cygni	3.94	A 2	19 28 19.124	+1.5121	+ 19	+51 36 42.67	+ 7.664	+ 129
732	$\beta$ Cygni <i>pr</i>	3.24	K o +A o	19 28 30.114	+2.4190	— 3	+27 50 34.58	+ 7.546	— 4
1510	[8 Cygni]	4.85	B 3	19 29 43.572	+2.2290	— 6	+34 20 5.76	+ 7.649	0
735	[ $\iota$ Telescopii]	5.02	K o	19 31 8.445	+4.4502	— 16	—48 13 11.16	+ 7.730	— 35
1511	[ $\mu$ Aquilae]	4.65	K o	19 31 24.092	+2.9304	+ 141	+ 7 15 38.79	+ 7.630	— 155
736	52 Sagittarii	4.66	B 9	19 33 21.707	+3.6504	+ 51	—25 0 24.07	+ 7.923	— 20
737	[ $\kappa$ Aquilae]	5.04	B o	19 33 55.937	+3.2269	0	— 7 9 4.75	+ 7.985	— 4
738	$\theta$ Cygni	4.64	F 5	19 34 57.919	+1.6077	— 30	+50 5 34.35	+ 8.324	+ 254
1512	[54 Sagittarii]	5.45	K o	19 37 34.372	+3.4364	+ 46	—16 25 15.25	+ 8.235	— 45
1513	[ $\beta$ Sagittae]	4.45	K o	19 38 34.650	+2.6941	+ 2	+17 20 50.18	+ 8.325	— 34
1514	[55 Sagittarii]	5.10	F o	19 39 22.404	+3.4308	+ 42	—16 15 16.17	+ 8.412	— 11
1515	[10 Vulpeculae]	5.45	G 5	19 41 25.619	+2.4941	+ 4	+25 38 20.79	+ 8.605	+ 20
740	15 Cygni	5.02	K o	19 42 17.482	+2.1632	+ 56	+37 13 13.51	+ 8.687	+ 34
1516	[228 G. Sagittar.]	5.56	B 8	19 42 30.814	+3.8273	+ 2	—32 2 34.70	+ 8.652	— 19
1517	[56 Sagittarii]	5.06	K o	19 43 9.295	+3.4990	— 95	—19 53 41.80	+ 8.635	— 87
739	$\eta$ Telescopii	5.52	A 5	19 43 32.240	+4.8991	+ 102	—56 29 48.69	+ 8.624	— 129
741	$\gamma$ Aquilae	2.80	K 2	19 43 38.644	+2.8517	+ 8	+10 28 40.61	+ 8.763	+ 3
743	$\delta$ Sagittae	3.78	M o +A o	19 44 56.048	+2.6747	+ 2	+18 23 50.35	+ 8.873	+ 12
744	[51 Aquilae]	5.55	F o	19 47 45.271	+3.3007	— 19	—10 54 16.46	+ 9.117	+ 35
745	$\alpha$ Aquilae	0.89	A 5	19 48 5.951	+2.9265	+ 360	+ 8 43 18.23	+ 9.496	+ 387
746	[ $\eta$ Aquilae]	3.7-4.4	G o p	19 49 40.244	+3.0556	+ 3	+ 0 51 47.16	+ 9.227	— 4
1518	[75 G. Pavonis]	6.32	A 3	19 49 53.215	+5.2410	+ 13	—61 18 54.42	+ 9.259	+ 9
1519	[90 G. Aquilae]	5.64	F o p +A	19 50 25.895	+3.1420	+ 14	— 3 15 29.97	+ 9.306	+ 16
1520	[ $\iota$ Sagittarii]	4.21	K o	19 51 28.266	+4.1379	+ 7	—42 0 52.67	+ 9.427	+ 56
749	$\beta$ Aquilae	3.90	K o	19 52 36.645	+2.9464	+ 26	+ 6 16 4.97	+ 8.981	— 478
1521	[ $\eta$ Cygni]	4.03	K o	19 54 14.477	+2.2504	— 30	+34 56 10.43	+ 9.556	— 27
748	$\epsilon$ Pavonis	4.10	A o	19 54 16.096	+6.9439	+ 190	—73 3 31.17	+ 9.457	— 130
1522	[61 Sagittarii]	5.05	A o	19 54 49.913	+3.4019	+ 7	—15 38 19.98	+ 9.534	— 96
751	$\theta$ Sagittarii	4.39	B 3	19 56 9.576	+3.9040	0	—35 25 36.07	+ 9.707	— 25
752	$\gamma$ Sagittae	3.71	K 5	19 56 18.587	+2.6675	+ 42	+19 20 29.70	+ 9.770	+ 28
1523	[15 Vulpeculae]	4.74	A 5	19 58 50.042	+2.4704	+ 40	+27 36 1.74	+ 9.945	+ 10
753	[62 Sagittarii]	4.60	M 3	19 59 16.727	+3.6887	+ 27	—27 51 51.60	+ 9.989	+ 20
1524	[ $\tau$ Aquilae]	5.65	K o	20 1 27.084	+2.9296	+ 5	+ 7 7 17.19	+10.149	+ 16
755	[ $\xi$ Telescopii]	4.86	M o	20 3 10.856	+4.5969	— 15	—53 2 24.54	+10.276	+ 12
754	$\delta$ Pavonis	3.64	G 5	20 3 20.974	+5.8867	+1974	—66 19 29.06	+ 9.137	—1140
1525	[28 Cygni]	4.82	B 2 p	20 7 22.950	+2.2276	— 2	+36 40 36.09	+10.592	+ 15
756	$\theta$ Aquilae	3.37	A o	20 8 28.015	+3.0948	+ 22	— 0 59 9.51	+10.664	+ 6
759	$\kappa$ Cephei	4.43	B 9	20 10 46.640	—2.0174	+ 22	+77 32 48.26	+10.853	+ 28



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.001	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.001
1526	[ $\rho$ Aquilae]	4.96	A o	<sup>h</sup> 20 <sup>m</sup> 11 43.857	+2.7757	+ 36	+15° 1' 43.38"	+10.953	+ 55
757	31 $\alpha^1$ Cygni	3.95	K o + B 8	20 11 53.896	+1.8886	- 3	+46 34 25.34	+10.916	+ 6
758	33 Cygni	4.32	A 3	20 12 7.170	+1.3943	+ 72	+56 23 55.84	+11.009	+ 83
760	24 Vulpeculae	5.45	K o	20 14 25.786	+2.5669	+ 9	+24 30 2.08	+11.081	- 14
1527	[ $\alpha^1$ Capricorni]	4.55	G o p	20 14 36.014	+3.3245	+ 11	-12 40 46.59	+11.112	+ 3
1529	[4 Capricorni]	5.96	K o	20 14 47.638	+3.5241	+ 23	-21 58 53.17	+11.093	- 29
1528	[83 G. Telescopii]	6.28	M o	20 14 59.710	+4.3024	+ 6	-47 52 58.76	+11.143	+ 5
761	$\alpha^2$ Capricorni	3.77	G 5	20 15 0.236	+3.3279	+ 41	-12 43 0.28	+11.143	+ 6
1530	[290 G. Sagittarii]	6.51	K 2	20 17 19.006	+3.8717	+ 14	-35 50 54.93	+11.333	+ 28
762	[ $\beta$ Capricorni]	3.25	G o + A o	20 17 55.346	+3.3700	+ 26	-14 57 23.44	+11.352	+ 3
763	[ $\alpha^1$ Sagittarii]	5.64	A o	20 18 43.793	+4.0734	+ 32	-42 13 28.38	+11.319	- 88
765	$\gamma$ Cygni	2.32	F 8 p	20 20 15.170	+2.1529	0	+40 4 46.91	+11.517	+ 1
1531	[132 G. Aquilae]	5.41	K o	20 20 27.135	+2.9718	- 25	+ 5 9 57.47	+11.495	- 35
764	$\alpha$ Pavonis	2.12	B 3	20 21 18.525	+4.7471	+ 11	-56 54 47.46	+11.510	- 82
1532	[296 G. Sagittarii]	5.97	K o	20 22 4.959	+3.6728	+ 8	-28 50 34.92	+11.666	+ 19
1533	[69 Aquilae]	5.11	K o	20 26 46.532	+3.1350	+ 44	- 3 4 10.87	+11.964	- 15
1534	[41 Cygni]	4.09	F 5 p	20 27 8.798	+2.4509	+ 2	+30 11 2.12	+12.001	- 3
1535	42 Cygni	5.94	A o	20 27 14.420	+2.2883	+ 1	+36 16 12.67	+12.012	+ 2
767	$\delta$ Cephei	4.28	A 5	20 28 39.656	+1.0064	+ 60	+62 48 31.82	+12.098	- 11
1536	[29 G. Capricorni]	5.82	G 5	20 29 23.187	+3.2815	+202	-10 2 32.66	+12.263	+102
1538	[Grb 3241 Draco]	6.42	K 2	20 30 15.714	-0.2564	- 14	+72 20 44.00	+12.203	- 16
768	$\epsilon$ Delphini	3.98	B 5	20 30 35.064	+2.8657	+ 4	+11 6 54.70	+12.226	- 17
1537	[9 G. Delphini]	6.68	K o	20 31 15.629	+2.9868	+ 6	+ 4 42 34.55	+12.284	- 6
770	73 Draconis	5.18	A 2 p	20 32 15.327	-0.7895	+ 10	+74 45 59.40	+12.345	- 11
769	$\alpha$ Indi	3.21	K o	20 33 42.402	+4.2197	+ 50	-47 29 5.46	+12.531	+ 72
1539	29 Vulpeculae	4.78	A o	20 36 3.834	+2.6790	+ 44	+21 0 25.45	+12.627	+ 7
772	[ $\alpha$ Delphini]	5.23	G 5	20 36 27.419	+2.9134	+210	+ 9 53 28.54	+12.667	+ 21
1540	[13 G. Microscopii]	5.54	K 2	20 36 53.098	+3.7641	+ 26	-33 37 39.80	+12.726	+ 50
773	$\nu$ Capricorni	5.33	M o	20 36 55.235	+3.4146	- 15	-18 20 1.17	+12.660	- 18
774	$\alpha$ Delphini	3.86	B 8	20 37 4.934	+2.7862	+ 41	+15 43 0.87	+12.690	+ 1
777	$\alpha$ Cygni	1.33	A 2 p	20 39 33.321	+2.0449	0	+45 4 58.76	+12.859	+ 5
776	[ $\eta$ Indi]	4.70	F o	20 40 0.653	+4.4058	+172	-52 7 8.75	+12.832	- 54
775	$\beta$ Pavonis	3.60	A 5	20 40 1.633	+5.4092	- 64	-66 24 9.91	+12.905	+ 18
778	[ $\delta$ Delphini]	4.53	A 5	20 40 53.404	+2.8005	- 16	+14 52 34.19	+12.904	- 40
779	[ $\psi$ Capricorni]	4.26	F 8	20 42 50.526	+3.5516	- 40	-25 28 11.76	+12.920	-155
780	$\epsilon$ Cygni	2.64	K o	20 43 59.035	+2.4273	+283	+33 45 47.84	+13.479	+330
782	[6 H. Cephei]	4.63	G o	20 43 59.187	+1.4886	- 87	+57 22 54.44	+12.916	-234
1541	[ $\gamma$ Delphini sq]	4.49	G 5	20 44 6.312	+2.7828	- 28	+15 55 29.99	+12.965	-193
783	$\eta$ Cephei	3.59	K o	20 44 10.400	+1.2202	+129	+61 37 29.01	+13.983	+822
781	$\epsilon$ Aquarii	3.83	A o	20 44 41.976	+3.2470	+ 20	- 9 41 54.07	+13.166	- 31



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o'oor
1544	[Grb 3285 Cygn]	6.43	K o	20 44 45.441	+1.7390	— 97	+52° 47' 39".71	+13.094	— 106
1542	[ι Microscopii]	5.14	F o	20 44 45.831	+4.0672	+ 167	—44 11 25.63	+13.100	— 102
1543	[ζ Aquarii]	4.60	M o	20 44 50.144	+3.1649	— 3	— 5 13 49.13	+13.170	— 37
1545	[—1° 4057 Aqar]	6.53	M 3	20 46 27.537	+3.0841	— 24	— 0 46 3.68	+13.301	— 12
1546	[ω Capricorni]	4.24	M o	20 48 32.548	+3.5800	— 7	—27 7 34.67	+13.446	— 2
1547	[μ Aquarii]	4.80	A 3	20 49 41.294	+3.2353	+ 26	— 9 11 27.28	+13.495	— 28
785	β Indi	3.72	K o	20 50 31.609	+4.6896	+ 23	—58 39 47.86	+13.558	— 19
786	32 Vulpeculae	5.24	K 5	20 52 12.844	+2.5568	— 6	+27 50 50.89	+13.686	+ 2
1548	[64 G. Capricor.]	5.95	A 3	20 54 35.985	+3.3579	+ 31	—16 14 40.25	+13.837	0
788	ν Cygni	4.04	A o	20 55 7.234	+2.2364	+ 5	+40 57 16.66	+13.859	— 9
1549	[33 Vulpeculae]	5.57	K 5	20 55 48.715	+2.6818	— 6	+22 6 44.36	+13.919	+ 6
789	[ιι Aquarii]	6.26	G o	20 57 40.074	+3.1583	+ 26	— 4 56 37.82	+13.898	— 132
1550	[γ Microscopii]	4.71	G 5	20 57 55.331	+3.6798	0	—32 28 26.69	+14.051	+ 6
1551	[59 Cygni]	4.88	B o p	20 57 57.193	+2.0400	0	+47 18 19.81	+14.052	+ 5
787	[α Octantis]	5.24	F 2	20 58 7.728	+7.2793	+ 31	—77 14 9.67	+13.696	— 362
790	ζ Microscopii	5.35	F o	20 59 27.445	+3.8333	— 25	—38 50 51.25	+14.031	— 109
1552	[θ Capricorni]	4.19	A o	21 2 51.455	+3.3722	+ 57	—17 27 9.25	+14.296	— 54
792	[ξ Cygni]	3.92	K 5	21 2 55.685	+2.1820	+ 4	+43 42 27.53	+14.358	+ 5
1553	[—0° 4161 Aqar]	7.10	K 2	21 3 44.034	+3.0791	+ 6	— 0 19 34.79	+14.418	+ 15
791	[A Capricorni]	4.60	M o	21 3 54.843	+3.5085	— 21	—25 13 37.12	+14.371	— 43
793	6ι Cygni pr	5.57	K 5	21 4 25.684	+2.6873	+3504	+38 28 40.72	+17.705	+3260.
794	ν Aquarii	4.52	K o	21 6 35.965	+3.2674	+ 61	—11 35 43.98	+14.564	— 12
795	Br 2777 Cep	5.90	B 9	21 6 38.007	—1.2010	+ 60	+77 54 13.84	+14.612	+ 36
1555	[γ Equulei]	4.76	F o p	21 7 39.990	+2.9175	+ 38	+ 9 54 32.34	+14.489	— 151
1554	[ο Pavonis]	5.08	M o	21 8 13.156	+5.6308	+ 86	—70 21 9.45	+14.643	— 32
1556	[58 G. Microscopii]	5.55	K 5	21 10 1.882	+3.5572	+ 73	—27 50 41.71	+14.665	— 116
797	ζ Cygni	3.40	K o	21 10 35.591	+2.5531	— 4	+30 0 1.65	+14.760	— 53
796	[23 G. Indi]	5.84	A 5	21 11 50.814	+4.2835	+ 18	—53 29 31.42	+14.877	— 11
800	α Equulei	4.14	F 8 + A 3	21 13 4.443	+2.9986	+ 36	+ 5 1 9.97	+14.876	— 83
1557	[24 G. Indi]	6.70	K o	21 14 8.340	+4.0865	— 24	—48 56 53.11	+14.943	— 79
801	[ε Microscopii]	4.79	A o	21 14 36.433	+3.6373	+ 39	—32 24 12.75	+15.027	— 21
1558	[σ Cygni]	4.28	A o p	21 15 15.176	+2.3561	— 4	+39 9 47.99	+15.082	— 2
1559	[υ Cygni]	4.42	B 3 p	21 15 39.224	+2.4666	+ 6	+34 39 54.26	+15.106	— 2
802	[θ <sup>1</sup> Microscopii]	4.92	A 2 p	21 17 14.943	+3.8370	+ 56	—41 2 35.81	+15.199	— 1
803	α Cephei	2.60	A 5	21 17 16.014	+1.4316	+ 212	+62 21 7.47	+15.251	+ 52
1560	[Grb 3434 Cygn]	6.81	K 2	21 17 54.525	+1.9290	+ 6	+52 49 28.49	+15.237	0
1561	[ι Capricorni]	4.30	K o	21 19 11.183	+3.3401	+ 22	—17 4 11.68	+15.316	+ 6
804	ι Pegasi	4.27	K o	21 19 32.475	+2.7744	+ 72	+19 34 5.81	+15.397	+ 68
1562	[ι8 Aquarii]	5.54	A 5	21 21 11.257	+3.2780	+ 60	—13 6 54.66	+15.432	+ 11
805	γ Pavonis	4.30	F 8	21 21 55.385	+4.9639	+ 154	—65 37 0.02	+16.262	+ 799



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.0001	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in 0.0001
1563	[γ Indi]	6.24	F 0	<sup>h</sup> 21 <sup>m</sup> 22 <sup>a</sup> 20.850	+4.2808	+ 8	<sup>o</sup> -54 53 57.52	+15.533	+ 46
806	ζ Capricorni	3.86	G 5 p	21 23 31.812	+3.4250	+ 1	-22 39 2.34	+15.579	+ 27
1564	[2 G. Pegasi]	6.66	M 0	21 25 42.115	+2.9571	+ 4	+ 7 57 19.33	+15.638	- 32
807	[71 Cygni]	5.34	K 0	21 27 25.015	+2.2138	+ 42	+46 17 50.58	+15.872	+ 108
1565	[2 Pegasi]	4.76	K 5	21 27 27.260	+2.7174	+ 13	+23 23 48.73	+15.772	+ 6
809	β Cephei	3.33	B 1	21 27 57.476	+0.7745	+ 21	+70 19 8.86	+15.806	+ 13
808	β Aquarii	3.07	G 0	21 28 39.858	+3.1578	+ 12	- 5 48 50.84	+15.827	- 4
1566	[6 Piscis austr.]	5.99	A 2	21 28 55.309	+3.6295	+ 6	-34 11 17.09	+15.842	- 3
1567	[3 G. Gruis]	5.73	K 0	21 29 50.162	+3.8880	- 18	-45 5 34.61	+15.890	- 4
1568	[ρ Cygni]	4.22	K 0	21 31 54.560	+2.2563	- 25	+45 20 52.80	+15.914	- 90
811	74 Cygni	5.09	A 5	21 34 44.484	+2.4046	- 7	+40 9 56.80	+16.170	+ 19
1569	[ξ Aquarii]	4.78	A 5	21 34 49.486	+3.1932	+ 74	- 8 6 6.62	+16.134	- 22
1570	[5 Pegasi]	5.29	F 0	21 35 10.903	+2.8073	+ 70	+19 4 12.93	+16.190	+ 16
810	ν Octantis	3.74	K 0	21 35 26.545	+6.6848	+ 185	-77 38 10.04	+15.949	- 240
812	[γ Capricorni]	3.80	F 0 p	21 37 2.753	+3.3235	+ 131	-16 54 42.40	+16.248	- 22
813	[13 H. Cephei]	5.97	O e 5	21 37 15.088	+1.8612	- 7	+57 14 23.22	+16.280	0
817	[11 Cephei]	4.85	K 0	21 41 7.336	+0.8789	+ 235	+71 3 28.86	+16.580	+ 105
815	ε Pegasi	2.54	K 0	21 41 29.022	+2.9462	+ 18	+ 9 37 19.13	+16.498	+ 5
814	[1 Piscis austr.]	4.35	A 0	21 41 40.559	+3.5737	+ 29	-33 16 39.96	+16.412	- 91
1571	[+35° 4626 Cygni]	6.60	K 0	21 43 24.417	+2.5437	+ 75	+35 36 10.43	+16.605	+ 17
818	[λ Capricorni]	5.43	A 0	21 43 34.539	+3.2289	+ 17	-11 37 13.79	+16.592	- 4
1572	[ν Cephei]	4.46	A 2 p	21 43 51.618	+1.7307	- 7	+60 51 59.48	+16.612	+ 2
819	δ Capricorni	2.98	A 5	21 44 0.436	+3.3108	+ 181	-16 22 40.11	+16.325	- 293
1574	[11 Pegasi]	5.50	A 0	21 44 26.607	+3.0420	+ 5	+ 2 25 51.43	+16.644	+ 5
1573	[13 G. Gruis]	5.75	G 5	21 44 41.666	+3.9021	+ 159	-47 33 17.68	+16.357	- 295
821	π <sup>2</sup> Cygni	4.26	B 3	21 44 45.489	+2.2165	+ 2	+49 3 15.99	+16.656	+ 2
820	[o Indi]	5.50	K 2	21 46 10.141	+5.0795	- 44	-69 53 12.25	+16.721	- 3
1575	[14 Pegasi]	5.00	A 0	21 47 24.524	+2.6538	+ 10	+29 55 2.49	+16.759	- 23
1576	[127 G. Capricor.]	6.85	F 8	21 48 17.003	+3.4147	+ 253	-23 31 39.08	+16.740	- 84
1577	[μ Capricorni]	5.18	F 0	21 50 17.949	+3.2704	+ 211	-13 48 41.74	+16.933	+ 14
823	16 Pegasi	5.05	B 3	21 50 33.425	+2.7297	+ 2	+25 39 56.22	+16.934	+ 3
822	γ Gruis	3.16	B 8	21 50 36.272	+3.6326	+ 85	-37 37 27.95	+16.921	- 13
1578	[Br 2880 Ceph]	6.58	A 0	21 52 8.914	+0.7017	+ 79	+73 26 31.20	+17.035	+ 31
1579	[Piz 1 <sup>a</sup> 339 Pegs]	6.62	K 5	21 53 49.528	+2.8048	- 3	+20 58 39.81	+17.101	+ 19
824	[8 Indi]	4.56	F 0	21 54 13.351	+4.0844	+ 63	-55 15 18.41	+17.096	- 3
1580	[98 G. Aquarii]	6.42	K 0	21 56 2.889	+3.1285	- 4	- 4 37 58.11	+16.930	- 254
826	[20 Pegasi]	5.66	F 2	21 58 24.475	+2.9224	+ 35	+12 51 20.74	+17.243	- 46
825	[e Indi]	4.74	K 5	21 59 10.071	+4.5894	+4808	-57 0 47.27	+14.771	-2552
1581	[λ Gruis]	4.60	K 2	22 2 48.407	+3.6162	- 18	-39 48 34.50	+17.366	- 114
827	α Aquarii	3.19	G 0	22 2 57.541	+3.0809	+ 10	- 0 35 16.03	+17.483	- 4



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o"oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in o"oor
830	20 Cephei	<sup>m</sup> 5.39	K 5	<sup>h m s</sup> 22 3 20.041	+1.8235	+ 21	+62° 31' 0.88"	+17.566	+ 64
828	ι Aquarii	4.35	B 8	22 3 28.105	+3.2396	+ 26	-14 8 14.33	+17.456	- 53
831	[ι Pegasi]	3.96	F 5	22 4 26.863	+2.7927	+215	+25 4 32.84	+17.578	+ 28
829	α Gruis	2.16	B 5	22 4 46.550	+3.7812	+123	-47 13 41.56	+17.417	-147
832	[μ Piscis austr.]	4.62	A 2	22 5 10.790	+3.5003	+ 64	-33 15 28.17	+17.544	- 37
833	[27 Pegasi]	5.65	K 0	22 6 47.204	+2.6584	- 49	+32 54 10.82	+17.585	- 63
834	ϑ Pegasi	3.70	A 2	22 7 25.465	+3.0259	+181	+ 5 55 35.84	+17.711	+ 37
835	π Pegasi	4.38	F 5	22 7 32.476	+2.6645	- 13	+32 54 27.69	+17.662	- 17
837	24 Cephei	4.99	G 5	22 8 45.233	+1.1526	+ 63	+72 4 12.52	+17.742	+ 14
836	ζ Cephei	3.62	K 0	22 8 56.525	+2.0812	+ 14	+57 55 46.78	+17.744	+ 8
838	[λ Piscis austr.]	5.40	B 9	22 11 11.958	+3.4004	+ 20	-28 2 25.38	+17.827	0
1583	[ι H. Lacertae]	4.64	K 2	22 11 30.846	+2.5754	+ 33	+39 26 29.03	+17.851	+ 11
1582	[125 G. Aquarii]	6.60	G 5	22 11 39.629	+3.2478	- 8	-16 5 12.03	+17.494	-352
840	ϑ Aquarii	4.32	K 0	22 13 55.938	+3.1654	+ 78	- 8 3 28.38	+17.917	- 19
839	[ε Octantis]	5.11	M 3	22 13 59.259	+6.7480	+304	-80 42 53.62	+17.904	- 34
841	α Tucanae	2.91	K 2	22 14 45.138	+4.1128	- 83	-60 32 4.47	+17.933	- 34
1584	[47 Aquarii]	5.40	K 0	22 18 34.099	+3.3024	- 5	-21 52 28.67	+18.029	- 84
843	[31 Pegasi]	4.93	B 3 p	22 18 48.539	+2.9528	+ 2	+11 55 39.20	+18.139	+ 17
842	γ Aquarii	3.97	A 0	22 18 48.930	+3.0983	+ 85	- 1 39 54.49	+18.134	+ 13
844	β Lacertae	4.58	K 0	22 21 23.521	+2.3592	- 19	+51 57 10.70	+18.032	-185
1585	[π Aquarii]	4.64	B 1 p	22 22 28.061	+3.0636	+ 10	+ 1 5 51.48	+18.261	+ 4
1586	[Pi 22 <sup>h</sup> 97 Pegs]	6.40	K 0	22 23 1.284	+2.8945	+ 13	+18 9 50.50	+18.315	+ 39
1587	[72 G. Indi]	5.70	A 3	22 24 36.336	+4.4220	+277	-67 46 8.98	+18.268	- 65
845	[γ Gruis]	5.48	K 0	22 25 26.163	+3.5165	+ 31	-39 24 38.60	+18.205	-156
846	[δ <sup>1</sup> Gruis]	4.02	G 5	22 25 59.400	+3.5860	+ 24	-43 46 38.10	+18.383	+ 2
1588	[36 Pegasi]	5.82	K 2	22 26 23.213	+2.9942	+ 36	+ 8 50 51.35	+18.380	- 15
1589	[Pi 22 <sup>h</sup> 120 Pegs]	5.96	K 2	22 26 35.394	+2.8109	+ 15	+26 28 53.05	+18.397	- 5
847	[δ Cephei]	3.7-4.4	G 0 v	22 27 7.383	+2.2270	+ 11	+58 7 59.50	+18.423	+ 3
1590	[38 Pegasi]	5.51	A 0	22 27 30.643	+2.7441	+ 25	+32 17 26.03	+18.422	- 12
1591	[σ Aquarii]	4.89	A 0	22 27 44.251	+3.1745	0	-10 57 36.24	+18.415	- 27
1592	[β Piscis austr.]	4.40	A 0	22 28 23.011	+3.4113	+ 53	-32 37 43.03	+18.458	- 6
848	α Lacertae	3.85	A 0	22 29 1.202	+2.4716	+139	+49 59 57.40	+18.507	+ 22
1593	[ρ Cephei]	5.50	A 2	22 29 24.710	+0.5330	- 13	+78 32 31.07	+18.483	- 14
1594	[Grb 3834 Ceph]	5.74	A 0	22 31 18.676	+1.0521	- 69	+75 56 34.31	+18.559	- 2
849	[υ Aquarii]	5.29	F 5	22 31 41.268	+3.2814	+155	-20 59 26.20	+18.431	-143
850	η Aquarii	4.13	B 8	22 32 31.797	+3.0826	+ 60	- 0 24 5.52	+18.551	- 50
851	31 Cephei	5.22	F 0	22 34 24.560	+1.4813	+390	+73 21 26.94	+18.692	+ 31
1595	[κ Aquarii]	5.33	K 0	22 34 54.489	+3.1067	- 48	- 4 30 44.14	+18.566	-112
853	[30 Cephei]	5.21	A 2	22 36 41.592	+2.1276	- 12	+63 17 53.52	+18.714	- 20
852	10 Lacertae	4.91	O e 5	22 36 47.319	+2.6921	- 1	+38 45 48.63	+18.734	- 3
854	[ε Piscis austr.]	4.22	B 8	22 37 37.043	+3.3181	+ 21	-27 19 51.60	+18.768	+ 6



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o''oor	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in o''oor
855	ζ Pegasi	3.61 <sup>m</sup>	B 8	22 <sup>h</sup> 38 <sup>m</sup> 43.040	+2.9921	+ 53	+10° 32' 37.46	+18.789	- 7
856	β Gruis	2.24	M 3	22 39 23.517	+3.5829	+ 133	-47 10 22.10	+18.814	- 3
857	η Pegasi	3.10	G 0	22 40 25.206	+2.8123	+ 9	+29 55 59.24	+18.825	- 22
858	[13 Lacertae]	5.24	K 0	22 41 37.993	+2.6755	- 10	+41 31 48.79	+18.894	+ 11
1596	[45 Pegasi]	6.45	K 0	22 42 47.452	+2.9181	- 24	+19 4 34.07	+18.980	+ 63
859	λ Pegasi	4.14	K 0	22 43 52.718	+2.8897	+ 39	+23 16 32.67	+18.942	- 6
1597	[68 Aquarii]	5.43	G 5	22 44 36.016	+3.2221	- 73	-19 54 2.61	+18.771	-198
1598	[-2° 5826 Aqar]	7.58	K 2	22 44 39.839	+3.0891	+ 3	- 2 4 44.28	+18.973	+ 3
860	ε Gruis	3.69	A 2	22 45 14.559	+3.6244	+ III	-51 36 23.63	+18.928	- 59
861	[τ Aquarii]	4.21	K 5	22 46 40.871	+3.1760	- 10	-13 53 0.09	+18.996	- 31
862	[μ Pegasi]	3.67	K 0	22 47 20.715	+2.8957	+ 107	+24 18 38.71	+19.009	- 36
863	ι Cephei	3.68	K 0	22 47 42.914	+2.1349	- 113	+65 54 39.16	+18.937	-118
1599	69 G. Gruis	5.39	K 2	22 47 54.691	+3.4150	+ 18	-39 26 55.04	+19.054	- 7
864	λ Aquarii	3.84	M 0	22 49 44.733	+3.1294	+ 5	- 7 52 21.94	+19.149	+ 40
865	ρ Indi	6.14	G 0	22 50 51.783	+4.1781	- 73	-70 22 5.10	+19.213	+ 74
866	δ Aquarii	3.51	A 2	22 51 43.987	+3.1835	- 29	-16 6 49.62	+19.140	- 20
1600	[+36° 4956 Laer]	6.00	F 2	22 52 28.873	+2.7902	+ 70	+36 46 59.76	+19.195	+ 15
867	α Piscis austr.	1.29	A 3	22 54 36.956	+3.3153	+ 258	-29 54 51.07	+19.074	-159
868	[ζ Gruis]	4.18	G 5	22 57 38.607	+3.5430	- 74	-53 2 58.16	+19.302	- 4
869	ο Andromedae	3.63	B <sup>5</sup> +A <sub>2</sub> p	22 59 23.079	+2.7603	+ 18	+42 1 48.52	+19.348	+ 2
1601	[π Piscis austr.]	5.13	F 0	23 0 27.464	+3.3191	+ 53	-35 2 49.80	+19.460	+ 89
1602	[β Piscium]	4.58	B 5p	23 1 4.601	+3.0529	+ 6	+ 3 31 24.92	+19.382	- 3
870	β Pegasi	2.61	M 0	23 1 6.232	+2.9085	+ 141	+27 47 2.88	+19.529	+143
871	α Pegasi	2.57	A 0	23 2 1.121	+2.9883	+ 42	+14 54 32.30	+19.369	- 36
1603	[55 Pegasi]	4.69	M 0	23 4 13.910	+3.0220	+ 5	+ 9 6 43.32	+19.445	- 8
1604	[5 Andromedae]	5.83	F 0	23 5 15.046	+2.7248	+ 152	+48 59 45.35	+19.614	+139
873	88 Aquarii	3.80	K 0	23 6 30.988	+3.1985	+ 39	-21 28 16.50	+19.540	+ 40
1605	[ι Gruis]	4.10	K 0	23 7 15.166	+3.3961	+ 124	-45 32 41.64	+19.497	- 18
1606	[59 Pegasi]	5.15	A 3	23 8 57.466	+3.0288	- 7	+ 8 25 15.96	+19.548	- 1
875	Br 3077 Cass	5.65	K 2	23 10 37.415	+2.8882	+2524	+56 51 52.04	+19.880	+300
1607	[φ Aquarii]	4.40	M 0	23 11 28.438	+3.1068	+ 24	- 6 20 44.88	+19.405	-190
1608	[ψ <sup>1</sup> Aquarii]	4.48	K 0	23 13 0.639	+3.1432	+ 251	- 9 23 15.73	+19.613	- 11
876	[25 G. Tucanae]	5.69	G 0	23 13 40.215	+3.6091	+ 252	-62 18 4.82	+19.611	- 24
877	γ Tucanae	4.10	F 2	23 14 13.940	+3.5023	- 38	-58 32 14.90	+19.739	+ 94
878	γ Piscium	3.85	K 0	23 14 18.781	+3.1100	+ 506	+ 2 58 53.42	+19.671	+ 24
879	γ Sculptoris	4.51	K 0	23 15 51.507	+3.2399	+ 17	-32 49 54.70	+19.612	- 60
1609	[ψ <sup>3</sup> Aquarii]	5.16	A 0	23 16 6.050	+3.1206	+ 30	- 9 54 42.09	+19.681	+ 4
880	τ Pegasi	4.65	A 5	23 17 54.655	+2.9696	+ 21	+23 26 20.65	+19.704	- 2
1610	[12 Andromedae]	5.75	F 5	23 18 13.597	+2.8951	+ 103	+37 52 54.21	+19.646	- 66
1611	[11 G. Sculptoris]	5.81	G 5	23 18 19.861	+3.1968	- 10	-27 17 17.74	+19.701	- 12
1612	[98 Aquarii]	4.20	K 0	23 20 5.023	+3.1505	- 87	-20 24 3.72	+19.652	- 88



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.0001	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.0001
1613	[67 Pegasi]	5.46	A 0	<sup>h</sup> 23 <sup>m</sup> 22 <sup>s</sup> 8.969	+2.9364	+ 8	+32° 4' 57.02"	+19.775	+ 4
882	4 Cassiopeiae	5.20	K 5	23 22 22.992	+2.6639	+ 7	+61 58 50.54	+19.768	- 6
881	[10 Pegasi]	4.57	G 0	23 22 37.819	+2.9944	+137	+23 6 4.02	+19.819	+ 42
883	[0 Gruis]	5.54	F 0	23 23 32.404	+3.3567	+ 25	-53 1 34.55	+19.923	+133
884	κ Piscium	4.94	A 2 p	23 24 6.705	+3.0753	+ 56	+ 0 57 15.48	+19.708	- 90
1614	[9 Piscium]	4.45	G 5	23 25 10.586	+3.0433	- 84	+ 6 4 35.95	+19.773	- 39
1615	[+15° 4830 Pegs]	6.98	A 2	23 26 16.035	+3.0182	+ 1	+15 42 33.94	+19.836	+ 9
885	70 Pegasi	4.67	K 0	23 26 22.235	+3.0342	+ 42	+12 27 25.30	+19.867	+ 39
886	[β Sculptoris]	4.46	B 9	23 30 1.603	+3.2171	+ 73	-38 7 21.74	+19.893	+ 21
1616	[15 Andromedae]	5.50	A 0	23 31 55.702	+2.9351	- 15	+39 55 59.15	+19.855	- 38
1617	[ι Phoenicis]	4.80	A 2 p	23 32 7.356	+3.2273	+ 35	-42 55 9.63	+19.903	+ 8
888	248 G. Aquarii	6.51	K 0	23 32 41.824	+3.0946	- 3	- 7 46 8.21	+19.926	+ 25
890	λ Andromedae	4.00	K 0	23 34 51.830	+2.9362	+152	+46 9 36.31	+19.507	-416
889	[11 G. Phoenicis]	4.86	A 2	23 34 53.723	+3.2296	+ 64	-45 47 48.46	+19.918	- 5
891	ι Andromedae	4.28	B 8	23 35 25.888	+2.9425	+ 23	+42 57 48.51	+19.930	+ 3
893	γ Cephei	3.42	K 0	23 37 4.152	+2.4587	-214	+77 19 31.37	+20.100	+157
892	ι Piscium	4.28	F 8	23 37 7.170	+3.0857	+250	+ 5 19 41.04	+19.512	-432
1619	[κ Andromedae]	4.33	A 0	23 37 41.480	+2.9551	+ 73	+44 1 45.49	+19.933	- 15
1618	[μ Sculptoris]	5.33	K 0	23 37 45.197	+3.1478	- 74	-32 22 38.37	+19.900	- 49
1620	[λ Piscium]	4.61	A 5	23 39 14.326	+3.0613	- 88	+ 1 28 38.42	+19.818	-143
894	ω <sup>3</sup> Aquarii	4.62	A 0	23 39 52.250	+3.1108	+ 66	-14 50 57.03	+19.902	- 64
1621	[106 Aquarii]	5.26	B 8	23 41 20.998	+3.1116	+ 19	-18 34 56.06	+19.983	+ 6
1622	[ψ Andromedae]	5.09	K 0 + A 5	23 43 18.002	+2.9728	+ 6	+46 6 53.57	+19.989	- 1
1623	[20 Piscium]	5.60	K 0	23 45 6.831	+3.0838	+ 60	- 3 4 2.59	+20.012	+ 12
895	41 H. Cephei	5.02	A 0	23 45 15.896	+2.8677	+ 13	+67 30 4.28	+20.005	+ 3
896	δ Sculptoris	4.64	A 0	23 46 3.847	+3.1251	+ 81	-28 26 4.13	+19.906	-100
1624	[π <sup>23</sup> 194 Aqr]	7.14	K 0	23 46 35.319	+3.1043	- 3	-21 55 11.93	+20.021	+ 12
897	[268 G. Aquarii]	6.08	K 0	23 47 24.442	+3.0957	+ 92	-10 16 52.62	+20.091	+ 79
898	φ Pegasi	5.23	M 0	23 49 41.164	+3.0523	- 5	+18 48 53.37	+19.992	- 30
1625	[82 Pegasi]	5.39	A 3	23 49 48.632	+3.0604	- 16	+10 38 28.77	+20.030	+ 7
899	ρ Cassiopeiae	4.4-5.1	F 8 p	23 51 37.423	+2.9970	- 7	+57 11 36.42	+20.034	+ 5
1626	[27 G. Phoenicis]	6.01	F 8	23 51 45.845	+3.1462	+320	-40 36 24.08	+20.064	+ 34
1627	[Grb 4163 Ceph]	6.57	B 9	23 52 7.546	+2.9099	- 26	+74 6 15.06	+20.030	- 1
1628	[π <sup>23</sup> 235 Pegs]	6.30	M 0	23 53 53.091	+3.0570	- 16	+22 20 31.49	+20.040	+ 4
1629	[ψ Pegasi]	4.75	M 0	23 54 57.082	+3.0569	- 27	+24 50 8.71	+20.013	- 25
900	27 Piscium	5.07	K 0	23 55 51.410	+3.0716	- 33	- 3 51 39.99	+19.974	- 66
901	[π Phoenicis]	5.14	K 0	23 56 5.211	+3.1089	+ 56	-53 3 10.87	+20.109	+ 69
902	ω Piscium	4.03	F 5	23 56 29.090	+3.0810	+101	+ 6 33 31.78	+19.932	-108
903	ε Tucanae	4.71	B 9	23 57 4.382	+3.1200	+ 89	-65 52 59.08	+20.023	- 19
904	[9 Octantis]	4.73	K 0	23 58 47.936	+3.0886	-151	-77 22 9.03	+19.883	-160
1630	[30 Piscium]	4.66	M 3	23 59 8.339	+3.0771	+ 34	- 6 19 10.80	+20.010	- 33

Von den Sternen, deren Namen eingeklammert sind, folgen keine Ephemeriden.



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.001	Dekl. 1945.0	Jährl. Veränderung 1945-5	Jährl. Eigenbew. in 0.001
-----	------	-------	----------	------------	---------------------------	---------------------------	--------------	---------------------------	---------------------------

Nördliche Polsterne

<i>Na</i>	43 H. Cephei	4.52 <sup>m</sup>	K o	1 <sup>h</sup> 0 <sup>m</sup> 50.01 <sup>s</sup>	+ 8.126	+ 77	+85° 57' 47.62"	+19.333	— 6
<i>Nb</i>	α Ursae min.	2.12*	F 8 v	1 45 36.89	+37.605	+174	+89 0 14.29	+17.934	— 5
<i>Nα</i>	[Br 256 Ceph]	6.86	K o	2 8 6.14	+ 9.155	+ 39	+83 18 19.95	+16.949	— 41
<i>Nβ</i>	[Br 402 Ceph]	5.78	K o	3 18 55.32	+14.175	+ 57	+84 43 19.58	+12.818	—129
<i>Nc</i>	Grb 750 Ceph	6.70	F 8	4 18 22.94	+18.120	+ 18	+85 24 20.47	+ 8.615	+ 28
<i>Nγ</i>	[+85° 74 Ceph]	6.54	A 5	5 12 3.53	+21.288	+ 24	+85 53 20.35	+ 4.067	— 81
<i>Nδ</i>	[Grb 944 Ceph]	6.41	K o	5 43 59.95	+18.869	+ 12	+85 10 20.71	+ 1.387	+ 3
<i>Nd</i>	51 H. Cephei	5.26	M o	7 15 29.63	+28.277	— 48	+87 8 7.60	— 6.537	— 34
<i>Ne</i>	[Grb 1359 Caml]	6.39	A o	8 4 1.95	+14.379	— 8	+84 13 22.84	—10.355	— 22
<i>Nε</i>	[+84° 196 Caml]	6.26	F o	9 4 13.74	+12.551	+ 18	+84 24 22.74	—14.429	+ 9
<i>Ne</i>	1 H. Draconis	4.58	K 2	9 29 24.66	+ 8.571	— 7	+81 34 19.82	—15.892	— 18
<i>Nf</i>	30 H. Camelop.	5.34	F 2	10 24 33.34	+ 7.328	— 44	+82 50 23.60	—18.307	+ 25
<i>Nη</i>	[+86° 161 Caml]	7.17	A 2	11 8 12.61	+ 7.242	— 41	+85 56 21.29	—19.535	+ 1
<i>Nθ</i>	[Grb 1850 Caml]	6.38	F 5	11 1 55.64	+ 2.865	— 50	+85 53 30.61	—19.955	+ 88
<i>Nι</i>	[Grb 2063 Caml]	6.16	G 5	13 43 49.24	— 1.687	+ 20	+83 1 43.29	—18.070	— 48
<i>Nκ</i>	[Grb 2196 UMin]	5.73	G o	14 53 53.81	— 4.049	+ 90	+82 44 20.98	—14.779	—232
<i>Nλ</i>	[Grb 2315 UMin]	7.32	A 2	15 48 59.33	— 6.227	+ 4	+83 6 57.71	—10.848	— 1
<i>Ng</i>	ε Ursae min.	4.40	G 5	16 51 31.65	— 6.158	+ 6	+82 7 51.16	— 5.900	+ 4
<i>Nh</i>	δ Ursae min.	4.44	A o	17 49 55.54	—19.455	+ 12	+86 36 39.33	— 0.839	+ 55
<i>Nι</i>	λ Ursae min.	6.55	M 3	18 27 46.96	—76.914	—112	+89 2 52.77	+ 2.370	+ 2
<i>Nμ</i>	[Br 2412 Drae]	6.15	A 2	18 31 27.43	— 7.923	+ 6	+83 8 19.07	+ 2.706	— 31
<i>Nν</i>	[Grb 3212 Drae]	6.61	A 2	20 7 37.03	— 8.748	— 9	+84 30 43.72	+10.546	— 41
<i>Nk</i>	76 Draconis	5.69	A o	20 46 41.53	— 4.326	+ 14	+82 19 45.67	+13.351	+ 27
<i>Nξ</i>	[32 H. Cephei]	5.38	A o	22 17 57.78	— 4.781	+ 50	+85 49 56.40	+18.137	+ 49
<i>No</i>	[36 H. Cephei]	4.96	K 5	22 54 55.47	— 0.463	+ 58	+84 3 7.50	+19.275	+ 33
<i>Nπ</i>	[V Cephei]	6.42	A o	23 53 49.84	+ 2.812	+ 26	+82 53 6.10	+20.055	+ 18

\* var.

Von den Sternen, deren Namen eingeklammert sind, folgen keine Ephemeriden.



Nr.	Name	Größe	Spektrum	AR. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\alpha^{\circ}$ oor	Dekl. 1945.0	Jährl. Veränderung 1945.5	Jährl. Eigenbew. in $\delta^{\circ}$ oor
-----	------	-------	----------	------------	---------------------------	--	--------------	---------------------------	--

## Südliche Polsterne

<i>S<math>\alpha</math></i>	[ $\circ$ Octantis]	7.22	A $\circ$	0 12 16.59	+ 0.046	+ 45	-88° 40' 7.58	+20.017	+ 3
<i>S<math>\beta</math></i>	4 G. Octantis	5.63	K $\circ$	1 40 22.41	- 3.441	+ 22	-85 2 53.58	+18.177	+ 25
	[Lac 1029 Octn]	7.76	F $\circ$	2 28 50.18	- 8.368	+ 1	-85 57 52.39	+15.945	- 21
<i>S<math>\gamma</math></i>	[Lac 1848 Octn]	8.35	G 5	2 40 22.16	-27.501	- 48	-88 23 21.40	+15.324	- 21
<i>S<math>\delta</math></i>	[12 G. Mensae]	6.76	A 2	4 29 8.30	- 7.003	- 10	-83 1 16.90	+ 7.747	+ 2
<i>S<math>\beta</math></i>	$\xi$ Mensae	5.85	K $\circ$	5 5 3.36	- 6.850	- 3	-82 32 50.25	+ 4.774	+ 10
<i>S<math>\epsilon</math></i>	[31 G. Mensae]	6.24	A $\circ$	5 40 48.80	-11.617	- 8	-84 49 6.48	+ 1.733	+ 49
<i>S<math>\zeta</math></i>	[6 G. Octantis]	6.74	K $\circ$	5 54 21.66	-15.722	- 15	-85 55 53.76	+ 0.508	+ 4
<i>S<math>\eta</math></i>	[7 G. Octantis]	6.41	F 2	7 6 44.34	-20.948	+ 10	-86 56 59.07	- 5.737	+ 3
<i>S<math>\theta</math></i>	[A Octantis]	7.75	A $\circ$	7 17 5.78	-51.528	- 9	-88 40 28.82	- 6.566	+ 15
<i>S<math>\epsilon</math></i>	$\zeta$ Octantis	5.38	F $\circ$	9 5 4.31	- 8.624	- 92	-85 26 45.80	-14.442	+ 36
<i>S<math>\iota</math></i>	[10 G. Octantis]	6.74	A $\circ$	10 34 26.52	- 3.582	- 2	-85 48 22.42	-18.658	+ 4
<i>S<math>\kappa</math></i>	[7 $\eta$ Octantis]	6.26	A $\circ$	10 59 44.66	- 0.451	- 44	-84 17 52.81	-19.359	- 5
<i>S<math>\lambda</math></i>	$\iota$ Octantis	5.38	K $\circ$	12 48 58.78	+ 6.254	+ 46	-84 49 30.88	-19.561	+ 25
<i>S<math>\lambda</math></i>	[ $\kappa$ Octantis]	5.65	A 2	13 31 37.35	+ 9.632	- 67	-85 30 21.74	-18.483	- 23
<i>S<math>\epsilon</math></i>	20 G. Octantis	6.52	A 2	14 59 0.04	+28.953	-178	-87 55 41.62	-14.289	- 69
<i>S<math>\mu</math></i>	[ $\rho$ Octantis]	5.66	A 2	15 30 17.01	+13.779	+ 91	-84 17 14.71	-12.083	+ 91
<i>S<math>\nu</math></i>	26 G. Octantis	6.13	A $\circ$	16 39 58.34	+22.367	+ 10	-86 16 21.74	- 6.842	0
<i>S<math>\zeta</math></i>	$\chi$ Octantis	5.22	K $\circ$	18 22 50.02	+35.469	- 71	-87 39 19.91	+ 1.889	-131
<i>S<math>\nu</math></i>	[44 G. Octantis]	6.32	K $\circ$	19 46 0.67	+11.069	+ 5	-81 29 32.98	+ 8.952	+ 1
<i>S<math>\eta</math></i>	$\sigma$ Octantis	5.48	F $\circ$	20 8 31.59	+79.526	+132	-89 9 13.06	+10.707	- 3
<i>S<math>\xi</math></i>	[48 G. Octantis]	7.08	A $\circ$	20 29 48.94	+14.322	+ 36	-84 35 58.88	+12.177	- 20
<i>S<math>\circ</math></i>	[B Octantis]	6.54	A 5	22 17 6.48	+39.916	+ 62	-89 6 6.82	+18.028	- 41
<i>S<math>\pi</math></i>	[ $\nu$ Octantis]	5.74	K $\circ$	22 21 42.29	+11.500	- 37	-86 14 58.36	+18.293	+ 62
<i>S<math>\iota</math></i>	$\beta$ Octantis	4.34	F $\circ$	22 40 33.87	+ 6.148	- 23	-81 40 15.25	+18.861	+ 9
<i>S<math>\kappa</math></i>	$\tau$ Octantis	5.56	K $\circ$	23 20 37.25	+ 8.989	+ 27	-87 47 6.26	+19.760	+ 11

Von den Sternen, deren Namen eingeklammert sind, folgen keine Ephemeriden.



# Scheinbare Sternörter 1945

41\*

## Obere Kulmination Greenwich

Tag	1) $\alpha$ Andromedae		2) $\beta$ Cassiopeiae		3) $\varepsilon$ Phoenicis		7) $\gamma$ Pegasi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$^{\text{h}} 5^{\text{m}}$	$+28^{\circ} 47'$	$^{\text{h}} 6^{\text{m}}$	$+58^{\circ} 50'$	$^{\text{h}} 6^{\text{m}}$	$-46^{\circ} 2'$	$^{\text{h}} 10^{\text{m}}$	$+14^{\circ} 52'$
Jan. 0	31.268 <sup>146</sup>	14.78 <sup>94</sup>	12.745 <sup>327</sup>	57.58 <sup>76</sup>	36.098 <sup>193</sup>	84.64 <sup>34</sup>	22.915 <sup>121</sup>	37.82 <sup>85</sup>
10	31.122 <sup>139</sup>	13.84 <sup>120</sup>	12.418 <sup>315</sup>	56.82 <sup>127</sup>	35.905 <sup>178</sup>	84.30 <sup>80</sup>	22.794 <sup>115</sup>	36.97 <sup>96</sup>
20	30.983 <sup>127</sup>	12.64 <sup>141</sup>	12.103 <sup>290</sup>	55.55 <sup>174</sup>	35.727 <sup>156</sup>	83.50 <sup>123</sup>	22.679 <sup>106</sup>	36.01 <sup>103</sup>
30	30.856 <sup>109</sup>	11.23 <sup>155</sup>	11.813 <sup>253</sup>	53.81 <sup>213</sup>	35.571 <sup>130</sup>	82.27 <sup>164</sup>	22.573 <sup>90</sup>	34.98 <sup>106</sup>
Febr. 9	30.747 <sup>83</sup>	9.68 <sup>164</sup>	11.560 <sup>204</sup>	51.68 <sup>243</sup>	35.441 <sup>97</sup>	80.63 <sup>201</sup>	22.483 <sup>70</sup>	33.92 <sup>103</sup>
19	30.664 <sup>53</sup>	8.04 <sup>165</sup>	11.356 <sup>144</sup>	49.25 <sup>264</sup>	35.344 <sup>60</sup>	78.62 <sup>234</sup>	22.413 <sup>43</sup>	32.89 <sup>96</sup>
März 1	30.611 <sup>16</sup>	6.39 <sup>158</sup>	11.212 <sup>75</sup>	46.61 <sup>274</sup>	35.284 <sup>17</sup>	76.28 <sup>260</sup>	22.370 <sup>11</sup>	31.93 <sup>83</sup>
11	30.595 <sup>27</sup>	4.81 <sup>143</sup>	11.137 <sup>1</sup>	43.87 <sup>271</sup>	35.267 <sup>29</sup>	73.68 <sup>282</sup>	22.359 <sup>25</sup>	31.10 <sup>64</sup>
21	30.622 <sup>71</sup>	3.38 <sup>121</sup>	11.138 <sup>81</sup>	41.16 <sup>257</sup>	35.296 <sup>78</sup>	70.86 <sup>298</sup>	22.384 <sup>66</sup>	30.46 <sup>41</sup>
31	30.693 <sup>118</sup>	2.17 <sup>94</sup>	11.219 <sup>161</sup>	38.59 <sup>234</sup>	35.374 <sup>130</sup>	67.88 <sup>308</sup>	22.450 <sup>107</sup>	30.05 <sup>14</sup>
Apr. 10	30.811 <sup>165</sup>	1.23 <sup>60</sup>	11.380 <sup>238</sup>	36.25 <sup>201</sup>	35.504 <sup>182</sup>	64.80 <sup>312</sup>	22.557 <sup>150</sup>	29.91 <sup>16</sup>
20	30.976 <sup>210</sup>	0.63 <sup>24</sup>	11.618 <sup>309</sup>	34.24 <sup>160</sup>	35.686 <sup>232</sup>	61.68 <sup>310</sup>	22.707 <sup>190</sup>	30.07 <sup>48</sup>
30	31.186 <sup>249</sup>	0.39 <sup>16</sup>	11.927 <sup>372</sup>	32.64 <sup>114</sup>	35.918 <sup>279</sup>	58.58 <sup>300</sup>	22.897 <sup>228</sup>	30.55 <sup>80</sup>
Mai 10	31.435 <sup>284</sup>	0.55 <sup>55</sup>	12.299 <sup>425</sup>	31.50 <sup>63</sup>	36.197 <sup>322</sup>	55.58 <sup>284</sup>	23.125 <sup>261</sup>	31.35 <sup>110</sup>
20	31.719 <sup>311</sup>	1.10 <sup>93</sup>	12.724 <sup>464</sup>	30.87 <sup>11</sup>	36.519 <sup>357</sup>	52.74 <sup>262</sup>	23.386 <sup>288</sup>	32.45 <sup>139</sup>
30	32.030 <sup>329</sup>	2.03 <sup>130</sup>	13.188 <sup>490</sup>	30.76 <sup>43</sup>	36.876 <sup>385</sup>	50.12 <sup>233</sup>	23.674 <sup>306</sup>	33.84 <sup>163</sup>
Juni 9	32.359 <sup>340</sup>	3.33 <sup>162</sup>	13.678 <sup>502</sup>	31.19 <sup>95</sup>	37.261 <sup>404</sup>	47.79 <sup>198</sup>	23.980 <sup>318</sup>	35.47 <sup>185</sup>
19	32.699 <sup>340</sup>	4.95 <sup>190</sup>	14.180 <sup>501</sup>	32.14 <sup>143</sup>	37.665 <sup>411</sup>	45.81 <sup>160</sup>	24.298 <sup>320</sup>	37.32 <sup>200</sup>
29	33.039 <sup>333</sup>	6.85 <sup>214</sup>	14.681 <sup>486</sup>	33.57 <sup>189</sup>	38.076 <sup>409</sup>	44.21 <sup>116</sup>	24.618 <sup>314</sup>	39.32 <sup>210</sup>
Juli 9	33.372 <sup>316</sup>	8.99 <sup>232</sup>	15.167 <sup>459</sup>	35.46 <sup>229</sup>	38.485 <sup>395</sup>	43.05 <sup>69</sup>	24.932 <sup>300</sup>	41.42 <sup>216</sup>
19	33.688 <sup>292</sup>	11.31 <sup>244</sup>	15.626 <sup>421</sup>	37.75 <sup>264</sup>	38.880 <sup>371</sup>	42.36 <sup>22</sup>	25.232 <sup>280</sup>	43.58 <sup>216</sup>
29	33.980 <sup>262</sup>	13.75 <sup>250</sup>	16.047 <sup>375</sup>	40.39 <sup>293</sup>	39.251 <sup>337</sup>	42.14 <sup>26</sup>	25.512 <sup>252</sup>	45.74 <sup>211</sup>
Aug. 8	34.242 <sup>227</sup>	16.25 <sup>251</sup>	16.422 <sup>320</sup>	43.32 <sup>316</sup>	39.588 <sup>296</sup>	42.40 <sup>73</sup>	25.764 <sup>221</sup>	47.85 <sup>201</sup>
18	34.469 <sup>188</sup>	18.76 <sup>246</sup>	16.742 <sup>262</sup>	46.48 <sup>331</sup>	39.884 <sup>247</sup>	43.13 <sup>116</sup>	25.985 <sup>185</sup>	49.86 <sup>187</sup>
28	34.657 <sup>147</sup>	21.22 <sup>238</sup>	17.004 <sup>200</sup>	49.79 <sup>339</sup>	40.131 <sup>194</sup>	44.29 <sup>154</sup>	26.170 <sup>147</sup>	51.73 <sup>171</sup>
Sept. 7	34.804 <sup>107</sup>	23.60 <sup>225</sup>	17.204 <sup>135</sup>	53.18 <sup>341</sup>	40.325 <sup>137</sup>	45.83 <sup>187</sup>	26.317 <sup>109</sup>	53.44 <sup>151</sup>
17	34.911 <sup>66</sup>	25.85 <sup>207</sup>	17.339 <sup>71</sup>	56.59 <sup>336</sup>	40.462 <sup>80</sup>	47.70 <sup>211</sup>	26.426 <sup>71</sup>	54.95 <sup>129</sup>
26	34.977 <sup>28</sup>	27.92 <sup>186</sup>	17.410 <sup>9</sup>	59.95 <sup>325</sup>	40.542 <sup>24</sup>	49.81 <sup>227</sup>	26.497 <sup>36</sup>	56.24 <sup>108</sup>
Okt. 6	35.005 <sup>7</sup>	29.78 <sup>164</sup>	17.419 <sup>50</sup>	63.20 <sup>305</sup>	40.566 <sup>28</sup>	52.08 <sup>233</sup>	26.533 <sup>4</sup>	57.32 <sup>85</sup>
16	34.998 <sup>38</sup>	31.42 <sup>139</sup>	17.369 <sup>106</sup>	66.25 <sup>281</sup>	40.538 <sup>75</sup>	54.41 <sup>230</sup>	26.537 <sup>25</sup>	58.17 <sup>62</sup>
26	34.960 <sup>66</sup>	32.81 <sup>111</sup>	17.263 <sup>157</sup>	69.06 <sup>249</sup>	40.463 <sup>116</sup>	56.71 <sup>216</sup>	26.512 <sup>50</sup>	58.79 <sup>40</sup>
Nov. 5	34.894 <sup>89</sup>	33.92 <sup>81</sup>	17.106 <sup>204</sup>	71.55 <sup>211</sup>	40.347 <sup>149</sup>	58.87 <sup>195</sup>	26.462 <sup>71</sup>	59.19 <sup>18</sup>
15	34.805 <sup>108</sup>	34.73 <sup>50</sup>	16.902 <sup>243</sup>	73.66 <sup>169</sup>	40.198 <sup>173</sup>	60.82 <sup>164</sup>	26.391 <sup>87</sup>	59.37 <sup>2</sup>
25	34.697 <sup>124</sup>	35.23 <sup>20</sup>	16.659 <sup>277</sup>	75.35 <sup>121</sup>	40.025 <sup>191</sup>	62.46 <sup>127</sup>	26.304 <sup>101</sup>	59.35 <sup>23</sup>
Dez. 5	34.573 <sup>134</sup>	35.43 <sup>13</sup>	16.382 <sup>302</sup>	76.56 <sup>68</sup>	39.834 <sup>200</sup>	63.73 <sup>85</sup>	26.203 <sup>111</sup>	59.12 <sup>42</sup>
15	34.439 <sup>141</sup>	35.30 <sup>45</sup>	16.080 <sup>319</sup>	77.24 <sup>15</sup>	39.634 <sup>201</sup>	64.58 <sup>40</sup>	26.092 <sup>116</sup>	58.70 <sup>59</sup>
25	34.298 <sup>144</sup>	34.85 <sup>74</sup>	15.761 <sup>325</sup>	77.39 <sup>40</sup>	39.433 <sup>197</sup>	64.98 <sup>6</sup>	25.976 <sup>118</sup>	58.11 <sup>74</sup>
35	34.154	34.11	15.436	76.99	39.236	64.92	25.858	57.37
Mittl. Ort	32.337	12.72	13.712	47.44	37.557	62.62	23.999	40.49
sec $\delta$ , tg $\delta$	1.141	+0.549	1.933	+1.654	1.441	-1.037	1.035	+0.266
a, a'	+3.1	+20.0	+3.1	+20.0	+3.0	+20.0	+3.1	+20.0
b, b'	+0.04	-0.02	+0.11	-0.03	-0.07	-0.03	+0.02	-0.05



# Scheinbare Sternörter 1945

Tag	9) $\iota$ Ceti		10) $\zeta$ Tucanae <sup>1)</sup>		11) $\beta$ Hydri <sup>2)</sup>		12) $\alpha$ Phoenicis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$0^h 16^m$	$-9^\circ 7'$	$0^h 17^m$	$-65^\circ 11'$	$0^h 22^m$	$-77^\circ 33'$	$0^h 23^m$	$-42^\circ 35'$
Jan. 0	36. <sup>a</sup> 37I <sub>113</sub>	54. <sup>a</sup> 25 56	11.43 39	77. <sup>a</sup> 86 81	51. <sup>a</sup> 41 85	76. <sup>a</sup> 68 104	32. <sup>a</sup> 956 185	97. <sup>a</sup> 41 8
10	36.258 <sub>108</sub>	54.81 41	11.04 36	77.05 136	50.56 81	75.64 164	32.771 <sub>175</sub>	97.33 54
20	36.150 <sub>99</sub>	55.22 24	10.68 32	75.69 189	49.75 72	74.00 217	32.596 158	96.79 96
30	36.051 <sub>84</sub>	55.46 6	10.36 27	73.80 235	49.03 62	71.83 264	32.438 137	95.83 138
Febr. 9	35.967 <sub>65</sub>	55.52 14	10.09 22	71.45 276	48.41 50	69.19 305	32.301 <sub>110</sub>	94.45 176
19	35.902 <sub>41</sub>	55.38 35	9.87 15	68.69 309	47.91 38	66.14 337	32.191 <sub>76</sub>	92.69 210
März 1	35.861 <sub>12</sub>	55.03 58	9.72 8	65.60 336	47.53 23	62.77 362	32.115 <sub>38</sub>	90.59 239
11	35.849 <sub>22</sub>	54.45 82	9.64 0	62.24 354	47.30 8	59.15 377	32.077 <sub>5</sub>	88.20 264
21	35.871 <sub>59</sub>	53.63 105	9.64 8	58.70 365	47.22 7	55.38 384	32.082 <sub>52</sub>	85.56 284
31	35.930 <sub>99</sub>	52.58 129	9.72 16	55.05 369	47.29 23	51.54 383	32.134 <sub>102</sub>	82.72 298
Apr. 10	36.029 <sub>140</sub>	51.29 151	9.88 24	51.36 363	47.52 38	47.71 374	32.236 <sub>152</sub>	79.74 305
20	36.169 <sub>180</sub>	49.78 171	10.12 31	47.73 352	47.90 52	43.97 357	32.388 <sub>201</sub>	76.69 307
30	36.349 <sub>216</sub>	48.07 189	10.43 40	44.21 332	48.42 67	40.40 332	32.589 <sub>249</sub>	73.62 302
Mai 10	36.565 <sub>250</sub>	46.18 201	10.83 46	40.89 305	49.09 79	37.08 300	32.838 <sub>292</sub>	70.60 291
20	36.815 <sub>278</sub>	44.17 210	11.29 52	37.84 272	49.88 91	34.08 262	33.130 <sub>329</sub>	67.69 272
30	37.093 <sub>298</sub>	42.07 214	11.81 56	35.12 231	50.79 99	31.46 217	33.459 <sub>359</sub>	64.97 247
Juni 9	37.391 <sub>312</sub>	39.93 211	12.37 60	32.81 186	51.78 106	29.29 168	33.818 <sub>379</sub>	62.50 217
19	37.703 <sub>317</sub>	37.82 205	12.97 61	30.95 136	52.84 109	27.61 114	34.197 <sub>390</sub>	60.33 180
29	38.020 <sub>314</sub>	35.77 192	13.58 62	29.59 83	53.93 111	26.47 58	34.587 <sub>391</sub>	58.53 140
Juli 9	38.334 <sub>303</sub>	33.85 174	14.20 60	28.76 28	55.04 109	25.89 1	34.978 <sub>382</sub>	57.13 95
19	38.637 <sub>284</sub>	32.11 153	14.80 58	28.48 27	56.13 104	25.88 57	35.360 <sub>362</sub>	56.18 49
29	38.921 <sub>259</sub>	30.58 127	15.38 52	28.75 82	57.17 97	26.45 112	35.722 <sub>333</sub>	55.69 1
Aug. 8	39.180 <sub>229</sub>	29.31 100	15.90 47	29.57 132	58.14 85	27.57 164	36.055 <sub>297</sub>	55.68 46
18	39.409 <sub>194</sub>	28.31 70	16.37 39	30.89 179	58.99 73	29.21 210	36.352 <sub>253</sub>	56.14 91
28	39.603 <sub>156</sub>	27.61 41	16.76 31	32.68 219	59.72 57	31.31 249	36.605 <sub>205</sub>	57.05 131
Sept. 7	39.759 <sub>118</sub>	27.20 12	17.07 22	34.87 251	60.29 40	33.80 279	36.810 <sub>153</sub>	58.36 167
17	39.877 <sub>80</sub>	27.08 15	17.29 12	37.38 273	60.69 21	36.59 298	36.963 <sub>100</sub>	60.03 194
26*)	39.957 <sub>43</sub>	27.23 37	17.41 3	40.11 284	60.90 3	39.57 307	37.063 <sub>47</sub>	61.97 215
Okt. 6	40.000 <sub>9</sub>	27.60 57	17.44 6	42.95 285	60.93 15	42.64 303	37.110 <sub>1</sub>	64.12 226
16	40.009 <sub>20</sub>	28.17 73	17.38 15	45.80 273	60.78 33	45.67 287	37.109 <sub>47</sub>	66.38 226
26	39.989 <sub>45</sub>	28.90 83	17.23 22	48.53 250	60.45 49	48.54 259	37.062 <sub>87</sub>	68.64 219
Nov. 5	39.944 <sub>67</sub>	29.73 89	17.01 29	51.03 216	59.96 63	51.13 220	36.975 <sub>120</sub>	70.83 201
15	39.877 <sub>84</sub>	30.62 91	16.72 34	53.19 175	59.33 74	53.33 173	36.855 <sub>146</sub>	72.84 175
25	39.793 <sub>96</sub>	31.53 88	16.38 38	54.94 125	58.59 82	55.06 118	36.709 <sub>166</sub>	74.59 143
Dez. 5	39.697 <sub>105</sub>	32.41 83	16.00 39	56.19 70	57.77 87	56.24 57	36.543 <sub>179</sub>	76.02 105
15	39.592 <sub>110</sub>	33.24 73	15.61 40	56.89 12	56.90 89	56.81 5	36.364 <sub>185</sub>	77.07 62
25	39.482 <sub>111</sub>	33.97 62	15.21 40	57.01 47	56.01 88	56.76 67	36.179 <sub>185</sub>	77.69 18
35	39.371	34.59	14.81	56.54	55.13	56.09	35.994	77.87
Mittl. Ort	37.502	43.03	13.13	52.18	53.65	49.79	34.209	75.89
sec $\delta$ , tg $\delta$	1.013	-0.161	2.384	-2.164	4.644	-4.535	1.359	-0.920
a, a'	+3.1	+20.0	+2.9	+20.0	+2.5	+19.9	+2.9	+19.9
b, b'	-0.01	-0.07	-0.14	-0.08	-0.30	-0.10	-0.06	-0.10

<sup>1)</sup> Die jährliche Parallaxe (0".133) ist bereits berücksichtigt.

<sup>2)</sup> Die jährliche Parallaxe (0".143) ist bereits berücksichtigt.

<sup>3)</sup> Die Sternörter sind auf den 1. Januar 1945 bezogen.



# Obere Kulmination Greenwich

43\*

Tag	13) $\zeta$ Ceti		17) $\zeta$ Cassiopeiae		18) $\pi$ Andromedae		20) $\delta$ Andromedae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$0^h 27^m$	$-4^\circ 15'$	$0^h 33^m$	$+53^\circ 35'$	$0^h 33^m$	$+33^\circ 24'$	$0^h 36^m$	$+30^\circ 33'$
Jan. 0	12.807 <sup>5</sup> <sub>114</sub>	49.01 <sup>64</sup>	52.815 <sup>273</sup>	49.11 <sup>48</sup>	55.273 <sup>162</sup>	63.93 <sup>70</sup>	21.920 <sup>153</sup>	39.37 <sup>70</sup>
10	12.693 <sup>111</sup>	49.65 <sup>54</sup>	52.542 <sup>272</sup>	48.63 <sup>97</sup>	55.111 <sup>161</sup>	63.23 <sup>101</sup>	21.767 <sup>153</sup>	38.67 <sup>98</sup>
20	12.582 <sup>104</sup>	50.19 <sup>41</sup>	52.270 <sup>260</sup>	47.66 <sup>141</sup>	54.950 <sup>155</sup>	62.22 <sup>127</sup>	21.614 <sup>148</sup>	37.69 <sup>121</sup>
30	12.478 <sup>91</sup>	50.60 <sup>27</sup>	52.010 <sup>236</sup>	46.25 <sup>180</sup>	54.795 <sup>140</sup>	60.95 <sup>148</sup>	21.466 <sup>134</sup>	36.48 <sup>140</sup>
Febr. 9	12.387 <sup>74</sup>	50.87 <sup>11</sup>	51.774 <sup>201</sup>	44.45 <sup>211</sup>	54.655 <sup>118</sup>	59.47 <sup>163</sup>	21.332 <sup>113</sup>	35.08 <sup>153</sup>
19	12.313 <sup>51</sup>	50.98 <sup>9</sup>	51.573 <sup>155</sup>	42.34 <sup>233</sup>	54.537 <sup>89</sup>	57.84 <sup>171</sup>	21.219 <sup>85</sup>	33.55 <sup>159</sup>
März 1	12.262 <sup>22</sup>	50.89 <sup>29</sup>	51.418 <sup>100</sup>	40.01 <sup>246</sup>	54.448 <sup>51</sup>	56.13 <sup>170</sup>	21.134 <sup>50</sup>	31.96 <sup>157</sup>
11	12.240 <sup>11</sup>	50.60 <sup>52</sup>	51.318 <sup>36</sup>	37.55 <sup>247</sup>	54.397 <sup>9</sup>	54.43 <sup>162</sup>	21.084 <sup>9</sup>	30.39 <sup>147</sup>
21	12.251 <sup>49</sup>	50.08 <sup>77</sup>	51.282 <sup>33</sup>	35.08 <sup>239</sup>	54.388 <sup>39</sup>	52.81 <sup>146</sup>	21.075 <sup>37</sup>	28.92 <sup>131</sup>
31	12.300 <sup>88</sup>	49.31 <sup>100</sup>	51.315 <sup>104</sup>	32.69 <sup>219</sup>	54.427 <sup>90</sup>	51.35 <sup>122</sup>	21.112 <sup>86</sup>	27.61 <sup>107</sup>
Apr. 10	12.388 <sup>129</sup>	48.31 <sup>124</sup>	51.419 <sup>174</sup>	30.50 <sup>191</sup>	54.517 <sup>140</sup>	50.13 <sup>93</sup>	21.198 <sup>135</sup>	26.54 <sup>78</sup>
20	12.517 <sup>170</sup>	47.07 <sup>147</sup>	51.593 <sup>242</sup>	28.59 <sup>156</sup>	54.657 <sup>189</sup>	49.20 <sup>58</sup>	21.333 <sup>183</sup>	25.76 <sup>44</sup>
30	12.687 <sup>208</sup>	45.60 <sup>167</sup>	51.835 <sup>303</sup>	27.03 <sup>114</sup>	54.846 <sup>235</sup>	48.62 <sup>21</sup>	21.516 <sup>228</sup>	25.32 <sup>8</sup>
Mai 10	12.895 <sup>242</sup>	43.93 <sup>185</sup>	52.138 <sup>355</sup>	25.89 <sup>68</sup>	55.081 <sup>275</sup>	48.41 <sup>19</sup>	21.744 <sup>267</sup>	25.24 <sup>30</sup>
20	13.137 <sup>271</sup>	42.08 <sup>197</sup>	52.493 <sup>398</sup>	25.21 <sup>19</sup>	55.356 <sup>308</sup>	48.60 <sup>58</sup>	22.011 <sup>300</sup>	25.54 <sup>67</sup>
30	13.408 <sup>293</sup>	40.11 <sup>205</sup>	52.891 <sup>429</sup>	25.02 <sup>29</sup>	55.664 <sup>333</sup>	49.18 <sup>97</sup>	22.311 <sup>324</sup>	26.21 <sup>104</sup>
Juni 9	13.701 <sup>307</sup>	38.06 <sup>209</sup>	53.320 <sup>448</sup>	25.31 <sup>78</sup>	55.997 <sup>348</sup>	50.15 <sup>132</sup>	22.635 <sup>341</sup>	27.25 <sup>138</sup>
19	14.008 <sup>315</sup>	35.97 <sup>206</sup>	53.768 <sup>455</sup>	26.09 <sup>125</sup>	56.345 <sup>353</sup>	51.47 <sup>165</sup>	22.976 <sup>346</sup>	28.63 <sup>168</sup>
29	14.323 <sup>312</sup>	33.91 <sup>199</sup>	54.223 <sup>449</sup>	27.34 <sup>167</sup>	56.698 <sup>351</sup>	53.12 <sup>193</sup>	23.322 <sup>344</sup>	30.31 <sup>194</sup>
Juli 9	14.635 <sup>303</sup>	31.92 <sup>186</sup>	54.672 <sup>433</sup>	29.01 <sup>206</sup>	57.049 <sup>339</sup>	55.05 <sup>216</sup>	23.666 <sup>333</sup>	32.25 <sup>215</sup>
19	14.938 <sup>286</sup>	30.06 <sup>169</sup>	55.105 <sup>406</sup>	31.07 <sup>240</sup>	57.388 <sup>319</sup>	57.21 <sup>235</sup>	23.999 <sup>315</sup>	34.40 <sup>229</sup>
29	15.224 <sup>262</sup>	28.37 <sup>147</sup>	55.511 <sup>371</sup>	33.47 <sup>268</sup>	57.707 <sup>292</sup>	59.56 <sup>246</sup>	24.314 <sup>288</sup>	36.69 <sup>240</sup>
Aug. 8	15.486 <sup>233</sup>	26.90 <sup>123</sup>	55.882 <sup>328</sup>	36.15 <sup>291</sup>	57.999 <sup>259</sup>	62.02 <sup>253</sup>	24.602 <sup>256</sup>	39.09 <sup>245</sup>
18	15.719 <sup>200</sup>	25.67 <sup>96</sup>	56.210 <sup>280</sup>	39.06 <sup>306</sup>	58.258 <sup>223</sup>	64.55 <sup>254</sup>	24.858 <sup>222</sup>	41.54 <sup>243</sup>
28	15.919 <sup>164</sup>	24.71 <sup>69</sup>	56.490 <sup>228</sup>	42.12 <sup>315</sup>	58.481 <sup>183</sup>	67.09 <sup>251</sup>	25.080 <sup>183</sup>	43.97 <sup>239</sup>
Sept. 7	16.083 <sup>126</sup>	24.02 <sup>42</sup>	56.718 <sup>174</sup>	45.27 <sup>320</sup>	58.664 <sup>143</sup>	69.60 <sup>243</sup>	25.263 <sup>143</sup>	46.36 <sup>228</sup>
17	16.209 <sup>90</sup>	23.60 <sup>16</sup>	56.892 <sup>120</sup>	48.47 <sup>316</sup>	58.807 <sup>102</sup>	72.03 <sup>229</sup>	25.406 <sup>104</sup>	48.64 <sup>215</sup>
27	16.299 <sup>54</sup>	23.44 <sup>9</sup>	57.012 <sup>65</sup>	51.63 <sup>307</sup>	58.909 <sup>63</sup>	74.32 <sup>214</sup>	25.510 <sup>66</sup>	50.79 <sup>198</sup>
Okt. 6	16.353 <sup>21</sup>	23.53 <sup>29</sup>	57.077 <sup>13</sup>	54.70 <sup>292</sup>	58.972 <sup>25</sup>	76.46 <sup>193</sup>	25.576 <sup>30</sup>	52.77 <sup>177</sup>
16	16.374 <sup>9</sup>	23.82 <sup>47</sup>	57.090 <sup>37</sup>	57.62 <sup>270</sup>	58.997 <sup>9</sup>	78.39 <sup>170</sup>	25.606 <sup>4</sup>	54.54 <sup>155</sup>
26	16.365 <sup>34</sup>	24.29 <sup>61</sup>	57.053 <sup>84</sup>	60.32 <sup>244</sup>	58.988 <sup>41</sup>	80.09 <sup>145</sup>	25.602 <sup>35</sup>	56.09 <sup>130</sup>
Nov. 5	16.331 <sup>57</sup>	24.90 <sup>70</sup>	56.969 <sup>127</sup>	62.76 <sup>211</sup>	58.947 <sup>68</sup>	81.54 <sup>117</sup>	25.567 <sup>62</sup>	57.39 <sup>102</sup>
15	16.274 <sup>74</sup>	25.60 <sup>75</sup>	56.842 <sup>166</sup>	64.87 <sup>173</sup>	58.879 <sup>94</sup>	82.71 <sup>85</sup>	25.505 <sup>86</sup>	58.41 <sup>74</sup>
25	16.200 <sup>89</sup>	26.35 <sup>78</sup>	56.676 <sup>201</sup>	66.60 <sup>131</sup>	58.785 <sup>115</sup>	83.56 <sup>54</sup>	25.419 <sup>107</sup>	59.15 <sup>44</sup>
Dez. 5	16.111 <sup>100</sup>	27.13 <sup>77</sup>	56.475 <sup>229</sup>	67.91 <sup>84</sup>	58.670 <sup>133</sup>	84.10 <sup>20</sup>	25.312 <sup>124</sup>	59.59 <sup>13</sup>
15	16.011 <sup>107</sup>	27.90 <sup>74</sup>	56.246 <sup>251</sup>	68.75 <sup>36</sup>	58.537 <sup>147</sup>	84.30 <sup>14</sup>	25.188 <sup>138</sup>	59.72 <sup>19</sup>
25	15.904 <sup>110</sup>	28.64 <sup>67</sup>	55.995 <sup>266</sup>	69.11 <sup>15</sup>	58.390 <sup>155</sup>	84.16 <sup>48</sup>	25.050 <sup>147</sup>	59.53 <sup>50</sup>
35	15.794	29.31	55.729	68.96	58.235	83.68	24.903	59.03
Mittl. Ort	13.855	39.36	53.599	40.32	56.163	60.67	22.808	37.03
sec $\delta$ , tg $\delta$	1.003	-0.075	1.685	+1.356	1.198	+0.660	1.161	+0.590
$a, a'$	+3.1	+19.9	+3.3	+19.8	+3.2	+19.8	+3.2	+19.8
$b, b'$	0.00	-0.12	+0.09	-0.15	+0.04	-0.15	+0.04	-0.16



Tag	21) $\alpha$ Cassiopeiae		22) $\beta$ Ceti		25) $\sigma$ Cassiopeiae		24) $\zeta$ I Cassiopeiae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$^{\circ} 37^m$	$+56^{\circ} 13'$	$^{\circ} 40^m$	$-18^{\circ} 17'$	$^{\circ} 41^m$	$+47^{\circ} 58'$	$^{\circ} 41^m$	$+74^{\circ} 40'$
Jan. 0	21.534 <sup>299</sup>	79.25 <sup>40</sup>	48.758 <sup>125</sup>	32.04 <sup>49</sup>	38.160 <sup>229</sup>	68.80 <sup>48</sup>	58.27 <sup>75</sup>	88.71 <sup>2</sup>
10	21.235 <sup>298</sup>	78.85 <sup>91</sup>	48.633 <sup>124</sup>	32.53 <sup>25</sup>	37.931 <sup>231</sup>	68.32 <sup>91</sup>	57.52 <sup>74</sup>	88.73 <sup>60</sup>
20	20.937 <sup>286</sup>	77.94 <sup>137</sup>	48.509 <sup>118</sup>	32.78 <sup>2</sup>	37.700 <sup>222</sup>	67.41 <sup>132</sup>	56.78 <sup>72</sup>	88.13 <sup>118</sup>
30	20.651 <sup>261</sup>	76.57 <sup>178</sup>	48.391 <sup>106</sup>	32.76 <sup>29</sup>	37.478 <sup>205</sup>	66.09 <sup>166</sup>	56.06 <sup>65</sup>	86.95 <sup>172</sup>
Febr. 9	20.390 <sup>224</sup>	74.79 <sup>212</sup>	48.285 <sup>88</sup>	32.47 <sup>56</sup>	37.273 <sup>176</sup>	64.43 <sup>194</sup>	55.41 <sup>57</sup>	85.23 <sup>219</sup>
19	20.166 <sup>175</sup>	72.67 <sup>237</sup>	48.197 <sup>67</sup>	31.91 <sup>83</sup>	37.097 <sup>138</sup>	62.49 <sup>214</sup>	54.84 <sup>46</sup>	83.04 <sup>255</sup>
März I	19.991 <sup>116</sup>	70.30 <sup>251</sup>	48.130 <sup>38</sup>	31.08 <sup>109</sup>	36.959 <sup>91</sup>	60.35 <sup>225</sup>	54.38 <sup>33</sup>	80.49 <sup>282</sup>
11	19.875 <sup>48</sup>	67.79 <sup>255</sup>	48.092 <sup>4</sup>	29.99 <sup>135</sup>	36.868 <sup>36</sup>	58.10 <sup>224</sup>	54.05 <sup>18</sup>	77.67 <sup>296</sup>
21	19.827 <sup>25</sup>	65.24 <sup>248</sup>	48.088 <sup>34</sup>	28.64 <sup>159</sup>	36.832 <sup>24</sup>	55.86 <sup>215</sup>	53.87 <sup>2</sup>	74.71 <sup>298</sup>
31	19.852 <sup>101</sup>	62.76 <sup>230</sup>	48.122 <sup>74</sup>	27.05 <sup>182</sup>	36.856 <sup>88</sup>	53.71 <sup>196</sup>	53.85 <sup>13</sup>	71.73 <sup>288</sup>
Apr. 10	19.953 <sup>177</sup>	60.46 <sup>204</sup>	48.196 <sup>117</sup>	25.23 <sup>201</sup>	36.944 <sup>151</sup>	51.75 <sup>168</sup>	53.98 <sup>29</sup>	68.85 <sup>267</sup>
20	20.130 <sup>249</sup>	58.42 <sup>169</sup>	48.313 <sup>159</sup>	23.22 <sup>218</sup>	37.095 <sup>212</sup>	50.07 <sup>135</sup>	54.27 <sup>44</sup>	66.18 <sup>236</sup>
30	20.379 <sup>314</sup>	56.73 <sup>127</sup>	48.472 <sup>200</sup>	21.04 <sup>230</sup>	37.307 <sup>268</sup>	48.72 <sup>95</sup>	54.71 <sup>56</sup>	63.82 <sup>196</sup>
Mai 10	20.693 <sup>371</sup>	55.46 <sup>82</sup>	48.672 <sup>237</sup>	18.74 <sup>237</sup>	37.575 <sup>318</sup>	47.77 <sup>51</sup>	55.27 <sup>68</sup>	61.86 <sup>150</sup>
20	21.064 <sup>416</sup>	54.64 <sup>33</sup>	48.909 <sup>269</sup>	16.37 <sup>240</sup>	37.893 <sup>358</sup>	47.26 <sup>6</sup>	55.95 <sup>77</sup>	60.36 <sup>100</sup>
30	21.480 <sup>451</sup>	54.31 <sup>17</sup>	49.178 <sup>295</sup>	13.97 <sup>235</sup>	38.251 <sup>388</sup>	47.20 <sup>41</sup>	56.72 <sup>83</sup>	59.36 <sup>46</sup>
Juni 9	21.931 <sup>471</sup>	54.48 <sup>67</sup>	49.473 <sup>312</sup>	11.62 <sup>227</sup>	38.639 <sup>407</sup>	47.61 <sup>86</sup>	57.55 <sup>87</sup>	58.90 <sup>10</sup>
19	22.402 <sup>479</sup>	55.15 <sup>115</sup>	49.785 <sup>324</sup>	9.35 <sup>211</sup>	39.046 <sup>416</sup>	48.47 <sup>129</sup>	58.42 <sup>90</sup>	59.00 <sup>64</sup>
29	22.881 <sup>474</sup>	56.30 <sup>159</sup>	50.109 <sup>324</sup>	7.24 <sup>191</sup>	39.462 <sup>413</sup>	49.76 <sup>168</sup>	59.32 <sup>88</sup>	59.64 <sup>117</sup>
Juli 9	23.355 <sup>458</sup>	57.89 <sup>200</sup>	50.433 <sup>319</sup>	5.33 <sup>165</sup>	39.875 <sup>400</sup>	51.44 <sup>204</sup>	60.20 <sup>86</sup>	60.81 <sup>168</sup>
19	23.813 <sup>430</sup>	59.89 <sup>235</sup>	50.752 <sup>303</sup>	3.68 <sup>135</sup>	40.275 <sup>378</sup>	53.48 <sup>233</sup>	61.06 <sup>81</sup>	62.49 <sup>213</sup>
29	24.243 <sup>394</sup>	62.24 <sup>266</sup>	51.055 <sup>281</sup>	2.33 <sup>103</sup>	40.653 <sup>347</sup>	55.81 <sup>259</sup>	61.87 <sup>74</sup>	64.62 <sup>255</sup>
Aug. 8	24.637 <sup>349</sup>	64.90 <sup>290</sup>	51.336 <sup>254</sup>	1.30 <sup>68</sup>	41.000 <sup>310</sup>	58.40 <sup>277</sup>	62.61 <sup>65</sup>	67.17 <sup>291</sup>
18	24.986 <sup>299</sup>	67.80 <sup>309</sup>	51.590 <sup>220</sup>	0.62 <sup>32</sup>	41.310 <sup>267</sup>	61.17 <sup>290</sup>	63.26 <sup>57</sup>	70.08 <sup>319</sup>
28	25.285 <sup>245</sup>	70.89 <sup>320</sup>	51.810 <sup>184</sup>	0.30 <sup>3</sup>	41.577 <sup>221</sup>	64.07 <sup>297</sup>	63.83 <sup>46</sup>	73.27 <sup>343</sup>
Sept. 7	25.530 <sup>189</sup>	74.09 <sup>325</sup>	51.994 <sup>146</sup>	0.33 <sup>36</sup>	41.798 <sup>174</sup>	67.04 <sup>299</sup>	64.29 <sup>34</sup>	76.70 <sup>359</sup>
17	25.719 <sup>131</sup>	77.34 <sup>324</sup>	52.140 <sup>106</sup>	0.69 <sup>66</sup>	41.972 <sup>125</sup>	70.03 <sup>293</sup>	64.63 <sup>23</sup>	80.29 <sup>368</sup>
27	25.850 <sup>72</sup>	80.58 <sup>318</sup>	52.246 <sup>68</sup>	1.35 <sup>91</sup>	42.097 <sup>77</sup>	72.96 <sup>284</sup>	64.86 <sup>11</sup>	83.97 <sup>369</sup>
Okt. 6	25.922 <sup>17</sup>	83.76 <sup>303</sup>	52.314 <sup>32</sup>	2.26 <sup>111</sup>	42.174 <sup>31</sup>	75.80 <sup>268</sup>	64.97 <sup>1</sup>	87.66 <sup>363</sup>
16	25.939 <sup>37</sup>	86.79 <sup>283</sup>	52.346 <sup>1</sup>	3.37 <sup>125</sup>	42.205 <sup>14</sup>	78.48 <sup>247</sup>	64.96 <sup>13</sup>	91.29 <sup>348</sup>
26	25.902 <sup>88</sup>	89.62 <sup>256</sup>	52.345 <sup>30</sup>	4.62 <sup>132</sup>	42.191 <sup>55</sup>	80.95 <sup>221</sup>	64.83 <sup>25</sup>	94.77 <sup>326</sup>
Nov. 5	25.814 <sup>135</sup>	92.18 <sup>225</sup>	52.315 <sup>56</sup>	5.94 <sup>134</sup>	42.136 <sup>93</sup>	83.16 <sup>191</sup>	64.58 <sup>36</sup>	98.03 <sup>295</sup>
15	25.679 <sup>178</sup>	94.43 <sup>187</sup>	52.259 <sup>77</sup>	7.28 <sup>129</sup>	42.043 <sup>128</sup>	85.07 <sup>155</sup>	64.22 <sup>46</sup>	100.98 <sup>258</sup>
25	25.501 <sup>216</sup>	96.30 <sup>143</sup>	52.182 <sup>94</sup>	8.57 <sup>118</sup>	41.915 <sup>159</sup>	86.62 <sup>116</sup>	63.76 <sup>55</sup>	103.56 <sup>212</sup>
Dez. 5	25.285 <sup>249</sup>	97.73 <sup>97</sup>	52.088 <sup>107</sup>	9.75 <sup>103</sup>	41.756 <sup>185</sup>	87.78 <sup>74</sup>	63.21 <sup>63</sup>	105.68 <sup>160</sup>
15	25.036 <sup>274</sup>	98.70 <sup>46</sup>	51.981 <sup>116</sup>	10.78 <sup>84</sup>	41.571 <sup>207</sup>	88.52 <sup>29</sup>	62.58 <sup>70</sup>	107.28 <sup>103</sup>
25	24.762 <sup>290</sup>	99.16 <sup>5</sup>	51.865 <sup>121</sup>	11.62 <sup>62</sup>	41.364 <sup>220</sup>	88.81 <sup>17</sup>	61.88 <sup>73</sup>	108.31 <sup>42</sup>
35	24.472	99.11	51.744	12.24	41.144	88.64	61.15	108.73
Mittl. Ort	22.271	69.90	49.761	17.42	38.930	61.46	58.59	76.28
sec $\delta$ , tg $\delta$	1.799	+1.496	1.053	-0.331	1.494	+1.110	3.787	+3.652
a, a'	+3.4	+19.8	+3.0	+19.7	+3.3	+19.7	+4.0	+19.7
b, b'	+0.10	-0.16	-0.02	-0.18	+0.07	-0.18	+0.24	-0.18



# Obere Kulmination Greenwich

45\*

Tag	27) ζ Andromedae		32) γ Cassiopeiae		33) μ Andromedae		35) α Sculptoris	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	0 <sup>h</sup> 44 <sup>m</sup>	+23° 57'	0 <sup>h</sup> 53 <sup>m</sup>	+60° 24'	0 <sup>h</sup> 53 <sup>m</sup>	+38° 11'	0 <sup>h</sup> 55 <sup>m</sup>	-29° 38'
Jan. 0	24.196 <sup>138</sup>	66.15 <sup>68</sup>	21.63 <sup>34</sup>	79.90 <sup>12</sup>	40.750 <sup>178</sup>	69.85 <sup>48</sup>	56.501 <sup>149</sup>	93.82 <sup>42</sup>
10	24.058 <sup>141</sup>	65.47 <sup>89</sup>	21.29 <sup>36</sup>	79.78 <sup>66</sup>	40.572 <sup>182</sup>	69.37 <sup>83</sup>	56.352 <sup>150</sup>	94.24 <sup>6</sup>
20	23.917 <sup>136</sup>	64.58 <sup>106</sup>	20.93 <sup>34</sup>	79.12 <sup>117</sup>	40.390 <sup>179</sup>	68.54 <sup>115</sup>	56.202 <sup>144</sup>	94.30 <sup>30</sup>
30	23.781 <sup>126</sup>	63.52 <sup>119</sup>	20.59 <sup>32</sup>	77.95 <sup>163</sup>	40.211 <sup>167</sup>	67.39 <sup>142</sup>	56.058 <sup>133</sup>	94.00 <sup>67</sup>
Febr. 9	23.655 <sup>107</sup>	62.33 <sup>126</sup>	20.27 <sup>28</sup>	76.32 <sup>201</sup>	40.044 <sup>147</sup>	65.97 <sup>163</sup>	55.925 <sup>116</sup>	93.33 <sup>103</sup>
19	23.548 <sup>83</sup>	61.07 <sup>128</sup>	19.99 <sup>23</sup>	74.31 <sup>231</sup>	39.897 <sup>118</sup>	64.34 <sup>177</sup>	55.809 <sup>93</sup>	92.30 <sup>135</sup>
März 1	23.465 <sup>52</sup>	59.79 <sup>122</sup>	19.76 <sup>17</sup>	72.00 <sup>252</sup>	39.779 <sup>80</sup>	62.57 <sup>182</sup>	55.716 <sup>63</sup>	90.95 <sup>167</sup>
11	23.413 <sup>13</sup>	58.57 <sup>112</sup>	19.59 <sup>9</sup>	69.48 <sup>262</sup>	39.699 <sup>36</sup>	60.75 <sup>180</sup>	55.653 <sup>27</sup>	89.28 <sup>195</sup>
21	23.400 <sup>29</sup>	57.45 <sup>93</sup>	19.50 <sup>1</sup>	66.86 <sup>259</sup>	39.663 <sup>14</sup>	58.95 <sup>168</sup>	55.626 <sup>12</sup>	87.33 <sup>220</sup>
31	23.429 <sup>75</sup>	56.52 <sup>70</sup>	19.49 <sup>8</sup>	64.27 <sup>248</sup>	39.677 <sup>68</sup>	57.27 <sup>149</sup>	55.638 <sup>56</sup>	85.13 <sup>241</sup>
Apr. 10	23.504 <sup>121</sup>	55.82 <sup>43</sup>	19.57 <sup>17</sup>	61.79 <sup>225</sup>	39.745 <sup>124</sup>	55.78 <sup>123</sup>	55.694 <sup>101</sup>	82.72 <sup>258</sup>
20	23.625 <sup>168</sup>	55.39 <sup>11</sup>	19.74 <sup>24</sup>	59.54 <sup>194</sup>	39.869 <sup>177</sup>	54.55 <sup>91</sup>	55.795 <sup>147</sup>	80.14 <sup>271</sup>
30	23.793 <sup>211</sup>	55.28 <sup>22</sup>	19.98 <sup>32</sup>	57.60 <sup>156</sup>	40.046 <sup>227</sup>	53.64 <sup>55</sup>	55.942 <sup>192</sup>	77.43 <sup>276</sup>
Mai 10	24.004 <sup>249</sup>	55.50 <sup>57</sup>	20.30 <sup>39</sup>	56.04 <sup>112</sup>	40.273 <sup>273</sup>	53.09 <sup>16</sup>	56.134 <sup>234</sup>	74.67 <sup>278</sup>
20	24.253 <sup>282</sup>	56.07 <sup>90</sup>	20.69 <sup>44</sup>	54.92 <sup>64</sup>	40.546 <sup>310</sup>	52.93 <sup>25</sup>	56.368 <sup>270</sup>	71.89 <sup>272</sup>
30	24.535 <sup>307</sup>	56.97 <sup>121</sup>	21.13 <sup>49</sup>	54.28 <sup>14</sup>	40.856 <sup>340</sup>	53.18 <sup>65</sup>	56.638 <sup>300</sup>	69.17 <sup>260</sup>
Juni 9	24.842 <sup>324</sup>	58.18 <sup>150</sup>	21.62 <sup>51</sup>	54.14 <sup>37</sup>	41.196 <sup>359</sup>	53.83 <sup>104</sup>	56.938 <sup>324</sup>	66.57 <sup>242</sup>
19	25.166 <sup>332</sup>	59.68 <sup>174</sup>	22.13 <sup>53</sup>	54.51 <sup>85</sup>	41.555 <sup>370</sup>	54.87 <sup>140</sup>	57.262 <sup>338</sup>	64.15 <sup>217</sup>
29	25.498 <sup>332</sup>	61.42 <sup>194</sup>	22.66 <sup>53</sup>	55.36 <sup>133</sup>	41.925 <sup>370</sup>	56.27 <sup>172</sup>	57.600 <sup>343</sup>	61.98 <sup>188</sup>
Juli 9	25.830 <sup>322</sup>	63.36 <sup>209</sup>	23.19 <sup>51</sup>	56.69 <sup>177</sup>	42.295 <sup>361</sup>	57.99 <sup>200</sup>	57.943 <sup>341</sup>	60.10 <sup>153</sup>
19	26.152 <sup>306</sup>	65.45 <sup>219</sup>	23.70 <sup>49</sup>	58.46 <sup>216</sup>	42.656 <sup>344</sup>	59.99 <sup>222</sup>	58.284 <sup>328</sup>	58.57 <sup>114</sup>
29	26.458 <sup>282</sup>	67.64 <sup>224</sup>	24.19 <sup>45</sup>	60.62 <sup>251</sup>	43.000 <sup>320</sup>	62.21 <sup>241</sup>	58.612 <sup>308</sup>	57.43 <sup>72</sup>
Aug. 8	26.740 <sup>254</sup>	69.88 <sup>223</sup>	24.64 <sup>41</sup>	63.13 <sup>280</sup>	43.320 <sup>288</sup>	64.62 <sup>253</sup>	58.920 <sup>281</sup>	56.71 <sup>30</sup>
18	26.994 <sup>220</sup>	72.11 <sup>218</sup>	25.05 <sup>35</sup>	65.93 <sup>302</sup>	43.608 <sup>253</sup>	67.15 <sup>259</sup>	59.201 <sup>248</sup>	56.41 <sup>13</sup>
28	27.214 <sup>185</sup>	74.29 <sup>208</sup>	25.40 <sup>30</sup>	68.95 <sup>319</sup>	43.861 <sup>213</sup>	69.74 <sup>261</sup>	59.449 <sup>210</sup>	56.54 <sup>54</sup>
Sept. 7	27.399 <sup>148</sup>	76.37 <sup>195</sup>	25.70 <sup>24</sup>	72.14 <sup>329</sup>	44.074 <sup>173</sup>	72.35 <sup>257</sup>	59.659 <sup>170</sup>	57.08 <sup>92</sup>
17	27.547 <sup>110</sup>	78.32 <sup>179</sup>	25.94 <sup>18</sup>	75.43 <sup>333</sup>	44.247 <sup>132</sup>	74.92 <sup>249</sup>	59.829 <sup>127</sup>	58.00 <sup>126</sup>
27	27.657 <sup>74</sup>	80.11 <sup>161</sup>	26.12 <sup>11</sup>	78.76 <sup>330</sup>	44.379 <sup>91</sup>	77.41 <sup>237</sup>	59.956 <sup>84</sup>	59.26 <sup>152</sup>
Okt. 6	27.731 <sup>40</sup>	81.72 <sup>140</sup>	26.23 <sup>4</sup>	82.06 <sup>321</sup>	44.470 <sup>51</sup>	79.78 <sup>220</sup>	60.040 <sup>44</sup>	60.78 <sup>172</sup>
16	27.771 <sup>7</sup>	83.12 <sup>118</sup>	26.27 <sup>1</sup>	85.27 <sup>304</sup>	44.521 <sup>14</sup>	81.98 <sup>200</sup>	60.084 <sup>6</sup>	62.50 <sup>184</sup>
26	27.778 <sup>21</sup>	84.30 <sup>95</sup>	26.26 <sup>7</sup>	88.31 <sup>281</sup>	44.535 <sup>22</sup>	83.98 <sup>175</sup>	60.090 <sup>28</sup>	64.34 <sup>188</sup>
Nov. 5	27.757 <sup>48</sup>	85.25 <sup>71</sup>	26.19 <sup>14</sup>	91.12 <sup>252</sup>	44.513 <sup>54</sup>	85.73 <sup>149</sup>	60.062 <sup>60</sup>	66.22 <sup>183</sup>
15	27.709 <sup>71</sup>	85.96 <sup>47</sup>	26.05 <sup>18</sup>	93.64 <sup>216</sup>	44.459 <sup>84</sup>	87.22 <sup>119</sup>	60.002 <sup>85</sup>	68.05 <sup>171</sup>
25	27.638 <sup>91</sup>	86.43 <sup>22</sup>	25.87 <sup>23</sup>	95.80 <sup>175</sup>	44.375 <sup>111</sup>	88.41 <sup>85</sup>	59.917 <sup>107</sup>	69.76 <sup>151</sup>
Dez. 5	27.547 <sup>108</sup>	86.65 <sup>4</sup>	25.64 <sup>28</sup>	97.55 <sup>127</sup>	44.264 <sup>135</sup>	89.26 <sup>50</sup>	59.810 <sup>124</sup>	71.27 <sup>126</sup>
15	27.439 <sup>121</sup>	86.61 <sup>28</sup>	25.36 <sup>31</sup>	98.82 <sup>77</sup>	44.129 <sup>153</sup>	89.76 <sup>14</sup>	59.686 <sup>137</sup>	72.53 <sup>96</sup>
25	27.318 <sup>131</sup>	86.33 <sup>52</sup>	25.05 <sup>33</sup>	99.59 <sup>24</sup>	43.976 <sup>169</sup>	89.90 <sup>24</sup>	59.549 <sup>144</sup>	73.49 <sup>62</sup>
35	27.187	85.81	24.72	99.83	43.807	89.66	59.405	74.11
Mittl. Ort	25.061	66.06	22.19	69.87	41.503	65.36	57.417	75.51
sec δ, tg δ	1.094	+0.445	2.026	+1.762	1.273	+0.787	1.151	-0.569
a, a'	+3.2	+19.7	+3.6	+19.5	+3.3	+19.5	+2.9	+19.4
b, b'	+0.03	-0.19	+0.11	-0.23	+0.05	-0.23	-0.04	-0.24



## Scheinbare Sternörter 1945

Tag	36) ε Piscium		1031) υ Phoenicis		42) β Andromedae		45) υ Piscium	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	1 <sup>h</sup> 0 <sup>m</sup>	+7° 35'	1 <sup>h</sup> 5 <sup>m</sup>	-41° 46'	1 <sup>h</sup> 6 <sup>m</sup>	+35° 19'	1 <sup>h</sup> 16 <sup>m</sup>	+26° 58'
Jan. 0	4.304 <sup>a</sup> <sub>119</sub>	34.40 <sup>"</sup> <sub>67</sub>	16.420 <sup>"</sup> <sub>194</sub>	72.25 <sup>"</sup> <sub>32</sub>	37.972 <sup>"</sup> <sub>166</sub>	49.66 <sup>"</sup> <sub>41</sub>	25.528 <sup>"</sup> <sub>142</sub>	32.73 <sup>"</sup> <sub>46</sub>
10	4.185 <sup>"</sup> <sub>122</sub>	33.73 <sup>"</sup> <sub>69</sub>	16.226 <sup>"</sup> <sub>194</sub>	72.57 <sup>"</sup> <sub>15</sub>	37.806 <sup>"</sup> <sub>173</sub>	49.25 <sup>"</sup> <sub>74</sub>	25.386 <sup>"</sup> <sub>151</sub>	32.27 <sup>"</sup> <sub>68</sub>
20	4.063 <sup>"</sup> <sub>122</sub>	33.03 <sup>"</sup> <sub>70</sub>	16.032 <sup>"</sup> <sub>188</sub>	72.42 <sup>"</sup> <sub>60</sub>	37.633 <sup>"</sup> <sub>173</sub>	48.51 <sup>"</sup> <sub>102</sub>	25.235 <sup>"</sup> <sub>153</sub>	31.59 <sup>"</sup> <sub>89</sub>
30	3.941 <sup>"</sup> <sub>115</sub>	32.34 <sup>"</sup> <sub>66</sub>	15.844 <sup>"</sup> <sub>174</sub>	71.82 <sup>"</sup> <sub>105</sub>	37.460 <sup>"</sup> <sub>165</sub>	47.49 <sup>"</sup> <sub>127</sub>	25.082 <sup>"</sup> <sub>148</sub>	30.70 <sup>"</sup> <sub>106</sub>
Febr. 9	3.826 <sup>"</sup> <sub>102</sub>	31.68 <sup>"</sup> <sub>59</sub>	15.670 <sup>"</sup> <sub>155</sub>	70.77 <sup>"</sup> <sub>148</sub>	37.295 <sup>"</sup> <sub>148</sub>	46.22 <sup>"</sup> <sub>147</sub>	24.934 <sup>"</sup> <sub>135</sub>	29.64 <sup>"</sup> <sub>118</sub>
19	3.724 <sup>"</sup> <sub>81</sub>	31.09 <sup>"</sup> <sub>48</sub>	15.515 <sup>"</sup> <sub>127</sub>	69.29 <sup>"</sup> <sub>186</sub>	37.147 <sup>"</sup> <sub>122</sub>	44.75 <sup>"</sup> <sub>160</sub>	24.799 <sup>"</sup> <sub>114</sub>	28.46 <sup>"</sup> <sub>125</sub>
März 1	3.643 <sup>"</sup> <sub>55</sub>	30.61 <sup>"</sup> <sub>35</sub>	15.388 <sup>"</sup> <sub>94</sub>	67.43 <sup>"</sup> <sub>221</sub>	37.025 <sup>"</sup> <sub>88</sub>	43.15 <sup>"</sup> <sub>165</sub>	24.685 <sup>"</sup> <sub>84</sub>	27.21 <sup>"</sup> <sub>126</sub>
11	3.588 <sup>"</sup> <sub>23</sub>	30.26 <sup>"</sup> <sub>17</sub>	15.294 <sup>"</sup> <sub>55</sub>	65.22 <sup>"</sup> <sub>251</sub>	36.937 <sup>"</sup> <sub>47</sub>	41.50 <sup>"</sup> <sub>163</sub>	24.601 <sup>"</sup> <sub>48</sub>	25.95 <sup>"</sup> <sub>119</sub>
21	3.565 <sup>"</sup> <sub>15</sub>	30.09 <sup>"</sup> <sub>4</sub>	15.239 <sup>"</sup> <sub>9</sub>	62.71 <sup>"</sup> <sub>276</sub>	36.890 <sup>"</sup> <sub>1</sub>	39.87 <sup>"</sup> <sub>152</sub>	24.553 <sup>"</sup> <sub>6</sub>	24.76 <sup>"</sup> <sub>107</sub>
31	3.580 <sup>"</sup> <sub>56</sub>	30.13 <sup>"</sup> <sub>27</sub>	15.230 <sup>"</sup> <sub>40</sub>	59.95 <sup>"</sup> <sub>296</sub>	36.891 <sup>"</sup> <sub>53</sub>	38.35 <sup>"</sup> <sub>135</sub>	24.547 <sup>"</sup> <sub>41</sub>	23.69 <sup>"</sup> <sub>89</sub>
Apr. 10	3.636 <sup>"</sup> <sub>99</sub>	30.40 <sup>"</sup> <sub>53</sub>	15.270 <sup>"</sup> <sub>92</sub>	56.99 <sup>"</sup> <sub>309</sub>	36.944 <sup>"</sup> <sub>106</sub>	37.00 <sup>"</sup> <sub>111</sub>	24.588 <sup>"</sup> <sub>90</sub>	22.80 <sup>"</sup> <sub>64</sub>
20	3.735 <sup>"</sup> <sub>143</sub>	30.93 <sup>"</sup> <sub>79</sub>	15.362 <sup>"</sup> <sub>144</sub>	53.90 <sup>"</sup> <sub>318</sub>	37.050 <sup>"</sup> <sub>159</sub>	35.89 <sup>"</sup> <sub>81</sub>	24.678 <sup>"</sup> <sub>140</sub>	22.16 <sup>"</sup> <sub>37</sub>
30	3.878 <sup>"</sup> <sub>185</sub>	31.72 <sup>"</sup> <sub>105</sub>	15.506 <sup>"</sup> <sub>195</sub>	50.72 <sup>"</sup> <sub>318</sub>	37.209 <sup>"</sup> <sub>209</sub>	35.08 <sup>"</sup> <sub>47</sub>	24.818 <sup>"</sup> <sub>187</sub>	21.79 <sup>"</sup> <sub>6</sub>
Mai 10	4.063 <sup>"</sup> <sub>221</sub>	32.77 <sup>"</sup> <sub>130</sub>	15.701 <sup>"</sup> <sub>243</sub>	47.54 <sup>"</sup> <sub>312</sub>	37.418 <sup>"</sup> <sub>255</sub>	34.61 <sup>"</sup> <sub>10</sub>	25.005 <sup>"</sup> <sub>230</sub>	21.73 <sup>"</sup> <sub>27</sub>
20	4.284 <sup>"</sup> <sub>255</sub>	34.07 <sup>"</sup> <sub>151</sub>	15.944 <sup>"</sup> <sub>286</sub>	44.42 <sup>"</sup> <sub>299</sub>	37.673 <sup>"</sup> <sub>293</sub>	34.51 <sup>"</sup> <sub>28</sub>	25.235 <sup>"</sup> <sub>267</sub>	22.00 <sup>"</sup> <sub>60</sub>
30	4.539 <sup>"</sup> <sub>282</sub>	35.58 <sup>"</sup> <sub>170</sub>	16.230 <sup>"</sup> <sub>323</sub>	41.43 <sup>"</sup> <sub>279</sub>	37.966 <sup>"</sup> <sub>324</sub>	34.79 <sup>"</sup> <sub>65</sub>	25.502 <sup>"</sup> <sub>298</sub>	22.60 <sup>"</sup> <sub>92</sub>
Juni 9	4.821 <sup>"</sup> <sub>300</sub>	37.28 <sup>"</sup> <sub>185</sub>	16.553 <sup>"</sup> <sub>352</sub>	38.64 <sup>"</sup> <sub>253</sub>	38.290 <sup>"</sup> <sub>346</sub>	35.44 <sup>"</sup> <sub>102</sub>	25.800 <sup>"</sup> <sub>321</sub>	23.52 <sup>"</sup> <sub>122</sub>
19	5.121 <sup>"</sup> <sub>312</sub>	39.13 <sup>"</sup> <sub>195</sub>	16.905 <sup>"</sup> <sub>371</sub>	36.11 <sup>"</sup> <sub>219</sub>	38.636 <sup>"</sup> <sub>358</sub>	36.46 <sup>"</sup> <sub>135</sub>	26.121 <sup>"</sup> <sub>335</sub>	24.74 <sup>"</sup> <sub>149</sub>
29	5.433 <sup>"</sup> <sub>314</sub>	41.08 <sup>"</sup> <sub>199</sub>	17.276 <sup>"</sup> <sub>381</sub>	33.92 <sup>"</sup> <sub>180</sub>	38.994 <sup>"</sup> <sub>362</sub>	37.81 <sup>"</sup> <sub>166</sub>	26.456 <sup>"</sup> <sub>339</sub>	26.23 <sup>"</sup> <sub>172</sub>
Juli 9	5.747 <sup>"</sup> <sub>310</sub>	43.07 <sup>"</sup> <sub>199</sub>	17.657 <sup>"</sup> <sub>381</sub>	32.12 <sup>"</sup> <sub>137</sub>	39.356 <sup>"</sup> <sub>356</sub>	39.47 <sup>"</sup> <sub>191</sub>	26.795 <sup>"</sup> <sub>335</sub>	27.95 <sup>"</sup> <sub>190</sub>
19	6.057 <sup>"</sup> <sub>297</sub>	45.06 <sup>"</sup> <sub>193</sub>	18.038 <sup>"</sup> <sub>370</sub>	30.75 <sup>"</sup> <sub>91</sub>	39.712 <sup>"</sup> <sub>341</sub>	41.38 <sup>"</sup> <sub>212</sub>	27.130 <sup>"</sup> <sub>325</sub>	29.85 <sup>"</sup> <sub>204</sub>
29	6.354 <sup>"</sup> <sub>277</sub>	46.99 <sup>"</sup> <sub>183</sub>	18.408 <sup>"</sup> <sub>351</sub>	29.84 <sup>"</sup> <sub>41</sub>	40.053 <sup>"</sup> <sub>320</sub>	43.50 <sup>"</sup> <sub>228</sub>	27.455 <sup>"</sup> <sub>306</sub>	31.89 <sup>"</sup> <sub>213</sub>
Aug. 8	6.631 <sup>"</sup> <sub>253</sub>	48.82 <sup>"</sup> <sub>169</sub>	18.759 <sup>"</sup> <sub>323</sub>	29.43 <sup>"</sup> <sub>9</sub>	40.373 <sup>"</sup> <sub>292</sub>	45.78 <sup>"</sup> <sub>239</sub>	27.761 <sup>"</sup> <sub>281</sub>	34.02 <sup>"</sup> <sub>216</sub>
18	6.884 <sup>"</sup> <sub>223</sub>	50.51 <sup>"</sup> <sub>151</sub>	19.082 <sup>"</sup> <sub>287</sub>	29.52 <sup>"</sup> <sub>57</sub>	40.665 <sup>"</sup> <sub>259</sub>	48.17 <sup>"</sup> <sub>244</sub>	28.042 <sup>"</sup> <sub>252</sub>	36.18 <sup>"</sup> <sub>216</sub>
28	7.107 <sup>"</sup> <sub>191</sub>	52.02 <sup>"</sup> <sub>131</sub>	19.369 <sup>"</sup> <sub>245</sub>	30.09 <sup>"</sup> <sub>104</sub>	40.924 <sup>"</sup> <sub>223</sub>	50.61 <sup>"</sup> <sub>245</sub>	28.294 <sup>"</sup> <sub>219</sub>	38.34 <sup>"</sup> <sub>211</sub>
Sept. 7	7.298 <sup>"</sup> <sub>157</sub>	53.33 <sup>"</sup> <sub>108</sub>	19.614 <sup>"</sup> <sub>199</sub>	31.13 <sup>"</sup> <sub>145</sub>	41.147 <sup>"</sup> <sub>185</sub>	53.06 <sup>"</sup> <sub>240</sub>	28.513 <sup>"</sup> <sub>184</sub>	40.45 <sup>"</sup> <sub>201</sub>
17	7.455 <sup>"</sup> <sub>123</sub>	54.41 <sup>"</sup> <sub>86</sub>	19.813 <sup>"</sup> <sub>150</sub>	32.58 <sup>"</sup> <sub>181</sub>	41.332 <sup>"</sup> <sub>145</sub>	55.46 <sup>"</sup> <sub>232</sub>	28.697 <sup>"</sup> <sub>149</sub>	42.46 <sup>"</sup> <sub>189</sub>
27	7.578 <sup>"</sup> <sub>88</sub>	55.27 <sup>"</sup> <sub>63</sub>	19.963 <sup>"</sup> <sub>100</sub>	34.39 <sup>"</sup> <sub>208</sub>	41.477 <sup>"</sup> <sub>106</sub>	57.78 <sup>"</sup> <sub>220</sub>	28.846 <sup>"</sup> <sub>112</sub>	44.35 <sup>"</sup> <sub>174</sub>
Okt. 6*)	7.666 <sup>"</sup> <sub>55</sub>	55.90 <sup>"</sup> <sub>41</sub>	20.063 <sup>"</sup> <sub>50</sub>	36.47 <sup>"</sup> <sub>227</sub>	41.583 <sup>"</sup> <sub>69</sub>	59.98 <sup>"</sup> <sub>204</sub>	28.958 <sup>"</sup> <sub>78</sub>	46.09 <sup>"</sup> <sub>156</sub>
16	7.721 <sup>"</sup> <sub>26</sub>	56.31 <sup>"</sup> <sub>21</sub>	20.113 <sup>"</sup> <sub>5</sub>	38.74 <sup>"</sup> <sub>237</sub>	41.652 <sup>"</sup> <sub>32</sub>	62.02 <sup>"</sup> <sub>185</sub>	29.036 <sup>"</sup> <sub>45</sub>	47.65 <sup>"</sup> <sub>138</sub>
26	7.747 <sup>"</sup> <sub>3</sub>	56.52 <sup>"</sup> <sub>2</sub>	20.118 <sup>"</sup> <sub>39</sub>	41.11 <sup>"</sup> <sub>236</sub>	41.684 <sup>"</sup> <sub>3</sub>	63.87 <sup>"</sup> <sub>162</sub>	29.081 <sup>"</sup> <sub>12</sub>	49.03 <sup>"</sup> <sub>116</sub>
Nov. 5	7.744 <sup>"</sup> <sub>27</sub>	56.54 <sup>"</sup> <sub>13</sub>	20.079 <sup>"</sup> <sub>78</sub>	43.47 <sup>"</sup> <sub>226</sub>	41.681 <sup>"</sup> <sub>35</sub>	65.49 <sup>"</sup> <sub>138</sub>	29.093 <sup>"</sup> <sub>17</sub>	50.19 <sup>"</sup> <sub>95</sub>
15	7.717 <sup>"</sup> <sub>50</sub>	56.41 <sup>"</sup> <sub>28</sub>	20.001 <sup>"</sup> <sub>112</sub>	45.73 <sup>"</sup> <sub>206</sub>	41.646 <sup>"</sup> <sub>65</sub>	66.87 <sup>"</sup> <sub>110</sub>	29.076 <sup>"</sup> <sub>44</sub>	51.14 <sup>"</sup> <sub>71</sub>
25	7.667 <sup>"</sup> <sub>69</sub>	56.13 <sup>"</sup> <sub>40</sub>	19.889 <sup>"</sup> <sub>139</sub>	47.79 <sup>"</sup> <sub>178</sub>	41.581 <sup>"</sup> <sub>92</sub>	67.97 <sup>"</sup> <sub>80</sub>	29.032 <sup>"</sup> <sub>70</sub>	51.85 <sup>"</sup> <sub>47</sub>
Dez. 5	7.598 <sup>"</sup> <sub>87</sub>	55.73 <sup>"</sup> <sub>49</sub>	19.750 <sup>"</sup> <sub>161</sub>	49.57 <sup>"</sup> <sub>143</sub>	41.489 <sup>"</sup> <sub>117</sub>	68.77 <sup>"</sup> <sub>48</sub>	28.962 <sup>"</sup> <sub>94</sub>	52.32 <sup>"</sup> <sub>23</sub>
15	7.511 <sup>"</sup> <sub>100</sub>	55.24 <sup>"</sup> <sub>57</sub>	19.589 <sup>"</sup> <sub>178</sub>	51.00 <sup>"</sup> <sub>102</sub>	41.372 <sup>"</sup> <sub>137</sub>	69.25 <sup>"</sup> <sub>15</sub>	28.868 <sup>"</sup> <sub>113</sub>	52.55 <sup>"</sup> <sub>3</sub>
25	7.411 <sup>"</sup> <sub>111</sub>	54.67 <sup>"</sup> <sub>63</sub>	19.411 <sup>"</sup> <sub>188</sub>	52.02 <sup>"</sup> <sub>59</sub>	41.235 <sup>"</sup> <sub>155</sub>	69.40 <sup>"</sup> <sub>18</sub>	28.755 <sup>"</sup> <sub>130</sub>	52.52 <sup>"</sup> <sub>29</sub>
35	7.300 <sup>"</sup>	54.04 <sup>"</sup>	19.223 <sup>"</sup>	52.61 <sup>"</sup>	41.080 <sup>"</sup>	69.22 <sup>"</sup>	28.625 <sup>"</sup>	52.23 <sup>"</sup>
Mittl. Ort	5.128	40.16	17.262	50.62	38.664	46.19	26.204	32.00
sec δ, tg δ	1.009	+0.133	1.341	-0.893	1.226	+0.709	1.122	+0.509
a, a'	+3.1	+19.4	+2.7	+19.2	+3.3	+19.2	+3.3	+18.9
b, b'	+0.01	-0.26	-0.06	-0.28	+0.05	-0.29	+0.03	-0.33

\*) Bei Stern 1031, 42) und 45) lies Okt. 7.



Tag	47) $\delta$ Ceti		48) $\delta$ Cassiopeiae		50) $\eta$ Piscium		51) $\alpha$ Cassiopeiae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$1^h 21^m$	$-8^\circ 27'$	$1^h 22^m$	$+59^\circ 56'$	$1^h 28^m$	$+15^\circ 3'$	$1^h 34^m$	$+72^\circ 45'$
Jan. 0	15.650 <sub>120</sub>	71.44 <sub>71</sub>	11.527 <sub>329</sub>	70.18 <sub>23</sub>	31.490 <sub>122</sub>	43.08 <sub>55</sub>	4.74 <sub>62</sub>	49.90 <sub>69</sub>
10	15.530 <sub>126</sub>	72.15 <sub>54</sub>	11.198 <sub>345</sub>	70.41 <sub>30</sub>	31.368 <sub>132</sub>	42.53 <sub>65</sub>	4.12 <sub>65</sub>	50.59 <sub>10</sub>
20	15.404 <sub>128</sub>	72.69 <sub>36</sub>	10.853 <sub>347</sub>	70.11 <sub>81</sub>	31.236 <sub>136</sub>	41.88 <sub>72</sub>	3.47 <sub>66</sub>	50.69 <sub>50</sub>
30	15.276 <sub>124</sub>	73.05 <sub>17</sub>	10.506 <sub>335</sub>	69.30 <sub>129</sub>	31.100 <sub>134</sub>	41.16 <sub>76</sub>	2.81 <sub>63</sub>	50.19 <sub>106</sub>
Febr. 9	15.152 <sub>114</sub>	73.22 <sub>5</sub>	10.171 <sub>306</sub>	68.01 <sub>171</sub>	30.966 <sub>125</sub>	40.40 <sub>77</sub>	2.18 <sub>59</sub>	49.13 <sub>159</sub>
19	15.038 <sub>97</sub>	73.17 <sub>26</sub>	9.865 <sub>264</sub>	66.30 <sub>205</sub>	30.841 <sub>108</sub>	39.63 <sub>75</sub>	1.59 <sub>52</sub>	47.54 <sub>204</sub>
März 1	14.941 <sub>74</sub>	72.91 <sub>50</sub>	9.601 <sub>206</sub>	64.25 <sub>231</sub>	30.733 <sub>84</sub>	38.88 <sub>67</sub>	1.07 <sub>42</sub>	45.50 <sub>240</sub>
11	14.867 <sub>74</sub>	72.41 <sub>74</sub>	9.395 <sub>137</sub>	61.94 <sub>247</sub>	30.649 <sub>51</sub>	38.21 <sub>55</sub>	0.65 <sub>30</sub>	43.10 <sub>265</sub>
21	14.824 <sub>43</sub>	71.67 <sub>99</sub>	9.258 <sub>59</sub>	59.47 <sub>251</sub>	30.598 <sub>14</sub>	37.66 <sub>39</sub>	0.35 <sub>18</sub>	40.45 <sub>280</sub>
31	14.817 <sub>32</sub>	70.68 <sub>122</sub>	9.199 <sub>25</sub>	56.96 <sub>246</sub>	30.584 <sub>28</sub>	37.27 <sub>19</sub>	0.17 <sub>3</sub>	37.65 <sub>283</sub>
Apr. 10	14.849 <sub>74</sub>	69.46 <sub>146</sub>	9.224 <sub>112</sub>	54.50 <sub>230</sub>	30.612 <sub>74</sub>	37.08 <sub>4</sub>	0.14 <sub>11</sub>	34.82 <sub>273</sub>
20	14.923 <sub>118</sub>	68.00 <sub>167</sub>	9.336 <sub>196</sub>	52.20 <sub>205</sub>	30.686 <sub>120</sub>	37.12 <sub>31</sub>	0.25 <sub>25</sub>	32.09 <sub>255</sub>
30	15.041 <sub>161</sub>	66.33 <sub>186</sub>	9.532 <sub>276</sub>	50.15 <sub>172</sub>	30.806 <sub>164</sub>	37.43 <sub>57</sub>	0.50 <sub>38</sub>	29.54 <sub>227</sub>
Mai 10	15.202 <sub>201</sub>	64.47 <sub>201</sub>	9.808 <sub>348</sub>	48.43 <sub>133</sub>	30.970 <sub>205</sub>	38.00 <sub>85</sub>	0.88 <sub>50</sub>	27.27 <sub>190</sub>
20	15.403 <sub>236</sub>	62.46 <sub>213</sub>	10.156 <sub>410</sub>	47.10 <sub>90</sub>	31.175 <sub>243</sub>	38.85 <sub>110</sub>	1.38 <sub>61</sub>	25.37 <sub>148</sub>
30	15.639 <sub>267</sub>	60.33 <sub>219</sub>	10.566 <sub>460</sub>	46.20 <sub>43</sub>	31.418 <sub>274</sub>	39.95 <sub>134</sub>	1.99 <sub>70</sub>	23.89 <sub>101</sub>
Juni 9	15.906 <sub>289</sub>	58.14 <sub>220</sub>	11.026 <sub>496</sub>	45.77 <sub>5</sub>	31.692 <sub>297</sub>	41.29 <sub>154</sub>	2.69 <sub>76</sub>	22.88 <sub>50</sub>
19	16.195 <sub>305</sub>	55.94 <sub>215</sub>	11.522 <sub>519</sub>	45.82 <sub>53</sub>	31.985 <sub>312</sub>	42.83 <sub>171</sub>	3.45 <sub>80</sub>	22.38 <sub>2</sub>
29	16.500 <sub>312</sub>	53.79 <sub>205</sub>	12.041 <sub>529</sub>	46.35 <sub>99</sub>	32.301 <sub>319</sub>	44.54 <sub>184</sub>	4.25 <sub>82</sub>	22.40 <sub>53</sub>
Juli 9	16.812 <sub>312</sub>	51.74 <sub>190</sub>	12.570 <sub>524</sub>	47.34 <sub>143</sub>	32.620 <sub>319</sub>	46.38 <sub>191</sub>	5.07 <sub>82</sub>	22.93 <sub>103</sub>
19	17.124 <sub>303</sub>	49.84 <sub>169</sub>	13.094 <sub>509</sub>	48.77 <sub>185</sub>	32.939 <sub>310</sub>	48.29 <sub>193</sub>	5.89 <sub>81</sub>	23.96 <sub>151</sub>
29	17.427 <sub>288</sub>	48.15 <sub>144</sub>	13.603 <sub>481</sub>	50.62 <sub>220</sub>	33.249 <sub>295</sub>	50.22 <sub>191</sub>	6.70 <sub>77</sub>	25.47 <sub>195</sub>
Aug. 8	17.715 <sub>267</sub>	46.71 <sub>117</sub>	14.084 <sub>444</sub>	52.82 <sub>251</sub>	33.544 <sub>273</sub>	52.13 <sub>185</sub>	7.47 <sub>72</sub>	27.42 <sub>235</sub>
18	17.982 <sub>240</sub>	45.54 <sub>86</sub>	14.528 <sub>399</sub>	55.33 <sub>277</sub>	33.817 <sub>247</sub>	53.98 <sub>173</sub>	8.19 <sub>65</sub>	29.77 <sub>271</sub>
28	18.222 <sub>210</sub>	44.68 <sub>54</sub>	14.927 <sub>349</sub>	58.10 <sub>297</sub>	34.064 <sub>218</sub>	55.71 <sub>160</sub>	8.84 <sub>58</sub>	32.48 <sub>300</sub>
Sept. 7	18.432 <sub>176</sub>	44.14 <sub>23</sub>	15.276 <sub>293</sub>	61.07 <sub>311</sub>	34.282 <sub>186</sub>	57.31 <sub>142</sub>	9.42 <sub>49</sub>	35.48 <sub>323</sub>
17	18.608 <sub>143</sub>	43.91 <sub>7</sub>	15.569 <sub>235</sub>	64.18 <sub>320</sub>	34.468 <sub>153</sub>	58.73 <sub>124</sub>	9.91 <sub>40</sub>	38.71 <sub>341</sub>
27	18.751 <sub>108</sub>	43.98 <sub>34</sub>	15.804 <sub>174</sub>	67.38 <sub>321</sub>	34.621 <sub>120</sub>	59.97 <sub>104</sub>	10.31 <sub>30</sub>	42.12 <sub>351</sub>
Okt. 7	18.859 <sub>74</sub>	44.32 <sub>59</sub>	15.978 <sub>112</sub>	70.59 <sub>316</sub>	34.741 <sub>88</sub>	61.01 <sub>85</sub>	10.61 <sub>19</sub>	45.63 <sub>355</sub>
16	18.933 <sub>43</sub>	44.91 <sub>77</sub>	16.090 <sub>52</sub>	73.75 <sub>306</sub>	34.829 <sub>57</sub>	61.86 <sub>65</sub>	10.80 <sub>9</sub>	49.18 <sub>350</sub>
26	18.976 <sub>13</sub>	45.68 <sub>92</sub>	16.142 <sub>10</sub>	76.81 <sub>288</sub>	34.886 <sub>26</sub>	62.51 <sub>46</sub>	10.89 <sub>2</sub>	52.68 <sub>338</sub>
Nov. 5	18.989 <sub>14</sub>	46.60 <sub>102</sub>	16.132 <sub>70</sub>	79.69 <sub>265</sub>	34.912 <sub>1</sub>	62.97 <sub>27</sub>	10.87 <sub>14</sub>	56.06 <sub>319</sub>
15	18.975 <sub>39</sub>	47.62 <sub>105</sub>	16.062 <sub>128</sub>	82.34 <sub>234</sub>	34.911 <sub>27</sub>	63.24 <sub>11</sub>	10.73 <sub>24</sub>	59.25 <sub>291</sub>
25	18.936 <sub>61</sub>	48.67 <sub>104</sub>	15.934 <sub>181</sub>	84.68 <sub>197</sub>	34.884 <sub>51</sub>	63.35 <sub>4</sub>	10.49 <sub>34</sub>	62.16 <sub>256</sub>
Dez. 5	18.875 <sub>80</sub>	49.71 <sub>98</sub>	15.753 <sub>231</sub>	86.65 <sub>154</sub>	34.833 <sub>73</sub>	63.31 <sub>20</sub>	10.15 <sub>43</sub>	64.72 <sub>212</sub>
15	18.795 <sub>97</sub>	50.69 <sub>90</sub>	15.522 <sub>274</sub>	88.19 <sub>108</sub>	34.760 <sub>94</sub>	63.11 <sub>33</sub>	9.72 <sub>52</sub>	66.84 <sub>163</sub>
25	18.698 <sub>110</sub>	51.59 <sub>77</sub>	15.248 <sub>309</sub>	89.27 <sub>57</sub>	34.666 <sub>109</sub>	62.78 <sub>46</sub>	9.20 <sub>58</sub>	68.47 <sub>107</sub>
35	18.588	52.36	14.939	89.84	34.557	62.32	8.62	69.54
Mittl. Ort	16.373	59.93	11.857	60.73	32.139	46.46	4.45	38.63
sec $\delta$ , tg $\delta$	1.011	-0.149	1.997	+1.729	1.036	+0.269	3.374	+3.223
a, a'	+3.0	+18.8	+3.9	+18.8	+3.2	+18.6	+4.8	+18.4
b, b'	-0.01	-0.35	+0.11	-0.35	+0.02	-0.38	+0.20	-0.40



## Scheinbare Sternörter 1945

Tag	52) 51 Andromedae		54) $\alpha$ Eridani		55) 43 Cassiopeiae		57) $\varphi$ Persei	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$1^h 34^m$	$+48^\circ 20'$	$1^h 35^m$	$-57^\circ 30'$	$1^h 38^m$	$+67^\circ 45'$	$1^h 40^m$	$+50^\circ 24'$
Jan. 0	$35.792^{218}$	$68.07^{10}$	$39.722^{317}$	$80.74^{42}$	$14.20^{46}$	$67.68^{62}$	$11.578^{229}$	$52.22^{20}$
10	$35.574^{235}$	$68.17^{34}$	$39.405^{324}$	$81.16^{16}$	$13.74^{49}$	$68.30^5$	$11.349^{249}$	$52.42^{24}$
20	$35.339^{242}$	$67.83^{75}$	$39.081^{320}$	$81.00^{72}$	$13.25^{49}$	$68.35^{51}$	$11.100^{257}$	$52.18^{67}$
30	$35.097^{237}$	$67.08^{114}$	$38.761^{307}$	$80.28^{125}$	$12.76^{48}$	$67.84^{105}$	$10.843^{253}$	$51.51^{108}$
Febr. 9	$34.860^{222}$	$65.94^{147}$	$38.454^{282}$	$79.03^{175}$	$12.28^{45}$	$66.79^{155}$	$10.590^{239}$	$50.43^{144}$
19	$34.638^{194}$	$64.47^{174}$	$38.172^{249}$	$77.28^{222}$	$11.83^{40}$	$65.24^{197}$	$10.351^{211}$	$48.99^{173}$
März 1	$34.444^{155}$	$62.73^{194}$	$37.923^{206}$	$75.06^{261}$	$11.43^{32}$	$63.27^{231}$	$10.140^{170}$	$47.26^{195}$
11	$34.289^{106}$	$60.79^{204}$	$37.717^{155}$	$72.45^{295}$	$11.11^{24}$	$60.96^{254}$	$9.970^{121}$	$45.31^{208}$
21	$34.183^{49}$	$58.75^{205}$	$37.562^{96}$	$69.50^{324}$	$10.87^{13}$	$58.42^{267}$	$9.849^{61}$	$43.23^{211}$
31	$34.134^{14}$	$56.70^{198}$	$37.466^{31}$	$66.26^{344}$	$10.74^3$	$55.75^{269}$	$9.788^5$	$41.12^{206}$
Apr. 10	$34.148^{79}$	$54.72^{181}$	$37.435^{37}$	$62.82^{357}$	$10.71^9$	$53.06^{259}$	$9.793^{73}$	$39.06^{191}$
20	$34.227^{146}$	$52.91^{157}$	$37.472^{107}$	$59.25^{363}$	$10.80^{20}$	$50.47^{240}$	$9.866^{141}$	$37.15^{169}$
30	$34.373^{209}$	$51.34^{127}$	$37.579^{178}$	$55.62^{361}$	$11.00^{31}$	$48.07^{212}$	$10.007^{208}$	$35.46^{139}$
Mai 10	$34.582^{267}$	$50.07^{91}$	$37.757^{245}$	$52.01^{351}$	$11.31^{41}$	$45.95^{176}$	$10.215^{269}$	$34.07^{103}$
20	$34.849^{318}$	$49.16^{51}$	$38.002^{308}$	$48.50^{334}$	$11.72^{49}$	$44.19^{134}$	$10.484^{323}$	$33.04^{65}$
30	$35.167^{360}$	$48.65^{10}$	$38.310^{364}$	$45.16^{307}$	$12.21^{56}$	$42.85^{88}$	$10.807^{367}$	$32.39^{23}$
Juni 9	$35.527^{391}$	$48.55^{32}$	$38.674^{410}$	$42.09^{275}$	$12.77^{61}$	$41.97^{39}$	$11.174^{401}$	$32.16^{19}$
19	$35.918^{412}$	$48.87^{74}$	$39.084^{447}$	$39.34^{235}$	$13.38^{64}$	$41.58^{10}$	$11.575^{424}$	$32.35^{62}$
29	$36.330^{422}$	$49.61^{113}$	$39.531^{472}$	$36.99^{190}$	$14.02^{67}$	$41.68^{60}$	$11.999^{436}$	$32.97^{102}$
Juli 9	$36.752^{422}$	$50.74^{149}$	$40.003^{483}$	$35.09^{139}$	$14.69^{67}$	$42.28^{109}$	$12.435^{436}$	$33.99^{140}$
19	$37.174^{412}$	$52.23^{182}$	$40.486^{483}$	$33.70^{84}$	$15.36^{65}$	$43.37^{153}$	$12.871^{428}$	$35.39^{174}$
29	$37.586^{392}$	$54.05^{210}$	$40.969^{469}$	$32.86^{28}$	$16.01^{63}$	$44.90^{196}$	$13.299^{409}$	$37.13^{204}$
Aug. 8	$37.978^{365}$	$56.15^{233}$	$41.438^{441}$	$32.58^{29}$	$16.64^{59}$	$46.86^{233}$	$13.708^{383}$	$39.17^{230}$
18	$38.343^{332}$	$58.48^{252}$	$41.879^{404}$	$32.87^{86}$	$17.23^{54}$	$49.19^{265}$	$14.091^{349}$	$41.47^{250}$
28	$38.675^{294}$	$61.00^{265}$	$42.283^{355}$	$33.73^{138}$	$17.77^{47}$	$51.84^{293}$	$14.440^{311}$	$43.97^{265}$
Sept. 7	$38.969^{253}$	$63.65^{273}$	$42.638^{297}$	$35.11^{186}$	$18.24^{41}$	$54.77^{314}$	$14.751^{269}$	$46.62^{276}$
17	$39.222^{208}$	$66.38^{275}$	$42.935^{234}$	$36.97^{227}$	$18.65^{34}$	$57.91^{329}$	$15.020^{223}$	$49.38^{280}$
27	$39.430^{163}$	$69.13^{273}$	$43.169^{166}$	$39.24^{259}$	$18.99^{25}$	$61.20^{337}$	$15.243^{178}$	$52.18^{279}$
Okt. 7	$39.593^{118}$	$71.86^{266}$	$43.335^{95}$	$41.83^{280}$	$19.24^{18}$	$64.57^{340}$	$15.421^{130}$	$54.97^{274}$
16	$39.711^{73}$	$74.52^{254}$	$43.430^{26}$	$44.63^{290}$	$19.42^9$	$67.97^{334}$	$15.551^{83}$	$57.71^{264}$
26	$39.784^{27}$	$77.06^{236}$	$43.456^{41}$	$47.53^{290}$	$19.51^1$	$71.31^{323}$	$15.634^{35}$	$60.35^{247}$
Nov. 5	$39.811^{16}$	$79.42^{213}$	$43.415^{104}$	$50.43^{277}$	$19.52^7$	$74.54^{302}$	$15.669^{11}$	$62.82^{226}$
15	$39.795^{59}$	$81.55^{187}$	$43.311^{161}$	$53.20^{253}$	$19.45^{16}$	$77.56^{275}$	$15.658^{56}$	$65.08^{200}$
25	$39.736^{99}$	$83.42^{156}$	$43.150^{210}$	$55.73^{219}$	$19.29^{23}$	$80.31^{240}$	$15.602^{100}$	$67.08^{168}$
Dez. 5	$39.637^{137}$	$84.98^{119}$	$42.940^{251}$	$57.92^{176}$	$19.06^{31}$	$82.71^{199}$	$15.502^{141}$	$68.76^{132}$
15	$39.500^{172}$	$86.17^{81}$	$42.689^{283}$	$59.68^{128}$	$18.75^{38}$	$84.70^{151}$	$15.361^{178}$	$70.08^{93}$
25	$39.328^{200}$	$86.98^{38}$	$42.406^{306}$	$60.96^{74}$	$18.37^{42}$	$86.21^{99}$	$15.183^{210}$	$71.01^{51}$
35	$39.128$	$87.36$	$42.100$	$61.70$	$17.95$	$87.20$	$14.973$	$71.52$
Mittl. Ort	$36.215$	$61.44$	$40.115$	$56.11$	$14.14$	$57.20$	$11.940$	$45.20$
sec $\delta$ , tg $\delta$	$1.505$	$+1.124$	$1.862$	$-1.571$	$2.643$	$+2.446$	$1.569$	$+1.209$
a, a'	$+3.7$	$+18.4$	$+2.2$	$+18.3$	$+4.4$	$+18.2$	$+3.8$	$+18.2$
b, b'	$+0.07$	$-0.40$	$-0.10$	$-0.41$	$+0.15$	$-0.42$	$+0.07$	$-0.42$



# Obere Kulmination Greenwich

49\*

Tag	59) $\tau$ Ceti <sup>1)</sup>		60) $\circ$ Piscium		61) $\epsilon$ Sculptoris		62) $\zeta$ Ceti	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$1^h 41^m$	$-16^\circ 13'$	$1^h 42^m$	$+8^\circ 52'$	$1^h 43^m$	$-25^\circ 19'$	$1^h 48^m$	$-10^\circ 36'$
Jan. 0	30.117 <sub>130</sub>	49.48 <sub>74</sub>	28.543 <sub>116</sub>	48.52 <sub>59</sub>	3.642 <sub>142</sub>	53.27 <sub>79</sub>	44.086 <sub>119</sub>	33.86 <sub>78</sub>
10	29.987 <sub>139</sub>	50.22 <sub>48</sub>	28.427 <sub>127</sub>	47.93 <sub>61</sub>	3.500 <sub>151</sub>	54.06 <sub>45</sub>	43.967 <sub>130</sub>	34.64 <sub>60</sub>
20	29.848 <sub>143</sub>	50.70 <sub>22</sub>	28.300 <sub>134</sub>	47.32 <sub>61</sub>	3.349 <sub>155</sub>	54.51 <sub>11</sub>	43.837 <sub>137</sub>	35.24 <sub>39</sub>
30	29.705 <sub>142</sub>	50.92 <sub>6</sub>	28.166 <sub>134</sub>	46.71 <sub>60</sub>	3.194 <sub>154</sub>	54.62 <sub>25</sub>	43.700 <sub>138</sub>	35.63 <sub>15</sub>
Febr. 9	29.563 <sub>134</sub>	50.86 <sub>34</sub>	28.032 <sub>127</sub>	46.11 <sub>54</sub>	3.040 <sub>145</sub>	54.37 <sub>61</sub>	43.562 <sub>131</sub>	35.78 <sub>7</sub>
19	29.429 <sub>118</sub>	50.52 <sub>63</sub>	27.905 <sub>114</sub>	45.57 <sub>47</sub>	2.895 <sub>129</sub>	53.76 <sub>95</sub>	43.431 <sub>118</sub>	35.71 <sub>32</sub>
März 1	29.311 <sub>96</sub>	49.89 <sub>91</sub>	27.791 <sub>91</sub>	45.10 <sub>35</sub>	2.766 <sub>106</sub>	52.81 <sub>128</sub>	43.313 <sub>98</sub>	35.39 <sub>57</sub>
11	29.215 <sub>67</sub>	48.98 <sub>118</sub>	27.700 <sub>62</sub>	44.75 <sub>20</sub>	2.660 <sub>76</sub>	51.53 <sub>159</sub>	43.215 <sub>70</sub>	34.82 <sub>82</sub>
21	29.148 <sub>32</sub>	47.80 <sub>144</sub>	27.638 <sub>26</sub>	44.55 <sub>3</sub>	2.584 <sub>39</sub>	49.94 <sub>188</sub>	43.145 <sub>35</sub>	34.00 <sub>108</sub>
31	29.116 <sub>9</sub>	46.36 <sub>170</sub>	27.612 <sub>14</sub>	44.52 <sub>18</sub>	2.545 <sub>2</sub>	48.06 <sub>213</sub>	43.110 <sub>4</sub>	32.92 <sub>133</sub>
Apr. 10	29.125 <sub>52</sub>	44.66 <sub>192</sub>	27.626 <sub>58</sub>	44.70 <sub>41</sub>	2.547 <sub>47</sub>	45.93 <sub>235</sub>	43.114 <sub>46</sub>	31.59 <sub>155</sub>
20	29.177 <sub>96</sub>	42.74 <sub>212</sub>	27.684 <sub>103</sub>	45.11 <sub>65</sub>	2.594 <sub>93</sub>	43.58 <sub>253</sub>	43.160 <sub>90</sub>	30.04 <sub>177</sub>
30	29.273 <sub>141</sub>	40.62 <sub>228</sub>	27.787 <sub>148</sub>	45.76 <sub>90</sub>	2.687 <sub>140</sub>	41.05 <sub>266</sub>	43.250 <sub>135</sub>	28.27 <sub>196</sub>
Mai 10	29.414 <sub>183</sub>	38.34 <sub>239</sub>	27.935 <sub>190</sub>	46.66 <sub>113</sub>	2.827 <sub>185</sub>	38.39 <sub>274</sub>	43.385 <sub>177</sub>	26.31 <sub>211</sub>
20	29.597 <sub>222</sub>	35.95 <sub>246</sub>	28.125 <sub>227</sub>	47.79 <sub>136</sub>	3.012 <sub>225</sub>	35.65 <sub>275</sub>	43.562 <sub>216</sub>	24.20 <sub>222</sub>
30	29.819 <sub>254</sub>	33.49 <sub>247</sub>	28.352 <sub>260</sub>	49.15 <sub>154</sub>	3.237 <sub>261</sub>	32.90 <sub>270</sub>	43.778 <sub>249</sub>	21.98 <sub>227</sub>
Juni 9	30.073 <sub>281</sub>	31.02 <sub>242</sub>	28.612 <sub>285</sub>	50.69 <sub>170</sub>	3.498 <sub>290</sub>	30.20 <sub>258</sub>	44.027 <sub>276</sub>	19.71 <sub>228</sub>
19	30.354 <sub>300</sub>	28.60 <sub>231</sub>	28.897 <sub>302</sub>	52.39 <sub>182</sub>	3.788 <sub>311</sub>	27.62 <sub>241</sub>	44.303 <sub>295</sub>	17.43 <sub>223</sub>
29	30.654 <sub>311</sub>	26.29 <sub>214</sub>	29.199 <sub>312</sub>	54.21 <sub>188</sub>	4.099 <sub>324</sub>	25.21 <sub>217</sub>	44.598 <sub>308</sub>	15.20 <sub>211</sub>
Juli 9	30.965 <sub>314</sub>	24.15 <sub>192</sub>	29.511 <sub>313</sub>	56.09 <sub>190</sub>	4.423 <sub>329</sub>	23.04 <sub>188</sub>	44.906 <sub>312</sub>	13.09 <sub>195</sub>
19	31.279 <sub>309</sub>	22.23 <sub>165</sub>	29.824 <sub>308</sub>	57.99 <sub>187</sub>	4.752 <sub>326</sub>	21.16 <sub>152</sub>	45.218 <sub>308</sub>	11.14 <sub>173</sub>
29	31.588 <sub>296</sub>	20.58 <sub>133</sub>	30.132 <sub>295</sub>	59.86 <sub>178</sub>	5.078 <sub>315</sub>	19.64 <sub>114</sub>	45.526 <sub>298</sub>	9.41 <sub>147</sub>
Aug. 8	31.884 <sub>278</sub>	19.25 <sub>98</sub>	30.427 <sub>276</sub>	61.64 <sub>167</sub>	5.393 <sub>296</sub>	18.50 <sub>72</sub>	45.824 <sub>280</sub>	7.94 <sub>117</sub>
18	32.162 <sub>253</sub>	18.27 <sub>62</sub>	30.703 <sub>253</sub>	63.31 <sub>150</sub>	5.689 <sub>271</sub>	17.78 <sub>29</sub>	46.104 <sub>257</sub>	6.77 <sub>84</sub>
28	32.415 <sub>224</sub>	17.65 <sub>24</sub>	30.956 <sub>225</sub>	64.81 <sub>132</sub>	5.960 <sub>242</sub>	17.49 <sub>13</sub>	46.361 <sub>231</sub>	5.93 <sub>50</sub>
Sept. 7	32.639 <sub>192</sub>	17.41 <sub>13</sub>	31.181 <sub>195</sub>	66.13 <sub>110</sub>	6.202 <sub>207</sub>	17.62 <sub>55</sub>	46.592 <sub>200</sub>	5.43 <sub>16</sub>
17	32.831 <sub>157</sub>	17.54 <sub>47</sub>	31.376 <sub>164</sub>	67.23 <sub>89</sub>	6.409 <sub>171</sub>	18.17 <sub>93</sub>	46.792 <sub>168</sub>	5.27 <sub>16</sub>
27	32.988 <sub>122</sub>	18.01 <sub>77</sub>	31.540 <sub>132</sub>	68.12 <sub>66</sub>	6.580 <sub>134</sub>	19.10 <sub>126</sub>	46.960 <sub>135</sub>	5.43 <sub>46</sub>
Okt. 7	33.110 <sub>88</sub>	18.78 <sub>103</sub>	31.672 <sub>100</sub>	68.78 <sub>46</sub>	6.714 <sub>96</sub>	20.36 <sub>152</sub>	47.095 <sub>102</sub>	5.89 <sub>72</sub>
17	33.198 <sub>54</sub>	19.81 <sub>123</sub>	31.772 <sub>70</sub>	69.24 <sub>25</sub>	6.810 <sub>59</sub>	21.88 <sub>172</sub>	47.197 <sub>70</sub>	6.61 <sub>92</sub>
26	33.252 <sub>22</sub>	21.04 <sub>136</sub>	31.842 <sub>40</sub>	69.49 <sub>7</sub>	6.869 <sub>24</sub>	23.60 <sub>183</sub>	47.267 <sub>39</sub>	7.53 <sub>109</sub>
Nov. 5	33.274 <sub>8</sub>	22.40 <sub>142</sub>	31.882 <sub>12</sub>	69.56 <sub>8</sub>	6.893 <sub>9</sub>	25.43 <sub>187</sub>	47.306 <sub>9</sub>	8.62 <sub>118</sub>
15	33.266 <sub>35</sub>	23.82 <sub>143</sub>	31.894 <sub>15</sub>	69.48 <sub>21</sub>	6.884 <sub>39</sub>	27.30 <sub>182</sub>	47.315 <sub>18</sub>	9.80 <sub>122</sub>
25	33.231 <sub>60</sub>	25.25 <sub>136</sub>	31.879 <sub>39</sub>	69.27 <sub>33</sub>	6.845 <sub>67</sub>	29.12 <sub>169</sub>	47.297 <sub>43</sub>	11.02 <sub>120</sub>
Dez. 5	33.171 <sub>83</sub>	26.61 <sub>124</sub>	31.840 <sub>62</sub>	68.94 <sub>42</sub>	6.778 <sub>91</sub>	30.81 <sub>151</sub>	47.254 <sub>67</sub>	12.22 <sub>113</sub>
15	33.088 <sub>103</sub>	27.85 <sub>107</sub>	31.778 <sub>84</sub>	68.52 <sub>49</sub>	6.687 <sub>113</sub>	32.32 <sub>126</sub>	47.187 <sub>88</sub>	13.35 <sub>102</sub>
25	32.985 <sub>118</sub>	28.92 <sub>86</sub>	31.694 <sub>102</sub>	68.03 <sub>54</sub>	6.574 <sub>129</sub>	33.58 <sub>97</sub>	47.099 <sub>106</sub>	14.37 <sub>88</sub>
35	32.867	29.78	31.592	67.49	6.445	34.55	46.993	15.25
Mittl. Ort	30.726	35.29	29.128	54.12	4.201	36.39	44.639	21.66
sec $\delta$ , tg $\delta$	1.041	-0.291	1.012	+0.156	1.106	-0.473	1.017	-0.187
a, a'	+2.9	+18.1	+3.2	+18.1	+2.8	+18.0	+3.0	+17.8
b, b'	-0.02	-0.43	+0.01	-0.43	-0.03	-0.43	-0.01	-0.46

<sup>1)</sup> Die jährliche Parallaxe ( $\rho=298$ ) ist bereits berücksichtigt.



Tag	64) $\alpha$ Trianguli		63) $\epsilon$ Cassiopeiae		65) $\xi$ Piscium		67) $\psi$ Phoenicis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$1^h 49^m$	$+29^\circ 18'$	$1^h 5^m$	$+63^\circ 23'$	$1^h 50^m$	$+2^\circ 54'$	$1^h 51^m$	$-46^\circ 33'$
Jan. 0	55.850 <sup>s</sup> <sub>138</sub>	43.39 <sub>21</sub>	24.75 <sup>a</sup> <sub>36</sub>	70.62 <sub>65</sub>	41.759 <sup>b</sup> <sub>112</sub>	52.91 <sub>66</sub>	26.202 <sup>a</sup> <sub>224</sub>	99.23 <sub>74</sub>
10	55.712 <sub>155</sub>	43.18 <sub>45</sub>	24.39 <sub>39</sub>	71.27 <sub>12</sub>	41.647 <sub>125</sub>	52.25 <sub>61</sub>	25.978 <sub>235</sub>	99.97 <sub>24</sub>
20	55.557 <sub>165</sub>	42.73 <sub>67</sub>	24.00 <sub>41</sub>	71.39 <sub>41</sub>	41.522 <sub>133</sub>	51.64 <sub>55</sub>	25.743 <sub>238</sub>	100.21 <sub>27</sub>
30	55.392 <sub>166</sub>	42.06 <sub>88</sub>	23.59 <sub>40</sub>	70.98 <sub>93</sub>	41.389 <sub>135</sub>	51.09 <sub>46</sub>	25.505 <sub>234</sub>	99.94 <sub>77</sub>
Febr. 9	55.226 <sub>159</sub>	41.18 <sub>104</sub>	23.19 <sub>38</sub>	70.05 <sub>140</sub>	41.254 <sub>130</sub>	50.63 <sub>35</sub>	25.271 <sub>221</sub>	99.17 <sub>126</sub>
19	55.067 <sub>143</sub>	40.14 <sub>115</sub>	22.81 <sub>34</sub>	68.65 <sub>180</sub>	41.124 <sub>117</sub>	50.28 <sub>23</sub>	25.050 <sub>199</sub>	97.91 <sub>171</sub>
März 1	54.924 <sub>117</sub>	38.99 <sub>121</sub>	22.47 <sub>29</sub>	66.85 <sub>214</sub>	41.007 <sub>96</sub>	50.05 <sub>6</sub>	24.851 <sub>170</sub>	96.20 <sub>212</sub>
11	54.807 <sub>84</sub>	37.78 <sub>120</sub>	22.18 <sub>21</sub>	64.71 <sub>238</sub>	40.911 <sub>69</sub>	49.99 <sub>11</sub>	24.681 <sub>131</sub>	94.08 <sub>248</sub>
21	54.723 <sub>42</sub>	36.58 <sub>114</sub>	21.97 <sub>12</sub>	62.33 <sub>250</sub>	40.842 <sub>34</sub>	50.10 <sub>31</sub>	24.550 <sub>85</sub>	91.60 <sub>279</sub>
31	54.681 <sub>5</sub>	35.44 <sub>101</sub>	21.85 <sub>4</sub>	59.83 <sub>253</sub>	40.808 <sub>6</sub>	50.41 <sub>54</sub>	24.465 <sub>35</sub>	88.81 <sub>304</sub>
Apr. 10	54.686 <sub>55</sub>	34.43 <sub>82</sub>	21.81 <sub>6</sub>	57.30 <sub>245</sub>	40.814 <sub>48</sub>	50.95 <sub>76</sub>	24.430 <sub>20</sub>	85.77 <sub>323</sub>
20	54.741 <sub>107</sub>	33.61 <sub>58</sub>	21.87 <sub>16</sub>	54.85 <sub>227</sub>	40.862 <sub>93</sub>	51.71 <sub>99</sub>	24.450 <sub>79</sub>	82.54 <sub>336</sub>
30	54.848 <sub>157</sub>	33.03 <sub>32</sub>	22.03 <sub>25</sub>	52.58 <sub>201</sub>	40.955 <sub>137</sub>	52.70 <sub>122</sub>	24.529 <sub>136</sub>	79.18 <sub>341</sub>
Mai 10	55.005 <sub>205</sub>	32.71 <sub>1</sub>	22.28 <sub>33</sub>	50.57 <sub>168</sub>	41.092 <sub>180</sub>	53.92 <sub>144</sub>	24.665 <sub>192</sub>	75.77 <sub>339</sub>
20	55.210 <sub>247</sub>	32.70 <sub>30</sub>	22.61 <sub>41</sub>	48.89 <sub>128</sub>	41.272 <sub>218</sub>	55.36 <sub>161</sub>	24.857 <sub>245</sub>	72.38 <sub>329</sub>
30	55.457 <sub>284</sub>	33.00 <sub>61</sub>	23.02 <sub>47</sub>	47.61 <sub>85</sub>	41.490 <sub>250</sub>	56.97 <sub>177</sub>	25.102 <sub>292</sub>	69.09 <sub>311</sub>
Juni 9	55.741 <sub>311</sub>	33.61 <sub>92</sub>	23.49 <sub>53</sub>	46.76 <sub>38</sub>	41.740 <sub>276</sub>	58.74 <sub>188</sub>	25.394 <sub>332</sub>	65.98 <sub>287</sub>
19	56.052 <sub>331</sub>	34.53 <sub>119</sub>	24.02 <sub>55</sub>	46.38 <sub>8</sub>	42.016 <sub>296</sub>	60.62 <sub>194</sub>	25.726 <sub>363</sub>	63.11 <sub>255</sub>
29	56.383 <sub>342</sub>	35.72 <sub>144</sub>	24.57 <sub>58</sub>	46.46 <sub>56</sub>	42.312 <sub>307</sub>	62.56 <sub>196</sub>	26.089 <sub>384</sub>	60.56 <sub>216</sub>
Juli 9	56.725 <sub>345</sub>	37.16 <sub>164</sub>	25.15 <sub>59</sub>	47.02 <sub>102</sub>	42.619 <sub>310</sub>	64.52 <sub>191</sub>	26.473 <sub>396</sub>	58.40 <sub>173</sub>
19	57.070 <sub>339</sub>	38.80 <sub>182</sub>	25.74 <sub>57</sub>	48.04 <sub>145</sub>	42.929 <sub>306</sub>	66.43 <sub>183</sub>	26.869 <sub>397</sub>	56.67 <sub>123</sub>
29	57.409 <sub>326</sub>	40.62 <sub>193</sub>	26.31 <sub>56</sub>	49.49 <sub>185</sub>	43.235 <sub>295</sub>	68.26 <sub>169</sub>	27.266 <sub>387</sub>	55.44 <sub>71</sub>
Aug. 8	57.735 <sub>306</sub>	42.55 <sub>201</sub>	26.87 <sub>52</sub>	51.34 <sub>220</sub>	43.530 <sub>277</sub>	69.95 <sub>151</sub>	27.653 <sub>369</sub>	54.73 <sub>17</sub>
18	58.041 <sub>282</sub>	44.56 <sub>203</sub>	27.39 <sub>48</sub>	53.54 <sub>251</sub>	43.807 <sub>256</sub>	71.46 <sub>130</sub>	28.022 <sub>340</sub>	54.56 <sub>38</sub>
28	58.323 <sub>254</sub>	46.59 <sub>203</sub>	27.87 <sub>44</sub>	56.05 <sub>277</sub>	44.063 <sub>229</sub>	72.76 <sub>107</sub>	28.362 <sub>304</sub>	54.94 <sub>90</sub>
Sept. 7	58.577 <sub>221</sub>	48.62 <sub>197</sub>	28.31 <sub>38</sub>	58.82 <sub>297</sub>	44.292 <sub>200</sub>	73.83 <sub>81</sub>	28.666 <sub>261</sub>	55.84 <sub>139</sub>
17	58.798 <sub>187</sub>	50.59 <sub>189</sub>	28.69 <sub>32</sub>	61.79 <sub>311</sub>	44.492 <sub>170</sub>	74.64 <sub>56</sub>	28.927 <sub>214</sub>	57.23 <sub>182</sub>
27	58.985 <sub>154</sub>	52.48 <sub>177</sub>	29.01 <sub>25</sub>	64.90 <sub>320</sub>	44.662 <sub>138</sub>	75.20 <sub>31</sub>	29.141 <sub>164</sub>	59.05 <sub>217</sub>
Okt. 7	59.139 <sub>119</sub>	54.25 <sub>164</sub>	29.26 <sub>19</sub>	68.10 <sub>321</sub>	44.800 <sub>106</sub>	75.51 <sub>8</sub>	29.305 <sub>111</sub>	61.22 <sub>245</sub>
17	59.258 <sub>86</sub>	55.89 <sub>148</sub>	29.45 <sub>12</sub>	71.31 <sub>318</sub>	44.906 <sub>76</sub>	75.59 <sub>12</sub>	29.416 <sub>59</sub>	63.67 <sub>263</sub>
26	59.344 <sub>52</sub>	57.37 <sub>131</sub>	29.57 <sub>4</sub>	74.49 <sub>307</sub>	44.982 <sub>47</sub>	75.47 <sub>30</sub>	29.475 <sub>8</sub>	66.30 <sub>268</sub>
Nov. 5	59.396 <sub>19</sub>	58.68 <sub>111</sub>	29.61 <sub>2</sub>	77.56 <sub>288</sub>	45.029 <sub>18</sub>	75.17 <sub>44</sub>	29.483 <sub>39</sub>	68.98 <sub>264</sub>
15	59.415 <sub>12</sub>	59.79 <sub>91</sub>	29.59 <sub>9</sub>	80.44 <sub>264</sub>	45.047 <sub>9</sub>	74.73 <sub>54</sub>	29.444 <sub>84</sub>	71.62 <sub>249</sub>
25	59.403 <sub>43</sub>	60.70 <sub>69</sub>	29.50 <sub>16</sub>	83.08 <sub>231</sub>	45.038 <sub>34</sub>	74.19 <sub>62</sub>	29.360 <sub>124</sub>	74.11 <sub>223</sub>
Dez. 5	59.360 <sub>72</sub>	61.39 <sub>46</sub>	29.34 <sub>23</sub>	85.39 <sub>194</sub>	45.004 <sub>57</sub>	73.57 <sub>65</sub>	29.236 <sub>159</sub>	76.34 <sub>190</sub>
15	59.288 <sub>99</sub>	61.85 <sub>21</sub>	29.11 <sub>28</sub>	87.33 <sub>149</sub>	44.947 <sub>80</sub>	72.92 <sub>66</sub>	29.077 <sub>187</sub>	78.24 <sub>149</sub>
25	59.189 <sub>122</sub>	62.06 <sub>3</sub>	28.83 <sub>33</sub>	88.82 <sub>100</sub>	44.867 <sub>99</sub>	72.26 <sub>66</sub>	28.890 <sub>210</sub>	79.73 <sub>103</sub>
35	59.067	62.03	28.50	89.82	44.768	71.60	28.680	80.76
Mittl. Ort	56.335	42.36	24.75	61.15	42.306	60.58	26.551	76.97
sec $\delta$ , tg $\delta$	1.147	+0.561	2.233	+1.997	1.001	+0.051	1.455	-1.056
a, a'	+3.4	+17.8	+4.3	+17.8	+3.1	+17.8	+2.4	+17.7
b, b'	+0.03	-0.46	+0.12	-0.46	0.00	-0.46	-0.06	-0.47



# Obere Kulmination Greenwich

51\*

Tag	66) $\beta$ Arietis		68) $\chi$ Eridani		72) $\alpha$ Hydrī		71) $\nu$ Ceti	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$1^h 51^m$	$+20^\circ 32'$	$1^h 53^m$	$-51^\circ 52'$	$1^h 56^m$	$-61^\circ 49'$	$1^h 57^m$	$-21^\circ 20'$
Jan. 0	35.254 <sup>5</sup> <sub>123</sub>	22.25 <sup>11</sup> <sub>37</sub>	48.896 <sup>8</sup> <sub>259</sub>	78.51 <sup>11</sup> <sub>71</sub>	62.26 <sup>11</sup> <sub>38</sub>	97.49 <sup>11</sup> <sub>62</sub>	24.298 <sup>5</sup> <sub>132</sub>	52.28 <sup>11</sup> <sub>87</sub>
10	35.131 <sup>138</sup>	21.88 <sup>52</sup>	48.637 <sup>272</sup>	79.22 <sup>16</sup>	61.88 <sup>39</sup>	98.11 <sup>4</sup>	24.166 <sup>145</sup>	53.15 <sup>58</sup>
20	34.993 <sup>147</sup>	21.36 <sup>66</sup>	48.365 <sup>276</sup>	79.38 <sup>37</sup>	61.49 <sup>40</sup>	98.15 <sup>55</sup>	24.021 <sup>152</sup>	53.73 <sup>26</sup>
30	34.846 <sup>150</sup>	20.70 <sup>76</sup>	48.089 <sup>269</sup>	79.01 <sup>90</sup>	61.09 <sup>38</sup>	97.60 <sup>111</sup>	23.869 <sup>153</sup>	53.99 <sup>7</sup>
Febr. 9	34.696 <sup>144</sup>	19.94 <sup>83</sup>	47.820 <sup>255</sup>	78.11 <sup>141</sup>	60.71 <sup>36</sup>	96.49 <sup>164</sup>	23.716 <sup>147</sup>	53.92 <sup>40</sup>
19	34.552 <sup>128</sup>	19.11 <sup>86</sup>	47.565 <sup>229</sup>	76.70 <sup>187</sup>	60.35 <sup>32</sup>	94.85 <sup>213</sup>	23.569 <sup>135</sup>	53.52 <sup>72</sup>
März 1	34.424 <sup>107</sup>	18.25 <sup>85</sup>	47.336 <sup>196</sup>	74.83 <sup>230</sup>	60.03 <sup>29</sup>	92.72 <sup>256</sup>	23.434 <sup>114</sup>	52.80 <sup>104</sup>
11	34.317 <sup>76</sup>	17.40 <sup>79</sup>	47.140 <sup>155</sup>	72.53 <sup>266</sup>	59.74 <sup>23</sup>	90.16 <sup>293</sup>	23.320 <sup>85</sup>	51.76 <sup>135</sup>
21	34.241 <sup>38</sup>	16.61 <sup>67</sup>	46.985 <sup>104</sup>	69.87 <sup>297</sup>	59.51 <sup>16</sup>	87.23 <sup>324</sup>	23.235 <sup>52</sup>	50.41 <sup>163</sup>
31	34.203 <sup>5</sup>	15.94 <sup>51</sup>	46.881 <sup>48</sup>	66.90 <sup>323</sup>	59.35 <sup>9</sup>	83.99 <sup>347</sup>	23.183 <sup>11</sup>	48.78 <sup>190</sup>
Apr. 10	34.208 <sup>51</sup>	15.43 <sup>31</sup>	46.833 <sup>12</sup>	63.67 <sup>340</sup>	59.26 <sup>2</sup>	80.52 <sup>362</sup>	23.172 <sup>33</sup>	46.88 <sup>213</sup>
20	34.259 <sup>100</sup>	15.12 <sup>7</sup>	46.845 <sup>75</sup>	60.27 <sup>351</sup>	59.24 <sup>6</sup>	76.90 <sup>371</sup>	23.205 <sup>78</sup>	44.75 <sup>232</sup>
30	34.359 <sup>148</sup>	15.05 <sup>20</sup>	46.920 <sup>139</sup>	56.76 <sup>355</sup>	59.30 <sup>15</sup>	73.19 <sup>371</sup>	23.283 <sup>125</sup>	42.43 <sup>249</sup>
Mai 10	34.507 <sup>192</sup>	15.25 <sup>46</sup>	47.059 <sup>200</sup>	53.21 <sup>351</sup>	59.45 <sup>22</sup>	69.48 <sup>364</sup>	23.408 <sup>169</sup>	39.94 <sup>259</sup>
20	34.699 <sup>233</sup>	15.71 <sup>74</sup>	47.259 <sup>258</sup>	49.70 <sup>339</sup>	59.67 <sup>30</sup>	65.84 <sup>347</sup>	23.577 <sup>210</sup>	37.35 <sup>263</sup>
30	34.932 <sup>266</sup>	16.45 <sup>101</sup>	47.517 <sup>311</sup>	46.31 <sup>319</sup>	59.97 <sup>36</sup>	62.37 <sup>323</sup>	23.787 <sup>247</sup>	34.72 <sup>263</sup>
Juni 9	35.198 <sup>294</sup>	17.46 <sup>124</sup>	47.828 <sup>355</sup>	43.12 <sup>291</sup>	60.33 <sup>42</sup>	59.14 <sup>291</sup>	24.034 <sup>276</sup>	32.09 <sup>256</sup>
19	35.492 <sup>313</sup>	18.70 <sup>145</sup>	48.183 <sup>391</sup>	40.21 <sup>256</sup>	60.75 <sup>47</sup>	56.23 <sup>252</sup>	24.310 <sup>299</sup>	29.53 <sup>242</sup>
29	35.805 <sup>324</sup>	20.15 <sup>163</sup>	48.574 <sup>416</sup>	37.65 <sup>215</sup>	61.22 <sup>50</sup>	53.71 <sup>207</sup>	24.609 <sup>314</sup>	27.11 <sup>222</sup>
Juli 9	36.129 <sup>327</sup>	21.78 <sup>176</sup>	48.990 <sup>430</sup>	35.50 <sup>169</sup>	61.72 <sup>53</sup>	51.64 <sup>155</sup>	24.923 <sup>321</sup>	24.89 <sup>196</sup>
19	36.456 <sup>322</sup>	23.54 <sup>184</sup>	49.420 <sup>433</sup>	33.81 <sup>117</sup>	62.25 <sup>53</sup>	50.09 <sup>101</sup>	25.244 <sup>320</sup>	22.93 <sup>165</sup>
29	36.778 <sup>310</sup>	25.38 <sup>187</sup>	49.853 <sup>424</sup>	32.64 <sup>62</sup>	62.78 <sup>53</sup>	49.08 <sup>43</sup>	25.564 <sup>311</sup>	21.28 <sup>130</sup>
Aug. 8	37.088 <sup>291</sup>	27.25 <sup>187</sup>	50.277 <sup>404</sup>	32.02 <sup>6</sup>	63.31 <sup>51</sup>	48.65 <sup>17</sup>	25.875 <sup>294</sup>	19.98 <sup>91</sup>
18	37.379 <sup>269</sup>	29.12 <sup>181</sup>	50.681 <sup>375</sup>	31.96 <sup>51</sup>	63.82 <sup>47</sup>	48.82 <sup>75</sup>	26.169 <sup>273</sup>	19.07 <sup>50</sup>
28	37.648 <sup>241</sup>	30.93 <sup>173</sup>	51.056 <sup>336</sup>	32.47 <sup>104</sup>	64.29 <sup>42</sup>	49.57 <sup>131</sup>	26.442 <sup>246</sup>	18.57 <sup>9</sup>
Sept. 7	37.889 <sup>211</sup>	32.66 <sup>161</sup>	51.392 <sup>289</sup>	33.51 <sup>154</sup>	64.71 <sup>36</sup>	50.88 <sup>182</sup>	26.688 <sup>214</sup>	18.48 <sup>32</sup>
17	38.100 <sup>180</sup>	34.27 <sup>146</sup>	51.681 <sup>237</sup>	35.05 <sup>199</sup>	65.07 <sup>29</sup>	52.70 <sup>226</sup>	26.902 <sup>181</sup>	18.80 <sup>69</sup>
27	38.280 <sup>148</sup>	35.73 <sup>130</sup>	51.918 <sup>180</sup>	37.04 <sup>234</sup>	65.36 <sup>22</sup>	54.96 <sup>262</sup>	27.083 <sup>146</sup>	19.49 <sup>103</sup>
Okt. 7	38.428 <sup>115</sup>	37.03 <sup>114</sup>	52.098 <sup>121</sup>	39.38 <sup>261</sup>	65.58 <sup>15</sup>	57.58 <sup>287</sup>	27.229 <sup>111</sup>	20.52 <sup>132</sup>
17	38.543 <sup>84</sup>	38.17 <sup>96</sup>	52.219 <sup>62</sup>	41.99 <sup>278</sup>	65.73 <sup>6</sup>	60.45 <sup>302</sup>	27.340 <sup>75</sup>	21.84 <sup>153</sup>
26	38.627 <sup>52</sup>	39.13 <sup>77</sup>	52.281 <sup>4</sup>	44.77 <sup>283</sup>	65.79 <sup>2</sup>	63.47 <sup>304</sup>	27.415 <sup>42</sup>	23.37 <sup>167</sup>
Nov. 5	38.679 <sup>23</sup>	39.90 <sup>60</sup>	52.285 <sup>51</sup>	47.60 <sup>276</sup>	65.77 <sup>10</sup>	66.51 <sup>294</sup>	27.457 <sup>9</sup>	25.04 <sup>173</sup>
15	38.702 <sup>7</sup>	40.50 <sup>43</sup>	52.234 <sup>102</sup>	50.36 <sup>259</sup>	65.67 <sup>16</sup>	69.45 <sup>273</sup>	27.466 <sup>21</sup>	26.77 <sup>173</sup>
25	38.695 <sup>34</sup>	40.93 <sup>25</sup>	52.132 <sup>148</sup>	52.95 <sup>231</sup>	65.51 <sup>23</sup>	72.18 <sup>241</sup>	27.445 <sup>50</sup>	28.50 <sup>164</sup>
Dez. 5	38.661 <sup>61</sup>	41.18 <sup>7</sup>	51.984 <sup>188</sup>	55.26 <sup>194</sup>	65.28 <sup>28</sup>	74.59 <sup>198</sup>	27.395 <sup>75</sup>	30.14 <sup>149</sup>
15	38.600 <sup>86</sup>	41.25 <sup>9</sup>	51.796 <sup>219</sup>	57.20 <sup>151</sup>	65.00 <sup>33</sup>	76.57 <sup>150</sup>	27.320 <sup>98</sup>	31.63 <sup>128</sup>
25	38.514 <sup>108</sup>	41.16 <sup>26</sup>	51.577 <sup>246</sup>	58.71 <sup>101</sup>	64.67 <sup>36</sup>	78.07 <sup>96</sup>	27.222 <sup>119</sup>	32.91 <sup>103</sup>
35	38.406	40.90	51.331	59.72	64.31	79.03	27.103	33.94
Mittl. Ort sec $\delta$ , tg $\delta$	35.765 1.068	24.03 +0.375	49.147 1.620	55.24 -1.275	62.23 2.119	72.68 -1.868	24.769 1.074	36.75 -0.391
a, a'	+3.3	+17.7	+2.3	+17.6	+1.9	+17.5	+2.8	+17.5
b, b'	+0.02	-0.47	-0.07	-0.48	-0.11	-0.49	-0.02	-0.49



Tag	70) $\zeta$ Cassiopeiae		73) $\gamma$ Andromedae pr		74) $\alpha$ Arietis		75) $\beta$ Trianguli	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	1 <sup>h</sup> 58 <sup>m</sup>	+72° 9'	2 <sup>h</sup> 0 <sup>m</sup>	+42° 3'	2 <sup>h</sup> 4 <sup>m</sup>	+23° 12'	2 <sup>h</sup> 6 <sup>m</sup>	+34° 43'
Jan. 0	42.02 <sup>a</sup> <sub>57</sub>	34.21 <sub>99</sub>	30.432 <sup>a</sup> <sub>174</sub>	65.15 <sub>19</sub>	3.566 <sup>a</sup> <sub>121</sub>	10.84 <sub>26</sub>	15.356 <sup>a</sup> <sub>146</sub>	43.70 <sub>4</sub>
10	41.45 <sub>61</sub>	35.20 <sub>42</sub>	30.258 <sub>195</sub>	65.34 <sub>18</sub>	3.445 <sub>142</sub>	10.58 <sub>44</sub>	15.210 <sub>166</sub>	43.74 <sub>25</sub>
20	40.84 <sub>63</sub>	35.62 <sub>16</sub>	30.063 <sub>209</sub>	65.16 <sub>52</sub>	3.393 <sub>152</sub>	10.14 <sub>59</sub>	15.044 <sub>180</sub>	43.49 <sub>53</sub>
30	40.21 <sub>63</sub>	35.46 <sub>74</sub>	29.854 <sub>213</sub>	64.64 <sub>86</sub>	3.151 <sub>157</sub>	9.55 <sub>72</sub>	14.864 <sub>185</sub>	42.96 <sub>78</sub>
Febr. 9	39.58 <sub>60</sub>	34.72 <sub>129</sub>	29.641 <sub>205</sub>	63.78 <sub>115</sub>	2.994 <sub>153</sub>	8.83 <sub>83</sub>	14.679 <sub>181</sub>	42.18 <sub>101</sub>
19	38.98 <sub>54</sub>	33.43 <sub>176</sub>	29.436 <sub>187</sub>	62.63 <sub>140</sub>	2.841 <sub>141</sub>	8.00 <sub>89</sub>	14.498 <sub>167</sub>	41.17 <sub>119</sub>
März 1	38.44 <sub>46</sub>	31.67 <sub>216</sub>	29.249 <sub>157</sub>	61.23 <sub>157</sub>	2.700 <sub>119</sub>	7.11 <sub>92</sub>	14.331 <sub>141</sub>	39.98 <sub>131</sub>
11	37.98 <sub>35</sub>	29.51 <sub>247</sub>	29.092 <sub>118</sub>	59.66 <sub>167</sub>	2.581 <sub>89</sub>	6.19 <sub>87</sub>	14.190 <sub>107</sub>	38.67 <sub>136</sub>
21	37.63 <sub>24</sub>	27.04 <sub>266</sub>	28.974 <sub>69</sub>	57.99 <sub>170</sub>	2.492 <sub>51</sub>	5.32 <sub>79</sub>	14.083 <sub>64</sub>	37.31 <sub>135</sub>
31	37.39 <sub>10</sub>	24.38 <sub>275</sub>	28.905 <sub>15</sub>	56.29 <sub>165</sub>	2.441 <sub>8</sub>	4.53 <sub>66</sub>	14.019 <sub>15</sub>	35.96 <sub>127</sub>
Apr. 10	37.29 <sub>4</sub>	21.63 <sub>273</sub>	28.890 <sub>44</sub>	54.64 <sub>151</sub>	2.433 <sub>39</sub>	3.87 <sub>47</sub>	14.004 <sub>38</sub>	34.69 <sub>112</sub>
20	37.33 <sub>17</sub>	18.90 <sub>260</sub>	28.934 <sub>105</sub>	53.13 <sub>131</sub>	2.472 <sub>89</sub>	3.40 <sub>25</sub>	14.042 <sub>93</sub>	33.57 <sub>92</sub>
30	37.50 <sub>31</sub>	16.30 <sub>237</sub>	29.039 <sub>164</sub>	51.82 <sub>105</sub>	2.561 <sub>138</sub>	3.15 <sub>0</sub>	14.135 <sub>147</sub>	32.65 <sub>66</sub>
Mai 10	37.81 <sub>43</sub>	13.93 <sub>206</sub>	29.203 <sub>220</sub>	50.77 <sub>74</sub>	2.699 <sub>184</sub>	3.15 <sub>28</sub>	14.282 <sub>199</sub>	31.99 <sub>38</sub>
20	38.24 <sub>54</sub>	11.87 <sub>168</sub>	29.423 <sub>270</sub>	50.03 <sub>40</sub>	2.883 <sub>227</sub>	3.43 <sub>55</sub>	14.481 <sub>245</sub>	31.61 <sub>6</sub>
30	38.78 <sub>64</sub>	10.19 <sub>124</sub>	29.693 <sub>312</sub>	49.63 <sub>3</sub>	3.110 <sub>263</sub>	3.98 <sub>82</sub>	14.726 <sub>285</sub>	31.55 <sub>26</sub>
Juni 9	39.42 <sub>70</sub>	8.95 <sub>78</sub>	30.005 <sub>346</sub>	49.60 <sub>32</sub>	3.373 <sub>292</sub>	4.80 <sub>107</sub>	15.011 <sub>317</sub>	31.81 <sub>59</sub>
19	40.12 <sub>77</sub>	8.17 <sub>28</sub>	30.351 <sub>370</sub>	49.92 <sub>69</sub>	3.665 <sub>313</sub>	5.87 <sub>130</sub>	15.328 <sub>341</sub>	32.40 <sub>89</sub>
29	40.89 <sub>80</sub>	7.89 <sub>22</sub>	30.721 <sub>385</sub>	50.61 <sub>103</sub>	3.978 <sub>326</sub>	7.17 <sub>149</sub>	15.669 <sub>355</sub>	33.29 <sub>118</sub>
Juli 9	41.69 <sub>81</sub>	8.11 <sub>71</sub>	31.106 <sub>390</sub>	51.64 <sub>134</sub>	4.304 <sub>332</sub>	8.66 <sub>164</sub>	16.024 <sub>361</sub>	34.47 <sub>143</sub>
19	42.50 <sub>80</sub>	8.82 <sub>120</sub>	31.496 <sub>386</sub>	52.98 <sub>163</sub>	4.636 <sub>328</sub>	10.30 <sub>176</sub>	16.385 <sub>358</sub>	35.90 <sub>165</sub>
29	43.30 <sub>78</sub>	10.02 <sub>164</sub>	31.882 <sub>374</sub>	54.61 <sub>186</sub>	4.964 <sub>319</sub>	12.06 <sub>182</sub>	16.743 <sub>347</sub>	37.55 <sub>183</sub>
Aug. 8	44.08 <sub>75</sub>	11.66 <sub>205</sub>	32.256 <sub>354</sub>	56.47 <sub>205</sub>	5.283 <sub>302</sub>	13.88 <sub>184</sub>	17.090 <sub>330</sub>	39.38 <sub>195</sub>
18	44.83 <sub>69</sub>	13.71 <sub>243</sub>	32.610 <sub>327</sub>	58.52 <sub>221</sub>	5.585 <sub>280</sub>	15.72 <sub>183</sub>	17.420 <sub>307</sub>	41.33 <sub>205</sub>
28	45.52 <sub>63</sub>	16.14 <sub>275</sub>	32.937 <sub>297</sub>	60.73 <sub>231</sub>	5.865 <sub>254</sub>	17.55 <sub>176</sub>	17.727 <sub>280</sub>	43.38 <sub>208</sub>
Sept. 7	46.15 <sub>55</sub>	18.89 <sub>301</sub>	33.234 <sub>263</sub>	63.04 <sub>237</sub>	6.119 <sub>226</sub>	19.31 <sub>167</sub>	18.007 <sub>248</sub>	45.46 <sub>209</sub>
17	46.70 <sub>47</sub>	21.90 <sub>322</sub>	33.497 <sub>226</sub>	65.41 <sub>238</sub>	6.345 <sub>195</sub>	20.98 <sub>155</sub>	18.255 <sub>215</sub>	47.55 <sub>206</sub>
27	47.17 <sub>37</sub>	25.12 <sub>337</sub>	33.723 <sub>187</sub>	67.79 <sub>236</sub>	6.540 <sub>163</sub>	22.53 <sub>141</sub>	18.470 <sub>181</sub>	49.61 <sub>199</sub>
Okt. 7	47.54 <sub>28</sub>	28.49 <sub>345</sub>	33.910 <sub>148</sub>	70.15 <sub>228</sub>	6.703 <sub>131</sub>	23.94 <sub>126</sub>	18.651 <sub>145</sub>	51.60 <sub>189</sub>
17	47.82 <sub>17</sub>	31.94 <sub>346</sub>	34.058 <sub>108</sub>	72.43 <sub>218</sub>	6.834 <sub>99</sub>	25.20 <sub>110</sub>	18.796 <sub>110</sub>	53.49 <sub>177</sub>
26	47.99 <sub>7</sub>	35.40 <sub>339</sub>	34.166 <sub>68</sub>	74.61 <sub>204</sub>	6.933 <sub>67</sub>	26.30 <sub>93</sub>	18.906 <sub>74</sub>	55.26 <sub>162</sub>
Nov. 5	48.06 <sub>4</sub>	38.79 <sub>324</sub>	34.234 <sub>28</sub>	76.65 <sub>186</sub>	7.000 <sub>37</sub>	27.23 <sub>75</sub>	18.980 <sub>38</sub>	56.88 <sub>145</sub>
15	48.02 <sub>15</sub>	42.03 <sub>302</sub>	34.262 <sub>11</sub>	78.51 <sub>164</sub>	7.037 <sub>5</sub>	27.98 <sub>59</sub>	19.018 <sub>3</sub>	58.33 <sub>124</sub>
25	47.87 <sub>25</sub>	45.05 <sub>272</sub>	34.251 <sub>50</sub>	80.15 <sub>138</sub>	7.042 <sub>24</sub>	28.57 <sub>40</sub>	19.021 <sub>32</sub>	59.57 <sub>103</sub>
Dez. 5	47.62 <sub>35</sub>	47.77 <sub>233</sub>	34.201 <sub>88</sub>	81.53 <sub>110</sub>	7.018 <sub>54</sub>	28.97 <sub>23</sub>	18.989 <sub>66</sub>	60.60 <sub>78</sub>
15	47.27 <sub>45</sub>	50.10 <sub>188</sub>	34.113 <sub>123</sub>	82.63 <sub>77</sub>	6.964 <sub>80</sub>	29.20 <sub>5</sub>	18.923 <sub>97</sub>	61.38 <sub>52</sub>
25	46.82 <sub>52</sub>	51.98 <sub>136</sub>	33.990 <sub>153</sub>	83.40 <sub>43</sub>	6.884 <sub>106</sub>	29.25 <sub>13</sub>	18.826 <sub>127</sub>	61.90 <sub>23</sub>
35	46.30	53.34	33.837	83.83	6.778	29.12	18.699	62.13
Mittl. Ort	41.48	23.65	30.770	60.65	4.004	11.90	15.724	41.32
sec $\delta$ , tg $\delta$	3.264	+3.107	1.347	+0.903	1.088	+0.429	1.217	+0.693
a, a'	+5.1	+17.4	+3.7	+17.3	+3.4	+17.2	+3.6	+17.1
b, b'	+0.18	-0.50	+0.05	-0.50	+0.02	-0.52	+0.04	-0.52



# Obere Kulmination Greenwich

53\*

Tag	76) 55 Cassiopeiae		78) $\mu$ Fornacis		80) 67 Ceti		85) $\xi^3$ Ceti	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$2^h 10^m$	$+66^\circ 15'$	$2^h 10^m$	$-30^\circ 58'$	$2^h 14^m$	$-6^\circ 40'$	$2^h 25^m$	$+8^\circ 12'$
Jan. 0	$8.43$	$74.27$	$28.831$	$69.75$	$13.878$	$39.76$	$13.477$	$46.52$
10	$8.04$	$75.24$	$28.678$	$70.74$	$13.767$	$40.58$	$13.374$	$45.97$
20	$7.60$	$75.68$	$28.510$	$71.34$	$13.641$	$41.25$	$13.251$	$45.42$
30	$7.14$	$75.57$	$28.333$	$71.54$	$13.503$	$41.74$	$13.113$	$44.89$
Febr. 9	$6.68$	$74.92$	$28.153$	$71.33$	$13.359$	$42.04$	$12.967$	$44.39$
19	$6.23$	$73.76$	$27.978$	$70.71$	$13.217$	$42.14$	$12.821$	$43.94$
März 1	$5.82$	$72.15$	$27.816$	$69.70$	$13.085$	$42.02$	$12.683$	$43.57$
11	$5.47$	$70.16$	$27.674$	$68.31$	$12.970$	$41.68$	$12.561$	$43.31$
21	$5.19$	$67.88$	$27.561$	$66.58$	$12.880$	$41.09$	$12.463$	$43.18$
31	$5.00$	$65.40$	$27.484$	$64.52$	$12.822$	$40.27$	$12.398$	$43.20$
Apr. 10	$4.91$	$62.84$	$27.449$	$62.19$	$12.801$	$39.21$	$12.371$	$43.41$
20	$4.93$	$60.30$	$27.460$	$59.61$	$12.823$	$37.92$	$12.387$	$43.82$
30	$5.05$	$57.88$	$27.519$	$56.85$	$12.890$	$36.40$	$12.448$	$44.45$
Mai 10	$5.28$	$55.68$	$27.628$	$53.96$	$13.001$	$34.68$	$12.556$	$45.30$
20	$5.61$	$53.76$	$27.785$	$50.98$	$13.156$	$32.79$	$12.708$	$46.36$
30	$6.02$	$52.20$	$27.987$	$48.00$	$13.351$	$30.76$	$12.902$	$47.63$
Juni 9	$6.51$	$51.06$	$28.230$	$45.08$	$13.582$	$28.64$	$13.132$	$49.08$
19	$7.06$	$50.36$	$28.507$	$42.29$	$13.843$	$26.47$	$13.392$	$50.68$
29	$7.66$	$50.12$	$28.812$	$39.69$	$14.127$	$24.31$	$13.677$	$52.39$
Juli 9	$8.28$	$50.35$	$29.136$	$37.36$	$14.426$	$22.22$	$13.977$	$54.16$
19	$8.93$	$51.04$	$29.471$	$35.36$	$14.733$	$20.26$	$14.286$	$55.95$
29	$9.57$	$52.19$	$29.808$	$33.74$	$15.039$	$18.47$	$14.596$	$57.71$
Aug. 8	$10.19$	$53.75$	$30.138$	$32.54$	$15.339$	$16.90$	$14.900$	$59.38$
18	$10.79$	$55.70$	$30.456$	$31.80$	$15.627$	$15.59$	$15.192$	$60.94$
28	$11.36$	$58.00$	$30.752$	$31.54$	$15.895$	$14.58$	$15.467$	$62.34$
Sept. 7	$11.87$	$60.59$	$31.021$	$31.75$	$16.140$	$13.88$	$15.720$	$63.55$
17	$12.33$	$63.42$	$31.259$	$32.43$	$16.358$	$13.51$	$15.948$	$64.55$
27	$12.72$	$66.45$	$31.462$	$33.53$	$16.547$	$13.46$	$16.149$	$65.33$
Okt. 7	$13.05$	$69.61$	$31.627$	$35.00$	$16.706$	$13.70$	$16.321$	$65.89$
17	$13.31$	$72.84$	$31.753$	$36.78$	$16.833$	$14.21$	$16.464$	$66.23$
26*)	$13.49$	$76.07$	$31.840$	$38.79$	$16.930$	$14.94$	$16.578$	$66.38$
Nov. 5	$13.59$	$79.25$	$31.889$	$40.94$	$16.996$	$15.84$	$16.662$	$66.35$
15	$13.60$	$82.29$	$31.900$	$43.14$	$17.032$	$16.87$	$16.716$	$66.18$
25	$13.54$	$85.13$	$31.876$	$45.30$	$17.040$	$17.97$	$16.740$	$65.89$
Dez. 5	$13.40$	$87.68$	$31.819$	$47.32$	$17.019$	$19.08$	$16.736$	$65.51$
15	$13.18$	$89.89$	$31.732$	$49.13$	$16.972$	$20.15$	$16.704$	$65.06$
25	$12.88$	$91.68$	$31.618$	$50.67$	$16.900$	$21.16$	$16.644$	$64.56$
35	$12.53$	$92.99$	$31.481$	$51.87$	$16.806$	$22.04$	$16.558$	$64.04$
Mittl. Ort	8.15	64.89	29.157	51.67	14.286	28.99	13.838	52.49
sec $\delta$ , tg $\delta$	2.485	+2.275	1.166	-0.600	1.007	-0.117	1.010	+0.144
a, a'	+4.7	+16.9	+2.6	+16.9	+3.0	+16.7	+3.2	+16.2
b, b'	+0.13	-0.54	-0.03	-0.54	-0.01	-0.55	+0.01	-0.59

\*) Bei Stern 85) lies Okt. 27.



Tag	87) 36 H. Cassiopeiae		90) $\mu$ Hydri		89) $\nu$ Arietis		91) $\delta$ Ceti	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$2^h 32^m$	$+72^\circ 34'$	$2^h 32^m$	$-79^\circ 20'$	$2^h 35^m$	$+21^\circ 43'$	$2^h 36^m$	$+0^\circ 5'$
Jan. 0	$46.15^{52}$	$56.23^{143}$	$50.27^{112}$	$83.43^{82}$	$40.935^{108}$	$27.21^{16}$	$39.309^{99}$	$23.95^{74}$
10	$45.63^{60}$	$57.66^{88}$	$49.15^{117}$	$84.25^{22}$	$40.827^{131}$	$27.05^{31}$	$39.210^{121}$	$23.21^{65}$
20	$45.03^{63}$	$58.54^{30}$	$47.98^{120}$	$84.47^{39}$	$40.696^{150}$	$26.74^{43}$	$39.089^{136}$	$22.56^{54}$
30	$44.40^{66}$	$58.84^{27}$	$46.78^{118}$	$84.08^{99}$	$40.546^{160}$	$26.31^{55}$	$38.953^{146}$	$22.02^{41}$
Febr. 9	$43.74^{64}$	$58.57^{83}$	$45.60^{115}$	$83.09^{155}$	$40.386^{163}$	$25.76^{64}$	$38.807^{149}$	$21.61^{28}$
19	$43.10^{61}$	$57.74^{136}$	$44.45^{107}$	$81.54^{206}$	$40.223^{156}$	$25.12^{70}$	$38.658^{143}$	$21.33^{12}$
März 1	$42.49^{54}$	$56.38^{181}$	$43.38^{98}$	$79.48^{252}$	$40.067^{140}$	$24.42^{72}$	$38.515^{129}$	$21.21^6$
11	$41.95^{44}$	$54.57^{218}$	$42.40^{85}$	$76.96^{291}$	$39.927^{114}$	$23.70^{71}$	$38.386^{106}$	$21.27^{24}$
21	$41.51^{33}$	$52.39^{246}$	$41.55^{70}$	$74.05^{323}$	$39.813^{80}$	$22.99^{65}$	$38.280^{75}$	$21.51^{44}$
31	$41.18^{21}$	$49.93^{262}$	$40.85^{54}$	$70.82^{349}$	$39.733^{38}$	$22.34^{53}$	$38.205^{39}$	$21.95^{65}$
Apr. 10	$40.97^6$	$47.31^{270}$	$40.31^{36}$	$67.33^{366}$	$39.695^7$	$21.81^{39}$	$38.166^2$	$22.60^{88}$
20	$40.91^7$	$44.61^{265}$	$39.95^{17}$	$63.67^{376}$	$39.702^{56}$	$21.42^{19}$	$38.168^{47}$	$23.48^{109}$
30	$40.98^{22}$	$41.96^{250}$	$39.78^2$	$59.91^{378}$	$39.758^{105}$	$21.23^2$	$38.215^{93}$	$24.57^{131}$
Mai 10	$41.20^{35}$	$39.46^{228}$	$39.80^{22}$	$56.13^{371}$	$39.863^{153}$	$21.25^{25}$	$38.308^{137}$	$25.88^{150}$
20	$41.55^{48}$	$37.18^{196}$	$40.02^{40}$	$52.42^{356}$	$40.016^{198}$	$21.50^{50}$	$38.445^{179}$	$27.38^{166}$
30	$42.03^{58}$	$35.22^{159}$	$40.42^{59}$	$48.86^{332}$	$40.214^{237}$	$22.00^{74}$	$38.624^{217}$	$29.04^{181}$
Juni 9	$42.61^{67}$	$33.63^{117}$	$41.01^{75}$	$45.54^{302}$	$40.451^{271}$	$22.74^{97}$	$38.841^{248}$	$30.85^{190}$
19	$43.28^{75}$	$32.46^{72}$	$41.76^{90}$	$42.52^{264}$	$40.722^{296}$	$23.71^{118}$	$39.089^{273}$	$32.75^{195}$
29	$44.03^{80}$	$31.74^{24}$	$42.66^{102}$	$39.88^{218}$	$41.018^{314}$	$24.89^{135}$	$39.362^{291}$	$34.70^{194}$
Juli 9	$44.83^{83}$	$31.50^{24}$	$43.68^{111}$	$37.70^{167}$	$41.332^{324}$	$26.24^{148}$	$39.653^{302}$	$36.64^{189}$
19	$45.66^{84}$	$31.74^{71}$	$44.79^{118}$	$36.03^{111}$	$41.656^{327}$	$27.72^{159}$	$39.955^{306}$	$38.53^{178}$
29	$46.50^{83}$	$32.45^{117}$	$45.97^{120}$	$34.92^{53}$	$41.983^{322}$	$29.31^{164}$	$40.261^{302}$	$40.31^{163}$
Aug. 8	$47.33^{81}$	$33.62^{160}$	$47.17^{120}$	$34.39^8$	$42.305^{311}$	$30.95^{165}$	$40.563^{291}$	$41.94^{143}$
18	$48.14^{78}$	$35.22^{200}$	$48.37^{115}$	$34.47^{69}$	$42.616^{294}$	$32.60^{163}$	$40.854^{277}$	$43.37^{120}$
28	$48.92^{72}$	$37.22^{236}$	$49.52^{107}$	$35.16^{128}$	$42.910^{273}$	$34.23^{157}$	$41.131^{257}$	$44.57^{94}$
Sept. 7	$49.64^{66}$	$39.58^{266}$	$50.59^{94}$	$36.44^{181}$	$43.183^{249}$	$35.80^{148}$	$41.388^{232}$	$45.51^{66}$
17	$50.30^{58}$	$42.24^{293}$	$51.53^{80}$	$38.25^{229}$	$43.432^{222}$	$37.28^{136}$	$41.620^{207}$	$46.17^{38}$
27	$50.88^{50}$	$45.17^{313}$	$52.33^{62}$	$40.54^{269}$	$43.654^{193}$	$38.64^{123}$	$41.827^{180}$	$46.55^{11}$
Okt. 7	$51.38^{40}$	$48.30^{328}$	$52.95^{43}$	$43.23^{298}$	$43.847^{164}$	$39.87^{108}$	$42.007^{150}$	$46.66^{14}$
17	$51.78^{30}$	$51.58^{335}$	$53.38^{21}$	$46.21^{316}$	$44.011^{133}$	$40.95^{94}$	$42.157^{121}$	$46.52^{36}$
27	$52.08^{20}$	$54.93^{337}$	$53.59^1$	$49.37^{322}$	$44.144^{102}$	$41.89^{80}$	$42.278^{92}$	$46.16^{54}$
Nov. 5	$52.28^8$	$58.30^{329}$	$53.58^{23}$	$52.59^{314}$	$44.246^{70}$	$42.69^{64}$	$42.370^{61}$	$45.62^{68}$
15	$52.36^4$	$61.59^{315}$	$53.35^{44}$	$55.73^{295}$	$44.316^{38}$	$43.33^{50}$	$42.431^{32}$	$44.94^{78}$
25	$52.32^{15}$	$64.74^{292}$	$52.91^{63}$	$58.68^{264}$	$44.354^6$	$43.83^{37}$	$42.463^2$	$44.16^{83}$
Dez. 5	$52.17^{26}$	$67.66^{262}$	$52.28^{81}$	$61.32^{222}$	$44.360^{26}$	$44.20^{22}$	$42.465^{26}$	$43.33^{84}$
15	$51.91^{38}$	$70.28^{222}$	$51.47^{95}$	$63.54^{172}$	$44.334^{58}$	$44.42^8$	$42.439^{55}$	$42.49^{81}$
25	$51.53^{47}$	$72.50^{176}$	$50.52^{106}$	$65.26^{117}$	$44.276^{87}$	$44.50^6$	$42.384^{81}$	$41.68^{77}$
35	$51.06$	$74.26$	$49.46$	$66.43$	$44.189$	$44.44$	$42.303$	$40.91$
Mittl. Ort	45.19	46.73	47.24	58.49	41.223	29.07	39.608	32.44
sec $\delta$ , tg $\delta$	3.340	+3.187	5.411	-5.317	1.076	+0.398	1.000	+0.002
a, a'	+5.7	+15.8	-1.3	+15.8	+3.4	+15.6	+3.1	+15.5
b, b'	+0.17	-0.62	-0.28	-0.62	+0.02	-0.63	0.00	-0.63



# Obere Kulmination Greenwich

55\*

Tag	93) $\delta$ Persei		97) $\pi$ Ceti		98) $\mu$ Ceti		100) $\alpha$ Arietis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$2^h 40^m$	$+48^\circ 59'$	$2^h 41^m$	$-14^\circ 5'$	$2^h 41^m$	$+9^\circ 52'$	$2^h 46^m$	$+27^\circ 1'$
Jan. 0	25.760 <sub>180</sub>	55.45 <sub>75</sub>	29.968 <sub>109</sub>	39.03 <sub>104</sub>	57.602 <sub>96</sub>	53.48 <sub>50</sub>	44.158 <sub>109</sub>	65.77 <sub>5</sub>
10	25.580 <sub>216</sub>	56.20 <sub>36</sub>	29.859 <sub>130</sub>	40.07 <sub>81</sub>	57.506 <sub>120</sub>	52.98 <sub>50</sub>	44.049 <sub>136</sub>	65.82 <sub>14</sub>
20	25.364 <sub>241</sub>	56.56 <sub>4</sub>	29.729 <sub>147</sub>	40.88 <sub>54</sub>	57.386 <sub>137</sub>	52.48 <sub>50</sub>	43.913 <sub>157</sub>	65.68 <sub>32</sub>
30	25.123 <sub>256</sub>	56.52 <sub>43</sub>	29.582 <sub>156</sub>	41.42 <sub>28</sub>	57.249 <sub>148</sub>	51.98 <sub>48</sub>	43.756 <sub>171</sub>	65.36 <sub>49</sub>
Febr. 9	24.867 <sub>257</sub>	56.09 <sub>81</sub>	29.426 <sub>159</sub>	41.70 <sub>1</sub>	57.101 <sub>152</sub>	51.50 <sub>45</sub>	43.585 <sub>175</sub>	64.87 <sub>63</sub>
19	24.610 <sub>246</sub>	55.28 <sub>115</sub>	29.267 <sub>153</sub>	41.69 <sub>29</sub>	56.949 <sub>147</sub>	51.05 <sub>38</sub>	43.410 <sub>170</sub>	64.24 <sub>77</sub>
März 1	24.364 <sub>221</sub>	54.13 <sub>143</sub>	29.114 <sub>140</sub>	41.40 <sub>58</sub>	56.802 <sub>133</sub>	50.67 <sub>31</sub>	43.240 <sub>154</sub>	63.47 <sub>84</sub>
11	24.143 <sub>183</sub>	52.70 <sub>164</sub>	28.974 <sub>117</sub>	40.82 <sub>86</sub>	56.669 <sub>110</sub>	50.36 <sub>19</sub>	43.086 <sub>129</sub>	62.63 <sub>87</sub>
21	23.960 <sub>133</sub>	51.06 <sub>178</sub>	28.857 <sub>87</sub>	39.96 <sub>114</sub>	56.559 <sub>80</sub>	50.17 <sub>5</sub>	42.957 <sub>94</sub>	61.76 <sub>87</sub>
31	23.827 <sub>75</sub>	49.28 <sub>184</sub>	28.770 <sub>51</sub>	38.82 <sub>140</sub>	56.479 <sub>42</sub>	50.12 <sub>11</sub>	42.863 <sub>52</sub>	60.89 <sub>80</sub>
Apr. 10	23.752 <sub>11</sub>	47.44 <sub>181</sub>	28.719 <sub>10</sub>	37.42 <sub>166</sub>	56.437 <sub>1</sub>	50.23 <sub>30</sub>	42.811 <sub>5</sub>	60.09 <sub>68</sub>
20	23.741 <sub>58</sub>	45.63 <sub>170</sub>	28.709 <sub>35</sub>	35.76 <sub>188</sub>	56.438 <sub>46</sub>	50.53 <sub>51</sub>	42.806 <sub>46</sub>	59.41 <sub>52</sub>
30	23.799 <sub>126</sub>	43.93 <sub>153</sub>	28.744 <sub>81</sub>	33.88 <sub>207</sub>	56.484 <sub>93</sub>	51.04 <sub>72</sub>	42.852 <sub>98</sub>	58.89 <sub>32</sub>
Mai 10	23.925 <sub>192</sub>	42.40 <sub>129</sub>	28.825 <sub>127</sub>	31.81 <sub>224</sub>	56.577 <sub>139</sub>	51.76 <sub>93</sub>	42.950 <sub>148</sub>	58.57 <sub>9</sub>
20	24.117 <sub>253</sub>	41.11 <sub>99</sub>	28.952 <sub>169</sub>	29.57 <sub>235</sub>	56.716 <sub>181</sub>	52.69 <sub>113</sub>	43.098 <sub>195</sub>	58.48 <sub>15</sub>
30	24.370 <sub>306</sub>	40.12 <sub>67</sub>	29.121 <sub>209</sub>	27.22 <sub>241</sub>	56.897 <sub>220</sub>	53.82 <sub>132</sub>	43.293 <sub>238</sub>	58.63 <sub>41</sub>
Juni 9	24.676 <sub>352</sub>	39.45 <sub>31</sub>	29.330 <sub>242</sub>	24.81 <sub>242</sub>	57.117 <sub>252</sub>	55.14 <sub>147</sub>	43.531 <sub>272</sub>	59.04 <sub>66</sub>
19	25.028 <sub>387</sub>	39.14 <sub>5</sub>	29.572 <sub>269</sub>	22.39 <sub>237</sub>	57.369 <sub>278</sub>	56.61 <sub>159</sub>	43.803 <sub>301</sub>	59.70 <sub>89</sub>
29	25.415 <sub>412</sub>	39.19 <sub>41</sub>	29.841 <sub>290</sub>	20.02 <sub>224</sub>	57.647 <sub>296</sub>	58.20 <sub>168</sub>	44.104 <sub>321</sub>	60.59 <sub>110</sub>
Juli 9	25.827 <sub>427</sub>	39.60 <sub>76</sub>	30.131 <sub>303</sub>	17.78 <sub>208</sub>	57.943 <sub>307</sub>	59.88 <sub>170</sub>	44.425 <sub>333</sub>	61.69 <sub>129</sub>
19	26.254 <sub>433</sub>	40.36 <sub>109</sub>	30.434 <sub>307</sub>	15.70 <sub>184</sub>	58.250 <sub>311</sub>	61.58 <sub>169</sub>	44.758 <sub>338</sub>	62.98 <sub>143</sub>
29	26.687 <sub>428</sub>	41.45 <sub>140</sub>	30.741 <sub>306</sub>	13.86 <sub>156</sub>	58.561 <sub>307</sub>	63.27 <sub>164</sub>	45.096 <sub>335</sub>	64.41 <sub>154</sub>
Aug. 8	27.115 <sub>416</sub>	42.85 <sub>166</sub>	31.047 <sub>298</sub>	12.30 <sub>123</sub>	58.868 <sub>299</sub>	64.91 <sub>153</sub>	45.431 <sub>325</sub>	65.95 <sub>161</sub>
18	27.531 <sub>396</sub>	44.51 <sub>189</sub>	31.345 <sub>283</sub>	11.07 <sub>88</sub>	59.167 <sub>283</sub>	66.44 <sub>139</sub>	45.756 <sub>310</sub>	67.56 <sub>164</sub>
28	27.927 <sub>370</sub>	46.40 <sub>208</sub>	31.628 <sub>263</sub>	10.19 <sub>49</sub>	59.450 <sub>264</sub>	67.83 <sub>122</sub>	46.066 <sub>290</sub>	69.20 <sub>163</sub>
Sept. 7	28.297 <sub>339</sub>	48.48 <sub>223</sub>	31.891 <sub>239</sub>	9.70 <sub>11</sub>	59.714 <sub>241</sub>	69.05 <sub>102</sub>	46.356 <sub>267</sub>	70.83 <sub>159</sub>
17	28.636 <sub>304</sub>	50.71 <sub>233</sub>	32.130 <sub>213</sub>	9.59 <sub>26</sub>	59.955 <sub>216</sub>	70.07 <sub>82</sub>	46.623 <sub>240</sub>	72.42 <sub>152</sub>
27	28.940 <sub>266</sub>	53.04 <sub>241</sub>	32.343 <sub>184</sub>	9.85 <sub>61</sub>	60.171 <sub>189</sub>	70.89 <sub>61</sub>	46.863 <sub>212</sub>	73.94 <sub>143</sub>
Okt. 7	29.206 <sub>225</sub>	55.45 <sub>242</sub>	32.527 <sub>153</sub>	10.46 <sub>92</sub>	60.360 <sub>161</sub>	71.50 <sub>40</sub>	47.075 <sub>181</sub>	75.37 <sub>133</sub>
17	29.431 <sub>181</sub>	57.87 <sub>240</sub>	32.680 <sub>121</sub>	11.38 <sub>117</sub>	60.521 <sub>131</sub>	71.90 <sub>22</sub>	47.256 <sub>151</sub>	76.70 <sub>122</sub>
27	29.612 <sub>136</sub>	60.27 <sub>235</sub>	32.801 <sub>90</sub>	12.55 <sub>137</sub>	60.652 <sub>102</sub>	72.12 <sub>4</sub>	47.407 <sub>119</sub>	77.92 <sub>108</sub>
Nov. 5	29.748 <sub>89</sub>	62.62 <sub>223</sub>	32.891 <sub>58</sub>	13.92 <sub>149</sub>	60.754 <sub>73</sub>	72.16 <sub>10</sub>	47.526 <sub>85</sub>	79.00 <sub>96</sub>
15	29.837 <sub>41</sub>	64.85 <sub>208</sub>	32.949 <sub>27</sub>	15.41 <sub>155</sub>	60.827 <sub>42</sub>	72.06 <sub>21</sub>	47.611 <sub>51</sub>	79.96 <sub>82</sub>
25	29.878 <sub>9</sub>	66.93 <sub>188</sub>	32.976 <sub>5</sub>	16.96 <sub>154</sub>	60.869 <sub>11</sub>	71.85 <sub>31</sub>	47.662 <sub>17</sub>	80.78 <sub>66</sub>
Dez. 5	29.869 <sub>58</sub>	68.81 <sub>163</sub>	32.971 <sub>35</sub>	18.50 <sub>146</sub>	60.880 <sub>19</sub>	71.54 <sub>38</sub>	47.679 <sub>19</sub>	81.44 <sub>52</sub>
15	29.811 <sub>107</sub>	70.44 <sub>133</sub>	32.936 <sub>64</sub>	19.96 <sub>132</sub>	60.861 <sub>49</sub>	71.16 <sub>43</sub>	47.660 <sub>53</sub>	81.96 <sub>35</sub>
25	29.704 <sub>151</sub>	71.77 <sub>100</sub>	32.872 <sub>91</sub>	21.28 <sub>115</sub>	60.812 <sub>76</sub>	70.73 <sub>46</sub>	47.607 <sub>87</sub>	82.31 <sub>17</sub>
35	29.553	72.77	32.781	22.43	60.736	70.27	47.520	82.48
Mittl. Ort	25.787	50.23	30.195	26.33	57.881	58.95	44.373	66.24
sec $\delta$ , tg $\delta$	1.524	+1.150	1.031	-0.251	1.015	+0.174	1.123	+0.510
a, a'	+4.1	+15.3	+2.9	+15.3	+3.2	+15.2	+3.5	+15.0
b, b'	+0.06	-0.64	-0.01	-0.65	+0.01	-0.65	+0.03	-0.67



Tag	101) $\beta$ Fornacis		102) $\tau^2$ Eridani		103) $\tau$ Persei		104) $\eta$ Eridani	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$2^h 46^m$	$-32^\circ 37'$	$2^h 48^m$	$-21^\circ 13'$	$2^h 50^m$	$+52^\circ 32'$	$2^h 53^m$	$-9^\circ 6'$
Jan. 0	<sup>n</sup> 47.250 <sub>148</sub>	<sup>n</sup> 86.94 <sub>130</sub>	<sup>a</sup> 32.406 <sub>118</sub>	61.76 <sub>119</sub>	<sup>a</sup> 20.687 <sub>194</sub>	" 25.80 <sub>95</sub>	<sup>e</sup> 44.120 <sub>98</sub>	68.46 <sub>100</sub>
10	47.102 <sub>170</sub>	88.24 <sub>91</sub>	32.288 <sub>140</sub>	62.95 <sub>88</sub>	20.493 <sub>234</sub>	26.75 <sub>56</sub>	44.022 <sub>122</sub>	69.46 <sub>80</sub>
20	46.932 <sub>186</sub>	89.15 <sub>48</sub>	32.148 <sub>158</sub>	63.83 <sub>57</sub>	20.259 <sub>264</sub>	27.31 <sub>13</sub>	43.900 <sub>141</sub>	70.26 <sub>60</sub>
30	46.746 <sub>197</sub>	89.63 <sub>5</sub>	31.990 <sub>169</sub>	64.40 <sub>22</sub>	19.995 <sub>283</sub>	27.44 <sub>29</sub>	43.759 <sub>153</sub>	70.86 <sub>38</sub>
Febr. 9	46.549 <sub>199</sub>	89.68 <sub>38</sub>	31.821 <sub>172</sub>	64.62 <sub>12</sub>	19.712 <sub>287</sub>	27.15 <sub>70</sub>	43.606 <sub>158</sub>	71.24 <sub>13</sub>
19	46.350 <sub>192</sub>	89.30 <sub>81</sub>	31.649 <sub>167</sub>	64.50 <sub>46</sub>	19.425 <sub>276</sub>	26.45 <sub>107</sub>	43.448 <sub>154</sub>	71.37 <sub>10</sub>
März 1	46.158 <sub>176</sub>	88.49 <sub>121</sub>	31.482 <sub>153</sub>	64.04 <sub>81</sub>	19.149 <sub>252</sub>	25.38 <sub>140</sub>	43.294 <sub>143</sub>	71.27 <sub>36</sub>
11	45.982 <sub>151</sub>	87.28 <sub>159</sub>	31.329 <sub>131</sub>	63.23 <sub>113</sub>	18.897 <sub>212</sub>	23.98 <sub>166</sub>	43.151 <sub>122</sub>	70.91 <sub>61</sub>
21	45.831 <sub>119</sub>	85.69 <sub>195</sub>	31.198 <sub>102</sub>	62.10 <sub>144</sub>	18.685 <sub>161</sub>	22.32 <sub>183</sub>	43.029 <sub>94</sub>	70.30 <sub>86</sub>
31	45.712 <sub>80</sub>	83.74 <sub>226</sub>	31.096 <sub>65</sub>	60.66 <sub>174</sub>	18.524 <sub>99</sub>	20.49 <sub>193</sub>	42.935 <sub>58</sub>	69.44 <sub>111</sub>
Apr. 10	45.632 <sub>34</sub>	81.48 <sub>253</sub>	31.031 <sub>22</sub>	58.92 <sub>200</sub>	18.425 <sub>30</sub>	18.56 <sub>194</sub>	42.877 <sub>18</sub>	68.33 <sub>135</sub>
20	45.598 <sub>14</sub>	78.95 <sub>276</sub>	31.009 <sub>23</sub>	56.92 <sub>223</sub>	18.395 <sub>43</sub>	16.62 <sub>187</sub>	42.859 <sub>26</sub>	66.98 <sub>158</sub>
30	45.612 <sub>65</sub>	76.19 <sub>293</sub>	31.032 <sub>70</sub>	54.69 <sub>242</sub>	18.438 <sub>116</sub>	14.75 <sub>172</sub>	42.885 <sub>71</sub>	65.40 <sub>179</sub>
Mai 10	45.677 <sub>116</sub>	73.26 <sub>304</sub>	31.102 <sub>117</sub>	52.27 <sub>256</sub>	18.554 <sub>187</sub>	13.03 <sub>150</sub>	42.956 <sub>117</sub>	63.61 <sub>196</sub>
20	45.793 <sub>165</sub>	70.22 <sub>308</sub>	31.219 <sub>161</sub>	49.71 <sub>266</sub>	18.741 <sub>253</sub>	11.53 <sub>123</sub>	43.073 <sub>160</sub>	61.65 <sub>210</sub>
30	45.958 <sub>209</sub>	67.14 <sub>305</sub>	31.380 <sub>203</sub>	47.05 <sub>268</sub>	18.994 <sub>312</sub>	10.30 <sub>90</sub>	43.233 <sub>199</sub>	59.55 <sub>219</sub>
Juni 9	46.167 <sub>248</sub>	64.09 <sub>296</sub>	31.583 <sub>238</sub>	44.37 <sub>266</sub>	19.306 <sub>363</sub>	9.40 <sub>56</sub>	43.432 <sub>234</sub>	57.36 <sub>223</sub>
19	46.415 <sub>282</sub>	61.13 <sub>278</sub>	31.821 <sub>268</sub>	41.71 <sub>255</sub>	19.669 <sub>402</sub>	8.84 <sub>19</sub>	43.666 <sub>261</sub>	55.13 <sub>222</sub>
29	46.697 <sub>307</sub>	58.35 <sub>254</sub>	32.089 <sub>291</sub>	39.16 <sub>239</sub>	20.071 <sub>433</sub>	8.65 <sub>19</sub>	43.927 <sub>283</sub>	52.91 <sub>215</sub>
Juli 9	47.004 <sub>325</sub>	55.81 <sub>222</sub>	32.380 <sub>306</sub>	36.77 <sub>216</sub>	20.504 <sub>451</sub>	8.84 <sub>55</sub>	44.210 <sub>296</sub>	50.76 <sub>202</sub>
19	47.329 <sub>334</sub>	53.59 <sub>185</sub>	32.686 <sub>313</sub>	34.61 <sub>188</sub>	20.955 <sub>459</sub>	9.39 <sub>91</sub>	44.506 <sub>304</sub>	48.74 <sub>184</sub>
29	47.663 <sub>335</sub>	51.74 <sub>142</sub>	32.999 <sub>313</sub>	32.73 <sub>153</sub>	21.414 <sub>458</sub>	10.30 <sub>123</sub>	44.810 <sub>303</sub>	46.90 <sub>160</sub>
Aug. 8	47.998 <sub>329</sub>	50.32 <sub>96</sub>	33.312 <sub>306</sub>	31.20 <sub>115</sub>	21.872 <sub>447</sub>	11.53 <sub>153</sub>	45.113 <sub>296</sub>	45.30 <sub>132</sub>
18	48.327 <sub>314</sub>	49.36 <sub>47</sub>	33.618 <sub>293</sub>	30.05 <sub>73</sub>	22.319 <sub>429</sub>	13.06 <sub>180</sub>	45.409 <sub>284</sub>	43.98 <sub>100</sub>
28	48.641 <sub>294</sub>	48.89 <sub>4</sub>	33.911 <sub>274</sub>	29.32 <sub>30</sub>	22.748 <sub>403</sub>	14.86 <sub>202</sub>	45.693 <sub>266</sub>	42.98 <sub>67</sub>
Sept. 7	48.935 <sub>268</sub>	48.93 <sub>54</sub>	34.185 <sub>250</sub>	29.02 <sub>13</sub>	23.151 <sub>372</sub>	16.88 <sub>221</sub>	45.959 <sub>245</sub>	42.31 <sub>31</sub>
17	49.203 <sub>237</sub>	49.47 <sub>101</sub>	34.435 <sub>222</sub>	29.15 <sub>56</sub>	23.523 <sub>337</sub>	19.09 <sub>235</sub>	46.204 <sub>219</sub>	42.00 <sub>4</sub>
27	49.440 <sub>203</sub>	50.48 <sub>143</sub>	34.657 <sub>193</sub>	29.71 <sub>94</sub>	23.860 <sub>297</sub>	21.44 <sub>245</sub>	46.423 <sub>193</sub>	42.04 <sub>37</sub>
Okt. 7	49.643 <sub>166</sub>	51.91 <sub>180</sub>	34.850 <sub>161</sub>	30.65 <sub>127</sub>	24.157 <sub>254</sub>	23.89 <sub>251</sub>	46.616 <sub>165</sub>	42.41 <sub>66</sub>
17	49.809 <sub>127</sub>	53.71 <sub>208</sub>	35.011 <sub>128</sub>	31.92 <sub>155</sub>	24.411 <sub>207</sub>	26.40 <sub>252</sub>	46.781 <sub>135</sub>	43.07 <sub>91</sub>
27	49.936 <sub>88</sub>	55.79 <sub>227</sub>	35.139 <sub>94</sub>	33.47 <sub>175</sub>	24.618 <sub>159</sub>	28.92 <sub>250</sub>	46.916 <sub>104</sub>	43.98 <sub>111</sub>
Nov. 5	50.024 <sub>49</sub>	58.06 <sub>237</sub>	35.233 <sub>60</sub>	35.22 <sub>187</sub>	24.777 <sub>108</sub>	31.42 <sub>241</sub>	47.020 <sub>73</sub>	45.09 <sub>126</sub>
15	50.073 <sub>10</sub>	60.43 <sub>238</sub>	35.293 <sub>27</sub>	37.09 <sub>192</sub>	24.885 <sub>54</sub>	33.83 <sub>227</sub>	47.093 <sub>43</sub>	46.35 <sub>133</sub>
25	50.083 <sub>27</sub>	62.81 <sub>228</sub>	35.320 <sub>7</sub>	39.01 <sub>187</sub>	24.939 <sub>1</sub>	36.10 <sub>209</sub>	47.136 <sub>11</sub>	47.68 <sub>135</sub>
Dez. 5	50.056 <sub>63</sub>	65.09 <sub>209</sub>	35.313 <sub>40</sub>	40.88 <sub>176</sub>	24.938 <sub>56</sub>	38.19 <sub>185</sub>	47.147 <sub>21</sub>	49.03 <sub>130</sub>
15	49.993 <sub>97</sub>	67.18 <sub>184</sub>	35.273 <sub>70</sub>	42.64 <sub>157</sub>	24.882 <sub>110</sub>	40.04 <sub>156</sub>	47.126 <sub>50</sub>	50.33 <sub>122</sub>
25	49.896 <sub>128</sub>	69.02 <sub>151</sub>	35.203 <sub>99</sub>	44.21 <sub>135</sub>	24.772 <sub>160</sub>	41.60 <sub>121</sub>	47.076 <sub>79</sub>	51.55 <sub>107</sub>
35	49.768	70.53	35.104	45.56	24.612	42.81	46.997	52.62
Mittl. Ort	47.289	69.42	32.547	47.20	20.590	20.12	44.304	57.40
sec $\delta$ , tg $\delta$	1.187	-0.640	1.073	-0.388	1.644	+1.305	1.013	-0.160
a, a'	+2.5	+15.0	+2.7	+14.9	+4.3	+14.8	+2.9	+14.6
b, b'	-0.03	-0.67	-0.02	-0.67	+0.06	-0.68	-0.01	-0.69



# Obere Kulmination Greenwich

57\*

Tag	106) $\delta$ Eridani <i>pr</i>		105) 47 H. Cephei		107) $\alpha$ Ceti		108) $\gamma$ Persei	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$2^h 56^m$	$-40^\circ 31'$	$2^h 58^m$	$+79^\circ 11'$	$2^h 59^m$	$+3^\circ 52'$	$3^h 0^m$	$+53^\circ 17'$
Jan. 0	10.652 <sup>174</sup>	45.96 <sup>144</sup>	43.71 <sup>82</sup>	84.27 <sup>192</sup>	23.875 <sup>89</sup>	23.31 <sup>66</sup>	48.032 <sup>188</sup>	39.21 <sup>107</sup>
10	10.478 <sup>200</sup>	47.40 <sup>99</sup>	42.89 <sup>95</sup>	86.19 <sup>137</sup>	23.786 <sup>114</sup>	22.65 <sup>61</sup>	47.844 <sup>232</sup>	40.28 <sup>69</sup>
20	10.278 <sup>220</sup>	48.39 <sup>52</sup>	41.94 <sup>103</sup>	87.56 <sup>80</sup>	23.672 <sup>134</sup>	22.04 <sup>53</sup>	47.612 <sup>266</sup>	40.97 <sup>26</sup>
30	10.058 <sup>231</sup>	48.91 <sup>3</sup>	40.91 <sup>109</sup>	88.36 <sup>19</sup>	23.538 <sup>148</sup>	21.51 <sup>44</sup>	47.346 <sup>288</sup>	41.23 <sup>17</sup>
Febr. 9	9.827 <sup>234</sup>	48.94 <sup>46</sup>	39.82 <sup>109</sup>	88.55 <sup>42</sup>	23.390 <sup>155</sup>	21.07 <sup>34</sup>	47.058 <sup>295</sup>	41.06 <sup>58</sup>
19	9.593 <sup>227</sup>	48.48 <sup>93</sup>	38.73 <sup>105</sup>	88.13 <sup>100</sup>	23.235 <sup>153</sup>	20.73 <sup>22</sup>	46.763 <sup>288</sup>	40.48 <sup>97</sup>
März 1	9.366 <sup>211</sup>	47.55 <sup>138</sup>	37.68 <sup>96</sup>	87.13 <sup>152</sup>	23.082 <sup>142</sup>	20.51 <sup>8</sup>	46.475 <sup>265</sup>	39.51 <sup>131</sup>
11	9.155 <sup>185</sup>	46.17 <sup>180</sup>	36.72 <sup>83</sup>	85.61 <sup>199</sup>	22.940 <sup>122</sup>	20.43 <sup>7</sup>	46.210 <sup>228</sup>	38.20 <sup>158</sup>
21	8.970 <sup>151</sup>	44.37 <sup>217</sup>	35.89 <sup>67</sup>	83.62 <sup>235</sup>	22.818 <sup>94</sup>	20.50 <sup>24</sup>	45.982 <sup>177</sup>	36.62 <sup>179</sup>
31	8.819 <sup>109</sup>	42.20 <sup>251</sup>	35.22 <sup>47</sup>	81.27 <sup>261</sup>	22.724 <sup>58</sup>	20.74 <sup>43</sup>	45.805 <sup>115</sup>	34.83 <sup>191</sup>
Apr. 10	8.710 <sup>61</sup>	39.69 <sup>280</sup>	34.75 <sup>26</sup>	78.66 <sup>277</sup>	22.666 <sup>18</sup>	21.17 <sup>62</sup>	45.690 <sup>47</sup>	32.92 <sup>194</sup>
20	8.649 <sup>8</sup>	36.89 <sup>303</sup>	34.49 <sup>4</sup>	75.89 <sup>282</sup>	22.648 <sup>27</sup>	21.79 <sup>84</sup>	45.643 <sup>27</sup>	30.98 <sup>190</sup>
30	8.641 <sup>46</sup>	33.86 <sup>319</sup>	34.45 <sup>19</sup>	73.07 <sup>276</sup>	22.675 <sup>73</sup>	22.63 <sup>104</sup>	45.670 <sup>101</sup>	29.08 <sup>177</sup>
Mai 10	8.687 <sup>102</sup>	30.67 <sup>329</sup>	34.64 <sup>40</sup>	70.31 <sup>260</sup>	22.748 <sup>118</sup>	23.67 <sup>124</sup>	45.771 <sup>174</sup>	27.31 <sup>158</sup>
20	8.789 <sup>155</sup>	27.38 <sup>332</sup>	35.04 <sup>60</sup>	67.71 <sup>236</sup>	22.866 <sup>161</sup>	24.91 <sup>141</sup>	45.945 <sup>243</sup>	25.73 <sup>132</sup>
30	8.944 <sup>205</sup>	24.06 <sup>327</sup>	35.64 <sup>78</sup>	65.35 <sup>204</sup>	23.027 <sup>201</sup>	26.32 <sup>157</sup>	46.188 <sup>304</sup>	24.41 <sup>101</sup>
Juni 9	9.149 <sup>250</sup>	20.79 <sup>314</sup>	36.42 <sup>95</sup>	63.31 <sup>166</sup>	23.228 <sup>235</sup>	27.89 <sup>169</sup>	46.492 <sup>357</sup>	23.40 <sup>68</sup>
19	9.399 <sup>287</sup>	17.65 <sup>292</sup>	37.37 <sup>107</sup>	61.65 <sup>123</sup>	23.463 <sup>262</sup>	29.58 <sup>176</sup>	46.849 <sup>400</sup>	22.72 <sup>32</sup>
29	9.686 <sup>319</sup>	14.73 <sup>265</sup>	38.44 <sup>118</sup>	60.42 <sup>77</sup>	23.725 <sup>284</sup>	31.34 <sup>180</sup>	47.249 <sup>433</sup>	22.40 <sup>4</sup>
Juli 9	10.005 <sup>341</sup>	12.08 <sup>230</sup>	39.62 <sup>126</sup>	59.65 <sup>29</sup>	24.009 <sup>297</sup>	33.14 <sup>178</sup>	47.682 <sup>454</sup>	22.44 <sup>41</sup>
19	10.346 <sup>354</sup>	9.78 <sup>188</sup>	40.88 <sup>129</sup>	59.36 <sup>20</sup>	24.306 <sup>304</sup>	34.92 <sup>172</sup>	48.136 <sup>466</sup>	22.85 <sup>77</sup>
29	10.700 <sup>359</sup>	7.90 <sup>140</sup>	42.17 <sup>131</sup>	59.56 <sup>68</sup>	24.610 <sup>303</sup>	36.64 <sup>160</sup>	48.602 <sup>467</sup>	23.62 <sup>109</sup>
Aug. 8	11.059 <sup>355</sup>	6.50 <sup>89</sup>	43.48 <sup>131</sup>	60.24 <sup>115</sup>	24.913 <sup>297</sup>	38.24 <sup>144</sup>	49.069 <sup>458</sup>	24.71 <sup>140</sup>
18	11.414 <sup>342</sup>	5.61 <sup>36</sup>	44.79 <sup>126</sup>	61.39 <sup>160</sup>	25.210 <sup>285</sup>	39.68 <sup>124</sup>	49.527 <sup>442</sup>	26.11 <sup>167</sup>
28	11.756 <sup>322</sup>	5.25 <sup>19</sup>	46.05 <sup>120</sup>	62.99 <sup>201</sup>	25.495 <sup>269</sup>	40.92 <sup>102</sup>	49.969 <sup>419</sup>	27.78 <sup>191</sup>
Sept. 7	12.078 <sup>295</sup>	5.44 <sup>74</sup>	47.25 <sup>112</sup>	65.00 <sup>238</sup>	25.764 <sup>248</sup>	41.94 <sup>77</sup>	50.388 <sup>390</sup>	29.69 <sup>212</sup>
17	12.373 <sup>262</sup>	6.18 <sup>124</sup>	48.37 <sup>102</sup>	67.38 <sup>272</sup>	26.012 <sup>225</sup>	42.71 <sup>52</sup>	50.778 <sup>356</sup>	31.81 <sup>227</sup>
27	12.635 <sup>225</sup>	7.42 <sup>169</sup>	49.39 <sup>88</sup>	70.10 <sup>300</sup>	26.237 <sup>200</sup>	43.23 <sup>27</sup>	51.134 <sup>316</sup>	34.08 <sup>239</sup>
Okt. 7	12.860 <sup>185</sup>	9.11 <sup>208</sup>	50.27 <sup>75</sup>	73.10 <sup>322</sup>	26.437 <sup>173</sup>	43.50 <sup>4</sup>	51.450 <sup>275</sup>	36.47 <sup>247</sup>
17	13.045 <sup>141</sup>	11.19 <sup>239</sup>	51.02 <sup>59</sup>	76.32 <sup>338</sup>	26.610 <sup>145</sup>	43.54 <sup>18</sup>	51.725 <sup>228</sup>	38.94 <sup>250</sup>
27	13.186 <sup>97</sup>	13.58 <sup>259</sup>	51.61 <sup>42</sup>	79.70 <sup>348</sup>	26.755 <sup>116</sup>	43.36 <sup>36</sup>	51.953 <sup>180</sup>	41.44 <sup>250</sup>
Nov. 5*)	13.283 <sup>51</sup>	16.17 <sup>269</sup>	52.03 <sup>23</sup>	83.18 <sup>349</sup>	26.871 <sup>86</sup>	43.00 <sup>50</sup>	52.133 <sup>127</sup>	43.94 <sup>243</sup>
15	13.334 <sup>7</sup>	18.86 <sup>269</sup>	52.26 <sup>4</sup>	86.67 <sup>341</sup>	26.957 <sup>55</sup>	42.50 <sup>61</sup>	52.260 <sup>72</sup>	46.37 <sup>231</sup>
25	13.341 <sup>37</sup>	21.55 <sup>256</sup>	52.30 <sup>16</sup>	90.08 <sup>326</sup>	27.012 <sup>25</sup>	41.89 <sup>67</sup>	52.332 <sup>15</sup>	48.68 <sup>215</sup>
Dez. 5	13.304 <sup>79</sup>	24.11 <sup>235</sup>	52.14 <sup>36</sup>	93.34 <sup>301</sup>	27.037 <sup>7</sup>	41.22 <sup>70</sup>	52.347 <sup>42</sup>	50.83 <sup>193</sup>
15	13.225 <sup>117</sup>	26.46 <sup>205</sup>	51.78 <sup>54</sup>	96.35 <sup>266</sup>	27.030 <sup>38</sup>	40.52 <sup>70</sup>	52.305 <sup>99</sup>	52.76 <sup>166</sup>
25	13.108 <sup>152</sup>	28.51 <sup>169</sup>	51.24 <sup>71</sup>	99.01 <sup>224</sup>	26.992 <sup>68</sup>	39.82 <sup>67</sup>	52.206 <sup>153</sup>	54.42 <sup>132</sup>
35	12.956	30.20	50.53	101.25	26.924	39.15	52.053	55.74
Mittl. Ort	10.497	27.02	41.19	75.13	24.068	30.54	47.861	33.72
sec $\delta$ , tg $\delta$	1.316	-0.855	5.339	+5.244	1.002	+0.068	1.673	+1.341
a, a'	+2.3	+14.4	+8.0	+14.3	+3.1	+14.2	+4.3	+14.1
b, b'	-0.04	-0.70	+0.25	-0.70	0.00	-0.71	+0.06	-0.71

\*) Bei Stern 107) und 108) lies Nov. 6.



## Scheinbare Sternörter 1945

Tag	109) $\rho$ Persei		110) $\mu$ Horologii		111) $\beta$ Persei		114) $\delta$ Arietis		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
1945	$3^h 1^m$	$+38^\circ 37'$	$3^h 2^m$	$-59^\circ 56'$	$3^h 4^m$	$+40^\circ 44'$	$3^h 8^m$	$+19^\circ 31'$	
Jan.	o	$38.506$ <sup>124</sup>	$45.26$ <sup>53</sup>	$19.722$ <sup>326</sup>	$83.36$ <sup>149</sup>	$34.819$ <sup>128</sup>	$45.79$ <sup>64</sup>	$28.580$ <sup>88</sup>	$9.39$ <sup>14</sup>
	10	$38.382$ <sup>158</sup>	$45.79$ <sup>26</sup>	$19.396$ <sup>362</sup>	$84.85$ <sup>95</sup>	$34.691$ <sup>164</sup>	$46.43$ <sup>34</sup>	$28.492$ <sup>117</sup>	$9.25$ <sup>23</sup>
	20	$38.224$ <sup>185</sup>	$46.05$ <sup>2</sup>	$19.034$ <sup>388</sup>	$85.80$ <sup>38</sup>	$34.527$ <sup>193</sup>	$46.77$ <sup>4</sup>	$28.375$ <sup>141</sup>	$9.02$ <sup>31</sup>
	30	$38.039$ <sup>203</sup>	$46.03$ <sup>32</sup>	$18.646$ <sup>401</sup>	$86.18$ <sup>20</sup>	$34.334$ <sup>211</sup>	$46.81$ <sup>26</sup>	$28.234$ <sup>158</sup>	$8.71$ <sup>40</sup>
Febr.	9	$37.836$ <sup>211</sup>	$45.71$ <sup>59</sup>	$18.245$ <sup>401</sup>	$85.98$ <sup>76</sup>	$34.123$ <sup>220</sup>	$46.55$ <sup>56</sup>	$28.076$ <sup>167</sup>	$8.31$ <sup>47</sup>
	19	$37.625$ <sup>207</sup>	$45.12$ <sup>83</sup>	$17.844$ <sup>387</sup>	$85.22$ <sup>130</sup>	$33.903$ <sup>217</sup>	$45.99$ <sup>83</sup>	$27.909$ <sup>166</sup>	$7.84$ <sup>51</sup>
März	1	$37.418$ <sup>192</sup>	$44.29$ <sup>104</sup>	$17.457$ <sup>363</sup>	$83.92$ <sup>181</sup>	$33.686$ <sup>201</sup>	$45.16$ <sup>106</sup>	$27.743$ <sup>155</sup>	$7.33$ <sup>53</sup>
	11	$37.226$ <sup>164</sup>	$43.25$ <sup>119</sup>	$17.094$ <sup>324</sup>	$82.11$ <sup>227</sup>	$33.485$ <sup>173</sup>	$44.10$ <sup>123</sup>	$27.588$ <sup>135</sup>	$6.80$ <sup>51</sup>
	21	$37.062$ <sup>126</sup>	$42.06$ <sup>128</sup>	$16.770$ <sup>275</sup>	$79.84$ <sup>267</sup>	$33.312$ <sup>135</sup>	$42.87$ <sup>134</sup>	$27.453$ <sup>105</sup>	$6.29$ <sup>47</sup>
	31	$36.936$ <sup>80</sup>	$40.78$ <sup>131</sup>	$16.495$ <sup>215</sup>	$77.17$ <sup>302</sup>	$33.177$ <sup>87</sup>	$41.53$ <sup>139</sup>	$27.348$ <sup>67</sup>	$5.82$ <sup>37</sup>
Apr.	10	$36.856$ <sup>26</sup>	$39.47$ <sup>128</sup>	$16.280$ <sup>148</sup>	$74.15$ <sup>330</sup>	$33.090$ <sup>32</sup>	$40.14$ <sup>137</sup>	$27.281$ <sup>25</sup>	$5.45$ <sup>25</sup>
	20	$36.830$ <sup>31</sup>	$38.19$ <sup>117</sup>	$16.132$ <sup>74</sup>	$70.85$ <sup>350</sup>	$33.058$ <sup>27</sup>	$38.77$ <sup>128</sup>	$27.256$ <sup>23</sup>	$5.20$ <sup>9</sup>
	30	$36.861$ <sup>89</sup>	$37.02$ <sup>101</sup>	$16.058$ <sup>3</sup>	$67.35$ <sup>364</sup>	$33.085$ <sup>87</sup>	$37.49$ <sup>113</sup>	$27.279$ <sup>72</sup>	$5.11$ <sup>9</sup>
Mai	10	$36.950$ <sup>146</sup>	$36.01$ <sup>80</sup>	$16.061$ <sup>81</sup>	$63.71$ <sup>369</sup>	$33.172$ <sup>146</sup>	$36.36$ <sup>93</sup>	$27.351$ <sup>121</sup>	$5.20$ <sup>30</sup>
	20	$37.096$ <sup>201</sup>	$35.21$ <sup>56</sup>	$16.142$ <sup>159</sup>	$60.02$ <sup>366</sup>	$33.318$ <sup>201</sup>	$35.43$ <sup>69</sup>	$27.472$ <sup>167</sup>	$5.50$ <sup>50</sup>
	30	$37.297$ <sup>249</sup>	$34.65$ <sup>29</sup>	$16.301$ <sup>233</sup>	$56.36$ <sup>355</sup>	$33.519$ <sup>252</sup>	$34.74$ <sup>41</sup>	$27.639$ <sup>208</sup>	$6.00$ <sup>72</sup>
Juni	9	$37.546$ <sup>290</sup>	$34.36$ <sup>0</sup>	$16.534$ <sup>301</sup>	$52.81$ <sup>335</sup>	$33.771$ <sup>295</sup>	$34.33$ <sup>12</sup>	$27.847$ <sup>244</sup>	$6.72$ <sup>91</sup>
	19	$37.836$ <sup>325</sup>	$34.36$ <sup>29</sup>	$16.835$ <sup>361</sup>	$49.46$ <sup>307</sup>	$34.066$ <sup>330</sup>	$34.21$ <sup>18</sup>	$28.091$ <sup>275</sup>	$7.63$ <sup>109</sup>
	29	$38.161$ <sup>350</sup>	$34.65$ <sup>57</sup>	$17.196$ <sup>411</sup>	$46.39$ <sup>270</sup>	$34.396$ <sup>356</sup>	$34.39$ <sup>47</sup>	$28.366$ <sup>297</sup>	$8.72$ <sup>123</sup>
Juli	9	$38.511$ <sup>366</sup>	$35.22$ <sup>84</sup>	$17.607$ <sup>451</sup>	$43.69$ <sup>227</sup>	$34.752$ <sup>374</sup>	$34.86$ <sup>75</sup>	$28.663$ <sup>312</sup>	$9.95$ <sup>135</sup>
	19	$38.877$ <sup>374</sup>	$36.06$ <sup>108</sup>	$18.058$ <sup>478</sup>	$41.42$ <sup>177</sup>	$35.126$ <sup>383</sup>	$35.61$ <sup>101</sup>	$28.975$ <sup>319</sup>	$11.30$ <sup>143</sup>
	29	$39.251$ <sup>374</sup>	$37.14$ <sup>130</sup>	$18.536$ <sup>492</sup>	$39.65$ <sup>122</sup>	$35.509$ <sup>384</sup>	$36.62$ <sup>124</sup>	$29.294$ <sup>321</sup>	$12.73$ <sup>147</sup>
Aug.	8	$39.625$ <sup>367</sup>	$38.44$ <sup>147</sup>	$19.028$ <sup>494</sup>	$38.43$ <sup>63</sup>	$35.893$ <sup>377</sup>	$37.86$ <sup>144</sup>	$29.615$ <sup>315</sup>	$14.20$ <sup>146</sup>
	18	$39.992$ <sup>354</sup>	$39.91$ <sup>162</sup>	$19.522$ <sup>481</sup>	$37.80$ <sup>2</sup>	$36.270$ <sup>364</sup>	$39.30$ <sup>160</sup>	$29.930$ <sup>304</sup>	$15.66$ <sup>142</sup>
	28	$40.346$ <sup>334</sup>	$41.53$ <sup>173</sup>	$20.003$ <sup>456</sup>	$37.78$ <sup>59</sup>	$36.634$ <sup>344</sup>	$40.90$ <sup>174</sup>	$30.234$ <sup>288</sup>	$17.08$ <sup>135</sup>
Sept.	7	$40.680$ <sup>310</sup>	$43.26$ <sup>180</sup>	$20.459$ <sup>419</sup>	$38.37$ <sup>118</sup>	$36.978$ <sup>321</sup>	$42.64$ <sup>182</sup>	$30.522$ <sup>268</sup>	$18.43$ <sup>124</sup>
	17	$40.990$ <sup>283</sup>	$45.06$ <sup>184</sup>	$20.878$ <sup>371</sup>	$39.55$ <sup>173</sup>	$37.299$ <sup>294</sup>	$44.46$ <sup>189</sup>	$30.790$ <sup>246</sup>	$19.67$ <sup>112</sup>
	27	$41.273$ <sup>254</sup>	$46.90$ <sup>185</sup>	$21.249$ <sup>314</sup>	$41.28$ <sup>221</sup>	$37.593$ <sup>263</sup>	$46.35$ <sup>192</sup>	$31.036$ <sup>221</sup>	$20.79$ <sup>99</sup>
Okt.	7	$41.527$ <sup>221</sup>	$48.75$ <sup>184</sup>	$21.563$ <sup>249</sup>	$43.49$ <sup>261</sup>	$37.856$ <sup>230</sup>	$48.27$ <sup>191</sup>	$31.257$ <sup>194</sup>	$21.78$ <sup>85</sup>
	17	$41.748$ <sup>187</sup>	$50.59$ <sup>179</sup>	$21.812$ <sup>179</sup>	$46.10$ <sup>291</sup>	$38.086$ <sup>195</sup>	$50.18$ <sup>189</sup>	$31.451$ <sup>166</sup>	$22.63$ <sup>71</sup>
	27	$41.935$ <sup>150</sup>	$52.38$ <sup>172</sup>	$21.991$ <sup>105</sup>	$49.01$ <sup>311</sup>	$38.281$ <sup>158</sup>	$52.07$ <sup>183</sup>	$31.617$ <sup>136</sup>	$23.34$ <sup>57</sup>
Nov.	6	$42.085$ <sup>112</sup>	$54.10$ <sup>163</sup>	$22.096$ <sup>30</sup>	$52.12$ <sup>316</sup>	$38.439$ <sup>117</sup>	$53.90$ <sup>174</sup>	$31.753$ <sup>106</sup>	$23.91$ <sup>45</sup>
	15	$42.197$ <sup>72</sup>	$55.73$ <sup>150</sup>	$22.126$ <sup>44</sup>	$55.28$ <sup>311</sup>	$38.556$ <sup>76</sup>	$55.64$ <sup>163</sup>	$31.859$ <sup>73</sup>	$24.36$ <sup>34</sup>
	25	$42.269$ <sup>30</sup>	$57.23$ <sup>135</sup>	$22.082$ <sup>116</sup>	$58.39$ <sup>294</sup>	$38.632$ <sup>33</sup>	$57.27$ <sup>148</sup>	$31.932$ <sup>39</sup>	$24.70$ <sup>23</sup>
Dez.	5	$42.299$ <sup>13</sup>	$58.58$ <sup>117</sup>	$21.966$ <sup>183</sup>	$61.33$ <sup>264</sup>	$38.665$ <sup>12</sup>	$58.75$ <sup>130</sup>	$31.971$ <sup>4</sup>	$24.93$ <sup>13</sup>
	15	$42.286$ <sup>55</sup>	$59.75$ <sup>96</sup>	$21.783$ <sup>243</sup>	$63.97$ <sup>226</sup>	$38.653$ <sup>57</sup>	$60.05$ <sup>107</sup>	$31.975$ <sup>30</sup>	$25.06$ <sup>3</sup>
	25	$42.231$ <sup>96</sup>	$60.71$ <sup>72</sup>	$21.540$ <sup>296</sup>	$66.23$ <sup>179</sup>	$38.596$ <sup>99</sup>	$61.12$ <sup>83</sup>	$31.945$ <sup>65</sup>	$25.09$ <sup>6</sup>
	35	$42.135$	$61.43$	$21.244$	$68.02$	$38.497$	$61.95$	$31.880$	$25.03$
Mittl. Ort		$38.569$	$42.98$	$18.843$	$61.50$	$34.845$	$43.09$	$28.727$	$12.19$
sec $\delta$ , tg $\delta$		$1.280$	$+0.799$	$1.997$	$-1.729$	$1.320$	$+0.862$	$1.061$	$+0.354$
a, a'		$+3.8$	$+14.1$	$+1.4$	$+14.0$	$+3.9$	$+13.9$	$+3.4$	$+13.6$
b, b'		$+0.04$	$-0.71$	$-0.08$	$-0.71$	$+0.04$	$-0.72$	$+0.02$	$-0.73$



# Obere Kulmination Greenwich

59\*

Tag	1090) 79 G. Fornacis		115) 48 H. Cephei		120) α Persei		121) ο Tauri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	3 <sup>h</sup> 12 <sup>m</sup>	-35° 45'	3 <sup>h</sup> 13 <sup>m</sup>	+77° 31'	3 <sup>h</sup> 20 <sup>m</sup>	+49° 39'	3 <sup>h</sup> 21 <sup>m</sup>	+8° 50'
Jan. 0	30.432 <sup>146</sup>	58.10 <sup>156</sup>	18.10 <sup>65</sup>	76.79 <sup>202</sup>	23.217 <sup>148</sup>	66.04 <sup>110</sup>	50.880 <sup>77</sup>	6.30 <sup>51</sup>
10	30.286 <sup>176</sup>	59.66 <sup>115</sup>	17.45 <sup>78</sup>	78.81 <sup>151</sup>	23.069 <sup>194</sup>	67.14 <sup>75</sup>	50.803 <sup>106</sup>	5.79 <sup>49</sup>
20	30.110 <sup>198</sup>	60.81 <sup>72</sup>	16.67 <sup>86</sup>	80.32 <sup>98</sup>	22.875 <sup>230</sup>	67.89 <sup>38</sup>	50.697 <sup>131</sup>	5.30 <sup>46</sup>
30	29.912 <sup>212</sup>	61.53 <sup>25</sup>	15.81 <sup>93</sup>	81.27 <sup>36</sup>	22.645 <sup>256</sup>	68.27 <sup>0</sup>	50.566 <sup>149</sup>	4.84 <sup>41</sup>
Febr. 9	29.700 <sup>220</sup>	61.78 <sup>21</sup>	14.88 <sup>94</sup>	81.63 <sup>23</sup>	22.389 <sup>270</sup>	68.27 <sup>38</sup>	50.417 <sup>160</sup>	4.43 <sup>37</sup>
19	29.480 <sup>217</sup>	61.57 <sup>66</sup>	13.94 <sup>91</sup>	81.40 <sup>81</sup>	22.119 <sup>269</sup>	67.89 <sup>74</sup>	50.257 <sup>162</sup>	4.06 <sup>30</sup>
März 1	29.263 <sup>205</sup>	60.91 <sup>110</sup>	13.03 <sup>86</sup>	80.59 <sup>135</sup>	21.850 <sup>253</sup>	67.15 <sup>107</sup>	50.095 <sup>154</sup>	3.76 <sup>21</sup>
11	29.058 <sup>183</sup>	59.81 <sup>151</sup>	12.17 <sup>75</sup>	79.24 <sup>182</sup>	21.597 <sup>224</sup>	66.08 <sup>134</sup>	49.941 <sup>137</sup>	3.55 <sup>11</sup>
21	28.875 <sup>153</sup>	58.30 <sup>189</sup>	11.42 <sup>61</sup>	77.42 <sup>220</sup>	21.373 <sup>181</sup>	64.74 <sup>154</sup>	49.804 <sup>110</sup>	3.44 <sup>2</sup>
31	28.722 <sup>115</sup>	56.41 <sup>224</sup>	10.81 <sup>45</sup>	75.22 <sup>249</sup>	21.192 <sup>127</sup>	63.20 <sup>167</sup>	49.694 <sup>77</sup>	3.46 <sup>17</sup>
Apr. 10	28.607 <sup>70</sup>	54.17 <sup>253</sup>	10.36 <sup>28</sup>	72.73 <sup>268</sup>	21.065 <sup>65</sup>	61.53 <sup>173</sup>	49.617 <sup>37</sup>	3.63 <sup>34</sup>
20	28.537 <sup>21</sup>	51.64 <sup>279</sup>	10.08 <sup>8</sup>	70.05 <sup>275</sup>	21.000 <sup>1</sup>	59.80 <sup>171</sup>	49.580 <sup>7</sup>	3.97 <sup>52</sup>
30	28.516 <sup>31</sup>	48.85 <sup>299</sup>	10.00 <sup>11</sup>	67.30 <sup>273</sup>	21.001 <sup>71</sup>	58.09 <sup>161</sup>	49.587 <sup>54</sup>	4.49 <sup>70</sup>
Mai 10	28.547 <sup>83</sup>	45.86 <sup>311</sup>	10.11 <sup>30</sup>	64.57 <sup>260</sup>	21.072 <sup>140</sup>	56.48 <sup>145</sup>	49.641 <sup>100</sup>	5.19 <sup>90</sup>
20	28.630 <sup>135</sup>	42.75 <sup>318</sup>	10.41 <sup>48</sup>	61.97 <sup>239</sup>	21.212 <sup>205</sup>	55.03 <sup>123</sup>	49.741 <sup>145</sup>	6.09 <sup>108</sup>
30	28.765 <sup>183</sup>	39.57 <sup>318</sup>	10.89 <sup>65</sup>	59.58 <sup>211</sup>	21.417 <sup>265</sup>	53.80 <sup>97</sup>	49.886 <sup>186</sup>	7.17 <sup>125</sup>
Juni 9	28.948 <sup>227</sup>	36.39 <sup>309</sup>	11.54 <sup>79</sup>	57.47 <sup>175</sup>	21.682 <sup>317</sup>	52.83 <sup>67</sup>	50.072 <sup>222</sup>	8.42 <sup>139</sup>
19	29.175 <sup>264</sup>	33.30 <sup>292</sup>	12.33 <sup>92</sup>	55.72 <sup>134</sup>	21.999 <sup>360</sup>	52.16 <sup>36</sup>	50.294 <sup>252</sup>	9.81 <sup>149</sup>
29	29.439 <sup>296</sup>	30.38 <sup>270</sup>	13.25 <sup>101</sup>	54.38 <sup>91</sup>	22.359 <sup>395</sup>	51.80 <sup>2</sup>	50.546 <sup>276</sup>	11.30 <sup>157</sup>
Juli 9	29.735 <sup>318</sup>	27.68 <sup>238</sup>	14.26 <sup>109</sup>	53.47 <sup>45</sup>	22.754 <sup>418</sup>	51.78 <sup>30</sup>	50.822 <sup>293</sup>	12.87 <sup>159</sup>
19	30.053 <sup>333</sup>	25.30 <sup>201</sup>	15.35 <sup>114</sup>	53.02 <sup>2</sup>	23.172 <sup>433</sup>	52.08 <sup>62</sup>	51.115 <sup>302</sup>	14.46 <sup>157</sup>
29	30.386 <sup>340</sup>	23.29 <sup>157</sup>	16.49 <sup>116</sup>	53.04 <sup>49</sup>	23.605 <sup>438</sup>	52.70 <sup>92</sup>	51.417 <sup>306</sup>	16.03 <sup>151</sup>
Aug. 8	30.726 <sup>338</sup>	21.72 <sup>109</sup>	17.65 <sup>115</sup>	53.53 <sup>96</sup>	24.043 <sup>435</sup>	53.62 <sup>120</sup>	51.723 <sup>302</sup>	17.54 <sup>140</sup>
18	31.064 <sup>330</sup>	20.63 <sup>58</sup>	18.80 <sup>114</sup>	54.49 <sup>139</sup>	24.478 <sup>424</sup>	54.82 <sup>144</sup>	52.025 <sup>294</sup>	18.94 <sup>126</sup>
28	31.394 <sup>313</sup>	20.05 <sup>5</sup>	19.94 <sup>109</sup>	55.88 <sup>181</sup>	24.902 <sup>406</sup>	56.26 <sup>166</sup>	52.319 <sup>281</sup>	20.20 <sup>108</sup>
Sept. 7	31.707 <sup>291</sup>	20.00 <sup>48</sup>	21.03 <sup>102</sup>	57.69 <sup>219</sup>	25.308 <sup>382</sup>	57.92 <sup>184</sup>	52.600 <sup>263</sup>	21.28 <sup>88</sup>
17	31.998 <sup>264</sup>	20.48 <sup>99</sup>	22.05 <sup>94</sup>	59.88 <sup>253</sup>	25.690 <sup>354</sup>	59.76 <sup>199</sup>	52.863 <sup>243</sup>	22.16 <sup>67</sup>
27	32.262 <sup>231</sup>	21.47 <sup>145</sup>	22.99 <sup>84</sup>	62.41 <sup>283</sup>	26.044 <sup>322</sup>	61.75 <sup>210</sup>	53.106 <sup>221</sup>	22.83 <sup>45</sup>
Okt. 7	32.493 <sup>195</sup>	22.92 <sup>185</sup>	23.83 <sup>72</sup>	65.24 <sup>306</sup>	26.366 <sup>285</sup>	63.85 <sup>218</sup>	53.327 <sup>196</sup>	23.28 <sup>24</sup>
17	32.688 <sup>157</sup>	24.77 <sup>218</sup>	24.55 <sup>59</sup>	68.30 <sup>325</sup>	26.651 <sup>245</sup>	66.03 <sup>223</sup>	53.523 <sup>169</sup>	23.52 <sup>6</sup>
27	32.845 <sup>117</sup>	26.95 <sup>242</sup>	25.14 <sup>44</sup>	71.55 <sup>336</sup>	26.896 <sup>201</sup>	68.26 <sup>223</sup>	53.692 <sup>141</sup>	23.58 <sup>11</sup>
Nov. 6	32.962 <sup>76</sup>	29.37 <sup>256</sup>	25.58 <sup>29</sup>	74.91 <sup>340</sup>	27.097 <sup>154</sup>	70.49 <sup>219</sup>	53.833 <sup>112</sup>	23.47 <sup>25</sup>
15	33.038 <sup>33</sup>	31.93 <sup>259</sup>	25.87 <sup>12</sup>	78.31 <sup>336</sup>	27.251 <sup>104</sup>	72.68 <sup>211</sup>	53.945 <sup>80</sup>	23.22 <sup>36</sup>
25	33.071 <sup>8</sup>	34.52 <sup>251</sup>	25.99 <sup>6</sup>	81.67 <sup>323</sup>	27.355 <sup>51</sup>	74.79 <sup>199</sup>	54.025 <sup>48</sup>	22.86 <sup>42</sup>
Dez. 5	33.063 <sup>49</sup>	37.03 <sup>235</sup>	25.93 <sup>22</sup>	84.90 <sup>303</sup>	27.406 <sup>3</sup>	76.78 <sup>181</sup>	54.073 <sup>15</sup>	22.44 <sup>48</sup>
15	33.014 <sup>88</sup>	39.38 <sup>210</sup>	25.71 <sup>40</sup>	87.93 <sup>271</sup>	27.403 <sup>59</sup>	78.59 <sup>158</sup>	54.088 <sup>20</sup>	21.96 <sup>49</sup>
25	32.926 <sup>124</sup>	41.48 <sup>178</sup>	25.31 <sup>56</sup>	90.64 <sup>232</sup>	27.344 <sup>113</sup>	80.17 <sup>131</sup>	54.068 <sup>53</sup>	21.47 <sup>50</sup>
35	32.802	43.26	24.75	92.96	27.231	81.48	54.015	20.97
Mittl. Ort	30.240	40.86	15.85	68.41	23.030	61.89	50.979	12.04
sec δ, tg δ	1.232	-0.720	4.633	+4.524	1.545	+1.178	1.012	+0.155
a, a'	+2.4	+13.4	+7.6	+13.3	+4.3	+12.9	+3.2	+12.8
b, b'	-0.03	-0.74	+0.20	-0.75	+0.05	-0.77	+0.01	-0.77



## Scheinbare Sternörter 1945

Tag	122) 2 H. Camelop.		125) 5 Tauri		127) ε Eridani <sup>1)</sup>		131) δ Persei	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	3 <sup>h</sup> 24 <sup>m</sup>	+59° 44'	3 <sup>h</sup> 27 <sup>m</sup>	+12° 44'	3 <sup>h</sup> 30 <sup>m</sup>	-9° 38'	3 <sup>h</sup> 38 <sup>m</sup>	+47° 36'
Jan. 0	36.257 <sup>n</sup> <sub>210</sub>	68.05 <sup>n</sup> <sub>152</sub>	49.871 <sup>n</sup> <sub>73</sub>	53.88 <sup>n</sup> <sub>36</sub>	20.212 <sup>n</sup> <sub>86</sub>	46.34 <sup>n</sup> <sub>112</sub>	60.113 <sup>n</sup> <sub>119</sub>	51.86 <sup>n</sup> <sub>114</sub>
10	36.047 <sub>268</sub>	69.57 <sub>112</sub>	49.798 <sub>105</sub>	53.52 <sub>38</sub>	20.126 <sub>114</sub>	47.46 <sub>92</sub>	59.994 <sub>168</sub>	53.00 <sub>84</sub>
20	35.779 <sub>315</sub>	70.69 <sub>67</sub>	49.693 <sub>130</sub>	53.14 <sub>37</sub>	20.012 <sub>139</sub>	48.38 <sub>71</sub>	59.826 <sub>208</sub>	53.84 <sub>51</sub>
30	35.464 <sub>348</sub>	71.36 <sub>20</sub>	49.563 <sub>151</sub>	52.77 <sub>38</sub>	19.873 <sub>157</sub>	49.09 <sub>46</sub>	59.618 <sub>238</sub>	54.35 <sub>15</sub>
Febr. 9	35.116 <sub>365</sub>	71.56 <sub>26</sub>	49.412 <sub>163</sub>	52.39 <sub>37</sub>	19.716 <sub>167</sub>	49.55 <sub>22</sub>	59.380 <sub>257</sub>	54.50 <sub>20</sub>
19	34.751 <sub>363</sub>	71.30 <sub>71</sub>	49.249 <sub>165</sub>	52.02 <sub>34</sub>	19.549 <sub>170</sub>	49.77 <sub>4</sub>	59.123 <sub>261</sub>	54.30 <sub>54</sub>
März 1	34.388 <sub>343</sub>	70.59 <sub>113</sub>	49.084 <sub>158</sub>	51.68 <sub>30</sub>	19.379 <sub>163</sub>	49.73 <sub>30</sub>	58.862 <sub>251</sub>	53.76 <sub>86</sub>
11	34.045 <sub>305</sub>	69.46 <sub>149</sub>	48.926 <sub>142</sub>	51.38 <sub>23</sub>	19.216 <sub>147</sub>	49.43 <sub>55</sub>	58.611 <sub>226</sub>	52.90 <sub>113</sub>
21	33.740 <sub>250</sub>	67.97 <sub>178</sub>	48.784 <sub>116</sub>	51.15 <sub>14</sub>	19.069 <sub>122</sub>	48.88 <sub>82</sub>	58.385 <sub>190</sub>	51.77 <sub>135</sub>
31	33.490 <sub>183</sub>	66.19 <sub>199</sub>	48.668 <sub>82</sub>	51.01 <sub>2</sub>	18.947 <sub>90</sub>	48.06 <sub>107</sub>	58.195 <sub>141</sub>	50.42 <sub>149</sub>
Apr. 10	33.307 <sub>105</sub>	64.20 <sub>210</sub>	48.586 <sub>41</sub>	50.99 <sub>13</sub>	18.857 <sub>52</sub>	46.99 <sub>132</sub>	58.054 <sub>84</sub>	48.93 <sub>157</sub>
20	33.202 <sub>20</sub>	62.10 <sub>214</sub>	48.545 <sub>3</sub>	51.12 <sub>28</sub>	18.805 <sub>8</sub>	45.67 <sub>155</sub>	57.970 <sub>20</sub>	47.36 <sub>158</sub>
30	33.182 <sub>67</sub>	59.96 <sub>209</sub>	48.548 <sub>50</sub>	51.40 <sub>47</sub>	18.797 <sub>37</sub>	44.12 <sub>175</sub>	57.950 <sub>46</sub>	45.78 <sub>152</sub>
Mai 10	33.249 <sub>154</sub>	57.87 <sub>195</sub>	48.598 <sub>97</sub>	51.87 <sub>66</sub>	18.834 <sub>83</sub>	42.37 <sub>193</sub>	57.996 <sub>112</sub>	44.26 <sub>138</sub>
20	33.403 <sub>236</sub>	55.92 <sub>174</sub>	48.695 <sub>142</sub>	52.53 <sub>84</sub>	18.917 <sub>127</sub>	40.44 <sub>208</sub>	58.108 <sub>176</sub>	42.88 <sub>120</sub>
30	33.639 <sub>311</sub>	54.18 <sub>148</sub>	48.837 <sub>185</sub>	53.37 <sub>101</sub>	19.044 <sub>168</sub>	38.36 <sub>218</sub>	58.284 <sub>236</sub>	41.68 <sub>97</sub>
Juni 9	33.950 <sub>378</sub>	52.70 <sub>117</sub>	49.022 <sub>221</sub>	54.38 <sub>118</sub>	19.212 <sub>206</sub>	36.18 <sub>222</sub>	58.520 <sub>288</sub>	40.71 <sub>71</sub>
19	34.328 <sub>435</sub>	51.53 <sub>82</sub>	49.243 <sub>253</sub>	55.56 <sub>130</sub>	19.418 <sub>237</sub>	33.96 <sub>222</sub>	58.808 <sub>333</sub>	40.00 <sub>42</sub>
29	34.763 <sub>479</sub>	50.71 <sub>45</sub>	49.496 <sub>277</sub>	56.86 <sub>139</sub>	19.655 <sub>263</sub>	31.74 <sub>217</sub>	59.141 <sub>369</sub>	39.58 <sub>13</sub>
Juli 9	35.242 <sub>511</sub>	50.26 <sub>7</sub>	49.773 <sub>295</sub>	58.25 <sub>146</sub>	19.918 <sub>282</sub>	29.57 <sub>204</sub>	59.510 <sub>396</sub>	39.45 <sub>18</sub>
19	35.753 <sub>533</sub>	50.19 <sub>31</sub>	50.068 <sub>305</sub>	59.71 <sub>147</sub>	20.200 <sub>293</sub>	27.53 <sub>187</sub>	59.906 <sub>414</sub>	39.63 <sub>46</sub>
29	36.286 <sub>542</sub>	50.50 <sub>67</sub>	50.373 <sub>309</sub>	61.18 <sub>144</sub>	20.493 <sub>298</sub>	25.66 <sub>163</sub>	60.320 <sub>422</sub>	40.09 <sub>74</sub>
Aug. 8	36.828 <sub>541</sub>	51.17 <sub>103</sub>	50.682 <sub>307</sub>	62.62 <sub>138</sub>	20.791 <sub>296</sub>	24.03 <sub>135</sub>	60.742 <sub>423</sub>	40.83 <sub>100</sub>
18	37.369 <sub>530</sub>	52.20 <sub>136</sub>	50.989 <sub>299</sub>	64.00 <sub>127</sub>	21.087 <sub>290</sub>	22.68 <sub>103</sub>	61.165 <sub>417</sub>	41.83 <sub>123</sub>
28	37.899 <sub>510</sub>	53.56 <sub>166</sub>	51.288 <sub>287</sub>	65.27 <sub>113</sub>	21.377 <sub>277</sub>	21.65 <sub>69</sub>	61.582 <sub>403</sub>	43.06 <sub>143</sub>
Sept. 7	38.409 <sub>482</sub>	55.22 <sub>192</sub>	51.575 <sub>270</sub>	66.40 <sub>97</sub>	21.654 <sub>260</sub>	20.96 <sub>32</sub>	61.985 <sub>384</sub>	44.49 <sub>161</sub>
17	38.891 <sub>448</sub>	57.14 <sub>216</sub>	51.845 <sub>251</sub>	67.37 <sub>79</sub>	21.914 <sub>240</sub>	20.64 <sub>4</sub>	62.369 <sub>360</sub>	46.10 <sub>175</sub>
27	39.339 <sub>407</sub>	59.30 <sub>236</sub>	52.096 <sub>228</sub>	68.16 <sub>61</sub>	22.154 <sub>217</sub>	20.68 <sub>40</sub>	62.729 <sub>332</sub>	47.85 <sub>187</sub>
Okt. 7	39.746 <sub>360</sub>	61.66 <sub>250</sub>	52.324 <sub>205</sub>	68.77 <sub>43</sub>	22.371 <sub>192</sub>	21.08 <sub>71</sub>	63.061 <sub>299</sub>	49.72 <sub>195</sub>
17	40.106 <sub>308</sub>	64.16 <sub>262</sub>	52.529 <sub>178</sub>	69.20 <sub>26</sub>	22.563 <sub>163</sub>	21.79 <sub>99</sub>	63.360 <sub>264</sub>	51.67 <sub>200</sub>
27	40.414 <sub>251</sub>	66.78 <sub>267</sub>	52.707 <sub>151</sub>	69.46 <sub>11</sub>	22.726 <sub>135</sub>	22.78 <sub>121</sub>	63.624 <sub>223</sub>	53.67 <sub>203</sub>
Nov. 6	40.665 <sub>189</sub>	69.45 <sub>268</sub>	52.858 <sub>120</sub>	69.57 <sub>2</sub>	22.861 <sub>104</sub>	23.99 <sub>136</sub>	63.847 <sub>179</sub>	55.70 <sub>202</sub>
15*)	40.854 <sub>122</sub>	72.13 <sub>262</sub>	52.978 <sub>89</sub>	69.55 <sub>13</sub>	22.965 <sub>72</sub>	25.35 <sub>146</sub>	64.026 <sub>131</sub>	57.72 <sub>197</sub>
25	40.976 <sub>51</sub>	74.75 <sub>251</sub>	53.067 <sub>56</sub>	69.42 <sub>20</sub>	23.037 <sub>38</sub>	26.81 <sub>149</sub>	64.157 <sub>80</sub>	59.69 <sub>188</sub>
Dez. 5	41.027 <sub>21</sub>	77.26 <sub>233</sub>	53.123 <sub>21</sub>	69.22 <sub>26</sub>	23.075 <sub>5</sub>	28.30 <sub>145</sub>	64.237 <sub>26</sub>	61.57 <sub>174</sub>
15	41.006 <sub>93</sub>	79.59 <sub>208</sub>	53.144 <sub>14</sub>	68.96 <sub>30</sub>	23.080 <sub>30</sub>	29.75 <sub>135</sub>	64.263 <sub>28</sub>	63.31 <sub>155</sub>
25	40.913 <sub>164</sub>	81.67 <sub>176</sub>	53.130 <sub>49</sub>	68.66 <sub>33</sub>	23.050 <sub>63</sub>	31.10 <sub>122</sub>	64.235 <sub>83</sub>	64.86 <sub>133</sub>
35	40.749	83.43	53.081	68.33	22.987	32.32	64.152	66.19
Mittl. Ort	35.751	62.29	49.946	58.58	20.223	35.70	59.886	48.72
sec δ, tg δ	1.985	+1.715	1.025	+0.226	1.014	-0.170	1.483	+1.096
a, a'	+4.9	+12.6	+3.3	+12.4	+2.9	+12.2	+4.3	+11.6
b, b'	+0.07	-0.78	+0.01	-0.79	-0.01	-0.79	+0.04	-0.82

<sup>1)</sup> Die jährliche Parallaxe (α<sup>o</sup>305) ist bereits berücksichtigt.

\*) Bei Stern 131) lies Nov. 16.



Tag	134) $\nu$ Persei		141) $\beta$ Reticuli		139) $\eta$ Tauri		140) $\tau^8$ Eridani	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	3 <sup>h</sup> 41 <sup>m</sup>	+42° 24'	3 <sup>h</sup> 43 <sup>m</sup>	-64° 58'	3 <sup>h</sup> 44 <sup>m</sup>	+23° 56'	3 <sup>h</sup> 44 <sup>m</sup>	-23° 24'
Jan. 0	27.060 <sup>a</sup> <sub>101</sub>	25.77 <sup>"</sup> <sub>93</sub>	31.99 <sup>"</sup> <sub>37</sub>	66.28 <sup>"</sup> <sub>198</sub>	12.599 <sup>"</sup> <sub>68</sub>	9.79 <sup>"</sup> <sub>13</sub>	29.014 <sup>"</sup> <sub>95</sub>	52.93 <sup>"</sup> <sub>161</sub>
10	26.959 <sup>"</sup> <sub>145</sub>	26.70 <sup>"</sup> <sub>67</sub>	31.62 <sup>"</sup> <sub>42</sub>	68.26 <sup>"</sup> <sub>145</sub>	12.531 <sup>"</sup> <sub>104</sub>	9.92 <sup>"</sup> <sub>3</sub>	28.919 <sup>"</sup> <sub>127</sub>	54.54 <sup>"</sup> <sub>129</sub>
20	26.814 <sup>"</sup> <sub>182</sub>	27.37 <sup>"</sup> <sub>39</sub>	31.20 <sup>"</sup> <sub>47</sub>	69.71 <sup>"</sup> <sub>89</sub>	12.427 <sup>"</sup> <sub>135</sub>	9.95 <sup>"</sup> <sub>8</sub>	28.792 <sup>"</sup> <sub>155</sub>	55.83 <sup>"</sup> <sub>97</sub>
30	26.632 <sup>"</sup> <sub>211</sub>	27.76 <sup>"</sup> <sub>9</sub>	30.73 <sup>"</sup> <sub>50</sub>	70.60 <sup>"</sup> <sub>32</sub>	12.292 <sup>"</sup> <sub>160</sub>	9.87 <sup>"</sup> <sub>20</sub>	28.637 <sup>"</sup> <sub>176</sub>	56.80 <sup>"</sup> <sub>60</sub>
Febr. 9	26.421 <sup>"</sup> <sub>230</sub>	27.85 <sup>"</sup> <sub>22</sub>	30.23 <sup>"</sup> <sub>51</sub>	70.92 <sup>"</sup> <sub>26</sub>	12.132 <sup>"</sup> <sub>176</sub>	9.67 <sup>"</sup> <sub>30</sub>	28.461 <sup>"</sup> <sub>189</sub>	57.40 <sup>"</sup> <sub>22</sub>
19	26.191 <sup>"</sup> <sub>234</sub>	27.63 <sup>"</sup> <sub>51</sub>	29.72 <sup>"</sup> <sub>51</sub>	70.66 <sup>"</sup> <sub>83</sub>	11.956 <sup>"</sup> <sub>181</sub>	9.37 <sup>"</sup> <sub>40</sub>	28.272 <sup>"</sup> <sub>194</sub>	57.62 <sup>"</sup> <sub>15</sub>
März 1	25.957 <sup>"</sup> <sub>226</sub>	27.12 <sup>"</sup> <sub>77</sub>	29.21 <sup>"</sup> <sub>50</sub>	69.83 <sup>"</sup> <sub>136</sub>	11.775 <sup>"</sup> <sub>177</sub>	8.97 <sup>"</sup> <sub>47</sub>	28.078 <sup>"</sup> <sub>189</sub>	57.47 <sup>"</sup> <sub>52</sub>
11	25.731 <sup>"</sup> <sub>205</sub>	26.35 <sup>"</sup> <sub>100</sub>	28.71 <sup>"</sup> <sub>46</sub>	68.47 <sup>"</sup> <sub>187</sub>	11.598 <sup>"</sup> <sub>161</sub>	8.50 <sup>"</sup> <sub>52</sub>	27.889 <sup>"</sup> <sub>175</sub>	56.95 <sup>"</sup> <sub>89</sub>
21	25.526 <sup>"</sup> <sub>172</sub>	25.35 <sup>"</sup> <sub>118</sub>	28.25 <sup>"</sup> <sub>41</sub>	66.60 <sup>"</sup> <sub>232</sub>	11.437 <sup>"</sup> <sub>136</sub>	7.98 <sup>"</sup> <sub>54</sub>	27.714 <sup>"</sup> <sub>151</sub>	56.06 <sup>"</sup> <sub>123</sub>
31	25.354 <sup>"</sup> <sub>128</sub>	24.17 <sup>"</sup> <sub>128</sub>	27.84 <sup>"</sup> <sub>35</sub>	64.28 <sup>"</sup> <sub>272</sub>	11.301 <sup>"</sup> <sub>101</sub>	7.44 <sup>"</sup> <sub>51</sub>	27.563 <sup>"</sup> <sub>120</sub>	54.83 <sup>"</sup> <sub>156</sub>
Apr. 10	25.226 <sup>"</sup> <sub>76</sub>	22.89 <sup>"</sup> <sub>134</sub>	27.49 <sup>"</sup> <sub>28</sub>	61.56 <sup>"</sup> <sub>306</sub>	11.200 <sup>"</sup> <sub>58</sub>	6.93 <sup>"</sup> <sub>45</sub>	27.443 <sup>"</sup> <sub>81</sub>	53.27 <sup>"</sup> <sub>186</sub>
20	25.150 <sup>"</sup> <sub>18</sub>	21.55 <sup>"</sup> <sub>132</sub>	27.21 <sup>"</sup> <sub>20</sub>	58.50 <sup>"</sup> <sub>334</sub>	11.142 <sup>"</sup> <sub>12</sub>	6.48 <sup>"</sup> <sub>34</sub>	27.362 <sup>"</sup> <sub>38</sub>	51.41 <sup>"</sup> <sub>213</sub>
30	25.132 <sup>"</sup> <sub>43</sub>	20.23 <sup>"</sup> <sub>124</sub>	27.01 <sup>"</sup> <sub>11</sub>	55.16 <sup>"</sup> <sub>354</sub>	11.130 <sup>"</sup> <sub>38</sub>	6.14 <sup>"</sup> <sub>21</sub>	27.324 <sup>"</sup> <sub>9</sub>	49.28 <sup>"</sup> <sub>236</sub>
Mai 10	25.175 <sup>"</sup> <sub>104</sub>	18.99 <sup>"</sup> <sub>111</sub>	26.90 <sup>"</sup> <sub>2</sub>	51.62 <sup>"</sup> <sub>366</sub>	11.168 <sup>"</sup> <sub>88</sub>	5.93 <sup>"</sup> <sub>5</sub>	27.333 <sup>"</sup> <sub>56</sub>	46.92 <sup>"</sup> <sub>254</sub>
20	25.279 <sup>"</sup> <sub>163</sub>	17.88 <sup>"</sup> <sub>93</sub>	26.88 <sup>"</sup> <sub>7</sub>	47.96 <sup>"</sup> <sub>370</sub>	11.256 <sup>"</sup> <sub>137</sub>	5.88 <sup>"</sup> <sub>13</sub>	27.389 <sup>"</sup> <sub>104</sub>	44.38 <sup>"</sup> <sub>267</sub>
30	25.442 <sup>"</sup> <sub>218</sub>	16.95 <sup>"</sup> <sub>70</sub>	26.95 <sup>"</sup> <sub>16</sub>	44.26 <sup>"</sup> <sub>365</sub>	11.393 <sup>"</sup> <sub>183</sub>	6.01 <sup>"</sup> <sub>32</sub>	27.493 <sup>"</sup> <sub>149</sub>	41.71 <sup>"</sup> <sub>274</sub>
Juni 9	25.660 <sup>"</sup> <sub>267</sub>	16.25 <sup>"</sup> <sub>46</sub>	27.11 <sup>"</sup> <sub>25</sub>	40.61 <sup>"</sup> <sub>353</sub>	11.576 <sup>"</sup> <sub>223</sub>	6.33 <sup>"</sup> <sub>51</sub>	27.642 <sup>"</sup> <sub>189</sub>	38.97 <sup>"</sup> <sub>275</sub>
19	25.927 <sup>"</sup> <sub>308</sub>	15.79 <sup>"</sup> <sub>20</sub>	27.36 <sup>"</sup> <sub>33</sub>	37.08 <sup>"</sup> <sub>330</sub>	11.799 <sup>"</sup> <sub>257</sub>	6.84 <sup>"</sup> <sub>69</sub>	27.831 <sup>"</sup> <sub>226</sub>	36.22 <sup>"</sup> <sub>269</sub>
29	26.235 <sup>"</sup> <sub>342</sub>	15.59 <sup>"</sup> <sub>7</sub>	27.69 <sup>"</sup> <sub>40</sub>	33.78 <sup>"</sup> <sub>300</sub>	12.056 <sup>"</sup> <sub>285</sub>	7.53 <sup>"</sup> <sub>84</sub>	28.057 <sup>"</sup> <sub>256</sub>	33.53 <sup>"</sup> <sub>255</sub>
Juli 9	26.577 <sup>"</sup> <sub>366</sub>	15.66 <sup>"</sup> <sub>34</sub>	28.09 <sup>"</sup> <sub>46</sub>	30.78 <sup>"</sup> <sub>261</sub>	12.341 <sup>"</sup> <sub>306</sub>	8.37 <sup>"</sup> <sub>99</sub>	28.313 <sup>"</sup> <sub>280</sub>	30.98 <sup>"</sup> <sub>235</sub>
19	26.943 <sup>"</sup> <sub>383</sub>	16.00 <sup>"</sup> <sub>59</sub>	28.55 <sup>"</sup> <sub>50</sub>	28.17 <sup>"</sup> <sub>214</sub>	12.647 <sup>"</sup> <sub>319</sub>	9.36 <sup>"</sup> <sub>110</sub>	28.593 <sup>"</sup> <sub>297</sub>	28.63 <sup>"</sup> <sub>209</sub>
29	27.326 <sup>"</sup> <sub>391</sub>	16.59 <sup>"</sup> <sub>82</sub>	29.05 <sup>"</sup> <sub>55</sub>	26.03 <sup>"</sup> <sub>162</sub>	12.966 <sup>"</sup> <sub>326</sub>	10.46 <sup>"</sup> <sub>117</sub>	28.890 <sup>"</sup> <sub>305</sub>	26.54 <sup>"</sup> <sub>175</sub>
Aug. 8	27.717 <sup>"</sup> <sub>392</sub>	17.41 <sup>"</sup> <sub>104</sub>	29.60 <sup>"</sup> <sub>56</sub>	24.41 <sup>"</sup> <sub>105</sub>	13.292 <sup>"</sup> <sub>326</sub>	11.63 <sup>"</sup> <sub>122</sub>	29.195 <sup>"</sup> <sub>309</sub>	24.79 <sup>"</sup> <sub>137</sub>
18	28.109 <sup>"</sup> <sub>385</sub>	18.45 <sup>"</sup> <sub>122</sub>	30.16 <sup>"</sup> <sub>56</sub>	23.36 <sup>"</sup> <sub>44</sub>	13.618 <sup>"</sup> <sub>321</sub>	12.85 <sup>"</sup> <sub>122</sub>	29.504 <sup>"</sup> <sub>305</sub>	23.42 <sup>"</sup> <sub>94</sub>
28	28.494 <sup>"</sup> <sub>373</sub>	19.67 <sup>"</sup> <sub>138</sub>	30.72 <sup>"</sup> <sub>55</sub>	22.92 <sup>"</sup> <sub>20</sub>	13.939 <sup>"</sup> <sub>310</sub>	14.07 <sup>"</sup> <sub>120</sub>	29.809 <sup>"</sup> <sub>296</sub>	22.48 <sup>"</sup> <sub>48</sub>
Sept. 7	28.867 <sup>"</sup> <sub>356</sub>	21.05 <sup>"</sup> <sub>151</sub>	31.27 <sup>"</sup> <sub>52</sub>	23.12 <sup>"</sup> <sub>82</sub>	14.249 <sup>"</sup> <sub>296</sub>	15.27 <sup>"</sup> <sub>114</sub>	30.105 <sup>"</sup> <sub>281</sub>	22.00 <sup>"</sup> <sub>1</sub>
17	29.223 <sup>"</sup> <sub>335</sub>	22.56 <sup>"</sup> <sub>160</sub>	31.79 <sup>"</sup> <sub>49</sub>	23.94 <sup>"</sup> <sub>142</sub>	14.545 <sup>"</sup> <sub>278</sub>	16.41 <sup>"</sup> <sub>108</sub>	30.386 <sup>"</sup> <sub>262</sub>	21.99 <sup>"</sup> <sub>45</sub>
27	29.558 <sup>"</sup> <sub>308</sub>	24.16 <sup>"</sup> <sub>168</sub>	32.28 <sup>"</sup> <sub>42</sub>	25.36 <sup>"</sup> <sub>197</sub>	14.823 <sup>"</sup> <sub>257</sub>	17.49 <sup>"</sup> <sub>99</sub>	30.648 <sup>"</sup> <sub>239</sub>	22.44 <sup>"</sup> <sub>89</sub>
Okt. 7	29.866 <sup>"</sup> <sub>280</sub>	25.84 <sup>"</sup> <sub>173</sub>	32.70 <sup>"</sup> <sub>36</sub>	27.33 <sup>"</sup> <sub>244</sub>	15.080 <sup>"</sup> <sub>233</sub>	18.48 <sup>"</sup> <sub>89</sub>	30.887 <sup>"</sup> <sub>212</sub>	23.33 <sup>"</sup> <sub>130</sub>
17	30.146 <sup>"</sup> <sub>247</sub>	27.57 <sup>"</sup> <sub>175</sub>	33.06 <sup>"</sup> <sub>28</sub>	29.77 <sup>"</sup> <sub>283</sub>	15.313 <sup>"</sup> <sub>208</sub>	19.37 <sup>"</sup> <sub>81</sub>	31.099 <sup>"</sup> <sub>182</sub>	24.63 <sup>"</sup> <sub>164</sub>
27	30.393 <sup>"</sup> <sub>211</sub>	29.32 <sup>"</sup> <sub>175</sub>	33.34 <sup>"</sup> <sub>20</sub>	32.60 <sup>"</sup> <sub>311</sub>	15.521 <sup>"</sup> <sub>179</sub>	20.18 <sup>"</sup> <sub>71</sub>	31.281 <sup>"</sup> <sub>151</sub>	26.27 <sup>"</sup> <sub>190</sub>
Nov. 6	30.604 <sup>"</sup> <sub>171</sub>	31.07 <sup>"</sup> <sub>172</sub>	33.54 <sup>"</sup> <sub>11</sub>	35.71 <sup>"</sup> <sub>327</sub>	15.700 <sup>"</sup> <sub>148</sub>	20.89 <sup>"</sup> <sub>62</sub>	31.432 <sup>"</sup> <sub>117</sub>	28.17 <sup>"</sup> <sub>210</sub>
16	30.775 <sup>"</sup> <sub>128</sub>	32.79 <sup>"</sup> <sub>167</sub>	33.65 <sup>"</sup> <sub>1</sub>	38.98 <sup>"</sup> <sub>329</sub>	15.848 <sup>"</sup> <sub>114</sub>	21.51 <sup>"</sup> <sub>53</sub>	31.549 <sup>"</sup> <sub>80</sub>	30.27 <sup>"</sup> <sub>220</sub>
25	30.903 <sup>"</sup> <sub>83</sub>	34.46 <sup>"</sup> <sub>158</sub>	33.66 <sup>"</sup> <sub>8</sub>	42.27 <sup>"</sup> <sub>320</sub>	15.962 <sup>"</sup> <sub>78</sub>	22.04 <sup>"</sup> <sub>46</sub>	31.629 <sup>"</sup> <sub>43</sub>	32.47 <sup>"</sup> <sub>220</sub>
Dez. 5	30.986 <sup>"</sup> <sub>33</sub>	36.04 <sup>"</sup> <sub>146</sub>	33.58 <sup>"</sup> <sub>16</sub>	45.47 <sup>"</sup> <sub>299</sub>	16.040 <sup>"</sup> <sub>39</sub>	22.50 <sup>"</sup> <sub>38</sub>	31.672 <sup>"</sup> <sub>5</sub>	34.67 <sup>"</sup> <sub>213</sub>
15	31.019 <sup>"</sup> <sub>17</sub>	37.50 <sup>"</sup> <sub>129</sub>	33.42 <sup>"</sup> <sub>25</sub>	48.46 <sup>"</sup> <sub>266</sub>	16.079 <sup>"</sup> <sub>0</sub>	22.88 <sup>"</sup> <sub>30</sub>	31.677 <sup>"</sup> <sub>33</sub>	36.80 <sup>"</sup> <sub>198</sub>
25	31.002 <sup>"</sup> <sub>66</sub>	38.79 <sup>"</sup> <sub>109</sub>	33.17 <sup>"</sup> <sub>32</sub>	51.12 <sup>"</sup> <sub>226</sub>	16.079 <sup>"</sup> <sub>39</sub>	23.18 <sup>"</sup> <sub>20</sub>	31.644 <sup>"</sup> <sub>70</sub>	38.78 <sup>"</sup> <sub>176</sub>
35	30.936 <sup>"</sup>	39.88 <sup>"</sup>	32.85 <sup>"</sup>	53.38 <sup>"</sup>	16.040 <sup>"</sup>	23.38 <sup>"</sup>	31.574 <sup>"</sup>	40.54 <sup>"</sup>
Mittl. Ort	26.909	23.70	30.15	46.56	12.591	11.82	28.813	39.68
sec $\delta$ , tg $\delta$	1.354	+0.913	2.364	-2.143	1.094	+0.444	1.090	-0.433
a, a'	+4.1	+11.4	+0.7	+11.2	+3.6	+11.2	+2.6	+11.2
b, b'	+0.03	-0.82	-0.08	-0.83	+0.02	-0.83	-0.02	-0.83



Tag	138) $\gamma$ Camelop.		143) 138 G. Eridani		146) $\gamma$ Hydri		1105) $+57^{\circ}752$ Caml	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$3^h 44^m$	$+71^{\circ} 9'$	$3 47^m$	$-36^{\circ} 21'$	$3^h 47^m$	$-74^{\circ} 24'$	$3^h 49^m$	$+57^{\circ} 48'$
Jan. 0	$32.36$ <sup>34</sup>	$62.39$ <sup>211</sup>	$24.102$ <sup>129</sup>	$72.24$ <sup>188</sup>	$67.73$ <sup>64</sup>	$48.51$ <sup>194</sup>	$14.969$ <sup>160</sup>	$53.82$ <sup>164</sup>
10	$32.02$ <sup>43</sup>	$64.50$ <sup>168</sup>	$23.973$ <sup>164</sup>	$74.12$ <sup>148</sup>	$67.09$ <sup>73</sup>	$50.45$ <sup>141</sup>	$14.809$ <sup>221</sup>	$55.46$ <sup>128</sup>
20	$31.59$ <sup>51</sup>	$66.18$ <sup>119</sup>	$23.809$ <sup>194</sup>	$75.60$ <sup>106</sup>	$66.36$ <sup>80</sup>	$51.86$ <sup>84</sup>	$14.588$ <sup>274</sup>	$56.74$ <sup>88</sup>
30	$31.08$ <sup>57</sup>	$67.37$ <sup>66</sup>	$23.615$ <sup>216</sup>	$76.66$ <sup>60</sup>	$65.56$ <sup>84</sup>	$52.70$ <sup>26</sup>	$14.314$ <sup>314</sup>	$57.62$ <sup>46</sup>
Febr. 9	$30.51$ <sup>60</sup>	$68.03$ <sup>11</sup>	$23.399$ <sup>230</sup>	$77.26$ <sup>13</sup>	$64.72$ <sup>85</sup>	$52.96$ <sup>32</sup>	$14.000$ <sup>339</sup>	$58.08$ <sup>1</sup>
19	$29.91$ <sup>61</sup>	$68.14$ <sup>43</sup>	$23.169$ <sup>234</sup>	$77.39$ <sup>34</sup>	$63.87$ <sup>85</sup>	$52.64$ <sup>89</sup>	$13.661$ <sup>346</sup>	$58.09$ <sup>43</sup>
März 1	$29.30$ <sup>58</sup>	$67.71$ <sup>94</sup>	$22.935$ <sup>229</sup>	$77.05$ <sup>80</sup>	$63.02$ <sup>82</sup>	$51.75$ <sup>142</sup>	$13.315$ <sup>335</sup>	$57.66$ <sup>84</sup>
11	$28.72$ <sup>53</sup>	$66.77$ <sup>141</sup>	$22.706$ <sup>212</sup>	$76.25$ <sup>123</sup>	$62.20$ <sup>77</sup>	$50.33$ <sup>192</sup>	$12.980$ <sup>307</sup>	$56.82$ <sup>121</sup>
21	$28.19$ <sup>46</sup>	$65.36$ <sup>182</sup>	$22.494$ <sup>187</sup>	$75.02$ <sup>164</sup>	$61.43$ <sup>70</sup>	$48.41$ <sup>238</sup>	$12.673$ <sup>263</sup>	$55.61$ <sup>152</sup>
31	$27.73$ <sup>36</sup>	$63.54$ <sup>213</sup>	$22.307$ <sup>152</sup>	$73.38$ <sup>201</sup>	$60.73$ <sup>61</sup>	$46.03$ <sup>276</sup>	$12.410$ <sup>203</sup>	$54.09$ <sup>176</sup>
Apr. 10	$27.37$ <sup>24</sup>	$61.41$ <sup>235</sup>	$22.155$ <sup>111</sup>	$71.37$ <sup>235</sup>	$60.12$ <sup>50</sup>	$43.27$ <sup>309</sup>	$12.207$ <sup>133</sup>	$52.33$ <sup>192</sup>
20	$27.13$ <sup>12</sup>	$59.06$ <sup>249</sup>	$22.044$ <sup>64</sup>	$69.02$ <sup>265</sup>	$59.62$ <sup>37</sup>	$40.18$ <sup>336</sup>	$12.074$ <sup>56</sup>	$50.41$ <sup>200</sup>
30	$27.01$ <sup>2</sup>	$56.57$ <sup>252</sup>	$21.980$ <sup>12</sup>	$66.37$ <sup>288</sup>	$59.25$ <sup>25</sup>	$36.82$ <sup>355</sup>	$12.018$ <sup>26</sup>	$48.41$ <sup>199</sup>
Mai 10	$27.03$ <sup>14</sup>	$54.05$ <sup>245</sup>	$21.968$ <sup>40</sup>	$63.49$ <sup>305</sup>	$59.00$ <sup>11</sup>	$33.27$ <sup>366</sup>	$12.044$ <sup>109</sup>	$46.42$ <sup>191</sup>
20	$27.17$ <sup>27</sup>	$51.60$ <sup>231</sup>	$22.008$ <sup>92</sup>	$60.44$ <sup>317</sup>	$58.89$ <sup>3</sup>	$29.61$ <sup>369</sup>	$12.153$ <sup>189</sup>	$44.51$ <sup>175</sup>
30	$27.44$ <sup>40</sup>	$49.29$ <sup>209</sup>	$22.100$ <sup>143</sup>	$57.27$ <sup>320</sup>	$58.92$ <sup>17</sup>	$25.92$ <sup>363</sup>	$12.342$ <sup>263</sup>	$42.76$ <sup>154</sup>
Juni 9	$27.84$ <sup>49</sup>	$47.20$ <sup>180</sup>	$22.243$ <sup>190</sup>	$54.07$ <sup>316</sup>	$59.09$ <sup>30</sup>	$22.29$ <sup>349</sup>	$12.605$ <sup>331</sup>	$41.22$ <sup>127</sup>
19	$28.33$ <sup>60</sup>	$45.40$ <sup>146</sup>	$22.433$ <sup>231</sup>	$50.91$ <sup>304</sup>	$59.39$ <sup>43</sup>	$18.80$ <sup>327</sup>	$12.936$ <sup>389</sup>	$39.95$ <sup>97</sup>
29	$28.93$ <sup>66</sup>	$43.94$ <sup>109</sup>	$22.664$ <sup>267</sup>	$47.87$ <sup>285</sup>	$59.82$ <sup>55</sup>	$15.53$ <sup>295</sup>	$13.325$ <sup>436</sup>	$38.98$ <sup>65</sup>
Juli 9	$29.59$ <sup>73</sup>	$42.85$ <sup>68</sup>	$22.931$ <sup>296</sup>	$45.02$ <sup>258</sup>	$60.37$ <sup>65</sup>	$12.58$ <sup>255</sup>	$13.761$ <sup>473</sup>	$38.33$ <sup>31</sup>
19	$30.32$ <sup>78</sup>	$42.17$ <sup>26</sup>	$23.227$ <sup>317</sup>	$42.44$ <sup>222</sup>	$61.02$ <sup>73</sup>	$10.03$ <sup>209</sup>	$14.234$ <sup>500</sup>	$38.02$ <sup>5</sup>
29	$31.10$ <sup>80</sup>	$41.91$ <sup>16</sup>	$23.544$ <sup>331</sup>	$40.22$ <sup>181</sup>	$61.75$ <sup>79</sup>	$7.94$ <sup>156</sup>	$14.734$ <sup>515</sup>	$38.07$ <sup>39</sup>
Aug. 8	$31.90$ <sup>81</sup>	$42.07$ <sup>58</sup>	$23.875$ <sup>337</sup>	$38.41$ <sup>134</sup>	$62.54$ <sup>83</sup>	$6.38$ <sup>98</sup>	$15.249$ <sup>519</sup>	$38.46$ <sup>72</sup>
18	$32.71$ <sup>81</sup>	$42.65$ <sup>100</sup>	$24.212$ <sup>334</sup>	$37.07$ <sup>84</sup>	$63.37$ <sup>84</sup>	$5.40$ <sup>37</sup>	$15.768$ <sup>516</sup>	$39.18$ <sup>104</sup>
28	$33.52$ <sup>79</sup>	$43.65$ <sup>138</sup>	$24.546$ <sup>326</sup>	$36.23$ <sup>29</sup>	$64.21$ <sup>83</sup>	$5.03$ <sup>26</sup>	$16.284$ <sup>504</sup>	$40.22$ <sup>133</sup>
Sept. 7	$34.31$ <sup>75</sup>	$45.03$ <sup>174</sup>	$24.872$ <sup>310</sup>	$35.94$ <sup>26</sup>	$65.04$ <sup>79</sup>	$5.29$ <sup>89</sup>	$16.788$ <sup>483</sup>	$41.55$ <sup>160</sup>
17	$35.06$ <sup>72</sup>	$46.77$ <sup>207</sup>	$25.182$ <sup>288</sup>	$36.20$ <sup>79</sup>	$65.83$ <sup>73</sup>	$6.18$ <sup>148</sup>	$17.271$ <sup>456</sup>	$43.15$ <sup>183</sup>
27	$35.78$ <sup>65</sup>	$48.84$ <sup>237</sup>	$25.470$ <sup>262</sup>	$36.99$ <sup>129</sup>	$66.56$ <sup>64</sup>	$7.66$ <sup>202</sup>	$17.727$ <sup>422</sup>	$44.98$ <sup>204</sup>
Okt. 7	$36.43$ <sup>59</sup>	$51.21$ <sup>263</sup>	$25.732$ <sup>230</sup>	$38.28$ <sup>175</sup>	$67.20$ <sup>53</sup>	$9.68$ <sup>250</sup>	$18.149$ <sup>384</sup>	$47.02$ <sup>221</sup>
17	$37.02$ <sup>51</sup>	$53.84$ <sup>282</sup>	$25.962$ <sup>195</sup>	$40.03$ <sup>214</sup>	$67.73$ <sup>41</sup>	$12.18$ <sup>287</sup>	$18.533$ <sup>338</sup>	$49.23$ <sup>235</sup>
27	$37.53$ <sup>41</sup>	$56.66$ <sup>298</sup>	$26.157$ <sup>156</sup>	$42.17$ <sup>242</sup>	$68.14$ <sup>27</sup>	$15.05$ <sup>314</sup>	$18.871$ <sup>288</sup>	$51.58$ <sup>244</sup>
Nov. 6	$37.94$ <sup>32</sup>	$59.64$ <sup>307</sup>	$26.313$ <sup>115</sup>	$44.59$ <sup>262</sup>	$68.41$ <sup>13</sup>	$18.19$ <sup>329</sup>	$19.159$ <sup>230</sup>	$54.02$ <sup>248</sup>
16	$38.26$ <sup>21</sup>	$62.71$ <sup>308</sup>	$26.428$ <sup>73</sup>	$47.21$ <sup>272</sup>	$68.54$ <sup>3</sup>	$21.48$ <sup>331</sup>	$19.389$ <sup>169</sup>	$56.50$ <sup>247</sup>
25	$38.47$ <sup>10</sup>	$65.79$ <sup>303</sup>	$26.501$ <sup>28</sup>	$49.93$ <sup>270</sup>	$68.51$ <sup>18</sup>	$24.79$ <sup>321</sup>	$19.558$ <sup>102</sup>	$58.97$ <sup>242</sup>
Dez. 5	$38.57$ <sup>2</sup>	$68.82$ <sup>289</sup>	$26.529$ <sup>16</sup>	$52.63$ <sup>258</sup>	$68.33$ <sup>32</sup>	$28.00$ <sup>298</sup>	$19.660$ <sup>31</sup>	$61.39$ <sup>228</sup>
15	$38.55$ <sup>15</sup>	$71.71$ <sup>266</sup>	$26.513$ <sup>60</sup>	$55.21$ <sup>237</sup>	$68.01$ <sup>46</sup>	$30.98$ <sup>265</sup>	$19.691$ <sup>41</sup>	$63.67$ <sup>210</sup>
25	$38.40$ <sup>25</sup>	$74.37$ <sup>236</sup>	$26.453$ <sup>102</sup>	$57.58$ <sup>208</sup>	$67.55$ <sup>57</sup>	$33.63$ <sup>222</sup>	$19.650$ <sup>112</sup>	$65.77$ <sup>185</sup>
35	$38.15$	$76.73$	$26.351$	$59.66$	$66.98$	$35.85$	$19.538$	$67.62$
Mittl. Ort	$30.92$	$56.02$	$23.663$	$56.57$	$64.13$	$28.56$	$14.417$	$49.34$
sec $\delta$ , tg $\delta$	$3.098$	$+2.932$	$1.242$	$-0.736$	$3.720$	$-3.584$	$1.877$	$+1.589$
a, a'	$+6.3$	$+11.2$	$+2.2$	$+11.0$	$-0.9$	$+10.9$	$+4.9$	$+10.8$
b, b'	$+0.11$	$-0.83$	$-0.03$	$-0.84$	$-0.13$	$-0.84$	$+0.06$	$-0.84$



# Obere Kulmination Greenwich

63\*

Tag	144) ζ Persei		147) ε Persei		148) ξ Persei		149) γ Eridani	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	3 <sup>h</sup> 50 <sup>m</sup>	+31° 43'	3 <sup>h</sup> 54 <sup>m</sup>	+39° 51'	3 <sup>h</sup> 55 <sup>m</sup>	+35° 37'	3 <sup>h</sup> 55 <sup>m</sup>	-13° 39'
Jan. 0	40.182 <sup>a</sup> <sub>72</sub>	18.64 <sup>b</sup> <sub>50</sub>	9.473 <sup>a</sup> <sub>82</sub>	11.53 <sup>b</sup> <sub>89</sub>	23.486 <sup>a</sup> <sub>72</sub>	64.96 <sup>b</sup> <sub>70</sub>	27.836 <sup>a</sup> <sub>71</sub>	60.09 <sup>b</sup> <sub>138</sub>
10	40.110 <sup>a</sup> <sub>111</sub>	19.14 <sup>b</sup> <sub>33</sub>	9.391 <sup>a</sup> <sub>127</sub>	12.42 <sup>b</sup> <sub>66</sub>	23.414 <sup>a</sup> <sub>116</sub>	65.66 <sup>b</sup> <sub>50</sub>	27.765 <sup>a</sup> <sub>105</sub>	61.47 <sup>b</sup> <sub>114</sub>
20	39.999 <sup>a</sup> <sub>146</sub>	19.47 <sup>b</sup> <sub>16</sub>	9.264 <sup>a</sup> <sub>166</sub>	13.08 <sup>b</sup> <sub>41</sub>	23.298 <sup>a</sup> <sub>153</sub>	66.16 <sup>b</sup> <sub>30</sub>	27.660 <sup>a</sup> <sub>133</sub>	62.61 <sup>b</sup> <sub>90</sub>
30	39.853 <sup>a</sup> <sub>173</sub>	19.63 <sup>b</sup> <sub>3</sub>	9.098 <sup>a</sup> <sub>197</sub>	13.49 <sup>b</sup> <sub>15</sub>	23.145 <sup>a</sup> <sub>182</sub>	66.46 <sup>b</sup> <sub>8</sub>	27.527 <sup>a</sup> <sub>157</sub>	63.51 <sup>b</sup> <sub>62</sub>
Febr. 9	39.680 <sup>a</sup> <sub>192</sub>	19.60 <sup>b</sup> <sub>22</sub>	8.901 <sup>a</sup> <sub>217</sub>	13.64 <sup>b</sup> <sub>13</sub>	22.963 <sup>a</sup> <sub>202</sub>	66.54 <sup>b</sup> <sub>15</sub>	27.370 <sup>a</sup> <sub>172</sub>	64.13 <sup>b</sup> <sub>32</sub>
19	39.488 <sup>a</sup> <sub>199</sub>	19.38 <sup>b</sup> <sub>40</sub>	8.684 <sup>a</sup> <sub>225</sub>	13.51 <sup>b</sup> <sub>39</sub>	22.761 <sup>a</sup> <sub>211</sub>	66.39 <sup>b</sup> <sub>38</sub>	27.198 <sup>a</sup> <sub>179</sub>	64.45 <sup>b</sup> <sub>4</sub>
März 1	39.289 <sup>a</sup> <sub>194</sub>	18.98 <sup>b</sup> <sub>56</sub>	8.459 <sup>a</sup> <sub>221</sub>	13.12 <sup>b</sup> <sub>63</sub>	22.550 <sup>a</sup> <sub>207</sub>	66.01 <sup>b</sup> <sub>58</sub>	27.019 <sup>a</sup> <sub>177</sub>	64.49 <sup>b</sup> <sub>27</sub>
11	39.095 <sup>a</sup> <sub>179</sub>	18.42 <sup>b</sup> <sub>69</sub>	8.238 <sup>a</sup> <sub>203</sub>	12.49 <sup>b</sup> <sub>85</sub>	22.343 <sup>a</sup> <sub>191</sub>	65.43 <sup>b</sup> <sub>74</sub>	26.842 <sup>a</sup> <sub>164</sub>	64.22 <sup>b</sup> <sub>56</sub>
21	38.916 <sup>a</sup> <sub>151</sub>	17.73 <sup>b</sup> <sub>77</sub>	8.035 <sup>a</sup> <sub>174</sub>	11.64 <sup>b</sup> <sub>101</sub>	22.152 <sup>a</sup> <sub>163</sub>	64.69 <sup>b</sup> <sub>88</sub>	26.678 <sup>a</sup> <sub>144</sub>	63.66 <sup>b</sup> <sub>85</sub>
31	38.765 <sup>a</sup> <sub>115</sub>	16.96 <sup>b</sup> <sub>82</sub>	7.861 <sup>a</sup> <sub>133</sub>	10.63 <sup>b</sup> <sub>112</sub>	21.989 <sup>a</sup> <sub>125</sub>	63.81 <sup>b</sup> <sub>95</sub>	26.534 <sup>a</sup> <sub>114</sub>	62.81 <sup>b</sup> <sub>113</sub>
Apr. 10	38.650 <sup>a</sup> <sub>71</sub>	16.14 <sup>b</sup> <sub>81</sub>	7.728 <sup>a</sup> <sub>85</sub>	9.51 <sup>b</sup> <sub>118</sub>	21.864 <sup>a</sup> <sub>80</sub>	62.86 <sup>b</sup> <sub>98</sub>	26.420 <sup>a</sup> <sub>78</sub>	61.68 <sup>b</sup> <sub>139</sub>
20	38.579 <sup>a</sup> <sub>20</sub>	15.33 <sup>b</sup> <sub>76</sub>	7.643 <sup>a</sup> <sub>30</sub>	8.33 <sup>b</sup> <sub>117</sub>	21.784 <sup>a</sup> <sub>28</sub>	61.88 <sup>b</sup> <sub>96</sub>	26.342 <sup>a</sup> <sub>37</sub>	60.29 <sup>b</sup> <sub>165</sub>
30	38.559 <sup>a</sup> <sub>33</sub>	14.57 <sup>b</sup> <sub>66</sub>	7.613 <sup>a</sup> <sub>28</sub>	7.16 <sup>b</sup> <sub>110</sub>	21.756 <sup>a</sup> <sub>28</sub>	60.92 <sup>b</sup> <sub>87</sub>	26.305 <sup>a</sup> <sub>8</sub>	58.64 <sup>b</sup> <sub>187</sub>
Mai 10	38.592 <sup>a</sup> <sub>86</sub>	13.91 <sup>b</sup> <sub>52</sub>	7.641 <sup>a</sup> <sub>88</sub>	6.06 <sup>b</sup> <sub>99</sub>	21.784 <sup>a</sup> <sub>84</sub>	60.05 <sup>b</sup> <sub>75</sub>	26.313 <sup>a</sup> <sub>54</sub>	56.77 <sup>b</sup> <sub>207</sub>
20	38.678 <sup>a</sup> <sub>139</sub>	13.39 <sup>b</sup> <sub>35</sub>	7.729 <sup>a</sup> <sub>145</sub>	5.07 <sup>b</sup> <sub>83</sub>	21.868 <sup>a</sup> <sub>138</sub>	59.30 <sup>b</sup> <sub>59</sub>	26.367 <sup>a</sup> <sub>100</sub>	54.70 <sup>b</sup> <sub>221</sub>
30	38.817 <sup>a</sup> <sub>187</sub>	13.04 <sup>b</sup> <sub>15</sub>	7.874 <sup>a</sup> <sub>198</sub>	4.24 <sup>b</sup> <sub>62</sub>	22.006 <sup>a</sup> <sub>189</sub>	58.71 <sup>b</sup> <sub>40</sub>	26.467 <sup>a</sup> <sub>142</sub>	52.49 <sup>b</sup> <sub>232</sub>
Juni 9	39.004 <sup>a</sup> <sub>231</sub>	12.89 <sup>b</sup> <sub>5</sub>	8.072 <sup>a</sup> <sub>247</sub>	3.62 <sup>b</sup> <sub>41</sub>	22.195 <sup>a</sup> <sub>235</sub>	58.31 <sup>b</sup> <sub>18</sub>	26.609 <sup>a</sup> <sub>182</sub>	50.17 <sup>b</sup> <sub>237</sub>
19	39.235 <sup>a</sup> <sub>269</sub>	12.94 <sup>b</sup> <sub>27</sub>	8.319 <sup>a</sup> <sub>289</sub>	3.21 <sup>b</sup> <sub>17</sub>	22.430 <sup>a</sup> <sub>275</sub>	58.13 <sup>b</sup> <sub>3</sub>	26.791 <sup>a</sup> <sub>217</sub>	47.80 <sup>b</sup> <sub>236</sub>
29	39.504 <sup>a</sup> <sub>298</sub>	13.21 <sup>b</sup> <sub>46</sub>	8.608 <sup>a</sup> <sub>322</sub>	3.04 <sup>b</sup> <sub>8</sub>	22.705 <sup>a</sup> <sub>307</sub>	58.16 <sup>b</sup> <sub>26</sub>	27.008 <sup>a</sup> <sub>246</sub>	45.44 <sup>b</sup> <sub>229</sub>
Juli 9	39.802 <sup>a</sup> <sub>322</sub>	13.67 <sup>b</sup> <sub>66</sub>	8.930 <sup>a</sup> <sub>348</sub>	3.12 <sup>b</sup> <sub>31</sub>	23.012 <sup>a</sup> <sub>331</sub>	58.42 <sup>b</sup> <sub>46</sub>	27.254 <sup>a</sup> <sub>268</sub>	43.15 <sup>b</sup> <sub>217</sub>
19	40.124 <sup>a</sup> <sub>338</sub>	14.33 <sup>b</sup> <sub>82</sub>	9.278 <sup>a</sup> <sub>366</sub>	3.43 <sup>b</sup> <sub>54</sub>	23.343 <sup>a</sup> <sub>349</sub>	58.88 <sup>b</sup> <sub>66</sub>	27.522 <sup>a</sup> <sub>285</sub>	40.98 <sup>b</sup> <sub>197</sub>
29	40.462 <sup>a</sup> <sub>345</sub>	15.15 <sup>b</sup> <sub>96</sub>	9.644 <sup>a</sup> <sub>377</sub>	3.97 <sup>b</sup> <sub>75</sub>	23.692 <sup>a</sup> <sub>359</sub>	59.54 <sup>b</sup> <sub>84</sub>	27.807 <sup>a</sup> <sub>295</sub>	39.01 <sup>b</sup> <sub>172</sub>
Aug. 8	40.807 <sup>a</sup> <sub>347</sub>	16.11 <sup>b</sup> <sub>108</sub>	10.021 <sup>a</sup> <sub>379</sub>	4.72 <sup>b</sup> <sub>93</sub>	24.051 <sup>a</sup> <sub>361</sub>	60.38 <sup>b</sup> <sub>98</sub>	28.102 <sup>a</sup> <sub>298</sub>	37.29 <sup>b</sup> <sub>142</sub>
18	41.154 <sup>a</sup> <sub>343</sub>	17.19 <sup>b</sup> <sub>116</sub>	10.400 <sup>a</sup> <sub>376</sub>	5.65 <sup>b</sup> <sub>110</sub>	24.412 <sup>a</sup> <sub>357</sub>	61.36 <sup>b</sup> <sub>110</sub>	28.400 <sup>a</sup> <sub>296</sub>	35.87 <sup>b</sup> <sub>106</sub>
28	41.497 <sup>a</sup> <sub>333</sub>	18.35 <sup>b</sup> <sub>122</sub>	10.776 <sup>a</sup> <sub>366</sub>	6.75 <sup>b</sup> <sub>123</sub>	24.769 <sup>a</sup> <sub>348</sub>	62.46 <sup>b</sup> <sub>120</sub>	28.696 <sup>a</sup> <sub>288</sub>	34.81 <sup>b</sup> <sub>69</sub>
Sept. 7	41.830 <sup>a</sup> <sub>319</sub>	19.57 <sup>b</sup> <sub>124</sub>	11.142 <sup>a</sup> <sub>351</sub>	7.98 <sup>b</sup> <sub>134</sub>	25.117 <sup>a</sup> <sub>335</sub>	63.66 <sup>b</sup> <sub>127</sub>	28.984 <sup>a</sup> <sub>275</sub>	34.12 <sup>b</sup> <sub>29</sub>
17	42.149 <sup>a</sup> <sub>301</sub>	20.81 <sup>b</sup> <sub>125</sub>	11.493 <sup>a</sup> <sub>333</sub>	9.32 <sup>b</sup> <sub>142</sub>	25.452 <sup>a</sup> <sub>317</sub>	64.93 <sup>b</sup> <sub>131</sub>	29.259 <sup>a</sup> <sub>260</sub>	33.83 <sup>b</sup> <sub>12</sub>
27	42.450 <sup>a</sup> <sub>280</sub>	22.06 <sup>b</sup> <sub>124</sub>	11.826 <sup>a</sup> <sub>310</sub>	10.74 <sup>b</sup> <sub>148</sub>	25.769 <sup>a</sup> <sub>296</sub>	66.24 <sup>b</sup> <sub>133</sub>	29.519 <sup>a</sup> <sub>239</sub>	33.95 <sup>b</sup> <sub>50</sub>
Okt. 7	42.730 <sup>a</sup> <sub>256</sub>	23.30 <sup>b</sup> <sub>121</sub>	12.136 <sup>a</sup> <sub>284</sub>	12.22 <sup>b</sup> <sub>152</sub>	26.065 <sup>a</sup> <sub>271</sub>	67.57 <sup>b</sup> <sub>134</sub>	29.758 <sup>a</sup> <sub>217</sub>	34.45 <sup>b</sup> <sub>86</sub>
17	42.986 <sup>a</sup> <sub>228</sub>	24.51 <sup>b</sup> <sub>117</sub>	12.420 <sup>a</sup> <sub>254</sub>	13.74 <sup>b</sup> <sub>154</sub>	26.336 <sup>a</sup> <sub>243</sub>	68.91 <sup>b</sup> <sub>134</sub>	29.975 <sup>a</sup> <sub>191</sub>	35.31 <sup>b</sup> <sub>118</sub>
27	43.214 <sup>a</sup> <sub>199</sub>	25.68 <sup>b</sup> <sub>113</sub>	12.674 <sup>a</sup> <sub>220</sub>	15.28 <sup>b</sup> <sub>155</sub>	26.579 <sup>a</sup> <sub>211</sub>	70.25 <sup>b</sup> <sub>131</sub>	30.166 <sup>a</sup> <sub>162</sub>	36.49 <sup>b</sup> <sub>143</sub>
Nov. 6	43.413 <sup>a</sup> <sub>165</sub>	26.81 <sup>b</sup> <sub>106</sub>	12.894 <sup>a</sup> <sub>184</sub>	16.83 <sup>b</sup> <sub>152</sub>	26.790 <sup>a</sup> <sub>177</sub>	71.56 <sup>b</sup> <sub>128</sub>	30.328 <sup>a</sup> <sub>132</sub>	37.92 <sup>b</sup> <sub>162</sub>
16	43.578 <sup>a</sup> <sub>129</sub>	27.87 <sup>b</sup> <sub>101</sub>	13.078 <sup>a</sup> <sub>143</sub>	18.35 <sup>b</sup> <sub>149</sub>	26.967 <sup>a</sup> <sub>140</sub>	72.84 <sup>b</sup> <sub>123</sub>	30.460 <sup>a</sup> <sub>99</sub>	39.54 <sup>b</sup> <sub>173</sub>
25	43.707 <sup>a</sup> <sub>89</sub>	28.88 <sup>b</sup> <sub>93</sub>	13.221 <sup>a</sup> <sub>98</sub>	19.84 <sup>b</sup> <sub>141</sub>	27.107 <sup>a</sup> <sub>97</sub>	74.07 <sup>b</sup> <sub>116</sub>	30.559 <sup>a</sup> <sub>64</sub>	41.27 <sup>b</sup> <sub>177</sub>
Dez. 5	43.796 <sup>a</sup> <sub>47</sub>	29.81 <sup>b</sup> <sub>84</sub>	13.319 <sup>a</sup> <sub>51</sub>	21.25 <sup>b</sup> <sub>132</sub>	27.204 <sup>a</sup> <sub>53</sub>	75.23 <sup>b</sup> <sub>108</sub>	30.623 <sup>a</sup> <sub>28</sub>	43.04 <sup>b</sup> <sub>174</sub>
15	43.843 <sup>a</sup> <sub>4</sub>	30.65 <sup>b</sup> <sub>73</sub>	13.370 <sup>a</sup> <sub>1</sub>	22.57 <sup>b</sup> <sub>119</sub>	27.257 <sup>a</sup> <sub>6</sub>	76.31 <sup>b</sup> <sub>95</sub>	30.651 <sup>a</sup> <sub>9</sub>	44.78 <sup>b</sup> <sub>164</sub>
25	43.847 <sup>a</sup> <sub>41</sub>	31.38 <sup>b</sup> <sub>60</sub>	13.371 <sup>a</sup> <sub>48</sub>	23.76 <sup>b</sup> <sub>102</sub>	27.263 <sup>a</sup> <sub>41</sub>	77.26 <sup>b</sup> <sub>82</sub>	30.642 <sup>a</sup> <sub>46</sub>	46.42 <sup>b</sup> <sub>148</sub>
35	43.806 <sup>a</sup>	31.98 <sup>b</sup>	13.323 <sup>a</sup>	24.78 <sup>b</sup>	27.222 <sup>a</sup>	78.08 <sup>b</sup>	30.596 <sup>a</sup>	47.90 <sup>b</sup>
Mittl. Ort	40.108	19.02	9.309	10.33	23.364	64.63	27.688	49.35
sec δ, tg δ	1.176	+0.618	1.303	+0.835	1.230	+0.717	1.029	-0.243
a, a'	+3.8	+10.7	+4.0	+10.5	+3.9	+10.4	+2.8	+10.4
b, b'	+0.02	-0.85	+0.03	-0.85	+0.02	-0.86	-0.01	-0.86



## Scheinbare Sternörter 1945

Tag	150) $\lambda$ Tauri		151) $\nu$ Tauri		153) 174 G. Eridani		152) 48 Persei	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$3^h 57^m$	$+12^\circ 20'$	$4^h 0^m$	$+5^\circ 50'$	$4^h 3^m$	$-27^\circ 47'$	$4^h 4^m$	$+47^\circ 33'$
Jan. 0	37.799 <sup>n</sup> <sub>54</sub>	6.29 <sup>n</sup> <sub>36</sub>	13.682 <sup>n</sup> <sub>53</sub>	11.27 <sup>n</sup> <sub>65</sub>	21.699 <sup>n</sup> <sub>92</sub>	77.25 <sup>n</sup> <sub>183</sub>	39.858 <sup>n</sup> <sub>91</sub>	65.94 <sup>n</sup> <sub>129</sub>
10	37.745 <sub>89</sub>	5.93 <sub>36</sub>	13.629 <sub>88</sub>	10.62 <sub>58</sub>	21.607 <sub>128</sub>	79.08 <sub>150</sub>	39.767 <sub>144</sub>	67.23 <sub>103</sub>
20	37.656 <sub>121</sub>	5.57 <sub>34</sub>	13.541 <sub>118</sub>	10.04 <sub>50</sub>	21.479 <sub>160</sub>	80.58 <sub>113</sub>	39.623 <sub>191</sub>	68.26 <sub>73</sub>
30	37.535 <sub>145</sub>	5.23 <sub>33</sub>	13.423 <sub>143</sub>	9.54 <sub>42</sub>	21.319 <sub>184</sub>	81.71 <sub>73</sub>	39.432 <sub>227</sub>	68.99 <sub>40</sub>
Febr. 9	37.390 <sub>163</sub>	4.90 <sub>30</sub>	13.280 <sub>161</sub>	9.12 <sub>32</sub>	21.135 <sub>201</sub>	82.44 <sub>33</sub>	39.205 <sub>252</sub>	69.39 <sub>6</sub>
19	37.227 <sub>170</sub>	4.60 <sub>27</sub>	13.119 <sub>168</sub>	8.80 <sub>22</sub>	20.934 <sub>208</sub>	82.77 <sub>8</sub>	38.953 <sub>264</sub>	69.45 <sub>28</sub>
März 1	37.057 <sub>169</sub>	4.33 <sub>22</sub>	12.951 <sub>168</sub>	8.58 <sub>11</sub>	20.726 <sub>207</sub>	82.69 <sub>49</sub>	38.689 <sub>261</sub>	69.17 <sub>61</sub>
11	36.888 <sub>157</sub>	4.11 <sub>16</sub>	12.783 <sub>156</sub>	8.47 <sub>1</sub>	20.519 <sub>194</sub>	82.20 <sub>89</sub>	38.428 <sub>242</sub>	68.56 <sub>90</sub>
21	36.731 <sub>135</sub>	3.95 <sub>8</sub>	12.627 <sub>135</sub>	8.48 <sub>15</sub>	20.325 <sub>174</sub>	81.31 <sub>127</sub>	38.186 <sub>211</sub>	67.66 <sub>115</sub>
31	36.596 <sub>105</sub>	3.87 <sub>2</sub>	12.492 <sub>106</sub>	8.63 <sub>31</sub>	20.151 <sub>143</sub>	80.04 <sub>162</sub>	37.975 <sub>167</sub>	66.51 <sub>133</sub>
Apr. 10	36.491 <sub>67</sub>	3.89 <sub>15</sub>	12.386 <sub>70</sub>	8.94 <sub>46</sub>	20.008 <sub>106</sub>	78.42 <sub>195</sub>	37.808 <sub>113</sub>	65.18 <sub>145</sub>
20	36.424 <sub>24</sub>	4.04 <sub>29</sub>	12.316 <sub>28</sub>	9.40 <sub>64</sub>	19.902 <sub>63</sub>	76.47 <sub>249</sub>	37.695 <sub>53</sub>	63.73 <sub>151</sub>
30	36.400 <sub>22</sub>	4.33 <sub>45</sub>	12.288 <sub>17</sub>	10.04 <sub>82</sub>	19.839 <sub>16</sub>	74.23 <sub>224</sub>	37.642 <sub>72</sub>	62.22 <sub>149</sub>
Mai 10	36.422 <sub>68</sub>	4.78 <sub>61</sub>	12.305 <sub>62</sub>	10.86 <sub>99</sub>	19.823 <sub>33</sub>	71.74 <sub>268</sub>	37.654 <sub>19</sub>	60.73 <sub>141</sub>
20	36.490 <sub>115</sub>	5.39 <sub>78</sub>	12.367 <sub>108</sub>	11.85 <sub>116</sub>	19.856 <sub>81</sub>	69.06 <sub>283</sub>	37.733 <sub>143</sub>	59.32 <sub>128</sub>
30	36.605 <sub>158</sub>	6.17 <sub>95</sub>	12.475 <sub>151</sub>	13.01 <sub>130</sub>	19.937 <sub>128</sub>	66.23 <sub>291</sub>	37.876 <sub>204</sub>	58.04 <sub>110</sub>
Juni 9	36.763 <sub>198</sub>	7.12 <sub>108</sub>	12.626 <sub>189</sub>	14.31 <sub>142</sub>	20.065 <sub>172</sub>	63.32 <sub>292</sub>	38.080 <sub>260</sub>	56.94 <sub>88</sub>
19	36.961 <sub>230</sub>	8.20 <sub>120</sub>	12.815 <sub>222</sub>	15.73 <sub>150</sub>	20.237 <sub>212</sub>	60.40 <sub>285</sub>	38.340 <sub>309</sub>	56.06 <sub>62</sub>
29	37.191 <sub>259</sub>	9.40 <sub>129</sub>	13.037 <sub>251</sub>	17.23 <sub>156</sub>	20.449 <sub>245</sub>	57.55 <sub>272</sub>	38.649 <sub>348</sub>	55.44 <sub>36</sub>
Juli 9	37.450 <sub>280</sub>	10.69 <sub>134</sub>	13.288 <sub>272</sub>	18.79 <sub>156</sub>	20.694 <sub>272</sub>	54.83 <sub>251</sub>	38.997 <sub>380</sub>	55.08 <sub>9</sub>
19	37.730 <sub>296</sub>	12.03 <sub>135</sub>	13.560 <sub>288</sub>	20.35 <sub>152</sub>	20.966 <sub>292</sub>	52.32 <sub>222</sub>	39.377 <sub>403</sub>	54.99 <sub>18</sub>
29	38.026 <sub>303</sub>	13.38 <sub>132</sub>	13.848 <sub>296</sub>	21.87 <sub>144</sub>	21.258 <sub>307</sub>	50.10 <sub>188</sub>	39.780 <sub>417</sub>	55.17 <sub>45</sub>
Aug. 8	38.329 <sub>306</sub>	14.70 <sub>125</sub>	14.144 <sub>299</sub>	23.31 <sub>130</sub>	21.565 <sub>313</sub>	48.22 <sub>147</sub>	40.197 <sub>424</sub>	55.62 <sub>69</sub>
18	38.635 <sub>302</sub>	15.95 <sub>114</sub>	14.443 <sub>296</sub>	24.61 <sub>113</sub>	21.878 <sub>314</sub>	46.75 <sub>102</sub>	40.621 <sub>422</sub>	56.31 <sub>93</sub>
28	38.937 <sub>295</sub>	17.09 <sub>100</sub>	14.739 <sub>290</sub>	25.74 <sub>93</sub>	22.192 <sub>307</sub>	45.73 <sub>53</sub>	41.043 <sub>414</sub>	57.24 <sub>113</sub>
Sept. 7	39.232 <sub>283</sub>	18.09 <sub>85</sub>	15.029 <sub>278</sub>	26.67 <sub>70</sub>	22.499 <sub>296</sub>	45.20 <sub>3</sub>	41.457 <sub>401</sub>	58.37 <sub>132</sub>
17	39.515 <sub>268</sub>	18.94 <sub>66</sub>	15.307 <sub>263</sub>	27.37 <sub>47</sub>	22.795 <sub>279</sub>	45.17 <sub>43</sub>	41.858 <sub>382</sub>	59.69 <sub>147</sub>
27	39.783 <sub>249</sub>	19.60 <sub>48</sub>	15.570 <sub>245</sub>	27.84 <sub>22</sub>	23.074 <sub>258</sub>	45.65 <sub>95</sub>	42.240 <sub>358</sub>	61.16 <sub>161</sub>
Okt. 7	40.032 <sub>228</sub>	20.08 <sub>30</sub>	15.815 <sub>225</sub>	28.06 <sub>0</sub>	23.332 <sub>232</sub>	46.60 <sub>139</sub>	42.598 <sub>330</sub>	62.77 <sub>172</sub>
17	40.260 <sub>205</sub>	20.38 <sub>13</sub>	16.040 <sub>202</sub>	28.06 <sub>21</sub>	23.564 <sub>203</sub>	47.99 <sub>177</sub>	42.928 <sub>297</sub>	64.49 <sub>181</sub>
27	40.465 <sub>180</sub>	20.51 <sub>1</sub>	16.242 <sub>175</sub>	27.85 <sub>39</sub>	23.767 <sub>171</sub>	49.76 <sub>208</sub>	43.225 <sub>260</sub>	66.30 <sub>186</sub>
Nov. 6	40.645 <sub>150</sub>	20.50 <sub>13</sub>	16.417 <sub>148</sub>	27.46 <sub>53</sub>	23.938 <sub>135</sub>	51.84 <sub>229</sub>	43.485 <sub>218</sub>	68.16 <sub>190</sub>
16	40.795 <sub>119</sub>	20.37 <sub>23</sub>	16.565 <sub>117</sub>	26.93 <sub>62</sub>	24.073 <sub>98</sub>	54.13 <sub>241</sub>	43.793 <sub>170</sub>	70.06 <sub>189</sub>
25	40.914 <sub>86</sub>	20.14 <sub>28</sub>	16.682 <sub>84</sub>	26.31 <sub>69</sub>	24.171 <sub>58</sub>	56.54 <sub>245</sub>	43.873 <sub>119</sub>	71.95 <sub>185</sub>
Dez. 5	41.000 <sub>49</sub>	19.86 <sub>33</sub>	16.766 <sub>48</sub>	25.62 <sub>71</sub>	24.229 <sub>17</sub>	58.99 <sub>237</sub>	43.992 <sub>64</sub>	73.80 <sub>176</sub>
15	41.049 <sub>11</sub>	19.53 <sub>35</sub>	16.814 <sub>11</sub>	24.91 <sub>71</sub>	24.246 <sub>24</sub>	61.36 <sub>222</sub>	44.056 <sub>7</sub>	75.56 <sub>162</sub>
25	41.060 <sub>26</sub>	19.18 <sub>35</sub>	16.825 <sub>27</sub>	24.20 <sub>66</sub>	24.222 <sub>65</sub>	63.58 <sub>198</sub>	44.063 <sub>51</sub>	77.18 <sub>145</sub>
35	41.034	18.83	16.798	23.54	24.157	65.56	44.012	78.63
Mittl. Ort	37.761	11.08	13.625	17.52	21.334	63.97	39.534	63.67
sec $\delta$ , tg $\delta$	1.024	+0.219	1.005	+0.102	1.130	-0.527	1.482	+1.094
$a, a'$	+3.3	+10.2	+3.2	+10.0	+2.5	+9.8	+4.4	+9.7
$b, b'$	+0.01	-0.86	0.00	-0.87	-0.02	-0.87	+0.04	-0.88



# Obere Kulmination Greenwich

65\*

Tag	154) $\alpha^1$ Eridani		155) $\alpha$ Horologii		156) $\alpha$ Reticuli		162) $\delta$ Tauri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	4 <sup>h</sup> 9 <sup>m</sup>	-6° 58'	4 <sup>h</sup> 12 <sup>m</sup>	-42° 25'	4 <sup>h</sup> 13 <sup>m</sup>	-62° 36'	4 <sup>h</sup> 19 <sup>m</sup>	+17° 24'
Jan. 0	10.853 <sup>55</sup>	55.50 <sup>119</sup>	11.386 <sup>34</sup>	59.57 <sup>220</sup>	44.61 <sup>29</sup>	57.14 <sup>234</sup>	45.659 <sup>38</sup>	50.83 <sup>12</sup>
10	10.798 <sup>90</sup>	56.69 <sup>101</sup>	11.252 <sup>177</sup>	61.77 <sup>180</sup>	44.32 <sup>36</sup>	59.48 <sup>186</sup>	45.621 <sup>76</sup>	50.71 <sup>14</sup>
20	10.708 <sup>121</sup>	57.70 <sup>82</sup>	11.075 <sup>213</sup>	63.57 <sup>134</sup>	43.96 <sup>41</sup>	61.34 <sup>134</sup>	45.545 <sup>112</sup>	50.57 <sup>15</sup>
30	10.587 <sup>147</sup>	58.52 <sup>60</sup>	10.862 <sup>242</sup>	64.91 <sup>86</sup>	43.55 <sup>45</sup>	62.68 <sup>79</sup>	45.433 <sup>142</sup>	50.42 <sup>18</sup>
Febr. 9	10.440 <sup>165</sup>	59.12 <sup>38</sup>	10.620 <sup>261</sup>	65.77 <sup>36</sup>	43.10 <sup>47</sup>	63.47 <sup>22</sup>	45.291 <sup>164</sup>	50.24 <sup>21</sup>
19	10.275 <sup>174</sup>	59.50 <sup>14</sup>	10.359 <sup>270</sup>	66.13 <sup>15</sup>	42.63 <sup>48</sup>	63.69 <sup>35</sup>	45.127 <sup>176</sup>	50.03 <sup>22</sup>
März 1	10.101 <sup>174</sup>	59.64 <sup>10</sup>	10.089 <sup>268</sup>	65.98 <sup>64</sup>	42.15 <sup>47</sup>	63.34 <sup>91</sup>	44.951 <sup>178</sup>	49.81 <sup>23</sup>
11	9.927 <sup>164</sup>	59.54 <sup>34</sup>	9.821 <sup>255</sup>	65.34 <sup>111</sup>	41.68 <sup>46</sup>	62.43 <sup>142</sup>	44.773 <sup>170</sup>	49.58 <sup>23</sup>
21	9.763 <sup>145</sup>	59.20 <sup>58</sup>	9.566 <sup>232</sup>	64.23 <sup>157</sup>	41.22 <sup>41</sup>	61.01 <sup>191</sup>	44.603 <sup>150</sup>	49.35 <sup>20</sup>
31	9.618 <sup>118</sup>	58.62 <sup>82</sup>	9.334 <sup>199</sup>	62.66 <sup>198</sup>	40.81 <sup>37</sup>	59.10 <sup>236</sup>	44.453 <sup>121</sup>	49.15 <sup>16</sup>
Apr. 10	9.500 <sup>83</sup>	57.80 <sup>105</sup>	9.135 <sup>158</sup>	60.68 <sup>235</sup>	40.44 <sup>31</sup>	56.74 <sup>274</sup>	44.332 <sup>86</sup>	48.99 <sup>8</sup>
20	9.417 <sup>43</sup>	56.75 <sup>129</sup>	8.977 <sup>109</sup>	58.33 <sup>267</sup>	40.13 <sup>23</sup>	54.00 <sup>307</sup>	44.246 <sup>43</sup>	48.91 <sup>2</sup>
30	9.374 <sup>1</sup>	55.46 <sup>149</sup>	8.868 <sup>56</sup>	55.66 <sup>294</sup>	39.90 <sup>16</sup>	50.93 <sup>333</sup>	44.203 <sup>3</sup>	48.93 <sup>14</sup>
Mai 10	9.375 <sup>45</sup>	53.97 <sup>168</sup>	8.812 <sup>1</sup>	52.72 <sup>315</sup>	39.74 <sup>8</sup>	47.60 <sup>352</sup>	44.206 <sup>51</sup>	49.07 <sup>28</sup>
20	9.420 <sup>91</sup>	52.29 <sup>185</sup>	8.811 <sup>55</sup>	49.57 <sup>328</sup>	39.66 <sup>1</sup>	44.08 <sup>363</sup>	44.257 <sup>98</sup>	49.35 <sup>42</sup>
30	9.511 <sup>134</sup>	50.44 <sup>137</sup>	8.866 <sup>110</sup>	46.29 <sup>335</sup>	39.67 <sup>9</sup>	40.45 <sup>365</sup>	44.355 <sup>143</sup>	49.77 <sup>57</sup>
Juni 9	9.645 <sup>173</sup>	48.47 <sup>205</sup>	8.976 <sup>163</sup>	42.94 <sup>332</sup>	39.76 <sup>18</sup>	36.80 <sup>358</sup>	44.408 <sup>184</sup>	50.34 <sup>72</sup>
19	9.818 <sup>207</sup>	46.42 <sup>208</sup>	9.139 <sup>211</sup>	39.62 <sup>322</sup>	39.94 <sup>25</sup>	33.22 <sup>344</sup>	44.682 <sup>220</sup>	51.06 <sup>85</sup>
29	10.025 <sup>237</sup>	44.34 <sup>205</sup>	9.350 <sup>254</sup>	36.40 <sup>303</sup>	40.19 <sup>33</sup>	29.78 <sup>319</sup>	44.902 <sup>250</sup>	51.91 <sup>95</sup>
Juli 9	10.262 <sup>261</sup>	42.29 <sup>198</sup>	9.604 <sup>289</sup>	33.37 <sup>276</sup>	40.52 <sup>39</sup>	26.59 <sup>286</sup>	45.152 <sup>276</sup>	52.86 <sup>104</sup>
19	10.523 <sup>277</sup>	40.31 <sup>184</sup>	9.893 <sup>317</sup>	30.61 <sup>242</sup>	40.91 <sup>43</sup>	23.73 <sup>245</sup>	45.428 <sup>293</sup>	53.90 <sup>108</sup>
29	10.800 <sup>289</sup>	38.47 <sup>164</sup>	10.210 <sup>339</sup>	28.19 <sup>199</sup>	41.34 <sup>48</sup>	21.28 <sup>196</sup>	45.721 <sup>304</sup>	54.98 <sup>109</sup>
Aug. 8	11.089 <sup>294</sup>	36.83 <sup>140</sup>	10.549 <sup>351</sup>	26.20 <sup>150</sup>	41.82 <sup>50</sup>	19.32 <sup>141</sup>	46.025 <sup>311</sup>	56.07 <sup>107</sup>
18	11.383 <sup>292</sup>	35.43 <sup>112</sup>	10.900 <sup>355</sup>	24.70 <sup>97</sup>	42.32 <sup>52</sup>	17.91 <sup>82</sup>	46.336 <sup>311</sup>	57.14 <sup>101</sup>
28	11.675 <sup>288</sup>	34.31 <sup>79</sup>	11.255 <sup>352</sup>	23.73 <sup>41</sup>	42.84 <sup>52</sup>	17.09 <sup>20</sup>	46.647 <sup>306</sup>	58.15 <sup>93</sup>
Sept. 7	11.963 <sup>277</sup>	33.52 <sup>45</sup>	11.607 <sup>340</sup>	23.32 <sup>18</sup>	43.36 <sup>50</sup>	16.89 <sup>44</sup>	46.953 <sup>298</sup>	59.08 <sup>82</sup>
17	12.240 <sup>264</sup>	33.07 <sup>10</sup>	11.947 <sup>322</sup>	23.50 <sup>76</sup>	43.86 <sup>48</sup>	17.33 <sup>107</sup>	47.251 <sup>285</sup>	59.90 <sup>69</sup>
27	12.504 <sup>246</sup>	32.97 <sup>25</sup>	12.269 <sup>298</sup>	24.26 <sup>131</sup>	44.34 <sup>43</sup>	18.40 <sup>166</sup>	47.536 <sup>270</sup>	60.59 <sup>56</sup>
Okt. 7	12.750 <sup>226</sup>	33.22 <sup>58</sup>	12.567 <sup>267</sup>	25.57 <sup>181</sup>	44.77 <sup>38</sup>	20.06 <sup>218</sup>	47.806 <sup>252</sup>	61.15 <sup>42</sup>
17	12.976 <sup>203</sup>	33.80 <sup>86</sup>	12.834 <sup>230</sup>	27.38 <sup>224</sup>	45.15 <sup>32</sup>	22.24 <sup>263</sup>	48.058 <sup>230</sup>	61.57 <sup>30</sup>
27	13.179 <sup>177</sup>	34.66 <sup>110</sup>	13.064 <sup>190</sup>	29.62 <sup>259</sup>	45.47 <sup>25</sup>	24.87 <sup>299</sup>	48.288 <sup>206</sup>	61.87 <sup>18</sup>
Nov. 6	13.356 <sup>149</sup>	35.76 <sup>128</sup>	13.254 <sup>145</sup>	32.21 <sup>283</sup>	45.72 <sup>16</sup>	27.86 <sup>322</sup>	48.494 <sup>178</sup>	62.05 <sup>10</sup>
16	13.505 <sup>117</sup>	37.04 <sup>140</sup>	13.399 <sup>98</sup>	35.04 <sup>296</sup>	45.88 <sup>8</sup>	31.08 <sup>333</sup>	48.672 <sup>147</sup>	62.15 <sup>2</sup>
25*)	13.622 <sup>82</sup>	38.44 <sup>145</sup>	13.497 <sup>47</sup>	38.00 <sup>298</sup>	45.96 <sup>0</sup>	34.41 <sup>332</sup>	48.819 <sup>112</sup>	62.17 <sup>2</sup>
Dez. 5	13.704 <sup>47</sup>	39.89 <sup>144</sup>	13.544 <sup>3</sup>	40.98 <sup>288</sup>	45.96 <sup>9</sup>	37.73 <sup>318</sup>	48.931 <sup>73</sup>	62.15 <sup>6</sup>
15	13.751 <sup>10</sup>	41.33 <sup>139</sup>	13.541 <sup>54</sup>	43.86 <sup>270</sup>	45.87 <sup>17</sup>	40.91 <sup>294</sup>	49.004 <sup>34</sup>	62.09 <sup>9</sup>
25	13.761 <sup>29</sup>	42.72 <sup>126</sup>	13.487 <sup>104</sup>	46.56 <sup>240</sup>	45.70 <sup>25</sup>	43.85 <sup>259</sup>	49.038 <sup>8</sup>	62.00 <sup>10</sup>
35	13.732	43.98	13.383	48.96	45.45	46.44	49.030	61.90
Mittl. Ort sec $\delta$ , tg $\delta$	10.702	46.60	10.626	44.43	42.66	39.95	45.548	54.55
a, a'	+2.9	+9.3	+2.0	+9.1	+0.8	+9.0	+3.5	+8.5
b, b'	0.00	-0.89	-0.03	-0.89	-0.06	-0.89	+0.01	-0.91

\*) Bel Stern 162 a Nov. 26.



Tag	164) $\epsilon$ Tauri		168) $\alpha$ Tauri		171) $\alpha$ Doradus		169) $\nu$ Eridani	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	4 <sup>h</sup> 25 <sup>m</sup>	+19° 3'	4 <sup>h</sup> 32 <sup>m</sup>	+16° 23'	4 <sup>h</sup> 32 <sup>m</sup>	-55° 9'	4 <sup>h</sup> 33 <sup>m</sup>	-3° 27'
Jan. 0	24.197 <sup>34</sup>	33.03 <sup>3</sup>	45.835 <sup>26</sup>	57.33 <sup>17</sup>	49.807 <sup>191</sup>	43.76 <sup>253</sup>	34.325 <sup>34</sup>	56.03 <sup>112</sup>
10	24.163 <sup>73</sup>	33.00 <sup>6</sup>	45.809 <sup>68</sup>	57.16 <sup>17</sup>	49.616 <sup>248</sup>	46.29 <sup>210</sup>	34.291 <sup>72</sup>	57.15 <sup>98</sup>
20	24.090 <sup>110</sup>	32.94 <sup>10</sup>	45.741 <sup>105</sup>	56.99 <sup>17</sup>	49.368 <sup>297</sup>	48.39 <sup>162</sup>	34.219 <sup>107</sup>	58.13 <sup>81</sup>
30	23.980 <sup>142</sup>	32.84 <sup>12</sup>	45.636 <sup>136</sup>	56.82 <sup>18</sup>	49.071 <sup>335</sup>	50.01 <sup>109</sup>	34.112 <sup>137</sup>	58.94 <sup>61</sup>
Febr. 9	23.838 <sup>164</sup>	32.72 <sup>17</sup>	45.500 <sup>160</sup>	56.64 <sup>18</sup>	48.736 <sup>363</sup>	51.10 <sup>55</sup>	33.975 <sup>160</sup>	59.55 <sup>43</sup>
19	23.674 <sup>178</sup>	32.55 <sup>20</sup>	45.340 <sup>176</sup>	56.46 <sup>19</sup>	48.373 <sup>376</sup>	51.65 <sup>1</sup>	33.815 <sup>173</sup>	59.98 <sup>22</sup>
März 1	23.496 <sup>181</sup>	32.35 <sup>23</sup>	45.164 <sup>179</sup>	56.27 <sup>19</sup>	47.997 <sup>378</sup>	51.64 <sup>54</sup>	33.642 <sup>177</sup>	60.20 <sup>1</sup>
11	23.315 <sup>173</sup>	32.12 <sup>24</sup>	44.985 <sup>173</sup>	56.08 <sup>17</sup>	47.619 <sup>366</sup>	51.10 <sup>107</sup>	33.465 <sup>171</sup>	60.21 <sup>20</sup>
21	23.142 <sup>154</sup>	31.88 <sup>24</sup>	44.812 <sup>156</sup>	55.91 <sup>15</sup>	47.253 <sup>341</sup>	50.03 <sup>157</sup>	33.294 <sup>155</sup>	60.01 <sup>41</sup>
31	22.988 <sup>126</sup>	31.64 <sup>20</sup>	44.656 <sup>129</sup>	55.76 <sup>10</sup>	46.912 <sup>304</sup>	48.46 <sup>203</sup>	33.139 <sup>131</sup>	59.60 <sup>62</sup>
Apr. 10	22.862 <sup>91</sup>	31.44 <sup>15</sup>	44.527 <sup>95</sup>	55.66 <sup>2</sup>	46.608 <sup>256</sup>	46.43 <sup>243</sup>	33.008 <sup>99</sup>	58.98 <sup>84</sup>
20	22.771 <sup>48</sup>	31.29 <sup>6</sup>	44.432 <sup>54</sup>	55.64 <sup>7</sup>	46.352 <sup>201</sup>	44.00 <sup>280</sup>	32.909 <sup>60</sup>	58.14 <sup>104</sup>
30	22.723 <sup>2</sup>	31.23 <sup>4</sup>	44.378 <sup>9</sup>	55.71 <sup>18</sup>	46.151 <sup>139</sup>	41.20 <sup>310</sup>	32.849 <sup>18</sup>	57.10 <sup>125</sup>
Mai 10	22.721 <sup>46</sup>	31.27 <sup>17</sup>	44.369 <sup>38</sup>	55.89 <sup>32</sup>	46.012 <sup>71</sup>	38.10 <sup>332</sup>	32.831 <sup>26</sup>	55.85 <sup>143</sup>
20	22.767 <sup>94</sup>	31.44 <sup>32</sup>	44.407 <sup>85</sup>	56.21 <sup>45</sup>	45.941 <sup>2</sup>	34.78 <sup>348</sup>	32.857 <sup>70</sup>	54.42 <sup>159</sup>
30	22.861 <sup>139</sup>	31.76 <sup>46</sup>	44.492 <sup>130</sup>	56.66 <sup>59</sup>	45.939 <sup>67</sup>	31.30 <sup>356</sup>	32.927 <sup>113</sup>	52.83 <sup>172</sup>
Juni 9	23.000 <sup>181</sup>	32.22 <sup>60</sup>	44.622 <sup>171</sup>	57.25 <sup>72</sup>	46.006 <sup>136</sup>	27.74 <sup>355</sup>	33.040 <sup>154</sup>	51.11 <sup>181</sup>
19	23.181 <sup>218</sup>	32.82 <sup>73</sup>	44.793 <sup>208</sup>	57.97 <sup>84</sup>	46.142 <sup>199</sup>	24.19 <sup>345</sup>	33.194 <sup>190</sup>	49.30 <sup>187</sup>
29	23.399 <sup>249</sup>	33.55 <sup>85</sup>	45.001 <sup>240</sup>	58.81 <sup>94</sup>	46.341 <sup>258</sup>	20.74 <sup>325</sup>	33.384 <sup>221</sup>	47.43 <sup>187</sup>
Juli 9	23.648 <sup>274</sup>	34.40 <sup>93</sup>	45.241 <sup>266</sup>	59.75 <sup>100</sup>	46.599 <sup>311</sup>	17.49 <sup>298</sup>	33.605 <sup>246</sup>	45.56 <sup>182</sup>
19	23.922 <sup>294</sup>	35.33 <sup>99</sup>	45.507 <sup>285</sup>	60.75 <sup>105</sup>	46.910 <sup>354</sup>	14.51 <sup>262</sup>	33.851 <sup>266</sup>	43.74 <sup>171</sup>
29	24.216 <sup>305</sup>	36.32 <sup>102</sup>	45.792 <sup>298</sup>	61.80 <sup>104</sup>	47.264 <sup>388</sup>	11.89 <sup>217</sup>	34.117 <sup>280</sup>	42.03 <sup>156</sup>
Aug. 8	24.521 <sup>312</sup>	37.34 <sup>101</sup>	46.090 <sup>306</sup>	62.84 <sup>101</sup>	47.652 <sup>413</sup>	9.72 <sup>165</sup>	34.397 <sup>288</sup>	40.47 <sup>136</sup>
18	24.833 <sup>314</sup>	38.35 <sup>97</sup>	46.396 <sup>308</sup>	63.85 <sup>94</sup>	48.065 <sup>428</sup>	8.07 <sup>109</sup>	34.685 <sup>291</sup>	39.11 <sup>110</sup>
28	25.147 <sup>310</sup>	39.32 <sup>90</sup>	46.704 <sup>307</sup>	64.79 <sup>85</sup>	48.493 <sup>432</sup>	6.98 <sup>49</sup>	34.976 <sup>290</sup>	38.01 <sup>82</sup>
Sept. 7	25.457 <sup>302</sup>	40.22 <sup>80</sup>	47.011 <sup>299</sup>	65.64 <sup>73</sup>	48.925 <sup>425</sup>	6.49 <sup>14</sup>	35.266 <sup>283</sup>	37.19 <sup>50</sup>
17	25.759 <sup>291</sup>	41.02 <sup>70</sup>	47.310 <sup>289</sup>	66.37 <sup>60</sup>	49.350 <sup>407</sup>	6.63 <sup>77</sup>	35.549 <sup>274</sup>	36.69 <sup>18</sup>
27	26.050 <sup>276</sup>	41.72 <sup>57</sup>	47.599 <sup>276</sup>	66.97 <sup>45</sup>	49.757 <sup>380</sup>	7.40 <sup>137</sup>	35.823 <sup>260</sup>	36.51 <sup>15</sup>
Okt. 7	26.326 <sup>258</sup>	42.29 <sup>46</sup>	47.875 <sup>259</sup>	67.42 <sup>31</sup>	50.137 <sup>343</sup>	8.77 <sup>193</sup>	36.083 <sup>243</sup>	36.66 <sup>45</sup>
17	26.584 <sup>238</sup>	42.75 <sup>35</sup>	48.134 <sup>240</sup>	67.73 <sup>18</sup>	50.480 <sup>297</sup>	10.70 <sup>241</sup>	36.326 <sup>223</sup>	37.11 <sup>73</sup>
27	26.822 <sup>213</sup>	43.10 <sup>25</sup>	48.374 <sup>216</sup>	67.91 <sup>7</sup>	50.777 <sup>244</sup>	13.11 <sup>280</sup>	36.549 <sup>200</sup>	37.84 <sup>96</sup>
Nov. 6	27.035 <sup>185</sup>	43.35 <sup>17</sup>	48.590 <sup>190</sup>	67.98 <sup>2</sup>	51.021 <sup>185</sup>	15.91 <sup>309</sup>	36.749 <sup>173</sup>	38.80 <sup>114</sup>
16	27.220 <sup>155</sup>	43.52 <sup>11</sup>	48.780 <sup>158</sup>	67.96 <sup>9</sup>	51.206 <sup>121</sup>	19.00 <sup>326</sup>	36.922 <sup>142</sup>	39.94 <sup>127</sup>
26	27.375 <sup>119</sup>	43.63 <sup>6</sup>	48.938 <sup>125</sup>	67.87 <sup>13</sup>	51.327 <sup>53</sup>	22.26 <sup>330</sup>	37.064 <sup>109</sup>	41.21 <sup>133</sup>
Dez. 5	27.494 <sup>80</sup>	43.69 <sup>3</sup>	49.063 <sup>86</sup>	67.74 <sup>15</sup>	51.380 <sup>16</sup>	25.56 <sup>323</sup>	37.173 <sup>73</sup>	42.54 <sup>133</sup>
15	27.574 <sup>40</sup>	43.72 <sup>1</sup>	49.149 <sup>46</sup>	67.59 <sup>17</sup>	51.364 <sup>85</sup>	28.79 <sup>304</sup>	37.246 <sup>34</sup>	43.87 <sup>128</sup>
25	27.614 <sup>3</sup>	43.73 <sup>1</sup>	49.195 <sup>3</sup>	67.42 <sup>16</sup>	51.279 <sup>151</sup>	31.83 <sup>274</sup>	37.280 <sup>6</sup>	45.15 <sup>119</sup>
35	27.611	43.72	49.198	67.26	51.128	34.57	37.274	46.34
Mittl. Ort	24.068	36.45	45.688	61.27	48.301	28.74	34.114	48.44
sec $\delta$ , tg $\delta$	1.058	+0.346	1.042	+0.294	1.750	-1.437	1.002	-0.061
a, a'	+3.5	+8.0	+3.4	+7.4	+1.3	+7.4	+3.0	+7.4
b, b'	+0.01	-0.92	+0.01	-0.93	-0.04	-0.93	0.00	-0.93



# Obere Kulmination Greenwich

67\*

Tag	172) 53 Eridani		174) $\tau$ Tauri		173) Grb 848 Caml		175) 4 Camelopard.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	4 <sup>h</sup> 35 <sup>m</sup>	-14° 24'	4 <sup>h</sup> 38 <sup>m</sup>	+22° 51'	4 <sup>h</sup> 41 <sup>m</sup>	+75° 50'	4 <sup>h</sup> 43 <sup>m</sup>	+56° 39'
Jan. 0	39.915 <sup>5</sup>	46.27 <sup>160</sup>	56.571 <sup>22</sup>	8.61 <sup>17</sup>	26.30 <sup>28</sup>	45.76 <sup>268</sup>	25.439 <sup>69</sup>	45.09 <sup>190</sup>
10	39.870 <sup>83</sup>	47.87 <sup>137</sup>	56.549 <sup>66</sup>	8.78 <sup>13</sup>	26.02 <sup>43</sup>	48.44 <sup>236</sup>	25.370 <sup>143</sup>	46.99 <sup>166</sup>
20	39.787 <sup>118</sup>	49.24 <sup>111</sup>	56.483 <sup>106</sup>	8.91 <sup>8</sup>	25.59 <sup>57</sup>	50.80 <sup>194</sup>	25.227 <sup>209</sup>	48.65 <sup>135</sup>
30	39.669 <sup>148</sup>	50.35 <sup>83</sup>	56.377 <sup>140</sup>	8.99 <sup>2</sup>	25.02 <sup>69</sup>	52.74 <sup>146</sup>	25.018 <sup>264</sup>	50.00 <sup>101</sup>
Febr. 9	39.521 <sup>171</sup>	51.18 <sup>53</sup>	56.237 <sup>166</sup>	9.01 <sup>6</sup>	24.33 <sup>76</sup>	54.20 <sup>93</sup>	24.754 <sup>305</sup>	51.01 <sup>61</sup>
19	39.350 <sup>184</sup>	51.71 <sup>23</sup>	56.071 <sup>182</sup>	8.95 <sup>12</sup>	23.57 <sup>81</sup>	55.13 <sup>38</sup>	24.449 <sup>331</sup>	51.62 <sup>19</sup>
März 1	39.166 <sup>189</sup>	51.94 <sup>8</sup>	55.889 <sup>188</sup>	8.83 <sup>20</sup>	22.76 <sup>83</sup>	55.51 <sup>19</sup>	24.118 <sup>338</sup>	51.81 <sup>22</sup>
11	38.977 <sup>182</sup>	51.86 <sup>39</sup>	55.701 <sup>181</sup>	8.63 <sup>26</sup>	21.93 <sup>79</sup>	55.32 <sup>74</sup>	23.780 <sup>328</sup>	51.59 <sup>61</sup>
21	38.795 <sup>167</sup>	51.47 <sup>69</sup>	55.520 <sup>165</sup>	8.37 <sup>29</sup>	21.14 <sup>73</sup>	54.58 <sup>123</sup>	23.452 <sup>300</sup>	50.98 <sup>98</sup>
31	38.628 <sup>143</sup>	50.78 <sup>99</sup>	55.355 <sup>138</sup>	8.08 <sup>30</sup>	20.41 <sup>63</sup>	53.35 <sup>168</sup>	23.152 <sup>256</sup>	50.00 <sup>129</sup>
Apr. 10	38.485 <sup>111</sup>	49.79 <sup>126</sup>	55.217 <sup>103</sup>	7.78 <sup>29</sup>	19.78 <sup>51</sup>	51.67 <sup>205</sup>	22.896 <sup>199</sup>	48.71 <sup>154</sup>
20	38.374 <sup>73</sup>	48.53 <sup>152</sup>	55.114 <sup>61</sup>	7.49 <sup>24</sup>	19.27 <sup>36</sup>	49.62 <sup>232</sup>	22.697 <sup>131</sup>	47.17 <sup>171</sup>
30	38.301 <sup>30</sup>	47.01 <sup>176</sup>	55.053 <sup>15</sup>	7.25 <sup>16</sup>	18.91 <sup>20</sup>	47.30 <sup>252</sup>	22.566 <sup>57</sup>	45.46 <sup>182</sup>
Mai 10	38.271 <sup>14</sup>	45.25 <sup>197</sup>	55.038 <sup>34</sup>	7.09 <sup>6</sup>	18.71 <sup>4</sup>	44.78 <sup>260</sup>	22.509 <sup>21</sup>	43.64 <sup>186</sup>
20	38.285 <sup>60</sup>	43.28 <sup>214</sup>	55.072 <sup>83</sup>	7.03 <sup>6</sup>	18.67 <sup>13</sup>	42.18 <sup>261</sup>	22.530 <sup>99</sup>	41.78 <sup>181</sup>
30	38.345 <sup>103</sup>	41.14 <sup>227</sup>	55.155 <sup>130</sup>	7.09 <sup>20</sup>	18.80 <sup>30</sup>	39.57 <sup>253</sup>	22.629 <sup>175</sup>	39.97 <sup>171</sup>
Juni 9	38.448 <sup>145</sup>	38.87 <sup>234</sup>	55.285 <sup>173</sup>	7.29 <sup>33</sup>	19.10 <sup>45</sup>	37.04 <sup>236</sup>	22.804 <sup>247</sup>	38.26 <sup>156</sup>
19	38.593 <sup>183</sup>	36.53 <sup>235</sup>	55.458 <sup>211</sup>	7.62 <sup>46</sup>	19.55 <sup>59</sup>	34.68 <sup>214</sup>	23.051 <sup>311</sup>	36.70 <sup>135</sup>
29	38.776 <sup>215</sup>	34.18 <sup>231</sup>	55.669 <sup>245</sup>	8.08 <sup>59</sup>	20.14 <sup>73</sup>	32.54 <sup>186</sup>	23.362 <sup>366</sup>	35.35 <sup>112</sup>
Juli 9	38.991 <sup>242</sup>	31.87 <sup>220</sup>	55.914 <sup>272</sup>	8.67 <sup>69</sup>	20.87 <sup>83</sup>	30.68 <sup>152</sup>	23.728 <sup>414</sup>	34.23 <sup>85</sup>
19	39.233 <sup>264</sup>	29.67 <sup>202</sup>	56.186 <sup>293</sup>	9.36 <sup>77</sup>	21.70 <sup>92</sup>	29.16 <sup>115</sup>	24.142 <sup>451</sup>	33.38 <sup>57</sup>
29	39.497 <sup>279</sup>	27.65 <sup>179</sup>	56.479 <sup>308</sup>	10.13 <sup>82</sup>	22.62 <sup>98</sup>	28.01 <sup>76</sup>	24.593 <sup>479</sup>	32.81 <sup>27</sup>
Aug. 8	39.776 <sup>290</sup>	25.86 <sup>150</sup>	56.787 <sup>317</sup>	10.95 <sup>84</sup>	23.60 <sup>104</sup>	27.25 <sup>35</sup>	25.072 <sup>498</sup>	32.54 <sup>3</sup>
18	40.066 <sup>293</sup>	24.36 <sup>116</sup>	57.104 <sup>320</sup>	11.79 <sup>84</sup>	24.64 <sup>107</sup>	26.90 <sup>6</sup>	25.570 <sup>508</sup>	32.57 <sup>31</sup>
28	40.359 <sup>292</sup>	23.20 <sup>77</sup>	57.424 <sup>319</sup>	12.63 <sup>81</sup>	25.71 <sup>108</sup>	26.96 <sup>48</sup>	26.078 <sup>509</sup>	32.88 <sup>60</sup>
Sept. 7	40.651 <sup>287</sup>	22.43 <sup>36</sup>	57.743 <sup>313</sup>	13.44 <sup>75</sup>	26.79 <sup>107</sup>	27.44 <sup>89</sup>	26.587 <sup>504</sup>	33.48 <sup>86</sup>
17	40.938 <sup>276</sup>	22.07 <sup>5</sup>	58.056 <sup>303</sup>	14.19 <sup>69</sup>	27.86 <sup>104</sup>	28.33 <sup>129</sup>	27.091 <sup>491</sup>	34.34 <sup>112</sup>
27	41.214 <sup>262</sup>	22.12 <sup>47</sup>	58.359 <sup>291</sup>	14.88 <sup>60</sup>	28.90 <sup>99</sup>	29.62 <sup>167</sup>	27.582 <sup>471</sup>	35.46 <sup>136</sup>
Okt. 7	41.476 <sup>246</sup>	22.59 <sup>85</sup>	58.650 <sup>274</sup>	15.48 <sup>53</sup>	29.89 <sup>93</sup>	31.29 <sup>202</sup>	28.053 <sup>445</sup>	36.82 <sup>158</sup>
17	41.722 <sup>223</sup>	23.44 <sup>119</sup>	58.924 <sup>255</sup>	16.01 <sup>45</sup>	30.82 <sup>85</sup>	33.31 <sup>233</sup>	28.498 <sup>411</sup>	38.40 <sup>178</sup>
27	41.945 <sup>198</sup>	24.63 <sup>149</sup>	59.179 <sup>232</sup>	16.46 <sup>39</sup>	31.67 <sup>75</sup>	35.64 <sup>262</sup>	28.909 <sup>370</sup>	40.18 <sup>195</sup>
Nov. 6	42.143 <sup>170</sup>	26.12 <sup>171</sup>	59.411 <sup>204</sup>	16.85 <sup>33</sup>	32.42 <sup>62</sup>	38.26 <sup>284</sup>	29.279 <sup>322</sup>	42.13 <sup>208</sup>
16	42.313 <sup>138</sup>	27.83 <sup>186</sup>	59.615 <sup>172</sup>	17.18 <sup>29</sup>	33.04 <sup>49</sup>	41.10 <sup>301</sup>	29.601 <sup>266</sup>	44.21 <sup>218</sup>
26	42.451 <sup>103</sup>	29.69 <sup>193</sup>	59.787 <sup>137</sup>	17.47 <sup>25</sup>	33.53 <sup>34</sup>	44.11 <sup>309</sup>	29.867 <sup>202</sup>	46.39 <sup>223</sup>
Dez. 5	42.554 <sup>65</sup>	31.62 <sup>192</sup>	59.924 <sup>97</sup>	17.72 <sup>24</sup>	33.87 <sup>18</sup>	47.20 <sup>311</sup>	30.069 <sup>132</sup>	48.62 <sup>224</sup>
15	42.619 <sup>25</sup>	33.54 <sup>185</sup>	60.021 <sup>54</sup>	17.96 <sup>23</sup>	34.05 <sup>1</sup>	50.31 <sup>302</sup>	30.201 <sup>59</sup>	50.86 <sup>216</sup>
25	42.644 <sup>16</sup>	35.39 <sup>170</sup>	60.075 <sup>11</sup>	18.19 <sup>19</sup>	34.06 <sup>17</sup>	53.33 <sup>285</sup>	30.260 <sup>18</sup>	53.02 <sup>203</sup>
35	42.628	37.09	60.086	18.38	33.89	56.18	30.242	55.05
Mittl. Ort sec $\delta$ , tg $\delta$	39.599 1.032	36.83 <sup>*</sup> -0.257	56.398 1.085	11.44 +0.421	23.68 4.089	41.89 +3.965	24.734 1.820	43.07 +1.520
a, a'	+2.8	+7.2	+3.6	+6.9	+8.1	+6.7	+5.0	+6.6
b, b'	-0.01	-0.93	+0.01	-0.94	+0.09	-0.94	+0.03	-0.94



## Scheinbare Sternörter 1945

Tag	178) $\alpha$ Camelopard.		180) $\pi^5$ Orionis		181) $\iota$ Aurigae		183) $\epsilon$ Aurigae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	4 <sup>h</sup> 48 <sup>m</sup>	+66° 14'	4 <sup>h</sup> 51 <sup>m</sup>	+2° 20'	4 <sup>h</sup> 53 <sup>m</sup>	+33° 4'	4 <sup>h</sup> 57 <sup>m</sup>	+43° 44'
Jan. 0	35.25 <sup>12</sup>	70.82 <sup>236</sup>	23.261 <sup>16</sup>	61.63 <sup>90</sup>	24.710 <sup>13</sup>	49.96 <sup>73</sup>	61.410 <sup>18</sup>	38.50 <sup>132</sup>
10	35.13 <sup>21</sup>	73.18 <sup>208</sup>	23.245 <sup>57</sup>	60.73 <sup>78</sup>	24.697 <sup>63</sup>	50.69 <sup>65</sup>	61.392 <sup>76</sup>	39.82 <sup>118</sup>
20	34.92 <sup>31</sup>	75.26 <sup>173</sup>	23.188 <sup>95</sup>	59.95 <sup>66</sup>	24.634 <sup>109</sup>	51.34 <sup>53</sup>	61.316 <sup>130</sup>	41.00 <sup>98</sup>
30	34.61 <sup>37</sup>	76.99 <sup>132</sup>	23.093 <sup>127</sup>	59.29 <sup>52</sup>	24.525 <sup>149</sup>	51.87 <sup>39</sup>	61.186 <sup>176</sup>	41.98 <sup>75</sup>
Febr. 9	34.24 <sup>44</sup>	78.31 <sup>85</sup>	22.966 <sup>152</sup>	58.77 <sup>37</sup>	24.376 <sup>180</sup>	52.26 <sup>22</sup>	61.010 <sup>213</sup>	42.73 <sup>49</sup>
19	33.80 <sup>47</sup>	79.16 <sup>36</sup>	22.814 <sup>170</sup>	58.40 <sup>23</sup>	24.196 <sup>201</sup>	52.48 <sup>4</sup>	60.797 <sup>238</sup>	43.22 <sup>20</sup>
März 1	33.33 <sup>48</sup>	79.52 <sup>13</sup>	22.644 <sup>177</sup>	58.17 <sup>8</sup>	23.995 <sup>209</sup>	52.52 <sup>14</sup>	60.559 <sup>248</sup>	43.42 <sup>9</sup>
11	32.85 <sup>46</sup>	79.39 <sup>60</sup>	22.467 <sup>173</sup>	58.09 <sup>7</sup>	23.786 <sup>206</sup>	52.38 <sup>31</sup>	60.311 <sup>244</sup>	43.33 <sup>36</sup>
21	32.39 <sup>43</sup>	78.79 <sup>105</sup>	22.294 <sup>161</sup>	58.16 <sup>24</sup>	23.580 <sup>190</sup>	52.07 <sup>45</sup>	60.067 <sup>227</sup>	42.97 <sup>62</sup>
31	31.96 <sup>37</sup>	77.74 <sup>144</sup>	22.133 <sup>138</sup>	58.40 <sup>40</sup>	23.390 <sup>162</sup>	51.62 <sup>57</sup>	59.840 <sup>196</sup>	42.35 <sup>84</sup>
Apr. 10	31.59 <sup>30</sup>	76.30 <sup>176</sup>	21.995 <sup>108</sup>	58.80 <sup>56</sup>	23.228 <sup>125</sup>	51.05 <sup>64</sup>	59.644 <sup>154</sup>	41.51 <sup>101</sup>
20	31.29 <sup>21</sup>	74.54 <sup>201</sup>	21.887 <sup>71</sup>	59.36 <sup>74</sup>	23.103 <sup>81</sup>	50.41 <sup>69</sup>	59.490 <sup>104</sup>	40.50 <sup>112</sup>
30	31.08 <sup>11</sup>	72.53 <sup>217</sup>	21.816 <sup>30</sup>	60.10 <sup>91</sup>	23.022 <sup>32</sup>	49.72 <sup>68</sup>	59.386 <sup>48</sup>	39.38 <sup>120</sup>
Mai 10	30.97 <sup>1</sup>	70.36 <sup>224</sup>	21.786 <sup>14</sup>	61.01 <sup>107</sup>	22.990 <sup>20</sup>	49.04 <sup>64</sup>	59.338 <sup>13</sup>	38.18 <sup>120</sup>
20	30.96 <sup>9</sup>	68.12 <sup>225</sup>	21.800 <sup>59</sup>	62.08 <sup>122</sup>	23.010 <sup>74</sup>	48.40 <sup>56</sup>	59.351 <sup>73</sup>	36.98 <sup>116</sup>
30	31.05 <sup>20</sup>	65.87 <sup>217</sup>	21.859 <sup>101</sup>	63.30 <sup>136</sup>	23.084 <sup>125</sup>	47.84 <sup>45</sup>	59.424 <sup>131</sup>	35.82 <sup>107</sup>
Juni 9	31.25 <sup>30</sup>	63.70 <sup>202</sup>	21.960 <sup>142</sup>	64.66 <sup>146</sup>	23.209 <sup>173</sup>	47.39 <sup>32</sup>	59.555 <sup>187</sup>	34.75 <sup>94</sup>
19	31.55 <sup>38</sup>	61.68 <sup>181</sup>	22.102 <sup>179</sup>	66.12 <sup>152</sup>	23.382 <sup>217</sup>	47.07 <sup>18</sup>	59.742 <sup>237</sup>	33.81 <sup>79</sup>
29	31.93 <sup>46</sup>	59.87 <sup>157</sup>	22.281 <sup>211</sup>	67.64 <sup>156</sup>	23.599 <sup>254</sup>	46.89 <sup>3</sup>	59.979 <sup>282</sup>	33.02 <sup>61</sup>
Juli 9	32.39 <sup>53</sup>	58.30 <sup>127</sup>	22.492 <sup>238</sup>	69.20 <sup>155</sup>	23.853 <sup>285</sup>	46.86 <sup>12</sup>	60.261 <sup>319</sup>	32.41 <sup>42</sup>
19	32.92 <sup>58</sup>	57.03 <sup>95</sup>	22.730 <sup>259</sup>	70.75 <sup>148</sup>	24.138 <sup>310</sup>	46.98 <sup>25</sup>	60.580 <sup>348</sup>	31.99 <sup>22</sup>
29	33.50 <sup>63</sup>	56.08 <sup>61</sup>	22.989 <sup>275</sup>	72.23 <sup>138</sup>	24.448 <sup>329</sup>	47.23 <sup>38</sup>	60.928 <sup>371</sup>	31.77 <sup>3</sup>
Aug. 8	34.13 <sup>65</sup>	55.47 <sup>25</sup>	23.264 <sup>286</sup>	73.61 <sup>122</sup>	24.777 <sup>341</sup>	47.61 <sup>48</sup>	61.299 <sup>387</sup>	31.74 <sup>16</sup>
18	34.78 <sup>67</sup>	55.22 <sup>10</sup>	23.550 <sup>290</sup>	74.83 <sup>103</sup>	25.118 <sup>348</sup>	48.09 <sup>58</sup>	61.686 <sup>396</sup>	31.90 <sup>34</sup>
28	35.45 <sup>68</sup>	55.32 <sup>45</sup>	23.840 <sup>292</sup>	75.86 <sup>80</sup>	25.466 <sup>348</sup>	48.67 <sup>64</sup>	62.082 <sup>399</sup>	32.24 <sup>52</sup>
Sept. 7	36.13 <sup>67</sup>	55.77 <sup>79</sup>	24.132 <sup>288</sup>	76.66 <sup>53</sup>	25.814 <sup>346</sup>	49.31 <sup>69</sup>	62.481 <sup>397</sup>	32.76 <sup>66</sup>
17	36.80 <sup>66</sup>	56.56 <sup>114</sup>	24.420 <sup>281</sup>	77.19 <sup>27</sup>	26.160 <sup>338</sup>	50.00 <sup>73</sup>	62.878 <sup>389</sup>	33.42 <sup>81</sup>
27	37.46 <sup>63</sup>	57.70 <sup>145</sup>	24.701 <sup>270</sup>	77.46 <sup>1</sup>	26.498 <sup>326</sup>	50.73 <sup>75</sup>	63.267 <sup>377</sup>	34.23 <sup>94</sup>
Okt. 7	38.09 <sup>60</sup>	59.15 <sup>175</sup>	24.971 <sup>257</sup>	77.45 <sup>27</sup>	26.824 <sup>311</sup>	51.48 <sup>78</sup>	63.644 <sup>360</sup>	35.17 <sup>106</sup>
17	38.69 <sup>55</sup>	60.90 <sup>201</sup>	25.228 <sup>238</sup>	77.18 <sup>51</sup>	27.135 <sup>292</sup>	52.26 <sup>79</sup>	64.004 <sup>337</sup>	36.23 <sup>117</sup>
27	39.24 <sup>50</sup>	62.91 <sup>225</sup>	25.466 <sup>218</sup>	76.67 <sup>71</sup>	27.427 <sup>267</sup>	53.05 <sup>80</sup>	64.341 <sup>310</sup>	37.40 <sup>126</sup>
Nov. 6	39.74 <sup>42</sup>	65.16 <sup>245</sup>	25.684 <sup>193</sup>	75.96 <sup>88</sup>	27.694 <sup>239</sup>	53.85 <sup>82</sup>	64.651 <sup>276</sup>	38.66 <sup>136</sup>
16	40.16 <sup>35</sup>	67.61 <sup>260</sup>	25.877 <sup>164</sup>	75.08 <sup>98</sup>	27.933 <sup>204</sup>	54.67 <sup>84</sup>	64.927 <sup>236</sup>	40.02 <sup>142</sup>
26	40.51 <sup>26</sup>	70.21 <sup>267</sup>	26.041 <sup>131</sup>	74.10 <sup>104</sup>	28.137 <sup>166</sup>	55.51 <sup>85</sup>	65.163 <sup>191</sup>	41.44 <sup>147</sup>
Dez. 5*)	40.77 <sup>16</sup>	72.88 <sup>270</sup>	26.172 <sup>94</sup>	73.06 <sup>105</sup>	28.303 <sup>121</sup>	56.36 <sup>85</sup>	65.354 <sup>139</sup>	42.91 <sup>148</sup>
15	40.93 <sup>6</sup>	75.58 <sup>264</sup>	26.266 <sup>55</sup>	72.01 <sup>102</sup>	28.424 <sup>73</sup>	57.21 <sup>82</sup>	65.493 <sup>82</sup>	44.39 <sup>146</sup>
25	40.99 <sup>4</sup>	78.22 <sup>249</sup>	26.321 <sup>14</sup>	70.99 <sup>94</sup>	28.497 <sup>23</sup>	58.03 <sup>79</sup>	65.575 <sup>23</sup>	45.85 <sup>139</sup>
35	40.95	80.71	26.335	70.05	28.520	58.82	65.598	47.24
Mittl. Ort	33.98	68.08	23.032	67.84	24.448	51.38	61.010	38.62
sec $\delta$ , tg $\delta$	2.483	+2.273	1.001	+0.041	1.193	+0.651	1.384	+0.957
a, a'	+6.0	+6.1	+3.1	+5.9	+3.9	+5.7	+4.3	+5.4
b, b'	+0.05	-0.95	0.00	-0.96	+0.01	-0.96	+0.02	-0.96

\*) Bei Stern 183) lies Dez. 6.



# Obere Kulmination Greenwich

69\*

Tag	182) β Camelopard.		184) τ Tauri		185) η Aurigae		186) ε Leporis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	4 <sup>h</sup> 58 <sup>m</sup>	+60° 21'	4 <sup>h</sup> 59 <sup>m</sup>	+21° 30'	5 <sup>h</sup> 2 <sup>m</sup>	+41° 9'	5 <sup>h</sup> 3 <sup>m</sup>	-22° 26'
Jan. 0	31.83 <sup>8</sup> <sub>6</sub>	53.95 <sup>215</sup>	48.507 <sup>3</sup>	44.33 <sup>11</sup>	39.542 <sup>10</sup>	43.46 <sup>119</sup>	8.398 <sup>34</sup>	46.30 <sup>204</sup>
10	31.77 <sup>15</sup>	56.10 <sup>191</sup>	48.504 <sup>48</sup>	44.44 <sup>9</sup>	39.532 <sup>66</sup>	44.65 <sup>107</sup>	8.364 <sup>78</sup>	48.34 <sup>179</sup>
20	31.62 <sup>22</sup>	58.01 <sup>162</sup>	48.456 <sup>91</sup>	44.53 <sup>8</sup>	39.466 <sup>118</sup>	45.72 <sup>90</sup>	8.286 <sup>117</sup>	50.13 <sup>148</sup>
30	31.40 <sup>28</sup>	59.63 <sup>125</sup>	48.365 <sup>128</sup>	44.61 <sup>5</sup>	39.348 <sup>164</sup>	46.62 <sup>70</sup>	8.169 <sup>152</sup>	51.61 <sup>114</sup>
Febr. 9	31.12 <sup>34</sup>	60.88 <sup>85</sup>	48.237 <sup>157</sup>	44.66 <sup>0</sup>	39.184 <sup>200</sup>	47.32 <sup>46</sup>	8.017 <sup>179</sup>	52.75 <sup>78</sup>
19	30.78 <sup>36</sup>	61.73 <sup>42</sup>	48.080 <sup>178</sup>	44.66 <sup>5</sup>	38.984 <sup>225</sup>	47.78 <sup>21</sup>	7.838 <sup>198</sup>	53.53 <sup>41</sup>
März 1	30.42 <sup>38</sup>	62.15 <sup>3</sup>	47.902 <sup>187</sup>	44.61 <sup>10</sup>	38.759 <sup>237</sup>	47.99 <sup>5</sup>	7.640 <sup>206</sup>	53.94 <sup>3</sup>
11	30.04 <sup>38</sup>	62.12 <sup>46</sup>	47.715 <sup>185</sup>	44.51 <sup>15</sup>	38.522 <sup>234</sup>	47.94 <sup>30</sup>	7.434 <sup>205</sup>	53.97 <sup>34</sup>
21	29.66 <sup>35</sup>	61.66 <sup>86</sup>	47.530 <sup>172</sup>	44.36 <sup>18</sup>	38.288 <sup>218</sup>	47.64 <sup>54</sup>	7.229 <sup>193</sup>	53.63 <sup>71</sup>
31	29.31 <sup>30</sup>	60.80 <sup>123</sup>	47.358 <sup>148</sup>	44.18 <sup>19</sup>	38.070 <sup>190</sup>	47.10 <sup>74</sup>	7.036 <sup>172</sup>	52.92 <sup>106</sup>
Apr. 10	29.01 <sup>25</sup>	59.57 <sup>152</sup>	47.210 <sup>116</sup>	43.99 <sup>18</sup>	37.880 <sup>150</sup>	46.36 <sup>89</sup>	6.864 <sup>143</sup>	51.86 <sup>139</sup>
20	28.76 <sup>17</sup>	58.05 <sup>175</sup>	47.094 <sup>77</sup>	43.81 <sup>15</sup>	37.730 <sup>102</sup>	45.47 <sup>100</sup>	6.721 <sup>106</sup>	50.47 <sup>170</sup>
30	28.59 <sup>10</sup>	56.30 <sup>191</sup>	47.017 <sup>33</sup>	43.66 <sup>8</sup>	37.628 <sup>49</sup>	44.47 <sup>106</sup>	6.615 <sup>66</sup>	48.77 <sup>197</sup>
Mai 10	28.49 <sup>1</sup>	54.39 <sup>199</sup>	46.984 <sup>14</sup>	43.58 <sup>0</sup>	37.579 <sup>8</sup>	43.41 <sup>107</sup>	6.549 <sup>21</sup>	46.80 <sup>222</sup>
20	28.48 <sup>8</sup>	52.40 <sup>199</sup>	46.998 <sup>62</sup>	43.58 <sup>10</sup>	37.587 <sup>67</sup>	42.34 <sup>102</sup>	6.528 <sup>25</sup>	44.58 <sup>240</sup>
30	28.56 <sup>16</sup>	50.41 <sup>193</sup>	47.060 <sup>109</sup>	43.68 <sup>22</sup>	37.654 <sup>123</sup>	41.32 <sup>94</sup>	6.553 <sup>70</sup>	42.18 <sup>255</sup>
Juni 9	28.72 <sup>24</sup>	48.48 <sup>180</sup>	47.169 <sup>152</sup>	43.90 <sup>33</sup>	37.777 <sup>177</sup>	40.38 <sup>82</sup>	6.623 <sup>114</sup>	39.63 <sup>264</sup>
19	28.96 <sup>31</sup>	46.68 <sup>163</sup>	47.321 <sup>191</sup>	44.23 <sup>44</sup>	37.954 <sup>225</sup>	39.56 <sup>68</sup>	6.737 <sup>154</sup>	36.99 <sup>265</sup>
29	29.27 <sup>38</sup>	45.05 <sup>140</sup>	47.512 <sup>227</sup>	44.67 <sup>55</sup>	38.179 <sup>268</sup>	38.88 <sup>51</sup>	6.891 <sup>191</sup>	34.34 <sup>260</sup>
Juli 9	29.65 <sup>43</sup>	43.65 <sup>115</sup>	47.739 <sup>255</sup>	45.22 <sup>63</sup>	38.447 <sup>304</sup>	38.37 <sup>34</sup>	7.082 <sup>222</sup>	31.74 <sup>247</sup>
19	30.08 <sup>48</sup>	42.50 <sup>86</sup>	47.994 <sup>278</sup>	45.85 <sup>69</sup>	38.751 <sup>334</sup>	38.03 <sup>16</sup>	7.304 <sup>249</sup>	29.27 <sup>228</sup>
29	30.56 <sup>51</sup>	41.64 <sup>57</sup>	48.272 <sup>296</sup>	46.54 <sup>72</sup>	39.085 <sup>356</sup>	37.87 <sup>1</sup>	7.553 <sup>269</sup>	26.99 <sup>201</sup>
Aug. 8	31.07 <sup>54</sup>	41.07 <sup>26</sup>	48.568 <sup>308</sup>	47.26 <sup>73</sup>	39.441 <sup>371</sup>	37.88 <sup>18</sup>	7.822 <sup>285</sup>	24.98 <sup>168</sup>
18	31.61 <sup>55</sup>	40.81 <sup>4</sup>	48.876 <sup>314</sup>	47.99 <sup>72</sup>	39.812 <sup>380</sup>	38.06 <sup>34</sup>	8.107 <sup>295</sup>	23.30 <sup>129</sup>
28	32.16 <sup>57</sup>	40.85 <sup>36</sup>	49.190 <sup>316</sup>	48.71 <sup>66</sup>	40.192 <sup>385</sup>	38.40 <sup>48</sup>	8.402 <sup>299</sup>	22.01 <sup>85</sup>
Sept. 7	32.73 <sup>56</sup>	41.21 <sup>66</sup>	49.506 <sup>314</sup>	49.37 <sup>60</sup>	40.577 <sup>383</sup>	38.88 <sup>61</sup>	8.701 <sup>298</sup>	21.16 <sup>38</sup>
17	33.29 <sup>55</sup>	41.87 <sup>95</sup>	49.820 <sup>308</sup>	49.97 <sup>52</sup>	40.960 <sup>376</sup>	39.49 <sup>72</sup>	8.999 <sup>292</sup>	20.78 <sup>10</sup>
27	33.84 <sup>53</sup>	42.82 <sup>122</sup>	50.128 <sup>298</sup>	50.49 <sup>43</sup>	41.336 <sup>366</sup>	40.21 <sup>84</sup>	9.291 <sup>282</sup>	20.88 <sup>56</sup>
Okt. 7	34.37 <sup>51</sup>	44.04 <sup>149</sup>	50.426 <sup>285</sup>	50.92 <sup>34</sup>	41.702 <sup>350</sup>	41.05 <sup>93</sup>	9.573 <sup>266</sup>	21.46 <sup>103</sup>
17	34.88 <sup>47</sup>	45.53 <sup>173</sup>	50.711 <sup>269</sup>	51.26 <sup>27</sup>	42.052 <sup>329</sup>	41.98 <sup>103</sup>	9.839 <sup>248</sup>	22.49 <sup>144</sup>
27	35.35 <sup>43</sup>	47.26 <sup>194</sup>	50.980 <sup>247</sup>	51.53 <sup>20</sup>	42.381 <sup>304</sup>	43.01 <sup>110</sup>	10.087 <sup>223</sup>	23.93 <sup>180</sup>
Nov. 6	35.78 <sup>38</sup>	49.20 <sup>212</sup>	51.227 <sup>222</sup>	51.73 <sup>15</sup>	42.685 <sup>272</sup>	44.11 <sup>119</sup>	10.310 <sup>195</sup>	25.73 <sup>208</sup>
16	36.16 <sup>31</sup>	51.32 <sup>227</sup>	51.449 <sup>193</sup>	51.88 <sup>12</sup>	42.957 <sup>235</sup>	45.30 <sup>125</sup>	10.505 <sup>162</sup>	27.81 <sup>227</sup>
26	36.47 <sup>25</sup>	53.59 <sup>236</sup>	51.642 <sup>157</sup>	52.00 <sup>10</sup>	43.192 <sup>191</sup>	46.55 <sup>129</sup>	10.667 <sup>124</sup>	30.08 <sup>238</sup>
Dez. 6	36.72 <sup>17</sup>	55.95 <sup>239</sup>	51.799 <sup>119</sup>	52.10 <sup>10</sup>	43.383 <sup>142</sup>	47.84 <sup>132</sup>	10.791 <sup>84</sup>	32.46 <sup>239</sup>
15	36.89 <sup>8</sup>	58.34 <sup>236</sup>	51.918 <sup>75</sup>	52.20 <sup>11</sup>	43.525 <sup>88</sup>	49.16 <sup>130</sup>	10.875 <sup>41</sup>	34.85 <sup>232</sup>
25	36.97 <sup>1</sup>	60.70 <sup>225</sup>	51.993 <sup>30</sup>	52.31 <sup>11</sup>	43.613 <sup>31</sup>	50.46 <sup>125</sup>	10.916 <sup>4</sup>	37.17 <sup>216</sup>
35	36.98	62.95	52.023	52.42	43.644	51.71	10.912	39.33
Mittl. Ort sec δ, tg δ	30.92 2.022	52.24 +1.758	48.289 1.075	47.54 +0.394	39.172 1.328	44.04 +0.874	7.878 1.082	36.97 -0.413
a, a'	+5.3	+5.3	+3.6	+5.2	+4.2	+5.0	+2.5	+4.9
b, b'	+0.03	-0.96	+0.01	-0.97	+0.01	-0.97	-0.01	-0.97



Tag	188) $\beta$ Eridani		192) $\mu$ Aurigae		194) $\beta$ Orionis		193) $\alpha$ Aurigae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	5 <sup>h</sup> 5 <sup>m</sup>	-5° 9'	5 <sup>h</sup> 9 <sup>m</sup>	+38° 25'	5 <sup>h</sup> 11 <sup>m</sup>	-8° 15'	5 <sup>h</sup> 12 <sup>m</sup>	+45° 56'
Jan. 0	8.939 <sup>10</sup>	28.67 <sup>131</sup>	39.965 <sup>1</sup>	15.69 <sup>105</sup>	53.941 <sup>7</sup>	56.61 <sup>147</sup>	37.778 <sup>2</sup>	39.35 <sup>146</sup>
10	8.929 <sup>53</sup>	29.98 <sup>114</sup>	39.966 <sup>54</sup>	16.74 <sup>96</sup>	53.934 <sup>51</sup>	58.08 <sup>130</sup>	37.776 <sup>64</sup>	40.81 <sup>133</sup>
20	8.876 <sup>91</sup>	31.12 <sup>96</sup>	39.912 <sup>105</sup>	17.70 <sup>83</sup>	53.883 <sup>90</sup>	59.38 <sup>109</sup>	37.712 <sup>122</sup>	42.14 <sup>115</sup>
Febr. 30	8.785 <sup>126</sup>	32.08 <sup>75</sup>	39.807 <sup>151</sup>	18.53 <sup>65</sup>	53.793 <sup>125</sup>	60.47 <sup>86</sup>	37.590 <sup>174</sup>	43.29 <sup>92</sup>
9	8.659 <sup>153</sup>	32.83 <sup>53</sup>	39.656 <sup>188</sup>	19.18 <sup>45</sup>	53.668 <sup>154</sup>	61.33 <sup>61</sup>	37.416 <sup>214</sup>	44.21 <sup>65</sup>
19	8.506 <sup>172</sup>	33.36 <sup>31</sup>	39.468 <sup>213</sup>	19.63 <sup>23</sup>	53.514 <sup>173</sup>	61.94 <sup>36</sup>	37.202 <sup>244</sup>	44.86 <sup>35</sup>
März 1	8.334 <sup>181</sup>	33.67 <sup>9</sup>	39.255 <sup>226</sup>	19.86 <sup>0</sup>	53.341 <sup>184</sup>	62.30 <sup>10</sup>	36.958 <sup>258</sup>	45.21 <sup>5</sup>
11	8.153 <sup>180</sup>	33.76 <sup>14</sup>	39.029 <sup>225</sup>	19.86 <sup>23</sup>	53.157 <sup>183</sup>	62.40 <sup>15</sup>	36.700 <sup>258</sup>	45.26 <sup>25</sup>
21	7.973 <sup>169</sup>	33.62 <sup>37</sup>	38.804 <sup>211</sup>	19.63 <sup>44</sup>	52.974 <sup>174</sup>	62.25 <sup>41</sup>	36.442 <sup>243</sup>	45.01 <sup>54</sup>
31	7.804 <sup>149</sup>	33.25 <sup>60</sup>	38.593 <sup>185</sup>	19.19 <sup>62</sup>	52.800 <sup>155</sup>	61.84 <sup>66</sup>	36.199 <sup>214</sup>	44.47 <sup>79</sup>
Apr. 10	7.655 <sup>121</sup>	32.65 <sup>81</sup>	38.408 <sup>149</sup>	18.57 <sup>76</sup>	52.645 <sup>128</sup>	61.18 <sup>90</sup>	35.985 <sup>174</sup>	43.68 <sup>99</sup>
20	7.534 <sup>86</sup>	31.84 <sup>103</sup>	38.259 <sup>104</sup>	17.81 <sup>86</sup>	52.517 <sup>93</sup>	60.28 <sup>113</sup>	35.811 <sup>124</sup>	42.69 <sup>116</sup>
30	7.448 <sup>46</sup>	30.81 <sup>123</sup>	38.155 <sup>52</sup>	16.95 <sup>91</sup>	52.424 <sup>54</sup>	59.15 <sup>136</sup>	35.687 <sup>67</sup>	41.53 <sup>125</sup>
Mai 10	7.402 <sup>4</sup>	29.58 <sup>143</sup>	38.103 <sup>2</sup>	16.04 <sup>91</sup>	52.370 <sup>12</sup>	57.79 <sup>155</sup>	35.620 <sup>7</sup>	40.28 <sup>131</sup>
20	7.398 <sup>40</sup>	28.15 <sup>158</sup>	38.105 <sup>58</sup>	15.13 <sup>87</sup>	52.358 <sup>31</sup>	56.24 <sup>172</sup>	35.613 <sup>55</sup>	38.97 <sup>129</sup>
30	7.438 <sup>83</sup>	26.57 <sup>172</sup>	38.163 <sup>112</sup>	14.26 <sup>80</sup>	52.389 <sup>75</sup>	54.52 <sup>187</sup>	35.668 <sup>116</sup>	37.68 <sup>123</sup>
Juni 9	7.521 <sup>124</sup>	24.85 <sup>182</sup>	38.275 <sup>164</sup>	13.46 <sup>70</sup>	52.464 <sup>115</sup>	52.65 <sup>196</sup>	35.784 <sup>174</sup>	36.45 <sup>113</sup>
19	7.645 <sup>162</sup>	23.03 <sup>187</sup>	38.439 <sup>211</sup>	12.76 <sup>56</sup>	52.579 <sup>154</sup>	50.69 <sup>201</sup>	35.958 <sup>228</sup>	35.32 <sup>100</sup>
29	7.807 <sup>194</sup>	21.16 <sup>188</sup>	38.650 <sup>253</sup>	12.20 <sup>42</sup>	52.733 <sup>188</sup>	48.68 <sup>201</sup>	36.186 <sup>274</sup>	34.32 <sup>84</sup>
Juli 9	8.001 <sup>223</sup>	19.28 <sup>183</sup>	38.903 <sup>288</sup>	11.78 <sup>26</sup>	52.921 <sup>217</sup>	46.67 <sup>195</sup>	36.460 <sup>315</sup>	33.48 <sup>65</sup>
19	8.224 <sup>247</sup>	17.45 <sup>172</sup>	39.191 <sup>318</sup>	11.52 <sup>10</sup>	53.138 <sup>241</sup>	44.72 <sup>183</sup>	36.775 <sup>349</sup>	32.83 <sup>47</sup>
29	8.471 <sup>264</sup>	15.73 <sup>157</sup>	39.509 <sup>339</sup>	11.42 <sup>4</sup>	53.379 <sup>260</sup>	42.89 <sup>166</sup>	37.124 <sup>374</sup>	32.36 <sup>26</sup>
Aug. 8	8.735 <sup>278</sup>	14.16 <sup>136</sup>	39.848 <sup>356</sup>	11.46 <sup>18</sup>	53.639 <sup>274</sup>	41.23 <sup>143</sup>	37.498 <sup>394</sup>	32.10 <sup>7</sup>
18	9.013 <sup>285</sup>	12.80 <sup>110</sup>	40.204 <sup>365</sup>	11.64 <sup>31</sup>	53.913 <sup>284</sup>	39.80 <sup>114</sup>	37.892 <sup>406</sup>	32.03 <sup>12</sup>
28	9.298 <sup>288</sup>	11.70 <sup>80</sup>	40.569 <sup>371</sup>	11.95 <sup>43</sup>	54.197 <sup>287</sup>	38.66 <sup>82</sup>	38.298 <sup>413</sup>	32.15 <sup>30</sup>
Sept. 7	9.586 <sup>287</sup>	10.90 <sup>48</sup>	40.940 <sup>370</sup>	12.38 <sup>54</sup>	54.484 <sup>288</sup>	37.84 <sup>47</sup>	38.711 <sup>413</sup>	32.45 <sup>48</sup>
17	9.873 <sup>282</sup>	10.42 <sup>14</sup>	41.310 <sup>365</sup>	12.92 <sup>62</sup>	54.772 <sup>284</sup>	37.37 <sup>10</sup>	39.124 <sup>409</sup>	32.93 <sup>64</sup>
27	10.155 <sup>273</sup>	10.28 <sup>21</sup>	41.675 <sup>356</sup>	13.54 <sup>70</sup>	55.056 <sup>276</sup>	37.27 <sup>27</sup>	39.533 <sup>399</sup>	33.57 <sup>80</sup>
Okt. 7	10.428 <sup>261</sup>	10.49 <sup>54</sup>	42.031 <sup>342</sup>	14.24 <sup>79</sup>	55.332 <sup>264</sup>	37.54 <sup>63</sup>	39.932 <sup>384</sup>	34.37 <sup>94</sup>
17	10.689 <sup>244</sup>	11.03 <sup>83</sup>	42.373 <sup>323</sup>	15.03 <sup>85</sup>	55.596 <sup>248</sup>	38.17 <sup>95</sup>	40.316 <sup>363</sup>	35.31 <sup>109</sup>
27	10.933 <sup>225</sup>	11.86 <sup>109</sup>	42.696 <sup>300</sup>	15.88 <sup>93</sup>	55.844 <sup>229</sup>	39.12 <sup>123</sup>	40.679 <sup>336</sup>	36.40 <sup>122</sup>
Nov. 6	11.158 <sup>200</sup>	12.95 <sup>130</sup>	42.996 <sup>271</sup>	16.81 <sup>99</sup>	56.073 <sup>205</sup>	40.35 <sup>146</sup>	41.015 <sup>303</sup>	37.62 <sup>134</sup>
16	11.358 <sup>171</sup>	14.25 <sup>144</sup>	43.267 <sup>235</sup>	17.80 <sup>105</sup>	56.278 <sup>176</sup>	41.81 <sup>161</sup>	41.318 <sup>263</sup>	38.96 <sup>143</sup>
26	11.529 <sup>138</sup>	15.69 <sup>151</sup>	43.502 <sup>194</sup>	18.85 <sup>111</sup>	56.454 <sup>142</sup>	43.42 <sup>169</sup>	41.581 <sup>216</sup>	40.39 <sup>151</sup>
Dez. 6	11.667 <sup>102</sup>	17.20 <sup>153</sup>	43.696 <sup>148</sup>	19.96 <sup>112</sup>	56.596 <sup>106</sup>	45.11 <sup>172</sup>	41.797 <sup>163</sup>	41.90 <sup>156</sup>
15	11.769 <sup>61</sup>	18.73 <sup>148</sup>	43.844 <sup>96</sup>	21.08 <sup>113</sup>	56.702 <sup>65</sup>	46.83 <sup>167</sup>	41.960 <sup>104</sup>	43.46 <sup>156</sup>
25	11.830 <sup>19</sup>	20.21 <sup>138</sup>	43.940 <sup>40</sup>	22.21 <sup>110</sup>	56.767 <sup>22</sup>	48.50 <sup>156</sup>	42.064 <sup>43</sup>	45.02 <sup>152</sup>
35	11.849 <sup>7</sup>	21.59 <sup>9</sup>	43.980 <sup>9</sup>	23.31 <sup>9</sup>	56.789 <sup>9</sup>	50.06 <sup>9</sup>	42.107 <sup>9</sup>	46.54 <sup>9</sup>
Mittl. Ort	8.626	21.68	39.619	16.81	53.584	49.44	37.310	39.71
sec $\delta$ , tg $\delta$	1.004	-0.090	1.276	+0.793	1.010	-0.145	1.438	+1.034
a, a'	+3.0	+4.8	+4.1	+4.4	+2.9	+4.2	+4.4	+4.1
b, b'	0.00	-0.97	+0.01	-0.98	0.00	-0.98	+0.01	-0.98



# Obere Kulmination Greenwich

71\*

Tag	191) 19 H. Camelop.		196) 8 Doradus		201) γ Orionis		202) β Tauri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	5 <sup>h</sup> 13 <sup>m</sup>	+79° 10'	5 <sup>h</sup> 13 <sup>m</sup>	-67° 14'	5 <sup>h</sup> 22 <sup>m</sup>	+6° 17'	5 <sup>h</sup> 22 <sup>m</sup>	+28° 33'
Jan. 0	31.00 <sup>5</sup>	24.75 <sup>11</sup>	50.76 <sup>11</sup>	62.05 <sup>11</sup>	11.025 <sup>11</sup>	60.12 <sup>11</sup>	49.035 <sup>11</sup>	43.91 <sup>11</sup>
10	30.76 <sup>24</sup>	27.72 <sup>297</sup>	50.49 <sup>27</sup>	65.00 <sup>295</sup>	11.037 <sup>12</sup>	59.36 <sup>76</sup>	49.054 <sup>19</sup>	44.42 <sup>51</sup>
20	30.31 <sup>45</sup>	30.42 <sup>270</sup>	50.13 <sup>36</sup>	67.57 <sup>257</sup>	11.005 <sup>32</sup>	58.70 <sup>66</sup>	49.023 <sup>31</sup>	44.90 <sup>48</sup>
30	29.66 <sup>65</sup>	32.76 <sup>234</sup>	49.69 <sup>44</sup>	69.69 <sup>212</sup>	10.932 <sup>73</sup>	58.16 <sup>54</sup>	48.944 <sup>79</sup>	45.34 <sup>44</sup>
Febr. 9	28.85 <sup>81</sup>	34.67 <sup>191</sup>	49.18 <sup>51</sup>	71.30 <sup>161</sup>	10.821 <sup>111</sup>	57.73 <sup>43</sup>	48.821 <sup>123</sup>	45.71 <sup>37</sup>
19	27.90 <sup>95</sup>	36.08 <sup>141</sup>	48.62 <sup>56</sup>	72.39 <sup>109</sup>	10.679 <sup>142</sup>	57.41 <sup>32</sup>	48.663 <sup>158</sup>	45.98 <sup>27</sup>
März 1	26.85 <sup>105</sup>	36.93 <sup>85</sup>	48.03 <sup>59</sup>	72.92 <sup>53</sup>	10.515 <sup>164</sup>	57.21 <sup>20</sup>	48.480 <sup>183</sup>	46.14 <sup>16</sup>
11	25.77 <sup>108</sup>	37.20 <sup>27</sup>	47.43 <sup>60</sup>	72.89 <sup>3</sup>	10.339 <sup>176</sup>	57.13 <sup>8</sup>	48.283 <sup>197</sup>	46.17 <sup>3</sup>
21	24.70 <sup>107</sup>	36.89 <sup>31</sup>	46.83 <sup>60</sup>	72.31 <sup>58</sup>	10.161 <sup>178</sup>	57.15 <sup>2</sup>	48.083 <sup>200</sup>	46.09 <sup>8</sup>
31	23.68 <sup>102</sup>	36.04 <sup>85</sup>	46.24 <sup>59</sup>	71.20 <sup>111</sup>	9.991 <sup>170</sup>	57.30 <sup>15</sup>	47.893 <sup>190</sup>	45.89 <sup>20</sup>
Apr. 10	22.76 <sup>92</sup>	34.68 <sup>136</sup>	45.70 <sup>54</sup>	69.59 <sup>161</sup>	9.839 <sup>152</sup>	57.56 <sup>26</sup>	47.724 <sup>169</sup>	45.59 <sup>30</sup>
20	21.97 <sup>79</sup>	32.89 <sup>179</sup>	45.22 <sup>48</sup>	67.52 <sup>207</sup>	9.714 <sup>125</sup>	57.96 <sup>40</sup>	47.585 <sup>139</sup>	45.23 <sup>36</sup>
30	21.36 <sup>61</sup>	30.73 <sup>216</sup>	44.80 <sup>42</sup>	65.04 <sup>248</sup>	9.622 <sup>92</sup>	58.48 <sup>52</sup>	47.485 <sup>100</sup>	44.82 <sup>41</sup>
Mai 10	20.93 <sup>43</sup>	28.30 <sup>243</sup>	44.46 <sup>34</sup>	62.20 <sup>284</sup>	9.570 <sup>52</sup>	59.14 <sup>66</sup>	47.430 <sup>55</sup>	44.41 <sup>41</sup>
20	20.71 <sup>22</sup>	25.69 <sup>261</sup>	44.20 <sup>26</sup>	59.05 <sup>315</sup>	9.560 <sup>10</sup>	59.94 <sup>80</sup>	47.423 <sup>7</sup>	44.03 <sup>38</sup>
30	20.7 <sup>0</sup>	22.99 <sup>270</sup>	44.04 <sup>16</sup>	55.69 <sup>336</sup>	9.593 <sup>33</sup>	60.87 <sup>93</sup>	47.465 <sup>42</sup>	43.70 <sup>26</sup>
Juni 9	20.92 <sup>21</sup>	20.29 <sup>270</sup>	43.98 <sup>6</sup>	52.18 <sup>351</sup>	9.669 <sup>76</sup>	61.92 <sup>105</sup>	47.556 <sup>91</sup>	43.44 <sup>17</sup>
19	21.34 <sup>42</sup>	17.66 <sup>263</sup>	44.02 <sup>4</sup>	48.61 <sup>357</sup>	9.787 <sup>118</sup>	63.07 <sup>115</sup>	47.693 <sup>137</sup>	43.27 <sup>6</sup>
29	21.94 <sup>60</sup>	15.19 <sup>247</sup>	44.15 <sup>13</sup>	45.06 <sup>355</sup>	9.942 <sup>155</sup>	64.29 <sup>122</sup>	47.873 <sup>180</sup>	43.21 <sup>6</sup>
Juli 9	22.73 <sup>79</sup>	12.95 <sup>224</sup>	44.38 <sup>23</sup>	41.64 <sup>342</sup>	10.132 <sup>190</sup>	65.55 <sup>126</sup>	48.091 <sup>218</sup>	43.25 <sup>4</sup>
19	23.68 <sup>95</sup>	10.99 <sup>196</sup>	44.70 <sup>32</sup>	38.44 <sup>320</sup>	10.351 <sup>219</sup>	66.81 <sup>126</sup>	48.342 <sup>251</sup>	43.38 <sup>23</sup>
Aug. 8	24.77 <sup>109</sup>	9.35 <sup>164</sup>	45.09 <sup>39</sup>	35.54 <sup>290</sup>	10.594 <sup>243</sup>	68.04 <sup>123</sup>	48.620 <sup>278</sup>	43.61 <sup>23</sup>
18	25.97 <sup>120</sup>	8.07 <sup>128</sup>	45.55 <sup>46</sup>	33.04 <sup>250</sup>	10.856 <sup>262</sup>	69.20 <sup>116</sup>	48.920 <sup>300</sup>	43.91 <sup>30</sup>
28	27.25 <sup>128</sup>	7.18 <sup>89</sup>	46.07 <sup>52</sup>	31.01 <sup>203</sup>	11.133 <sup>277</sup>	70.24 <sup>104</sup>	49.235 <sup>315</sup>	44.27 <sup>36</sup>
Sept. 7	28.60 <sup>135</sup>	6.71 <sup>47</sup>	46.64 <sup>57</sup>	29.53 <sup>148</sup>	11.419 <sup>286</sup>	71.12 <sup>88</sup>	49.561 <sup>326</sup>	44.66 <sup>39</sup>
17	29.99 <sup>139</sup>	6.66 <sup>5</sup>	47.23 <sup>59</sup>	28.65 <sup>88</sup>	11.710 <sup>291</sup>	71.80 <sup>68</sup>	49.893 <sup>332</sup>	45.07 <sup>41</sup>
27	31.39 <sup>140</sup>	7.04 <sup>38</sup>	47.83 <sup>60</sup>	28.41 <sup>24</sup>	12.003 <sup>293</sup>	72.27 <sup>47</sup>	50.226 <sup>333</sup>	45.49 <sup>42</sup>
Okt. 7	32.78 <sup>139</sup>	7.04 <sup>80</sup>	48.42 <sup>59</sup>	28.82 <sup>41</sup>	12.293 <sup>290</sup>	72.51 <sup>24</sup>	50.558 <sup>332</sup>	45.90 <sup>41</sup>
17	34.14 <sup>136</sup>	7.84 <sup>121</sup>	48.99 <sup>57</sup>	29.87 <sup>105</sup>	12.578 <sup>285</sup>	72.50 <sup>1</sup>	50.883 <sup>325</sup>	46.29 <sup>39</sup>
27	35.43 <sup>129</sup>	9.05 <sup>162</sup>	49.51 <sup>52</sup>	31.53 <sup>166</sup>	12.853 <sup>275</sup>	72.27 <sup>23</sup>	51.197 <sup>314</sup>	46.67 <sup>38</sup>
Nov. 6	36.63 <sup>120</sup>	10.67 <sup>200</sup>	49.98 <sup>47</sup>	33.74 <sup>221</sup>	13.115 <sup>262</sup>	71.83 <sup>44</sup>	51.498 <sup>301</sup>	47.05 <sup>38</sup>
16	37.71 <sup>108</sup>	12.67 <sup>234</sup>	50.38 <sup>40</sup>	36.43 <sup>269</sup>	13.359 <sup>244</sup>	71.20 <sup>63</sup>	51.779 <sup>281</sup>	47.43 <sup>38</sup>
26	38.65 <sup>94</sup>	15.01 <sup>264</sup>	50.69 <sup>31</sup>	39.49 <sup>306</sup>	13.581 <sup>222</sup>	70.44 <sup>76</sup>	52.037 <sup>258</sup>	47.81 <sup>38</sup>
Dez. 6	39.43 <sup>78</sup>	17.65 <sup>289</sup>	50.91 <sup>22</sup>	42.80 <sup>331</sup>	13.777 <sup>196</sup>	69.59 <sup>85</sup>	52.264 <sup>227</sup>	48.22 <sup>41</sup>
15	40.01 <sup>58</sup>	20.54 <sup>307</sup>	51.02 <sup>11</sup>	46.26 <sup>346</sup>	13.941 <sup>164</sup>	68.68 <sup>91</sup>	52.455 <sup>191</sup>	48.66 <sup>44</sup>
25	40.39 <sup>38</sup>	23.61 <sup>316</sup>	51.03 <sup>1</sup>	49.72 <sup>346</sup>	14.069 <sup>128</sup>	67.77 <sup>91</sup>	52.606 <sup>151</sup>	49.13 <sup>47</sup>
35	40.54 <sup>15</sup>	25.77 <sup>317</sup>	50.93 <sup>10</sup>	53.07 <sup>335</sup>	14.156 <sup>87</sup>	66.89 <sup>88</sup>	52.710 <sup>104</sup>	49.63 <sup>50</sup>
Mittl. Ort	40.46 <sup>8</sup>	33.02 <sup>308</sup>	50.72 <sup>21</sup>	56.20 <sup>313</sup>	14.199 <sup>43</sup>	66.08 <sup>81</sup>	52.765 <sup>55</sup>	50.14 <sup>51</sup>
sec δ, tg δ	27.13	22.48	47.57	50.15	10.747	65.26	48.751	46.46
a, a'	5.324	+5.229	2.586	-2.384	1.006	+0.110	1.139	+0.544
b, b'	+9.9	+4.0	0.0	+4.0	+3.2	+3.3	+3.8	+3.2
	+0.07	-0.98	-0.03	-0.98	0.00	-0.99	+0.01	-0.99



Tag	203) 17 Camelopard.		206) 8 Orionis		207) $\alpha$ Leporis		205) Grb 966 Caml	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	5 <sup>h</sup> 24 <sup>m</sup>	+63° 1'	5 <sup>h</sup> 29 <sup>m</sup>	—0° 20'	5 <sup>h</sup> 30 <sup>m</sup>	—17° 51'	5 <sup>h</sup> 32 <sup>m</sup>	+75° 0'
Jan. 0	59.19 <sup>a</sup> <sub>2</sub>	27.69 <sup>a</sup> <sub>235</sub>	12.023 <sup>a</sup> <sub>14</sub>	23.38 <sup>a</sup> <sub>114</sub>	18.695 <sup>a</sup> <sub>3</sub>	44.39 <sup>a</sup> <sub>199</sub>	24.00 <sup>a</sup> <sub>7</sub>	42.50 <sup>a</sup> <sub>288</sub>
10	59.17 <sup>a</sup> <sub>11</sub>	30.04 <sup>a</sup> <sub>217</sub>	12.037 <sup>a</sup> <sub>30</sub>	24.52 <sup>a</sup> <sub>99</sub>	18.692 <sup>a</sup> <sub>49</sub>	46.38 <sup>a</sup> <sub>177</sub>	23.93 <sup>a</sup> <sub>24</sub>	45.38 <sup>a</sup> <sub>267</sub>
20	59.06 <sup>a</sup> <sub>20</sub>	32.21 <sup>a</sup> <sub>192</sub>	12.007 <sup>a</sup> <sub>72</sub>	25.51 <sup>a</sup> <sub>84</sub>	18.643 <sup>a</sup> <sub>91</sub>	48.15 <sup>a</sup> <sub>151</sub>	23.69 <sup>a</sup> <sub>39</sub>	48.05 <sup>a</sup> <sub>238</sub>
30	58.86 <sup>a</sup> <sub>29</sub>	34.13 <sup>a</sup> <sub>159</sub>	11.935 <sup>a</sup> <sub>110</sub>	26.35 <sup>a</sup> <sub>67</sub>	18.552 <sup>a</sup> <sub>129</sub>	49.66 <sup>a</sup> <sub>121</sub>	23.30 <sup>a</sup> <sub>53</sub>	50.43 <sup>a</sup> <sub>200</sub>
Febr. 9	58.57 <sup>a</sup> <sub>34</sub>	35.72 <sup>a</sup> <sub>120</sub>	11.825 <sup>a</sup> <sub>140</sub>	27.02 <sup>a</sup> <sub>49</sub>	18.423 <sup>a</sup> <sub>160</sub>	50.87 <sup>a</sup> <sub>89</sub>	22.77 <sup>a</sup> <sub>64</sub>	52.43 <sup>a</sup> <sub>154</sub>
19	58.23 <sup>a</sup> <sub>39</sub>	36.92 <sup>a</sup> <sub>76</sub>	11.685 <sup>a</sup> <sub>164</sub>	27.51 <sup>a</sup> <sub>30</sub>	18.263 <sup>a</sup> <sub>183</sub>	51.76 <sup>a</sup> <sub>55</sub>	22.13 <sup>a</sup> <sub>71</sub>	53.97 <sup>a</sup> <sub>104</sub>
März 1	57.84 <sup>a</sup> <sub>42</sub>	37.68 <sup>a</sup> <sub>31</sub>	11.521 <sup>a</sup> <sub>177</sub>	27.81 <sup>a</sup> <sub>13</sub>	18.080 <sup>a</sup> <sub>197</sub>	52.31 <sup>a</sup> <sub>22</sub>	21.42 <sup>a</sup> <sub>76</sub>	55.01 <sup>a</sup> <sub>49</sub>
11	57.42 <sup>a</sup> <sub>42</sub>	37.99 <sup>a</sup> <sub>15</sub>	11.344 <sup>a</sup> <sub>180</sub>	27.94 <sup>a</sup> <sub>6</sub>	17.883 <sup>a</sup> <sub>199</sub>	52.53 <sup>a</sup> <sub>13</sub>	20.66 <sup>a</sup> <sub>77</sub>	55.50 <sup>a</sup> <sub>5</sub>
21	57.00 <sup>a</sup> <sub>40</sub>	37.84 <sup>a</sup> <sub>59</sub>	11.164 <sup>a</sup> <sub>174</sub>	27.88 <sup>a</sup> <sub>24</sub>	17.684 <sup>a</sup> <sub>192</sub>	52.40 <sup>a</sup> <sub>46</sub>	19.89 <sup>a</sup> <sub>75</sub>	55.45 <sup>a</sup> <sub>59</sub>
31	56.60 <sup>a</sup> <sub>36</sub>	37.25 <sup>a</sup> <sub>100</sub>	10.990 <sup>a</sup> <sub>156</sub>	27.64 <sup>a</sup> <sub>42</sub>	17.492 <sup>a</sup> <sub>176</sub>	51.94 <sup>a</sup> <sub>79</sub>	19.14 <sup>a</sup> <sub>68</sub>	54.86 <sup>a</sup> <sub>109</sub>
Apr. 10	56.24 <sup>a</sup> <sub>30</sub>	36.25 <sup>a</sup> <sub>136</sub>	10.834 <sup>a</sup> <sub>131</sub>	27.22 <sup>a</sup> <sub>59</sub>	17.316 <sup>a</sup> <sub>151</sub>	51.15 <sup>a</sup> <sub>110</sub>	18.46 <sup>a</sup> <sub>59</sub>	53.77 <sup>a</sup> <sub>153</sub>
20	55.94 <sup>a</sup> <sub>24</sub>	34.89 <sup>a</sup> <sub>165</sub>	10.703 <sup>a</sup> <sub>98</sub>	26.63 <sup>a</sup> <sub>78</sub>	17.165 <sup>a</sup> <sub>118</sub>	50.05 <sup>a</sup> <sub>139</sub>	17.87 <sup>a</sup> <sub>48</sub>	52.24 <sup>a</sup> <sub>191</sub>
30	55.70 <sup>a</sup> <sub>15</sub>	33.24 <sup>a</sup> <sub>187</sub>	10.605 <sup>a</sup> <sub>61</sub>	25.85 <sup>a</sup> <sub>95</sub>	17.047 <sup>a</sup> <sub>80</sub>	48.66 <sup>a</sup> <sub>166</sub>	17.39 <sup>a</sup> <sub>34</sub>	50.33 <sup>a</sup> <sub>220</sub>
Mai 10	55.55 <sup>a</sup> <sub>7</sub>	31.37 <sup>a</sup> <sub>202</sub>	10.544 <sup>a</sup> <sub>20</sub>	24.90 <sup>a</sup> <sub>112</sub>	16.967 <sup>a</sup> <sub>39</sub>	47.00 <sup>a</sup> <sub>190</sub>	17.05 <sup>a</sup> <sub>20</sub>	48.13 <sup>a</sup> <sub>241</sub>
20	55.48 <sup>a</sup> <sub>3</sub>	29.35 <sup>a</sup> <sub>210</sub>	10.524 <sup>a</sup> <sub>23</sub>	23.78 <sup>a</sup> <sub>127</sub>	16.928 <sup>a</sup> <sub>5</sub>	45.10 <sup>a</sup> <sub>210</sub>	16.85 <sup>a</sup> <sub>4</sub>	45.72 <sup>a</sup> <sub>254</sub>
30	55.51 <sup>a</sup> <sub>11</sub>	27.25 <sup>a</sup> <sub>209</sub>	10.547 <sup>a</sup> <sub>65</sub>	22.51 <sup>a</sup> <sub>139</sub>	16.933 <sup>a</sup> <sub>48</sub>	43.00 <sup>a</sup> <sub>226</sub>	16.81 <sup>a</sup> <sub>12</sub>	43.18 <sup>a</sup> <sub>258</sub>
Juni 9	55.62 <sup>a</sup> <sub>21</sub>	25.16 <sup>a</sup> <sub>202</sub>	10.612 <sup>a</sup> <sub>106</sub>	21.12 <sup>a</sup> <sub>150</sub>	16.981 <sup>a</sup> <sub>91</sub>	40.74 <sup>a</sup> <sub>237</sub>	16.93 <sup>a</sup> <sub>26</sub>	40.60 <sup>a</sup> <sub>255</sub>
19	55.83 <sup>a</sup> <sub>28</sub>	23.14 <sup>a</sup> <sub>190</sub>	10.718 <sup>a</sup> <sub>144</sub>	19.62 <sup>a</sup> <sub>156</sub>	17.072 <sup>a</sup> <sub>130</sub>	38.37 <sup>a</sup> <sub>241</sub>	17.19 <sup>a</sup> <sub>41</sub>	38.05 <sup>a</sup> <sub>243</sub>
29	56.11 <sup>a</sup> <sub>36</sub>	21.24 <sup>a</sup> <sub>173</sub>	10.862 <sup>a</sup> <sub>178</sub>	18.06 <sup>a</sup> <sub>158</sub>	17.202 <sup>a</sup> <sub>167</sub>	35.96 <sup>a</sup> <sub>240</sub>	17.60 <sup>a</sup> <sub>55</sub>	35.62 <sup>a</sup> <sub>226</sub>
Juli 9	56.47 <sup>a</sup> <sub>43</sub>	19.51 <sup>a</sup> <sub>151</sub>	11.040 <sup>a</sup> <sub>208</sub>	16.48 <sup>a</sup> <sub>156</sub>	17.369 <sup>a</sup> <sub>200</sub>	33.56 <sup>a</sup> <sub>232</sub>	18.15 <sup>a</sup> <sub>66</sub>	33.36 <sup>a</sup> <sub>202</sub>
19	56.90 <sup>a</sup> <sub>48</sub>	18.00 <sup>a</sup> <sub>126</sub>	11.248 <sup>a</sup> <sub>233</sub>	14.92 <sup>a</sup> <sub>150</sub>	17.569 <sup>a</sup> <sub>227</sub>	31.24 <sup>a</sup> <sub>216</sub>	18.81 <sup>a</sup> <sub>77</sub>	31.34 <sup>a</sup> <sub>174</sub>
29	57.38 <sup>a</sup> <sub>53</sub>	16.74 <sup>a</sup> <sub>98</sub>	11.481 <sup>a</sup> <sub>253</sub>	13.42 <sup>a</sup> <sub>137</sub>	17.796 <sup>a</sup> <sub>250</sub>	29.08 <sup>a</sup> <sub>194</sub>	19.58 <sup>a</sup> <sub>85</sub>	29.60 <sup>a</sup> <sub>143</sub>
Aug. 8	57.91 <sup>a</sup> <sub>56</sub>	15.76 <sup>a</sup> <sub>68</sub>	11.734 <sup>a</sup> <sub>268</sub>	12.05 <sup>a</sup> <sub>121</sub>	18.046 <sup>a</sup> <sub>268</sub>	27.14 <sup>a</sup> <sub>166</sub>	20.43 <sup>a</sup> <sub>93</sub>	28.17 <sup>a</sup> <sub>107</sub>
18	58.47 <sup>a</sup> <sub>59</sub>	15.08 <sup>a</sup> <sub>37</sub>	12.002 <sup>a</sup> <sub>280</sub>	10.84 <sup>a</sup> <sub>100</sub>	18.314 <sup>a</sup> <sub>281</sub>	25.48 <sup>a</sup> <sub>132</sub>	21.36 <sup>a</sup> <sub>98</sub>	27.10 <sup>a</sup> <sub>70</sub>
28	59.06 <sup>a</sup> <sub>61</sub>	14.71 <sup>a</sup> <sub>5</sub>	12.282 <sup>a</sup> <sub>286</sub>	9.84 <sup>a</sup> <sub>74</sub>	18.595 <sup>a</sup> <sub>289</sub>	24.16 <sup>a</sup> <sub>93</sub>	22.34 <sup>a</sup> <sub>102</sub>	26.40 <sup>a</sup> <sub>31</sub>
Sept. 7	59.67 <sup>a</sup> <sub>61</sub>	14.66 <sup>a</sup> <sub>26</sub>	12.568 <sup>a</sup> <sub>288</sub>	9.10 <sup>a</sup> <sub>46</sub>	18.884 <sup>a</sup> <sub>292</sub>	23.23 <sup>a</sup> <sub>49</sub>	23.36 <sup>a</sup> <sub>104</sub>	26.09 <sup>a</sup> <sub>8</sub>
17	60.28 <sup>a</sup> <sub>61</sub>	14.92 <sup>a</sup> <sub>57</sub>	12.856 <sup>a</sup> <sub>288</sub>	8.64 <sup>a</sup> <sub>17</sub>	19.176 <sup>a</sup> <sub>292</sub>	22.74 <sup>a</sup> <sub>5</sub>	24.40 <sup>a</sup> <sub>104</sub>	26.17 <sup>a</sup> <sub>49</sub>
27	60.89 <sup>a</sup> <sub>60</sub>	15.49 <sup>a</sup> <sub>88</sub>	13.144 <sup>a</sup> <sub>282</sub>	8.47 <sup>a</sup> <sub>14</sub>	19.468 <sup>a</sup> <sub>286</sub>	22.69 <sup>a</sup> <sub>40</sub>	25.44 <sup>a</sup> <sub>102</sub>	26.66 <sup>a</sup> <sub>89</sub>
Okt. 7	61.49 <sup>a</sup> <sub>58</sub>	16.37 <sup>a</sup> <sub>119</sub>	13.426 <sup>a</sup> <sub>274</sub>	8.61 <sup>a</sup> <sub>42</sub>	19.754 <sup>a</sup> <sub>276</sub>	23.09 <sup>a</sup> <sub>85</sub>	26.46 <sup>a</sup> <sub>99</sub>	27.55 <sup>a</sup> <sub>127</sub>
17	62.07 <sup>a</sup> <sub>54</sub>	17.56 <sup>a</sup> <sub>147</sub>	13.700 <sup>a</sup> <sub>261</sub>	9.03 <sup>a</sup> <sub>70</sub>	20.030 <sup>a</sup> <sub>262</sub>	23.94 <sup>a</sup> <sub>125</sub>	27.45 <sup>a</sup> <sub>93</sub>	28.82 <sup>a</sup> <sub>165</sub>
27	62.61 <sup>a</sup> <sub>51</sub>	19.03 <sup>a</sup> <sub>174</sub>	13.961 <sup>a</sup> <sub>244</sub>	9.73 <sup>a</sup> <sub>93</sub>	20.292 <sup>a</sup> <sub>243</sub>	25.19 <sup>a</sup> <sub>160</sub>	28.38 <sup>a</sup> <sub>86</sub>	30.47 <sup>a</sup> <sub>200</sub>
Nov. 6	63.12 <sup>a</sup> <sub>45</sub>	20.77 <sup>a</sup> <sub>198</sub>	14.205 <sup>a</sup> <sub>223</sub>	10.66 <sup>a</sup> <sub>111</sub>	20.535 <sup>a</sup> <sub>218</sub>	26.79 <sup>a</sup> <sub>188</sub>	29.24 <sup>a</sup> <sub>76</sub>	32.47 <sup>a</sup> <sub>231</sub>
16	63.57 <sup>a</sup> <sub>40</sub>	22.75 <sup>a</sup> <sub>219</sub>	14.428 <sup>a</sup> <sub>196</sub>	11.77 <sup>a</sup> <sub>124</sub>	20.753 <sup>a</sup> <sub>189</sub>	28.67 <sup>a</sup> <sub>209</sub>	30.00 <sup>a</sup> <sub>66</sub>	34.78 <sup>a</sup> <sub>258</sub>
26	63.97 <sup>a</sup> <sub>32</sub>	24.94 <sup>a</sup> <sub>234</sub>	14.624 <sup>a</sup> <sub>165</sub>	13.01 <sup>a</sup> <sub>131</sub>	20.942 <sup>a</sup> <sub>155</sub>	30.76 <sup>a</sup> <sub>222</sub>	30.66 <sup>a</sup> <sub>52</sub>	37.36 <sup>a</sup> <sub>280</sub>
Dez. 6	64.29 <sup>a</sup> <sub>23</sub>	27.28 <sup>a</sup> <sub>244</sub>	14.789 <sup>a</sup> <sub>129</sub>	14.32 <sup>a</sup> <sub>132</sub>	21.097 <sup>a</sup> <sub>115</sub>	32.98 <sup>a</sup> <sub>226</sub>	31.18 <sup>a</sup> <sub>37</sub>	40.16 <sup>a</sup> <sub>294</sub>
15	64.52 <sup>a</sup> <sub>14</sub>	29.72 <sup>a</sup> <sub>247</sub>	14.918 <sup>a</sup> <sub>89</sub>	15.64 <sup>a</sup> <sub>129</sub>	21.212 <sup>a</sup> <sub>74</sub>	35.24 <sup>a</sup> <sub>222</sub>	31.55 <sup>a</sup> <sub>21</sub>	43.10 <sup>a</sup> <sub>298</sub>
25	64.66 <sup>a</sup> <sub>5</sub>	32.19 <sup>a</sup> <sub>243</sub>	15.007 <sup>a</sup> <sub>45</sub>	16.93 <sup>a</sup> <sub>120</sub>	21.286 <sup>a</sup> <sub>28</sub>	37.46 <sup>a</sup> <sub>209</sub>	31.76 <sup>a</sup> <sub>4</sub>	46.08 <sup>a</sup> <sub>295</sub>
35	64.71 <sup>a</sup> <sub>12</sub>	34.62 <sup>a</sup> <sub>14</sub>	15.052 <sup>a</sup> <sub>14</sub>	18.13 <sup>a</sup> <sub>14</sub>	21.314 <sup>a</sup> <sub>14</sub>	39.55 <sup>a</sup> <sub>14</sub>	31.80 <sup>a</sup> <sub>14</sub>	49.03 <sup>a</sup> <sub>14</sub>
Mittl. Ort	58.07	27.04	11.695	17.66	18.177	36.99	21.39	41.52
sec $\delta$ , tg $\delta$	2.205	+1.965	1.000	—0.006	1.051	—0.322	3.867	+3.735
$a, a'$	+5.7	+3.1	+3.1	+2.7	+2.6	+2.6	+8.0	+2.4
$b, b'$	+0.02	—0.99	0.00	—0.99	0.00	—0.99	+0.03	—0.99



# Obere Kulmination Greenwich

Tag	209) $\iota$ Orionis		212) $\beta$ Doradus		210) $\epsilon$ Orionis		211) $\zeta$ Tauri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	5 <sup>h</sup> 32 <sup>m</sup>	-5° 56'	5 <sup>h</sup> 33 <sup>m</sup>	-62° 31'	5 <sup>h</sup> 33 <sup>m</sup>	-1° 13'	5 <sup>h</sup> 34 <sup>m</sup>	+21° 6'
Jan. 0	44.841 <sup>12</sup>	46.12 <sup>144</sup>	11.29 <sup>17</sup>	41.68 <sup>311</sup>	25.597 <sup>18</sup>	73.37 <sup>120</sup>	21.609 <sup>30</sup>	35.44 <sup>7</sup>
10	44.853 <sup>32</sup>	47.56 <sup>127</sup>	11.12 <sup>26</sup>	44.79 <sup>278</sup>	25.615 <sup>27</sup>	74.57 <sup>105</sup>	21.639 <sup>19</sup>	35.51 <sup>10</sup>
20	44.821 <sup>74</sup>	48.83 <sup>108</sup>	10.86 <sup>32</sup>	47.57 <sup>236</sup>	25.588 <sup>70</sup>	75.62 <sup>89</sup>	21.620 <sup>65</sup>	35.61 <sup>12</sup>
30	44.747 <sup>111</sup>	49.91 <sup>86</sup>	10.54 <sup>39</sup>	49.93 <sup>190</sup>	25.518 <sup>108</sup>	76.51 <sup>70</sup>	21.555 <sup>107</sup>	35.73 <sup>13</sup>
Febr. 9	44.636 <sup>143</sup>	50.77 <sup>64</sup>	10.15 <sup>45</sup>	51.83 <sup>138</sup>	25.410 <sup>139</sup>	77.21 <sup>52</sup>	21.448 <sup>142</sup>	35.86 <sup>11</sup>
19	44.493 <sup>167</sup>	51.41 <sup>40</sup>	9.70 <sup>48</sup>	53.21 <sup>83</sup>	25.271 <sup>163</sup>	77.73 <sup>33</sup>	21.306 <sup>168</sup>	35.97 <sup>8</sup>
März 1	44.326 <sup>181</sup>	51.81 <sup>17</sup>	9.22 <sup>49</sup>	54.04 <sup>29</sup>	25.108 <sup>177</sup>	78.06 <sup>14</sup>	21.138 <sup>184</sup>	36.05 <sup>4</sup>
11	44.145 <sup>182</sup>	51.91 <sup>7</sup>	8.73 <sup>50</sup>	54.33 <sup>26</sup>	24.931 <sup>181</sup>	78.20 <sup>5</sup>	20.954 <sup>189</sup>	36.09 <sup>1</sup>
21	43.961 <sup>177</sup>	51.91 <sup>31</sup>	8.23 <sup>49</sup>	54.07 <sup>80</sup>	24.750 <sup>175</sup>	78.15 <sup>24</sup>	20.765 <sup>181</sup>	36.08 <sup>4</sup>
31	43.784 <sup>161</sup>	51.60 <sup>53</sup>	7.74 <sup>46</sup>	53.27 <sup>131</sup>	24.575 <sup>158</sup>	77.91 <sup>43</sup>	20.584 <sup>164</sup>	36.04 <sup>7</sup>
Apr. 10	43.623 <sup>137</sup>	51.07 <sup>76</sup>	7.28 <sup>42</sup>	51.96 <sup>179</sup>	24.417 <sup>134</sup>	77.48 <sup>62</sup>	20.420 <sup>137</sup>	35.97 <sup>7</sup>
20	43.486 <sup>105</sup>	50.31 <sup>97</sup>	6.86 <sup>36</sup>	50.17 <sup>223</sup>	24.283 <sup>102</sup>	76.86 <sup>80</sup>	20.283 <sup>102</sup>	35.90 <sup>7</sup>
30	43.381 <sup>68</sup>	49.34 <sup>119</sup>	6.50 <sup>30</sup>	47.94 <sup>263</sup>	24.181 <sup>64</sup>	76.06 <sup>98</sup>	20.181 <sup>61</sup>	35.83 <sup>3</sup>
Mai 10	43.313 <sup>27</sup>	48.15 <sup>137</sup>	6.20 <sup>23</sup>	45.31 <sup>295</sup>	24.117 <sup>24</sup>	75.08 <sup>115</sup>	20.120 <sup>16</sup>	35.80 <sup>1</sup>
20	43.286 <sup>15</sup>	46.78 <sup>154</sup>	5.97 <sup>16</sup>	42.36 <sup>322</sup>	24.093 <sup>18</sup>	73.93 <sup>131</sup>	20.104 <sup>29</sup>	35.81 <sup>8</sup>
30	43.301 <sup>58</sup>	45.24 <sup>168</sup>	5.81 <sup>7</sup>	39.14 <sup>340</sup>	24.111 <sup>61</sup>	72.62 <sup>143</sup>	20.133 <sup>75</sup>	35.89 <sup>17</sup>
Juni 9	43.359 <sup>98</sup>	43.56 <sup>178</sup>	5.74 <sup>1</sup>	35.74 <sup>351</sup>	24.172 <sup>101</sup>	71.19 <sup>153</sup>	20.208 <sup>119</sup>	36.06 <sup>24</sup>
19	43.457 <sup>137</sup>	41.78 <sup>184</sup>	5.75 <sup>10</sup>	32.23 <sup>353</sup>	24.273 <sup>140</sup>	69.66 <sup>159</sup>	20.327 <sup>159</sup>	36.30 <sup>33</sup>
29	43.594 <sup>171</sup>	39.94 <sup>186</sup>	5.85 <sup>17</sup>	28.70 <sup>346</sup>	24.413 <sup>174</sup>	68.07 <sup>162</sup>	20.486 <sup>196</sup>	36.63 <sup>40</sup>
Juli 9	43.765 <sup>201</sup>	38.08 <sup>181</sup>	6.02 <sup>25</sup>	25.24 <sup>328</sup>	24.587 <sup>204</sup>	66.45 <sup>159</sup>	20.682 <sup>227</sup>	37.03 <sup>46</sup>
19	43.966 <sup>228</sup>	36.27 <sup>172</sup>	6.27 <sup>32</sup>	21.96 <sup>302</sup>	24.791 <sup>229</sup>	64.86 <sup>153</sup>	20.909 <sup>255</sup>	37.49 <sup>51</sup>
29	44.194 <sup>248</sup>	34.55 <sup>156</sup>	6.59 <sup>37</sup>	18.94 <sup>266</sup>	25.020 <sup>250</sup>	63.33 <sup>140</sup>	21.164 <sup>275</sup>	38.00 <sup>52</sup>
Aug. 8	44.442 <sup>265</sup>	32.99 <sup>136</sup>	6.96 <sup>43</sup>	16.28 <sup>222</sup>	25.270 <sup>266</sup>	61.93 <sup>122</sup>	21.439 <sup>292</sup>	38.52 <sup>51</sup>
18	44.707 <sup>277</sup>	31.63 <sup>111</sup>	7.39 <sup>47</sup>	14.06 <sup>169</sup>	25.536 <sup>278</sup>	60.71 <sup>101</sup>	21.731 <sup>304</sup>	39.03 <sup>49</sup>
28	44.984 <sup>284</sup>	30.52 <sup>81</sup>	7.86 <sup>49</sup>	12.37 <sup>112</sup>	25.814 <sup>285</sup>	59.70 <sup>75</sup>	22.035 <sup>311</sup>	39.52 <sup>43</sup>
Sept. 7	45.268 <sup>287</sup>	29.71 <sup>47</sup>	8.35 <sup>51</sup>	11.25 <sup>49</sup>	26.099 <sup>288</sup>	58.95 <sup>46</sup>	22.346 <sup>314</sup>	39.95 <sup>36</sup>
17	45.555 <sup>286</sup>	29.24 <sup>13</sup>	8.86 <sup>52</sup>	10.76 <sup>15</sup>	26.387 <sup>287</sup>	58.49 <sup>15</sup>	22.660 <sup>314</sup>	40.31 <sup>28</sup>
27	45.841 <sup>282</sup>	29.11 <sup>23</sup>	9.38 <sup>50</sup>	10.91 <sup>81</sup>	26.674 <sup>283</sup>	58.34 <sup>15</sup>	22.974 <sup>310</sup>	40.59 <sup>18</sup>
Okt. 7	46.123 <sup>274</sup>	29.34 <sup>57</sup>	9.88 <sup>47</sup>	11.72 <sup>144</sup>	26.957 <sup>275</sup>	58.49 <sup>46</sup>	23.284 <sup>302</sup>	40.77 <sup>11</sup>
17	46.397 <sup>261</sup>	29.91 <sup>88</sup>	10.35 <sup>43</sup>	13.16 <sup>202</sup>	27.232 <sup>263</sup>	58.95 <sup>73</sup>	23.586 <sup>290</sup>	40.88 <sup>3</sup>
27	46.658 <sup>245</sup>	30.79 <sup>116</sup>	10.78 <sup>38</sup>	15.18 <sup>252</sup>	27.495 <sup>247</sup>	59.68 <sup>98</sup>	23.876 <sup>273</sup>	40.91 <sup>3</sup>
Nov. 6	46.903 <sup>222</sup>	31.95 <sup>138</sup>	11.16 <sup>31</sup>	17.70 <sup>294</sup>	27.742 <sup>226</sup>	60.66 <sup>116</sup>	24.149 <sup>252</sup>	40.88 <sup>7</sup>
16	47.125 <sup>196</sup>	33.33 <sup>153</sup>	11.47 <sup>24</sup>	20.64 <sup>324</sup>	27.968 <sup>199</sup>	61.82 <sup>130</sup>	24.401 <sup>226</sup>	40.81 <sup>7</sup>
26	47.321 <sup>164</sup>	34.86 <sup>163</sup>	11.71 <sup>16</sup>	23.88 <sup>344</sup>	28.167 <sup>168</sup>	63.12 <sup>137</sup>	24.627 <sup>192</sup>	40.74 <sup>7</sup>
Dez. 6	47.485 <sup>128</sup>	36.49 <sup>166</sup>	11.87 <sup>6</sup>	27.32 <sup>349</sup>	28.335 <sup>132</sup>	64.49 <sup>139</sup>	24.819 <sup>154</sup>	40.67 <sup>3</sup>
15	47.623 <sup>87</sup>	38.15 <sup>161</sup>	11.93 <sup>2</sup>	30.81 <sup>344</sup>	28.467 <sup>92</sup>	65.88 <sup>135</sup>	24.973 <sup>111</sup>	40.64 <sup>0</sup>
25	47.700 <sup>43</sup>	39.76 <sup>152</sup>	11.91 <sup>12</sup>	34.25 <sup>327</sup>	28.559 <sup>49</sup>	67.23 <sup>127</sup>	25.084 <sup>64</sup>	40.64 <sup>6</sup>
35	47.743	41.28	11.79	37.52	28.608	68.50	25.148	40.70
Mittl. Ort	44.462	39.94	8.67	31.86	25.257	67.67	21.334	38.90
sec $\delta$ , tg $\delta$	1.005	-0.104	2.168	-1.923	1.000	-0.022	1.072	+0.386
a, a'	+2.9	+2.4	+0.5	+2.3	+3.0	+2.3	+3.6	+2.2
b, b'	0.00	-0.99	-0.02	-0.99	0.00	-0.99	0.00	-0.99



## Scheinbare Sternörter 1945

Tag	215) $\alpha$ Columbae		216) $\alpha$ Aurigae		219) $\zeta$ Leporis		220) $\kappa$ Orionis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	5 <sup>h</sup> 37 <sup>m</sup>	-34° 5'	5 <sup>h</sup> 41 <sup>m</sup>	+49° 48'	5 <sup>h</sup> 44 <sup>m</sup>	-14° 50'	5 <sup>h</sup> 45 <sup>m</sup>	-9° 41'
Jan. 0	40.229 <sup>a</sup> <sub>25</sub>	76.37 <sup>b</sup> <sub>265</sub>	38.782 <sup>a</sup> <sub>34</sub>	15.39 <sup>b</sup> <sub>173</sub>	28.215 <sup>a</sup> <sub>13</sub>	34.50 <sup>b</sup> <sub>192</sub>	9.237 <sup>a</sup> <sub>20</sub>	21.89 <sup>b</sup> <sub>168</sub>
10	40.204 <sup>a</sup> <sub>77</sub>	79.02 <sup>b</sup> <sub>237</sub>	38.816 <sup>a</sup> <sub>35</sub>	17.12 <sup>b</sup> <sub>163</sub>	28.228 <sup>a</sup> <sub>32</sub>	36.42 <sup>b</sup> <sub>172</sub>	9.257 <sup>a</sup> <sub>26</sub>	23.57 <sup>b</sup> <sub>149</sub>
20	40.127 <sup>a</sup> <sub>124</sub>	81.39 <sup>b</sup> <sub>203</sub>	38.781 <sup>a</sup> <sub>102</sub>	18.75 <sup>b</sup> <sub>149</sub>	28.196 <sup>a</sup> <sub>76</sub>	38.14 <sup>b</sup> <sub>147</sub>	9.231 <sup>a</sup> <sub>69</sub>	25.06 <sup>b</sup> <sub>128</sub>
30	40.003 <sup>a</sup> <sub>166</sub>	83.42 <sup>b</sup> <sub>165</sub>	38.679 <sup>a</sup> <sub>163</sub>	20.24 <sup>b</sup> <sub>128</sub>	28.120 <sup>a</sup> <sub>116</sub>	39.61 <sup>b</sup> <sub>120</sub>	9.162 <sup>a</sup> <sub>108</sub>	26.34 <sup>b</sup> <sub>103</sub>
Febr. 9	39.837 <sup>a</sup> <sub>200</sub>	85.07 <sup>b</sup> <sub>123</sub>	38.516 <sup>a</sup> <sub>214</sub>	21.52 <sup>b</sup> <sub>101</sub>	28.004 <sup>a</sup> <sub>149</sub>	40.81 <sup>b</sup> <sub>91</sub>	9.054 <sup>a</sup> <sub>141</sub>	27.37 <sup>b</sup> <sub>78</sub>
19	39.637 <sup>a</sup> <sub>226</sub>	86.30 <sup>b</sup> <sub>79</sub>	38.302 <sup>a</sup> <sub>252</sub>	22.53 <sup>b</sup> <sub>71</sub>	27.855 <sup>a</sup> <sub>174</sub>	41.72 <sup>b</sup> <sub>59</sub>	8.913 <sup>a</sup> <sub>167</sub>	28.15 <sup>b</sup> <sub>51</sub>
März 1	39.411 <sup>a</sup> <sub>241</sub>	87.09 <sup>b</sup> <sub>34</sub>	38.050 <sup>a</sup> <sub>275</sub>	23.24 <sup>b</sup> <sub>37</sub>	27.681 <sup>a</sup> <sub>189</sub>	42.31 <sup>b</sup> <sub>28</sub>	8.746 <sup>a</sup> <sub>183</sub>	28.66 <sup>b</sup> <sub>24</sub>
11	39.170 <sup>a</sup> <sub>245</sub>	87.43 <sup>b</sup> <sub>12</sub>	37.775 <sup>a</sup> <sub>282</sub>	23.61 <sup>b</sup> <sub>4</sub>	27.492 <sup>a</sup> <sub>195</sub>	42.59 <sup>b</sup> <sub>3</sub>	8.563 <sup>a</sup> <sub>187</sub>	28.90 <sup>b</sup> <sub>3</sub>
21	38.925 <sup>a</sup> <sub>239</sub>	87.31 <sup>b</sup> <sub>57</sub>	37.493 <sup>a</sup> <sub>274</sub>	23.65 <sup>b</sup> <sub>29</sub>	27.297 <sup>a</sup> <sub>191</sub>	42.56 <sup>b</sup> <sub>35</sub>	8.376 <sup>a</sup> <sub>184</sub>	28.87 <sup>b</sup> <sub>30</sub>
31	38.686 <sup>a</sup> <sub>222</sub>	86.74 <sup>b</sup> <sub>99</sub>	37.219 <sup>a</sup> <sub>251</sub>	23.36 <sup>b</sup> <sub>61</sub>	27.106 <sup>a</sup> <sub>176</sub>	42.21 <sup>b</sup> <sub>65</sub>	8.192 <sup>a</sup> <sub>169</sub>	28.57 <sup>b</sup> <sub>56</sub>
Apr. 10	38.464 <sup>a</sup> <sub>196</sub>	85.75 <sup>b</sup> <sub>141</sub>	36.968 <sup>a</sup> <sub>214</sub>	22.75 <sup>b</sup> <sub>87</sub>	26.930 <sup>a</sup> <sub>153</sub>	41.56 <sup>b</sup> <sub>95</sub>	8.023 <sup>a</sup> <sub>147</sub>	28.01 <sup>b</sup> <sub>81</sub>
20	38.268 <sup>a</sup> <sub>162</sub>	84.34 <sup>b</sup> <sub>178</sub>	36.754 <sup>a</sup> <sub>167</sub>	21.88 <sup>b</sup> <sub>111</sub>	26.777 <sup>a</sup> <sub>122</sub>	40.61 <sup>b</sup> <sub>122</sub>	7.876 <sup>a</sup> <sub>116</sub>	27.20 <sup>b</sup> <sub>106</sub>
30	38.106 <sup>a</sup> <sub>121</sub>	82.56 <sup>b</sup> <sub>213</sub>	36.587 <sup>a</sup> <sub>110</sub>	20.77 <sup>b</sup> <sub>128</sub>	26.655 <sup>a</sup> <sub>86</sub>	39.39 <sup>b</sup> <sub>148</sub>	7.760 <sup>a</sup> <sub>80</sub>	26.14 <sup>b</sup> <sub>129</sub>
Mai 10	37.985 <sup>a</sup> <sub>77</sub>	80.43 <sup>b</sup> <sub>242</sub>	36.477 <sup>a</sup> <sub>48</sub>	19.49 <sup>b</sup> <sub>139</sub>	26.569 <sup>a</sup> <sub>47</sub>	37.91 <sup>b</sup> <sub>171</sub>	7.680 <sup>a</sup> <sub>41</sub>	24.85 <sup>b</sup> <sub>149</sub>
20	37.908 <sup>a</sup> <sub>30</sub>	78.01 <sup>b</sup> <sub>267</sub>	36.429 <sup>a</sup> <sub>16</sub>	18.10 <sup>b</sup> <sub>146</sub>	26.522 <sup>a</sup> <sub>4</sub>	36.20 <sup>b</sup> <sub>191</sub>	7.639 <sup>a</sup> <sub>1</sub>	23.36 <sup>b</sup> <sub>168</sub>
30	37.878 <sup>a</sup> <sub>18</sub>	75.34 <sup>b</sup> <sub>285</sub>	36.445 <sup>a</sup> <sub>80</sub>	16.64 <sup>b</sup> <sub>146</sub>	26.518 <sup>a</sup> <sub>38</sub>	34.29 <sup>b</sup> <sub>207</sub>	7.640 <sup>a</sup> <sub>43</sub>	21.68 <sup>b</sup> <sub>182</sub>
Juni 9	37.896 <sup>a</sup> <sub>67</sub>	72.49 <sup>b</sup> <sub>297</sub>	36.525 <sup>a</sup> <sub>143</sub>	15.18 <sup>b</sup> <sub>142</sub>	26.556 <sup>a</sup> <sub>80</sub>	32.22 <sup>b</sup> <sub>219</sub>	7.683 <sup>a</sup> <sub>84</sub>	19.86 <sup>b</sup> <sub>194</sub>
19	37.963 <sup>a</sup> <sub>112</sub>	69.52 <sup>b</sup> <sub>301</sub>	36.668 <sup>a</sup> <sub>201</sub>	13.76 <sup>b</sup> <sub>133</sub>	26.636 <sup>a</sup> <sub>119</sub>	30.03 <sup>b</sup> <sub>224</sub>	7.767 <sup>a</sup> <sub>122</sub>	17.92 <sup>b</sup> <sub>199</sub>
29	38.075 <sup>a</sup> <sub>155</sub>	66.51 <sup>b</sup> <sub>298</sub>	36.869 <sup>a</sup> <sub>255</sub>	12.43 <sup>b</sup> <sub>121</sub>	26.755 <sup>a</sup> <sub>156</sub>	27.79 <sup>b</sup> <sub>224</sub>	7.889 <sup>a</sup> <sub>158</sub>	15.93 <sup>b</sup> <sub>201</sub>
Juli 9	38.230 <sup>a</sup> <sub>194</sub>	63.53 <sup>b</sup> <sub>286</sub>	37.124 <sup>a</sup> <sub>303</sub>	11.22 <sup>b</sup> <sub>106</sub>	26.911 <sup>a</sup> <sub>188</sub>	25.55 <sup>b</sup> <sub>219</sub>	8.047 <sup>a</sup> <sub>190</sub>	13.92 <sup>b</sup> <sub>196</sub>
19	38.424 <sup>a</sup> <sub>229</sub>	60.67 <sup>b</sup> <sub>265</sub>	37.427 <sup>a</sup> <sub>342</sub>	10.16 <sup>b</sup> <sub>89</sub>	27.099 <sup>a</sup> <sub>216</sub>	23.36 <sup>b</sup> <sub>205</sub>	8.237 <sup>a</sup> <sub>216</sub>	11.96 <sup>b</sup> <sub>185</sub>
29	38.653 <sup>a</sup> <sub>258</sub>	58.02 <sup>b</sup> <sub>237</sub>	37.769 <sup>a</sup> <sub>376</sub>	9.27 <sup>b</sup> <sub>70</sub>	27.315 <sup>a</sup> <sub>240</sub>	21.31 <sup>b</sup> <sub>186</sub>	8.453 <sup>a</sup> <sub>240</sub>	10.11 <sup>b</sup> <sub>168</sub>
Aug. 8	38.911 <sup>a</sup> <sub>282</sub>	55.65 <sup>b</sup> <sub>200</sub>	38.145 <sup>a</sup> <sub>403</sub>	8.57 <sup>b</sup> <sub>50</sub>	27.555 <sup>a</sup> <sub>259</sub>	19.45 <sup>b</sup> <sub>161</sub>	8.693 <sup>a</sup> <sub>258</sub>	8.43 <sup>b</sup> <sub>147</sub>
18	39.193 <sup>a</sup> <sub>300</sub>	53.65 <sup>b</sup> <sub>158</sub>	38.548 <sup>a</sup> <sub>422</sub>	8.07 <sup>b</sup> <sub>30</sub>	27.814 <sup>a</sup> <sub>273</sub>	17.84 <sup>b</sup> <sub>129</sub>	8.951 <sup>a</sup> <sub>272</sub>	6.96 <sup>b</sup> <sub>118</sub>
28	39.493 <sup>a</sup> <sub>313</sub>	52.07 <sup>b</sup> <sub>108</sub>	38.970 <sup>a</sup> <sub>435</sub>	7.77 <sup>b</sup> <sub>10</sub>	28.087 <sup>a</sup> <sub>283</sub>	16.55 <sup>b</sup> <sub>92</sub>	9.223 <sup>a</sup> <sub>281</sub>	5.78 <sup>b</sup> <sub>85</sub>
Sept. 7	39.806 <sup>a</sup> <sub>319</sub>	50.99 <sup>b</sup> <sub>55</sub>	39.405 <sup>a</sup> <sub>443</sub>	7.67 <sup>b</sup> <sub>10</sub>	28.370 <sup>a</sup> <sub>289</sub>	15.63 <sup>b</sup> <sub>53</sub>	9.504 <sup>a</sup> <sub>286</sub>	4.93 <sup>b</sup> <sub>50</sub>
17	40.125 <sup>a</sup> <sub>320</sub>	50.44 <sup>b</sup> <sub>0</sub>	39.848 <sup>a</sup> <sub>444</sub>	7.77 <sup>b</sup> <sub>30</sub>	28.659 <sup>a</sup> <sub>290</sub>	15.10 <sup>b</sup> <sub>10</sub>	9.790 <sup>a</sup> <sub>288</sub>	4.43 <sup>b</sup> <sub>12</sub>
27	40.445 <sup>a</sup> <sub>315</sub>	50.44 <sup>b</sup> <sub>56</sub>	40.292 <sup>a</sup> <sub>440</sub>	8.07 <sup>b</sup> <sub>50</sub>	28.949 <sup>a</sup> <sub>288</sub>	15.00 <sup>b</sup> <sub>34</sub>	10.078 <sup>a</sup> <sub>286</sub>	4.31 <sup>b</sup> <sub>27</sub>
Okt. 7	40.760 <sup>a</sup> <sub>304</sub>	51.00 <sup>b</sup> <sub>112</sub>	40.732 <sup>a</sup> <sub>430</sub>	8.57 <sup>b</sup> <sub>70</sub>	29.237 <sup>a</sup> <sub>280</sub>	15.34 <sup>b</sup> <sub>75</sub>	10.364 <sup>a</sup> <sub>278</sub>	4.58 <sup>b</sup> <sub>66</sub>
17	41.064 <sup>a</sup> <sub>286</sub>	52.12 <sup>b</sup> <sub>162</sub>	41.162 <sup>a</sup> <sub>413</sub>	9.27 <sup>b</sup> <sub>90</sub>	29.517 <sup>a</sup> <sub>268</sub>	16.09 <sup>b</sup> <sub>114</sub>	10.642 <sup>a</sup> <sub>268</sub>	5.24 <sup>b</sup> <sub>100</sub>
27	41.350 <sup>a</sup> <sub>263</sub>	53.74 <sup>b</sup> <sub>206</sub>	41.575 <sup>a</sup> <sub>390</sub>	10.17 <sup>b</sup> <sub>108</sub>	29.785 <sup>a</sup> <sub>252</sub>	17.23 <sup>b</sup> <sub>148</sub>	10.910 <sup>a</sup> <sub>252</sub>	6.24 <sup>b</sup> <sub>130</sub>
Nov. 6	41.613 <sup>a</sup> <sub>233</sub>	55.80 <sup>b</sup> <sub>243</sub>	41.965 <sup>a</sup> <sub>358</sub>	11.25 <sup>b</sup> <sub>126</sub>	30.037 <sup>a</sup> <sub>230</sub>	18.71 <sup>b</sup> <sub>177</sub>	11.162 <sup>a</sup> <sub>231</sub>	7.54 <sup>b</sup> <sub>156</sub>
16	41.846 <sup>a</sup> <sub>197</sub>	58.23 <sup>b</sup> <sub>271</sub>	42.323 <sup>a</sup> <sub>319</sub>	12.51 <sup>b</sup> <sub>143</sub>	30.267 <sup>a</sup> <sub>202</sub>	20.48 <sup>b</sup> <sub>198</sub>	11.393 <sup>a</sup> <sub>205</sub>	9.10 <sup>b</sup> <sub>174</sub>
26	42.043 <sup>a</sup> <sub>156</sub>	60.94 <sup>b</sup> <sub>288</sub>	42.642 <sup>a</sup> <sub>270</sub>	13.94 <sup>b</sup> <sub>157</sub>	30.469 <sup>a</sup> <sub>170</sub>	22.46 <sup>b</sup> <sub>210</sub>	11.598 <sup>a</sup> <sub>173</sub>	10.84 <sup>b</sup> <sub>185</sub>
Dez. 6	42.199 <sup>a</sup> <sub>110</sub>	63.82 <sup>b</sup> <sub>294</sub>	42.912 <sup>a</sup> <sub>214</sub>	15.51 <sup>b</sup> <sub>168</sub>	30.639 <sup>a</sup> <sub>132</sub>	24.56 <sup>b</sup> <sub>215</sub>	11.771 <sup>a</sup> <sub>137</sub>	12.69 <sup>b</sup> <sub>189</sub>
16	42.309 <sup>a</sup> <sub>61</sub>	66.76 <sup>b</sup> <sub>291</sub>	43.126 <sup>a</sup> <sub>152</sub>	17.19 <sup>b</sup> <sub>174</sub>	30.771 <sup>a</sup> <sub>90</sub>	26.71 <sup>b</sup> <sub>212</sub>	11.908 <sup>a</sup> <sub>95</sub>	14.58 <sup>b</sup> <sub>186</sub>
25	42.370 <sup>a</sup> <sub>9</sub>	69.67 <sup>b</sup> <sub>277</sub>	43.278 <sup>a</sup> <sub>84</sub>	18.93 <sup>b</sup> <sub>175</sub>	30.861 <sup>a</sup> <sub>45</sub>	28.83 <sup>b</sup> <sub>201</sub>	12.003 <sup>a</sup> <sub>52</sub>	16.44 <sup>b</sup> <sub>176</sub>
35	42.379 <sup>a</sup>	72.44 <sup>b</sup>	43.362 <sup>a</sup>	20.68 <sup>b</sup>	30.906 <sup>a</sup>	30.84 <sup>b</sup>	12.055 <sup>a</sup>	18.20 <sup>b</sup>
Mittl. Ort	39.347	68.20	38.190	16.49	27.713	28.05	8.799	15.86
sec $\delta$ , tg $\delta$	1.208	-0.677	1.549	+1.183	1.034	-0.265	1.014	-0.171
a, a'	+2.2	+2.0	+4.6	+1.6	+2.7	+1.4	+2.8	+1.3
b, b'	0.00	-1.00	+0.01	-1.00	0.00	-1.00	0.00	-1.00



# Obere Kulmination Greenwich

75\*

Tag	224) $\alpha$ Orionis		225) $\delta$ Aurigae		227) $\beta$ Aurigae		1162) $+33^\circ$ 1209 Auri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$5^h 52^m$	$+7^\circ 23'$	$5^h 54^m$	$+54^\circ 16'$	$5^h 55^m$	$+44^\circ 56'$	$5^h 56^m$	$+33^\circ 8'$
Jan. 0	11.895 <sup>h</sup> <sub>40</sub>	50.03 <sup>"</sup> <sub>76</sub>	60.553 <sup>h</sup> <sub>53</sub>	57.33 <sup>"</sup> <sub>197</sub>	30.077 <sup>h</sup> <sub>56</sub>	36.79 <sup>"</sup> <sub>146</sub>	37.701 <sup>h</sup> <sub>57</sub>	2.89 <sup>"</sup> <sub>78</sub>
10	11.935 <sub>6</sub>	49.27 <sub>66</sub>	60.606 <sub>25</sub>	59.30 <sub>189</sub>	30.133 <sub>9</sub>	38.25 <sub>143</sub>	37.758 <sub>1</sub>	3.67 <sub>78</sub>
20	11.929 <sub>51</sub>	48.61 <sub>53</sub>	60.581 <sub>101</sub>	61.19 <sub>175</sub>	30.124 <sub>73</sub>	39.68 <sub>132</sub>	37.759 <sub>54</sub>	4.45 <sub>75</sub>
30	11.878 <sub>92</sub>	48.08 <sub>41</sub>	60.480 <sub>170</sub>	62.94 <sub>153</sub>	30.051 <sub>131</sub>	41.00 <sub>118</sub>	37.705 <sub>104</sub>	5.20 <sub>69</sub>
Febr. 9	11.786 <sub>127</sub>	47.67 <sub>29</sub>	60.310 <sub>228</sub>	64.47 <sub>125</sub>	29.920 <sub>180</sub>	42.18 <sub>97</sub>	37.601 <sub>146</sub>	5.89 <sub>59</sub>
19	11.659 <sub>155</sub>	47.38 <sub>18</sub>	60.082 <sub>273</sub>	65.72 <sub>93</sub>	29.740 <sub>218</sub>	43.15 <sub>73</sub>	37.455 <sub>179</sub>	6.48 <sub>45</sub>
März 1	11.504 <sub>173</sub>	47.20 <sub>7</sub>	59.809 <sub>303</sub>	66.65 <sub>56</sub>	29.522 <sub>244</sub>	43.88 <sub>45</sub>	37.276 <sub>202</sub>	6.93 <sub>30</sub>
11	11.331 <sub>179</sub>	47.13 <sub>4</sub>	59.506 <sub>315</sub>	67.21 <sub>19</sub>	29.278 <sub>254</sub>	44.33 <sub>17</sub>	37.074 <sub>210</sub>	7.23 <sub>13</sub>
21	11.152 <sub>176</sub>	47.17 <sub>14</sub>	59.191 <sub>310</sub>	67.40 <sub>19</sub>	29.024 <sub>250</sub>	44.50 <sub>13</sub>	36.864 <sub>207</sub>	7.36 <sub>3</sub>
31	10.976 <sub>162</sub>	47.31 <sub>24</sub>	58.881 <sub>288</sub>	67.21 <sub>55</sub>	28.774 <sub>231</sub>	44.37 <sub>40</sub>	36.657 <sub>192</sub>	7.33 <sub>20</sub>
Apr. 10	10.814 <sub>140</sub>	47.55 <sub>35</sub>	58.593 <sub>251</sub>	66.66 <sub>88</sub>	28.543 <sub>201</sub>	43.97 <sub>64</sub>	36.465 <sub>165</sub>	7.13 <sub>33</sub>
20	10.674 <sub>109</sub>	47.90 <sub>47</sub>	58.342 <sub>202</sub>	65.78 <sub>115</sub>	28.342 <sub>159</sub>	43.33 <sub>85</sub>	36.300 <sub>130</sub>	6.80 <sub>44</sub>
30	10.565 <sub>73</sub>	48.37 <sub>58</sub>	58.140 <sub>143</sub>	64.63 <sub>138</sub>	28.183 <sub>110</sub>	42.48 <sub>101</sub>	36.170 <sub>88</sub>	6.36 <sub>52</sub>
Mai 10	10.492 <sub>34</sub>	48.95 <sub>69</sub>	57.997 <sub>78</sub>	63.25 <sub>154</sub>	28.073 <sub>55</sub>	41.47 <sub>113</sub>	36.082 <sub>41</sub>	5.84 <sub>56</sub>
20	10.458 <sub>8</sub>	49.64 <sub>81</sub>	57.919 <sub>8</sub>	61.71 <sub>165</sub>	28.018 <sub>3</sub>	40.34 <sub>119</sub>	36.041 <sub>8</sub>	5.28 <sub>58</sub>
30	10.466 <sub>50</sub>	50.45 <sub>91</sub>	57.911 <sub>62</sub>	60.06 <sub>169</sub>	28.021 <sub>61</sub>	39.15 <sub>121</sub>	36.049 <sub>58</sub>	4.70 <sub>56</sub>
Juni 9	10.516 <sub>91</sub>	51.36 <sub>99</sub>	57.973 <sub>131</sub>	58.37 <sub>168</sub>	28.082 <sub>119</sub>	37.94 <sub>118</sub>	36.107 <sub>107</sub>	4.14 <sub>52</sub>
19	10.607 <sub>130</sub>	52.35 <sub>106</sub>	58.104 <sub>196</sub>	56.69 <sub>162</sub>	28.201 <sub>172</sub>	36.76 <sub>113</sub>	36.214 <sub>152</sub>	3.62 <sub>46</sub>
29	10.737 <sub>165</sub>	53.41 <sub>111</sub>	58.300 <sub>256</sub>	55.07 <sub>152</sub>	28.373 <sub>222</sub>	35.63 <sub>103</sub>	36.366 <sub>194</sub>	3.16 <sub>38</sub>
Juli 9	10.902 <sub>196</sub>	54.52 <sub>110</sub>	58.556 <sub>310</sub>	53.55 <sub>138</sub>	28.595 <sub>266</sub>	34.60 <sub>92</sub>	36.560 <sub>231</sub>	2.78 <sub>30</sub>
19	11.098 <sub>223</sub>	55.62 <sub>108</sub>	58.866 <sub>356</sub>	52.17 <sub>121</sub>	28.861 <sub>303</sub>	33.68 <sub>79</sub>	36.791 <sub>262</sub>	2.48 <sub>23</sub>
29	11.321 <sub>245</sub>	56.70 <sub>100</sub>	59.222 <sub>397</sub>	50.96 <sub>102</sub>	29.164 <sub>336</sub>	32.89 <sub>65</sub>	37.053 <sub>290</sub>	2.25 <sub>15</sub>
Aug. 8	11.566 <sub>263</sub>	57.70 <sub>90</sub>	59.619 <sub>428</sub>	49.94 <sub>80</sub>	29.500 <sub>361</sub>	32.24 <sub>49</sub>	37.343 <sub>310</sub>	2.10 <sub>7</sub>
18	11.829 <sub>276</sub>	58.60 <sub>75</sub>	60.047 <sub>454</sub>	49.14 <sub>58</sub>	29.861 <sub>382</sub>	31.75 <sub>34</sub>	37.653 <sub>327</sub>	2.03 <sub>2</sub>
28	12.105 <sub>286</sub>	59.35 <sub>57</sub>	60.501 <sub>472</sub>	48.56 <sub>35</sub>	30.243 <sub>396</sub>	31.41 <sub>18</sub>	37.980 <sub>339</sub>	2.01 <sub>4</sub>
Sept. 7	12.391 <sub>292</sub>	59.92 <sub>36</sub>	60.973 <sub>484</sub>	48.21 <sub>12</sub>	30.639 <sub>405</sub>	31.23 <sub>3</sub>	38.319 <sub>347</sub>	2.05 <sub>7</sub>
17	12.683 <sub>294</sub>	60.28 <sub>14</sub>	61.457 <sub>489</sub>	48.09 <sub>12</sub>	31.044 <sub>409</sub>	31.20 <sub>12</sub>	38.666 <sub>350</sub>	2.12 <sub>12</sub>
27	12.977 <sub>292</sub>	60.42 <sub>9</sub>	61.946 <sub>487</sub>	48.21 <sub>37</sub>	31.453 <sub>408</sub>	31.32 <sub>28</sub>	39.016 <sub>349</sub>	2.24 <sub>15</sub>
Okt. 7	13.269 <sub>288</sub>	60.33 <sub>31</sub>	62.433 <sub>480</sub>	48.58 <sub>61</sub>	31.861 <sub>402</sub>	31.60 <sub>43</sub>	39.365 <sub>345</sub>	2.39 <sub>19</sub>
17	13.557 <sub>280</sub>	60.02 <sub>51</sub>	62.913 <sub>463</sub>	49.19 <sub>84</sub>	32.263 <sub>390</sub>	32.03 <sub>59</sub>	39.710 <sub>335</sub>	2.58 <sub>24</sub>
27	13.837 <sub>265</sub>	59.51 <sub>69</sub>	63.376 <sub>440</sub>	50.03 <sub>109</sub>	32.653 <sub>371</sub>	32.62 <sub>76</sub>	40.045 <sub>320</sub>	2.82 <sub>30</sub>
Nov. 6	14.102 <sub>247</sub>	58.82 <sub>81</sub>	63.816 <sub>407</sub>	51.12 <sub>131</sub>	33.024 <sub>346</sub>	33.38 <sub>92</sub>	40.365 <sub>300</sub>	3.12 <sub>37</sub>
16	14.349 <sub>223</sub>	58.01 <sub>91</sub>	64.223 <sub>364</sub>	52.43 <sub>153</sub>	33.370 <sub>311</sub>	34.30 <sub>107</sub>	40.665 <sub>271</sub>	3.49 <sub>44</sub>
26	14.572 <sub>193</sub>	57.10 <sub>95</sub>	64.587 <sub>313</sub>	53.96 <sub>170</sub>	33.681 <sub>270</sub>	35.37 <sub>121</sub>	40.936 <sub>237</sub>	3.93 <sub>54</sub>
Dez. 6	14.765 <sub>158</sub>	56.15 <sub>94</sub>	64.900 <sub>251</sub>	55.66 <sub>185</sub>	33.951 <sub>220</sub>	36.58 <sub>133</sub>	41.173 <sub>195</sub>	4.47 <sub>62</sub>
16	14.923 <sub>117</sub>	55.21 <sub>90</sub>	65.151 <sub>183</sub>	57.51 <sub>195</sub>	34.171 <sub>163</sub>	37.91 <sub>142</sub>	41.368 <sub>148</sub>	5.09 <sub>70</sub>
25	15.040 <sub>73</sub>	54.31 <sub>82</sub>	65.334 <sub>107</sub>	59.46 <sub>198</sub>	34.334 <sub>102</sub>	39.33 <sub>146</sub>	41.516 <sub>95</sub>	5.79 <sub>76</sub>
35	15.113	53.49	65.441	61.44	34.436	40.79	41.611	6.55
Mittl. Ort	11.579	54.59	59.819	58.68	29.580	38.73	37.352	5.64
sec $\delta$ , tg $\delta$	1.008	+0.130	1.713	+1.391	1.413	+0.998	1.194	+0.653
a, a'	+3.2	+0.7	+4.9	+0.4	+4.4	+0.4	+3.9	+0.3
b, b'	0.00	-1.00	0.00	-1.00	0.00	-1.00	0.00	-1.00



Tag	229) $\eta$ Columbae		232) $\nu$ Orionis		1168) $\kappa$ Aurigae		234) 22 H. Camelop.		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
1945	$5^h 57^m$	$-42^\circ 48'$	$6^h 4^m$	$+14^\circ 46'$	$6^h 11^m$	$+29^\circ 31'$	$6^h 12^m$	$+69^\circ 20'$	
Jan.	o	28.933 <sub>26</sub>	69.34 <sub>301</sub>	26.128 <sub>57</sub>	32.38 <sub>35</sub>	52.697 <sub>72</sub>	9.64 <sub>53</sub>	49.01 <sub>9</sub>	31.92 <sub>270</sub>
	10	28.907 <sub>85</sub>	72.35 <sub>274</sub>	26.185 <sub>8</sub>	32.03 <sub>27</sub>	52.769 <sub>17</sub>	10.17 <sub>57</sub>	49.10 <sub>5</sub>	34.62 <sub>262</sub>
	20	28.822 <sub>139</sub>	75.09 <sub>240</sub>	26.193 <sub>40</sub>	31.76 <sub>17</sub>	52.786 <sub>36</sub>	10.74 <sub>60</sub>	49.05 <sub>17</sub>	37.24 <sub>245</sub>
	30	28.683 <sub>188</sub>	77.49 <sub>201</sub>	26.153 <sub>83</sub>	31.59 <sub>10</sub>	52.750 <sub>86</sub>	11.34 <sub>57</sub>	48.88 <sub>28</sub>	39.69 <sub>218</sub>
Febr.	9	28.495 <sub>229</sub>	79.50 <sub>156</sub>	26.070 <sub>122</sub>	31.49 <sub>4</sub>	52.664 <sub>130</sub>	11.91 <sub>52</sub>	48.60 <sub>39</sub>	41.87 <sub>184</sub>
	19	28.266 <sub>259</sub>	81.06 <sub>108</sub>	25.948 <sub>152</sub>	31.45 <sub>2</sub>	52.534 <sub>164</sub>	12.43 <sub>44</sub>	48.21 <sub>46</sub>	43.71 <sub>142</sub>
März	1	28.007 <sub>280</sub>	82.14 <sub>59</sub>	25.796 <sub>172</sub>	31.47 <sub>5</sub>	52.370 <sub>188</sub>	12.87 <sub>32</sub>	47.75 <sub>51</sub>	45.13 <sub>96</sub>
	11	27.727 <sub>288</sub>	82.73 <sub>10</sub>	25.624 <sub>181</sub>	31.52 <sub>8</sub>	52.182 <sub>200</sub>	13.19 <sub>20</sub>	47.24 <sub>55</sub>	46.09 <sub>46</sub>
	21	27.439 <sub>285</sub>	82.83 <sub>40</sub>	25.443 <sub>180</sub>	31.60 <sub>11</sub>	51.982 <sub>201</sub>	13.39 <sub>7</sub>	46.69 <sub>54</sub>	46.55 <sub>5</sub>
	31	27.154 <sub>270</sub>	82.43 <sub>87</sub>	25.263 <sub>168</sub>	31.71 <sub>14</sub>	51.781 <sub>188</sub>	13.46 <sub>5</sub>	46.15 <sub>52</sub>	46.50 <sub>54</sub>
Apr.	10	26.884 <sub>246</sub>	81.56 <sub>133</sub>	25.095 <sub>146</sub>	31.85 <sub>17</sub>	51.593 <sub>165</sub>	13.41 <sub>16</sub>	45.63 <sub>47</sub>	45.96 <sub>99</sub>
	20	26.638 <sub>213</sub>	80.23 <sub>176</sub>	24.949 <sub>117</sub>	32.02 <sub>21</sub>	51.428 <sub>134</sub>	13.25 <sub>26</sub>	45.16 <sub>40</sub>	44.97 <sub>140</sub>
	30	26.425 <sub>171</sub>	78.47 <sub>214</sub>	24.832 <sub>81</sub>	32.23 <sub>27</sub>	51.294 <sub>95</sub>	12.99 <sub>33</sub>	44.76 <sub>31</sub>	43.57 <sub>174</sub>
Mai	10	26.254 <sub>126</sub>	76.33 <sub>249</sub>	24.751 <sub>42</sub>	32.50 <sub>33</sub>	51.199 <sub>52</sub>	12.66 <sub>37</sub>	44.45 <sub>21</sub>	41.83 <sub>202</sub>
	20	26.128 <sub>76</sub>	73.84 <sub>277</sub>	24.709 <sub>1</sub>	32.83 <sub>40</sub>	51.147 <sub>5</sub>	12.29 <sub>38</sub>	44.24 <sub>11</sub>	39.81 <sub>222</sub>
	30	26.052 <sub>23</sub>	71.07 <sub>299</sub>	24.710 <sub>44</sub>	33.23 <sub>47</sub>	51.142 <sub>42</sub>	11.91 <sub>38</sub>	44.13 <sub>1</sub>	37.59 <sub>234</sub>
Juni	9	26.029 <sub>29</sub>	68.08 <sub>314</sub>	24.754 <sub>85</sub>	33.70 <sub>53</sub>	51.184 <sub>88</sub>	11.53 <sub>34</sub>	44.14 <sub>12</sub>	35.25 <sub>240</sub>
	19	26.058 <sub>81</sub>	64.94 <sub>321</sub>	24.839 <sub>125</sub>	34.23 <sub>60</sub>	51.272 <sub>132</sub>	11.19 <sub>31</sub>	44.26 <sub>23</sub>	32.85 <sub>238</sub>
	29	26.139 <sub>130</sub>	61.73 <sub>320</sub>	24.964 <sub>162</sub>	34.83 <sub>64</sub>	51.404 <sub>172</sub>	10.88 <sub>25</sub>	44.49 <sub>32</sub>	30.47 <sub>230</sub>
Juli	9	26.269 <sub>176</sub>	58.53 <sub>309</sub>	25.126 <sub>193</sub>	35.47 <sub>67</sub>	51.576 <sub>209</sub>	10.63 <sub>19</sub>	44.81 <sub>42</sub>	28.17 <sub>216</sub>
	19	26.445 <sub>219</sub>	55.44 <sub>290</sub>	25.319 <sub>222</sub>	36.14 <sub>66</sub>	51.785 <sub>240</sub>	10.44 <sub>15</sub>	45.23 <sub>51</sub>	26.01 <sub>197</sub>
	29	26.664 <sub>255</sub>	52.54 <sub>262</sub>	25.541 <sub>245</sub>	36.80 <sub>62</sub>	52.025 <sub>268</sub>	10.29 <sub>11</sub>	45.74 <sub>58</sub>	24.04 <sub>174</sub>
Aug.	8	26.919 <sub>287</sub>	49.92 <sub>225</sub>	25.786 <sub>265</sub>	37.42 <sub>57</sub>	52.293 <sub>289</sub>	10.18 <sub>6</sub>	46.32 <sub>65</sub>	22.30 <sub>147</sub>
	18	27.206 <sub>313</sub>	47.67 <sub>180</sub>	26.051 <sub>280</sub>	37.99 <sub>48</sub>	52.582 <sub>308</sub>	10.12 <sub>5</sub>	46.97 <sub>69</sub>	20.83 <sub>118</sub>
	28	27.519 <sub>332</sub>	45.87 <sub>129</sub>	26.331 <sub>291</sub>	38.47 <sub>37</sub>	52.890 <sub>321</sub>	10.07 <sub>3</sub>	47.66 <sub>74</sub>	19.65 <sub>85</sub>
Sept.	7	27.851 <sub>345</sub>	44.58 <sub>73</sub>	26.622 <sub>299</sub>	38.84 <sub>22</sub>	53.211 <sub>331</sub>	10.04 <sub>3</sub>	48.40 <sub>76</sub>	18.80 <sub>52</sub>
	17	28.196 <sub>350</sub>	43.85 <sub>13</sub>	26.921 <sub>304</sub>	39.06 <sub>8</sub>	53.542 <sub>337</sub>	10.01 <sub>3</sub>	49.16 <sub>78</sub>	18.28 <sub>16</sub>
	27	28.546 <sub>349</sub>	43.72 <sub>47</sub>	27.225 <sub>304</sub>	39.14 <sub>8</sub>	53.879 <sub>339</sub>	9.98 <sub>3</sub>	49.94 <sub>78</sub>	18.12 <sub>20</sub>
Okt.	7	28.895 <sub>340</sub>	44.19 <sub>107</sub>	27.529 <sub>301</sub>	39.06 <sub>22</sub>	54.218 <sub>337</sub>	9.95 <sub>3</sub>	50.72 <sub>78</sub>	18.32 <sub>57</sub>
	17	29.235 <sub>323</sub>	45.26 <sub>164</sub>	27.830 <sub>294</sub>	38.84 <sub>35</sub>	54.555 <sub>331</sub>	9.92 <sub>1</sub>	51.50 <sub>75</sub>	18.89 <sub>94</sub>
	27	29.558 <sub>298</sub>	46.90 <sub>214</sub>	28.124 <sub>282</sub>	38.49 <sub>46</sub>	54.886 <sub>319</sub>	9.91 <sub>3</sub>	52.25 <sub>71</sub>	19.83 <sub>130</sub>
Nov.	6	29.856 <sub>266</sub>	49.04 <sub>257</sub>	28.406 <sub>265</sub>	38.03 <sub>54</sub>	55.205 <sub>300</sub>	9.94 <sub>7</sub>	52.96 <sub>67</sub>	21.13 <sub>165</sub>
	16	30.122 <sub>227</sub>	51.61 <sub>290</sub>	28.671 <sub>242</sub>	37.49 <sub>57</sub>	55.505 <sub>276</sub>	10.01 <sub>15</sub>	53.63 <sub>59</sub>	22.78 <sub>197</sub>
	26	30.349 <sub>180</sub>	54.51 <sub>312</sub>	28.913 <sub>213</sub>	36.92 <sub>58</sub>	55.781 <sub>245</sub>	10.16 <sub>22</sub>	54.22 <sub>51</sub>	24.75 <sub>225</sub>
Dez.	6	30.529 <sub>128</sub>	57.63 <sub>324</sub>	29.126 <sub>177</sub>	36.34 <sub>54</sub>	56.026 <sub>205</sub>	10.38 <sub>32</sub>	54.73 <sub>41</sub>	27.00 <sub>247</sub>
	16	30.657 <sub>71</sub>	60.87 <sub>323</sub>	29.303 <sub>136</sub>	35.80 <sub>49</sub>	56.231 <sub>160</sub>	10.70 <sub>41</sub>	55.14 <sub>29</sub>	29.47 <sub>262</sub>
	25	30.728 <sub>13</sub>	64.10 <sub>312</sub>	29.439 <sub>90</sub>	35.31 <sub>40</sub>	56.391 <sub>110</sub>	11.11 <sub>49</sub>	55.43 <sub>17</sub>	32.09 <sub>270</sub>
	35	30.741	67.22	29.529	34.91	56.501	11.60	55.60	34.79
Mittl. Ort		27.692	62.38	25.824	36.33	52.365	12.86	47.31	33.44
sec $\delta$ , tg $\delta$		1.363	-0.927	1.034	+0.264	1.149	+0.566	2.835	+2.652
a, a'		+1.8	+0.2	+3.4	-0.4	+3.8	-1.0	+6.6	-1.1
b, b'		0.00	-1.00	0.00	-1.00	0.00	-1.00	-0.01	-1.00



# Obere Kulmination Greenwich

77\*

Tag	240) ζ Canis maj.		241) μ Geminorum		243) β Canis maj.		242) ψ <sup>1</sup> Aurigae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	6 <sup>h</sup> 18 <sup>m</sup>	-30° 2'	6 <sup>h</sup> 19 <sup>m</sup>	+22° 32'	6 <sup>h</sup> 20 <sup>m</sup>	-17° 55'	6 <sup>h</sup> 20 <sup>m</sup>	+49° 18'
Jan. 0	12.873	20.81	38.261	33.54	17.183	43.07	40.369	63.20
10	12.898 <sup>25</sup> / <sub>27</sub>	23.53 <sup>272</sup> / <sub>250</sub>	38.338 <sup>77</sup> / <sub>25</sub>	33.63 <sup>9</sup> / <sub>17</sub>	17.227 <sup>44</sup> / <sub>5</sub>	45.28 <sup>221</sup> / <sub>203</sub>	40.462 <sup>93</sup> / <sub>21</sub>	64.90 <sup>170</sup> / <sub>170</sub>
20	12.871 <sup>77</sup> / <sub>27</sub>	26.03 <sup>222</sup> / <sub>222</sub>	38.363 <sup>25</sup> / <sub>27</sub>	33.80 <sup>17</sup> / <sub>23</sub>	17.222 <sup>52</sup> / <sub>52</sub>	47.31 <sup>178</sup> / <sub>178</sub>	40.483 <sup>50</sup> / <sub>50</sub>	66.60 <sup>163</sup> / <sub>163</sub>
30	12.794 <sup>124</sup> / <sub>164</sub>	28.25 <sup>189</sup> / <sub>151</sub>	38.336 <sup>74</sup> / <sub>116</sub>	34.03 <sup>27</sup> / <sub>28</sub>	17.170 <sup>96</sup> / <sub>135</sub>	49.09 <sup>150</sup> / <sub>119</sub>	40.433 <sup>117</sup> / <sub>175</sub>	68.23 <sup>150</sup> / <sub>130</sub>
Febr. 9	12.670	30.14	38.262	34.30	17.074	50.59	40.316	69.73
19	12.506 <sup>195</sup> / <sub>217</sub>	31.65 <sup>111</sup> / <sub>69</sub>	38.146 <sup>150</sup> / <sub>174</sub>	34.58 <sup>27</sup> / <sub>24</sub>	16.939 <sup>165</sup> / <sub>186</sub>	51.78 <sup>87</sup> / <sub>52</sub>	40.141 <sup>222</sup> / <sub>256</sub>	71.03 <sup>104</sup> / <sub>75</sub>
März 1	12.311	32.76	37.996	34.85	16.774	52.65	39.919	72.07
11	12.094 <sup>229</sup> / <sub>229</sub>	33.45 <sup>27</sup> / <sub>16</sub>	37.822 <sup>187</sup> / <sub>188</sub>	35.09 <sup>19</sup> / <sub>13</sub>	16.588 <sup>198</sup> / <sub>199</sub>	53.17 <sup>19</sup> / <sub>15</sub>	39.663 <sup>274</sup> / <sub>275</sub>	72.82 <sup>43</sup> / <sub>10</sub>
21	11.865 <sup>229</sup> / <sub>220</sub>	33.72 <sup>16</sup> / <sub>57</sub>	37.635 <sup>188</sup> / <sub>179</sub>	35.28 <sup>13</sup> / <sub>8</sub>	16.390 <sup>199</sup> / <sub>189</sub>	53.36 <sup>15</sup> / <sub>48</sub>	39.389 <sup>275</sup> / <sub>263</sub>	73.25 <sup>10/<sub>22</sub></sup>
31	11.636	33.56	37.447	35.41	16.191	53.21	39.114	73.35
Apr. 10	11.416 <sup>201</sup> / <sub>173</sub>	32.99 <sup>98</sup> / <sub>136</sub>	37.268 <sup>158</sup> / <sub>120</sub>	35.49 <sup>2</sup> / <sub>0</sub>	16.002 <sup>172</sup> / <sub>147</sub>	52.73 <sup>80</sup> / <sub>110</sub>	38.851 <sup>236</sup> / <sub>197</sub>	73.13 <sup>53</sup> / <sub>80</sub>
20	11.215	32.01	37.110	35.51	15.830	51.93	38.615	72.60
30	11.042 <sup>141</sup> / <sub>102</sub>	30.65 <sup>171</sup> / <sub>202</sub>	36.981 <sup>94</sup> / <sub>54</sub>	35.51 <sup>3</sup> / <sub>3</sub>	15.683 <sup>115</sup> / <sub>78</sub>	50.83 <sup>139</sup> / <sub>164</sub>	38.418 <sup>148</sup> / <sub>93</sub>	71.80 <sup>104</sup> / <sub>121</sub>
Mai 10	10.901	28.04	36.887	35.48	15.568	49.44	38.270	70.76
20	10.799 <sup>59</sup> / <sub>15</sub>	26.92 <sup>229</sup> / <sub>252</sub>	36.833 <sup>11</sup> / <sub>33</sub>	35.45 <sup>1</sup> / <sub>1</sub>	15.490 <sup>38</sup> / <sub>2</sub>	47.80 <sup>187</sup> / <sub>206</sub>	38.177 <sup>33</sup> / <sub>28</sub>	69.55 <sup>135</sup> / <sub>142</sub>
30	10.740	24.63	36.822	35.44	15.452	45.93	38.144	68.20
Juni 9	10.725 <sup>29</sup> / <sub>29</sub>	22.11 <sup>268</sup> / <sub>277</sub>	36.855 <sup>77</sup> / <sub>117</sub>	35.45 <sup>5</sup> / <sub>10</sub>	15.454 <sup>43</sup> / <sub>83</sub>	43.87 <sup>220</sup> / <sub>228</sub>	38.172 <sup>89</sup> / <sub>148</sub>	66.78 <sup>146</sup> / <sub>144</sub>
19	10.754 <sup>72</sup> / <sub>113</sub>	19.43 <sup>277</sup> / <sub>279</sub>	36.932 <sup>117</sup> / <sub>156</sub>	35.50 <sup>10</sup> / <sub>12</sub>	15.497 <sup>83</sup> / <sub>120</sub>	41.67 <sup>228</sup> / <sub>231</sub>	38.261 <sup>148</sup> / <sub>202</sub>	65.32 <sup>144</sup> / <sub>139</sub>
29	10.826	16.66	37.049	35.60	15.580	39.39	38.409	63.88
Juli 9	10.939 <sup>153</sup> / <sub>188</sub>	13.87 <sup>274</sup> / <sub>260</sub>	37.205 <sup>191</sup> / <sub>220</sub>	35.72 <sup>16</sup> / <sub>18</sub>	15.700 <sup>155</sup> / <sub>186</sub>	37.08 <sup>226</sup> / <sub>216</sub>	38.611 <sup>252</sup> / <sub>297</sub>	62.49 <sup>131</sup> / <sub>119</sub>
19	11.092	11.13	37.396	35.88	15.855	34.82	38.863	61.18
29	11.280 <sup>219</sup> / <sub>8</sub>	8.53 <sup>238</sup> / <sub>208</sub>	37.616 <sup>247</sup> / <sub>269</sub>	36.06 <sup>18</sup> / <sub>17</sub>	16.041 <sup>213</sup> / <sub>237</sub>	32.66 <sup>198</sup> / <sub>173</sub>	39.160 <sup>334</sup> / <sub>368</sub>	59.99 <sup>106</sup> / <sub>91</sub>
Aug. 8	11.499	6.15	37.863	36.24	16.254	30.68	39.494	58.93
18	11.746 <sup>269</sup> / <sub>288</sub>	4.07 <sup>171</sup> / <sub>127</sub>	38.132 <sup>286</sup> / <sub>300</sub>	36.41 <sup>13</sup> / <sub>8</sub>	16.491 <sup>257</sup> / <sub>272</sub>	28.95 <sup>142</sup> / <sub>105</sub>	39.862 <sup>394</sup> / <sub>415</sub>	58.02 <sup>75</sup> / <sub>58</sub>
28	12.015	2.36	38.418	36.54	16.748	27.53	40.256	57.27
Sept. 7	12.303 <sup>301</sup> / <sub>309</sub>	1.09 <sup>78</sup> / <sub>25</sub>	38.718 <sup>311</sup> / <sub>317</sub>	36.62 <sup>2</sup> / <sub>6</sub>	17.020 <sup>284</sup> / <sub>291</sub>	26.48 <sup>64</sup> / <sub>20</sub>	40.671 <sup>430</sup> / <sub>440</sub>	56.69 <sup>39</sup> / <sub>21</sub>
17	12.604	0.31	39.029	36.64	17.304	25.84	41.101	56.30
27	12.913 <sup>312</sup> / <sub>321</sub>	0.06 <sup>29</sup> / <sub>321</sub>	39.346 <sup>321</sup> / <sub>320</sub>	36.58 <sup>13</sup> / <sub>19</sub>	17.595 <sup>294</sup> / <sub>294</sub>	25.64 <sup>26</sup> / <sub>71</sub>	41.541 <sup>444</sup> / <sub>444</sub>	56.09 <sup>2</sup> / <sub>19</sub>
Okt. 7	13.225 <sup>309</sup> / <sub>301</sub>	0.35 <sup>82</sup> / <sub>134</sub>	39.667 <sup>320</sup> / <sub>315</sub>	36.45 <sup>19</sup> / <sub>25</sub>	17.889 <sup>294</sup> / <sub>286</sub>	25.90 <sup>71</sup> / <sub>115</sub>	41.985 <sup>444</sup> / <sub>435</sub>	56.07 <sup>19</sup> / <sub>40</sub>
17	13.534	1.17	39.987	36.26	18.183	26.61	42.429	56.26
27	13.835 <sup>286</sup> / <sub>263</sub>	2.51 <sup>181</sup> / <sub>221</sub>	40.302 <sup>305</sup> / <sub>290</sub>	36.01 <sup>28</sup> / <sub>28</sub>	18.469 <sup>275</sup> / <sub>257</sub>	27.76 <sup>153</sup> / <sub>186</sub>	42.864 <sup>420</sup> / <sub>396</sub>	56.66 <sup>62</sup> / <sub>84</sub>
Nov. 6	14.121	4.32	40.607	35.73	18.744	29.29	43.284	57.28
16	14.384 <sup>235</sup> / <sub>200</sub>	6.53 <sup>252</sup> / <sub>274</sub>	40.897 <sup>268</sup> / <sub>238</sub>	35.45 <sup>26</sup> / <sub>22</sub>	19.001 <sup>233</sup> / <sub>201</sub>	31.15 <sup>211</sup> / <sub>229</sub>	43.680 <sup>363</sup> / <sub>321</sub>	58.12 <sup>105</sup> / <sub>125</sub>
26	14.619	9.05	41.165	35.19	19.234	33.26	44.043	59.17
Dez. 6	14.819 <sup>157</sup> / <sub>111</sub>	11.79 <sup>286</sup> / <sub>289</sub>	41.403 <sup>202</sup> / <sub>160</sub>	34.97 <sup>14</sup> / <sub>5</sub>	19.435 <sup>166</sup> / <sub>123</sub>	35.55 <sup>238</sup> / <sub>237</sub>	44.364 <sup>269</sup> / <sub>210</sub>	60.42 <sup>144</sup> / <sub>157</sub>
16	14.976	14.65	41.605	34.83	19.601	37.93	44.633	61.86
26	15.087 <sup>61</sup> / <sub>26</sub>	17.54 <sup>281</sup> / <sub>112</sub>	41.765 <sup>112</sup> / <sub>4</sub>	34.78 <sup>4</sup> / <sub>4</sub>	19.724 <sup>77</sup> / <sub>26</sub>	40.30 <sup>230</sup> / <sub>27</sub>	44.843 <sup>142</sup> / <sub>27</sub>	63.43 <sup>167</sup> / <sub>10</sub>
35	15.148	20.35	41.877	34.82	19.801	42.60	44.985	65.10
Mittl. Ort	12.028	15.79	37.951	37.13	16.589	38.37	39.777	65.84
sec δ, tg δ	1.155	-0.578	1.083	+0.415	1.051	-0.324	1.534	+1.163
a, a'	+2.3	-1.6	+3.6	-1.7	+2.6	-1.8	+4.6	-1.8
b, b'	0.00	-1.00	0.00	-1.00	0.00	-1.00	-0.01	-1.00



Tag	244) 8ε Monocerotis		245) α Carinae		246) ιο Monocerotis		247) 8 Lynceis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	6 <sup>h</sup> 20 <sup>m</sup>	+4° 37'	6 <sup>h</sup> 22 <sup>m</sup>	−52° 39'	6 <sup>h</sup> 25 <sup>m</sup>	−4° 43'	6 <sup>h</sup> 32 <sup>m</sup>	+61° 31'
Jan. 0	51.512 <sup>a</sup> <sub>66</sub>	16.62 <sup>b</sup> <sub>101</sub>	45.653 <sup>a</sup> <sub>25</sub>	58.14 <sup>b</sup> <sub>334</sub>	14.959 <sup>a</sup> <sub>62</sub>	39.99 <sup>b</sup> <sub>156</sub>	41.11 <sup>a</sup> <sub>12</sub>	53.27 <sup>b</sup> <sub>232</sub>
10	51.578 <sup>a</sup> <sub>18</sub>	15.61 <sup>b</sup> <sub>87</sub>	45.628 <sup>a</sup> <sub>97</sub>	61.48 <sup>b</sup> <sub>312</sub>	15.021 <sup>a</sup> <sub>15</sub>	41.55 <sup>b</sup> <sub>139</sub>	41.23 <sup>a</sup> <sub>3</sub>	55.59 <sup>b</sup> <sub>232</sub>
20	51.596 <sup>a</sup> <sub>30</sub>	14.74 <sup>b</sup> <sub>72</sub>	45.531 <sup>a</sup> <sub>164</sub>	64.60 <sup>b</sup> <sub>281</sub>	15.036 <sup>a</sup> <sub>32</sub>	42.94 <sup>b</sup> <sub>121</sub>	41.26 <sup>a</sup> <sub>7</sub>	57.91 <sup>b</sup> <sub>223</sub>
30	51.566 <sup>a</sup> <sub>73</sub>	14.02 <sup>b</sup> <sub>57</sub>	45.367 <sup>a</sup> <sub>224</sub>	67.41 <sup>b</sup> <sub>241</sub>	15.004 <sup>a</sup> <sub>76</sub>	44.15 <sup>b</sup> <sub>99</sub>	41.19 <sup>a</sup> <sub>16</sub>	60.14 <sup>b</sup> <sub>204</sub>
Febr. 9	51.493 <sup>a</sup> <sub>112</sub>	13.45 <sup>b</sup> <sub>40</sub>	45.143 <sup>a</sup> <sub>276</sub>	69.82 <sup>b</sup> <sub>196</sub>	14.928 <sup>a</sup> <sub>115</sub>	45.14 <sup>b</sup> <sub>77</sub>	41.03 <sup>a</sup> <sub>25</sub>	62.18 <sup>b</sup> <sub>179</sub>
19	51.381 <sup>a</sup> <sub>143</sub>	13.05 <sup>b</sup> <sub>26</sub>	44.867 <sup>a</sup> <sub>317</sub>	71.78 <sup>b</sup> <sub>149</sub>	14.813 <sup>a</sup> <sub>146</sub>	45.91 <sup>b</sup> <sub>54</sub>	40.78 <sup>a</sup> <sub>30</sub>	63.97 <sup>b</sup> <sub>146</sub>
März I	51.238 <sup>a</sup> <sub>165</sub>	12.79 <sup>b</sup> <sub>12</sub>	44.550 <sup>a</sup> <sub>345</sub>	73.27 <sup>b</sup> <sub>98</sub>	14.667 <sup>a</sup> <sub>167</sub>	46.45 <sup>b</sup> <sub>31</sub>	40.48 <sup>a</sup> <sub>36</sub>	65.43 <sup>b</sup> <sub>107</sub>
11	51.073 <sup>a</sup> <sub>176</sub>	12.67 <sup>b</sup> <sub>2</sub>	44.205 <sup>a</sup> <sub>361</sub>	74.25 <sup>b</sup> <sub>45</sub>	14.500 <sup>a</sup> <sub>180</sub>	46.76 <sup>b</sup> <sub>8</sub>	40.12 <sup>a</sup> <sub>38</sub>	66.50 <sup>b</sup> <sub>65</sub>
21	50.897 <sup>a</sup> <sub>178</sub>	12.69 <sup>b</sup> <sub>15</sub>	43.844 <sup>a</sup> <sub>363</sub>	74.70 <sup>b</sup> <sub>7</sub>	14.320 <sup>a</sup> <sub>182</sub>	46.84 <sup>b</sup> <sub>14</sub>	39.74 <sup>a</sup> <sub>39</sub>	67.15 <sup>b</sup> <sub>21</sub>
31	50.719 <sup>a</sup> <sub>169</sub>	12.84 <sup>b</sup> <sub>28</sub>	43.481 <sup>a</sup> <sub>352</sub>	74.63 <sup>b</sup> <sub>60</sub>	14.138 <sup>a</sup> <sub>174</sub>	46.70 <sup>b</sup> <sub>36</sub>	39.35 <sup>a</sup> <sub>38</sub>	67.36 <sup>b</sup> <sub>23</sub>
Apr. 10	50.550 <sup>a</sup> <sub>150</sub>	13.12 <sup>b</sup> <sub>41</sub>	43.129 <sup>a</sup> <sub>331</sub>	74.03 <sup>b</sup> <sub>109</sub>	13.964 <sup>a</sup> <sub>156</sub>	46.34 <sup>b</sup> <sub>56</sub>	38.97 <sup>a</sup> <sub>35</sub>	67.13 <sup>b</sup> <sub>64</sub>
20	50.400 <sup>a</sup> <sub>125</sub>	13.53 <sup>b</sup> <sub>53</sub>	42.798 <sup>a</sup> <sub>296</sub>	72.94 <sup>b</sup> <sub>157</sub>	13.808 <sup>a</sup> <sub>131</sub>	45.78 <sup>b</sup> <sub>77</sub>	38.62 <sup>a</sup> <sub>30</sub>	66.49 <sup>b</sup> <sub>102</sub>
30	50.275 <sup>a</sup> <sub>92</sub>	14.06 <sup>b</sup> <sub>65</sub>	42.502 <sup>a</sup> <sub>257</sub>	71.37 <sup>b</sup> <sub>200</sub>	13.677 <sup>a</sup> <sub>101</sub>	45.01 <sup>b</sup> <sub>97</sub>	38.32 <sup>a</sup> <sub>24</sub>	65.47 <sup>b</sup> <sub>136</sub>
Mai 10	50.183 <sup>a</sup> <sub>56</sub>	14.71 <sup>b</sup> <sub>77</sub>	42.245 <sup>a</sup> <sub>207</sub>	69.37 <sup>b</sup> <sub>239</sub>	13.576 <sup>a</sup> <sub>65</sub>	44.04 <sup>b</sup> <sub>115</sub>	38.08 <sup>a</sup> <sub>17</sub>	64.11 <sup>b</sup> <sub>162</sub>
20	50.127 <sup>a</sup> <sub>17</sub>	15.48 <sup>b</sup> <sub>89</sub>	42.038 <sup>a</sup> <sub>152</sub>	66.98 <sup>b</sup> <sub>273</sub>	13.511 <sup>a</sup> <sub>27</sub>	42.89 <sup>b</sup> <sub>130</sub>	37.91 <sup>a</sup> <sub>9</sub>	62.49 <sup>b</sup> <sub>184</sub>
30	50.110 <sup>a</sup> <sub>23</sub>	16.37 <sup>b</sup> <sub>99</sub>	41.886 <sup>a</sup> <sub>93</sub>	64.25 <sup>b</sup> <sub>301</sub>	13.484 <sup>a</sup> <sub>12</sub>	41.59 <sup>b</sup> <sub>145</sub>	37.82 <sup>a</sup> <sub>1</sub>	60.65 <sup>b</sup> <sub>198</sub>
Juni 9	50.133 <sup>a</sup> <sub>64</sub>	17.36 <sup>b</sup> <sub>107</sub>	41.793 <sup>a</sup> <sub>33</sub>	61.24 <sup>b</sup> <sub>321</sub>	13.496 <sup>a</sup> <sub>52</sub>	40.14 <sup>b</sup> <sub>155</sub>	37.81 <sup>a</sup> <sub>7</sub>	58.67 <sup>b</sup> <sub>207</sub>
19	50.197 <sup>a</sup> <sub>101</sub>	18.43 <sup>b</sup> <sub>113</sub>	41.760 <sup>a</sup> <sub>28</sub>	58.03 <sup>b</sup> <sub>332</sub>	13.548 <sup>a</sup> <sub>90</sub>	38.59 <sup>b</sup> <sub>163</sub>	37.88 <sup>a</sup> <sub>15</sub>	56.60 <sup>b</sup> <sub>209</sub>
29	50.298 <sup>a</sup> <sub>137</sub>	19.56 <sup>b</sup> <sub>117</sub>	41.788 <sup>a</sup> <sub>88</sub>	54.71 <sup>b</sup> <sub>336</sub>	13.638 <sup>a</sup> <sub>125</sub>	36.96 <sup>b</sup> <sub>165</sub>	38.03 <sup>a</sup> <sub>23</sub>	54.51 <sup>b</sup> <sub>206</sub>
Juli 9	50.435 <sup>a</sup> <sub>169</sub>	20.73 <sup>b</sup> <sub>115</sub>	41.876 <sup>a</sup> <sub>147</sub>	51.35 <sup>b</sup> <sub>329</sub>	13.763 <sup>a</sup> <sub>158</sub>	35.31 <sup>b</sup> <sub>163</sub>	38.26 <sup>a</sup> <sub>30</sub>	52.45 <sup>b</sup> <sub>197</sub>
19	50.604 <sup>a</sup> <sub>198</sub>	21.88 <sup>b</sup> <sub>112</sub>	42.023 <sup>a</sup> <sub>202</sub>	48.06 <sup>b</sup> <sub>313</sub>	13.921 <sup>a</sup> <sub>188</sub>	33.68 <sup>b</sup> <sub>157</sub>	38.56 <sup>a</sup> <sub>36</sub>	50.48 <sup>b</sup> <sub>185</sub>
29	50.802 <sup>a</sup> <sub>222</sub>	23.00 <sup>b</sup> <sub>103</sub>	42.225 <sup>a</sup> <sub>252</sub>	44.93 <sup>b</sup> <sub>288</sub>	14.109 <sup>a</sup> <sub>212</sub>	32.11 <sup>b</sup> <sub>144</sub>	38.92 <sup>a</sup> <sub>41</sub>	48.63 <sup>b</sup> <sub>167</sub>
Aug. 8	51.024 <sup>a</sup> <sub>243</sub>	24.03 <sup>b</sup> <sub>90</sub>	42.477 <sup>a</sup> <sub>297</sub>	42.05 <sup>b</sup> <sub>253</sub>	14.321 <sup>a</sup> <sub>235</sub>	30.67 <sup>b</sup> <sub>125</sub>	39.33 <sup>a</sup> <sub>46</sub>	46.96 <sup>b</sup> <sub>148</sub>
18	51.267 <sup>a</sup> <sub>260</sub>	24.93 <sup>b</sup> <sub>73</sub>	42.774 <sup>a</sup> <sub>335</sub>	39.52 <sup>b</sup> <sub>210</sub>	14.556 <sup>a</sup> <sub>252</sub>	29.42 <sup>b</sup> <sub>103</sub>	39.79 <sup>a</sup> <sub>52</sub>	45.48 <sup>b</sup> <sub>125</sub>
28	51.527 <sup>a</sup> <sub>273</sub>	25.66 <sup>b</sup> <sub>54</sub>	43.109 <sup>a</sup> <sub>366</sub>	37.42 <sup>b</sup> <sub>159</sub>	14.808 <sup>a</sup> <sub>267</sub>	28.39 <sup>b</sup> <sub>76</sub>	40.31 <sup>a</sup> <sub>54</sub>	44.23 <sup>b</sup> <sub>100</sub>
Sept. 7	51.800 <sup>a</sup> <sub>284</sub>	26.20 <sup>b</sup> <sub>31</sub>	43.475 <sup>a</sup> <sub>390</sub>	35.83 <sup>b</sup> <sub>101</sub>	15.075 <sup>a</sup> <sub>278</sub>	27.63 <sup>b</sup> <sub>45</sub>	40.85 <sup>a</sup> <sub>56</sub>	43.23 <sup>b</sup> <sub>74</sub>
17	52.084 <sup>a</sup> <sub>290</sub>	26.51 <sup>b</sup> <sub>5</sub>	43.865 <sup>a</sup> <sub>404</sub>	34.82 <sup>b</sup> <sub>40</sub>	15.353 <sup>a</sup> <sub>286</sub>	27.18 <sup>b</sup> <sub>12</sub>	41.41 <sup>a</sup> <sub>59</sub>	42.49 <sup>b</sup> <sub>44</sub>
27	52.374 <sup>a</sup> <sub>294</sub>	26.56 <sup>b</sup> <sub>20</sub>	44.269 <sup>a</sup> <sub>409</sub>	34.42 <sup>b</sup> <sub>25</sub>	15.639 <sup>a</sup> <sub>290</sub>	27.06 <sup>b</sup> <sub>23</sub>	42.00 <sup>a</sup> <sub>59</sub>	42.05 <sup>b</sup> <sub>14</sub>
Okt. 7	52.668 <sup>a</sup> <sub>293</sub>	26.36 <sup>b</sup> <sub>46</sub>	44.678 <sup>a</sup> <sub>404</sub>	34.67 <sup>b</sup> <sub>89</sub>	15.929 <sup>a</sup> <sub>290</sub>	27.29 <sup>b</sup> <sub>58</sub>	42.59 <sup>a</sup> <sub>59</sub>	41.91 <sup>b</sup> <sub>17</sub>
17	52.961 <sup>a</sup> <sub>289</sub>	25.90 <sup>b</sup> <sub>68</sub>	45.082 <sup>a</sup> <sub>388</sub>	35.56 <sup>b</sup> <sub>150</sub>	16.219 <sup>a</sup> <sub>285</sub>	27.87 <sup>b</sup> <sub>89</sub>	43.18 <sup>a</sup> <sub>59</sub>	42.08 <sup>b</sup> <sub>49</sub>
27	53.250 <sup>a</sup> <sub>279</sub>	25.22 <sup>b</sup> <sub>88</sub>	45.470 <sup>a</sup> <sub>362</sub>	37.06 <sup>b</sup> <sub>207</sub>	16.504 <sup>a</sup> <sub>275</sub>	28.76 <sup>b</sup> <sub>117</sub>	43.77 <sup>a</sup> <sub>56</sub>	42.57 <sup>b</sup> <sub>81</sub>
Nov. 6	53.529 <sup>a</sup> <sub>264</sub>	24.34 <sup>b</sup> <sub>104</sub>	45.832 <sup>a</sup> <sub>326</sub>	39.13 <sup>b</sup> <sub>256</sub>	16.779 <sup>a</sup> <sub>261</sub>	29.93 <sup>b</sup> <sub>141</sub>	44.33 <sup>a</sup> <sub>54</sub>	43.38 <sup>b</sup> <sub>113</sub>
16	53.793 <sup>a</sup> <sub>243</sub>	23.30 <sup>b</sup> <sub>115</sub>	46.158 <sup>a</sup> <sub>280</sub>	41.69 <sup>b</sup> <sub>297</sub>	17.040 <sup>a</sup> <sub>240</sub>	31.34 <sup>b</sup> <sub>159</sub>	44.87 <sup>a</sup> <sub>49</sub>	44.51 <sup>b</sup> <sub>145</sub>
26	54.036 <sup>a</sup> <sub>216</sub>	22.15 <sup>b</sup> <sub>121</sub>	46.438 <sup>a</sup> <sub>224</sub>	44.66 <sup>b</sup> <sub>326</sub>	17.280 <sup>a</sup> <sub>212</sub>	32.93 <sup>b</sup> <sub>169</sub>	45.36 <sup>a</sup> <sub>43</sub>	45.96 <sup>b</sup> <sub>172</sub>
Dez. 6	54.252 <sup>a</sup> <sub>181</sub>	20.94 <sup>b</sup> <sub>121</sub>	46.662 <sup>a</sup> <sub>161</sub>	47.92 <sup>b</sup> <sub>343</sub>	17.492 <sup>a</sup> <sub>178</sub>	34.62 <sup>b</sup> <sub>174</sub>	45.79 <sup>a</sup> <sub>36</sub>	47.68 <sup>b</sup> <sub>197</sub>
16	54.433 <sup>a</sup> <sub>143</sub>	19.73 <sup>b</sup> <sub>116</sub>	46.823 <sup>a</sup> <sub>93</sub>	51.35 <sup>b</sup> <sub>350</sub>	17.670 <sup>a</sup> <sub>139</sub>	36.36 <sup>b</sup> <sub>171</sub>	46.15 <sup>a</sup> <sub>28</sub>	49.65 <sup>b</sup> <sub>215</sub>
26	54.576 <sup>a</sup> <sub>98</sub>	18.57 <sup>b</sup> <sub>107</sub>	46.916 <sup>a</sup> <sub>21</sub>	54.85 <sup>b</sup> <sub>343</sub>	17.809 <sup>a</sup> <sub>95</sub>	38.07 <sup>b</sup> <sub>163</sub>	46.43 <sup>a</sup> <sub>19</sub>	51.80 <sup>b</sup> <sub>229</sub>
35	54.674 <sup>a</sup>	17.50 <sup>b</sup>	46.937 <sup>a</sup>	58.28 <sup>b</sup>	17.904 <sup>a</sup>	39.70 <sup>b</sup>	46.62 <sup>a</sup>	54.09 <sup>b</sup>
Mittl. Ort	51.162	20.77	43.807	53.43	14.535	35.76	40.06	56.07
sec δ, tg δ	1.003	+0.081	1.649	−1.311	1.003	−0.083	2.098	+1.844
a, a'	+3.2	−1.8	+1.3	−2.0	+3.0	−2.2	+5.5	−2.8
b, b'	0.00	−1.00	+0.01	−1.00	0.00	−0.99	−0.02	−0.99



# Obere Kulmination Greenwich

79\*

Tag	249) $\xi^a$ Canis maj.		251) $\gamma$ Geminorum		250) $\zeta$ Aurigae		252) $\nu$ Puppis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$6^h 32^m$	$-22^\circ 54'$	$6^h 34^m$	$+16^\circ 26'$	$6^h 34^m$	$+39^\circ 26'$	$6^h 36^m$	$-43^\circ 8'$
Jan. 0	45.685 <sup>a</sup> <sub>51</sub>	75.82 <sup>a</sup> <sub>249</sub>	32.380 <sup>a</sup> <sub>88</sub>	48.89 <sup>a</sup> <sub>32</sub>	51.312 <sup>a</sup> <sub>106</sub>	25.45 <sup>a</sup> <sub>110</sub>	5.926 <sup>a</sup> <sub>21</sub>	51.58 <sup>a</sup> <sub>322</sub>
10	45.736 <sup>o</sup>	78.31 <sup>o</sup> <sub>230</sub>	32.468 <sup>o</sup> <sub>38</sub>	48.57 <sup>o</sup> <sub>21</sub>	51.418 <sup>o</sup> <sub>43</sub>	26.55 <sup>o</sup> <sub>116</sub>	5.947 <sup>o</sup> <sub>40</sub>	54.80 <sup>o</sup> <sub>301</sub>
20	45.736 <sup>o</sup> <sub>49</sub>	80.61 <sup>o</sup> <sub>206</sub>	32.506 <sup>o</sup> <sub>13</sub>	48.36 <sup>o</sup> <sub>10</sub>	51.461 <sup>o</sup> <sub>19</sub>	27.71 <sup>o</sup> <sub>117</sub>	5.907 <sup>o</sup> <sub>99</sub>	57.81 <sup>o</sup> <sub>273</sub>
30	45.687 <sup>o</sup> <sub>96</sub>	82.67 <sup>o</sup> <sub>175</sub>	32.493 <sup>o</sup> <sub>60</sub>	48.26 <sup>o</sup> <sub>2</sub>	51.442 <sup>o</sup> <sub>77</sub>	28.88 <sup>o</sup> <sub>111</sub>	5.808 <sup>o</sup> <sub>154</sub>	60.54 <sup>o</sup> <sub>237</sub>
Febr. 9	45.591 <sup>o</sup> <sub>136</sub>	84.42 <sup>o</sup> <sub>142</sub>	32.433 <sup>o</sup> <sub>103</sub>	48.24 <sup>o</sup> <sub>7</sub>	51.365 <sup>o</sup> <sub>130</sub>	29.99 <sup>o</sup> <sub>102</sub>	5.654 <sup>o</sup> <sub>202</sub>	62.91 <sup>o</sup> <sub>197</sub>
19	45.455 <sup>o</sup> <sub>168</sub>	85.84 <sup>o</sup> <sub>107</sub>	32.330 <sup>o</sup> <sub>137</sub>	48.31 <sup>o</sup> <sub>12</sub>	51.235 <sup>o</sup> <sub>172</sub>	31.01 <sup>o</sup> <sub>86</sub>	5.452 <sup>o</sup> <sub>239</sub>	64.88 <sup>o</sup> <sub>152</sub>
März 1	45.287 <sup>o</sup> <sub>192</sub>	86.91 <sup>o</sup> <sub>70</sub>	32.193 <sup>o</sup> <sub>163</sub>	48.43 <sup>o</sup> <sub>15</sub>	51.063 <sup>o</sup> <sub>204</sub>	31.87 <sup>o</sup> <sub>68</sub>	5.213 <sup>o</sup> <sub>267</sub>	66.40 <sup>o</sup> <sub>105</sub>
11	45.095 <sup>o</sup> <sub>206</sub>	87.61 <sup>o</sup> <sub>32</sub>	32.030 <sup>o</sup> <sub>178</sub>	48.58 <sup>o</sup> <sub>17</sub>	50.859 <sup>o</sup> <sub>223</sub>	32.55 <sup>o</sup> <sub>46</sub>	4.946 <sup>o</sup> <sub>284</sub>	67.45 <sup>o</sup> <sub>56</sub>
21	44.889 <sup>o</sup> <sub>209</sub>	87.93 <sup>o</sup> <sub>5</sub>	31.852 <sup>o</sup> <sub>181</sub>	48.75 <sup>o</sup> <sub>18</sub>	50.636 <sup>o</sup> <sub>227</sub>	33.01 <sup>o</sup> <sub>23</sub>	4.662 <sup>o</sup> <sub>288</sub>	68.01 <sup>o</sup> <sub>7</sub>
31	44.680 <sup>o</sup> <sub>203</sub>	87.88 <sup>o</sup> <sub>42</sub>	31.671 <sup>o</sup> <sub>174</sub>	48.93 <sup>o</sup> <sub>19</sub>	50.409 <sup>o</sup> <sub>220</sub>	33.24 <sup>o</sup> <sub>0</sub>	4.374 <sup>o</sup> <sub>281</sub>	68.08 <sup>o</sup> <sub>42</sub>
Apr. 10	44.477 <sup>o</sup> <sub>186</sub>	87.46 <sup>o</sup> <sub>78</sub>	31.497 <sup>o</sup> <sub>157</sub>	49.12 <sup>o</sup> <sub>20</sub>	50.189 <sup>o</sup> <sub>199</sub>	33.24 <sup>o</sup> <sub>23</sub>	4.093 <sup>o</sup> <sub>264</sub>	67.66 <sup>o</sup> <sub>89</sub>
20	44.291 <sup>o</sup> <sub>162</sub>	86.68 <sup>o</sup> <sub>112</sub>	31.340 <sup>o</sup> <sub>132</sub>	49.32 <sup>o</sup> <sub>20</sub>	49.990 <sup>o</sup> <sub>168</sub>	33.01 <sup>o</sup> <sub>43</sub>	3.829 <sup>o</sup> <sub>238</sub>	66.77 <sup>o</sup> <sub>135</sub>
30	44.129 <sup>o</sup> <sub>131</sub>	85.56 <sup>o</sup> <sub>143</sub>	31.208 <sup>o</sup> <sub>100</sub>	49.52 <sup>o</sup> <sub>23</sub>	49.822 <sup>o</sup> <sub>128</sub>	32.58 <sup>o</sup> <sub>59</sub>	3.591 <sup>o</sup> <sub>203</sub>	65.42 <sup>o</sup> <sub>176</sub>
Mai 10	43.998 <sup>o</sup> <sub>96</sub>	84.13 <sup>o</sup> <sub>173</sub>	31.108 <sup>o</sup> <sub>64</sub>	49.75 <sup>o</sup> <sub>26</sub>	49.694 <sup>o</sup> <sub>84</sub>	31.99 <sup>o</sup> <sub>74</sub>	3.388 <sup>o</sup> <sub>162</sub>	63.66 <sup>o</sup> <sub>214</sub>
20	43.902 <sup>o</sup> <sub>57</sub>	82.40 <sup>o</sup> <sub>198</sub>	31.044 <sup>o</sup> <sub>23</sub>	50.01 <sup>o</sup> <sub>29</sub>	49.610 <sup>o</sup> <sub>34</sub>	31.25 <sup>o</sup> <sub>84</sub>	3.226 <sup>o</sup> <sub>117</sub>	61.52 <sup>o</sup> <sub>248</sub>
30	43.845 <sup>o</sup> <sub>16</sub>	80.42 <sup>o</sup> <sub>220</sub>	31.021 <sup>o</sup> <sub>18</sub>	50.30 <sup>o</sup> <sub>34</sub>	49.576 <sup>o</sup> <sub>17</sub>	30.41 <sup>o</sup> <sub>90</sub>	3.109 <sup>o</sup> <sub>69</sub>	59.04 <sup>o</sup> <sub>275</sub>
Juni 9	43.829 <sup>o</sup> <sub>26</sub>	78.22 <sup>o</sup> <sub>235</sub>	31.039 <sup>o</sup> <sub>59</sub>	50.64 <sup>o</sup> <sub>37</sub>	49.593 <sup>o</sup> <sub>68</sub>	29.51 <sup>o</sup> <sub>93</sub>	3.040 <sup>o</sup> <sub>19</sub>	56.29 <sup>o</sup> <sub>296</sub>
19	43.855 <sup>o</sup> <sub>65</sub>	75.87 <sup>o</sup> <sub>245</sub>	31.098 <sup>o</sup> <sub>99</sub>	51.01 <sup>o</sup> <sub>41</sub>	49.661 <sup>o</sup> <sub>118</sub>	28.58 <sup>o</sup> <sub>94</sub>	3.021 <sup>o</sup> <sub>32</sub>	53.33 <sup>o</sup> <sub>310</sub>
29	43.920 <sup>o</sup> <sub>104</sub>	73.42 <sup>o</sup> <sub>249</sub>	31.197 <sup>o</sup> <sub>135</sub>	51.42 <sup>o</sup> <sub>44</sub>	49.779 <sup>o</sup> <sub>163</sub>	27.64 <sup>o</sup> <sub>91</sub>	3.053 <sup>o</sup> <sub>82</sub>	50.23 <sup>o</sup> <sub>314</sub>
Juli 9	44.024 <sup>o</sup> <sub>141</sub>	70.93 <sup>o</sup> <sub>245</sub>	31.332 <sup>o</sup> <sub>169</sub>	51.86 <sup>o</sup> <sub>44</sub>	49.942 <sup>o</sup> <sub>206</sub>	26.73 <sup>o</sup> <sub>87</sub>	3.135 <sup>o</sup> <sub>129</sub>	47.09 <sup>o</sup> <sub>311</sub>
19	44.165 <sup>o</sup> <sub>174</sub>	68.48 <sup>o</sup> <sub>235</sub>	31.501 <sup>o</sup> <sub>199</sub>	52.30 <sup>o</sup> <sub>44</sub>	50.148 <sup>o</sup> <sub>243</sub>	25.86 <sup>o</sup> <sub>80</sub>	3.264 <sup>o</sup> <sub>174</sub>	43.98 <sup>o</sup> <sub>298</sub>
29	44.339 <sup>o</sup> <sub>204</sub>	66.13 <sup>o</sup> <sub>216</sub>	31.700 <sup>o</sup> <sub>225</sub>	52.74 <sup>o</sup> <sub>40</sub>	50.391 <sup>o</sup> <sub>277</sub>	25.06 <sup>o</sup> <sub>74</sub>	3.438 <sup>o</sup> <sub>215</sub>	41.00 <sup>o</sup> <sub>276</sub>
Aug. 8	44.543 <sup>o</sup> <sub>229</sub>	63.97 <sup>o</sup> <sub>191</sub>	31.925 <sup>o</sup> <sub>248</sub>	53.14 <sup>o</sup> <sub>35</sub>	50.668 <sup>o</sup> <sub>304</sub>	24.32 <sup>o</sup> <sub>66</sub>	3.653 <sup>o</sup> <sub>252</sub>	38.24 <sup>o</sup> <sub>245</sub>
18	44.772 <sup>o</sup> <sub>252</sub>	62.06 <sup>o</sup> <sub>158</sub>	32.173 <sup>o</sup> <sub>266</sub>	53.49 <sup>o</sup> <sub>26</sub>	50.972 <sup>o</sup> <sub>329</sub>	23.66 <sup>o</sup> <sub>58</sub>	3.905 <sup>o</sup> <sub>284</sub>	35.79 <sup>o</sup> <sub>206</sub>
28	45.024 <sup>o</sup> <sub>271</sub>	60.48 <sup>o</sup> <sub>119</sub>	32.439 <sup>o</sup> <sub>282</sub>	53.75 <sup>o</sup> <sub>15</sub>	51.301 <sup>o</sup> <sub>348</sub>	23.08 <sup>o</sup> <sub>50</sub>	4.189 <sup>o</sup> <sub>311</sub>	33.73 <sup>o</sup> <sub>158</sub>
Sept. 7	45.295 <sup>o</sup> <sub>285</sub>	59.29 <sup>o</sup> <sub>76</sub>	32.721 <sup>o</sup> <sub>294</sub>	53.90 <sup>o</sup> <sub>3</sub>	51.649 <sup>o</sup> <sub>362</sub>	22.58 <sup>o</sup> <sub>41</sub>	4.500 <sup>o</sup> <sub>332</sub>	32.15 <sup>o</sup> <sub>105</sub>
17	45.580 <sup>o</sup> <sub>295</sub>	58.53 <sup>o</sup> <sub>28</sub>	33.015 <sup>o</sup> <sub>303</sub>	53.93 <sup>o</sup> <sub>10</sub>	52.011 <sup>o</sup> <sub>374</sub>	22.17 <sup>o</sup> <sub>32</sub>	4.832 <sup>o</sup> <sub>346</sub>	31.10 <sup>o</sup> <sub>46</sub>
27	45.875 <sup>o</sup> <sub>300</sub>	58.25 <sup>o</sup> <sub>22</sub>	33.318 <sup>o</sup> <sub>309</sub>	53.83 <sup>o</sup> <sub>25</sub>	52.385 <sup>o</sup> <sub>381</sub>	21.85 <sup>o</sup> <sub>22</sub>	5.178 <sup>o</sup> <sub>354</sub>	30.64 <sup>o</sup> <sub>14</sub>
Okt. 7	46.175 <sup>o</sup> <sub>301</sub>	58.47 <sup>o</sup> <sub>70</sub>	33.627 <sup>o</sup> <sub>310</sub>	53.58 <sup>o</sup> <sub>37</sub>	52.766 <sup>o</sup> <sub>382</sub>	21.63 <sup>o</sup> <sub>12</sub>	5.532 <sup>o</sup> <sub>354</sub>	30.78 <sup>o</sup> <sub>75</sub>
17	46.476 <sup>o</sup> <sub>296</sub>	59.17 <sup>o</sup> <sub>118</sub>	33.937 <sup>o</sup> <sub>308</sub>	53.21 <sup>o</sup> <sub>49</sub>	53.148 <sup>o</sup> <sub>379</sub>	21.51 <sup>o</sup> <sub>1</sub>	5.886 <sup>o</sup> <sub>345</sub>	31.53 <sup>o</sup> <sub>135</sub>
27	46.772 <sup>o</sup> <sub>286</sub>	60.35 <sup>o</sup> <sub>161</sub>	34.245 <sup>o</sup> <sub>301</sub>	52.72 <sup>o</sup> <sub>58</sub>	53.527 <sup>o</sup> <sub>370</sub>	21.52 <sup>o</sup> <sub>14</sub>	6.231 <sup>o</sup> <sub>329</sub>	32.88 <sup>o</sup> <sub>189</sub>
Nov. 6	47.058 <sup>o</sup> <sub>268</sub>	61.96 <sup>o</sup> <sub>199</sub>	34.546 <sup>o</sup> <sub>288</sub>	52.14 <sup>o</sup> <sub>63</sub>	53.897 <sup>o</sup> <sub>353</sub>	21.66 <sup>o</sup> <sub>29</sub>	6.560 <sup>o</sup> <sub>303</sub>	34.77 <sup>o</sup> <sub>238</sub>
16	47.326 <sup>o</sup> <sub>243</sub>	63.95 <sup>o</sup> <sub>228</sub>	34.834 <sup>o</sup> <sub>268</sub>	51.51 <sup>o</sup> <sub>64</sub>	54.250 <sup>o</sup> <sub>328</sub>	21.95 <sup>o</sup> <sub>46</sub>	6.863 <sup>o</sup> <sub>269</sub>	37.15 <sup>o</sup> <sub>277</sub>
26	47.569 <sup>o</sup> <sub>213</sub>	66.23 <sup>o</sup> <sub>249</sub>	35.102 <sup>o</sup> <sub>241</sub>	50.87 <sup>o</sup> <sub>63</sub>	54.578 <sup>o</sup> <sub>295</sub>	22.41 <sup>o</sup> <sub>62</sub>	7.132 <sup>o</sup> <sub>227</sub>	39.92 <sup>o</sup> <sub>307</sub>
Dez. 6	47.782 <sup>o</sup> <sub>175</sub>	68.72 <sup>o</sup> <sub>260</sub>	35.343 <sup>o</sup> <sub>208</sub>	50.24 <sup>o</sup> <sub>57</sub>	54.873 <sup>o</sup> <sub>254</sub>	23.03 <sup>o</sup> <sub>78</sub>	7.359 <sup>o</sup> <sub>177</sub>	42.99 <sup>o</sup> <sub>325</sub>
16	47.957 <sup>o</sup> <sub>132</sub>	71.32 <sup>o</sup> <sub>264</sub>	35.551 <sup>o</sup> <sub>168</sub>	49.67 <sup>o</sup> <sub>50</sub>	55.127 <sup>o</sup> <sub>204</sub>	23.81 <sup>o</sup> <sub>92</sub>	7.536 <sup>o</sup> <sub>121</sub>	46.24 <sup>o</sup> <sub>333</sub>
26	48.089 <sup>o</sup> <sub>85</sub>	73.96 <sup>o</sup> <sub>257</sub>	35.719 <sup>o</sup> <sub>123</sub>	49.17 <sup>o</sup> <sub>38</sub>	55.331 <sup>o</sup> <sub>147</sub>	24.73 <sup>o</sup> <sub>105</sub>	7.657 <sup>o</sup> <sub>62</sub>	49.57 <sup>o</sup> <sub>330</sub>
35	48.174 <sup>o</sup> <sub>30</sub>	76.53 <sup>o</sup> <sub>30</sub>	35.842 <sup>o</sup> <sub>30</sub>	48.79 <sup>o</sup> <sub>30</sub>	55.478 <sup>o</sup> <sub>30</sub>	25.78 <sup>o</sup> <sub>30</sub>	7.719 <sup>o</sup> <sub>30</sub>	52.87 <sup>o</sup> <sub>30</sub>
Mittl. Ort	44.993	71.84	32.071	52.63	50.898	28.83	4.611	48.04
sec $\delta$ , tg $\delta$	1.086	-0.423	1.043	+0.295	1.295	+0.823	1.371	-0.937
a, a'	+2.5	-2.9	+3.5	-3.0	+4.2	-3.0	+1.8	-3.1
b, b'	0.90	-0.99	0.00	-0.99	-0.01	-0.99	+0.01	-0.99



Tag	248) 23 H. Camelop.		254) ε Geminorum		256) ξ Geminorum		257) α Canis maj. <sup>1)</sup>	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	6 <sup>h</sup> 36 <sup>m</sup>	+79° 37'	6 <sup>h</sup> 40 <sup>m</sup>	+25° 11'	6 <sup>h</sup> 42 <sup>m</sup>	+12° 57'	6 <sup>h</sup> 42 <sup>m</sup>	-16° 38'
Jan. 0*)	57.21 <sup>8</sup> <sub>21</sub>	42.85 <sup>307</sup>	33.216 <sup>101</sup>	10.98 <sup>22</sup>	12.444 <sup>92</sup>	19.90 <sup>57</sup>	44.138 <sup>62</sup>	24.71 <sup>226</sup>
10	57.42 <sup>5</sup>	45.92 <sup>304</sup>	33.317 <sup>47</sup>	11.20 <sup>31</sup>	12.536 <sup>43</sup>	19.33 <sup>43</sup>	44.200 <sup>13</sup>	26.97 <sup>208</sup>
20	57.37 <sup>29</sup>	48.96 <sup>289</sup>	33.364 <sup>7</sup>	11.51 <sup>39</sup>	12.579 <sup>7</sup>	18.90 <sup>31</sup>	44.213 <sup>36</sup>	29.05 <sup>184</sup>
30	57.08 <sup>52</sup>	51.85 <sup>264</sup>	33.357 <sup>57</sup>	11.90 <sup>43</sup>	12.572 <sup>54</sup>	18.59 <sup>19</sup>	44.177 <sup>82</sup>	30.89 <sup>157</sup>
Febr. 9	56.56 <sup>71</sup>	54.49 <sup>230</sup>	33.300 <sup>103</sup>	12.33 <sup>45</sup>	12.518 <sup>97</sup>	18.40 <sup>9</sup>	44.095 <sup>122</sup>	32.46 <sup>126</sup>
19	55.85 <sup>89</sup>	56.79 <sup>185</sup>	33.197 <sup>141</sup>	12.78 <sup>43</sup>	12.421 <sup>132</sup>	18.31 <sup>1</sup>	43.973 <sup>155</sup>	33.72 <sup>95</sup>
März 1	54.96 <sup>101</sup>	58.64 <sup>135</sup>	33.056 <sup>170</sup>	13.21 <sup>38</sup>	12.289 <sup>158</sup>	18.32 <sup>7</sup>	43.818 <sup>179</sup>	34.67 <sup>63</sup>
11	53.95 <sup>109</sup>	59.99 <sup>80</sup>	32.886 <sup>186</sup>	13.59 <sup>32</sup>	12.131 <sup>174</sup>	18.39 <sup>14</sup>	43.639 <sup>193</sup>	35.30 <sup>29</sup>
21	52.86 <sup>111</sup>	60.79 <sup>24</sup>	32.700 <sup>191</sup>	13.91 <sup>23</sup>	11.957 <sup>178</sup>	18.53 <sup>18</sup>	43.446 <sup>198</sup>	35.59 <sup>3</sup>
31	51.75 <sup>109</sup>	61.03 <sup>33</sup>	32.509 <sup>185</sup>	14.14 <sup>15</sup>	11.779 <sup>173</sup>	18.71 <sup>22</sup>	43.248 <sup>191</sup>	35.56 <sup>35</sup>
Apr. 10	50.66 <sup>102</sup>	60.70 <sup>88</sup>	32.324 <sup>168</sup>	14.29 <sup>7</sup>	11.606 <sup>158</sup>	18.93 <sup>27</sup>	43.057 <sup>176</sup>	35.21 <sup>66</sup>
20	49.64 <sup>90</sup>	59.82 <sup>136</sup>	32.156 <sup>142</sup>	14.36 <sup>1</sup>	11.448 <sup>134</sup>	19.20 <sup>30</sup>	42.881 <sup>153</sup>	34.55 <sup>96</sup>
30	48.74 <sup>76</sup>	58.46 <sup>180</sup>	32.014 <sup>109</sup>	14.35 <sup>7</sup>	11.314 <sup>104</sup>	19.50 <sup>35</sup>	42.728 <sup>124</sup>	33.59 <sup>123</sup>
Mai 10	47.98 <sup>59</sup>	56.66 <sup>217</sup>	31.905 <sup>71</sup>	14.28 <sup>11</sup>	11.210 <sup>68</sup>	19.85 <sup>40</sup>	42.604 <sup>89</sup>	32.36 <sup>149</sup>
20	47.39 <sup>40</sup>	54.49 <sup>245</sup>	31.834 <sup>29</sup>	14.17 <sup>13</sup>	11.142 <sup>30</sup>	20.25 <sup>46</sup>	42.515 <sup>52</sup>	30.87 <sup>170</sup>
30	46.99 <sup>19</sup>	52.04 <sup>266</sup>	31.805 <sup>14</sup>	14.04 <sup>14</sup>	11.112 <sup>10</sup>	20.71 <sup>50</sup>	42.463 <sup>13</sup>	29.17 <sup>189</sup>
Juni 9	46.80 <sup>2</sup>	49.38 <sup>279</sup>	31.819 <sup>57</sup>	13.90 <sup>13</sup>	11.122 <sup>50</sup>	21.21 <sup>55</sup>	42.450 <sup>27</sup>	27.28 <sup>203</sup>
19	46.82 <sup>23</sup>	46.59 <sup>283</sup>	31.876 <sup>99</sup>	13.77 <sup>12</sup>	11.172 <sup>88</sup>	21.76 <sup>59</sup>	42.477 <sup>66</sup>	25.25 <sup>213</sup>
29	47.05 <sup>44</sup>	43.76 <sup>280</sup>	31.975 <sup>139</sup>	13.65 <sup>10</sup>	11.260 <sup>124</sup>	22.35 <sup>61</sup>	42.543 <sup>103</sup>	23.12 <sup>215</sup>
Juli 9	47.49 <sup>63</sup>	40.96 <sup>270</sup>	32.114 <sup>174</sup>	13.55 <sup>8</sup>	11.384 <sup>158</sup>	22.96 <sup>62</sup>	42.646 <sup>137</sup>	20.97 <sup>213</sup>
19	48.12 <sup>81</sup>	38.26 <sup>253</sup>	32.288 <sup>206</sup>	13.47 <sup>7</sup>	11.542 <sup>188</sup>	23.58 <sup>59</sup>	42.783 <sup>169</sup>	18.84 <sup>204</sup>
29	48.93 <sup>97</sup>	35.73 <sup>232</sup>	32.494 <sup>235</sup>	13.40 <sup>7</sup>	11.730 <sup>214</sup>	24.17 <sup>53</sup>	42.952 <sup>198</sup>	16.80 <sup>187</sup>
Aug. 8	49.90 <sup>112</sup>	33.41 <sup>204</sup>	32.729 <sup>259</sup>	13.33 <sup>8</sup>	11.944 <sup>237</sup>	24.70 <sup>46</sup>	43.150 <sup>222</sup>	14.93 <sup>165</sup>
18	51.02 <sup>123</sup>	31.37 <sup>173</sup>	32.988 <sup>279</sup>	13.25 <sup>10</sup>	12.181 <sup>257</sup>	25.16 <sup>35</sup>	43.372 <sup>243</sup>	13.28 <sup>135</sup>
28	52.25 <sup>134</sup>	29.64 <sup>138</sup>	33.267 <sup>297</sup>	13.15 <sup>15</sup>	12.438 <sup>273</sup>	25.51 <sup>21</sup>	43.615 <sup>262</sup>	11.93 <sup>100</sup>
Sept. 7	53.59 <sup>141</sup>	28.26 <sup>100</sup>	33.564 <sup>310</sup>	13.00 <sup>18</sup>	12.711 <sup>285</sup>	25.72 <sup>6</sup>	43.877 <sup>275</sup>	10.93 <sup>61</sup>
17	55.00 <sup>147</sup>	27.26 <sup>59</sup>	33.874 <sup>320</sup>	12.82 <sup>24</sup>	12.996 <sup>296</sup>	25.78 <sup>11</sup>	44.152 <sup>286</sup>	10.32 <sup>18</sup>
27	56.47 <sup>149</sup>	26.67 <sup>16</sup>	34.194 <sup>327</sup>	12.58 <sup>29</sup>	13.292 <sup>303</sup>	25.67 <sup>29</sup>	44.438 <sup>292</sup>	10.14 <sup>26</sup>
Okt. 7	57.96 <sup>148</sup>	26.51 <sup>28</sup>	34.521 <sup>331</sup>	12.29 <sup>32</sup>	13.595 <sup>305</sup>	25.38 <sup>46</sup>	44.730 <sup>294</sup>	10.40 <sup>71</sup>
17	59.44 <sup>146</sup>	26.79 <sup>72</sup>	34.852 <sup>329</sup>	11.97 <sup>35</sup>	13.900 <sup>305</sup>	24.92 <sup>60</sup>	45.024 <sup>291</sup>	11.11 <sup>114</sup>
27	60.90 <sup>139</sup>	27.51 <sup>117</sup>	35.181 <sup>322</sup>	11.62 <sup>35</sup>	14.205 <sup>299</sup>	24.32 <sup>72</sup>	45.315 <sup>281</sup>	12.25 <sup>152</sup>
Nov. 6	62.29 <sup>131</sup>	28.68 <sup>160</sup>	35.503 <sup>309</sup>	11.27 <sup>32</sup>	14.504 <sup>286</sup>	23.60 <sup>81</sup>	45.596 <sup>267</sup>	13.77 <sup>185</sup>
16	63.60 <sup>117</sup>	30.28 <sup>200</sup>	35.812 <sup>289</sup>	10.95 <sup>26</sup>	14.790 <sup>268</sup>	22.79 <sup>86</sup>	45.863 <sup>245</sup>	15.62 <sup>212</sup>
26	64.77 <sup>101</sup>	32.28 <sup>237</sup>	36.101 <sup>262</sup>	10.69 <sup>19</sup>	15.058 <sup>243</sup>	21.93 <sup>86</sup>	46.108 <sup>217</sup>	17.74 <sup>229</sup>
Dez. 6	65.78 <sup>83</sup>	34.65 <sup>267</sup>	36.363 <sup>227</sup>	10.50 <sup>9</sup>	15.301 <sup>210</sup>	21.07 <sup>81</sup>	46.325 <sup>182</sup>	20.03 <sup>240</sup>
16	66.61 <sup>61</sup>	37.32 <sup>289</sup>	36.590 <sup>185</sup>	10.41 <sup>3</sup>	15.511 <sup>171</sup>	20.26 <sup>74</sup>	46.507 <sup>140</sup>	22.43 <sup>240</sup>
26	67.22 <sup>37</sup>	40.21 <sup>303</sup>	36.775 <sup>137</sup>	10.44 <sup>14</sup>	15.682 <sup>127</sup>	19.52 <sup>64</sup>	46.647 <sup>95</sup>	24.83 <sup>234</sup>
35	67.59 <sup>31</sup>	43.24	36.912	10.58	15.809	18.88	46.742	27.17
Mittl. Ort	53.11	45.42	32.903	14.66	12.129	23.60	43.557	21.04
sec δ, tg δ	5.555	+5.464	1.105	+0.470	1.026	+0.230	1.044	-0.299
a, a'	+10.3	-3.2	+3.7	-3.5	+3.4	-3.7	+2.7	-3.7
b, b'	-0.06	-0.99	-0.01	-0.98	0.00	-0.98	0.00	-0.98

<sup>1)</sup> Ort des Hauptsterns; die jährliche Parallaxe (0"377) ist bereits berücksichtigt.

\*) Bei Stern 256) und 257) lies Jan. r.



# Obere Kulmination Greenwich

81\*

Tag	1177) 16 Monocerotis		258) 18 Monocerotis		262) $\alpha$ Pictoris		261) $\delta$ Geminorum	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	6 <sup>h</sup> 43 <sup>m</sup>	+8° 38'	6 <sup>h</sup> 44 <sup>m</sup>	+2° 28'	6 <sup>h</sup> 47 <sup>m</sup>	-61° 52'	6 <sup>h</sup> 49 <sup>m</sup>	+34° 1'
Jan. I	32.735 <sup>91</sup>	45.55 <sup>83</sup>	59.896 <sup>88</sup>	22.50 <sup>121</sup>	40.40 <sup>3</sup>	56.73 <sup>356</sup>	10.252 <sup>119</sup>	42.44 <sup>74</sup>
10	32.826 <sup>42</sup>	44.72 <sup>69</sup>	59.984 <sup>38</sup>	21.29 <sup>106</sup>	40.37 <sup>11</sup>	60.29 <sup>339</sup>	10.371 <sup>59</sup>	43.18 <sup>84</sup>
20	32.868 <sup>8</sup>	44.03 <sup>55</sup>	60.022 <sup>10</sup>	20.23 <sup>89</sup>	40.26 <sup>20</sup>	63.68 <sup>311</sup>	10.430 <sup>0</sup>	44.02 <sup>89</sup>
30	32.860	43.48 <sup>40</sup>	60.012 <sup>55</sup>	19.34 <sup>71</sup>	40.06 <sup>28</sup>	66.79 <sup>277</sup>	10.430 <sup>55</sup>	44.91 <sup>90</sup>
Febr. 9	32.806 <sup>54</sup>	43.08 <sup>27</sup>	59.957 <sup>97</sup>	18.63 <sup>53</sup>	39.78 <sup>35</sup>	69.56 <sup>235</sup>	10.375 <sup>106</sup>	45.81 <sup>86</sup>
19	32.710 <sup>130</sup>	42.81 <sup>14</sup>	59.860 <sup>131</sup>	18.10 <sup>35</sup>	39.43 <sup>41</sup>	71.91 <sup>188</sup>	10.269 <sup>149</sup>	46.67 <sup>77</sup>
März I	32.580 <sup>156</sup>	42.67 <sup>3</sup>	59.729 <sup>156</sup>	17.75 <sup>19</sup>	39.02 <sup>45</sup>	73.79 <sup>138</sup>	10.120 <sup>181</sup>	47.44 <sup>65</sup>
11	32.424 <sup>172</sup>	42.64 <sup>8</sup>	59.573 <sup>172</sup>	17.56 <sup>3</sup>	38.57 <sup>47</sup>	75.17 <sup>85</sup>	9.939 <sup>202</sup>	48.09 <sup>49</sup>
21	32.252 <sup>177</sup>	42.72 <sup>16</sup>	59.401 <sup>177</sup>	17.53 <sup>13</sup>	38.10 <sup>49</sup>	76.02 <sup>32</sup>	9.737 <sup>209</sup>	48.58 <sup>33</sup>
31	32.075 <sup>171</sup>	42.88 <sup>25</sup>	59.224 <sup>171</sup>	17.66 <sup>28</sup>	37.61 <sup>48</sup>	76.34 <sup>22</sup>	9.528 <sup>204</sup>	48.91 <sup>14</sup>
Apr. 10	31.904 <sup>157</sup>	43.13 <sup>34</sup>	59.053 <sup>158</sup>	17.94 <sup>42</sup>	37.13 <sup>46</sup>	76.12 <sup>75</sup>	9.324 <sup>187</sup>	49.05 <sup>4</sup>
20	31.747 <sup>134</sup>	43.47 <sup>41</sup>	58.895 <sup>135</sup>	18.36 <sup>55</sup>	36.67 <sup>42</sup>	75.37 <sup>126</sup>	9.137 <sup>162</sup>	49.01 <sup>19</sup>
30	31.613 <sup>104</sup>	43.88 <sup>50</sup>	58.760 <sup>107</sup>	18.91 <sup>69</sup>	36.25 <sup>39</sup>	74.11 <sup>173</sup>	8.975 <sup>127</sup>	48.82 <sup>34</sup>
Mai 10	31.509 <sup>69</sup>	44.38 <sup>58</sup>	58.653 <sup>73</sup>	19.60 <sup>82</sup>	35.86 <sup>33</sup>	72.38 <sup>217</sup>	8.848 <sup>86</sup>	48.48 <sup>45</sup>
20	31.440 <sup>32</sup>	44.96 <sup>66</sup>	58.580 <sup>36</sup>	20.42 <sup>94</sup>	35.53 <sup>27</sup>	70.21 <sup>256</sup>	8.762 <sup>41</sup>	48.03 <sup>55</sup>
30	31.408 <sup>7</sup>	45.62 <sup>73</sup>	58.544 <sup>2</sup>	21.36 <sup>103</sup>	35.26 <sup>20</sup>	67.65 <sup>288</sup>	8.721 <sup>5</sup>	47.48 <sup>60</sup>
Juni 9	31.415 <sup>46</sup>	46.35 <sup>79</sup>	58.546 <sup>41</sup>	22.39 <sup>112</sup>	35.06 <sup>13</sup>	64.77 <sup>313</sup>	8.726 <sup>51</sup>	46.88 <sup>64</sup>
19	31.461 <sup>84</sup>	47.14 <sup>84</sup>	58.587 <sup>78</sup>	23.51 <sup>118</sup>	34.93 <sup>4</sup>	61.64 <sup>331</sup>	8.777 <sup>97</sup>	46.24 <sup>65</sup>
29	31.545 <sup>120</sup>	47.98 <sup>86</sup>	58.665 <sup>114</sup>	24.69 <sup>121</sup>	34.89 <sup>2</sup>	58.33 <sup>341</sup>	8.874 <sup>139</sup>	45.59 <sup>65</sup>
Juli 9	31.665 <sup>153</sup>	48.84 <sup>86</sup>	58.779 <sup>145</sup>	25.90 <sup>119</sup>	34.91 <sup>10</sup>	54.92 <sup>339</sup>	9.013 <sup>179</sup>	44.94 <sup>63</sup>
19	31.818 <sup>182</sup>	49.70 <sup>82</sup>	58.924 <sup>176</sup>	27.09 <sup>115</sup>	35.01 <sup>18</sup>	51.53 <sup>328</sup>	9.192 <sup>215</sup>	44.31 <sup>60</sup>
29	32.000 <sup>208</sup>	50.52 <sup>76</sup>	59.100 <sup>202</sup>	28.24 <sup>105</sup>	35.19 <sup>25</sup>	48.25 <sup>309</sup>	9.407 <sup>247</sup>	43.71 <sup>57</sup>
Aug. 8	32.208 <sup>232</sup>	51.28 <sup>65</sup>	59.302 <sup>224</sup>	29.29 <sup>92</sup>	35.44 <sup>31</sup>	45.16 <sup>278</sup>	9.654 <sup>274</sup>	43.14 <sup>54</sup>
18	32.440 <sup>250</sup>	51.93 <sup>51</sup>	59.526 <sup>245</sup>	30.21 <sup>75</sup>	35.75 <sup>38</sup>	42.38 <sup>238</sup>	9.928 <sup>298</sup>	42.60 <sup>51</sup>
28	32.690 <sup>267</sup>	52.44 <sup>34</sup>	59.771 <sup>261</sup>	30.96 <sup>53</sup>	36.13 <sup>42</sup>	40.00 <sup>189</sup>	10.226 <sup>317</sup>	42.09 <sup>48</sup>
Sept. 7	32.957 <sup>281</sup>	52.78 <sup>15</sup>	60.032 <sup>274</sup>	31.49 <sup>28</sup>	36.55 <sup>46</sup>	38.11 <sup>133</sup>	10.543 <sup>334</sup>	41.61 <sup>45</sup>
17	33.238 <sup>290</sup>	52.93 <sup>6</sup>	60.306 <sup>285</sup>	31.77 <sup>1</sup>	37.01 <sup>49</sup>	36.78 <sup>72</sup>	10.877 <sup>347</sup>	41.16 <sup>42</sup>
27	33.528 <sup>297</sup>	52.87 <sup>28</sup>	60.591 <sup>293</sup>	31.78 <sup>27</sup>	37.50 <sup>50</sup>	36.06 <sup>7</sup>	11.224 <sup>356</sup>	40.74 <sup>38</sup>
Okt. 7	33.825 <sup>301</sup>	52.59 <sup>49</sup>	60.884 <sup>295</sup>	31.51 <sup>54</sup>	38.00 <sup>51</sup>	35.99 <sup>59</sup>	11.580 <sup>359</sup>	40.36 <sup>32</sup>
17	34.126 <sup>300</sup>	52.10 <sup>68</sup>	61.179 <sup>294</sup>	30.97 <sup>79</sup>	38.51 <sup>49</sup>	36.58 <sup>125</sup>	11.939 <sup>360</sup>	40.04 <sup>25</sup>
27	34.426 <sup>293</sup>	51.42 <sup>85</sup>	61.473 <sup>289</sup>	30.18 <sup>102</sup>	39.00 <sup>46</sup>	37.83 <sup>186</sup>	12.299 <sup>354</sup>	39.79 <sup>17</sup>
Nov. 6	34.719 <sup>282</sup>	50.57 <sup>97</sup>	61.762 <sup>277</sup>	29.16 <sup>120</sup>	39.46 <sup>43</sup>	39.69 <sup>240</sup>	12.653 <sup>341</sup>	39.62 <sup>5</sup>
16	35.001 <sup>264</sup>	49.60 <sup>105</sup>	62.039 <sup>259</sup>	27.96 <sup>132</sup>	39.89 <sup>36</sup>	42.09 <sup>287</sup>	12.994 <sup>320</sup>	39.57 <sup>8</sup>
26	35.265 <sup>239</sup>	48.55 <sup>108</sup>	62.298 <sup>233</sup>	26.64 <sup>140</sup>	40.25 <sup>30</sup>	44.96 <sup>323</sup>	13.314 <sup>292</sup>	39.65 <sup>22</sup>
Dez. 6	35.504 <sup>207</sup>	47.47 <sup>106</sup>	62.531 <sup>202</sup>	25.24 <sup>141</sup>	40.55 <sup>21</sup>	48.19 <sup>347</sup>	13.606 <sup>254</sup>	39.87 <sup>38</sup>
16	35.711 <sup>168</sup>	46.41 <sup>100</sup>	62.733 <sup>164</sup>	23.83 <sup>137</sup>	40.76 <sup>13</sup>	51.66 <sup>361</sup>	13.860 <sup>209</sup>	40.25 <sup>53</sup>
26	35.879 <sup>124</sup>	45.41 <sup>91</sup>	62.897 <sup>120</sup>	22.46 <sup>128</sup>	40.89 <sup>4</sup>	55.27 <sup>361</sup>	14.069 <sup>158</sup>	40.78 <sup>67</sup>
35	36.003	44.50	63.017	21.18	40.93	58.88	14.227	41.45
Mittl. Ort	32.404	49.22	59.530	26.09	37.62	54.80	9.900	46.21
sec $\delta$ , tg $\delta$	1.011	+0.152	1.001	+0.043	2.122	-1.871	1.207	+0.675
a, a'	+3.3	-3.8	+3.1	-3.9	+0.6	-4.1	+4.0	-4.3
b, b'	0.00	-0.98	0.00	-0.98	+0.03	-0.98	-0.01	-0.98



## Scheinbare Sternörter 1945

Tag	266) ♂ Canis maj.		260) ♀ H. Camelop.		268) ε Canis maj.		269) ζ Geminorum	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	6 <sup>h</sup> 51 <sup>m</sup>	-11° 57'	6 <sup>h</sup> 51 <sup>m</sup>	+77° 2'	6 <sup>h</sup> 56 <sup>m</sup>	-28° 53'	7 <sup>h</sup> 0 <sup>m</sup>	+20° 39'
Jan. I	38.530 <sup>81</sup>	69.15 <sup>203</sup>	67.56 <sup>26</sup>	63.05 <sup>297</sup>	28.636 <sup>68</sup>	47.99 <sup>283</sup>	51.129 <sup>118</sup>	6.10 <sup>12</sup>
10	38.611 <sup>32</sup>	71.18 <sup>187</sup>	67.82 <sup>4</sup>	66.02 <sup>298</sup>	28.704 <sup>15</sup>	50.82 <sup>266</sup>	51.247 <sup>66</sup>	5.98 <sup>0</sup>
20	38.643 <sup>17</sup>	73.05 <sup>166</sup>	67.86 <sup>15</sup>	69.00 <sup>289</sup>	28.719 <sup>38</sup>	53.48 <sup>242</sup>	51.313 <sup>13</sup>	5.98 <sup>12</sup>
30	38.626 <sup>63</sup>	74.71 <sup>142</sup>	67.71 <sup>34</sup>	71.89 <sup>268</sup>	28.681 <sup>87</sup>	55.90 <sup>212</sup>	51.326 <sup>38</sup>	6.10 <sup>22</sup>
Febr. 9	38.563 <sup>105</sup>	76.13 <sup>114</sup>	67.37 <sup>52</sup>	74.57 <sup>239</sup>	28.594 <sup>132</sup>	58.02 <sup>178</sup>	51.288 <sup>84</sup>	6.32 <sup>28</sup>
19	38.458 <sup>139</sup>	77.27 <sup>86</sup>	66.85 <sup>66</sup>	76.96 <sup>199</sup>	28.462 <sup>169</sup>	59.80 <sup>141</sup>	51.204 <sup>124</sup>	6.60 <sup>33</sup>
März I	38.319 <sup>165</sup>	78.13 <sup>58</sup>	66.19 <sup>77</sup>	78.95 <sup>152</sup>	28.293 <sup>197</sup>	61.21 <sup>100</sup>	51.080 <sup>154</sup>	6.93 <sup>33</sup>
11	38.154 <sup>181</sup>	78.71 <sup>28</sup>	65.42 <sup>84</sup>	80.47 <sup>100</sup>	28.096 <sup>215</sup>	62.21 <sup>60</sup>	50.926 <sup>174</sup>	7.26 <sup>33</sup>
21	37.973 <sup>187</sup>	78.99 <sup>0</sup>	64.58 <sup>87</sup>	81.47 <sup>45</sup>	27.881 <sup>223</sup>	62.81 <sup>18</sup>	50.752 <sup>182</sup>	7.59 <sup>29</sup>
31	37.786 <sup>184</sup>	78.99 <sup>29</sup>	63.71 <sup>87</sup>	81.92 <sup>9</sup>	27.658 <sup>220</sup>	62.99 <sup>22</sup>	50.570 <sup>180</sup>	7.88 <sup>25</sup>
Apr. 10	37.602 <sup>171</sup>	78.70 <sup>55</sup>	62.84 <sup>82</sup>	81.83 <sup>63</sup>	27.438 <sup>207</sup>	62.77 <sup>63</sup>	50.390 <sup>167</sup>	8.13 <sup>21</sup>
20	37.431 <sup>149</sup>	78.15 <sup>82</sup>	62.02 <sup>75</sup>	81.20 <sup>113</sup>	27.231 <sup>186</sup>	62.14 <sup>101</sup>	50.223 <sup>145</sup>	8.34 <sup>17</sup>
30	37.282 <sup>123</sup>	77.33 <sup>106</sup>	61.27 <sup>63</sup>	80.07 <sup>158</sup>	27.045 <sup>159</sup>	61.13 <sup>138</sup>	50.078 <sup>116</sup>	8.51 <sup>14</sup>
Mai 10	37.159 <sup>90</sup>	76.27 <sup>129</sup>	60.64 <sup>50</sup>	78.49 <sup>196</sup>	26.886 <sup>126</sup>	59.75 <sup>171</sup>	49.962 <sup>82</sup>	8.65 <sup>12</sup>
20	37.069 <sup>54</sup>	74.98 <sup>150</sup>	60.14 <sup>35</sup>	76.53 <sup>227</sup>	26.760 <sup>88</sup>	58.04 <sup>200</sup>	49.880 <sup>44</sup>	8.77 <sup>10</sup>
30	37.015 <sup>17</sup>	73.48 <sup>168</sup>	59.79 <sup>19</sup>	74.26 <sup>251</sup>	26.672 <sup>48</sup>	56.04 <sup>226</sup>	49.836 <sup>3</sup>	8.87 <sup>9</sup>
Juni 9	36.998 <sup>22</sup>	71.80 <sup>181</sup>	59.60 <sup>2</sup>	71.75 <sup>267</sup>	26.624 <sup>6</sup>	53.78 <sup>245</sup>	49.833 <sup>37</sup>	8.96 <sup>10</sup>
19	37.020 <sup>59</sup>	69.99 <sup>189</sup>	59.58 <sup>14</sup>	69.08 <sup>274</sup>	26.618 <sup>34</sup>	51.33 <sup>258</sup>	49.870 <sup>76</sup>	9.06 <sup>11</sup>
29	37.079 <sup>95</sup>	68.10 <sup>194</sup>	59.72 <sup>31</sup>	66.34 <sup>275</sup>	26.652 <sup>75</sup>	48.75 <sup>266</sup>	49.946 <sup>114</sup>	9.17 <sup>11</sup>
Juli 9	37.174 <sup>129</sup>	66.16 <sup>193</sup>	60.03 <sup>47</sup>	63.59 <sup>269</sup>	26.727 <sup>113</sup>	46.09 <sup>264</sup>	50.060 <sup>149</sup>	9.28 <sup>10</sup>
19	37.303 <sup>160</sup>	64.23 <sup>185</sup>	60.50 <sup>61</sup>	60.90 <sup>256</sup>	26.840 <sup>150</sup>	43.45 <sup>256</sup>	50.209 <sup>180</sup>	9.38 <sup>8</sup>
29	37.463 <sup>189</sup>	62.38 <sup>172</sup>	61.11 <sup>75</sup>	58.34 <sup>238</sup>	26.990 <sup>183</sup>	40.89 <sup>239</sup>	50.389 <sup>209</sup>	9.46 <sup>6</sup>
Aug. 8	37.652 <sup>213</sup>	60.66 <sup>152</sup>	61.86 <sup>86</sup>	55.96 <sup>214</sup>	27.173 <sup>214</sup>	38.50 <sup>214</sup>	50.598 <sup>235</sup>	9.52 <sup>1</sup>
18	37.865 <sup>235</sup>	59.14 <sup>126</sup>	62.72 <sup>97</sup>	53.82 <sup>187</sup>	27.387 <sup>241</sup>	36.36 <sup>182</sup>	50.833 <sup>257</sup>	9.53 <sup>6</sup>
28	38.100 <sup>254</sup>	57.88 <sup>95</sup>	63.69 <sup>106</sup>	51.95 <sup>154</sup>	27.628 <sup>264</sup>	34.54 <sup>142</sup>	51.090 <sup>275</sup>	9.47 <sup>13</sup>
Sept. 7	38.354 <sup>270</sup>	56.93 <sup>60</sup>	64.75 <sup>112</sup>	50.41 <sup>120</sup>	27.892 <sup>284</sup>	33.12 <sup>96</sup>	51.365 <sup>292</sup>	9.34 <sup>23</sup>
17	38.624 <sup>281</sup>	56.33 <sup>20</sup>	65.87 <sup>117</sup>	49.21 <sup>81</sup>	28.176 <sup>299</sup>	32.16 <sup>46</sup>	51.657 <sup>304</sup>	9.11 <sup>33</sup>
27	38.905 <sup>290</sup>	56.13 <sup>20</sup>	67.04 <sup>121</sup>	48.40 <sup>40</sup>	28.475 <sup>309</sup>	31.70 <sup>7</sup>	51.961 <sup>315</sup>	8.78 <sup>42</sup>
Okt. 7	39.195 <sup>294</sup>	56.33 <sup>60</sup>	68.25 <sup>121</sup>	48.00 <sup>2</sup>	28.784 <sup>314</sup>	31.77 <sup>61</sup>	52.276 <sup>320</sup>	8.36 <sup>51</sup>
17	39.489 <sup>294</sup>	56.93 <sup>100</sup>	69.46 <sup>120</sup>	48.02 <sup>46</sup>	29.098 <sup>312</sup>	32.38 <sup>113</sup>	52.596 <sup>323</sup>	7.85 <sup>59</sup>
27	39.783 <sup>287</sup>	57.93 <sup>136</sup>	70.66 <sup>116</sup>	48.48 <sup>90</sup>	29.410 <sup>305</sup>	33.51 <sup>161</sup>	52.919 <sup>320</sup>	7.26 <sup>62</sup>
Nov. 6	40.070 <sup>275</sup>	59.29 <sup>166</sup>	71.82 <sup>109</sup>	49.38 <sup>133</sup>	29.715 <sup>289</sup>	35.12 <sup>205</sup>	53.239 <sup>310</sup>	6.64 <sup>64</sup>
16	40.345 <sup>257</sup>	60.95 <sup>191</sup>	72.91 <sup>101</sup>	50.71 <sup>175</sup>	30.004 <sup>267</sup>	37.17 <sup>240</sup>	53.549 <sup>294</sup>	6.00 <sup>61</sup>
26	40.602 <sup>230</sup>	62.86 <sup>206</sup>	73.92 <sup>89</sup>	52.46 <sup>213</sup>	30.271 <sup>236</sup>	39.57 <sup>268</sup>	53.843 <sup>270</sup>	5.39 <sup>55</sup>
Dez. 6	40.832 <sup>197</sup>	64.92 <sup>216</sup>	74.81 <sup>74</sup>	54.59 <sup>246</sup>	30.507 <sup>198</sup>	42.25 <sup>284</sup>	54.113 <sup>238</sup>	4.84 <sup>46</sup>
16	41.029 <sup>158</sup>	67.08 <sup>217</sup>	75.55 <sup>57</sup>	57.05 <sup>272</sup>	30.705 <sup>153</sup>	45.09 <sup>292</sup>	54.351 <sup>199</sup>	4.38 <sup>34</sup>
26	41.187 <sup>114</sup>	69.25 <sup>211</sup>	76.12 <sup>38</sup>	59.77 <sup>291</sup>	30.858 <sup>104</sup>	48.01 <sup>289</sup>	54.550 <sup>154</sup>	4.04 <sup>22</sup>
35*)	41.301	71.36	76.50	62.68	30.962	50.90	54.704	3.82
Mittl. Ort	38.019	66.07	64.49	66.54	27.805	45.76	50.834	9.83
sec δ, tg δ	1.022	-0.212	4.463	+4.349	1.142	-0.552	1.069	+0.377
a, a'	+2.8	-4.5	+8.7	-4.5	+2.4	-4.9	+3.6	-5.3
b, b'	0.00	-0.97	-0.07	-6.97	+0.01	-0.97	-0.01	-0.96

\*) Bei Stern 268) und 269) lies Dez. 36.



# Obere Kulmination Greenwich

83\*

Tag	271) γ Canis maj.		273) δ Canis maj.		274) 63 Aurigae		277) λ Geminorum	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	7 <sup>h</sup> 1 <sup>m</sup>	-15° 32'	7 <sup>h</sup> 6 <sup>m</sup>	-26° 18'	7 <sup>h</sup> 7 <sup>m</sup>	+39° 24'	7 <sup>h</sup> 14 <sup>m</sup>	+16° 38'
Jan. I	16.717 <sup>88</sup>	64.77 <sup>224</sup>	10.006 <sup>83</sup>	18.39 <sup>275</sup>	52.857 <sup>147</sup>	39.74 <sup>102</sup>	56.240 <sup>129</sup>	25.04 <sup>42</sup>
10	16.805 <sup>38</sup>	67.01 <sup>209</sup>	10.089 <sup>29</sup>	21.14 <sup>260</sup>	53.004 <sup>85</sup>	40.76 <sup>114</sup>	56.369 <sup>78</sup>	24.62 <sup>28</sup>
20	16.843 <sup>12</sup>	69.10 <sup>187</sup>	10.118 <sup>23</sup>	23.74 <sup>237</sup>	53.089 <sup>21</sup>	41.90 <sup>121</sup>	56.447 <sup>26</sup>	24.34 <sup>14</sup>
30	16.831 <sup>60</sup>	70.97 <sup>162</sup>	10.095 <sup>73</sup>	26.11 <sup>209</sup>	53.110 <sup>41</sup>	43.11 <sup>122</sup>	56.473 <sup>26</sup>	24.20 <sup>0</sup>
Febr. 9	16.771 <sup>102</sup>	72.59 <sup>133</sup>	10.022 <sup>118</sup>	28.20 <sup>176</sup>	53.069 <sup>98</sup>	44.33 <sup>116</sup>	56.447 <sup>72</sup>	24.20 <sup>11</sup>
19	16.669 <sup>138</sup>	73.92 <sup>103</sup>	9.904 <sup>156</sup>	29.96 <sup>141</sup>	52.971 <sup>146</sup>	45.49 <sup>107</sup>	56.375 <sup>112</sup>	24.31 <sup>18</sup>
März I	16.531 <sup>165</sup>	74.95 <sup>72</sup>	9.748 <sup>185</sup>	31.37 <sup>102</sup>	52.825 <sup>184</sup>	46.56 <sup>91</sup>	56.263 <sup>143</sup>	24.49 <sup>25</sup>
11	16.366 <sup>183</sup>	75.67 <sup>39</sup>	9.563 <sup>203</sup>	32.39 <sup>63</sup>	52.641 <sup>209</sup>	47.47 <sup>72</sup>	56.120 <sup>165</sup>	24.74 <sup>28</sup>
21	16.183 <sup>191</sup>	76.06 <sup>9</sup>	9.360 <sup>213</sup>	33.02 <sup>24</sup>	52.432 <sup>222</sup>	48.19 <sup>50</sup>	55.955 <sup>175</sup>	25.02 <sup>29</sup>
31	15.992 <sup>189</sup>	76.15 <sup>23</sup>	9.147 <sup>212</sup>	33.26 <sup>15</sup>	52.210 <sup>221</sup>	48.69 <sup>26</sup>	55.780 <sup>175</sup>	25.31 <sup>29</sup>
Apr. 10	15.803 <sup>177</sup>	75.92 <sup>54</sup>	8.935 <sup>201</sup>	33.11 <sup>53</sup>	51.989 <sup>208</sup>	48.95 <sup>3</sup>	55.605 <sup>166</sup>	25.60 <sup>30</sup>
20	15.626 <sup>158</sup>	75.38 <sup>82</sup>	8.734 <sup>182</sup>	32.58 <sup>91</sup>	51.781 <sup>183</sup>	48.98 <sup>20</sup>	55.439 <sup>146</sup>	25.90 <sup>29</sup>
30	15.468 <sup>132</sup>	74.56 <sup>110</sup>	8.552 <sup>156</sup>	31.67 <sup>126</sup>	51.598 <sup>151</sup>	48.78 <sup>40</sup>	55.293 <sup>121</sup>	26.19 <sup>27</sup>
Mai 10	15.336 <sup>100</sup>	73.46 <sup>134</sup>	8.396 <sup>125</sup>	30.41 <sup>158</sup>	51.447 <sup>110</sup>	48.38 <sup>58</sup>	55.172 <sup>89</sup>	26.46 <sup>28</sup>
20	15.236 <sup>65</sup>	72.12 <sup>158</sup>	8.271 <sup>89</sup>	28.83 <sup>187</sup>	51.337 <sup>65</sup>	47.80 <sup>73</sup>	55.083 <sup>53</sup>	26.74 <sup>29</sup>
30	15.171 <sup>29</sup>	70.54 <sup>177</sup>	8.182 <sup>51</sup>	26.96 <sup>211</sup>	51.272 <sup>17</sup>	47.07 <sup>85</sup>	55.030 <sup>15</sup>	27.03 <sup>29</sup>
Juni 9	15.142 <sup>9</sup>	68.77 <sup>192</sup>	8.131 <sup>11</sup>	24.85 <sup>232</sup>	51.255 <sup>31</sup>	46.22 <sup>92</sup>	55.015 <sup>23</sup>	27.32 <sup>30</sup>
19	15.151 <sup>47</sup>	66.85 <sup>204</sup>	8.120 <sup>29</sup>	22.53 <sup>245</sup>	51.286 <sup>78</sup>	45.30 <sup>98</sup>	55.038 <sup>61</sup>	27.62 <sup>31</sup>
29	15.198 <sup>84</sup>	64.81 <sup>208</sup>	8.149 <sup>68</sup>	20.08 <sup>252</sup>	51.364 <sup>125</sup>	44.32 <sup>101</sup>	55.099 <sup>97</sup>	27.93 <sup>30</sup>
Juli 9	15.282 <sup>118</sup>	62.73 <sup>207</sup>	8.217 <sup>105</sup>	17.56 <sup>253</sup>	51.489 <sup>168</sup>	43.31 <sup>102</sup>	55.196 <sup>131</sup>	28.23 <sup>29</sup>
19	15.400 <sup>149</sup>	60.66 <sup>200</sup>	8.322 <sup>141</sup>	15.03 <sup>245</sup>	51.657 <sup>207</sup>	42.29 <sup>100</sup>	55.327 <sup>162</sup>	28.52 <sup>26</sup>
29	15.549 <sup>180</sup>	58.66 <sup>187</sup>	8.463 <sup>174</sup>	12.58 <sup>230</sup>	51.864 <sup>243</sup>	41.29 <sup>96</sup>	55.489 <sup>191</sup>	28.78 <sup>20</sup>
Aug. 8	15.729 <sup>206</sup>	56.79 <sup>166</sup>	8.637 <sup>204</sup>	10.28 <sup>207</sup>	52.107 <sup>274</sup>	40.33 <sup>93</sup>	55.680 <sup>217</sup>	28.98 <sup>14</sup>
18	15.935 <sup>229</sup>	55.13 <sup>139</sup>	8.841 <sup>231</sup>	8.21 <sup>176</sup>	52.381 <sup>302</sup>	39.40 <sup>88</sup>	55.897 <sup>240</sup>	29.12 <sup>4</sup>
28	16.164 <sup>250</sup>	53.74 <sup>107</sup>	9.072 <sup>254</sup>	6.45 <sup>139</sup>	52.683 <sup>327</sup>	38.52 <sup>83</sup>	56.137 <sup>260</sup>	29.16 <sup>8</sup>
Sept. 7	16.414 <sup>267</sup>	52.67 <sup>69</sup>	9.326 <sup>275</sup>	5.06 <sup>96</sup>	53.010 <sup>347</sup>	37.69 <sup>75</sup>	56.397 <sup>277</sup>	29.08 <sup>20</sup>
17	16.681 <sup>281</sup>	51.98 <sup>28</sup>	9.601 <sup>292</sup>	4.10 <sup>47</sup>	53.357 <sup>363</sup>	36.94 <sup>68</sup>	56.674 <sup>293</sup>	28.88 <sup>35</sup>
27	16.962 <sup>291</sup>	51.70 <sup>16</sup>	9.893 <sup>302</sup>	3.63 <sup>4</sup>	53.720 <sup>377</sup>	36.26 <sup>60</sup>	56.967 <sup>304</sup>	28.53 <sup>48</sup>
Okt. 7	17.253 <sup>297</sup>	51.86 <sup>59</sup>	10.195 <sup>310</sup>	3.67 <sup>56</sup>	54.097 <sup>385</sup>	35.66 <sup>49</sup>	57.271 <sup>313</sup>	28.05 <sup>62</sup>
17	17.550 <sup>297</sup>	52.45 <sup>102</sup>	10.505 <sup>311</sup>	4.23 <sup>107</sup>	54.482 <sup>387</sup>	35.17 <sup>36</sup>	57.584 <sup>317</sup>	27.43 <sup>73</sup>
27	17.847 <sup>293</sup>	53.47 <sup>141</sup>	10.816 <sup>305</sup>	5.30 <sup>154</sup>	54.869 <sup>385</sup>	34.81 <sup>21</sup>	57.901 <sup>316</sup>	26.70 <sup>81</sup>
Nov. 6	18.140 <sup>282</sup>	54.88 <sup>175</sup>	11.121 <sup>292</sup>	6.84 <sup>197</sup>	55.254 <sup>374</sup>	34.60 <sup>4</sup>	58.217 <sup>309</sup>	25.89 <sup>86</sup>
16	18.422 <sup>263</sup>	56.63 <sup>202</sup>	11.413 <sup>271</sup>	8.81 <sup>231</sup>	55.628 <sup>356</sup>	34.56 <sup>15</sup>	58.526 <sup>296</sup>	25.03 <sup>87</sup>
26	18.685 <sup>238</sup>	58.65 <sup>222</sup>	11.684 <sup>244</sup>	11.12 <sup>259</sup>	55.984 <sup>327</sup>	34.71 <sup>34</sup>	58.822 <sup>274</sup>	24.16 <sup>83</sup>
Dez. 6	18.923 <sup>205</sup>	60.87 <sup>233</sup>	11.928 <sup>207</sup>	13.71 <sup>275</sup>	56.311 <sup>290</sup>	35.05 <sup>55</sup>	59.096 <sup>244</sup>	23.33 <sup>76</sup>
16	19.128 <sup>165</sup>	63.20 <sup>237</sup>	12.135 <sup>165</sup>	16.46 <sup>283</sup>	56.601 <sup>243</sup>	35.60 <sup>75</sup>	59.340 <sup>206</sup>	22.57 <sup>66</sup>
26	19.293 <sup>121</sup>	65.57 <sup>232</sup>	12.300 <sup>117</sup>	19.29 <sup>282</sup>	56.844 <sup>188</sup>	36.35 <sup>92</sup>	59.546 <sup>163</sup>	21.91 <sup>52</sup>
36	19.414	67.89	12.417	22.11	57.032	37.27	59.709	21.39
Mittl. Ort sec δ, tg δ	16.157 1.038	62.31 -0.278	9.243 1.116	16.74 -0.494	52.474 1.294	43.98 -0.822	55.956 1.044	28.58 +0.299
a, a'	+2.7	-5.3	+2.4	-5.7	+4.1	-5.8	+3.5	-6.4
b, b'	0.00	-0.96	+0.01	-0.96	-0.02	-0.96	-0.01	-0.95



## Scheinbare Sternörter 1945

Tag	278) $\pi$ Puppis		279) $\delta$ Geminorum		281) $\delta$ Volantis		280) $\rho$ Lyncis sq	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$7^h 15^m$	$-36^\circ 59'$	$7^h 16^m$	$+22^\circ 4'$	$7^h 16^m$	$-67^\circ 51'$	$7^h 18^m$	$+55^\circ 22'$
Jan. I	$13.025$ <sup>a</sup> <sub>81</sub>	$51.55$ <sup>b</sup> <sub>317</sub>	$50.631$ <sup>a</sup> <sub>137</sub>	$63.39$ <sup>b</sup> <sub>8</sub>	$55.55$ <sup>a</sup> <sub>2</sub>	$22.09$ <sup>b</sup> <sub>368</sub>	$23.875$ <sup>a</sup> <sub>196</sub>	$69.55$ <sup>b</sup> <sub>190</sub>
10	$13.106$ <sub>22</sub>	$54.72$ <sub>304</sub>	$50.768$ <sub>83</sub>	$63.31$ <sub>6</sub>	$55.57$ <sub>10</sub>	$25.77$ <sub>358</sub>	$24.071$ <sub>112</sub>	$71.45$ <sub>202</sub>
20	$13.128$ <sub>35</sub>	$57.76$ <sub>282</sub>	$50.851$ <sub>29</sub>	$63.37$ <sub>19</sub>	$55.47$ <sub>21</sub>	$29.35$ <sub>338</sub>	$24.183$ <sub>27</sub>	$73.47$ <sub>206</sub>
30	$13.093$ <sub>90</sub>	$60.58$ <sub>252</sub>	$50.880$ <sub>23</sub>	$63.56$ <sub>30</sub>	$55.26$ <sub>31</sub>	$32.73$ <sub>310</sub>	$24.210$ <sub>56</sub>	$75.53$ <sub>202</sub>
Febr. 9	$13.003$ <sub>140</sub>	$63.10$ <sub>217</sub>	$50.857$ <sub>72</sub>	$63.86$ <sub>37</sub>	$54.95$ <sub>41</sub>	$35.83$ <sub>274</sub>	$24.154$ <sub>132</sub>	$77.55$ <sub>189</sub>
19	$12.863$ <sub>182</sub>	$65.27$ <sub>178</sub>	$50.785$ <sub>113</sub>	$64.23$ <sub>42</sub>	$54.54$ <sub>48</sub>	$38.57$ <sub>230</sub>	$24.022$ <sub>199</sub>	$79.44$ <sub>168</sub>
März I	$12.681$ <sub>214</sub>	$67.05$ <sub>136</sub>	$50.672$ <sub>146</sub>	$64.65$ <sub>43</sub>	$54.06$ <sub>54</sub>	$40.87$ <sub>184</sub>	$23.823$ <sub>252</sub>	$81.12$ <sub>141</sub>
11	$12.467$ <sub>236</sub>	$68.41$ <sub>91</sub>	$50.526$ <sub>169</sub>	$65.08$ <sub>41</sub>	$53.52$ <sub>58</sub>	$42.71$ <sub>134</sub>	$23.571$ <sub>289</sub>	$82.53$ <sub>108</sub>
21	$12.231$ <sub>248</sub>	$69.32$ <sub>46</sub>	$50.357$ <sub>181</sub>	$65.49$ <sub>37</sub>	$52.94$ <sub>61</sub>	$44.05$ <sub>81</sub>	$23.282$ <sub>310</sub>	$83.61$ <sub>72</sub>
31	$11.983$ <sub>249</sub>	$69.78$ <sub>0</sub>	$50.176$ <sub>181</sub>	$65.86$ <sub>32</sub>	$52.33$ <sub>61</sub>	$44.86$ <sub>27</sub>	$22.972$ <sub>314</sub>	$84.33$ <sub>33</sub>
Apr. 10	$11.734$ <sub>239</sub>	$69.78$ <sub>45</sub>	$49.995$ <sub>171</sub>	$66.18$ <sub>25</sub>	$51.72$ <sub>60</sub>	$45.13$ <sub>26</sub>	$22.658$ <sub>300</sub>	$84.66$ <sub>6</sub>
20	$11.495$ <sub>222</sub>	$69.33$ <sub>89</sub>	$49.824$ <sub>151</sub>	$66.43$ <sub>20</sub>	$51.12$ <sub>58</sub>	$44.87$ <sub>80</sub>	$22.358$ <sub>272</sub>	$84.60$ <sub>43</sub>
30	$11.273$ <sub>195</sub>	$68.44$ <sub>130</sub>	$49.673$ <sub>125</sub>	$66.63$ <sub>14</sub>	$50.54$ <sub>53</sub>	$44.07$ <sub>130</sub>	$22.086$ <sub>232</sub>	$84.17$ <sub>78</sub>
Mai 10	$11.078$ <sub>163</sub>	$67.14$ <sub>169</sub>	$49.548$ <sub>93</sub>	$66.77$ <sub>9</sub>	$50.01$ <sub>48</sub>	$42.77$ <sub>177</sub>	$21.854$ <sub>181</sub>	$83.39$ <sub>108</sub>
20	$10.915$ <sub>127</sub>	$65.45$ <sub>203</sub>	$49.455$ <sub>56</sub>	$66.86$ <sub>5</sub>	$49.53$ <sub>41</sub>	$41.00$ <sub>220</sub>	$21.673$ <sub>124</sub>	$82.31$ <sub>134</sub>
30	$10.788$ <sub>86</sub>	$63.42$ <sub>233</sub>	$49.399$ <sub>16</sub>	$66.91$ <sub>3</sub>	$49.12$ <sub>34</sub>	$38.80$ <sub>259</sub>	$21.549$ <sub>62</sub>	$80.97$ <sub>156</sub>
Juni 9	$10.702$ <sub>43</sub>	$61.09$ <sub>258</sub>	$49.383$ <sub>22</sub>	$66.94$ <sub>0</sub>	$48.78$ <sub>25</sub>	$36.21$ <sub>290</sub>	$21.487$ <sub>3</sub>	$79.41$ <sub>172</sub>
19	$10.659$ <sub>1</sub>	$58.51$ <sub>275</sub>	$49.405$ <sub>62</sub>	$66.94$ <sub>0</sub>	$48.53$ <sub>16</sub>	$33.31$ <sub>315</sub>	$21.490$ <sub>68</sub>	$77.69$ <sub>183</sub>
29	$10.660$ <sub>44</sub>	$55.76$ <sub>286</sub>	$49.467$ <sub>100</sub>	$66.94$ <sub>2</sub>	$48.37$ <sub>7</sub>	$30.16$ <sub>330</sub>	$21.558$ <sub>130</sub>	$75.86$ <sub>188</sub>
Juli 9	$10.704$ <sub>86</sub>	$52.90$ <sub>288</sub>	$49.567$ <sub>134</sub>	$66.92$ <sub>4</sub>	$48.30$ <sub>3</sub>	$26.86$ <sub>337</sub>	$21.688$ <sub>190</sub>	$73.98$ <sub>191</sub>
19	$10.790$ <sub>128</sub>	$50.02$ <sub>282</sub>	$49.701$ <sub>168</sub>	$66.88$ <sub>7</sub>	$48.33$ <sub>12</sub>	$23.49$ <sub>333</sub>	$21.878$ <sub>246</sub>	$72.07$ <sub>187</sub>
29	$10.918$ <sub>166</sub>	$47.20$ <sub>267</sub>	$49.869$ <sub>197</sub>	$66.81$ <sub>10</sub>	$48.45$ <sub>22</sub>	$20.16$ <sub>321</sub>	$22.124$ <sub>298</sub>	$70.20$ <sub>181</sub>
Aug. 8	$11.084$ <sub>203</sub>	$44.53$ <sub>243</sub>	$50.066$ <sub>223</sub>	$66.71$ <sub>15</sub>	$48.67$ <sub>31</sub>	$16.95$ <sub>296</sub>	$22.422$ <sub>343</sub>	$68.39$ <sub>171</sub>
18	$11.287$ <sub>236</sub>	$42.10$ <sub>211</sub>	$50.289$ <sub>248</sub>	$66.56$ <sub>21</sub>	$48.98$ <sub>39</sub>	$13.99$ <sub>262</sub>	$22.765$ <sub>384</sub>	$66.68$ <sub>157</sub>
28	$11.523$ <sub>266</sub>	$39.99$ <sub>170</sub>	$50.537$ <sub>268</sub>	$66.35$ <sub>29</sub>	$49.37$ <sub>46</sub>	$11.37$ <sub>219</sub>	$23.149$ <sub>421</sub>	$65.11$ <sub>142</sub>
Sept. 7	$11.789$ <sub>290</sub>	$38.29$ <sub>123</sub>	$50.805$ <sub>287</sub>	$66.06$ <sub>37</sub>	$49.83$ <sub>53</sub>	$9.18$ <sub>168</sub>	$23.570$ <sub>451</sub>	$63.69$ <sub>124</sub>
17	$12.079$ <sub>311</sub>	$37.06$ <sub>69</sub>	$51.092$ <sub>302</sub>	$65.69$ <sub>46</sub>	$50.36$ <sub>57</sub>	$7.50$ <sub>109</sub>	$24.021$ <sub>476</sub>	$62.45$ <sub>104</sub>
27	$12.390$ <sub>327</sub>	$36.37$ <sub>13</sub>	$51.394$ <sub>314</sub>	$65.23$ <sub>55</sub>	$50.93$ <sub>60</sub>	$6.41$ <sub>45</sub>	$24.497$ <sub>495</sub>	$61.41$ <sub>80</sub>
Okt. 7	$12.717$ <sub>335</sub>	$36.24$ <sub>45</sub>	$51.708$ <sub>324</sub>	$64.68$ <sub>63</sub>	$51.53$ <sub>62</sub>	$5.96$ <sub>21</sub>	$24.992$ <sub>508</sub>	$60.61$ <sub>54</sub>
17	$13.052$ <sub>336</sub>	$36.69$ <sub>103</sub>	$52.032$ <sub>328</sub>	$64.05$ <sub>68</sub>	$52.15$ <sub>62</sub>	$6.17$ <sub>88</sub>	$25.500$ <sub>513</sub>	$60.07$ <sub>27</sub>
27	$13.388$ <sub>331</sub>	$37.72$ <sub>158</sub>	$52.360$ <sub>328</sub>	$63.37$ <sub>70</sub>	$52.77$ <sub>59</sub>	$7.05$ <sub>152</sub>	$26.013$ <sub>510</sub>	$59.80$ <sub>4</sub>
Nov. 6	$13.719$ <sub>316</sub>	$39.30$ <sub>208</sub>	$52.688$ <sub>321</sub>	$62.67$ <sub>70</sub>	$53.36$ <sub>54</sub>	$8.57$ <sub>212</sub>	$26.523$ <sub>496</sub>	$59.84$ <sub>35</sub>
16	$14.035$ <sub>293</sub>	$41.38$ <sub>250</sub>	$53.009$ <sub>307</sub>	$61.97$ <sub>66</sub>	$53.90$ <sub>48</sub>	$10.69$ <sub>264</sub>	$27.019$ <sub>470</sub>	$60.19$ <sub>66</sub>
26	$14.328$ <sub>261</sub>	$43.88$ <sub>283</sub>	$53.316$ <sub>285</sub>	$61.31$ <sub>58</sub>	$54.38$ <sub>40</sub>	$13.33$ <sub>306</sub>	$27.489$ <sub>434</sub>	$60.85$ <sub>99</sub>
Dez. 6	$14.589$ <sub>220</sub>	$46.71$ <sub>307</sub>	$53.601$ <sub>255</sub>	$60.73$ <sub>47</sub>	$54.78$ <sub>31</sub>	$16.39$ <sub>339</sub>	$27.923$ <sub>383</sub>	$61.84$ <sub>129</sub>
16	$14.809$ <sub>172</sub>	$49.78$ <sub>319</sub>	$53.856$ <sub>216</sub>	$60.26$ <sub>34</sub>	$55.09$ <sub>20</sub>	$19.78$ <sub>360</sub>	$28.306$ <sub>322</sub>	$63.13$ <sub>156</sub>
26	$14.981$ <sub>118</sub>	$52.97$ <sub>322</sub>	$54.072$ <sub>172</sub>	$59.92$ <sub>19</sub>	$55.29$ <sub>9</sub>	$23.38$ <sub>369</sub>	$28.628$ <sub>250</sub>	$64.69$ <sub>179</sub>
36	$15.099$	$56.19$	$54.244$	$59.73$	$55.38$	$27.07$	$28.878$	$66.48$
Mittl. Ort	11.962	51.19	50.352	67.19	51.80	23.61	23.181	74.44
sec $\delta$ , tg $\delta$	1.252	-0.754	1.079	+0.406	2.653	-2.457	1.761	+1.449
a, a'	+2.1	-6.5	+3.6	-6.6	0.0	-6.6	+4.9	-6.7
b, b'	+0.02	-0.95	-0.01	-0.94	+0.05	-0.94	-0.03	-0.94



# Obere Kulmination Greenwich

85\*

Tag	282) α Geminorum		285) β Canis min.		284) γ 1308 Caml		286) ρ Geminorum	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	7 <sup>h</sup> 22 <sup>m</sup>	+27° 54'	7 <sup>h</sup> 24 <sup>m</sup>	+8° 23'	7 <sup>h</sup> 25 <sup>m</sup>	+68° 34'	7 <sup>h</sup> 25 <sup>m</sup>	+31° 53'
Jan. I	19.026 <sup>a</sup> <sub>148</sub>	28.81 <sup>a</sup> <sub>26</sub>	10.389 <sup>a</sup> <sub>130</sub>	63.21 <sup>a</sup> <sub>97</sub>	11.91 <sup>a</sup> <sub>28</sub>	46.18 <sup>a</sup> <sub>252</sub>	34.843 <sup>a</sup> <sub>158</sub>	39.87 <sup>a</sup> <sub>51</sub>
II	19.174 <sup>II</sup> <sub>94</sub>	29.07 <sup>II</sup> <sub>41</sub>	10.519 <sup>II</sup> <sub>81</sub>	62.24 <sup>II</sup> <sub>81</sub>	12.19 <sup>II</sup> <sub>15</sub>	48.70 <sup>II</sup> <sub>264</sub>	35.001 <sup>II</sup> <sub>101</sub>	40.38 <sup>II</sup> <sub>66</sub>
20	19.268 <sup>II</sup> <sub>37</sub>	29.48 <sup>II</sup> <sub>54</sub>	10.600 <sup>II</sup> <sub>31</sub>	61.43 <sup>II</sup> <sub>65</sub>	12.34 <sup>II</sup> <sub>2</sub>	51.34 <sup>II</sup> <sub>265</sub>	35.102 <sup>II</sup> <sub>42</sub>	41.04 <sup>II</sup> <sub>77</sub>
30	19.305 <sup>II</sup> <sub>19</sub>	30.02 <sup>II</sup> <sub>62</sub>	10.631 <sup>II</sup> <sub>19</sub>	60.78 <sup>II</sup> <sub>47</sub>	12.36 <sup>II</sup> <sub>10</sub>	53.99 <sup>II</sup> <sub>258</sub>	35.144 <sup>II</sup> <sub>16</sub>	41.81 <sup>II</sup> <sub>86</sub>
Febr. 9	19.286 <sup>II</sup> <sub>70</sub>	30.64 <sup>II</sup> <sub>67</sub>	10.612 <sup>II</sup> <sub>65</sub>	60.31 <sup>II</sup> <sub>31</sub>	12.26 <sup>II</sup> <sub>22</sub>	56.57 <sup>II</sup> <sub>239</sub>	35.128 <sup>II</sup> <sub>70</sub>	42.67 <sup>II</sup> <sub>88</sub>
19	19.216 <sup>II</sup> <sub>115</sub>	31.31 <sup>II</sup> <sub>67</sub>	10.547 <sup>II</sup> <sub>105</sub>	60.00 <sup>II</sup> <sub>16</sub>	12.04 <sup>II</sup> <sub>32</sub>	58.96 <sup>II</sup> <sub>211</sub>	35.058 <sup>II</sup> <sub>117</sub>	43.55 <sup>II</sup> <sub>86</sub>
März I	19.101 <sup>II</sup> <sub>150</sub>	31.98 <sup>II</sup> <sub>64</sub>	10.442 <sup>II</sup> <sub>136</sub>	59.84 <sup>II</sup> <sub>3</sub>	11.72 <sup>II</sup> <sub>41</sub>	61.07 <sup>II</sup> <sub>176</sub>	34.941 <sup>II</sup> <sub>154</sub>	44.41 <sup>II</sup> <sub>79</sub>
II	18.951 <sup>II</sup> <sub>175</sub>	32.62 <sup>II</sup> <sub>57</sub>	10.306 <sup>II</sup> <sub>157</sub>	59.81 <sup>II</sup> <sub>9</sub>	11.31 <sup>II</sup> <sub>47</sub>	62.83 <sup>II</sup> <sub>133</sub>	34.787 <sup>II</sup> <sub>180</sub>	45.20 <sup>II</sup> <sub>69</sub>
21	18.776 <sup>II</sup> <sub>188</sub>	33.19 <sup>II</sup> <sub>47</sub>	10.149 <sup>II</sup> <sub>170</sub>	59.90 <sup>II</sup> <sub>19</sub>	10.84 <sup>II</sup> <sub>50</sub>	64.16 <sup>II</sup> <sub>86</sub>	34.607 <sup>II</sup> <sub>194</sub>	45.89 <sup>II</sup> <sub>55</sub>
31	18.588 <sup>II</sup> <sub>190</sub>	33.66 <sup>II</sup> <sub>36</sub>	9.979 <sup>II</sup> <sub>170</sub>	60.09 <sup>II</sup> <sub>28</sub>	10.34 <sup>II</sup> <sub>51</sub>	65.02 <sup>II</sup> <sub>37</sub>	34.413 <sup>II</sup> <sub>198</sub>	46.44 <sup>II</sup> <sub>39</sub>
Apr. 10	18.398 <sup>II</sup> <sub>180</sub>	34.02 <sup>II</sup> <sub>23</sub>	9.809 <sup>II</sup> <sub>162</sub>	60.37 <sup>II</sup> <sub>36</sub>	9.83 <sup>II</sup> <sub>50</sub>	65.39 <sup>II</sup> <sub>12</sub>	34.215 <sup>II</sup> <sub>188</sub>	46.83 <sup>II</sup> <sub>23</sub>
20	18.218 <sup>II</sup> <sub>162</sub>	34.25 <sup>II</sup> <sub>11</sub>	9.647 <sup>II</sup> <sub>146</sub>	60.73 <sup>II</sup> <sub>42</sub>	9.33 <sup>II</sup> <sub>46</sub>	65.27 <sup>II</sup> <sub>59</sub>	34.027 <sup>II</sup> <sub>169</sub>	47.06 <sup>II</sup> <sub>6</sub>
30	18.056 <sup>II</sup> <sub>134</sub>	34.36 <sup>II</sup> <sub>0</sub>	9.501 <sup>II</sup> <sub>122</sub>	61.15 <sup>II</sup> <sub>50</sub>	8.87 <sup>II</sup> <sub>40</sub>	64.68 <sup>II</sup> <sub>104</sub>	33.858 <sup>II</sup> <sub>142</sub>	47.12 <sup>II</sup> <sub>8</sub>
Mai 10	17.922 <sup>II</sup> <sub>101</sub>	34.36 <sup>II</sup> <sub>10</sub>	9.379 <sup>II</sup> <sub>93</sub>	61.65 <sup>II</sup> <sub>56</sub>	8.47 <sup>II</sup> <sub>33</sub>	63.64 <sup>II</sup> <sub>144</sub>	33.716 <sup>II</sup> <sub>108</sub>	47.04 <sup>II</sup> <sub>23</sub>
20	17.821 <sup>II</sup> <sub>64</sub>	34.26 <sup>II</sup> <sub>19</sub>	9.286 <sup>II</sup> <sub>60</sub>	62.21 <sup>II</sup> <sub>62</sub>	8.14 <sup>II</sup> <sub>25</sub>	62.20 <sup>II</sup> <sub>177</sub>	33.608 <sup>II</sup> <sub>69</sub>	46.81 <sup>II</sup> <sub>34</sub>
30	17.757 <sup>II</sup> <sub>23</sub>	34.07 <sup>II</sup> <sub>25</sub>	9.226 <sup>II</sup> <sub>24</sub>	62.83 <sup>II</sup> <sub>68</sub>	7.89 <sup>II</sup> <sub>16</sub>	60.43 <sup>II</sup> <sub>206</sub>	33.539 <sup>II</sup> <sub>28</sub>	46.47 <sup>II</sup> <sub>43</sub>
Juni 9	17.734 <sup>II</sup> <sub>18</sub>	33.82 <sup>II</sup> <sub>31</sub>	9.202 <sup>II</sup> <sub>11</sub>	63.51 <sup>II</sup> <sub>71</sub>	7.73 <sup>II</sup> <sub>5</sub>	58.37 <sup>II</sup> <sub>227</sub>	33.511 <sup>II</sup> <sub>15</sub>	46.04 <sup>II</sup> <sub>51</sub>
19	17.752 <sup>II</sup> <sub>59</sub>	33.51 <sup>II</sup> <sub>35</sub>	9.213 <sup>II</sup> <sub>48</sub>	64.22 <sup>II</sup> <sub>75</sub>	7.68 <sup>II</sup> <sub>4</sub>	56.10 <sup>II</sup> <sub>242</sub>	33.526 <sup>II</sup> <sub>57</sub>	45.53 <sup>II</sup> <sub>57</sub>
29	17.811 <sup>II</sup> <sub>98</sub>	33.16 <sup>II</sup> <sub>38</sub>	9.261 <sup>II</sup> <sub>82</sub>	64.97 <sup>II</sup> <sub>75</sub>	7.72 <sup>II</sup> <sub>14</sub>	53.68 <sup>II</sup> <sub>250</sub>	33.583 <sup>II</sup> <sub>98</sub>	44.96 <sup>II</sup> <sub>61</sub>
Juli 9	17.909 <sup>II</sup> <sub>135</sub>	32.78 <sup>II</sup> <sub>40</sub>	9.343 <sup>II</sup> <sub>115</sub>	65.72 <sup>II</sup> <sub>74</sub>	7.86 <sup>II</sup> <sub>24</sub>	51.18 <sup>II</sup> <sub>252</sub>	33.681 <sup>II</sup> <sub>137</sub>	44.35 <sup>II</sup> <sub>64</sub>
19	18.044 <sup>II</sup> <sub>170</sub>	32.38 <sup>II</sup> <sub>43</sub>	9.458 <sup>II</sup> <sub>146</sub>	66.46 <sup>II</sup> <sub>70</sub>	8.10 <sup>II</sup> <sub>32</sub>	48.66 <sup>II</sup> <sub>248</sub>	33.818 <sup>II</sup> <sub>173</sub>	43.71 <sup>II</sup> <sub>66</sub>
29	18.214 <sup>II</sup> <sub>201</sub>	31.95 <sup>II</sup> <sub>45</sub>	9.604 <sup>II</sup> <sub>174</sub>	67.16 <sup>II</sup> <sub>62</sub>	8.42 <sup>II</sup> <sub>41</sub>	46.18 <sup>II</sup> <sub>239</sub>	33.991 <sup>II</sup> <sub>206</sub>	43.05 <sup>II</sup> <sub>68</sub>
Aug. 8	18.415 <sup>II</sup> <sub>230</sub>	31.50 <sup>II</sup> <sub>47</sub>	9.778 <sup>II</sup> <sub>200</sub>	67.78 <sup>II</sup> <sub>51</sub>	8.83 <sup>II</sup> <sub>49</sub>	43.79 <sup>II</sup> <sub>225</sub>	34.197 <sup>II</sup> <sub>236</sub>	42.37 <sup>II</sup> <sub>69</sub>
18	18.645 <sup>II</sup> <sub>254</sub>	31.03 <sup>II</sup> <sub>51</sub>	9.978 <sup>II</sup> <sub>222</sub>	68.29 <sup>II</sup> <sub>37</sub>	9.32 <sup>II</sup> <sub>56</sub>	41.54 <sup>II</sup> <sub>206</sub>	34.433 <sup>II</sup> <sub>263</sub>	41.68 <sup>II</sup> <sub>70</sub>
28	18.899 <sup>II</sup> <sub>278</sub>	30.52 <sup>II</sup> <sub>55</sub>	10.200 <sup>II</sup> <sub>244</sub>	68.66 <sup>II</sup> <sub>20</sub>	9.88 <sup>II</sup> <sub>61</sub>	39.48 <sup>II</sup> <sub>183</sub>	34.696 <sup>II</sup> <sub>286</sub>	40.98 <sup>II</sup> <sub>72</sub>
Sept. 7	19.177 <sup>II</sup> <sub>297</sub>	29.97 <sup>II</sup> <sub>59</sub>	10.444 <sup>II</sup> <sub>262</sub>	68.86 <sup>II</sup> <sub>0</sub>	10.49 <sup>II</sup> <sub>67</sub>	37.65 <sup>II</sup> <sub>157</sub>	34.982 <sup>II</sup> <sub>308</sub>	40.26 <sup>II</sup> <sub>72</sub>
17	19.474 <sup>II</sup> <sub>315</sub>	29.38 <sup>II</sup> <sub>62</sub>	10.706 <sup>II</sup> <sub>278</sub>	68.86 <sup>II</sup> <sub>22</sub>	11.16 <sup>II</sup> <sub>71</sub>	36.08 <sup>II</sup> <sub>127</sub>	35.290 <sup>II</sup> <sub>326</sub>	39.54 <sup>II</sup> <sub>72</sub>
27	19.789 <sup>II</sup> <sub>328</sub>	28.76 <sup>II</sup> <sub>65</sub>	10.984 <sup>II</sup> <sub>291</sub>	68.64 <sup>II</sup> <sub>43</sub>	11.87 <sup>II</sup> <sub>74</sub>	34.81 <sup>II</sup> <sub>94</sub>	35.616 <sup>II</sup> <sub>340</sub>	38.82 <sup>II</sup> <sub>72</sub>
Okt. 7	20.117 <sup>II</sup> <sub>338</sub>	28.11 <sup>II</sup> <sub>67</sub>	11.275 <sup>II</sup> <sub>301</sub>	68.21 <sup>II</sup> <sub>65</sub>	12.61 <sup>II</sup> <sub>76</sub>	33.87 <sup>II</sup> <sub>58</sub>	35.956 <sup>II</sup> <sub>352</sub>	38.10 <sup>II</sup> <sub>68</sub>
17	20.455 <sup>II</sup> <sub>344</sub>	27.44 <sup>II</sup> <sub>66</sub>	11.576 <sup>II</sup> <sub>306</sub>	67.56 <sup>II</sup> <sub>85</sub>	13.37 <sup>II</sup> <sub>77</sub>	33.29 <sup>II</sup> <sub>19</sub>	36.308 <sup>II</sup> <sub>357</sub>	37.42 <sup>II</sup> <sub>64</sub>
27	20.799 <sup>II</sup> <sub>344</sub>	26.78 <sup>II</sup> <sub>62</sub>	11.882 <sup>II</sup> <sub>307</sub>	66.71 <sup>II</sup> <sub>102</sub>	14.14 <sup>II</sup> <sub>76</sub>	33.10 <sup>II</sup> <sub>21</sub>	36.665 <sup>II</sup> <sub>359</sub>	36.78 <sup>II</sup> <sub>57</sub>
Nov. 6	21.143 <sup>II</sup> <sub>338</sub>	26.16 <sup>II</sup> <sub>56</sub>	12.189 <sup>II</sup> <sub>302</sub>	65.69 <sup>II</sup> <sub>115</sub>	14.90 <sup>II</sup> <sub>74</sub>	33.31 <sup>II</sup> <sub>63</sub>	37.024 <sup>II</sup> <sub>353</sub>	36.21 <sup>II</sup> <sub>45</sub>
16	21.481 <sup>II</sup> <sub>325</sub>	25.60 <sup>II</sup> <sub>47</sub>	12.491 <sup>II</sup> <sub>289</sub>	64.54 <sup>II</sup> <sub>124</sub>	15.64 <sup>II</sup> <sub>70</sub>	33.94 <sup>II</sup> <sub>104</sub>	37.377 <sup>II</sup> <sub>339</sub>	35.76 <sup>II</sup> <sub>33</sub>
26	21.806 <sup>II</sup> <sub>302</sub>	25.13 <sup>II</sup> <sub>33</sub>	12.780 <sup>II</sup> <sub>269</sub>	63.30 <sup>II</sup> <sub>126</sub>	16.34 <sup>II</sup> <sub>64</sub>	34.98 <sup>II</sup> <sub>144</sub>	37.716 <sup>II</sup> <sub>316</sub>	35.43 <sup>II</sup> <sub>17</sub>
Dez. 6	22.108 <sup>II</sup> <sub>271</sub>	24.80 <sup>II</sup> <sub>19</sub>	13.049 <sup>II</sup> <sub>241</sub>	62.04 <sup>II</sup> <sub>124</sub>	16.98 <sup>II</sup> <sub>56</sub>	36.42 <sup>II</sup> <sub>181</sub>	38.032 <sup>II</sup> <sub>284</sub>	35.26 <sup>II</sup> <sub>2</sub>
16	22.379 <sup>II</sup> <sub>232</sub>	24.61 <sup>II</sup> <sub>2</sub>	13.290 <sup>II</sup> <sub>205</sub>	60.80 <sup>II</sup> <sub>117</sub>	17.54 <sup>II</sup> <sub>47</sub>	38.23 <sup>II</sup> <sub>213</sub>	38.316 <sup>II</sup> <sub>244</sub>	35.28 <sup>II</sup> <sub>20</sub>
26	22.611 <sup>II</sup> <sub>185</sub>	24.59 <sup>II</sup> <sub>15</sub>	13.495 <sup>II</sup> <sub>163</sub>	59.63 <sup>II</sup> <sub>106</sub>	18.01 <sup>II</sup> <sub>36</sub>	40.36 <sup>II</sup> <sub>239</sub>	38.560 <sup>II</sup> <sub>196</sub>	35.48 <sup>II</sup> <sub>39</sub>
36	22.796 <sup>II</sup>	24.74 <sup>II</sup>	13.658 <sup>II</sup>	58.57 <sup>II</sup>	18.37 <sup>II</sup>	42.75 <sup>II</sup>	38.756 <sup>II</sup>	35.87 <sup>II</sup>
Mittl. Ort	18.743	32.92	10.087	66.16	10.46	51.51	34.548	44.22
sec δ, tg δ	1.132	+0.530	1.011	+0.148	2.738	+2.549	1.178	+0.622
a, a'	+3.7	-7.0	+3.3	-7.2	+6.2	-7.3	+3.8	-7.3
b, b'	-0.01	-0.94	0.00	-0.93	-0.06	-0.93	-0.02	-0.93



## Scheinbare Sternörter 1945

Tag	287) $\alpha$ Geminorum <sup>1)</sup>		289) $\gamma$ Monocerotis		291) $\alpha$ Canis min. <sup>2)</sup>		292) $\gamma$ Lyncis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	7 <sup>h</sup> 31 <sup>m</sup>	+32° 0'	7 <sup>h</sup> 34 <sup>m</sup>	-3° 59'	7 <sup>h</sup> 36 <sup>m</sup>	+5° 21'	7 <sup>h</sup> 38 <sup>m</sup>	+58° 50'
Jan. I	5.813 <sup>a</sup> <sub>164</sub>	35.16 <sup>b</sup> <sub>48</sub>	32.954 <sup>a</sup> <sub>130</sub>	14.19 <sup>b</sup> <sub>173</sub>	25.716 <sup>a</sup> <sub>135</sub>	58.97 <sup>b</sup> <sub>121</sub>	22.591 <sup>a</sup> <sub>244</sub>	23.23 <sup>b</sup> <sub>199</sub>
II	5.977 <sup>a</sup> <sub>106</sub>	35.64 <sup>b</sup> <sub>64</sub>	33.084 <sup>a</sup> <sub>81</sub>	15.92 <sup>b</sup> <sub>158</sub>	25.851 <sup>a</sup> <sub>86</sub>	57.76 <sup>b</sup> <sub>105</sub>	22.835 <sup>a</sup> <sub>154</sub>	25.22 <sup>b</sup> <sub>216</sub>
20	6.083 <sup>a</sup> <sub>47</sub>	36.28 <sup>b</sup> <sub>77</sub>	33.165 <sup>a</sup> <sub>31</sub>	17.50 <sup>b</sup> <sub>138</sub>	25.937 <sup>a</sup> <sub>35</sub>	56.71 <sup>b</sup> <sub>87</sub>	22.989 <sup>a</sup> <sub>61</sub>	27.38 <sup>b</sup> <sub>224</sub>
30	6.130 <sup>a</sup> <sub>11</sub>	37.05 <sup>b</sup> <sub>86</sub>	33.196 <sup>a</sup> <sub>17</sub>	18.88 <sup>b</sup> <sub>118</sub>	25.972 <sup>a</sup> <sub>14</sub>	55.84 <sup>b</sup> <sub>68</sub>	23.050 <sup>a</sup> <sub>32</sub>	29.62 <sup>b</sup> <sub>223</sub>
Febr. 9	6.119 <sup>a</sup> <sub>65</sub>	37.91 <sup>b</sup> <sub>89</sub>	33.179 <sup>a</sup> <sub>63</sub>	20.06 <sup>b</sup> <sub>95</sub>	25.958 <sup>a</sup> <sub>60</sub>	55.16 <sup>b</sup> <sub>49</sub>	23.018 <sup>a</sup> <sub>118</sub>	31.85 <sup>b</sup> <sub>212</sub>
19	6.054 <sup>a</sup> <sub>113</sub>	38.80 <sup>b</sup> <sub>88</sub>	33.116 <sup>a</sup> <sub>103</sub>	21.01 <sup>b</sup> <sub>71</sub>	25.898 <sup>a</sup> <sub>100</sub>	54.67 <sup>b</sup> <sub>32</sub>	22.900 <sup>a</sup> <sub>194</sub>	33.97 <sup>b</sup> <sub>194</sub>
März I	5.941 <sup>a</sup> <sub>151</sub>	39.68 <sup>b</sup> <sub>81</sub>	33.013 <sup>a</sup> <sub>134</sub>	21.72 <sup>b</sup> <sub>49</sub>	25.798 <sup>a</sup> <sub>132</sub>	54.35 <sup>b</sup> <sub>15</sub>	22.706 <sup>a</sup> <sub>258</sub>	35.91 <sup>b</sup> <sub>167</sub>
II	5.790 <sup>a</sup> <sub>178</sub>	40.49 <sup>b</sup> <sub>71</sub>	32.879 <sup>a</sup> <sub>156</sub>	22.21 <sup>b</sup> <sub>26</sub>	25.666 <sup>a</sup> <sub>155</sub>	54.20 <sup>b</sup> <sub>0</sub>	22.448 <sup>a</sup> <sub>305</sub>	37.58 <sup>b</sup> <sub>133</sub>
21	5.612 <sup>a</sup> <sub>194</sub>	41.20 <sup>b</sup> <sub>58</sub>	32.723 <sup>a</sup> <sub>169</sub>	22.47 <sup>b</sup> <sub>4</sub>	25.511 <sup>a</sup> <sub>167</sub>	54.20 <sup>b</sup> <sub>12</sub>	22.143 <sup>a</sup> <sub>334</sub>	38.91 <sup>b</sup> <sub>96</sub>
31	5.418 <sup>a</sup> <sub>198</sub>	41.78 <sup>b</sup> <sub>42</sub>	32.554 <sup>a</sup> <sub>173</sub>	22.51 <sup>b</sup> <sub>17</sub>	25.344 <sup>a</sup> <sub>171</sub>	54.32 <sup>b</sup> <sub>25</sub>	21.809 <sup>a</sup> <sub>344</sub>	39.87 <sup>b</sup> <sub>55</sub>
Apr. 10	5.220 <sup>a</sup> <sub>190</sub>	42.20 <sup>b</sup> <sub>25</sub>	32.381 <sup>a</sup> <sub>166</sub>	22.34 <sup>b</sup> <sub>37</sub>	25.173 <sup>a</sup> <sub>164</sub>	54.57 <sup>b</sup> <sub>35</sub>	21.465 <sup>a</sup> <sub>338</sub>	40.42 <sup>b</sup> <sub>13</sub>
20	5.030 <sup>a</sup> <sub>172</sub>	42.45 <sup>b</sup> <sub>9</sub>	32.215 <sup>a</sup> <sub>152</sub>	21.97 <sup>b</sup> <sub>56</sub>	25.009 <sup>a</sup> <sub>148</sub>	54.92 <sup>b</sup> <sub>45</sub>	21.127 <sup>a</sup> <sub>314</sub>	40.55 <sup>b</sup> <sub>29</sub>
30	4.858 <sup>a</sup> <sub>145</sub>	42.54 <sup>b</sup> <sub>7</sub>	32.063 <sup>a</sup> <sub>130</sub>	21.41 <sup>b</sup> <sub>73</sub>	24.861 <sup>a</sup> <sub>127</sub>	55.37 <sup>b</sup> <sub>54</sub>	20.813 <sup>a</sup> <sub>276</sub>	40.26 <sup>b</sup> <sub>68</sub>
Mai 10	4.713 <sup>a</sup> <sub>113</sub>	42.47 <sup>b</sup> <sub>21</sub>	31.933 <sup>a</sup> <sub>103</sub>	20.68 <sup>b</sup> <sub>90</sub>	24.734 <sup>a</sup> <sub>99</sub>	55.91 <sup>b</sup> <sub>62</sub>	20.537 <sup>a</sup> <sub>227</sub>	39.58 <sup>b</sup> <sub>103</sub>
20	4.600 <sup>a</sup> <sub>74</sub>	42.26 <sup>b</sup> <sub>34</sub>	31.830 <sup>a</sup> <sub>73</sub>	19.78 <sup>b</sup> <sub>105</sub>	24.635 <sup>a</sup> <sub>67</sub>	56.53 <sup>b</sup> <sub>70</sub>	20.310 <sup>a</sup> <sub>168</sub>	38.55 <sup>b</sup> <sub>134</sub>
30	4.526 <sup>a</sup> <sub>33</sub>	41.92 <sup>b</sup> <sub>44</sub>	31.757 <sup>a</sup> <sub>40</sub>	18.73 <sup>b</sup> <sub>118</sub>	24.568 <sup>a</sup> <sub>34</sub>	57.23 <sup>b</sup> <sub>77</sub>	20.142 <sup>a</sup> <sub>105</sub>	37.21 <sup>b</sup> <sub>161</sub>
Juni 9	4.493 <sup>a</sup> <sub>8</sub>	41.48 <sup>b</sup> <sub>53</sub>	31.717 <sup>a</sup> <sub>5</sub>	17.55 <sup>b</sup> <sub>129</sub>	24.534 <sup>a</sup> <sub>2</sub>	58.00 <sup>b</sup> <sub>82</sub>	20.037 <sup>a</sup> <sub>37</sub>	35.60 <sup>b</sup> <sub>182</sub>
19	4.501 <sup>a</sup> <sub>51</sub>	40.95 <sup>b</sup> <sub>58</sub>	31.712 <sup>a</sup> <sub>29</sub>	16.26 <sup>b</sup> <sub>136</sub>	24.536 <sup>a</sup> <sub>37</sub>	58.82 <sup>b</sup> <sub>85</sub>	20.000 <sup>a</sup> <sub>32</sub>	33.78 <sup>b</sup> <sub>198</sub>
29	4.552 <sup>a</sup> <sub>92</sub>	40.37 <sup>b</sup> <sub>64</sub>	31.741 <sup>a</sup> <sub>63</sub>	14.90 <sup>b</sup> <sub>141</sub>	24.573 <sup>a</sup> <sub>70</sub>	59.67 <sup>b</sup> <sub>86</sub>	20.032 <sup>a</sup> <sub>100</sub>	31.80 <sup>b</sup> <sub>208</sub>
Juli 9	4.644 <sup>a</sup> <sub>130</sub>	39.73 <sup>b</sup> <sub>67</sub>	31.804 <sup>a</sup> <sub>96</sub>	13.49 <sup>b</sup> <sub>140</sub>	24.643 <sup>a</sup> <sub>103</sub>	60.53 <sup>b</sup> <sub>84</sub>	20.132 <sup>a</sup> <sub>166</sub>	29.72 <sup>b</sup> <sub>213</sub>
19	4.774 <sup>a</sup> <sub>167</sub>	39.06 <sup>b</sup> <sub>71</sub>	31.900 <sup>a</sup> <sub>126</sub>	12.09 <sup>b</sup> <sub>135</sub>	24.746 <sup>a</sup> <sub>134</sub>	61.37 <sup>b</sup> <sub>79</sub>	20.298 <sup>a</sup> <sub>228</sub>	27.59 <sup>b</sup> <sub>214</sub>
29	4.941 <sup>a</sup> <sub>199</sub>	38.35 <sup>b</sup> <sub>72</sub>	32.026 <sup>a</sup> <sub>155</sub>	10.74 <sup>b</sup> <sub>126</sub>	24.880 <sup>a</sup> <sub>162</sub>	62.16 <sup>b</sup> <sub>71</sub>	20.526 <sup>a</sup> <sub>287</sub>	25.45 <sup>b</sup> <sub>210</sub>
Aug. 8	5.140 <sup>a</sup> <sub>230</sub>	37.63 <sup>b</sup> <sub>74</sub>	32.181 <sup>a</sup> <sub>182</sub>	9.48 <sup>b</sup> <sub>110</sub>	25.042 <sup>a</sup> <sub>188</sub>	62.87 <sup>b</sup> <sub>58</sub>	20.813 <sup>a</sup> <sub>340</sub>	23.35 <sup>b</sup> <sub>201</sub>
18	5.370 <sup>a</sup> <sub>258</sub>	36.89 <sup>b</sup> <sub>75</sub>	32.363 <sup>a</sup> <sub>207</sub>	8.38 <sup>b</sup> <sub>91</sub>	25.230 <sup>a</sup> <sub>212</sub>	63.45 <sup>b</sup> <sub>43</sub>	21.153 <sup>a</sup> <sub>389</sub>	21.34 <sup>b</sup> <sub>190</sub>
28	5.628 <sup>a</sup> <sub>282</sub>	36.14 <sup>b</sup> <sub>77</sub>	32.570 <sup>a</sup> <sub>229</sub>	7.47 <sup>b</sup> <sub>66</sub>	25.442 <sup>a</sup> <sub>234</sub>	63.88 <sup>b</sup> <sub>24</sub>	21.542 <sup>a</sup> <sub>433</sub>	19.44 <sup>b</sup> <sub>175</sub>
Sept. 7	5.910 <sup>a</sup> <sub>303</sub>	35.37 <sup>b</sup> <sub>78</sub>	32.799 <sup>a</sup> <sub>248</sub>	6.81 <sup>b</sup> <sub>38</sub>	25.676 <sup>a</sup> <sub>253</sub>	64.12 <sup>b</sup> <sub>1</sub>	21.975 <sup>a</sup> <sub>470</sub>	17.69 <sup>b</sup> <sub>157</sub>
17	6.213 <sup>a</sup> <sub>323</sub>	34.59 <sup>b</sup> <sub>79</sub>	33.047 <sup>a</sup> <sub>267</sub>	6.43 <sup>b</sup> <sub>6</sub>	25.929 <sup>a</sup> <sub>270</sub>	64.13 <sup>b</sup> <sub>22</sub>	22.445 <sup>a</sup> <sub>503</sub>	16.12 <sup>b</sup> <sub>134</sub>
27	6.536 <sup>a</sup> <sub>338</sub>	33.80 <sup>b</sup> <sub>78</sub>	33.314 <sup>a</sup> <sub>281</sub>	6.37 <sup>b</sup> <sub>27</sub>	26.199 <sup>a</sup> <sub>285</sub>	63.91 <sup>b</sup> <sub>47</sub>	22.948 <sup>a</sup> <sub>528</sub>	14.78 <sup>b</sup> <sub>110</sub>
Okt. 7	6.874 <sup>a</sup> <sub>351</sub>	33.02 <sup>b</sup> <sub>75</sub>	33.595 <sup>a</sup> <sub>293</sub>	6.64 <sup>b</sup> <sub>61</sub>	26.484 <sup>a</sup> <sub>295</sub>	63.44 <sup>b</sup> <sub>72</sub>	23.476 <sup>a</sup> <sub>548</sub>	13.68 <sup>b</sup> <sub>82</sub>
17	7.225 <sup>a</sup> <sub>357</sub>	32.27 <sup>b</sup> <sub>70</sub>	33.888 <sup>a</sup> <sub>299</sub>	7.25 <sup>b</sup> <sub>93</sub>	26.779 <sup>a</sup> <sub>303</sub>	62.72 <sup>b</sup> <sub>95</sub>	24.024 <sup>a</sup> <sub>559</sub>	12.86 <sup>b</sup> <sub>51</sub>
27	7.582 <sup>a</sup> <sub>360</sub>	31.57 <sup>b</sup> <sub>62</sub>	34.187 <sup>a</sup> <sub>301</sub>	8.18 <sup>b</sup> <sub>123</sub>	27.082 <sup>a</sup> <sub>304</sub>	61.77 <sup>b</sup> <sub>115</sub>	24.583 <sup>a</sup> <sub>560</sub>	12.35 <sup>b</sup> <sub>17</sub>
Nov. 6	7.942 <sup>a</sup> <sub>355</sub>	30.95 <sup>b</sup> <sub>52</sub>	34.488 <sup>a</sup> <sub>297</sub>	9.41 <sup>b</sup> <sub>148</sub>	27.386 <sup>a</sup> <sub>300</sub>	60.62 <sup>b</sup> <sub>131</sub>	25.143 <sup>a</sup> <sub>550</sub>	12.18 <sup>b</sup> <sub>17</sub>
16	8.297 <sup>a</sup> <sub>341</sub>	30.43 <sup>b</sup> <sub>38</sub>	34.785 <sup>a</sup> <sub>285</sub>	10.89 <sup>b</sup> <sub>168</sub>	27.686 <sup>a</sup> <sub>289</sub>	59.31 <sup>b</sup> <sub>142</sub>	25.693 <sup>a</sup> <sub>528</sub>	12.35 <sup>b</sup> <sub>54</sub>
26	8.638 <sup>a</sup> <sub>320</sub>	30.05 <sup>b</sup> <sub>21</sub>	35.070 <sup>a</sup> <sub>266</sub>	12.57 <sup>b</sup> <sub>181</sub>	27.975 <sup>a</sup> <sub>270</sub>	57.89 <sup>b</sup> <sub>148</sub>	26.221 <sup>a</sup> <sub>492</sub>	12.89 <sup>b</sup> <sub>90</sub>
Dez. 6	8.958 <sup>a</sup> <sub>289</sub>	29.84 <sup>b</sup> <sub>3</sub>	35.336 <sup>a</sup> <sub>238</sub>	14.38 <sup>b</sup> <sub>188</sub>	28.245 <sup>a</sup> <sub>243</sub>	56.41 <sup>b</sup> <sub>147</sub>	26.713 <sup>a</sup> <sub>441</sub>	13.79 <sup>b</sup> <sub>126</sub>
16	9.247 <sup>a</sup> <sub>249</sub>	29.81 <sup>b</sup> <sub>17</sub>	35.574 <sup>a</sup> <sub>203</sub>	16.26 <sup>b</sup> <sub>187</sub>	28.488 <sup>a</sup> <sub>209</sub>	54.94 <sup>b</sup> <sub>141</sub>	27.154 <sup>a</sup> <sub>377</sub>	15.05 <sup>b</sup> <sub>157</sub>
26	9.496 <sup>a</sup> <sub>201</sub>	29.98 <sup>b</sup> <sub>36</sub>	35.777 <sup>a</sup> <sub>162</sub>	18.13 <sup>b</sup> <sub>180</sub>	28.697 <sup>a</sup> <sub>167</sub>	53.53 <sup>b</sup> <sub>131</sub>	27.531 <sup>a</sup> <sub>302</sub>	16.62 <sup>b</sup> <sub>185</sub>
36	9.697 <sup>a</sup>	30.34 <sup>b</sup>	35.939 <sup>a</sup>	19.93 <sup>b</sup>	28.864 <sup>a</sup>	52.22 <sup>b</sup>	27.833 <sup>a</sup>	18.47 <sup>b</sup>
Mittl. Ort	5.526	39.59	32.573	12.49	25.410	61.52	21.821	29.02
sec $\delta$ , tg $\delta$	1.179	+0.625	1.002	-0.070	1.004	+0.094	1.933	+1.654
a, a'	+3.8	-7.8	+3.0	-8.0	+3.2	-8.2	+5.1	-8.3
b, b'	-0.02	-0.92	0.00	-0.92	0.00	-0.91	-0.05	-0.91

1) Ort des helleren Sterns.

2) Ort des hellen Sterns; die jährliche Parallaxe ( $\alpha_{291}$ ) ist bereits berücksichtigt.



# Obere Kulmination Greenwich

Tag	294) $\alpha$ Geminorum		295) $\beta$ Geminorum <sup>1)</sup>		297) $\zeta$ Volantis		296) $\pi$ Geminorum	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	7 <sup>h</sup> 41 <sup>m</sup>	+24° 31'	7 <sup>h</sup> 41 <sup>m</sup>	+28° 9'	7 <sup>h</sup> 42 <sup>m</sup>	-72° 28'	7 <sup>h</sup> 43 <sup>m</sup>	+33° 32'
Jan. I	7.994 <sup>a</sup> <sub>165</sub>	49.70 <sub>3</sub>	57.414 <sup>a</sup> <sub>167</sub>	34.22 <sub>20</sub>	35.53 <sup>a</sup> <sub>7</sub>	22.70 <sub>371</sub>	58.060 <sup>a</sup> <sub>181</sub>	64.06 <sup>a</sup>
II	8.159 <sup>b</sup> <sub>111</sub>	49.67 <sub>16</sub>	57.581 <sup>b</sup> <sub>113</sub>	34.42 <sub>38</sub>	35.60 <sup>b</sup> <sub>7</sub>	26.41 <sub>368</sub>	58.241 <sup>b</sup> <sub>123</sub>	64.59 <sup>b</sup> <sub>70</sub>
20	8.270 <sup>c</sup> <sub>55</sub>	49.83 <sub>31</sub>	57.694 <sup>c</sup> <sub>56</sub>	34.80 <sub>53</sub>	35.53 <sup>c</sup> <sub>21</sub>	30.09 <sub>356</sub>	58.364 <sup>c</sup> <sub>63</sub>	65.29 <sup>c</sup> <sub>86</sub>
30	8.325 <sup>d</sup> <sub>1</sub>	50.14 <sub>43</sub>	57.750 <sup>d</sup> <sub>1</sub>	35.33 <sub>65</sub>	35.32 <sup>d</sup> <sub>34</sub>	33.65 <sub>333</sub>	58.427 <sup>d</sup> <sub>3</sub>	66.15 <sup>d</sup> <sub>96</sub>
Febr. 9	8.326 <sup>e</sup> <sub>50</sub>	50.57 <sub>53</sub>	57.749 <sup>e</sup> <sub>54</sub>	35.98 <sub>72</sub>	34.98 <sup>e</sup> <sub>45</sub>	36.98 <sub>302</sub>	58.430 <sup>e</sup> <sub>53</sub>	67.11 <sup>e</sup> <sub>100</sub>
19	8.276 <sup>f</sup> <sub>96</sub>	51.10 <sub>58</sub>	57.695 <sup>f</sup> <sub>100</sub>	36.70 <sub>75</sub>	34.53 <sup>f</sup> <sub>56</sub>	40.00 <sub>265</sub>	58.377 <sup>f</sup> <sub>103</sub>	68.11 <sup>f</sup> <sub>99</sub>
März I	8.180 <sup>g</sup> <sub>134</sub>	51.68 <sub>59</sub>	57.595 <sup>g</sup> <sub>139</sub>	37.45 <sub>73</sub>	33.97 <sup>g</sup> <sub>65</sub>	42.65 <sub>222</sub>	58.274 <sup>g</sup> <sub>144</sub>	69.10 <sup>g</sup> <sub>93</sub>
II	8.046 <sup>h</sup> <sub>160</sub>	52.27 <sub>57</sub>	57.456 <sup>h</sup> <sub>167</sub>	38.18 <sub>67</sub>	33.32 <sup>h</sup> <sub>71</sub>	44.87 <sub>174</sub>	58.130 <sup>h</sup> <sub>174</sub>	70.03 <sup>h</sup> <sub>83</sub>
21	7.886 <sup>i</sup> <sub>176</sub>	52.84 <sub>51</sub>	57.289 <sup>i</sup> <sub>183</sub>	38.85 <sub>58</sub>	32.61 <sup>i</sup> <sub>75</sub>	46.61 <sub>124</sub>	57.956 <sup>i</sup> <sub>192</sub>	70.86 <sup>i</sup> <sub>68</sub>
31	7.710 <sup>j</sup> <sub>181</sub>	53.35 <sub>43</sub>	57.106 <sup>j</sup> <sub>189</sub>	39.43 <sub>46</sub>	31.86 <sup>j</sup> <sub>76</sub>	47.85 <sub>71</sub>	57.764 <sup>j</sup> <sub>199</sub>	71.54 <sup>j</sup> <sub>52</sub>
Apr. 10	7.529 <sup>k</sup> <sub>175</sub>	53.78 <sub>35</sub>	56.917 <sup>k</sup> <sub>183</sub>	39.89 <sub>34</sub>	31.10 <sup>k</sup> <sub>77</sub>	48.56 <sub>18</sub>	57.565 <sup>k</sup> <sub>193</sub>	72.06 <sup>k</sup> <sub>34</sub>
20	7.354 <sup>l</sup> <sub>161</sub>	54.13 <sub>25</sub>	56.734 <sup>l</sup> <sub>167</sub>	40.23 <sub>21</sub>	30.33 <sup>l</sup> <sub>75</sub>	48.74 <sub>35</sub>	57.372 <sup>l</sup> <sub>178</sub>	72.40 <sup>l</sup> <sub>14</sub>
30	7.193 <sup>m</sup> <sub>137</sub>	54.38 <sub>16</sub>	56.567 <sup>m</sup> <sub>143</sub>	40.44 <sub>7</sub>	29.58 <sup>m</sup> <sub>71</sub>	48.39 <sub>88</sub>	57.194 <sup>m</sup> <sub>153</sub>	72.54 <sup>m</sup> <sub>3</sub>
Mai 10	7.056 <sup>n</sup> <sub>108</sub>	54.54 <sub>7</sub>	56.424 <sup>n</sup> <sub>113</sub>	40.51 <sub>4</sub>	28.87 <sup>n</sup> <sub>66</sub>	47.51 <sub>139</sub>	57.041 <sup>n</sup> <sub>122</sub>	72.51 <sup>n</sup> <sub>20</sub>
20	6.948 <sup>o</sup> <sub>73</sub>	54.61 <sub>1</sub>	56.311 <sup>o</sup> <sub>78</sub>	40.47 <sub>15</sub>	28.21 <sup>o</sup> <sub>59</sub>	46.12 <sub>185</sub>	56.919 <sup>o</sup> <sub>86</sub>	72.31 <sup>o</sup> <sub>35</sub>
30	6.875 <sup>p</sup> <sub>37</sub>	54.60 <sub>7</sub>	56.233 <sup>p</sup> <sub>40</sub>	40.32 <sub>24</sub>	27.62 <sup>p</sup> <sub>50</sub>	44.27 <sub>227</sub>	56.833 <sup>p</sup> <sub>45</sub>	71.96 <sup>p</sup> <sub>48</sub>
Juni 9	6.838 <sup>q</sup> <sub>1</sub>	54.53 <sub>12</sub>	56.193 <sup>q</sup> <sub>0</sub>	40.08 <sub>32</sub>	27.12 <sup>q</sup> <sub>41</sub>	42.00 <sub>264</sub>	56.788 <sup>q</sup> <sub>4</sub>	71.48 <sup>q</sup> <sub>59</sub>
19	6.839 <sup>r</sup> <sub>40</sub>	54.41 <sub>18</sub>	56.193 <sup>r</sup> <sub>40</sub>	39.76 <sub>38</sub>	26.71 <sup>r</sup> <sub>30</sub>	39.36 <sub>294</sub>	56.784 <sup>r</sup> <sub>38</sub>	70.89 <sup>r</sup> <sub>67</sub>
29	6.879 <sup>s</sup> <sub>77</sub>	54.23 <sub>22</sub>	56.233 <sup>s</sup> <sub>78</sub>	39.38 <sub>43</sub>	26.41 <sup>s</sup> <sub>18</sub>	36.42 <sub>315</sub>	56.822 <sup>s</sup> <sub>79</sub>	70.22 <sup>s</sup> <sub>74</sub>
Juli 9	6.956 <sup>t</sup> <sub>113</sub>	54.01 <sub>26</sub>	56.311 <sup>t</sup> <sub>115</sub>	38.95 <sub>48</sub>	26.23 <sup>t</sup> <sub>7</sub>	33.27 <sub>329</sub>	56.901 <sup>t</sup> <sub>118</sub>	69.48 <sup>t</sup> <sub>80</sub>
19	7.069 <sup>u</sup> <sub>146</sub>	53.75 <sub>30</sub>	56.426 <sup>u</sup> <sub>150</sub>	38.47 <sub>52</sub>	26.16 <sup>u</sup> <sub>5</sub>	29.98 <sub>333</sub>	57.019 <sup>u</sup> <sub>156</sub>	68.68 <sup>u</sup> <sub>83</sub>
29	7.215 <sup>v</sup> <sub>178</sub>	53.45 <sub>35</sub>	56.576 <sup>v</sup> <sub>182</sub>	37.95 <sub>56</sub>	26.21 <sup>v</sup> <sub>17</sub>	26.65 <sub>326</sub>	57.175 <sup>v</sup> <sub>189</sub>	67.85 <sup>v</sup> <sub>87</sub>
Aug. 8	7.393 <sup>w</sup> <sub>206</sub>	53.10 <sub>41</sub>	56.758 <sup>w</sup> <sub>212</sub>	37.39 <sub>60</sub>	26.38 <sup>w</sup> <sub>29</sub>	23.39 <sub>308</sub>	57.364 <sup>w</sup> <sub>221</sub>	66.98 <sup>w</sup> <sub>89</sub>
18	7.599 <sup>x</sup> <sub>232</sub>	52.69 <sub>47</sub>	56.970 <sup>x</sup> <sub>239</sub>	36.79 <sub>65</sub>	26.67 <sup>x</sup> <sub>40</sub>	20.31 <sub>281</sub>	57.585 <sup>x</sup> <sub>251</sub>	66.09 <sup>x</sup> <sub>91</sub>
28	7.831 <sup>y</sup> <sub>256</sub>	52.22 <sub>54</sub>	57.209 <sup>y</sup> <sub>263</sub>	36.14 <sub>70</sub>	27.07 <sup>y</sup> <sub>51</sub>	17.50 <sub>244</sub>	57.836 <sup>y</sup> <sub>276</sub>	65.18 <sup>y</sup> <sub>93</sub>
Sept. 7	8.087 <sup>z</sup> <sub>278</sub>	51.68 <sub>62</sub>	57.472 <sup>z</sup> <sub>285</sub>	35.44 <sub>75</sub>	27.58 <sup>z</sup> <sub>59</sub>	15.06 <sub>197</sub>	58.112 <sup>z</sup> <sub>301</sub>	64.25 <sup>z</sup> <sub>94</sub>
17	8.365 <sup>aa</sup> <sub>297</sub>	51.06 <sub>69</sub>	57.757 <sup>aa</sup> <sub>305</sub>	34.69 <sub>78</sub>	28.17 <sup>aa</sup> <sub>67</sub>	13.09 <sub>142</sub>	58.413 <sup>aa</sup> <sub>321</sub>	63.31 <sup>aa</sup> <sub>93</sub>
27	8.662 <sup>ab</sup> <sub>313</sub>	50.37 <sub>76</sub>	58.062 <sup>ab</sup> <sub>322</sub>	33.91 <sub>82</sub>	28.84 <sup>ab</sup> <sub>72</sub>	11.67 <sub>80</sub>	58.734 <sup>ab</sup> <sub>340</sub>	62.38 <sup>ab</sup> <sub>92</sub>
Okt. 7	8.975 <sup>ac</sup> <sub>327</sub>	49.61 <sub>82</sub>	58.384 <sup>ac</sup> <sub>336</sub>	33.09 <sub>84</sub>	29.56 <sup>ac</sup> <sub>76</sub>	10.87 <sub>15</sub>	59.074 <sup>ac</sup> <sub>354</sub>	61.46 <sup>ac</sup> <sub>87</sub>
17	9.302 <sup>ad</sup> <sub>335</sub>	48.79 <sub>84</sub>	58.720 <sup>ad</sup> <sub>344</sub>	32.25 <sub>83</sub>	30.32 <sup>ad</sup> <sub>76</sub>	10.72 <sub>51</sub>	59.428 <sup>ad</sup> <sub>364</sub>	60.59 <sup>ad</sup> <sub>81</sub>
27	9.637 <sup>ae</sup> <sub>339</sub>	47.95 <sub>85</sub>	59.064 <sup>ae</sup> <sub>348</sub>	31.42 <sub>79</sub>	31.08 <sup>ae</sup> <sub>74</sub>	11.23 <sub>117</sub>	59.792 <sup>ae</sup> <sub>368</sub>	59.78 <sup>ae</sup> <sub>72</sub>
Nov. 6	9.976 <sup>af</sup> <sub>337</sub>	47.10 <sub>81</sub>	59.412 <sup>af</sup> <sub>345</sub>	30.63 <sub>71</sub>	31.82 <sup>af</sup> <sub>69</sub>	12.40 <sub>180</sub>	60.160 <sup>af</sup> <sub>365</sub>	59.06 <sup>af</sup> <sub>59</sub>
16	10.313 <sup>ag</sup> <sub>326</sub>	46.29 <sub>74</sub>	59.757 <sup>ag</sup> <sub>334</sub>	29.92 <sub>61</sub>	32.51 <sup>ag</sup> <sub>64</sub>	14.20 <sub>237</sub>	60.525 <sup>ag</sup> <sub>355</sub>	58.47 <sup>ag</sup> <sub>44</sub>
26	10.639 <sup>ah</sup> <sub>307</sub>	45.55 <sub>63</sub>	60.091 <sup>ah</sup> <sub>315</sub>	29.31 <sub>47</sub>	33.15 <sup>ah</sup> <sub>54</sub>	16.57 <sub>285</sub>	60.880 <sup>ah</sup> <sub>334</sub>	58.03 <sup>ah</sup> <sub>25</sub>
Dez. 6	10.946 <sup>ai</sup> <sub>280</sub>	44.92 <sub>49</sub>	60.406 <sup>ai</sup> <sub>286</sub>	28.84 <sub>31</sub>	33.69 <sup>ai</sup> <sub>42</sub>	19.42 <sub>323</sub>	61.214 <sup>ai</sup> <sub>305</sub>	57.78 <sup>ai</sup> <sub>4</sub>
16	11.226 <sup>aj</sup> <sub>243</sub>	44.43 <sub>33</sub>	60.692 <sup>aj</sup> <sub>249</sub>	28.53 <sub>11</sub>	34.11 <sup>aj</sup> <sub>29</sub>	22.65 <sub>351</sub>	61.519 <sup>aj</sup> <sub>266</sub>	57.74 <sup>aj</sup> <sub>18</sub>
26	11.469 <sup>ak</sup> <sub>199</sub>	44.10 <sub>14</sub>	60.941 <sup>ak</sup> <sub>203</sub>	28.42 <sub>8</sub>	34.40 <sup>ak</sup> <sub>17</sub>	26.16 <sub>367</sub>	61.785 <sup>ak</sup> <sub>218</sub>	57.92 <sup>ak</sup> <sub>39</sub>
36	11.668 <sup>al</sup>	43.96	61.144 <sup>al</sup>	28.50	34.57 <sup>al</sup>	29.83	62.003 <sup>al</sup>	58.31 <sup>al</sup>
Mittl. Ort	7.750	53.72	57.161	38.51	30.64	27.34	57.789	68.78
sec $\delta$ , tg $\delta$	1.099	+0.456	1.134	+0.535	3.321	-3.167	1.200	+0.663
a, a'	+3.6	-8.6	+3.7	-8.6	-0.7	-8.7	+3.9	-8.8
b, b'	-0.01	-0.90	-0.02	-0.90	+0.09	-0.90	-0.02	-0.90

1) Die jährliche Parallaxe (0".100) ist bereits berücksichtigt.



Tag	300) Grb 1374 Caml		303) $\chi$ Carinae		305) $\chi$ Geminorum		306) $\zeta$ Puppis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	7 <sup>h</sup> 53 <sup>m</sup>	+74° 3'	7 <sup>h</sup> 55 <sup>m</sup>	-52° 49'	8 <sup>h</sup> 0 <sup>m</sup>	+27° 56'	8 <sup>h</sup> 1 <sup>m</sup>	-39° 50'
Jan. I	41.18 41.61 43 41.88 27 41.99 11	58.37 260 60.97 279 63.76 287 66.63 285	24.558 123 24.681 48 24.729 26 24.703 98	57.67 362 61.29 359 64.88 345 68.33 322	8.782 189 8.971 135 9.106 78 9.184 21	56.02 11 55.13 31 56.44 49 56.93 63	40.068 137 40.205 77 40.282 15 40.297 44	46.08 335 49.43 329 52.72 314 55.86 291
Febr. 9	41.92 22	69.48 272	24.605 165	71.55 291	9.205 33	57.56 73	40.253 99	58.77 261
März 19	41.70 37	72.20 247	24.440 222	74.46 255	9.172 82	58.29 78	40.154 148	61.38 226
I	41.33 49	74.67 212	24.218 270	77.01 212	9.090 123	59.07 79	40.006 189	63.64 187
II	40.84 58	76.79 171	23.948 307	79.13 166	8.967 153	59.86 75	39.817 219	65.51 144
21	40.26 66	78.50 123	23.641 330	80.79 117	8.814 174	60.61 67	39.598 240	66.95 99
31	39.60 68	79.73 72	23.311 342	81.96 66	8.640 182	61.28 56	39.358 250	67.94 53
Apr. 10	38.92 68	80.45 19	22.969 342	82.62 15	8.458 181	61.84 44	39.108 249	68.47 8
20	38.24 66	80.64 34	22.627 331	82.77 36	8.277 169	62.28 31	38.859 240	68.55 39
30	37.58 60	80.30 84	22.296 311	82.41 86	8.108 148	62.59 17	38.619 223	68.16 82
Mai 10	36.98 52	79.46 131	21.985 281	81.55 133	7.960 121	62.76 4	38.396 198	67.34 125
20	36.46 43	78.15 172	21.704 244	80.22 178	7.839 89	62.80 8	38.198 167	66.09 164
30	36.03 31	76.43 206	21.460 201	78.44 217	7.750 53	62.72 19	38.031 133	64.45 200
Juni 9	35.72 19	74.37 236	21.259 153	76.27 252	7.697 16	62.53 29	37.898 95	62.45 230
19	35.53 7	72.01 258	21.106 102	73.75 281	7.681 22	62.24 36	37.803 55	60.15 254
29	35.46 6	69.43 272	21.004 48	70.94 301	7.703 60	61.88 45	37.748 13	57.61 272
Juli 9	35.52 19	66.71 280	20.956 8	67.93 312	7.763 96	61.43 50	37.735 29	54.89 282
19	35.71 32	63.91 282	20.964 65	64.81 316	7.859 130	60.93 57	37.764 72	52.07 283
29	36.03 43	61.09 278	21.029 120	61.65 309	7.989 163	60.36 63	37.836 114	49.24 276
Aug. 8	36.46 54	58.31 267	21.149 175	58.56 292	8.152 194	59.73 69	37.950 154	46.48 260
18	37.00 64	55.64 251	21.324 227	55.64 266	8.346 221	59.04 75	38.104 194	43.88 235
28	37.64 73	53.13 230	21.551 275	52.98 228	8.567 249	58.29 81	38.298 231	41.53 199
Sept. 7	38.37 81	50.83 203	21.826 320	50.70 183	8.816 273	57.48 87	38.529 264	39.54 157
17	39.18 88	48.80 174	22.146 358	48.87 130	9.089 295	56.61 93	38.793 295	37.97 107
27	40.06 94	47.06 138	22.504 388	47.57 70	9.384 314	55.68 97	39.088 319	36.90 52
Okt. 7	41.00 97	45.68 100	22.892 410	46.87 7	9.698 331	54.71 99	39.407 339	36.38 6
17	41.97 100	44.68 59	23.302 421	46.80 57	10.029 344	53.72 99	39.746 351	36.44 65
27	42.97 100	44.09 13	23.723 421	47.37 121	10.373 351	52.73 95	40.097 355	37.09 124
Nov. 6	43.97 98	43.96 33	24.144 408	48.58 182	10.724 352	51.78 88	40.452 349	38.33 179
16	44.95 95	44.29 80	24.552 383	50.40 236	11.076 344	50.90 78	40.801 334	40.12 228
26	45.90 88	45.09 126	24.935 346	52.76 282	11.420 328	50.12 62	41.135 307	42.40 269
Dez. 6	46.78 78	46.35 170	25.281 297	55.58 320	11.748 302	49.50 45	41.442 272	45.09 301
16	47.56 68	48.05 210	25.578 237	58.78 345	12.050 268	49.05 25	41.714 227	48.10 323
26	48.24 53	50.15 243	25.815 169	62.23 359	12.318 224	48.80 3	41.941 175	51.33 333
36	48.77	52.58	25.984	65.82	12.542	48.77	42.116	54.66
Mittl. Ort	39.15	65.14	22.774	62.25	8.570	60.46	38.987	49.90
sec $\delta$ , tg $\delta$	3.643	+3.503	1.655	-1.319	1.132	+0.531	1.303	-0.835
a, a'	+7.2	-9.5	+1.5	-9.7	+3.7	-10.0	+2.1	-10.1
b, b'	-0.11	-0.88	+0.04	-0.88	-0.02	-0.87	+0.03	-0.86

\*) Bei Stern 305) und 306) lies Jan. 21.



# Obere Kulmination Greenwich

89\*

Tag	307) 27 Lyncis		308) ρ Puppis		309) γ Velorum		311) 20 Puppis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	8 <sup>h</sup> 4 <sup>m</sup>	+51° 39'	8 <sup>h</sup> 5 <sup>m</sup>	-24° 8'	8 <sup>h</sup> 7 <sup>m</sup>	-47° 10'	8 <sup>h</sup> 10 <sup>m</sup>	-15° 37'
Jan. I	20.178 <sup>253</sup>	55.24 <sup>148</sup>	12.672 <sup>148</sup>	38.19 <sup>280</sup>	51.599 <sup>143</sup>	19.95 <sup>353</sup>	48.686 <sup>158</sup>	15.42 <sup>243</sup>
II	20.431 <sup>180</sup>	56.72 <sup>170</sup>	12.820 <sup>95</sup>	40.99 <sup>270</sup>	51.742 <sup>77</sup>	23.48 <sup>350</sup>	48.844 <sup>108</sup>	17.85 <sup>231</sup>
21	20.611 <sup>101</sup>	58.42 <sup>186</sup>	12.915 <sup>43</sup>	43.69 <sup>253</sup>	51.819 <sup>9</sup>	26.98 <sup>338</sup>	48.952 <sup>57</sup>	20.16 <sup>214</sup>
30	20.712 <sup>22</sup>	60.28 <sup>194</sup>	12.958 <sup>10</sup>	46.22 <sup>231</sup>	51.828 <sup>57</sup>	30.36 <sup>317</sup>	49.009 <sup>6</sup>	22.30 <sup>192</sup>
Febr. 9	20.734 <sup>54</sup>	62.22 <sup>193</sup>	12.948 <sup>60</sup>	48.53 <sup>203</sup>	51.771 <sup>118</sup>	33.53 <sup>287</sup>	49.015 <sup>42</sup>	24.22 <sup>165</sup>
19	20.680 <sup>122</sup>	64.15 <sup>185</sup>	12.888 <sup>104</sup>	50.56 <sup>171</sup>	51.653 <sup>172</sup>	36.40 <sup>252</sup>	48.973 <sup>85</sup>	25.87 <sup>137</sup>
März I	20.558 <sup>182</sup>	66.00 <sup>167</sup>	12.784 <sup>140</sup>	52.27 <sup>137</sup>	51.481 <sup>218</sup>	38.92 <sup>213</sup>	48.888 <sup>121</sup>	27.24 <sup>108</sup>
II	20.376 <sup>226</sup>	67.67 <sup>143</sup>	12.644 <sup>167</sup>	53.64 <sup>102</sup>	51.263 <sup>253</sup>	41.05 <sup>168</sup>	48.767 <sup>148</sup>	28.32 <sup>76</sup>
21	20.150 <sup>256</sup>	69.10 <sup>114</sup>	12.477 <sup>186</sup>	54.66 <sup>65</sup>	51.010 <sup>276</sup>	42.73 <sup>121</sup>	48.619 <sup>167</sup>	29.08 <sup>46</sup>
31	19.894 <sup>273</sup>	70.24 <sup>80</sup>	12.291 <sup>194</sup>	55.31 <sup>28</sup>	50.734 <sup>290</sup>	43.94 <sup>73</sup>	48.452 <sup>176</sup>	29.54 <sup>15</sup>
Apr. 10	19.621 <sup>273</sup>	71.04 <sup>45</sup>	12.097 <sup>193</sup>	55.59 <sup>8</sup>	50.444 <sup>291</sup>	44.67 <sup>24</sup>	48.276 <sup>175</sup>	29.69 <sup>14</sup>
20	19.348 <sup>259</sup>	71.49 <sup>9</sup>	11.904 <sup>184</sup>	55.51 <sup>44</sup>	50.153 <sup>284</sup>	44.91 <sup>25</sup>	48.101 <sup>167</sup>	29.55 <sup>44</sup>
30	19.089 <sup>233</sup>	71.58 <sup>27</sup>	11.720 <sup>168</sup>	55.07 <sup>78</sup>	49.869 <sup>266</sup>	44.66 <sup>73</sup>	47.934 <sup>152</sup>	29.11 <sup>71</sup>
Mai 10	18.856 <sup>198</sup>	71.31 <sup>60</sup>	11.552 <sup>146</sup>	54.29 <sup>111</sup>	49.603 <sup>241</sup>	43.93 <sup>119</sup>	47.782 <sup>131</sup>	28.40 <sup>97</sup>
20	18.658 <sup>154</sup>	70.71 <sup>91</sup>	11.406 <sup>119</sup>	53.18 <sup>141</sup>	49.362 <sup>210</sup>	42.74 <sup>162</sup>	47.651 <sup>105</sup>	27.43 <sup>120</sup>
30	18.504 <sup>105</sup>	69.80 <sup>117</sup>	11.287 <sup>88</sup>	51.77 <sup>167</sup>	49.152 <sup>174</sup>	41.12 <sup>201</sup>	47.546 <sup>76</sup>	26.23 <sup>142</sup>
Juni 9	18.399 <sup>52</sup>	68.63 <sup>140</sup>	11.199 <sup>56</sup>	50.10 <sup>190</sup>	48.978 <sup>132</sup>	39.11 <sup>236</sup>	47.470 <sup>45</sup>	24.81 <sup>160</sup>
19	18.347 <sup>3</sup>	67.23 <sup>159</sup>	11.143 <sup>21</sup>	48.20 <sup>208</sup>	48.846 <sup>88</sup>	36.75 <sup>263</sup>	47.425 <sup>12</sup>	23.21 <sup>174</sup>
29	18.350 <sup>57</sup>	65.64 <sup>173</sup>	11.122 <sup>13</sup>	46.12 <sup>220</sup>	48.758 <sup>42</sup>	34.12 <sup>284</sup>	47.413 <sup>20</sup>	21.47 <sup>183</sup>
Juli 9	18.407 <sup>110</sup>	63.91 <sup>183</sup>	11.135 <sup>49</sup>	43.92 <sup>226</sup>	48.716 <sup>6</sup>	31.28 <sup>297</sup>	47.433 <sup>52</sup>	19.64 <sup>187</sup>
19	18.517 <sup>162</sup>	62.08 <sup>190</sup>	11.184 <sup>82</sup>	41.66 <sup>226</sup>	48.722 <sup>55</sup>	28.31 <sup>302</sup>	47.485 <sup>84</sup>	17.77 <sup>185</sup>
29	18.679 <sup>210</sup>	60.18 <sup>192</sup>	11.266 <sup>116</sup>	39.40 <sup>217</sup>	48.777 <sup>104</sup>	25.29 <sup>296</sup>	47.569 <sup>115</sup>	15.92 <sup>177</sup>
Aug. 8	18.889 <sup>256</sup>	58.26 <sup>191</sup>	11.382 <sup>149</sup>	37.23 <sup>202</sup>	48.881 <sup>151</sup>	22.33 <sup>281</sup>	47.684 <sup>145</sup>	14.15 <sup>162</sup>
18	19.145 <sup>298</sup>	56.35 <sup>186</sup>	11.531 <sup>179</sup>	35.21 <sup>178</sup>	49.032 <sup>198</sup>	19.52 <sup>257</sup>	47.829 <sup>174</sup>	12.53 <sup>141</sup>
28	19.443 <sup>337</sup>	54.49 <sup>179</sup>	11.710 <sup>209</sup>	33.43 <sup>147</sup>	49.230 <sup>241</sup>	16.95 <sup>222</sup>	48.003 <sup>201</sup>	11.12 <sup>113</sup>
Sept. 7	19.780 <sup>373</sup>	52.70 <sup>168</sup>	11.919 <sup>236</sup>	31.96 <sup>110</sup>	49.471 <sup>282</sup>	14.73 <sup>180</sup>	48.204 <sup>227</sup>	9.99 <sup>80</sup>
17	20.153 <sup>405</sup>	51.02 <sup>155</sup>	12.155 <sup>261</sup>	30.86 <sup>67</sup>	49.753 <sup>317</sup>	12.93 <sup>128</sup>	48.431 <sup>251</sup>	9.19 <sup>42</sup>
27	20.558 <sup>432</sup>	49.47 <sup>138</sup>	12.416 <sup>282</sup>	30.19 <sup>20</sup>	50.070 <sup>347</sup>	11.65 <sup>72</sup>	48.682 <sup>272</sup>	8.77 <sup>1</sup>
Okt. 7	20.990 <sup>455</sup>	48.09 <sup>117</sup>	12.698 <sup>300</sup>	29.99 <sup>29</sup>	50.417 <sup>370</sup>	10.93 <sup>11</sup>	48.954 <sup>289</sup>	8.76 <sup>43</sup>
17	21.445 <sup>471</sup>	46.92 <sup>93</sup>	12.998 <sup>312</sup>	30.28 <sup>79</sup>	50.787 <sup>384</sup>	10.82 <sup>51</sup>	49.243 <sup>302</sup>	9.19 <sup>85</sup>
27	21.916 <sup>480</sup>	45.99 <sup>67</sup>	13.310 <sup>318</sup>	31.07 <sup>128</sup>	51.171 <sup>389</sup>	11.33 <sup>114</sup>	49.545 <sup>310</sup>	10.04 <sup>126</sup>
Nov. 6	22.396 <sup>479</sup>	45.32 <sup>36</sup>	13.628 <sup>316</sup>	32.35 <sup>171</sup>	51.560 <sup>382</sup>	12.47 <sup>173</sup>	49.855 <sup>310</sup>	11.30 <sup>164</sup>
16	22.875 <sup>468</sup>	44.96 <sup>3</sup>	13.944 <sup>306</sup>	34.06 <sup>210</sup>	51.942 <sup>364</sup>	14.20 <sup>226</sup>	50.165 <sup>303</sup>	12.94 <sup>196</sup>
26	23.343 <sup>445</sup>	44.93 <sup>31</sup>	14.250 <sup>288</sup>	36.16 <sup>242</sup>	52.306 <sup>335</sup>	16.46 <sup>272</sup>	50.468 <sup>287</sup>	14.90 <sup>221</sup>
Dez. 6	23.788 <sup>409</sup>	45.24 <sup>66</sup>	14.538 <sup>260</sup>	38.58 <sup>264</sup>	52.641 <sup>294</sup>	19.18 <sup>308</sup>	50.755 <sup>262</sup>	17.11 <sup>237</sup>
16	24.197 <sup>361</sup>	45.90 <sup>99</sup>	14.798 <sup>223</sup>	41.22 <sup>277</sup>	52.935 <sup>244</sup>	22.26 <sup>335</sup>	51.017 <sup>229</sup>	19.48 <sup>247</sup>
26	24.558 <sup>301</sup>	46.89 <sup>130</sup>	15.021 <sup>181</sup>	43.99 <sup>283</sup>	53.179 <sup>185</sup>	25.61 <sup>349</sup>	51.246 <sup>189</sup>	21.95 <sup>247</sup>
36	24.859	48.19	15.202	46.82	53.364	29.10	51.435	24.42
Mittl. Ort	19.720	61.70	12.048	40.34	50.207	25.14	48.229	16.73
sec δ, tg δ	1.612	+1.265	1.096	-0.448	1.471	-1.079	1.038	-0.280
a, a'	+4.5	-10.3	+2.6	-10.4	+1.9	-10.6	+2.8	-10.8
b, b'	-0.04	-0.86	+0.02	-0.85	+0.04	-0.85	+0.01	-0.84



## Scheinbare Sternörter 1945

Tag	310) Br 1147 Caml		312) $\beta$ Cancri		314) $\gamma$ Lyncis		315) $\epsilon$ Carinae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	8 <sup>h</sup> 12 <sup>m</sup>	+75° 55'	8 <sup>h</sup> 13 <sup>m</sup>	+9° 21'	8 <sup>h</sup> 19 <sup>m</sup>	+43° 21'	8 <sup>h</sup> 21 <sup>m</sup>	-59° 19'
Jan. I	43.39 55	33.16 255	32.211 179	21.06 108	4.882 245	52.18 93	25.431 171	47.05 369
II	43.94 37	35.71 279	32.390 131	19.98 90	5.127 181	53.11 117	25.602 85	50.74 373
21	44.31 18	38.50 292	32.521 79	19.08 70	5.308 113	54.28 137	25.687 2	54.47 366
30	44.49 1	41.42 294	32.600 28	18.38 51	5.421 45	55.65 151	25.685 87	58.13 349
Febr. 9	44.48 19	44.36 285	32.628 21	17.87 31	5.466 21	57.16 157	25.598 166	61.62 325
19	44.29 36	47.21 265	32.607 66	17.56 14	5.445 83	58.73 156	25.432 236	64.87 292
März I	43.93 50	49.86 233	32.541 103	17.42 1	5.362 135	60.29 148	25.196 296	67.79 252
II	43.43 63	52.19 193	32.438 131	17.43 14	5.227 175	61.77 132	24.900 344	70.31 209
21	42.80 71	54.12 147	32.307 150	17.57 25	5.052 205	63.09 112	24.556 379	72.40 162
31	42.09 76	55.59 95	32.157 160	17.82 33	4.847 221	64.21 87	24.177 400	74.02 111
Apr. 10	41.33 77	56.54 42	31.997 160	18.15 39	4.626 224	65.08 59	23.777 409	75.13 59
20	40.56 76	56.96 12	31.837 152	18.54 45	4.402 215	65.67 31	23.368 406	75.72 7
30	39.80 71	56.84 65	31.685 135	18.99 50	4.187 195	65.98 1	22.962 390	75.79 45
Mai 10	39.09 64	56.19 115	31.550 113	19.49 53	3.992 167	65.99 26	22.572 364	75.34 96
20	38.45 53	55.04 159	31.437 87	20.02 56	3.825 133	65.73 53	22.208 330	74.38 145
30	37.92 42	53.45 198	31.350 57	20.58 58	3.692 93	65.20 76	21.878 287	72.93 189
Juni 9	37.50 29	51.47 232	31.293 26	21.16 59	3.599 49	64.44 98	21.591 237	71.04 229
19	37.21 16	49.15 258	31.267 7	21.75 60	3.550 5	63.46 115	21.354 183	68.75 263
29	37.05 1	46.57 277	31.274 39	22.35 58	3.545 40	62.31 130	21.171 122	66.12 291
Juli 9	37.04 13	43.80 289	31.313 70	22.93 55	3.585 84	61.01 141	21.049 58	63.21 309
19	37.17 26	40.91 294	31.383 100	23.48 49	3.669 126	59.60 150	20.991 8	60.12 318
29	37.43 41	37.97 294	31.483 130	23.97 40	3.795 168	58.10 157	20.999 75	56.94 318
Aug. 8	37.84 53	35.03 287	31.613 157	24.37 29	3.963 206	56.53 160	21.074 143	53.76 308
18	38.37 65	32.16 273	31.770 184	24.66 15	4.169 243	54.93 162	21.217 209	50.68 287
28	39.02 76	29.43 255	31.954 209	24.81 2	4.412 277	53.31 161	21.426 273	47.81 256
Sept. 7	39.78 86	26.88 231	32.163 232	24.79 22	4.689 308	51.70 157	21.699 331	45.25 214
17	40.64 94	24.57 201	32.395 255	24.57 42	4.997 339	50.13 152	22.030 384	43.11 165
27	41.58 101	22.56 168	32.650 275	24.15 64	5.336 365	48.61 143	22.414 427	41.46 107
Okt. 7	42.59 107	20.88 129	32.925 293	23.51 85	5.701 387	47.18 131	22.841 461	40.39 45
17	43.66 111	19.59 87	33.218 306	22.66 105	6.088 406	45.87 116	23.302 482	39.94 20
27	44.77 112	18.72 41	33.524 315	21.61 121	6.494 417	44.71 96	23.784 489	40.14 86
Nov. 6	45.89 111	18.31 7	33.839 318	20.40 134	6.911 421	43.75 74	24.273 481	41.00 151
16	47.00 108	18.38 57	34.157 313	19.06 141	7.332 416	43.01 47	24.754 458	42.51 210
26	48.08 102	18.95 106	34.470 300	17.65 144	7.748 399	42.54 19	25.212 419	44.61 263
Dez. 6	49.10 92	20.01 153	34.770 278	16.21 140	8.147 372	42.35 13	25.631 365	47.24 306
16	50.02 81	21.54 197	35.048 248	14.81 133	8.519 334	42.48 44	25.996 299	50.30 339
26	50.83 65	23.51 235	35.206 210	13.48 119	8.853 283	42.92 73	26.295 223	53.69 362
36	51.48	25.86	35.506	12.29	9.136	43.65	26.518	57.31
Mittl. Ort	41.15	40.87	32.005	23.22	4.616	58.43	23.201	54.85
sec $\delta$ , tg $\delta$	4.113	+3.989	1.013	+0.165	1.376	+0.945	1.961	-1.686
a, a'	+7.5	-11.0	+3.3	-11.0	+4.1	-11.4	+1.2	-11.6
b, b'	-0.15	-0.84	-0.01	-0.84	-0.04	-0.82	+0.07	-0.82



# Obere Kulmination Greenwich

Tag	318) ♀ Chamael.		316) Br 1197 Hydra		317) ♀ Ursae maj.		320) Grb 1450 Lynx	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	8 <sup>h</sup> 22 <sup>m</sup>	−77° 18'	8 <sup>h</sup> 22 <sup>m</sup>	−3° 43'	8 <sup>h</sup> 25 <sup>m</sup>	+60° 53'	8 <sup>h</sup> 29 <sup>m</sup>	+38° 12'
Jan. I	26.57 <sup>a</sup> <sub>23</sub>	18.45 <sup>a</sup> <sub>365</sub>	55.010 <sup>a</sup> <sub>176</sub>	32.66 <sup>a</sup> <sub>186</sub>	43.35 <sup>a</sup> <sub>34</sub>	66.88 <sup>a</sup> <sub>181</sub>	20.970 <sup>a</sup> <sub>241</sub>	17.81 <sup>a</sup> <sub>56</sub>
II	26.80 <sup>b</sup> <sub>5</sub>	22.10 <sup>b</sup> <sub>374</sub>	55.186 <sup>b</sup> <sub>129</sub>	34.52 <sup>b</sup> <sub>170</sub>	43.69 <sup>b</sup> <sub>25</sub>	68.69 <sup>b</sup> <sub>209</sub>	21.211 <sup>b</sup> <sub>183</sub>	18.37 <sup>b</sup> <sub>83</sub>
21	26.85 <sup>c</sup> <sub>15</sub>	25.84 <sup>c</sup> <sub>372</sub>	55.315 <sup>c</sup> <sub>79</sub>	36.22 <sup>c</sup> <sub>152</sub>	43.94 <sup>c</sup> <sub>15</sub>	70.78 <sup>c</sup> <sub>228</sub>	21.394 <sup>c</sup> <sub>120</sub>	19.20 <sup>c</sup> <sub>104</sub>
30	26.70 <sup>d</sup> <sub>32</sub>	29.56 <sup>d</sup> <sub>360</sub>	55.394 <sup>d</sup> <sub>28</sub>	37.74 <sup>d</sup> <sub>130</sub>	44.09 <sup>d</sup> <sub>6</sub>	73.06 <sup>d</sup> <sub>238</sub>	21.514 <sup>d</sup> <sub>57</sub>	20.24 <sup>d</sup> <sub>121</sub>
Febr. 9	26.38 <sup>e</sup> <sub>50</sub>	33.16 <sup>e</sup> <sub>339</sub>	55.422 <sup>e</sup> <sub>19</sub>	39.04 <sup>e</sup> <sub>108</sub>	44.15 <sup>e</sup> <sub>4</sub>	75.44 <sup>e</sup> <sub>238</sub>	21.571 <sup>e</sup> <sub>6</sub>	21.45 <sup>e</sup> <sub>132</sub>
19	25.88 <sup>f</sup> <sub>64</sub>	36.55 <sup>f</sup> <sub>310</sub>	55.403 <sup>f</sup> <sub>63</sub>	40.12 <sup>f</sup> <sub>83</sub>	44.11 <sup>f</sup> <sub>14</sub>	77.82 <sup>f</sup> <sub>229</sub>	21.565 <sup>f</sup> <sub>63</sub>	22.77 <sup>f</sup> <sub>135</sub>
März I	25.24 <sup>g</sup> <sub>78</sub>	39.65 <sup>g</sup> <sub>274</sub>	55.340 <sup>g</sup> <sub>100</sub>	40.95 <sup>g</sup> <sub>60</sub>	43.97 <sup>g</sup> <sub>21</sub>	80.11 <sup>g</sup> <sub>209</sub>	21.502 <sup>g</sup> <sub>113</sub>	24.12 <sup>g</sup> <sub>132</sub>
II	24.46 <sup>h</sup> <sub>89</sub>	42.39 <sup>h</sup> <sub>233</sub>	55.240 <sup>h</sup> <sub>129</sub>	41.55 <sup>h</sup> <sub>37</sub>	43.76 <sup>h</sup> <sub>27</sub>	82.20 <sup>h</sup> <sub>182</sub>	21.389 <sup>h</sup> <sub>152</sub>	25.44 <sup>h</sup> <sub>122</sub>
21	23.57 <sup>i</sup> <sub>96</sub>	44.72 <sup>i</sup> <sub>187</sub>	55.111 <sup>i</sup> <sub>149</sub>	41.92 <sup>i</sup> <sub>15</sub>	43.49 <sup>i</sup> <sub>32</sub>	84.02 <sup>i</sup> <sub>147</sub>	21.237 <sup>i</sup> <sub>181</sub>	26.66 <sup>i</sup> <sub>108</sub>
31	22.61 <sup>j</sup> <sub>102</sub>	46.59 <sup>j</sup> <sub>138</sub>	54.962 <sup>j</sup> <sub>159</sub>	42.07 <sup>j</sup> <sub>6</sub>	43.17 <sup>j</sup> <sub>35</sub>	85.49 <sup>j</sup> <sub>108</sub>	21.056 <sup>j</sup> <sub>198</sub>	27.74 <sup>j</sup> <sub>88</sub>
Apr. 10	21.59 <sup>k</sup> <sub>104</sub>	47.97 <sup>k</sup> <sub>86</sub>	54.803 <sup>k</sup> <sub>160</sub>	42.01 <sup>k</sup> <sub>25</sub>	42.82 <sup>k</sup> <sub>36</sub>	86.57 <sup>k</sup> <sub>65</sub>	20.858 <sup>k</sup> <sub>202</sub>	28.62 <sup>k</sup> <sub>66</sub>
20	20.55 <sup>l</sup> <sub>105</sub>	48.83 <sup>l</sup> <sub>33</sub>	54.643 <sup>l</sup> <sub>154</sub>	41.76 <sup>l</sup> <sub>43</sub>	42.46 <sup>l</sup> <sub>35</sub>	87.22 <sup>l</sup> <sub>22</sub>	20.656 <sup>l</sup> <sub>196</sub>	29.28 <sup>l</sup> <sub>43</sub>
30	19.50 <sup>m</sup> <sub>103</sub>	49.16 <sup>m</sup> <sub>20</sub>	54.489 <sup>m</sup> <sub>140</sub>	41.33 <sup>m</sup> <sub>59</sub>	42.11 <sup>m</sup> <sub>32</sub>	87.44 <sup>m</sup> <sub>23</sub>	20.460 <sup>m</sup> <sub>179</sub>	29.71 <sup>m</sup> <sub>17</sub>
Mai 10	18.47 <sup>n</sup> <sub>98</sub>	48.96 <sup>n</sup> <sub>74</sub>	54.349 <sup>n</sup> <sub>120</sub>	40.74 <sup>n</sup> <sub>76</sub>	41.79 <sup>n</sup> <sub>29</sub>	87.21 <sup>n</sup> <sub>65</sub>	20.281 <sup>n</sup> <sub>155</sub>	29.88 <sup>n</sup> <sub>7</sub>
20	17.49 <sup>o</sup> <sub>91</sub>	48.22 <sup>o</sup> <sub>124</sub>	54.229 <sup>o</sup> <sub>96</sub>	39.98 <sup>o</sup> <sub>89</sub>	41.50 <sup>o</sup> <sub>24</sub>	86.56 <sup>o</sup> <sub>104</sub>	20.126 <sup>o</sup> <sub>125</sub>	29.81 <sup>o</sup> <sub>30</sub>
30	16.58 <sup>p</sup> <sub>82</sub>	46.98 <sup>p</sup> <sub>172</sub>	54.133 <sup>p</sup> <sub>69</sub>	39.09 <sup>p</sup> <sub>102</sub>	41.26 <sup>p</sup> <sub>19</sub>	85.52 <sup>p</sup> <sub>139</sub>	20.001 <sup>p</sup> <sub>89</sub>	29.51 <sup>p</sup> <sub>51</sub>
Juni 9	15.76 <sup>q</sup> <sub>72</sub>	45.26 <sup>q</sup> <sub>216</sub>	54.064 <sup>q</sup> <sub>40</sub>	38.07 <sup>q</sup> <sub>112</sub>	41.07 <sup>q</sup> <sub>12</sub>	84.13 <sup>q</sup> <sub>169</sub>	19.912 <sup>q</sup> <sub>51</sub>	29.00 <sup>q</sup> <sub>71</sub>
19	15.04 <sup>r</sup> <sub>59</sub>	43.10 <sup>r</sup> <sub>253</sub>	54.024 <sup>r</sup> <sub>9</sub>	36.95 <sup>r</sup> <sub>119</sub>	40.95 <sup>r</sup> <sub>5</sub>	82.44 <sup>r</sup> <sub>195</sub>	19.861 <sup>r</sup> <sub>11</sub>	28.29 <sup>r</sup> <sub>87</sub>
29	14.45 <sup>s</sup> <sub>45</sub>	40.57 <sup>s</sup> <sub>285</sub>	54.015 <sup>s</sup> <sub>21</sub>	35.76 <sup>s</sup> <sub>124</sub>	40.90 <sup>s</sup> <sub>1</sub>	80.49 <sup>s</sup> <sub>214</sub>	19.850 <sup>s</sup> <sub>29</sub>	27.42 <sup>s</sup> <sub>102</sub>
Juli 9	14.00 <sup>t</sup> <sub>29</sub>	37.72 <sup>t</sup> <sub>307</sub>	54.036 <sup>t</sup> <sub>52</sub>	34.52 <sup>t</sup> <sub>124</sub>	40.91 <sup>t</sup> <sub>8</sub>	78.35 <sup>t</sup> <sub>230</sub>	19.879 <sup>t</sup> <sub>69</sub>	26.40 <sup>t</sup> <sub>114</sub>
19	13.71 <sup>u</sup> <sub>13</sub>	34.65 <sup>u</sup> <sub>322</sub>	54.088 <sup>u</sup> <sub>82</sub>	33.28 <sup>u</sup> <sub>120</sub>	40.99 <sup>u</sup> <sub>14</sub>	76.05 <sup>u</sup> <sub>240</sub>	19.948 <sup>u</sup> <sub>108</sub>	25.26 <sup>u</sup> <sub>125</sub>
29	13.58 <sup>v</sup> <sub>3</sub>	31.43 <sup>v</sup> <sub>326</sub>	54.170 <sup>v</sup> <sub>111</sub>	32.08 <sup>v</sup> <sub>112</sub>	41.13 <sup>v</sup> <sub>21</sub>	73.65 <sup>v</sup> <sub>244</sub>	20.056 <sup>v</sup> <sub>145</sub>	24.01 <sup>v</sup> <sub>132</sub>
Aug. 8	13.61 <sup>w</sup> <sub>21</sub>	28.17 <sup>w</sup> <sub>319</sub>	54.281 <sup>w</sup> <sub>139</sub>	30.96 <sup>w</sup> <sub>99</sub>	41.34 <sup>w</sup> <sub>27</sub>	71.21 <sup>w</sup> <sub>244</sub>	20.201 <sup>w</sup> <sub>181</sub>	22.69 <sup>w</sup> <sub>139</sub>
18	13.82 <sup>x</sup> <sub>37</sub>	24.98 <sup>x</sup> <sub>302</sub>	54.420 <sup>x</sup> <sub>167</sub>	29.97 <sup>x</sup> <sub>81</sub>	41.61 <sup>x</sup> <sub>33</sub>	68.77 <sup>x</sup> <sub>239</sub>	20.382 <sup>x</sup> <sub>215</sub>	21.30 <sup>x</sup> <sub>144</sub>
28	14.19 <sup>y</sup> <sub>53</sub>	21.96 <sup>y</sup> <sub>274</sub>	54.587 <sup>y</sup> <sub>193</sub>	29.16 <sup>y</sup> <sub>59</sub>	41.94 <sup>y</sup> <sub>39</sub>	66.38 <sup>y</sup> <sub>231</sub>	20.597 <sup>y</sup> <sub>247</sub>	19.86 <sup>y</sup> <sub>147</sub>
Sept. 7	14.72 <sup>z</sup> <sub>67</sub>	19.22 <sup>z</sup> <sub>236</sub>	54.780 <sup>z</sup> <sub>218</sub>	28.57 <sup>z</sup> <sub>32</sub>	42.33 <sup>z</sup> <sub>43</sub>	64.07 <sup>z</sup> <sub>216</sub>	20.844 <sup>z</sup> <sub>278</sub>	18.39 <sup>z</sup> <sub>148</sub>
17	15.39 <sup>aa</sup> <sub>80</sub>	16.86 <sup>aa</sup> <sub>189</sub>	54.998 <sup>aa</sup> <sub>242</sub>	28.25 <sup>aa</sup> <sub>1</sub>	42.76 <sup>aa</sup> <sub>48</sub>	61.91 <sup>aa</sup> <sub>198</sub>	21.122 <sup>aa</sup> <sub>307</sub>	16.91 <sup>aa</sup> <sub>147</sub>
27	16.19 <sup>ab</sup> <sub>91</sub>	14.97 <sup>ab</sup> <sub>134</sub>	55.240 <sup>ab</sup> <sub>263</sub>	28.24 <sup>ab</sup> <sub>30</sub>	43.24 <sup>ab</sup> <sub>52</sub>	59.93 <sup>ab</sup> <sub>177</sub>	21.429 <sup>ab</sup> <sub>333</sub>	15.44 <sup>ab</sup> <sub>144</sub>
Okt. 7	17.10 <sup>ac</sup> <sub>97</sub>	13.63 <sup>ac</sup> <sub>72</sub>	55.503 <sup>ac</sup> <sub>282</sub>	28.54 <sup>ac</sup> <sub>64</sub>	43.76 <sup>ac</sup> <sub>55</sub>	58.16 <sup>ac</sup> <sub>149</sub>	21.762 <sup>ac</sup> <sub>356</sub>	14.00 <sup>ac</sup> <sub>137</sub>
17	18.07 <sup>ad</sup> <sub>101</sub>	12.91 <sup>ad</sup> <sub>6</sub>	55.785 <sup>ad</sup> <sub>297</sub>	29.18 <sup>ad</sup> <sub>96</sub>	44.31 <sup>ad</sup> <sub>57</sub>	56.67 <sup>ad</sup> <sub>119</sub>	22.118 <sup>ad</sup> <sub>376</sub>	12.63 <sup>ad</sup> <sub>127</sub>
27	19.08 <sup>ae</sup> <sub>102</sub>	12.85 <sup>ae</sup> <sub>60</sub>	56.082 <sup>ae</sup> <sub>307</sub>	30.14 <sup>ae</sup> <sub>126</sub>	44.88 <sup>ae</sup> <sub>59</sub>	55.48 <sup>ae</sup> <sub>83</sub>	22.494 <sup>ae</sup> <sub>388</sub>	11.36 <sup>ae</sup> <sub>114</sub>
Nov. 6	20.10 <sup>af</sup> <sub>99</sub>	13.45 <sup>af</sup> <sub>126</sub>	56.389 <sup>af</sup> <sub>311</sub>	31.40 <sup>af</sup> <sub>153</sub>	45.47 <sup>af</sup> <sub>60</sub>	54.65 <sup>af</sup> <sub>45</sub>	22.882 <sup>af</sup> <sub>395</sub>	10.22 <sup>af</sup> <sub>96</sub>
16	21.09 <sup>ag</sup> <sub>92</sub>	14.71 <sup>ag</sup> <sub>187</sub>	56.700 <sup>ag</sup> <sub>307</sub>	32.93 <sup>ag</sup> <sub>174</sub>	46.07 <sup>ag</sup> <sub>59</sub>	54.20 <sup>ag</sup> <sub>5</sub>	23.277 <sup>ag</sup> <sub>392</sub>	9.26 <sup>ag</sup> <sub>74</sub>
26	22.01 <sup>ah</sup> <sub>82</sub>	16.58 <sup>ah</sup> <sub>243</sub>	57.007 <sup>ah</sup> <sub>294</sub>	34.67 <sup>ah</sup> <sub>189</sub>	46.66 <sup>ah</sup> <sub>56</sub>	54.15 <sup>ah</sup> <sub>38</sub>	23.669 <sup>ah</sup> <sub>380</sub>	8.52 <sup>ah</sup> <sub>49</sub>
Dez. 6	22.83 <sup>ai</sup> <sub>68</sub>	19.01 <sup>ai</sup> <sub>291</sub>	57.301 <sup>ai</sup> <sub>274</sub>	36.56 <sup>ai</sup> <sub>196</sub>	47.22 <sup>ai</sup> <sub>53</sub>	54.53 <sup>ai</sup> <sub>81</sub>	24.049 <sup>ai</sup> <sub>356</sub>	8.03 <sup>ai</sup> <sub>21</sub>
16	23.51 <sup>aj</sup> <sub>53</sub>	21.92 <sup>aj</sup> <sub>328</sub>	57.575 <sup>aj</sup> <sub>244</sub>	38.52 <sup>aj</sup> <sub>198</sub>	47.75 <sup>aj</sup> <sub>47</sub>	55.34 <sup>aj</sup> <sub>122</sub>	24.405 <sup>aj</sup> <sub>322</sub>	7.82 <sup>aj</sup> <sub>8</sub>
26	24.04 <sup>ak</sup> <sub>34</sub>	25.20 <sup>ak</sup> <sub>355</sub>	57.819 <sup>ak</sup> <sub>206</sub>	40.50 <sup>ak</sup> <sub>193</sub>	48.22 <sup>ak</sup> <sub>39</sub>	56.56 <sup>ak</sup> <sub>159</sub>	24.727 <sup>ak</sup> <sub>278</sub>	7.90 <sup>ak</sup> <sub>38</sub>
36	24.38 <sup>al</sup>	28.75 <sup>al</sup>	58.025 <sup>al</sup>	42.43 <sup>al</sup>	48.61 <sup>al</sup>	58.15 <sup>al</sup>	25.005 <sup>al</sup>	8.28 <sup>al</sup>
Mittl. Ort	19.86	27.80	54.731	32.72	42.68	74.66	20.787	23.73
sec δ, tg δ	4.551	−4.440	1.002	−0.065	2.057	+1.797	1.273	+0.787
a, a'	−1.8	−11.7	+3.0	−11.7	+5.0	−11.9	+3.9	−12.2
b, b'	+0.17	−0.81	0.00	−0.81	−0.07	−0.80	−0.03	−0.80



## Scheinbare Sternörter 1945

Tag	321) $\eta$ Cancri		1227) $\sigma$ Velorum		327) $\alpha$ Pyxidid		326) $\delta$ Cancri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	8 <sup>h</sup> 29 <sup>m</sup>	+20° 37'	8 <sup>h</sup> 38 <sup>m</sup>	-52° 43'	8 <sup>h</sup> 41 <sup>m</sup>	-32° 59'	8 <sup>h</sup> 41 <sup>m</sup>	+18° 21'
Jan. I	31.938 <sup>207</sup>	42.17 <sup>48</sup>	44.625 <sup>193</sup>	24.34 <sup>359</sup>	23.561 <sup>185</sup>	7.67 <sup>315</sup>	33.794 <sup>215</sup>	24.77 <sup>68</sup>
II	32.145 <sup>158</sup>	41.69 <sup>25</sup>	44.818 <sup>121</sup>	27.93 <sup>366</sup>	23.746 <sup>131</sup>	10.82 <sup>313</sup>	34.009 <sup>167</sup>	24.09 <sup>44</sup>
21	32.303 <sup>104</sup>	41.44 <sup>4</sup>	44.959 <sup>47</sup>	31.59 <sup>360</sup>	23.877 <sup>75</sup>	13.95 <sup>302</sup>	34.176 <sup>115</sup>	23.65 <sup>22</sup>
30*)	32.407 <sup>50</sup>	41.40 <sup>16</sup>	44.986 <sup>27</sup>	35.19 <sup>346</sup>	23.952 <sup>18</sup>	16.97 <sup>284</sup>	34.291 <sup>61</sup>	23.43 <sup>1</sup>
Febr. 9	32.457 <sup>3</sup>	41.56 <sup>33</sup>	44.959 <sup>97</sup>	38.65 <sup>323</sup>	23.970 <sup>36</sup>	19.81 <sup>259</sup>	34.352 <sup>9</sup>	23.42 <sup>18</sup>
19	32.454 <sup>52</sup>	41.89 <sup>45</sup>	44.862 <sup>160</sup>	41.88 <sup>292</sup>	23.934 <sup>85</sup>	22.40 <sup>229</sup>	34.361 <sup>40</sup>	23.60 <sup>33</sup>
März I	32.402 <sup>93</sup>	42.34 <sup>55</sup>	44.702 <sup>214</sup>	44.80 <sup>255</sup>	23.849 <sup>128</sup>	24.69 <sup>195</sup>	34.321 <sup>82</sup>	23.93 <sup>45</sup>
II	32.309 <sup>126</sup>	42.89 <sup>59</sup>	44.488 <sup>259</sup>	47.35 <sup>214</sup>	23.721 <sup>162</sup>	26.64 <sup>158</sup>	34.239 <sup>115</sup>	24.38 <sup>53</sup>
21	32.183 <sup>148</sup>	43.48 <sup>60</sup>	44.229 <sup>291</sup>	49.49 <sup>169</sup>	23.559 <sup>186</sup>	28.22 <sup>118</sup>	34.124 <sup>140</sup>	24.91 <sup>56</sup>
31	32.035 <sup>162</sup>	44.08 <sup>59</sup>	43.938 <sup>312</sup>	51.18 <sup>122</sup>	23.373 <sup>202</sup>	29.40 <sup>77</sup>	33.984 <sup>155</sup>	25.47 <sup>57</sup>
Apr. 10	31.873 <sup>165</sup>	44.67 <sup>54</sup>	43.626 <sup>323</sup>	52.40 <sup>71</sup>	23.171 <sup>208</sup>	30.17 <sup>36</sup>	33.829 <sup>159</sup>	26.04 <sup>55</sup>
20	31.708 <sup>159</sup>	45.21 <sup>47</sup>	43.303 <sup>323</sup>	53.11 <sup>21</sup>	22.963 <sup>207</sup>	30.53 <sup>5</sup>	33.670 <sup>156</sup>	26.59 <sup>51</sup>
30	31.549 <sup>144</sup>	45.68 <sup>40</sup>	42.980 <sup>313</sup>	53.32 <sup>30</sup>	22.756 <sup>196</sup>	30.48 <sup>46</sup>	33.514 <sup>143</sup>	27.10 <sup>45</sup>
Mai 10	31.405 <sup>124</sup>	46.08 <sup>32</sup>	42.667 <sup>293</sup>	53.02 <sup>79</sup>	22.560 <sup>179</sup>	30.02 <sup>84</sup>	33.371 <sup>125</sup>	27.55 <sup>40</sup>
20	31.281 <sup>98</sup>	46.40 <sup>25</sup>	42.374 <sup>268</sup>	52.23 <sup>126</sup>	22.381 <sup>158</sup>	29.18 <sup>122</sup>	33.246 <sup>101</sup>	27.95 <sup>33</sup>
30	31.183 <sup>68</sup>	46.65 <sup>16</sup>	42.106 <sup>234</sup>	50.97 <sup>170</sup>	22.223 <sup>132</sup>	27.96 <sup>156</sup>	33.145 <sup>74</sup>	28.28 <sup>26</sup>
Juni 9	31.115 <sup>37</sup>	46.81 <sup>9</sup>	41.872 <sup>195</sup>	49.27 <sup>209</sup>	22.091 <sup>102</sup>	26.40 <sup>185</sup>	33.071 <sup>45</sup>	28.54 <sup>19</sup>
19	31.078 <sup>4</sup>	46.90 <sup>2</sup>	41.677 <sup>151</sup>	47.18 <sup>244</sup>	21.989 <sup>70</sup>	24.55 <sup>211</sup>	33.026 <sup>14</sup>	28.73 <sup>13</sup>
29	31.074 <sup>29</sup>	46.92 <sup>6</sup>	41.526 <sup>103</sup>	44.74 <sup>272</sup>	21.919 <sup>36</sup>	22.44 <sup>230</sup>	33.012 <sup>18</sup>	28.86 <sup>5</sup>
Juli 9	31.103 <sup>62</sup>	46.86 <sup>14</sup>	41.423 <sup>53</sup>	42.02 <sup>291</sup>	21.883 <sup>0</sup>	20.14 <sup>243</sup>	33.030 <sup>49</sup>	28.91 <sup>3</sup>
19	31.165 <sup>93</sup>	46.72 <sup>21</sup>	41.370 <sup>0</sup>	39.11 <sup>303</sup>	21.883 <sup>36</sup>	17.71 <sup>249</sup>	33.079 <sup>80</sup>	28.88 <sup>12</sup>
29	31.258 <sup>125</sup>	46.51 <sup>31</sup>	41.370 <sup>56</sup>	36.08 <sup>305</sup>	21.919 <sup>73</sup>	15.22 <sup>247</sup>	33.159 <sup>110</sup>	28.76 <sup>22</sup>
Aug. 8	31.383 <sup>153</sup>	46.20 <sup>41</sup>	41.426 <sup>110</sup>	33.03 <sup>297</sup>	21.992 <sup>109</sup>	12.75 <sup>236</sup>	33.269 <sup>139</sup>	28.54 <sup>32</sup>
18	31.536 <sup>182</sup>	45.79 <sup>52</sup>	41.536 <sup>166</sup>	30.06 <sup>279</sup>	22.101 <sup>147</sup>	10.39 <sup>217</sup>	33.408 <sup>168</sup>	28.22 <sup>45</sup>
28	31.718 <sup>209</sup>	45.27 <sup>64</sup>	41.702 <sup>220</sup>	27.27 <sup>250</sup>	22.248 <sup>182</sup>	8.22 <sup>189</sup>	33.576 <sup>195</sup>	27.77 <sup>59</sup>
Sept. 7	31.927 <sup>235</sup>	44.63 <sup>77</sup>	41.922 <sup>271</sup>	24.77 <sup>212</sup>	22.430 <sup>217</sup>	6.33 <sup>153</sup>	33.771 <sup>222</sup>	27.18 <sup>73</sup>
17	32.162 <sup>260</sup>	43.86 <sup>89</sup>	42.193 <sup>318</sup>	22.65 <sup>166</sup>	22.647 <sup>250</sup>	4.80 <sup>110</sup>	33.993 <sup>248</sup>	26.45 <sup>87</sup>
27	32.422 <sup>283</sup>	42.97 <sup>101</sup>	42.511 <sup>358</sup>	20.99 <sup>111</sup>	22.897 <sup>280</sup>	3.70 <sup>61</sup>	34.241 <sup>273</sup>	25.58 <sup>102</sup>
Okt. 7	32.705 <sup>304</sup>	41.96 <sup>112</sup>	42.869 <sup>392</sup>	19.88 <sup>51</sup>	23.177 <sup>305</sup>	3.09 <sup>9</sup>	34.514 <sup>294</sup>	24.56 <sup>116</sup>
17	33.009 <sup>320</sup>	40.84 <sup>119</sup>	43.261 <sup>416</sup>	19.37 <sup>13</sup>	23.482 <sup>325</sup>	3.00 <sup>46</sup>	34.808 <sup>313</sup>	23.40 <sup>126</sup>
27	33.329 <sup>333</sup>	39.65 <sup>125</sup>	43.677 <sup>429</sup>	19.50 <sup>76</sup>	23.807 <sup>338</sup>	3.46 <sup>101</sup>	35.121 <sup>327</sup>	22.14 <sup>133</sup>
Nov. 6	33.662 <sup>338</sup>	38.40 <sup>125</sup>	44.106 <sup>429</sup>	20.26 <sup>139</sup>	24.145 <sup>342</sup>	4.47 <sup>153</sup>	35.448 <sup>335</sup>	20.81 <sup>137</sup>
16	34.000 <sup>337</sup>	37.15 <sup>122</sup>	44.535 <sup>416</sup>	21.65 <sup>199</sup>	24.487 <sup>338</sup>	6.00 <sup>201</sup>	35.783 <sup>335</sup>	19.44 <sup>135</sup>
26	34.337 <sup>325</sup>	35.93 <sup>112</sup>	44.951 <sup>390</sup>	23.64 <sup>250</sup>	24.825 <sup>322</sup>	8.01 <sup>241</sup>	36.118 <sup>327</sup>	18.09 <sup>129</sup>
Dez. 6	34.662 <sup>307</sup>	34.81 <sup>100</sup>	45.341 <sup>350</sup>	26.14 <sup>294</sup>	25.147 <sup>297</sup>	10.42 <sup>275</sup>	36.445 <sup>309</sup>	16.80 <sup>117</sup>
16	34.969 <sup>277</sup>	33.81 <sup>82</sup>	45.691 <sup>298</sup>	29.08 <sup>329</sup>	25.444 <sup>262</sup>	13.17 <sup>298</sup>	36.754 <sup>282</sup>	15.63 <sup>101</sup>
26	35.246 <sup>239</sup>	32.99 <sup>62</sup>	45.989 <sup>237</sup>	32.37 <sup>351</sup>	25.706 <sup>218</sup>	16.15 <sup>312</sup>	37.036 <sup>245</sup>	14.62 <sup>81</sup>
36	35.485	32.37	46.226	35.88	25.924	19.27	37.281	13.81
Mittl. Ort	31.807	45.77	43.038	33.04	22.838	13.65	33.695	27.95
sec $\delta$ , tg $\delta$	1.069	+0.376	1.651	-1.314	1.192	-0.649	1.054	+0.332
a, a'	+3.5	-12.2	+1.7	-12.8	+2.4	-13.0	+3.4	-13.0
b, b'	-0.02	-0.79	+0.06	-0.77	+0.03	-0.76	-0.01	-0.76

\*) Bei Stern 327) und 326) lies Jan. 31.



# Obere Kulmination Greenwich

93\*

Tag	328) ♋ Cancri		334) ζ Hydrae		336) ιο8 G. Carinae		335) ♀ Ursae maj.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	8 <sup>h</sup> 43 <sup>m</sup>	+28° 57'	8 <sup>h</sup> 52 <sup>m</sup>	+6° 9'	8 <sup>h</sup> 53 <sup>m</sup>	-60° 25'	8 <sup>h</sup> 55 <sup>m</sup>	+48° 15'
Jan. I	22.457 <sup>234</sup>	40.18 <sup>6</sup>	29.346 <sup>210</sup>	20.87 <sup>140</sup>	50.28 <sup>24</sup>	50.95 <sup>363</sup>	27.277 <sup>305</sup>	24.85 <sup>94</sup>
II	22.691 <sup>183</sup>	40.12 <sup>21</sup>	29.556 <sup>165</sup>	19.47 <sup>121</sup>	50.52 <sup>15</sup>	54.58 <sup>375</sup>	27.582 <sup>241</sup>	25.79 <sup>127</sup>
2I	22.874 <sup>127</sup>	40.33 <sup>45</sup>	29.721 <sup>116</sup>	18.26 <sup>101</sup>	50.67 <sup>6</sup>	58.33 <sup>375</sup>	27.823 <sup>170</sup>	27.06 <sup>154</sup>
3I	23.001 <sup>69</sup>	40.78 <sup>65</sup>	29.837 <sup>65</sup>	17.25 <sup>78</sup>	50.73 <sup>3</sup>	62.08 <sup>366</sup>	27.993 <sup>97</sup>	28.60 <sup>173</sup>
Febr. 9	23.070 <sup>12</sup>	41.43 <sup>80</sup>	29.902 <sup>15</sup>	16.47 <sup>57</sup>	50.70 <sup>11</sup>	65.74 <sup>348</sup>	28.090 <sup>23</sup>	30.33 <sup>186</sup>
19	23.082 <sup>40</sup>	42.23 <sup>92</sup>	29.917 <sup>32</sup>	15.90 <sup>35</sup>	50.59 <sup>18</sup>	69.22 <sup>320</sup>	28.113 <sup>46</sup>	32.19 <sup>189</sup>
März I	23.042 <sup>87</sup>	43.15 <sup>97</sup>	29.885 <sup>72</sup>	15.55 <sup>16</sup>	50.41 <sup>25</sup>	72.42 <sup>287</sup>	28.067 <sup>108</sup>	34.08 <sup>184</sup>
II	22.955 <sup>124</sup>	44.12 <sup>96</sup>	29.813 <sup>105</sup>	15.39 <sup>2</sup>	50.16 <sup>32</sup>	75.29 <sup>248</sup>	27.959 <sup>160</sup>	35.92 <sup>171</sup>
2I	22.831 <sup>151</sup>	45.08 <sup>91</sup>	29.708 <sup>129</sup>	15.41 <sup>15</sup>	49.84 <sup>35</sup>	77.77 <sup>203</sup>	27.799 <sup>199</sup>	37.63 <sup>150</sup>
3I	22.680 <sup>168</sup>	45.99 <sup>81</sup>	29.579 <sup>143</sup>	15.56 <sup>28</sup>	49.49 <sup>38</sup>	79.80 <sup>156</sup>	27.600 <sup>226</sup>	39.13 <sup>124</sup>
Apr. 10	22.512 <sup>175</sup>	46.80 <sup>69</sup>	29.436 <sup>150</sup>	15.84 <sup>38</sup>	49.11 <sup>40</sup>	81.36 <sup>105</sup>	27.374 <sup>238</sup>	40.37 <sup>94</sup>
20	22.337 <sup>170</sup>	47.49 <sup>54</sup>	29.286 <sup>148</sup>	16.22 <sup>46</sup>	48.71 <sup>41</sup>	82.41 <sup>54</sup>	27.136 <sup>239</sup>	41.31 <sup>61</sup>
30	22.167 <sup>158</sup>	48.03 <sup>38</sup>	29.138 <sup>139</sup>	16.68 <sup>54</sup>	48.30 <sup>41</sup>	82.95 <sup>1</sup>	26.897 <sup>228</sup>	41.92 <sup>26</sup>
Mai 10	22.009 <sup>139</sup>	48.41 <sup>21</sup>	28.999 <sup>123</sup>	17.22 <sup>58</sup>	47.89 <sup>38</sup>	82.96 <sup>51</sup>	26.669 <sup>206</sup>	42.18 <sup>8</sup>
20	21.870 <sup>113</sup>	48.62 <sup>6</sup>	28.876 <sup>102</sup>	17.80 <sup>63</sup>	47.51 <sup>36</sup>	82.45 <sup>101</sup>	26.463 <sup>177</sup>	42.10 <sup>42</sup>
30	21.757 <sup>84</sup>	48.68 <sup>11</sup>	28.774 <sup>78</sup>	18.43 <sup>66</sup>	47.15 <sup>33</sup>	81.44 <sup>150</sup>	26.286 <sup>140</sup>	41.68 <sup>73</sup>
Juni 9	21.673 <sup>52</sup>	48.57 <sup>25</sup>	28.696 <sup>53</sup>	19.09 <sup>69</sup>	46.82 <sup>28</sup>	79.94 <sup>193</sup>	26.146 <sup>100</sup>	40.95 <sup>102</sup>
19	21.621 <sup>18</sup>	48.32 <sup>39</sup>	28.643 <sup>24</sup>	19.78 <sup>68</sup>	46.54 <sup>23</sup>	78.01 <sup>232</sup>	26.046 <sup>57</sup>	39.93 <sup>127</sup>
29	21.603 <sup>17</sup>	47.93 <sup>51</sup>	28.619 <sup>4</sup>	20.46 <sup>67</sup>	46.31 <sup>19</sup>	75.69 <sup>265</sup>	25.989 <sup>11</sup>	38.66 <sup>149</sup>
Juli 9	21.620 <sup>51</sup>	47.42 <sup>63</sup>	28.623 <sup>33</sup>	21.13 <sup>64</sup>	46.12 <sup>12</sup>	73.04 <sup>290</sup>	25.978 <sup>34</sup>	37.17 <sup>168</sup>
19	21.671 <sup>85</sup>	46.79 <sup>74</sup>	28.656 <sup>61</sup>	21.77 <sup>58</sup>	46.00 <sup>5</sup>	70.14 <sup>307</sup>	26.012 <sup>80</sup>	35.49 <sup>183</sup>
29	21.756 <sup>117</sup>	46.05 <sup>84</sup>	28.717 <sup>90</sup>	22.35 <sup>48</sup>	45.95 <sup>2</sup>	67.07 <sup>314</sup>	26.092 <sup>124</sup>	33.66 <sup>195</sup>
Aug. 8	21.873 <sup>150</sup>	45.21 <sup>94</sup>	28.807 <sup>118</sup>	22.83 <sup>36</sup>	45.97 <sup>8</sup>	63.93 <sup>312</sup>	26.216 <sup>168</sup>	31.71 <sup>202</sup>
18	22.023 <sup>180</sup>	44.27 <sup>104</sup>	28.925 <sup>146</sup>	23.19 <sup>21</sup>	46.05 <sup>16</sup>	60.81 <sup>297</sup>	26.384 <sup>210</sup>	29.69 <sup>208</sup>
28	22.203 <sup>211</sup>	43.23 <sup>112</sup>	29.071 <sup>174</sup>	23.40 <sup>2</sup>	46.21 <sup>22</sup>	57.84 <sup>273</sup>	26.594 <sup>251</sup>	27.61 <sup>208</sup>
Sept. 7	22.414 <sup>239</sup>	42.11 <sup>120</sup>	29.245 <sup>200</sup>	23.42 <sup>19</sup>	46.43 <sup>29</sup>	55.11 <sup>239</sup>	26.845 <sup>290</sup>	25.53 <sup>207</sup>
17	22.653 <sup>267</sup>	40.91 <sup>128</sup>	29.445 <sup>227</sup>	23.23 <sup>42</sup>	46.72 <sup>36</sup>	52.72 <sup>194</sup>	27.135 <sup>328</sup>	23.46 <sup>201</sup>
27	22.920 <sup>293</sup>	39.63 <sup>133</sup>	29.672 <sup>252</sup>	22.81 <sup>67</sup>	47.08 <sup>41</sup>	50.78 <sup>142</sup>	27.463 <sup>363</sup>	21.45 <sup>192</sup>
Okt. 7	23.213 <sup>317</sup>	38.30 <sup>136</sup>	29.924 <sup>275</sup>	22.14 <sup>91</sup>	47.49 <sup>45</sup>	49.36 <sup>82</sup>	27.826 <sup>394</sup>	19.53 <sup>178</sup>
17	23.530 <sup>337</sup>	36.94 <sup>136</sup>	30.199 <sup>294</sup>	21.23 <sup>114</sup>	47.94 <sup>49</sup>	48.54 <sup>19</sup>	28.220 <sup>421</sup>	17.75 <sup>160</sup>
27	23.867 <sup>352</sup>	35.58 <sup>132</sup>	30.493 <sup>310</sup>	20.09 <sup>134</sup>	48.43 <sup>50</sup>	48.35 <sup>48</sup>	28.641 <sup>441</sup>	16.15 <sup>137</sup>
Nov. 6	24.219 <sup>361</sup>	34.26 <sup>125</sup>	30.803 <sup>319</sup>	18.75 <sup>151</sup>	48.93 <sup>51</sup>	48.83 <sup>113</sup>	29.082 <sup>454</sup>	14.78 <sup>109</sup>
16	24.580 <sup>361</sup>	33.01 <sup>111</sup>	31.122 <sup>321</sup>	17.24 <sup>163</sup>	49.44 <sup>50</sup>	49.96 <sup>176</sup>	29.536 <sup>456</sup>	13.69 <sup>78</sup>
26	24.941 <sup>353</sup>	31.90 <sup>95</sup>	31.443 <sup>314</sup>	15.61 <sup>169</sup>	49.94 <sup>46</sup>	51.72 <sup>232</sup>	29.992 <sup>448</sup>	12.91 <sup>43</sup>
Dez. 6	25.294 <sup>334</sup>	30.95 <sup>73</sup>	31.757 <sup>298</sup>	13.92 <sup>169</sup>	50.40 <sup>42</sup>	54.04 <sup>282</sup>	30.440 <sup>426</sup>	12.48 <sup>6</sup>
16	25.628 <sup>305</sup>	30.22 <sup>49</sup>	32.055 <sup>273</sup>	12.23 <sup>163</sup>	50.82 <sup>36</sup>	56.86 <sup>322</sup>	30.866 <sup>391</sup>	12.42 <sup>33</sup>
26	25.933 <sup>267</sup>	29.73 <sup>23</sup>	32.328 <sup>239</sup>	10.60 <sup>151</sup>	51.18 <sup>29</sup>	60.08 <sup>352</sup>	31.257 <sup>345</sup>	12.75 <sup>71</sup>
36	26.200	29.50	32.567	9.09	51.47	63.60	31.602	13.46
Mittl. Ort	22.364	45.04	29.231	21.70	48.15	62.03	27.083	32.50
sec δ, tg δ	1.143	+0.553	1.006	+0.108	2.027	-1.763	1.502	+1.121
a, a'	+3.6	-13.1	+3.2	-13.7	+1.4	-13.8	+4.2	-13.9
b, b'	-0.02	-0.76	0.00	-0.73	+0.08	-0.73	-0.05	-0.72



Tag	337) $\alpha$ Cancri		339) Br. 1268 Lynx		338) $\rho$ Ursae maj.		341) $\kappa$ Ursae maj.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	8 <sup>h</sup> 55 <sup>m</sup>	+12° 4'	8 <sup>h</sup> 57 <sup>m</sup>	+41° 59'	8 <sup>h</sup> 57 <sup>m</sup>	+67° 50'	8 <sup>h</sup> 59 <sup>m</sup>	+47° 22'
Jan. I	28.914 <sup>219</sup>	16.78 <sup>109</sup>	4.711 <sup>282</sup>	59.95 <sup>59</sup>	37.72 <sup>48</sup>	35.90 <sup>187</sup>	52.933 <sup>307</sup>	24.30 <sup>87</sup>
II	29.133 <sup>174</sup>	15.69 <sup>87</sup>	4.993 <sup>224</sup>	60.54 <sup>91</sup>	38.20 <sup>38</sup>	37.77 <sup>222</sup>	53.240 <sup>245</sup>	25.17 <sup>120</sup>
21	29.307 <sup>123</sup>	14.82 <sup>65</sup>	5.217 <sup>160</sup>	61.45 <sup>118</sup>	38.58 <sup>26</sup>	39.99 <sup>249</sup>	53.485 <sup>176</sup>	26.37 <sup>147</sup>
31	29.430 <sup>72</sup>	14.17 <sup>43</sup>	5.377 <sup>93</sup>	62.63 <sup>139</sup>	38.84 <sup>13</sup>	42.48 <sup>265</sup>	53.661 <sup>103</sup>	27.84 <sup>169</sup>
Febr. 9	29.502 <sup>21</sup>	13.74 <sup>21</sup>	5.470 <sup>27</sup>	64.02 <sup>153</sup>	38.97 <sup>1</sup>	45.13 <sup>271</sup>	53.764 <sup>31</sup>	29.53 <sup>182</sup>
19	29.523 <sup>27</sup>	13.53 <sup>2</sup>	5.497 <sup>36</sup>	65.55 <sup>160</sup>	38.98 <sup>11</sup>	47.84 <sup>265</sup>	53.795 <sup>38</sup>	31.35 <sup>187</sup>
März I	29.496 <sup>69</sup>	13.51 <sup>15</sup>	5.461 <sup>92</sup>	67.15 <sup>159</sup>	38.87 <sup>21</sup>	50.49 <sup>249</sup>	53.757 <sup>99</sup>	33.22 <sup>182</sup>
II	29.427 <sup>102</sup>	13.66 <sup>28</sup>	5.369 <sup>138</sup>	68.74 <sup>151</sup>	38.66 <sup>31</sup>	52.98 <sup>223</sup>	53.658 <sup>151</sup>	35.04 <sup>171</sup>
21	29.325 <sup>128</sup>	13.94 <sup>37</sup>	5.231 <sup>173</sup>	70.25 <sup>136</sup>	38.35 <sup>38</sup>	55.21 <sup>189</sup>	53.507 <sup>190</sup>	36.75 <sup>153</sup>
31	29.197 <sup>144</sup>	14.31 <sup>45</sup>	5.058 <sup>197</sup>	71.61 <sup>115</sup>	37.97 <sup>43</sup>	57.10 <sup>148</sup>	53.317 <sup>217</sup>	38.28 <sup>127</sup>
Apr. 10	29.053 <sup>150</sup>	14.76 <sup>49</sup>	4.861 <sup>209</sup>	72.76 <sup>90</sup>	37.54 <sup>46</sup>	58.58 <sup>101</sup>	53.100 <sup>231</sup>	39.55 <sup>98</sup>
20	28.903 <sup>149</sup>	15.25 <sup>52</sup>	4.652 <sup>208</sup>	73.66 <sup>63</sup>	37.08 <sup>47</sup>	59.59 <sup>52</sup>	52.869 <sup>232</sup>	40.53 <sup>65</sup>
30	28.754 <sup>140</sup>	15.77 <sup>52</sup>	4.444 <sup>198</sup>	74.29 <sup>35</sup>	36.61 <sup>45</sup>	60.11 <sup>3</sup>	52.637 <sup>222</sup>	41.18 <sup>32</sup>
Mai 10	28.614 <sup>124</sup>	16.29 <sup>52</sup>	4.246 <sup>178</sup>	74.64 <sup>5</sup>	36.16 <sup>42</sup>	60.14 <sup>45</sup>	52.415 <sup>202</sup>	41.50 <sup>2</sup>
20	28.490 <sup>103</sup>	16.81 <sup>50</sup>	4.068 <sup>151</sup>	74.69 <sup>24</sup>	35.74 <sup>37</sup>	59.69 <sup>92</sup>	52.213 <sup>174</sup>	41.48 <sup>36</sup>
30	28.387 <sup>79</sup>	17.31 <sup>49</sup>	3.917 <sup>120</sup>	74.45 <sup>50</sup>	35.37 <sup>32</sup>	58.77 <sup>135</sup>	52.039 <sup>139</sup>	41.12 <sup>66</sup>
Juni 9	28.308 <sup>53</sup>	17.80 <sup>46</sup>	3.797 <sup>84</sup>	73.95 <sup>76</sup>	35.05 <sup>24</sup>	57.42 <sup>174</sup>	51.900 <sup>100</sup>	40.46 <sup>95</sup>
19	28.255 <sup>25</sup>	18.26 <sup>42</sup>	3.713 <sup>45</sup>	73.19 <sup>98</sup>	34.81 <sup>16</sup>	55.68 <sup>206</sup>	51.800 <sup>59</sup>	39.51 <sup>121</sup>
29	28.230 <sup>4</sup>	18.68 <sup>37</sup>	3.668 <sup>6</sup>	72.21 <sup>118</sup>	34.65 <sup>9</sup>	53.62 <sup>235</sup>	51.741 <sup>15</sup>	38.30 <sup>144</sup>
Juli 9	28.234 <sup>34</sup>	19.05 <sup>30</sup>	3.662 <sup>35</sup>	71.03 <sup>136</sup>	34.56 <sup>0</sup>	51.27 <sup>256</sup>	51.726 <sup>30</sup>	36.86 <sup>162</sup>
19	28.268 <sup>63</sup>	19.35 <sup>23</sup>	3.697 <sup>75</sup>	69.67 <sup>149</sup>	34.56 <sup>9</sup>	48.71 <sup>272</sup>	51.756 <sup>74</sup>	35.24 <sup>178</sup>
29	28.331 <sup>91</sup>	19.58 <sup>12</sup>	3.772 <sup>114</sup>	68.18 <sup>162</sup>	34.65 <sup>17</sup>	45.99 <sup>282</sup>	51.830 <sup>118</sup>	33.46 <sup>191</sup>
Aug. 8	28.422 <sup>120</sup>	19.70 <sup>1</sup>	3.886 <sup>153</sup>	66.56 <sup>171</sup>	34.82 <sup>25</sup>	43.17 <sup>287</sup>	51.948 <sup>161</sup>	31.55 <sup>199</sup>
18	28.542 <sup>148</sup>	19.71 <sup>14</sup>	4.039 <sup>190</sup>	64.85 <sup>179</sup>	35.07 <sup>33</sup>	40.30 <sup>285</sup>	52.109 <sup>202</sup>	29.56 <sup>205</sup>
28	28.690 <sup>176</sup>	19.57 <sup>30</sup>	4.229 <sup>226</sup>	63.06 <sup>183</sup>	35.40 <sup>40</sup>	37.45 <sup>278</sup>	52.311 <sup>242</sup>	27.51 <sup>208</sup>
Sept. 7	28.866 <sup>203</sup>	19.27 <sup>49</sup>	4.455 <sup>262</sup>	61.23 <sup>185</sup>	35.80 <sup>47</sup>	34.67 <sup>266</sup>	52.553 <sup>282</sup>	25.43 <sup>207</sup>
17	29.069 <sup>230</sup>	18.78 <sup>68</sup>	4.717 <sup>295</sup>	59.38 <sup>183</sup>	36.27 <sup>55</sup>	32.01 <sup>248</sup>	52.835 <sup>319</sup>	23.36 <sup>202</sup>
27	29.299 <sup>256</sup>	18.10 <sup>88</sup>	5.012 <sup>328</sup>	57.55 <sup>179</sup>	36.82 <sup>61</sup>	29.53 <sup>224</sup>	53.154 <sup>354</sup>	21.34 <sup>194</sup>
Okt. 7	29.555 <sup>279</sup>	17.22 <sup>107</sup>	5.340 <sup>357</sup>	55.76 <sup>171</sup>	37.43 <sup>65</sup>	27.29 <sup>196</sup>	53.508 <sup>386</sup>	19.40 <sup>181</sup>
17	29.834 <sup>299</sup>	16.15 <sup>125</sup>	5.697 <sup>381</sup>	54.05 <sup>159</sup>	38.08 <sup>70</sup>	25.33 <sup>162</sup>	53.894 <sup>413</sup>	17.59 <sup>164</sup>
27	30.133 <sup>316</sup>	14.90 <sup>139</sup>	6.078 <sup>401</sup>	52.46 <sup>142</sup>	38.78 <sup>73</sup>	23.71 <sup>122</sup>	54.307 <sup>434</sup>	15.95 <sup>143</sup>
Nov. 6	30.449 <sup>326</sup>	13.51 <sup>149</sup>	6.479 <sup>413</sup>	51.04 <sup>121</sup>	39.51 <sup>75</sup>	22.49 <sup>79</sup>	54.741 <sup>448</sup>	14.52 <sup>116</sup>
16	30.775 <sup>328</sup>	12.02 <sup>154</sup>	6.892 <sup>417</sup>	49.83 <sup>95</sup>	40.26 <sup>74</sup>	21.70 <sup>33</sup>	55.189 <sup>452</sup>	13.36 <sup>85</sup>
26	31.103 <sup>322</sup>	10.48 <sup>155</sup>	7.309 <sup>410</sup>	48.88 <sup>65</sup>	41.00 <sup>73</sup>	21.37 <sup>17</sup>	55.641 <sup>444</sup>	12.51 <sup>50</sup>
Dez. 6	31.425 <sup>307</sup>	8.93 <sup>149</sup>	7.719 <sup>390</sup>	48.23 <sup>32</sup>	41.73 <sup>69</sup>	21.54 <sup>66</sup>	56.085 <sup>424</sup>	12.01 <sup>14</sup>
16	31.732 <sup>282</sup>	7.44 <sup>137</sup>	8.109 <sup>360</sup>	47.91 <sup>2</sup>	42.42 <sup>63</sup>	22.20 <sup>115</sup>	56.509 <sup>391</sup>	11.87 <sup>25</sup>
26	32.014 <sup>248</sup>	6.07 <sup>122</sup>	8.469 <sup>317</sup>	47.93 <sup>37</sup>	43.05 <sup>55</sup>	23.35 <sup>160</sup>	56.900 <sup>346</sup>	12.12 <sup>63</sup>
36	32.262	4.85	8.786	48.30	43.60	24.95	57.246	12.75
Mittl. Ort	28.839	18.69	4.598	66.85	36.87	45.29	52.771	31.95
sec $\delta$ , tg $\delta$	1.023	+0.214	1.346	+0.900	2.652	+2.456	1.477	+1.087
a, a'	+3.3	-13.9	+3.9	-14.0	+5.4	-14.0	+4.1	-14.2
b, b'	-0.01	-0.72	-0.04	-0.72	-0.11	-0.71	-0.05	-0.71



Tag	343) $\alpha$ Volantis		345) $\lambda$ Velorum		347) $\vartheta$ Hydrae		348) $\beta$ Carinae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	9 <sup>h</sup> 1 <sup>m</sup>	-66° 10'	9 <sup>h</sup> 5 <sup>m</sup>	-43° 12'	9 <sup>h</sup> 11 <sup>m</sup>	+2° 32'	9 <sup>h</sup> 12 <sup>m</sup>	-69° 29'
Jan. I	37.85 <sup>28</sup>	21.73 <sup>362</sup>	59.193 <sup>220</sup>	25.13 <sup>338</sup>	30.285 <sup>224</sup>	50.86 <sup>166</sup>	39.66 <sup>33</sup>	11.52 <sup>356</sup>
II	38.13 <sup>18</sup>	25.35 <sup>377</sup>	59.413 <sup>162</sup>	28.51 <sup>345</sup>	30.509 <sup>180</sup>	49.20 <sup>149</sup>	39.99 <sup>21</sup>	15.08 <sup>374</sup>
2I	38.31 <sup>7</sup>	29.12 <sup>381</sup>	59.575 <sup>99</sup>	31.96 <sup>341</sup>	30.689 <sup>132</sup>	47.71 <sup>129</sup>	40.20 <sup>10</sup>	18.82 <sup>383</sup>
3I	38.38 <sup>3</sup>	32.93 <sup>376</sup>	59.674 <sup>35</sup>	35.37 <sup>330</sup>	30.821 <sup>82</sup>	46.42 <sup>106</sup>	40.30 <sup>2</sup>	22.65 <sup>380</sup>
Febr. 9	38.35 <sup>14</sup>	36.69 <sup>360</sup>	59.709 <sup>25</sup>	38.67 <sup>309</sup>	30.903 <sup>32</sup>	45.36 <sup>83</sup>	40.28 <sup>14</sup>	26.45 <sup>369</sup>
19	38.21 <sup>22</sup>	40.29 <sup>336</sup>	59.684 <sup>81</sup>	41.76 <sup>282</sup>	30.935 <sup>15</sup>	44.53 <sup>59</sup>	40.14 <sup>24</sup>	30.14 <sup>347</sup>
März I	37.99 <sup>31</sup>	43.65 <sup>305</sup>	59.603 <sup>131</sup>	44.58 <sup>249</sup>	30.920 <sup>56</sup>	43.94 <sup>38</sup>	39.90 <sup>34</sup>	33.61 <sup>319</sup>
II	37.68 <sup>38</sup>	46.70 <sup>267</sup>	59.472 <sup>173</sup>	47.07 <sup>212</sup>	30.864 <sup>90</sup>	43.56 <sup>18</sup>	39.56 <sup>41</sup>	36.80 <sup>284</sup>
2I	37.30 <sup>43</sup>	49.37 <sup>225</sup>	59.299 <sup>204</sup>	49.19 <sup>172</sup>	30.774 <sup>116</sup>	43.38 <sup>0</sup>	39.15 <sup>49</sup>	39.64 <sup>243</sup>
3I	36.87 <sup>47</sup>	51.62 <sup>177</sup>	59.095 <sup>227</sup>	50.91 <sup>128</sup>	30.658 <sup>134</sup>	43.38 <sup>16</sup>	38.66 <sup>54</sup>	42.07 <sup>197</sup>
Apr. 10	36.40 <sup>50</sup>	53.39 <sup>127</sup>	58.868 <sup>240</sup>	52.19 <sup>83</sup>	30.524 <sup>142</sup>	43.54 <sup>29</sup>	38.12 <sup>57</sup>	44.04 <sup>148</sup>
20	35.90 <sup>51</sup>	54.66 <sup>75</sup>	58.628 <sup>243</sup>	53.02 <sup>37</sup>	30.382 <sup>144</sup>	43.83 <sup>41</sup>	37.55 <sup>59</sup>	45.52 <sup>96</sup>
30	35.39 <sup>51</sup>	55.41 <sup>22</sup>	58.385 <sup>239</sup>	53.39 <sup>9</sup>	30.238 <sup>137</sup>	44.24 <sup>51</sup>	36.96 <sup>59</sup>	46.48 <sup>43</sup>
Mai 10	34.88 <sup>50</sup>	55.63 <sup>31</sup>	58.146 <sup>227</sup>	53.30 <sup>55</sup>	30.101 <sup>125</sup>	44.75 <sup>60</sup>	36.37 <sup>59</sup>	46.91 <sup>11</sup>
20	34.38 <sup>46</sup>	55.32 <sup>84</sup>	57.919 <sup>209</sup>	52.75 <sup>98</sup>	29.976 <sup>108</sup>	45.35 <sup>67</sup>	35.78 <sup>56</sup>	46.80 <sup>64</sup>
30	33.92 <sup>43</sup>	54.48 <sup>134</sup>	57.710 <sup>185</sup>	51.77 <sup>139</sup>	29.868 <sup>87</sup>	46.02 <sup>73</sup>	35.22 <sup>52</sup>	46.16 <sup>116</sup>
Juni 9	33.49 <sup>39</sup>	53.14 <sup>181</sup>	57.525 <sup>157</sup>	50.38 <sup>177</sup>	29.781 <sup>64</sup>	46.75 <sup>77</sup>	34.70 <sup>48</sup>	45.00 <sup>164</sup>
19	33.10 <sup>32</sup>	51.33 <sup>222</sup>	57.368 <sup>124</sup>	48.61 <sup>210</sup>	29.717 <sup>39</sup>	47.52 <sup>79</sup>	34.22 <sup>41</sup>	43.36 <sup>208</sup>
29	32.78 <sup>26</sup>	49.11 <sup>258</sup>	57.244 <sup>89</sup>	46.51 <sup>237</sup>	29.678 <sup>12</sup>	48.31 <sup>80</sup>	33.81 <sup>34</sup>	41.28 <sup>247</sup>
Juli 9	32.52 <sup>19</sup>	46.53 <sup>286</sup>	57.155 <sup>50</sup>	44.14 <sup>257</sup>	29.666 <sup>15</sup>	49.11 <sup>78</sup>	33.47 <sup>25</sup>	38.81 <sup>278</sup>
19	32.33 <sup>11</sup>	43.67 <sup>307</sup>	57.105 <sup>11</sup>	41.57 <sup>270</sup>	29.681 <sup>42</sup>	49.89 <sup>72</sup>	33.22 <sup>17</sup>	36.03 <sup>302</sup>
29	32.22 <sup>2</sup>	40.60 <sup>317</sup>	57.094 <sup>33</sup>	38.87 <sup>275</sup>	29.723 <sup>70</sup>	50.61 <sup>63</sup>	33.05 <sup>7</sup>	33.01 <sup>315</sup>
Aug. 8	32.20 <sup>7</sup>	37.43 <sup>317</sup>	57.127 <sup>77</sup>	36.12 <sup>270</sup>	29.793 <sup>97</sup>	51.24 <sup>51</sup>	32.98 <sup>3</sup>	29.86 <sup>319</sup>
18	32.27 <sup>15</sup>	34.26 <sup>307</sup>	57.204 <sup>121</sup>	33.42 <sup>255</sup>	29.890 <sup>126</sup>	51.75 <sup>36</sup>	33.01 <sup>14</sup>	26.67 <sup>313</sup>
28	32.42 <sup>24</sup>	31.19 <sup>285</sup>	57.325 <sup>166</sup>	30.87 <sup>232</sup>	30.016 <sup>155</sup>	52.11 <sup>17</sup>	33.15 <sup>24</sup>	23.54 <sup>294</sup>
Sept. 7	32.66 <sup>33</sup>	28.34 <sup>253</sup>	57.491 <sup>210</sup>	28.55 <sup>198</sup>	30.171 <sup>183</sup>	52.28 <sup>7</sup>	33.39 <sup>34</sup>	20.60 <sup>266</sup>
17	32.99 <sup>41</sup>	25.81 <sup>212</sup>	57.701 <sup>252</sup>	26.57 <sup>157</sup>	30.354 <sup>211</sup>	52.21 <sup>31</sup>	33.73 <sup>44</sup>	17.94 <sup>226</sup>
27	33.40 <sup>47</sup>	23.69 <sup>160</sup>	57.953 <sup>291</sup>	25.00 <sup>108</sup>	30.565 <sup>238</sup>	51.90 <sup>58</sup>	34.17 <sup>51</sup>	15.68 <sup>177</sup>
Okt. 7	33.87 <sup>53</sup>	22.09 <sup>101</sup>	58.244 <sup>325</sup>	23.92 <sup>53</sup>	30.803 <sup>264</sup>	51.32 <sup>86</sup>	34.68 <sup>59</sup>	13.91 <sup>120</sup>
17	34.40 <sup>58</sup>	21.08 <sup>38</sup>	58.569 <sup>352</sup>	23.39 <sup>6</sup>	31.067 <sup>287</sup>	50.46 <sup>113</sup>	35.27 <sup>64</sup>	12.71 <sup>58</sup>
27	34.98 <sup>59</sup>	20.70 <sup>29</sup>	58.921 <sup>372</sup>	23.45 <sup>66</sup>	31.354 <sup>304</sup>	49.33 <sup>136</sup>	35.91 <sup>67</sup>	12.13 <sup>8</sup>
Nov. 6	35.57 <sup>60</sup>	20.99 <sup>95</sup>	59.293 <sup>380</sup>	24.11 <sup>125</sup>	31.658 <sup>317</sup>	47.97 <sup>158</sup>	36.58 <sup>69</sup>	12.21 <sup>75</sup>
16	36.17 <sup>59</sup>	21.94 <sup>159</sup>	59.673 <sup>379</sup>	25.36 <sup>180</sup>	31.975 <sup>322</sup>	46.39 <sup>174</sup>	37.27 <sup>67</sup>	12.96 <sup>140</sup>
26	36.76 <sup>55</sup>	23.53 <sup>219</sup>	60.052 <sup>365</sup>	27.16 <sup>231</sup>	32.297 <sup>318</sup>	44.65 <sup>184</sup>	37.94 <sup>63</sup>	14.36 <sup>202</sup>
Dez. 6	37.31 <sup>50</sup>	25.72 <sup>271</sup>	60.417 <sup>340</sup>	29.47 <sup>273</sup>	32.615 <sup>306</sup>	42.81 <sup>187</sup>	38.57 <sup>57</sup>	16.38 <sup>257</sup>
16	37.81 <sup>43</sup>	28.43 <sup>315</sup>	60.757 <sup>302</sup>	32.20 <sup>306</sup>	32.921 <sup>283</sup>	40.94 <sup>185</sup>	39.14 <sup>50</sup>	18.95 <sup>303</sup>
26	38.24 <sup>33</sup>	31.58 <sup>348</sup>	61.059 <sup>256</sup>	35.26 <sup>330</sup>	33.204 <sup>251</sup>	39.09 <sup>176</sup>	39.64 <sup>39</sup>	21.98 <sup>340</sup>
36	38.57	35.06	61.315	38.56	33.455	37.33	40.03	25.38
Mittl. Ort	35.06	34.20	58.247	34.72	30.212	50.48	36.39	25.39
sec $\delta$ , tg $\delta$	2.476	-2.265	1.372	-0.939	1.001	+0.044	2.854	-2.673
a, a'	+0.9	-14.3	+2.2	-14.5	+3.1	-14.9	+0.7	-14.9
b, b'	+0.11	-0.76	+0.05	-0.69	0.00	-0.67	+0.13	-0.67



## Scheinbare Sternörter 1945

Tag	350) 83 Cancrī		352) α Lyncis		353) x Velorum		354) α-Hydrae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	9 <sup>h</sup> 15 <sup>m</sup>	+17° 56'	9 <sup>h</sup> 17 <sup>m</sup>	+34° 37'	9 <sup>h</sup> 20 <sup>m</sup>	-54° 46'	9 <sup>h</sup> 24 <sup>m</sup>	-8° 25'
Jan. I	54.797 <sup>a</sup> <sub>244</sub>	19.66 <sub>85</sub>	42.577 <sup>a</sup> <sub>280</sub>	28.64 <sub>5</sub>	25.992 <sup>a</sup> <sub>264</sub>	17.63 <sub>351</sub>	53.171 <sup>a</sup> <sub>229</sub>	6.18 <sub>220</sub>
II	55.041 <sub>199</sub>	18.81 <sub>61</sub>	42.857 <sub>229</sub>	28.69 <sub>38</sub>	26.256 <sub>193</sub>	21.14 <sub>365</sub>	53.400 <sub>185</sub>	8.38 <sub>210</sub>
2I	55.240 <sub>149</sub>	18.20 <sub>35</sub>	43.086 <sub>172</sub>	29.07 <sub>67</sub>	26.449 <sub>118</sub>	24.79 <sub>369</sub>	53.585 <sub>138</sub>	10.48 <sub>194</sub>
3I	55.389 <sub>97</sub>	17.85 <sub>11</sub>	43.258 <sub>112</sub>	29.74 <sub>92</sub>	26.567 <sub>42</sub>	28.48 <sub>363</sub>	53.723 <sub>88</sub>	12.42 <sub>174</sub>
Febr. 9*)	55.486 <sub>44</sub>	17.74 <sub>12</sub>	43.370 <sub>52</sub>	30.66 <sub>112</sub>	26.609 <sub>32</sub>	32.11 <sub>349</sub>	53.811 <sub>38</sub>	14.16 <sub>150</sub>
19	55.530 <sub>7</sub>	17.86 <sub>31</sub>	43.422 <sub>6</sub>	31.78 <sub>126</sub>	26.577 <sub>102</sub>	35.60 <sub>326</sub>	53.849 <sub>8</sub>	15.66 <sub>125</sub>
März I	55.523 <sub>51</sub>	18.17 <sub>46</sub>	43.416 <sub>59</sub>	33.04 <sub>133</sub>	26.475 <sub>164</sub>	38.86 <sub>295</sub>	53.841 <sub>50</sub>	16.91 <sub>99</sub>
II	55.472 <sub>88</sub>	18.63 <sub>56</sub>	43.357 <sub>102</sub>	34.37 <sub>132</sub>	26.311 <sub>216</sub>	41.81 <sub>260</sub>	53.791 <sub>85</sub>	17.90 <sub>74</sub>
2I	55.384 <sub>117</sub>	19.19 <sub>64</sub>	43.255 <sub>137</sub>	35.69 <sub>126</sub>	26.095 <sub>258</sub>	44.41 <sub>219</sub>	53.706 <sub>112</sub>	18.64 <sub>48</sub>
3I	55.267 <sub>137</sub>	19.83 <sub>66</sub>	43.118 <sub>162</sub>	36.95 <sub>114</sub>	25.837 <sub>290</sub>	46.60 <sub>175</sub>	53.594 <sub>131</sub>	19.12 <sub>24</sub>
Apr. 10	55.130 <sub>148</sub>	20.49 <sub>65</sub>	42.956 <sub>175</sub>	38.09 <sub>98</sub>	25.547 <sub>311</sub>	48.35 <sub>127</sub>	53.463 <sub>142</sub>	19.36 <sub>1</sub>
20	54.982 <sub>149</sub>	21.14 <sub>63</sub>	42.781 <sub>178</sub>	39.07 <sub>78</sub>	25.236 <sub>322</sub>	49.62 <sub>77</sub>	53.321 <sub>145</sub>	19.37 <sub>20</sub>
30	54.833 <sub>143</sub>	21.77 <sub>57</sub>	42.603 <sub>173</sub>	39.85 <sub>56</sub>	24.914 <sub>322</sub>	50.39 <sub>28</sub>	53.176 <sub>141</sub>	19.17 <sub>41</sub>
Mai 10	54.690 <sub>131</sub>	22.34 <sub>49</sub>	42.430 <sub>159</sub>	40.41 <sub>33</sub>	24.592 <sub>315</sub>	50.67 <sub>23</sub>	53.035 <sub>132</sub>	18.76 <sub>60</sub>
20	54.559 <sub>113</sub>	22.83 <sub>42</sub>	42.271 <sub>138</sub>	40.74 <sub>9</sub>	24.277 <sub>298</sub>	50.44 <sub>73</sub>	52.903 <sub>118</sub>	18.16 <sub>77</sub>
30	54.446 <sub>91</sub>	23.25 <sub>34</sub>	42.133 <sub>114</sub>	40.83 <sub>15</sub>	23.979 <sub>274</sub>	49.71 <sub>120</sub>	52.785 <sub>99</sub>	17.39 <sub>92</sub>
Juni 9	54.355 <sub>66</sub>	23.59 <sub>25</sub>	42.019 <sub>84</sub>	40.68 <sub>36</sub>	23.705 <sub>243</sub>	48.51 <sub>164</sub>	52.686 <sub>79</sub>	16.47 <sub>105</sub>
19	54.289 <sub>39</sub>	23.84 <sub>16</sub>	41.935 <sub>53</sub>	40.32 <sub>57</sub>	23.462 <sub>207</sub>	46.87 <sub>204</sub>	52.607 <sub>55</sub>	15.42 <sub>117</sub>
29	54.250 <sub>12</sub>	24.00 <sub>6</sub>	41.882 <sub>20</sub>	39.75 <sub>76</sub>	23.255 <sub>165</sub>	44.83 <sub>239</sub>	52.552 <sub>31</sub>	14.25 <sub>123</sub>
Juli 9	54.238 <sub>17</sub>	24.06 <sub>4</sub>	41.862 <sub>14</sub>	38.99 <sub>93</sub>	23.090 <sub>118</sub>	42.44 <sub>266</sub>	52.521 <sub>5</sub>	13.02 <sub>127</sub>
19	54.255 <sub>46</sub>	24.02 <sub>15</sub>	41.876 <sub>49</sub>	38.06 <sub>110</sub>	22.972 <sub>67</sub>	39.78 <sub>286</sub>	52.516 <sub>22</sub>	11.75 <sub>127</sub>
29	54.301 <sub>74</sub>	23.87 <sub>28</sub>	41.925 <sub>82</sub>	36.96 <sub>125</sub>	22.905 <sub>12</sub>	36.92 <sub>297</sub>	52.538 <sub>50</sub>	10.48 <sub>122</sub>
Aug. 8	54.375 <sub>104</sub>	23.59 <sub>40</sub>	42.007 <sub>117</sub>	35.71 <sub>137</sub>	22.893 <sub>45</sub>	33.95 <sub>298</sub>	52.588 <sub>78</sub>	9.26 <sub>112</sub>
18	54.479 <sub>133</sub>	23.19 <sub>54</sub>	42.124 <sub>150</sub>	34.34 <sub>149</sub>	22.938 <sub>105</sub>	30.97 <sub>289</sub>	52.666 <sub>108</sub>	8.14 <sub>96</sub>
28	54.612 <sub>162</sub>	22.65 <sub>70</sub>	42.274 <sub>185</sub>	32.85 <sub>159</sub>	23.043 <sub>165</sub>	28.08 <sub>269</sub>	52.774 <sub>137</sub>	7.18 <sub>75</sub>
Sept. 7	54.774 <sub>192</sub>	21.95 <sub>86</sub>	42.459 <sub>217</sub>	31.26 <sub>166</sub>	23.208 <sub>224</sub>	25.39 <sub>240</sub>	52.911 <sub>167</sub>	6.43 <sub>49</sub>
17	54.966 <sub>220</sub>	21.09 <sub>102</sub>	42.676 <sub>251</sub>	29.60 <sub>173</sub>	23.432 <sub>281</sub>	22.99 <sub>200</sub>	53.078 <sub>198</sub>	5.94 <sub>20</sub>
27	55.186 <sub>249</sub>	20.07 <sub>118</sub>	42.927 <sub>282</sub>	27.87 <sub>175</sub>	23.713 <sub>333</sub>	20.99 <sub>151</sub>	53.276 <sub>228</sub>	5.74 <sub>14</sub>
Okt. 7	55.435 <sub>275</sub>	18.89 <sub>132</sub>	43.209 <sub>313</sub>	26.12 <sub>176</sub>	24.046 <sub>379</sub>	19.48 <sub>96</sub>	53.504 <sub>255</sub>	5.88 <sub>49</sub>
17	55.710 <sub>300</sub>	17.57 <sub>145</sub>	43.522 <sub>339</sub>	24.36 <sub>172</sub>	24.425 <sub>416</sub>	18.52 <sub>35</sub>	53.759 <sub>280</sub>	6.37 <sub>86</sub>
27	56.010 <sub>319</sub>	16.12 <sub>153</sub>	43.861 <sub>362</sub>	22.64 <sub>163</sub>	24.841 <sub>442</sub>	18.17 <sub>28</sub>	54.039 <sub>300</sub>	7.23 <sub>120</sub>
Nov. 6	56.329 <sub>333</sub>	14.59 <sub>157</sub>	44.223 <sub>377</sub>	21.01 <sub>150</sub>	25.283 <sub>455</sub>	18.45 <sub>92</sub>	54.339 <sub>315</sub>	8.43 <sub>152</sub>
16	56.662 <sub>340</sub>	13.02 <sub>157</sub>	44.600 <sub>384</sub>	19.51 <sub>131</sub>	25.738 <sub>454</sub>	19.37 <sub>155</sub>	54.654 <sub>321</sub>	9.95 <sub>181</sub>
26	57.002 <sub>337</sub>	11.45 <sub>151</sub>	44.984 <sub>383</sub>	18.20 <sub>108</sub>	26.192 <sub>438</sub>	20.92 <sub>212</sub>	54.975 <sub>319</sub>	11.76 <sub>202</sub>
Dez. 6	57.339 <sub>326</sub>	9.94 <sub>139</sub>	45.367 <sub>370</sub>	17.12 <sub>81</sub>	26.630 <sub>407</sub>	23.04 <sub>263</sub>	55.294 <sub>307</sub>	13.78 <sub>217</sub>
16	57.665 <sub>304</sub>	8.55 <sub>123</sub>	45.737 <sub>346</sub>	16.31 <sub>50</sub>	27.037 <sub>363</sub>	25.67 <sub>304</sub>	55.601 <sub>285</sub>	15.95 <sub>225</sub>
26	57.969 <sub>271</sub>	7.32 <sub>102</sub>	46.083 <sub>310</sub>	15.81 <sub>17</sub>	27.400 <sub>306</sub>	28.71 <sub>337</sub>	55.886 <sub>255</sub>	18.20 <sub>225</sub>
36	58.240	6.30	46.393	15.64	27.706	32.08	56.141	20.45
Mittl. Ort	54.813	22.52	42.593	34.70	24.543	30.31	53.054	9.52
sec δ, tg δ	1.051	+0.324	1.215	+0.691	1.734	-1.416	1.011	-0.148
a, a'	+3.4	-15.1	+3.7	-15.2	+1.9	-15.4	+2.9	-15.6
b, b'	-0.02	-0.66	-0.03	-0.65	+0.07	-0.64	+0.01	-0.63

\*) Bei Stern 353) und 354) lies Febr. 10.



# Obere Kulmination Greenwich

97\*

Tag	356) ε Antliae		355) 23 Ursae maj.		358) ♀ Ursae maj.		357) 24 Ursae maj.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	9 <sup>h</sup> 26 <sup>m</sup>	-35° 42'	9 <sup>h</sup> 27 <sup>m</sup>	+63° 17'	9 <sup>h</sup> 29 <sup>m</sup>	+51° 55'	9 <sup>h</sup> 29 <sup>m</sup>	+70° 3'
Jan. I	58.951 <sup>a</sup> <sub>236</sub>	26.50 <sup>a</sup> <sub>316</sub>	13.27 <sup>a</sup> <sub>47</sub>	63.72 <sup>a</sup> <sub>139</sub>	11.501 <sup>a</sup> <sub>362</sub>	36.24 <sup>a</sup> <sub>84</sub>	40.00 <sup>a</sup> <sub>59</sub>	74.89 <sup>a</sup> <sub>165</sub>
II	59.187 <sup>a</sup> <sub>186</sub>	29.66 <sup>a</sup> <sub>323</sub>	13.74 <sup>a</sup> <sub>38</sub>	65.11 <sup>a</sup> <sub>181</sub>	11.863 <sup>a</sup> <sub>300</sub>	37.08 <sup>a</sup> <sub>123</sub>	40.59 <sup>a</sup> <sub>49</sub>	76.54 <sup>a</sup> <sub>207</sub>
2I	59.373 <sup>a</sup> <sub>130</sub>	32.89 <sup>a</sup> <sub>319</sub>	14.12 <sup>a</sup> <sub>29</sub>	66.92 <sup>a</sup> <sub>215</sub>	12.163 <sup>a</sup> <sub>228</sub>	38.31 <sup>a</sup> <sub>157</sub>	41.08 <sup>a</sup> <sub>36</sub>	78.61 <sup>a</sup> <sub>241</sub>
3I	59.503 <sup>a</sup> <sub>72</sub>	36.08 <sup>a</sup> <sub>307</sub>	14.41 <sup>a</sup> <sub>19</sub>	69.07 <sup>a</sup> <sub>239</sub>	12.391 <sup>a</sup> <sub>151</sub>	39.88 <sup>a</sup> <sub>184</sub>	41.44 <sup>a</sup> <sub>23</sub>	81.02 <sup>a</sup> <sub>266</sub>
Febr. 10	59.575 <sup>a</sup> <sub>16</sub>	39.15 <sup>a</sup> <sub>289</sub>	14.60 <sup>a</sup> <sub>8</sub>	71.46 <sup>a</sup> <sub>255</sub>	12.542 <sup>a</sup> <sub>73</sub>	41.72 <sup>a</sup> <sub>203</sub>	41.67 <sup>a</sup> <sub>9</sub>	83.68 <sup>a</sup> <sub>279</sub>
11	59.591 <sup>a</sup> <sub>37</sub>	42.04 <sup>a</sup> <sub>264</sub>	14.68 <sup>a</sup> <sub>2</sub>	74.01 <sup>a</sup> <sub>258</sub>	12.615 <sup>a</sup> <sub>4</sub>	43.75 <sup>a</sup> <sub>211</sub>	41.76 <sup>a</sup> <sub>4</sub>	86.47 <sup>a</sup> <sub>282</sub>
März I	59.554 <sup>a</sup> <sub>85</sub>	44.68 <sup>a</sup> <sub>234</sub>	14.66 <sup>a</sup> <sub>12</sub>	76.59 <sup>a</sup> <sub>252</sub>	12.611 <sup>a</sup> <sub>74</sub>	45.86 <sup>a</sup> <sub>211</sub>	41.72 <sup>a</sup> <sub>16</sub>	89.29 <sup>a</sup> <sub>272</sub>
II	59.469 <sup>a</sup> <sub>124</sub>	47.02 <sup>a</sup> <sub>200</sub>	14.54 <sup>a</sup> <sub>20</sub>	79.11 <sup>a</sup> <sub>235</sub>	12.537 <sup>a</sup> <sub>135</sub>	47.97 <sup>a</sup> <sub>202</sub>	41.56 <sup>a</sup> <sub>28</sub>	92.01 <sup>a</sup> <sub>251</sub>
2I	59.345 <sup>a</sup> <sub>156</sub>	49.02 <sup>a</sup> <sub>162</sub>	14.34 <sup>a</sup> <sub>27</sub>	81.46 <sup>a</sup> <sub>208</sub>	12.402 <sup>a</sup> <sub>185</sub>	49.99 <sup>a</sup> <sub>184</sub>	41.28 <sup>a</sup> <sub>36</sub>	94.52 <sup>a</sup> <sub>221</sub>
3I	59.189 <sup>a</sup> <sub>179</sub>	50.64 <sup>a</sup> <sub>124</sub>	14.07 <sup>a</sup> <sub>32</sub>	83.54 <sup>a</sup> <sub>175</sub>	12.217 <sup>a</sup> <sub>222</sub>	51.83 <sup>a</sup> <sub>158</sub>	40.92 <sup>a</sup> <sub>44</sub>	96.73 <sup>a</sup> <sub>183</sub>
Apr. 10	59.010 <sup>a</sup> <sub>194</sub>	51.88 <sup>a</sup> <sub>83</sub>	13.75 <sup>a</sup> <sub>35</sub>	85.29 <sup>a</sup> <sub>134</sub>	11.995 <sup>a</sup> <sub>245</sub>	53.41 <sup>a</sup> <sub>128</sub>	40.48 <sup>a</sup> <sub>48</sub>	98.56 <sup>a</sup> <sub>138</sub>
20	58.816 <sup>a</sup> <sub>200</sub>	52.71 <sup>a</sup> <sub>42</sub>	13.40 <sup>a</sup> <sub>37</sub>	86.63 <sup>a</sup> <sub>90</sub>	11.750 <sup>a</sup> <sub>255</sub>	54.69 <sup>a</sup> <sub>92</sub>	40.00 <sup>a</sup> <sub>51</sub>	99.94 <sup>a</sup> <sub>90</sub>
30	58.616 <sup>a</sup> <sub>198</sub>	53.13 <sup>a</sup> <sub>1</sub>	13.03 <sup>a</sup> <sub>37</sub>	87.53 <sup>a</sup> <sub>44</sub>	11.495 <sup>a</sup> <sub>253</sub>	55.61 <sup>a</sup> <sub>55</sub>	39.49 <sup>a</sup> <sub>51</sub>	100.84 <sup>a</sup> <sub>39</sub>
Mai 10	58.418 <sup>a</sup> <sub>191</sub>	53.14 <sup>a</sup> <sub>40</sub>	12.66 <sup>a</sup> <sub>36</sub>	87.97 <sup>a</sup> <sub>3</sub>	11.242 <sup>a</sup> <sub>240</sub>	56.16 <sup>a</sup> <sub>16</sub>	38.98 <sup>a</sup> <sub>50</sub>	101.23 <sup>a</sup> <sub>12</sub>
20	58.227 <sup>a</sup> <sub>178</sub>	52.74 <sup>a</sup> <sub>80</sub>	12.30 <sup>a</sup> <sub>32</sub>	87.94 <sup>a</sup> <sub>49</sub>	11.002 <sup>a</sup> <sub>216</sub>	56.32 <sup>a</sup> <sub>22</sub>	38.48 <sup>a</sup> <sub>45</sub>	101.11 <sup>a</sup> <sub>62</sub>
30	58.049 <sup>a</sup> <sub>159</sub>	51.94 <sup>a</sup> <sub>117</sub>	11.98 <sup>a</sup> <sub>28</sub>	87.45 <sup>a</sup> <sub>94</sub>	10.786 <sup>a</sup> <sub>186</sub>	56.10 <sup>a</sup> <sub>60</sub>	38.03 <sup>a</sup> <sub>41</sub>	100.49 <sup>a</sup> <sub>110</sub>
Juni 9	57.890 <sup>a</sup> <sub>136</sub>	50.77 <sup>a</sup> <sub>151</sub>	11.70 <sup>a</sup> <sub>23</sub>	86.51 <sup>a</sup> <sub>133</sub>	10.600 <sup>a</sup> <sub>150</sub>	55.50 <sup>a</sup> <sub>95</sub>	37.62 <sup>a</sup> <sub>34</sub>	99.39 <sup>a</sup> <sub>154</sub>
19	57.754 <sup>a</sup> <sub>110</sub>	49.26 <sup>a</sup> <sub>181</sub>	11.47 <sup>a</sup> <sub>18</sub>	85.18 <sup>a</sup> <sub>171</sub>	10.450 <sup>a</sup> <sub>109</sub>	54.55 <sup>a</sup> <sub>127</sub>	37.28 <sup>a</sup> <sub>26</sub>	97.85 <sup>a</sup> <sub>193</sub>
29	57.644 <sup>a</sup> <sub>82</sub>	47.45 <sup>a</sup> <sub>206</sub>	11.29 <sup>a</sup> <sub>11</sub>	83.47 <sup>a</sup> <sub>203</sub>	10.341 <sup>a</sup> <sub>65</sub>	53.28 <sup>a</sup> <sub>155</sub>	37.02 <sup>a</sup> <sub>18</sub>	95.92 <sup>a</sup> <sub>227</sub>
Juli 9	57.562 <sup>a</sup> <sub>50</sub>	45.39 <sup>a</sup> <sub>226</sub>	11.18 <sup>a</sup> <sub>4</sub>	81.44 <sup>a</sup> <sub>230</sub>	10.276 <sup>a</sup> <sub>20</sub>	51.73 <sup>a</sup> <sub>181</sub>	36.84 <sup>a</sup> <sub>10</sub>	93.65 <sup>a</sup> <sub>255</sub>
19	57.512 <sup>a</sup> <sub>16</sub>	43.13 <sup>a</sup> <sub>238</sub>	11.14 <sup>a</sup> <sub>2</sub>	79.14 <sup>a</sup> <sub>252</sub>	10.256 <sup>a</sup> <sub>27</sub>	49.92 <sup>a</sup> <sub>201</sub>	36.74 <sup>a</sup> <sub>0</sub>	91.10 <sup>a</sup> <sub>278</sub>
29	57.496 <sup>a</sup> <sub>20</sub>	40.75 <sup>a</sup> <sub>244</sub>	11.16 <sup>a</sup> <sub>8</sub>	76.62 <sup>a</sup> <sub>268</sub>	10.283 <sup>a</sup> <sub>74</sub>	47.91 <sup>a</sup> <sub>219</sub>	36.74 <sup>a</sup> <sub>8</sub>	88.32 <sup>a</sup> <sub>295</sub>
Aug. 8	57.516 <sup>a</sup> <sub>57</sub>	38.31 <sup>a</sup> <sub>240</sub>	11.24 <sup>a</sup> <sub>16</sub>	73.94 <sup>a</sup> <sub>280</sub>	10.357 <sup>a</sup> <sub>122</sub>	45.72 <sup>a</sup> <sub>232</sub>	36.82 <sup>a</sup> <sub>18</sub>	85.37 <sup>a</sup> <sub>305</sub>
18	57.573 <sup>a</sup> <sub>96</sub>	35.91 <sup>a</sup> <sub>228</sub>	11.40 <sup>a</sup> <sub>22</sub>	71.14 <sup>a</sup> <sub>285</sub>	10.479 <sup>a</sup> <sub>168</sub>	43.40 <sup>a</sup> <sub>241</sub>	37.00 <sup>a</sup> <sub>26</sub>	82.32 <sup>a</sup> <sub>309</sub>
28	57.669 <sup>a</sup> <sub>136</sub>	33.63 <sup>a</sup> <sub>207</sub>	11.62 <sup>a</sup> <sub>28</sub>	68.29 <sup>a</sup> <sub>286</sub>	10.647 <sup>a</sup> <sub>214</sub>	40.99 <sup>a</sup> <sub>247</sub>	37.26 <sup>a</sup> <sub>35</sub>	79.23 <sup>a</sup> <sub>307</sub>
Sept. 7	57.805 <sup>a</sup> <sub>176</sub>	31.56 <sup>a</sup> <sub>178</sub>	11.90 <sup>a</sup> <sub>35</sub>	65.43 <sup>a</sup> <sub>281</sub>	10.861 <sup>a</sup> <sub>260</sub>	38.52 <sup>a</sup> <sub>247</sub>	37.61 <sup>a</sup> <sub>44</sub>	76.16 <sup>a</sup> <sub>300</sub>
17	57.981 <sup>a</sup> <sub>216</sub>	29.78 <sup>a</sup> <sub>140</sub>	12.25 <sup>a</sup> <sub>41</sub>	62.62 <sup>a</sup> <sub>270</sub>	11.121 <sup>a</sup> <sub>305</sub>	36.05 <sup>a</sup> <sub>243</sub>	38.05 <sup>a</sup> <sub>52</sub>	73.16 <sup>a</sup> <sub>285</sub>
27	58.197 <sup>a</sup> <sub>253</sub>	28.38 <sup>a</sup> <sub>95</sub>	12.66 <sup>a</sup> <sub>47</sub>	59.92 <sup>a</sup> <sub>253</sub>	11.426 <sup>a</sup> <sub>348</sub>	33.62 <sup>a</sup> <sub>235</sub>	38.57 <sup>a</sup> <sub>59</sub>	70.31 <sup>a</sup> <sub>265</sub>
Okt. 7	58.450 <sup>a</sup> <sub>288</sub>	27.43 <sup>a</sup> <sub>46</sub>	13.13 <sup>a</sup> <sub>52</sub>	57.39 <sup>a</sup> <sub>231</sub>	11.774 <sup>a</sup> <sub>388</sub>	31.27 <sup>a</sup> <sub>221</sub>	39.16 <sup>a</sup> <sub>66</sub>	67.66 <sup>a</sup> <sub>239</sub>
17	58.738 <sup>a</sup> <sub>317</sub>	26.97 <sup>a</sup> <sub>9</sub>	13.65 <sup>a</sup> <sub>57</sub>	55.08 <sup>a</sup> <sub>204</sub>	12.162 <sup>a</sup> <sub>424</sub>	29.06 <sup>a</sup> <sub>203</sub>	39.82 <sup>a</sup> <sub>72</sub>	65.27 <sup>a</sup> <sub>206</sub>
27	59.055 <sup>a</sup> <sub>340</sub>	27.06 <sup>a</sup> <sub>64</sub>	14.22 <sup>a</sup> <sub>60</sub>	53.04 <sup>a</sup> <sub>169</sub>	12.586 <sup>a</sup> <sub>453</sub>	27.03 <sup>a</sup> <sub>178</sub>	40.54 <sup>a</sup> <sub>77</sub>	63.21 <sup>a</sup> <sub>168</sub>
Nov. 6	59.395 <sup>a</sup> <sub>354</sub>	27.70 <sup>a</sup> <sub>118</sub>	14.82 <sup>a</sup> <sub>63</sub>	51.35 <sup>a</sup> <sub>130</sub>	13.039 <sup>a</sup> <sub>475</sub>	25.25 <sup>a</sup> <sub>149</sub>	41.31 <sup>a</sup> <sub>80</sub>	61.53 <sup>a</sup> <sub>124</sub>
16	59.749 <sup>a</sup> <sub>358</sub>	28.88 <sup>a</sup> <sub>170</sub>	15.45 <sup>a</sup> <sub>64</sub>	50.05 <sup>a</sup> <sub>87</sub>	13.514 <sup>a</sup> <sub>486</sub>	23.76 <sup>a</sup> <sub>113</sub>	42.11 <sup>a</sup> <sub>82</sub>	60.29 <sup>a</sup> <sub>75</sub>
26	60.107 <sup>a</sup> <sub>353</sub>	30.58 <sup>a</sup> <sub>217</sub>	16.09 <sup>a</sup> <sub>64</sub>	49.18 <sup>a</sup> <sub>39</sub>	14.000 <sup>a</sup> <sub>485</sub>	22.63 <sup>a</sup> <sub>75</sub>	42.93 <sup>a</sup> <sub>81</sub>	59.54 <sup>a</sup> <sub>24</sub>
Dez. 6	60.460 <sup>a</sup> <sub>335</sub>	32.75 <sup>a</sup> <sub>257</sub>	16.73 <sup>a</sup> <sub>61</sub>	48.79 <sup>a</sup> <sub>11</sub>	14.485 <sup>a</sup> <sub>472</sub>	21.88 <sup>a</sup> <sub>33</sub>	43.74 <sup>a</sup> <sub>78</sub>	59.30 <sup>a</sup> <sub>29</sub>
16	60.795 <sup>a</sup> <sub>306</sub>	35.32 <sup>a</sup> <sub>287</sub>	17.34 <sup>a</sup> <sub>58</sub>	48.90 <sup>a</sup> <sub>61</sub>	14.957 <sup>a</sup> <sub>443</sub>	21.55 <sup>a</sup> <sub>12</sub>	44.52 <sup>a</sup> <sub>73</sub>	59.59 <sup>a</sup> <sub>83</sub>
26	61.101 <sup>a</sup> <sub>267</sub>	38.19 <sup>a</sup> <sub>309</sub>	17.92 <sup>a</sup> <sub>52</sub>	49.51 <sup>a</sup> <sub>109</sub>	15.400 <sup>a</sup> <sub>400</sub>	21.67 <sup>a</sup> <sub>56</sub>	45.25 <sup>a</sup> <sub>65</sub>	60.42 <sup>a</sup> <sub>133</sub>
36	61.368 <sup>a</sup>	41.28 <sup>a</sup>	18.44 <sup>a</sup>	50.60 <sup>a</sup>	15.800 <sup>a</sup>	22.23 <sup>a</sup>	45.90 <sup>a</sup>	61.75 <sup>a</sup>
Mittl. Ort sec 8, tg δ	58.368 1.232	36.18 -0.719	12.88 2.226	73.79 +1.989	11.416 1.622	45.14 +1.277	39.26 2.934	85.52 +2.759
a, a'	+2.5	-15.7	+4.7	-15.8	+4.1	-15.9	+5.3	-15.9
b, b'	+0.04	-0.62	-0.10	-0.62	-0.07	-0.61	-0.15	-0.61



Tag	360) $\iota$ Leonis min.		366) $\delta$ Antliae		367) $\varepsilon$ Leonis		368) $\upsilon$ Ursae maj.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$9^h 30^m$	$+36^\circ 38'$	$9^h 41^m$	$-27^\circ 30'$	$9^h 42^m$	$+24^\circ 1'$	$9^h 47^m$	$+59^\circ 17'$
Jan. I	$51.527^{297}$	$27.62^6$	$45.181^{244}$	$52.11^{291}$	$43.832^{276}$	$38.38^{68}$	$5.872^{446}$	$44.77^{101}$
II	$51.824^{249}$	$27.68^{40}$	$45.425^{199}$	$55.02^{294}$	$44.108^{233}$	$37.70^{37}$	$6.318^{376}$	$45.78^{146}$
2I	$52.073^{191}$	$28.08^{73}$	$45.624^{149}$	$57.96^{288}$	$44.341^{183}$	$37.33^8$	$6.694^{295}$	$47.24^{184}$
3I	$52.264^{130}$	$28.81^{101}$	$45.773^{95}$	$60.84^{276}$	$44.524^{129}$	$37.25^{20}$	$6.989^{206}$	$49.08^{214}$
Febr. 10	$52.394^{69}$	$29.82^{122}$	$45.868^{42}$	$63.60^{256}$	$44.653^{75}$	$37.45^{46}$	$7.195^{113}$	$51.22^{234}$
19	$52.463^9$	$31.04^{137}$	$45.910^7$	$66.16^{232}$	$44.728^{23}$	$37.91^{66}$	$7.308^{22}$	$53.56^{246}$
März I	$52.472^{45}$	$32.41^{146}$	$45.993^{53}$	$68.48^{204}$	$44.751^{26}$	$38.57^{81}$	$7.330^{64}$	$56.02^{246}$
II	$52.427^{92}$	$33.87^{146}$	$45.850^{92}$	$70.52^{173}$	$44.725^{68}$	$39.38^{91}$	$7.266^{141}$	$58.48^{235}$
2I	$52.335^{130}$	$35.33^{139}$	$45.758^{122}$	$72.25^{139}$	$44.657^{101}$	$40.29^{96}$	$7.125^{206}$	$60.83^{215}$
3I	$52.205^{157}$	$36.72^{127}$	$45.636^{146}$	$73.64^{104}$	$44.556^{126}$	$41.25^{95}$	$6.919^{255}$	$62.98^{187}$
Apr. 10	$52.048^{173}$	$37.99^{110}$	$45.490^{161}$	$74.68^{69}$	$44.430^{141}$	$42.20^{90}$	$6.664^{291}$	$64.85^{153}$
20	$51.875^{180}$	$39.09^{89}$	$45.329^{168}$	$75.37^{34}$	$44.289^{149}$	$43.10^{81}$	$6.373^{310}$	$66.38^{113}$
30	$51.695^{177}$	$39.98^{65}$	$45.161^{168}$	$75.71^2$	$44.140^{147}$	$43.91^{70}$	$6.063^{315}$	$67.51^{69}$
Mai 10	$51.518^{166}$	$40.63^{39}$	$44.993^{163}$	$75.69^{37}$	$43.993^{139}$	$44.61^{56}$	$5.748^{306}$	$68.20^{25}$
20	$51.352^{147}$	$41.02^{13}$	$44.830^{152}$	$75.32^{71}$	$43.854^{126}$	$45.17^{42}$	$5.442^{285}$	$68.45^{20}$
30	$51.205^{125}$	$41.15^{13}$	$44.678^{137}$	$74.61^{102}$	$43.728^{107}$	$45.59^{26}$	$5.157^{254}$	$68.25^{63}$
Juni 9	$51.080^{97}$	$41.02^{37}$	$44.541^{118}$	$73.59^{131}$	$43.621^{85}$	$45.85^{11}$	$4.903^{216}$	$67.62^{104}$
19	$50.983^{66}$	$40.65^{61}$	$44.423^{96}$	$72.28^{156}$	$43.536^{60}$	$45.96^6$	$4.687^{171}$	$66.58^{143}$
29	$50.917^{34}$	$40.04^{83}$	$44.327^{71}$	$70.72^{177}$	$43.476^{34}$	$45.90^{21}$	$4.516^{121}$	$65.15^{176}$
Juli 9	$50.883^1$	$39.21^{103}$	$44.256^{45}$	$68.95^{194}$	$43.442^7$	$45.69^{36}$	$4.395^{68}$	$63.39^{206}$
19	$50.882^{34}$	$38.18^{121}$	$44.211^{16}$	$67.01^{203}$	$43.435^{21}$	$45.33^{51}$	$4.327^{12}$	$61.33^{231}$
29	$50.916^{68}$	$36.97^{138}$	$44.195^{16}$	$64.98^{207}$	$43.456^{50}$	$44.82^{67}$	$4.315^{44}$	$59.02^{252}$
Ang. 8	$50.984^{103}$	$35.59^{152}$	$44.211^{48}$	$62.91^{203}$	$43.506^{80}$	$44.15^{82}$	$4.359^{102}$	$56.50^{268}$
18	$51.087^{138}$	$34.07^{164}$	$44.259^{82}$	$60.88^{192}$	$43.586^{110}$	$43.33^{97}$	$4.461^{159}$	$53.82^{278}$
28	$51.225^{173}$	$32.43^{175}$	$44.341^{119}$	$58.96^{172}$	$43.696^{141}$	$42.36^{113}$	$4.620^{218}$	$51.04^{283}$
Sept. 7	$51.398^{209}$	$30.68^{184}$	$44.460^{155}$	$57.24^{145}$	$43.837^{173}$	$41.23^{128}$	$4.838^{274}$	$48.21^{284}$
17	$51.607^{243}$	$28.84^{190}$	$44.615^{192}$	$55.79^{111}$	$44.010^{205}$	$39.95^{141}$	$5.112^{330}$	$45.37^{278}$
27	$51.850^{277}$	$26.94^{192}$	$44.807^{228}$	$54.68^{70}$	$44.215^{237}$	$38.54^{155}$	$5.442^{384}$	$42.59^{267}$
Okt. 7	$52.127^{310}$	$25.02^{191}$	$45.035^{261}$	$53.98^{25}$	$44.452^{268}$	$36.99^{165}$	$5.826^{435}$	$39.92^{251}$
17	$52.437^{339}$	$23.11^{187}$	$45.296^{292}$	$53.73^{24}$	$44.720^{297}$	$35.34^{172}$	$6.261^{482}$	$37.41^{227}$
27	$52.776^{364}$	$21.24^{176}$	$45.588^{316}$	$53.97^{73}$	$45.017^{321}$	$33.62^{176}$	$6.743^{520}$	$35.14^{199}$
Nov. 6	$53.140^{383}$	$19.48^{162}$	$45.994^{333}$	$54.70^{122}$	$45.338^{341}$	$31.86^{174}$	$7.263^{550}$	$33.15^{163}$
16	$53.523^{394}$	$17.86^{141}$	$46.237^{341}$	$55.92^{168}$	$45.679^{353}$	$30.12^{167}$	$7.813^{569}$	$31.52^{123}$
26	$53.917^{393}$	$16.45^{116}$	$46.578^{340}$	$57.60^{209}$	$46.032^{355}$	$28.45^{155}$	$8.382^{573}$	$30.29^{78}$
Dez. 6	$54.310^{384}$	$15.29^{86}$	$46.918^{328}$	$59.69^{243}$	$46.387^{349}$	$26.90^{137}$	$8.955^{561}$	$29.51^{30}$
16	$54.694^{362}$	$14.43^{53}$	$47.246^{305}$	$62.12^{269}$	$46.736^{330}$	$25.53^{115}$	$9.516^{532}$	$29.21^{20}$
26	$55.056^{328}$	$13.90^{18}$	$47.551^{272}$	$64.81^{286}$	$47.066^{302}$	$24.38^{87}$	$10.048^{488}$	$29.41^{70}$
36	$55.384$	$13.72$	$47.823$	$67.67$	$47.368$	$23.51$	$10.536$	$30.11$
Mittl. Ort	$51.590$	$34.16$	$44.865$	$60.87$	$43.965$	$42.41$	$5.748$	$54.98$
sec $\delta$ , tg $\delta$	$1.246$	$+0.744$	$1.128$	$-0.521$	$1.095$	$+0.446$	$1.959$	$+1.684$
a, a'	$+3.7$	$-15.9$	$+2.7$	$-16.5$	$+3.4$	$-16.6$	$+4.3$	$-16.8$
b, b'	$-0.04$	$-0.61$	$+0.03$	$-0.57$	$-0.02$	$-0.56$	$-0.09$	$-0.55$



# Obere Kulmination Greenwich

99\*

Tag	370) 6 Sextantis		372) Grb 1586 UMa <sup>j</sup>		375) φ Velorum		378) π Leonis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	9 <sup>h</sup> 48 <sup>m</sup>	-3° 59'	9 <sup>h</sup> 53 <sup>m</sup>	+73° 8'	9 <sup>h</sup> 54 <sup>m</sup>	-54° 18'	9 <sup>h</sup> 57 <sup>m</sup>	+8° 18'
Jan. I	27.679 <sup>a</sup> <sub>248</sub>	2.13 <sub>205</sub>	31.40 <sup>a</sup> <sub>73</sub>	21.09 <sub>150</sub>	56.823 <sup>a</sup> <sub>314</sub>	3.49 <sub>333</sub>	18.333 <sup>a</sup> <sub>264</sub>	32.07 <sup>a</sup> <sub>152</sub>
II	27.927 <sub>209</sub>	4.18 <sub>192</sub>	32.13 <sub>62</sub>	22.59 <sub>197</sub>	57.137 <sub>249</sub>	6.82 <sub>354</sub>	18.597 <sub>225</sub>	30.55 <sub>131</sub>
2I	28.136 <sub>163</sub>	6.10 <sub>174</sub>	32.75 <sub>48</sub>	24.56 <sub>237</sub>	57.386 <sub>179</sub>	10.36 <sub>366</sub>	18.822 <sub>180</sub>	29.24 <sub>107</sub>
3I	28.299 <sub>115</sub>	7.84 <sub>153</sub>	33.23 <sub>34</sub>	26.93 <sub>267</sub>	57.565 <sub>106</sub>	14.02 <sub>366</sub>	19.002 <sub>131</sub>	28.17 <sub>82</sub>
Febr. 10	28.414 <sub>65</sub>	9.37 <sub>130</sub>	33.57 <sub>18</sub>	29.60 <sub>285</sub>	57.671 <sub>32</sub>	17.68 <sub>357</sub>	19.133 <sub>81</sub>	27.35 <sub>55</sub>
19	28.479 <sub>18</sub>	10.67 <sub>104</sub>	33.75 <sub>2</sub>	32.45 <sub>293</sub>	57.703 <sub>38</sub>	21.25 <sub>341</sub>	19.214 <sub>32</sub>	26.80 <sub>31</sub>
März I	28.497 <sub>24</sub>	11.71 <sub>80</sub>	33.77 <sub>13</sub>	35.38 <sub>289</sub>	57.665 <sub>102</sub>	24.66 <sub>317</sub>	19.246 <sub>11</sub>	26.49 <sub>9</sub>
II	28.473 <sub>61</sub>	12.51 <sub>56</sub>	33.64 <sub>27</sub>	38.27 <sub>271</sub>	57.563 <sub>158</sub>	27.83 <sub>286</sub>	19.235 <sub>50</sub>	26.40 <sub>10</sub>
2I	28.412 <sub>91</sub>	13.07 <sub>33</sub>	33.37 <sub>38</sub>	40.98 <sub>244</sub>	57.405 <sub>205</sub>	30.69 <sub>249</sub>	19.185 <sub>82</sub>	26.50 <sub>26</sub>
3I	28.321 <sub>113</sub>	13.40 <sub>12</sub>	32.99 <sub>47</sub>	43.42 <sub>208</sub>	57.200 <sub>243</sub>	33.18 <sub>209</sub>	19.103 <sub>105</sub>	26.76 <sub>39</sub>
Apr. 10	28.208 <sub>127</sub>	13.52 <sub>7</sub>	32.52 <sub>55</sub>	45.50 <sub>165</sub>	56.957 <sub>271</sub>	35.27 <sub>165</sub>	18.998 <sub>121</sub>	27.15 <sub>48</sub>
20	28.081 <sub>133</sub>	13.45 <sub>25</sub>	31.97 <sub>59</sub>	47.15 <sub>116</sub>	56.686 <sub>290</sub>	36.92 <sub>118</sub>	18.877 <sub>129</sub>	27.63 <sub>55</sub>
30	27.948 <sub>134</sub>	13.20 <sub>41</sub>	31.38 <sub>61</sub>	48.31 <sub>65</sub>	56.396 <sub>299</sub>	38.10 <sub>69</sub>	18.748 <sub>131</sub>	28.18 <sub>59</sub>
Mai 10	27.814 <sub>127</sub>	12.79 <sub>54</sub>	30.77 <sub>60</sub>	48.96 <sub>11</sub>	56.097 <sub>300</sub>	38.79 <sub>20</sub>	18.617 <sub>125</sub>	28.77 <sub>61</sub>
20	27.687 <sub>117</sub>	12.25 <sub>68</sub>	30.17 <sub>57</sub>	49.07 <sub>41</sub>	55.797 <sub>293</sub>	38.99 <sub>30</sub>	18.492 <sub>115</sub>	29.38 <sub>61</sub>
30	27.570 <sub>102</sub>	11.57 <sub>79</sub>	29.60 <sub>53</sub>	48.66 <sub>93</sub>	55.504 <sub>278</sub>	38.69 <sub>78</sub>	18.377 <sub>101</sub>	29.99 <sub>60</sub>
Juni 9	27.468 <sub>85</sub>	10.78 <sub>87</sub>	29.07 <sub>46</sub>	47.73 <sub>140</sub>	55.226 <sub>257</sub>	37.91 <sub>124</sub>	18.276 <sub>83</sub>	30.59 <sub>58</sub>
19	27.383 <sub>64</sub>	9.91 <sub>95</sub>	28.61 <sub>38</sub>	46.33 <sub>184</sub>	54.969 <sub>230</sub>	36.67 <sub>167</sub>	18.193 <sub>64</sub>	31.17 <sub>54</sub>
29	27.319 <sub>43</sub>	8.96 <sub>98</sub>	28.23 <sub>30</sub>	44.49 <sub>223</sub>	54.739 <sub>195</sub>	35.00 <sub>205</sub>	18.129 <sub>43</sub>	31.71 <sub>49</sub>
Juli 9	27.276 <sub>19</sub>	7.98 <sub>100</sub>	27.93 <sub>20</sub>	42.26 <sub>256</sub>	54.544 <sub>156</sub>	32.95 <sub>238</sub>	18.086 <sub>20</sub>	32.20 <sub>41</sub>
19	27.257 <sub>5</sub>	6.98 <sub>98</sub>	27.73 <sub>10</sub>	39.70 <sub>283</sub>	54.388 <sub>111</sub>	30.57 <sub>263</sub>	18.066 <sub>5</sub>	32.61 <sub>33</sub>
29	27.262 <sub>31</sub>	6.00 <sub>92</sub>	27.63 <sub>0</sub>	36.87 <sub>304</sub>	54.277 <sub>61</sub>	27.94 <sub>280</sub>	18.071 <sub>29</sub>	32.94 <sub>22</sub>
Aug. 8	27.293 <sub>58</sub>	5.08 <sub>81</sub>	27.63 <sub>11</sub>	33.83 <sub>319</sub>	54.216 <sub>7</sub>	25.14 <sub>289</sub>	18.100 <sub>57</sub>	33.16 <sub>8</sub>
18	27.351 <sub>87</sub>	4.27 <sub>66</sub>	27.74 <sub>22</sub>	30.64 <sub>328</sub>	54.209 <sub>50</sub>	22.25 <sub>286</sub>	18.157 <sub>84</sub>	33.24 <sub>7</sub>
28	27.438 <sub>117</sub>	3.61 <sub>48</sub>	27.96 <sub>32</sub>	27.36 <sub>329</sub>	54.259 <sub>111</sub>	19.39 <sub>274</sub>	18.241 <sub>114</sub>	33.17 <sub>26</sub>
Sept. 7	27.555 <sub>147</sub>	3.13 <sub>24</sub>	28.28 <sub>42</sub>	24.07 <sub>324</sub>	54.370 <sub>173</sub>	16.65 <sub>252</sub>	18.355 <sub>144</sub>	32.91 <sub>46</sub>
17	27.702 <sub>179</sub>	2.89 <sub>4</sub>	28.70 <sub>53</sub>	20.83 <sub>313</sub>	54.543 <sub>233</sub>	14.13 <sub>218</sub>	18.499 <sub>176</sub>	32.45 <sub>69</sub>
27	27.881 <sub>210</sub>	2.93 <sub>33</sub>	29.23 <sub>62</sub>	17.70 <sub>294</sub>	54.776 <sub>290</sub>	11.95 <sub>176</sub>	18.675 <sub>208</sub>	31.76 <sub>92</sub>
Okt. 7	28.091 <sub>240</sub>	3.26 <sub>65</sub>	29.85 <sub>71</sub>	14.76 <sub>269</sub>	55.066 <sub>344</sub>	10.19 <sub>126</sub>	18.883 <sub>239</sub>	30.84 <sub>115</sub>
17	28.331 <sub>269</sub>	3.91 <sub>97</sub>	30.56 <sub>78</sub>	12.07 <sub>238</sub>	55.410 <sub>390</sub>	8.93 <sub>68</sub>	19.122 <sub>268</sub>	29.69 <sub>136</sub>
27	28.600 <sub>293</sub>	4.88 <sub>128</sub>	31.34 <sub>85</sub>	9.69 <sub>200</sub>	55.800 <sub>426</sub>	8.25 <sub>7</sub>	19.390 <sub>293</sub>	28.33 <sub>156</sub>
Nov. 6	28.893 <sub>311</sub>	6.16 <sub>156</sub>	32.19 <sub>90</sub>	7.69 <sub>155</sub>	56.226 <sub>450</sub>	8.18 <sub>56</sub>	19.683 <sub>314</sub>	26.77 <sub>172</sub>
16	29.204 <sub>322</sub>	7.72 <sub>180</sub>	33.09 <sub>93</sub>	6.14 <sub>106</sub>	56.676 <sub>460</sub>	8.74 <sub>118</sub>	19.997 <sub>327</sub>	25.05 <sub>183</sub>
26	29.526 <sub>324</sub>	9.52 <sub>198</sub>	34.02 <sub>94</sub>	5.08 <sub>53</sub>	57.136 <sub>455</sub>	9.92 <sub>178</sub>	20.324 <sub>333</sub>	23.22 <sub>188</sub>
Dez. 6	29.850 <sub>318</sub>	11.50 <sub>209</sub>	34.96 <sub>92</sub>	4.55 <sub>4</sub>	57.591 <sub>435</sub>	11.70 <sub>232</sub>	20.657 <sub>327</sub>	21.34 <sub>186</sub>
16	30.168 <sub>300</sub>	13.59 <sub>214</sub>	35.88 <sub>87</sub>	4.59 <sub>61</sub>	58.026 <sub>400</sub>	14.02 <sub>279</sub>	20.984 <sub>312</sub>	19.48 <sub>179</sub>
26	30.468 <sub>273</sub>	15.73 <sub>212</sub>	36.75 <sub>80</sub>	5.20 <sub>115</sub>	58.426 <sub>352</sub>	16.81 <sub>316</sub>	21.296 <sub>288</sub>	17.69 <sub>165</sub>
36	30.741	17.85	37.55	6.35	58.778	19.97	21.584	16.04
Mittl. Ort	27.704	5.18	30.66	32.63	55.696	18.83	18.480	32.07
sec δ, tg δ	1.002	-0.070	3.448	+3.300	1.714	-1.392	1.011	+0.146
a, a'	+3.0	-16.8	+5.4	-17.1	+2.1	-17.1	+3.2	-17.2
b, b'	0.00	-0.54	-0.19	-0.52	+0.08	-0.52	-0.01	-0.51



Tag	379) $\eta$ Leonis		380) $\alpha$ Leonis		381) $\lambda$ Hydrae		382) $\rho_1$ G. Velorum	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$10^h 4^m$	$+17^\circ 1'$	$10^h 5^m$	$+12^\circ 13'$	$10^h 7^m$	$-12^\circ 4'$	$10^h 12^m$	$-41^\circ 50'$
Jan. I	19.957 <sup>280</sup>	51.71 <sup>114</sup>	26.477 <sup>274</sup>	71.54 <sup>138</sup>	54.289 <sup>261</sup>	47.56 <sup>238</sup>	25.855 <sup>294</sup>	41.88 <sup>312</sup>
II	20.237 <sup>240</sup>	50.57 <sup>87</sup>	26.751 <sup>235</sup>	70.16 <sup>113</sup>	54.550 <sup>222</sup>	49.94 <sup>232</sup>	26.149 <sup>245</sup>	45.00 <sup>327</sup>
21	20.477 <sup>195</sup>	49.70 <sup>59</sup>	26.986 <sup>190</sup>	69.03 <sup>87</sup>	54.772 <sup>178</sup>	52.26 <sup>220</sup>	26.394 <sup>190</sup>	48.27 <sup>335</sup>
31	20.672 <sup>145</sup>	49.11 <sup>30</sup>	27.176 <sup>142</sup>	68.16 <sup>59</sup>	54.950 <sup>130</sup>	54.46 <sup>203</sup>	26.584 <sup>131</sup>	51.62 <sup>333</sup>
Febr. 10	20.817 <sup>94</sup>	48.81 <sup>2</sup>	27.318 <sup>91</sup>	67.57 <sup>33</sup>	55.080 <sup>81</sup>	56.49 <sup>181</sup>	26.715 <sup>72</sup>	54.95 <sup>323</sup>
20	20.911 <sup>43</sup>	48.79 <sup>22</sup>	27.409 <sup>42</sup>	67.24 <sup>8</sup>	55.161 <sup>33</sup>	58.30 <sup>156</sup>	26.787 <sup>14</sup>	58.18 <sup>304</sup>
März I	20.954 <sup>3</sup>	49.01 <sup>42</sup>	27.451 <sup>3</sup>	67.16 <sup>14</sup>	55.194 <sup>10</sup>	59.86 <sup>131</sup>	26.801 <sup>39</sup>	61.22 <sup>281</sup>
II	20.951 <sup>45</sup>	49.43 <sup>58</sup>	27.448 <sup>43</sup>	67.30 <sup>32</sup>	55.184 <sup>48</sup>	61.17 <sup>104</sup>	26.762 <sup>85</sup>	64.03 <sup>251</sup>
21	20.906 <sup>78</sup>	50.01 <sup>69</sup>	27.405 <sup>76</sup>	67.62 <sup>46</sup>	55.136 <sup>80</sup>	62.21 <sup>78</sup>	26.677 <sup>125</sup>	66.54 <sup>219</sup>
31	20.828 <sup>104</sup>	50.70 <sup>76</sup>	27.329 <sup>101</sup>	68.08 <sup>56</sup>	55.056 <sup>104</sup>	62.99 <sup>51</sup>	26.552 <sup>157</sup>	68.73 <sup>181</sup>
Apr. 10	20.724 <sup>122</sup>	51.46 <sup>78</sup>	27.228 <sup>118</sup>	68.64 <sup>63</sup>	54.952 <sup>121</sup>	63.50 <sup>27</sup>	26.395 <sup>181</sup>	70.54 <sup>141</sup>
20	20.602 <sup>131</sup>	52.24 <sup>76</sup>	27.110 <sup>128</sup>	69.27 <sup>65</sup>	54.831 <sup>130</sup>	63.77 <sup>3</sup>	26.214 <sup>196</sup>	71.95 <sup>100</sup>
30	20.471 <sup>133</sup>	53.00 <sup>72</sup>	26.982 <sup>130</sup>	69.92 <sup>67</sup>	54.701 <sup>134</sup>	63.80 <sup>20</sup>	26.018 <sup>205</sup>	72.95 <sup>58</sup>
Mai 10	20.338 <sup>130</sup>	53.72 <sup>66</sup>	26.852 <sup>126</sup>	70.59 <sup>64</sup>	54.567 <sup>131</sup>	63.60 <sup>41</sup>	25.813 <sup>207</sup>	73.53 <sup>14</sup>
20	20.208 <sup>120</sup>	54.38 <sup>57</sup>	26.726 <sup>118</sup>	71.23 <sup>60</sup>	54.436 <sup>125</sup>	63.19 <sup>61</sup>	25.606 <sup>202</sup>	73.67 <sup>29</sup>
30	20.088 <sup>107</sup>	54.95 <sup>47</sup>	26.608 <sup>104</sup>	71.83 <sup>55</sup>	54.311 <sup>113</sup>	62.58 <sup>79</sup>	25.404 <sup>194</sup>	73.38 <sup>70</sup>
Juni 9	19.981 <sup>89</sup>	55.42 <sup>37</sup>	26.504 <sup>88</sup>	72.38 <sup>49</sup>	54.198 <sup>99</sup>	61.79 <sup>95</sup>	25.210 <sup>179</sup>	72.68 <sup>110</sup>
19	19.892 <sup>69</sup>	55.79 <sup>25</sup>	26.416 <sup>69</sup>	72.87 <sup>41</sup>	54.099 <sup>82</sup>	60.84 <sup>109</sup>	25.031 <sup>160</sup>	71.58 <sup>147</sup>
29	19.823 <sup>48</sup>	56.04 <sup>13</sup>	26.347 <sup>48</sup>	73.28 <sup>33</sup>	54.017 <sup>63</sup>	59.75 <sup>119</sup>	24.871 <sup>136</sup>	70.11 <sup>180</sup>
Juli 9	19.775 <sup>24</sup>	56.17 <sup>1</sup>	26.299 <sup>26</sup>	73.61 <sup>22</sup>	53.954 <sup>41</sup>	58.56 <sup>127</sup>	24.735 <sup>109</sup>	68.31 <sup>207</sup>
19	19.751 <sup>0</sup>	56.16 <sup>14</sup>	26.273 <sup>2</sup>	73.83 <sup>12</sup>	53.913 <sup>18</sup>	57.29 <sup>129</sup>	24.626 <sup>78</sup>	66.24 <sup>229</sup>
29	19.751 <sup>27</sup>	56.02 <sup>28</sup>	26.271 <sup>24</sup>	73.95 <sup>2</sup>	53.895 <sup>7</sup>	56.00 <sup>128</sup>	24.548 <sup>43</sup>	63.95 <sup>242</sup>
Aug. 8	19.778 <sup>53</sup>	55.74 <sup>44</sup>	26.295 <sup>50</sup>	73.93 <sup>16</sup>	53.902 <sup>34</sup>	54.72 <sup>121</sup>	24.505 <sup>3</sup>	61.53 <sup>249</sup>
18	19.831 <sup>83</sup>	55.30 <sup>61</sup>	26.345 <sup>78</sup>	73.77 <sup>33</sup>	53.936 <sup>63</sup>	53.51 <sup>108</sup>	24.502 <sup>38</sup>	59.04 <sup>246</sup>
28	19.914 <sup>112</sup>	54.69 <sup>79</sup>	26.423 <sup>107</sup>	73.44 <sup>51</sup>	53.999 <sup>95</sup>	52.43 <sup>90</sup>	24.540 <sup>83</sup>	56.58 <sup>234</sup>
Sept. 7	20.026 <sup>144</sup>	53.90 <sup>98</sup>	26.530 <sup>139</sup>	72.93 <sup>70</sup>	54.094 <sup>127</sup>	51.53 <sup>67</sup>	24.623 <sup>131</sup>	54.24 <sup>212</sup>
17	20.170 <sup>176</sup>	52.92 <sup>115</sup>	26.669 <sup>171</sup>	72.23 <sup>91</sup>	54.221 <sup>161</sup>	50.86 <sup>39</sup>	24.754 <sup>178</sup>	52.12 <sup>182</sup>
27	20.346 <sup>209</sup>	51.77 <sup>134</sup>	26.840 <sup>203</sup>	71.32 <sup>112</sup>	54.382 <sup>195</sup>	50.47 <sup>6</sup>	24.932 <sup>226</sup>	50.30 <sup>142</sup>
Okt. 7	20.555 <sup>242</sup>	50.43 <sup>151</sup>	27.043 <sup>235</sup>	70.26 <sup>133</sup>	54.577 <sup>229</sup>	50.41 <sup>31</sup>	25.158 <sup>270</sup>	48.88 <sup>97</sup>
17	20.797 <sup>272</sup>	48.92 <sup>166</sup>	27.278 <sup>266</sup>	68.87 <sup>151</sup>	54.806 <sup>260</sup>	50.72 <sup>67</sup>	25.428 <sup>311</sup>	47.91 <sup>44</sup>
27	21.069 <sup>299</sup>	47.26 <sup>177</sup>	27.544 <sup>293</sup>	67.36 <sup>167</sup>	55.066 <sup>288</sup>	51.39 <sup>105</sup>	25.739 <sup>345</sup>	47.47 <sup>12</sup>
Nov. 6	21.368 <sup>322</sup>	45.49 <sup>183</sup>	27.837 <sup>315</sup>	65.69 <sup>179</sup>	55.354 <sup>309</sup>	52.44 <sup>141</sup>	26.084 <sup>370</sup>	47.59 <sup>68</sup>
16	21.690 <sup>337</sup>	43.66 <sup>185</sup>	28.152 <sup>330</sup>	63.90 <sup>186</sup>	55.663 <sup>323</sup>	53.85 <sup>173</sup>	26.454 <sup>385</sup>	48.27 <sup>125</sup>
26	22.027 <sup>344</sup>	41.81 <sup>180</sup>	28.482 <sup>337</sup>	62.04 <sup>186</sup>	55.986 <sup>329</sup>	55.58 <sup>200</sup>	26.839 <sup>388</sup>	49.52 <sup>178</sup>
Dez. 6	22.371 <sup>340</sup>	40.01 <sup>170</sup>	28.819 <sup>333</sup>	60.18 <sup>181</sup>	56.315 <sup>324</sup>	57.58 <sup>221</sup>	27.227 <sup>379</sup>	51.30 <sup>226</sup>
16	22.711 <sup>327</sup>	38.31 <sup>154</sup>	29.152 <sup>320</sup>	58.37 <sup>170</sup>	56.639 <sup>309</sup>	59.79 <sup>234</sup>	27.606 <sup>357</sup>	53.56 <sup>266</sup>
26	23.038 <sup>303</sup>	36.77 <sup>132</sup>	29.472 <sup>297</sup>	56.67 <sup>152</sup>	56.948 <sup>284</sup>	62.13 <sup>240</sup>	27.963 <sup>323</sup>	56.22 <sup>298</sup>
36	23.341	35.45	29.769	55.15	57.232	64.53	28.286	59.20
Mittl. Ort	20.170	53.91	26.679	72.45	54.329	53.50	25.391	55.86
sec $\delta$ , tg $\delta$	1.046	+0.306	1.023	+0.217	1.023	-0.214	1.342	-0.896
$a, a'$	+3.3	-17.5	+3.2	-17.6	+2.9	-17.7	+2.5	-17.9
$b, b'$	-0.02	-0.48	-0.01	-0.48	+0.01	-0.47	+0.05	-0.45



# Obere Kulmination Greenwich

101\*

Tag	384) ζ Leonis		383) λ Ursae maj.		386) μ Ursae maj.		387) 30 H. Ursae maj.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	10 <sup>h</sup> 13 <sup>m</sup>	+23° 41'	10 <sup>h</sup> 13 <sup>m</sup>	+43° 10'	10 <sup>h</sup> 19 <sup>m</sup>	+41° 46'	10 <sup>h</sup> 20 <sup>m</sup>	+65° 50'
Jan. I	37.795 <sup>298</sup>	27.79 <sup>88</sup>	47.014 <sup>358</sup>	75.12 <sup>2</sup>	3.318 <sup>356</sup>	28.77 <sup>10</sup>	11.42 <sup>58</sup>	31.84 <sup>92</sup>
II	38.093 <sup>258</sup>	26.91 <sup>57</sup>	47.372 <sup>312</sup>	75.14 <sup>45</sup>	3.674 <sup>311</sup>	28.67 <sup>34</sup>	12.00 <sup>50</sup>	32.76 <sup>142</sup>
21	38.351 <sup>212</sup>	26.34 <sup>24</sup>	47.684 <sup>257</sup>	75.59 <sup>85</sup>	3.985 <sup>258</sup>	29.01 <sup>75</sup>	12.50 <sup>42</sup>	34.18 <sup>188</sup>
31	38.563 <sup>162</sup>	26.10 <sup>8</sup>	47.941 <sup>194</sup>	76.44 <sup>121</sup>	4.243 <sup>197</sup>	29.76 <sup>111</sup>	12.92 <sup>31</sup>	36.06 <sup>226</sup>
Febr. 10	38.725 <sup>108</sup>	26.18 <sup>37</sup>	48.135 <sup>128</sup>	77.65 <sup>150</sup>	4.440 <sup>134</sup>	30.87 <sup>141</sup>	13.23 <sup>21</sup>	38.32 <sup>253</sup>
20	38.833 <sup>55</sup>	26.55 <sup>61</sup>	48.263 <sup>63</sup>	79.15 <sup>172</sup>	4.574 <sup>70</sup>	32.28 <sup>163</sup>	13.44 <sup>9</sup>	40.85 <sup>270</sup>
März I	38.888 <sup>7</sup>	27.16 <sup>81</sup>	48.326 <sup>2</sup>	80.87 <sup>184</sup>	4.644 <sup>9</sup>	33.91 <sup>179</sup>	13.53 <sup>1</sup>	43.55 <sup>275</sup>
II	38.895 <sup>37</sup>	27.97 <sup>95</sup>	48.328 <sup>55</sup>	82.71 <sup>189</sup>	4.653 <sup>46</sup>	35.70 <sup>184</sup>	13.52 <sup>12</sup>	46.30 <sup>269</sup>
21	38.858 <sup>74</sup>	28.92 <sup>102</sup>	48.273 <sup>102</sup>	84.60 <sup>184</sup>	4.607 <sup>93</sup>	37.54 <sup>181</sup>	13.40 <sup>21</sup>	48.99 <sup>252</sup>
31	38.784 <sup>103</sup>	29.94 <sup>105</sup>	48.171 <sup>140</sup>	86.44 <sup>172</sup>	4.514 <sup>131</sup>	39.35 <sup>171</sup>	13.19 <sup>27</sup>	51.51 <sup>225</sup>
Apr. 10	38.681 <sup>123</sup>	30.99 <sup>102</sup>	48.031 <sup>168</sup>	88.16 <sup>153</sup>	4.383 <sup>159</sup>	41.06 <sup>154</sup>	12.92 <sup>34</sup>	53.76 <sup>190</sup>
20	38.558 <sup>135</sup>	32.01 <sup>95</sup>	47.863 <sup>185</sup>	89.69 <sup>128</sup>	4.224 <sup>176</sup>	42.60 <sup>131</sup>	12.58 <sup>38</sup>	55.66 <sup>149</sup>
30	38.423 <sup>139</sup>	32.96 <sup>84</sup>	47.678 <sup>192</sup>	90.97 <sup>100</sup>	4.048 <sup>184</sup>	43.91 <sup>104</sup>	12.20 <sup>39</sup>	57.15 <sup>103</sup>
Mai 10	38.284 <sup>136</sup>	33.80 <sup>71</sup>	47.486 <sup>190</sup>	91.97 <sup>68</sup>	3.864 <sup>184</sup>	44.95 <sup>73</sup>	11.81 <sup>40</sup>	58.18 <sup>54</sup>
20	38.148 <sup>129</sup>	34.51 <sup>56</sup>	47.296 <sup>181</sup>	92.65 <sup>35</sup>	3.680 <sup>175</sup>	45.68 <sup>42</sup>	11.41 <sup>39</sup>	58.72 <sup>5</sup>
30	38.019 <sup>115</sup>	35.07 <sup>39</sup>	47.115 <sup>164</sup>	93.00 <sup>1</sup>	3.505 <sup>160</sup>	46.10 <sup>8</sup>	11.02 <sup>37</sup>	58.77 <sup>44</sup>
Juni 9	37.904 <sup>99</sup>	35.46 <sup>22</sup>	46.951 <sup>142</sup>	93.01 <sup>32</sup>	3.345 <sup>140</sup>	46.18 <sup>24</sup>	10.65 <sup>33</sup>	58.33 <sup>92</sup>
19	37.805 <sup>79</sup>	35.68 <sup>4</sup>	46.809 <sup>117</sup>	92.69 <sup>65</sup>	3.205 <sup>116</sup>	45.94 <sup>56</sup>	10.32 <sup>28</sup>	57.41 <sup>137</sup>
29	37.726 <sup>57</sup>	35.72 <sup>14</sup>	46.692 <sup>88</sup>	92.04 <sup>95</sup>	3.089 <sup>89</sup>	45.38 <sup>86</sup>	10.04 <sup>24</sup>	56.04 <sup>178</sup>
Juli 9	37.669 <sup>34</sup>	35.58 <sup>31</sup>	46.604 <sup>56</sup>	91.09 <sup>123</sup>	3.000 <sup>59</sup>	44.52 <sup>115</sup>	9.80 <sup>17</sup>	54.26 <sup>214</sup>
19	37.635 <sup>8</sup>	35.27 <sup>49</sup>	46.548 <sup>22</sup>	89.86 <sup>149</sup>	2.941 <sup>27</sup>	43.37 <sup>140</sup>	9.63 <sup>10</sup>	52.12 <sup>246</sup>
29	37.627 <sup>18</sup>	34.78 <sup>67</sup>	46.526 <sup>13</sup>	88.37 <sup>172</sup>	2.914 <sup>8</sup>	41.97 <sup>164</sup>	9.53 <sup>5</sup>	49.66 <sup>273</sup>
Aug. 8	37.645 <sup>47</sup>	34.11 <sup>84</sup>	46.539 <sup>49</sup>	86.65 <sup>192</sup>	2.922 <sup>42</sup>	40.33 <sup>185</sup>	9.48 <sup>3</sup>	46.93 <sup>294</sup>
18	37.692 <sup>76</sup>	33.27 <sup>102</sup>	46.588 <sup>88</sup>	84.73 <sup>210</sup>	2.964 <sup>30</sup>	38.48 <sup>204</sup>	9.51 <sup>10</sup>	43.99 <sup>310</sup>
28	37.768 <sup>107</sup>	32.25 <sup>120</sup>	46.676 <sup>128</sup>	82.63 <sup>225</sup>	3.044 <sup>118</sup>	36.44 <sup>218</sup>	9.61 <sup>18</sup>	40.89 <sup>319</sup>
Sept. 7	37.875 <sup>140</sup>	31.05 <sup>137</sup>	46.804 <sup>168</sup>	80.38 <sup>235</sup>	3.162 <sup>158</sup>	34.26 <sup>231</sup>	9.79 <sup>25</sup>	37.70 <sup>322</sup>
17	38.015 <sup>174</sup>	29.68 <sup>153</sup>	46.972 <sup>210</sup>	78.03 <sup>242</sup>	3.320 <sup>200</sup>	31.95 <sup>239</sup>	10.04 <sup>33</sup>	34.48 <sup>319</sup>
27	38.189 <sup>209</sup>	28.15 <sup>168</sup>	47.182 <sup>251</sup>	75.61 <sup>246</sup>	3.520 <sup>241</sup>	29.56 <sup>244</sup>	10.37 <sup>39</sup>	31.29 <sup>309</sup>
Okt. 7	38.398 <sup>243</sup>	26.47 <sup>180</sup>	47.433 <sup>293</sup>	73.15 <sup>243</sup>	3.761 <sup>281</sup>	27.12 <sup>243</sup>	10.76 <sup>47</sup>	28.20 <sup>293</sup>
17	38.641 <sup>276</sup>	24.67 <sup>189</sup>	47.726 <sup>332</sup>	70.72 <sup>236</sup>	4.042 <sup>321</sup>	24.69 <sup>238</sup>	11.23 <sup>53</sup>	25.27 <sup>269</sup>
27	38.917 <sup>305</sup>	22.78 <sup>195</sup>	48.058 <sup>366</sup>	68.36 <sup>223</sup>	4.363 <sup>356</sup>	22.31 <sup>226</sup>	11.76 <sup>59</sup>	22.58 <sup>239</sup>
Nov. 6	39.222 <sup>330</sup>	20.83 <sup>195</sup>	48.424 <sup>396</sup>	66.13 <sup>204</sup>	4.719 <sup>386</sup>	20.05 <sup>209</sup>	12.35 <sup>63</sup>	20.19 <sup>202</sup>
16	39.552 <sup>348</sup>	18.88 <sup>189</sup>	48.820 <sup>417</sup>	64.09 <sup>178</sup>	5.105 <sup>408</sup>	17.96 <sup>185</sup>	12.98 <sup>67</sup>	18.17 <sup>158</sup>
26	39.900 <sup>357</sup>	16.99 <sup>178</sup>	49.237 <sup>427</sup>	62.31 <sup>148</sup>	5.513 <sup>419</sup>	16.11 <sup>156</sup>	13.65 <sup>69</sup>	16.59 <sup>109</sup>
Dez. 6	40.257 <sup>355</sup>	15.21 <sup>160</sup>	49.664 <sup>426</sup>	60.83 <sup>111</sup>	5.932 <sup>420</sup>	14.55 <sup>120</sup>	14.34 <sup>69</sup>	15.50 <sup>56</sup>
16	40.612 <sup>344</sup>	13.61 <sup>138</sup>	50.090 <sup>412</sup>	59.72 <sup>70</sup>	6.352 <sup>407</sup>	13.35 <sup>81</sup>	15.03 <sup>66</sup>	14.94 <sup>0</sup>
26	40.956 <sup>320</sup>	12.23 <sup>109</sup>	50.502 <sup>386</sup>	59.02 <sup>27</sup>	6.759 <sup>382</sup>	12.54 <sup>38</sup>	15.69 <sup>62</sup>	14.94 <sup>55</sup>
36	41.276	11.14	50.888	58.75	7.141	12.16	16.31	15.49
Mittl. Ort	38.066	31.63	47.258	83.34	3.597	36.76	11.36	43.49
sec δ, tg δ	1.092	+0.439	1.372	+0.939	1.341	+0.893	2.444	+2.230
a, a'	+3.3	-17.9	+3.6	-17.9	+3.6	-18.1	+4.3	-18.2
b, b'	-0.03	-0.45	-0.06	-0.45	-0.05	-0.43	-0.13	-0.42



## Scheinbare Sternörter 1945

Tag	391) I Carinae		389) $\mu$ Hydrae		392) $\alpha$ Antliae		390) $\beta$ Leonis min.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$10^h 23^m$	$-73^\circ 44'$	$10^h 23^m$	$-16^\circ 33'$	$10^h 24^m$	$-30^\circ 47'$	$10^h 24^m$	$+36^\circ 58'$
Jan. I	21.62 <sup>60</sup>	44.74 <sup>306</sup>	25.635 <sup>273</sup>	9.87 <sup>252</sup>	38.042 <sup>286</sup>	1.45 <sup>287</sup>	42.210 <sup>341</sup>	75.93 <sup>36</sup>
II	22.22 <sup>49</sup>	47.80 <sup>341</sup>	25.908 <sup>236</sup>	12.39 <sup>250</sup>	38.328 <sup>244</sup>	4.32 <sup>297</sup>	42.551 <sup>300</sup>	75.57 <sup>5</sup>
2I	22.71 <sup>36</sup>	51.21 <sup>368</sup>	26.144 <sup>192</sup>	14.89 <sup>242</sup>	38.572 <sup>197</sup>	7.29 <sup>298</sup>	42.851 <sup>249</sup>	75.62 <sup>45</sup>
3I	23.07 <sup>22</sup>	54.89 <sup>382</sup>	26.336 <sup>144</sup>	17.31 <sup>227</sup>	38.769 <sup>145</sup>	10.27 <sup>292</sup>	43.100 <sup>193</sup>	76.07 <sup>81</sup>
Febr. 10	23.29 <sup>8</sup>	58.71 <sup>388</sup>	26.480 <sup>96</sup>	19.58 <sup>208</sup>	38.914 <sup>92</sup>	13.19 <sup>279</sup>	43.293 <sup>134</sup>	76.88 <sup>112</sup>
20	23.37 <sup>5</sup>	62.59 <sup>384</sup>	26.576 <sup>48</sup>	21.66 <sup>185</sup>	39.006 <sup>41</sup>	15.98 <sup>259</sup>	43.427 <sup>75</sup>	78.00 <sup>137</sup>
März I	23.32 <sup>18</sup>	66.43 <sup>371</sup>	26.624 <sup>3</sup>	23.51 <sup>160</sup>	39.047 <sup>7</sup>	18.57 <sup>235</sup>	43.502 <sup>17</sup>	79.37 <sup>154</sup>
II	23.14 <sup>29</sup>	70.14 <sup>349</sup>	26.627 <sup>36</sup>	25.11 <sup>132</sup>	39.040 <sup>49</sup>	20.92 <sup>207</sup>	43.519 <sup>35</sup>	80.91 <sup>163</sup>
2I	22.85 <sup>41</sup>	73.63 <sup>322</sup>	26.591 <sup>69</sup>	26.43 <sup>105</sup>	38.991 <sup>86</sup>	22.99 <sup>177</sup>	43.484 <sup>78</sup>	82.54 <sup>164</sup>
3I	22.44 <sup>49</sup>	76.85 <sup>286</sup>	26.522 <sup>95</sup>	27.48 <sup>78</sup>	38.905 <sup>114</sup>	24.76 <sup>143</sup>	43.406 <sup>114</sup>	84.18 <sup>159</sup>
Apr. 10	21.95 <sup>57</sup>	79.71 <sup>246</sup>	26.427 <sup>114</sup>	28.26 <sup>50</sup>	38.791 <sup>136</sup>	26.19 <sup>108</sup>	43.292 <sup>141</sup>	85.77 <sup>145</sup>
20	21.38 <sup>62</sup>	82.17 <sup>200</sup>	26.313 <sup>127</sup>	28.76 <sup>23</sup>	38.655 <sup>150</sup>	27.27 <sup>74</sup>	43.151 <sup>157</sup>	87.22 <sup>127</sup>
30	20.76 <sup>67</sup>	84.17 <sup>151</sup>	26.186 <sup>132</sup>	28.99 <sup>3</sup>	38.505 <sup>159</sup>	28.01 <sup>37</sup>	42.994 <sup>165</sup>	88.49 <sup>105</sup>
Mai 10	20.09 <sup>70</sup>	85.68 <sup>100</sup>	26.054 <sup>133</sup>	28.96 <sup>27</sup>	38.346 <sup>161</sup>	28.38 <sup>2</sup>	42.829 <sup>166</sup>	89.54 <sup>79</sup>
20	19.39 <sup>71</sup>	86.68 <sup>45</sup>	25.921 <sup>129</sup>	28.69 <sup>51</sup>	38.185 <sup>158</sup>	28.40 <sup>34</sup>	42.663 <sup>158</sup>	90.33 <sup>50</sup>
30	18.68 <sup>71</sup>	87.13 <sup>9</sup>	25.792 <sup>120</sup>	28.18 <sup>73</sup>	38.027 <sup>151</sup>	28.06 <sup>67</sup>	42.505 <sup>146</sup>	90.83 <sup>22</sup>
Juni 9	17.97 <sup>68</sup>	87.04 <sup>63</sup>	25.672 <sup>109</sup>	27.45 <sup>93</sup>	37.876 <sup>139</sup>	27.39 <sup>100</sup>	42.359 <sup>129</sup>	91.05 <sup>8</sup>
19	17.29 <sup>64</sup>	86.41 <sup>115</sup>	25.563 <sup>94</sup>	26.52 <sup>111</sup>	37.737 <sup>124</sup>	26.39 <sup>129</sup>	42.230 <sup>107</sup>	90.97 <sup>36</sup>
29	16.65 <sup>58</sup>	85.26 <sup>164</sup>	25.469 <sup>97</sup>	25.41 <sup>125</sup>	37.613 <sup>106</sup>	25.10 <sup>154</sup>	42.123 <sup>83</sup>	90.61 <sup>65</sup>
Juli 9	16.07 <sup>51</sup>	83.62 <sup>209</sup>	25.392 <sup>58</sup>	24.16 <sup>135</sup>	37.507 <sup>85</sup>	23.56 <sup>175</sup>	42.040 <sup>56</sup>	89.96 <sup>90</sup>
19	15.56 <sup>42</sup>	81.53 <sup>246</sup>	25.334 <sup>35</sup>	22.81 <sup>142</sup>	37.422 <sup>59</sup>	21.81 <sup>192</sup>	41.984 <sup>28</sup>	89.06 <sup>116</sup>
29	15.14 <sup>32</sup>	79.07 <sup>277</sup>	25.299 <sup>11</sup>	21.39 <sup>144</sup>	37.363 <sup>31</sup>	19.89 <sup>201</sup>	41.956 <sup>3</sup>	87.90 <sup>139</sup>
Aug. 8	14.82 <sup>20</sup>	76.30 <sup>298</sup>	25.288 <sup>17</sup>	19.95 <sup>139</sup>	37.332 <sup>0</sup>	17.88 <sup>203</sup>	41.959 <sup>36</sup>	86.51 <sup>160</sup>
18	14.62 <sup>8</sup>	73.32 <sup>310</sup>	25.305 <sup>45</sup>	18.56 <sup>130</sup>	37.332 <sup>35</sup>	15.85 <sup>199</sup>	41.995 <sup>69</sup>	84.91 <sup>179</sup>
28	14.54 <sup>6</sup>	70.22 <sup>311</sup>	25.350 <sup>78</sup>	17.26 <sup>113</sup>	37.367 <sup>72</sup>	13.86 <sup>186</sup>	42.064 <sup>105</sup>	83.12 <sup>196</sup>
Sept. 7	14.60 <sup>20</sup>	67.11 <sup>299</sup>	25.428 <sup>112</sup>	16.13 <sup>91</sup>	37.439 <sup>111</sup>	12.00 <sup>165</sup>	42.169 <sup>143</sup>	81.16 <sup>211</sup>
17	14.80 <sup>33</sup>	64.12 <sup>278</sup>	25.540 <sup>147</sup>	15.22 <sup>63</sup>	37.550 <sup>153</sup>	10.35 <sup>136</sup>	42.312 <sup>182</sup>	79.05 <sup>221</sup>
27	15.13 <sup>46</sup>	61.34 <sup>244</sup>	25.687 <sup>184</sup>	14.59 <sup>30</sup>	37.703 <sup>195</sup>	8.99 <sup>100</sup>	42.494 <sup>221</sup>	76.84 <sup>230</sup>
Okt. 7	15.59 <sup>58</sup>	58.90 <sup>200</sup>	25.871 <sup>220</sup>	14.29 <sup>7</sup>	37.898 <sup>235</sup>	7.99 <sup>57</sup>	42.715 <sup>260</sup>	74.54 <sup>233</sup>
17	16.17 <sup>68</sup>	56.90 <sup>148</sup>	26.091 <sup>255</sup>	14.36 <sup>46</sup>	38.133 <sup>273</sup>	7.42 <sup>11</sup>	42.975 <sup>299</sup>	72.21 <sup>232</sup>
27	16.85 <sup>77</sup>	55.42 <sup>89</sup>	26.346 <sup>284</sup>	14.82 <sup>87</sup>	38.406 <sup>305</sup>	7.31 <sup>38</sup>	43.274 <sup>333</sup>	69.89 <sup>225</sup>
Nov. 6	17.62 <sup>82</sup>	54.53 <sup>24</sup>	26.630 <sup>308</sup>	15.69 <sup>127</sup>	38.711 <sup>331</sup>	7.69 <sup>88</sup>	43.607 <sup>362</sup>	67.64 <sup>214</sup>
16	18.44 <sup>85</sup>	54.29 <sup>43</sup>	26.938 <sup>326</sup>	16.96 <sup>163</sup>	39.042 <sup>349</sup>	8.57 <sup>138</sup>	43.969 <sup>384</sup>	65.50 <sup>194</sup>
26	19.29 <sup>85</sup>	54.72 <sup>108</sup>	27.264 <sup>333</sup>	18.59 <sup>195</sup>	39.391 <sup>356</sup>	9.95 <sup>182</sup>	44.353 <sup>396</sup>	63.56 <sup>169</sup>
Dez. 6	20.14 <sup>82</sup>	55.80 <sup>172</sup>	27.597 <sup>332</sup>	20.54 <sup>221</sup>	39.747 <sup>352</sup>	11.77 <sup>221</sup>	44.749 <sup>398</sup>	61.87 <sup>138</sup>
16	20.96 <sup>76</sup>	57.52 <sup>230</sup>	27.929 <sup>318</sup>	22.75 <sup>239</sup>	40.099 <sup>337</sup>	13.98 <sup>254</sup>	45.147 <sup>388</sup>	60.49 <sup>103</sup>
26	21.72 <sup>67</sup>	59.82 <sup>280</sup>	28.247 <sup>296</sup>	25.14 <sup>251</sup>	40.436 <sup>310</sup>	16.52 <sup>278</sup>	45.535 <sup>364</sup>	59.46 <sup>64</sup>
36	22.39	62.62	28.543	27.65	40.746	19.30	45.899	58.82
Mittl. Ort	18.58	65.02	25.708	17.69	37.919	13.32	42.533	82.95
sec $\delta$ , tg $\delta$	3.574	-3.431	1.043	-0.297	1.164	-0.596	1.252	+0.753
a, a'	+1.2	-18.3	+2.9	-18.3	+2.8	-18.3	+3.5	-18.3
b, b'	+0.21	-0.41	+0.02	-0.41	+0.04	-0.40	-0.05	-0.40



# Obere Kulmination Greenwich

103\*

Tag	393) 196 G. Carinae		394) 36 Ursae maj.		395) 9 H. Draconis		1273) 219 G. Velorum	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	10 <sup>h</sup> 25 <sup>m</sup>	−58° 27'	10 <sup>h</sup> 27 <sup>m</sup>	+56° 15'	10 <sup>h</sup> 30 <sup>m</sup>	+75° 59'	10 <sup>h</sup> 30 <sup>m</sup>	−46° 42'
Jan. I	52.354 <sup>384</sup>	10.90 <sup>314</sup>	7.016 <sup>458</sup>	37.39 <sup>45</sup>	29.02 <sup>94</sup>	37.31 <sup>115</sup>	37.993 <sup>328</sup>	54.26 <sup>307</sup>
II	52.738 <sup>318</sup>	14.04 <sup>342</sup>	7.474 <sup>403</sup>	37.84 <sup>95</sup>	29.96 <sup>83</sup>	38.46 <sup>169</sup>	38.231 <sup>278</sup>	57.33 <sup>328</sup>
2I	53.056 <sup>245</sup>	17.46 <sup>362</sup>	7.877 <sup>335</sup>	38.79 <sup>141</sup>	30.79 <sup>68</sup>	40.15 <sup>216</sup>	38.509 <sup>222</sup>	60.61 <sup>342</sup>
3I	53.301 <sup>168</sup>	21.08 <sup>371</sup>	8.212 <sup>259</sup>	40.20 <sup>180</sup>	31.47 <sup>52</sup>	42.31 <sup>254</sup>	38.731 <sup>160</sup>	64.03 <sup>345</sup>
Febr. 10	53.469 <sup>89</sup>	24.79 <sup>370</sup>	8.471 <sup>177</sup>	42.00 <sup>211</sup>	31.99 <sup>34</sup>	44.85 <sup>283</sup>	38.891 <sup>98</sup>	67.48 <sup>340</sup>
20	53.558 <sup>13</sup>	28.49 <sup>360</sup>	8.648 <sup>93</sup>	44.11 <sup>232</sup>	32.33 <sup>16</sup>	47.68 <sup>298</sup>	38.989 <sup>37</sup>	70.88 <sup>327</sup>
März I	53.571 <sup>59</sup>	32.09 <sup>343</sup>	8.741 <sup>12</sup>	46.43 <sup>243</sup>	32.49 <sup>2</sup>	50.66 <sup>303</sup>	39.026 <sup>20</sup>	74.15 <sup>306</sup>
II	53.512 <sup>125</sup>	35.52 <sup>317</sup>	8.753 <sup>64</sup>	48.86 <sup>243</sup>	32.47 <sup>20</sup>	53.69 <sup>294</sup>	39.006 <sup>72</sup>	77.21 <sup>280</sup>
2I	53.387 <sup>181</sup>	38.69 <sup>287</sup>	8.689 <sup>129</sup>	51.29 <sup>233</sup>	32.27 <sup>35</sup>	56.63 <sup>273</sup>	38.934 <sup>116</sup>	80.01 <sup>249</sup>
3I	53.206 <sup>230</sup>	41.56 <sup>250</sup>	8.560 <sup>183</sup>	53.62 <sup>214</sup>	31.92 <sup>48</sup>	59.36 <sup>243</sup>	38.818 <sup>153</sup>	82.50 <sup>213</sup>
Apr. 10	52.976 <sup>268</sup>	44.06 <sup>209</sup>	8.377 <sup>225</sup>	55.76 <sup>186</sup>	31.44 <sup>59</sup>	61.79 <sup>204</sup>	38.665 <sup>183</sup>	84.63 <sup>175</sup>
20	52.708 <sup>296</sup>	46.15 <sup>164</sup>	8.152 <sup>253</sup>	57.62 <sup>153</sup>	30.85 <sup>66</sup>	63.83 <sup>158</sup>	38.482 <sup>203</sup>	86.38 <sup>132</sup>
30	52.412 <sup>317</sup>	47.79 <sup>116</sup>	7.899 <sup>269</sup>	59.15 <sup>115</sup>	30.19 <sup>71</sup>	65.41 <sup>107</sup>	38.279 <sup>217</sup>	87.70 <sup>89</sup>
Mai 10	52.095 <sup>328</sup>	48.95 <sup>67</sup>	7.630 <sup>273</sup>	60.30 <sup>72</sup>	29.48 <sup>74</sup>	66.48 <sup>53</sup>	38.062 <sup>224</sup>	88.59 <sup>44</sup>
20	51.767 <sup>330</sup>	49.62 <sup>17</sup>	7.357 <sup>266</sup>	61.02 <sup>28</sup>	28.74 <sup>73</sup>	67.01 <sup>2</sup>	37.838 <sup>225</sup>	89.03 <sup>0</sup>
30	51.437 <sup>325</sup>	49.79 <sup>33</sup>	7.091 <sup>249</sup>	61.30 <sup>15</sup>	28.01 <sup>70</sup>	66.99 <sup>56</sup>	37.613 <sup>220</sup>	89.03 <sup>46</sup>
Juni 9	51.112 <sup>310</sup>	49.46 <sup>83</sup>	6.842 <sup>224</sup>	61.15 <sup>58</sup>	27.31 <sup>64</sup>	66.43 <sup>108</sup>	37.393 <sup>209</sup>	88.57 <sup>89</sup>
19	50.802 <sup>289</sup>	48.63 <sup>130</sup>	6.618 <sup>193</sup>	60.57 <sup>99</sup>	26.67 <sup>57</sup>	65.35 <sup>157</sup>	37.184 <sup>193</sup>	87.68 <sup>129</sup>
29	50.513 <sup>260</sup>	47.33 <sup>173</sup>	6.425 <sup>156</sup>	59.58 <sup>138</sup>	26.10 <sup>49</sup>	63.78 <sup>202</sup>	36.991 <sup>171</sup>	86.39 <sup>167</sup>
Juli 9	50.253 <sup>223</sup>	45.60 <sup>211</sup>	6.269 <sup>116</sup>	58.20 <sup>173</sup>	25.61 <sup>39</sup>	61.76 <sup>242</sup>	36.820 <sup>145</sup>	84.72 <sup>198</sup>
19	50.030 <sup>179</sup>	43.49 <sup>243</sup>	6.153 <sup>72</sup>	56.47 <sup>205</sup>	25.22 <sup>28</sup>	59.34 <sup>276</sup>	36.675 <sup>114</sup>	82.74 <sup>225</sup>
29	49.851 <sup>128</sup>	41.06 <sup>268</sup>	6.081 <sup>24</sup>	54.42 <sup>232</sup>	24.94 <sup>16</sup>	56.58 <sup>304</sup>	36.561 <sup>77</sup>	80.49 <sup>245</sup>
Aug. 8	49.723 <sup>70</sup>	38.38 <sup>283</sup>	6.057 <sup>24</sup>	52.10 <sup>254</sup>	24.78 <sup>4</sup>	53.54 <sup>326</sup>	36.484 <sup>36</sup>	78.04 <sup>255</sup>
18	49.653 <sup>7</sup>	35.55 <sup>290</sup>	6.081 <sup>76</sup>	49.56 <sup>273</sup>	24.74 <sup>9</sup>	50.28 <sup>340</sup>	36.448 <sup>10</sup>	75.49 <sup>258</sup>
28	49.646 <sup>60</sup>	32.65 <sup>285</sup>	6.157 <sup>129</sup>	46.83 <sup>286</sup>	24.83 <sup>21</sup>	46.88 <sup>349</sup>	36.458 <sup>59</sup>	72.91 <sup>250</sup>
Sept. 7	49.706 <sup>131</sup>	29.80 <sup>271</sup>	6.286 <sup>183</sup>	43.97 <sup>295</sup>	25.04 <sup>34</sup>	43.39 <sup>351</sup>	36.517 <sup>111</sup>	70.41 <sup>234</sup>
17	49.837 <sup>203</sup>	27.09 <sup>245</sup>	6.469 <sup>238</sup>	41.02 <sup>297</sup>	25.38 <sup>47</sup>	39.88 <sup>345</sup>	36.628 <sup>165</sup>	68.07 <sup>206</sup>
27	50.040 <sup>273</sup>	24.64 <sup>208</sup>	6.707 <sup>293</sup>	38.05 <sup>294</sup>	25.85 <sup>59</sup>	36.43 <sup>331</sup>	36.793 <sup>218</sup>	66.01 <sup>171</sup>
Okt. 7	50.313 <sup>338</sup>	22.56 <sup>164</sup>	7.000 <sup>347</sup>	35.11 <sup>285</sup>	26.44 <sup>71</sup>	33.12 <sup>311</sup>	37.011 <sup>270</sup>	64.30 <sup>127</sup>
17	50.651 <sup>397</sup>	20.92 <sup>110</sup>	7.347 <sup>399</sup>	32.26 <sup>269</sup>	27.15 <sup>82</sup>	30.01 <sup>283</sup>	37.281 <sup>317</sup>	63.03 <sup>75</sup>
27	51.048 <sup>446</sup>	19.82 <sup>51</sup>	7.746 <sup>444</sup>	29.57 <sup>246</sup>	27.97 <sup>92</sup>	27.18 <sup>247</sup>	37.598 <sup>358</sup>	62.28 <sup>19</sup>
Nov. 6	51.494 <sup>482</sup>	19.31 <sup>11</sup>	8.190 <sup>484</sup>	27.11 <sup>217</sup>	28.89 <sup>99</sup>	24.71 <sup>205</sup>	37.956 <sup>388</sup>	62.09 <sup>39</sup>
16	51.976 <sup>503</sup>	19.42 <sup>75</sup>	8.674 <sup>513</sup>	24.94 <sup>180</sup>	29.88 <sup>106</sup>	22.66 <sup>156</sup>	38.344 <sup>409</sup>	62.48 <sup>97</sup>
26	52.479 <sup>508</sup>	20.17 <sup>138</sup>	9.187 <sup>529</sup>	23.14 <sup>139</sup>	30.94 <sup>108</sup>	21.10 <sup>101</sup>	38.753 <sup>416</sup>	63.45 <sup>154</sup>
Dez. 6	52.987 <sup>494</sup>	21.55 <sup>195</sup>	9.716 <sup>532</sup>	21.75 <sup>92</sup>	32.02 <sup>109</sup>	20.09 <sup>43</sup>	39.169 <sup>409</sup>	64.99 <sup>207</sup>
16	53.481 <sup>465</sup>	23.50 <sup>248</sup>	10.248 <sup>519</sup>	20.83 <sup>41</sup>	33.11 <sup>106</sup>	19.66 <sup>16</sup>	39.578 <sup>390</sup>	67.06 <sup>251</sup>
26	53.946 <sup>421</sup>	25.98 <sup>293</sup>	10.767 <sup>489</sup>	20.42 <sup>11</sup>	34.17 <sup>100</sup>	19.82 <sup>76</sup>	39.968 <sup>357</sup>	69.57 <sup>290</sup>
36	54.367	28.91	11.256	20.53	35.17	20.58	40.325	72.47
Mittl. Ort	51.292	29.16	7.228	48.01	28.52	49.93	37.433	70.44
sec δ, tg δ	1.912	−1.629	1.801	+1.497	4.133	+4.010	1.459	−1.062
a, a'	+2.2	−18.4	+3.9	−18.4	+5.1	−18.5	+2.5	−18.5
b, b'	+0.10	−0.40	−0.09	−0.39	−0.25	−0.38	+0.07	−0.38



## Scheinbare Sternörter 1945

Tag	404) 33 Sextantis		406) ♀ Carinae		407) 42 Leonis min.		409) 53 Leonis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	10 <sup>h</sup> 38 <sup>m</sup>	-1° 27'	10 <sup>h</sup> 40 <sup>m</sup>	-64° 6'	10 <sup>h</sup> 42 <sup>m</sup>	+30° 57'	10 <sup>h</sup> 46 <sup>m</sup>	+10° 49'
Jan. I	35.981 <sup>283</sup>	3.16 <sup>203</sup>	60.66 <sup>46</sup>	0.64 <sup>300</sup>	48.232 <sup>333</sup>	75.51 <sup>77</sup>	21.637 <sup>297</sup>	72.35 <sup>161</sup>
II	36.264 <sup>250</sup>	5.19 <sup>189</sup>	61.12 <sup>39</sup>	3.64 <sup>333</sup>	48.565 <sup>297</sup>	74.74 <sup>38</sup>	21.934 <sup>264</sup>	70.74 <sup>136</sup>
2I	36.514 <sup>209</sup>	7.08 <sup>171</sup>	61.51 <sup>31</sup>	6.97 <sup>359</sup>	48.862 <sup>252</sup>	74.36 <sup>1</sup>	22.198 <sup>225</sup>	69.38 <sup>109</sup>
3I	36.723 <sup>165</sup>	8.79 <sup>149</sup>	61.82 <sup>21</sup>	10.56 <sup>374</sup>	49.114 <sup>201</sup>	74.37 <sup>38</sup>	22.423 <sup>180</sup>	68.29 <sup>80</sup>
Febr. 10	36.888 <sup>117</sup>	10.28 <sup>124</sup>	62.03 <sup>13</sup>	14.30 <sup>378</sup>	49.315 <sup>147</sup>	74.75 <sup>72</sup>	22.603 <sup>132</sup>	67.49 <sup>51</sup>
20	37.005 <sup>71</sup>	11.52 <sup>98</sup>	62.16 <sup>4</sup>	18.08 <sup>374</sup>	49.462 <sup>92</sup>	75.47 <sup>100</sup>	22.735 <sup>84</sup>	66.98 <sup>23</sup>
März 2	37.076 <sup>26</sup>	12.50 <sup>73</sup>	62.20 <sup>5</sup>	21.82 <sup>362</sup>	49.554 <sup>39</sup>	76.47 <sup>122</sup>	22.819 <sup>39</sup>	66.75 <sup>3</sup>
II	37.102 <sup>13</sup>	13.23 <sup>48</sup>	62.15 <sup>13</sup>	25.44 <sup>340</sup>	49.593 <sup>10</sup>	77.69 <sup>136</sup>	22.858 <sup>3</sup>	66.78 <sup>23</sup>
2I	37.089 <sup>46</sup>	13.71 <sup>27</sup>	62.02 <sup>19</sup>	28.84 <sup>313</sup>	49.583 <sup>53</sup>	79.05 <sup>144</sup>	22.855 <sup>39</sup>	67.01 <sup>42</sup>
3I	37.043 <sup>74</sup>	13.98 <sup>6</sup>	61.83 <sup>26</sup>	31.97 <sup>279</sup>	49.530 <sup>86</sup>	80.49 <sup>144</sup>	22.816 <sup>68</sup>	67.43 <sup>55</sup>
Apr. 10	36.969 <sup>94</sup>	14.04 <sup>11</sup>	61.57 <sup>30</sup>	34.76 <sup>240</sup>	49.444 <sup>114</sup>	81.93 <sup>138</sup>	22.748 <sup>90</sup>	67.98 <sup>64</sup>
20	36.875 <sup>108</sup>	13.93 <sup>26</sup>	61.27 <sup>35</sup>	37.16 <sup>197</sup>	49.330 <sup>132</sup>	83.31 <sup>127</sup>	22.658 <sup>105</sup>	68.62 <sup>70</sup>
30	36.767 <sup>116</sup>	13.67 <sup>39</sup>	60.92 <sup>38</sup>	39.13 <sup>150</sup>	49.198 <sup>141</sup>	84.58 <sup>110</sup>	22.553 <sup>114</sup>	69.32 <sup>71</sup>
Mai 10	36.651 <sup>117</sup>	13.28 <sup>51</sup>	60.54 <sup>39</sup>	40.63 <sup>100</sup>	49.057 <sup>146</sup>	85.68 <sup>90</sup>	22.439 <sup>117</sup>	70.03 <sup>71</sup>
20	36.534 <sup>114</sup>	12.77 <sup>59</sup>	60.15 <sup>41</sup>	41.63 <sup>48</sup>	48.911 <sup>142</sup>	86.58 <sup>67</sup>	22.322 <sup>114</sup>	70.74 <sup>68</sup>
30	36.420 <sup>108</sup>	12.18 <sup>67</sup>	59.74 <sup>41</sup>	42.11 <sup>4</sup>	48.769 <sup>133</sup>	87.25 <sup>44</sup>	22.208 <sup>109</sup>	71.42 <sup>63</sup>
Juni 9	36.312 <sup>98</sup>	11.51 <sup>73</sup>	59.33 <sup>40</sup>	42.07 <sup>56</sup>	48.636 <sup>122</sup>	87.69 <sup>18</sup>	22.099 <sup>99</sup>	72.05 <sup>57</sup>
19	36.214 <sup>85</sup>	10.78 <sup>76</sup>	58.93 <sup>37</sup>	41.51 <sup>105</sup>	48.514 <sup>105</sup>	87.87 <sup>8</sup>	22.000 <sup>86</sup>	72.62 <sup>48</sup>
29	36.129 <sup>70</sup>	10.02 <sup>78</sup>	58.56 <sup>35</sup>	40.46 <sup>152</sup>	48.409 <sup>85</sup>	87.79 <sup>32</sup>	21.914 <sup>72</sup>	73.10 <sup>39</sup>
Juli 9	36.059 <sup>53</sup>	9.24 <sup>77</sup>	58.21 <sup>31</sup>	38.94 <sup>196</sup>	48.324 <sup>64</sup>	87.47 <sup>58</sup>	21.842 <sup>54</sup>	73.49 <sup>29</sup>
19	36.006 <sup>33</sup>	8.47 <sup>73</sup>	57.90 <sup>26</sup>	36.98 <sup>232</sup>	48.260 <sup>40</sup>	86.89 <sup>81</sup>	21.788 <sup>35</sup>	73.78 <sup>16</sup>
29	35.973 <sup>12</sup>	7.74 <sup>66</sup>	57.64 <sup>20</sup>	34.66 <sup>262</sup>	48.220 <sup>13</sup>	86.08 <sup>105</sup>	21.753 <sup>14</sup>	73.94 <sup>2</sup>
Aug. 8	35.961 <sup>12</sup>	7.08 <sup>56</sup>	57.44 <sup>13</sup>	32.04 <sup>283</sup>	48.207 <sup>15</sup>	85.03 <sup>127</sup>	21.739 <sup>10</sup>	73.96 <sup>13</sup>
18	35.973 <sup>39</sup>	6.52 <sup>43</sup>	57.31 <sup>5</sup>	29.21 <sup>295</sup>	48.222 <sup>45</sup>	83.76 <sup>147</sup>	21.749 <sup>37</sup>	73.83 <sup>31</sup>
28	36.012 <sup>68</sup>	6.09 <sup>24</sup>	57.26 <sup>2</sup>	26.26 <sup>296</sup>	48.267 <sup>78</sup>	82.29 <sup>167</sup>	21.786 <sup>65</sup>	73.52 <sup>50</sup>
Sept. 7	36.080 <sup>100</sup>	5.85 <sup>4</sup>	57.28 <sup>11</sup>	23.30 <sup>287</sup>	48.345 <sup>114</sup>	80.62 <sup>184</sup>	21.851 <sup>97</sup>	73.02 <sup>70</sup>
17	36.180 <sup>134</sup>	5.81 <sup>21</sup>	57.39 <sup>20</sup>	20.43 <sup>265</sup>	48.459 <sup>151</sup>	78.78 <sup>200</sup>	21.948 <sup>131</sup>	72.32 <sup>93</sup>
27	36.314 <sup>169</sup>	6.02 <sup>49</sup>	57.59 <sup>29</sup>	17.78 <sup>234</sup>	48.610 <sup>189</sup>	76.78 <sup>214</sup>	22.079 <sup>166</sup>	71.39 <sup>115</sup>
Okt. 7	36.483 <sup>204</sup>	6.51 <sup>78</sup>	57.88 <sup>37</sup>	15.44 <sup>192</sup>	48.799 <sup>228</sup>	74.64 <sup>222</sup>	22.245 <sup>202</sup>	70.24 <sup>137</sup>
17	36.687 <sup>238</sup>	7.29 <sup>107</sup>	58.25 <sup>44</sup>	13.52 <sup>141</sup>	49.027 <sup>267</sup>	72.42 <sup>228</sup>	22.447 <sup>237</sup>	68.87 <sup>158</sup>
27	36.925 <sup>270</sup>	8.36 <sup>135</sup>	58.69 <sup>51</sup>	12.11 <sup>84</sup>	49.294 <sup>302</sup>	70.14 <sup>228</sup>	22.684 <sup>270</sup>	67.29 <sup>176</sup>
Nov. 6	37.195 <sup>296</sup>	9.71 <sup>161</sup>	59.20 <sup>55</sup>	11.27 <sup>22</sup>	49.596 <sup>333</sup>	67.86 <sup>222</sup>	22.954 <sup>298</sup>	65.53 <sup>190</sup>
16	37.491 <sup>317</sup>	11.32 <sup>183</sup>	59.75 <sup>58</sup>	11.05 <sup>43</sup>	49.929 <sup>357</sup>	65.64 <sup>211</sup>	23.252 <sup>320</sup>	63.63 <sup>200</sup>
26	37.808 <sup>328</sup>	13.15 <sup>200</sup>	60.33 <sup>59</sup>	11.48 <sup>108</sup>	50.286 <sup>373</sup>	63.53 <sup>193</sup>	23.572 <sup>335</sup>	61.63 <sup>204</sup>
Dez. 6	38.136 <sup>330</sup>	15.15 <sup>210</sup>	60.92 <sup>58</sup>	12.56 <sup>169</sup>	50.659 <sup>377</sup>	61.60 <sup>168</sup>	23.907 <sup>338</sup>	59.59 <sup>200</sup>
16	38.466 <sup>322</sup>	17.25 <sup>214</sup>	61.50 <sup>55</sup>	14.25 <sup>225</sup>	51.036 <sup>372</sup>	59.92 <sup>137</sup>	24.245 <sup>333</sup>	57.59 <sup>191</sup>
26	38.788 <sup>303</sup>	19.39 <sup>210</sup>	62.05 <sup>50</sup>	16.50 <sup>275</sup>	51.408 <sup>353</sup>	58.55 <sup>103</sup>	24.578 <sup>316</sup>	55.68 <sup>174</sup>
36	39.091	21.49	62.55	19.25	51.761	57.52	24.894	53.94
Mittl. Ort	36.267	6.89	59.37	20.83	48.653	81.12	22.028	72.25
sec δ, tg δ	1.000	-0.025	2.290	-2.060	1.166	+0.600	1.018	+0.191
a, a'	+3.1	-18.8	+2.1	-18.9	+3.3	-18.9	+3.2	-19.0
b, b'	0.00	-0.35	+0.13	-0.34	-0.04	-0.33	-0.01	-0.32



Tag	415) 239 G. Velorum		416) β Ursae maj.		417) α Ursae maj.		418) χ Leonis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	10 <sup>h</sup> 57 <sup>m</sup>	-41° 55'	10 <sup>h</sup> 58 <sup>m</sup>	+56° 40'	11 <sup>h</sup> 0 <sup>m</sup>	+62° 2'	11 <sup>h</sup> 2 <sup>m</sup>	+7° 37'
Jan. I	37.598 <sup>338</sup>	33.48 <sup>286</sup>	31.704 <sup>487</sup>	28.49 <sup>11</sup>	20.63 <sup>56</sup>	42.15 <sup>28</sup>	10.363 <sup>301</sup>	62.81 <sup>178</sup>
II	37.936 <sup>296</sup>	36.34 <sup>308</sup>	32.191 <sup>441</sup>	28.60 <sup>65</sup>	21.19 <sup>50</sup>	42.43 <sup>84</sup>	10.664 <sup>271</sup>	61.03 <sup>156</sup>
21	38.232 <sup>248</sup>	39.42 <sup>321</sup>	32.632 <sup>381</sup>	29.25 <sup>116</sup>	21.69 <sup>43</sup>	43.27 <sup>137</sup>	10.935 <sup>234</sup>	59.47 <sup>130</sup>
31	38.480 <sup>193</sup>	42.63 <sup>326</sup>	33.013 <sup>309</sup>	30.41 <sup>161</sup>	22.12 <sup>36</sup>	44.64 <sup>182</sup>	11.169 <sup>191</sup>	58.17 <sup>103</sup>
Febr. 10	38.673 <sup>137</sup>	45.89 <sup>323</sup>	33.322 <sup>230</sup>	32.02 <sup>198</sup>	22.48 <sup>26</sup>	46.46 <sup>220</sup>	11.360 <sup>145</sup>	57.14 <sup>74</sup>
20	38.810 <sup>80</sup>	49.12 <sup>311</sup>	33.552 <sup>148</sup>	34.00 <sup>227</sup>	22.74 <sup>17</sup>	48.66 <sup>247</sup>	11.505 <sup>98</sup>	56.40 <sup>45</sup>
März 2	38.890 <sup>27</sup>	52.23 <sup>294</sup>	33.700 <sup>67</sup>	36.27 <sup>245</sup>	22.91 <sup>7</sup>	51.13 <sup>265</sup>	11.603 <sup>53</sup>	55.95 <sup>20</sup>
11	38.917 <sup>23</sup>	55.17 <sup>271</sup>	33.767 <sup>11</sup>	38.72 <sup>253</sup>	22.98 <sup>2</sup>	53.78 <sup>270</sup>	11.656 <sup>12</sup>	55.75 <sup>4</sup>
21	38.894 <sup>65</sup>	57.88 <sup>242</sup>	33.756 <sup>82</sup>	41.25 <sup>249</sup>	22.96 <sup>10</sup>	56.48 <sup>264</sup>	11.668 <sup>24</sup>	55.79 <sup>24</sup>
31	38.829 <sup>103</sup>	60.30 <sup>211</sup>	33.674 <sup>142</sup>	43.74 <sup>235</sup>	22.86 <sup>17</sup>	59.12 <sup>247</sup>	11.644 <sup>54</sup>	56.03 <sup>40</sup>
Apr. 10	38.726 <sup>132</sup>	62.41 <sup>176</sup>	33.532 <sup>191</sup>	46.09 <sup>213</sup>	22.69 <sup>24</sup>	61.59 <sup>222</sup>	11.590 <sup>78</sup>	56.43 <sup>53</sup>
20	38.594 <sup>156</sup>	64.17 <sup>138</sup>	33.341 <sup>229</sup>	48.22 <sup>183</sup>	22.45 <sup>27</sup>	63.81 <sup>189</sup>	11.512 <sup>94</sup>	56.96 <sup>60</sup>
30	38.438 <sup>173</sup>	65.55 <sup>98</sup>	33.112 <sup>253</sup>	50.05 <sup>146</sup>	22.18 <sup>31</sup>	65.70 <sup>149</sup>	11.418 <sup>105</sup>	57.56 <sup>66</sup>
Mai 10	38.265 <sup>184</sup>	66.53 <sup>58</sup>	32.859 <sup>267</sup>	51.51 <sup>106</sup>	21.87 <sup>33</sup>	67.19 <sup>104</sup>	11.313 <sup>111</sup>	58.22 <sup>69</sup>
20	38.081 <sup>189</sup>	67.11 <sup>16</sup>	32.592 <sup>270</sup>	52.57 <sup>62</sup>	21.54 <sup>34</sup>	68.23 <sup>58</sup>	11.202 <sup>112</sup>	58.91 <sup>68</sup>
30	37.892 <sup>189</sup>	67.27 <sup>24</sup>	32.322 <sup>262</sup>	53.19 <sup>18</sup>	21.20 <sup>32</sup>	68.81 <sup>9</sup>	11.090 <sup>108</sup>	59.59 <sup>66</sup>
Juni 9	37.703 <sup>185</sup>	67.03 <sup>64</sup>	32.060 <sup>246</sup>	53.37 <sup>28</sup>	20.88 <sup>31</sup>	68.90 <sup>40</sup>	10.982 <sup>101</sup>	60.25 <sup>62</sup>
19	37.518 <sup>175</sup>	66.39 <sup>103</sup>	31.814 <sup>224</sup>	53.09 <sup>72</sup>	20.57 <sup>28</sup>	68.50 <sup>86</sup>	10.881 <sup>92</sup>	60.87 <sup>57</sup>
29	37.343 <sup>161</sup>	65.36 <sup>138</sup>	31.590 <sup>194</sup>	52.37 <sup>115</sup>	20.29 <sup>25</sup>	67.64 <sup>130</sup>	10.789 <sup>79</sup>	61.44 <sup>49</sup>
Juli 9	37.182 <sup>142</sup>	63.98 <sup>170</sup>	31.396 <sup>160</sup>	51.22 <sup>154</sup>	20.04 <sup>20</sup>	66.34 <sup>172</sup>	10.710 <sup>65</sup>	61.93 <sup>41</sup>
19	37.040 <sup>118</sup>	62.28 <sup>195</sup>	31.236 <sup>121</sup>	49.68 <sup>190</sup>	19.84 <sup>16</sup>	64.62 <sup>210</sup>	10.645 <sup>48</sup>	62.34 <sup>30</sup>
29	36.922 <sup>89</sup>	60.33 <sup>216</sup>	31.115 <sup>79</sup>	47.78 <sup>222</sup>	19.68 <sup>11</sup>	62.52 <sup>244</sup>	10.597 <sup>28</sup>	62.64 <sup>17</sup>
Aug. 8	36.833 <sup>55</sup>	58.17 <sup>228</sup>	31.036 <sup>32</sup>	45.56 <sup>250</sup>	19.57 <sup>5</sup>	60.08 <sup>272</sup>	10.569 <sup>6</sup>	62.81 <sup>3</sup>
18	36.778 <sup>16</sup>	55.89 <sup>233</sup>	31.004 <sup>17</sup>	43.06 <sup>274</sup>	19.52 <sup>1</sup>	57.36 <sup>295</sup>	10.563 <sup>19</sup>	62.84 <sup>13</sup>
28	36.762 <sup>27</sup>	53.56 <sup>230</sup>	31.021 <sup>69</sup>	40.32 <sup>293</sup>	19.53 <sup>6</sup>	54.41 <sup>313</sup>	10.582 <sup>48</sup>	62.71 <sup>33</sup>
Sept. 7	36.789 <sup>75</sup>	51.26 <sup>216</sup>	31.090 <sup>125</sup>	37.39 <sup>306</sup>	19.59 <sup>13</sup>	51.28 <sup>325</sup>	10.630 <sup>79</sup>	62.38 <sup>54</sup>
17	36.864 <sup>125</sup>	49.10 <sup>193</sup>	31.215 <sup>182</sup>	34.33 <sup>314</sup>	19.72 <sup>20</sup>	48.03 <sup>331</sup>	10.709 <sup>113</sup>	61.84 <sup>76</sup>
27	36.989 <sup>177</sup>	47.17 <sup>162</sup>	31.397 <sup>240</sup>	31.19 <sup>315</sup>	19.92 <sup>27</sup>	44.72 <sup>330</sup>	10.822 <sup>148</sup>	61.08 <sup>101</sup>
Okt. 7	37.166 <sup>227</sup>	45.55 <sup>123</sup>	31.637 <sup>299</sup>	28.04 <sup>310</sup>	20.19 <sup>34</sup>	41.42 <sup>323</sup>	10.970 <sup>186</sup>	60.07 <sup>124</sup>
17	37.393 <sup>276</sup>	44.32 <sup>76</sup>	31.936 <sup>357</sup>	24.94 <sup>299</sup>	20.53 <sup>40</sup>	38.19 <sup>307</sup>	11.156 <sup>223</sup>	58.83 <sup>148</sup>
27	37.669 <sup>319</sup>	43.56 <sup>25</sup>	32.293 <sup>410</sup>	21.95 <sup>280</sup>	20.93 <sup>46</sup>	35.12 <sup>285</sup>	11.379 <sup>257</sup>	57.35 <sup>169</sup>
Nov. 6	37.988 <sup>355</sup>	43.31 <sup>29</sup>	32.703 <sup>457</sup>	19.15 <sup>253</sup>	21.39 <sup>52</sup>	32.27 <sup>255</sup>	11.636 <sup>288</sup>	55.66 <sup>186</sup>
16	38.343 <sup>380</sup>	43.60 <sup>85</sup>	33.160 <sup>496</sup>	16.62 <sup>219</sup>	21.91 <sup>56</sup>	29.72 <sup>217</sup>	11.924 <sup>312</sup>	53.80 <sup>200</sup>
26	38.723 <sup>395</sup>	44.45 <sup>138</sup>	33.656 <sup>522</sup>	14.43 <sup>179</sup>	22.47 <sup>60</sup>	27.55 <sup>172</sup>	12.236 <sup>329</sup>	51.80 <sup>207</sup>
Dez. 6	39.118 <sup>397</sup>	45.83 <sup>188</sup>	34.178 <sup>535</sup>	12.64 <sup>131</sup>	23.07 <sup>60</sup>	25.83 <sup>122</sup>	12.565 <sup>336</sup>	49.73 <sup>208</sup>
16	39.515 <sup>385</sup>	47.71 <sup>231</sup>	34.713 <sup>532</sup>	11.33 <sup>80</sup>	23.67 <sup>61</sup>	24.61 <sup>68</sup>	12.901 <sup>333</sup>	47.65 <sup>202</sup>
26	39.900 <sup>361</sup>	50.02 <sup>269</sup>	35.245 <sup>512</sup>	10.53 <sup>26</sup>	24.28 <sup>58</sup>	23.93 <sup>9</sup>	13.234 <sup>318</sup>	45.63 <sup>191</sup>
36	40.261	52.71	35.757	10.27	24.86	23.84	13.552	43.72
Mittl. Ort sec δ, tg δ	37.495 1.344	49.92 -0.898	32.139 1.820	39.57 +1.521	21.02 2.133	54.01 +1.885	10.822 1.009	61.46 +0.134
a, a'	+2.8	-19.3	+3.6	-19.3	+3.7	-19.4	+3.1	-19.4
b, b'	+0.06	-0.27	-0.10	-0.27	-0.12	-0.26	-0.01	-0.25



## Scheinbare Sternörter 1945

Tag	420) $\psi$ Ursae maj.		421) $\beta$ Crateris		422) $\delta$ Leonis		423) $\delta$ Leonis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$11^h 6^m$	$+44^\circ 47'$	$11^h 8^m$	$-22^\circ 31'$	$11^h 11^m$	$+20^\circ 49'$	$11^h 11^m$	$+15^\circ 43'$
Jan. I	34.182 <sup>400</sup>	41.43 <sup>43</sup>	56.697 <sup>308</sup>	19.48 <sup>256</sup>	10.583 <sup>323</sup>	28.62 <sup>137</sup>	20.784 <sup>315</sup>	48.71 <sup>154</sup>
II	34.582 <sup>365</sup>	41.00 <sup>6</sup>	57.005 <sup>275</sup>	22.04 <sup>263</sup>	10.906 <sup>295</sup>	27.25 <sup>103</sup>	21.099 <sup>287</sup>	47.17 <sup>125</sup>
21	34.947 <sup>317</sup>	41.06 <sup>54</sup>	57.280 <sup>236</sup>	24.67 <sup>262</sup>	11.201 <sup>257</sup>	26.22 <sup>68</sup>	21.386 <sup>250</sup>	45.92 <sup>94</sup>
31	35.264 <sup>262</sup>	41.60 <sup>99</sup>	57.516 <sup>191</sup>	27.29 <sup>254</sup>	11.458 <sup>213</sup>	25.54 <sup>33</sup>	21.636 <sup>206</sup>	44.98 <sup>60</sup>
Febr. 10	35.526 <sup>200</sup>	42.59 <sup>138</sup>	57.707 <sup>145</sup>	29.83 <sup>241</sup>	11.671 <sup>164</sup>	25.21 <sup>2</sup>	21.842 <sup>160</sup>	44.38 <sup>28</sup>
20	35.726 <sup>135</sup>	43.97 <sup>170</sup>	57.852 <sup>97</sup>	32.24 <sup>223</sup>	11.835 <sup>116</sup>	25.23 <sup>34</sup>	22.002 <sup>112</sup>	44.10 <sup>2</sup>
März 2	35.861 <sup>72</sup>	45.67 <sup>192</sup>	57.949 <sup>51</sup>	34.47 <sup>201</sup>	11.951 <sup>68</sup>	25.57 <sup>60</sup>	22.114 <sup>66</sup>	44.12 <sup>30</sup>
II	35.933 <sup>12</sup>	47.59 <sup>206</sup>	58.000 <sup>10</sup>	36.48 <sup>176</sup>	12.019 <sup>22</sup>	26.17 <sup>82</sup>	22.180 <sup>22</sup>	44.42 <sup>52</sup>
21	35.945 <sup>43</sup>	49.65 <sup>211</sup>	58.010 <sup>27</sup>	38.24 <sup>149</sup>	12.041 <sup>17</sup>	26.99 <sup>98</sup>	22.202 <sup>16</sup>	44.94 <sup>70</sup>
31	35.902 <sup>89</sup>	51.76 <sup>205</sup>	57.983 <sup>58</sup>	39.73 <sup>122</sup>	12.024 <sup>50</sup>	27.97 <sup>107</sup>	22.186 <sup>48</sup>	45.64 <sup>83</sup>
Apr. 10	35.813 <sup>126</sup>	53.81 <sup>193</sup>	57.925 <sup>83</sup>	40.95 <sup>94</sup>	11.974 <sup>77</sup>	29.04 <sup>112</sup>	22.138 <sup>73</sup>	46.47 <sup>89</sup>
20	35.687 <sup>155</sup>	55.74 <sup>172</sup>	57.842 <sup>102</sup>	41.89 <sup>65</sup>	11.897 <sup>97</sup>	30.16 <sup>110</sup>	22.065 <sup>93</sup>	47.36 <sup>93</sup>
30	35.532 <sup>174</sup>	57.46 <sup>145</sup>	57.740 <sup>115</sup>	42.54 <sup>37</sup>	11.800 <sup>111</sup>	31.26 <sup>104</sup>	21.972 <sup>105</sup>	48.29 <sup>91</sup>
Mai 10	35.358 <sup>185</sup>	58.91 <sup>115</sup>	57.625 <sup>124</sup>	42.91 <sup>9</sup>	11.689 <sup>118</sup>	32.30 <sup>94</sup>	21.867 <sup>112</sup>	49.20 <sup>86</sup>
20	35.173 <sup>187</sup>	60.06 <sup>80</sup>	57.501 <sup>127</sup>	43.00 <sup>18</sup>	11.571 <sup>119</sup>	33.24 <sup>81</sup>	21.755 <sup>115</sup>	50.06 <sup>77</sup>
30	34.986 <sup>183</sup>	60.86 <sup>43</sup>	57.374 <sup>128</sup>	42.82 <sup>44</sup>	11.452 <sup>118</sup>	34.05 <sup>67</sup>	21.640 <sup>112</sup>	50.83 <sup>68</sup>
Juni 9	34.803 <sup>173</sup>	61.29 <sup>6</sup>	57.246 <sup>124</sup>	42.38 <sup>69</sup>	11.334 <sup>111</sup>	34.72 <sup>49</sup>	21.528 <sup>106</sup>	51.51 <sup>55</sup>
19	34.630 <sup>158</sup>	61.35 <sup>31</sup>	57.122 <sup>117</sup>	41.69 <sup>91</sup>	11.223 <sup>101</sup>	35.21 <sup>31</sup>	21.422 <sup>98</sup>	52.06 <sup>42</sup>
29	34.472 <sup>137</sup>	61.04 <sup>68</sup>	57.005 <sup>106</sup>	40.78 <sup>112</sup>	11.122 <sup>89</sup>	35.52 <sup>12</sup>	21.324 <sup>35</sup>	52.48 <sup>27</sup>
Juli 9	34.335 <sup>114</sup>	60.36 <sup>103</sup>	56.899 <sup>94</sup>	39.66 <sup>128</sup>	11.033 <sup>74</sup>	35.64 <sup>8</sup>	21.239 <sup>72</sup>	52.75 <sup>11</sup>
19	34.221 <sup>88</sup>	59.33 <sup>136</sup>	56.805 <sup>76</sup>	38.38 <sup>141</sup>	10.959 <sup>57</sup>	35.56 <sup>28</sup>	21.167 <sup>54</sup>	52.86 <sup>5</sup>
29	34.133 <sup>57</sup>	57.97 <sup>167</sup>	56.729 <sup>56</sup>	36.97 <sup>150</sup>	10.902 <sup>36</sup>	35.28 <sup>49</sup>	21.113 <sup>35</sup>	52.81 <sup>23</sup>
Aug. 8	34.076 <sup>23</sup>	56.30 <sup>195</sup>	56.673 <sup>32</sup>	35.47 <sup>152</sup>	10.866 <sup>13</sup>	34.79 <sup>70</sup>	21.078 <sup>13</sup>	52.58 <sup>42</sup>
18	34.053 <sup>12</sup>	54.35 <sup>219</sup>	56.641 <sup>3</sup>	33.95 <sup>148</sup>	10.853 <sup>14</sup>	34.09 <sup>90</sup>	21.065 <sup>12</sup>	52.16 <sup>61</sup>
28	34.065 <sup>52</sup>	52.16 <sup>241</sup>	56.638 <sup>29</sup>	32.47 <sup>138</sup>	10.867 <sup>42</sup>	33.19 <sup>112</sup>	21.077 <sup>41</sup>	51.55 <sup>82</sup>
Sept. 7	34.117 <sup>94</sup>	49.75 <sup>259</sup>	56.667 <sup>65</sup>	31.09 <sup>122</sup>	10.909 <sup>75</sup>	32.07 <sup>134</sup>	21.118 <sup>72</sup>	50.73 <sup>103</sup>
17	34.211 <sup>139</sup>	47.16 <sup>272</sup>	56.732 <sup>104</sup>	29.87 <sup>98</sup>	10.984 <sup>110</sup>	30.73 <sup>154</sup>	21.190 <sup>108</sup>	49.70 <sup>125</sup>
27	34.350 <sup>186</sup>	44.44 <sup>280</sup>	56.836 <sup>145</sup>	28.89 <sup>68</sup>	11.094 <sup>148</sup>	29.19 <sup>173</sup>	21.298 <sup>144</sup>	48.45 <sup>147</sup>
Okt. 7	34.536 <sup>234</sup>	41.64 <sup>285</sup>	56.981 <sup>187</sup>	28.21 <sup>34</sup>	11.242 <sup>187</sup>	27.46 <sup>191</sup>	21.442 <sup>182</sup>	46.98 <sup>166</sup>
17	34.770 <sup>280</sup>	38.79 <sup>282</sup>	57.168 <sup>228</sup>	27.87 <sup>6</sup>	11.429 <sup>226</sup>	25.55 <sup>206</sup>	21.624 <sup>220</sup>	45.32 <sup>185</sup>
27	35.050 <sup>326</sup>	35.97 <sup>272</sup>	57.396 <sup>266</sup>	27.93 <sup>47</sup>	11.655 <sup>262</sup>	23.49 <sup>216</sup>	21.844 <sup>257</sup>	43.47 <sup>199</sup>
Nov. 6	35.376 <sup>367</sup>	33.25 <sup>257</sup>	57.662 <sup>298</sup>	28.40 <sup>89</sup>	11.917 <sup>296</sup>	21.33 <sup>223</sup>	22.101 <sup>290</sup>	41.48 <sup>210</sup>
16	35.743 <sup>399</sup>	30.68 <sup>233</sup>	57.960 <sup>324</sup>	29.29 <sup>131</sup>	12.213 <sup>324</sup>	19.10 <sup>222</sup>	22.391 <sup>316</sup>	39.38 <sup>216</sup>
26	36.142 <sup>423</sup>	28.35 <sup>202</sup>	58.284 <sup>341</sup>	30.60 <sup>169</sup>	12.537 <sup>343</sup>	16.88 <sup>216</sup>	22.707 <sup>335</sup>	37.22 <sup>214</sup>
Dez. 6	36.565 <sup>435</sup>	26.33 <sup>166</sup>	58.625 <sup>346</sup>	32.29 <sup>203</sup>	12.880 <sup>353</sup>	14.72 <sup>203</sup>	23.042 <sup>344</sup>	35.08 <sup>207</sup>
16	37.000 <sup>434</sup>	24.67 <sup>123</sup>	58.971 <sup>342</sup>	34.32 <sup>229</sup>	13.233 <sup>352</sup>	12.69 <sup>183</sup>	23.386 <sup>344</sup>	33.01 <sup>192</sup>
26	37.434 <sup>421</sup>	23.44 <sup>75</sup>	59.313 <sup>326</sup>	36.61 <sup>249</sup>	13.585 <sup>340</sup>	10.86 <sup>157</sup>	23.730 <sup>331</sup>	31.09 <sup>171</sup>
36	37.855	22.69	59.639	39.10	13.925	9.29	24.061	29.38
Mittl. Ort	34.726	50.35	56.980	30.78	11.135	31.27	21.322	49.80
sec $\delta$ , tg $\delta$	1.409	+0.993	1.083	-0.415	1.070	+0.380	1.039	+0.282
a, a'	+3.4	-19.5	+3.0	-19.5	+3.2	-19.6	+3.2	-19.6
b, b'	-0.06	-0.23	+0.03	-0.22	-0.02	-0.21	-0.02	-0.21



# Obere Kulmination Greenwich

107\*

Tag	425) v Ursae maj.		426) δ Crateris		427) σ Leonis		428) π Centauri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	11 <sup>h</sup> 15 <sup>m</sup>	+33° 23'	11 <sup>h</sup> 16 <sup>m</sup>	-14° 28'	11 <sup>h</sup> 18 <sup>m</sup>	+6° 19'	11 <sup>h</sup> 18 <sup>m</sup>	-54° 11'
Jan. I	30.142 <sup>356</sup>	34.63 <sup>94</sup>	34.894 <sup>305</sup>	41.39 <sup>238</sup>	17.481 <sup>308</sup>	53.83 <sup>186</sup>	29.709 <sup>418</sup>	1.18 <sup>270</sup>
II	30.498 <sup>326</sup>	33.69 <sup>51</sup>	35.199 <sup>276</sup>	43.77 <sup>238</sup>	17.789 <sup>280</sup>	51.97 <sup>166</sup>	30.127 <sup>371</sup>	3.88 <sup>305</sup>
2I	30.824 <sup>286</sup>	33.18 <sup>8</sup>	35.475 <sup>239</sup>	46.15 <sup>230</sup>	18.069 <sup>246</sup>	50.31 <sup>141</sup>	30.498 <sup>314</sup>	6.93 <sup>330</sup>
3I	31.110 <sup>238</sup>	33.10 <sup>35</sup>	35.714 <sup>196</sup>	48.45 <sup>217</sup>	18.315 <sup>205</sup>	48.90 <sup>114</sup>	30.812 <sup>252</sup>	10.23 <sup>346</sup>
Febr. 10	31.348 <sup>186</sup>	33.45 <sup>73</sup>	35.910 <sup>152</sup>	50.62 <sup>200</sup>	18.520 <sup>160</sup>	47.76 <sup>85</sup>	31.064 <sup>186</sup>	13.69 <sup>353</sup>
20	31.534 <sup>131</sup>	34.18 <sup>106</sup>	36.062 <sup>106</sup>	52.62 <sup>179</sup>	18.680 <sup>114</sup>	46.91 <sup>56</sup>	31.250 <sup>119</sup>	17.22 <sup>351</sup>
März 2	31.665 <sup>77</sup>	35.24 <sup>132</sup>	36.168 <sup>62</sup>	54.41 <sup>155</sup>	18.794 <sup>69</sup>	46.35 <sup>29</sup>	31.369 <sup>53</sup>	20.73 <sup>341</sup>
11*)	31.742 <sup>26</sup>	36.56 <sup>152</sup>	36.230 <sup>22</sup>	55.96 <sup>130</sup>	18.863 <sup>28</sup>	46.06 <sup>5</sup>	31.422 <sup>9</sup>	24.14 <sup>325</sup>
2I	31.768 <sup>19</sup>	38.08 <sup>163</sup>	36.252 <sup>14</sup>	57.26 <sup>105</sup>	18.891 <sup>8</sup>	46.01 <sup>17</sup>	31.413 <sup>63</sup>	27.39 <sup>301</sup>
3I	31.749 <sup>59</sup>	39.71 <sup>166</sup>	36.238 <sup>45</sup>	58.31 <sup>80</sup>	18.883 <sup>39</sup>	46.18 <sup>34</sup>	31.350 <sup>113</sup>	30.40 <sup>272</sup>
Apr. 10	31.690 <sup>90</sup>	41.37 <sup>162</sup>	36.193 <sup>69</sup>	59.11 <sup>55</sup>	18.844 <sup>64</sup>	46.52 <sup>48</sup>	31.237 <sup>155</sup>	33.12 <sup>238</sup>
20	31.600 <sup>114</sup>	42.99 <sup>152</sup>	36.124 <sup>88</sup>	59.66 <sup>31</sup>	18.780 <sup>82</sup>	47.00 <sup>58</sup>	31.082 <sup>191</sup>	35.50 <sup>201</sup>
30	31.486 <sup>131</sup>	44.51 <sup>135</sup>	36.036 <sup>102</sup>	59.97 <sup>9</sup>	18.698 <sup>96</sup>	47.58 <sup>64</sup>	30.891 <sup>219</sup>	37.51 <sup>159</sup>
Mai 10	31.355 <sup>141</sup>	45.86 <sup>113</sup>	35.934 <sup>110</sup>	60.06 <sup>12</sup>	18.602 <sup>104</sup>	48.22 <sup>68</sup>	30.672 <sup>240</sup>	39.10 <sup>115</sup>
20	31.214 <sup>144</sup>	46.99 <sup>90</sup>	35.824 <sup>115</sup>	59.94 <sup>33</sup>	18.498 <sup>106</sup>	48.90 <sup>68</sup>	30.432 <sup>255</sup>	40.25 <sup>69</sup>
30	31.070 <sup>142</sup>	47.89 <sup>62</sup>	35.709 <sup>114</sup>	59.61 <sup>51</sup>	18.392 <sup>107</sup>	49.58 <sup>68</sup>	30.177 <sup>263</sup>	40.94 <sup>22</sup>
Juni 9	30.928 <sup>135</sup>	48.51 <sup>34</sup>	35.595 <sup>112</sup>	59.10 <sup>68</sup>	18.285 <sup>102</sup>	50.26 <sup>64</sup>	29.914 <sup>265</sup>	41.16 <sup>25</sup>
19	30.793 <sup>125</sup>	48.85 <sup>5</sup>	35.483 <sup>106</sup>	58.42 <sup>84</sup>	18.183 <sup>96</sup>	50.90 <sup>60</sup>	29.649 <sup>260</sup>	40.91 <sup>71</sup>
29	30.668 <sup>111</sup>	48.90 <sup>25</sup>	35.377 <sup>98</sup>	57.58 <sup>97</sup>	18.087 <sup>85</sup>	51.50 <sup>53</sup>	29.389 <sup>248</sup>	40.20 <sup>115</sup>
Juli 9	30.557 <sup>93</sup>	48.65 <sup>54</sup>	35.279 <sup>85</sup>	56.61 <sup>106</sup>	18.002 <sup>74</sup>	52.03 <sup>45</sup>	29.141 <sup>228</sup>	39.05 <sup>156</sup>
19	30.464 <sup>72</sup>	48.11 <sup>82</sup>	35.194 <sup>70</sup>	55.55 <sup>114</sup>	17.928 <sup>59</sup>	52.48 <sup>35</sup>	28.913 <sup>202</sup>	37.49 <sup>192</sup>
29	30.392 <sup>50</sup>	47.29 <sup>109</sup>	35.124 <sup>52</sup>	54.41 <sup>116</sup>	17.869 <sup>40</sup>	52.83 <sup>23</sup>	28.711 <sup>167</sup>	35.57 <sup>223</sup>
Aug. 8	30.342 <sup>23</sup>	46.20 <sup>136</sup>	35.072 <sup>30</sup>	53.25 <sup>114</sup>	17.829 <sup>21</sup>	53.06 <sup>9</sup>	28.544 <sup>124</sup>	33.34 <sup>245</sup>
18	30.319 <sup>7</sup>	44.84 <sup>160</sup>	35.042 <sup>5</sup>	52.11 <sup>107</sup>	17.808 <sup>4</sup>	53.15 <sup>8</sup>	28.420 <sup>76</sup>	30.89 <sup>260</sup>
28	30.326 <sup>38</sup>	43.24 <sup>183</sup>	35.037 <sup>26</sup>	51.04 <sup>94</sup>	17.812 <sup>32</sup>	53.07 <sup>26</sup>	28.344 <sup>19</sup>	28.29 <sup>265</sup>
Sept. 7	30.364 <sup>75</sup>	41.41 <sup>203</sup>	35.063 <sup>59</sup>	50.10 <sup>77</sup>	17.844 <sup>62</sup>	52.81 <sup>48</sup>	28.325 <sup>42</sup>	25.64 <sup>260</sup>
17	30.439 <sup>113</sup>	39.38 <sup>221</sup>	35.122 <sup>95</sup>	49.33 <sup>54</sup>	17.906 <sup>97</sup>	52.33 <sup>71</sup>	28.367 <sup>108</sup>	23.04 <sup>245</sup>
27	30.552 <sup>155</sup>	37.17 <sup>236</sup>	35.217 <sup>135</sup>	48.79 <sup>26</sup>	18.003 <sup>133</sup>	51.62 <sup>94</sup>	28.475 <sup>176</sup>	20.59 <sup>220</sup>
Okt. 7	30.707 <sup>197</sup>	34.81 <sup>247</sup>	35.352 <sup>175</sup>	48.53 <sup>7</sup>	18.136 <sup>172</sup>	50.68 <sup>119</sup>	28.651 <sup>243</sup>	18.39 <sup>184</sup>
17	30.904 <sup>239</sup>	32.34 <sup>254</sup>	35.527 <sup>214</sup>	48.60 <sup>42</sup>	18.308 <sup>210</sup>	49.49 <sup>144</sup>	28.894 <sup>307</sup>	16.55 <sup>139</sup>
27	31.143 <sup>281</sup>	29.80 <sup>255</sup>	35.741 <sup>252</sup>	49.02 <sup>78</sup>	18.518 <sup>246</sup>	48.05 <sup>167</sup>	29.201 <sup>365</sup>	15.16 <sup>89</sup>
Nov. 6	31.424 <sup>318</sup>	27.25 <sup>249</sup>	35.993 <sup>285</sup>	49.80 <sup>114</sup>	18.764 <sup>279</sup>	46.38 <sup>185</sup>	29.566 <sup>412</sup>	14.27 <sup>32</sup>
16	31.742 <sup>348</sup>	24.76 <sup>237</sup>	36.278 <sup>312</sup>	50.94 <sup>150</sup>	19.043 <sup>306</sup>	44.53 <sup>200</sup>	29.978 <sup>449</sup>	13.95 <sup>28</sup>
26	32.090 <sup>371</sup>	22.39 <sup>218</sup>	36.590 <sup>329</sup>	52.44 <sup>179</sup>	19.349 <sup>325</sup>	42.53 <sup>210</sup>	30.427 <sup>471</sup>	14.23 <sup>87</sup>
Dez. 6	32.461 <sup>383</sup>	20.21 <sup>192</sup>	36.919 <sup>338</sup>	54.23 <sup>205</sup>	19.674 <sup>335</sup>	40.43 <sup>212</sup>	30.898 <sup>477</sup>	15.10 <sup>145</sup>
16	32.844 <sup>385</sup>	18.29 <sup>159</sup>	37.257 <sup>334</sup>	56.28 <sup>225</sup>	20.009 <sup>335</sup>	38.31 <sup>209</sup>	31.375 <sup>468</sup>	16.55 <sup>199</sup>
26	33.229 <sup>373</sup>	16.70 <sup>122</sup>	37.591 <sup>322</sup>	58.53 <sup>236</sup>	20.344 <sup>323</sup>	36.22 <sup>198</sup>	31.843 <sup>443</sup>	18.54 <sup>247</sup>
36	33.602	15.48	37.913	60.89	20.667	34.24	32.286	21.01
Mittl. Ort	30.741	40.82	35.299	50.33	18.020	51.80	29.473	21.49
sec δ, tg δ	1.198	+0.659	1.033	-0.258	1.006	+0.111	1.709	-1.386
a, a'	+3.2	-19.7	+3.0	-19.7	+3.1	-19.7	+2.7	-19.7
b, b'	-0.04	-0.19	+0.02	-0.19	-0.01	-0.18	+0.09	-0.18

\*) Bei Stern 427) und 428) lies März 12.



Tag	429) Grb 1771 U Maj		433) $\lambda$ Draconis		434) $\xi$ Hydrae		436) $\lambda$ Centauri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	11 <sup>h</sup> 19 <sup>m</sup>	+64° 37'	11 <sup>h</sup> 28 <sup>m</sup>	+69° 37'	11 <sup>h</sup> 30 <sup>m</sup>	-31° 32'	11 <sup>h</sup> 33 <sup>m</sup>	-62° 42'
Jan. I	35.71 <sup>61</sup>	41.85 <sup>13</sup>	9.16 <sup>74</sup>	52.51 <sup>17</sup>	17.176 <sup>334</sup>	56.01 <sup>257</sup>	14.38 <sup>52</sup>	32.26 <sup>249</sup>
II	36.32 <sup>57</sup>	41.98 <sup>72</sup>	9.90 <sup>68</sup>	52.68 <sup>79</sup>	17.510 <sup>303</sup>	58.58 <sup>274</sup>	14.90 <sup>47</sup>	34.75 <sup>291</sup>
21	36.89 <sup>50</sup>	42.70 <sup>127</sup>	10.58 <sup>61</sup>	53.47 <sup>135</sup>	17.813 <sup>264</sup>	61.32 <sup>283</sup>	15.37 <sup>40</sup>	37.66 <sup>324</sup>
31	37.39 <sup>41</sup>	43.97 <sup>177</sup>	11.19 <sup>51</sup>	54.82 <sup>187</sup>	18.077 <sup>219</sup>	64.15 <sup>284</sup>	15.77 <sup>32</sup>	40.90 <sup>348</sup>
Febr. 10	37.80 <sup>32</sup>	45.74 <sup>218</sup>	11.70 <sup>40</sup>	56.69 <sup>230</sup>	18.296 <sup>171</sup>	66.99 <sup>279</sup>	16.09 <sup>25</sup>	44.38 <sup>362</sup>
20	38.12 <sup>22</sup>	47.92 <sup>250</sup>	12.10 <sup>28</sup>	58.99 <sup>263</sup>	18.467 <sup>122</sup>	69.78 <sup>266</sup>	16.34 <sup>16</sup>	48.00 <sup>368</sup>
März 2	38.34 <sup>12</sup>	50.42 <sup>271</sup>	12.38 <sup>16</sup>	61.62 <sup>284</sup>	18.589 <sup>75</sup>	72.44 <sup>249</sup>	16.50 <sup>9</sup>	51.68 <sup>364</sup>
12	38.46 <sup>2</sup>	53.13 <sup>281</sup>	12.54 <sup>3</sup>	64.46 <sup>293</sup>	18.664 <sup>30</sup>	74.93 <sup>228</sup>	16.59 <sup>1</sup>	55.32 <sup>353</sup>
21	38.48 <sup>8</sup>	55.94 <sup>277</sup>	12.57 <sup>8</sup>	67.39 <sup>290</sup>	18.694 <sup>9</sup>	77.21 <sup>203</sup>	16.60 <sup>6</sup>	58.85 <sup>335</sup>
31	38.40 <sup>16</sup>	58.71 <sup>264</sup>	12.49 <sup>19</sup>	70.29 <sup>276</sup>	18.685 <sup>45</sup>	79.24 <sup>175</sup>	16.54 <sup>13</sup>	62.20 <sup>310</sup>
Apr. 10	38.24 <sup>23</sup>	61.35 <sup>240</sup>	12.30 <sup>28</sup>	73.05 <sup>252</sup>	18.640 <sup>74</sup>	80.99 <sup>146</sup>	16.41 <sup>19</sup>	65.30 <sup>278</sup>
20	38.01 <sup>28</sup>	63.75 <sup>209</sup>	12.02 <sup>36</sup>	75.57 <sup>218</sup>	18.566 <sup>97</sup>	82.45 <sup>114</sup>	16.22 <sup>23</sup>	68.08 <sup>243</sup>
30	37.73 <sup>33</sup>	65.84 <sup>169</sup>	11.66 <sup>41</sup>	77.75 <sup>177</sup>	18.469 <sup>116</sup>	83.59 <sup>83</sup>	15.99 <sup>28</sup>	70.51 <sup>201</sup>
Mai 10	37.40 <sup>36</sup>	67.53 <sup>124</sup>	11.25 <sup>45</sup>	79.52 <sup>130</sup>	18.353 <sup>129</sup>	84.42 <sup>51</sup>	15.71 <sup>31</sup>	72.52 <sup>157</sup>
20	37.04 <sup>36</sup>	68.77 <sup>77</sup>	10.80 <sup>47</sup>	80.82 <sup>81</sup>	18.224 <sup>138</sup>	84.93 <sup>17</sup>	15.40 <sup>34</sup>	74.09 <sup>110</sup>
30	36.68 <sup>37</sup>	69.54 <sup>27</sup>	10.33 <sup>48</sup>	81.63 <sup>28</sup>	18.086 <sup>144</sup>	85.10 <sup>15</sup>	15.06 <sup>36</sup>	75.19 <sup>00</sup>
Juni 9	36.31 <sup>36</sup>	69.81 <sup>23</sup>	9.85 <sup>47</sup>	81.91 <sup>24</sup>	17.942 <sup>144</sup>	84.95 <sup>47</sup>	14.70 <sup>36</sup>	75.79 <sup>9</sup>
19	35.95 <sup>34</sup>	69.58 <sup>73</sup>	9.38 <sup>44</sup>	81.67 <sup>76</sup>	17.798 <sup>141</sup>	84.48 <sup>77</sup>	14.34 <sup>36</sup>	75.88 <sup>41</sup>
29	35.61 <sup>30</sup>	68.85 <sup>120</sup>	8.94 <sup>41</sup>	80.91 <sup>126</sup>	17.657 <sup>135</sup>	83.71 <sup>105</sup>	13.98 <sup>36</sup>	75.47 <sup>90</sup>
Juli 9	35.31 <sup>26</sup>	67.65 <sup>164</sup>	8.53 <sup>36</sup>	79.65 <sup>173</sup>	17.522 <sup>124</sup>	82.66 <sup>130</sup>	13.62 <sup>33</sup>	74.57 <sup>137</sup>
19	35.05 <sup>22</sup>	66.01 <sup>206</sup>	8.17 <sup>31</sup>	77.92 <sup>215</sup>	17.398 <sup>110</sup>	81.36 <sup>151</sup>	13.29 <sup>30</sup>	73.20 <sup>179</sup>
29	34.83 <sup>16</sup>	63.95 <sup>242</sup>	7.86 <sup>24</sup>	75.77 <sup>254</sup>	17.288 <sup>89</sup>	79.85 <sup>167</sup>	12.99 <sup>26</sup>	71.41 <sup>216</sup>
Aug. 8	34.67 <sup>11</sup>	61.53 <sup>273</sup>	7.62 <sup>18</sup>	73.23 <sup>286</sup>	17.199 <sup>65</sup>	78.18 <sup>178</sup>	12.73 <sup>21</sup>	69.25 <sup>246</sup>
18	34.56 <sup>5</sup>	58.80 <sup>301</sup>	7.44 <sup>9</sup>	70.37 <sup>314</sup>	17.134 <sup>35</sup>	76.40 <sup>181</sup>	12.52 <sup>15</sup>	66.79 <sup>268</sup>
28	34.51 <sup>2</sup>	55.79 <sup>321</sup>	7.35 <sup>2</sup>	67.23 <sup>336</sup>	17.099 <sup>1</sup>	74.59 <sup>177</sup>	12.37 <sup>7</sup>	64.11 <sup>280</sup>
Sept. 7	34.53 <sup>9</sup>	52.58 <sup>336</sup>	7.33 <sup>8</sup>	63.87 <sup>351</sup>	17.098 <sup>39</sup>	72.82 <sup>167</sup>	12.30 <sup>1</sup>	61.31 <sup>282</sup>
17	34.62 <sup>17</sup>	49.22 <sup>345</sup>	7.41 <sup>16</sup>	60.36 <sup>359</sup>	17.137 <sup>82</sup>	71.15 <sup>147</sup>	12.31 <sup>9</sup>	58.49 <sup>273</sup>
27	34.79 <sup>24</sup>	45.77 <sup>346</sup>	7.57 <sup>26</sup>	56.77 <sup>359</sup>	17.219 <sup>128</sup>	69.68 <sup>120</sup>	12.40 <sup>18</sup>	55.76 <sup>253</sup>
Okt. 7	35.03 <sup>32</sup>	42.31 <sup>340</sup>	7.83 <sup>35</sup>	53.18 <sup>353</sup>	17.347 <sup>175</sup>	68.48 <sup>87</sup>	12.58 <sup>26</sup>	53.23 <sup>222</sup>
17	35.35 <sup>39</sup>	38.91 <sup>327</sup>	8.18 <sup>45</sup>	49.65 <sup>338</sup>	17.522 <sup>222</sup>	67.61 <sup>48</sup>	12.84 <sup>35</sup>	51.01 <sup>182</sup>
27	35.74 <sup>47</sup>	35.64 <sup>305</sup>	8.63 <sup>53</sup>	46.27 <sup>315</sup>	17.744 <sup>266</sup>	67.13 <sup>3</sup>	13.19 <sup>43</sup>	49.19 <sup>132</sup>
Nov. 6	36.21 <sup>53</sup>	32.59 <sup>276</sup>	9.16 <sup>61</sup>	43.12 <sup>283</sup>	18.010 <sup>304</sup>	67.10 <sup>43</sup>	13.62 <sup>49</sup>	47.87 <sup>76</sup>
16	36.74 <sup>58</sup>	29.83 <sup>238</sup>	9.77 <sup>68</sup>	40.29 <sup>244</sup>	18.314 <sup>335</sup>	67.53 <sup>90</sup>	14.11 <sup>53</sup>	47.11 <sup>16</sup>
26	37.32 <sup>62</sup>	27.45 <sup>193</sup>	10.45 <sup>74</sup>	37.85 <sup>197</sup>	18.649 <sup>355</sup>	68.43 <sup>136</sup>	14.64 <sup>57</sup>	46.95 <sup>47</sup>
Dez. 6	37.94 <sup>65</sup>	25.52 <sup>142</sup>	11.19 <sup>76</sup>	35.88 <sup>143</sup>	19.004 <sup>366</sup>	69.79 <sup>178</sup>	15.21 <sup>58</sup>	47.42 <sup>108</sup>
16	38.59 <sup>66</sup>	24.10 <sup>86</sup>	11.95 <sup>78</sup>	34.45 <sup>85</sup>	19.370 <sup>365</sup>	71.57 <sup>215</sup>	15.79 <sup>58</sup>	48.50 <sup>167</sup>
26	39.25 <sup>63</sup>	23.24 <sup>27</sup>	12.73 <sup>76</sup>	33.60 <sup>24</sup>	19.735 <sup>350</sup>	73.72 <sup>244</sup>	16.37 <sup>54</sup>	50.17 <sup>222</sup>
36	39.88	22.97	13.49	33.36	20.085	76.16	16.91	52.39
Mittl. Ort	36.25	54.22	9.72	65.47	17.510	70.81	13.99	54.89
sec $\delta$ , tg $\delta$	2.334	+2.109	2.874	+2.694	1.173	-0.614	2.181	-1.939
a, a'	+3.6	-19.7	+3.6	-19.9	+3.0	-19.9	+2.8	-19.9
b, b'	-0.14	-0.18	-0.18	-0.14	+0.04	-0.13	+0.13	-0.12



Tag	437) $\nu$ Leonis		440) $\gamma$ Draconis		441) $\chi$ Ursae maj.		444) $\beta$ Leonis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	11 <sup>h</sup> 34 <sup>m</sup>	-0° 31'	11 <sup>h</sup> 39 <sup>m</sup>	+67° 2'	11 <sup>h</sup> 43 <sup>m</sup>	+48° 4'	11 <sup>h</sup> 46 <sup>m</sup>	+14° 52'
Jan. I	7.300 <sup>311</sup>	7.13 <sup>207</sup>	24.62 <sup>67</sup>	45.12 <sup>6</sup>	8.412 <sup>435</sup>	54.30 <sup>71</sup>	14.584 <sup>326</sup>	45.97 <sup>173</sup>
II	7.611 <sup>286</sup>	9.20 <sup>194</sup>	25.29 <sup>63</sup>	45.06 <sup>56</sup>	8.847 <sup>407</sup>	53.59 <sup>17</sup>	14.910 <sup>304</sup>	44.24 <sup>145</sup>
2I	7.897 <sup>254</sup>	11.14 <sup>174</sup>	25.92 <sup>57</sup>	45.62 <sup>114</sup>	9.254 <sup>366</sup>	53.42 <sup>37</sup>	15.214 <sup>272</sup>	42.79 <sup>112</sup>
3I	8.151 <sup>214</sup>	12.88 <sup>152</sup>	26.49 <sup>48</sup>	46.76 <sup>167</sup>	9.620 <sup>315</sup>	53.79 <sup>87</sup>	15.486 <sup>234</sup>	41.67 <sup>78</sup>
Febr. 10	8.365 <sup>171</sup>	14.40 <sup>127</sup>	26.97 <sup>39</sup>	48.43 <sup>213</sup>	9.935 <sup>255</sup>	54.66 <sup>133</sup>	15.720 <sup>191</sup>	40.89 <sup>44</sup>
20	8.536 <sup>128</sup>	15.67 <sup>99</sup>	27.36 <sup>28</sup>	50.56 <sup>249</sup>	10.190 <sup>191</sup>	55.99 <sup>171</sup>	15.911 <sup>145</sup>	40.45 <sup>10</sup>
März 2	8.664 <sup>84</sup>	16.66 <sup>73</sup>	27.64 <sup>18</sup>	53.05 <sup>274</sup>	10.381 <sup>125</sup>	57.70 <sup>202</sup>	16.056 <sup>100</sup>	40.35 <sup>19</sup>
12	8.748 <sup>43</sup>	17.39 <sup>47</sup>	27.82 <sup>6</sup>	55.79 <sup>287</sup>	10.506 <sup>62</sup>	59.72 <sup>222</sup>	16.156 <sup>58</sup>	40.54 <sup>46</sup>
21	8.791 <sup>8</sup>	17.86 <sup>25</sup>	27.88 <sup>5</sup>	58.66 <sup>289</sup>	10.568 <sup>2</sup>	61.94 <sup>232</sup>	16.214 <sup>18</sup>	41.00 <sup>67</sup>
31	8.799 <sup>24</sup>	18.11 <sup>3</sup>	27.83 <sup>13</sup>	61.55 <sup>278</sup>	10.570 <sup>52</sup>	64.26 <sup>232</sup>	16.232 <sup>16</sup>	41.67 <sup>83</sup>
Apr. 10	8.775 <sup>50</sup>	18.14 <sup>14</sup>	27.70 <sup>22</sup>	64.33 <sup>257</sup>	10.518 <sup>98</sup>	66.58 <sup>222</sup>	16.216 <sup>44</sup>	42.50 <sup>93</sup>
20	8.725 <sup>70</sup>	18.00 <sup>29</sup>	27.48 <sup>30</sup>	66.90 <sup>227</sup>	10.420 <sup>135</sup>	68.80 <sup>205</sup>	16.172 <sup>67</sup>	43.43 <sup>98</sup>
30	8.655 <sup>85</sup>	17.71 <sup>41</sup>	27.18 <sup>34</sup>	69.17 <sup>189</sup>	10.285 <sup>164</sup>	70.85 <sup>180</sup>	16.105 <sup>85</sup>	44.41 <sup>99</sup>
Mai 10	8.570 <sup>95</sup>	17.30 <sup>51</sup>	26.84 <sup>39</sup>	71.06 <sup>146</sup>	10.121 <sup>183</sup>	72.65 <sup>149</sup>	16.020 <sup>97</sup>	45.40 <sup>95</sup>
20	8.475 <sup>101</sup>	16.79 <sup>58</sup>	26.45 <sup>40</sup>	72.52 <sup>97</sup>	9.938 <sup>196</sup>	74.14 <sup>113</sup>	15.923 <sup>105</sup>	46.35 <sup>88</sup>
30	8.374 <sup>103</sup>	16.21 <sup>63</sup>	26.05 <sup>42</sup>	73.49 <sup>47</sup>	9.742 <sup>201</sup>	75.27 <sup>74</sup>	15.818 <sup>108</sup>	47.23 <sup>79</sup>
Juni 9	8.271 <sup>103</sup>	15.58 <sup>66</sup>	25.63 <sup>41</sup>	73.96 <sup>5</sup>	9.541 <sup>199</sup>	76.01 <sup>34</sup>	15.710 <sup>108</sup>	48.02 <sup>66</sup>
19	8.168 <sup>98</sup>	14.92 <sup>68</sup>	25.22 <sup>39</sup>	73.91 <sup>57</sup>	9.342 <sup>191</sup>	76.35 <sup>7</sup>	15.602 <sup>106</sup>	48.68 <sup>52</sup>
29	8.070 <sup>92</sup>	14.24 <sup>67</sup>	24.83 <sup>37</sup>	73.34 <sup>106</sup>	9.151 <sup>178</sup>	76.28 <sup>49</sup>	15.496 <sup>99</sup>	49.20 <sup>37</sup>
Juli 9	7.978 <sup>83</sup>	13.57 <sup>65</sup>	24.46 <sup>33</sup>	72.28 <sup>153</sup>	8.973 <sup>160</sup>	75.79 <sup>89</sup>	15.397 <sup>91</sup>	49.57 <sup>21</sup>
19	7.895 <sup>70</sup>	12.92 <sup>60</sup>	24.13 <sup>29</sup>	70.75 <sup>198</sup>	8.813 <sup>138</sup>	74.90 <sup>128</sup>	15.306 <sup>79</sup>	49.78 <sup>2</sup>
29	7.825 <sup>55</sup>	12.32 <sup>52</sup>	23.84 <sup>23</sup>	68.77 <sup>237</sup>	8.675 <sup>112</sup>	73.62 <sup>163</sup>	15.227 <sup>64</sup>	49.80 <sup>16</sup>
Aug. 8	7.770 <sup>35</sup>	11.80 <sup>42</sup>	23.61 <sup>18</sup>	66.40 <sup>272</sup>	8.563 <sup>80</sup>	71.99 <sup>197</sup>	15.163 <sup>45</sup>	49.64 <sup>36</sup>
18	7.735 <sup>13</sup>	11.38 <sup>29</sup>	23.43 <sup>11</sup>	63.68 <sup>302</sup>	8.483 <sup>45</sup>	70.02 <sup>227</sup>	15.118 <sup>23</sup>	49.28 <sup>57</sup>
28	7.722 <sup>15</sup>	11.09 <sup>12</sup>	23.32 <sup>3</sup>	60.66 <sup>326</sup>	8.438 <sup>6</sup>	67.75 <sup>253</sup>	15.095 <sup>4</sup>	48.71 <sup>78</sup>
Sept. 7	7.737 <sup>45</sup>	10.97 <sup>7</sup>	23.29 <sup>4</sup>	57.40 <sup>344</sup>	8.432 <sup>38</sup>	65.22 <sup>276</sup>	15.099 <sup>34</sup>	47.93 <sup>101</sup>
17	7.782 <sup>79</sup>	11.04 <sup>30</sup>	23.33 <sup>12</sup>	53.96 <sup>355</sup>	8.470 <sup>86</sup>	62.46 <sup>294</sup>	15.133 <sup>69</sup>	46.92 <sup>124</sup>
27	7.861 <sup>117</sup>	11.34 <sup>56</sup>	23.45 <sup>20</sup>	50.41 <sup>359</sup>	8.556 <sup>137</sup>	59.52 <sup>306</sup>	15.202 <sup>107</sup>	45.68 <sup>147</sup>
Okt. 7	7.978 <sup>157</sup>	11.90 <sup>83</sup>	23.65 <sup>29</sup>	46.82 <sup>355</sup>	8.693 <sup>190</sup>	56.46 <sup>312</sup>	15.309 <sup>147</sup>	44.21 <sup>169</sup>
17	8.135 <sup>196</sup>	12.73 <sup>111</sup>	23.94 <sup>38</sup>	43.27 <sup>344</sup>	8.883 <sup>243</sup>	53.34 <sup>313</sup>	15.456 <sup>187</sup>	42.52 <sup>188</sup>
27	8.331 <sup>234</sup>	13.84 <sup>137</sup>	24.32 <sup>46</sup>	39.83 <sup>325</sup>	9.126 <sup>296</sup>	50.21 <sup>306</sup>	15.643 <sup>228</sup>	40.64 <sup>206</sup>
Nov. 6	8.565 <sup>269</sup>	15.21 <sup>163</sup>	24.78 <sup>53</sup>	36.58 <sup>297</sup>	9.422 <sup>345</sup>	47.15 <sup>292</sup>	15.871 <sup>265</sup>	38.58 <sup>218</sup>
16	8.834 <sup>208</sup>	16.84 <sup>185</sup>	25.31 <sup>60</sup>	33.61 <sup>260</sup>	9.767 <sup>388</sup>	44.23 <sup>269</sup>	16.136 <sup>297</sup>	36.40 <sup>226</sup>
26	9.132 <sup>319</sup>	18.69 <sup>202</sup>	25.91 <sup>66</sup>	31.01 <sup>215</sup>	10.155 <sup>422</sup>	41.54 <sup>239</sup>	16.433 <sup>323</sup>	34.14 <sup>228</sup>
Dez. 6	9.451 <sup>332</sup>	20.71 <sup>213</sup>	26.57 <sup>68</sup>	28.86 <sup>165</sup>	10.577 <sup>445</sup>	39.15 <sup>200</sup>	16.756 <sup>338</sup>	31.86 <sup>222</sup>
16	9.783 <sup>334</sup>	22.84 <sup>216</sup>	27.25 <sup>70</sup>	27.21 <sup>107</sup>	11.022 <sup>454</sup>	37.15 <sup>156</sup>	17.094 <sup>343</sup>	29.64 <sup>209</sup>
26	10.117 <sup>325</sup>	25.00 <sup>215</sup>	27.95 <sup>70</sup>	26.14 <sup>46</sup>	11.476 <sup>449</sup>	35.59 <sup>106</sup>	17.437 <sup>338</sup>	27.55 <sup>190</sup>
36	10.442	27.15	28.65	25.68	11.925	34.53	17.775	25.65
Mittl. Ort	7.895	11.74	25.33	57.87	9.188	63.97	15.308	46.38
sec $\delta$ , tg $\delta$	1.000	-0.009	2.565	+2.362	1.497	+1.114	1.035	+0.266
a, a'	+3.1	-19.9	+3.4	-20.0	+3.2	-20.0	+3.1	-20.0
b, b'	0.00	-0.11	-0.16	-0.09	-0.07	-0.07	-0.02	-0.06



## Scheinbare Sternörter 1945

Tag	445) $\beta$ Virginis <sup>1)</sup>		447) $\gamma$ Ursae maj.		450) $\alpha$ Virginis		452) $\delta$ Centauri	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	11 <sup>h</sup> 47 <sup>m</sup>	+2° 4'	11 <sup>h</sup> 50 <sup>m</sup>	+53° 59'	12 <sup>h</sup> 2 <sup>m</sup>	+9° 1'	12 <sup>h</sup> 5 <sup>m</sup>	-50° 24'
Jan. I	49.081 <sup>a</sup> <sub>318</sub>	32.93 <sup>b</sup> <sub>203</sub>	55.946 <sup>a</sup> <sub>485</sub>	51.24 <sup>b</sup> <sub>61</sub>	23.635 <sup>a</sup> <sub>324</sub>	80.16 <sup>b</sup> <sub>192</sub>	29.492 <sup>a</sup> <sub>430</sub>	36.91 <sup>b</sup> <sub>227</sub>
II	49.399 <sup>a</sup> <sub>295</sub>	30.90 <sup>b</sup> <sub>188</sub>	56.431 <sup>a</sup> <sub>456</sub>	50.63 <sup>b</sup> <sub>4</sub>	23.959 <sup>a</sup> <sub>305</sub>	78.24 <sup>b</sup> <sub>169</sub>	29.922 <sup>a</sup> <sub>399</sub>	39.18 <sup>b</sup> <sub>264</sub>
2I	49.694 <sup>a</sup> <sub>264</sub>	29.02 <sup>b</sup> <sub>166</sub>	56.887 <sup>a</sup> <sub>414</sub>	50.59 <sup>b</sup> <sub>53</sub>	24.264 <sup>a</sup> <sub>277</sub>	76.55 <sup>b</sup> <sub>142</sub>	30.321 <sup>a</sup> <sub>357</sub>	41.82 <sup>b</sup> <sub>293</sub>
3I	49.958 <sup>a</sup> <sub>227</sub>	27.36 <sup>b</sup> <sub>142</sub>	57.301 <sup>a</sup> <sub>358</sub>	51.12 <sup>b</sup> <sub>106</sub>	24.541 <sup>a</sup> <sub>241</sub>	75.13 <sup>b</sup> <sub>112</sub>	30.678 <sup>a</sup> <sub>308</sub>	44.75 <sup>b</sup> <sub>313</sub>
Febr. 10	50.185 <sup>a</sup> <sub>185</sub>	25.94 <sup>b</sup> <sub>115</sub>	57.659 <sup>a</sup> <sub>293</sub>	52.18 <sup>b</sup> <sub>154</sub>	24.782 <sup>a</sup> <sub>201</sub>	74.01 <sup>b</sup> <sub>79</sub>	30.986 <sup>a</sup> <sub>251</sub>	47.88 <sup>b</sup> <sub>324</sub>
20	50.370 <sup>a</sup> <sub>142</sub>	24.79 <sup>b</sup> <sub>86</sub>	57.952 <sup>a</sup> <sub>223</sub>	53.72 <sup>b</sup> <sub>194</sub>	24.983 <sup>a</sup> <sub>158</sub>	73.22 <sup>b</sup> <sub>48</sub>	31.237 <sup>a</sup> <sub>194</sub>	51.12 <sup>b</sup> <sub>329</sub>
März 2	50.512 <sup>a</sup> <sub>99</sub>	23.93 <sup>b</sup> <sub>58</sub>	58.175 <sup>a</sup> <sub>149</sub>	55.66 <sup>b</sup> <sub>224</sub>	25.141 <sup>a</sup> <sub>115</sub>	72.74 <sup>b</sup> <sub>17</sub>	31.431 <sup>a</sup> <sub>136</sub>	54.41 <sup>b</sup> <sub>324</sub>
12	50.611 <sup>a</sup> <sub>59</sub>	23.35 <sup>b</sup> <sub>33</sub>	58.324 <sup>a</sup> <sub>77</sub>	57.90 <sup>b</sup> <sub>245</sub>	25.256 <sup>a</sup> <sub>73</sub>	72.57 <sup>b</sup> <sub>10</sub>	31.567 <sup>a</sup> <sub>79</sub>	57.66 <sup>b</sup> <sub>315</sub>
21*) <sup>19</sup>	50.670 <sup>a</sup> <sub>21</sub>	23.02 <sup>b</sup> <sub>9</sub>	58.401 <sup>a</sup> <sub>8</sub>	60.35 <sup>b</sup> <sub>255</sub>	25.329 <sup>a</sup> <sub>23</sub>	72.67 <sup>b</sup> <sub>33</sub>	31.646 <sup>a</sup> <sub>26</sub>	60.80 <sup>b</sup> <sub>298</sub>
3I	50.691 <sup>a</sup> <sub>11</sub>	22.93 <sup>b</sup> <sub>11</sub>	58.409 <sup>a</sup> <sub>55</sub>	62.90 <sup>b</sup> <sub>253</sub>	25.365 <sup>a</sup> <sub>36</sub>	73.00 <sup>b</sup> <sub>52</sub>	31.672 <sup>a</sup> <sub>22</sub>	63.78 <sup>b</sup> <sub>275</sub>
Apr. 10	50.680 <sup>a</sup> <sub>37</sub>	23.04 <sup>b</sup> <sub>28</sub>	58.354 <sup>a</sup> <sub>109</sub>	65.43 <sup>b</sup> <sub>242</sub>	25.367 <sup>a</sup> <sub>27</sub>	73.52 <sup>b</sup> <sub>66</sub>	31.650 <sup>a</sup> <sub>65</sub>	66.53 <sup>b</sup> <sub>249</sub>
20	50.643 <sup>a</sup> <sub>59</sub>	23.32 <sup>b</sup> <sub>42</sub>	58.245 <sup>a</sup> <sub>154</sub>	67.85 <sup>b</sup> <sub>222</sub>	25.340 <sup>a</sup> <sub>51</sub>	74.18 <sup>b</sup> <sub>76</sub>	31.585 <sup>a</sup> <sub>104</sub>	69.02 <sup>b</sup> <sub>218</sub>
30	50.584 <sup>a</sup> <sub>76</sub>	23.74 <sup>b</sup> <sub>51</sub>	58.091 <sup>a</sup> <sub>190</sub>	70.07 <sup>b</sup> <sub>193</sub>	25.289 <sup>a</sup> <sub>69</sub>	74.94 <sup>b</sup> <sub>82</sub>	31.481 <sup>a</sup> <sub>137</sub>	71.20 <sup>b</sup> <sub>183</sub>
Mai 10	50.508 <sup>a</sup> <sub>87</sub>	24.25 <sup>b</sup> <sub>59</sub>	57.901 <sup>a</sup> <sub>215</sub>	72.00 <sup>b</sup> <sub>159</sub>	25.220 <sup>a</sup> <sub>83</sub>	75.76 <sup>b</sup> <sub>83</sub>	31.344 <sup>a</sup> <sub>166</sub>	73.03 <sup>b</sup> <sub>145</sub>
20	50.421 <sup>a</sup> <sub>95</sub>	24.84 <sup>b</sup> <sub>63</sub>	57.686 <sup>a</sup> <sub>233</sub>	73.59 <sup>b</sup> <sub>120</sub>	25.137 <sup>a</sup> <sub>93</sub>	76.59 <sup>b</sup> <sub>81</sub>	31.178 <sup>a</sup> <sub>188</sub>	74.48 <sup>b</sup> <sub>105</sub>
30	50.326 <sup>a</sup> <sub>100</sub>	25.47 <sup>b</sup> <sub>65</sub>	57.453 <sup>a</sup> <sub>240</sub>	74.79 <sup>b</sup> <sub>77</sub>	25.044 <sup>a</sup> <sub>100</sub>	77.40 <sup>b</sup> <sub>78</sub>	30.990 <sup>a</sup> <sub>207</sub>	75.53 <sup>b</sup> <sub>63</sub>
Juni 9	50.226 <sup>a</sup> <sub>100</sub>	26.12 <sup>b</sup> <sub>66</sub>	57.213 <sup>a</sup> <sub>240</sub>	75.56 <sup>b</sup> <sub>32</sub>	24.944 <sup>a</sup> <sub>104</sub>	78.18 <sup>b</sup> <sub>70</sub>	30.783 <sup>a</sup> <sub>219</sub>	76.16 <sup>b</sup> <sub>20</sub>
19	50.126 <sup>a</sup> <sub>99</sub>	26.78 <sup>b</sup> <sub>64</sub>	56.973 <sup>a</sup> <sub>233</sub>	75.88 <sup>b</sup> <sub>13</sub>	24.840 <sup>a</sup> <sub>103</sub>	78.88 <sup>b</sup> <sub>62</sub>	30.564 <sup>a</sup> <sub>227</sub>	76.36 <sup>b</sup> <sub>24</sub>
29	50.027 <sup>a</sup> <sub>94</sub>	27.42 <sup>b</sup> <sub>61</sub>	56.740 <sup>a</sup> <sub>220</sub>	75.75 <sup>b</sup> <sub>58</sub>	24.737 <sup>a</sup> <sub>100</sub>	79.50 <sup>b</sup> <sub>51</sub>	30.337 <sup>a</sup> <sub>227</sub>	76.12 <sup>b</sup> <sub>66</sub>
Juli 9	49.933 <sup>a</sup> <sub>86</sub>	28.03 <sup>b</sup> <sub>55</sub>	56.520 <sup>a</sup> <sub>201</sub>	75.17 <sup>b</sup> <sub>102</sub>	24.637 <sup>a</sup> <sub>95</sub>	80.01 <sup>b</sup> <sub>40</sub>	30.110 <sup>a</sup> <sub>222</sub>	75.46 <sup>b</sup> <sub>106</sub>
19	49.847 <sup>a</sup> <sub>75</sub>	28.58 <sup>b</sup> <sub>48</sub>	56.319 <sup>a</sup> <sub>176</sub>	74.15 <sup>b</sup> <sub>143</sub>	24.542 <sup>a</sup> <sub>85</sub>	80.41 <sup>b</sup> <sub>25</sub>	29.888 <sup>a</sup> <sub>208</sub>	74.40 <sup>b</sup> <sub>144</sub>
29	49.772 <sup>a</sup> <sub>62</sub>	29.06 <sup>b</sup> <sub>38</sub>	56.143 <sup>a</sup> <sub>146</sub>	72.72 <sup>b</sup> <sub>182</sub>	24.457 <sup>a</sup> <sub>74</sub>	80.66 <sup>b</sup> <sub>11</sub>	29.680 <sup>a</sup> <sub>188</sub>	72.96 <sup>b</sup> <sub>176</sub>
Aug. 8	49.710 <sup>a</sup> <sub>43</sub>	29.44 <sup>b</sup> <sub>27</sub>	55.997 <sup>a</sup> <sub>111</sub>	70.90 <sup>b</sup> <sub>218</sub>	24.383 <sup>a</sup> <sub>57</sub>	80.77 <sup>b</sup> <sub>6</sub>	29.492 <sup>a</sup> <sub>158</sub>	71.20 <sup>b</sup> <sub>204</sub>
18	49.667 <sup>a</sup> <sub>22</sub>	29.71 <sup>b</sup> <sub>11</sub>	55.886 <sup>a</sup> <sub>71</sub>	68.72 <sup>b</sup> <sub>250</sub>	24.326 <sup>a</sup> <sub>37</sub>	80.71 <sup>b</sup> <sub>24</sub>	29.334 <sup>a</sup> <sub>121</sub>	69.16 <sup>b</sup> <sub>224</sub>
28	49.645 <sup>a</sup> <sub>4</sub>	29.82 <sup>b</sup> <sub>5</sub>	55.815 <sup>a</sup> <sub>26</sub>	66.22 <sup>b</sup> <sub>277</sub>	24.289 <sup>a</sup> <sub>12</sub>	80.47 <sup>b</sup> <sub>45</sub>	29.213 <sup>a</sup> <sub>76</sub>	66.92 <sup>b</sup> <sub>236</sub>
Sept. 7	49.649 <sup>a</sup> <sub>34</sub>	29.77 <sup>b</sup> <sub>26</sub>	55.789 <sup>a</sup> <sub>22</sub>	63.45 <sup>b</sup> <sub>300</sub>	24.277 <sup>a</sup> <sub>18</sub>	80.02 <sup>b</sup> <sub>67</sub>	29.137 <sup>a</sup> <sub>23</sub>	64.56 <sup>b</sup> <sub>239</sub>
17	49.683 <sup>a</sup> <sub>69</sub>	29.51 <sup>b</sup> <sub>48</sub>	55.811 <sup>a</sup> <sub>77</sub>	60.45 <sup>b</sup> <sub>316</sub>	24.295 <sup>a</sup> <sub>52</sub>	79.35 <sup>b</sup> <sub>89</sub>	29.114 <sup>a</sup> <sub>36</sub>	62.17 <sup>b</sup> <sub>232</sub>
27	49.752 <sup>a</sup> <sub>106</sub>	29.03 <sup>b</sup> <sub>73</sub>	55.888 <sup>a</sup> <sub>134</sub>	57.29 <sup>b</sup> <sub>329</sub>	24.347 <sup>a</sup> <sub>89</sub>	78.46 <sup>b</sup> <sub>114</sub>	29.150 <sup>a</sup> <sub>100</sub>	59.85 <sup>b</sup> <sub>216</sub>
Okt. 7	49.858 <sup>a</sup> <sub>146</sub>	28.30 <sup>b</sup> <sub>99</sub>	56.022 <sup>a</sup> <sub>194</sub>	54.00 <sup>b</sup> <sub>334</sub>	24.436 <sup>a</sup> <sub>129</sub>	77.32 <sup>b</sup> <sub>137</sub>	29.250 <sup>a</sup> <sub>166</sub>	57.69 <sup>b</sup> <sub>189</sub>
17	50.004 <sup>a</sup> <sub>186</sub>	27.31 <sup>b</sup> <sub>126</sub>	56.216 <sup>a</sup> <sub>255</sub>	50.66 <sup>b</sup> <sub>331</sub>	24.565 <sup>a</sup> <sub>171</sub>	75.95 <sup>b</sup> <sub>161</sub>	29.416 <sup>a</sup> <sub>232</sub>	55.80 <sup>b</sup> <sub>154</sub>
27	50.190 <sup>a</sup> <sub>226</sub>	26.05 <sup>b</sup> <sub>151</sub>	56.471 <sup>a</sup> <sub>315</sub>	47.35 <sup>b</sup> <sub>322</sub>	24.736 <sup>a</sup> <sub>213</sub>	74.34 <sup>b</sup> <sub>183</sub>	29.648 <sup>a</sup> <sub>294</sub>	54.26 <sup>b</sup> <sub>111</sub>
Nov. 6	50.416 <sup>a</sup> <sub>262</sub>	24.54 <sup>b</sup> <sub>174</sub>	56.786 <sup>a</sup> <sub>370</sub>	44.13 <sup>b</sup> <sub>304</sub>	24.949 <sup>a</sup> <sub>251</sub>	72.51 <sup>b</sup> <sub>200</sub>	29.942 <sup>a</sup> <sub>349</sub>	53.15 <sup>b</sup> <sub>62</sub>
16	50.678 <sup>a</sup> <sub>294</sub>	22.80 <sup>b</sup> <sub>193</sub>	57.156 <sup>a</sup> <sub>419</sub>	41.09 <sup>b</sup> <sub>278</sub>	25.200 <sup>a</sup> <sub>285</sub>	70.51 <sup>b</sup> <sub>214</sub>	30.291 <sup>a</sup> <sub>396</sub>	52.53 <sup>b</sup> <sub>8</sub>
26	50.972 <sup>a</sup> <sub>317</sub>	20.87 <sup>b</sup> <sub>208</sub>	57.575 <sup>a</sup> <sub>459</sub>	38.31 <sup>b</sup> <sub>244</sub>	25.485 <sup>a</sup> <sub>311</sub>	68.37 <sup>b</sup> <sub>222</sub>	30.687 <sup>a</sup> <sub>430</sub>	52.45 <sup>b</sup> <sub>48</sub>
Dez. 6	51.289 <sup>a</sup> <sub>332</sub>	18.79 <sup>b</sup> <sub>216</sub>	58.034 <sup>a</sup> <sub>487</sub>	35.87 <sup>b</sup> <sub>201</sub>	25.796 <sup>a</sup> <sub>330</sub>	66.15 <sup>b</sup> <sub>223</sub>	31.117 <sup>a</sup> <sub>450</sub>	52.93 <sup>b</sup> <sub>102</sub>
16	51.621 <sup>a</sup> <sub>336</sub>	16.63 <sup>b</sup> <sub>217</sub>	58.521 <sup>a</sup> <sub>501</sub>	33.86 <sup>b</sup> <sub>153</sub>	26.126 <sup>a</sup> <sub>338</sub>	63.92 <sup>b</sup> <sub>218</sub>	31.567 <sup>a</sup> <sub>456</sub>	53.95 <sup>b</sup> <sub>155</sub>
26	51.957 <sup>a</sup> <sub>331</sub>	14.46 <sup>b</sup> <sub>213</sub>	59.022 <sup>a</sup> <sub>498</sub>	32.33 <sup>b</sup> <sub>98</sub>	26.464 <sup>a</sup> <sub>336</sub>	61.74 <sup>b</sup> <sub>205</sub>	32.023 <sup>a</sup> <sub>446</sub>	55.50 <sup>b</sup> <sub>203</sub>
36	52.288 <sup>a</sup>	12.33 <sup>b</sup>	59.520 <sup>a</sup>	31.35 <sup>b</sup>	26.800 <sup>a</sup>	59.69 <sup>b</sup>	32.469 <sup>a</sup>	57.53 <sup>b</sup>
Mittl. Ort	49.760	29.02	56.780	62.08	24.428	78.42	29.896	57.95
sec $\delta$ , tg $\delta$	1.001	+0.036	1.701	+1.376	1.013	+0.159	1.569	-1.210
a, a'	+3.1	-20.0	+3.1	-20.0	+3.1	-20.0	+3.1	-20.0
b, b'	0.00	-0.05	-0.09	-0.04	-0.01	+0.01	+0.08	+0.02

<sup>1)</sup> Die jährliche Parallaxe ( $\alpha''_{101}$ ) ist bereits berücksichtigt.

<sup>\*</sup> Bei Stern 450) und 452) lies März 22.



# Obere Kulmination Greenwich

111\*

Tag	453) ε Corvi		454) Br 1634 Caml		456) δ Ursae maj.		459) β Chamael.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	12 <sup>h</sup> 7 <sup>m</sup>	-22° 18'	12 <sup>h</sup> 9 <sup>m</sup>	+77° 54'	12 <sup>h</sup> 12 <sup>m</sup>	+57° 19'	12 <sup>h</sup> 14 <sup>m</sup>	-78° 59'
Jan. I	16.808 335	37.32 231	37.61 179	64.64 17	41.716 523	65.60 79	65.38 120	58.60 171
II	17.143 313	39.63 242	38.80 114	64.47 48	42.239 501	64.81 18	66.58 111	60.31 226
21	17.456 283	42.05 246	39.94 105	64.95 111	42.740 462	64.63 42	67.69 100	62.57 273
31	17.739 246	44.51 242	40.99 93	66.06 169	43.202 409	65.05 99	68.69 86	65.30 313
Febr. 10	17.985 204	46.93 232	41.92 77	67.75 219	43.611 345	66.04 150	69.55 70	68.43 344
20	18.189 161	49.25 218	42.69 60	69.94 259	43.956 272	67.54 195	70.25 53	71.87 366
März 2	18.350 118	51.43 200	43.29 40	72.53 289	44.228 194	69.49 230	70.78 36	75.53 379
12	18.468 77	53.43 180	43.69 20	75.42 306	44.422 117	71.79 254	71.14 19	79.32 383
22	18.545 39	55.23 156	43.89 1	78.48 310	44.539 41	74.33 267	71.33 1	83.15 379
31	18.584 4	56.79 132	43.90 19	81.58 302	44.580 29	77.00 269	71.34 15	86.94 367
Apr. 10	18.588 25	58.11 108	43.71 35	84.60 283	44.551 92	79.69 261	71.19 31	90.61 347
20	18.563 50	59.19 83	43.36 51	87.43 253	44.459 146	82.30 242	70.88 47	94.08 320
30	18.513 71	60.02 58	42.85 64	89.96 215	44.313 191	84.72 215	70.41 59	97.28 287
Mai 10	18.442 88	60.60 34	42.21 73	92.11 170	44.122 225	86.87 181	69.82 72	100.15 248
20	18.354 100	60.94 9	41.48 81	93.81 119	43.897 250	88.68 141	69.10 82	102.63 203
30	18.254 111	61.03 13	40.67 85	95.00 66	43.647 266	90.09 97	68.28 90	104.66 154
Juni 9	18.143 117	60.90 37	39.82 87	95.66 10	43.381 273	91.06 51	67.38 97	106.20 102
19	18.026 120	60.53 58	38.95 87	95.76 45	43.108 271	91.57 4	66.41 100	107.22 48
29	17.906 121	59.95 77	38.08 83	95.31 99	42.837 263	91.61 44	65.41 101	107.70 8
Juli 9	17.785 117	59.18 95	37.25 78	94.32 151	42.574 248	91.17 91	64.40 100	107.62 62
19	17.668 108	58.23 109	36.47 71	92.81 199	42.326 225	90.26 136	63.40 94	107.00 116
29	17.560 97	57.14 120	35.76 62	90.82 244	42.101 197	88.90 179	62.46 87	105.84 166
Aug. 8	17.463 80	55.94 127	35.14 52	88.38 282	41.904 162	87.11 217	61.59 76	104.18 210
18	17.383 57	54.67 128	34.62 40	85.56 316	41.742 122	84.94 252	60.83 62	102.08 247
28	17.326 29	53.39 124	34.22 27	82.40 343	41.620 75	82.42 283	60.21 46	99.61 277
Sept. 7	17.297 5	52.15 113	33.95 13	78.97 364	41.545 23	79.59 309	59.75 27	96.84 295
17	17.302 43	51.02 97	33.82 2	75.33 377	41.522 34	76.50 329	59.48 6	93.89 304
27	17.345 85	50.05 74	33.84 17	71.56 382	41.556 97	73.21 343	59.42 15	90.85 300
Okt. 7	17.430 131	49.31 46	34.01 34	67.74 381	41.653 163	69.78 349	59.57 37	87.85 285
17	17.561 177	48.85 12	34.35 49	63.93 369	41.816 230	66.29 350	59.94 58	85.00 257
27	17.738 222	48.73 25	34.84 65	60.24 349	42.046 297	62.79 342	60.52 77	82.43 218
Nov. 6	17.960 263	48.98 63	35.49 80	56.75 321	42.343 362	59.37 325	61.29 94	80.25 171
16	18.223 299	49.61 102	36.29 93	53.54 283	42.705 420	56.12 299	62.23 109	78.54 115
26	18.522 327	50.63 139	37.22 105	50.71 237	43.125 468	53.13 265	63.32 118	77.39 54
Dez. 6	18.849 344	52.02 172	38.27 113	48.34 183	43.593 505	50.48 222	64.50 124	76.85 10
16	19.193 351	53.74 201	39.40 118	46.51 124	44.098 527	48.26 173	65.74 126	76.95 74
26	19.544 346	55.75 223	40.58 120	45.27 60	44.625 532	46.53 117	67.00 124	77.69 136
36	19.890	57.98	41.78	44.67	45.157	45.36	68.24	79.05
Mittl. Ort see δ, tg δ	17.494 1.081	50.07 -0.410	38.75 4.779	78.29 +4.673	42.725 1.853	76.96 +1.560	64.59 5.244	84.80 -5.148
a, a'	+3.1	-20.0	+2.8	-20.0	+3.0	-20.0	+3.5	-20.0
b, b'	+0.03	+0.03	-0.31	+0.04	-0.10	+0.06	+0.34	+0.07



Tag	460) $\eta$ Virginis		462) $\alpha$ Crucis $m$		466) $z\sigma$ Comae		465) $\delta$ Corvi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$12^h 17^m$	$-0^\circ 21'$	$12^h 23^m$	$-62^\circ 47'$	$12^h 26^m$	$+21^\circ 11'$	$12^h 27^m$	$-16^\circ 12'$
Jan. I	4.569 <sup>324</sup>	35.40 <sup>210</sup>	31.25 <sup>57</sup>	16.60 <sup>191</sup>	56.535 <sup>345</sup>	59.65 <sup>180</sup>	0.011 <sup>333</sup>	22.99 <sup>222</sup>
II	4.893 <sup>306</sup>	37.50 <sup>197</sup>	31.82 <sup>53</sup>	18.51 <sup>238</sup>	56.880 <sup>330</sup>	57.85 <sup>145</sup>	0.344 <sup>315</sup>	25.21 <sup>226</sup>
21	5.199 <sup>280</sup>	39.47 <sup>179</sup>	32.35 <sup>49</sup>	20.89 <sup>279</sup>	57.210 <sup>305</sup>	56.40 <sup>106</sup>	0.659 <sup>290</sup>	27.47 <sup>224</sup>
31	5.479 <sup>247</sup>	41.26 <sup>157</sup>	32.84 <sup>43</sup>	23.68 <sup>309</sup>	57.515 <sup>272</sup>	55.34 <sup>65</sup>	0.949 <sup>257</sup>	29.71 <sup>216</sup>
Febr. 10	5.726 <sup>209</sup>	42.83 <sup>130</sup>	33.27 <sup>35</sup>	26.77 <sup>333</sup>	57.787 <sup>233</sup>	54.69 <sup>25</sup>	1.206 <sup>218</sup>	31.87 <sup>203</sup>
20	5.935 <sup>169</sup>	44.13 <sup>103</sup>	33.62 <sup>28</sup>	30.10 <sup>348</sup>	58.020 <sup>190</sup>	54.44 <sup>14</sup>	1.424 <sup>179</sup>	33.90 <sup>187</sup>
März 2	6.104 <sup>127</sup>	45.16 <sup>75</sup>	33.90 <sup>21</sup>	33.58 <sup>354</sup>	58.210 <sup>146</sup>	54.58 <sup>49</sup>	1.603 <sup>138</sup>	35.77 <sup>166</sup>
12	6.231 <sup>87</sup>	45.91 <sup>49</sup>	34.11 <sup>13</sup>	37.12 <sup>352</sup>	58.356 <sup>103</sup>	55.07 <sup>80</sup>	1.741 <sup>97</sup>	37.43 <sup>144</sup>
22	6.318 <sup>51</sup>	46.40 <sup>25</sup>	34.24 <sup>6</sup>	40.64 <sup>342</sup>	58.459 <sup>61</sup>	55.87 <sup>104</sup>	1.838 <sup>61</sup>	38.87 <sup>121</sup>
31	6.369 <sup>18</sup>	46.65 <sup>2</sup>	34.30 <sup>1</sup>	44.06 <sup>327</sup>	58.520 <sup>24</sup>	56.91 <sup>121</sup>	1.899 <sup>27</sup>	40.08 <sup>98</sup>
Apr. 10	6.387 <sup>11</sup>	46.67 <sup>16</sup>	34.29 <sup>8</sup>	47.33 <sup>305</sup>	58.544 <sup>9</sup>	58.12 <sup>133</sup>	1.926 <sup>2</sup>	41.06 <sup>76</sup>
20	6.376 <sup>35</sup>	46.51 <sup>31</sup>	34.21 <sup>13</sup>	50.38 <sup>277</sup>	58.535 <sup>38</sup>	59.45 <sup>138</sup>	1.924 <sup>29</sup>	41.82 <sup>55</sup>
30	6.341 <sup>56</sup>	46.20 <sup>43</sup>	34.08 <sup>19</sup>	53.15 <sup>243</sup>	58.497 <sup>61</sup>	60.83 <sup>135</sup>	1.895 <sup>50</sup>	42.37 <sup>33</sup>
Mai 10	6.285 <sup>71</sup>	45.77 <sup>52</sup>	33.89 <sup>23</sup>	55.58 <sup>206</sup>	58.436 <sup>80</sup>	62.18 <sup>129</sup>	1.845 <sup>68</sup>	42.70 <sup>14</sup>
20	6.214 <sup>83</sup>	45.25 <sup>58</sup>	33.66 <sup>28</sup>	57.64 <sup>163</sup>	58.356 <sup>94</sup>	63.47 <sup>117</sup>	1.777 <sup>83</sup>	42.84 <sup>4</sup>
30	6.131 <sup>92</sup>	44.67 <sup>63</sup>	33.38 <sup>30</sup>	59.27 <sup>119</sup>	58.262 <sup>105</sup>	64.64 <sup>102</sup>	1.694 <sup>95</sup>	42.80 <sup>22</sup>
Juni 9	6.039 <sup>98</sup>	44.04 <sup>65</sup>	33.08 <sup>34</sup>	60.46 <sup>70</sup>	58.157 <sup>112</sup>	65.66 <sup>84</sup>	1.599 <sup>104</sup>	42.58 <sup>39</sup>
19	5.941 <sup>102</sup>	43.39 <sup>65</sup>	32.74 <sup>35</sup>	61.16 <sup>22</sup>	58.045 <sup>115</sup>	66.50 <sup>62</sup>	1.495 <sup>111</sup>	42.19 <sup>53</sup>
29	5.839 <sup>102</sup>	42.74 <sup>63</sup>	32.39 <sup>36</sup>	61.38 <sup>27</sup>	57.930 <sup>116</sup>	67.12 <sup>41</sup>	1.384 <sup>113</sup>	41.66 <sup>67</sup>
Juli 9	5.737 <sup>98</sup>	42.11 <sup>59</sup>	32.03 <sup>36</sup>	61.11 <sup>76</sup>	57.814 <sup>112</sup>	67.53 <sup>16</sup>	1.271 <sup>113</sup>	40.99 <sup>79</sup>
19	5.639 <sup>93</sup>	41.52 <sup>54</sup>	31.67 <sup>34</sup>	60.35 <sup>123</sup>	57.702 <sup>107</sup>	67.69 <sup>8</sup>	1.158 <sup>109</sup>	40.20 <sup>87</sup>
29	5.546 <sup>83</sup>	40.98 <sup>47</sup>	31.33 <sup>32</sup>	59.12 <sup>164</sup>	57.595 <sup>96</sup>	67.61 <sup>33</sup>	1.049 <sup>100</sup>	39.33 <sup>94</sup>
Aug. 8	5.463 <sup>69</sup>	40.51 <sup>35</sup>	31.01 <sup>27</sup>	57.48 <sup>202</sup>	57.499 <sup>81</sup>	67.28 <sup>58</sup>	0.949 <sup>86</sup>	38.39 <sup>97</sup>
18	5.394 <sup>50</sup>	40.16 <sup>23</sup>	30.74 <sup>23</sup>	55.46 <sup>232</sup>	57.418 <sup>63</sup>	66.70 <sup>85</sup>	0.863 <sup>67</sup>	37.42 <sup>94</sup>
28	5.344 <sup>26</sup>	39.93 <sup>7</sup>	30.51 <sup>17</sup>	53.14 <sup>255</sup>	57.355 <sup>38</sup>	65.85 <sup>110</sup>	0.796 <sup>42</sup>	36.48 <sup>88</sup>
Sept. 7	5.318 <sup>2</sup>	39.86 <sup>11</sup>	30.34 <sup>9</sup>	50.59 <sup>268</sup>	57.317 <sup>8</sup>	64.75 <sup>136</sup>	0.754 <sup>13</sup>	35.60 <sup>77</sup>
17	5.320 <sup>36</sup>	39.97 <sup>34</sup>	30.25 <sup>1</sup>	47.91 <sup>271</sup>	57.309 <sup>25</sup>	63.39 <sup>161</sup>	0.741 <sup>24</sup>	34.83 <sup>60</sup>
27	5.356 <sup>74</sup>	40.31 <sup>57</sup>	30.24 <sup>8</sup>	45.20 <sup>263</sup>	57.334 <sup>64</sup>	61.78 <sup>185</sup>	0.765 <sup>64</sup>	34.23 <sup>38</sup>
Okt. 7	5.430 <sup>115</sup>	40.88 <sup>84</sup>	30.32 <sup>17</sup>	42.57 <sup>244</sup>	57.398 <sup>106</sup>	59.93 <sup>206</sup>	0.829 <sup>108</sup>	33.85 <sup>12</sup>
17	5.545 <sup>158</sup>	41.72 <sup>110</sup>	30.49 <sup>27</sup>	40.13 <sup>213</sup>	57.504 <sup>151</sup>	57.87 <sup>226</sup>	0.937 <sup>154</sup>	33.73 <sup>18</sup>
27	5.703 <sup>200</sup>	42.82 <sup>136</sup>	30.76 <sup>35</sup>	38.00 <sup>175</sup>	57.655 <sup>196</sup>	55.61 <sup>240</sup>	1.091 <sup>199</sup>	33.91 <sup>51</sup>
Nov. 6	5.903 <sup>240</sup>	44.18 <sup>162</sup>	31.11 <sup>43</sup>	36.25 <sup>127</sup>	57.851 <sup>239</sup>	53.21 <sup>251</sup>	1.290 <sup>242</sup>	34.42 <sup>85</sup>
16	6.143 <sup>275</sup>	45.80 <sup>184</sup>	31.54 <sup>50</sup>	34.98 <sup>72</sup>	58.090 <sup>278</sup>	50.70 <sup>255</sup>	1.532 <sup>279</sup>	35.27 <sup>119</sup>
26	6.418 <sup>304</sup>	47.64 <sup>201</sup>	32.04 <sup>55</sup>	34.26 <sup>15</sup>	58.368 <sup>310</sup>	48.15 <sup>253</sup>	1.811 <sup>310</sup>	36.46 <sup>150</sup>
Dez. 6	6.722 <sup>324</sup>	49.65 <sup>213</sup>	32.59 <sup>58</sup>	34.11 <sup>45</sup>	58.678 <sup>334</sup>	45.62 <sup>243</sup>	2.121 <sup>330</sup>	37.96 <sup>178</sup>
16	7.046 <sup>334</sup>	51.78 <sup>218</sup>	33.17 <sup>60</sup>	34.56 <sup>105</sup>	59.012 <sup>349</sup>	43.19 <sup>225</sup>	2.451 <sup>342</sup>	39.74 <sup>200</sup>
26	7.380 <sup>333</sup>	53.96 <sup>217</sup>	33.77 <sup>59</sup>	35.61 <sup>161</sup>	59.361 <sup>352</sup>	40.94 <sup>200</sup>	2.793 <sup>342</sup>	41.74 <sup>217</sup>
36	7.713	56.13	34.36	37.22	59.713	38.94	3.135	43.91
Mittl. Ort	5.414	40.62	31.67	40.69	57.504	61.71	0.862	33.95
sec $\delta$ , tg $\delta$	1.000	-0.006	2.187	-1.945	1.073	+0.388	1.041	-0.291
a, a'	+3.1	-20.0	+3.3	-19.9	+3.0	-19.9	+3.1	-19.9
b, b'	0.00	+0.07	+0.13	+0.10	-0.03	+0.12	+0.02	+0.12



# Obere Kulmination Greenwich

113\*

Tag	470) $\beta$ Canum ven. <sup>1)</sup>		472) $\times$ Draconis		471) $\beta$ Corvi		473) 24 Comae sq	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	12 <sup>h</sup> 31 <sup>m</sup>	+41° 38'	12 <sup>h</sup> 31 <sup>m</sup>	+70° 4'	12 <sup>h</sup> 31 <sup>m</sup>	-23° 5'	12 <sup>h</sup> 32 <sup>m</sup>	+18° 40'
Jan. I	6.992 <sup>404</sup>	74.00 <sup>137</sup>	7.43 <sup>77</sup>	75.25 <sup>69</sup>	28.732 <sup>344</sup>	20.68 <sup>220</sup>	21.273 <sup>341</sup>	45.35 <sup>187</sup>
II	7.396 <sup>390</sup>	72.63 <sup>86</sup>	8.20 <sup>74</sup>	74.56 <sup>3</sup>	29.076 <sup>326</sup>	22.88 <sup>232</sup>	21.614 <sup>327</sup>	43.48 <sup>154</sup>
2I	7.786 <sup>363</sup>	71.77 <sup>32</sup>	8.94 <sup>71</sup>	74.53 <sup>61</sup>	29.402 <sup>300</sup>	25.20 <sup>238</sup>	21.941 <sup>304</sup>	41.94 <sup>118</sup>
3I	8.149 <sup>325</sup>	71.45 <sup>21</sup>	9.65 <sup>63</sup>	75.14 <sup>122</sup>	29.702 <sup>267</sup>	27.58 <sup>236</sup>	22.245 <sup>272</sup>	40.76 <sup>79</sup>
Febr. 10	8.474 <sup>280</sup>	71.66 <sup>72</sup>	10.28 <sup>55</sup>	76.36 <sup>177</sup>	29.969 <sup>228</sup>	29.94 <sup>230</sup>	22.517 <sup>234</sup>	39.97 <sup>40</sup>
20	8.754 <sup>228</sup>	72.38 <sup>118</sup>	10.83 <sup>44</sup>	78.13 <sup>223</sup>	30.197 <sup>187</sup>	32.24 <sup>218</sup>	22.751 <sup>193</sup>	39.57 <sup>1</sup>
März 2	8.982 <sup>173</sup>	73.56 <sup>157</sup>	11.27 <sup>32</sup>	80.36 <sup>261</sup>	30.384 <sup>145</sup>	34.42 <sup>201</sup>	22.944 <sup>149</sup>	39.56 <sup>34</sup>
12	9.155 <sup>118</sup>	75.13 <sup>188</sup>	11.59 <sup>20</sup>	82.97 <sup>286</sup>	30.529 <sup>105</sup>	36.43 <sup>183</sup>	23.093 <sup>107</sup>	39.90 <sup>64</sup>
22	9.273 <sup>65</sup>	77.01 <sup>210</sup>	11.79 <sup>8</sup>	85.83 <sup>299</sup>	30.634 <sup>66</sup>	38.26 <sup>161</sup>	23.200 <sup>67</sup>	40.54 <sup>90</sup>
3I	9.338 <sup>15</sup>	79.11 <sup>221</sup>	11.87 <sup>3</sup>	88.82 <sup>299</sup>	30.700 <sup>32</sup>	39.87 <sup>138</sup>	23.267 <sup>30</sup>	41.44 <sup>109</sup>
Apr. 10	9.353 <sup>29</sup>	81.32 <sup>223</sup>	11.84 <sup>14</sup>	91.81 <sup>290</sup>	30.732 <sup>1</sup>	41.25 <sup>116</sup>	23.297 <sup>3</sup>	42.53 <sup>121</sup>
20	9.324 <sup>68</sup>	83.55 <sup>217</sup>	11.70 <sup>24</sup>	94.71 <sup>268</sup>	30.733 <sup>27</sup>	42.41 <sup>93</sup>	23.294 <sup>30</sup>	43.74 <sup>128</sup>
30	9.256 <sup>100</sup>	85.72 <sup>202</sup>	11.46 <sup>32</sup>	97.39 <sup>237</sup>	30.706 <sup>50</sup>	43.34 <sup>68</sup>	23.264 <sup>54</sup>	45.02 <sup>128</sup>
Mai 10	9.156 <sup>125</sup>	87.74 <sup>180</sup>	11.14 <sup>39</sup>	99.76 <sup>193</sup>	30.656 <sup>70</sup>	44.02 <sup>46</sup>	23.210 <sup>74</sup>	46.30 <sup>123</sup>
20	9.031 <sup>146</sup>	89.54 <sup>153</sup>	10.75 <sup>43</sup>	101.74 <sup>154</sup>	30.586 <sup>86</sup>	44.48 <sup>22</sup>	23.136 <sup>88</sup>	47.53 <sup>114</sup>
30	8.885 <sup>159</sup>	91.07 <sup>121</sup>	10.32 <sup>48</sup>	103.28 <sup>105</sup>	30.500 <sup>101</sup>	44.70 <sup>0</sup>	23.048 <sup>99</sup>	48.67 <sup>101</sup>
Juni 9	8.726 <sup>169</sup>	92.28 <sup>85</sup>	9.84 <sup>49</sup>	104.33 <sup>53</sup>	30.399 <sup>111</sup>	44.70 <sup>23</sup>	22.949 <sup>107</sup>	49.68 <sup>85</sup>
19	8.557 <sup>172</sup>	93.13 <sup>47</sup>	9.35 <sup>50</sup>	104.86 <sup>0</sup>	30.288 <sup>119</sup>	44.47 <sup>43</sup>	22.842 <sup>112</sup>	50.53 <sup>67</sup>
29	8.385 <sup>171</sup>	93.60 <sup>8</sup>	8.85 <sup>49</sup>	104.86 <sup>53</sup>	30.169 <sup>123</sup>	44.04 <sup>64</sup>	22.730 <sup>114</sup>	51.20 <sup>46</sup>
Juli 9	8.214 <sup>166</sup>	93.68 <sup>31</sup>	8.36 <sup>48</sup>	104.33 <sup>106</sup>	30.046 <sup>124</sup>	43.40 <sup>81</sup>	22.616 <sup>112</sup>	51.66 <sup>24</sup>
19	8.048 <sup>155</sup>	93.37 <sup>71</sup>	7.88 <sup>44</sup>	103.27 <sup>155</sup>	29.922 <sup>120</sup>	42.59 <sup>97</sup>	22.504 <sup>106</sup>	51.90 <sup>2</sup>
29	7.893 <sup>140</sup>	92.66 <sup>108</sup>	7.44 <sup>39</sup>	101.72 <sup>202</sup>	29.802 <sup>111</sup>	41.62 <sup>110</sup>	22.398 <sup>98</sup>	51.92 <sup>22</sup>
Aug. 8	7.753 <sup>121</sup>	91.58 <sup>145</sup>	7.05 <sup>35</sup>	99.70 <sup>244</sup>	29.691 <sup>98</sup>	40.52 <sup>117</sup>	22.300 <sup>83</sup>	51.70 <sup>46</sup>
18	7.632 <sup>95</sup>	90.13 <sup>180</sup>	6.70 <sup>28</sup>	97.26 <sup>282</sup>	29.593 <sup>78</sup>	39.35 <sup>122</sup>	22.217 <sup>66</sup>	51.24 <sup>71</sup>
28	7.537 <sup>65</sup>	88.33 <sup>211</sup>	6.42 <sup>21</sup>	94.44 <sup>314</sup>	29.515 <sup>52</sup>	38.13 <sup>120</sup>	22.151 <sup>42</sup>	50.53 <sup>96</sup>
Sept. 7	7.472 <sup>29</sup>	86.22 <sup>240</sup>	6.21 <sup>13</sup>	91.30 <sup>341</sup>	29.463 <sup>20</sup>	36.93 <sup>112</sup>	22.109 <sup>14</sup>	49.57 <sup>121</sup>
17	7.443 <sup>13</sup>	83.82 <sup>265</sup>	6.08 <sup>4</sup>	87.89 <sup>361</sup>	29.443 <sup>18</sup>	35.81 <sup>99</sup>	22.095 <sup>20</sup>	48.36 <sup>146</sup>
27	7.456 <sup>58</sup>	81.17 <sup>286</sup>	6.04 <sup>6</sup>	84.28 <sup>374</sup>	29.461 <sup>60</sup>	34.82 <sup>79</sup>	22.115 <sup>58</sup>	46.90 <sup>170</sup>
Okt. 7	7.514 <sup>109</sup>	78.31 <sup>302</sup>	6.10 <sup>16</sup>	80.54 <sup>379</sup>	29.521 <sup>106</sup>	34.03 <sup>54</sup>	22.173 <sup>100</sup>	45.20 <sup>193</sup>
17	7.623 <sup>162</sup>	75.29 <sup>313</sup>	6.26 <sup>26</sup>	76.75 <sup>377</sup>	29.627 <sup>155</sup>	33.49 <sup>23</sup>	22.273 <sup>144</sup>	43.27 <sup>214</sup>
27	7.785 <sup>214</sup>	72.16 <sup>316</sup>	6.52 <sup>37</sup>	72.98 <sup>364</sup>	29.782 <sup>202</sup>	33.26 <sup>12</sup>	22.417 <sup>189</sup>	41.13 <sup>230</sup>
Nov. 6	7.999 <sup>266</sup>	69.00 <sup>311</sup>	6.89 <sup>47</sup>	69.34 <sup>343</sup>	29.984 <sup>247</sup>	33.38 <sup>48</sup>	22.606 <sup>232</sup>	38.83 <sup>243</sup>
16	8.265 <sup>313</sup>	65.89 <sup>300</sup>	7.36 <sup>57</sup>	65.91 <sup>314</sup>	30.231 <sup>286</sup>	33.86 <sup>87</sup>	22.838 <sup>271</sup>	36.40 <sup>249</sup>
26	8.578 <sup>353</sup>	62.89 <sup>280</sup>	7.93 <sup>64</sup>	62.77 <sup>274</sup>	30.517 <sup>318</sup>	34.73 <sup>124</sup>	23.109 <sup>305</sup>	33.91 <sup>249</sup>
Dez. 6	8.931 <sup>384</sup>	60.09 <sup>251</sup>	8.57 <sup>71</sup>	60.03 <sup>226</sup>	30.835 <sup>340</sup>	35.97 <sup>157</sup>	23.414 <sup>329</sup>	31.42 <sup>243</sup>
16	9.315 <sup>403</sup>	57.58 <sup>214</sup>	9.28 <sup>75</sup>	57.77 <sup>171</sup>	31.175 <sup>352</sup>	37.54 <sup>187</sup>	23.743 <sup>343</sup>	28.99 <sup>228</sup>
26	9.718 <sup>411</sup>	55.44 <sup>170</sup>	10.03 <sup>77</sup>	56.06 <sup>111</sup>	31.527 <sup>353</sup>	39.41 <sup>210</sup>	24.086 <sup>348</sup>	26.71 <sup>205</sup>
36	10.129	53.74	10.80	54.95	31.880	41.51	24.434	24.66
Mittl. Ort	8.048	81.96	8.74	88.20	29.589	34.06	22.264	46.53
sec $\delta$ , tg $\delta$	1.338	+0.890	2.937	+2.761	1.087	-0.426	1.056	+0.338
a, a'	+2.9	-19.9	+2.6	-19.9	+3.2	-19.9	+3.0	-19.8
b, b'	-0.06	+0.14	-0.18	+0.14	+0.03	+0.14	-0.02	+0.14

<sup>1)</sup> Die jährliche Parallaxe ( $\alpha''107$ ) ist bereits berücksichtigt.



Tag	474) $\alpha$ Muscae		1325) 133 G. Centauri		478) 76 Ursae maj.		481) $\beta$ Crucis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	12 <sup>h</sup> 33 <sup>m</sup>	-68° 49'	12 <sup>h</sup> 38 <sup>m</sup>	-45° 50'	12 <sup>h</sup> 39 <sup>m</sup>	+63° 0'	12 <sup>h</sup> 44 <sup>m</sup>	-59° 22'
Jan. I	52.36 <sup>a</sup> <sub>71</sub>	32.23 <sub>167</sub>	20.211 <sup>a</sup> <sub>419</sub>	20.79 <sub>199</sub>	8.85 <sup>a</sup> <sub>60</sub>	40.84 <sub>97</sub>	28.714 <sup>a</sup> <sub>537</sub>	54.25 <sub>171</sub>
II	53.07 <sub>66</sub>	33.90 <sub>219</sub>	20.630 <sub>399</sub>	22.78 <sub>234</sub>	9.45 <sub>59</sub>	39.87 <sub>35</sub>	29.251 <sub>512</sub>	55.96 <sub>218</sub>
2I	53.73 <sub>61</sub>	36.09 <sub>263</sub>	21.029 <sub>367</sub>	25.12 <sub>261</sub>	10.04 <sub>56</sub>	39.52 <sub>29</sub>	29.763 <sub>473</sub>	58.14 <sub>257</sub>
3I	54.34 <sub>54</sub>	38.72 <sub>301</sub>	21.396 <sub>326</sub>	27.73 <sub>283</sub>	10.60 <sub>50</sub>	39.81 <sub>91</sub>	30.236 <sub>423</sub>	60.71 <sub>290</sub>
Febr. 10	54.88 <sub>46</sub>	41.73 <sub>329</sub>	21.722 <sub>281</sub>	30.56 <sub>295</sub>	11.10 <sub>44</sub>	40.72 <sub>147</sub>	30.659 <sub>365</sub>	63.61 <sub>313</sub>
20	55.34 <sub>36</sub>	45.02 <sub>349</sub>	22.003 <sub>231</sub>	33.51 <sub>300</sub>	11.54 <sub>36</sub>	42.19 <sub>196</sub>	31.024 <sub>301</sub>	66.74 <sub>328</sub>
März 2	55.70 <sub>28</sub>	48.51 <sub>360</sub>	22.234 <sub>179</sub>	36.51 <sub>299</sub>	11.90 <sub>27</sub>	44.15 <sub>236</sub>	31.325 <sub>235</sub>	70.02 <sub>337</sub>
12	55.98 <sub>18</sub>	52.11 <sub>363</sub>	22.413 <sub>129</sub>	39.50 <sub>292</sub>	12.17 <sub>18</sub>	46.51 <sub>265</sub>	31.560 <sub>169</sub>	73.39 <sub>337</sub>
22	56.16 <sub>9</sub>	55.74 <sub>359</sub>	22.542 <sub>81</sub>	42.42 <sub>278</sub>	12.35 <sub>9</sub>	49.16 <sub>282</sub>	31.729 <sub>104</sub>	76.76 <sub>331</sub>
31*)	56.25 <sub>1</sub>	59.33 <sub>348</sub>	22.623 <sub>35</sub>	45.20 <sub>260</sub>	12.44 <sub>1</sub>	51.98 <sub>289</sub>	31.833 <sub>41</sub>	80.07 <sub>317</sub>
Apr. 10	56.26 <sub>8</sub>	62.81 <sub>328</sub>	22.658 <sub>6</sub>	47.80 <sub>237</sub>	12.45 <sub>8</sub>	54.87 <sub>283</sub>	31.874 <sub>17</sub>	83.24 <sub>298</sub>
20	56.18 <sub>16</sub>	66.09 <sub>302</sub>	22.652 <sub>44</sub>	50.17 <sub>212</sub>	12.37 <sub>14</sub>	57.70 <sub>266</sub>	31.857 <sub>71</sub>	86.22 <sub>274</sub>
30	56.02 <sub>23</sub>	69.11 <sub>272</sub>	22.608 <sub>78</sub>	52.29 <sub>182</sub>	12.23 <sub>21</sub>	60.36 <sub>241</sub>	31.786 <sub>122</sub>	88.96 <sub>243</sub>
Mai 10	55.79 <sub>30</sub>	71.83 <sub>235</sub>	22.530 <sub>108</sub>	54.11 <sub>149</sub>	12.02 <sub>26</sub>	62.77 <sub>208</sub>	31.664 <sub>167</sub>	91.39 <sub>210</sub>
20	55.49 <sub>35</sub>	74.18 <sub>193</sub>	22.422 <sub>135</sub>	55.60 <sub>115</sub>	11.76 <sub>29</sub>	64.85 <sub>167</sub>	31.497 <sub>208</sub>	93.49 <sub>171</sub>
30	55.14 <sub>40</sub>	76.11 <sub>148</sub>	22.287 <sub>157</sub>	56.75 <sub>78</sub>	11.47 <sub>33</sub>	66.52 <sub>122</sub>	31.289 <sub>243</sub>	95.20 <sub>129</sub>
Juni 9	54.74 <sub>44</sub>	77.59 <sub>99</sub>	22.130 <sub>175</sub>	57.53 <sub>40</sub>	11.14 <sub>34</sub>	67.74 <sub>74</sub>	31.046 <sub>273</sub>	96.49 <sub>85</sub>
19	54.30 <sub>47</sub>	78.58 <sub>49</sub>	21.955 <sub>189</sub>	57.93 <sub>1</sub>	10.80 <sub>35</sub>	68.48 <sub>23</sub>	30.773 <sub>293</sub>	97.34 <sub>38</sub>
29	53.83 <sub>48</sub>	79.07 <sub>3</sub>	21.766 <sub>198</sub>	57.94 <sub>37</sub>	10.45 <sub>35</sub>	68.71 <sub>27</sub>	30.480 <sub>308</sub>	97.72 <sub>8</sub>
Juli 9	53.35 <sub>48</sub>	79.04 <sub>55</sub>	21.568 <sub>200</sub>	57.57 <sub>75</sub>	10.10 <sub>34</sub>	68.44 <sub>78</sub>	30.172 <sub>313</sub>	97.64 <sub>55</sub>
19	52.87 <sub>47</sub>	78.49 <sub>105</sub>	21.368 <sub>197</sub>	56.82 <sub>110</sub>	9.76 <sub>32</sub>	67.66 <sub>127</sub>	29.859 <sub>307</sub>	97.09 <sub>99</sub>
29	52.40 <sub>44</sub>	77.44 <sub>151</sub>	21.171 <sub>184</sub>	55.72 <sub>142</sub>	9.44 <sub>29</sub>	66.39 <sub>173</sub>	29.552 <sub>292</sub>	96.10 <sub>142</sub>
Aug. 8	51.96 <sub>39</sub>	75.93 <sub>193</sub>	20.987 <sub>165</sub>	54.30 <sub>169</sub>	9.15 <sub>25</sub>	64.66 <sub>216</sub>	29.260 <sub>264</sub>	94.68 <sub>179</sub>
18	51.57 <sub>32</sub>	74.00 <sub>229</sub>	20.822 <sub>138</sub>	52.61 <sub>191</sub>	8.90 <sub>21</sub>	62.50 <sub>255</sub>	28.996 <sub>224</sub>	92.89 <sub>211</sub>
28	51.25 <sub>25</sub>	71.71 <sub>257</sub>	20.684 <sub>102</sub>	50.70 <sub>204</sub>	8.69 <sub>16</sub>	59.95 <sub>290</sub>	28.772 <sub>174</sub>	90.78 <sub>235</sub>
Sept. 7	51.00 <sub>16</sub>	69.14 <sub>275</sub>	20.582 <sub>57</sub>	48.66 <sub>212</sub>	8.53 <sub>10</sub>	57.05 <sub>319</sub>	28.598 <sub>111</sub>	88.43 <sub>250</sub>
17	50.84 <sub>5</sub>	66.39 <sub>284</sub>	20.525 <sub>5</sub>	46.54 <sub>210</sub>	8.43 <sub>4</sub>	53.86 <sub>342</sub>	28.487 <sub>40</sub>	85.93 <sub>256</sub>
27	50.79 <sub>6</sub>	63.55 <sub>280</sub>	20.520 <sub>52</sub>	44.44 <sub>198</sub>	8.39 <sub>4</sub>	50.44 <sub>359</sub>	28.447 <sub>40</sub>	83.37 <sub>252</sub>
Okt. 7	50.85 <sub>17</sub>	60.75 <sub>266</sub>	20.572 <sub>114</sub>	42.46 <sub>177</sub>	8.43 <sub>12</sub>	46.85 <sub>369</sub>	28.487 <sub>124</sub>	80.85 <sub>237</sub>
17	51.02 <sub>30</sub>	58.09 <sub>240</sub>	20.686 <sub>178</sub>	40.69 <sub>148</sub>	8.55 <sub>19</sub>	43.16 <sub>371</sub>	28.611 <sub>210</sub>	78.48 <sub>210</sub>
27	51.32 <sub>40</sub>	55.69 <sub>203</sub>	20.864 <sub>239</sub>	39.21 <sub>111</sub>	8.74 <sub>28</sub>	39.45 <sub>364</sub>	28.821 <sub>293</sub>	76.38 <sub>176</sub>
Nov. 6	51.72 <sub>51</sub>	53.66 <sub>158</sub>	21.103 <sub>296</sub>	38.10 <sub>68</sub>	9.02 <sub>36</sub>	35.81 <sub>348</sub>	29.114 <sub>369</sub>	74.62 <sub>132</sub>
16	52.23 <sub>59</sub>	52.08 <sub>106</sub>	21.399 <sub>347</sub>	37.42 <sub>19</sub>	9.38 <sub>44</sub>	32.33 <sub>324</sub>	29.483 <sub>436</sub>	73.30 <sub>81</sub>
26	52.82 <sub>66</sub>	51.02 <sub>47</sub>	21.746 <sub>387</sub>	37.23 <sub>31</sub>	9.82 <sub>49</sub>	29.09 <sub>289</sub>	29.919 <sub>489</sub>	72.49 <sub>27</sub>
Dez. 6	53.48 <sub>70</sub>	50.55 <sub>14</sub>	22.133 <sub>414</sub>	37.54 <sub>81</sub>	10.31 <sub>55</sub>	26.20 <sub>246</sub>	30.408 <sub>526</sub>	72.22 <sub>30</sub>
16	54.18 <sub>73</sub>	50.69 <sub>75</sub>	22.547 <sub>429</sub>	38.35 <sub>130</sub>	10.86 <sub>59</sub>	23.74 <sub>195</sub>	30.934 <sub>546</sub>	72.52 <sub>87</sub>
26	54.91 <sub>72</sub>	51.44 <sub>134</sub>	22.976 <sub>429</sub>	39.65 <sub>176</sub>	11.45 <sub>61</sub>	21.79 <sub>138</sub>	31.480 <sub>548</sub>	73.39 <sub>142</sub>
36	55.63	52.78	23.405	41.41	12.06	20.41	32.028	74.81
Mittl. Ort	52.84	57.50	21.023	41.22	10.13	52.89	29.516	77.93
sec $\delta$ , tg $\delta$	2.769	-2.583	1.436	-1.030	2.204	+1.964	1.964	-1.690
a, a'	+3.6	-19.8	+3.3	-19.8	+2.6	-19.8	+3.5	-19.7
b, b'	+0.17	+0.15	+0.07	+0.17	-0.13	+0.17	+0.11	+0.19

\*) Bei Stern 1325, 478) und 481) lies April 1.



# Obere Kulmination Greenwich

115\*

Tag	482) 150 G. Centauri		483) ε Ursae maj.		484) δ Virginis		486) 8 Draconis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	12 <sup>h</sup> 50 <sup>m</sup>	-39° 52'	12 <sup>h</sup> 51 <sup>m</sup>	+56° 14'	12 <sup>h</sup> 52 <sup>m</sup>	+3° 41'	12 <sup>h</sup> 53 <sup>m</sup>	+65° 43'
Jan. I	21.047 <sup>395</sup>	29.39 <sup>194</sup>	35.594 <sup>510</sup>	78.15 <sup>129</sup>	48.809 <sup>328</sup>	49.58 <sup>209</sup>	16.04 <sup>65</sup>	59.01 <sup>110</sup>
II	22.342 <sup>379</sup>	31.33 <sup>225</sup>	36.104 <sup>501</sup>	76.86 <sup>69</sup>	49.137 <sup>318</sup>	47.49 <sup>193</sup>	16.69 <sup>64</sup>	57.91 <sup>45</sup>
21	22.721 <sup>352</sup>	33.58 <sup>249</sup>	36.605 <sup>476</sup>	76.17 <sup>7</sup>	49.455 <sup>298</sup>	45.56 <sup>171</sup>	17.33 <sup>62</sup>	57.46 <sup>19</sup>
31	23.073 <sup>317</sup>	36.07 <sup>265</sup>	37.081 <sup>435</sup>	76.10 <sup>54</sup>	49.753 <sup>271</sup>	43.85 <sup>145</sup>	17.95 <sup>56</sup>	57.65 <sup>83</sup>
Febr. 10	23.390 <sup>276</sup>	38.72 <sup>273</sup>	37.516 <sup>383</sup>	76.64 <sup>112</sup>	50.024 <sup>237</sup>	42.40 <sup>116</sup>	18.51 <sup>50</sup>	58.48 <sup>141</sup>
20	23.666 <sup>231</sup>	41.45 <sup>276</sup>	37.899 <sup>320</sup>	77.76 <sup>163</sup>	50.261 <sup>199</sup>	41.24 <sup>84</sup>	19.01 <sup>41</sup>	59.89 <sup>193</sup>
März 2	23.897 <sup>185</sup>	44.21 <sup>273</sup>	38.219 <sup>251</sup>	79.39 <sup>206</sup>	50.460 <sup>162</sup>	40.40 <sup>55</sup>	19.42 <sup>32</sup>	61.82 <sup>235</sup>
12	24.082 <sup>140</sup>	46.94 <sup>263</sup>	38.470 <sup>179</sup>	81.45 <sup>239</sup>	50.622 <sup>123</sup>	39.85 <sup>25</sup>	19.74 <sup>23</sup>	64.17 <sup>267</sup>
22	24.222 <sup>96</sup>	49.57 <sup>249</sup>	38.649 <sup>107</sup>	83.84 <sup>262</sup>	50.745 <sup>86</sup>	39.60 <sup>1</sup>	19.97 <sup>13</sup>	66.84 <sup>288</sup>
Apr. I	24.318 <sup>54</sup>	52.06 <sup>231</sup>	38.756 <sup>37</sup>	86.46 <sup>273</sup>	50.831 <sup>52</sup>	39.61 <sup>23</sup>	20.10 <sup>3</sup>	69.72 <sup>295</sup>
10	24.372 <sup>17</sup>	54.37 <sup>210</sup>	38.793 <sup>28</sup>	89.19 <sup>273</sup>	50.883 <sup>22</sup>	39.84 <sup>41</sup>	20.13 <sup>6</sup>	72.67 <sup>292</sup>
20	24.389 <sup>19</sup>	56.47 <sup>186</sup>	38.765 <sup>85</sup>	91.92 <sup>263</sup>	50.905 <sup>5</sup>	40.25 <sup>55</sup>	20.07 <sup>14</sup>	75.59 <sup>278</sup>
30	24.370 <sup>50</sup>	58.33 <sup>159</sup>	38.680 <sup>136</sup>	94.55 <sup>244</sup>	50.900 <sup>29</sup>	40.80 <sup>66</sup>	19.93 <sup>22</sup>	78.37 <sup>253</sup>
Mai 10	24.320 <sup>78</sup>	59.92 <sup>130</sup>	38.544 <sup>179</sup>	96.99 <sup>215</sup>	50.871 <sup>49</sup>	41.46 <sup>72</sup>	19.71 <sup>27</sup>	80.90 <sup>221</sup>
20	24.242 <sup>103</sup>	61.22 <sup>99</sup>	38.365 <sup>212</sup>	99.14 <sup>180</sup>	50.822 <sup>65</sup>	42.18 <sup>75</sup>	19.44 <sup>32</sup>	83.11 <sup>181</sup>
30	24.139 <sup>125</sup>	62.21 <sup>67</sup>	38.153 <sup>239</sup>	100.94 <sup>140</sup>	50.757 <sup>80</sup>	42.93 <sup>75</sup>	19.12 <sup>36</sup>	84.92 <sup>135</sup>
Juni 9	24.014 <sup>143</sup>	62.88 <sup>33</sup>	37.914 <sup>257</sup>	102.34 <sup>96</sup>	50.677 <sup>91</sup>	43.68 <sup>73</sup>	18.76 <sup>39</sup>	86.27 <sup>87</sup>
19	23.871 <sup>158</sup>	63.21 <sup>1</sup>	37.657 <sup>267</sup>	103.30 <sup>49</sup>	50.586 <sup>99</sup>	44.41 <sup>68</sup>	18.37 <sup>40</sup>	87.14 <sup>36</sup>
29	23.713 <sup>167</sup>	63.20 <sup>34</sup>	37.390 <sup>270</sup>	103.79 <sup>1</sup>	50.487 <sup>106</sup>	45.09 <sup>62</sup>	17.97 <sup>40</sup>	87.50 <sup>16</sup>
Juli 9	23.546 <sup>173</sup>	62.86 <sup>67</sup>	37.120 <sup>267</sup>	103.80 <sup>47</sup>	50.381 <sup>108</sup>	45.71 <sup>53</sup>	17.57 <sup>40</sup>	87.34 <sup>68</sup>
19	23.373 <sup>172</sup>	62.19 <sup>98</sup>	36.853 <sup>255</sup>	103.33 <sup>95</sup>	50.273 <sup>108</sup>	46.24 <sup>43</sup>	17.17 <sup>38</sup>	86.66 <sup>119</sup>
29	23.201 <sup>165</sup>	61.21 <sup>125</sup>	36.598 <sup>237</sup>	102.38 <sup>141</sup>	50.165 <sup>102</sup>	46.67 <sup>32</sup>	16.79 <sup>35</sup>	85.47 <sup>166</sup>
Aug. 8	23.036 <sup>150</sup>	59.96 <sup>149</sup>	36.361 <sup>212</sup>	100.97 <sup>183</sup>	50.063 <sup>93</sup>	46.99 <sup>17</sup>	16.44 <sup>31</sup>	83.81 <sup>212</sup>
18	22.886 <sup>127</sup>	58.47 <sup>166</sup>	36.149 <sup>180</sup>	99.14 <sup>224</sup>	49.970 <sup>79</sup>	47.16 <sup>2</sup>	16.13 <sup>27</sup>	81.69 <sup>253</sup>
28	22.759 <sup>97</sup>	56.81 <sup>179</sup>	35.969 <sup>141</sup>	96.90 <sup>260</sup>	49.891 <sup>58</sup>	47.18 <sup>16</sup>	15.86 <sup>22</sup>	79.16 <sup>289</sup>
Sept. 7	22.662 <sup>59</sup>	55.02 <sup>184</sup>	35.828 <sup>95</sup>	94.30 <sup>291</sup>	49.833 <sup>32</sup>	47.02 <sup>36</sup>	15.64 <sup>15</sup>	76.27 <sup>320</sup>
17	22.603 <sup>14</sup>	53.18 <sup>181</sup>	35.733 <sup>41</sup>	91.39 <sup>319</sup>	49.801 <sup>0</sup>	46.66 <sup>58</sup>	15.49 <sup>8</sup>	73.07 <sup>345</sup>
27	22.589 <sup>38</sup>	51.37 <sup>169</sup>	35.692 <sup>19</sup>	88.20 <sup>339</sup>	49.801 <sup>36</sup>	46.08 <sup>82</sup>	15.41 <sup>0</sup>	69.62 <sup>364</sup>
Okt. 7	22.627 <sup>94</sup>	49.68 <sup>150</sup>	35.711 <sup>83</sup>	84.81 <sup>354</sup>	49.837 <sup>78</sup>	45.26 <sup>106</sup>	15.41 <sup>8</sup>	65.98 <sup>375</sup>
17	22.721 <sup>153</sup>	48.18 <sup>121</sup>	35.794 <sup>151</sup>	81.27 <sup>361</sup>	49.915 <sup>122</sup>	44.20 <sup>132</sup>	15.49 <sup>17</sup>	62.23 <sup>379</sup>
27	22.874 <sup>211</sup>	46.97 <sup>87</sup>	35.945 <sup>221</sup>	77.66 <sup>360</sup>	50.037 <sup>167</sup>	42.88 <sup>156</sup>	15.66 <sup>27</sup>	58.44 <sup>374</sup>
Nov. 6	23.085 <sup>265</sup>	46.10 <sup>47</sup>	36.166 <sup>290</sup>	74.06 <sup>351</sup>	50.204 <sup>210</sup>	41.32 <sup>179</sup>	15.93 <sup>35</sup>	54.70 <sup>359</sup>
16	23.350 <sup>314</sup>	45.63 <sup>2</sup>	36.456 <sup>355</sup>	70.55 <sup>331</sup>	50.414 <sup>250</sup>	39.53 <sup>198</sup>	16.28 <sup>44</sup>	51.11 <sup>335</sup>
26	23.664 <sup>353</sup>	45.61 <sup>44</sup>	36.811 <sup>412</sup>	67.24 <sup>304</sup>	50.664 <sup>285</sup>	37.55 <sup>212</sup>	16.72 <sup>51</sup>	47.76 <sup>301</sup>
Dez. 6	24.017 <sup>383</sup>	46.05 <sup>90</sup>	37.223 <sup>459</sup>	64.20 <sup>266</sup>	50.949 <sup>311</sup>	35.43 <sup>221</sup>	17.23 <sup>58</sup>	44.75 <sup>259</sup>
16	24.400 <sup>399</sup>	46.95 <sup>134</sup>	37.682 <sup>492</sup>	61.54 <sup>220</sup>	51.260 <sup>327</sup>	33.22 <sup>223</sup>	17.81 <sup>62</sup>	42.16 <sup>208</sup>
26	24.799 <sup>402</sup>	48.29 <sup>175</sup>	38.174 <sup>510</sup>	59.34 <sup>167</sup>	51.587 <sup>334</sup>	30.99 <sup>220</sup>	18.43 <sup>65</sup>	40.08 <sup>151</sup>
36	25.201	50.04	38.684	57.67	51.921	28.79	19.08	38.57
Mittl. Ort sec δ, tg δ	22.903 1.303	48.25 -0.836	36.899 1.800	88.99 +1.497	49.875 1.002	45.43 +0.065	17.50 2.433	71.24 +2.219
a, a'	+3.3	-19.6	+2.6	-19.5	+3.1	-19.5	+2.4	-19.5
b, b'	+0.05	+0.22	-0.10	+0.22	0.00	+0.23	-0.14	+0.23



## Scheinbare Sternörter 1945

Tag	485) $\alpha$ Can. ven. sq		488) $\epsilon$ Virginis		490) $\delta$ Virginis		492) $\beta$ Comae <sup>1)</sup>	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	12 <sup>h</sup> 53 <sup>m</sup>	+38° 36'	12 <sup>h</sup> 59 <sup>m</sup>	+11° 14'	13 <sup>h</sup> 7 <sup>m</sup>	-5° 14'	13 <sup>h</sup> 9 <sup>m</sup>	+28° 8'
Jan. I	26.265 <sup>392</sup>	47.05 <sup>168</sup>	25.160 <sup>333</sup>	77.28 <sup>206</sup>	4.806 <sup>331</sup>	37.51 <sup>210</sup>	17.231 <sup>357</sup>	79.32 <sup>192</sup>
II	26.657 <sup>383</sup>	45.37 <sup>117</sup>	25.493 <sup>324</sup>	75.22 <sup>182</sup>	5.137 <sup>322</sup>	39.61 <sup>205</sup>	17.588 <sup>351</sup>	77.40 <sup>151</sup>
2I	27.040 <sup>362</sup>	44.20 <sup>65</sup>	25.817 <sup>306</sup>	73.40 <sup>152</sup>	5.459 <sup>304</sup>	41.66 <sup>192</sup>	17.939 <sup>333</sup>	75.89 <sup>106</sup>
3I	27.402 <sup>331</sup>	43.55 <sup>12</sup>	26.123 <sup>279</sup>	71.88 <sup>119</sup>	5.763 <sup>278</sup>	43.58 <sup>175</sup>	18.272 <sup>307</sup>	74.83 <sup>58</sup>
Febr. 10	27.733 <sup>291</sup>	43.43 <sup>41</sup>	26.402 <sup>246</sup>	70.69 <sup>83</sup>	6.041 <sup>246</sup>	45.33 <sup>153</sup>	18.579 <sup>274</sup>	74.25 <sup>11</sup>
20	28.024 <sup>244</sup>	43.84 <sup>89</sup>	26.648 <sup>209</sup>	69.86 <sup>47</sup>	6.287 <sup>212</sup>	46.86 <sup>129</sup>	18.853 <sup>234</sup>	74.14 <sup>35</sup>
März 2	28.268 <sup>195</sup>	44.73 <sup>131</sup>	26.857 <sup>170</sup>	69.39 <sup>13</sup>	6.499 <sup>175</sup>	48.15 <sup>104</sup>	19.087 <sup>191</sup>	74.49 <sup>77</sup>
12	28.463 <sup>144</sup>	46.04 <sup>166</sup>	27.027 <sup>131</sup>	69.26 <sup>18</sup>	6.674 <sup>137</sup>	49.19 <sup>77</sup>	19.278 <sup>148</sup>	75.26 <sup>114</sup>
22	28.607 <sup>94</sup>	47.70 <sup>193</sup>	27.158 <sup>94</sup>	69.44 <sup>46</sup>	6.811 <sup>102</sup>	49.96 <sup>53</sup>	19.426 <sup>105</sup>	76.40 <sup>143</sup>
Apr. I	28.701 <sup>47</sup>	49.63 <sup>210</sup>	27.252 <sup>58</sup>	69.90 <sup>69</sup>	6.913 <sup>69</sup>	50.49 <sup>31</sup>	19.531 <sup>64</sup>	77.83 <sup>164</sup>
10	28.748 <sup>3</sup>	51.73 <sup>217</sup>	27.310 <sup>26</sup>	70.59 <sup>85</sup>	6.982 <sup>39</sup>	50.80 <sup>11</sup>	19.595 <sup>26</sup>	79.47 <sup>177</sup>
20	28.751 <sup>35</sup>	53.90 <sup>216</sup>	27.336 <sup>2</sup>	71.44 <sup>97</sup>	7.021 <sup>10</sup>	50.91 <sup>7</sup>	19.621 <sup>7</sup>	81.24 <sup>184</sup>
30	28.716 <sup>68</sup>	56.06 <sup>207</sup>	27.334 <sup>26</sup>	72.41 <sup>103</sup>	7.031 <sup>13</sup>	50.84 <sup>22</sup>	19.614 <sup>37</sup>	83.08 <sup>181</sup>
Mai 10	28.648 <sup>97</sup>	58.13 <sup>190</sup>	27.308 <sup>48</sup>	73.44 <sup>106</sup>	7.018 <sup>35</sup>	50.62 <sup>33</sup>	19.577 <sup>63</sup>	84.89 <sup>172</sup>
20	28.551 <sup>119</sup>	60.03 <sup>166</sup>	27.260 <sup>66</sup>	74.50 <sup>102</sup>	6.983 <sup>54</sup>	50.29 <sup>42</sup>	19.514 <sup>85</sup>	86.61 <sup>158</sup>
30	28.432 <sup>137</sup>	61.69 <sup>138</sup>	27.194 <sup>81</sup>	75.52 <sup>96</sup>	6.929 <sup>70</sup>	49.87 <sup>50</sup>	19.429 <sup>102</sup>	88.19 <sup>138</sup>
Juni 9	28.295 <sup>150</sup>	63.07 <sup>106</sup>	27.113 <sup>93</sup>	76.48 <sup>87</sup>	6.859 <sup>84</sup>	49.37 <sup>55</sup>	19.327 <sup>117</sup>	89.57 <sup>114</sup>
19	28.145 <sup>159</sup>	64.13 <sup>70</sup>	27.020 <sup>103</sup>	77.35 <sup>75</sup>	6.775 <sup>96</sup>	48.82 <sup>58</sup>	19.210 <sup>128</sup>	90.71 <sup>87</sup>
29	27.986 <sup>163</sup>	64.83 <sup>33</sup>	26.917 <sup>109</sup>	78.10 <sup>62</sup>	6.679 <sup>105</sup>	48.24 <sup>60</sup>	19.082 <sup>136</sup>	91.58 <sup>58</sup>
Juli 9	27.823 <sup>163</sup>	65.16 <sup>5</sup>	26.808 <sup>112</sup>	78.72 <sup>45</sup>	6.574 <sup>109</sup>	47.64 <sup>60</sup>	18.946 <sup>139</sup>	92.16 <sup>27</sup>
19	27.660 <sup>159</sup>	65.11 <sup>43</sup>	26.696 <sup>112</sup>	79.17 <sup>28</sup>	6.465 <sup>112</sup>	47.04 <sup>58</sup>	18.807 <sup>138</sup>	92.43 <sup>4</sup>
29	27.501 <sup>148</sup>	64.68 <sup>82</sup>	26.584 <sup>108</sup>	79.45 <sup>10</sup>	6.353 <sup>110</sup>	46.46 <sup>54</sup>	18.669 <sup>133</sup>	92.39 <sup>37</sup>
Aug. 8	27.353 <sup>134</sup>	63.86 <sup>119</sup>	26.476 <sup>99</sup>	79.55 <sup>10</sup>	6.243 <sup>103</sup>	45.92 <sup>48</sup>	18.536 <sup>124</sup>	92.02 <sup>70</sup>
18	27.219 <sup>113</sup>	62.67 <sup>154</sup>	26.377 <sup>84</sup>	79.45 <sup>31</sup>	6.140 <sup>89</sup>	45.44 <sup>40</sup>	18.412 <sup>108</sup>	91.32 <sup>101</sup>
28	27.106 <sup>87</sup>	61.13 <sup>188</sup>	26.293 <sup>65</sup>	79.14 <sup>54</sup>	6.051 <sup>71</sup>	45.04 <sup>27</sup>	18.304 <sup>87</sup>	90.31 <sup>132</sup>
Sept. 7	27.019 <sup>55</sup>	59.25 <sup>219</sup>	26.228 <sup>39</sup>	78.60 <sup>78</sup>	5.980 <sup>45</sup>	44.77 <sup>13</sup>	18.217 <sup>60</sup>	88.99 <sup>163</sup>
17	26.964 <sup>16</sup>	57.06 <sup>247</sup>	26.189 <sup>8</sup>	77.82 <sup>101</sup>	5.935 <sup>13</sup>	44.64 <sup>6</sup>	18.157 <sup>26</sup>	87.36 <sup>191</sup>
27	26.948 <sup>28</sup>	54.59 <sup>272</sup>	26.181 <sup>30</sup>	76.81 <sup>126</sup>	5.922 <sup>24</sup>	44.70 <sup>27</sup>	18.131 <sup>13</sup>	85.45 <sup>217</sup>
Okt. 7	26.976 <sup>76</sup>	51.87 <sup>291</sup>	26.211 <sup>70</sup>	75.55 <sup>151</sup>	5.946 <sup>65</sup>	44.97 <sup>52</sup>	18.144 <sup>57</sup>	83.28 <sup>241</sup>
17	27.052 <sup>127</sup>	48.96 <sup>306</sup>	26.281 <sup>115</sup>	74.04 <sup>175</sup>	6.011 <sup>111</sup>	45.49 <sup>77</sup>	18.201 <sup>105</sup>	80.87 <sup>261</sup>
27	27.179 <sup>181</sup>	45.90 <sup>315</sup>	26.396 <sup>161</sup>	72.29 <sup>196</sup>	6.122 <sup>157</sup>	46.26 <sup>104</sup>	18.306 <sup>154</sup>	78.26 <sup>275</sup>
Nov. 6	27.360 <sup>233</sup>	42.75 <sup>316</sup>	26.557 <sup>204</sup>	70.33 <sup>214</sup>	6.279 <sup>202</sup>	47.30 <sup>132</sup>	18.460 <sup>202</sup>	75.51 <sup>285</sup>
16	27.593 <sup>282</sup>	39.59 <sup>309</sup>	26.761 <sup>246</sup>	68.19 <sup>229</sup>	6.481 <sup>244</sup>	48.62 <sup>156</sup>	18.662 <sup>249</sup>	72.66 <sup>287</sup>
26	27.875 <sup>324</sup>	36.50 <sup>294</sup>	27.007 <sup>283</sup>	65.90 <sup>237</sup>	6.725 <sup>279</sup>	50.18 <sup>178</sup>	18.911 <sup>289</sup>	69.79 <sup>281</sup>
Dez. 6	28.199 <sup>359</sup>	33.56 <sup>270</sup>	27.290 <sup>310</sup>	63.53 <sup>238</sup>	7.004 <sup>307</sup>	51.96 <sup>196</sup>	19.200 <sup>322</sup>	66.98 <sup>268</sup>
16	28.558 <sup>382</sup>	30.86 <sup>238</sup>	27.600 <sup>328</sup>	61.15 <sup>232</sup>	7.311 <sup>326</sup>	53.92 <sup>208</sup>	19.522 <sup>346</sup>	64.30 <sup>246</sup>
26	28.940 <sup>394</sup>	28.48 <sup>198</sup>	27.928 <sup>337</sup>	58.83 <sup>220</sup>	7.637 <sup>334</sup>	56.00 <sup>212</sup>	19.868 <sup>358</sup>	61.84 <sup>216</sup>
36	29.334	26.50	28.265	56.63	7.971	58.12	20.226	59.68
Mittl. Ort	27.451	53.97	26.282	75.70	5.940	44.93	18.452	83.16
sec $\delta$ , tg $\delta$	1.280	+0.799	1.020	+0.199	1.004	-0.092	1.134	+0.535
a, a'	+2.8	-19.5	+3.0	-19.4	+3.1	-19.2	+2.9	-19.1
b, b'	-0.05	+0.23	-0.01	+0.26	+0.01	+0.29	-0.03	+0.30

1) Die jährliche Parallaxe ( $\alpha''_{121}$ ) ist bereits berücksichtigt.



Tag	495) $\gamma$ Hydrae		496) $\iota$ Centauri		497) $\zeta$ Ursae maj. pr		498) $\alpha$ Virginis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$13^h 15^m$	$-22^\circ 52'$	$13^h 17^m$	$-36^\circ 25'$	$13^h 21^m$	$+55^\circ 12'$	$13^h 22^m$	$-10^\circ 52'$
Jan. I	54.399 <sup>350</sup>	41.38 <sup>195</sup>	28.610 <sup>385</sup>	3.91 <sup>176</sup>	41.325 <sup>491</sup>	33.36 <sup>168</sup>	16.282 <sup>334</sup>	19.97 <sup>204</sup>
II	54.749 <sup>342</sup>	43.33 <sup>209</sup>	28.995 <sup>376</sup>	5.67 <sup>203</sup>	41.816 <sup>492</sup>	31.68 <sup>108</sup>	16.616 <sup>328</sup>	22.01 <sup>205</sup>
21	55.091 <sup>323</sup>	45.42 <sup>216</sup>	29.371 <sup>356</sup>	7.70 <sup>225</sup>	42.308 <sup>476</sup>	30.60 <sup>45</sup>	16.944 <sup>312</sup>	24.06 <sup>199</sup>
31	55.414 <sup>297</sup>	47.58 <sup>218</sup>	29.727 <sup>327</sup>	9.95 <sup>239</sup>	42.784 <sup>447</sup>	30.15 <sup>17</sup>	17.256 <sup>288</sup>	26.05 <sup>188</sup>
Febr. 10	55.711 <sup>266</sup>	49.76 <sup>213</sup>	30.054 <sup>292</sup>	12.34 <sup>249</sup>	43.231 <sup>403</sup>	30.32 <sup>78</sup>	17.544 <sup>259</sup>	27.93 <sup>172</sup>
20	55.977 <sup>230</sup>	51.89 <sup>203</sup>	30.346 <sup>253</sup>	14.83 <sup>250</sup>	43.634 <sup>349</sup>	31.10 <sup>134</sup>	17.803 <sup>225</sup>	29.65 <sup>153</sup>
März 2	56.207 <sup>192</sup>	53.92 <sup>190</sup>	30.599 <sup>212</sup>	17.33 <sup>247</sup>	43.983 <sup>288</sup>	32.44 <sup>183</sup>	18.028 <sup>190</sup>	31.18 <sup>130</sup>
12	56.399 <sup>154</sup>	55.82 <sup>174</sup>	30.811 <sup>170</sup>	19.80 <sup>239</sup>	44.271 <sup>222</sup>	34.27 <sup>222</sup>	18.218 <sup>154</sup>	32.48 <sup>108</sup>
22	56.553 <sup>117</sup>	57.56 <sup>155</sup>	30.981 <sup>129</sup>	22.19 <sup>228</sup>	44.493 <sup>154</sup>	36.49 <sup>252</sup>	18.372 <sup>119</sup>	33.56 <sup>86</sup>
Apr. 1	56.670 <sup>83</sup>	59.11 <sup>136</sup>	31.110 <sup>89</sup>	24.47 <sup>211</sup>	44.647 <sup>86</sup>	39.01 <sup>270</sup>	18.491 <sup>85</sup>	34.42 <sup>63</sup>
11	56.753 <sup>50</sup>	60.47 <sup>116</sup>	31.199 <sup>53</sup>	26.58 <sup>193</sup>	44.733 <sup>22</sup>	41.71 <sup>278</sup>	18.576 <sup>55</sup>	35.05 <sup>44</sup>
20	56.803 <sup>21</sup>	61.63 <sup>96</sup>	31.252 <sup>18</sup>	28.51 <sup>172</sup>	44.755 <sup>37</sup>	44.49 <sup>274</sup>	18.631 <sup>27</sup>	35.49 <sup>25</sup>
30	56.824 <sup>7</sup>	62.59 <sup>76</sup>	31.270 <sup>14</sup>	30.23 <sup>150</sup>	44.718 <sup>90</sup>	47.23 <sup>261</sup>	18.658 <sup>1</sup>	35.74 <sup>9</sup>
Mai 10	56.817 <sup>31</sup>	63.35 <sup>55</sup>	31.256 <sup>44</sup>	31.73 <sup>124</sup>	44.628 <sup>138</sup>	49.84 <sup>238</sup>	18.659 <sup>23</sup>	35.83 <sup>5</sup>
20	56.786 <sup>54</sup>	63.90 <sup>36</sup>	31.212 <sup>70</sup>	32.97 <sup>99</sup>	44.490 <sup>177</sup>	52.22 <sup>207</sup>	18.636 <sup>43</sup>	35.78 <sup>18</sup>
30	56.732 <sup>74</sup>	64.26 <sup>16</sup>	31.142 <sup>95</sup>	33.96 <sup>70</sup>	44.313 <sup>211</sup>	54.29 <sup>171</sup>	18.593 <sup>63</sup>	35.60 <sup>29</sup>
Juni 9	56.658 <sup>91</sup>	64.42 <sup>3</sup>	31.047 <sup>117</sup>	34.66 <sup>42</sup>	44.102 <sup>236</sup>	56.00 <sup>129</sup>	18.530 <sup>79</sup>	35.31 <sup>39</sup>
19	56.567 <sup>107</sup>	64.39 <sup>23</sup>	30.930 <sup>136</sup>	35.08 <sup>12</sup>	43.866 <sup>255</sup>	57.29 <sup>85</sup>	18.451 <sup>94</sup>	34.92 <sup>46</sup>
29	56.460 <sup>119</sup>	64.16 <sup>40</sup>	30.794 <sup>151</sup>	35.20 <sup>17</sup>	43.611 <sup>266</sup>	58.14 <sup>37</sup>	18.357 <sup>105</sup>	34.46 <sup>53</sup>
Juli 9	56.341 <sup>128</sup>	63.76 <sup>57</sup>	30.643 <sup>160</sup>	35.03 <sup>46</sup>	43.345 <sup>271</sup>	58.51 <sup>12</sup>	18.252 <sup>114</sup>	33.93 <sup>58</sup>
19	56.213 <sup>131</sup>	63.19 <sup>72</sup>	30.483 <sup>166</sup>	34.57 <sup>75</sup>	43.074 <sup>269</sup>	58.39 <sup>59</sup>	18.138 <sup>118</sup>	33.35 <sup>61</sup>
29	56.082 <sup>130</sup>	62.47 <sup>86</sup>	30.317 <sup>165</sup>	33.82 <sup>99</sup>	42.805 <sup>259</sup>	57.80 <sup>107</sup>	18.020 <sup>119</sup>	32.74 <sup>63</sup>
Aug. 8	55.952 <sup>124</sup>	61.61 <sup>95</sup>	30.152 <sup>156</sup>	32.83 <sup>122</sup>	42.546 <sup>242</sup>	56.73 <sup>153</sup>	17.901 <sup>113</sup>	32.11 <sup>62</sup>
18	55.828 <sup>111</sup>	60.66 <sup>101</sup>	29.996 <sup>139</sup>	31.61 <sup>139</sup>	42.304 <sup>216</sup>	55.20 <sup>196</sup>	17.788 <sup>103</sup>	31.49 <sup>58</sup>
28	55.717 <sup>89</sup>	59.65 <sup>104</sup>	29.857 <sup>115</sup>	30.22 <sup>152</sup>	42.088 <sup>184</sup>	53.24 <sup>237</sup>	17.685 <sup>84</sup>	30.91 <sup>51</sup>
Sept. 7	55.628 <sup>62</sup>	58.61 <sup>100</sup>	29.742 <sup>83</sup>	28.70 <sup>159</sup>	41.904 <sup>143</sup>	50.87 <sup>272</sup>	17.601 <sup>60</sup>	30.40 <sup>40</sup>
17	55.566 <sup>28</sup>	57.61 <sup>91</sup>	29.659 <sup>41</sup>	27.11 <sup>158</sup>	41.761 <sup>94</sup>	48.15 <sup>303</sup>	17.541 <sup>29</sup>	30.00 <sup>25</sup>
27	55.538 <sup>14</sup>	56.70 <sup>77</sup>	29.618 <sup>6</sup>	25.53 <sup>149</sup>	41.667 <sup>38</sup>	45.12 <sup>330</sup>	17.512 <sup>9</sup>	29.75 <sup>7</sup>
Okt. 7	55.552 <sup>60</sup>	55.93 <sup>56</sup>	29.624 <sup>60</sup>	24.04 <sup>133</sup>	41.629 <sup>24</sup>	41.82 <sup>349</sup>	17.521 <sup>51</sup>	29.68 <sup>16</sup>
17	55.612 <sup>110</sup>	55.37 <sup>31</sup>	29.684 <sup>116</sup>	22.71 <sup>110</sup>	41.653 <sup>92</sup>	38.33 <sup>362</sup>	17.572 <sup>98</sup>	29.84 <sup>41</sup>
27	55.722 <sup>160</sup>	55.06 <sup>2</sup>	29.800 <sup>174</sup>	21.61 <sup>80</sup>	41.745 <sup>163</sup>	34.71 <sup>368</sup>	17.670 <sup>145</sup>	30.25 <sup>68</sup>
Nov. 6	55.882 <sup>209</sup>	55.04 <sup>32</sup>	29.974 <sup>229</sup>	20.81 <sup>44</sup>	41.908 <sup>233</sup>	31.03 <sup>364</sup>	17.815 <sup>192</sup>	30.93 <sup>97</sup>
16	56.091 <sup>255</sup>	55.36 <sup>66</sup>	30.203 <sup>280</sup>	20.37 <sup>4</sup>	42.141 <sup>301</sup>	27.39 <sup>350</sup>	18.007 <sup>236</sup>	31.90 <sup>126</sup>
26	56.346 <sup>294</sup>	56.02 <sup>100</sup>	30.483 <sup>324</sup>	20.33 <sup>37</sup>	42.442 <sup>363</sup>	23.89 <sup>328</sup>	18.243 <sup>274</sup>	33.16 <sup>150</sup>
Dez. 6	56.640 <sup>324</sup>	57.02 <sup>132</sup>	30.807 <sup>357</sup>	20.70 <sup>80</sup>	42.805 <sup>417</sup>	20.61 <sup>296</sup>	18.517 <sup>305</sup>	34.66 <sup>173</sup>
16	56.964 <sup>344</sup>	58.34 <sup>161</sup>	31.164 <sup>379</sup>	21.50 <sup>119</sup>	43.222 <sup>457</sup>	17.65 <sup>254</sup>	18.822 <sup>325</sup>	36.39 <sup>191</sup>
26	57.308 <sup>353</sup>	59.95 <sup>185</sup>	31.543 <sup>389</sup>	22.69 <sup>157</sup>	43.679 <sup>485</sup>	15.11 <sup>204</sup>	19.147 <sup>336</sup>	38.30 <sup>202</sup>
36	57.661	61.80	31.932	24.26	44.164	13.07	19.483	40.32
Mittl. Ort	55.579	54.94	29.813	21.78	42.840	43.55	17.505	29.42
sec $\delta$ , tg $\delta$	1.085	-0.422	1.243	-0.738	1.753	+1.440	1.018	-0.192
a, a'	+3.3	-19.0	+3.4	-18.9	+2.4	-18.8	+3.2	-18.8
b, b'	+0.03	+0.33	+0.05	+0.33	-0.09	+0.35	+0.01	+0.35



Tag	499) Grb 2001 U Min		500) 69 H. Ursae maj.		501) ζ Virginis		502) 17 H. Can. ven.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	13 <sup>h</sup> 24 <sup>m</sup>	+72° 40'	13 <sup>h</sup> 26 <sup>m</sup>	+60° 13'	13 <sup>h</sup> 31 <sup>m</sup>	—0° 18'	13 <sup>h</sup> 32 <sup>m</sup>	+37° 27'
Jan. I	41.63 <sup>a</sup> <sub>84</sub>	23.85 <sub>136</sub>	24.46 <sup>a</sup> <sub>55</sub>	34.81 <sub>164</sub>	51.989 <sup>a</sup> <sub>328</sub>	49.70 <sub>210</sub>	19.118 <sup>a</sup> <sub>381</sub>	42.88 <sup>a</sup> <sub>203</sub>
II	42.47 <sub>85</sub>	22.49 <sub>71</sub>	25.01 <sub>55</sub>	33.17 <sub>102</sub>	52.317 <sub>324</sub>	51.80 <sub>199</sub>	19.499 <sub>381</sub>	40.85 <sub>156</sub>
2I	43.32 <sub>83</sub>	21.78 <sub>4</sub>	25.56 <sub>53</sub>	32.15 <sub>38</sub>	52.641 <sub>310</sub>	53.79 <sub>182</sub>	19.880 <sub>370</sub>	39.29 <sub>103</sub>
3I	44.15 <sub>78</sub>	21.74 <sub>62</sub>	26.09 <sub>50</sub>	31.77 <sub>27</sub>	52.951 <sub>290</sub>	55.61 <sub>161</sub>	20.250 <sub>347</sub>	38.26 <sub>48</sub>
Febr. 10	44.93 <sub>72</sub>	22.36 <sub>125</sub>	26.59 <sub>46</sub>	32.04 <sub>89</sub>	53.241 <sub>262</sub>	57.22 <sub>134</sub>	20.597 <sub>315</sub>	37.78 <sub>6</sub>
20	45.65 <sub>62</sub>	23.61 <sub>182</sub>	27.05 <sub>40</sub>	32.93 <sub>146</sub>	53.593 <sub>230</sub>	58.56 <sub>106</sub>	20.912 <sub>277</sub>	37.84 <sub>59</sub>
März 2	46.27 <sub>50</sub>	25.43 <sub>229</sub>	27.45 <sub>33</sub>	34.39 <sub>196</sub>	53.733 <sub>195</sub>	59.62 <sub>77</sub>	21.189 <sub>233</sub>	38.43 <sub>106</sub>
12	46.77 <sub>39</sub>	27.72 <sub>266</sub>	27.78 <sub>25</sub>	36.35 <sub>236</sub>	53.928 <sub>160</sub>	60.39 <sub>48</sub>	21.422 <sub>186</sub>	39.49 <sub>147</sub>
22	47.16 <sub>25</sub>	30.38 <sub>292</sub>	28.03 <sub>18</sub>	38.71 <sub>265</sub>	54.088 <sub>126</sub>	60.87 <sub>23</sub>	21.608 <sub>140</sub>	40.96 <sub>181</sub>
Apr. I	47.41 <sub>11</sub>	33.30 <sub>306</sub>	28.21 <sub>10</sub>	41.36 <sub>284</sub>	54.214 <sub>92</sub>	61.10 <sub>2</sub>	21.748 <sub>94</sub>	42.77 <sub>205</sub>
II	47.52 <sub>2</sub>	36.36 <sub>308</sub>	28.31 <sub>2</sub>	44.20 <sub>290</sub>	54.306 <sub>62</sub>	61.08 <sub>21</sub>	21.842 <sub>51</sub>	44.82 <sub>219</sub>
20	47.50 <sub>13</sub>	39.44 <sub>297</sub>	28.33 <sub>5</sub>	47.10 <sub>285</sub>	54.368 <sub>33</sub>	60.87 <sub>38</sub>	21.893 <sub>10</sub>	47.01 <sub>225</sub>
30	47.37 <sub>25</sub>	42.41 <sub>277</sub>	28.28 <sub>11</sub>	49.95 <sub>271</sub>	54.401 <sub>7</sub>	60.49 <sub>50</sub>	21.903 <sub>26</sub>	49.26 <sub>222</sub>
Mai 10	47.12 <sub>35</sub>	45.18 <sub>247</sub>	28.17 <sub>17</sub>	52.66 <sub>246</sub>	54.408 <sub>16</sub>	59.99 <sub>60</sub>	21.877 <sub>59</sub>	51.48 <sub>210</sub>
20	46.77 <sub>43</sub>	47.65 <sub>209</sub>	28.00 <sub>22</sub>	55.12 <sub>214</sub>	54.392 <sub>38</sub>	59.39 <sub>65</sub>	21.818 <sub>87</sub>	53.58 <sub>191</sub>
30	46.34 <sub>50</sub>	49.74 <sub>164</sub>	27.78 <sub>25</sub>	57.26 <sub>175</sub>	54.354 <sub>58</sub>	58.74 <sub>68</sub>	21.731 <sub>112</sub>	55.49 <sub>167</sub>
Juni 9	45.84 <sub>56</sub>	51.38 <sub>116</sub>	27.53 <sub>29</sub>	59.01 <sub>132</sub>	54.296 <sub>74</sub>	58.06 <sub>68</sub>	21.619 <sub>133</sub>	57.16 <sub>137</sub>
19	45.28 <sub>59</sub>	52.54 <sub>64</sub>	27.24 <sub>31</sub>	60.33 <sub>85</sub>	54.222 <sub>90</sub>	57.38 <sub>67</sub>	21.486 <sub>148</sub>	58.53 <sub>104</sub>
29	44.69 <sub>61</sub>	53.18 <sub>10</sub>	26.93 <sub>32</sub>	61.18 <sub>35</sub>	54.132 <sub>102</sub>	56.71 <sub>63</sub>	21.338 <sub>161</sub>	59.57 <sub>68</sub>
Juli 9	44.08 <sub>61</sub>	53.28 <sub>44</sub>	26.61 <sub>33</sub>	61.53 <sub>16</sub>	54.030 <sub>111</sub>	56.08 <sub>57</sub>	21.177 <sub>168</sub>	60.25 <sub>29</sub>
19	43.47 <sub>61</sub>	52.84 <sub>97</sub>	26.28 <sub>33</sub>	61.37 <sub>66</sub>	53.919 <sub>117</sub>	55.51 <sub>51</sub>	21.009 <sub>172</sub>	60.54 <sub>9</sub>
29	42.86 <sub>58</sub>	51.87 <sub>148</sub>	25.95 <sub>31</sub>	60.71 <sub>115</sub>	53.802 <sub>118</sub>	55.00 <sub>41</sub>	20.837 <sub>169</sub>	60.45 <sub>49</sub>
Aug. 8	42.28 <sub>53</sub>	50.39 <sub>197</sub>	25.64 <sub>30</sub>	59.56 <sub>163</sub>	53.684 <sub>114</sub>	54.59 <sub>31</sub>	20.668 <sub>161</sub>	59.96 <sub>88</sub>
18	41.75 <sub>49</sub>	48.42 <sub>241</sub>	25.34 <sub>27</sub>	57.93 <sub>207</sub>	53.570 <sub>105</sub>	54.28 <sub>19</sub>	20.507 <sub>148</sub>	59.08 <sub>126</sub>
28	41.26 <sub>42</sub>	46.01 <sub>282</sub>	25.07 <sub>22</sub>	55.86 <sub>248</sub>	53.465 <sub>89</sub>	54.09 <sub>3</sub>	20.359 <sub>126</sub>	57.82 <sub>163</sub>
Sept. 7	40.84 <sub>34</sub>	43.19 <sub>317</sub>	24.85 <sub>19</sub>	53.38 <sub>284</sub>	53.376 <sub>67</sub>	54.06 <sub>14</sub>	20.233 <sub>99</sub>	56.19 <sub>198</sub>
17	40.50 <sub>24</sub>	40.02 <sub>345</sub>	24.66 <sub>13</sub>	50.54 <sub>316</sub>	53.309 <sub>37</sub>	54.20 <sub>34</sub>	20.134 <sub>65</sub>	54.21 <sub>230</sub>
27	40.26 <sub>14</sub>	36.57 <sub>368</sub>	24.53 <sub>6</sub>	47.38 <sub>343</sub>	53.272 <sub>1</sub>	54.54 <sub>56</sub>	20.069 <sub>23</sub>	51.91 <sub>259</sub>
Okt. 7	40.12 <sub>3</sub>	32.89 <sub>383</sub>	24.47 <sub>1</sub>	43.95 <sub>361</sub>	53.271 <sub>39</sub>	55.10 <sub>79</sub>	20.046 <sub>24</sub>	49.32 <sub>283</sub>
17	40.09 <sub>10</sub>	29.06 <sub>391</sub>	24.48 <sub>8</sub>	40.34 <sub>374</sub>	53.310 <sub>84</sub>	55.89 <sub>105</sub>	20.070 <sub>75</sub>	46.49 <sub>304</sub>
27	40.19 <sub>22</sub>	25.15 <sub>388</sub>	24.56 <sub>16</sub>	36.60 <sub>377</sub>	53.394 <sub>131</sub>	56.94 <sub>130</sub>	20.145 <sub>130</sub>	43.45 <sub>317</sub>
Nov. 6	40.41 <sub>34</sub>	21.27 <sub>377</sub>	24.72 <sub>25</sub>	32.83 <sub>372</sub>	53.525 <sub>178</sub>	58.24 <sub>153</sub>	20.275 <sub>184</sub>	40.28 <sub>325</sub>
16	40.75 <sub>47</sub>	17.50 <sub>356</sub>	24.97 <sub>32</sub>	29.11 <sub>357</sub>	53.793 <sub>221</sub>	59.77 <sub>176</sub>	20.459 <sub>237</sub>	37.03 <sub>324</sub>
26	41.22 <sub>58</sub>	13.94 <sub>325</sub>	25.29 <sub>39</sub>	25.54 <sub>333</sub>	53.924 <sub>261</sub>	61.53 <sub>194</sub>	20.696 <sub>286</sub>	33.79 <sub>314</sub>
Dez. 6	41.80 <sub>68</sub>	10.69 <sub>284</sub>	25.68 <sub>45</sub>	22.21 <sub>298</sub>	54.185 <sub>292</sub>	63.47 <sub>207</sub>	20.982 <sub>326</sub>	30.65 <sub>296</sub>
16	42.48 <sub>76</sub>	7.85 <sub>234</sub>	26.13 <sub>50</sub>	19.23 <sub>254</sub>	54.477 <sub>315</sub>	65.54 <sub>215</sub>	21.308 <sub>357</sub>	27.69 <sub>268</sub>
26	43.24 <sub>82</sub>	5.51 <sub>177</sub>	26.63 <sub>54</sub>	16.69 <sub>202</sub>	54.792 <sub>329</sub>	67.69 <sub>215</sub>	21.665 <sub>377</sub>	25.01 <sub>231</sub>
36	44.06	3.74	27.17	14.67	55.121	69.84	22.042	22.70
Mittl. Ort	43.71	36.25	26.10	45.74	53.275	55.49	20.523	48.98
sec δ, tg δ	3.358	+3.206	2.014	+1.748	1.000	—0.006	1.260	+0.766
a, a'	+1.5	—18.7	+2.2	—18.6	+3.1	—18.5	+2.7	—18.4
b, b'	—0.20	+0.36	—0.11	+0.37	0.00	+0.39	—0.05	+0.39



Tag	504) ε Centauri		507) τ Bootis		509) η Ursae maj.		510) 89 Virginis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	13 <sup>h</sup> 36 <sup>m</sup>	-53° 10'	13 <sup>h</sup> 44 <sup>m</sup>	+17° 43'	13 <sup>h</sup> 45 <sup>m</sup>	+49° 34'	13 <sup>h</sup> 46 <sup>m</sup>	-17° 51'
Jan. I	21.828 <sup>486</sup>	52.50 <sup>120</sup>	37.469 <sup>334</sup>	48.41 <sup>219</sup>	20.895 <sup>435</sup>	65.33 <sup>202</sup>	51.281 <sup>340</sup>	27.81 <sup>185</sup>
II	22.314 <sup>480</sup>	53.70 <sup>164</sup>	37.803 <sup>333</sup>	46.22 <sup>190</sup>	21.330 <sup>441</sup>	63.31 <sup>146</sup>	51.621 <sup>338</sup>	29.66 <sup>194</sup>
21	22.794 <sup>460</sup>	55.34 <sup>203</sup>	38.136 <sup>324</sup>	44.32 <sup>154</sup>	21.771 <sup>433</sup>	61.85 <sup>87</sup>	51.959 <sup>326</sup>	31.60 <sup>197</sup>
31	23.254 <sup>429</sup>	57.37 <sup>234</sup>	38.460 <sup>306</sup>	42.78 <sup>114</sup>	22.204 <sup>412</sup>	60.98 <sup>25</sup>	52.285 <sup>307</sup>	33.57 <sup>195</sup>
Febr. 10	23.683 <sup>390</sup>	59.71 <sup>259</sup>	38.766 <sup>279</sup>	41.64 <sup>73</sup>	22.616 <sup>380</sup>	60.73 <sup>36</sup>	52.592 <sup>280</sup>	35.52 <sup>186</sup>
20	24.073 <sup>344</sup>	62.30 <sup>278</sup>	39.045 <sup>247</sup>	40.91 <sup>30</sup>	22.996 <sup>336</sup>	61.09 <sup>94</sup>	52.872 <sup>249</sup>	37.38 <sup>174</sup>
März 2	24.417 <sup>294</sup>	65.08 <sup>289</sup>	39.292 <sup>213</sup>	40.61 <sup>10</sup>	23.332 <sup>286</sup>	62.03 <sup>146</sup>	53.121 <sup>216</sup>	39.12 <sup>157</sup>
12	24.711 <sup>242</sup>	67.97 <sup>294</sup>	39.505 <sup>176</sup>	40.71 <sup>47</sup>	23.618 <sup>232</sup>	63.49 <sup>190</sup>	53.337 <sup>182</sup>	40.69 <sup>140</sup>
22	24.953 <sup>190</sup>	70.91 <sup>293</sup>	39.681 <sup>139</sup>	41.18 <sup>80</sup>	23.850 <sup>174</sup>	65.39 <sup>225</sup>	53.519 <sup>147</sup>	42.09 <sup>122</sup>
Apr. I	25.143 <sup>139</sup>	73.84 <sup>287</sup>	39.820 <sup>103</sup>	41.98 <sup>106</sup>	24.024 <sup>117</sup>	67.64 <sup>250</sup>	53.666 <sup>114</sup>	43.31 <sup>102</sup>
11	25.282 <sup>87</sup>	76.71 <sup>275</sup>	39.923 <sup>69</sup>	43.04 <sup>126</sup>	24.141 <sup>62</sup>	70.14 <sup>265</sup>	53.780 <sup>83</sup>	44.33 <sup>83</sup>
20	25.369 <sup>39</sup>	79.46 <sup>258</sup>	39.992 <sup>38</sup>	44.30 <sup>140</sup>	24.203 <sup>9</sup>	72.79 <sup>268</sup>	53.863 <sup>53</sup>	45.16 <sup>65</sup>
30	25.408 <sup>7</sup>	82.04 <sup>237</sup>	40.030 <sup>8</sup>	45.70 <sup>146</sup>	24.212 <sup>39</sup>	75.47 <sup>261</sup>	53.916 <sup>25</sup>	45.81 <sup>49</sup>
Mai 10	25.401 <sup>53</sup>	84.41 <sup>212</sup>	40.038 <sup>19</sup>	47.16 <sup>146</sup>	24.173 <sup>84</sup>	78.08 <sup>245</sup>	53.941 <sup>1</sup>	46.30 <sup>32</sup>
20	25.348 <sup>94</sup>	86.53 <sup>183</sup>	40.019 <sup>42</sup>	48.62 <sup>140</sup>	24.089 <sup>122</sup>	80.53 <sup>222</sup>	53.940 <sup>26</sup>	46.62 <sup>17</sup>
30	25.254 <sup>134</sup>	88.36 <sup>151</sup>	39.977 <sup>64</sup>	50.02 <sup>131</sup>	23.967 <sup>155</sup>	82.75 <sup>191</sup>	53.914 <sup>49</sup>	46.79 <sup>3</sup>
Juni 9	25.120 <sup>170</sup>	89.87 <sup>114</sup>	39.913 <sup>83</sup>	51.33 <sup>117</sup>	23.812 <sup>183</sup>	84.66 <sup>155</sup>	53.865 <sup>70</sup>	46.82 <sup>11</sup>
19	24.950 <sup>200</sup>	91.01 <sup>75</sup>	39.830 <sup>100</sup>	52.50 <sup>99</sup>	23.629 <sup>205</sup>	86.21 <sup>114</sup>	53.795 <sup>89</sup>	46.71 <sup>24</sup>
29	24.750 <sup>226</sup>	91.76 <sup>36</sup>	39.730 <sup>114</sup>	53.49 <sup>78</sup>	23.424 <sup>222</sup>	87.35 <sup>70</sup>	53.706 <sup>106</sup>	46.47 <sup>35</sup>
Juli 9	24.524 <sup>245</sup>	92.12 <sup>5</sup>	39.616 <sup>124</sup>	54.27 <sup>56</sup>	23.202 <sup>233</sup>	88.05 <sup>25</sup>	53.600 <sup>119</sup>	46.12 <sup>47</sup>
19	24.279 <sup>256</sup>	92.07 <sup>46</sup>	39.492 <sup>131</sup>	54.83 <sup>32</sup>	22.969 <sup>237</sup>	88.30 <sup>21</sup>	53.481 <sup>128</sup>	45.65 <sup>56</sup>
29	24.023 <sup>257</sup>	91.61 <sup>86</sup>	39.361 <sup>133</sup>	55.15 <sup>7</sup>	22.732 <sup>236</sup>	88.09 <sup>68</sup>	53.353 <sup>132</sup>	45.09 <sup>65</sup>
Aug. 8	23.766 <sup>248</sup>	90.75 <sup>123</sup>	39.228 <sup>130</sup>	55.22 <sup>19</sup>	22.496 <sup>226</sup>	87.41 <sup>114</sup>	53.221 <sup>131</sup>	44.44 <sup>70</sup>
18	23.518 <sup>229</sup>	89.52 <sup>156</sup>	39.098 <sup>122</sup>	55.03 <sup>47</sup>	22.270 <sup>210</sup>	86.27 <sup>157</sup>	53.090 <sup>123</sup>	43.74 <sup>73</sup>
28	23.289 <sup>196</sup>	87.96 <sup>183</sup>	38.976 <sup>106</sup>	54.56 <sup>74</sup>	22.060 <sup>186</sup>	84.70 <sup>199</sup>	52.967 <sup>108</sup>	43.01 <sup>73</sup>
Sept. 7	23.093 <sup>154</sup>	86.13 <sup>204</sup>	38.870 <sup>85</sup>	53.82 <sup>102</sup>	21.874 <sup>153</sup>	82.71 <sup>237</sup>	52.859 <sup>85</sup>	42.28 <sup>68</sup>
17	22.939 <sup>100</sup>	84.09 <sup>217</sup>	38.785 <sup>56</sup>	52.80 <sup>130</sup>	21.721 <sup>114</sup>	80.34 <sup>272</sup>	52.774 <sup>54</sup>	41.60 <sup>60</sup>
27	22.839 <sup>37</sup>	81.92 <sup>220</sup>	38.729 <sup>21</sup>	51.50 <sup>158</sup>	21.607 <sup>65</sup>	77.62 <sup>302</sup>	52.720 <sup>16</sup>	41.00 <sup>46</sup>
Okt. 7	22.802 <sup>34</sup>	79.72 <sup>215</sup>	38.708 <sup>20</sup>	49.92 <sup>183</sup>	21.542 <sup>10</sup>	74.60 <sup>328</sup>	52.704 <sup>27</sup>	40.54 <sup>27</sup>
17	22.836 <sup>110</sup>	77.57 <sup>199</sup>	38.728 <sup>65</sup>	48.09 <sup>208</sup>	21.532 <sup>50</sup>	71.32 <sup>346</sup>	52.731 <sup>75</sup>	40.27 <sup>5</sup>
27	22.946 <sup>186</sup>	75.58 <sup>174</sup>	38.793 <sup>113</sup>	46.01 <sup>229</sup>	21.582 <sup>115</sup>	67.86 <sup>357</sup>	52.806 <sup>125</sup>	40.22 <sup>21</sup>
Nov. 6	23.132 <sup>261</sup>	73.84 <sup>141</sup>	38.906 <sup>162</sup>	43.72 <sup>246</sup>	21.697 <sup>180</sup>	64.29 <sup>361</sup>	52.931 <sup>176</sup>	40.43 <sup>50</sup>
16	23.393 <sup>329</sup>	72.43 <sup>101</sup>	39.068 <sup>208</sup>	41.26 <sup>258</sup>	21.877 <sup>243</sup>	60.68 <sup>355</sup>	53.107 <sup>223</sup>	40.93 <sup>79</sup>
26	23.722 <sup>389</sup>	71.42 <sup>56</sup>	39.276 <sup>251</sup>	38.68 <sup>265</sup>	22.120 <sup>303</sup>	57.13 <sup>339</sup>	53.330 <sup>265</sup>	41.72 <sup>109</sup>
Dez. 6	24.111 <sup>436</sup>	70.86 <sup>6</sup>	39.527 <sup>287</sup>	36.03 <sup>262</sup>	22.423 <sup>355</sup>	53.74 <sup>314</sup>	53.595 <sup>299</sup>	42.81 <sup>136</sup>
16	24.547 <sup>468</sup>	70.80 <sup>45</sup>	39.814 <sup>314</sup>	33.41 <sup>253</sup>	22.778 <sup>396</sup>	50.60 <sup>280</sup>	53.894 <sup>325</sup>	44.17 <sup>159</sup>
26	25.015 <sup>487</sup>	71.25 <sup>93</sup>	40.128 <sup>331</sup>	30.88 <sup>236</sup>	23.174 <sup>426</sup>	47.80 <sup>235</sup>	54.219 <sup>340</sup>	45.76 <sup>178</sup>
36	25.502	72.18	40.459	28.52	23.600	45.45	54.559	47.54
Mittl. Ort	23.319	74.61	38.853	48.60	22.490	74.00	52.668	39.57
sec δ, tg δ	1.669	-1.336	1.050	+0.320	1.543	+1.174	1.051	-0.322
a, a'	+3.8	-18.3	+2.9	-18.0	+2.4	-18.0	+3.3	-17.9
b, b'	+0.08	+0.41	-0.02	+0.44	-0.07	+0.44	+0.02	+0.45



Tag	513) $\eta$ Bootis <sup>1)</sup>		512) $\zeta$ Centauri		517) $\Pi$ Bootis		516) $\tau$ Virginis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	13 <sup>h</sup> 52 <sup>m</sup>	+18° 40'	13 <sup>h</sup> 52 <sup>m</sup>	-47° 0'	13 <sup>h</sup> 58 <sup>m</sup>	+27° 38'	13 <sup>h</sup> 58 <sup>m</sup>	+1° 48'
Jan. I	2.474 333	21.11 223	4.196 439	45.72 118	39.313 346	62.30 227	49.237 324	40.72 211
II	2.807 336	18.88 191	4.635 438	46.90 156	39.659 350	60.03 188	49.561 325	38.61 198
21	3.143 327	16.97 156	5.073 423	48.46 189	40.009 344	58.15 144	49.886 316	36.63 180
31	3.470 310	15.41 116	5.496 399	50.35 217	40.353 327	56.71 96	50.202 301	34.83 156
Febr. 10	3.780 284	14.25 72	5.895 366	52.52 237	40.680 303	55.75 46	50.503 277	33.27 128
20.	4.064 253	13.53 29	6.261 329	54.89 253	40.983 272	55.29 3	50.780 248	31.99 98
März 2	4.317 220	13.24 12	6.590 286	57.42 261	41.255 236	55.32 50	51.028 218	31.01 67
12	4.537 183	13.36 51	6.876 241	60.03 264	41.491 198	55.82 92	51.246 185	30.34 37
22	4.720 146	13.87 84	7.117 197	62.67 262	41.689 159	56.74 129	51.431 151	29.97 9
Apr. I	4.866 110	14.71 111	7.314 152	65.29 256	41.848 120	58.03 156	51.582 119	29.88 16
II	4.976 76	15.82 131	7.466 108	67.85 244	41.968 82	59.59 178	51.701 89	30.04 37
20*)	5.052 44	17.13 145	7.574 66	70.29 229	42.050 47	61.37 190	51.790 59	30.41 53
30	5.096 14	18.58 151	7.640 24	72.58 210	42.097 13	63.27 194	51.849 31	30.94 66
Mai 10	5.110 14	20.09 152	7.664 16	74.68 188	42.110 17	65.21 191	51.880 6	31.60 74
20	5.096 38	21.61 146	7.648 54	76.56 162	42.093 45	67.12 181	51.886 18	32.34 79
30	5.058 61	23.07 136	7.594 89	78.18 135	42.048 70	68.93 165	51.868 40	33.13 80
Juni 9	4.997 81	24.43 120	7.505 123	79.53 103	41.978 93	70.58 144	51.828 62	33.93 78
19	4.916 98	25.63 102	7.382 154	80.56 70	41.885 113	72.02 119	51.766 80	34.71 74
29	4.818 114	26.65 81	7.228 179	81.26 35	41.772 129	73.21 90	51.686 96	35.45 67
Juli 9	4.704 124	27.46 57	7.049 199	81.61 1	41.643 142	74.11 60	51.590 110	36.12 60
19	4.580 133	28.03 33	6.850 214	81.60 36	41.501 150	74.71 27	51.480 120	36.72 50
29	4.447 136	28.36 6	6.636 219	81.24 72	41.351 154	74.98 7	51.360 125	37.22 38
Aug. 8	4.311 134	28.42 22	6.417 216	80.52 104	41.197 152	74.91 41	51.235 126	37.60 26
18	4.177 126	28.20 49	6.201 203	79.48 133	41.045 145	74.50 75	51.109 120	37.86 11
28	4.051 111	27.71 78	5.998 179	78.15 158	40.900 130	73.75 109	50.989 107	37.97 6
Sept. 7	3.940 91	26.93 107	5.819 145	76.57 176	40.770 109	72.66 142	50.882 88	37.91 24
17	3.849 62	25.86 135	5.674 101	74.81 187	40.661 80	71.24 174	50.794 61	37.67 44
27	3.787 27	24.51 162	5.573 47	72.94 191	40.581 43	69.50 205	50.733 28	37.23 67
Okt. 7	3.760 13	22.89 189	5.526 15	71.03 186	40.538 2	67.45 232	50.705 12	36.56 90
17	3.773 59	21.00 214	5.541 82	69.17 172	40.536 45	65.13 257	50.717 57	35.66 114
27	3.832 107	18.86 235	5.623 151	67.45 149	40.581 97	62.56 277	50.774 105	34.52 139
Nov. 6	3.939 156	16.51 252	5.774 218	65.96 118	40.678 148	59.79 291	50.879 152	33.13 162
16	4.095 203	13.99 264	5.992 282	64.78 82	40.826 198	56.88 299	51.031 198	31.51 182
26	4.298 247	11.35 269	6.274 338	63.96 40	41.024 246	53.89 299	51.229 240	29.69 200
Dez. 6	4.545 284	8.66 268	6.612 384	63.56 4	41.270 286	50.90 292	51.469 276	27.69 212
16	4.829 312	5.98 257	6.996 417	63.60 49	41.556 317	47.98 274	51.745 304	25.57 217
26	5.141 331	3.41 240	7.413 437	64.09 93	41.873 341	45.24 249	52.049 321	23.40 217
36	5.472	1.01	7.850	65.02	42.214	42.75	52.370	21.23
Mittl. Ort	3.893	21.58	5.794	66.08	40.806	65.33	50.676	35.62
sec $\delta$ , tg $\delta$	1.056	+0.338	1.467	-1.073	1.129	+0.524	1.001	+0.032
a, a'	+2.9	-17.7	+3.7	-17.7	+2.7	-17.4	+3.1	-17.4
b, b'	-0.02	+0.47	+0.06	+0.47	-0.03	+0.50	0.00	+0.50

<sup>1)</sup> Die jährliche Parallaxe ( $\alpha''/112$ ) ist bereits berücksichtigt.

<sup>2)</sup> Bei Stern 517) und 516) lies Apr. 21.



# Obere Kulmination Greenwich

121\*

Tag	518) β Centauri		521) α Draconis		520) θ Centauri		522) ι 2 d Bootis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	13 <sup>h</sup> 59 <sup>m</sup>	-60° 6'	14 <sup>h</sup> 2 <sup>m</sup>	+64° 37'	14 <sup>h</sup> 3 <sup>m</sup>	-36° 5'	14 <sup>h</sup> 7 <sup>m</sup>	+25° 20'
Jan. I	53.40 <sup>57</sup>	7.98 <sup>73</sup>	51.77 <sup>58</sup>	66.89 <sup>201</sup>	24.624 <sup>383</sup>	43.77 <sup>135</sup>	51.856 <sup>338</sup>	62.88 <sup>231</sup>
II	53.97 <sup>56</sup>	8.71 <sup>121</sup>	52.35 <sup>61</sup>	64.88 <sup>139</sup>	25.007 <sup>384</sup>	45.12 <sup>164</sup>	52.194 <sup>344</sup>	60.57 <sup>196</sup>
21	54.53 <sup>56</sup>	9.92 <sup>166</sup>	52.96 <sup>61</sup>	63.49 <sup>74</sup>	25.391 <sup>373</sup>	46.76 <sup>186</sup>	52.538 <sup>339</sup>	58.61 <sup>154</sup>
31	55.09 <sup>52</sup>	11.58 <sup>205</sup>	53.57 <sup>59</sup>	62.75 <sup>7</sup>	25.764 <sup>355</sup>	48.62 <sup>204</sup>	52.877 <sup>325</sup>	57.07 <sup>108</sup>
Febr. 10	55.61 <sup>48</sup>	13.63 <sup>238</sup>	54.16 <sup>55</sup>	62.68 <sup>60</sup>	26.119 <sup>328</sup>	50.66 <sup>215</sup>	53.202 <sup>303</sup>	55.99 <sup>59</sup>
20	56.09 <sup>44</sup>	16.01 <sup>265</sup>	54.71 <sup>50</sup>	63.28 <sup>121</sup>	26.447 <sup>296</sup>	52.81 <sup>221</sup>	53.505 <sup>274</sup>	55.40 <sup>11</sup>
März 2	56.53 <sup>39</sup>	18.66 <sup>284</sup>	55.21 <sup>43</sup>	64.49 <sup>176</sup>	26.743 <sup>260</sup>	55.02 <sup>221</sup>	53.779 <sup>240</sup>	55.29 <sup>36</sup>
12	56.92 <sup>32</sup>	21.50 <sup>297</sup>	55.64 <sup>35</sup>	66.25 <sup>224</sup>	27.003 <sup>224</sup>	57.23 <sup>218</sup>	54.019 <sup>203</sup>	55.65 <sup>79</sup>
22	57.24 <sup>27</sup>	24.47 <sup>304</sup>	55.99 <sup>27</sup>	68.49 <sup>261</sup>	27.227 <sup>186</sup>	59.41 <sup>210</sup>	54.222 <sup>167</sup>	56.44 <sup>115</sup>
Apr. I	57.51 <sup>21</sup>	27.51 <sup>305</sup>	56.26 <sup>18</sup>	71.10 <sup>286</sup>	27.413 <sup>149</sup>	61.51 <sup>200</sup>	54.389 <sup>129</sup>	57.59 <sup>144</sup>
II	57.72 <sup>14</sup>	30.56 <sup>299</sup>	56.44 <sup>9</sup>	73.96 <sup>300</sup>	27.562 <sup>112</sup>	63.51 <sup>187</sup>	54.518 <sup>92</sup>	59.03 <sup>167</sup>
21	57.86 <sup>9</sup>	33.55 <sup>289</sup>	56.53 <sup>1</sup>	76.96 <sup>302</sup>	27.674 <sup>76</sup>	65.38 <sup>171</sup>	54.610 <sup>58</sup>	60.70 <sup>180</sup>
30	57.95 <sup>2</sup>	36.44 <sup>272</sup>	56.54 <sup>8</sup>	79.98 <sup>293</sup>	27.750 <sup>42</sup>	67.09 <sup>154</sup>	54.668 <sup>25</sup>	62.50 <sup>187</sup>
Mai 10	57.97 <sup>3</sup>	39.16 <sup>251</sup>	56.46 <sup>15</sup>	82.91 <sup>275</sup>	27.792 <sup>9</sup>	68.63 <sup>136</sup>	54.693 <sup>6</sup>	64.37 <sup>186</sup>
20	57.94 <sup>9</sup>	41.67 <sup>225</sup>	56.31 <sup>21</sup>	85.66 <sup>246</sup>	27.801 <sup>23</sup>	69.99 <sup>114</sup>	54.687 <sup>34</sup>	66.23 <sup>177</sup>
30	57.85 <sup>14</sup>	43.92 <sup>194</sup>	56.10 <sup>28</sup>	88.12 <sup>211</sup>	27.778 <sup>54</sup>	71.13 <sup>91</sup>	54.653 <sup>60</sup>	68.00 <sup>164</sup>
Juni 9	57.71 <sup>19</sup>	45.86 <sup>159</sup>	55.82 <sup>32</sup>	90.23 <sup>169</sup>	27.724 <sup>83</sup>	72.04 <sup>68</sup>	54.593 <sup>83</sup>	69.64 <sup>145</sup>
19	57.52 <sup>24</sup>	47.45 <sup>119</sup>	55.50 <sup>36</sup>	91.92 <sup>123</sup>	27.641 <sup>109</sup>	72.72 <sup>43</sup>	54.510 <sup>104</sup>	71.09 <sup>122</sup>
29	57.28 <sup>27</sup>	48.64 <sup>78</sup>	55.14 <sup>39</sup>	93.15 <sup>74</sup>	27.532 <sup>133</sup>	73.15 <sup>16</sup>	54.406 <sup>122</sup>	72.31 <sup>95</sup>
Juli 9	57.01 <sup>30</sup>	49.42 <sup>35</sup>	54.75 <sup>41</sup>	93.89 <sup>22</sup>	27.399 <sup>152</sup>	73.31 <sup>10</sup>	54.284 <sup>136</sup>	73.26 <sup>66</sup>
19	56.71 <sup>33</sup>	49.77 <sup>11</sup>	54.34 <sup>42</sup>	94.11 <sup>30</sup>	27.247 <sup>167</sup>	73.21 <sup>37</sup>	54.148 <sup>146</sup>	73.92 <sup>36</sup>
29	56.38 <sup>33</sup>	49.66 <sup>55</sup>	53.92 <sup>41</sup>	93.81 <sup>82</sup>	27.080 <sup>175</sup>	72.84 <sup>61</sup>	54.002 <sup>152</sup>	74.28 <sup>3</sup>
Aug. 8	56.05 <sup>33</sup>	49.11 <sup>98</sup>	53.51 <sup>41</sup>	92.99 <sup>132</sup>	26.905 <sup>175</sup>	72.23 <sup>85</sup>	53.850 <sup>152</sup>	74.31 <sup>29</sup>
18	55.72 <sup>31</sup>	48.13 <sup>139</sup>	53.10 <sup>38</sup>	91.67 <sup>181</sup>	26.730 <sup>167</sup>	71.38 <sup>106</sup>	53.698 <sup>146</sup>	74.02 <sup>62</sup>
28	55.41 <sup>27</sup>	46.74 <sup>173</sup>	52.72 <sup>34</sup>	89.86 <sup>226</sup>	26.563 <sup>151</sup>	70.32 <sup>122</sup>	53.552 <sup>134</sup>	73.40 <sup>96</sup>
Sept. 7	55.14 <sup>23</sup>	45.01 <sup>202</sup>	52.38 <sup>30</sup>	87.60 <sup>268</sup>	26.412 <sup>125</sup>	69.10 <sup>133</sup>	53.418 <sup>113</sup>	72.44 <sup>128</sup>
17	54.91 <sup>17</sup>	42.99 <sup>224</sup>	52.08 <sup>24</sup>	84.92 <sup>304</sup>	26.287 <sup>90</sup>	67.77 <sup>138</sup>	53.305 <sup>86</sup>	71.16 <sup>160</sup>
27	54.74 <sup>10</sup>	40.75 <sup>236</sup>	51.84 <sup>18</sup>	81.88 <sup>335</sup>	26.197 <sup>45</sup>	66.39 <sup>137</sup>	53.219 <sup>51</sup>	69.56 <sup>191</sup>
Okt. 7	54.64 <sup>1</sup>	38.39 <sup>240</sup>	51.66 <sup>9</sup>	78.53 <sup>360</sup>	26.152 <sup>5</sup>	65.02 <sup>129</sup>	53.168 <sup>10</sup>	67.65 <sup>219</sup>
17	54.63 <sup>8</sup>	35.99 <sup>231</sup>	51.57 <sup>2</sup>	74.93 <sup>378</sup>	26.157 <sup>62</sup>	63.73 <sup>113</sup>	53.158 <sup>36</sup>	65.46 <sup>244</sup>
27	54.71 <sup>16</sup>	33.68 <sup>214</sup>	51.55 <sup>8</sup>	71.15 <sup>386</sup>	26.219 <sup>122</sup>	62.60 <sup>91</sup>	53.194 <sup>86</sup>	63.02 <sup>265</sup>
Nov. 6	54.87 <sup>26</sup>	31.54 <sup>187</sup>	51.63 <sup>18</sup>	67.29 <sup>387</sup>	26.341 <sup>180</sup>	61.69 <sup>63</sup>	53.280 <sup>138</sup>	60.37 <sup>282</sup>
16	55.13 <sup>35</sup>	29.67 <sup>150</sup>	51.81 <sup>27</sup>	63.42 <sup>378</sup>	26.521 <sup>237</sup>	61.06 <sup>29</sup>	53.418 <sup>188</sup>	57.55 <sup>291</sup>
26	55.48 <sup>42</sup>	28.17 <sup>108</sup>	52.08 <sup>36</sup>	59.64 <sup>358</sup>	26.758 <sup>287</sup>	60.77 <sup>7</sup>	53.606 <sup>235</sup>	54.64 <sup>295</sup>
Dez. 6	55.90 <sup>48</sup>	27.09 <sup>59</sup>	52.44 <sup>44</sup>	56.06 <sup>327</sup>	27.045 <sup>329</sup>	60.84 <sup>45</sup>	53.841 <sup>276</sup>	51.69 <sup>289</sup>
16	56.38 <sup>53</sup>	26.50 <sup>9</sup>	52.88 <sup>51</sup>	52.79 <sup>287</sup>	27.374 <sup>360</sup>	61.29 <sup>82</sup>	54.117 <sup>309</sup>	48.80 <sup>274</sup>
26	56.91 <sup>56</sup>	26.41 <sup>43</sup>	53.39 <sup>56</sup>	49.92 <sup>237</sup>	27.734 <sup>380</sup>	62.11 <sup>117</sup>	54.426 <sup>332</sup>	46.06 <sup>252</sup>
36	57.47	26.84	53.95	47.55	28.114	63.28	54.758	43.54
Mittl. Ort	55.35	31.03	53.84	77.56	26.221	60.97	53.386	65.14
sec δ, tg δ	2.007	-1.740	2.335	+2.110	1.238	-0.729	1.107	+0.474
a, a'	+4.2	-17.4	+1.6	-17.2	+3.6	-17.2	+2.7	-17.0
b, b'	+0.10	+0.50	-0.12	+0.51	+0.04	+0.51	-0.03	+0.53



Tag	524) 4 Ursae min.		523) $\times$ Virginis		525) $\iota$ Virginis		526) $\alpha$ Bootis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	14 <sup>h</sup> 8 <sup>m</sup>	+77° 47'	14 <sup>h</sup> 9 <sup>m</sup>	-10° 0'	14 <sup>h</sup> 13 <sup>m</sup>	-5° 44'	14 <sup>h</sup> 13 <sup>m</sup>	+19° 27'
Jan. I	58.42 <sup>a</sup> <sub>106</sub>	69.71 <sup>a</sup> <sub>184</sub>	55.935 <sup>a</sup> <sub>327</sub>	58.09 <sup>a</sup> <sub>189</sub>	6.082 <sup>a</sup> <sub>323</sub>	12.52 <sup>a</sup> <sub>198</sub>	7.543 <sup>a</sup> <sub>326</sub>	64.25 <sup>a</sup> <sub>236</sub>
II	59.48 <sup>a</sup> <sub>112</sub>	67.87 <sup>a</sup> <sub>121</sub>	56.262 <sup>a</sup> <sub>329</sub>	59.98 <sup>a</sup> <sub>190</sub>	6.405 <sup>a</sup> <sub>327</sub>	14.50 <sup>a</sup> <sub>195</sub>	7.869 <sup>a</sup> <sub>332</sub>	61.89 <sup>a</sup> <sub>206</sub>
2I	60.60 <sup>a</sup> <sub>114</sub>	66.66 <sup>a</sup> <sub>54</sub>	56.591 <sup>a</sup> <sub>323</sub>	61.88 <sup>a</sup> <sub>185</sub>	6.732 <sup>a</sup> <sub>320</sub>	16.45 <sup>a</sup> <sub>184</sub>	8.201 <sup>a</sup> <sub>328</sub>	59.83 <sup>a</sup> <sub>170</sub>
3I	61.74 <sup>a</sup> <sub>111</sub>	66.12 <sup>a</sup> <sub>14</sub>	56.914 <sup>a</sup> <sub>308</sub>	63.73 <sup>a</sup> <sub>174</sub>	7.052 <sup>a</sup> <sub>306</sub>	18.29 <sup>a</sup> <sub>169</sub>	8.529 <sup>a</sup> <sub>314</sub>	58.13 <sup>a</sup> <sub>128</sub>
Febr. 10	62.85 <sup>a</sup> <sub>106</sub>	66.26 <sup>a</sup> <sub>80</sub>	57.222 <sup>a</sup> <sub>286</sub>	65.47 <sup>a</sup> <sub>159</sub>	7.358 <sup>a</sup> <sub>285</sub>	19.98 <sup>a</sup> <sub>149</sub>	8.843 <sup>a</sup> <sub>293</sub>	56.85 <sup>a</sup> <sub>85</sub>
20	63.91 <sup>a</sup> <sub>96</sub>	67.06 <sup>a</sup> <sub>142</sub>	57.508 <sup>a</sup> <sub>259</sub>	67.06 <sup>a</sup> <sub>139</sub>	7.643 <sup>a</sup> <sub>258</sub>	21.47 <sup>a</sup> <sub>126</sub>	9.136 <sup>a</sup> <sub>266</sub>	56.00 <sup>a</sup> <sub>40</sub>
März 2	64.87 <sup>a</sup> <sub>83</sub>	68.48 <sup>a</sup> <sub>197</sub>	57.767 <sup>a</sup> <sub>228</sub>	68.45 <sup>a</sup> <sub>118</sub>	7.901 <sup>a</sup> <sub>229</sub>	22.73 <sup>a</sup> <sub>101</sub>	9.402 <sup>a</sup> <sub>235</sub>	55.60 <sup>a</sup> <sub>4</sub>
12	65.70 <sup>a</sup> <sub>68</sub>	70.45 <sup>a</sup> <sub>243</sub>	57.995 <sup>a</sup> <sub>198</sub>	69.63 <sup>a</sup> <sub>95</sub>	8.130 <sup>a</sup> <sub>199</sub>	23.74 <sup>a</sup> <sub>75</sub>	9.637 <sup>a</sup> <sub>201</sub>	55.64 <sup>a</sup> <sub>44</sub>
22	66.38 <sup>a</sup> <sub>50</sub>	72.88 <sup>a</sup> <sub>277</sub>	58.193 <sup>a</sup> <sub>166</sub>	70.58 <sup>a</sup> <sub>72</sub>	8.329 <sup>a</sup> <sub>166</sub>	24.49 <sup>a</sup> <sub>50</sub>	9.838 <sup>a</sup> <sub>165</sub>	56.08 <sup>a</sup> <sub>79</sub>
Apr. I	66.88 <sup>a</sup> <sub>33</sub>	75.65 <sup>a</sup> <sub>300</sub>	58.359 <sup>a</sup> <sub>134</sub>	71.30 <sup>a</sup> <sub>52</sub>	8.495 <sup>a</sup> <sub>135</sub>	24.99 <sup>a</sup> <sub>28</sub>	10.003 <sup>a</sup> <sub>131</sub>	56.87 <sup>a</sup> <sub>109</sub>
II	67.21 <sup>a</sup> <sub>14</sub>	78.65 <sup>a</sup> <sub>312</sub>	58.493 <sup>a</sup> <sub>103</sub>	71.82 <sup>a</sup> <sub>32</sub>	8.630 <sup>a</sup> <sub>105</sub>	25.27 <sup>a</sup> <sub>7</sub>	10.134 <sup>a</sup> <sub>96</sub>	57.96 <sup>a</sup> <sub>132</sub>
2I	67.35 <sup>a</sup> <sub>5</sub>	81.77 <sup>a</sup> <sub>311</sub>	58.596 <sup>a</sup> <sub>74</sub>	72.14 <sup>a</sup> <sub>15</sub>	8.735 <sup>a</sup> <sub>76</sub>	25.34 <sup>a</sup> <sub>10</sub>	10.230 <sup>a</sup> <sub>64</sub>	59.28 <sup>a</sup> <sub>147</sub>
30	67.30 <sup>a</sup> <sub>24</sub>	84.88 <sup>a</sup> <sub>299</sub>	58.670 <sup>a</sup> <sub>47</sub>	72.29 <sup>a</sup> <sub>0</sub>	8.811 <sup>a</sup> <sub>48</sub>	25.24 <sup>a</sup> <sub>24</sub>	10.294 <sup>a</sup> <sub>33</sub>	60.75 <sup>a</sup> <sub>156</sub>
Mai 10	67.08 <sup>a</sup> <sub>38</sub>	87.87 <sup>a</sup> <sub>276</sub>	58.717 <sup>a</sup> <sub>20</sub>	72.29 <sup>a</sup> <sub>13</sub>	8.859 <sup>a</sup> <sub>22</sub>	25.00 <sup>a</sup> <sub>34</sub>	10.327 <sup>a</sup> <sub>3</sub>	62.31 <sup>a</sup> <sub>158</sub>
20	66.70 <sup>a</sup> <sub>53</sub>	90.63 <sup>a</sup> <sub>245</sub>	58.737 <sup>a</sup> <sub>6</sub>	72.16 <sup>a</sup> <sub>22</sub>	8.881 <sup>a</sup> <sub>4</sub>	24.66 <sup>a</sup> <sub>43</sub>	10.330 <sup>a</sup> <sub>24</sub>	63.89 <sup>a</sup> <sub>153</sub>
30	66.17 <sup>a</sup> <sub>65</sub>	93.08 <sup>a</sup> <sub>207</sub>	58.731 <sup>a</sup> <sub>30</sub>	71.94 <sup>a</sup> <sub>31</sub>	8.877 <sup>a</sup> <sub>28</sub>	24.23 <sup>a</sup> <sub>49</sub>	10.306 <sup>a</sup> <sub>49</sub>	65.42 <sup>a</sup> <sub>143</sub>
Juni 9	65.52 <sup>a</sup> <sub>76</sub>	95.15 <sup>a</sup> <sub>162</sub>	58.701 <sup>a</sup> <sub>53</sub>	71.63 <sup>a</sup> <sub>37</sub>	8.849 <sup>a</sup> <sub>51</sub>	23.74 <sup>a</sup> <sub>52</sub>	10.257 <sup>a</sup> <sub>72</sub>	66.85 <sup>a</sup> <sub>129</sub>
19	64.76 <sup>a</sup> <sub>84</sub>	96.77 <sup>a</sup> <sub>112</sub>	58.648 <sup>a</sup> <sub>74</sub>	71.26 <sup>a</sup> <sub>43</sub>	8.798 <sup>a</sup> <sub>73</sub>	23.22 <sup>a</sup> <sub>54</sub>	10.185 <sup>a</sup> <sub>93</sub>	68.14 <sup>a</sup> <sub>110</sub>
29	63.92 <sup>a</sup> <sub>90</sub>	97.89 <sup>a</sup> <sub>61</sub>	58.574 <sup>a</sup> <sub>93</sub>	70.83 <sup>a</sup> <sub>47</sub>	8.725 <sup>a</sup> <sub>91</sub>	22.68 <sup>a</sup> <sub>54</sub>	10.092 <sup>a</sup> <sub>112</sub>	69.24 <sup>a</sup> <sub>89</sub>
Juli 9	63.02 <sup>a</sup> <sub>94</sub>	98.50 <sup>a</sup> <sub>6</sub>	58.481 <sup>a</sup> <sub>109</sub>	70.36 <sup>a</sup> <sub>49</sub>	8.634 <sup>a</sup> <sub>107</sub>	22.14 <sup>a</sup> <sub>53</sub>	9.980 <sup>a</sup> <sub>127</sub>	70.13 <sup>a</sup> <sub>64</sub>
19	62.08 <sup>a</sup> <sub>95</sub>	98.56 <sup>a</sup> <sub>48</sub>	58.372 <sup>a</sup> <sub>122</sub>	69.87 <sup>a</sup> <sub>51</sub>	8.527 <sup>a</sup> <sub>121</sub>	21.61 <sup>a</sup> <sub>49</sub>	9.853 <sup>a</sup> <sub>138</sub>	70.77 <sup>a</sup> <sub>39</sub>
29	61.13 <sup>a</sup> <sub>94</sub>	98.08 <sup>a</sup> <sub>101</sub>	58.250 <sup>a</sup> <sub>130</sub>	69.36 <sup>a</sup> <sub>51</sub>	8.406 <sup>a</sup> <sub>129</sub>	21.12 <sup>a</sup> <sub>46</sub>	9.715 <sup>a</sup> <sub>145</sub>	71.16 <sup>a</sup> <sub>11</sub>
Aug. 8	60.19 <sup>a</sup> <sub>92</sub>	97.07 <sup>a</sup> <sub>152</sub>	58.120 <sup>a</sup> <sub>132</sub>	68.85 <sup>a</sup> <sub>49</sub>	8.277 <sup>a</sup> <sub>131</sub>	20.66 <sup>a</sup> <sub>39</sub>	9.570 <sup>a</sup> <sub>147</sub>	71.27 <sup>a</sup> <sub>18</sub>
18	59.27 <sup>a</sup> <sub>86</sub>	95.55 <sup>a</sup> <sub>201</sub>	57.988 <sup>a</sup> <sub>128</sub>	68.36 <sup>a</sup> <sub>45</sub>	8.146 <sup>a</sup> <sub>127</sub>	20.27 <sup>a</sup> <sub>32</sub>	9.423 <sup>a</sup> <sub>142</sub>	71.09 <sup>a</sup> <sub>46</sub>
28	58.41 <sup>a</sup> <sub>79</sub>	93.54 <sup>a</sup> <sub>246</sub>	57.860 <sup>a</sup> <sub>117</sub>	67.91 <sup>a</sup> <sub>39</sub>	8.019 <sup>a</sup> <sub>117</sub>	19.95 <sup>a</sup> <sub>22</sub>	9.281 <sup>a</sup> <sub>130</sub>	70.63 <sup>a</sup> <sub>77</sub>
Sept. 7	57.62 <sup>a</sup> <sub>69</sub>	91.08 <sup>a</sup> <sub>286</sub>	57.743 <sup>a</sup> <sub>98</sub>	67.52 <sup>a</sup> <sub>29</sub>	7.902 <sup>a</sup> <sub>99</sub>	19.73 <sup>a</sup> <sub>8</sub>	9.151 <sup>a</sup> <sub>113</sub>	69.86 <sup>a</sup> <sub>106</sub>
17	56.93 <sup>a</sup> <sub>58</sub>	88.22 <sup>a</sup> <sub>321</sub>	57.645 <sup>a</sup> <sub>71</sub>	67.23 <sup>a</sup> <sub>17</sub>	7.803 <sup>a</sup> <sub>73</sub>	19.65 <sup>a</sup> <sub>6</sub>	9.038 <sup>a</sup> <sub>86</sub>	68.80 <sup>a</sup> <sub>136</sub>
27	56.35 <sup>a</sup> <sub>45</sub>	85.01 <sup>a</sup> <sub>351</sub>	57.574 <sup>a</sup> <sub>36</sub>	67.06 <sup>a</sup> <sub>1</sub>	7.730 <sup>a</sup> <sub>40</sub>	19.71 <sup>a</sup> <sub>24</sub>	8.952 <sup>a</sup> <sub>52</sub>	67.44 <sup>a</sup> <sub>165</sub>
Okt. 7	55.90 <sup>a</sup> <sub>29</sub>	81.50 <sup>a</sup> <sub>372</sub>	57.538 <sup>a</sup> <sub>4</sub>	67.05 <sup>a</sup> <sub>18</sub>	7.690 <sup>a</sup> <sub>0</sub>	19.95 <sup>a</sup> <sub>45</sub>	8.900 <sup>a</sup> <sub>14</sub>	65.79 <sup>a</sup> <sub>192</sub>
17	55.61 <sup>a</sup> <sub>13</sub>	77.78 <sup>a</sup> <sub>387</sub>	57.542 <sup>a</sup> <sub>49</sub>	67.23 <sup>a</sup> <sub>41</sub>	7.690 <sup>a</sup> <sub>45</sub>	20.40 <sup>a</sup> <sub>68</sub>	8.886 <sup>a</sup> <sub>32</sub>	63.87 <sup>a</sup> <sub>218</sub>
27	55.48 <sup>a</sup> <sub>4</sub>	73.91 <sup>a</sup> <sub>393</sub>	57.591 <sup>a</sup> <sub>98</sub>	67.64 <sup>a</sup> <sub>64</sub>	7.735 <sup>a</sup> <sub>93</sub>	21.08 <sup>a</sup> <sub>92</sub>	8.918 <sup>a</sup> <sub>81</sub>	61.69 <sup>a</sup> <sub>241</sub>
Nov. 6	55.52 <sup>a</sup> <sub>22</sub>	69.98 <sup>a</sup> <sub>389</sub>	57.689 <sup>a</sup> <sub>148</sub>	68.28 <sup>a</sup> <sub>90</sub>	7.828 <sup>a</sup> <sub>142</sub>	22.00 <sup>a</sup> <sub>116</sub>	8.999 <sup>a</sup> <sub>130</sub>	59.28 <sup>a</sup> <sub>260</sub>
16	55.74 <sup>a</sup> <sub>41</sub>	66.09 <sup>a</sup> <sub>376</sub>	57.837 <sup>a</sup> <sub>196</sub>	69.18 <sup>a</sup> <sub>115</sub>	7.970 <sup>a</sup> <sub>190</sub>	23.16 <sup>a</sup> <sub>140</sub>	9.129 <sup>a</sup> <sub>180</sub>	56.68 <sup>a</sup> <sub>272</sub>
26	56.15 <sup>a</sup> <sub>59</sub>	62.33 <sup>a</sup> <sub>353</sub>	58.033 <sup>a</sup> <sub>240</sub>	70.33 <sup>a</sup> <sub>139</sub>	8.160 <sup>a</sup> <sub>234</sub>	24.56 <sup>a</sup> <sub>162</sub>	9.309 <sup>a</sup> <sub>226</sub>	53.96 <sup>a</sup> <sub>279</sub>
Dez. 6	56.74 <sup>a</sup> <sub>74</sub>	58.80 <sup>a</sup> <sub>319</sub>	58.273 <sup>a</sup> <sub>276</sub>	71.72 <sup>a</sup> <sub>160</sub>	8.394 <sup>a</sup> <sub>270</sub>	26.18 <sup>a</sup> <sub>179</sub>	9.535 <sup>a</sup> <sub>265</sub>	51.17 <sup>a</sup> <sub>279</sub>
16	57.48 <sup>a</sup> <sub>89</sub>	55.61 <sup>a</sup> <sub>275</sub>	58.549 <sup>a</sup> <sub>304</sub>	73.32 <sup>a</sup> <sub>176</sub>	8.664 <sup>a</sup> <sub>300</sub>	27.97 <sup>a</sup> <sub>192</sub>	9.800 <sup>a</sup> <sub>298</sub>	48.38 <sup>a</sup> <sub>270</sub>
26	58.37 <sup>a</sup> <sub>101</sub>	52.86 <sup>a</sup> <sub>222</sub>	58.853 <sup>a</sup> <sub>324</sub>	75.08 <sup>a</sup> <sub>188</sub>	8.964 <sup>a</sup> <sub>319</sub>	29.89 <sup>a</sup> <sub>199</sub>	10.098 <sup>a</sup> <sub>320</sub>	45.68 <sup>a</sup> <sub>253</sub>
36	59.38 <sup>a</sup>	50.64 <sup>a</sup>	59.177 <sup>a</sup>	76.96 <sup>a</sup>	9.283 <sup>a</sup>	31.88 <sup>a</sup>	10.418 <sup>a</sup>	43.15 <sup>a</sup>
Mittl. Ort	61.72	81.27	57.449	67.07	7.606	20.08	9.079	64.73
sec $\delta$ , tg $\delta$	4.734	+4.628	1.016	-0.177	1.005	-0.101	1.061	+0.354
a, a'	-0.2	-16.9	+3.2	-16.9	+3.1	-16.8	+2.8	-16.8
b, b'	-0.26	+0.53	+0.01	+0.54	+0.01	+0.55	-0.02	+0.55



Tag	527) λ Bootis		531) ♀ Bootis		534) ρ Bootis		535) γ Bootis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	14 <sup>h</sup> 14 <sup>m</sup>	+46° 19'	14 <sup>h</sup> 23 <sup>m</sup>	+52° 5'	14 <sup>h</sup> 29 <sup>m</sup>	+30° 36'	14 <sup>h</sup> 29 <sup>m</sup>	+38° 32'
Jan. I	15.851 <sup>1</sup> <sub>399</sub>	77.26 <sub>232</sub>	17.537 <sup>1</sup> <sub>428</sub>	67.26 <sub>239</sub>	25.858 <sup>1</sup> <sub>338</sub>	39.82 <sub>245</sub>	50.041 <sup>1</sup> <sub>359</sub>	47.58 <sub>248</sub>
II	16.250 <sup>1</sup> <sub>413</sub>	74.94 <sub>181</sub>	17.965 <sup>1</sup> <sub>446</sub>	64.87 <sub>185</sub>	26.196 <sup>1</sup> <sub>350</sub>	37.37 <sub>206</sub>	50.400 <sup>1</sup> <sub>372</sub>	45.10 <sub>202</sub>
2I	16.663 <sup>1</sup> <sub>413</sub>	73.13 <sub>124</sub>	18.411 <sup>1</sup> <sub>451</sub>	63.02 <sub>125</sub>	26.546 <sup>1</sup> <sub>350</sub>	35.31 <sub>161</sub>	50.772 <sup>1</sup> <sub>375</sub>	43.08 <sub>151</sub>
3I	17.076 <sup>1</sup> <sub>400</sub>	71.89 <sub>64</sub>	18.862 <sup>1</sup> <sub>440</sub>	61.77 <sub>61</sub>	26.896 <sup>1</sup> <sub>341</sub>	33.70 <sub>110</sub>	51.147 <sup>1</sup> <sub>366</sub>	41.57 <sub>95</sub>
Febr. 10	17.476 <sup>1</sup> <sub>375</sub>	71.25 <sub>2</sub>	19.302 <sup>1</sup> <sub>417</sub>	61.16 <sub>3</sub>	27.237 <sup>1</sup> <sub>322</sub>	32.60 <sub>57</sub>	51.513 <sup>1</sup> <sub>346</sub>	40.62 <sub>37</sub>
20	17.851 <sup>1</sup> <sub>342</sub>	71.23 <sub>58</sub>	19.719 <sup>1</sup> <sub>383</sub>	61.19 <sub>65</sub>	27.559 <sup>1</sup> <sub>296</sub>	32.03 <sub>4</sub>	51.859 <sup>1</sup> <sub>319</sub>	40.25 <sub>20</sub>
März 2	18.193 <sup>1</sup> <sub>301</sub>	71.81 <sub>113</sub>	20.102 <sup>1</sup> <sub>338</sub>	61.84 <sub>122</sub>	27.855 <sup>1</sup> <sub>264</sub>	31.99 <sub>46</sub>	52.178 <sup>1</sup> <sub>285</sub>	40.45 <sub>75</sub>
12	18.494 <sup>1</sup> <sub>253</sub>	72.94 <sub>162</sub>	20.440 <sup>1</sup> <sub>288</sub>	63.06 <sub>173</sub>	28.119 <sup>1</sup> <sub>230</sub>	32.45 <sub>93</sub>	52.463 <sup>1</sup> <sub>246</sub>	41.20 <sub>124</sub>
22	18.747 <sup>1</sup> <sub>203</sub>	74.56 <sub>203</sub>	20.728 <sup>1</sup> <sub>232</sub>	64.79 <sub>216</sub>	28.349 <sup>1</sup> <sub>192</sub>	33.38 <sub>134</sub>	52.709 <sup>1</sup> <sub>204</sub>	42.44 <sub>167</sub>
Apr. I	18.950 <sup>1</sup> <sub>152</sub>	76.59 <sub>234</sub>	20.960 <sup>1</sup> <sub>175</sub>	66.95 <sub>248</sub>	28.541 <sup>1</sup> <sub>153</sub>	34.72 <sub>167</sub>	52.913 <sup>1</sup> <sub>161</sub>	44.11 <sub>200</sub>
11	19.102 <sup>1</sup> <sub>101</sub>	78.93 <sub>254</sub>	21.135 <sup>1</sup> <sub>116</sub>	69.43 <sub>270</sub>	28.694 <sup>1</sup> <sub>115</sub>	36.39 <sub>191</sub>	53.074 <sup>1</sup> <sub>118</sub>	46.11 <sub>225</sub>
21	19.203 <sup>1</sup> <sub>52</sub>	81.47 <sub>265</sub>	21.251 <sup>1</sup> <sub>60</sub>	72.13 <sub>280</sub>	28.809 <sup>1</sup> <sub>78</sub>	38.30 <sub>208</sub>	53.192 <sup>1</sup> <sub>75</sub>	48.36 <sub>240</sub>
30	19.255 <sup>1</sup> <sub>4</sub>	84.12 <sub>265</sub>	21.311 <sup>1</sup> <sub>5</sub>	74.93 <sub>280</sub>	28.887 <sup>1</sup> <sub>42</sub>	40.38 <sub>216</sub>	53.267 <sup>1</sup> <sub>34</sub>	50.76 <sub>246</sub>
Mai 10	19.259 <sup>1</sup> <sub>39</sub>	86.77 <sub>256</sub>	21.316 <sup>1</sup> <sub>47</sub>	77.73 <sub>271</sub>	28.929 <sup>1</sup> <sub>8</sub>	42.54 <sub>214</sub>	53.301 <sup>1</sup> <sub>4</sub>	53.22 <sub>241</sub>
20	19.220 <sup>1</sup> <sub>79</sub>	89.33 <sub>237</sub>	21.269 <sup>1</sup> <sub>94</sub>	80.44 <sub>251</sub>	28.937 <sup>1</sup> <sub>25</sub>	44.68 <sub>206</sub>	53.297 <sup>1</sup> <sub>40</sub>	55.63 <sub>230</sub>
30	19.141 <sup>1</sup> <sub>116</sub>	91.70 <sub>212</sub>	21.175 <sup>1</sup> <sub>136</sub>	82.95 <sub>225</sub>	28.912 <sup>1</sup> <sub>54</sub>	46.74 <sub>191</sub>	53.257 <sup>1</sup> <sub>74</sub>	57.93 <sub>210</sub>
Juni 9	19.025 <sup>1</sup> <sub>147</sub>	93.82 <sub>181</sub>	21.039 <sup>1</sup> <sub>174</sub>	85.20 <sub>191</sub>	28.858 <sup>1</sup> <sub>82</sub>	48.65 <sub>170</sub>	53.183 <sup>1</sup> <sub>104</sub>	60.03 <sub>185</sub>
19	18.878 <sup>1</sup> <sub>174</sub>	95.63 <sub>144</sub>	20.865 <sup>1</sup> <sub>207</sub>	87.11 <sub>152</sub>	28.776 <sup>1</sup> <sub>107</sub>	50.35 <sub>144</sub>	53.079 <sup>1</sup> <sub>132</sub>	61.88 <sub>154</sub>
29	18.704 <sup>1</sup> <sub>197</sub>	97.07 <sub>104</sub>	20.658 <sup>1</sup> <sub>234</sub>	88.63 <sub>109</sub>	28.669 <sup>1</sup> <sub>129</sub>	51.79 <sub>115</sub>	52.947 <sup>1</sup> <sub>154</sub>	63.42 <sub>119</sub>
Juli 9	18.507 <sup>1</sup> <sub>214</sub>	98.11 <sub>60</sub>	20.424 <sup>1</sup> <sub>253</sub>	89.72 <sub>63</sub>	28.540 <sup>1</sup> <sub>147</sub>	52.94 <sub>82</sub>	52.793 <sup>1</sup> <sub>174</sub>	64.61 <sub>81</sub>
19	18.293 <sup>1</sup> <sub>226</sub>	98.71 <sub>16</sub>	20.171 <sup>1</sup> <sub>268</sub>	90.35 <sub>16</sub>	28.393 <sup>1</sup> <sub>161</sub>	53.76 <sub>47</sub>	52.619 <sup>1</sup> <sub>189</sub>	65.42 <sub>41</sub>
29	18.067 <sup>1</sup> <sub>230</sub>	98.87 <sub>30</sub>	19.903 <sup>1</sup> <sub>275</sub>	90.51 <sub>33</sub>	28.232 <sup>1</sup> <sub>170</sub>	54.23 <sub>10</sub>	52.430 <sup>1</sup> <sub>197</sub>	65.83 <sub>1</sub>
Aug. 8	17.837 <sup>1</sup> <sub>229</sub>	98.57 <sub>76</sub>	19.628 <sup>1</sup> <sub>274</sub>	90.18 <sub>81</sub>	28.062 <sup>1</sup> <sub>174</sub>	54.33 <sub>26</sub>	52.233 <sup>1</sup> <sub>200</sub>	65.82 <sub>43</sub>
18	17.608 <sup>1</sup> <sub>220</sub>	97.81 <sub>120</sub>	19.354 <sup>1</sup> <sub>264</sub>	89.37 <sub>128</sub>	27.888 <sup>1</sup> <sub>171</sub>	54.07 <sub>64</sub>	52.033 <sup>1</sup> <sub>196</sub>	65.39 <sub>85</sub>
28	17.388 <sup>1</sup> <sub>202</sub>	96.61 <sub>164</sub>	19.090 <sup>1</sup> <sub>246</sub>	88.09 <sub>174</sub>	27.717 <sup>1</sup> <sub>160</sub>	53.43 <sub>101</sub>	51.837 <sup>1</sup> <sub>184</sub>	64.54 <sub>126</sub>
Sept. 7	17.186 <sup>1</sup> <sub>176</sub>	94.97 <sub>205</sub>	18.844 <sup>1</sup> <sub>218</sub>	86.35 <sub>216</sub>	27.557 <sup>1</sup> <sub>142</sub>	52.42 <sub>138</sub>	51.653 <sup>1</sup> <sub>163</sub>	63.28 <sub>166</sub>
17	17.010 <sup>1</sup> <sub>142</sub>	92.92 <sub>242</sub>	18.626 <sup>1</sup> <sub>182</sub>	84.19 <sub>256</sub>	27.415 <sup>1</sup> <sub>115</sub>	51.04 <sub>172</sub>	51.490 <sup>1</sup> <sub>135</sub>	61.62 <sub>204</sub>
27	16.868 <sup>1</sup> <sub>100</sub>	90.50 <sub>276</sub>	18.444 <sup>1</sup> <sub>135</sub>	81.63 <sub>292</sub>	27.300 <sup>1</sup> <sub>82</sub>	49.32 <sub>206</sub>	51.355 <sup>1</sup> <sub>99</sub>	59.58 <sub>238</sub>
Okt. 7	16.768 <sup>1</sup> <sub>50</sub>	87.74 <sub>306</sub>	18.309 <sup>1</sup> <sub>81</sub>	78.71 <sub>321</sub>	27.218 <sup>1</sup> <sub>41</sub>	47.26 <sub>236</sub>	51.256 <sup>1</sup> <sub>54</sub>	57.20 <sub>270</sub>
17	16.718 <sup>1</sup> <sub>7</sub>	84.68 <sub>329</sub>	18.228 <sup>1</sup> <sub>19</sub>	75.50 <sub>346</sub>	27.177 <sup>1</sup> <sub>6</sub>	44.90 <sub>264</sub>	51.202 <sup>1</sup> <sub>4</sub>	54.50 <sub>297</sub>
27	16.725 <sup>1</sup> <sub>68</sub>	81.39 <sub>347</sub>	18.209 <sup>1</sup> <sub>48</sub>	72.04 <sub>363</sub>	27.183 <sup>1</sup> <sub>58</sub>	42.26 <sub>286</sub>	51.198 <sup>1</sup> <sub>51</sub>	51.53 <sub>318</sub>
Nov. 6	16.793 <sup>1</sup> <sub>131</sub>	77.92 <sub>357</sub>	18.257 <sup>1</sup> <sub>119</sub>	68.41 <sub>372</sub>	27.241 <sup>1</sup> <sub>112</sub>	39.40 <sub>303</sub>	51.249 <sup>1</sup> <sub>109</sub>	48.35 <sub>333</sub>
16	16.924 <sup>1</sup> <sub>195</sub>	74.35 <sub>357</sub>	18.376 <sup>1</sup> <sub>188</sub>	64.69 <sub>373</sub>	27.353 <sup>1</sup> <sub>165</sub>	36.37 <sub>312</sub>	51.358 <sup>1</sup> <sub>167</sub>	45.02 <sub>339</sub>
26	17.119 <sup>1</sup> <sub>255</sub>	70.78 <sub>349</sub>	18.564 <sup>1</sup> <sub>256</sub>	60.96 <sub>362</sub>	27.518 <sup>1</sup> <sub>216</sub>	33.25 <sub>315</sub>	51.525 <sup>1</sup> <sub>223</sub>	41.63 <sub>338</sub>
Dez. 6	17.374 <sup>1</sup> <sub>308</sub>	67.29 <sub>330</sub>	18.820 <sup>1</sup> <sub>318</sub>	57.34 <sub>342</sub>	27.734 <sup>1</sup> <sub>262</sub>	30.10 <sub>308</sub>	51.748 <sup>1</sup> <sub>272</sub>	38.25 <sub>326</sub>
16	17.682 <sup>1</sup> <sub>353</sub>	63.99 <sub>301</sub>	19.138 <sup>1</sup> <sub>370</sub>	53.92 <sub>311</sub>	27.996 <sup>1</sup> <sub>300</sub>	27.02 <sub>292</sub>	52.020 <sup>1</sup> <sub>314</sub>	34.99 <sub>304</sub>
26	18.035 <sup>1</sup> <sub>388</sub>	60.98 <sub>263</sub>	19.508 <sup>1</sup> <sub>411</sub>	50.81 <sub>271</sub>	28.206 <sup>1</sup> <sub>329</sub>	24.10 <sub>267</sub>	52.334 <sup>1</sup> <sub>347</sub>	31.95 <sub>273</sub>
36	18.423 <sup>1</sup>	58.35	19.919 <sup>1</sup>	48.10	28.625 <sup>1</sup>	21.43	52.681 <sup>1</sup>	29.22
Mittl. Ort	17.576	84.63	19.406	75.51	27.520	43.21	51.764	52.90
sec δ, tag δ	1.448	+1.048	1.628	+1.285	1.162	+0.592	1.279	+0.797
a, a'	+2.3	-16.7	+2.1	-16.2	+2.6	-15.9	+2.4	-15.9
b, b'	-0.06	+0.55	-0.07	+0.59	-0.03	+0.61	-0.04	+0.61



124\* Scheinbare Sternörter 1945

Tag	537) $\eta$ Centauri		538) $\alpha$ Centauri 1)		1382) $\beta$ Bootis		545) $\mu$ Virginis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	14 <sup>h</sup> 31 <sup>m</sup>	-41° 54'	14 <sup>h</sup> 35 <sup>m</sup>	-60° 36'	14 <sup>h</sup> 39 <sup>m</sup>	+11° 53'	14 <sup>h</sup> 40 <sup>m</sup>	-5° 25'
Jan. I	58.348 <sup>403</sup>	44.60 <sup>89</sup>	48.44 <sup>55</sup>	16.86 <sup>33</sup>	3.206 <sup>312</sup>	49.53 <sup>228</sup>	7.802 <sup>315</sup>	5.45 <sup>192</sup>
II	58.751 <sup>410</sup>	45.49 <sup>122</sup>	48.99 <sup>57</sup>	17.19 <sup>81</sup>	3.518 <sup>322</sup>	47.25 <sup>207</sup>	8.117 <sup>323</sup>	7.37 <sup>188</sup>
2I	59.161 <sup>407</sup>	46.71 <sup>152</sup>	49.56 <sup>56</sup>	18.00 <sup>125</sup>	3.840 <sup>322</sup>	45.18 <sup>178</sup>	8.440 <sup>321</sup>	9.25 <sup>179</sup>
3I	59.568 <sup>394</sup>	48.23 <sup>175</sup>	50.12 <sup>55</sup>	19.25 <sup>165</sup>	4.162 <sup>312</sup>	43.40 <sup>146</sup>	8.761 <sup>312</sup>	11.04 <sup>163</sup>
Febr. 10	59.962 <sup>371</sup>	49.98 <sup>194</sup>	50.67 <sup>51</sup>	20.90 <sup>201</sup>	4.474 <sup>297</sup>	41.94 <sup>108</sup>	9.073 <sup>296</sup>	12.67 <sup>143</sup>
20	60.333 <sup>342</sup>	51.92 <sup>208</sup>	51.18 <sup>47</sup>	22.91 <sup>230</sup>	4.771 <sup>274</sup>	40.86 <sup>68</sup>	9.369 <sup>273</sup>	14.10 <sup>120</sup>
März 2	60.675 <sup>309</sup>	54.00 <sup>215</sup>	51.65 <sup>43</sup>	25.21 <sup>254</sup>	5.045 <sup>248</sup>	40.18 <sup>29</sup>	9.642 <sup>248</sup>	15.30 <sup>95</sup>
12	60.984 <sup>274</sup>	56.15 <sup>220</sup>	52.08 <sup>37</sup>	27.75 <sup>270</sup>	5.293 <sup>218</sup>	39.89 <sup>9</sup>	9.890 <sup>220</sup>	16.25 <sup>69</sup>
22	61.258 <sup>236</sup>	58.35 <sup>219</sup>	52.45 <sup>31</sup>	30.45 <sup>282</sup>	5.511 <sup>188</sup>	39.98 <sup>43</sup>	10.110 <sup>190</sup>	16.94 <sup>45</sup>
Apr. I	61.494 <sup>198</sup>	60.54 <sup>214</sup>	52.76 <sup>26</sup>	33.27 <sup>286</sup>	5.699 <sup>156</sup>	40.41 <sup>73</sup>	10.300 <sup>161</sup>	17.39 <sup>21</sup>
II	61.692 <sup>159</sup>	62.68 <sup>207</sup>	53.02 <sup>19</sup>	36.13 <sup>287</sup>	5.855 <sup>124</sup>	41.14 <sup>98</sup>	10.461 <sup>132</sup>	17.60 <sup>0</sup>
2I	61.851 <sup>121</sup>	64.75 <sup>197</sup>	53.21 <sup>13</sup>	39.00 <sup>281</sup>	5.979 <sup>94</sup>	42.12 <sup>116</sup>	10.593 <sup>103</sup>	17.60 <sup>16</sup>
30*)	61.972 <sup>82</sup>	66.72 <sup>184</sup>	53.34 <sup>7</sup>	41.81 <sup>271</sup>	6.073 <sup>64</sup>	43.28 <sup>128</sup>	10.696 <sup>74</sup>	17.44 <sup>30</sup>
Mai 10	62.054 <sup>43</sup>	68.56 <sup>167</sup>	53.41 <sup>1</sup>	44.52 <sup>254</sup>	6.137 <sup>36</sup>	44.56 <sup>135</sup>	10.770 <sup>47</sup>	17.14 <sup>41</sup>
20	62.097 <sup>5</sup>	70.23 <sup>150</sup>	53.42 <sup>5</sup>	47.06 <sup>233</sup>	6.173 <sup>7</sup>	45.91 <sup>135</sup>	10.817 <sup>19</sup>	16.73 <sup>48</sup>
30	62.102 <sup>32</sup>	71.73 <sup>129</sup>	53.37 <sup>11</sup>	49.39 <sup>208</sup>	6.180 <sup>20</sup>	47.26 <sup>131</sup>	10.836 <sup>8</sup>	16.25 <sup>54</sup>
Juni 9	62.070 <sup>68</sup>	73.02 <sup>105</sup>	53.26 <sup>17</sup>	51.47 <sup>177</sup>	6.160 <sup>46</sup>	48.57 <sup>122</sup>	10.828 <sup>33</sup>	15.71 <sup>55</sup>
19	62.002 <sup>102</sup>	74.07 <sup>79</sup>	53.09 <sup>22</sup>	53.24 <sup>143</sup>	6.114 <sup>69</sup>	49.79 <sup>110</sup>	10.795 <sup>58</sup>	15.16 <sup>56</sup>
29	61.900 <sup>133</sup>	74.86 <sup>52</sup>	52.87 <sup>26</sup>	54.67 <sup>105</sup>	6.045 <sup>92</sup>	50.89 <sup>95</sup>	10.737 <sup>81</sup>	14.60 <sup>55</sup>
Juli 9	61.767 <sup>160</sup>	75.38 <sup>23</sup>	52.61 <sup>31</sup>	55.72 <sup>63</sup>	5.953 <sup>110</sup>	51.84 <sup>77</sup>	10.656 <sup>102</sup>	14.05 <sup>53</sup>
19	61.607 <sup>182</sup>	75.61 <sup>7</sup>	52.30 <sup>33</sup>	56.35 <sup>21</sup>	5.843 <sup>127</sup>	52.61 <sup>57</sup>	10.554 <sup>118</sup>	13.52 <sup>48</sup>
29	61.425 <sup>197</sup>	75.54 <sup>36</sup>	51.97 <sup>35</sup>	56.56 <sup>23</sup>	5.716 <sup>139</sup>	53.18 <sup>36</sup>	10.436 <sup>131</sup>	13.04 <sup>44</sup>
Aug. 8	61.228 <sup>203</sup>	75.18 <sup>66</sup>	51.62 <sup>36</sup>	56.33 <sup>67</sup>	5.577 <sup>144</sup>	53.54 <sup>13</sup>	10.305 <sup>138</sup>	12.60 <sup>36</sup>
18	61.025 <sup>201</sup>	74.52 <sup>92</sup>	51.26 <sup>35</sup>	55.66 <sup>107</sup>	5.433 <sup>144</sup>	53.67 <sup>10</sup>	10.167 <sup>138</sup>	12.24 <sup>29</sup>
28	60.824 <sup>187</sup>	73.60 <sup>115</sup>	50.91 <sup>32</sup>	54.59 <sup>146</sup>	5.289 <sup>137</sup>	53.57 <sup>35</sup>	10.029 <sup>132</sup>	11.95 <sup>18</sup>
Sept. 7	60.637 <sup>163</sup>	72.45 <sup>135</sup>	50.59 <sup>28</sup>	53.13 <sup>179</sup>	5.152 <sup>123</sup>	53.22 <sup>62</sup>	9.897 <sup>117</sup>	11.77 <sup>7</sup>
17	60.474 <sup>129</sup>	71.10 <sup>149</sup>	50.31 <sup>23</sup>	51.34 <sup>205</sup>	5.029 <sup>99</sup>	52.60 <sup>87</sup>	9.780 <sup>94</sup>	11.70 <sup>9</sup>
27	60.345 <sup>85</sup>	69.61 <sup>155</sup>	50.08 <sup>16</sup>	49.29 <sup>224</sup>	4.930 <sup>70</sup>	51.73 <sup>114</sup>	9.686 <sup>63</sup>	11.79 <sup>25</sup>
Okt. 7	60.260 <sup>31</sup>	68.06 <sup>154</sup>	49.92 <sup>8</sup>	47.05 <sup>233</sup>	4.860 <sup>33</sup>	50.59 <sup>140</sup>	9.623 <sup>25</sup>	12.04 <sup>45</sup>
17	60.229 <sup>29</sup>	66.52 <sup>146</sup>	49.84 <sup>2</sup>	44.72 <sup>233</sup>	4.827 <sup>11</sup>	49.19 <sup>167</sup>	9.598 <sup>18</sup>	12.49 <sup>66</sup>
27	60.258 <sup>93</sup>	65.06 <sup>131</sup>	49.86 <sup>10</sup>	42.39 <sup>223</sup>	4.838 <sup>59</sup>	47.52 <sup>191</sup>	9.616 <sup>66</sup>	13.15 <sup>89</sup>
Nov. 6	60.351 <sup>158</sup>	63.75 <sup>107</sup>	49.96 <sup>20</sup>	40.16 <sup>201</sup>	4.897 <sup>108</sup>	45.61 <sup>212</sup>	9.682 <sup>116</sup>	14.04 <sup>112</sup>
16	60.509 <sup>221</sup>	62.68 <sup>78</sup>	50.16 <sup>30</sup>	38.15 <sup>173</sup>	5.005 <sup>157</sup>	43.49 <sup>230</sup>	9.798 <sup>165</sup>	15.16 <sup>135</sup>
26	60.730 <sup>279</sup>	61.90 <sup>45</sup>	50.46 <sup>37</sup>	36.42 <sup>136</sup>	5.162 <sup>203</sup>	41.19 <sup>243</sup>	9.963 <sup>211</sup>	16.51 <sup>156</sup>
Dez. 6	61.009 <sup>329</sup>	61.45 <sup>7</sup>	50.83 <sup>45</sup>	35.06 <sup>92</sup>	5.365 <sup>245</sup>	38.76 <sup>248</sup>	10.174 <sup>251</sup>	18.07 <sup>173</sup>
16	61.338 <sup>369</sup>	61.38 <sup>31</sup>	51.28 <sup>51</sup>	34.14 <sup>45</sup>	5.610 <sup>279</sup>	36.28 <sup>248</sup>	10.425 <sup>284</sup>	19.80 <sup>185</sup>
26	61.707 <sup>396</sup>	61.69 <sup>68</sup>	51.79 <sup>54</sup>	33.69 <sup>4</sup>	5.889 <sup>304</sup>	33.80 <sup>240</sup>	10.709 <sup>308</sup>	21.65 <sup>193</sup>
36	62.103	62.37	52.33	33.73	6.193	31.40	11.017	23.58
Mittl. Ort	60.259	62.59	50.84	38.85	4.856	47.59	9.474	12.67
see $\delta$ , tg $\delta$	1.344	-0.898	2.038	-1.775	1.022	+0.211	1.005	-0.095
a, a'	+3.8	-15.8	+4.6	-15.6	+2.9	-15.4	+3.2	-15.3
b, b'	+0.05	+0.62	+0.09	+0.63	-0.01	+0.64	0.00	+0.64

1) Ort des helleren Sterns. Die jährliche Parallaxe (0.756) ist bereits berücksichtigt.

\*) Bei Stern 538), 1382) und 545) Hes Mai 1.



Tag	542) $\alpha$ Apodis		547) $\iota_{09}$ Virginis		548) $\alpha^2$ Librae		549) Grb $\alpha 164$ Draco	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	14 <sup>h</sup> 40 <sup>m</sup>	-78° 48'	14 <sup>h</sup> 43 <sup>m</sup>	+2° 7'	14 <sup>h</sup> 47 <sup>m</sup>	-15° 48'	14 <sup>h</sup> 50 <sup>m</sup>	+59° 30'
Jan. I	50.70 <sub>127</sub>	25.20 <sub>38</sub>	26.251 <sub>310</sub>	29.69 <sub>209</sub>	48.093 <sub>322</sub>	41.54 <sub>159</sub>	0.185 <sub>465</sub>	52.21 <sub>258</sub>
II	51.97 <sub>132</sub>	24.82 <sub>19</sub>	26.561 <sub>318</sub>	27.60 <sub>197</sub>	48.415 <sub>332</sub>	43.13 <sub>167</sub>	0.650 <sub>499</sub>	49.63 <sub>204</sub>
21	53.29 <sub>132</sub>	25.01 <sub>75</sub>	26.879 <sub>319</sub>	25.63 <sub>180</sub>	48.747 <sub>331</sub>	44.80 <sub>168</sub>	1.149 <sub>517</sub>	47.59 <sub>142</sub>
31	54.61 <sub>131</sub>	25.76 <sub>127</sub>	27.198 <sub>310</sub>	23.83 <sub>156</sub>	49.078 <sub>323</sub>	46.48 <sub>165</sub>	1.666 <sub>516</sub>	46.17 <sub>76</sub>
Febr. 10	55.92 <sub>125</sub>	27.03 <sub>175</sub>	27.508 <sub>294</sub>	22.27 <sub>128</sub>	49.401 <sub>307</sub>	48.13 <sub>156</sub>	2.182 <sub>501</sub>	45.41 <sub>10</sub>
20	57.17 <sub>117</sub>	28.78 <sub>219</sub>	27.802 <sub>273</sub>	20.99 <sub>98</sub>	49.708 <sub>286</sub>	49.69 <sub>144</sub>	2.683 <sub>469</sub>	45.31 <sub>56</sub>
März 2	58.34 <sub>106</sub>	30.97 <sub>256</sub>	28.075 <sub>248</sub>	20.01 <sub>66</sub>	49.994 <sub>260</sub>	51.13 <sub>128</sub>	3.152 <sub>425</sub>	45.87 <sub>118</sub>
12	59.40 <sub>95</sub>	33.53 <sub>287</sub>	28.323 <sub>220</sub>	19.35 <sub>34</sub>	50.254 <sub>233</sub>	52.41 <sub>111</sub>	3.577 <sub>372</sub>	47.05 <sub>174</sub>
22	60.35 <sub>81</sub>	36.40 <sub>312</sub>	28.543 <sub>191</sub>	19.01 <sub>5</sub>	50.487 <sub>204</sub>	53.52 <sub>93</sub>	3.949 <sub>309</sub>	48.79 <sub>221</sub>
Apr. I	61.16 <sub>67</sub>	39.52 <sub>329</sub>	28.734 <sub>161</sub>	18.96 <sub>21</sub>	50.691 <sub>175</sub>	54.45 <sub>76</sub>	4.258 <sub>241</sub>	51.00 <sub>257</sub>
11	61.83 <sub>51</sub>	42.81 <sub>339</sub>	28.895 <sub>131</sub>	19.17 <sub>44</sub>	50.866 <sub>145</sub>	55.21 <sub>58</sub>	4.499 <sub>171</sub>	53.57 <sub>284</sub>
21	62.34 <sub>34</sub>	46.20 <sub>343</sub>	29.026 <sub>102</sub>	19.61 <sub>62</sub>	51.011 <sub>116</sub>	55.79 <sub>44</sub>	4.670 <sub>101</sub>	56.41 <sub>298</sub>
Mai I	62.68 <sub>18</sub>	49.63 <sub>340</sub>	29.128 <sub>74</sub>	20.23 <sub>76</sub>	51.127 <sub>87</sub>	56.23 <sub>30</sub>	4.771 <sub>31</sub>	59.39 <sub>302</sub>
10	62.86 <sub>0</sub>	53.03 <sub>328</sub>	29.202 <sub>45</sub>	20.99 <sub>84</sub>	51.214 <sub>57</sub>	56.53 <sub>17</sub>	4.802 <sub>36</sub>	62.41 <sub>295</sub>
20	62.86 <sub>16</sub>	56.31 <sub>311</sub>	29.247 <sub>18</sub>	21.83 <sub>89</sub>	51.271 <sub>29</sub>	56.70 <sub>7</sub>	4.766 <sub>98</sub>	65.36 <sub>278</sub>
30	62.70 <sub>33</sub>	59.42 <sub>286</sub>	29.265 <sub>9</sub>	22.72 <sub>90</sub>	51.300 <sub>0</sub>	56.77 <sub>2</sub>	4.668 <sub>157</sub>	68.14 <sub>253</sub>
Juni 9	62.37 <sub>48</sub>	62.28 <sub>255</sub>	29.256 <sub>35</sub>	23.62 <sub>88</sub>	51.300 <sub>27</sub>	56.75 <sub>10</sub>	4.511 <sub>210</sub>	70.67 <sub>220</sub>
19	61.89 <sub>62</sub>	64.83 <sub>218</sub>	29.221 <sub>59</sub>	24.50 <sub>83</sub>	51.273 <sub>55</sub>	56.65 <sub>18</sub>	4.301 <sub>255</sub>	72.87 <sub>181</sub>
29	61.27 <sub>75</sub>	67.01 <sub>174</sub>	29.162 <sub>82</sub>	25.33 <sub>75</sub>	51.218 <sub>81</sub>	56.47 <sub>25</sub>	4.046 <sub>295</sub>	74.68 <sub>137</sub>
Juli 9	60.52 <sub>85</sub>	68.75 <sub>127</sub>	29.080 <sub>102</sub>	26.08 <sub>66</sub>	51.137 <sub>103</sub>	56.22 <sub>32</sub>	3.751 <sub>325</sub>	76.05 <sub>89</sub>
19	59.67 <sub>93</sub>	70.02 <sub>76</sub>	28.978 <sub>120</sub>	26.74 <sub>54</sub>	51.034 <sub>122</sub>	55.90 <sub>36</sub>	3.426 <sub>349</sub>	76.94 <sub>40</sub>
29	58.74 <sub>98</sub>	70.78 <sub>21</sub>	28.858 <sub>132</sub>	27.28 <sub>43</sub>	50.912 <sub>136</sub>	55.54 <sub>42</sub>	3.077 <sub>363</sub>	77.34 <sub>11</sub>
Aug. 8	57.76 <sub>99</sub>	70.99 <sub>33</sub>	28.726 <sub>139</sub>	27.71 <sub>28</sub>	50.776 <sub>146</sub>	55.12 <sub>45</sub>	2.714 <sub>367</sub>	77.23 <sub>63</sub>
18	56.77 <sub>97</sub>	70.66 <sub>86</sub>	28.587 <sub>140</sub>	27.99 <sub>14</sub>	50.630 <sub>147</sub>	54.67 <sub>47</sub>	2.347 <sub>362</sub>	76.60 <sub>112</sub>
28	55.80 <sub>90</sub>	69.80 <sub>138</sub>	28.447 <sub>134</sub>	28.13 <sub>4</sub>	50.483 <sub>141</sub>	54.20 <sub>47</sub>	1.985 <sub>345</sub>	75.48 <sub>162</sub>
Sept. 7	54.90 <sub>81</sub>	68.42 <sub>184</sub>	28.313 <sub>120</sub>	28.09 <sub>22</sub>	50.342 <sub>127</sub>	53.73 <sub>44</sub>	1.640 <sub>317</sub>	73.86 <sub>208</sub>
17	54.09 <sub>67</sub>	66.58 <sub>224</sub>	28.193 <sub>98</sub>	27.87 <sub>42</sub>	50.215 <sub>104</sub>	53.29 <sub>38</sub>	1.323 <sub>278</sub>	71.78 <sub>251</sub>
27	53.42 <sub>50</sub>	64.34 <sub>256</sub>	28.095 <sub>68</sub>	27.45 <sub>63</sub>	50.111 <sub>71</sub>	52.91 <sub>28</sub>	1.045 <sub>227</sub>	69.27 <sub>290</sub>
Okt. 7	52.92 <sub>31</sub>	61.78 <sub>278</sub>	28.027 <sub>31</sub>	26.82 <sub>86</sub>	50.040 <sub>33</sub>	52.63 <sub>15</sub>	0.818 <sub>167</sub>	66.37 <sub>323</sub>
17	52.61 <sub>9</sub>	59.00 <sub>289</sub>	27.996 <sub>11</sub>	25.96 <sub>110</sub>	50.007 <sub>13</sub>	52.48 <sub>3</sub>	0.651 <sub>96</sub>	63.14 <sub>350</sub>
27	52.52 <sub>14</sub>	56.11 <sub>288</sub>	28.007 <sub>59</sub>	24.86 <sub>133</sub>	50.020 <sub>63</sub>	52.51 <sub>23</sub>	0.555 <sub>18</sub>	59.64 <sub>371</sub>
Nov. 6	52.66 <sub>36</sub>	53.23 <sub>275</sub>	28.066 <sub>109</sub>	23.53 <sub>156</sub>	50.083 <sub>114</sub>	52.74 <sub>46</sub>	0.537 <sub>64</sub>	55.93 <sub>383</sub>
16	53.02 <sub>59</sub>	50.48 <sub>252</sub>	28.175 <sub>157</sub>	21.97 <sub>176</sub>	50.197 <sub>166</sub>	53.20 <sub>70</sub>	0.601 <sub>148</sub>	52.10 <sub>385</sub>
26	53.61 <sub>78</sub>	47.96 <sub>217</sub>	28.332 <sub>203</sub>	20.21 <sub>194</sub>	50.363 <sub>213</sub>	53.90 <sub>95</sub>	0.749 <sub>232</sub>	48.25 <sub>378</sub>
Dez. 6	54.39 <sub>97</sub>	45.79 <sub>175</sub>	28.535 <sub>244</sub>	18.27 <sub>207</sub>	50.576 <sub>256</sub>	54.85 <sub>117</sub>	0.981 <sub>311</sub>	44.47 <sub>359</sub>
16	55.36 <sub>111</sub>	44.04 <sub>126</sub>	28.779 <sub>277</sub>	16.20 <sub>214</sub>	50.832 <sub>290</sub>	56.02 <sub>137</sub>	1.292 <sub>380</sub>	40.88 <sub>329</sub>
26	56.47 <sub>123</sub>	42.78 <sub>71</sub>	29.056 <sub>302</sub>	14.06 <sub>213</sub>	51.122 <sub>315</sub>	57.39 <sub>154</sub>	1.672 <sub>438</sub>	37.59 <sub>290</sub>
36	57.70	42.07	29.358	11.93	51.437	58.93	2.110	34.69
Mittl. Ort	55.74	49.21	27.924	24.81	49.852	51.80	2.412	60.78
sec $\delta$ , tg $\delta$	5.155	-5.057	1.001	+0.037	1.039	-0.283	1.971	+1.699
a, a'	+7.4	-15.3	+3.0	-15.2	+3.3	-14.9	+1.5	-14.8
b, b'	+0.26	+0.65	0.00	+0.65	+0.01	+0.67	-0.08	+0.68



Tag	550) $\beta$ Ursae min.		551) Pi 14 <sup>h</sup> 221 Boot		552) $\beta$ Lupi		555) $\beta$ Bootis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	14 <sup>h</sup> 50 <sup>m</sup>	+74° 22'	14 <sup>h</sup> 53 <sup>m</sup>	+14° 39'	14 <sup>h</sup> 54 <sup>m</sup>	-42° 54'	14 <sup>h</sup> 59 <sup>m</sup>	+40° 36'
Jan. I	47.22 <sup>77</sup>	39.20 <sup>241</sup>	35.618 <sup>307</sup>	64.26 <sup>235</sup>	52.987 <sup>399</sup>	31.96 <sup>62</sup>	50.483 <sup>345</sup>	18.68 <sup>270</sup>
II	47.99 <sup>85</sup>	36.79 <sup>182</sup>	35.925 <sup>319</sup>	61.91 <sup>212</sup>	53.386 <sup>413</sup>	32.58 <sup>95</sup>	50.828 <sup>367</sup>	15.98 <sup>226</sup>
2I	48.84 <sup>88</sup>	34.97 <sup>118</sup>	36.244 <sup>322</sup>	59.79 <sup>182</sup>	53.799 <sup>415</sup>	33.53 <sup>125</sup>	51.195 <sup>376</sup>	13.72 <sup>175</sup>
3I	49.72 <sup>90</sup>	33.79 <sup>51</sup>	36.566 <sup>317</sup>	57.97 <sup>146</sup>	54.214 <sup>406</sup>	34.78 <sup>150</sup>	51.571 <sup>375</sup>	11.97 <sup>119</sup>
Febr. 10	50.62 <sup>88</sup>	33.28 <sup>17</sup>	36.883 <sup>303</sup>	56.51 <sup>107</sup>	54.620 <sup>389</sup>	36.28 <sup>171</sup>	51.946 <sup>363</sup>	10.78 <sup>59</sup>
20	51.50 <sup>83</sup>	33.45 <sup>84</sup>	37.186 <sup>283</sup>	55.44 <sup>64</sup>	55.009 <sup>364</sup>	37.99 <sup>187</sup>	52.309 <sup>341</sup>	10.19 <sup>1</sup>
März 2	52.33 <sup>75</sup>	34.29 <sup>145</sup>	37.469 <sup>258</sup>	54.80 <sup>22</sup>	55.373 <sup>335</sup>	39.86 <sup>198</sup>	52.650 <sup>313</sup>	10.20 <sup>59</sup>
12	53.08 <sup>64</sup>	35.74 <sup>200</sup>	37.727 <sup>230</sup>	54.58 <sup>19</sup>	55.708 <sup>303</sup>	41.84 <sup>204</sup>	52.963 <sup>278</sup>	10.79 <sup>112</sup>
22	53.72 <sup>53</sup>	37.74 <sup>245</sup>	37.957 <sup>201</sup>	54.77 <sup>55</sup>	56.011 <sup>267</sup>	43.88 <sup>207</sup>	53.241 <sup>238</sup>	11.91 <sup>159</sup>
Apr. I	54.25 <sup>40</sup>	40.19 <sup>278</sup>	38.158 <sup>170</sup>	55.32 <sup>87</sup>	56.278 <sup>230</sup>	45.95 <sup>206</sup>	53.479 <sup>197</sup>	13.50 <sup>199</sup>
II	54.65 <sup>26</sup>	42.97 <sup>302</sup>	38.328 <sup>138</sup>	56.19 <sup>114</sup>	56.508 <sup>193</sup>	48.01 <sup>202</sup>	53.676 <sup>154</sup>	15.49 <sup>227</sup>
21	54.91 <sup>12</sup>	45.99 <sup>313</sup>	38.466 <sup>108</sup>	57.33 <sup>132</sup>	56.701 <sup>154</sup>	50.03 <sup>195</sup>	53.830 <sup>111</sup>	17.76 <sup>248</sup>
Mai I	55.03 <sup>2</sup>	49.12 <sup>312</sup>	38.574 <sup>77</sup>	58.65 <sup>146</sup>	56.855 <sup>114</sup>	51.98 <sup>185</sup>	53.941 <sup>68</sup>	20.24 <sup>259</sup>
10	55.01 <sup>15</sup>	52.24 <sup>301</sup>	38.651 <sup>47</sup>	60.11 <sup>153</sup>	56.969 <sup>75</sup>	53.83 <sup>173</sup>	54.009 <sup>25</sup>	22.83 <sup>258</sup>
20	54.86 <sup>28</sup>	55.25 <sup>279</sup>	38.698 <sup>17</sup>	61.64 <sup>153</sup>	57.044 <sup>34</sup>	55.56 <sup>159</sup>	54.034 <sup>14</sup>	25.41 <sup>250</sup>
30	54.58 <sup>40</sup>	58.04 <sup>250</sup>	38.715 <sup>11</sup>	63.17 <sup>147</sup>	57.078 <sup>7</sup>	57.15 <sup>140</sup>	54.020 <sup>53</sup>	27.91 <sup>234</sup>
Juni 9	54.18 <sup>50</sup>	60.54 <sup>212</sup>	38.704 <sup>39</sup>	64.64 <sup>138</sup>	57.071 <sup>46</sup>	58.55 <sup>119</sup>	53.967 <sup>89</sup>	30.25 <sup>211</sup>
19	53.68 <sup>58</sup>	62.66 <sup>169</sup>	38.665 <sup>64</sup>	66.02 <sup>124</sup>	57.025 <sup>84</sup>	59.74 <sup>97</sup>	53.878 <sup>122</sup>	32.36 <sup>181</sup>
29	53.10 <sup>65</sup>	64.35 <sup>122</sup>	38.601 <sup>89</sup>	67.26 <sup>107</sup>	56.941 <sup>120</sup>	60.71 <sup>71</sup>	53.756 <sup>151</sup>	34.17 <sup>146</sup>
Juli 9	52.45 <sup>71</sup>	65.57 <sup>71</sup>	38.512 <sup>110</sup>	68.33 <sup>86</sup>	56.821 <sup>152</sup>	61.42 <sup>43</sup>	53.605 <sup>176</sup>	35.63 <sup>109</sup>
19	51.74 <sup>75</sup>	66.28 <sup>18</sup>	38.402 <sup>129</sup>	69.19 <sup>65</sup>	56.669 <sup>178</sup>	61.85 <sup>14</sup>	53.429 <sup>197</sup>	36.72 <sup>68</sup>
29	50.99 <sup>76</sup>	66.46 <sup>35</sup>	38.273 <sup>142</sup>	69.84 <sup>40</sup>	56.491 <sup>199</sup>	61.99 <sup>16</sup>	53.232 <sup>212</sup>	37.40 <sup>25</sup>
Aug. 8	50.23 <sup>77</sup>	66.11 <sup>89</sup>	38.131 <sup>150</sup>	70.24 <sup>15</sup>	56.292 <sup>210</sup>	61.83 <sup>44</sup>	53.020 <sup>221</sup>	37.65 <sup>19</sup>
18	49.46 <sup>74</sup>	65.22 <sup>140</sup>	37.981 <sup>153</sup>	70.39 <sup>11</sup>	56.082 <sup>213</sup>	61.39 <sup>73</sup>	52.799 <sup>221</sup>	37.46 <sup>62</sup>
28	48.72 <sup>71</sup>	63.82 <sup>188</sup>	37.828 <sup>147</sup>	70.28 <sup>39</sup>	55.869 <sup>204</sup>	60.66 <sup>99</sup>	52.578 <sup>214</sup>	36.84 <sup>106</sup>
Sept. 7	48.01 <sup>66</sup>	61.94 <sup>235</sup>	37.681 <sup>135</sup>	69.89 <sup>66</sup>	55.665 <sup>185</sup>	59.67 <sup>121</sup>	52.364 <sup>199</sup>	35.78 <sup>149</sup>
17	47.35 <sup>58</sup>	59.59 <sup>276</sup>	37.546 <sup>113</sup>	69.23 <sup>95</sup>	55.480 <sup>153</sup>	58.46 <sup>137</sup>	52.165 <sup>173</sup>	34.29 <sup>190</sup>
27	46.77 <sup>48</sup>	56.83 <sup>314</sup>	37.433 <sup>85</sup>	68.28 <sup>123</sup>	55.327 <sup>112</sup>	57.09 <sup>149</sup>	51.992 <sup>130</sup>	32.39 <sup>228</sup>
Okt. 7	46.29 <sup>38</sup>	53.69 <sup>344</sup>	37.348 <sup>48</sup>	67.05 <sup>151</sup>	55.215 <sup>60</sup>	55.60 <sup>153</sup>	51.853 <sup>97</sup>	30.11 <sup>263</sup>
17	45.91 <sup>26</sup>	50.25 <sup>368</sup>	37.300 <sup>6</sup>	65.54 <sup>177</sup>	55.155 <sup>0</sup>	54.07 <sup>149</sup>	51.756 <sup>48</sup>	27.48 <sup>293</sup>
27	45.65 <sup>11</sup>	46.57 <sup>385</sup>	37.294 <sup>42</sup>	63.77 <sup>203</sup>	55.155 <sup>65</sup>	52.58 <sup>138</sup>	51.708 <sup>8</sup>	24.55 <sup>318</sup>
Nov. 6	45.54 <sup>3</sup>	42.72 <sup>392</sup>	37.336 <sup>92</sup>	61.74 <sup>224</sup>	55.220 <sup>131</sup>	51.20 <sup>119</sup>	51.716 <sup>67</sup>	21.37 <sup>337</sup>
16	45.57 <sup>17</sup>	38.80 <sup>390</sup>	37.428 <sup>142</sup>	59.50 <sup>242</sup>	55.351 <sup>197</sup>	50.01 <sup>95</sup>	51.783 <sup>128</sup>	18.00 <sup>347</sup>
26	45.74 <sup>33</sup>	34.90 <sup>377</sup>	37.570 <sup>189</sup>	57.08 <sup>254</sup>	55.548 <sup>259</sup>	49.06 <sup>65</sup>	51.911 <sup>187</sup>	14.53 <sup>349</sup>
Dez. 6	46.07 <sup>48</sup>	31.13 <sup>354</sup>	37.759 <sup>233</sup>	54.54 <sup>259</sup>	55.807 <sup>312</sup>	48.41 <sup>30</sup>	52.098 <sup>242</sup>	11.04 <sup>341</sup>
16	46.55 <sup>60</sup>	27.59 <sup>319</sup>	37.992 <sup>269</sup>	51.95 <sup>258</sup>	56.119 <sup>350</sup>	48.11 <sup>5</sup>	52.340 <sup>290</sup>	7.63 <sup>323</sup>
26	47.15 <sup>71</sup>	24.40 <sup>275</sup>	38.261 <sup>297</sup>	49.37 <sup>247</sup>	56.475 <sup>390</sup>	48.16 <sup>42</sup>	52.630 <sup>328</sup>	4.40 <sup>294</sup>
36	47.86	21.65	38.558	46.90	56.865	48.58	52.958	1.46
Mittl. Ort	50.52	49.13	37.338	63.06	55.116	49.32	52.372	23.78
sec $\delta$ , tg $\delta$	3.714	+3.577	1.034	+0.262	1.365	-0.930	1.317	+0.857
a, a'	-0.2	-14.7	+2.8	-14.6	+3.9	-14.5	+2.3	-14.2
b, b'	-0.18	+0.68	-0.01	+0.69	+0.04	+0.69	-0.04	+0.71



# Obere Kulmination Greenwich

127\*

Tag	556) $\sigma$ Librae		557) $\psi$ Bootis		558) $\zeta$ Lupi		563) $\delta$ Bootis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	15 <sup>h</sup> 0 <sup>m</sup>	-25° 3'	15 <sup>h</sup> 2 <sup>m</sup>	+27° 9'	15 <sup>h</sup> 8 <sup>m</sup>	-51° 53'	15 <sup>h</sup> 13 <sup>m</sup>	+33° 30'
Jan. I	48.775 <sup>a</sup> <sub>335</sub>	49.03 <sup>a</sup> <sub>120</sub>	3.446 <sup>a</sup> <sub>314</sub>	37.92 <sup>a</sup> <sub>258</sub>	16.678 <sup>a</sup> <sub>451</sub>	10.44 <sup>a</sup> <sub>15</sub>	15.143 <sup>a</sup> <sub>318</sub>	65.00 <sup>a</sup> <sub>272</sub>
II	49.110 <sup>a</sup> <sub>346</sub>	50.23 <sup>a</sup> <sub>138</sub>	3.760 <sup>a</sup> <sub>330</sub>	35.34 <sup>a</sup> <sub>225</sub>	17.129 <sup>a</sup> <sub>472</sub>	10.59 <sup>a</sup> <sub>54</sub>	15.461 <sup>a</sup> <sub>339</sub>	62.28 <sup>a</sup> <sub>235</sub>
2I	49.456 <sup>a</sup> <sub>348</sub>	51.61 <sup>a</sup> <sub>149</sub>	4.090 <sup>a</sup> <sub>338</sub>	33.09 <sup>a</sup> <sub>184</sub>	17.601 <sup>a</sup> <sub>477</sub>	11.13 <sup>a</sup> <sub>91</sub>	15.800 <sup>a</sup> <sub>349</sub>	59.93 <sup>a</sup> <sub>190</sub>
3I	49.804 <sup>a</sup> <sub>342</sub>	53.10 <sup>a</sup> <sub>156</sub>	4.428 <sup>a</sup> <sub>334</sub>	31.25 <sup>a</sup> <sub>137</sub>	18.078 <sup>a</sup> <sub>472</sub>	12.04 <sup>a</sup> <sub>125</sub>	16.149 <sup>a</sup> <sub>349</sub>	58.03 <sup>a</sup> <sub>138</sub>
Febr. 10	50.146 <sup>a</sup> <sub>327</sub>	54.66 <sup>a</sup> <sub>158</sub>	4.762 <sup>a</sup> <sub>322</sub>	29.88 <sup>a</sup> <sub>87</sub>	18.550 <sup>a</sup> <sub>457</sub>	13.29 <sup>a</sup> <sub>155</sub>	16.498 <sup>a</sup> <sub>341</sub>	56.65 <sup>a</sup> <sub>83</sub>
20	50.473 <sup>a</sup> <sub>308</sub>	56.24 <sup>a</sup> <sub>155</sub>	5.084 <sup>a</sup> <sub>303</sub>	29.01 <sup>a</sup> <sub>35</sub>	19.007 <sup>a</sup> <sub>433</sub>	14.84 <sup>a</sup> <sub>180</sub>	16.839 <sup>a</sup> <sub>323</sub>	55.82 <sup>a</sup> <sub>27</sub>
März 2	50.781 <sup>a</sup> <sub>283</sub>	57.79 <sup>a</sup> <sub>150</sub>	5.387 <sup>a</sup> <sub>279</sub>	28.66 <sup>a</sup> <sub>17</sub>	19.440 <sup>a</sup> <sub>402</sub>	16.64 <sup>a</sup> <sub>200</sub>	17.162 <sup>a</sup> <sub>298</sub>	55.55 <sup>a</sup> <sub>28</sub>
12	51.064 <sup>a</sup> <sub>257</sub>	59.29 <sup>a</sup> <sub>140</sub>	5.666 <sup>a</sup> <sub>249</sub>	28.83 <sup>a</sup> <sub>64</sub>	19.842 <sup>a</sup> <sub>366</sub>	18.64 <sup>a</sup> <sub>215</sub>	17.460 <sup>a</sup> <sub>269</sub>	55.83 <sup>a</sup> <sub>81</sub>
22	51.321 <sup>a</sup> <sub>228</sub>	60.69 <sup>a</sup> <sub>130</sub>	5.915 <sup>a</sup> <sub>216</sub>	29.47 <sup>a</sup> <sub>108</sub>	20.208 <sup>a</sup> <sub>328</sub>	20.79 <sup>a</sup> <sub>226</sub>	17.729 <sup>a</sup> <sub>236</sub>	56.64 <sup>a</sup> <sub>127</sub>
Apr. I	51.549 <sup>a</sup> <sub>198</sub>	61.99 <sup>a</sup> <sub>119</sub>	6.131 <sup>a</sup> <sub>183</sub>	30.55 <sup>a</sup> <sub>144</sub>	20.536 <sup>a</sup> <sub>285</sub>	23.05 <sup>a</sup> <sub>233</sub>	17.965 <sup>a</sup> <sub>201</sub>	57.91 <sup>a</sup> <sub>167</sub>
II	51.747 <sup>a</sup> <sub>168</sub>	63.18 <sup>a</sup> <sub>106</sub>	6.314 <sup>a</sup> <sub>148</sub>	31.99 <sup>a</sup> <sub>174</sub>	20.821 <sup>a</sup> <sub>241</sub>	25.38 <sup>a</sup> <sub>236</sub>	18.166 <sup>a</sup> <sub>163</sub>	59.58 <sup>a</sup> <sub>198</sub>
2I	51.915 <sup>a</sup> <sub>137</sub>	64.24 <sup>a</sup> <sub>95</sub>	6.462 <sup>a</sup> <sub>113</sub>	33.73 <sup>a</sup> <sub>194</sub>	21.062 <sup>a</sup> <sub>196</sub>	27.74 <sup>a</sup> <sub>234</sub>	18.329 <sup>a</sup> <sub>125</sub>	61.56 <sup>a</sup> <sub>221</sub>
Mai I	52.052 <sup>a</sup> <sub>107</sub>	65.19 <sup>a</sup> <sub>82</sub>	6.575 <sup>a</sup> <sub>78</sub>	35.67 <sup>a</sup> <sub>207</sub>	21.258 <sup>a</sup> <sub>147</sub>	30.08 <sup>a</sup> <sub>228</sub>	18.454 <sup>a</sup> <sub>88</sub>	63.77 <sup>a</sup> <sub>235</sub>
10	52.159 <sup>a</sup> <sub>74</sub>	66.01 <sup>a</sup> <sub>71</sub>	6.653 <sup>a</sup> <sub>44</sub>	37.74 <sup>a</sup> <sub>211</sub>	21.405 <sup>a</sup> <sub>99</sub>	32.36 <sup>a</sup> <sub>219</sub>	18.542 <sup>a</sup> <sub>50</sub>	66.12 <sup>a</sup> <sub>239</sub>
20	52.233 <sup>a</sup> <sub>43</sub>	66.72 <sup>a</sup> <sub>59</sub>	6.697 <sup>a</sup> <sub>11</sub>	39.85 <sup>a</sup> <sub>208</sub>	21.504 <sup>a</sup> <sub>49</sub>	34.55 <sup>a</sup> <sub>206</sub>	18.592 <sup>a</sup> <sub>12</sub>	68.51 <sup>a</sup> <sub>234</sub>
30	52.276 <sup>a</sup> <sub>12</sub>	67.31 <sup>a</sup> <sub>47</sub>	6.708 <sup>a</sup> <sub>21</sub>	41.93 <sup>a</sup> <sub>198</sub>	21.553 <sup>a</sup> <sub>1</sub>	36.61 <sup>a</sup> <sub>188</sub>	18.604 <sup>a</sup> <sub>23</sub>	70.85 <sup>a</sup> <sub>223</sub>
Juni. 9	52.288 <sup>a</sup> <sub>21</sub>	67.78 <sup>a</sup> <sub>35</sub>	6.687 <sup>a</sup> <sub>53</sub>	43.91 <sup>a</sup> <sub>182</sub>	21.552 <sup>a</sup> <sub>52</sub>	38.49 <sup>a</sup> <sub>167</sub>	18.581 <sup>a</sup> <sub>56</sub>	73.08 <sup>a</sup> <sub>205</sub>
19	52.267 <sup>a</sup> <sub>51</sub>	68.13 <sup>a</sup> <sub>22</sub>	6.634 <sup>a</sup> <sub>81</sub>	45.73 <sup>a</sup> <sub>160</sub>	21.500 <sup>a</sup> <sub>99</sub>	40.16 <sup>a</sup> <sub>141</sub>	18.525 <sup>a</sup> <sub>89</sub>	75.13 <sup>a</sup> <sub>180</sub>
29	52.216 <sup>a</sup> <sub>80</sub>	68.35 <sup>a</sup> <sub>10</sub>	6.553 <sup>a</sup> <sub>107</sub>	47.33 <sup>a</sup> <sub>133</sub>	21.401 <sup>a</sup> <sub>145</sub>	41.57 <sup>a</sup> <sub>113</sub>	18.436 <sup>a</sup> <sub>119</sub>	76.93 <sup>a</sup> <sub>151</sub>
Juli 9	52.136 <sup>a</sup> <sub>107</sub>	68.45 <sup>a</sup> <sub>4</sub>	6.446 <sup>a</sup> <sub>131</sub>	48.66 <sup>a</sup> <sub>105</sub>	21.256 <sup>a</sup> <sub>185</sub>	42.70 <sup>a</sup> <sub>81</sub>	18.317 <sup>a</sup> <sub>145</sub>	78.44 <sup>a</sup> <sub>118</sub>
19	52.029 <sup>a</sup> <sub>130</sub>	68.41 <sup>a</sup> <sub>17</sub>	6.315 <sup>a</sup> <sub>151</sub>	49.71 <sup>a</sup> <sub>72</sub>	21.071 <sup>a</sup> <sub>220</sub>	43.51 <sup>a</sup> <sub>46</sub>	18.172 <sup>a</sup> <sub>167</sub>	79.62 <sup>a</sup> <sub>82</sub>
29	51.899 <sup>a</sup> <sub>147</sub>	68.24 <sup>a</sup> <sub>31</sub>	6.164 <sup>a</sup> <sub>166</sub>	50.43 <sup>a</sup> <sub>39</sub>	20.851 <sup>a</sup> <sub>246</sub>	43.97 <sup>a</sup> <sub>10</sub>	18.005 <sup>a</sup> <sub>185</sub>	80.44 <sup>a</sup> <sub>43</sub>
Aug. 8	51.752 <sup>a</sup> <sub>159</sub>	67.93 <sup>a</sup> <sub>43</sub>	5.998 <sup>a</sup> <sub>175</sub>	50.82 <sup>a</sup> <sub>3</sub>	20.605 <sup>a</sup> <sub>262</sub>	44.07 <sup>a</sup> <sub>26</sub>	17.820 <sup>a</sup> <sub>195</sub>	80.87 <sup>a</sup> <sub>4</sub>
18	51.593 <sup>a</sup> <sub>163</sub>	67.50 <sup>a</sup> <sub>54</sub>	5.823 <sup>a</sup> <sub>178</sub>	50.85 <sup>a</sup> <sub>33</sub>	20.343 <sup>a</sup> <sub>268</sub>	43.81 <sup>a</sup> <sub>63</sub>	17.625 <sup>a</sup> <sub>199</sub>	80.91 <sup>a</sup> <sub>37</sub>
28	51.430 <sup>a</sup> <sub>158</sub>	66.96 <sup>a</sup> <sub>63</sub>	5.645 <sup>a</sup> <sub>173</sub>	50.52 <sup>a</sup> <sub>69</sub>	20.075 <sup>a</sup> <sub>260</sub>	43.18 <sup>a</sup> <sub>97</sub>	17.426 <sup>a</sup> <sub>196</sub>	80.54 <sup>a</sup> <sub>77</sub>
Sept. 7	51.272 <sup>a</sup> <sub>145</sub>	66.33 <sup>a</sup> <sub>69</sub>	5.472 <sup>a</sup> <sub>160</sub>	49.83 <sup>a</sup> <sub>105</sub>	19.815 <sup>a</sup> <sub>239</sub>	42.21 <sup>a</sup> <sub>127</sub>	17.230 <sup>a</sup> <sub>184</sub>	79.77 <sup>a</sup> <sub>117</sub>
17	51.127 <sup>a</sup> <sub>121</sub>	65.64 <sup>a</sup> <sub>72</sub>	5.312 <sup>a</sup> <sub>139</sub>	48.78 <sup>a</sup> <sub>141</sub>	19.576 <sup>a</sup> <sub>204</sub>	40.94 <sup>a</sup> <sub>153</sub>	17.046 <sup>a</sup> <sub>163</sub>	78.60 <sup>a</sup> <sub>157</sub>
27	51.006 <sup>a</sup> <sub>89</sub>	64.92 <sup>a</sup> <sub>70</sub>	5.173 <sup>a</sup> <sub>109</sub>	47.37 <sup>a</sup> <sub>175</sub>	19.372 <sup>a</sup> <sub>157</sub>	39.41 <sup>a</sup> <sub>173</sub>	16.883 <sup>a</sup> <sub>133</sub>	77.03 <sup>a</sup> <sub>193</sub>
Okt. 7	50.917 <sup>a</sup> <sub>48</sub>	64.22 <sup>a</sup> <sub>63</sub>	5.064 <sup>a</sup> <sub>72</sub>	45.62 <sup>a</sup> <sub>207</sub>	19.215 <sup>a</sup> <sub>97</sub>	37.68 <sup>a</sup> <sub>186</sub>	16.750 <sup>a</sup> <sub>95</sub>	75.10 <sup>a</sup> <sub>229</sub>
17	50.869 <sup>a</sup> <sub>0</sub>	63.59 <sup>a</sup> <sub>52</sub>	4.992 <sup>a</sup> <sub>27</sub>	43.55 <sup>a</sup> <sub>237</sub>	19.118 <sup>a</sup> <sub>29</sub>	35.82 <sup>a</sup> <sub>189</sub>	16.655 <sup>a</sup> <sub>50</sub>	72.81 <sup>a</sup> <sub>260</sub>
27	50.869 <sup>a</sup> <sub>53</sub>	63.07 <sup>a</sup> <sub>35</sub>	4.965 <sup>a</sup> <sub>22</sub>	41.18 <sup>a</sup> <sub>263</sub>	19.089 <sup>a</sup> <sub>46</sub>	33.93 <sup>a</sup> <sub>184</sub>	16.605 <sup>a</sup> <sub>2</sub>	70.21 <sup>a</sup> <sub>286</sub>
Nov. 6	50.922 <sup>a</sup> <sub>108</sub>	62.72 <sup>a</sup> <sub>15</sub>	4.987 <sup>a</sup> <sub>74</sub>	38.55 <sup>a</sup> <sub>284</sub>	19.135 <sup>a</sup> <sub>125</sub>	32.09 <sup>a</sup> <sub>171</sub>	16.607 <sup>a</sup> <sub>57</sub>	67.35 <sup>a</sup> <sub>309</sub>
16	51.030 <sup>a</sup> <sub>162</sub>	62.57 <sup>a</sup> <sub>9</sub>	5.061 <sup>a</sup> <sub>128</sub>	35.71 <sup>a</sup> <sub>298</sub>	19.260 <sup>a</sup> <sub>203</sub>	30.38 <sup>a</sup> <sub>150</sub>	16.664 <sup>a</sup> <sub>113</sub>	64.26 <sup>a</sup> <sub>323</sub>
26	51.192 <sup>a</sup> <sub>214</sub>	62.66 <sup>a</sup> <sub>35</sub>	5.189 <sup>a</sup> <sub>180</sub>	32.73 <sup>a</sup> <sub>306</sub>	19.463 <sup>a</sup> <sub>275</sub>	28.88 <sup>a</sup> <sub>121</sub>	16.777 <sup>a</sup> <sub>168</sub>	61.03 <sup>a</sup> <sub>329</sub>
Dez. 6	51.406 <sup>a</sup> <sub>260</sub>	63.01 <sup>a</sup> <sub>61</sub>	5.369 <sup>a</sup> <sub>227</sub>	29.67 <sup>a</sup> <sub>306</sub>	19.738 <sup>a</sup> <sub>340</sub>	27.67 <sup>a</sup> <sub>88</sub>	16.945 <sup>a</sup> <sub>219</sub>	57.74 <sup>a</sup> <sub>327</sub>
16	51.666 <sup>a</sup> <sub>297</sub>	63.62 <sup>a</sup> <sub>87</sub>	5.596 <sup>a</sup> <sub>269</sub>	26.61 <sup>a</sup> <sub>296</sub>	20.078 <sup>a</sup> <sub>395</sub>	26.79 <sup>a</sup> <sub>49</sub>	17.164 <sup>a</sup> <sub>265</sub>	54.47 <sup>a</sup> <sub>314</sub>
26	51.963 <sup>a</sup> <sub>326</sub>	64.49 <sup>a</sup> <sub>110</sub>	5.865 <sup>a</sup> <sub>301</sub>	23.65 <sup>a</sup> <sub>276</sub>	20.473 <sup>a</sup> <sub>436</sub>	26.30 <sup>a</sup> <sub>9</sub>	17.429 <sup>a</sup> <sub>302</sub>	51.33 <sup>a</sup> <sub>293</sub>
36	52.289 <sup>a</sup>	65.59 <sup>a</sup>	6.166 <sup>a</sup>	20.89 <sup>a</sup>	20.909 <sup>a</sup>	26.21 <sup>a</sup>	17.731 <sup>a</sup>	48.40 <sup>a</sup>

Mittl. Ort	50.685	61.60	5.241	39.94	19.184	29.10	17.026	68.30
sec $\delta$ , tg $\delta$	1.104	-0.468	1.124	+0.513	1.620	-1.275	1.199	+0.662
a, a'	+3.5	-14.1	+2.6	-14.0	+4.3	-13.6	+2.4	-13.3
b, b'	+0.02	+0.71	-0.02	+0.71	+0.06	+0.73	-0.03	+0.75



## Scheinbare Sternörter 1945

Tag	560) $\gamma$ Triang. austr.			565) $\iota$ H. Ursae min.			564) $\beta$ Librae			566) $\phi^1$ Lupi		
	AR.	Dekl.		AR.	Dekl.		AR.	Dekl.		AR.	Dekl.	
1945	15 <sup>h</sup> 13 <sup>m</sup>	-68° 28'		15 <sup>h</sup> 13 <sup>m</sup>	+67° 32'		15 <sup>h</sup> 14 <sup>m</sup>	-9° 10'		15 <sup>h</sup> 18 <sup>m</sup>	-36° 3'	
Jan. I	40.90 <sup>a</sup> <sub>70</sub>	21.00 <sup>"</sup> <sub>51</sub>		56.99 <sup>a</sup> <sub>54</sub>	70.63 <sup>"</sup> <sub>276</sub>		0.725 <sup>b</sup> <sub>303</sub>	44.66 <sup>"</sup> <sub>169</sub>		16.272 <sup>a</sup> <sub>358</sub>	33.05 <sup>"</sup> <sub>65</sub>	
II	41.60 <sub>73</sub>	20.49 <sub>2</sub>		57.53 <sub>60</sub>	67.87 <sub>221</sub>		1.028 <sub>317</sub>	46.35 <sub>170</sub>		16.630 <sub>376</sub>	33.70 <sub>92</sub>	
2I	42.33 <sub>74</sub>	20.47 <sub>46</sub>		58.13 <sub>64</sub>	65.66 <sub>161</sub>		1.345 <sub>321</sub>	48.05 <sub>165</sub>		17.006 <sub>381</sub>	34.62 <sub>114</sub>	
3I	43.07 <sub>75</sub>	20.93 <sub>93</sub>		58.77 <sub>65</sub>	64.05 <sub>95</sub>		1.666 <sub>317</sub>	49.70 <sub>154</sub>		17.387 <sub>378</sub>	35.76 <sub>132</sub>	
Febr. 10	43.82 <sub>73</sub>	21.86 <sub>137</sub>		59.42 <sub>65</sub>	63.10 <sub>26</sub>		1.983 <sub>307</sub>	51.24 <sub>139</sub>		17.765 <sub>366</sub>	37.08 <sub>147</sub>	
20	44.55 <sub>70</sub>	23.23 <sub>175</sub>		60.07 <sub>61</sub>	62.84 <sub>41</sub>		2.290 <sub>291</sub>	52.63 <sub>120</sub>		18.131 <sub>348</sub>	38.55 <sub>157</sub>	
März 2	45.25 <sub>65</sub>	24.98 <sub>210</sub>		60.68 <sub>58</sub>	63.25 <sub>106</sub>		2.581 <sub>269</sub>	53.83 <sub>98</sub>		18.479 <sub>325</sub>	40.12 <sub>162</sub>	
12	45.90 <sub>59</sub>	27.08 <sub>239</sub>		61.26 <sub>51</sub>	64.31 <sub>165</sub>		2.850 <sub>246</sub>	54.81 <sub>76</sub>		18.804 <sub>299</sub>	41.74 <sub>165</sub>	
22	46.49 <sub>53</sub>	29.47 <sub>262</sub>		61.77 <sub>44</sub>	65.96 <sub>215</sub>		3.096 <sub>220</sub>	55.57 <sub>54</sub>		19.103 <sub>269</sub>	43.39 <sub>164</sub>	
Apr. I	47.02 <sub>46</sub>	32.09 <sub>279</sub>		62.21 <sub>35</sub>	68.11 <sub>257</sub>		3.316 <sub>193</sub>	56.11 <sub>33</sub>		19.372 <sub>238</sub>	45.03 <sub>161</sub>	
II	47.48 <sub>39</sub>	34.88 <sub>292</sub>		62.56 <sub>26</sub>	70.68 <sub>286</sub>		3.509 <sub>165</sub>	56.44 <sub>14</sub>		19.610 <sub>206</sub>	46.64 <sub>156</sub>	
2I	47.87 <sub>30</sub>	37.80 <sub>298</sub>		62.82 <sub>16</sub>	73.54 <sub>305</sub>		3.674 <sub>138</sub>	56.58 <sub>2</sub>		19.816 <sub>171</sub>	48.20 <sub>150</sub>	
Mai I	48.17 <sub>23</sub>	40.78 <sub>298</sub>		62.98 <sub>6</sub>	76.59 <sub>312</sub>		3.812 <sub>109</sub>	56.56 <sub>16</sub>		19.987 <sub>137</sub>	49.70 <sub>142</sub>	
II	48.40 <sub>13</sub>	43.76 <sub>292</sub>		63.04 <sub>2</sub>	79.71 <sub>309</sub>		3.921 <sub>80</sub>	56.40 <sub>26</sub>		20.124 <sub>101</sub>	51.12 <sub>132</sub>	
20	48.53 <sub>4</sub>	46.68 <sub>281</sub>		63.02 <sub>12</sub>	82.80 <sub>294</sub>		4.001 <sub>51</sub>	56.14 <sub>34</sub>		20.225 <sub>64</sub>	52.44 <sub>121</sub>	
30	48.57 <sub>5</sub>	49.49 <sub>264</sub>		62.90 <sub>20</sub>	85.74 <sub>271</sub>		4.052 <sub>22</sub>	55.80 <sub>39</sub>		20.289 <sub>27</sub>	53.65 <sub>108</sub>	
Juni 9	48.52 <sub>13</sub>	52.13 <sub>239</sub>		62.70 <sub>28</sub>	88.45 <sub>239</sub>		4.074 <sub>8</sub>	55.41 <sub>42</sub>		20.316 <sub>12</sub>	54.73 <sub>94</sub>	
19	48.39 <sub>21</sub>	54.52 <sub>210</sub>		62.42 <sub>35</sub>	90.84 <sub>201</sub>		4.066 <sub>37</sub>	54.99 <sub>44</sub>		20.304 <sub>49</sub>	55.67 <sub>76</sub>	
29	48.18 <sub>30</sub>	56.62 <sub>175</sub>		62.07 <sub>41</sub>	92.85 <sub>158</sub>		4.029 <sub>65</sub>	54.55 <sub>45</sub>		20.255 <sub>84</sub>	56.43 <sub>59</sub>	
Juli 9	47.88 <sub>36</sub>	58.37 <sub>136</sub>		61.66 <sub>46</sub>	94.43 <sub>111</sub>		3.964 <sub>91</sub>	54.10 <sub>44</sub>		20.171 <sub>118</sub>	57.02 <sub>38</sub>	
19	47.52 <sub>42</sub>	59.73 <sub>91</sub>		61.20 <sub>49</sub>	95.54 <sub>60</sub>		3.873 <sub>112</sub>	53.66 <sub>42</sub>		20.053 <sub>146</sub>	57.40 <sub>16</sub>	
29	47.10 <sub>46</sub>	60.64 <sub>45</sub>		60.71 <sub>52</sub>	96.14 <sub>7</sub>		3.761 <sub>131</sub>	53.24 <sub>40</sub>		19.907 <sub>169</sub>	57.56 <sub>6</sub>	
Aug. 8	46.64 <sub>49</sub>	61.09 <sub>3</sub>		60.19 <sub>53</sub>	96.21 <sub>45</sub>		3.630 <sub>144</sub>	52.84 <sub>36</sub>		19.738 <sub>185</sub>	57.50 <sub>29</sub>	
18	46.15 <sub>50</sub>	61.06 <sub>51</sub>		59.66 <sub>53</sub>	95.76 <sub>97</sub>		3.486 <sub>150</sub>	52.48 <sub>32</sub>		19.553 <sub>193</sub>	57.21 <sub>50</sub>	
28	45.65 <sub>48</sub>	60.55 <sub>99</sub>		59.13 <sub>51</sub>	94.79 <sub>149</sub>		3.336 <sub>148</sub>	52.16 <sub>25</sub>		19.360 <sub>190</sub>	56.71 <sub>71</sub>	
Sept. 7	45.17 <sub>44</sub>	59.56 <sub>142</sub>		58.62 <sub>48</sub>	93.30 <sub>196</sub>		3.188 <sub>138</sub>	51.91 <sub>17</sub>		19.170 <sub>177</sub>	56.00 <sub>88</sub>	
17	44.73 <sub>38</sub>	58.14 <sub>181</sub>		58.14 <sub>44</sub>	91.34 <sub>242</sub>		3.050 <sub>119</sub>	51.74 <sub>7</sub>		18.993 <sub>154</sub>	55.12 <sub>101</sub>	
27	44.35 <sub>31</sub>	56.33 <sub>214</sub>		57.70 <sub>38</sub>	88.92 <sub>284</sub>		2.931 <sub>91</sub>	51.67 <sub>6</sub>		18.839 <sub>119</sub>	54.11 <sub>110</sub>	
Okt. 7	44.04 <sub>21</sub>	54.19 <sub>237</sub>		57.32 <sub>30</sub>	86.08 <sub>319</sub>		2.840 <sub>56</sub>	51.73 <sub>22</sub>		18.720 <sub>74</sub>	53.01 <sub>113</sub>	
17	43.83 <sub>10</sub>	51.82 <sub>251</sub>		57.02 <sub>22</sub>	82.89 <sub>350</sub>		2.784 <sub>13</sub>	51.95 <sub>40</sub>		18.646 <sub>23</sub>	51.88 <sub>110</sub>	
27	43.73 <sub>2</sub>	49.31 <sub>255</sub>		56.80 <sub>12</sub>	79.39 <sub>373</sub>		2.771 <sub>34</sub>	52.35 <sub>60</sub>		18.623 <sub>35</sub>	50.78 <sub>101</sub>	
Nov. 6	43.75 <sub>15</sub>	46.76 <sub>248</sub>		56.68 <sub>1</sub>	75.66 <sub>387</sub>		2.805 <sub>84</sub>	52.95 <sub>81</sub>		18.658 <sub>96</sub>	49.77 <sub>85</sub>	
16	43.90 <sub>28</sub>	44.28 <sub>231</sub>		56.67 <sub>9</sub>	71.79 <sub>393</sub>		2.889 <sub>135</sub>	53.76 <sub>103</sub>		18.754 <sub>158</sub>	48.92 <sub>64</sub>	
26	44.18 <sub>39</sub>	41.97 <sub>204</sub>		56.76 <sub>21</sub>	67.86 <sub>387</sub>		3.024 <sub>184</sub>	54.79 <sub>124</sub>		18.912 <sub>216</sub>	48.28 <sub>38</sub>	
Dez. 6	44.57 <sub>50</sub>	39.93 <sub>168</sub>		56.97 <sub>31</sub>	63.99 <sub>372</sub>		3.208 <sub>227</sub>	56.03 <sub>142</sub>		19.128 <sub>268</sub>	47.90 <sub>10</sub>	
16	45.07 <sub>59</sub>	38.25 <sub>127</sub>		57.28 <sub>41</sub>	60.27 <sub>344</sub>		3.435 <sub>265</sub>	57.45 <sub>157</sub>		19.396 <sub>313</sub>	47.80 <sub>19</sub>	
26	45.66 <sub>67</sub>	36.98 <sub>80</sub>		57.69 <sub>50</sub>	56.83 <sub>306</sub>		3.700 <sub>293</sub>	59.02 <sub>166</sub>		19.709 <sub>346</sub>	47.99 <sub>50</sub>	
36	46.33	36.18		58.19	53.77		3.993	60.68		20.055	48.49	
Mittl. Ort	44.61	42.03		59.79	79.16		2.587	52.47		18.449	47.77	
sec $\delta$ , tg $\delta$	2.726	-2.536		2.619	+2.421		1.013	-0.162		1.237	-0.728	
a, a'	+5.6	-13.3		+0.7	-13.3		+3.2	-13.3		+3.8	-13.0	
b, b'	+0.11	+0.75		-0.11	+0.75		+0.01	+0.75		+0.03	+0.76	



# Obere Kulmination Greenwich

129\*

Tag	569) $\gamma$ Ursae min.		568) $\mu$ Bootis <i>pr</i>		571) $\iota$ Draconis		572) $\beta$ Coronae bor.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	15 <sup>h</sup> 20 <sup>m</sup>	+72° 1'	15 <sup>h</sup> 22 <sup>m</sup>	+37° 33'	15 <sup>h</sup> 23 <sup>m</sup>	+59° 9'	15 <sup>h</sup> 25 <sup>m</sup>	+29° 17'
Jan. I	44.54 <sup>63</sup>	38.51 <sup>276</sup>	22.712 <sup>319</sup>	64.70 <sup>281</sup>	39.665 <sup>421</sup>	21.91 <sup>290</sup>	31.676 <sup>301</sup>	37.14 <sup>271</sup>
II	45.17 <sup>70</sup>	35.75 <sup>222</sup>	23.031 <sup>343</sup>	61.89 <sup>242</sup>	40.086 <sup>465</sup>	19.01 <sup>239</sup>	31.977 <sup>323</sup>	34.43 <sup>239</sup>
21	45.87 <sup>76</sup>	33.53 <sup>161</sup>	23.374 <sup>358</sup>	59.47 <sup>195</sup>	40.551 <sup>493</sup>	16.62 <sup>182</sup>	32.300 <sup>334</sup>	32.04 <sup>197</sup>
31	46.63 <sup>78</sup>	31.92 <sup>96</sup>	23.732 <sup>360</sup>	57.52 <sup>141</sup>	41.044 <sup>505</sup>	14.80 <sup>118</sup>	32.634 <sup>337</sup>	30.07 <sup>149</sup>
Febr. 10	47.41 <sup>78</sup>	30.96 <sup>27</sup>	24.092 <sup>354</sup>	56.11 <sup>84</sup>	41.549 <sup>501</sup>	13.62 <sup>52</sup>	32.971 <sup>330</sup>	28.58 <sup>98</sup>
20	48.19 <sup>76</sup>	30.69 <sup>41</sup>	24.446 <sup>338</sup>	55.27 <sup>25</sup>	42.050 <sup>483</sup>	13.10 <sup>16</sup>	33.301 <sup>315</sup>	27.60 <sup>44</sup>
März 2	48.95 <sup>70</sup>	31.10 <sup>106</sup>	24.784 <sup>314</sup>	55.02 <sup>34</sup>	42.533 <sup>450</sup>	13.26 <sup>81</sup>	33.616 <sup>294</sup>	27.16 <sup>9</sup>
12	49.65 <sup>63</sup>	32.16 <sup>165</sup>	25.098 <sup>285</sup>	55.36 <sup>88</sup>	42.983 <sup>406</sup>	14.07 <sup>141</sup>	33.910 <sup>269</sup>	27.25 <sup>61</sup>
22	50.28 <sup>54</sup>	33.81 <sup>216</sup>	25.383 <sup>252</sup>	56.24 <sup>137</sup>	43.389 <sup>352</sup>	15.48 <sup>194</sup>	34.179 <sup>238</sup>	27.86 <sup>107</sup>
Apr. I	50.82 <sup>43</sup>	35.97 <sup>258</sup>	25.635 <sup>215</sup>	57.61 <sup>179</sup>	43.741 <sup>292</sup>	17.42 <sup>237</sup>	34.417 <sup>206</sup>	28.93 <sup>148</sup>
II	51.25 <sup>32</sup>	38.55 <sup>289</sup>	25.850 <sup>176</sup>	59.40 <sup>213</sup>	44.033 <sup>227</sup>	19.79 <sup>271</sup>	34.623 <sup>173</sup>	30.41 <sup>179</sup>
21	51.57 <sup>20</sup>	41.44 <sup>307</sup>	26.026 <sup>136</sup>	61.53 <sup>236</sup>	44.260 <sup>159</sup>	22.50 <sup>294</sup>	34.796 <sup>137</sup>	32.20 <sup>204</sup>
Mai I	51.77 <sup>8</sup>	44.51 <sup>316</sup>	26.162 <sup>95</sup>	63.89 <sup>250</sup>	44.419 <sup>91</sup>	25.44 <sup>305</sup>	34.933 <sup>101</sup>	34.24 <sup>220</sup>
II	51.85 <sup>5</sup>	47.67 <sup>312</sup>	26.257 <sup>55</sup>	66.39 <sup>256</sup>	44.510 <sup>22</sup>	28.49 <sup>305</sup>	35.034 <sup>66</sup>	36.44 <sup>226</sup>
20	51.80 <sup>15</sup>	50.79 <sup>298</sup>	26.312 <sup>15</sup>	68.95 <sup>252</sup>	44.532 <sup>44</sup>	31.54 <sup>296</sup>	35.100 <sup>31</sup>	38.70 <sup>225</sup>
30	51.65 <sup>27</sup>	53.77 <sup>275</sup>	26.327 <sup>24</sup>	71.47 <sup>240</sup>	44.488 <sup>107</sup>	34.50 <sup>277</sup>	35.131 <sup>4</sup>	40.95 <sup>217</sup>
Juni 9	51.38 <sup>36</sup>	56.52 <sup>244</sup>	26.303 <sup>60</sup>	73.87 <sup>220</sup>	44.381 <sup>166</sup>	37.27 <sup>249</sup>	35.127 <sup>39</sup>	43.12 <sup>201</sup>
19	51.02 <sup>45</sup>	58.96 <sup>206</sup>	26.243 <sup>96</sup>	76.07 <sup>195</sup>	44.215 <sup>219</sup>	39.76 <sup>216</sup>	35.088 <sup>71</sup>	45.13 <sup>180</sup>
29	50.57 <sup>52</sup>	61.02 <sup>162</sup>	26.147 <sup>128</sup>	78.02 <sup>164</sup>	43.996 <sup>267</sup>	41.92 <sup>175</sup>	35.017 <sup>101</sup>	46.93 <sup>154</sup>
Juli 9	50.05 <sup>59</sup>	62.64 <sup>115</sup>	26.019 <sup>156</sup>	79.66 <sup>129</sup>	43.729 <sup>307</sup>	43.67 <sup>131</sup>	34.916 <sup>128</sup>	48.47 <sup>124</sup>
19	49.46 <sup>63</sup>	63.79 <sup>64</sup>	25.863 <sup>181</sup>	80.95 <sup>91</sup>	43.422 <sup>340</sup>	44.98 <sup>83</sup>	34.788 <sup>153</sup>	49.71 <sup>92</sup>
29	48.83 <sup>66</sup>	64.43 <sup>12</sup>	25.682 <sup>200</sup>	81.86 <sup>50</sup>	43.082 <sup>363</sup>	45.81 <sup>33</sup>	34.635 <sup>171</sup>	50.63 <sup>56</sup>
Aug. 8	48.17 <sup>69</sup>	64.55 <sup>41</sup>	25.482 <sup>212</sup>	82.36 <sup>8</sup>	42.719 <sup>378</sup>	46.14 <sup>18</sup>	34.464 <sup>184</sup>	51.19 <sup>19</sup>
18	47.48 <sup>68</sup>	64.14 <sup>93</sup>	25.270 <sup>218</sup>	82.44 <sup>35</sup>	42.341 <sup>382</sup>	45.96 <sup>69</sup>	34.280 <sup>192</sup>	51.38 <sup>19</sup>
28	46.80 <sup>66</sup>	63.21 <sup>145</sup>	25.052 <sup>216</sup>	82.09 <sup>78</sup>	41.959 <sup>374</sup>	45.27 <sup>120</sup>	34.088 <sup>190</sup>	51.19 <sup>57</sup>
Sept. 7	46.14 <sup>63</sup>	61.76 <sup>193</sup>	24.836 <sup>204</sup>	81.31 <sup>120</sup>	41.585 <sup>355</sup>	44.07 <sup>169</sup>	33.898 <sup>181</sup>	50.62 <sup>96</sup>
17	45.51 <sup>57</sup>	59.83 <sup>239</sup>	24.632 <sup>184</sup>	80.11 <sup>161</sup>	41.230 <sup>324</sup>	42.38 <sup>215</sup>	33.717 <sup>162</sup>	49.66 <sup>133</sup>
27	44.94 <sup>50</sup>	57.44 <sup>281</sup>	24.448 <sup>154</sup>	78.50 <sup>201</sup>	40.906 <sup>281</sup>	40.23 <sup>258</sup>	33.555 <sup>135</sup>	48.33 <sup>169</sup>
Okt. 7	44.44 <sup>42</sup>	54.63 <sup>317</sup>	24.294 <sup>116</sup>	76.49 <sup>238</sup>	40.625 <sup>226</sup>	37.65 <sup>297</sup>	33.420 <sup>100</sup>	46.64 <sup>205</sup>
17	44.02 <sup>31</sup>	51.46 <sup>347</sup>	24.178 <sup>70</sup>	74.11 <sup>270</sup>	40.399 <sup>160</sup>	34.68 <sup>330</sup>	33.320 <sup>56</sup>	44.59 <sup>236</sup>
27	43.71 <sup>19</sup>	47.99 <sup>371</sup>	24.108 <sup>17</sup>	71.41 <sup>208</sup>	40.239 <sup>86</sup>	31.38 <sup>356</sup>	33.264 <sup>8</sup>	42.23 <sup>263</sup>
Nov. 6	43.52 <sup>7</sup>	44.28 <sup>386</sup>	24.091 <sup>40</sup>	68.43 <sup>321</sup>	40.153 <sup>5</sup>	27.82 <sup>375</sup>	33.256 <sup>45</sup>	39.60 <sup>287</sup>
16	43.45 <sup>7</sup>	40.42 <sup>391</sup>	24.131 <sup>99</sup>	65.22 <sup>335</sup>	40.148 <sup>79</sup>	24.07 <sup>385</sup>	33.301 <sup>100</sup>	36.73 <sup>305</sup>
26	43.52 <sup>20</sup>	36.51 <sup>387</sup>	24.230 <sup>157</sup>	61.87 <sup>342</sup>	40.227 <sup>165</sup>	20.22 <sup>384</sup>	33.401 <sup>154</sup>	33.68 <sup>313</sup>
Dez. 6	43.72 <sup>33</sup>	32.64 <sup>370</sup>	24.387 <sup>212</sup>	58.45 <sup>339</sup>	40.392 <sup>247</sup>	16.38 <sup>374</sup>	33.555 <sup>204</sup>	30.55 <sup>315</sup>
16	44.05 <sup>46</sup>	28.94 <sup>344</sup>	24.599 <sup>260</sup>	55.06 <sup>325</sup>	40.639 <sup>321</sup>	12.64 <sup>351</sup>	33.759 <sup>249</sup>	27.40 <sup>306</sup>
26	44.51 <sup>57</sup>	25.50 <sup>306</sup>	24.859 <sup>301</sup>	51.81 <sup>303</sup>	40.960 <sup>387</sup>	9.13 <sup>317</sup>	34.008 <sup>285</sup>	24.34 <sup>289</sup>
36	45.08	22.44	25.160	48.78	41.347	5.96	34.293	21.45
Mittl. Ort	47.83	47.07	24.668	68.64	42.078	29.23	33.580	39.29
sec $\delta$ , tg $\delta$	3.241	+3.083	1.262	+0.769	1.951	+1.675	1.147	+0.561
a, a'	-0.1	-12.8	+2.3	-12.7	+1.3	-12.6	+2.5	-12.5
b, b'	-0.13	+0.77	-0.03	+0.77	-0.07	+0.78	-0.02	+0.78



Tag	573) $\nu^1$ Bootis		578) $\alpha$ Coronae bor.		1410) $\eta$ G. Lupi		577) $\gamma$ Librae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$15^h 28^m$	$+41^\circ 0'$	$15^h 32^m$	$+26^\circ 53'$	$15^h 32^m$	$-44^\circ 12'$	$15^h 32^m$	$-14^\circ 36'$
Jan. I	55.089 <sub>323</sub>	66.36 <sub>289</sub>	19.533 <sub>294</sub>	53.83 <sub>270</sub>	22.963 <sub>386</sub>	34.43 <sub>18</sub>	24.701 <sub>300</sub>	18.34 <sub>141</sub>
II	55.412 <sub>350</sub>	63.47 <sub>248</sub>	19.827 <sub>316</sub>	51.13 <sub>239</sub>	23.349 <sub>409</sub>	34.61 <sub>50</sub>	25.001 <sub>317</sub>	19.75 <sub>147</sub>
2I	55.762 <sub>367</sub>	60.99 <sub>200</sub>	20.143 <sub>328</sub>	48.74 <sub>200</sub>	23.758 <sub>419</sub>	35.11 <sub>80</sub>	25.318 <sub>325</sub>	21.22 <sub>148</sub>
3I	56.129 <sub>373</sub>	58.99 <sub>144</sub>	20.471 <sub>331</sub>	46.74 <sub>155</sub>	24.177 <sub>420</sub>	35.91 <sub>107</sub>	25.643 <sub>324</sub>	22.70 <sub>144</sub>
Febr. 10	56.502 <sub>367</sub>	57.55 <sub>85</sub>	20.802 <sub>326</sub>	45.19 <sub>106</sub>	24.597 <sub>410</sub>	36.98 <sub>129</sub>	25.967 <sub>316</sub>	24.14 <sub>134</sub>
20	56.869 <sub>353</sub>	56.70 <sub>23</sub>	21.128 <sub>312</sub>	44.13 <sub>53</sub>	25.007 <sub>394</sub>	38.27 <sub>147</sub>	26.283 <sub>302</sub>	25.48 <sub>121</sub>
März 2	57.222 <sub>331</sub>	56.47 <sub>37</sub>	21.440 <sub>293</sub>	43.60 <sub>1</sub>	25.401 <sub>371</sub>	39.74 <sub>162</sub>	26.585 <sub>285</sub>	26.69 <sub>106</sub>
12	57.553 <sub>301</sub>	56.84 <sub>93</sub>	21.733 <sub>269</sub>	43.59 <sub>49</sub>	25.772 <sub>345</sub>	41.36 <sub>174</sub>	26.870 <sub>263</sub>	27.75 <sub>89</sub>
22	57.854 <sub>266</sub>	57.77 <sub>144</sub>	22.002 <sub>241</sub>	44.08 <sub>95</sub>	26.117 <sub>314</sub>	43.10 <sub>180</sub>	27.133 <sub>239</sub>	28.64 <sub>70</sub>
Apr. I	58.120 <sub>229</sub>	59.21 <sub>187</sub>	22.243 <sub>210</sub>	45.03 <sub>136</sub>	26.431 <sub>281</sub>	44.90 <sub>185</sub>	27.372 <sub>214</sub>	29.34 <sub>54</sub>
II	58.349 <sub>187</sub>	61.08 <sub>222</sub>	22.453 <sub>179</sub>	46.39 <sub>168</sub>	26.712 <sub>246</sub>	46.75 <sub>186</sub>	27.586 <sub>187</sub>	29.88 <sub>38</sub>
2I	58.536 <sub>146</sub>	63.30 <sub>248</sub>	22.632 <sub>144</sub>	48.07 <sub>193</sub>	26.958 <sub>208</sub>	48.61 <sub>185</sub>	27.773 <sub>160</sub>	30.26 <sub>24</sub>
Mai I	58.682 <sub>102</sub>	65.78 <sub>262</sub>	22.776 <sub>110</sub>	50.00 <sub>209</sub>	27.166 <sub>168</sub>	50.46 <sub>181</sub>	27.933 <sub>132</sub>	30.50 <sub>11</sub>
II	58.784 <sub>59</sub>	68.40 <sub>268</sub>	22.886 <sub>76</sub>	52.09 <sub>218</sub>	27.334 <sub>128</sub>	52.27 <sub>174</sub>	28.065 <sub>101</sub>	30.61 <sub>2</sub>
20	58.843 <sub>17</sub>	71.08 <sub>264</sub>	22.962 <sub>40</sub>	54.27 <sub>218</sub>	27.462 <sub>84</sub>	54.01 <sub>166</sub>	28.166 <sub>72</sub>	30.63 <sub>5</sub>
30	58.860 <sub>25</sub>	73.72 <sub>252</sub>	23.002 <sub>6</sub>	56.45 <sub>211</sub>	27.546 <sub>40</sub>	55.67 <sub>153</sub>	28.238 <sub>40</sub>	30.58 <sub>12</sub>
Juni 9	58.835 <sub>65</sub>	76.24 <sub>232</sub>	23.008 <sub>27</sub>	58.56 <sub>197</sub>	27.586 <sub>4</sub>	57.20 <sub>137</sub>	28.278 <sub>8</sub>	30.46 <sub>17</sub>
19	58.770 <sub>102</sub>	78.56 <sub>206</sub>	22.981 <sub>60</sub>	60.53 <sub>178</sub>	27.582 <sub>49</sub>	58.57 <sub>120</sub>	28.286 <sub>23</sub>	30.29 <sub>20</sub>
29	58.668 <sub>137</sub>	80.62 <sub>173</sub>	22.921 <sub>91</sub>	62.31 <sub>153</sub>	27.533 <sub>91</sub>	59.77 <sub>98</sub>	28.263 <sub>54</sub>	30.09 <sub>24</sub>
Juli 9	58.531 <sub>168</sub>	82.35 <sub>137</sub>	22.830 <sub>120</sub>	63.84 <sub>126</sub>	27.442 <sub>131</sub>	60.75 <sub>74</sub>	28.209 <sub>83</sub>	29.85 <sub>27</sub>
19	58.363 <sub>194</sub>	83.72 <sub>97</sub>	22.710 <sub>143</sub>	65.10 <sub>95</sub>	27.311 <sub>166</sub>	61.49 <sub>47</sub>	28.126 <sub>109</sub>	29.58 <sub>29</sub>
29	58.169 <sub>215</sub>	84.69 <sub>55</sub>	22.567 <sub>164</sub>	66.05 <sub>61</sub>	27.145 <sub>194</sub>	61.96 <sub>19</sub>	28.017 <sub>130</sub>	29.29 <sub>31</sub>
Aug. 8	57.954 <sub>229</sub>	85.24 <sub>11</sub>	22.403 <sub>179</sub>	66.66 <sub>25</sub>	26.951 <sub>215</sub>	62.15 <sub>10</sub>	27.887 <sub>147</sub>	28.98 <sub>32</sub>
18	57.725 <sub>235</sub>	85.35 <sub>35</sub>	22.224 <sub>186</sub>	66.91 <sub>10</sub>	26.736 <sub>225</sub>	62.05 <sub>39</sub>	27.740 <sub>155</sub>	28.66 <sub>33</sub>
28	57.490 <sub>234</sub>	85.00 <sub>79</sub>	22.038 <sub>186</sub>	66.81 <sub>48</sub>	26.511 <sub>226</sub>	61.66 <sub>68</sub>	27.585 <sub>157</sub>	28.33 <sub>32</sub>
Sept. 7	57.256 <sub>223</sub>	84.21 <sub>123</sub>	21.852 <sub>178</sub>	66.33 <sub>84</sub>	26.285 <sub>214</sub>	60.98 <sub>93</sub>	27.428 <sub>150</sub>	28.01 <sub>29</sub>
17	57.033 <sub>203</sub>	82.98 <sub>166</sub>	21.674 <sub>161</sub>	65.49 <sub>121</sub>	26.071 <sub>188</sub>	60.05 <sub>115</sub>	27.278 <sub>132</sub>	27.72 <sub>24</sub>
27	56.830 <sub>172</sub>	81.32 <sub>207</sub>	21.513 <sub>136</sub>	64.28 <sub>157</sub>	25.883 <sub>153</sub>	58.90 <sub>132</sub>	27.146 <sub>106</sub>	27.48 <sub>16</sub>
Okt. 7	56.658 <sub>134</sub>	79.25 <sub>245</sub>	21.377 <sub>101</sub>	62.71 <sub>191</sub>	25.730 <sub>105</sub>	57.58 <sub>144</sub>	27.040 <sub>72</sub>	27.32 <sub>6</sub>
17	56.524 <sub>86</sub>	76.80 <sub>279</sub>	21.276 <sub>59</sub>	60.80 <sub>223</sub>	25.625 <sub>47</sub>	56.14 <sub>147</sub>	26.968 <sub>30</sub>	27.26 <sub>8</sub>
27	56.438 <sub>32</sub>	74.01 <sub>308</sub>	21.217 <sub>11</sub>	58.57 <sub>252</sub>	25.578 <sub>17</sub>	54.67 <sub>144</sub>	26.938 <sub>18</sub>	27.34 <sub>25</sub>
Nov. 6	56.406 <sub>27</sub>	70.93 <sub>331</sub>	21.206 <sub>40</sub>	56.05 <sub>275</sub>	25.595 <sub>84</sub>	53.23 <sub>134</sub>	26.956 <sub>70</sub>	27.59 <sub>44</sub>
16	56.433 <sub>88</sub>	67.62 <sub>345</sub>	21.246 <sub>94</sub>	53.30 <sub>293</sub>	25.679 <sub>153</sub>	51.89 <sub>116</sub>	27.026 <sub>121</sub>	28.03 <sub>65</sub>
26	56.521 <sub>149</sub>	64.17 <sub>352</sub>	21.340 <sub>148</sub>	50.37 <sub>304</sub>	25.832 <sub>219</sub>	50.73 <sub>93</sub>	27.147 <sub>172</sub>	28.68 <sub>85</sub>
Dez. 6	56.670 <sub>206</sub>	60.65 <sub>349</sub>	21.488 <sub>197</sub>	47.33 <sub>307</sub>	26.051 <sub>278</sub>	49.80 <sub>65</sub>	27.319 <sub>218</sub>	29.53 <sub>105</sub>
16	56.876 <sub>259</sub>	57.16 <sub>335</sub>	21.685 <sub>241</sub>	44.26 <sub>302</sub>	26.329 <sub>330</sub>	49.15 <sub>33</sub>	27.537 <sub>258</sub>	30.58 <sub>122</sub>
26	57.135 <sub>302</sub>	53.81 <sub>310</sub>	21.926 <sub>278</sub>	41.24 <sub>285</sub>	26.659 <sub>371</sub>	48.82 <sub>1</sub>	27.795 <sub>288</sub>	31.80 <sub>137</sub>
36	57.437	50.71	22.204	38.39	27.030	48.81	28.083	33.17
Mittl. Ort	57.111	70.79	21.451	55.35	25.434	50.23	26.691	27.17
sec $\delta$ , tg $\delta$	1.325	+0.870	1.121	+0.507	1.395	-0.973	1.033	-0.261
a, a'	+2.2	-12.3	+2.5	-12.0	+4.1	-12.0	+3.4	-12.0
b, b'	-0.04	+0.79	-0.02	+0.80	+0.04	+0.80	+0.01	+0.80



# Obere Kulmination Greenwich

131\*

Tag	582) $\alpha$ Serpentis		583) $\beta$ Serpentis		590) $\zeta$ Ursae min.		584) $\kappa$ Serpentis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	15 <sup>h</sup> 41 <sup>m</sup>	+6° 35'	15 <sup>h</sup> 43 <sup>m</sup>	+15° 35'	15 <sup>h</sup> 45 <sup>m</sup>	+77° 57'	15 <sup>h</sup> 46 <sup>m</sup>	+18° 18'
Jan. I	31.455 <sup>a</sup> <sub>279</sub>	53.86 <sup>a</sup> <sub>216</sub>	36.902 <sup>a</sup> <sub>277</sub>	34.88 <sup>a</sup> <sub>245</sub>	53.88 <sup>a</sup> <sub>79</sub>	44.80 <sup>a</sup> <sub>291</sub>	13.779 <sup>a</sup> <sub>277</sub>	37.39 <sup>a</sup> <sub>253</sub>
II	31.734 <sup>a</sup> <sub>298</sub>	51.70 <sup>a</sup> <sub>203</sub>	37.179 <sup>a</sup> <sub>299</sub>	32.43 <sup>a</sup> <sub>224</sub>	54.67 <sup>a</sup> <sub>92</sub>	41.89 <sup>a</sup> <sub>241</sub>	14.056 <sup>a</sup> <sub>299</sub>	34.86 <sup>a</sup> <sub>230</sub>
2I	32.032 <sup>a</sup> <sub>308</sub>	49.67 <sup>a</sup> <sub>183</sub>	37.478 <sup>a</sup> <sub>311</sub>	30.19 <sup>a</sup> <sub>195</sub>	55.59 <sup>a</sup> <sub>102</sub>	39.48 <sup>a</sup> <sub>183</sub>	14.355 <sup>a</sup> <sub>312</sub>	32.56 <sup>a</sup> <sub>199</sub>
3I	32.340 <sup>a</sup> <sub>311</sub>	47.84 <sup>a</sup> <sub>156</sub>	37.789 <sup>a</sup> <sub>314</sub>	28.24 <sup>a</sup> <sub>160</sub>	56.61 <sup>a</sup> <sub>109</sub>	37.65 <sup>a</sup> <sub>120</sub>	14.667 <sup>a</sup> <sub>316</sub>	30.57 <sup>a</sup> <sub>162</sub>
Febr. 10	32.651 <sup>a</sup> <sub>305</sub>	46.28 <sup>a</sup> <sub>125</sub>	38.103 <sup>a</sup> <sub>310</sub>	26.64 <sup>a</sup> <sub>121</sub>	57.70 <sup>a</sup> <sub>112</sub>	36.45 <sup>a</sup> <sub>53</sub>	14.983 <sup>a</sup> <sub>312</sub>	28.95 <sup>a</sup> <sub>120</sub>
20	32.956 <sup>a</sup> <sub>294</sub>	45.03 <sup>a</sup> <sub>90</sub>	38.413 <sup>a</sup> <sub>299</sub>	25.43 <sup>a</sup> <sub>78</sub>	58.82 <sup>a</sup> <sub>110</sub>	35.92 <sup>a</sup> <sub>15</sub>	15.295 <sup>a</sup> <sub>302</sub>	27.75 <sup>a</sup> <sub>75</sub>
März 2	33.250 <sup>a</sup> <sub>277</sub>	44.13 <sup>a</sup> <sub>54</sub>	38.712 <sup>a</sup> <sub>283</sub>	24.65 <sup>a</sup> <sub>33</sub>	59.92 <sup>a</sup> <sub>105</sub>	36.07 <sup>a</sup> <sub>81</sub>	15.597 <sup>a</sup> <sub>286</sub>	27.00 <sup>a</sup> <sub>28</sub>
12	33.527 <sup>a</sup> <sub>257</sub>	43.59 <sup>a</sup> <sub>18</sub>	38.995 <sup>a</sup> <sub>261</sub>	24.32 <sup>a</sup> <sub>10</sub>	60.97 <sup>a</sup> <sub>95</sub>	36.88 <sup>a</sup> <sub>143</sub>	15.883 <sup>a</sup> <sub>265</sub>	26.72 <sup>a</sup> <sub>18</sub>
22	33.784 <sup>a</sup> <sub>234</sub>	43.41 <sup>a</sup> <sub>17</sub>	39.256 <sup>a</sup> <sub>238</sub>	24.42 <sup>a</sup> <sub>51</sub>	61.92 <sup>a</sup> <sub>84</sub>	38.31 <sup>a</sup> <sub>196</sub>	16.148 <sup>a</sup> <sub>241</sub>	26.90 <sup>a</sup> <sub>60</sub>
Apr. I	34.018 <sup>a</sup> <sub>209</sub>	43.58 <sup>a</sup> <sub>48</sub>	39.494 <sup>a</sup> <sub>212</sub>	24.93 <sup>a</sup> <sub>87</sub>	62.76 <sup>a</sup> <sub>70</sub>	40.27 <sup>a</sup> <sub>242</sub>	16.389 <sup>a</sup> <sub>215</sub>	27.50 <sup>a</sup> <sub>97</sub>
11	34.227 <sup>a</sup> <sub>183</sub>	44.06 <sup>a</sup> <sub>74</sub>	39.706 <sup>a</sup> <sub>185</sub>	25.80 <sup>a</sup> <sub>117</sub>	63.46 <sup>a</sup> <sub>54</sub>	42.69 <sup>a</sup> <sub>277</sub>	16.604 <sup>a</sup> <sub>187</sub>	28.47 <sup>a</sup> <sub>130</sub>
21	34.410 <sup>a</sup> <sub>156</sub>	44.80 <sup>a</sup> <sub>96</sub>	39.891 <sup>a</sup> <sub>155</sub>	26.97 <sup>a</sup> <sub>141</sub>	64.00 <sup>a</sup> <sub>36</sub>	45.46 <sup>a</sup> <sub>300</sub>	16.791 <sup>a</sup> <sub>157</sub>	29.77 <sup>a</sup> <sub>154</sub>
Mai I	34.566 <sup>a</sup> <sub>126</sub>	45.76 <sup>a</sup> <sub>112</sub>	40.046 <sup>a</sup> <sub>124</sub>	28.38 <sup>a</sup> <sub>159</sub>	64.36 <sup>a</sup> <sub>18</sub>	48.46 <sup>a</sup> <sub>313</sub>	16.948 <sup>a</sup> <sub>126</sub>	31.31 <sup>a</sup> <sub>172</sub>
11	34.692 <sup>a</sup> <sub>98</sub>	46.88 <sup>a</sup> <sub>122</sub>	40.170 <sup>a</sup> <sub>94</sub>	29.97 <sup>a</sup> <sub>168</sub>	64.54 <sup>a</sup> <sub>1</sub>	51.59 <sup>a</sup> <sub>315</sub>	17.074 <sup>a</sup> <sub>94</sub>	33.03 <sup>a</sup> <sub>182</sub>
20	34.790 <sup>a</sup> <sub>67</sub>	48.10 <sup>a</sup> <sub>127</sub>	40.264 <sup>a</sup> <sub>62</sub>	31.65 <sup>a</sup> <sub>173</sub>	64.53 <sup>a</sup> <sub>18</sub>	54.74 <sup>a</sup> <sub>306</sub>	17.168 <sup>a</sup> <sub>63</sub>	34.85 <sup>a</sup> <sub>185</sub>
30	34.857 <sup>a</sup> <sub>36</sub>	49.37 <sup>a</sup> <sub>127</sub>	40.326 <sup>a</sup> <sub>30</sub>	33.38 <sup>a</sup> <sub>170</sub>	64.35 <sup>a</sup> <sub>35</sub>	57.80 <sup>a</sup> <sub>286</sub>	17.231 <sup>a</sup> <sub>29</sub>	36.70 <sup>a</sup> <sub>183</sub>
Juni 9	34.893 <sup>a</sup> <sub>5</sub>	50.64 <sup>a</sup> <sub>122</sub>	40.356 <sup>a</sup> <sub>2</sub>	35.08 <sup>a</sup> <sub>161</sub>	64.00 <sup>a</sup> <sub>51</sub>	60.66 <sup>a</sup> <sub>260</sub>	17.260 <sup>a</sup> <sub>4</sub>	38.53 <sup>a</sup> <sub>174</sub>
19	34.898 <sup>a</sup> <sub>25</sub>	51.86 <sup>a</sup> <sub>115</sub>	40.354 <sup>a</sup> <sub>34</sub>	36.69 <sup>a</sup> <sub>149</sub>	63.49 <sup>a</sup> <sub>65</sub>	63.26 <sup>a</sup> <sub>225</sub>	17.256 <sup>a</sup> <sub>36</sub>	40.27 <sup>a</sup> <sub>159</sub>
29	34.873 <sup>a</sup> <sub>56</sub>	53.01 <sup>a</sup> <sub>103</sub>	40.320 <sup>a</sup> <sub>64</sub>	38.18 <sup>a</sup> <sub>132</sub>	62.84 <sup>a</sup> <sub>78</sub>	65.51 <sup>a</sup> <sub>185</sub>	17.220 <sup>a</sup> <sub>67</sub>	41.86 <sup>a</sup> <sub>141</sub>
Juli 9	34.817 <sup>a</sup> <sub>84</sub>	54.04 <sup>a</sup> <sub>90</sub>	40.256 <sup>a</sup> <sub>93</sub>	39.50 <sup>a</sup> <sub>112</sub>	62.06 <sup>a</sup> <sub>89</sub>	67.36 <sup>a</sup> <sub>140</sub>	17.153 <sup>a</sup> <sub>96</sub>	43.27 <sup>a</sup> <sub>119</sub>
19	34.733 <sup>a</sup> <sub>109</sub>	54.94 <sup>a</sup> <sub>73</sub>	40.163 <sup>a</sup> <sub>119</sub>	40.62 <sup>a</sup> <sub>90</sub>	61.17 <sup>a</sup> <sub>96</sub>	68.76 <sup>a</sup> <sub>91</sub>	17.057 <sup>a</sup> <sub>123</sub>	44.46 <sup>a</sup> <sub>95</sub>
29	34.624 <sup>a</sup> <sub>130</sub>	55.67 <sup>a</sup> <sub>57</sub>	40.044 <sup>a</sup> <sub>140</sub>	41.52 <sup>a</sup> <sub>64</sub>	60.21 <sup>a</sup> <sub>103</sub>	69.67 <sup>a</sup> <sub>40</sub>	16.934 <sup>a</sup> <sub>144</sub>	45.41 <sup>a</sup> <sub>67</sub>
Aug. 8	34.494 <sup>a</sup> <sub>146</sub>	56.24 <sup>a</sup> <sub>37</sub>	39.904 <sup>a</sup> <sub>156</sub>	42.16 <sup>a</sup> <sub>37</sub>	59.18 <sup>a</sup> <sub>106</sub>	70.07 <sup>a</sup> <sub>12</sub>	16.790 <sup>a</sup> <sub>161</sub>	46.08 <sup>a</sup> <sub>38</sub>
18	34.348 <sup>a</sup> <sub>157</sub>	56.61 <sup>a</sup> <sub>17</sub>	39.748 <sup>a</sup> <sub>167</sub>	42.53 <sup>a</sup> <sub>10</sub>	58.12 <sup>a</sup> <sub>108</sub>	69.95 <sup>a</sup> <sub>64</sub>	16.629 <sup>a</sup> <sub>171</sub>	46.46 <sup>a</sup> <sub>9</sub>
28	34.191 <sup>a</sup> <sub>159</sub>	56.78 <sup>a</sup> <sub>4</sub>	39.581 <sup>a</sup> <sub>169</sub>	42.63 <sup>a</sup> <sub>19</sub>	57.04 <sup>a</sup> <sub>106</sub>	69.31 <sup>a</sup> <sub>116</sub>	16.458 <sup>a</sup> <sub>174</sub>	46.55 <sup>a</sup> <sub>22</sub>
Sept. 7	34.032 <sup>a</sup> <sub>153</sub>	56.74 <sup>a</sup> <sub>25</sub>	39.412 <sup>a</sup> <sub>164</sub>	42.44 <sup>a</sup> <sub>48</sub>	55.98 <sup>a</sup> <sub>103</sub>	68.15 <sup>a</sup> <sub>165</sub>	16.284 <sup>a</sup> <sub>169</sub>	46.33 <sup>a</sup> <sub>54</sub>
17	33.879 <sup>a</sup> <sub>139</sub>	56.49 <sup>a</sup> <sub>49</sub>	39.248 <sup>a</sup> <sub>149</sub>	41.96 <sup>a</sup> <sub>79</sub>	54.95 <sup>a</sup> <sub>96</sub>	66.50 <sup>a</sup> <sub>213</sub>	16.115 <sup>a</sup> <sub>155</sub>	45.79 <sup>a</sup> <sub>86</sub>
27	33.740 <sup>a</sup> <sub>115</sub>	56.00 <sup>a</sup> <sub>73</sub>	39.099 <sup>a</sup> <sub>125</sub>	41.17 <sup>a</sup> <sub>108</sub>	53.99 <sup>a</sup> <sub>87</sub>	64.37 <sup>a</sup> <sub>255</sub>	15.960 <sup>a</sup> <sub>131</sub>	44.93 <sup>a</sup> <sub>117</sub>
Okt. 7	33.625 <sup>a</sup> <sub>84</sub>	55.27 <sup>a</sup> <sub>97</sub>	38.974 <sup>a</sup> <sub>95</sub>	40.09 <sup>a</sup> <sub>137</sub>	53.12 <sup>a</sup> <sub>75</sub>	61.82 <sup>a</sup> <sub>295</sub>	15.829 <sup>a</sup> <sub>101</sub>	43.76 <sup>a</sup> <sub>149</sub>
17	33.541 <sup>a</sup> <sub>45</sub>	54.30 <sup>a</sup> <sub>122</sub>	38.879 <sup>a</sup> <sub>55</sub>	38.72 <sup>a</sup> <sub>167</sub>	52.37 <sup>a</sup> <sub>61</sub>	58.87 <sup>a</sup> <sub>329</sub>	15.728 <sup>a</sup> <sub>61</sub>	42.27 <sup>a</sup> <sub>178</sub>
27	33.496 <sup>a</sup> <sub>1</sub>	53.08 <sup>a</sup> <sub>146</sub>	38.824 <sup>a</sup> <sub>10</sub>	37.05 <sup>a</sup> <sub>193</sub>	51.76 <sup>a</sup> <sub>45</sub>	55.58 <sup>a</sup> <sub>354</sub>	15.667 <sup>a</sup> <sub>16</sub>	40.49 <sup>a</sup> <sub>205</sub>
Nov. 6	33.495 <sup>a</sup> <sub>48</sub>	51.62 <sup>a</sup> <sub>169</sub>	38.814 <sup>a</sup> <sub>39</sub>	35.12 <sup>a</sup> <sub>217</sub>	51.31 <sup>a</sup> <sub>28</sub>	52.04 <sup>a</sup> <sub>374</sub>	15.651 <sup>a</sup> <sub>34</sub>	38.44 <sup>a</sup> <sub>230</sub>
16	33.543 <sup>a</sup> <sub>98</sub>	49.93 <sup>a</sup> <sub>189</sub>	38.853 <sup>a</sup> <sub>89</sub>	32.95 <sup>a</sup> <sub>237</sub>	51.03 <sup>a</sup> <sub>8</sub>	48.30 <sup>a</sup> <sub>384</sub>	15.685 <sup>a</sup> <sub>85</sub>	36.14 <sup>a</sup> <sub>251</sub>
26	33.641 <sup>a</sup> <sub>148</sub>	48.04 <sup>a</sup> <sub>206</sub>	38.942 <sup>a</sup> <sub>140</sub>	30.58 <sup>a</sup> <sub>252</sub>	50.95 <sup>a</sup> <sub>12</sub>	44.46 <sup>a</sup> <sub>384</sub>	15.770 <sup>a</sup> <sub>136</sub>	33.63 <sup>a</sup> <sub>265</sub>
Dez. 6	33.789 <sup>a</sup> <sub>193</sub>	45.98 <sup>a</sup> <sub>218</sub>	39.082 <sup>a</sup> <sub>187</sub>	28.06 <sup>a</sup> <sub>261</sub>	51.07 <sup>a</sup> <sub>32</sub>	40.62 <sup>a</sup> <sub>373</sub>	15.906 <sup>a</sup> <sub>183</sub>	30.98 <sup>a</sup> <sub>272</sub>
16	33.982 <sup>a</sup> <sub>233</sub>	43.80 <sup>a</sup> <sub>223</sub>	39.269 <sup>a</sup> <sub>229</sub>	25.45 <sup>a</sup> <sub>262</sub>	51.39 <sup>a</sup> <sub>50</sub>	36.89 <sup>a</sup> <sub>352</sub>	16.089 <sup>a</sup> <sub>226</sub>	28.26 <sup>a</sup> <sub>273</sub>
26	34.215 <sup>a</sup> <sub>265</sub>	41.57 <sup>a</sup> <sub>222</sub>	39.498 <sup>a</sup> <sub>264</sub>	22.83 <sup>a</sup> <sub>254</sub>	51.89 <sup>a</sup> <sub>69</sub>	33.37 <sup>a</sup> <sub>318</sub>	16.315 <sup>a</sup> <sub>262</sub>	25.53 <sup>a</sup> <sub>264</sub>
36	34.480 <sup>a</sup>	39.35 <sup>a</sup>	39.762 <sup>a</sup>	20.29 <sup>a</sup>	52.58 <sup>a</sup>	30.19 <sup>a</sup>	16.577 <sup>a</sup>	22.89 <sup>a</sup>
Mittl. Ort	.33.381	50.59	38.831	33.75	58.55	52.46	15.722	36.87
sec $\delta$ , tg $\delta$	1.007	+0.116	1.038	+0.279	4.796	+4.690	1.053	+0.331
a, a'	+2.9	-11.4	+2.8	-11.2	-2.2	-11.1	+2.7	-11.0
b, b'	0.00	+0.82	-0.01	+0.83	-0.17	+0.83	-0.01	+0.83



## Scheinbare Sternörter 1945

Tag	585) $\mu$ Serpentis		588) $\epsilon$ Serpentis		589) $\beta$ Triang. austr.		593) $\epsilon$ Coronae bor.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	15 <sup>h</sup> 46 <sup>m</sup>	-3° 15'	15 <sup>h</sup> 48 <sup>m</sup>	+4° 38'	15 <sup>h</sup> 50 <sup>m</sup>	-63° 15'	15 <sup>h</sup> 55 <sup>m</sup>	+27° 1'
Jan. I	42.818 <sup>280</sup>	42.26 <sup>180</sup>	2.339 <sup>275</sup>	34.80 <sup>209</sup>	12.85 <sup>55</sup>	28.99 <sup>79</sup>	16.500 <sup>276</sup>	68.29 <sup>277</sup>
II	43.098 <sup>299</sup>	44.06 <sup>176</sup>	2.614 <sup>295</sup>	32.71 <sup>197</sup>	13.40 <sup>59</sup>	28.20 <sup>35</sup>	16.776 <sup>302</sup>	65.52 <sup>249</sup>
2I	43.397 <sup>309</sup>	45.82 <sup>165</sup>	2.909 <sup>307</sup>	30.74 <sup>180</sup>	13.99 <sup>62</sup>	27.85 <sup>7</sup>	17.078 <sup>318</sup>	63.03 <sup>212</sup>
3I	43.706 <sup>312</sup>	47.47 <sup>149</sup>	3.216 <sup>309</sup>	28.94 <sup>155</sup>	14.61 <sup>62</sup>	27.92 <sup>50</sup>	17.396 <sup>326</sup>	60.91 <sup>168</sup>
Febr. 10	44.018 <sup>306</sup>	48.96 <sup>128</sup>	3.525 <sup>305</sup>	27.39 <sup>126</sup>	15.23 <sup>63</sup>	28.42 <sup>89</sup>	17.722 <sup>325</sup>	59.23 <sup>119</sup>
20	44.324 <sup>296</sup>	50.24 <sup>103</sup>	3.830 <sup>295</sup>	26.13 <sup>93</sup>	15.86 <sup>61</sup>	29.31 <sup>126</sup>	18.047 <sup>317</sup>	58.04 <sup>66</sup>
März 2	44.620 <sup>280</sup>	51.27 <sup>76</sup>	4.125 <sup>279</sup>	25.20 <sup>59</sup>	16.47 <sup>58</sup>	30.57 <sup>158</sup>	18.364 <sup>301</sup>	57.38 <sup>13</sup>
12	44.900 <sup>261</sup>	52.03 <sup>48</sup>	4.404 <sup>261</sup>	24.61 <sup>23</sup>	17.05 <sup>54</sup>	32.15 <sup>186</sup>	18.665 <sup>281</sup>	57.25 <sup>38</sup>
22	45.161 <sup>240</sup>	52.51 <sup>21</sup>	4.665 <sup>238</sup>	24.38 <sup>9</sup>	17.59 <sup>51</sup>	34.01 <sup>211</sup>	18.946 <sup>257</sup>	57.63 <sup>86</sup>
Apr. I	45.401 <sup>215</sup>	52.72 <sup>3</sup>	4.903 <sup>215</sup>	24.47 <sup>39</sup>	18.10 <sup>45</sup>	36.12 <sup>231</sup>	19.203 <sup>228</sup>	58.49 <sup>129</sup>
II	45.616 <sup>191</sup>	52.69 <sup>25</sup>	5.118 <sup>188</sup>	24.86 <sup>66</sup>	18.55 <sup>40</sup>	38.43 <sup>247</sup>	19.431 <sup>199</sup>	59.78 <sup>165</sup>
2I	45.807 <sup>164</sup>	52.44 <sup>44</sup>	5.306 <sup>162</sup>	25.52 <sup>86</sup>	18.95 <sup>34</sup>	40.90 <sup>256</sup>	19.630 <sup>167</sup>	61.43 <sup>192</sup>
Mai I	45.971 <sup>137</sup>	52.00 <sup>58</sup>	5.468 <sup>134</sup>	26.38 <sup>102</sup>	19.29 <sup>27</sup>	43.46 <sup>263</sup>	19.797 <sup>132</sup>	63.35 <sup>212</sup>
II	46.108 <sup>108</sup>	51.42 <sup>68</sup>	5.602 <sup>105</sup>	27.40 <sup>113</sup>	19.56 <sup>20</sup>	46.09 <sup>264</sup>	19.929 <sup>99</sup>	65.47 <sup>222</sup>
20*)	46.216 <sup>78</sup>	50.74 <sup>74</sup>	5.707 <sup>74</sup>	28.53 <sup>119</sup>	19.76 <sup>14</sup>	48.73 <sup>259</sup>	20.028 <sup>63</sup>	67.69 <sup>226</sup>
30	46.294 <sup>47</sup>	50.00 <sup>77</sup>	5.781 <sup>43</sup>	29.72 <sup>119</sup>	19.90 <sup>5</sup>	51.32 <sup>249</sup>	20.091 <sup>26</sup>	69.95 <sup>221</sup>
Juni 9	46.341 <sup>16</sup>	49.23 <sup>77</sup>	5.824 <sup>12</sup>	30.91 <sup>115</sup>	19.95 <sup>2</sup>	53.81 <sup>233</sup>	20.117 <sup>9</sup>	72.16 <sup>210</sup>
19	46.357 <sup>16</sup>	48.46 <sup>73</sup>	5.836 <sup>19</sup>	32.06 <sup>109</sup>	19.93 <sup>9</sup>	56.14 <sup>212</sup>	20.108 <sup>44</sup>	74.26 <sup>192</sup>
29	46.341 <sup>46</sup>	47.73 <sup>69</sup>	5.817 <sup>50</sup>	33.15 <sup>99</sup>	19.84 <sup>17</sup>	58.26 <sup>186</sup>	20.064 <sup>77</sup>	76.18 <sup>169</sup>
Juli 9	46.295 <sup>76</sup>	47.04 <sup>62</sup>	5.767 <sup>79</sup>	34.14 <sup>86</sup>	19.67 <sup>23</sup>	60.12 <sup>154</sup>	19.987 <sup>109</sup>	77.87 <sup>142</sup>
19	46.219 <sup>102</sup>	46.42 <sup>54</sup>	5.688 <sup>105</sup>	35.00 <sup>72</sup>	19.44 <sup>29</sup>	61.66 <sup>117</sup>	19.878 <sup>138</sup>	79.29 <sup>112</sup>
29	46.117 <sup>125</sup>	45.88 <sup>45</sup>	5.583 <sup>128</sup>	35.72 <sup>55</sup>	19.15 <sup>34</sup>	62.83 <sup>78</sup>	19.740 <sup>161</sup>	80.41 <sup>79</sup>
Aug. 8	45.992 <sup>143</sup>	45.43 <sup>36</sup>	5.455 <sup>145</sup>	36.27 <sup>39</sup>	18.81 <sup>37</sup>	63.61 <sup>35</sup>	19.579 <sup>179</sup>	81.20 <sup>43</sup>
18	45.849 <sup>153</sup>	45.07 <sup>24</sup>	5.310 <sup>156</sup>	36.66 <sup>20</sup>	18.44 <sup>40</sup>	63.96 <sup>10</sup>	19.400 <sup>191</sup>	81.63 <sup>7</sup>
28	45.696 <sup>157</sup>	44.83 <sup>13</sup>	5.154 <sup>159</sup>	36.86 <sup>1</sup>	18.04 <sup>40</sup>	63.86 <sup>54</sup>	19.209 <sup>196</sup>	81.70 <sup>30</sup>
Sept. 7	45.539 <sup>153</sup>	44.70 <sup>1</sup>	4.995 <sup>155</sup>	36.87 <sup>19</sup>	17.64 <sup>38</sup>	63.32 <sup>96</sup>	19.013 <sup>190</sup>	81.40 <sup>69</sup>
17	45.386 <sup>138</sup>	44.71 <sup>15</sup>	4.840 <sup>141</sup>	36.68 <sup>41</sup>	17.26 <sup>35</sup>	62.36 <sup>136</sup>	18.823 <sup>177</sup>	80.71 <sup>105</sup>
27	45.248 <sup>115</sup>	44.86 <sup>32</sup>	4.699 <sup>119</sup>	36.27 <sup>63</sup>	16.91 <sup>29</sup>	61.00 <sup>170</sup>	18.646 <sup>155</sup>	79.66 <sup>143</sup>
Okt. 7	45.133 <sup>84</sup>	45.18 <sup>50</sup>	4.580 <sup>88</sup>	35.64 <sup>86</sup>	16.62 <sup>23</sup>	59.30 <sup>198</sup>	18.491 <sup>123</sup>	78.23 <sup>178</sup>
17	45.049 <sup>45</sup>	45.68 <sup>69</sup>	4.492 <sup>50</sup>	34.78 <sup>110</sup>	16.39 <sup>14</sup>	57.32 <sup>217</sup>	18.368 <sup>83</sup>	76.45 <sup>212</sup>
27	45.004 <sup>1</sup>	46.37 <sup>90</sup>	4.442 <sup>5</sup>	33.68 <sup>134</sup>	16.25 <sup>4</sup>	55.15 <sup>228</sup>	18.285 <sup>37</sup>	74.33 <sup>242</sup>
Nov. 6	45.005 <sup>49</sup>	47.27 <sup>110</sup>	4.437 <sup>43</sup>	32.34 <sup>156</sup>	16.21 <sup>6</sup>	52.87 <sup>228</sup>	18.248 <sup>14</sup>	71.91 <sup>267</sup>
16	45.054 <sup>99</sup>	48.37 <sup>131</sup>	4.480 <sup>93</sup>	30.78 <sup>176</sup>	16.27 <sup>17</sup>	50.59 <sup>219</sup>	18.262 <sup>68</sup>	69.24 <sup>288</sup>
26	45.153 <sup>149</sup>	49.68 <sup>149</sup>	4.573 <sup>142</sup>	29.02 <sup>194</sup>	16.44 <sup>27</sup>	48.40 <sup>201</sup>	18.330 <sup>121</sup>	66.36 <sup>302</sup>
Dez. 6	45.302 <sup>194</sup>	51.17 <sup>164</sup>	4.715 <sup>188</sup>	27.08 <sup>206</sup>	16.71 <sup>36</sup>	46.39 <sup>174</sup>	18.451 <sup>172</sup>	63.34 <sup>308</sup>
16	45.496 <sup>234</sup>	52.81 <sup>175</sup>	4.903 <sup>229</sup>	25.02 <sup>213</sup>	17.07 <sup>45</sup>	44.65 <sup>141</sup>	18.623 <sup>219</sup>	60.26 <sup>304</sup>
26	45.730 <sup>267</sup>	54.56 <sup>181</sup>	5.132 <sup>261</sup>	22.89 <sup>214</sup>	17.52 <sup>52</sup>	43.24 <sup>102</sup>	18.842 <sup>258</sup>	57.22 <sup>291</sup>
36	45.997	56.37	5.393	20.75	18.04	42.22	19.100	54.31
Mittl. Ort	44.799	47.89	4.295	31.11	16.53	46.83	18.502	69.51
sec $\delta$ , tg $\delta$	1.002	-0.057	1.003	+0.081	2.223	-1.985	1.123	+0.510
a, a'	+3.1	-11.0	+3.0	-10.9	+5.3	-10.7	+2.5	-10.4
b, b'	0.00	+0.84	0.00	+0.84	+0.07	+0.84	-0.02	+0.86

\*) Bei Stern 593) lies Mai 21.



# Obere Kulmination Greenwich

133\*

Tag	594) $\delta$ Scorpii		598) $\delta$ Draconis		597) $\beta$ Scorpii <i>pr</i>		603) $\delta$ Ophiuchi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	15 <sup>h</sup> 57 <sup>m</sup>	-22° 27'	16 <sup>h</sup> 0 <sup>m</sup>	+58° 42'	16 <sup>h</sup> 2 <sup>m</sup>	-19° 39'	16 <sup>h</sup> 11 <sup>m</sup>	-3° 33'
Jan. I	2.391 <sup>299</sup>	50.41 <sup>94</sup>	48.639 <sup>363</sup>	35.95 <sup>318</sup>	11.884 <sup>290</sup>	14.24 <sup>103</sup>	25.529 <sup>264</sup>	9.91 <sup>172</sup>
II	2.690 <sup>320</sup>	51.35 <sup>106</sup>	49.002 <sup>416</sup>	32.77 <sup>274</sup>	12.174 <sup>312</sup>	15.27 <sup>113</sup>	25.793 <sup>286</sup>	11.63 <sup>168</sup>
2I	3.010 <sup>332</sup>	52.41 <sup>114</sup>	49.418 <sup>456</sup>	30.03 <sup>221</sup>	12.486 <sup>325</sup>	16.40 <sup>119</sup>	26.079 <sup>301</sup>	13.31 <sup>159</sup>
3I	3.342 <sup>336</sup>	53.55 <sup>119</sup>	49.874 <sup>481</sup>	27.82 <sup>161</sup>	12.811 <sup>329</sup>	17.59 <sup>120</sup>	26.380 <sup>307</sup>	14.90 <sup>143</sup>
Febr. 10	3.678 <sup>332</sup>	54.74 <sup>118</sup>	50.355 <sup>490</sup>	26.21 <sup>95</sup>	13.140 <sup>326</sup>	18.79 <sup>117</sup>	26.687 <sup>307</sup>	16.33 <sup>123</sup>
20	4.010 <sup>322</sup>	55.92 <sup>114</sup>	50.845 <sup>485</sup>	25.26 <sup>28</sup>	13.466 <sup>318</sup>	19.96 <sup>109</sup>	26.994 <sup>300</sup>	17.56 <sup>99</sup>
März 2	4.332 <sup>308</sup>	57.06 <sup>107</sup>	51.330 <sup>465</sup>	24.98 <sup>39</sup>	13.784 <sup>304</sup>	21.05 <sup>100</sup>	27.294 <sup>288</sup>	18.55 <sup>72</sup>
12	4.640 <sup>289</sup>	58.13 <sup>99</sup>	51.795 <sup>433</sup>	25.37 <sup>103</sup>	14.088 <sup>287</sup>	22.05 <sup>88</sup>	27.582 <sup>273</sup>	19.27 <sup>44</sup>
22	4.929 <sup>268</sup>	59.12 <sup>88</sup>	52.228 <sup>390</sup>	26.40 <sup>161</sup>	14.375 <sup>266</sup>	22.93 <sup>76</sup>	27.855 <sup>254</sup>	19.71 <sup>18</sup>
Apr. I	5.197 <sup>245</sup>	60.00 <sup>78</sup>	52.618 <sup>339</sup>	28.01 <sup>211</sup>	14.641 <sup>244</sup>	23.69 <sup>63</sup>	28.109 <sup>234</sup>	19.89 <sup>7</sup>
II	5.442 <sup>220</sup>	60.78 <sup>67</sup>	52.957 <sup>281</sup>	30.12 <sup>252</sup>	14.885 <sup>220</sup>	24.32 <sup>51</sup>	28.343 <sup>211</sup>	19.82 <sup>30</sup>
2I	5.662 <sup>192</sup>	61.45 <sup>59</sup>	53.238 <sup>219</sup>	32.64 <sup>284</sup>	15.105 <sup>194</sup>	24.83 <sup>41</sup>	28.554 <sup>186</sup>	19.52 <sup>47</sup>
Mai I	5.854 <sup>164</sup>	62.04 <sup>50</sup>	53.457 <sup>152</sup>	35.48 <sup>303</sup>	15.299 <sup>166</sup>	25.24 <sup>32</sup>	28.740 <sup>160</sup>	19.05 <sup>62</sup>
II	6.018 <sup>133</sup>	62.54 <sup>42</sup>	53.609 <sup>84</sup>	38.51 <sup>312</sup>	15.465 <sup>135</sup>	25.56 <sup>24</sup>	28.900 <sup>131</sup>	18.43 <sup>73</sup>
2I	6.151 <sup>101</sup>	62.96 <sup>36</sup>	53.693 <sup>17</sup>	41.63 <sup>310</sup>	15.600 <sup>104</sup>	25.80 <sup>18</sup>	29.031 <sup>102</sup>	17.70 <sup>78</sup>
30	6.252 <sup>66</sup>	63.32 <sup>30</sup>	53.710 <sup>49</sup>	44.73 <sup>299</sup>	15.704 <sup>70</sup>	25.98 <sup>13</sup>	29.133 <sup>69</sup>	16.92 <sup>81</sup>
Juni 9	6.318 <sup>31</sup>	63.62 <sup>25</sup>	53.661 <sup>113</sup>	47.72 <sup>279</sup>	15.774 <sup>36</sup>	26.11 <sup>8</sup>	29.202 <sup>37</sup>	16.11 <sup>80</sup>
19	6.349 <sup>4</sup>	63.87 <sup>18</sup>	53.548 <sup>173</sup>	50.51 <sup>250</sup>	15.810 <sup>1</sup>	26.19 <sup>5</sup>	29.239 <sup>3</sup>	15.31 <sup>76</sup>
29	6.345 <sup>40</sup>	64.05 <sup>12</sup>	53.375 <sup>229</sup>	53.01 <sup>216</sup>	15.811 <sup>35</sup>	26.24 <sup>0</sup>	29.242 <sup>30</sup>	14.55 <sup>72</sup>
Juli 9	6.305 <sup>73</sup>	64.17 <sup>6</sup>	53.146 <sup>278</sup>	55.17 <sup>176</sup>	15.776 <sup>69</sup>	26.24 <sup>5</sup>	29.212 <sup>62</sup>	13.83 <sup>64</sup>
19	6.232 <sup>104</sup>	64.23 <sup>2</sup>	52.868 <sup>320</sup>	56.93 <sup>131</sup>	15.707 <sup>99</sup>	26.19 <sup>8</sup>	29.150 <sup>92</sup>	13.19 <sup>55</sup>
29	6.128 <sup>131</sup>	64.21 <sup>10</sup>	52.548 <sup>354</sup>	58.24 <sup>84</sup>	15.608 <sup>126</sup>	26.11 <sup>14</sup>	29.058 <sup>118</sup>	12.64 <sup>47</sup>
Aug. 8	5.997 <sup>152</sup>	64.11 <sup>18</sup>	52.194 <sup>379</sup>	59.08 <sup>33</sup>	15.482 <sup>148</sup>	25.97 <sup>19</sup>	28.940 <sup>139</sup>	12.17 <sup>36</sup>
18	5.845 <sup>166</sup>	63.93 <sup>25</sup>	51.815 <sup>393</sup>	59.41 <sup>18</sup>	15.334 <sup>162</sup>	25.78 <sup>24</sup>	28.801 <sup>155</sup>	11.81 <sup>25</sup>
28	5.679 <sup>171</sup>	63.68 <sup>33</sup>	51.422 <sup>397</sup>	59.23 <sup>69</sup>	15.172 <sup>169</sup>	25.54 <sup>28</sup>	28.646 <sup>161</sup>	11.56 <sup>13</sup>
Sept. 7	5.508 <sup>168</sup>	63.35 <sup>38</sup>	51.025 <sup>387</sup>	58.54 <sup>120</sup>	15.003 <sup>165</sup>	25.26 <sup>31</sup>	28.485 <sup>161</sup>	11.43 <sup>0</sup>
17	5.340 <sup>153</sup>	62.97 <sup>41</sup>	50.638 <sup>365</sup>	57.34 <sup>169</sup>	14.838 <sup>153</sup>	24.95 <sup>32</sup>	28.324 <sup>151</sup>	11.43 <sup>14</sup>
27	5.187 <sup>129</sup>	62.56 <sup>43</sup>	50.273 <sup>330</sup>	55.65 <sup>216</sup>	14.685 <sup>130</sup>	24.63 <sup>31</sup>	28.173 <sup>130</sup>	11.57 <sup>30</sup>
Okt. 7	5.058 <sup>95</sup>	62.13 <sup>39</sup>	49.943 <sup>284</sup>	53.49 <sup>260</sup>	14.555 <sup>97</sup>	24.32 <sup>25</sup>	28.043 <sup>102</sup>	11.87 <sup>46</sup>
17	4.963 <sup>53</sup>	61.74 <sup>32</sup>	49.659 <sup>225</sup>	50.89 <sup>298</sup>	14.458 <sup>57</sup>	24.07 <sup>18</sup>	27.941 <sup>66</sup>	12.33 <sup>65</sup>
27	4.910 <sup>5</sup>	61.42 <sup>23</sup>	49.434 <sup>156</sup>	47.91 <sup>331</sup>	14.401 <sup>10</sup>	23.89 <sup>6</sup>	27.875 <sup>22</sup>	12.98 <sup>84</sup>
Nov. 6	4.905 <sup>48</sup>	61.19 <sup>8</sup>	49.278 <sup>79</sup>	44.60 <sup>357</sup>	14.391 <sup>42</sup>	23.83 <sup>8</sup>	27.853 <sup>26</sup>	13.82 <sup>103</sup>
16	4.953 <sup>102</sup>	61.11 <sup>10</sup>	49.199 <sup>4</sup>	41.03 <sup>375</sup>	14.433 <sup>95</sup>	23.91 <sup>26</sup>	27.879 <sup>75</sup>	14.85 <sup>123</sup>
26	5.055 <sup>156</sup>	61.21 <sup>28</sup>	49.203 <sup>89</sup>	37.28 <sup>383</sup>	14.528 <sup>148</sup>	24.17 <sup>44</sup>	27.954 <sup>125</sup>	16.08 <sup>141</sup>
Dez. 6	5.211 <sup>206</sup>	61.49 <sup>48</sup>	49.292 <sup>173</sup>	33.45 <sup>381</sup>	14.676 <sup>197</sup>	24.61 <sup>63</sup>	28.079 <sup>172</sup>	17.49 <sup>155</sup>
16	5.417 <sup>249</sup>	61.97 <sup>68</sup>	49.465 <sup>252</sup>	29.64 <sup>366</sup>	14.873 <sup>240</sup>	25.24 <sup>81</sup>	28.251 <sup>214</sup>	19.04 <sup>167</sup>
26	5.666 <sup>284</sup>	62.65 <sup>85</sup>	49.717 <sup>325</sup>	25.98 <sup>340</sup>	15.113 <sup>276</sup>	26.05 <sup>96</sup>	28.465 <sup>249</sup>	20.71 <sup>173</sup>
36	5.950	63.50	50.042	22.58	15.389	27.01	28.714	22.44
Mittl. Ort	4.585	60.26	51.216	41.73	14.067	23.25	27.608	15.09
sec $\delta$ , tg $\delta$	1.082	-0.414	1.926	+1.646	1.062	-0.357	1.002	-0.062
a, a'	+3.5	-10.2	+1.2	-10.0	+3.5	-9.9	+3.1	-9.1
b, b'	+0.01	+0.86	-0.05	+0.87	+0.01	+0.87	0.00	+0.89



## Scheinbare Sternörter 1945

Tag	606) 19 Ursae min.		605) ε Ophiuchi		604) γ <sup>2</sup> Normae		608) τ Herculis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	16 <sup>h</sup> 12 <sup>m</sup>	+76° 0'	16 <sup>h</sup> 15 <sup>m</sup>	-4° 33'	16 <sup>h</sup> 15 <sup>m</sup>	-5° 0' 1'	16 <sup>h</sup> 18 <sup>m</sup>	+46° 26'
Jan. I	17.34 <sup>60</sup>	54.38 <sup>316</sup>	22.376 <sup>263</sup>	30.32 <sup>166</sup>	39.842 <sup>386</sup>	7.33 <sup>51</sup>	2.820 <sup>287</sup>	32.70 <sup>321</sup>
II	17.94 <sup>74</sup>	51.22 <sup>271</sup>	22.639 <sup>285</sup>	31.98 <sup>163</sup>	40.228 <sup>421</sup>	6.82 <sup>20</sup>	3.107 <sup>328</sup>	29.49 <sup>285</sup>
21	18.68 <sup>84</sup>	48.51 <sup>217</sup>	22.924 <sup>300</sup>	33.61 <sup>155</sup>	40.649 <sup>444</sup>	6.62 <sup>12</sup>	3.435 <sup>359</sup>	26.64 <sup>239</sup>
31	19.52 <sup>91</sup>	46.34 <sup>157</sup>	23.224 <sup>307</sup>	35.16 <sup>140</sup>	41.093 <sup>456</sup>	6.74 <sup>43</sup>	3.794 <sup>379</sup>	24.25 <sup>185</sup>
Febr. 10	20.43 <sup>96</sup>	44.77 <sup>92</sup>	23.531 <sup>307</sup>	36.56 <sup>121</sup>	41.549 <sup>457</sup>	7.17 <sup>70</sup>	4.173 <sup>387</sup>	22.40 <sup>125</sup>
20	21.39 <sup>96</sup>	43.85 <sup>23</sup>	23.838 <sup>301</sup>	37.77 <sup>97</sup>	42.006 <sup>451</sup>	7.87 <sup>94</sup>	4.560 <sup>386</sup>	21.15 <sup>62</sup>
März 2	22.35 <sup>94</sup>	43.62 <sup>45</sup>	24.139 <sup>290</sup>	38.74 <sup>72</sup>	42.457 <sup>436</sup>	8.81 <sup>117</sup>	4.946 <sup>373</sup>	20.53 <sup>2</sup>
12	23.29 <sup>88</sup>	44.07 <sup>108</sup>	24.429 <sup>275</sup>	39.46 <sup>46</sup>	42.893 <sup>416</sup>	9.98 <sup>136</sup>	5.319 <sup>353</sup>	20.55 <sup>64</sup>
22	24.17 <sup>79</sup>	45.15 <sup>167</sup>	24.704 <sup>258</sup>	39.92 <sup>20</sup>	43.309 <sup>391</sup>	11.34 <sup>152</sup>	5.672 <sup>325</sup>	21.19 <sup>123</sup>
Apr. I	24.96 <sup>68</sup>	46.82 <sup>217</sup>	24.962 <sup>238</sup>	40.12 <sup>5</sup>	43.700 <sup>360</sup>	12.86 <sup>166</sup>	5.997 <sup>292</sup>	22.42 <sup>174</sup>
II	25.64 <sup>56</sup>	48.99 <sup>259</sup>	25.200 <sup>215</sup>	40.07 <sup>26</sup>	44.060 <sup>326</sup>	14.52 <sup>175</sup>	6.289 <sup>252</sup>	24.16 <sup>218</sup>
21	26.20 <sup>41</sup>	51.58 <sup>290</sup>	25.415 <sup>190</sup>	39.81 <sup>44</sup>	44.386 <sup>289</sup>	16.27 <sup>183</sup>	6.541 <sup>210</sup>	26.34 <sup>251</sup>
Mai I	26.61 <sup>26</sup>	54.48 <sup>309</sup>	25.605 <sup>164</sup>	39.37 <sup>58</sup>	44.675 <sup>247</sup>	18.10 <sup>188</sup>	6.751 <sup>164</sup>	28.85 <sup>276</sup>
II	26.87 <sup>10</sup>	57.57 <sup>317</sup>	25.769 <sup>137</sup>	38.79 <sup>68</sup>	44.922 <sup>201</sup>	19.98 <sup>191</sup>	6.915 <sup>116</sup>	31.61 <sup>289</sup>
21	26.97 <sup>5</sup>	60.74 <sup>316</sup>	25.906 <sup>106</sup>	38.11 <sup>75</sup>	45.123 <sup>153</sup>	21.89 <sup>188</sup>	7.031 <sup>67</sup>	34.50 <sup>293</sup>
30	26.92 <sup>20</sup>	63.90 <sup>303</sup>	26.012 <sup>74</sup>	37.36 <sup>76</sup>	45.276 <sup>101</sup>	23.77 <sup>183</sup>	7.098 <sup>17</sup>	37.43 <sup>288</sup>
Juni 9	26.72 <sup>34</sup>	66.93 <sup>282</sup>	26.086 <sup>41</sup>	36.60 <sup>76</sup>	45.377 <sup>48</sup>	25.60 <sup>175</sup>	7.115 <sup>32</sup>	40.31 <sup>274</sup>
19	26.38 <sup>48</sup>	69.75 <sup>254</sup>	26.127 <sup>7</sup>	35.84 <sup>74</sup>	45.425 <sup>6</sup>	27.35 <sup>161</sup>	7.083 <sup>80</sup>	43.05 <sup>252</sup>
29	25.90 <sup>60</sup>	72.29 <sup>218</sup>	26.134 <sup>27</sup>	35.10 <sup>68</sup>	45.419 <sup>61</sup>	28.96 <sup>144</sup>	7.003 <sup>124</sup>	45.57 <sup>223</sup>
Juli 9	25.30 <sup>71</sup>	74.47 <sup>176</sup>	26.107 <sup>59</sup>	34.42 <sup>61</sup>	45.358 <sup>112</sup>	30.40 <sup>123</sup>	6.879 <sup>167</sup>	47.80 <sup>189</sup>
19	24.59 <sup>79</sup>	76.23 <sup>130</sup>	26.048 <sup>89</sup>	33.81 <sup>54</sup>	45.246 <sup>159</sup>	31.63 <sup>98</sup>	6.712 <sup>204</sup>	49.69 <sup>150</sup>
29	23.80 <sup>86</sup>	77.53 <sup>82</sup>	25.959 <sup>117</sup>	33.27 <sup>45</sup>	45.087 <sup>201</sup>	32.61 <sup>69</sup>	6.508 <sup>236</sup>	51.19 <sup>107</sup>
Aug. 8	22.94 <sup>91</sup>	78.35 <sup>31</sup>	25.842 <sup>138</sup>	32.82 <sup>35</sup>	44.886 <sup>234</sup>	33.30 <sup>38</sup>	6.272 <sup>260</sup>	52.26 <sup>62</sup>
18	22.03 <sup>93</sup>	78.66 <sup>21</sup>	25.704 <sup>154</sup>	32.47 <sup>25</sup>	44.652 <sup>256</sup>	33.68 <sup>6</sup>	6.012 <sup>277</sup>	52.88 <sup>15</sup>
28	21.10 <sup>95</sup>	78.45 <sup>74</sup>	25.550 <sup>162</sup>	32.22 <sup>15</sup>	44.396 <sup>267</sup>	33.74 <sup>28</sup>	5.735 <sup>285</sup>	53.03 <sup>33</sup>
Sept. 7	20.15 <sup>92</sup>	77.71 <sup>124</sup>	25.388 <sup>162</sup>	32.07 <sup>2</sup>	44.129 <sup>264</sup>	33.46 <sup>61</sup>	5.450 <sup>283</sup>	52.70 <sup>81</sup>
17	19.23 <sup>89</sup>	76.47 <sup>174</sup>	25.226 <sup>151</sup>	32.05 <sup>10</sup>	43.865 <sup>247</sup>	32.85 <sup>91</sup>	5.167 <sup>270</sup>	51.89 <sup>129</sup>
27	18.34 <sup>81</sup>	74.73 <sup>221</sup>	25.075 <sup>133</sup>	32.15 <sup>25</sup>	43.618 <sup>215</sup>	31.94 <sup>118</sup>	4.897 <sup>246</sup>	50.60 <sup>175</sup>
Okt. 7	17.53 <sup>73</sup>	72.52 <sup>264</sup>	24.942 <sup>104</sup>	32.40 <sup>42</sup>	43.403 <sup>170</sup>	30.76 <sup>140</sup>	4.651 <sup>212</sup>	48.85 <sup>218</sup>
17	16.80 <sup>62</sup>	69.88 <sup>302</sup>	24.838 <sup>68</sup>	32.82 <sup>59</sup>	43.233 <sup>114</sup>	29.36 <sup>155</sup>	4.439 <sup>167</sup>	46.67 <sup>259</sup>
27	16.18 <sup>48</sup>	66.86 <sup>334</sup>	24.770 <sup>26</sup>	33.41 <sup>77</sup>	43.119 <sup>48</sup>	27.81 <sup>164</sup>	4.272 <sup>114</sup>	44.08 <sup>294</sup>
Nov. 6	15.70 <sup>33</sup>	63.52 <sup>360</sup>	24.744 <sup>23</sup>	34.18 <sup>96</sup>	43.071 <sup>26</sup>	26.17 <sup>165</sup>	4.158 <sup>55</sup>	41.14 <sup>324</sup>
16	15.37 <sup>17</sup>	59.92 <sup>376</sup>	24.767 <sup>73</sup>	35.14 <sup>116</sup>	43.097 <sup>101</sup>	24.52 <sup>158</sup>	4.103 <sup>10</sup>	37.90 <sup>346</sup>
26	15.20 <sup>0</sup>	56.16 <sup>384</sup>	24.840 <sup>122</sup>	36.30 <sup>133</sup>	43.198 <sup>176</sup>	22.94 <sup>144</sup>	4.113 <sup>76</sup>	34.44 <sup>360</sup>
Dez. 6	15.20 <sup>18</sup>	52.32 <sup>380</sup>	24.962 <sup>169</sup>	37.63 <sup>148</sup>	43.374 <sup>246</sup>	21.50 <sup>124</sup>	4.189 <sup>141</sup>	30.84 <sup>364</sup>
16	15.38 <sup>35</sup>	48.52 <sup>365</sup>	25.131 <sup>212</sup>	39.11 <sup>159</sup>	43.620 <sup>310</sup>	20.26 <sup>98</sup>	4.330 <sup>202</sup>	27.20 <sup>357</sup>
26	15.73 <sup>51</sup>	44.87 <sup>339</sup>	25.343 <sup>247</sup>	40.70 <sup>166</sup>	43.930 <sup>363</sup>	19.28 <sup>69</sup>	4.532 <sup>259</sup>	23.63 <sup>340</sup>
36	16.24	41.48	25.590	42.36	44.293	18.59	4.791	20.23
Mittl. Ort	21.73	60.67	24.476	35.63	42.862	21.37	5.108	36.47
sec δ, tg δ	4.138	+4.016	1.003	-0.080	1.556	-1.193	1.451	+1.052
a, a'	-1.7	-9.1	+3.2	-8.8	+4.5	-8.8	+1.8	-8.6
b, b'	-0.12	+0.89	0.00	+0.90	+0.03	+0.90	-0.03	+0.90



Tag	609) $\gamma$ Herculis		611) $\gamma$ Apodis		616) $\alpha$ Scorpii		618) $\beta$ Herculis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$16^h 19^m$	$+19^\circ 16'$	$16^h 24^m$	$-78^\circ 46'$	$16^h 25^m$	$-26^\circ 18'$	$16^h 27^m$	$+21^\circ 36'$
Jan. I	27.446 <sub>252</sub>	52.19 <sub>259</sub>	48.47 <sub>104</sub>	23.24 <sub>177</sub>	59.462 <sub>287</sub>	32.69 <sub>56</sub>	49.125 <sub>246</sub>	29.59 <sub>268</sub>
II	27.698 <sub>279</sub>	49.60 <sub>238</sub>	49.51 <sub>118</sub>	21.47 <sub>132</sub>	59.749 <sub>313</sub>	33.25 <sub>71</sub>	49.371 <sub>274</sub>	26.91 <sub>246</sub>
21	27.977 <sub>297</sub>	47.22 <sub>210</sub>	50.69 <sub>127</sub>	20.15 <sub>86</sub>	60.062 <sub>330</sub>	33.96 <sub>81</sub>	49.645 <sub>295</sub>	24.45 <sub>217</sub>
31	28.274 <sub>308</sub>	45.12 <sub>174</sub>	51.96 <sub>134</sub>	19.29 <sub>37</sub>	60.392 <sub>339</sub>	34.77 <sub>88</sub>	49.940 <sub>307</sub>	22.28 <sub>179</sub>
Febr. 10	28.582 <sub>311</sub>	43.38 <sub>131</sub>	53.30 <sub>137</sub>	18.92 <sub>13</sub>	60.731 <sub>340</sub>	35.65 <sub>93</sub>	50.247 <sub>312</sub>	20.49 <sub>135</sub>
20	28.893 <sub>306</sub>	42.07 <sub>85</sub>	54.67 <sub>137</sub>	19.05 <sub>60</sub>	61.071 <sub>336</sub>	36.58 <sub>93</sub>	50.559 <sub>309</sub>	19.14 <sub>88</sub>
März 2	29.199 <sub>296</sub>	41.22 <sub>38</sub>	56.04 <sub>134</sub>	19.65 <sub>104</sub>	61.407 <sub>326</sub>	37.51 <sub>90</sub>	50.868 <sub>300</sub>	18.26 <sub>38</sub>
12	29.495 <sub>281</sub>	40.84 <sub>9</sub>	57.38 <sub>128</sub>	20.69 <sub>147</sub>	61.733 <sub>312</sub>	38.41 <sub>87</sub>	51.168 <sub>287</sub>	17.88 <sub>11</sub>
22	29.776 <sub>262</sub>	40.93 <sub>54</sub>	58.66 <sub>121</sub>	22.16 <sub>186</sub>	62.405 <sub>295</sub>	39.28 <sub>81</sub>	51.455 <sub>268</sub>	17.99 <sub>58</sub>
Apr. I	30.038 <sub>239</sub>	41.47 <sub>95</sub>	59.87 <sub>112</sub>	24.02 <sub>219</sub>	62.340 <sub>275</sub>	40.09 <sub>75</sub>	51.723 <sub>247</sub>	18.57 <sub>100</sub>
11	30.277 <sub>215</sub>	42.42 <sub>130</sub>	60.99 <sub>99</sub>	26.21 <sub>248</sub>	62.615 <sub>251</sub>	40.84 <sub>69</sub>	51.970 <sub>222</sub>	19.57 <sub>137</sub>
21	30.492 <sub>187</sub>	43.72 <sub>159</sub>	61.98 <sub>86</sub>	28.69 <sub>272</sub>	62.866 <sub>227</sub>	41.53 <sub>64</sub>	52.192 <sub>195</sub>	20.94 <sub>168</sub>
Mai I	30.679 <sub>157</sub>	45.31 <sub>179</sub>	62.84 <sub>71</sub>	31.41 <sub>291</sub>	63.093 <sub>198</sub>	42.17 <sub>59</sub>	52.387 <sub>164</sub>	22.62 <sub>189</sub>
11	30.836 <sub>126</sub>	47.10 <sub>193</sub>	63.55 <sub>55</sub>	34.32 <sub>303</sub>	63.291 <sub>167</sub>	42.76 <sub>55</sub>	52.551 <sub>133</sub>	24.51 <sub>205</sub>
21	30.962 <sub>93</sub>	49.03 <sub>199</sub>	64.10 <sub>37</sub>	37.35 <sub>309</sub>	63.458 <sub>134</sub>	43.31 <sub>51</sub>	52.684 <sub>99</sub>	26.56 <sub>211</sub>
30	31.055 <sub>58</sub>	51.02 <sub>199</sub>	64.47 <sub>19</sub>	40.44 <sub>308</sub>	63.592 <sub>99</sub>	43.82 <sub>48</sub>	52.783 <sub>64</sub>	28.67 <sub>211</sub>
Juni 9	31.113 <sub>24</sub>	53.01 <sub>192</sub>	64.66 <sub>1</sub>	43.52 <sub>299</sub>	63.691 <sub>60</sub>	44.30 <sub>44</sub>	52.847 <sub>28</sub>	30.78 <sub>205</sub>
19	31.137 <sub>12</sub>	54.93 <sub>179</sub>	64.67 <sub>18</sub>	46.51 <sub>283</sub>	63.751 <sub>22</sub>	44.74 <sub>39</sub>	52.875 <sub>9</sub>	32.83 <sub>191</sub>
29	31.125 <sub>47</sub>	56.72 <sub>162</sub>	64.49 <sub>36</sub>	49.34 <sub>260</sub>	63.773 <sub>18</sub>	45.13 <sub>34</sub>	52.866 <sub>44</sub>	34.74 <sub>174</sub>
Juli 9	31.078 <sub>80</sub>	58.34 <sub>140</sub>	64.13 <sub>53</sub>	51.94 <sub>230</sub>	63.755 <sub>56</sub>	45.47 <sub>28</sub>	52.822 <sub>79</sub>	36.48 <sub>151</sub>
19	30.998 <sub>111</sub>	59.74 <sub>115</sub>	63.60 <sub>68</sub>	54.24 <sub>193</sub>	63.699 <sub>92</sub>	45.75 <sub>20</sub>	52.743 <sub>112</sub>	37.99 <sub>125</sub>
29	30.887 <sub>138</sub>	60.89 <sub>88</sub>	62.92 <sub>81</sub>	56.17 <sub>150</sub>	63.607 <sub>124</sub>	45.95 <sub>11</sub>	52.631 <sub>140</sub>	39.24 <sub>97</sub>
Aug. 8	30.749 <sub>160</sub>	61.77 <sub>59</sub>	62.11 <sub>91</sub>	57.67 <sub>102</sub>	63.483 <sub>150</sub>	46.06 <sub>1</sub>	52.491 <sub>162</sub>	40.21 <sub>65</sub>
18	30.589 <sub>175</sub>	62.36 <sub>28</sub>	61.20 <sub>97</sub>	58.69 <sub>50</sub>	63.333 <sub>170</sub>	46.07 <sub>10</sub>	52.329 <sub>180</sub>	40.86 <sub>34</sub>
28	30.414 <sub>184</sub>	62.64 <sub>4</sub>	60.23 <sub>101</sub>	59.19 <sub>4</sub>	63.163 <sub>181</sub>	45.97 <sub>20</sub>	52.149 <sub>190</sub>	41.20 <sub>1</sub>
Sept. 7	30.230 <sub>183</sub>	62.60 <sub>36</sub>	59.22 <sub>99</sub>	59.15 <sub>58</sub>	62.982 <sub>181</sub>	45.77 <sub>30</sub>	51.959 <sub>190</sub>	41.19 <sub>35</sub>
17	30.047 <sub>174</sub>	62.24 <sub>70</sub>	58.23 <sub>94</sub>	58.57 <sub>111</sub>	62.801 <sub>172</sub>	45.47 <sub>38</sub>	51.769 <sub>183</sub>	40.84 <sub>70</sub>
27	29.873 <sub>156</sub>	61.54 <sub>103</sub>	57.29 <sub>84</sub>	57.46 <sub>160</sub>	62.629 <sub>152</sub>	45.09 <sub>45</sub>	51.586 <sub>165</sub>	40.14 <sub>105</sub>
Okt. 7	29.717 <sub>128</sub>	60.51 <sub>135</sub>	56.45 <sub>71</sub>	55.86 <sub>204</sub>	62.477 <sub>121</sub>	44.64 <sub>47</sub>	51.421 <sub>138</sub>	39.09 <sub>139</sub>
17	29.589 <sub>92</sub>	59.16 <sub>167</sub>	55.74 <sub>54</sub>	53.82 <sub>238</sub>	62.356 <sub>81</sub>	44.17 <sub>47</sub>	51.283 <sub>103</sub>	37.70 <sub>172</sub>
27	29.497 <sub>50</sub>	57.49 <sub>196</sub>	55.20 <sub>34</sub>	51.44 <sub>265</sub>	62.275 <sub>33</sub>	43.70 <sub>41</sub>	51.180 <sub>61</sub>	35.98 <sub>202</sub>
Nov. 6	29.447 <sub>2</sub>	55.53 <sub>222</sub>	54.86 <sub>12</sub>	48.79 <sub>281</sub>	62.242 <sub>20</sub>	43.29 <sub>33</sub>	51.119 <sub>13</sub>	33.96 <sub>230</sub>
16	29.445 <sub>49</sub>	53.31 <sub>245</sub>	54.74 <sub>11</sub>	45.98 <sub>285</sub>	62.262 <sub>75</sub>	42.96 <sub>21</sub>	51.106 <sub>37</sub>	31.66 <sub>253</sub>
26	29.494 <sub>101</sub>	50.86 <sub>262</sub>	54.85 <sub>34</sub>	43.13 <sub>279</sub>	62.337 <sub>130</sub>	42.75 <sub>5</sub>	51.143 <sub>89</sub>	29.13 <sub>271</sub>
Dez. 6	29.595 <sub>149</sub>	48.24 <sub>273</sub>	55.19 <sub>57</sub>	40.34 <sub>261</sub>	62.467 <sub>182</sub>	42.70 <sub>12</sub>	51.232 <sub>140</sub>	26.42 <sub>281</sub>
16	29.744 <sub>195</sub>	45.51 <sub>274</sub>	55.76 <sub>77</sub>	37.73 <sub>236</sub>	62.649 <sub>230</sub>	42.82 <sub>30</sub>	51.372 <sub>186</sub>	23.61 <sub>284</sub>
26	29.939 <sub>234</sub>	42.77 <sub>269</sub>	56.53 <sub>95</sub>	35.37 <sub>200</sub>	62.879 <sub>270</sub>	43.12 <sub>47</sub>	51.558 <sub>227</sub>	20.77 <sub>277</sub>
36	30.173	40.08	57.48	33.37	63.149	43.59	51.785	18.00
Mittl. Ort	29.501	51.69	56.75	39.69	61.850	41.97	51.209	29.44
sec $\delta$ , tg $\delta$	1.059	+0.350	5.138	-5.040	1.116	-0.495	1.076	+0.396
a, a'	+2.7	-8.5	+9.2	-8.1	+3.7	-8.0	+2.6	-7.8
b, b'	-0.01	+0.91	+0.14	+0.92	+0.01	+0.92	-0.01	+0.92



Tag	619) A Draconis		1432) Pi 16 <sup>h</sup> 140 Draco		621) $\sigma$ Herculis		622) $\zeta$ Ophiuchi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	16 <sup>h</sup> 28 <sup>m</sup>	+68° 52'	16 <sup>h</sup> 31 <sup>m</sup>	+60° 55'	16 <sup>h</sup> 32 <sup>m</sup>	+42° 32'	16 <sup>h</sup> 34 <sup>m</sup>	-10° 27'
Jan. I	1.39 <sup>a</sup> <sub>41</sub>	68.59 <sup>b</sup> <sub>333</sub>	35.86 <sup>a</sup> <sub>33</sub>	72.52 <sup>b</sup> <sub>337</sub>	17.396 <sup>a</sup> <sub>262</sub>	55.38 <sup>b</sup> <sub>321</sub>	5.408 <sup>a</sup> <sub>254</sub>	20.33 <sup>b</sup> <sub>132</sub>
II	1.80 <sub>50</sub>	65.26 <sub>293</sub>	36.19 <sub>39</sub>	69.15 <sub>300</sub>	17.658 <sub>302</sub>	52.17 <sub>289</sub>	5.662 <sub>280</sub>	21.65 <sub>133</sub>
2I	2.30 <sub>57</sub>	62.33 <sub>243</sub>	36.58 <sub>45</sub>	66.15 <sub>251</sub>	17.960 <sub>332</sub>	49.28 <sub>248</sub>	5.942 <sub>298</sub>	22.98 <sub>130</sub>
3I	2.87 <sub>62</sub>	59.90 <sub>184</sub>	37.03 <sub>48</sub>	63.64 <sub>194</sub>	18.292 <sub>353</sub>	46.80 <sub>197</sub>	6.240 <sub>307</sub>	24.28 <sub>122</sub>
Febr. 10	3.49 <sub>66</sub>	58.06 <sub>119</sub>	37.51 <sub>51</sub>	61.70 <sub>131</sub>	18.645 <sub>364</sub>	44.83 <sub>139</sub>	6.547 <sub>310</sub>	25.50 <sub>108</sub>
20	4.15 <sub>66</sub>	56.87 <sub>52</sub>	38.02 <sub>51</sub>	60.39 <sub>64</sub>	19.009 <sub>365</sub>	43.44 <sub>79</sub>	6.857 <sub>307</sub>	26.58 <sub>92</sub>
März 2	4.81 <sub>66</sub>	56.35 <sub>17</sub>	38.53 <sub>50</sub>	59.75 <sub>5</sub>	19.374 <sub>357</sub>	42.65 <sub>16</sub>	7.164 <sub>299</sub>	27.50 <sub>73</sub>
12	5.47 <sub>62</sub>	56.52 <sub>83</sub>	39.03 <sub>49</sub>	59.80 <sub>71</sub>	19.731 <sub>341</sub>	42.49 <sub>46</sub>	7.463 <sub>287</sub>	28.23 <sub>52</sub>
22	6.09 <sub>57</sub>	57.35 <sub>144</sub>	39.52 <sub>44</sub>	60.51 <sub>132</sub>	20.072 <sub>319</sub>	42.95 <sub>103</sub>	7.750 <sub>272</sub>	28.75 <sub>32</sub>
Apr. I	6.66 <sub>51</sub>	58.79 <sub>199</sub>	39.96 <sub>40</sub>	61.83 <sub>188</sub>	20.391 <sub>289</sub>	43.98 <sub>156</sub>	8.022 <sub>254</sub>	29.07 <sub>12</sub>
II	7.17 <sub>42</sub>	60.78 <sub>245</sub>	40.36 <sub>34</sub>	63.71 <sub>235</sub>	20.680 <sub>256</sub>	45.54 <sub>201</sub>	8.276 <sub>234</sub>	29.19 <sub>6</sub>
2I	7.59 <sub>34</sub>	63.23 <sub>280</sub>	40.70 <sub>28</sub>	66.06 <sub>271</sub>	20.936 <sub>218</sub>	47.55 <sub>237</sub>	8.510 <sub>211</sub>	29.13 <sub>20</sub>
Mai I	7.93 <sub>25</sub>	66.03 <sub>304</sub>	40.98 <sub>21</sub>	68.77 <sub>298</sub>	21.154 <sub>178</sub>	49.92 <sub>263</sub>	8.721 <sub>186</sub>	28.93 <sub>31</sub>
II	8.18 <sub>14</sub>	69.07 <sub>318</sub>	41.19 <sub>14</sub>	71.75 <sub>313</sub>	21.332 <sub>134</sub>	52.55 <sub>279</sub>	8.907 <sub>158</sub>	28.62 <sub>40</sub>
2I	8.32 <sub>4</sub>	72.25 <sub>322</sub>	41.33 <sub>7</sub>	74.88 <sub>319</sub>	21.466 <sub>88</sub>	55.34 <sub>287</sub>	9.065 <sub>128</sub>	28.22 <sub>45</sub>
30*)	8.36 <sub>6</sub>	75.47 <sub>314</sub>	41.40 <sub>1</sub>	78.07 <sub>313</sub>	21.554 <sub>42</sub>	58.21 <sub>284</sub>	9.193 <sub>95</sub>	27.77 <sub>48</sub>
Juni 9	8.30 <sub>16</sub>	78.61 <sub>297</sub>	41.39 <sub>8</sub>	81.20 <sub>299</sub>	21.596 <sub>5</sub>	61.05 <sub>274</sub>	9.288 <sub>61</sub>	27.29 <sub>48</sub>
19	8.14 <sub>26</sub>	81.58 <sub>273</sub>	41.31 <sub>15</sub>	84.19 <sub>276</sub>	21.591 <sub>51</sub>	63.79 <sub>254</sub>	9.349 <sub>25</sub>	26.81 <sub>46</sub>
29	7.88 <sub>33</sub>	84.31 <sub>241</sub>	41.16 <sub>22</sub>	86.95 <sub>245</sub>	21.540 <sub>95</sub>	66.33 <sub>229</sub>	9.374 <sub>10</sub>	26.35 <sub>43</sub>
Juli 9	7.55 <sub>42</sub>	86.72 <sub>202</sub>	40.94 <sub>27</sub>	89.40 <sub>209</sub>	21.445 <sub>137</sub>	68.62 <sub>198</sub>	9.364 <sub>46</sub>	25.92 <sub>40</sub>
19	7.13 <sub>48</sub>	88.74 <sub>159</sub>	40.67 <sub>33</sub>	91.49 <sub>168</sub>	21.308 <sub>175</sub>	70.60 <sub>161</sub>	9.318 <sub>80</sub>	25.52 <sub>36</sub>
29	6.65 <sub>54</sub>	90.33 <sub>112</sub>	40.34 <sub>37</sub>	93.17 <sub>121</sub>	21.133 <sub>208</sub>	72.21 <sub>122</sub>	9.238 <sub>109</sub>	25.16 <sub>30</sub>
Aug. 8	6.11 <sub>58</sub>	91.45 <sub>62</sub>	39.97 <sub>40</sub>	94.38 <sub>73</sub>	20.925 <sub>234</sub>	73.43 <sub>79</sub>	9.129 <sub>134</sub>	24.86 <sub>26</sub>
18	5.53 <sub>60</sub>	92.07 <sub>10</sub>	39.57 <sub>43</sub>	95.11 <sub>22</sub>	20.691 <sub>254</sub>	74.22 <sub>33</sub>	8.995 <sub>154</sub>	24.60 <sub>21</sub>
28	4.93 <sub>62</sub>	92.17 <sub>42</sub>	39.14 <sub>44</sub>	95.33 <sub>30</sub>	20.437 <sub>264</sub>	74.55 <sub>12</sub>	8.841 <sub>165</sub>	24.39 <sub>16</sub>
Sept. 7	4.31 <sub>62</sub>	91.75 <sub>94</sub>	38.70 <sub>44</sub>	95.03 <sub>81</sub>	20.173 <sub>266</sub>	74.43 <sub>60</sub>	8.676 <sub>167</sub>	24.23 <sub>10</sub>
17	3.69 <sub>59</sub>	90.81 <sub>146</sub>	38.26 <sub>43</sub>	94.22 <sub>133</sub>	19.907 <sub>256</sub>	73.83 <sub>106</sub>	8.509 <sub>160</sub>	24.13 <sub>2</sub>
27	3.10 <sub>55</sub>	89.35 <sub>195</sub>	37.83 <sub>40</sub>	92.89 <sub>182</sub>	19.651 <sub>236</sub>	72.77 <sub>152</sub>	8.349 <sub>143</sub>	24.11 <sub>6</sub>
Okt. 7	2.55 <sub>50</sub>	87.40 <sub>241</sub>	37.43 <sub>35</sub>	91.07 <sub>229</sub>	19.415 <sub>205</sub>	71.25 <sub>196</sub>	8.206 <sub>117</sub>	24.17 <sub>17</sub>
17	2.05 <sub>42</sub>	84.99 <sub>282</sub>	37.08 <sub>30</sub>	88.78 <sub>272</sub>	19.210 <sub>166</sub>	69.29 <sub>236</sub>	8.089 <sub>81</sub>	24.34 <sub>29</sub>
27	1.63 <sub>34</sub>	82.17 <sub>319</sub>	36.78 <sub>23</sub>	86.06 <sub>310</sub>	19.044 <sub>117</sub>	66.93 <sub>273</sub>	8.008 <sub>40</sub>	24.63 <sub>44</sub>
Nov. 6	1.29 <sub>23</sub>	78.98 <sub>350</sub>	36.55 <sub>15</sub>	82.96 <sub>341</sub>	18.927 <sub>61</sub>	64.20 <sub>305</sub>	7.968 <sub>8</sub>	25.07 <sub>59</sub>
16	1.06 <sub>13</sub>	75.48 <sub>371</sub>	36.40 <sub>7</sub>	79.55 <sub>365</sub>	18.866 <sub>1</sub>	61.15 <sub>330</sub>	7.976 <sub>58</sub>	25.66 <sub>75</sub>
26	0.93 <sub>0</sub>	71.77 <sub>383</sub>	36.33 <sub>2</sub>	75.90 <sub>380</sub>	18.865 <sub>61</sub>	57.85 <sub>346</sub>	8.034 <sub>109</sub>	26.41 <sub>92</sub>
Dez. 6	0.93 <sub>12</sub>	67.94 <sub>385</sub>	36.35 <sub>12</sub>	72.10 <sub>383</sub>	18.926 <sub>122</sub>	54.39 <sub>354</sub>	8.143 <sub>157</sub>	27.33 <sub>107</sub>
16	1.05 <sub>23</sub>	64.09 <sub>375</sub>	36.47 <sub>20</sub>	68.27 <sub>377</sub>	19.048 <sub>181</sub>	50.85 <sub>351</sub>	8.300 <sub>201</sub>	28.40 <sub>119</sub>
26	1.28 <sub>34</sub>	60.34 <sub>354</sub>	36.67 <sub>28</sub>	64.50 <sub>357</sub>	19.229 <sub>235</sub>	47.34 <sub>337</sub>	8.501 <sub>238</sub>	29.59 <sub>129</sub>
36	1.62	56.80	36.95	60.93	19.464	43.97	8.739	30.88
Mittl. Ort	4.76	73.83	38.66	77.13	19.659	58.21	7.619	26.27
sec $\delta$ , tg $\delta$	2.776	+2.590	2.059	+1.799	1.357	+0.918	1.017	-0.185
a, a'	-0.1	-7.8	+0.8	-7.5	+1.9	-7.5	+3.3	-7.3
b, b'	-0.07	+0.92	-0.05	+0.93	-0.02	+0.93	0.00	+0.93

\*) Bei Stern 622) lies Mai 31.



# Obere Kulmination Greenwich

137\*

Tag	626) η Hercules		625) α Triang. austr.		627) Grb 2377 Draco		628) ε Scorpii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	16 <sup>h</sup> 40 <sup>m</sup>	+39° 1'	16 <sup>h</sup> 42 <sup>m</sup>	−68° 55'	16 <sup>h</sup> 44 <sup>m</sup>	+56° 52'	16 <sup>h</sup> 46 <sup>m</sup>	−34° 11'
Jan. I	58.265 <sup>246</sup>	30.90 <sup>318</sup>	44.18 <sup>58</sup>	32.69 <sup>161</sup>	12.304 <sup>286</sup>	42.80 <sup>343</sup>	33.132 <sup>288</sup>	33.28 <sup>1</sup>
II	58.511 <sup>286</sup>	27.72 <sup>289</sup>	44.76 <sup>65</sup>	31.08 <sup>124</sup>	12.590 <sup>346</sup>	39.37 <sup>308</sup>	33.420 <sup>320</sup>	33.29 <sup>20</sup>
21	58.797 <sup>315</sup>	24.83 <sup>250</sup>	45.41 <sup>71</sup>	29.84 <sup>84</sup>	12.936 <sup>394</sup>	36.29 <sup>263</sup>	33.740 <sup>342</sup>	33.49 <sup>35</sup>
31	59.112 <sup>336</sup>	22.33 <sup>202</sup>	46.12 <sup>75</sup>	29.00 <sup>42</sup>	13.330 <sup>430</sup>	33.66 <sup>208</sup>	34.082 <sup>356</sup>	33.84 <sup>50</sup>
Febr. 10	59.448 <sup>348</sup>	20.31 <sup>147</sup>	46.87 <sup>77</sup>	28.58 <sup>0</sup>	13.760 <sup>453</sup>	31.58 <sup>147</sup>	34.438 <sup>362</sup>	34.34 <sup>62</sup>
20	59.796 <sup>349</sup>	18.84 <sup>88</sup>	47.64 <sup>77</sup>	28.58 <sup>40</sup>	14.213 <sup>461</sup>	30.11 <sup>82</sup>	34.800 <sup>361</sup>	34.96 <sup>70</sup>
März 2	60.145 <sup>344</sup>	17.96 <sup>28</sup>	48.41 <sup>76</sup>	28.98 <sup>80</sup>	14.674 <sup>457</sup>	29.29 <sup>14</sup>	35.161 <sup>355</sup>	35.66 <sup>76</sup>
12	60.489 <sup>331</sup>	17.68 <sup>33</sup>	49.17 <sup>74</sup>	29.78 <sup>116</sup>	15.131 <sup>440</sup>	29.15 <sup>53</sup>	35.516 <sup>344</sup>	36.42 <sup>81</sup>
22	60.820 <sup>311</sup>	18.01 <sup>90</sup>	49.91 <sup>71</sup>	30.94 <sup>149</sup>	15.571 <sup>413</sup>	29.68 <sup>115</sup>	35.860 <sup>328</sup>	37.23 <sup>84</sup>
Apr. I	61.131 <sup>285</sup>	18.91 <sup>142</sup>	50.62 <sup>66</sup>	32.43 <sup>179</sup>	15.984 <sup>375</sup>	30.83 <sup>172</sup>	36.188 <sup>310</sup>	38.07 <sup>87</sup>
11	61.416 <sup>255</sup>	20.33 <sup>187</sup>	51.28 <sup>60</sup>	34.22 <sup>205</sup>	16.359 <sup>328</sup>	32.55 <sup>220</sup>	36.498 <sup>288</sup>	38.94 <sup>88</sup>
21	61.671 <sup>222</sup>	22.20 <sup>224</sup>	51.88 <sup>53</sup>	36.27 <sup>228</sup>	16.687 <sup>276</sup>	34.75 <sup>260</sup>	36.786 <sup>262</sup>	39.82 <sup>89</sup>
Mai I	61.893 <sup>184</sup>	24.44 <sup>251</sup>	52.41 <sup>47</sup>	38.55 <sup>245</sup>	16.963 <sup>219</sup>	37.35 <sup>289</sup>	37.048 <sup>234</sup>	40.71 <sup>90</sup>
11	62.077 <sup>144</sup>	26.95 <sup>270</sup>	52.88 <sup>38</sup>	41.00 <sup>259</sup>	17.182 <sup>157</sup>	40.24 <sup>308</sup>	37.282 <sup>201</sup>	41.61 <sup>90</sup>
21	62.221 <sup>101</sup>	29.65 <sup>278</sup>	53.26 <sup>28</sup>	43.59 <sup>266</sup>	17.339 <sup>92</sup>	43.32 <sup>316</sup>	37.483 <sup>165</sup>	42.51 <sup>91</sup>
31	62.322 <sup>57</sup>	32.43 <sup>277</sup>	53.54 <sup>20</sup>	46.25 <sup>268</sup>	17.431 <sup>27</sup>	46.48 <sup>314</sup>	37.648 <sup>126</sup>	43.42 <sup>90</sup>
Juni 9	62.379 <sup>13</sup>	35.20 <sup>268</sup>	53.74 <sup>9</sup>	48.93 <sup>264</sup>	17.458 <sup>37</sup>	49.62 <sup>303</sup>	37.774 <sup>84</sup>	44.32 <sup>87</sup>
19	62.392 <sup>31</sup>	37.88 <sup>252</sup>	53.83 <sup>1</sup>	51.57 <sup>252</sup>	17.421 <sup>101</sup>	52.65 <sup>283</sup>	37.858 <sup>41</sup>	45.19 <sup>84</sup>
29	62.361 <sup>75</sup>	40.40 <sup>229</sup>	53.82 <sup>11</sup>	54.09 <sup>235</sup>	17.320 <sup>162</sup>	55.48 <sup>256</sup>	37.899 <sup>3</sup>	46.03 <sup>77</sup>
Juli 9	62.286 <sup>116</sup>	42.69 <sup>199</sup>	53.71 <sup>20</sup>	56.44 <sup>212</sup>	17.158 <sup>217</sup>	58.04 <sup>222</sup>	37.896 <sup>48</sup>	46.80 <sup>69</sup>
19	62.170 <sup>155</sup>	44.68 <sup>166</sup>	53.51 <sup>30</sup>	58.56 <sup>181</sup>	16.941 <sup>268</sup>	60.26 <sup>182</sup>	37.848 <sup>90</sup>	47.49 <sup>58</sup>
29	62.015 <sup>187</sup>	46.34 <sup>128</sup>	53.21 <sup>37</sup>	60.37 <sup>144</sup>	16.673 <sup>312</sup>	62.08 <sup>139</sup>	37.758 <sup>127</sup>	48.07 <sup>45</sup>
Aug. 8	61.828 <sup>215</sup>	47.62 <sup>86</sup>	52.84 <sup>44</sup>	61.81 <sup>104</sup>	16.361 <sup>346</sup>	63.47 <sup>92</sup>	37.631 <sup>159</sup>	48.52 <sup>29</sup>
18	61.613 <sup>235</sup>	48.48 <sup>44</sup>	52.40 <sup>49</sup>	62.85 <sup>60</sup>	16.015 <sup>372</sup>	64.39 <sup>43</sup>	37.472 <sup>184</sup>	48.81 <sup>12</sup>
28	61.378 <sup>247</sup>	48.92 <sup>1</sup>	51.91 <sup>52</sup>	63.45 <sup>12</sup>	15.643 <sup>387</sup>	64.82 <sup>9</sup>	37.288 <sup>199</sup>	48.93 <sup>5</sup>
Sept. 7	61.131 <sup>250</sup>	48.91 <sup>46</sup>	51.39 <sup>52</sup>	63.57 <sup>36</sup>	15.256 <sup>390</sup>	64.73 <sup>60</sup>	37.089 <sup>204</sup>	48.88 <sup>23</sup>
17	60.881 <sup>243</sup>	48.45 <sup>92</sup>	50.87 <sup>49</sup>	63.21 <sup>84</sup>	14.866 <sup>379</sup>	64.13 <sup>111</sup>	36.885 <sup>197</sup>	48.65 <sup>40</sup>
27	60.638 <sup>225</sup>	47.53 <sup>137</sup>	50.38 <sup>46</sup>	62.37 <sup>129</sup>	14.487 <sup>356</sup>	63.02 <sup>161</sup>	36.688 <sup>179</sup>	48.25 <sup>55</sup>
Okt. 7	60.413 <sup>198</sup>	46.16 <sup>179</sup>	49.92 <sup>39</sup>	61.08 <sup>168</sup>	14.131 <sup>321</sup>	61.41 <sup>208</sup>	36.509 <sup>149</sup>	47.70 <sup>67</sup>
17	60.215 <sup>160</sup>	44.37 <sup>220</sup>	49.53 <sup>29</sup>	59.40 <sup>201</sup>	13.810 <sup>273</sup>	59.33 <sup>253</sup>	36.360 <sup>108</sup>	47.03 <sup>74</sup>
27	60.055 <sup>114</sup>	42.17 <sup>257</sup>	49.24 <sup>20</sup>	57.39 <sup>227</sup>	13.537 <sup>214</sup>	56.80 <sup>293</sup>	36.252 <sup>60</sup>	46.29 <sup>78</sup>
Nov. 6	59.941 <sup>62</sup>	39.60 <sup>290</sup>	49.04 <sup>7</sup>	55.12 <sup>243</sup>	13.323 <sup>145</sup>	53.87 <sup>327</sup>	36.192 <sup>5</sup>	45.51 <sup>76</sup>
16	59.879 <sup>4</sup>	36.70 <sup>315</sup>	48.97 <sup>5</sup>	52.69 <sup>249</sup>	13.178 <sup>69</sup>	50.60 <sup>353</sup>	36.187 <sup>55</sup>	44.75 <sup>70</sup>
26	59.875 <sup>55</sup>	33.55 <sup>334</sup>	49.02 <sup>19</sup>	50.20 <sup>245</sup>	13.109 <sup>11</sup>	47.07 <sup>371</sup>	36.242 <sup>114</sup>	44.05 <sup>59</sup>
Dez. 6	59.930 <sup>113</sup>	30.21 <sup>343</sup>	49.21 <sup>30</sup>	47.75 <sup>232</sup>	13.120 <sup>91</sup>	43.36 <sup>379</sup>	36.356 <sup>171</sup>	43.46 <sup>44</sup>
16	60.043 <sup>170</sup>	26.78 <sup>343</sup>	49.51 <sup>43</sup>	45.43 <sup>211</sup>	13.211 <sup>170</sup>	39.57 <sup>375</sup>	36.527 <sup>223</sup>	43.02 <sup>28</sup>
26	60.213 <sup>221</sup>	23.35 <sup>331</sup>	49.94 <sup>53</sup>	43.32 <sup>182</sup>	13.381 <sup>245</sup>	35.82 <sup>359</sup>	36.750 <sup>268</sup>	42.74 <sup>9</sup>
36	60.434	20.04	50.47	41.50	13.626	32.23	37.018	42.65
Mittl. Ort	60.502	33.05	49.30	46.73	14.962	46.56	35.778	42.68
sec δ, tg δ	1.287	+0.811	2.782	−2.596	1.830	+1.533	1.209	−0.679
a, a'	+2.1	−6.8	+6.3	−6.6	+1.1	−6.5	+3.9	−6.3
b, b'	−0.02	+0.94	+0.06	+0.94	−0.03	+0.95	+0.01	+0.95



## Scheinbare Sternörter 1945

Tag	629) 49 Hercules		1444) 24 G. Arae		631) ζ Arae		633) × Ophiuchi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	16 <sup>h</sup> 49 <sup>m</sup>	+15° 3'	16 <sup>h</sup> 53 <sup>m</sup>	−50° 33'	16 <sup>h</sup> 53 <sup>m</sup>	−55° 54'	16 <sup>h</sup> 55 <sup>m</sup>	+9° 27'
Jan. I	32.337 <sup>227</sup>	55.72 <sup>244</sup>	59.489 <sup>350</sup>	11.98 <sup>90</sup>	59.935 <sup>386</sup>	8.27 <sup>116</sup>	1.609 <sup>223</sup>	34.91 <sup>220</sup>
II	32.564 <sup>256</sup>	53.28 <sup>229</sup>	59.839 <sup>393</sup>	11.08 <sup>63</sup>	60.321 <sup>436</sup>	7.11 <sup>86</sup>	1.832 <sup>252</sup>	32.71 <sup>209</sup>
2I	32.820 <sup>278</sup>	50.99 <sup>206</sup>	60.232 <sup>425</sup>	10.45 <sup>35</sup>	60.757 <sup>472</sup>	6.25 <sup>55</sup>	2.084 <sup>274</sup>	30.62 <sup>189</sup>
3I	33.098 <sup>293</sup>	48.93 <sup>175</sup>	60.657 <sup>446</sup>	10.10 <sup>8</sup>	61.229 <sup>498</sup>	5.70 <sup>24</sup>	2.358 <sup>288</sup>	28.73 <sup>164</sup>
Febr. 10	33.391 <sup>300</sup>	47.18 <sup>138</sup>	61.103 <sup>457</sup>	10.02 <sup>19</sup>	61.727 <sup>511</sup>	5.46 <sup>8</sup>	2.646 <sup>296</sup>	27.09 <sup>132</sup>
20	33.691 <sup>301</sup>	45.80 <sup>96</sup>	61.560 <sup>460</sup>	10.21 <sup>44</sup>	62.238 <sup>515</sup>	5.54 <sup>38</sup>	2.942 <sup>297</sup>	25.77 <sup>95</sup>
März 2	33.992 <sup>297</sup>	44.84 <sup>52</sup>	62.020 <sup>455</sup>	10.65 <sup>67</sup>	62.753 <sup>510</sup>	5.92 <sup>66</sup>	3.239 <sup>293</sup>	24.82 <sup>57</sup>
12	34.289 <sup>286</sup>	44.32 <sup>8</sup>	62.475 <sup>442</sup>	11.32 <sup>89</sup>	63.263 <sup>496</sup>	6.58 <sup>92</sup>	3.532 <sup>284</sup>	24.25 <sup>17</sup>
22	34.575 <sup>273</sup>	44.24 <sup>36</sup>	62.917 <sup>425</sup>	12.21 <sup>107</sup>	63.759 <sup>476</sup>	7.50 <sup>116</sup>	3.816 <sup>272</sup>	24.08 <sup>23</sup>
Apr. I	34.848 <sup>256</sup>	44.60 <sup>75</sup>	63.342 <sup>402</sup>	13.28 <sup>124</sup>	64.235 <sup>450</sup>	8.66 <sup>137</sup>	4.088 <sup>257</sup>	24.31 <sup>58</sup>
II	35.104 <sup>235</sup>	45.35 <sup>111</sup>	63.744 <sup>374</sup>	14.52 <sup>140</sup>	64.685 <sup>418</sup>	10.03 <sup>157</sup>	4.345 <sup>237</sup>	24.89 <sup>90</sup>
2I	35.339 <sup>211</sup>	46.46 <sup>139</sup>	64.118 <sup>341</sup>	15.92 <sup>152</sup>	65.103 <sup>380</sup>	11.60 <sup>173</sup>	4.582 <sup>215</sup>	25.79 <sup>116</sup>
Mai I	35.550 <sup>185</sup>	47.85 <sup>162</sup>	64.459 <sup>303</sup>	17.44 <sup>163</sup>	65.483 <sup>336</sup>	13.33 <sup>186</sup>	4.797 <sup>190</sup>	26.95 <sup>137</sup>
II	35.735 <sup>156</sup>	49.47 <sup>178</sup>	64.762 <sup>260</sup>	19.07 <sup>172</sup>	65.819 <sup>286</sup>	15.19 <sup>196</sup>	4.987 <sup>163</sup>	28.32 <sup>152</sup>
2I	35.891 <sup>124</sup>	51.25 <sup>186</sup>	65.022 <sup>212</sup>	20.79 <sup>176</sup>	66.105 <sup>232</sup>	17.15 <sup>203</sup>	5.150 <sup>132</sup>	29.84 <sup>160</sup>
3I	36.015 <sup>90</sup>	53.11 <sup>188</sup>	65.234 <sup>160</sup>	22.55 <sup>178</sup>	66.337 <sup>172</sup>	19.18 <sup>206</sup>	5.282 <sup>99</sup>	31.44 <sup>162</sup>
Juni 9	36.105 <sup>55</sup>	54.99 <sup>185</sup>	65.394 <sup>105</sup>	24.33 <sup>177</sup>	66.509 <sup>109</sup>	21.24 <sup>204</sup>	5.381 <sup>64</sup>	33.06 <sup>160</sup>
19	36.160 <sup>19</sup>	56.84 <sup>175</sup>	65.499 <sup>47</sup>	26.10 <sup>170</sup>	66.618 <sup>43</sup>	23.28 <sup>196</sup>	5.445 <sup>29</sup>	34.66 <sup>152</sup>
29	36.179 <sup>19</sup>	58.59 <sup>161</sup>	65.546 <sup>12</sup>	27.80 <sup>160</sup>	66.661 <sup>23</sup>	25.24 <sup>185</sup>	5.474 <sup>8</sup>	36.18 <sup>140</sup>
Juli 9	36.160 <sup>54</sup>	60.20 <sup>143</sup>	65.534 <sup>69</sup>	29.40 <sup>145</sup>	66.638 <sup>87</sup>	27.09 <sup>168</sup>	5.466 <sup>45</sup>	37.58 <sup>125</sup>
19	36.106 <sup>89</sup>	61.63 <sup>121</sup>	65.465 <sup>124</sup>	30.85 <sup>125</sup>	66.551 <sup>149</sup>	28.77 <sup>145</sup>	5.421 <sup>79</sup>	38.83 <sup>107</sup>
29	36.017 <sup>120</sup>	62.84 <sup>98</sup>	65.341 <sup>173</sup>	32.10 <sup>102</sup>	66.402 <sup>205</sup>	30.22 <sup>118</sup>	5.342 <sup>111</sup>	39.90 <sup>87</sup>
Aug. 8	35.897 <sup>145</sup>	63.82 <sup>71</sup>	65.168 <sup>215</sup>	33.12 <sup>74</sup>	66.197 <sup>251</sup>	31.40 <sup>87</sup>	5.231 <sup>137</sup>	40.77 <sup>65</sup>
18	35.752 <sup>166</sup>	64.53 <sup>44</sup>	64.953 <sup>248</sup>	33.86 <sup>43</sup>	65.946 <sup>288</sup>	32.27 <sup>52</sup>	5.094 <sup>158</sup>	41.42 <sup>42</sup>
28	35.586 <sup>179</sup>	64.97 <sup>16</sup>	64.705 <sup>268</sup>	34.29 <sup>11</sup>	65.658 <sup>310</sup>	32.79 <sup>15</sup>	4.936 <sup>172</sup>	41.84 <sup>18</sup>
Sept. 7	35.407 <sup>183</sup>	65.13 <sup>15</sup>	64.437 <sup>275</sup>	34.40 <sup>22</sup>	65.348 <sup>318</sup>	32.94 <sup>23</sup>	4.764 <sup>178</sup>	42.02 <sup>7</sup>
17	35.224 <sup>179</sup>	64.98 <sup>44</sup>	64.162 <sup>268</sup>	34.18 <sup>56</sup>	65.030 <sup>309</sup>	32.71 <sup>60</sup>	4.586 <sup>174</sup>	41.95 <sup>33</sup>
27	35.045 <sup>165</sup>	64.54 <sup>75</sup>	63.894 <sup>246</sup>	33.62 <sup>86</sup>	64.721 <sup>284</sup>	32.11 <sup>96</sup>	4.412 <sup>161</sup>	41.62 <sup>59</sup>
Okt. 7	34.880 <sup>142</sup>	63.79 <sup>106</sup>	63.648 <sup>209</sup>	32.76 <sup>113</sup>	64.437 <sup>243</sup>	31.15 <sup>127</sup>	4.251 <sup>139</sup>	41.03 <sup>85</sup>
17	34.738 <sup>110</sup>	62.73 <sup>135</sup>	63.439 <sup>159</sup>	31.63 <sup>135</sup>	64.194 <sup>186</sup>	29.88 <sup>154</sup>	4.112 <sup>107</sup>	40.18 <sup>112</sup>
27	34.628 <sup>71</sup>	61.38 <sup>164</sup>	63.280 <sup>98</sup>	30.28 <sup>151</sup>	64.008 <sup>118</sup>	28.34 <sup>174</sup>	4.005 <sup>70</sup>	39.06 <sup>137</sup>
Nov. 6	34.557 <sup>25</sup>	59.74 <sup>190</sup>	63.182 <sup>28</sup>	28.77 <sup>161</sup>	63.890 <sup>40</sup>	26.60 <sup>185</sup>	3.935 <sup>25</sup>	37.69 <sup>161</sup>
16	34.532 <sup>23</sup>	57.84 <sup>214</sup>	63.154 <sup>46</sup>	27.16 <sup>162</sup>	63.850 <sup>44</sup>	24.75 <sup>190</sup>	3.910 <sup>23</sup>	36.08 <sup>184</sup>
26	34.555 <sup>72</sup>	55.70 <sup>233</sup>	63.200 <sup>122</sup>	25.54 <sup>157</sup>	63.894 <sup>129</sup>	22.85 <sup>185</sup>	3.933 <sup>72</sup>	34.24 <sup>201</sup>
Dez. 6	34.627 <sup>122</sup>	53.37 <sup>245</sup>	63.322 <sup>195</sup>	23.97 <sup>145</sup>	64.023 <sup>211</sup>	21.00 <sup>174</sup>	4.005 <sup>120</sup>	32.23 <sup>215</sup>
16	34.749 <sup>168</sup>	50.92 <sup>252</sup>	63.517 <sup>263</sup>	22.52 <sup>127</sup>	64.234 <sup>287</sup>	19.26 <sup>156</sup>	4.125 <sup>165</sup>	30.08 <sup>223</sup>
26	34.917 <sup>207</sup>	48.40 <sup>250</sup>	63.780 <sup>322</sup>	21.25 <sup>104</sup>	64.521 <sup>355</sup>	17.70 <sup>131</sup>	4.290 <sup>204</sup>	27.85 <sup>224</sup>
36	35.124	45.90	64.102	20.21	64.876	16.39	4.494	25.61
Mittl. Ort	34.470	54.45	62.794	23.08	63.584	19.99	3.763	32.82
sec δ, tg δ	1.036	+0.269	1.574	−1.216	1.784	−1.477	1.014	+0.167
a, a'	+2.7	−6.1	+4.6	−5.7	+5.0	−5.7	+2.9	−5.6
b, b'	−0.01	+0.95	+0.02	+0.96	+0.03	+0.96	0.00	+0.96



# Obere Kulmination Greenwich

139\*

Tag	634) ε Herculis		1449) 85 G. Ophiuchi		639) ζ Draconis		641) δ Herculis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	16 <sup>h</sup> 58 <sup>m</sup>	+31° 0'	17 <sup>h</sup> 5 <sup>m</sup>	-17° 32'	17 <sup>h</sup> 8 <sup>m</sup>	+65° 46'	17 <sup>h</sup> 12 <sup>m</sup>	+24° 53'
Jan. I	8.789 <sup>221</sup>	21.70 <sup>300</sup>	0.639 <sup>239</sup>	10.63 <sup>81</sup>	34.08 <sup>28</sup>	53.14 <sup>355</sup>	44.036 <sup>205</sup>	70.04 <sup>282</sup>
II	9.010 <sup>258</sup>	18.70 <sup>278</sup>	0.878 <sup>269</sup>	11.44 <sup>86</sup>	34.36 <sup>37</sup>	49.59 <sup>325</sup>	44.241 <sup>240</sup>	67.22 <sup>264</sup>
2I	9.268 <sup>286</sup>	15.92 <sup>246</sup>	1.147 <sup>291</sup>	12.30 <sup>88</sup>	34.73 <sup>45</sup>	46.34 <sup>282</sup>	44.481 <sup>269</sup>	64.58 <sup>237</sup>
3I	9.554 <sup>306</sup>	13.46 <sup>204</sup>	1.438 <sup>306</sup>	13.18 <sup>86</sup>	35.18 <sup>51</sup>	43.52 <sup>230</sup>	44.750 <sup>288</sup>	62.21 <sup>200</sup>
Febr. 10	9.860 <sup>318</sup>	11.42 <sup>155</sup>	1.744 <sup>313</sup>	14.04 <sup>80</sup>	35.69 <sup>55</sup>	41.22 <sup>171</sup>	45.038 <sup>302</sup>	60.21 <sup>158</sup>
20	10.178 <sup>323</sup>	9.87 <sup>103</sup>	2.057 <sup>316</sup>	14.84 <sup>71</sup>	36.24 <sup>58</sup>	39.51 <sup>106</sup>	45.340 <sup>308</sup>	58.63 <sup>109</sup>
März 2	10.501 <sup>321</sup>	8.84 <sup>46</sup>	2.373 <sup>312</sup>	15.55 <sup>60</sup>	36.82 <sup>58</sup>	38.45 <sup>37</sup>	45.648 <sup>308</sup>	57.54 <sup>57</sup>
12	10.822 <sup>311</sup>	8.38 <sup>10</sup>	2.685 <sup>306</sup>	16.15 <sup>47</sup>	37.40 <sup>58</sup>	38.08 <sup>31</sup>	45.956 <sup>303</sup>	56.97 <sup>5</sup>
22	11.133 <sup>298</sup>	8.48 <sup>65</sup>	2.991 <sup>295</sup>	16.62 <sup>34</sup>	37.98 <sup>54</sup>	38.39 <sup>95</sup>	46.259 <sup>291</sup>	56.92 <sup>46</sup>
Apr. I	11.431 <sup>278</sup>	9.13 <sup>114</sup>	3.286 <sup>281</sup>	16.96 <sup>21</sup>	38.52 <sup>51</sup>	39.34 <sup>156</sup>	46.556 <sup>276</sup>	57.38 <sup>93</sup>
II	11.709 <sup>254</sup>	10.27 <sup>159</sup>	3.567 <sup>264</sup>	17.17 <sup>9</sup>	39.03 <sup>45</sup>	40.90 <sup>209</sup>	46.826 <sup>257</sup>	58.31 <sup>136</sup>
2I	11.963 <sup>227</sup>	11.86 <sup>195</sup>	3.831 <sup>244</sup>	17.26 <sup>1</sup>	39.48 <sup>38</sup>	42.99 <sup>252</sup>	47.083 <sup>233</sup>	59.67 <sup>172</sup>
Mai I	12.190 <sup>195</sup>	13.81 <sup>223</sup>	4.075 <sup>221</sup>	17.27 <sup>7</sup>	39.86 <sup>30</sup>	45.51 <sup>286</sup>	47.316 <sup>206</sup>	61.39 <sup>200</sup>
II	12.385 <sup>161</sup>	16.04 <sup>243</sup>	4.296 <sup>194</sup>	17.20 <sup>11</sup>	40.16 <sup>22</sup>	48.37 <sup>311</sup>	47.522 <sup>175</sup>	63.39 <sup>221</sup>
2I	12.546 <sup>124</sup>	18.47 <sup>255</sup>	4.490 <sup>163</sup>	17.09 <sup>14</sup>	40.38 <sup>14</sup>	51.48 <sup>323</sup>	47.697 <sup>141</sup>	65.60 <sup>232</sup>
3I	12.670 <sup>85</sup>	21.02 <sup>257</sup>	4.653 <sup>131</sup>	16.95 <sup>15</sup>	40.52 <sup>5</sup>	54.71 <sup>325</sup>	47.838 <sup>105</sup>	67.92 <sup>237</sup>
Juni 9*)	12.755 <sup>44</sup>	23.59 <sup>252</sup>	4.784 <sup>94</sup>	16.80 <sup>14</sup>	40.57 <sup>5</sup>	57.96 <sup>319</sup>	47.943 <sup>66</sup>	70.29 <sup>234</sup>
19	12.799 <sup>3</sup>	26.11 <sup>239</sup>	4.878 <sup>57</sup>	16.66 <sup>12</sup>	40.52 <sup>13</sup>	61.15 <sup>303</sup>	48.009 <sup>26</sup>	72.63 <sup>224</sup>
29	12.802 <sup>39</sup>	28.50 <sup>220</sup>	4.935 <sup>17</sup>	16.54 <sup>10</sup>	40.39 <sup>21</sup>	64.18 <sup>279</sup>	48.035 <sup>14</sup>	74.87 <sup>209</sup>
Juli 9	12.763 <sup>79</sup>	30.70 <sup>196</sup>	4.952 <sup>23</sup>	16.44 <sup>8</sup>	40.18 <sup>30</sup>	66.97 <sup>247</sup>	48.021 <sup>54</sup>	76.96 <sup>187</sup>
19	12.684 <sup>116</sup>	32.66 <sup>167</sup>	4.929 <sup>61</sup>	16.36 <sup>7</sup>	39.88 <sup>36</sup>	69.44 <sup>210</sup>	47.967 <sup>92</sup>	78.83 <sup>162</sup>
29	12.568 <sup>150</sup>	34.33 <sup>133</sup>	4.868 <sup>96</sup>	16.29 <sup>6</sup>	39.52 <sup>43</sup>	71.54 <sup>168</sup>	47.875 <sup>127</sup>	80.45 <sup>133</sup>
Aug. 8	12.418 <sup>179</sup>	35.66 <sup>98</sup>	4.772 <sup>127</sup>	16.23 <sup>5</sup>	39.09 <sup>48</sup>	73.22 <sup>122</sup>	47.748 <sup>156</sup>	81.78 <sup>101</sup>
18	12.239 <sup>202</sup>	36.64 <sup>60</sup>	4.645 <sup>151</sup>	16.18 <sup>6</sup>	38.61 <sup>51</sup>	74.44 <sup>73</sup>	47.592 <sup>181</sup>	82.79 <sup>67</sup>
28	12.037 <sup>216</sup>	37.24 <sup>19</sup>	4.494 <sup>167</sup>	16.12 <sup>7</sup>	38.10 <sup>55</sup>	75.17 <sup>21</sup>	47.411 <sup>198</sup>	83.46 <sup>31</sup>
Sept. 7	11.821 <sup>222</sup>	37.43 <sup>21</sup>	4.327 <sup>176</sup>	16.05 <sup>7</sup>	37.55 <sup>55</sup>	75.38 <sup>31</sup>	47.213 <sup>206</sup>	83.77 <sup>6</sup>
17	11.599 <sup>219</sup>	37.22 <sup>63</sup>	4.151 <sup>174</sup>	15.98 <sup>8</sup>	37.00 <sup>55</sup>	75.07 <sup>84</sup>	47.007 <sup>205</sup>	83.71 <sup>44</sup>
27	11.380 <sup>205</sup>	36.59 <sup>104</sup>	3.977 <sup>160</sup>	15.90 <sup>7</sup>	36.45 <sup>52</sup>	74.23 <sup>135</sup>	46.802 <sup>194</sup>	83.27 <sup>82</sup>
Okt. 7	11.175 <sup>181</sup>	35.55 <sup>145</sup>	3.817 <sup>138</sup>	15.83 <sup>4</sup>	35.93 <sup>49</sup>	72.88 <sup>185</sup>	46.608 <sup>174</sup>	82.45 <sup>119</sup>
17	10.994 <sup>149</sup>	34.10 <sup>184</sup>	3.679 <sup>105</sup>	15.79 <sup>0</sup>	35.44 <sup>43</sup>	71.03 <sup>233</sup>	46.434 <sup>145</sup>	81.26 <sup>155</sup>
27	10.845 <sup>109</sup>	32.26 <sup>219</sup>	3.574 <sup>65</sup>	15.79 <sup>7</sup>	35.01 <sup>37</sup>	68.70 <sup>276</sup>	46.289 <sup>106</sup>	79.71 <sup>190</sup>
Nov. 6	10.736 <sup>61</sup>	30.07 <sup>252</sup>	3.509 <sup>19</sup>	15.86 <sup>16</sup>	34.64 <sup>28</sup>	65.94 <sup>314</sup>	46.183 <sup>62</sup>	77.81 <sup>221</sup>
16	10.675 <sup>8</sup>	27.55 <sup>279</sup>	3.490 <sup>32</sup>	16.02 <sup>28</sup>	34.36 <sup>19</sup>	62.80 <sup>345</sup>	46.121 <sup>14</sup>	75.60 <sup>248</sup>
26	10.667 <sup>45</sup>	24.76 <sup>300</sup>	3.522 <sup>84</sup>	16.30 <sup>40</sup>	34.17 <sup>9</sup>	59.35 <sup>366</sup>	46.107 <sup>38</sup>	73.12 <sup>270</sup>
Dez. 6	10.712 <sup>99</sup>	21.76 <sup>313</sup>	3.606 <sup>133</sup>	16.70 <sup>53</sup>	34.08 <sup>2</sup>	55.69 <sup>379</sup>	46.145 <sup>89</sup>	70.42 <sup>285</sup>
16	10.811 <sup>151</sup>	18.63 <sup>316</sup>	3.739 <sup>180</sup>	17.23 <sup>65</sup>	34.10 <sup>12</sup>	51.90 <sup>380</sup>	46.234 <sup>137</sup>	67.57 <sup>292</sup>
26	10.962 <sup>198</sup>	15.47 <sup>311</sup>	3.919 <sup>221</sup>	17.88 <sup>75</sup>	34.22 <sup>22</sup>	48.10 <sup>369</sup>	46.371 <sup>183</sup>	64.65 <sup>289</sup>
36	11.160	12.36	4.140	18.63	34.44	44.41	46.554	61.76
Mittl. Ort	10.989	22.50	3.031	16.48	37.31	56.19	46.233	69.94
sec δ, tg δ	1.167	+0.601	1.049	-0.316	2.438	+2.223	1.103	+0.464
a, a'	+2.3	-5.3	+3.5	-4.8	+0.2	-4.5	+2.5	-4.1
b, b'	-0.01	+0.96	+0.01	+0.97	-0.03	+0.98	-0.01	+0.98

\*) Bei Stern 641) lies Juni 10.



Tag	643) $\pi$ Herclis		1454) $\text{Pi } 17^h$ 68 Herc		644) $\delta$ Ophiuchi		645) $\beta$ Arae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$17^h 13^m$	$+36^\circ 51'$	$17^h 17^m$	$+18^\circ 6'$	$17^h 18^m$	$-24^\circ 56'$	$17^h 20^m$	$-55^\circ 28'$
Jan. I	5.489 <sup>209</sup>	71.16 <sup>319</sup>	51.111 <sup>201</sup>	45.18 <sup>256</sup>	35.177 <sup>239</sup>	41.09 <sup>31</sup>	39.526 <sup>347</sup>	39.76 <sup>138</sup>
II	5.698 <sup>250</sup>	67.97 <sup>297</sup>	51.312 <sup>234</sup>	42.62 <sup>240</sup>	35.416 <sup>272</sup>	41.40 <sup>41</sup>	39.873 <sup>401</sup>	38.38 <sup>112</sup>
21	5.948 <sup>284</sup>	65.00 <sup>263</sup>	51.546 <sup>261</sup>	40.22 <sup>218</sup>	35.688 <sup>297</sup>	41.81 <sup>47</sup>	40.274 <sup>444</sup>	37.26 <sup>85</sup>
31	6.232 <sup>309</sup>	62.37 <sup>220</sup>	51.807 <sup>280</sup>	38.04 <sup>187</sup>	35.985 <sup>315</sup>	42.28 <sup>52</sup>	40.718 <sup>475</sup>	36.41 <sup>57</sup>
Febr. 10	6.541 <sup>326</sup>	60.17 <sup>170</sup>	52.087 <sup>292</sup>	36.17 <sup>149</sup>	36.300 <sup>325</sup>	42.80 <sup>53</sup>	41.193 <sup>496</sup>	35.84 <sup>27</sup>
20	6.867 <sup>335</sup>	58.47 <sup>114</sup>	52.379 <sup>299</sup>	34.68 <sup>106</sup>	36.625 <sup>329</sup>	43.33 <sup>52</sup>	41.689 <sup>506</sup>	35.57 <sup>1</sup>
März 2	7.202 <sup>337</sup>	57.33 <sup>55</sup>	52.678 <sup>299</sup>	33.62 <sup>60</sup>	36.954 <sup>329</sup>	43.85 <sup>48</sup>	42.195 <sup>507</sup>	35.58 <sup>28</sup>
12	7.539 <sup>331</sup>	56.78 <sup>6</sup>	52.977 <sup>294</sup>	33.02 <sup>12</sup>	37.283 <sup>324</sup>	44.33 <sup>43</sup>	42.702 <sup>502</sup>	35.86 <sup>54</sup>
22	7.870 <sup>318</sup>	56.84 <sup>64</sup>	53.271 <sup>285</sup>	32.90 <sup>34</sup>	37.607 <sup>316</sup>	44.76 <sup>38</sup>	43.204 <sup>489</sup>	36.40 <sup>79</sup>
April I	8.188 <sup>299</sup>	57.48 <sup>118</sup>	53.556 <sup>272</sup>	33.24 <sup>77</sup>	37.923 <sup>302</sup>	45.14 <sup>33</sup>	43.693 <sup>468</sup>	37.19 <sup>103</sup>
11	8.487 <sup>276</sup>	58.66 <sup>165</sup>	53.828 <sup>254</sup>	34.01 <sup>116</sup>	38.225 <sup>287</sup>	45.47 <sup>28</sup>	44.161 <sup>443</sup>	38.22 <sup>124</sup>
21	8.763 <sup>248</sup>	60.31 <sup>206</sup>	54.082 <sup>233</sup>	35.17 <sup>149</sup>	38.512 <sup>268</sup>	45.75 <sup>25</sup>	44.604 <sup>410</sup>	39.46 <sup>143</sup>
Mai I	9.011 <sup>214</sup>	62.37 <sup>238</sup>	54.315 <sup>209</sup>	36.66 <sup>174</sup>	38.780 <sup>244</sup>	46.00 <sup>23</sup>	45.014 <sup>370</sup>	40.89 <sup>160</sup>
11	9.225 <sup>178</sup>	64.75 <sup>261</sup>	54.524 <sup>180</sup>	38.40 <sup>194</sup>	39.024 <sup>218</sup>	46.23 <sup>23</sup>	45.384 <sup>325</sup>	42.49 <sup>175</sup>
21	9.403 <sup>138</sup>	67.36 <sup>275</sup>	54.704 <sup>149</sup>	40.34 <sup>205</sup>	39.242 <sup>186</sup>	46.46 <sup>23</sup>	45.709 <sup>273</sup>	44.24 <sup>186</sup>
31	9.541 <sup>96</sup>	70.11 <sup>280</sup>	54.853 <sup>115</sup>	42.39 <sup>210</sup>	39.428 <sup>152</sup>	46.69 <sup>24</sup>	45.982 <sup>216</sup>	46.10 <sup>194</sup>
Juni 10	9.637 <sup>51</sup>	72.91 <sup>276</sup>	54.968 <sup>78</sup>	44.49 <sup>207</sup>	39.580 <sup>113</sup>	46.93 <sup>27</sup>	46.198 <sup>153</sup>	48.04 <sup>197</sup>
19	9.688 <sup>6</sup>	75.67 <sup>264</sup>	55.046 <sup>39</sup>	46.56 <sup>199</sup>	39.693 <sup>73</sup>	47.20 <sup>28</sup>	46.351 <sup>87</sup>	50.01 <sup>196</sup>
29	9.694 <sup>39</sup>	78.31 <sup>246</sup>	55.085 <sup>0</sup>	48.55 <sup>186</sup>	39.766 <sup>30</sup>	47.48 <sup>29</sup>	46.438 <sup>20</sup>	51.97 <sup>189</sup>
Juli 9	9.655 <sup>83</sup>	80.77 <sup>220</sup>	55.085 <sup>38</sup>	50.41 <sup>167</sup>	39.796 <sup>12</sup>	47.77 <sup>29</sup>	46.458 <sup>48</sup>	53.86 <sup>177</sup>
19	9.572 <sup>125</sup>	82.97 <sup>190</sup>	55.047 <sup>76</sup>	52.08 <sup>146</sup>	39.784 <sup>53</sup>	48.06 <sup>27</sup>	46.410 <sup>112</sup>	55.63 <sup>160</sup>
29	9.447 <sup>162</sup>	84.87 <sup>156</sup>	54.971 <sup>110</sup>	53.54 <sup>120</sup>	39.731 <sup>93</sup>	48.33 <sup>24</sup>	46.298 <sup>173</sup>	57.23 <sup>137</sup>
Aug. 8	9.285 <sup>194</sup>	86.43 <sup>118</sup>	54.861 <sup>141</sup>	54.74 <sup>92</sup>	39.638 <sup>127</sup>	48.57 <sup>19</sup>	46.125 <sup>226</sup>	58.60 <sup>110</sup>
18	9.091 <sup>220</sup>	87.61 <sup>77</sup>	54.720 <sup>165</sup>	55.66 <sup>63</sup>	39.511 <sup>154</sup>	48.76 <sup>13</sup>	45.899 <sup>269</sup>	59.70 <sup>78</sup>
28	8.871 <sup>238</sup>	88.38 <sup>33</sup>	54.555 <sup>182</sup>	56.29 <sup>32</sup>	39.357 <sup>174</sup>	48.89 <sup>6</sup>	45.630 <sup>298</sup>	60.48 <sup>43</sup>
Sept. 7	8.633 <sup>246</sup>	88.71 <sup>10</sup>	54.373 <sup>192</sup>	56.61 <sup>0</sup>	39.183 <sup>185</sup>	48.95 <sup>3</sup>	45.332 <sup>314</sup>	60.91 <sup>6</sup>
17	8.387 <sup>246</sup>	88.61 <sup>55</sup>	54.181 <sup>191</sup>	56.61 <sup>33</sup>	38.998 <sup>185</sup>	48.92 <sup>11</sup>	45.018 <sup>314</sup>	60.97 <sup>32</sup>
27	8.141 <sup>234</sup>	88.06 <sup>100</sup>	53.990 <sup>182</sup>	56.28 <sup>65</sup>	38.813 <sup>174</sup>	48.81 <sup>18</sup>	44.704 <sup>297</sup>	60.65 <sup>68</sup>
Okt. 7	7.907 <sup>211</sup>	87.06 <sup>144</sup>	53.808 <sup>162</sup>	55.63 <sup>99</sup>	38.639 <sup>152</sup>	48.63 <sup>23</sup>	44.407 <sup>263</sup>	59.97 <sup>102</sup>
17	7.696 <sup>180</sup>	85.62 <sup>186</sup>	53.646 <sup>135</sup>	54.64 <sup>131</sup>	38.487 <sup>120</sup>	48.40 <sup>26</sup>	44.144 <sup>214</sup>	58.95 <sup>132</sup>
27	7.516 <sup>140</sup>	83.76 <sup>226</sup>	53.511 <sup>98</sup>	53.33 <sup>163</sup>	38.367 <sup>79</sup>	48.14 <sup>27</sup>	43.930 <sup>151</sup>	57.63 <sup>157</sup>
Nov. 6	7.376 <sup>92</sup>	81.50 <sup>260</sup>	53.413 <sup>55</sup>	51.70 <sup>191</sup>	38.288 <sup>31</sup>	47.87 <sup>23</sup>	43.779 <sup>79</sup>	56.06 <sup>173</sup>
16	7.284 <sup>38</sup>	78.90 <sup>291</sup>	53.358 <sup>8</sup>	49.79 <sup>216</sup>	38.257 <sup>20</sup>	47.64 <sup>18</sup>	43.700 <sup>1</sup>	54.33 <sup>184</sup>
26	7.246 <sup>18</sup>	75.99 <sup>314</sup>	53.350 <sup>41</sup>	47.63 <sup>237</sup>	38.277 <sup>74</sup>	47.46 <sup>8</sup>	43.701 <sup>84</sup>	52.49 <sup>186</sup>
Dez. 6	7.264 <sup>75</sup>	72.85 <sup>329</sup>	53.391 <sup>90</sup>	45.26 <sup>252</sup>	38.351 <sup>127</sup>	47.38 <sup>2</sup>	43.785 <sup>166</sup>	50.63 <sup>181</sup>
16	7.339 <sup>131</sup>	69.56 <sup>334</sup>	53.481 <sup>137</sup>	42.74 <sup>261</sup>	38.478 <sup>176</sup>	47.40 <sup>13</sup>	43.951 <sup>244</sup>	48.82 <sup>168</sup>
26	7.470 <sup>181</sup>	66.22 <sup>329</sup>	53.618 <sup>180</sup>	40.13 <sup>260</sup>	38.654 <sup>219</sup>	47.53 <sup>25</sup>	44.195 <sup>314</sup>	47.14 <sup>150</sup>
36	7.651	62.93	53.798	37.53	38.873	47.78	44.509	45.64
Mittl. Ort	7.769	72.24	53.303	44.30	37.731	47.19	43.306	49.00
sec $\delta$ , tg $\delta$	1.250	+0.750	1.052	+0.327	1.103	-0.465	1.765	-1.454
a, a'	+2.1	-4.1	+2.6	-3.7	+3.7	-3.6	+5.0	-3.4
b, b'	-0.01	+0.98	0.00	+0.98	+0.01	+0.98	+0.02	+0.99



# Obere Kulmination Greenwich

Tag	648) $\delta$ Arae		651) $\alpha$ Arae		653) $\beta$ Draconis		652) $\lambda$ Scorpii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	17 <sup>h</sup> 26 <sup>m</sup>	-60° 38'	17 <sup>h</sup> 27 <sup>m</sup>	-49° 49'	17 <sup>h</sup> 29 <sup>m</sup>	+52° 20'	17 <sup>h</sup> 29 <sup>m</sup>	-37° 3'
Jan. I	3.37 <sup>38</sup>	16.35 <sup>166</sup>	31.71 <sup>3</sup>	57.18 <sup>113</sup>	8.655 <sup>202</sup>	27.45 <sup>353</sup>	49.345 <sup>256</sup>	49.64 <sup>46</sup>
II	3.75 <sup>44</sup>	14.69 <sup>141</sup>	32.018 <sup>305</sup>	56.05 <sup>93</sup>	8.857 <sup>262</sup>	23.92 <sup>329</sup>	49.601 <sup>294</sup>	49.18 <sup>30</sup>
2I	4.19 <sup>50</sup>	13.28 <sup>111</sup>	32.371 <sup>392</sup>	55.12 <sup>70</sup>	9.119 <sup>313</sup>	20.63 <sup>294</sup>	49.895 <sup>324</sup>	48.88 <sup>16</sup>
3I	4.69 <sup>53</sup>	12.17 <sup>79</sup>	32.763 <sup>419</sup>	54.42 <sup>46</sup>	9.432 <sup>354</sup>	17.69 <sup>247</sup>	50.219 <sup>347</sup>	48.72 <sup>2</sup>
Febr. 10	5.22 <sup>56</sup>	11.38 <sup>48</sup>	33.182 <sup>438</sup>	53.96 <sup>22</sup>	9.786 <sup>384</sup>	15.22 <sup>193</sup>	50.566 <sup>361</sup>	48.70 <sup>9</sup>
20	5.78 <sup>58</sup>	10.90 <sup>15</sup>	33.620 <sup>448</sup>	53.74 <sup>1</sup>	10.170 <sup>405</sup>	13.29 <sup>131</sup>	50.927 <sup>369</sup>	48.79 <sup>21</sup>
März 2	6.36 <sup>58</sup>	10.75 <sup>17</sup>	34.068 <sup>451</sup>	53.75 <sup>23</sup>	10.575 <sup>413</sup>	11.98 <sup>66</sup>	51.296 <sup>371</sup>	49.00 <sup>30</sup>
12	6.94 <sup>57</sup>	10.92 <sup>48</sup>	34.519 <sup>447</sup>	53.98 <sup>44</sup>	10.988 <sup>410</sup>	11.32 <sup>0</sup>	51.667 <sup>367</sup>	49.30 <sup>38</sup>
22	7.51 <sup>56</sup>	11.40 <sup>78</sup>	34.966 <sup>437</sup>	54.42 <sup>64</sup>	11.398 <sup>399</sup>	11.32 <sup>64</sup>	52.034 <sup>360</sup>	49.68 <sup>46</sup>
Apr. I	8.07 <sup>54</sup>	12.18 <sup>104</sup>	35.403 <sup>421</sup>	55.06 <sup>82</sup>	11.797 <sup>377</sup>	11.96 <sup>125</sup>	52.394 <sup>348</sup>	50.14 <sup>52</sup>
II	8.61 <sup>51</sup>	13.22 <sup>131</sup>	35.824 <sup>399</sup>	55.88 <sup>101</sup>	12.174 <sup>346</sup>	13.21 <sup>180</sup>	52.742 <sup>331</sup>	50.66 <sup>59</sup>
2I	9.12 <sup>48</sup>	14.53 <sup>154</sup>	36.223 <sup>373</sup>	56.89 <sup>116</sup>	12.520 <sup>309</sup>	15.01 <sup>227</sup>	53.073 <sup>311</sup>	51.25 <sup>66</sup>
Mai I	9.60 <sup>42</sup>	16.07 <sup>175</sup>	36.596 <sup>340</sup>	58.05 <sup>130</sup>	12.829 <sup>265</sup>	17.28 <sup>263</sup>	53.384 <sup>285</sup>	51.91 <sup>73</sup>
II	10.02 <sup>38</sup>	17.82 <sup>193</sup>	36.936 <sup>301</sup>	59.35 <sup>144</sup>	13.094 <sup>215</sup>	19.91 <sup>292</sup>	53.669 <sup>256</sup>	52.64 <sup>79</sup>
2I	10.40 <sup>31</sup>	19.75 <sup>206</sup>	37.237 <sup>258</sup>	60.79 <sup>155</sup>	13.309 <sup>160</sup>	22.83 <sup>310</sup>	53.925 <sup>220</sup>	53.43 <sup>86</sup>
3I	10.71 <sup>25</sup>	21.81 <sup>216</sup>	37.495 <sup>207</sup>	62.34 <sup>162</sup>	13.469 <sup>102</sup>	25.93 <sup>317</sup>	54.145 <sup>181</sup>	54.29 <sup>90</sup>
Juni 10	10.96 <sup>18</sup>	23.97 <sup>222</sup>	37.702 <sup>153</sup>	63.96 <sup>166</sup>	13.571 <sup>44</sup>	29.10 <sup>316</sup>	54.326 <sup>138</sup>	55.19 <sup>95</sup>
19	11.14 <sup>9</sup>	26.19 <sup>220</sup>	37.855 <sup>96</sup>	65.62 <sup>166</sup>	13.615 <sup>17</sup>	32.26 <sup>305</sup>	54.464 <sup>91</sup>	56.14 <sup>96</sup>
29	11.23 <sup>2</sup>	28.39 <sup>214</sup>	37.951 <sup>35</sup>	67.28 <sup>163</sup>	13.598 <sup>76</sup>	35.31 <sup>286</sup>	54.555 <sup>43</sup>	57.10 <sup>95</sup>
Juli 9	11.25 <sup>5</sup>	30.53 <sup>202</sup>	37.986 <sup>24</sup>	68.91 <sup>154</sup>	13.522 <sup>134</sup>	38.17 <sup>260</sup>	54.598 <sup>7</sup>	58.05 <sup>92</sup>
19	11.20 <sup>13</sup>	32.55 <sup>183</sup>	37.962 <sup>83</sup>	70.45 <sup>140</sup>	13.388 <sup>188</sup>	40.77 <sup>228</sup>	54.591 <sup>55</sup>	58.97 <sup>85</sup>
29	11.07 <sup>21</sup>	34.38 <sup>158</sup>	37.879 <sup>138</sup>	71.85 <sup>122</sup>	13.200 <sup>236</sup>	43.05 <sup>190</sup>	54.536 <sup>100</sup>	59.82 <sup>75</sup>
Aug. 8	10.86 <sup>26</sup>	35.96 <sup>129</sup>	37.741 <sup>187</sup>	73.07 <sup>100</sup>	12.964 <sup>278</sup>	44.95 <sup>147</sup>	54.436 <sup>140</sup>	60.57 <sup>62</sup>
18	10.60 <sup>32</sup>	37.25 <sup>94</sup>	37.554 <sup>226</sup>	74.07 <sup>73</sup>	12.686 <sup>312</sup>	46.42 <sup>102</sup>	54.296 <sup>174</sup>	61.19 <sup>45</sup>
28	10.28 <sup>35</sup>	38.19 <sup>55</sup>	37.328 <sup>254</sup>	74.80 <sup>43</sup>	12.374 <sup>336</sup>	47.44 <sup>54</sup>	54.122 <sup>199</sup>	61.64 <sup>28</sup>
Sept. 7	9.93 <sup>36</sup>	38.74 <sup>14</sup>	37.074 <sup>271</sup>	75.23 <sup>11</sup>	12.038 <sup>350</sup>	47.98 <sup>4</sup>	53.923 <sup>212</sup>	61.92 <sup>7</sup>
17	9.57 <sup>37</sup>	38.88 <sup>27</sup>	36.803 <sup>272</sup>	75.34 <sup>22</sup>	11.688 <sup>351</sup>	48.02 <sup>46</sup>	53.711 <sup>214</sup>	61.99 <sup>13</sup>
27	9.20 <sup>36</sup>	38.61 <sup>69</sup>	36.531 <sup>259</sup>	75.12 <sup>53</sup>	11.337 <sup>340</sup>	47.56 <sup>98</sup>	53.497 <sup>204</sup>	61.86 <sup>32</sup>
Okt. 7	8.84 <sup>32</sup>	37.92 <sup>108</sup>	36.272 <sup>231</sup>	74.59 <sup>83</sup>	10.997 <sup>318</sup>	46.58 <sup>148</sup>	53.293 <sup>181</sup>	61.54 <sup>51</sup>
17	8.52 <sup>26</sup>	36.84 <sup>143</sup>	36.041 <sup>189</sup>	73.76 <sup>109</sup>	10.679 <sup>282</sup>	45.10 <sup>196</sup>	53.112 <sup>147</sup>	61.03 <sup>65</sup>
27	8.26 <sup>19</sup>	35.41 <sup>171</sup>	35.852 <sup>134</sup>	72.67 <sup>131</sup>	10.397 <sup>237</sup>	43.14 <sup>241</sup>	52.965 <sup>103</sup>	60.38 <sup>77</sup>
Nov. 6	8.07 <sup>11</sup>	33.70 <sup>192</sup>	35.718 <sup>70</sup>	71.36 <sup>145</sup>	10.160 <sup>181</sup>	40.73 <sup>282</sup>	52.862 <sup>50</sup>	59.61 <sup>84</sup>
16	7.96 <sup>2</sup>	31.78 <sup>207</sup>	35.648 <sup>1</sup>	69.91 <sup>155</sup>	9.979 <sup>117</sup>	37.91 <sup>316</sup>	52.812 <sup>7</sup>	58.77 <sup>86</sup>
26	7.94 <sup>7</sup>	29.71 <sup>211</sup>	35.647 <sup>72</sup>	68.36 <sup>156</sup>	9.862 <sup>49</sup>	34.75 <sup>342</sup>	52.819 <sup>67</sup>	57.91 <sup>83</sup>
Dez. 6	8.01 <sup>17</sup>	27.60 <sup>208</sup>	35.719 <sup>145</sup>	66.80 <sup>151</sup>	9.813 <sup>23</sup>	31.33 <sup>360</sup>	52.886 <sup>126</sup>	57.08 <sup>77</sup>
16	8.18 <sup>26</sup>	25.52 <sup>198</sup>	35.864 <sup>214</sup>	65.29 <sup>140</sup>	9.835 <sup>94</sup>	27.73 <sup>368</sup>	53.012 <sup>182</sup>	56.31 <sup>66</sup>
26	8.44 <sup>34</sup>	23.54 <sup>180</sup>	36.078 <sup>276</sup>	63.89 <sup>126</sup>	9.930 <sup>163</sup>	24.05 <sup>362</sup>	53.194 <sup>233</sup>	55.65 <sup>54</sup>
36	8.78	21.74	36.354	62.63	10.093	20.43	53.427	55.11
Mittl. Ort	7.66	25.51	35.147	65.29	11.249	29.01	52.237	56.32
sec $\delta$ , tg $\delta$	2.040	-1.778	1.550	-1.185	1.637	+1.296	1.253	-0.755
a, a'	+5.4	-3.0	+4.6	-2.8	+1.4	--2.7	+ .1	-2.6
b, b'	+0.02	+0.99	+0.01	+0.99	-0.01	+0.99	+0.01	+0.99



## Scheinbare Sternörter 1945

Tag	656) $\alpha$ Ophiuchi		654) $\delta$ Scorpii		658) $\xi$ Serpentis		664) $\omega$ Draconis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	17 <sup>h</sup> 32 <sup>m</sup>	+12° 35'	17 <sup>h</sup> 33 <sup>m</sup>	-42° 57'	17 <sup>h</sup> 34 <sup>m</sup>	-15° 21'	17 <sup>h</sup> 37 <sup>m</sup>	+68° 46'
Jan. I	20.557 <sup>a</sup> <sub>189</sub>	56.44 <sup>b</sup> <sub>230</sub>	18.684 <sup>a</sup> <sub>270</sub>	46.51 <sup>b</sup> <sub>81</sub>	23.659 <sup>a</sup> <sub>211</sub>	52.34 <sup>b</sup> <sub>79</sub>	12.54 <sup>a</sup> <sub>23</sub>	59.25 <sup>b</sup> <sub>362</sub>
II	20.746 <sup>a</sup> <sub>223</sub>	54.14 <sup>b</sup> <sub>219</sub>	18.954 <sup>a</sup> <sub>313</sub>	45.70 <sup>b</sup> <sub>64</sub>	23.870 <sup>a</sup> <sub>243</sub>	53.13 <sup>b</sup> <sub>82</sub>	12.77 <sup>a</sup> <sub>34</sub>	55.63 <sup>b</sup> <sub>339</sub>
2I	20.969 <sup>a</sup> <sub>249</sub>	51.95 <sup>b</sup> <sub>200</sub>	19.267 <sup>a</sup> <sub>347</sub>	45.06 <sup>b</sup> <sub>46</sub>	24.113 <sup>a</sup> <sub>268</sub>	53.95 <sup>b</sup> <sub>81</sub>	13.11 <sup>a</sup> <sub>43</sub>	52.24 <sup>b</sup> <sub>303</sub>
3I	21.218 <sup>a</sup> <sub>270</sub>	49.95 <sup>b</sup> <sub>174</sub>	19.614 <sup>a</sup> <sub>371</sub>	44.60 <sup>b</sup> <sub>28</sub>	24.381 <sup>a</sup> <sub>286</sub>	54.76 <sup>b</sup> <sub>77</sub>	13.54 <sup>a</sup> <sub>52</sub>	49.21 <sup>b</sup> <sub>256</sub>
Febr. 10	21.488 <sup>a</sup> <sub>283</sub>	48.21 <sup>b</sup> <sub>142</sub>	19.985 <sup>a</sup> <sub>389</sub>	44.32 <sup>b</sup> <sub>11</sub>	24.667 <sup>a</sup> <sub>300</sub>	55.53 <sup>b</sup> <sub>69</sub>	14.06 <sup>a</sup> <sub>58</sub>	46.65 <sup>b</sup> <sub>201</sub>
20	21.771 <sup>a</sup> <sub>291</sub>	46.79 <sup>b</sup> <sub>104</sub>	20.374 <sup>a</sup> <sub>398</sub>	44.21 <sup>b</sup> <sub>6</sub>	24.967 <sup>a</sup> <sub>306</sub>	56.22 <sup>b</sup> <sub>57</sub>	14.64 <sup>a</sup> <sub>62</sub>	44.64 <sup>b</sup> <sub>138</sub>
März 2	22.062 <sup>a</sup> <sub>294</sub>	45.75 <sup>b</sup> <sub>62</sub>	20.772 <sup>a</sup> <sub>402</sub>	44.27 <sup>b</sup> <sub>21</sub>	25.273 <sup>a</sup> <sub>308</sub>	56.79 <sup>b</sup> <sub>44</sub>	15.26 <sup>a</sup> <sub>64</sub>	43.26 <sup>b</sup> <sub>72</sub>
12	22.356 <sup>a</sup> <sub>292</sub>	45.13 <sup>b</sup> <sub>20</sub>	21.174 <sup>a</sup> <sub>398</sub>	44.48 <sup>b</sup> <sub>36</sub>	25.581 <sup>a</sup> <sub>306</sub>	57.23 <sup>b</sup> <sub>28</sub>	15.90 <sup>a</sup> <sub>65</sub>	42.54 <sup>b</sup> <sub>4</sub>
22	22.648 <sup>a</sup> <sub>285</sub>	44.93 <sup>b</sup> <sub>22</sub>	21.572 <sup>a</sup> <sub>391</sub>	44.84 <sup>b</sup> <sub>48</sub>	25.887 <sup>a</sup> <sub>300</sub>	57.51 <sup>b</sup> <sub>14</sub>	16.55 <sup>a</sup> <sub>63</sub>	42.50 <sup>b</sup> <sub>63</sub>
Apr. I	22.933 <sup>a</sup> <sub>275</sub>	45.15 <sup>b</sup> <sub>62</sub>	21.963 <sup>a</sup> <sub>379</sub>	45.32 <sup>b</sup> <sub>61</sub>	26.187 <sup>a</sup> <sub>290</sub>	57.65 <sup>b</sup> <sub>1</sub>	17.18 <sup>a</sup> <sub>59</sub>	43.13 <sup>b</sup> <sub>126</sub>
II	23.208 <sup>a</sup> <sub>260</sub>	45.77 <sup>b</sup> <sub>98</sub>	22.342 <sup>a</sup> <sub>361</sub>	45.93 <sup>b</sup> <sub>74</sub>	26.477 <sup>a</sup> <sub>278</sub>	57.64 <sup>b</sup> <sub>14</sub>	17.77 <sup>a</sup> <sub>54</sub>	44.39 <sup>b</sup> <sub>183</sub>
2I	23.468 <sup>a</sup> <sub>242</sub>	46.75 <sup>b</sup> <sub>128</sub>	22.703 <sup>a</sup> <sub>338</sub>	46.67 <sup>b</sup> <sub>85</sub>	26.755 <sup>a</sup> <sub>261</sub>	57.50 <sup>b</sup> <sub>24</sub>	18.31 <sup>a</sup> <sub>47</sub>	46.22 <sup>b</sup> <sub>232</sub>
Mai I	23.710 <sup>a</sup> <sub>220</sub>	48.03 <sup>b</sup> <sub>153</sub>	23.041 <sup>a</sup> <sub>312</sub>	47.52 <sup>b</sup> <sub>96</sub>	27.016 <sup>a</sup> <sub>241</sub>	57.26 <sup>b</sup> <sub>31</sub>	18.78 <sup>a</sup> <sub>40</sub>	48.54 <sup>b</sup> <sub>271</sub>
II	23.930 <sup>a</sup> <sub>194</sub>	49.56 <sup>b</sup> <sub>171</sub>	23.353 <sup>a</sup> <sub>278</sub>	48.48 <sup>b</sup> <sub>106</sub>	27.257 <sup>a</sup> <sub>217</sub>	56.95 <sup>b</sup> <sub>36</sub>	19.18 <sup>a</sup> <sub>30</sub>	51.25 <sup>b</sup> <sub>301</sub>
2I	24.124 <sup>a</sup> <sub>165</sub>	51.27 <sup>b</sup> <sub>182</sub>	23.631 <sup>a</sup> <sub>240</sub>	49.54 <sup>b</sup> <sub>115</sub>	27.474 <sup>a</sup> <sub>189</sub>	56.59 <sup>b</sup> <sub>38</sub>	19.48 <sup>a</sup> <sub>21</sub>	54.26 <sup>b</sup> <sub>320</sub>
3I	24.289 <sup>a</sup> <sub>132</sub>	53.09 <sup>b</sup> <sub>187</sub>	23.871 <sup>a</sup> <sub>198</sub>	50.69 <sup>b</sup> <sub>122</sub>	27.663 <sup>a</sup> <sub>156</sub>	56.21 <sup>b</sup> <sub>37</sub>	19.69 <sup>a</sup> <sub>10</sub>	57.46 <sup>b</sup> <sub>330</sub>
Juni 10	24.421 <sup>a</sup> <sub>96</sub>	54.96 <sup>b</sup> <sub>186</sub>	24.069 <sup>a</sup> <sub>150</sub>	51.91 <sup>b</sup> <sub>127</sub>	27.819 <sup>a</sup> <sub>120</sub>	55.84 <sup>b</sup> <sub>35</sub>	19.79 <sup>a</sup> <sub>0</sub>	60.76 <sup>b</sup> <sub>330</sub>
15	24.517 <sup>a</sup> <sub>59</sub>	56.82 <sup>b</sup> <sub>179</sub>	24.219 <sup>a</sup> <sub>99</sub>	53.18 <sup>b</sup> <sub>129</sub>	27.939 <sup>a</sup> <sub>83</sub>	55.49 <sup>b</sup> <sub>31</sub>	19.79 <sup>a</sup> <sub>10</sub>	64.06 <sup>b</sup> <sub>319</sub>
29	24.576 <sup>a</sup> <sub>19</sub>	58.61 <sup>b</sup> <sub>168</sub>	24.318 <sup>a</sup> <sub>46</sub>	54.47 <sup>b</sup> <sub>127</sub>	28.022 <sup>a</sup> <sub>42</sub>	55.18 <sup>b</sup> <sub>25</sub>	19.69 <sup>a</sup> <sub>20</sub>	67.25 <sup>b</sup> <sub>301</sub>
Juli 9	24.595 <sup>a</sup> <sub>19</sub>	60.29 <sup>b</sup> <sub>152</sub>	24.364 <sup>a</sup> <sub>8</sub>	55.74 <sup>b</sup> <sub>122</sub>	28.064 <sup>a</sup> <sub>1</sub>	54.93 <sup>b</sup> <sub>21</sub>	19.49 <sup>a</sup> <sub>29</sub>	70.26 <sup>b</sup> <sub>275</sub>
19	24.576 <sup>a</sup> <sub>58</sub>	61.81 <sup>b</sup> <sub>133</sub>	24.356 <sup>a</sup> <sub>60</sub>	56.96 <sup>b</sup> <sub>113</sub>	28.065 <sup>a</sup> <sub>40</sub>	54.72 <sup>b</sup> <sub>15</sub>	19.20 <sup>a</sup> <sub>38</sub>	73.01 <sup>b</sup> <sub>242</sub>
29	24.518 <sup>a</sup> <sub>94</sub>	63.14 <sup>b</sup> <sub>112</sub>	24.296 <sup>a</sup> <sub>110</sub>	58.09 <sup>b</sup> <sub>99</sub>	28.025 <sup>a</sup> <sub>77</sub>	54.57 <sup>b</sup> <sub>10</sub>	18.82 <sup>a</sup> <sub>46</sub>	75.43 <sup>b</sup> <sub>204</sub>
Aug. 8	24.424 <sup>a</sup> <sub>125</sub>	64.26 <sup>b</sup> <sub>87</sub>	24.186 <sup>a</sup> <sub>155</sub>	59.08 <sup>b</sup> <sub>83</sub>	27.948 <sup>a</sup> <sub>112</sub>	54.47 <sup>b</sup> <sub>7</sub>	18.36 <sup>a</sup> <sub>53</sub>	77.47 <sup>b</sup> <sub>161</sub>
18	24.299 <sup>a</sup> <sub>152</sub>	65.13 <sup>b</sup> <sub>62</sub>	24.031 <sup>a</sup> <sub>191</sub>	59.91 <sup>b</sup> <sub>62</sub>	27.836 <sup>a</sup> <sub>140</sub>	54.40 <sup>b</sup> <sub>4</sub>	17.83 <sup>a</sup> <sub>58</sub>	79.08 <sup>b</sup> <sub>114</sub>
28	24.147 <sup>a</sup> <sub>171</sub>	65.75 <sup>b</sup> <sub>35</sub>	23.840 <sup>a</sup> <sub>217</sub>	60.53 <sup>b</sup> <sub>38</sub>	27.696 <sup>a</sup> <sub>161</sub>	54.36 <sup>b</sup> <sub>1</sub>	17.25 <sup>a</sup> <sub>61</sub>	80.22 <sup>b</sup> <sub>64</sub>
Sept. 7	23.976 <sup>a</sup> <sub>182</sub>	66.10 <sup>b</sup> <sub>8</sub>	23.623 <sup>a</sup> <sub>234</sub>	60.91 <sup>b</sup> <sub>13</sub>	27.535 <sup>a</sup> <sub>174</sub>	54.35 <sup>b</sup> <sub>0</sub>	16.64 <sup>a</sup> <sub>64</sub>	80.86 <sup>b</sup> <sub>13</sub>
17	23.794 <sup>a</sup> <sub>185</sub>	66.18 <sup>b</sup> <sub>21</sub>	23.389 <sup>a</sup> <sub>237</sub>	61.04 <sup>b</sup> <sub>13</sub>	27.361 <sup>a</sup> <sub>176</sub>	54.35 <sup>b</sup> <sub>3</sub>	16.00 <sup>a</sup> <sub>65</sub>	80.99 <sup>b</sup> <sub>40</sub>
27	23.609 <sup>a</sup> <sub>178</sub>	65.97 <sup>b</sup> <sub>49</sub>	23.152 <sup>a</sup> <sub>226</sub>	60.91 <sup>b</sup> <sub>39</sub>	27.185 <sup>a</sup> <sub>169</sub>	54.38 <sup>b</sup> <sub>4</sub>	15.35 <sup>a</sup> <sub>63</sub>	80.59 <sup>b</sup> <sub>93</sub>
Okt. 7	23.431 <sup>a</sup> <sub>160</sub>	65.48 <sup>b</sup> <sub>79</sub>	22.926 <sup>a</sup> <sub>202</sub>	60.52 <sup>b</sup> <sub>62</sub>	27.016 <sup>a</sup> <sub>150</sub>	54.42 <sup>b</sup> <sub>8</sub>	14.72 <sup>a</sup> <sub>59</sub>	79.66 <sup>b</sup> <sub>144</sub>
17	23.271 <sup>a</sup> <sub>135</sub>	64.69 <sup>b</sup> <sub>107</sub>	22.724 <sup>a</sup> <sub>166</sub>	59.90 <sup>b</sup> <sub>83</sub>	26.866 <sup>a</sup> <sub>123</sub>	54.50 <sup>b</sup> <sub>13</sub>	14.13 <sup>a</sup> <sub>55</sub>	78.22 <sup>b</sup> <sub>195</sub>
27	23.136 <sup>a</sup> <sub>100</sub>	63.62 <sup>b</sup> <sub>135</sub>	22.558 <sup>a</sup> <sub>118</sub>	59.07 <sup>b</sup> <sub>100</sub>	26.743 <sup>a</sup> <sub>87</sub>	54.63 <sup>b</sup> <sub>19</sub>	13.58 <sup>a</sup> <sub>48</sub>	76.27 <sup>b</sup> <sub>242</sub>
Nov. 6	23.036 <sup>a</sup> <sub>60</sub>	62.27 <sup>b</sup> <sub>161</sub>	22.440 <sup>a</sup> <sub>62</sub>	58.07 <sup>b</sup> <sub>112</sub>	26.656 <sup>a</sup> <sub>44</sub>	54.82 <sup>b</sup> <sub>27</sub>	13.10 <sup>a</sup> <sub>41</sub>	73.85 <sup>b</sup> <sub>284</sub>
16	22.976 <sup>a</sup> <sub>14</sub>	60.66 <sup>b</sup> <sub>185</sub>	22.378 <sup>a</sup> <sub>1</sub>	56.95 <sup>b</sup> <sub>118</sub>	26.612 <sup>a</sup> <sub>3</sub>	55.09 <sup>b</sup> <sub>37</sub>	12.69 <sup>a</sup> <sub>30</sub>	71.01 <sup>b</sup> <sub>320</sub>
26	22.962 <sup>a</sup> <sub>33</sub>	58.81 <sup>b</sup> <sub>205</sub>	22.377 <sup>a</sup> <sub>64</sub>	55.77 <sup>b</sup> <sub>118</sub>	26.615 <sup>a</sup> <sub>53</sub>	55.46 <sup>b</sup> <sub>47</sub>	12.39 <sup>a</sup> <sub>19</sub>	67.81 <sup>b</sup> <sub>348</sub>
Dez. 6	22.995 <sup>a</sup> <sub>81</sub>	56.76 <sup>b</sup> <sub>221</sub>	22.441 <sup>a</sup> <sub>128</sub>	54.59 <sup>b</sup> <sub>113</sub>	26.668 <sup>a</sup> <sub>103</sub>	55.93 <sup>b</sup> <sub>58</sub>	12.20 <sup>a</sup> <sub>8</sub>	64.33 <sup>b</sup> <sub>368</sub>
16	23.076 <sup>a</sup> <sub>127</sub>	54.55 <sup>b</sup> <sub>230</sub>	22.569 <sup>a</sup> <sub>189</sub>	53.46 <sup>b</sup> <sub>103</sub>	26.771 <sup>a</sup> <sub>148</sub>	56.51 <sup>b</sup> <sub>68</sub>	12.12 <sup>a</sup> <sub>4</sub>	60.65 <sup>b</sup> <sub>375</sub>
26	23.203 <sup>a</sup> <sub>169</sub>	52.25 <sup>b</sup> <sub>233</sub>	22.758 <sup>a</sup> <sub>244</sub>	52.43 <sup>b</sup> <sub>90</sub>	26.919 <sup>a</sup> <sub>191</sub>	57.19 <sup>b</sup> <sub>75</sub>	12.16 <sup>a</sup> <sub>16</sub>	56.90 <sup>b</sup> <sub>372</sub>
36	23.372 <sup>a</sup>	49.92 <sup>b</sup>	23.002 <sup>a</sup>	51.53 <sup>b</sup>	27.110 <sup>a</sup>	57.94 <sup>b</sup>	12.32 <sup>a</sup>	53.18 <sup>b</sup>
Mittl. Ort	22.776	55.04	21.803	53.48	26.094	56.50	16.12	60.86
sec $\delta$ , tg $\delta$	1.025	+0.223	1.367	-0.931	1.037	-0.275	2.763	+2.576
a, a'	+2.8	-2.4	+4.3	-2.3	+3.4	-2.2	-0.4	-2.0
b, b'	0.00	+0.99	+0.01	+0.99	0.00	+0.99	-0.02	+1.00



Tag	663) $\epsilon$ Herculis		661) $\eta$ Pavonis		665) $\beta$ Ophiuchi		670) $\psi$ Draconis <i>pr</i>	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	17 <sup>h</sup> 37 <sup>m</sup>	+46° 1'	17 <sup>h</sup> 40 <sup>m</sup>	-64° 41'	17 <sup>h</sup> 40 <sup>m</sup>	+4° 35'	17 <sup>h</sup> 42 <sup>m</sup>	+72° 10'
Jan. I	52.154 <sup>a</sup> <sub>183</sub>	63.96 <sup>b</sup> <sub>344</sub>	14.92 <sup>a</sup> <sub>40</sub>	53.07 <sup>b</sup> <sub>197</sub>	42.964 <sup>a</sup> <sub>186</sub>	21.39 <sup>b</sup> <sub>187</sub>	50.61 <sup>a</sup> <sub>23</sub>	33.71 <sup>b</sup> <sub>363</sub>
II	52.337 <sub>236</sub>	60.52 <sub>323</sub>	15.32 <sub>47</sub>	51.10 <sub>172</sub>	43.150 <sub>219</sub>	19.52 <sub>181</sub>	50.84 <sub>37</sub>	30.08 <sub>342</sub>
21	52.573 <sub>280</sub>	57.29 <sub>290</sub>	15.79 <sub>54</sub>	49.38 <sub>144</sub>	43.369 <sub>244</sub>	17.71 <sub>167</sub>	51.21 <sub>48</sub>	26.66 <sub>307</sub>
31	52.853 <sub>317</sub>	54.39 <sub>248</sub>	16.33 <sub>59</sub>	47.94 <sub>111</sub>	43.613 <sub>265</sub>	16.04 <sub>147</sub>	51.69 <sub>58</sub>	23.59 <sub>262</sub>
Febr. 10	53.170 <sub>344</sub>	51.91 <sub>196</sub>	16.92 <sub>63</sub>	46.83 <sub>77</sub>	43.878 <sub>279</sub>	14.57 <sub>121</sub>	52.27 <sub>65</sub>	20.97 <sub>207</sub>
20	53.514 <sub>362</sub>	49.95 <sub>138</sub>	17.55 <sub>64</sub>	46.06 <sub>43</sub>	44.157 <sub>287</sub>	13.36 <sub>91</sub>	52.92 <sub>72</sub>	18.90 <sub>145</sub>
März 2	53.876 <sub>370</sub>	48.57 <sub>75</sub>	18.19 <sub>66</sub>	45.63 <sub>8</sub>	44.444 <sub>291</sub>	12.45 <sub>57</sub>	53.64 <sub>74</sub>	17.45 <sub>80</sub>
12	54.246 <sub>371</sub>	47.82 <sub>11</sub>	18.85 <sub>65</sub>	45.55 <sub>27</sub>	44.735 <sub>290</sub>	11.88 <sub>22</sub>	54.38 <sub>76</sub>	16.65 <sub>12</sub>
22	54.617 <sub>363</sub>	47.71 <sub>52</sub>	19.50 <sub>65</sub>	45.82 <sub>59</sub>	45.025 <sub>285</sub>	11.66 <sub>13</sub>	55.14 <sub>73</sub>	16.53 <sub>55</sub>
Apr. I	54.980 <sub>346</sub>	48.23 <sub>111</sub>	20.15 <sub>62</sub>	46.41 <sub>91</sub>	45.310 <sub>277</sub>	11.79 <sub>47</sub>	55.87 <sub>70</sub>	17.08 <sub>118</sub>
II	55.326 <sub>322</sub>	49.34 <sub>165</sub>	20.77 <sub>60</sub>	47.32 <sub>121</sub>	45.587 <sub>264</sub>	12.26 <sub>76</sub>	56.57 <sub>63</sub>	18.26 <sub>175</sub>
21	55.648 <sub>292</sub>	50.99 <sub>212</sub>	21.37 <sub>55</sub>	48.53 <sub>149</sub>	45.851 <sub>248</sub>	13.02 <sub>102</sub>	57.20 <sub>56</sub>	20.01 <sub>225</sub>
Mai I	55.940 <sub>256</sub>	53.11 <sub>250</sub>	21.92 <sub>51</sub>	50.02 <sub>174</sub>	46.099 <sub>228</sub>	14.04 <sub>123</sub>	57.76 <sub>46</sub>	22.26 <sub>265</sub>
II	56.196 <sub>214</sub>	55.61 <sub>279</sub>	22.43 <sub>44</sub>	51.76 <sub>196</sub>	46.327 <sub>204</sub>	15.27 <sub>137</sub>	58.22 <sub>35</sub>	24.91 <sub>296</sub>
21	56.410 <sub>168</sub>	58.40 <sub>297</sub>	22.87 <sub>38</sub>	53.72 <sub>214</sub>	46.531 <sub>176</sub>	16.64 <sub>146</sub>	58.57 <sub>25</sub>	27.87 <sub>317</sub>
31	56.578 <sub>118</sub>	61.37 <sub>307</sub>	23.25 <sub>31</sub>	55.86 <sub>227</sub>	46.707 <sub>144</sub>	18.10 <sub>151</sub>	58.82 <sub>11</sub>	31.04 <sub>327</sub>
Juni 10	56.696 <sub>67</sub>	64.44 <sub>307</sub>	23.56 <sub>22</sub>	58.13 <sub>235</sub>	46.851 <sub>110</sub>	19.61 <sub>149</sub>	58.93 <sub>0</sub>	34.31 <sub>328</sub>
19	56.763 <sub>13</sub>	67.51 <sub>298</sub>	23.78 <sub>13</sub>	60.48 <sub>237</sub>	46.961 <sub>74</sub>	21.10 <sub>143</sub>	58.93 <sub>13</sub>	37.59 <sub>319</sub>
29	56.776 <sub>40</sub>	70.49 <sub>282</sub>	23.91 <sub>4</sub>	62.85 <sub>234</sub>	47.035 <sub>34</sub>	22.53 <sub>134</sub>	58.80 <sub>24</sub>	40.78 <sub>301</sub>
Juli 9	56.736 <sub>93</sub>	73.31 <sub>257</sub>	23.95 <sub>5</sub>	65.19 <sub>223</sub>	47.069 <sub>5</sub>	23.87 <sub>121</sub>	58.56 <sub>35</sub>	43.79 <sub>277</sub>
19	56.643 <sub>142</sub>	75.88 <sub>228</sub>	23.90 <sub>13</sub>	67.42 <sub>206</sub>	47.064 <sub>44</sub>	25.08 <sub>106</sub>	58.21 <sub>46</sub>	46.56 <sub>246</sub>
29	56.501 <sub>187</sub>	78.16 <sub>193</sub>	23.77 <sub>22</sub>	69.48 <sub>182</sub>	47.020 <sub>80</sub>	26.14 <sub>89</sub>	57.75 <sub>55</sub>	49.02 <sub>208</sub>
Aug. 8	56.314 <sub>227</sub>	80.09 <sub>153</sub>	23.55 <sub>30</sub>	71.30 <sub>152</sub>	46.940 <sub>113</sub>	27.03 <sub>70</sub>	57.20 <sub>63</sub>	51.10 <sub>165</sub>
18	56.087 <sub>260</sub>	81.62 <sub>110</sub>	23.25 <sub>35</sub>	72.82 <sub>117</sub>	46.827 <sub>141</sub>	27.73 <sub>50</sub>	56.57 <sub>70</sub>	52.75 <sub>119</sub>
28	55.827 <sub>283</sub>	82.72 <sub>63</sub>	22.90 <sub>40</sub>	73.99 <sub>76</sub>	46.686 <sub>161</sub>	28.23 <sub>30</sub>	55.87 <sub>74</sub>	53.94 <sub>71</sub>
Sept. 7	55.544 <sub>298</sub>	83.35 <sub>17</sub>	22.50 <sub>43</sub>	74.75 <sub>33</sub>	46.525 <sub>174</sub>	28.53 <sub>10</sub>	55.13 <sub>76</sub>	54.65 <sub>19</sub>
17	55.246 <sub>301</sub>	83.52 <sub>33</sub>	22.07 <sub>43</sub>	75.08 <sub>12</sub>	46.351 <sub>178</sub>	28.63 <sub>12</sub>	54.37 <sub>78</sub>	54.84 <sub>33</sub>
27	54.945 <sub>294</sub>	83.19 <sub>82</sub>	21.64 <sub>42</sub>	74.96 <sub>57</sub>	46.173 <sub>171</sub>	28.51 <sub>34</sub>	53.59 <sub>76</sub>	54.51 <sub>86</sub>
Okt. 7	54.651 <sub>275</sub>	82.37 <sub>131</sub>	21.22 <sub>39</sub>	74.39 <sub>100</sub>	46.002 <sub>156</sub>	28.17 <sub>56</sub>	52.83 <sub>73</sub>	53.65 <sub>138</sub>
17	54.376 <sub>244</sub>	81.06 <sub>178</sub>	20.83 <sub>32</sub>	73.39 <sub>140</sub>	45.846 <sub>131</sub>	27.61 <sub>78</sub>	52.10 <sub>67</sub>	52.27 <sub>189</sub>
27	54.132 <sub>204</sub>	79.28 <sub>222</sub>	20.51 <sub>25</sub>	71.99 <sub>174</sub>	45.715 <sub>98</sub>	26.83 <sub>100</sub>	51.43 <sub>60</sub>	50.38 <sub>235</sub>
Nov. 6	53.928 <sub>154</sub>	77.06 <sub>263</sub>	20.26 <sub>17</sub>	70.25 <sub>201</sub>	45.617 <sub>58</sub>	25.83 <sub>122</sub>	50.83 <sub>50</sub>	48.03 <sub>279</sub>
16	53.774 <sub>98</sub>	74.43 <sub>298</sub>	20.09 <sub>6</sub>	68.24 <sub>219</sub>	45.559 <sub>13</sub>	24.61 <sub>142</sub>	50.33 <sub>40</sub>	45.24 <sub>316</sub>
26	53.676 <sub>37</sub>	71.45 <sub>325</sub>	20.03 <sub>4</sub>	66.05 <sub>230</sub>	45.546 <sub>33</sub>	23.19 <sub>160</sub>	49.93 <sub>27</sub>	42.08 <sub>344</sub>
Dez. 6	53.639 <sub>26</sub>	68.20 <sub>344</sub>	20.07 <sub>15</sub>	63.75 <sub>231</sub>	45.579 <sub>79</sub>	21.59 <sub>174</sub>	49.66 <sub>13</sub>	38.64 <sub>365</sub>
16	53.665 <sub>89</sub>	64.76 <sub>354</sub>	20.22 <sub>26</sub>	61.44 <sub>224</sub>	45.658 <sub>125</sub>	19.85 <sub>184</sub>	49.53 <sub>0</sub>	34.99 <sub>375</sub>
26	53.754 <sub>150</sub>	61.22 <sub>352</sub>	20.48 <sub>34</sub>	59.20 <sub>209</sub>	45.783 <sub>166</sub>	18.01 <sub>188</sub>	49.53 <sub>15</sub>	31.24 <sub>372</sub>
36	53.904	57.70	20.82	57.11	45.949	16.13	49.68	27.52
Mittl. Ort	54.604	64.89	19.82	61.07	45.224	19.37	54.65	35.03
sec $\delta$ , tg $\delta$	1.441	+1.037	2.340	-2.116	1.003	+0.080	3.267	+3.110
a, a'	+1.7	-1.9	+5.9	-1.7	+3.0	-1.7	-1.1	-1.5
b, b'	-0.01	+1.00	+0.01	+1.00	0.00	+1.00	-0.02	+1.00



## Scheinbare Sternörter 1945

Tag	667) $\mu$ Herculis <sup>1)</sup>		675) $\zeta$ Draconis		671) $\xi$ Draconis		672) $\theta$ Herculis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	17 <sup>h</sup> 44 <sup>m</sup>	+27° 44'	17 <sup>h</sup> 51 <sup>m</sup>	+76° 57'	17 <sup>h</sup> 52 <sup>m</sup>	+56° 52'	17 <sup>h</sup> 54 <sup>m</sup>	+37° 15'
Jan. I	15.987 <sup>173</sup>	66.30 <sup>293</sup>	49.31 <sup>23</sup>	76.64 <sup>360</sup>	31.755 <sup>169</sup>	49.80 <sup>362</sup>	19.566 <sup>160</sup>	24.06 <sup>323</sup>
II	16.160 <sup>213</sup>	63.37 <sup>278</sup>	49.54 <sup>42</sup>	73.04 <sup>340</sup>	31.924 <sup>239</sup>	46.18 <sup>342</sup>	19.726 <sup>206</sup>	20.83 <sup>307</sup>
21	16.373 <sup>245</sup>	60.59 <sup>253</sup>	49.96 <sup>58</sup>	69.64 <sup>309</sup>	32.163 <sup>302</sup>	42.76 <sup>311</sup>	19.932 <sup>246</sup>	17.76 <sup>280</sup>
31	16.618 <sup>271</sup>	58.06 <sup>218</sup>	50.54 <sup>73</sup>	66.55 <sup>265</sup>	32.465 <sup>355</sup>	39.65 <sup>268</sup>	20.178 <sup>277</sup>	14.96 <sup>243</sup>
Febr. 10	16.889 <sup>290</sup>	55.88 <sup>176</sup>	51.27 <sup>84</sup>	63.90 <sup>213</sup>	32.820 <sup>397</sup>	36.97 <sup>216</sup>	20.455 <sup>302</sup>	12.53 <sup>197</sup>
20	17.179 <sup>303</sup>	54.12 <sup>127</sup>	52.11 <sup>93</sup>	61.77 <sup>153</sup>	33.217 <sup>427</sup>	34.81 <sup>156</sup>	20.757 <sup>321</sup>	10.56 <sup>144</sup>
März 2	17.482 <sup>309</sup>	52.85 <sup>75</sup>	53.04 <sup>98</sup>	60.24 <sup>88</sup>	33.644 <sup>446</sup>	33.25 <sup>92</sup>	21.078 <sup>330</sup>	9.12 <sup>86</sup>
12	17.791 <sup>309</sup>	52.10 <sup>20</sup>	54.02 <sup>100</sup>	59.36 <sup>22</sup>	34.090 <sup>450</sup>	32.33 <sup>25</sup>	21.408 <sup>333</sup>	8.26 <sup>26</sup>
22	18.100 <sup>303</sup>	51.90 <sup>33</sup>	55.02 <sup>98</sup>	59.14 <sup>44</sup>	34.540 <sup>445</sup>	32.08 <sup>42</sup>	21.741 <sup>330</sup>	8.00 <sup>33</sup>
Apr. I	18.403 <sup>293</sup>	52.23 <sup>84</sup>	56.00 <sup>93</sup>	59.58 <sup>108</sup>	34.985 <sup>427</sup>	32.50 <sup>105</sup>	22.071 <sup>320</sup>	8.33 <sup>90</sup>
11	18.696 <sup>278</sup>	53.07 <sup>131</sup>	56.93 <sup>86</sup>	60.66 <sup>165</sup>	35.412 <sup>398</sup>	33.55 <sup>163</sup>	22.391 <sup>303</sup>	9.23 <sup>143</sup>
21	18.974 <sup>256</sup>	54.38 <sup>170</sup>	57.79 <sup>75</sup>	62.31 <sup>216</sup>	35.810 <sup>361</sup>	35.18 <sup>214</sup>	22.694 <sup>281</sup>	10.66 <sup>187</sup>
Mai I	19.230 <sup>232</sup>	56.08 <sup>204</sup>	58.54 <sup>62</sup>	64.47 <sup>257</sup>	36.171 <sup>314</sup>	37.32 <sup>256</sup>	22.975 <sup>253</sup>	12.53 <sup>226</sup>
11	19.462 <sup>203</sup>	58.12 <sup>228</sup>	59.16 <sup>48</sup>	67.04 <sup>290</sup>	36.485 <sup>261</sup>	39.88 <sup>289</sup>	23.228 <sup>220</sup>	14.79 <sup>255</sup>
21	19.665 <sup>169</sup>	60.40 <sup>244</sup>	59.64 <sup>32</sup>	69.94 <sup>312</sup>	36.746 <sup>201</sup>	42.77 <sup>311</sup>	23.448 <sup>183</sup>	17.34 <sup>275</sup>
31	19.834 <sup>132</sup>	62.84 <sup>253</sup>	59.96 <sup>15</sup>	73.06 <sup>325</sup>	36.947 <sup>137</sup>	45.88 <sup>325</sup>	23.631 <sup>141</sup>	20.09 <sup>286</sup>
Juni 10	19.966 <sup>93</sup>	65.37 <sup>253</sup>	60.11 <sup>1</sup>	76.31 <sup>327</sup>	37.084 <sup>70</sup>	49.13 <sup>327</sup>	23.772 <sup>96</sup>	22.95 <sup>289</sup>
19*)	20.059 <sup>50</sup>	67.90 <sup>246</sup>	60.10 <sup>18</sup>	79.58 <sup>320</sup>	37.154 <sup>2</sup>	52.40 <sup>321</sup>	23.868 <sup>50</sup>	25.84 <sup>283</sup>
29	20.109 <sup>8</sup>	70.36 <sup>233</sup>	59.92 <sup>34</sup>	82.78 <sup>306</sup>	37.156 <sup>67</sup>	55.61 <sup>306</sup>	23.918 <sup>2</sup>	28.67 <sup>270</sup>
Juli 9	20.117 <sup>35</sup>	72.69 <sup>213</sup>	59.58 <sup>49</sup>	85.84 <sup>282</sup>	37.089 <sup>132</sup>	58.67 <sup>284</sup>	23.920 <sup>46</sup>	31.37 <sup>250</sup>
19	20.082 <sup>77</sup>	74.82 <sup>188</sup>	59.99 <sup>63</sup>	88.66 <sup>253</sup>	36.957 <sup>196</sup>	61.51 <sup>254</sup>	23.874 <sup>92</sup>	33.87 <sup>224</sup>
29	20.005 <sup>116</sup>	76.70 <sup>159</sup>	58.46 <sup>76</sup>	91.19 <sup>217</sup>	36.761 <sup>253</sup>	64.05 <sup>219</sup>	23.782 <sup>136</sup>	36.11 <sup>193</sup>
Aug. 8	19.889 <sup>151</sup>	78.29 <sup>128</sup>	57.70 <sup>87</sup>	93.36 <sup>176</sup>	36.508 <sup>304</sup>	66.24 <sup>179</sup>	23.646 <sup>174</sup>	38.04 <sup>157</sup>
18	19.738 <sup>179</sup>	79.57 <sup>92</sup>	56.83 <sup>95</sup>	95.12 <sup>132</sup>	36.204 <sup>345</sup>	68.03 <sup>134</sup>	23.472 <sup>206</sup>	39.61 <sup>119</sup>
28	19.559 <sup>201</sup>	80.49 <sup>55</sup>	55.88 <sup>103</sup>	96.44 <sup>84</sup>	35.859 <sup>377</sup>	69.37 <sup>86</sup>	23.266 <sup>231</sup>	40.80 <sup>77</sup>
Sept. 7	19.358 <sup>214</sup>	81.04 <sup>17</sup>	54.85 <sup>106</sup>	97.28 <sup>33</sup>	35.482 <sup>398</sup>	70.23 <sup>36</sup>	23.035 <sup>247</sup>	41.57 <sup>33</sup>
17	19.144 <sup>219</sup>	81.21 <sup>23</sup>	53.79 <sup>108</sup>	97.61 <sup>17</sup>	35.084 <sup>405</sup>	70.59 <sup>15</sup>	22.788 <sup>254</sup>	41.90 <sup>11</sup>
27	18.925 <sup>213</sup>	80.98 <sup>63</sup>	52.71 <sup>107</sup>	97.44 <sup>70</sup>	34.679 <sup>400</sup>	70.44 <sup>68</sup>	22.534 <sup>249</sup>	41.79 <sup>57</sup>
Okt. 7	18.712 <sup>196</sup>	80.35 <sup>103</sup>	51.64 <sup>103</sup>	96.74 <sup>122</sup>	34.279 <sup>381</sup>	69.76 <sup>120</sup>	22.285 <sup>235</sup>	41.22 <sup>103</sup>
17	18.516 <sup>172</sup>	79.32 <sup>142</sup>	50.61 <sup>96</sup>	95.52 <sup>172</sup>	33.898 <sup>349</sup>	68.56 <sup>170</sup>	22.050 <sup>210</sup>	40.19 <sup>148</sup>
27	18.344 <sup>137</sup>	77.90 <sup>179</sup>	49.65 <sup>86</sup>	93.80 <sup>220</sup>	33.549 <sup>304</sup>	66.86 <sup>219</sup>	21.840 <sup>176</sup>	38.71 <sup>189</sup>
Nov. 6	18.207 <sup>96</sup>	76.11 <sup>213</sup>	48.79 <sup>75</sup>	91.60 <sup>264</sup>	33.245 <sup>248</sup>	64.67 <sup>263</sup>	21.664 <sup>133</sup>	36.82 <sup>229</sup>
16	18.111 <sup>49</sup>	73.98 <sup>244</sup>	48.04 <sup>61</sup>	88.96 <sup>302</sup>	32.997 <sup>183</sup>	62.04 <sup>302</sup>	21.531 <sup>84</sup>	34.53 <sup>264</sup>
26	18.062 <sup>1</sup>	71.54 <sup>269</sup>	47.43 <sup>44</sup>	85.94 <sup>332</sup>	32.814 <sup>110</sup>	59.02 <sup>332</sup>	21.447 <sup>31</sup>	31.89 <sup>293</sup>
Dez. 6	18.063 <sup>52</sup>	68.85 <sup>287</sup>	46.99 <sup>26</sup>	82.62 <sup>355</sup>	32.704 <sup>33</sup>	55.70 <sup>355</sup>	21.416 <sup>23</sup>	28.96 <sup>314</sup>
16	18.115 <sup>102</sup>	65.98 <sup>297</sup>	46.73 <sup>8</sup>	79.07 <sup>367</sup>	32.671 <sup>46</sup>	52.15 <sup>368</sup>	21.439 <sup>79</sup>	25.82 <sup>326</sup>
26	18.217 <sup>149</sup>	63.01 <sup>298</sup>	46.65 <sup>11</sup>	75.40 <sup>366</sup>	32.717 <sup>124</sup>	48.47 <sup>368</sup>	21.518 <sup>132</sup>	22.56 <sup>327</sup>
36	18.366	60.03	46.76	71.74	32.841	44.79	21.650	19.29
Mittl. Ort	18.237	66.14	54.41	77.43	34.531	50.47	21.898	24.10
sec $\delta$ , tg $\delta$	1.130	+0.526	4.436	+4.322	1.830	+1.533	1.256	+0.761
a, a'	+2.4	-1.4	-2.7	-0.7	+1.0	-0.6	+2.1	-0.5
b, b'	0.00	+1.00	-0.01	+1.00	0.00	+1.00	0.00	+1.00

1) Die jährliche Parallaxe (0"109) ist bereits berücksichtigt.

\*) Bei Stern 675), 671) und 672) lies Juni 20.



# Obere Kulmination Greenwich

145\*

Tag	676) $\gamma$ Draconis		673) $\nu$ Ophiuchi		677) $\delta$ Ophiuchi		679) $\gamma$ Sagittarii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	17 <sup>h</sup> 55 <sup>m</sup>	+51° 29'	17 <sup>h</sup> 55 <sup>m</sup>	-9° 46'	17 <sup>h</sup> 57 <sup>m</sup>	+2° 55'	18 <sup>h</sup> 2 <sup>m</sup>	-30° 25'
Jan. I	17.024 <sub>161</sub>	40.22 <sub>355</sub>	57.419 <sub>184</sub>	4.21 <sub>103</sub>	51.026 <sub>172</sub>	59.24 <sub>174</sub>	13.629 <sub>207</sub>	32.24 <sub>25</sub>
II	17.185 <sub>222</sub>	36.67 <sub>337</sub>	57.603 <sub>218</sub>	5.24 <sub>103</sub>	51.198 <sub>205</sub>	57.50 <sub>169</sub>	13.836 <sub>246</sub>	31.99 <sub>17</sub>
21	17.407 <sub>275</sub>	33.30 <sub>307</sub>	57.821 <sub>245</sub>	6.27 <sub>98</sub>	51.403 <sub>233</sub>	55.81 <sub>157</sub>	14.082 <sub>276</sub>	31.82 <sub>9</sub>
31	17.682 <sub>321</sub>	30.23 <sub>266</sub>	58.066 <sub>266</sub>	7.25 <sub>89</sub>	51.636 <sub>254</sub>	54.24 <sub>139</sub>	14.358 <sub>302</sub>	31.73 <sub>4</sub>
Febr. 10	18.003 <sub>357</sub>	27.57 <sub>215</sub>	58.332 <sub>281</sub>	8.14 <sub>75</sub>	51.890 <sub>271</sub>	52.85 <sub>115</sub>	14.660 <sub>320</sub>	31.69 <sub>1</sub>
20	18.360 <sub>383</sub>	25.42 <sub>156</sub>	58.613 <sub>292</sub>	8.89 <sub>59</sub>	52.161 <sub>282</sub>	51.70 <sub>87</sub>	14.980 <sub>332</sub>	31.70 <sub>3</sub>
März 2	18.743 <sub>399</sub>	23.86 <sub>94</sub>	58.905 <sub>297</sub>	9.48 <sub>39</sub>	52.443 <sub>288</sub>	50.83 <sub>55</sub>	15.312 <sub>340</sub>	31.73 <sub>5</sub>
12	19.142 <sub>404</sub>	22.92 <sub>28</sub>	59.202 <sub>299</sub>	9.87 <sub>18</sub>	52.731 <sub>290</sub>	50.28 <sub>21</sub>	15.652 <sub>342</sub>	31.78 <sub>7</sub>
22	19.546 <sub>399</sub>	22.64 <sub>37</sub>	59.501 <sub>296</sub>	10.05 <sub>3</sub>	53.021 <sub>288</sub>	50.07 <sub>13</sub>	15.994 <sub>341</sub>	31.85 <sub>7</sub>
Apr. I	19.945 <sub>385</sub>	23.01 <sub>100</sub>	59.797 <sub>290</sub>	10.02 <sub>22</sub>	53.309 <sub>282</sub>	50.20 <sub>44</sub>	16.335 <sub>335</sub>	31.92 <sub>9</sub>
II	20.330 <sub>362</sub>	24.01 <sub>157</sub>	60.087 <sub>281</sub>	9.80 <sub>40</sub>	53.591 <sub>272</sub>	50.64 <sub>73</sub>	16.670 <sub>325</sub>	32.01 <sub>10</sub>
21	20.692 <sub>331</sub>	25.58 <sub>207</sub>	60.368 <sub>267</sub>	9.40 <sub>55</sub>	53.863 <sub>258</sub>	51.37 <sub>99</sub>	16.995 <sub>311</sub>	32.11 <sub>14</sub>
Mai I	21.023 <sub>292</sub>	27.65 <sub>249</sub>	60.635 <sub>249</sub>	8.85 <sub>66</sub>	54.121 <sub>241</sub>	52.36 <sub>118</sub>	17.306 <sub>292</sub>	32.25 <sub>19</sub>
II	21.315 <sub>246</sub>	30.14 <sub>281</sub>	60.884 <sub>227</sub>	8.19 <sub>73</sub>	54.362 <sub>218</sub>	53.54 <sub>133</sub>	17.598 <sub>267</sub>	32.44 <sub>24</sub>
21	21.561 <sub>195</sub>	32.95 <sub>304</sub>	61.111 <sub>201</sub>	7.46 <sub>77</sub>	54.580 <sub>192</sub>	54.87 <sub>142</sub>	17.865 <sub>238</sub>	32.68 <sub>31</sub>
31	21.756 <sub>141</sub>	35.99 <sub>318</sub>	61.312 <sub>170</sub>	6.69 <sub>77</sub>	54.772 <sub>161</sub>	56.29 <sub>146</sub>	18.103 <sub>204</sub>	32.99 <sub>38</sub>
Juni 10	21.897 <sub>82</sub>	39.17 <sub>320</sub>	61.482 <sub>136</sub>	5.92 <sub>73</sub>	54.933 <sub>127</sub>	57.75 <sub>145</sub>	18.307 <sub>165</sub>	33.37 <sub>45</sub>
20	21.979 <sub>22</sub>	42.37 <sub>315</sub>	61.618 <sub>98</sub>	5.19 <sub>69</sub>	55.060 <sub>90</sub>	59.20 <sub>139</sub>	18.472 <sub>121</sub>	33.82 <sub>51</sub>
29	22.001 <sub>38</sub>	45.52 <sub>302</sub>	61.716 <sub>59</sub>	4.50 <sub>61</sub>	55.150 <sub>51</sub>	60.59 <sub>131</sub>	18.593 <sub>76</sub>	34.33 <sub>57</sub>
Juli 9	21.963 <sub>98</sub>	48.54 <sub>279</sub>	61.775 <sub>17</sub>	3.89 <sub>52</sub>	55.201 <sub>10</sub>	61.90 <sub>118</sub>	18.669 <sub>29</sub>	34.90 <sub>59</sub>
19	21.865 <sub>154</sub>	51.33 <sub>251</sub>	61.792 <sub>24</sub>	3.37 <sub>43</sub>	55.211 <sub>30</sub>	63.08 <sub>104</sub>	18.698 <sub>19</sub>	35.49 <sub>61</sub>
29	21.711 <sub>206</sub>	53.84 <sub>217</sub>	61.768 <sub>63</sub>	2.94 <sub>34</sub>	55.181 <sub>68</sub>	64.12 <sub>87</sub>	18.679 <sub>65</sub>	36.10 <sub>58</sub>
Aug. 8	21.505 <sub>252</sub>	56.01 <sub>177</sub>	61.705 <sub>98</sub>	2.60 <sub>25</sub>	55.113 <sub>102</sub>	64.99 <sub>69</sub>	18.614 <sub>106</sub>	36.68 <sub>54</sub>
18	21.253 <sub>291</sub>	57.78 <sub>134</sub>	61.607 <sub>129</sub>	2.35 <sub>16</sub>	55.011 <sub>132</sub>	65.68 <sub>51</sub>	18.508 <sub>143</sub>	37.22 <sub>46</sub>
28	20.962 <sub>320</sub>	59.12 <sub>88</sub>	61.478 <sub>153</sub>	2.19 <sub>7</sub>	54.879 <sub>156</sub>	66.19 <sub>32</sub>	18.365 <sub>171</sub>	37.68 <sub>37</sub>
Sept. 7	20.642 <sub>339</sub>	60.00 <sub>39</sub>	61.325 <sub>169</sub>	2.12 <sub>0</sub>	54.723 <sub>171</sub>	66.51 <sub>12</sub>	18.194 <sub>189</sub>	38.05 <sub>25</sub>
17	20.303 <sub>348</sub>	60.39 <sub>11</sub>	61.156 <sub>175</sub>	2.12 <sub>8</sub>	54.552 <sub>177</sub>	66.63 <sub>8</sub>	18.005 <sub>198</sub>	38.30 <sub>11</sub>
27	19.955 <sub>342</sub>	60.28 <sub>63</sub>	60.981 <sub>170</sub>	2.20 <sub>16</sub>	54.375 <sub>173</sub>	66.55 <sub>28</sub>	17.807 <sub>195</sub>	38.41 <sub>3</sub>
Okt. 7	19.613 <sub>326</sub>	59.65 <sub>114</sub>	60.811 <sub>157</sub>	2.36 <sub>24</sub>	54.202 <sub>161</sub>	66.27 <sub>48</sub>	17.612 <sub>180</sub>	38.38 <sub>15</sub>
17	19.287 <sub>297</sub>	58.51 <sub>163</sub>	60.654 <sub>133</sub>	2.60 <sub>33</sub>	54.041 <sub>138</sub>	65.79 <sub>69</sub>	17.432 <sub>154</sub>	38.23 <sub>27</sub>
27	18.990 <sub>257</sub>	56.88 <sub>211</sub>	60.521 <sub>101</sub>	2.93 <sub>43</sub>	53.903 <sub>107</sub>	65.10 <sub>90</sub>	17.278 <sub>117</sub>	37.96 <sub>36</sub>
Nov. 6	18.733 <sub>207</sub>	54.77 <sub>255</sub>	60.420 <sub>61</sub>	3.36 <sub>53</sub>	53.796 <sub>69</sub>	64.20 <sub>109</sub>	17.161 <sub>73</sub>	37.60 <sub>42</sub>
16	18.526 <sub>149</sub>	52.22 <sub>293</sub>	60.359 <sub>17</sub>	3.89 <sub>65</sub>	53.727 <sub>27</sub>	63.11 <sub>129</sub>	17.088 <sub>23</sub>	37.18 <sub>46</sub>
26	18.377 <sub>84</sub>	49.29 <sub>324</sub>	60.342 <sub>29</sub>	4.54 <sub>76</sub>	53.700 <sub>19</sub>	61.82 <sub>146</sub>	17.065 <sub>30</sub>	36.72 <sub>45</sub>
Dez. 6	18.293 <sub>15</sub>	46.05 <sub>346</sub>	60.371 <sub>77</sub>	5.30 <sub>87</sub>	53.719 <sub>65</sub>	60.36 <sub>160</sub>	17.095 <sub>84</sub>	36.27 <sub>42</sub>
16	18.278 <sub>54</sub>	42.59 <sub>360</sub>	60.448 <sub>123</sub>	6.17 <sub>95</sub>	53.784 <sub>110</sub>	58.76 <sub>169</sub>	17.179 <sub>136</sub>	35.85 <sub>36</sub>
26	18.332 <sub>122</sub>	38.99 <sub>361</sub>	60.571 <sub>164</sub>	7.12 <sub>101</sub>	53.894 <sub>151</sub>	57.07 <sub>175</sub>	17.315 <sub>183</sub>	35.49 <sub>29</sub>
36	18.454	35.38	60.735	8.13	54.045	55.32	17.498	35.20
Mittl. Ort	19.617	40.67	59.818	6.90	53.316	57.47	16.407	35.96
sec $\delta$ , tg $\delta$	1.606	+1.257	1.015	-0.172	1.001	+0.051	1.160	-0.587
a, a'	+1.4	-0.4	+3.3	-0.4	+3.0	-0.2	+3.9	+0.2
b, b'	0.00	+1.00	0.00	+1.00	0.00	+1.00	0.00	+1.00



Tag	680) $\gamma_2$ Ophiuchi		681) $\alpha$ Herculis		682) $\mu$ Sagittarii		685) $\zeta_6$ Draconis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$18^h 4^m$	$+9^\circ 33'$	$18^h 5^m$	$+28^\circ 44'$	$18^h 10^m$	$-21^\circ 4'$	$18^h 13^m$	$+64^\circ 22'$
Jan. I	$42.175_{160}$	$17.71_{207}$	$21.445_{150}$	$73.81_{294}$	$25.795_{184}$	$27.61_{28}$	$31.52_{13}$	$42.61_{367}$
II	$42.335_{195}$	$15.64_{200}$	$21.595_{191}$	$70.87_{281}$	$25.979_{220}$	$27.89_{31}$	$31.65_{23}$	$38.94_{354}$
2I	$42.530_{225}$	$13.64_{185}$	$21.786_{226}$	$68.06_{259}$	$26.199_{250}$	$28.20_{33}$	$31.88_{31}$	$35.40_{326}$
3I	$42.755_{247}$	$11.79_{163}$	$22.012_{255}$	$65.47_{227}$	$26.449_{273}$	$28.53_{32}$	$32.19_{38}$	$32.14_{288}$
Febr. 10	$43.002_{266}$	$10.16_{135}$	$22.267_{278}$	$63.20_{186}$	$26.722_{292}$	$28.85_{28}$	$32.57_{45}$	$29.26_{238}$
20	$43.268_{279}$	$8.81_{101}$	$22.545_{295}$	$61.34_{138}$	$27.014_{304}$	$29.13_{21}$	$33.02_{50}$	$26.88_{180}$
März 2	$43.547_{286}$	$7.80_{63}$	$22.840_{306}$	$59.96_{87}$	$27.318_{313}$	$29.34_{13}$	$33.52_{53}$	$25.08_{117}$
12	$43.833_{290}$	$7.17_{23}$	$23.146_{311}$	$59.09_{32}$	$27.631_{316}$	$29.47_{4}$	$34.05_{55}$	$23.91_{50}$
22	$44.123_{289}$	$6.94_{16}$	$23.457_{309}$	$58.77_{23}$	$27.947_{316}$	$29.51_{5}$	$34.60_{55}$	$23.41_{17}$
Apr. I	$44.412_{283}$	$7.10_{54}$	$23.766_{302}$	$59.00_{75}$	$28.263_{312}$	$29.46_{13}$	$35.15_{53}$	$23.58_{83}$
II	$44.695_{274}$	$7.64_{89}$	$24.068_{291}$	$59.75_{124}$	$28.575_{305}$	$29.33_{19}$	$35.68_{51}$	$24.41_{143}$
2I	$44.969_{261}$	$8.53_{119}$	$24.359_{273}$	$60.99_{166}$	$28.880_{292}$	$29.14_{25}$	$36.19_{46}$	$25.84_{198}$
Mai I	$45.230_{242}$	$9.72_{144}$	$24.632_{250}$	$62.65_{202}$	$29.172_{275}$	$28.89_{26}$	$36.65_{40}$	$27.82_{245}$
II	$45.472_{221}$	$11.16_{162}$	$24.882_{224}$	$64.67_{229}$	$29.447_{255}$	$28.63_{27}$	$37.05_{34}$	$30.27_{281}$
2I	$45.693_{194}$	$12.78_{175}$	$25.106_{191}$	$66.96_{249}$	$29.702_{228}$	$28.36_{24}$	$37.39_{26}$	$33.08_{309}$
3I	$45.887_{162}$	$14.53_{180}$	$25.297_{155}$	$69.45_{261}$	$29.930_{196}$	$28.12_{19}$	$37.65_{18}$	$36.17_{327}$
Juni 10	$46.049_{128}$	$16.33_{181}$	$25.452_{115}$	$72.06_{263}$	$30.126_{161}$	$27.93_{13}$	$37.83_{10}$	$39.44_{335}$
20	$46.177_{91}$	$18.14_{176}$	$25.567_{73}$	$74.69_{260}$	$30.287_{122}$	$27.80_{7}$	$37.93_{1}$	$42.79_{333}$
29	$46.268_{50}$	$19.90_{166}$	$25.640_{28}$	$77.29_{248}$	$30.409_{79}$	$27.73_{0}$	$37.94_{7}$	$46.12_{322}$
Juli 9	$46.318_{10}$	$21.56_{153}$	$25.668_{16}$	$79.77_{230}$	$30.488_{34}$	$27.73_{7}$	$37.87_{16}$	$49.34_{304}$
19	$46.328_{31}$	$23.09_{135}$	$25.652_{60}$	$82.07_{208}$	$30.522_{10}$	$27.80_{13}$	$37.71_{25}$	$52.38_{278}$
29	$46.297_{69}$	$24.44_{116}$	$25.592_{102}$	$84.15_{180}$	$30.512_{52}$	$27.93_{16}$	$37.46_{31}$	$55.16_{245}$
Aug. 8	$46.228_{105}$	$25.60_{94}$	$25.490_{139}$	$85.95_{149}$	$30.460_{92}$	$28.09_{19}$	$37.15_{38}$	$57.61_{207}$
18	$46.123_{135}$	$26.54_{70}$	$25.351_{172}$	$87.44_{115}$	$30.368_{127}$	$28.28_{20}$	$36.77_{44}$	$59.68_{164}$
28	$45.988_{160}$	$27.24_{47}$	$25.179_{196}$	$88.59_{77}$	$30.241_{154}$	$28.48_{19}$	$36.33_{49}$	$61.32_{117}$
Sept. 7	$45.828_{175}$	$27.71_{21}$	$24.983_{214}$	$89.36_{40}$	$30.087_{173}$	$28.67_{17}$	$35.84_{51}$	$62.49_{68}$
17	$45.653_{183}$	$27.92_{5}$	$24.769_{221}$	$89.76_{1}$	$29.914_{182}$	$28.84_{12}$	$35.33_{53}$	$63.17_{16}$
27	$45.470_{181}$	$27.87_{31}$	$24.548_{220}$	$89.75_{42}$	$29.732_{181}$	$28.96_{9}$	$34.80_{53}$	$63.33_{38}$
Okt. 7	$45.289_{169}$	$27.56_{57}$	$24.328_{207}$	$89.33_{83}$	$29.551_{168}$	$29.05_{5}$	$34.27_{51}$	$62.95_{91}$
17	$45.120_{147}$	$26.99_{83}$	$24.121_{186}$	$88.50_{123}$	$29.383_{145}$	$29.10_{3}$	$33.76_{49}$	$62.04_{143}$
27	$44.973_{117}$	$26.16_{109}$	$23.935_{154}$	$87.27_{162}$	$29.238_{113}$	$29.13_{1}$	$33.27_{43}$	$60.61_{195}$
Nov. 6	$44.856_{81}$	$25.07_{134}$	$23.781_{116}$	$85.65_{198}$	$29.125_{73}$	$29.14_{2}$	$32.84_{38}$	$58.66_{243}$
16	$44.775_{39}$	$23.73_{157}$	$23.665_{72}$	$83.67_{231}$	$29.052_{28}$	$29.16_{4}$	$32.46_{30}$	$56.23_{284}$
26	$44.736_{6}$	$22.16_{177}$	$23.593_{24}$	$81.36_{258}$	$29.024_{21}$	$29.20_{9}$	$32.16_{21}$	$53.39_{321}$
Dez. 6	$44.742_{52}$	$20.39_{192}$	$23.569_{27}$	$78.78_{279}$	$29.045_{70}$	$29.29_{13}$	$31.95_{13}$	$50.18_{347}$
16	$44.794_{97}$	$18.47_{204}$	$23.596_{77}$	$75.99_{293}$	$29.115_{118}$	$29.42_{20}$	$31.82_{2}$	$46.71_{365}$
26	$44.891_{139}$	$16.43_{208}$	$23.673_{124}$	$73.06_{296}$	$29.233_{163}$	$29.62_{26}$	$31.80_{7}$	$43.06_{371}$
36	$45.030$	$14.35$	$23.797$	$70.10$	$29.396$	$29.88$	$31.87$	$39.35$
Mittl. Ort sec $\delta$ , tg $\delta$	$44.438$ $1.014$	$16.43$ $+0.168$	$23.717$ $1.141$	$73.32$ $+0.549$	$28.379$ $1.072$	$30.24$ $-0.385$	$34.71$ $2.313$	$42.30$ $+2.085$
a, a'	$+2.8$	$+0.4$	$+2.3$	$+0.5$	$+3.6$	$+0.9$	$+0.3$	$+1.2$
b, b'	$0.00$	$+1.00$	$0.00$	$+1.00$	$0.00$	$+1.00$	$+0.01$	$+1.00$



# Obere Kulmination Greenwich

147\*

Tag	688) η Serpentis			689) ε Sagittarii			690) ιογ Herculis			695) χ Draconis <sup>1)</sup>		
	AR.	Dekl.		AR.	Dekl.		AR.	Dekl.		AR.	Dekl.	
1945	18 <sup>h</sup> 18 <sup>m</sup>	-2° 54'		18 <sup>h</sup> 20 <sup>m</sup>	-34° 24'		18 <sup>h</sup> 21 <sup>m</sup>	+21° 44'		18 <sup>h</sup> 21 <sup>m</sup>	+72° 42'	
Jan. I	25.390 <sup>a</sup> <sub>156</sub>	51.38 <sup>b</sup> <sub>137</sub>		28.371 <sup>a</sup> <sub>194</sub>	42.80 <sup>b</sup> <sub>58</sub>		18.905 <sup>a</sup> <sub>137</sub>	37.14 <sup>b</sup> <sub>263</sub>		58.78 <sup>a</sup> <sub>11</sub>	35.16 <sup>b</sup> <sub>367</sub>	
II	25.546 <sup>a</sup> <sub>190</sub>	52.75 <sup>b</sup> <sub>134</sub>		28.565 <sup>a</sup> <sub>236</sub>	42.22 <sup>b</sup> <sub>51</sub>		19.042 <sup>a</sup> <sub>176</sub>	34.51 <sup>b</sup> <sub>254</sub>		58.89 <sup>a</sup> <sub>26</sub>	31.49 <sup>b</sup> <sub>355</sub>	
21	25.736 <sup>a</sup> <sub>219</sub>	54.09 <sup>b</sup> <sub>126</sub>		28.801 <sup>a</sup> <sub>271</sub>	41.71 <sup>b</sup> <sub>44</sub>		19.218 <sup>a</sup> <sub>209</sub>	31.97 <sup>b</sup> <sub>236</sub>		59.15 <sup>a</sup> <sub>38</sub>	27.94 <sup>b</sup> <sub>330</sub>	
31	25.955 <sup>a</sup> <sub>243</sub>	55.35 <sup>b</sup> <sub>112</sub>		29.072 <sup>a</sup> <sub>300</sub>	41.27 <sup>b</sup> <sub>36</sub>		19.427 <sup>a</sup> <sub>238</sub>	29.61 <sup>b</sup> <sub>209</sub>		59.53 <sup>a</sup> <sub>51</sub>	24.64 <sup>b</sup> <sub>293</sub>	
Febr. 10	26.198 <sup>a</sup> <sub>262</sub>	56.47 <sup>b</sup> <sub>93</sub>		29.372 <sup>a</sup> <sub>321</sub>	40.91 <sup>b</sup> <sub>31</sub>		19.665 <sup>a</sup> <sub>260</sub>	27.52 <sup>b</sup> <sub>174</sub>		60.04 <sup>a</sup> <sub>60</sub>	21.71 <sup>b</sup> <sub>246</sub>	
20	26.460 <sup>a</sup> <sub>275</sub>	57.40 <sup>b</sup> <sub>70</sub>		29.693 <sup>a</sup> <sub>338</sub>	40.60 <sup>b</sup> <sub>24</sub>		19.925 <sup>a</sup> <sub>278</sub>	25.78 <sup>b</sup> <sub>132</sub>		60.64 <sup>a</sup> <sub>67</sub>	19.25 <sup>b</sup> <sub>189</sub>	
März 2	26.735 <sup>a</sup> <sub>284</sub>	58.10 <sup>b</sup> <sub>44</sub>		30.031 <sup>a</sup> <sub>349</sub>	40.36 <sup>b</sup> <sub>19</sub>		20.203 <sup>a</sup> <sub>291</sub>	24.46 <sup>b</sup> <sub>86</sub>		61.31 <sup>a</sup> <sub>74</sub>	17.36 <sup>b</sup> <sub>127</sub>	
12	27.019 <sup>a</sup> <sub>290</sub>	58.54 <sup>b</sup> <sub>16</sub>		30.380 <sup>a</sup> <sub>355</sub>	40.17 <sup>b</sup> <sub>15</sub>		20.494 <sup>a</sup> <sub>297</sub>	23.60 <sup>b</sup> <sub>36</sub>		62.05 <sup>a</sup> <sub>76</sub>	16.09 <sup>b</sup> <sub>61</sub>	
22	27.309 <sup>a</sup> <sub>291</sub>	58.70 <sup>b</sup> <sub>12</sub>		30.735 <sup>a</sup> <sub>357</sub>	40.02 <sup>b</sup> <sub>9</sub>		20.791 <sup>a</sup> <sub>298</sub>	23.24 <sup>b</sup> <sub>13</sub>		62.81 <sup>a</sup> <sub>77</sub>	15.48 <sup>b</sup> <sub>6</sub>	
Apr. I	27.600 <sup>a</sup> <sub>288</sub>	58.58 <sup>b</sup> <sub>38</sub>		31.092 <sup>a</sup> <sub>353</sub>	39.93 <sup>b</sup> <sub>3</sub>		21.089 <sup>a</sup> <sub>296</sub>	23.37 <sup>b</sup> <sub>62</sub>		63.58 <sup>a</sup> <sub>75</sub>	15.54 <sup>b</sup> <sub>71</sub>	
II	27.888 <sup>a</sup> <sub>282</sub>	58.20 <sup>b</sup> <sub>62</sub>		31.445 <sup>a</sup> <sub>347</sub>	39.90 <sup>b</sup> <sub>2</sub>		21.385 <sup>a</sup> <sub>288</sub>	23.99 <sup>b</sup> <sub>106</sub>		64.33 <sup>a</sup> <sub>71</sub>	16.25 <sup>b</sup> <sub>133</sub>	
21	28.170 <sup>a</sup> <sub>271</sub>	57.58 <sup>b</sup> <sub>83</sub>		31.792 <sup>a</sup> <sub>334</sub>	39.92 <sup>b</sup> <sub>11</sub>		21.673 <sup>a</sup> <sub>275</sub>	25.05 <sup>b</sup> <sub>146</sub>		65.04 <sup>a</sup> <sub>64</sub>	17.58 <sup>b</sup> <sub>188</sub>	
Mai I	28.441 <sup>a</sup> <sub>256</sub>	56.75 <sup>b</sup> <sub>99</sub>		32.126 <sup>a</sup> <sub>317</sub>	40.03 <sup>b</sup> <sub>20</sub>		21.948 <sup>a</sup> <sub>256</sub>	26.51 <sup>b</sup> <sub>179</sub>		65.68 <sup>a</sup> <sub>56</sub>	19.46 <sup>b</sup> <sub>235</sub>	
II	28.697 <sup>a</sup> <sub>236</sub>	55.76 <sup>b</sup> <sub>111</sub>		32.443 <sup>a</sup> <sub>294</sub>	40.23 <sup>b</sup> <sub>29</sub>		22.204 <sup>a</sup> <sub>233</sub>	28.30 <sup>b</sup> <sub>205</sub>		66.24 <sup>a</sup> <sub>47</sub>	21.81 <sup>b</sup> <sub>275</sub>	
21	28.933 <sup>a</sup> <sub>212</sub>	54.65 <sup>b</sup> <sub>118</sub>		32.737 <sup>a</sup> <sub>265</sub>	40.52 <sup>b</sup> <sub>39</sub>		22.437 <sup>a</sup> <sub>206</sub>	30.35 <sup>b</sup> <sub>224</sub>		66.71 <sup>a</sup> <sub>35</sub>	24.56 <sup>b</sup> <sub>303</sub>	
31	29.145 <sup>a</sup> <sub>182</sub>	53.47 <sup>b</sup> <sub>119</sub>		33.002 <sup>a</sup> <sub>230</sub>	40.91 <sup>b</sup> <sub>50</sub>		22.643 <sup>a</sup> <sub>172</sub>	32.59 <sup>b</sup> <sub>236</sub>		67.06 <sup>a</sup> <sub>23</sub>	27.59 <sup>b</sup> <sub>323</sub>	
Juni 10	29.327 <sup>a</sup> <sub>149</sub>	52.28 <sup>b</sup> <sub>118</sub>		33.232 <sup>a</sup> <sub>190</sub>	41.41 <sup>b</sup> <sub>61</sub>		22.815 <sup>a</sup> <sub>136</sub>	34.95 <sup>b</sup> <sub>239</sub>		67.29 <sup>a</sup> <sub>11</sub>	30.82 <sup>b</sup> <sub>333</sub>	
20	29.476 <sup>a</sup> <sub>112</sub>	51.10 <sup>b</sup> <sub>113</sub>		33.422 <sup>a</sup> <sub>146</sub>	42.02 <sup>b</sup> <sub>69</sub>		22.951 <sup>a</sup> <sub>96</sub>	37.34 <sup>b</sup> <sub>236</sub>		67.40 <sup>a</sup> <sub>2</sub>	34.15 <sup>b</sup> <sub>333</sub>	
29	29.588 <sup>a</sup> <sub>73</sub>	49.97 <sup>b</sup> <sub>103</sub>		33.568 <sup>a</sup> <sub>98</sub>	42.71 <sup>b</sup> <sub>76</sub>		23.047 <sup>a</sup> <sub>53</sub>	39.70 <sup>b</sup> <sub>227</sub>		67.38 <sup>a</sup> <sub>14</sub>	37.48 <sup>b</sup> <sub>323</sub>	
Juli 9	29.661 <sup>a</sup> <sub>31</sub>	48.94 <sup>b</sup> <sub>92</sub>		33.666 <sup>a</sup> <sub>48</sub>	43.47 <sup>b</sup> <sub>81</sub>		23.100 <sup>a</sup> <sub>10</sub>	41.97 <sup>b</sup> <sub>211</sub>		67.24 <sup>a</sup> <sub>27</sub>	40.71 <sup>b</sup> <sub>307</sub>	
19	29.692 <sup>a</sup> <sub>10</sub>	48.02 <sup>b</sup> <sub>80</sub>		33.714 <sup>a</sup> <sub>3</sub>	44.28 <sup>b</sup> <sub>83</sub>		23.110 <sup>a</sup> <sub>33</sub>	44.08 <sup>b</sup> <sub>192</sub>		66.97 <sup>a</sup> <sub>38</sub>	43.78 <sup>b</sup> <sub>283</sub>	
29	29.682 <sup>a</sup> <sub>51</sub>	47.22 <sup>b</sup> <sub>66</sub>		33.711 <sup>a</sup> <sub>52</sub>	45.11 <sup>b</sup> <sub>81</sub>		23.077 <sup>a</sup> <sub>74</sub>	46.00 <sup>b</sup> <sub>168</sub>		66.59 <sup>a</sup> <sub>49</sub>	46.61 <sup>b</sup> <sub>252</sub>	
Aug. 8	29.631 <sup>a</sup> <sub>88</sub>	46.56 <sup>b</sup> <sub>50</sub>		33.659 <sup>a</sup> <sub>97</sub>	45.92 <sup>b</sup> <sub>76</sub>		23.003 <sup>a</sup> <sub>113</sub>	47.68 <sup>b</sup> <sub>140</sub>		66.10 <sup>a</sup> <sub>59</sub>	49.13 <sup>b</sup> <sub>215</sub>	
18	29.543 <sup>a</sup> <sub>120</sub>	46.06 <sup>b</sup> <sub>36</sub>		33.562 <sup>a</sup> <sub>138</sub>	46.68 <sup>b</sup> <sub>67</sub>		22.890 <sup>a</sup> <sub>145</sub>	49.08 <sup>b</sup> <sub>110</sub>		65.51 <sup>a</sup> <sub>66</sub>	51.28 <sup>b</sup> <sub>173</sub>	
28	29.423 <sup>a</sup> <sub>146</sub>	45.70 <sup>b</sup> <sub>22</sub>		33.424 <sup>a</sup> <sub>171</sub>	47.35 <sup>b</sup> <sub>56</sub>		22.745 <sup>a</sup> <sub>173</sub>	50.18 <sup>b</sup> <sub>78</sub>		64.85 <sup>a</sup> <sub>73</sub>	53.01 <sup>b</sup> <sub>128</sub>	
Sept. 7	29.277 <sup>a</sup> <sub>165</sub>	45.48 <sup>b</sup> <sub>6</sub>		33.253 <sup>a</sup> <sub>194</sub>	47.91 <sup>b</sup> <sub>41</sub>		22.572 <sup>a</sup> <sub>191</sub>	50.96 <sup>b</sup> <sub>43</sub>		64.12 <sup>a</sup> <sub>77</sub>	54.29 <sup>b</sup> <sub>78</sub>	
17	29.112 <sup>a</sup> <sub>175</sub>	45.42 <sup>b</sup> <sub>8</sub>		33.059 <sup>a</sup> <sub>206</sub>	48.32 <sup>b</sup> <sub>24</sub>		22.381 <sup>a</sup> <sub>202</sub>	51.39 <sup>b</sup> <sub>9</sub>		63.35 <sup>a</sup> <sub>80</sub>	55.07 <sup>b</sup> <sub>27</sub>	
27	28.937 <sup>a</sup> <sub>174</sub>	45.50 <sup>b</sup> <sub>22</sub>		32.853 <sup>a</sup> <sub>207</sub>	48.56 <sup>b</sup> <sub>7</sub>		22.179 <sup>a</sup> <sub>202</sub>	51.48 <sup>b</sup> <sub>27</sub>		62.55 <sup>a</sup> <sub>80</sub>	55.34 <sup>b</sup> <sub>25</sub>	
Okt. 7	28.763 <sup>a</sup> <sub>164</sub>	45.72 <sup>b</sup> <sub>37</sub>		32.646 <sup>a</sup> <sub>194</sub>	48.63 <sup>b</sup> <sub>12</sub>		21.977 <sup>a</sup> <sub>193</sub>	51.21 <sup>b</sup> <sub>64</sub>		61.75 <sup>a</sup> <sub>79</sub>	55.09 <sup>b</sup> <sub>79</sub>	
17	28.599 <sup>a</sup> <sub>145</sub>	46.09 <sup>b</sup> <sub>52</sub>		32.452 <sup>a</sup> <sub>171</sub>	48.51 <sup>b</sup> <sub>28</sub>		21.784 <sup>a</sup> <sub>173</sub>	50.57 <sup>b</sup> <sub>99</sub>		60.96 <sup>a</sup> <sub>74</sub>	54.30 <sup>b</sup> <sub>132</sub>	
27	28.454 <sup>a</sup> <sub>116</sub>	46.61 <sup>b</sup> <sub>67</sub>		32.281 <sup>a</sup> <sub>137</sub>	48.23 <sup>b</sup> <sub>42</sub>		21.611 <sup>a</sup> <sub>147</sub>	49.58 <sup>b</sup> <sub>134</sub>		60.22 <sup>a</sup> <sub>69</sub>	52.98 <sup>b</sup> <sub>183</sub>	
Nov. 6	28.338 <sup>a</sup> <sub>81</sub>	47.28 <sup>b</sup> <sub>82</sub>		32.144 <sup>a</sup> <sub>93</sub>	47.81 <sup>b</sup> <sub>55</sub>		21.464 <sup>a</sup> <sub>111</sub>	48.24 <sup>b</sup> <sub>168</sub>		59.53 <sup>a</sup> <sub>60</sub>	51.15 <sup>b</sup> <sub>232</sub>	
16	28.257 <sup>a</sup> <sub>40</sub>	48.10 <sup>b</sup> <sub>97</sub>		32.051 <sup>a</sup> <sub>43</sub>	47.26 <sup>b</sup> <sub>62</sub>		21.353 <sup>a</sup> <sub>70</sub>	46.56 <sup>b</sup> <sub>197</sub>		58.93 <sup>a</sup> <sub>51</sub>	48.83 <sup>b</sup> <sub>275</sub>	
26	28.217 <sup>a</sup> <sub>5</sub>	49.07 <sup>b</sup> <sub>110</sub>		32.008 <sup>a</sup> <sub>10</sub>	46.64 <sup>b</sup> <sub>68</sub>		21.283 <sup>a</sup> <sub>25</sub>	44.59 <sup>b</sup> <sub>224</sub>		58.42 <sup>a</sup> <sub>39</sub>	46.08 <sup>b</sup> <sub>313</sub>	
Dez. 6	28.222 <sup>a</sup> <sub>49</sub>	50.17 <sup>b</sup> <sub>123</sub>		32.018 <sup>a</sup> <sub>65</sub>	45.96 <sup>b</sup> <sub>68</sub>		21.258 <sup>a</sup> <sub>22</sub>	42.35 <sup>b</sup> <sub>244</sub>		58.03 <sup>a</sup> <sub>26</sub>	42.95 <sup>b</sup> <sub>341</sub>	
16	28.271 <sup>a</sup> <sub>94</sub>	51.40 <sup>b</sup> <sub>131</sub>		32.083 <sup>a</sup> <sub>120</sub>	45.28 <sup>b</sup> <sub>66</sub>		21.280 <sup>a</sup> <sub>68</sub>	39.91 <sup>b</sup> <sub>259</sub>		57.77 <sup>a</sup> <sub>11</sub>	39.54 <sup>b</sup> <sub>361</sub>	
26	28.365 <sup>a</sup> <sub>136</sub>	52.71 <sup>b</sup> <sub>136</sub>		32.203 <sup>a</sup> <sub>170</sub>	44.62 <sup>b</sup> <sub>62</sub>		21.348 <sup>a</sup> <sub>114</sub>	37.32 <sup>b</sup> <sub>264</sub>		57.66 <sup>a</sup> <sub>2</sub>	35.93 <sup>b</sup> <sub>368</sub>	
36	28.501 <sup>a</sup>	54.07 <sup>b</sup>		32.373 <sup>a</sup>	44.00 <sup>b</sup>		21.462 <sup>a</sup>	34.68 <sup>b</sup>		57.68 <sup>a</sup>	32.25 <sup>b</sup>	
Mittl. Ort	27.740	52.86		31.287	45.35		21.161	36.33		62.90	34.41	
sec δ, tg δ	1.001	-0.051		1.212	-0.685		1.077	+0.399		3.365	+3.213	
a, a'	+3.1	+1.6		+4.0	+1.8		+2.5	+1.9		-1.2	+1.9	
b, b'	+0.00	+1.00		0.00	+1.00		0.00	+1.00		+0.02	+1.00	

<sup>1)</sup> Die jährliche Parallaxe (0".119) ist bereits berücksichtigt.



## Scheinbare Sternörter 1945

Tag	691) $\alpha$ Telescopii		699) $\alpha$ Lyrae <sup>1)</sup>		698) $\zeta$ Pavonis		703) $\eta$ Herculis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	18 <sup>h</sup> 22 <sup>m</sup>	-45° 59'	18 <sup>h</sup> 35 <sup>m</sup>	+38° 43'	18 <sup>h</sup> 36 <sup>m</sup>	-71° 28'	18 <sup>h</sup> 43 <sup>m</sup>	+20° 29'
Jan. I	50.324 <sup>a</sup> <sub>218</sub>	59.95 <sup>b</sup> <sub>128</sub>	2.151 <sup>a</sup> <sub>112</sub>	53.75 <sup>b</sup> <sub>323</sub>	30.66 <sup>a</sup> <sub>35</sub>	41.45 <sup>b</sup> <sub>262</sub>	15.338 <sup>a</sup> <sub>115</sub>	33.33 <sup>b</sup> <sub>253</sub>
II	50.542 <sup>a</sup> <sub>269</sub>	58.67 <sup>b</sup> <sub>118</sub>	2.263 <sup>a</sup> <sub>160</sub>	50.52 <sup>b</sup> <sub>313</sub>	31.01 <sup>a</sup> <sub>46</sub>	38.83 <sup>b</sup> <sub>249</sub>	15.453 <sup>a</sup> <sub>153</sub>	30.80 <sup>b</sup> <sub>246</sub>
21	50.811 <sup>a</sup> <sub>311</sub>	57.49 <sup>b</sup> <sub>105</sub>	2.423 <sup>a</sup> <sub>205</sub>	47.39 <sup>b</sup> <sub>293</sub>	31.47 <sup>a</sup> <sub>57</sub>	36.34 <sup>b</sup> <sub>229</sub>	15.606 <sup>a</sup> <sub>188</sub>	28.34 <sup>b</sup> <sub>231</sub>
31	51.122 <sup>a</sup> <sub>347</sub>	56.44 <sup>b</sup> <sub>91</sub>	2.628 <sup>a</sup> <sub>243</sub>	44.46 <sup>b</sup> <sub>261</sub>	32.04 <sup>a</sup> <sub>65</sub>	34.05 <sup>b</sup> <sub>202</sub>	15.794 <sup>a</sup> <sub>219</sub>	26.03 <sup>b</sup> <sub>207</sub>
Febr. 10	51.469 <sup>a</sup> <sub>373</sub>	55.53 <sup>b</sup> <sub>76</sub>	2.871 <sup>a</sup> <sub>275</sub>	41.85 <sup>b</sup> <sub>220</sub>	32.69 <sup>a</sup> <sub>74</sub>	32.03 <sup>b</sup> <sub>172</sub>	16.013 <sup>a</sup> <sub>244</sub>	23.96 <sup>b</sup> <sub>175</sub>
20	51.842 <sup>a</sup> <sub>394</sub>	54.77 <sup>b</sup> <sub>60</sub>	3.146 <sup>a</sup> <sub>301</sub>	39.65 <sup>b</sup> <sub>171</sub>	33.43 <sup>a</sup> <sub>79</sub>	30.31 <sup>b</sup> <sub>139</sub>	16.257 <sup>a</sup> <sub>264</sub>	22.21 <sup>b</sup> <sub>136</sub>
März 2	52.236 <sup>a</sup> <sub>409</sub>	54.17 <sup>b</sup> <sub>43</sub>	3.447 <sup>a</sup> <sub>320</sub>	37.94 <sup>b</sup> <sub>115</sub>	34.22 <sup>a</sup> <sub>82</sub>	28.92 <sup>b</sup> <sub>102</sub>	16.521 <sup>a</sup> <sub>279</sub>	20.85 <sup>b</sup> <sub>91</sub>
12	52.645 <sup>a</sup> <sub>416</sub>	53.74 <sup>b</sup> <sub>27</sub>	3.767 <sup>a</sup> <sub>332</sub>	36.79 <sup>b</sup> <sub>56</sub>	35.04 <sup>a</sup> <sub>86</sub>	27.90 <sup>b</sup> <sub>65</sub>	16.800 <sup>a</sup> <sub>290</sub>	19.94 <sup>b</sup> <sub>43</sub>
22	53.061 <sup>a</sup> <sub>419</sub>	53.47 <sup>b</sup> <sub>9</sub>	4.099 <sup>a</sup> <sub>337</sub>	36.23 <sup>b</sup> <sub>4</sub>	35.90 <sup>a</sup> <sub>86</sub>	27.25 <sup>b</sup> <sub>26</sub>	17.090 <sup>a</sup> <sub>296</sub>	19.51 <sup>b</sup> <sub>5</sub>
Apr. I	53.480 <sup>a</sup> <sub>415</sub>	53.38 <sup>b</sup> <sub>7</sub>	4.436 <sup>a</sup> <sub>335</sub>	36.27 <sup>b</sup> <sub>63</sub>	36.76 <sup>a</sup> <sub>86</sub>	26.99 <sup>b</sup> <sub>13</sub>	17.386 <sup>a</sup> <sub>297</sub>	19.56 <sup>b</sup> <sub>53</sub>
II	53.895 <sup>a</sup> <sub>407</sub>	53.45 <sup>b</sup> <sub>24</sub>	4.771 <sup>a</sup> <sub>326</sub>	36.90 <sup>b</sup> <sub>119</sub>	37.62 <sup>a</sup> <sub>85</sub>	27.12 <sup>b</sup> <sub>51</sub>	17.683 <sup>a</sup> <sub>293</sub>	20.09 <sup>b</sup> <sub>97</sub>
21	54.302 <sup>a</sup> <sub>391</sub>	53.69 <sup>b</sup> <sub>43</sub>	5.097 <sup>a</sup> <sub>310</sub>	38.09 <sup>b</sup> <sub>168</sub>	38.47 <sup>a</sup> <sub>81</sub>	27.63 <sup>b</sup> <sub>89</sub>	17.976 <sup>a</sup> <sub>283</sub>	21.06 <sup>b</sup> <sub>137</sub>
Mai I	54.693 <sup>a</sup> <sub>371</sub>	54.12 <sup>b</sup> <sub>61</sub>	5.407 <sup>a</sup> <sub>289</sub>	39.77 <sup>b</sup> <sub>212</sub>	39.28 <sup>a</sup> <sub>76</sub>	28.52 <sup>b</sup> <sub>125</sub>	18.259 <sup>a</sup> <sub>269</sub>	22.43 <sup>b</sup> <sub>171</sub>
II	55.064 <sup>a</sup> <sub>343</sub>	54.73 <sup>b</sup> <sub>78</sub>	5.696 <sup>a</sup> <sub>259</sub>	41.89 <sup>b</sup> <sub>247</sub>	40.04 <sup>a</sup> <sub>69</sub>	29.77 <sup>b</sup> <sub>158</sub>	18.528 <sup>a</sup> <sub>248</sub>	24.14 <sup>b</sup> <sub>199</sub>
21	55.407 <sup>a</sup> <sub>308</sub>	55.51 <sup>b</sup> <sub>95</sub>	5.955 <sup>a</sup> <sub>224</sub>	44.36 <sup>b</sup> <sub>274</sub>	40.73 <sup>a</sup> <sub>62</sub>	31.35 <sup>b</sup> <sub>188</sub>	18.776 <sup>a</sup> <sub>223</sub>	26.13 <sup>b</sup> <sub>219</sub>
31	55.715 <sup>a</sup> <sub>267</sub>	56.46 <sup>b</sup> <sub>110</sub>	6.179 <sup>a</sup> <sub>185</sub>	47.10 <sup>b</sup> <sub>291</sub>	41.35 <sup>a</sup> <sub>53</sub>	33.23 <sup>b</sup> <sub>214</sub>	18.999 <sup>a</sup> <sub>192</sub>	28.32 <sup>b</sup> <sub>232</sub>
Juni 10	55.982 <sup>a</sup> <sub>219</sub>	57.56 <sup>b</sup> <sub>123</sub>	6.364 <sup>a</sup> <sub>140</sub>	50.01 <sup>b</sup> <sub>300</sub>	41.88 <sup>a</sup> <sub>43</sub>	35.37 <sup>b</sup> <sub>236</sub>	19.191 <sup>a</sup> <sub>157</sub>	30.64 <sup>b</sup> <sub>238</sub>
20	56.201 <sup>a</sup> <sub>167</sub>	58.79 <sup>b</sup> <sub>134</sub>	6.504 <sup>a</sup> <sub>92</sub>	53.01 <sup>b</sup> <sub>300</sub>	42.31 <sup>a</sup> <sub>31</sub>	37.73 <sup>b</sup> <sub>251</sub>	19.348 <sup>a</sup> <sub>117</sub>	33.02 <sup>b</sup> <sub>236</sub>
29*)	56.368 <sup>a</sup> <sub>111</sub>	60.13 <sup>b</sup> <sub>140</sub>	6.596 <sup>a</sup> <sub>43</sub>	56.01 <sup>b</sup> <sub>293</sub>	42.62 <sup>a</sup> <sub>19</sub>	40.24 <sup>b</sup> <sub>259</sub>	19.465 <sup>a</sup> <sub>76</sub>	35.38 <sup>b</sup> <sub>229</sub>
Juli 9	56.479 <sup>a</sup> <sub>51</sub>	61.53 <sup>b</sup> <sub>144</sub>	6.639 <sup>a</sup> <sub>8</sub>	58.94 <sup>b</sup> <sub>278</sub>	42.81 <sup>a</sup> <sub>7</sub>	42.83 <sup>b</sup> <sub>261</sub>	19.541 <sup>a</sup> <sub>32</sub>	37.67 <sup>b</sup> <sub>215</sub>
19	56.530 <sup>a</sup> <sub>9</sub>	62.97 <sup>b</sup> <sub>141</sub>	6.631 <sup>a</sup> <sub>58</sub>	61.72 <sup>b</sup> <sub>256</sub>	42.88 <sup>a</sup> <sub>7</sub>	45.44 <sup>b</sup> <sub>253</sub>	19.573 <sup>a</sup> <sub>13</sub>	39.82 <sup>b</sup> <sub>198</sub>
29	56.521 <sup>a</sup> <sub>67</sub>	64.38 <sup>b</sup> <sub>134</sub>	6.573 <sup>a</sup> <sub>106</sub>	64.28 <sup>b</sup> <sub>229</sub>	42.81 <sup>a</sup> <sub>18</sub>	47.97 <sup>b</sup> <sub>239</sub>	19.560 <sup>a</sup> <sub>55</sub>	41.80 <sup>b</sup> <sub>175</sub>
Aug. 8	56.454 <sup>a</sup> <sub>120</sub>	65.72 <sup>b</sup> <sub>123</sub>	6.467 <sup>a</sup> <sub>150</sub>	66.57 <sup>b</sup> <sub>196</sub>	42.63 <sup>a</sup> <sub>30</sub>	50.36 <sup>b</sup> <sub>217</sub>	19.505 <sup>a</sup> <sub>95</sub>	43.55 <sup>b</sup> <sub>149</sub>
18	56.334 <sup>a</sup> <sub>168</sub>	66.95 <sup>b</sup> <sub>105</sub>	6.317 <sup>a</sup> <sub>189</sub>	68.53 <sup>b</sup> <sub>160</sub>	42.33 <sup>a</sup> <sub>40</sub>	52.53 <sup>b</sup> <sub>186</sub>	19.410 <sup>a</sup> <sub>131</sub>	45.04 <sup>b</sup> <sub>120</sub>
28	56.166 <sup>a</sup> <sub>207</sub>	68.00 <sup>b</sup> <sub>85</sub>	6.128 <sup>a</sup> <sub>221</sub>	70.13 <sup>b</sup> <sub>120</sub>	41.93 <sup>a</sup> <sub>48</sub>	54.39 <sup>b</sup> <sub>150</sub>	19.279 <sup>a</sup> <sub>160</sub>	46.24 <sup>b</sup> <sub>90</sub>
Sept. 7	55.959 <sup>a</sup> <sub>234</sub>	68.85 <sup>b</sup> <sub>59</sub>	5.907 <sup>a</sup> <sub>243</sub>	71.33 <sup>b</sup> <sub>77</sub>	41.45 <sup>a</sup> <sub>55</sub>	55.89 <sup>b</sup> <sub>106</sub>	19.119 <sup>a</sup> <sub>182</sub>	47.14 <sup>b</sup> <sub>56</sub>
17	55.725 <sup>a</sup> <sub>250</sub>	69.44 <sup>b</sup> <sub>32</sub>	5.664 <sup>a</sup> <sub>257</sub>	72.10 <sup>b</sup> <sub>32</sub>	40.90 <sup>a</sup> <sub>59</sub>	56.95 <sup>b</sup> <sub>59</sub>	18.937 <sup>a</sup> <sub>196</sub>	47.70 <sup>b</sup> <sub>23</sub>
27	55.475 <sup>a</sup> <sub>250</sub>	69.76 <sup>b</sup> <sub>2</sub>	5.407 <sup>a</sup> <sub>260</sub>	72.42 <sup>b</sup> <sub>14</sub>	40.31 <sup>a</sup> <sub>60</sub>	57.54 <sup>b</sup> <sub>8</sub>	18.741 <sup>a</sup> <sub>200</sub>	47.93 <sup>b</sup> <sub>12</sub>
Okt. 7	55.225 <sup>a</sup> <sub>238</sub>	69.78 <sup>b</sup> <sub>27</sub>	5.147 <sup>a</sup> <sub>253</sub>	72.28 <sup>b</sup> <sub>60</sub>	39.71 <sup>a</sup> <sub>58</sub>	57.62 <sup>b</sup> <sub>43</sub>	18.541 <sup>a</sup> <sub>194</sub>	47.81 <sup>b</sup> <sub>47</sub>
17	54.987 <sup>a</sup> <sub>211</sub>	69.51 <sup>b</sup> <sub>55</sub>	4.894 <sup>a</sup> <sub>235</sub>	71.68 <sup>b</sup> <sub>107</sub>	39.13 <sup>a</sup> <sub>54</sub>	57.19 <sup>b</sup> <sub>93</sub>	18.347 <sup>a</sup> <sub>179</sub>	47.34 <sup>b</sup> <sub>83</sub>
27	54.776 <sup>a</sup> <sub>171</sub>	68.96 <sup>b</sup> <sub>80</sub>	4.659 <sup>a</sup> <sub>207</sub>	70.61 <sup>b</sup> <sub>153</sub>	38.59 <sup>a</sup> <sub>47</sub>	56.26 <sup>b</sup> <sub>140</sub>	18.168 <sup>a</sup> <sub>154</sub>	46.51 <sup>b</sup> <sub>116</sub>
Nov. 6	54.605 <sup>a</sup> <sub>122</sub>	68.16 <sup>b</sup> <sub>102</sub>	4.452 <sup>a</sup> <sub>171</sub>	69.08 <sup>b</sup> <sub>195</sub>	38.12 <sup>a</sup> <sub>37</sub>	54.86 <sup>b</sup> <sub>181</sub>	18.014 <sup>a</sup> <sub>123</sub>	45.35 <sup>b</sup> <sub>150</sub>
16	54.483 <sup>a</sup> <sub>63</sub>	67.14 <sup>b</sup> <sub>119</sub>	4.281 <sup>a</sup> <sub>127</sub>	67.13 <sup>b</sup> <sub>235</sub>	37.75 <sup>a</sup> <sub>26</sub>	53.05 <sup>b</sup> <sub>216</sub>	17.891 <sup>a</sup> <sub>85</sub>	43.85 <sup>b</sup> <sub>180</sub>
26	54.420 <sup>a</sup> <sub>0</sub>	65.95 <sup>b</sup> <sub>130</sub>	4.154 <sup>a</sup> <sub>78</sub>	64.78 <sup>b</sup> <sub>268</sub>	37.49 <sup>a</sup> <sub>13</sub>	50.89 <sup>b</sup> <sub>242</sub>	17.806 <sup>a</sup> <sub>43</sub>	42.05 <sup>b</sup> <sub>207</sub>
Dez. 6	54.420 <sup>a</sup> <sub>65</sub>	64.65 <sup>b</sup> <sub>136</sub>	4.076 <sup>a</sup> <sub>25</sub>	62.10 <sup>b</sup> <sub>295</sub>	37.36 <sup>a</sup> <sub>0</sub>	48.47 <sup>b</sup> <sub>260</sub>	17.763 <sup>a</sup> <sub>2</sub>	39.98 <sup>b</sup> <sub>228</sub>
16	54.485 <sup>a</sup> <sub>128</sub>	63.29 <sup>b</sup> <sub>136</sub>	4.051 <sup>a</sup> <sub>29</sub>	59.15 <sup>b</sup> <sub>314</sub>	37.36 <sup>a</sup> <sub>14</sub>	45.87 <sup>b</sup> <sub>268</sub>	17.765 <sup>a</sup> <sub>48</sub>	37.70 <sup>b</sup> <sub>244</sub>
26	54.613 <sup>a</sup> <sub>188</sub>	61.93 <sup>b</sup> <sub>133</sub>	4.080 <sup>a</sup> <sub>82</sub>	56.01 <sup>b</sup> <sub>322</sub>	37.50 <sup>a</sup> <sub>28</sub>	43.19 <sup>b</sup> <sub>268</sub>	17.813 <sup>a</sup> <sub>91</sub>	35.26 <sup>b</sup> <sub>252</sub>
36	54.801 <sup>a</sup>	60.60 <sup>b</sup>	4.162 <sup>a</sup>	52.79 <sup>b</sup>	37.78 <sup>a</sup>	40.51 <sup>b</sup>	17.904 <sup>a</sup>	32.74 <sup>b</sup>
Mittl. Ort	53.706	62.73	4.504	52.86	37.26	43.58	17.591	32.47
sec $\delta$ , tg $\delta$	1.440	-1.036	1.282	+0.802	3.148	-2.985	1.068	+0.374
a, a'	+4.5	+2.0	+2.0	+3.1	+7.0	+3.2	+2.6	+3.8
b, b'	-0.01	+1.00	+0.01	+0.99	-0.03	+0.99	0.00	+0.98

1) Die jährliche Parallaxe (0.121) ist bereits berücksichtigt.

\*) Bei Stern 699), 698) und 703) lies Juni 30.



# Obere Kulmination Greenwich

Tag	704) λ Pavonis		705) β Lyrae		707) ο Draconis		706) σ Sagittarii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	18 <sup>h</sup> 47 <sup>m</sup>	-62° 14'	18 <sup>h</sup> 48 <sup>m</sup>	+33° 17'	18 <sup>h</sup> 50 <sup>m</sup>	+59° 18'	18 <sup>h</sup> 51 <sup>m</sup>	-26° 21'
Jan. I	2.81 <sup>a</sup> <sub>25</sub>	71.14 <sup>a</sup> <sub>226</sub>	0.566 <sup>a</sup> <sub>99</sub>	52.86 <sup>a</sup> <sub>304</sub>	20.508 <sup>a</sup> <sub>61</sub>	76.31 <sup>a</sup> <sub>361</sub>	48.605 <sup>a</sup> <sub>148</sub>	60.64 <sup>a</sup> <sub>22</sub>
II	3.06 <sup>a</sup> <sub>32</sub>	68.88 <sup>a</sup> <sub>217</sub>	0.665 <sup>a</sup> <sub>144</sub>	49.82 <sup>a</sup> <sub>296</sub>	20.569 <sup>a</sup> <sub>140</sub>	72.70 <sup>a</sup> <sub>356</sub>	48.753 <sup>a</sup> <sub>188</sub>	60.42 <sup>a</sup> <sub>20</sub>
21	3.38 <sup>a</sup> <sub>39</sub>	66.71 <sup>a</sup> <sub>203</sub>	0.809 <sup>a</sup> <sub>185</sub>	46.86 <sup>a</sup> <sub>279</sub>	20.709 <sup>a</sup> <sub>215</sub>	69.14 <sup>a</sup> <sub>338</sub>	48.941 <sup>a</sup> <sub>222</sub>	60.22 <sup>a</sup> <sub>20</sub>
31	3.77 <sup>a</sup> <sub>45</sub>	64.68 <sup>a</sup> <sub>182</sub>	0.994 <sup>a</sup> <sub>221</sub>	44.07 <sup>a</sup> <sub>252</sub>	20.924 <sup>a</sup> <sub>284</sub>	65.76 <sup>a</sup> <sub>307</sub>	49.163 <sup>a</sup> <sub>251</sub>	60.02 <sup>a</sup> <sub>21</sub>
Febr. 10	4.22 <sup>a</sup> <sub>50</sub>	62.86 <sup>a</sup> <sub>159</sub>	1.215 <sup>a</sup> <sub>252</sub>	41.55 <sup>a</sup> <sub>215</sub>	21.208 <sup>a</sup> <sub>343</sub>	62.69 <sup>a</sup> <sub>265</sub>	49.414 <sup>a</sup> <sub>275</sub>	59.81 <sup>a</sup> <sub>22</sub>
20	4.72 <sup>a</sup> <sub>55</sub>	61.27 <sup>a</sup> <sub>133</sub>	1.467 <sup>a</sup> <sub>278</sub>	39.40 <sup>a</sup> <sub>169</sub>	21.551 <sup>a</sup> <sub>394</sub>	60.04 <sup>a</sup> <sub>213</sub>	49.689 <sup>a</sup> <sub>295</sub>	59.59 <sup>a</sup> <sub>26</sub>
März 2	5.27 <sup>a</sup> <sub>57</sub>	59.94 <sup>a</sup> <sub>105</sub>	1.745 <sup>a</sup> <sub>298</sub>	37.71 <sup>a</sup> <sub>117</sub>	21.945 <sup>a</sup> <sub>432</sub>	57.91 <sup>a</sup> <sub>155</sub>	49.984 <sup>a</sup> <sub>309</sub>	59.33 <sup>a</sup> <sub>30</sub>
12	5.84 <sup>a</sup> <sub>59</sub>	58.89 <sup>a</sup> <sub>74</sub>	2.043 <sup>a</sup> <sub>311</sub>	36.54 <sup>a</sup> <sub>63</sub>	22.377 <sup>a</sup> <sub>458</sub>	56.36 <sup>a</sup> <sub>91</sub>	50.293 <sup>a</sup> <sub>320</sub>	59.03 <sup>a</sup> <sub>33</sub>
22	6.43 <sup>a</sup> <sub>60</sub>	58.15 <sup>a</sup> <sub>43</sub>	2.354 <sup>a</sup> <sub>318</sub>	35.91 <sup>a</sup> <sub>5</sub>	22.835 <sup>a</sup> <sub>471</sub>	55.45 <sup>a</sup> <sub>25</sub>	50.613 <sup>a</sup> <sub>328</sub>	58.70 <sup>a</sup> <sub>37</sub>
Apr. I	7.03 <sup>a</sup> <sub>61</sub>	57.72 <sup>a</sup> <sub>12</sub>	2.672 <sup>a</sup> <sub>321</sub>	35.86 <sup>a</sup> <sub>52</sub>	23.306 <sup>a</sup> <sub>472</sub>	55.20 <sup>a</sup> <sub>42</sub>	50.941 <sup>a</sup> <sub>331</sub>	58.33 <sup>a</sup> <sub>40</sub>
II	7.64 <sup>a</sup> <sub>59</sub>	57.60 <sup>a</sup> <sub>21</sub>	2.993 <sup>a</sup> <sub>315</sub>	36.38 <sup>a</sup> <sub>104</sub>	23.778 <sup>a</sup> <sub>460</sub>	55.62 <sup>a</sup> <sub>104</sub>	51.272 <sup>a</sup> <sub>329</sub>	57.93 <sup>a</sup> <sub>41</sub>
21	8.23 <sup>a</sup> <sub>58</sub>	57.81 <sup>a</sup> <sub>54</sub>	3.308 <sup>a</sup> <sub>304</sub>	37.42 <sup>a</sup> <sub>153</sub>	24.238 <sup>a</sup> <sub>435</sub>	56.66 <sup>a</sup> <sub>163</sub>	51.601 <sup>a</sup> <sub>322</sub>	57.52 <sup>a</sup> <sub>39</sub>
Mai I	8.81 <sup>a</sup> <sub>55</sub>	58.35 <sup>a</sup> <sub>85</sub>	3.612 <sup>a</sup> <sub>286</sub>	38.95 <sup>a</sup> <sub>195</sub>	24.673 <sup>a</sup> <sub>399</sub>	58.29 <sup>a</sup> <sub>214</sub>	51.923 <sup>a</sup> <sub>312</sub>	57.13 <sup>a</sup> <sub>36</sub>
II	9.36 <sup>a</sup> <sub>52</sub>	59.20 <sup>a</sup> <sub>114</sub>	3.898 <sup>a</sup> <sub>262</sub>	40.90 <sup>a</sup> <sub>230</sub>	25.072 <sup>a</sup> <sub>353</sub>	60.43 <sup>a</sup> <sub>257</sub>	52.235 <sup>a</sup> <sub>294</sub>	56.77 <sup>a</sup> <sub>30</sub>
21	9.88 <sup>a</sup> <sub>46</sub>	60.34 <sup>a</sup> <sub>143</sub>	4.160 <sup>a</sup> <sub>233</sub>	43.20 <sup>a</sup> <sub>256</sub>	25.425 <sup>a</sup> <sub>297</sub>	63.00 <sup>a</sup> <sub>292</sub>	52.529 <sup>a</sup> <sub>271</sub>	56.47 <sup>a</sup> <sub>21</sub>
31	10.34 <sup>a</sup> <sub>41</sub>	61.77 <sup>a</sup> <sub>168</sub>	4.393 <sup>a</sup> <sub>197</sub>	45.76 <sup>a</sup> <sub>275</sub>	25.722 <sup>a</sup> <sub>235</sub>	65.92 <sup>a</sup> <sub>317</sub>	52.800 <sup>a</sup> <sub>242</sub>	56.26 <sup>a</sup> <sub>12</sub>
Juni 10	10.75 <sup>a</sup> <sub>33</sub>	63.45 <sup>a</sup> <sub>189</sub>	4.590 <sup>a</sup> <sub>157</sub>	48.51 <sup>a</sup> <sub>284</sub>	25.957 <sup>a</sup> <sub>166</sub>	69.09 <sup>a</sup> <sub>332</sub>	53.042 <sup>a</sup> <sub>208</sub>	56.14 <sup>a</sup> <sub>1</sub>
20	11.08 <sup>a</sup> <sub>26</sub>	65.34 <sup>a</sup> <sub>206</sub>	4.747 <sup>a</sup> <sub>112</sub>	51.35 <sup>a</sup> <sub>286</sub>	26.123 <sup>a</sup> <sub>93</sub>	72.41 <sup>a</sup> <sub>339</sub>	53.250 <sup>a</sup> <sub>168</sub>	56.13 <sup>a</sup> <sub>10</sub>
30	11.34 <sup>a</sup> <sub>18</sub>	67.40 <sup>a</sup> <sub>217</sub>	4.859 <sup>a</sup> <sub>67</sub>	54.21 <sup>a</sup> <sub>280</sub>	26.216 <sup>a</sup> <sub>18</sub>	75.80 <sup>a</sup> <sub>335</sub>	53.418 <sup>a</sup> <sub>125</sub>	56.23 <sup>a</sup> <sub>21</sub>
Juli 9	11.52 <sup>a</sup> <sub>9</sub>	69.57 <sup>a</sup> <sub>222</sub>	4.926 <sup>a</sup> <sub>18</sub>	57.01 <sup>a</sup> <sub>268</sub>	26.234 <sup>a</sup> <sub>57</sub>	79.15 <sup>a</sup> <sub>324</sub>	53.543 <sup>a</sup> <sub>77</sub>	56.44 <sup>a</sup> <sub>32</sub>
19	11.61 <sup>a</sup> <sub>0</sub>	71.79 <sup>a</sup> <sub>221</sub>	4.944 <sup>a</sup> <sub>31</sub>	59.69 <sup>a</sup> <sub>248</sub>	26.177 <sup>a</sup> <sub>131</sub>	82.39 <sup>a</sup> <sub>304</sub>	53.620 <sup>a</sup> <sub>29</sub>	56.76 <sup>a</sup> <sub>40</sub>
29	11.61 <sup>a</sup> <sub>8</sub>	74.00 <sup>a</sup> <sub>211</sub>	4.913 <sup>a</sup> <sub>77</sub>	62.17 <sup>a</sup> <sub>223</sub>	26.046 <sup>a</sup> <sub>201</sub>	85.43 <sup>a</sup> <sub>278</sub>	53.649 <sup>a</sup> <sub>18</sub>	57.16 <sup>a</sup> <sub>46</sub>
Aug. 8	11.53 <sup>a</sup> <sub>17</sub>	76.11 <sup>a</sup> <sub>195</sub>	4.836 <sup>a</sup> <sub>120</sub>	64.40 <sup>a</sup> <sub>193</sub>	25.845 <sup>a</sup> <sub>265</sub>	88.21 <sup>a</sup> <sub>246</sub>	53.631 <sup>a</sup> <sub>64</sub>	57.62 <sup>a</sup> <sub>49</sub>
18	11.36 <sup>a</sup> <sub>24</sub>	78.06 <sup>a</sup> <sub>172</sub>	4.716 <sup>a</sup> <sub>159</sub>	66.33 <sup>a</sup> <sub>160</sub>	25.580 <sup>a</sup> <sub>322</sub>	90.67 <sup>a</sup> <sub>208</sub>	53.567 <sup>a</sup> <sub>105</sub>	58.11 <sup>a</sup> <sub>50</sub>
28	11.12 <sup>a</sup> <sub>31</sub>	79.78 <sup>a</sup> <sub>142</sub>	4.557 <sup>a</sup> <sub>192</sub>	67.93 <sup>a</sup> <sub>123</sub>	25.258 <sup>a</sup> <sub>369</sub>	92.75 <sup>a</sup> <sub>164</sub>	53.462 <sup>a</sup> <sub>139</sub>	58.61 <sup>a</sup> <sub>48</sub>
Sept. 7	10.81 <sup>a</sup> <sub>35</sub>	81.20 <sup>a</sup> <sub>106</sub>	4.365 <sup>a</sup> <sub>215</sub>	69.16 <sup>a</sup> <sub>84</sub>	24.889 <sup>a</sup> <sub>405</sub>	94.39 <sup>a</sup> <sub>118</sub>	53.323 <sup>a</sup> <sub>166</sub>	59.09 <sup>a</sup> <sub>43</sub>
17	10.46 <sup>a</sup> <sub>38</sub>	82.26 <sup>a</sup> <sub>67</sub>	4.150 <sup>a</sup> <sub>231</sub>	70.00 <sup>a</sup> <sub>42</sub>	24.484 <sup>a</sup> <sub>429</sub>	95.57 <sup>a</sup> <sub>69</sub>	53.157 <sup>a</sup> <sub>182</sub>	59.52 <sup>a</sup> <sub>35</sub>
27	10.08 <sup>a</sup> <sub>39</sub>	82.93 <sup>a</sup> <sub>23</sub>	3.919 <sup>a</sup> <sub>237</sub>	70.42 <sup>a</sup> <sub>2</sub>	24.055 <sup>a</sup> <sub>440</sub>	96.26 <sup>a</sup> <sub>16</sub>	52.975 <sup>a</sup> <sub>189</sub>	59.87 <sup>a</sup> <sub>27</sub>
Okt. 7	9.69 <sup>a</sup> <sub>39</sub>	83.16 <sup>a</sup> <sub>21</sub>	3.682 <sup>a</sup> <sub>232</sub>	70.40 <sup>a</sup> <sub>45</sub>	23.615 <sup>a</sup> <sub>435</sub>	96.42 <sup>a</sup> <sub>37</sub>	52.786 <sup>a</sup> <sub>184</sub>	60.14 <sup>a</sup> <sub>16</sub>
17	9.30 <sup>a</sup> <sub>35</sub>	82.95 <sup>a</sup> <sub>65</sub>	3.450 <sup>a</sup> <sub>217</sub>	69.95 <sup>a</sup> <sub>89</sub>	23.180 <sup>a</sup> <sub>419</sub>	96.05 <sup>a</sup> <sub>91</sub>	52.602 <sup>a</sup> <sub>167</sub>	60.30 <sup>a</sup> <sub>6</sub>
27	8.95 <sup>a</sup> <sub>31</sub>	82.30 <sup>a</sup> <sub>107</sub>	3.233 <sup>a</sup> <sub>193</sub>	69.06 <sup>a</sup> <sub>132</sub>	22.761 <sup>a</sup> <sub>387</sub>	95.14 <sup>a</sup> <sub>144</sub>	52.435 <sup>a</sup> <sub>141</sub>	60.36 <sup>a</sup> <sub>3</sub>
Nov. 6	8.64 <sup>a</sup> <sub>25</sub>	81.23 <sup>a</sup> <sub>144</sub>	3.040 <sup>a</sup> <sub>160</sub>	67.74 <sup>a</sup> <sub>173</sub>	22.374 <sup>a</sup> <sub>342</sub>	93.70 <sup>a</sup> <sub>196</sub>	52.294 <sup>a</sup> <sub>105</sub>	60.33 <sup>a</sup> <sub>10</sub>
16	8.39 <sup>a</sup> <sub>17</sub>	79.79 <sup>a</sup> <sub>176</sub>	2.880 <sup>a</sup> <sub>120</sub>	66.01 <sup>a</sup> <sub>211</sub>	22.032 <sup>a</sup> <sub>287</sub>	91.74 <sup>a</sup> <sub>242</sub>	52.189 <sup>a</sup> <sub>64</sub>	60.23 <sup>a</sup> <sub>17</sub>
26	8.22 <sup>a</sup> <sub>8</sub>	78.03 <sup>a</sup> <sub>200</sub>	2.760 <sup>a</sup> <sub>76</sub>	63.90 <sup>a</sup> <sub>244</sub>	21.745 <sup>a</sup> <sub>221</sub>	89.32 <sup>a</sup> <sub>284</sub>	52.125 <sup>a</sup> <sub>18</sub>	60.06 <sup>a</sup> <sub>21</sub>
Dez. 6	8.14 <sup>a</sup> <sub>1</sub>	76.03 <sup>a</sup> <sub>218</sub>	2.684 <sup>a</sup> <sub>27</sub>	61.46 <sup>a</sup> <sub>272</sub>	21.524 <sup>a</sup> <sub>148</sub>	86.48 <sup>a</sup> <sub>318</sub>	52.107 <sup>a</sup> <sub>31</sub>	59.85 <sup>a</sup> <sub>22</sub>
16	8.15 <sup>a</sup> <sub>11</sub>	73.85 <sup>a</sup> <sub>227</sub>	2.657 <sup>a</sup> <sub>22</sub>	58.74 <sup>a</sup> <sub>291</sub>	21.376 <sup>a</sup> <sub>70</sub>	83.30 <sup>a</sup> <sub>344</sub>	52.138 <sup>a</sup> <sub>79</sub>	59.63 <sup>a</sup> <sub>23</sub>
26	8.26 <sup>a</sup> <sub>19</sub>	71.58 <sup>a</sup> <sub>229</sub>	2.679 <sup>a</sup> <sub>71</sub>	55.83 <sup>a</sup> <sub>302</sub>	21.306 <sup>a</sup> <sub>11</sub>	79.86 <sup>a</sup> <sub>358</sub>	52.217 <sup>a</sup> <sub>125</sub>	59.40 <sup>a</sup> <sub>22</sub>
36	8.45 <sup>a</sup>	69.29 <sup>a</sup>	2.750 <sup>a</sup>	52.81 <sup>a</sup>	21.317 <sup>a</sup>	76.28 <sup>a</sup>	52.342 <sup>a</sup>	59.18 <sup>a</sup>
Mittl. Ort	7.58	71.90	2.863	51.67	23.367	74.29	51.322	60.70
sec δ, tg δ	2.148	-1.901	1.196	+0.657	1.960	+1.686	1.116	-0.496
a, a'	+5.6	+4.1	+2.2	+4.2	+0.9	+4.4	+3.7	+4.5
b, b'	-0.03	+0.98	+0.01	+0.98	+0.02	+0.98	-0.01	+0.97



Tag	709) $\delta$ Serpentis <i>pr</i>		711) R Lyrae		708) $\lambda$ Telescopii		713) $\gamma$ Lyrae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	18 <sup>h</sup> 53 <sup>m</sup>	+4° 7'	18 <sup>h</sup> 53 <sup>m</sup>	+43° 52'	18 <sup>h</sup> 54 <sup>m</sup>	-53° 0'	18 <sup>h</sup> 56 <sup>m</sup>	+32° 36'
Jan. I	26.765 <sup>a</sup> <sub>117</sub>	50.57 <sup>b</sup> <sub>165</sub>	37.196 <sup>a</sup> <sub>81</sub>	23.40 <sup>b</sup> <sub>334</sub>	0.165 <sup>a</sup> <sub>193</sub>	46.00 <sup>b</sup> <sub>182</sub>	50.790 <sup>a</sup> <sub>89</sub>	47.90 <sup>b</sup> <sub>298</sub>
II	26.882 <sup>a</sup> <sub>154</sub>	48.92 <sup>b</sup> <sub>161</sub>	37.277 <sup>a</sup> <sub>134</sub>	20.06 <sup>b</sup> <sub>328</sub>	0.358 <sup>a</sup> <sub>254</sub>	44.18 <sup>b</sup> <sub>175</sub>	50.879 <sup>a</sup> <sub>134</sub>	44.92 <sup>b</sup> <sub>294</sub>
2I	27.036 <sup>a</sup> <sub>185</sub>	47.31 <sup>b</sup> <sub>150</sub>	37.411 <sup>a</sup> <sub>184</sub>	16.78 <sup>b</sup> <sub>311</sub>	0.612 <sup>a</sup> <sub>308</sub>	42.43 <sup>b</sup> <sub>166</sub>	51.013 <sup>a</sup> <sub>175</sub>	41.98 <sup>b</sup> <sub>277</sub>
3I	27.221 <sup>a</sup> <sub>212</sub>	45.81 <sup>b</sup> <sub>134</sub>	37.595 <sup>a</sup> <sub>229</sub>	13.67 <sup>b</sup> <sub>282</sub>	0.920 <sup>a</sup> <sub>354</sub>	40.77 <sup>b</sup> <sub>152</sub>	51.188 <sup>a</sup> <sub>212</sub>	39.21 <sup>b</sup> <sub>252</sub>
Febr. 10	27.433 <sup>a</sup> <sub>236</sub>	44.47 <sup>b</sup> <sub>111</sub>	37.824 <sup>a</sup> <sub>269</sub>	10.85 <sup>b</sup> <sub>243</sub>	1.274 <sup>a</sup> <sub>393</sub>	39.25 <sup>b</sup> <sub>135</sub>	51.400 <sup>a</sup> <sub>244</sub>	36.69 <sup>b</sup> <sub>216</sub>
20	27.669 <sup>a</sup> <sub>254</sub>	43.36 <sup>b</sup> <sub>84</sub>	38.093 <sup>a</sup> <sub>301</sub>	8.42 <sup>b</sup> <sub>195</sub>	1.667 <sup>a</sup> <sub>423</sub>	37.90 <sup>b</sup> <sub>117</sub>	51.644 <sup>a</sup> <sub>270</sub>	34.53 <sup>b</sup> <sub>171</sub>
März 2	27.923 <sup>a</sup> <sub>270</sub>	42.52 <sup>b</sup> <sub>53</sub>	38.394 <sup>a</sup> <sub>327</sub>	6.47 <sup>b</sup> <sub>139</sub>	2.090 <sup>a</sup> <sub>447</sub>	36.73 <sup>b</sup> <sub>97</sub>	51.914 <sup>a</sup> <sub>291</sub>	32.82 <sup>b</sup> <sub>122</sub>
12	28.193 <sup>a</sup> <sub>280</sub>	41.99 <sup>b</sup> <sub>18</sub>	38.721 <sup>a</sup> <sub>345</sub>	5.08 <sup>b</sup> <sub>79</sub>	2.537 <sup>a</sup> <sub>464</sub>	35.76 <sup>b</sup> <sub>74</sub>	52.205 <sup>a</sup> <sub>306</sub>	31.60 <sup>b</sup> <sub>67</sub>
22	28.473 <sup>a</sup> <sub>287</sub>	41.81 <sup>b</sup> <sub>16</sub>	39.066 <sup>a</sup> <sub>355</sub>	4.29 <sup>b</sup> <sub>17</sub>	3.001 <sup>a</sup> <sub>474</sub>	35.02 <sup>b</sup> <sub>52</sub>	52.511 <sup>a</sup> <sub>316</sub>	30.93 <sup>b</sup> <sub>10</sub>
Apr. I	28.760 <sup>a</sup> <sub>290</sub>	41.97 <sup>b</sup> <sub>50</sub>	39.421 <sup>a</sup> <sub>357</sub>	4.12 <sup>b</sup> <sub>45</sub>	3.475 <sup>a</sup> <sub>478</sub>	34.50 <sup>b</sup> <sub>28</sub>	52.827 <sup>a</sup> <sub>319</sub>	30.83 <sup>b</sup> <sub>46</sub>
II	29.050 <sup>a</sup> <sub>289</sub>	42.47 <sup>b</sup> <sub>81</sub>	39.778 <sup>a</sup> <sub>351</sub>	4.57 <sup>b</sup> <sub>103</sub>	3.953 <sup>a</sup> <sub>475</sub>	34.22 <sup>b</sup> <sub>3</sub>	53.146 <sup>a</sup> <sub>315</sub>	31.29 <sup>b</sup> <sub>99</sub>
2I	29.339 <sup>a</sup> <sub>283</sub>	43.28 <sup>b</sup> <sub>108</sub>	40.129 <sup>a</sup> <sub>338</sub>	5.60 <sup>b</sup> <sub>157</sub>	4.428 <sup>a</sup> <sub>463</sub>	34.19 <sup>b</sup> <sub>23</sub>	53.461 <sup>a</sup> <sub>307</sub>	32.28 <sup>b</sup> <sub>147</sub>
Mai I	29.622 <sup>a</sup> <sub>271</sub>	44.36 <sup>b</sup> <sub>131</sub>	40.467 <sup>a</sup> <sub>316</sub>	7.17 <sup>b</sup> <sub>205</sub>	4.891 <sup>a</sup> <sub>445</sub>	34.42 <sup>b</sup> <sub>49</sub>	53.768 <sup>a</sup> <sub>290</sub>	33.75 <sup>b</sup> <sub>190</sub>
II	29.893 <sup>a</sup> <sub>256</sub>	45.67 <sup>b</sup> <sub>148</sub>	40.783 <sup>a</sup> <sub>288</sub>	9.22 <sup>b</sup> <sub>245</sub>	5.336 <sup>a</sup> <sub>418</sub>	34.91 <sup>b</sup> <sub>73</sub>	54.058 <sup>a</sup> <sub>268</sub>	35.65 <sup>b</sup> <sub>225</sub>
2I	30.149 <sup>a</sup> <sub>234</sub>	47.15 <sup>b</sup> <sub>160</sub>	41.071 <sup>a</sup> <sub>251</sub>	11.67 <sup>b</sup> <sub>276</sub>	5.754 <sup>a</sup> <sub>382</sub>	35.64 <sup>b</sup> <sub>98</sub>	54.326 <sup>a</sup> <sub>240</sub>	37.90 <sup>b</sup> <sub>253</sub>
3I	30.383 <sup>a</sup> <sub>207</sub>	48.75 <sup>b</sup> <sub>166</sub>	41.322 <sup>a</sup> <sub>210</sub>	14.43 <sup>b</sup> <sub>298</sub>	6.136 <sup>a</sup> <sub>339</sub>	36.62 <sup>b</sup> <sub>121</sub>	54.566 <sup>a</sup> <sub>205</sub>	40.43 <sup>b</sup> <sub>272</sub>
Juni 10	30.590 <sup>a</sup> <sub>175</sub>	50.41 <sup>b</sup> <sub>167</sub>	41.532 <sup>a</sup> <sub>163</sub>	17.41 <sup>b</sup> <sub>311</sub>	6.475 <sup>a</sup> <sub>288</sub>	37.83 <sup>b</sup> <sub>141</sub>	54.771 <sup>a</sup> <sub>166</sub>	43.15 <sup>b</sup> <sub>283</sub>
20	30.765 <sup>a</sup> <sub>139</sub>	52.08 <sup>b</sup> <sub>163</sub>	41.695 <sup>a</sup> <sub>112</sub>	20.52 <sup>b</sup> <sub>316</sub>	6.763 <sup>a</sup> <sub>229</sub>	39.24 <sup>b</sup> <sub>158</sub>	54.937 <sup>a</sup> <sub>123</sub>	45.98 <sup>b</sup> <sub>285</sub>
30	30.904 <sup>a</sup> <sub>100</sub>	53.71 <sup>b</sup> <sub>154</sub>	41.807 <sup>a</sup> <sub>58</sub>	23.68 <sup>b</sup> <sub>312</sub>	6.992 <sup>a</sup> <sub>164</sub>	40.82 <sup>b</sup> <sub>170</sub>	55.060 <sup>a</sup> <sub>76</sub>	48.83 <sup>b</sup> <sub>281</sub>
Juli 9	31.004 <sup>a</sup> <sub>58</sub>	55.25 <sup>b</sup> <sub>142</sub>	41.865 <sup>a</sup> <sub>3</sub>	26.80 <sup>b</sup> <sub>301</sub>	7.156 <sup>a</sup> <sub>97</sub>	42.52 <sup>b</sup> <sub>177</sub>	55.136 <sup>a</sup> <sub>29</sub>	51.64 <sup>b</sup> <sub>268</sub>
19	31.062 <sup>a</sup> <sub>14</sub>	56.67 <sup>b</sup> <sub>127</sub>	41.868 <sup>a</sup> <sub>52</sub>	29.81 <sup>b</sup> <sub>281</sub>	7.253 <sup>a</sup> <sub>27</sub>	44.29 <sup>b</sup> <sub>180</sub>	55.165 <sup>a</sup> <sub>20</sub>	54.32 <sup>b</sup> <sub>251</sub>
29	31.076 <sup>a</sup> <sub>27</sub>	57.94 <sup>b</sup> <sub>109</sub>	41.816 <sup>a</sup> <sub>105</sub>	32.62 <sup>b</sup> <sub>256</sub>	7.280 <sup>a</sup> <sub>42</sub>	46.09 <sup>b</sup> <sub>176</sub>	55.145 <sup>a</sup> <sub>67</sub>	56.83 <sup>b</sup> <sub>227</sub>
Aug. 8	31.049 <sup>a</sup> <sub>67</sub>	59.03 <sup>b</sup> <sub>90</sub>	41.711 <sup>a</sup> <sub>154</sub>	35.18 <sup>b</sup> <sub>224</sub>	7.238 <sup>a</sup> <sub>109</sub>	47.85 <sup>b</sup> <sub>165</sub>	55.078 <sup>a</sup> <sub>111</sub>	59.10 <sup>b</sup> <sub>198</sub>
18	30.982 <sup>a</sup> <sub>103</sub>	59.93 <sup>b</sup> <sub>71</sub>	41.557 <sup>a</sup> <sub>197</sub>	37.42 <sup>b</sup> <sub>189</sub>	7.129 <sup>a</sup> <sub>168</sub>	49.50 <sup>b</sup> <sub>149</sub>	54.967 <sup>a</sup> <sub>150</sub>	61.08 <sup>b</sup> <sub>165</sub>
28	30.879 <sup>a</sup> <sub>133</sub>	60.64 <sup>b</sup> <sub>49</sub>	41.360 <sup>a</sup> <sub>234</sub>	39.31 <sup>b</sup> <sub>149</sub>	6.961 <sup>a</sup> <sub>218</sub>	50.99 <sup>b</sup> <sub>127</sub>	54.817 <sup>a</sup> <sub>184</sub>	62.73 <sup>b</sup> <sub>130</sub>
Sept. 7	30.746 <sup>a</sup> <sub>156</sub>	61.13 <sup>b</sup> <sub>29</sub>	41.126 <sup>a</sup> <sub>262</sub>	40.80 <sup>b</sup> <sub>106</sub>	6.743 <sup>a</sup> <sub>258</sub>	52.26 <sup>b</sup> <sub>99</sub>	54.633 <sup>a</sup> <sub>210</sub>	64.03 <sup>b</sup> <sub>90</sub>
17	30.590 <sup>a</sup> <sub>171</sub>	61.42 <sup>b</sup> <sub>8</sub>	40.864 <sup>a</sup> <sub>280</sub>	41.86 <sup>b</sup> <sub>59</sub>	6.485 <sup>a</sup> <sub>284</sub>	53.25 <sup>b</sup> <sub>66</sub>	54.423 <sup>a</sup> <sub>226</sub>	64.93 <sup>b</sup> <sub>50</sub>
27	30.419 <sup>a</sup> <sub>177</sub>	61.50 <sup>b</sup> <sub>14</sub>	40.584 <sup>a</sup> <sub>288</sub>	42.45 <sup>b</sup> <sub>12</sub>	6.201 <sup>a</sup> <sub>295</sub>	53.91 <sup>b</sup> <sub>32</sub>	54.197 <sup>a</sup> <sub>233</sub>	65.43 <sup>b</sup> <sub>7</sub>
Okt. 7	30.242 <sup>a</sup> <sub>172</sub>	61.36 <sup>b</sup> <sub>35</sub>	40.296 <sup>a</sup> <sub>285</sub>	42.57 <sup>b</sup> <sub>38</sub>	5.906 <sup>a</sup> <sub>289</sub>	54.23 <sup>b</sup> <sub>5</sub>	53.964 <sup>a</sup> <sub>230</sub>	65.50 <sup>b</sup> <sub>36</sub>
17	30.070 <sup>a</sup> <sub>158</sub>	61.01 <sup>b</sup> <sub>55</sub>	40.011 <sup>a</sup> <sub>270</sub>	42.19 <sup>b</sup> <sub>87</sub>	5.617 <sup>a</sup> <sub>267</sub>	54.18 <sup>b</sup> <sub>41</sub>	53.734 <sup>a</sup> <sub>216</sub>	65.14 <sup>b</sup> <sub>80</sub>
27	29.912 <sup>a</sup> <sub>135</sub>	60.46 <sup>b</sup> <sub>77</sub>	39.741 <sup>a</sup> <sub>245</sub>	41.32 <sup>b</sup> <sub>136</sub>	5.350 <sup>a</sup> <sub>231</sub>	53.77 <sup>b</sup> <sub>76</sub>	53.518 <sup>a</sup> <sub>195</sub>	64.34 <sup>b</sup> <sub>123</sub>
Nov. 6	29.777 <sup>a</sup> <sub>106</sub>	59.69 <sup>b</sup> <sub>96</sub>	39.496 <sup>a</sup> <sub>211</sub>	39.96 <sup>b</sup> <sub>182</sub>	5.119 <sup>a</sup> <sub>182</sub>	53.01 <sup>b</sup> <sub>108</sub>	53.323 <sup>a</sup> <sub>163</sub>	63.11 <sup>b</sup> <sub>164</sub>
16	29.671 <sup>a</sup> <sub>69</sub>	58.73 <sup>b</sup> <sub>116</sub>	39.285 <sup>a</sup> <sub>168</sub>	38.14 <sup>b</sup> <sub>225</sub>	4.937 <sup>a</sup> <sub>122</sub>	51.93 <sup>b</sup> <sub>134</sub>	53.160 <sup>a</sup> <sub>125</sub>	61.47 <sup>b</sup> <sub>202</sub>
26	29.602 <sup>a</sup> <sub>29</sub>	57.57 <sup>b</sup> <sub>133</sub>	39.117 <sup>a</sup> <sub>118</sub>	35.89 <sup>b</sup> <sub>264</sub>	4.815 <sup>a</sup> <sub>55</sub>	50.59 <sup>b</sup> <sub>156</sub>	53.035 <sup>a</sup> <sub>81</sub>	59.45 <sup>b</sup> <sub>236</sub>
Dez. 6	29.573 <sup>a</sup> <sub>13</sub>	56.24 <sup>b</sup> <sub>147</sub>	38.999 <sup>a</sup> <sub>66</sub>	33.25 <sup>b</sup> <sub>295</sub>	4.760 <sup>a</sup> <sub>16</sub>	49.03 <sup>b</sup> <sub>171</sub>	52.954 <sup>a</sup> <sub>35</sub>	57.09 <sup>b</sup> <sub>264</sub>
16	29.586 <sup>a</sup> <sub>55</sub>	54.77 <sup>b</sup> <sub>157</sub>	38.933 <sup>a</sup> <sub>9</sub>	30.30 <sup>b</sup> <sub>318</sub>	4.776 <sup>a</sup> <sub>88</sub>	47.32 <sup>b</sup> <sub>180</sub>	52.919 <sup>a</sup> <sub>14</sub>	54.45 <sup>b</sup> <sub>284</sub>
26	29.641 <sup>a</sup> <sub>97</sub>	53.20 <sup>b</sup> <sub>164</sub>	38.924 <sup>a</sup> <sub>48</sub>	27.12 <sup>b</sup> <sub>330</sub>	4.864 <sup>a</sup> <sub>157</sub>	45.52 <sup>b</sup> <sub>183</sub>	52.933 <sup>a</sup> <sub>62</sub>	51.61 <sup>b</sup> <sub>296</sub>
36	29.738 <sup>a</sup>	51.56 <sup>b</sup>	38.972 <sup>a</sup>	23.82 <sup>b</sup>	5.021 <sup>a</sup>	43.69 <sup>b</sup>	52.995 <sup>a</sup>	48.65 <sup>b</sup>
Mittl. Ort	29.064	50.13	39.607	21.76	4.007	45.90	53.075	46.58
sec $\delta$ , tg $\delta$	1.003	+0.072	1.387	+0.961	1.662	-1.328	1.187	+0.640
<i>a, a'</i>	+3.0	+4.6	+1.8	+4.7	+4.8	+4.7	+2.2	+4.9
<i>b, b'</i>	0.00	+0.97	+0.01	+0.97	-0.02	+0.97	+0.01	+0.97



# Obere Kulmination Greenwich

151\*

Tag	716) ζ Aquilae		717) λ Aquilae		718) α Coron. austr.		720) π Sagittarii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	19 <sup>h</sup> 2 <sup>m</sup>	+13° 46'	19 <sup>h</sup> 3 <sup>m</sup>	-4° 57'	19 <sup>h</sup> 5 <sup>m</sup>	-37° 59'	19 <sup>h</sup> 6 <sup>m</sup>	-21° 6'
Jan. I	50.608 <sup>a</sup> <sub>100</sub>	49.73 <sup>b</sup> <sub>214</sub>	17.393 <sup>a</sup> <sub>115</sub>	59.83 <sup>b</sup> <sub>109</sub>	40.891 <sup>a</sup> <sub>147</sub>	32.57 <sup>b</sup> <sub>98</sub>	27.008 <sup>a</sup> <sub>127</sub>	47.03 <sup>b</sup> <sub>7</sub>
II	50.708 <sup>a</sup> <sub>138</sub>	47.59 <sup>b</sup> <sub>210</sub>	17.508 <sup>a</sup> <sub>152</sub>	60.92 <sup>b</sup> <sub>106</sub>	41.038 <sup>a</sup> <sub>193</sub>	31.59 <sup>b</sup> <sub>98</sub>	27.135 <sup>a</sup> <sub>165</sub>	47.10 <sup>b</sup> <sub>5</sub>
2I	50.846 <sup>a</sup> <sub>171</sub>	45.49 <sup>b</sup> <sub>198</sub>	17.660 <sup>a</sup> <sub>183</sub>	61.98 <sup>b</sup> <sub>98</sub>	41.231 <sup>a</sup> <sub>234</sub>	30.61 <sup>b</sup> <sub>94</sub>	27.300 <sup>a</sup> <sub>198</sub>	47.15 <sup>b</sup> <sub>3</sub>
3I	51.017 <sup>a</sup> <sub>202</sub>	43.51 <sup>b</sup> <sub>178</sub>	17.843 <sup>a</sup> <sub>210</sub>	62.96 <sup>b</sup> <sub>86</sub>	41.465 <sup>a</sup> <sub>269</sub>	29.67 <sup>b</sup> <sub>90</sub>	27.498 <sup>a</sup> <sub>228</sub>	47.18 <sup>b</sup> <sub>1</sub>
Febr. 10	51.219 <sup>a</sup> <sub>227</sub>	41.73 <sup>b</sup> <sub>151</sub>	18.053 <sup>a</sup> <sub>234</sub>	63.82 <sup>b</sup> <sub>70</sub>	41.734 <sup>a</sup> <sub>298</sub>	28.77 <sup>b</sup> <sub>86</sub>	27.726 <sup>a</sup> <sub>254</sub>	47.17 <sup>b</sup> <sub>8</sub>
20	51.446 <sup>a</sup> <sub>248</sub>	40.22 <sup>b</sup> <sub>118</sub>	18.287 <sup>a</sup> <sub>254</sub>	64.52 <sup>b</sup> <sub>48</sub>	42.032 <sup>a</sup> <sub>322</sub>	27.91 <sup>b</sup> <sub>79</sub>	27.980 <sup>a</sup> <sub>273</sub>	47.09 <sup>b</sup> <sub>17</sub>
März 2	51.694 <sup>a</sup> <sub>266</sub>	39.04 <sup>b</sup> <sub>79</sub>	18.541 <sup>a</sup> <sub>269</sub>	65.00 <sup>b</sup> <sub>25</sub>	42.354 <sup>a</sup> <sub>342</sub>	27.12 <sup>b</sup> <sub>74</sub>	28.253 <sup>a</sup> <sub>289</sub>	46.92 <sup>b</sup> <sub>25</sub>
12	51.960 <sup>a</sup> <sub>278</sub>	38.25 <sup>b</sup> <sub>37</sub>	18.810 <sup>a</sup> <sub>281</sub>	65.25 <sup>b</sup> <sub>0</sub>	42.696 <sup>a</sup> <sub>357</sub>	26.38 <sup>b</sup> <sub>66</sub>	28.542 <sup>a</sup> <sub>303</sub>	46.67 <sup>b</sup> <sub>35</sub>
22	52.238 <sup>a</sup> <sub>288</sub>	37.88 <sup>b</sup> <sub>6</sub>	19.091 <sup>a</sup> <sub>289</sub>	65.25 <sup>b</sup> <sub>26</sub>	43.053 <sup>a</sup> <sub>367</sub>	25.72 <sup>b</sup> <sub>58</sub>	28.845 <sup>a</sup> <sub>312</sub>	46.32 <sup>b</sup> <sub>45</sub>
Apr. I	52.526 <sup>a</sup> <sub>292</sub>	37.94 <sup>b</sup> <sub>48</sub>	19.380 <sup>a</sup> <sub>295</sub>	64.99 <sup>b</sup> <sub>51</sub>	43.420 <sup>a</sup> <sub>373</sub>	25.14 <sup>b</sup> <sub>49</sub>	29.157 <sup>a</sup> <sub>317</sub>	45.87 <sup>b</sup> <sub>52</sub>
II	52.818 <sup>a</sup> <sub>292</sub>	38.42 <sup>b</sup> <sub>88</sub>	19.675 <sup>a</sup> <sub>294</sub>	64.48 <sup>b</sup> <sub>74</sub>	43.793 <sup>a</sup> <sub>373</sub>	24.65 <sup>b</sup> <sub>38</sub>	29.474 <sup>a</sup> <sub>319</sub>	45.35 <sup>b</sup> <sub>59</sub>
2I	53.110 <sup>a</sup> <sub>286</sub>	39.30 <sup>b</sup> <sub>124</sub>	19.969 <sup>a</sup> <sub>291</sub>	63.74 <sup>b</sup> <sub>92</sub>	44.166 <sup>a</sup> <sub>369</sub>	24.27 <sup>b</sup> <sub>25</sub>	29.793 <sup>a</sup> <sub>314</sub>	44.76 <sup>b</sup> <sub>62</sub>
Mai I	53.396 <sup>a</sup> <sub>276</sub>	40.54 <sup>b</sup> <sub>154</sub>	20.260 <sup>a</sup> <sub>282</sub>	62.82 <sup>b</sup> <sub>108</sub>	44.535 <sup>a</sup> <sub>357</sub>	24.02 <sup>b</sup> <sub>10</sub>	30.107 <sup>a</sup> <sub>306</sub>	44.14 <sup>b</sup> <sub>63</sub>
II	53.672 <sup>a</sup> <sub>259</sub>	42.08 <sup>b</sup> <sub>178</sub>	20.542 <sup>a</sup> <sub>267</sub>	61.74 <sup>b</sup> <sub>119</sub>	44.892 <sup>a</sup> <sub>340</sub>	23.92 <sup>b</sup> <sub>5</sub>	30.413 <sup>a</sup> <sub>292</sub>	43.51 <sup>b</sup> <sub>61</sub>
2I	53.931 <sup>a</sup> <sub>238</sub>	43.86 <sup>b</sup> <sub>197</sub>	20.809 <sup>a</sup> <sub>246</sub>	60.55 <sup>b</sup> <sub>125</sub>	45.232 <sup>a</sup> <sub>316</sub>	23.97 <sup>b</sup> <sub>21</sub>	30.705 <sup>a</sup> <sub>271</sub>	42.90 <sup>b</sup> <sub>55</sub>
3I	54.169 <sup>a</sup> <sub>210</sub>	45.83 <sup>b</sup> <sub>209</sub>	21.055 <sup>a</sup> <sub>222</sub>	59.30 <sup>b</sup> <sub>126</sub>	45.548 <sup>a</sup> <sub>284</sub>	24.18 <sup>b</sup> <sub>39</sub>	30.976 <sup>a</sup> <sub>245</sub>	42.35 <sup>b</sup> <sub>48</sub>
Juni 10	54.379 <sup>a</sup> <sub>177</sub>	47.92 <sup>b</sup> <sub>213</sub>	21.277 <sup>a</sup> <sub>191</sub>	58.04 <sup>b</sup> <sub>123</sub>	45.832 <sup>a</sup> <sub>246</sub>	24.57 <sup>b</sup> <sub>56</sub>	31.221 <sup>a</sup> <sub>212</sub>	41.87 <sup>b</sup> <sub>38</sub>
20	54.556 <sup>a</sup> <sub>141</sub>	50.05 <sup>b</sup> <sub>212</sub>	21.468 <sup>a</sup> <sub>155</sub>	56.81 <sup>b</sup> <sub>117</sub>	46.078 <sup>a</sup> <sub>202</sub>	25.13 <sup>b</sup> <sub>71</sub>	31.433 <sup>a</sup> <sub>175</sub>	41.49 <sup>b</sup> <sub>26</sub>
30	54.697 <sup>a</sup> <sub>100</sub>	52.17 <sup>b</sup> <sub>205</sub>	21.623 <sup>a</sup> <sub>116</sub>	55.64 <sup>b</sup> <sub>107</sub>	46.280 <sup>a</sup> <sub>153</sub>	25.84 <sup>b</sup> <sub>84</sub>	31.608 <sup>a</sup> <sub>134</sub>	41.23 <sup>b</sup> <sub>15</sub>
Juli 9	54.797 <sup>a</sup> <sub>57</sub>	54.22 <sup>b</sup> <sub>193</sub>	21.739 <sup>a</sup> <sub>74</sub>	54.57 <sup>b</sup> <sub>95</sub>	46.433 <sup>a</sup> <sub>100</sub>	26.68 <sup>b</sup> <sub>96</sub>	31.742 <sup>a</sup> <sub>98</sub>	41.08 <sup>b</sup> <sub>2</sub>
19	54.854 <sup>a</sup> <sub>14</sub>	56.15 <sup>b</sup> <sub>177</sub>	21.813 <sup>a</sup> <sub>30</sub>	53.62 <sup>b</sup> <sub>81</sub>	46.533 <sup>a</sup> <sub>46</sub>	27.64 <sup>b</sup> <sub>104</sub>	31.830 <sup>a</sup> <sub>42</sub>	41.06 <sup>b</sup> <sub>9</sub>
29	54.868 <sup>a</sup> <sub>29</sub>	57.92 <sup>b</sup> <sub>157</sub>	21.843 <sup>a</sup> <sub>13</sub>	52.81 <sup>b</sup> <sub>66</sub>	46.579 <sup>a</sup> <sub>8</sub>	28.68 <sup>b</sup> <sub>107</sub>	31.872 <sup>a</sup> <sub>5</sub>	41.15 <sup>b</sup> <sub>19</sub>
Aug. 8	54.839 <sup>a</sup> <sub>70</sub>	59.49 <sup>b</sup> <sub>135</sub>	21.830 <sup>a</sup> <sub>54</sub>	52.15 <sup>b</sup> <sub>51</sub>	46.571 <sup>a</sup> <sub>61</sub>	29.75 <sup>b</sup> <sub>107</sub>	31.867 <sup>a</sup> <sub>49</sub>	41.34 <sup>b</sup> <sub>26</sub>
18	54.769 <sup>a</sup> <sub>107</sub>	60.84 <sup>b</sup> <sub>109</sub>	21.776 <sup>a</sup> <sub>92</sub>	51.64 <sup>b</sup> <sub>36</sub>	46.510 <sup>a</sup> <sub>110</sub>	30.82 <sup>b</sup> <sub>102</sub>	31.818 <sup>a</sup> <sub>90</sub>	41.60 <sup>b</sup> <sub>32</sub>
28	54.662 <sup>a</sup> <sub>139</sub>	61.93 <sup>b</sup> <sub>82</sub>	21.684 <sup>a</sup> <sub>123</sub>	51.28 <sup>b</sup> <sub>22</sub>	46.400 <sup>a</sup> <sub>151</sub>	31.84 <sup>b</sup> <sub>91</sub>	31.728 <sup>a</sup> <sub>126</sub>	41.92 <sup>b</sup> <sub>35</sub>
Sept. 7	54.523 <sup>a</sup> <sub>163</sub>	62.75 <sup>b</sup> <sub>55</sub>	21.561 <sup>a</sup> <sub>148</sub>	51.06 <sup>b</sup> <sub>7</sub>	46.249 <sup>a</sup> <sub>183</sub>	32.75 <sup>b</sup> <sub>77</sub>	31.602 <sup>a</sup> <sub>153</sub>	42.27 <sup>b</sup> <sub>35</sub>
17	54.360 <sup>a</sup> <sub>179</sub>	63.30 <sup>b</sup> <sub>26</sub>	21.413 <sup>a</sup> <sub>165</sub>	50.99 <sup>b</sup> <sub>5</sub>	46.066 <sup>a</sup> <sub>205</sub>	33.52 <sup>b</sup> <sub>60</sub>	31.449 <sup>a</sup> <sub>171</sub>	42.62 <sup>b</sup> <sub>33</sub>
27	54.181 <sup>a</sup> <sub>186</sub>	63.56 <sup>b</sup> <sub>4</sub>	21.248 <sup>a</sup> <sub>172</sub>	51.04 <sup>b</sup> <sub>19</sub>	45.861 <sup>a</sup> <sub>215</sub>	34.12 <sup>b</sup> <sub>40</sub>	31.278 <sup>a</sup> <sub>180</sub>	42.95 <sup>b</sup> <sub>31</sub>
Okt. 7	53.995 <sup>a</sup> <sub>183</sub>	63.52 <sup>b</sup> <sub>33</sub>	21.076 <sup>a</sup> <sub>169</sub>	51.23 <sup>b</sup> <sub>30</sub>	45.646 <sup>a</sup> <sub>212</sub>	34.52 <sup>b</sup> <sub>17</sub>	31.098 <sup>a</sup> <sub>177</sub>	43.26 <sup>b</sup> <sub>26</sub>
17	53.812 <sup>a</sup> <sub>171</sub>	63.19 <sup>b</sup> <sub>63</sub>	20.907 <sup>a</sup> <sub>156</sub>	51.53 <sup>b</sup> <sub>43</sub>	45.434 <sup>a</sup> <sub>198</sub>	34.69 <sup>b</sup> <sub>5</sub>	30.921 <sup>a</sup> <sub>164</sub>	43.52 <sup>b</sup> <sub>21</sub>
27	53.641 <sup>a</sup> <sub>151</sub>	62.56 <sup>b</sup> <sub>92</sub>	20.751 <sup>a</sup> <sub>135</sub>	51.96 <sup>b</sup> <sub>54</sub>	45.236 <sup>a</sup> <sub>171</sub>	34.64 <sup>b</sup> <sub>27</sub>	30.757 <sup>a</sup> <sub>141</sub>	43.73 <sup>b</sup> <sub>16</sub>
Nov. 6	53.490 <sup>a</sup> <sub>122</sub>	61.64 <sup>b</sup> <sub>120</sub>	20.616 <sup>a</sup> <sub>105</sub>	52.50 <sup>b</sup> <sub>66</sub>	45.065 <sup>a</sup> <sub>134</sub>	34.37 <sup>b</sup> <sub>47</sub>	30.616 <sup>a</sup> <sub>110</sub>	43.89 <sup>b</sup> <sub>12</sub>
16	53.368 <sup>a</sup> <sub>87</sub>	60.44 <sup>b</sup> <sub>146</sub>	20.511 <sup>a</sup> <sub>70</sub>	53.16 <sup>b</sup> <sub>78</sub>	44.931 <sup>a</sup> <sub>90</sub>	33.90 <sup>b</sup> <sub>64</sub>	30.506 <sup>a</sup> <sub>72</sub>	44.01 <sup>b</sup> <sub>10</sub>
26	53.281 <sup>a</sup> <sub>47</sub>	58.98 <sup>b</sup> <sub>170</sub>	20.441 <sup>a</sup> <sub>30</sub>	53.94 <sup>b</sup> <sub>88</sub>	44.841 <sup>a</sup> <sub>39</sub>	33.26 <sup>b</sup> <sub>78</sub>	30.434 <sup>a</sup> <sub>29</sub>	44.11 <sup>b</sup> <sub>7</sub>
Dez. 6	53.234 <sup>a</sup> <sub>6</sub>	57.28 <sup>b</sup> <sub>189</sub>	20.411 <sup>a</sup> <sub>12</sub>	54.82 <sup>b</sup> <sub>96</sub>	44.802 <sup>a</sup> <sub>14</sub>	32.48 <sup>b</sup> <sub>88</sub>	30.405 <sup>a</sup> <sub>16</sub>	44.18 <sup>b</sup> <sub>7</sub>
16	53.228 <sup>a</sup> <sub>36</sub>	55.39 <sup>b</sup> <sub>204</sub>	20.423 <sup>a</sup> <sub>54</sub>	55.78 <sup>b</sup> <sub>104</sub>	44.816 <sup>a</sup> <sub>69</sub>	31.60 <sup>b</sup> <sub>95</sub>	30.421 <sup>a</sup> <sub>61</sub>	44.25 <sup>b</sup> <sub>7</sub>
26	53.264 <sup>a</sup> <sub>78</sub>	53.35 <sup>b</sup> <sub>213</sub>	20.477 <sup>a</sup> <sub>95</sub>	56.82 <sup>b</sup> <sub>108</sub>	44.885 <sup>a</sup> <sub>121</sub>	30.65 <sup>b</sup> <sub>98</sub>	30.482 <sup>a</sup> <sub>105</sub>	44.32 <sup>b</sup> <sub>7</sub>
36	53.342 <sup>a</sup>	51.22 <sup>b</sup>	20.572 <sup>a</sup>	57.90 <sup>b</sup>	45.006 <sup>a</sup>	29.67 <sup>b</sup>	30.587 <sup>a</sup>	44.39 <sup>b</sup>
Mittl. Ort	52.858	49.13	19.763	59.70	43.943	31.43	29.608	46.22
see δ, tg δ	1.030	+0.245	1.004	-0.087	1.269	-0.781	1.072	-0.386
a, a'	+2.8	+5.4	+3.2	+5.5	+4.1	+5.7	+3.6	+5.7
b, b'	0.00	+0.96	0.00	+0.96	-0.01	+0.96	-0.01	+0.96



Tag	723) $\delta$ Draconis		724) $\theta$ Lyrae		725) $\omega$ Aquilae		726) $\kappa$ Cygni	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	19 <sup>h</sup> 12 <sup>m</sup>	+67° 33'	19 <sup>h</sup> 14 <sup>m</sup>	+38° 1'	19 <sup>h</sup> 15 <sup>m</sup>	+11° 29'	19 <sup>h</sup> 15 <sup>m</sup>	+53° 15'
Jan. I	29.41 <sup>a</sup> <sub>2</sub>	56.76 <sup>b</sup> <sub>358</sub>	25.138 <sup>a</sup> <sub>62</sub>	66.87 <sup>b</sup> <sub>312</sub>	11.770 <sup>a</sup> <sub>90</sub>	41.91 <sup>b</sup> <sub>198</sub>	47.280 <sup>a</sup> <sub>30</sub>	61.49 <sup>b</sup> <sub>347</sub>
II	29.39 <sub>9</sub>	53.18 <sub>360</sub>	25.200 <sub>110</sub>	63.75 <sub>309</sub>	11.860 <sub>127</sub>	39.93 <sub>195</sub>	47.310 <sub>98</sub>	58.02 <sub>346</sub>
21	29.48 <sub>20</sub>	49.58 <sub>348</sub>	25.310 <sub>156</sub>	60.66 <sub>297</sub>	11.987 <sub>161</sub>	37.98 <sub>184</sub>	47.408 <sub>161</sub>	54.56 <sub>334</sub>
31	29.68 <sub>29</sub>	46.10 <sub>323</sub>	25.466 <sub>198</sub>	57.69 <sub>272</sub>	12.148 <sub>191</sub>	36.14 <sub>166</sub>	47.569 <sub>220</sub>	51.22 <sub>309</sub>
Febr. 10	29.97 <sub>38</sub>	42.87 <sub>287</sub>	25.664 <sub>235</sub>	54.97 <sub>238</sub>	12.339 <sub>217</sub>	34.48 <sub>141</sub>	47.789 <sub>274</sub>	48.13 <sub>273</sub>
20	30.35 <sub>47</sub>	40.00 <sub>240</sub>	25.899 <sub>266</sub>	52.59 <sub>194</sub>	12.556 <sub>239</sub>	33.07 <sub>110</sub>	48.063 <sub>320</sub>	45.40 <sub>227</sub>
März 2	30.82 <sub>52</sub>	37.60 <sub>184</sub>	26.165 <sub>294</sub>	50.65 <sub>143</sub>	12.795 <sub>259</sub>	31.97 <sub>73</sub>	48.383 <sub>359</sub>	43.13 <sub>171</sub>
12	31.34 <sub>57</sub>	35.76 <sub>122</sub>	26.459 <sub>313</sub>	49.22 <sub>87</sub>	13.054 <sub>273</sub>	31.24 <sub>34</sub>	48.742 <sub>386</sub>	41.42 <sub>111</sub>
22	31.91 <sub>60</sub>	34.54 <sub>56</sub>	26.772 <sub>327</sub>	48.35 <sub>29</sub>	13.327 <sub>284</sub>	30.90 <sub>7</sub>	49.128 <sub>406</sub>	40.31 <sub>48</sub>
Apr. I	32.51 <sub>61</sub>	33.98 <sub>10</sub>	27.099 <sub>335</sub>	48.06 <sub>30</sub>	13.611 <sub>291</sub>	30.97 <sub>47</sub>	49.534 <sub>414</sub>	39.83 <sub>18</sub>
II	33.12 <sub>60</sub>	34.08 <sub>75</sub>	27.434 <sub>334</sub>	48.36 <sub>87</sub>	13.902 <sub>292</sub>	31.44 <sub>85</sub>	49.948 <sub>412</sub>	40.01 <sub>81</sub>
21	33.72 <sub>57</sub>	34.83 <sub>136</sub>	27.768 <sub>327</sub>	49.23 <sub>140</sub>	14.194 <sub>289</sub>	32.29 <sub>120</sub>	50.360 <sub>400</sub>	40.82 <sub>139</sub>
Mai I	34.29 <sub>53</sub>	36.19 <sub>191</sub>	28.095 <sub>312</sub>	50.63 <sub>186</sub>	14.483 <sub>281</sub>	33.49 <sub>149</sub>	50.760 <sub>376</sub>	42.21 <sub>192</sub>
II	34.82 <sub>47</sub>	38.10 <sub>239</sub>	28.407 <sub>290</sub>	52.49 <sub>227</sub>	14.764 <sub>266</sub>	34.98 <sub>172</sub>	51.136 <sub>344</sub>	44.13 <sub>238</sub>
21	35.29 <sub>40</sub>	40.49 <sub>278</sub>	28.697 <sub>261</sub>	54.76 <sub>258</sub>	15.030 <sub>246</sub>	36.70 <sub>190</sub>	51.480 <sub>303</sub>	46.51 <sub>276</sub>
31	35.69 <sub>32</sub>	43.27 <sub>309</sub>	28.958 <sub>226</sub>	57.34 <sub>283</sub>	15.276 <sub>221</sub>	38.60 <sub>201</sub>	51.783 <sub>254</sub>	49.27 <sub>305</sub>
Juni 10	36.01 <sub>23</sub>	46.36 <sub>330</sub>	29.184 <sub>185</sub>	60.17 <sub>297</sub>	15.497 <sub>189</sub>	40.61 <sub>206</sub>	52.037 <sub>199</sub>	52.32 <sub>324</sub>
20	36.24 <sub>14</sub>	49.66 <sub>342</sub>	29.369 <sub>140</sub>	63.14 <sub>303</sub>	15.686 <sub>153</sub>	42.67 <sub>205</sub>	52.236 <sub>138</sub>	55.56 <sub>334</sub>
30	36.38 <sub>3</sub>	53.08 <sub>344</sub>	29.509 <sub>90</sub>	66.17 <sub>302</sub>	15.839 <sub>114</sub>	44.72 <sub>198</sub>	52.374 <sub>74</sub>	58.90 <sub>335</sub>
Juli 10	36.41 <sub>10</sub> <sub>7</sub>	56.52 <sub>339</sub>	29.599 <sub>39</sub>	69.19 <sub>293</sub>	15.953 <sub>71</sub>	46.70 <sub>186</sub>	52.448 <sub>8</sub>	62.25 <sub>329</sub>
19	36.34 <sub>16</sub>	59.91 <sub>324</sub>	29.638 <sub>12</sub>	72.12 <sub>277</sub>	16.024 <sub>27</sub>	48.56 <sub>171</sub>	52.456 <sub>57</sub>	65.54 <sub>313</sub>
29	36.18 <sub>26</sub>	63.15 <sub>302</sub>	29.626 <sub>63</sub>	74.89 <sub>255</sub>	16.051 <sub>16</sub>	50.27 <sub>152</sub>	52.399 <sub>121</sub>	68.67 <sub>291</sub>
Aug. 8	35.92 <sub>34</sub>	66.17 <sub>275</sub>	29.563 <sub>111</sub>	77.44 <sub>227</sub>	16.035 <sub>58</sub>	51.79 <sub>130</sub>	52.278 <sub>180</sub>	71.58 <sub>263</sub>
18	35.58 <sub>42</sub>	68.92 <sub>240</sub>	29.452 <sub>155</sub>	79.71 <sub>194</sub>	15.977 <sub>95</sub>	53.09 <sub>106</sub>	52.098 <sub>234</sub>	74.21 <sub>228</sub>
28	35.16 <sub>49</sub>	71.32 <sub>199</sub>	29.297 <sub>191</sub>	81.65 <sub>158</sub>	15.882 <sub>128</sub>	54.15 <sub>81</sub>	51.864 <sub>280</sub>	76.49 <sub>189</sub>
Sept. 7	34.67 <sub>54</sub>	73.31 <sub>156</sub>	29.106 <sub>221</sub>	83.23 <sub>118</sub>	15.754 <sub>155</sub>	54.96 <sub>55</sub>	51.584 <sub>316</sub>	78.38 <sub>145</sub>
17	34.13 <sub>58</sub>	74.87 <sub>107</sub>	28.885 <sub>242</sub>	84.41 <sub>75</sub>	15.599 <sub>172</sub>	55.51 <sub>28</sub>	51.268 <sub>343</sub>	79.83 <sub>98</sub>
27	33.55 <sub>61</sub>	75.94 <sub>55</sub>	28.643 <sub>252</sub>	85.16 <sub>30</sub>	15.427 <sub>180</sub>	55.79 <sub>1</sub>	50.925 <sub>358</sub>	80.81 <sub>48</sub>
Okt. 7	32.94 <sub>61</sub>	76.49 <sub>2</sub>	28.391 <sub>253</sub>	85.46 <sub>16</sub>	15.247 <sub>180</sub>	55.80 <sub>27</sub>	50.567 <sub>360</sub>	81.29 <sub>4</sub>
17	32.33 <sub>59</sub>	76.51 <sub>53</sub>	28.138 <sub>242</sub>	85.30 <sub>63</sub>	15.067 <sub>170</sub>	55.53 <sub>55</sub>	50.207 <sub>350</sub>	81.25 <sub>57</sub>
27	31.74 <sub>57</sub>	75.98 <sub>109</sub>	27.896 <sub>223</sub>	84.67 <sub>109</sub>	14.897 <sub>151</sub>	54.98 <sub>81</sub>	49.857 <sub>328</sub>	80.68 <sub>109</sub>
Nov. 6	31.17 <sub>52</sub>	74.89 <sub>162</sub>	27.673 <sub>194</sub>	83.58 <sub>154</sub>	14.746 <sub>125</sub>	54.17 <sub>108</sub>	49.529 <sub>295</sub>	79.59 <sub>161</sub>
16	30.65 <sub>46</sub>	73.27 <sub>213</sub>	27.479 <sub>157</sub>	82.04 <sub>197</sub>	14.621 <sub>91</sub>	53.09 <sub>133</sub>	49.234 <sub>251</sub>	77.98 <sub>211</sub>
26	30.19 <sub>38</sub>	71.14 <sub>260</sub>	27.322 <sub>115</sub>	80.07 <sub>234</sub>	14.530 <sub>54</sub>	51.76 <sub>155</sub>	48.983 <sub>198</sub>	75.87 <sub>254</sub>
Dez. 6	29.81 <sub>29</sub>	68.54 <sub>299</sub>	27.207 <sub>67</sub>	77.73 <sub>266</sub>	14.476 <sub>14</sub>	50.21 <sub>173</sub>	48.785 <sub>140</sub>	73.33 <sub>291</sub>
16	29.52 <sub>19</sub>	65.55 <sub>330</sub>	27.140 <sub>18</sub>	75.07 <sub>291</sub>	14.462 <sub>28</sub>	48.48 <sub>188</sub>	48.645 <sub>77</sub>	70.42 <sub>320</sub>
26	29.33 <sub>8</sub>	62.25 <sub>351</sub>	27.122 <sub>33</sub>	72.16 <sub>307</sub>	14.490 <sub>69</sub>	46.60 <sub>196</sub>	48.568 <sub>9</sub>	67.22 <sub>339</sub>
36	29.25	58.74	27.155	69.09	14.559	44.64	48.559	63.83
Mittl. Ort	32.77	53.35	27.448	64.93	14.017	41.57	49.864	58.64
sec $\delta$ , tg $\delta$	2.620	+2.422	1.270	+0.782	1.020	+0.203	1.672	+1.340
a, a'	0.0	+6.2	+2.1	+6.4	+2.8	+6.5	+1.4	+6.5
b, b'	+0.05	+0.95	+0.02	+0.95	0.00	+0.95	+0.03	+0.95



# Obere Kulmination Greenwich

153\*

Tag	729) $\tau$ Draconis		728) $\alpha$ Sagittarii		730) $\delta$ Aquilae		734) Grb 2900 Draco	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	19 <sup>h</sup> 16 <sup>m</sup>	+73° 14'	19 <sup>h</sup> 20 <sup>m</sup>	-40° 43'	19 <sup>h</sup> 22 <sup>m</sup>	+3° 0'	19 <sup>h</sup> 24 <sup>m</sup>	+79° 29'
Jan. I	33.19 <sup>9</sup>	78.34 <sup>355</sup>	1.558 <sup>132</sup>	19.14 <sup>119</sup>	41.186 <sup>90</sup>	12.82 <sup>148</sup>	57.38 <sup>23</sup>	44.31 <sup>347</sup>
II	33.10 <sup>7</sup>	74.79 <sup>358</sup>	1.690 <sup>181</sup>	17.95 <sup>120</sup>	41.276 <sup>127</sup>	11.34 <sup>147</sup>	57.15 <sup>1</sup>	40.84 <sup>352</sup>
21	33.17 <sup>21</sup>	71.21 <sup>349</sup>	1.871 <sup>224</sup>	16.75 <sup>118</sup>	41.493 <sup>159</sup>	9.87 <sup>137</sup>	57.14 <sup>23</sup>	37.32 <sup>347</sup>
31	33.38 <sup>35</sup>	67.72 <sup>326</sup>	2.095 <sup>262</sup>	15.57 <sup>115</sup>	41.562 <sup>189</sup>	8.50 <sup>122</sup>	57.37 <sup>45</sup>	33.85 <sup>327</sup>
Febr. 10	33.73 <sup>47</sup>	64.46 <sup>291</sup>	2.357 <sup>294</sup>	14.42 <sup>110</sup>	41.751 <sup>214</sup>	7.28 <sup>101</sup>	57.82 <sup>66</sup>	30.58 <sup>296</sup>
20	34.20 <sup>57</sup>	61.55 <sup>245</sup>	2.651 <sup>322</sup>	13.32 <sup>103</sup>	41.965 <sup>236</sup>	6.27 <sup>76</sup>	58.48 <sup>84</sup>	27.62 <sup>254</sup>
März 2	34.77 <sup>67</sup>	59.10 <sup>191</sup>	2.973 <sup>345</sup>	12.29 <sup>96</sup>	42.201 <sup>255</sup>	5.51 <sup>46</sup>	59.32 <sup>99</sup>	25.08 <sup>202</sup>
12	35.44 <sup>72</sup>	57.19 <sup>130</sup>	3.318 <sup>362</sup>	11.33 <sup>86</sup>	42.456 <sup>270</sup>	5.05 <sup>13</sup>	60.31 <sup>109</sup>	23.06 <sup>143</sup>
22	36.16 <sup>77</sup>	55.89 <sup>66</sup>	3.680 <sup>376</sup>	10.47 <sup>77</sup>	42.726 <sup>282</sup>	4.92 <sup>20</sup>	61.40 <sup>117</sup>	21.63 <sup>81</sup>
Apr. I	36.93 <sup>78</sup>	55.23 <sup>0</sup>	4.056 <sup>385</sup>	9.70 <sup>64</sup>	43.008 <sup>290</sup>	5.12 <sup>52</sup>	62.57 <sup>120</sup>	20.82 <sup>16</sup>
II	37.71 <sup>77</sup>	55.23 <sup>66</sup>	4.441 <sup>388</sup>	9.06 <sup>51</sup>	43.298 <sup>293</sup>	5.64 <sup>82</sup>	63.77 <sup>118</sup>	20.66 <sup>49</sup>
21	38.48 <sup>74</sup>	55.89 <sup>126</sup>	4.829 <sup>386</sup>	8.55 <sup>35</sup>	43.591 <sup>291</sup>	6.46 <sup>110</sup>	64.95 <sup>113</sup>	21.15 <sup>109</sup>
Mai I	39.22 <sup>67</sup>	57.15 <sup>182</sup>	5.215 <sup>376</sup>	8.20 <sup>17</sup>	43.882 <sup>285</sup>	7.56 <sup>132</sup>	66.08 <sup>104</sup>	22.24 <sup>166</sup>
II	39.89 <sup>60</sup>	58.97 <sup>231</sup>	5.591 <sup>361</sup>	8.03 <sup>1</sup>	44.167 <sup>273</sup>	8.88 <sup>150</sup>	67.12 <sup>92</sup>	23.90 <sup>215</sup>
21	40.49 <sup>51</sup>	61.28 <sup>272</sup>	5.952 <sup>337</sup>	8.04 <sup>21</sup>	44.440 <sup>254</sup>	10.38 <sup>161</sup>	68.04 <sup>77</sup>	26.05 <sup>258</sup>
31	41.00 <sup>39</sup>	64.00 <sup>303</sup>	6.289 <sup>306</sup>	8.25 <sup>41</sup>	44.694 <sup>230</sup>	11.99 <sup>168</sup>	68.81 <sup>59</sup>	28.63 <sup>291</sup>
Juni 10	41.39 <sup>28</sup>	67.03 <sup>326</sup>	6.595 <sup>269</sup>	8.66 <sup>60</sup>	44.924 <sup>201</sup>	13.67 <sup>170</sup>	69.40 <sup>41</sup>	31.54 <sup>316</sup>
20	41.67 <sup>15</sup>	70.29 <sup>339</sup>	6.864 <sup>224</sup>	9.26 <sup>79</sup>	45.125 <sup>166</sup>	15.37 <sup>165</sup>	69.81 <sup>21</sup>	34.70 <sup>331</sup>
30	41.82 <sup>1</sup>	73.68 <sup>344</sup>	7.088 <sup>174</sup>	10.05 <sup>95</sup>	45.291 <sup>128</sup>	17.02 <sup>157</sup>	70.02 <sup>1</sup>	38.01 <sup>339</sup>
Juli 10	41.83 <sup>11</sup>	77.12 <sup>339</sup>	7.262 <sup>120</sup>	11.00 <sup>109</sup>	45.419 <sup>85</sup>	18.59 <sup>145</sup>	70.03 <sup>20</sup>	41.40 <sup>336</sup>
19	41.72 <sup>24</sup>	80.51 <sup>327</sup>	7.382 <sup>63</sup>	12.09 <sup>118</sup>	45.504 <sup>42</sup>	20.04 <sup>130</sup>	69.83 <sup>40</sup>	44.76 <sup>327</sup>
29	41.48 <sup>37</sup>	83.78 <sup>306</sup>	7.445 <sup>6</sup>	13.27 <sup>123</sup>	45.546 <sup>1</sup>	21.34 <sup>113</sup>	69.43 <sup>59</sup>	48.03 <sup>310</sup>
Aug. 8	41.11 <sup>47</sup>	86.84 <sup>279</sup>	7.451 <sup>50</sup>	14.50 <sup>123</sup>	45.545 <sup>43</sup>	22.47 <sup>94</sup>	68.84 <sup>76</sup>	51.13 <sup>285</sup>
18	40.64 <sup>58</sup>	89.63 <sup>246</sup>	7.401 <sup>102</sup>	15.73 <sup>118</sup>	45.502 <sup>82</sup>	23.41 <sup>74</sup>	68.08 <sup>93</sup>	53.98 <sup>256</sup>
28	40.06 <sup>66</sup>	92.09 <sup>208</sup>	7.299 <sup>146</sup>	16.91 <sup>109</sup>	45.420 <sup>115</sup>	24.15 <sup>54</sup>	67.15 <sup>106</sup>	56.54 <sup>219</sup>
Sept. 7	39.40 <sup>74</sup>	94.17 <sup>164</sup>	7.153 <sup>182</sup>	18.00 <sup>94</sup>	45.305 <sup>142</sup>	24.69 <sup>33</sup>	66.09 <sup>117</sup>	58.73 <sup>178</sup>
17	38.66 <sup>79</sup>	95.81 <sup>117</sup>	6.971 <sup>209</sup>	18.94 <sup>74</sup>	45.163 <sup>161</sup>	25.02 <sup>13</sup>	64.92 <sup>126</sup>	60.51 <sup>132</sup>
27	37.87 <sup>82</sup>	96.98 <sup>66</sup>	6.762 <sup>222</sup>	19.68 <sup>52</sup>	45.002 <sup>171</sup>	25.15 <sup>7</sup>	63.66 <sup>132</sup>	61.83 <sup>83</sup>
Okt. 7	37.05 <sup>82</sup>	97.64 <sup>13</sup>	6.540 <sup>223</sup>	20.20 <sup>28</sup>	44.831 <sup>171</sup>	25.08 <sup>27</sup>	62.34 <sup>135</sup>	62.66 <sup>31</sup>
17	36.23 <sup>82</sup>	97.77 <sup>42</sup>	6.317 <sup>210</sup>	20.48 <sup>2</sup>	44.660 <sup>162</sup>	24.81 <sup>47</sup>	60.99 <sup>134</sup>	62.97 <sup>22</sup>
27	35.41 <sup>79</sup>	97.35 <sup>98</sup>	6.107 <sup>187</sup>	20.50 <sup>23</sup>	44.498 <sup>144</sup>	24.34 <sup>65</sup>	59.65 <sup>129</sup>	62.75 <sup>77</sup>
Nov. 6	34.62 <sup>72</sup>	96.37 <sup>151</sup>	5.920 <sup>152</sup>	20.27 <sup>47</sup>	44.354 <sup>118</sup>	23.69 <sup>85</sup>	58.36 <sup>122</sup>	61.98 <sup>132</sup>
16	33.90 <sup>65</sup>	94.86 <sup>203</sup>	5.768 <sup>108</sup>	19.80 <sup>69</sup>	44.236 <sup>86</sup>	22.84 <sup>102</sup>	57.14 <sup>111</sup>	60.66 <sup>184</sup>
26	33.25 <sup>55</sup>	92.83 <sup>251</sup>	5.660 <sup>57</sup>	19.11 <sup>87</sup>	44.150 <sup>49</sup>	21.82 <sup>118</sup>	56.03 <sup>97</sup>	58.82 <sup>233</sup>
Dez. 6	32.70 <sup>44</sup>	90.32 <sup>291</sup>	5.603 <sup>4</sup>	18.24 <sup>100</sup>	44.101 <sup>10</sup>	20.64 <sup>131</sup>	55.06 <sup>80</sup>	56.49 <sup>276</sup>
16	32.26 <sup>31</sup>	87.41 <sup>324</sup>	5.599 <sup>51</sup>	17.24 <sup>111</sup>	44.091 <sup>30</sup>	19.33 <sup>141</sup>	54.26 <sup>60</sup>	53.73 <sup>310</sup>
26	31.95 <sup>18</sup>	84.17 <sup>347</sup>	5.650 <sup>105</sup>	16.13 <sup>118</sup>	44.121 <sup>69</sup>	17.92 <sup>147</sup>	53.66 <sup>38</sup>	50.63 <sup>336</sup>
36	31.77	80.70	5.755	14.95	44.190	16.45	53.28	47.27
Mittl. Ort	37.25	74.48	4.703	16.70	43.471	13.18	63.11	39.73
sec $\delta$ , tg $\delta$	3.471	+3.323	1.319	-0.861	1.001	+0.052	5.485	+5.393
a, a'	-1.1	+6.6	+4.2	+6.9	+3.0	+7.1	-3.6	+7.3
b, b'	+0.07	+0.94	-0.02	+0.94	0.00	+0.94	+0.13	+0.93



## Scheinbare Sternörter 1945

Tag	733) $\gamma$ Cygni		732) $\beta$ Cygni pr		736) $\zeta$ Sagittarii		738) $\theta$ Cygni	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	19 <sup>h</sup> 28 <sup>m</sup>	+51° 36'	19 <sup>h</sup> 28 <sup>m</sup>	+27° 50'	19 <sup>h</sup> 33 <sup>m</sup>	-25° 0'	19 <sup>h</sup> 34 <sup>m</sup>	+50° 5'
Jan. I	16.612 <sup>6</sup> 16	45.89 <sup>11</sup> 338	27.891 <sup>8</sup> 59	36.04 <sup>270</sup>	19.054 <sup>102</sup>	26.82 <sup>25</sup>	55.459 <sup>10</sup>	37.71 <sup>333</sup>
II	16.628 <sup>79</sup>	42.51 <sup>342</sup>	27.950 <sup>102</sup>	33.34 <sup>269</sup>	19.156 <sup>141</sup>	26.57 <sup>29</sup>	55.469 <sup>70</sup>	34.38 <sup>337</sup>
21	16.707 <sup>140</sup>	39.09 <sup>332</sup>	28.052 <sup>141</sup>	30.65 <sup>259</sup>	19.297 <sup>177</sup>	26.28 <sup>33</sup>	55.539 <sup>130</sup>	31.01 <sup>328</sup>
31	16.847 <sup>198</sup>	35.77 <sup>310</sup>	28.193 <sup>177</sup>	28.06 <sup>238</sup>	19.474 <sup>210</sup>	25.95 <sup>38</sup>	55.669 <sup>186</sup>	27.73 <sup>308</sup>
Febr. 10	17.045 <sup>251</sup>	32.67 <sup>276</sup>	28.370 <sup>210</sup>	25.68 <sup>209</sup>	19.684 <sup>237</sup>	25.57 <sup>44</sup>	55.855 <sup>237</sup>	24.65 <sup>276</sup>
20	17.296 <sup>298</sup>	29.91 <sup>232</sup>	28.580 <sup>239</sup>	23.59 <sup>170</sup>	19.921 <sup>262</sup>	25.13 <sup>50</sup>	56.092 <sup>283</sup>	21.89 <sup>233</sup>
März 2	17.594 <sup>336</sup>	27.59 <sup>180</sup>	28.819 <sup>263</sup>	21.89 <sup>125</sup>	20.183 <sup>282</sup>	24.63 <sup>57</sup>	56.375 <sup>322</sup>	19.56 <sup>182</sup>
12	17.930 <sup>367</sup>	25.79 <sup>121</sup>	29.082 <sup>283</sup>	20.64 <sup>75</sup>	20.465 <sup>300</sup>	24.06 <sup>63</sup>	56.697 <sup>353</sup>	17.74 <sup>124</sup>
22	18.297 <sup>389</sup>	24.58 <sup>57</sup>	29.365 <sup>298</sup>	19.89 <sup>23</sup>	20.765 <sup>313</sup>	23.43 <sup>69</sup>	57.050 <sup>376</sup>	16.50 <sup>62</sup>
Apr. I	18.686 <sup>400</sup>	24.01 <sup>6</sup>	29.663 <sup>307</sup>	19.66 <sup>30</sup>	21.078 <sup>324</sup>	22.74 <sup>74</sup>	57.426 <sup>389</sup>	15.88 <sup>1</sup>
II	19.086 <sup>402</sup>	24.07 <sup>68</sup>	29.970 <sup>311</sup>	19.96 <sup>80</sup>	21.402 <sup>329</sup>	22.00 <sup>76</sup>	57.815 <sup>392</sup>	15.89 <sup>64</sup>
21	19.488 <sup>393</sup>	24.75 <sup>128</sup>	30.281 <sup>307</sup>	20.76 <sup>128</sup>	21.731 <sup>330</sup>	21.24 <sup>75</sup>	58.207 <sup>386</sup>	16.53 <sup>122</sup>
Mai I	19.881 <sup>375</sup>	26.03 <sup>182</sup>	30.588 <sup>299</sup>	22.04 <sup>170</sup>	22.061 <sup>325</sup>	20.49 <sup>72</sup>	58.593 <sup>371</sup>	17.75 <sup>177</sup>
II	20.256 <sup>348</sup>	27.85 <sup>229</sup>	30.887 <sup>283</sup>	23.74 <sup>206</sup>	22.386 <sup>314</sup>	19.77 <sup>66</sup>	58.964 <sup>345</sup>	19.52 <sup>224</sup>
21	20.604 <sup>310</sup>	30.14 <sup>268</sup>	31.170 <sup>260</sup>	25.80 <sup>234</sup>	22.700 <sup>296</sup>	19.11 <sup>56</sup>	59.309 <sup>311</sup>	21.76 <sup>263</sup>
31	20.914 <sup>265</sup>	32.82 <sup>298</sup>	31.430 <sup>232</sup>	28.14 <sup>255</sup>	22.996 <sup>273</sup>	18.55 <sup>44</sup>	59.620 <sup>269</sup>	24.39 <sup>295</sup>
Juni 10	21.179 <sup>213</sup>	35.80 <sup>319</sup>	31.662 <sup>197</sup>	30.69 <sup>268</sup>	23.269 <sup>242</sup>	18.11 <sup>31</sup>	59.889 <sup>219</sup>	27.34 <sup>316</sup>
20	21.392 <sup>156</sup>	38.99 <sup>332</sup>	31.859 <sup>158</sup>	33.37 <sup>274</sup>	23.511 <sup>206</sup>	17.80 <sup>17</sup>	60.108 <sup>165</sup>	30.50 <sup>330</sup>
30	21.548 <sup>95</sup>	42.31 <sup>336</sup>	32.017 <sup>114</sup>	36.11 <sup>271</sup>	23.717 <sup>164</sup>	17.63 <sup>1</sup>	60.273 <sup>106</sup>	33.80 <sup>334</sup>
Juli 10	21.643 <sup>32</sup>	45.67 <sup>330</sup>	32.131 <sup>68</sup>	38.82 <sup>263</sup>	23.881 <sup>118</sup>	17.62 <sup>14</sup>	60.379 <sup>44</sup>	37.14 <sup>330</sup>
14	21.675 <sup>33</sup>	48.97 <sup>317</sup>	32.199 <sup>21</sup>	41.45 <sup>248</sup>	23.999 <sup>70</sup>	17.76 <sup>27</sup>	60.423 <sup>18</sup>	40.44 <sup>318</sup>
19	21.642 <sup>95</sup>	52.14 <sup>297</sup>	32.220 <sup>27</sup>	43.93 <sup>228</sup>	24.069 <sup>21</sup>	18.03 <sup>38</sup>	60.405 <sup>79</sup>	43.62 <sup>299</sup>
Aug. 8	21.547 <sup>154</sup>	55.11 <sup>271</sup>	32.193 <sup>71</sup>	46.21 <sup>203</sup>	24.090 <sup>26</sup>	18.41 <sup>48</sup>	60.326 <sup>137</sup>	46.61 <sup>273</sup>
18	21.393 <sup>207</sup>	57.82 <sup>238</sup>	32.122 <sup>113</sup>	48.24 <sup>174</sup>	24.064 <sup>71</sup>	18.89 <sup>53</sup>	60.189 <sup>191</sup>	49.34 <sup>242</sup>
28	21.186 <sup>254</sup>	60.20 <sup>200</sup>	32.009 <sup>149</sup>	49.98 <sup>142</sup>	23.993 <sup>110</sup>	19.42 <sup>57</sup>	59.998 <sup>236</sup>	51.76 <sup>204</sup>
Sept. 7	20.932 <sup>292</sup>	62.20 <sup>158</sup>	31.860 <sup>178</sup>	51.40 <sup>107</sup>	23.883 <sup>143</sup>	19.99 <sup>55</sup>	59.762 <sup>275</sup>	53.80 <sup>163</sup>
17	20.640 <sup>320</sup>	63.78 <sup>111</sup>	31.682 <sup>199</sup>	52.47 <sup>70</sup>	23.740 <sup>165</sup>	20.54 <sup>52</sup>	59.487 <sup>303</sup>	55.43 <sup>119</sup>
27	20.320 <sup>337</sup>	64.89 <sup>63</sup>	31.483 <sup>210</sup>	53.17 <sup>31</sup>	23.575 <sup>179</sup>	21.06 <sup>46</sup>	59.184 <sup>321</sup>	56.62 <sup>70</sup>
Okt. 7	19.983 <sup>342</sup>	65.52 <sup>12</sup>	31.273 <sup>213</sup>	53.48 <sup>10</sup>	23.396 <sup>182</sup>	21.52 <sup>37</sup>	58.863 <sup>327</sup>	57.32 <sup>19</sup>
17	19.641 <sup>336</sup>	65.64 <sup>41</sup>	31.060 <sup>205</sup>	53.38 <sup>49</sup>	23.214 <sup>173</sup>	21.89 <sup>27</sup>	58.536 <sup>322</sup>	57.51 <sup>32</sup>
27	19.305 <sup>316</sup>	65.23 <sup>93</sup>	30.855 <sup>189</sup>	52.89 <sup>90</sup>	23.041 <sup>155</sup>	22.16 <sup>18</sup>	58.214 <sup>305</sup>	57.19 <sup>85</sup>
Nov. 6	18.989 <sup>287</sup>	64.30 <sup>145</sup>	30.666 <sup>164</sup>	51.99 <sup>129</sup>	22.886 <sup>128</sup>	22.34 <sup>8</sup>	57.909 <sup>278</sup>	56.34 <sup>136</sup>
16	18.702 <sup>248</sup>	62.85 <sup>195</sup>	30.502 <sup>131</sup>	50.70 <sup>166</sup>	22.758 <sup>92</sup>	22.42 <sup>1</sup>	57.631 <sup>240</sup>	54.98 <sup>186</sup>
26	18.454 <sup>199</sup>	60.90 <sup>239</sup>	30.371 <sup>94</sup>	49.04 <sup>200</sup>	22.666 <sup>52</sup>	22.41 <sup>8</sup>	57.391 <sup>195</sup>	53.12 <sup>231</sup>
Dez. 6	18.255 <sup>145</sup>	58.51 <sup>278</sup>	30.277 <sup>53</sup>	47.04 <sup>228</sup>	22.614 <sup>9</sup>	22.33 <sup>15</sup>	57.196 <sup>143</sup>	50.81 <sup>270</sup>
16	18.110 <sup>85</sup>	55.73 <sup>309</sup>	30.224 <sup>9</sup>	44.76 <sup>250</sup>	22.605 <sup>36</sup>	22.18 <sup>19</sup>	57.053 <sup>87</sup>	48.11 <sup>301</sup>
26	18.025 <sup>23</sup>	52.64 <sup>331</sup>	30.215 <sup>35</sup>	42.26 <sup>265</sup>	22.641 <sup>79</sup>	21.99 <sup>24</sup>	56.966 <sup>26</sup>	45.10 <sup>324</sup>
36	18.002	49.33	30.250	39.61	22.720	21.75	56.940	41.86
Mittl. Ort	19.124	42.67	30.114	34.58	21.707	24.07	57.919	34.35
sec $\delta$ , tg $\delta$	1.610	+1.262	1.131	+0.528	1.103	-0.466	1.559	+1.196
a, a'	+1.5	+7.5	+2.4	+7.5	+3.6	+7.9	+1.6	+8.1
b, b'	+0.03	+0.93	+0.01	+0.93	-0.01	+0.92	+0.03	+0.92



Tag	740) $\gamma$ Cygni		741) $\gamma$ Aquilae		743) $\delta$ Sagittae		745) $\alpha$ Aquilae <sup>1)</sup>	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	19 <sup>h</sup> 42 <sup>m</sup>	+37° 12'	19 <sup>h</sup> 43 <sup>m</sup>	+10° 28'	19 <sup>h</sup> 44 <sup>m</sup>	+18° 23'	19 <sup>h</sup> 48 <sup>m</sup>	+8° 43'
Jan. I	15.229 <sup>a</sup> <sub>30</sub>	75.99 <sup>b</sup> <sub>298</sub>	36.432 <sup>c</sup> <sub>63</sub>	40.45 <sup>d</sup> <sub>183</sub>	53.860 <sup>e</sup> <sub>53</sub>	50.99 <sup>f</sup> <sub>222</sub>	3.735 <sup>g</sup> <sub>63</sub>	17.71 <sup>h</sup> <sub>171</sub>
II	15.259 <sup>a</sup> <sub>77</sub>	73.01 <sup>b</sup> <sub>301</sub>	36.495 <sup>c</sup> <sub>100</sub>	38.62 <sup>d</sup> <sub>182</sub>	53.913 <sup>e</sup> <sub>92</sub>	48.77 <sup>f</sup> <sub>222</sub>	3.798 <sup>g</sup> <sub>100</sub>	16.00 <sup>h</sup> <sub>170</sub>
21	15.336 <sup>a</sup> <sub>122</sub>	70.00 <sup>b</sup> <sub>293</sub>	36.595 <sup>c</sup> <sub>133</sub>	36.80 <sup>d</sup> <sub>173</sub>	54.005 <sup>e</sup> <sub>128</sub>	46.55 <sup>f</sup> <sub>214</sub>	3.898 <sup>g</sup> <sub>134</sub>	14.30 <sup>h</sup> <sub>161</sub>
31	15.458 <sup>a</sup> <sub>165</sub>	67.07 <sup>b</sup> <sub>274</sub>	36.728 <sup>c</sup> <sub>165</sub>	35.07 <sup>d</sup> <sub>158</sub>	54.133 <sup>e</sup> <sub>161</sub>	44.41 <sup>f</sup> <sub>196</sub>	4.032 <sup>g</sup> <sub>165</sub>	12.69 <sup>h</sup> <sub>145</sub>
Febr. 10	15.623 <sup>a</sup> <sub>205</sub>	64.33 <sup>b</sup> <sub>244</sub>	36.893 <sup>c</sup> <sub>194</sub>	33.49 <sup>d</sup> <sub>134</sub>	54.294 <sup>e</sup> <sub>192</sub>	42.45 <sup>f</sup> <sub>172</sub>	4.197 <sup>g</sup> <sub>193</sub>	11.24 <sup>h</sup> <sub>123</sub>
20	15.828 <sup>a</sup> <sub>240</sub>	61.89 <sup>b</sup> <sub>205</sub>	37.087 <sup>c</sup> <sub>219</sub>	32.15 <sup>d</sup> <sub>106</sub>	54.486 <sup>e</sup> <sub>219</sub>	40.73 <sup>f</sup> <sub>139</sub>	4.390 <sup>g</sup> <sub>218</sub>	10.01 <sup>h</sup> <sub>95</sub>
März 2	16.068 <sup>a</sup> <sub>271</sub>	59.84 <sup>b</sup> <sub>158</sub>	37.306 <sup>c</sup> <sub>241</sub>	31.09 <sup>d</sup> <sub>71</sub>	54.705 <sup>e</sup> <sub>243</sub>	39.34 <sup>f</sup> <sub>100</sub>	4.608 <sup>g</sup> <sub>241</sub>	9.06 <sup>h</sup> <sub>63</sub>
12	16.339 <sup>a</sup> <sub>296</sub>	58.26 <sup>b</sup> <sub>104</sub>	37.547 <sup>c</sup> <sub>260</sub>	30.38 <sup>d</sup> <sub>34</sub>	54.948 <sup>e</sup> <sub>263</sub>	38.34 <sup>f</sup> <sub>57</sub>	4.849 <sup>g</sup> <sub>260</sub>	8.43 <sup>h</sup> <sub>26</sub>
22	16.635 <sup>a</sup> <sub>315</sub>	57.22 <sup>b</sup> <sub>48</sub>	37.807 <sup>c</sup> <sub>275</sub>	30.04 <sup>d</sup> <sub>5</sub>	55.211 <sup>e</sup> <sub>280</sub>	37.77 <sup>f</sup> <sub>12</sub>	5.109 <sup>g</sup> <sub>275</sub>	8.17 <sup>h</sup> <sub>12</sub>
Apr. I	16.950 <sup>a</sup> <sub>329</sub>	56.74 <sup>b</sup> <sub>10</sub>	38.082 <sup>c</sup> <sub>287</sub>	30.09 <sup>d</sup> <sub>44</sub>	55.491 <sup>e</sup> <sub>291</sub>	37.65 <sup>f</sup> <sub>34</sub>	5.384 <sup>g</sup> <sub>286</sub>	8.29 <sup>h</sup> <sub>49</sub>
11	17.279 <sup>a</sup> <sub>334</sub>	56.84 <sup>b</sup> <sub>67</sub>	38.369 <sup>c</sup> <sub>293</sub>	30.53 <sup>d</sup> <sub>82</sub>	55.782 <sup>e</sup> <sub>298</sub>	37.99 <sup>f</sup> <sub>78</sub>	5.670 <sup>g</sup> <sub>294</sub>	8.78 <sup>h</sup> <sub>85</sub>
21	17.613 <sup>a</sup> <sub>333</sub>	57.51 <sup>b</sup> <sub>120</sub>	38.662 <sup>c</sup> <sub>295</sub>	31.35 <sup>d</sup> <sub>116</sub>	56.080 <sup>e</sup> <sub>300</sub>	38.77 <sup>f</sup> <sub>118</sub>	5.964 <sup>g</sup> <sub>296</sub>	9.63 <sup>h</sup> <sub>117</sub>
Mai I	17.946 <sup>a</sup> <sub>324</sub>	58.71 <sup>b</sup> <sub>169</sub>	38.957 <sup>c</sup> <sub>291</sub>	32.51 <sup>d</sup> <sub>145</sub>	56.380 <sup>e</sup> <sub>295</sub>	39.95 <sup>f</sup> <sub>155</sub>	6.260 <sup>g</sup> <sub>292</sub>	10.80 <sup>h</sup> <sub>146</sub>
11	18.270 <sup>a</sup> <sub>307</sub>	60.40 <sup>b</sup> <sub>211</sub>	39.248 <sup>c</sup> <sub>280</sub>	33.96 <sup>d</sup> <sub>170</sub>	56.675 <sup>e</sup> <sub>283</sub>	41.50 <sup>f</sup> <sub>185</sub>	6.552 <sup>g</sup> <sub>282</sub>	12.26 <sup>h</sup> <sub>168</sub>
21	18.577 <sup>a</sup> <sub>283</sub>	62.51 <sup>b</sup> <sub>246</sub>	39.528 <sup>c</sup> <sub>264</sub>	35.66 <sup>d</sup> <sub>188</sub>	56.958 <sup>e</sup> <sub>266</sub>	43.35 <sup>f</sup> <sub>209</sub>	6.834 <sup>g</sup> <sub>266</sub>	13.94 <sup>h</sup> <sub>186</sub>
31	18.860 <sup>a</sup> <sub>252</sub>	64.97 <sup>b</sup> <sub>274</sub>	39.792 <sup>c</sup> <sub>242</sub>	37.54 <sup>d</sup> <sub>200</sub>	57.224 <sup>e</sup> <sub>241</sub>	45.44 <sup>f</sup> <sub>227</sub>	7.100 <sup>g</sup> <sub>244</sub>	15.80 <sup>h</sup> <sub>196</sub>
Juni 10	19.112 <sup>a</sup> <sub>214</sub>	67.71 <sup>b</sup> <sub>292</sub>	40.034 <sup>c</sup> <sub>213</sub>	39.54 <sup>d</sup> <sub>206</sub>	57.465 <sup>e</sup> <sub>212</sub>	47.71 <sup>f</sup> <sub>236</sub>	7.344 <sup>g</sup> <sub>216</sub>	17.76 <sup>h</sup> <sub>201</sub>
20	19.326 <sup>a</sup> <sub>171</sub>	70.63 <sup>b</sup> <sub>302</sub>	40.247 <sup>c</sup> <sub>179</sub>	41.60 <sup>d</sup> <sub>206</sub>	57.677 <sup>e</sup> <sub>177</sub>	50.07 <sup>f</sup> <sub>240</sub>	7.560 <sup>g</sup> <sub>183</sub>	19.77 <sup>h</sup> <sub>200</sub>
30	19.497 <sup>a</sup> <sub>123</sub>	73.65 <sup>b</sup> <sub>305</sub>	40.426 <sup>c</sup> <sub>140</sub>	43.66 <sup>d</sup> <sub>201</sub>	57.854 <sup>e</sup> <sub>136</sub>	52.47 <sup>f</sup> <sub>237</sub>	7.743 <sup>g</sup> <sub>144</sub>	21.77 <sup>h</sup> <sub>194</sub>
Juli 10	19.620 <sup>a</sup> <sub>73</sub>	76.70 <sup>b</sup> <sub>300</sub>	40.566 <sup>c</sup> <sub>98</sub>	45.67 <sup>d</sup> <sub>190</sub>	57.990 <sup>e</sup> <sub>93</sub>	54.84 <sup>f</sup> <sub>228</sub>	7.887 <sup>g</sup> <sub>103</sub>	23.71 <sup>h</sup> <sub>183</sub>
19	19.693 <sup>a</sup> <sub>21</sub>	79.70 <sup>b</sup> <sub>287</sub>	40.664 <sup>c</sup> <sub>55</sub>	47.57 <sup>d</sup> <sub>175</sub>	58.083 <sup>e</sup> <sub>49</sub>	57.12 <sup>f</sup> <sub>214</sub>	7.990 <sup>g</sup> <sub>59</sub>	25.54 <sup>h</sup> <sub>168</sub>
29	19.714 <sup>a</sup> <sub>30</sub>	82.57 <sup>b</sup> <sub>269</sub>	40.719 <sup>c</sup> <sub>11</sub>	49.32 <sup>d</sup> <sub>157</sub>	58.132 <sup>e</sup> <sub>3</sub>	59.26 <sup>f</sup> <sub>196</sub>	8.049 <sup>g</sup> <sub>15</sub>	27.22 <sup>h</sup> <sub>150</sub>
Aug. 8	19.684 <sup>a</sup> <sub>80</sub>	85.26 <sup>b</sup> <sub>244</sub>	40.730 <sup>c</sup> <sub>33</sub>	50.89 <sup>d</sup> <sub>136</sub>	58.135 <sup>e</sup> <sub>41</sub>	61.22 <sup>f</sup> <sub>173</sub>	8.064 <sup>g</sup> <sub>29</sub>	28.72 <sup>h</sup> <sub>129</sub>
18	19.604 <sup>a</sup> <sub>126</sub>	87.70 <sup>b</sup> <sub>214</sub>	40.697 <sup>c</sup> <sub>73</sub>	52.25 <sup>d</sup> <sub>114</sub>	58.094 <sup>e</sup> <sub>82</sub>	62.95 <sup>f</sup> <sub>149</sub>	8.035 <sup>g</sup> <sub>68</sub>	30.01 <sup>h</sup> <sub>107</sub>
28	19.478 <sup>a</sup> <sub>166</sub>	89.84 <sup>b</sup> <sub>180</sub>	40.624 <sup>c</sup> <sub>109</sub>	53.39 <sup>d</sup> <sub>89</sub>	58.012 <sup>e</sup> <sub>118</sub>	64.44 <sup>f</sup> <sub>120</sub>	7.967 <sup>g</sup> <sub>104</sub>	31.08 <sup>h</sup> <sub>83</sub>
Sept. 7	19.312 <sup>a</sup> <sub>199</sub>	91.64 <sup>b</sup> <sub>143</sub>	40.515 <sup>c</sup> <sub>137</sub>	54.28 <sup>d</sup> <sub>64</sub>	57.894 <sup>e</sup> <sub>148</sub>	65.64 <sup>f</sup> <sub>90</sub>	7.863 <sup>g</sup> <sub>134</sub>	31.91 <sup>h</sup> <sub>59</sub>
17	19.113 <sup>a</sup> <sub>224</sub>	93.07 <sup>b</sup> <sub>102</sub>	40.378 <sup>c</sup> <sub>159</sub>	54.92 <sup>d</sup> <sub>37</sub>	57.746 <sup>e</sup> <sub>170</sub>	66.54 <sup>f</sup> <sub>59</sub>	7.729 <sup>g</sup> <sub>155</sub>	32.50 <sup>h</sup> <sub>33</sub>
27	18.889 <sup>a</sup> <sub>239</sub>	94.09 <sup>b</sup> <sub>58</sub>	40.219 <sup>c</sup> <sub>173</sub>	55.29 <sup>d</sup> <sub>12</sub>	57.576 <sup>e</sup> <sub>183</sub>	67.13 <sup>f</sup> <sub>27</sub>	7.574 <sup>g</sup> <sub>169</sub>	32.83 <sup>h</sup> <sub>9</sub>
Okt. 7	18.650 <sup>a</sup> <sub>245</sub>	94.67 <sup>b</sup> <sub>14</sub>	40.046 <sup>c</sup> <sub>176</sub>	55.41 <sup>d</sup> <sub>15</sub>	57.393 <sup>e</sup> <sub>188</sub>	67.40 <sup>f</sup> <sub>5</sub>	7.495 <sup>g</sup> <sub>172</sub>	32.92 <sup>h</sup> <sub>16</sub>
17	18.405 <sup>a</sup> <sub>240</sub>	94.81 <sup>b</sup> <sub>33</sub>	39.870 <sup>c</sup> <sub>170</sub>	55.26 <sup>d</sup> <sub>42</sub>	57.205 <sup>e</sup> <sub>183</sub>	67.35 <sup>f</sup> <sub>39</sub>	7.233 <sup>g</sup> <sub>168</sub>	32.76 <sup>h</sup> <sub>40</sub>
27	18.165 <sup>a</sup> <sub>226</sub>	94.48 <sup>b</sup> <sub>79</sub>	39.700 <sup>c</sup> <sub>157</sub>	54.84 <sup>d</sup> <sub>67</sub>	57.022 <sup>e</sup> <sub>169</sub>	66.96 <sup>f</sup> <sub>72</sub>	7.065 <sup>g</sup> <sub>153</sub>	32.36 <sup>h</sup> <sub>65</sub>
Nov. 6	17.939 <sup>a</sup> <sub>202</sub>	93.69 <sup>b</sup> <sub>124</sub>	39.543 <sup>c</sup> <sub>134</sub>	54.17 <sup>d</sup> <sub>93</sub>	56.853 <sup>e</sup> <sub>147</sub>	66.24 <sup>f</sup> <sub>104</sub>	6.912 <sup>g</sup> <sub>132</sub>	31.71 <sup>h</sup> <sub>88</sub>
16	17.737 <sup>a</sup> <sub>171</sub>	92.45 <sup>b</sup> <sub>168</sub>	39.409 <sup>c</sup> <sub>105</sub>	53.24 <sup>d</sup> <sub>116</sub>	56.706 <sup>e</sup> <sub>118</sub>	65.20 <sup>f</sup> <sub>135</sub>	6.780 <sup>g</sup> <sub>103</sub>	30.83 <sup>h</sup> <sub>110</sub>
26	17.566 <sup>a</sup> <sub>134</sub>	90.77 <sup>b</sup> <sub>208</sub>	39.304 <sup>c</sup> <sub>72</sub>	52.08 <sup>d</sup> <sub>138</sub>	56.588 <sup>e</sup> <sub>85</sub>	63.85 <sup>f</sup> <sub>162</sub>	6.677 <sup>g</sup> <sub>70</sub>	29.73 <sup>h</sup> <sub>130</sub>
Dez. 6	17.432 <sup>a</sup> <sub>91</sub>	88.69 <sup>b</sup> <sub>243</sub>	39.232 <sup>c</sup> <sub>35</sub>	50.70 <sup>d</sup> <sub>156</sub>	56.503 <sup>e</sup> <sub>47</sub>	62.23 <sup>f</sup> <sub>186</sub>	6.607 <sup>g</sup> <sub>33</sub>	28.43 <sup>h</sup> <sub>146</sub>
16	17.341 <sup>a</sup> <sub>46</sub>	86.26 <sup>b</sup> <sub>270</sub>	39.197 <sup>c</sup> <sub>4</sub>	49.14 <sup>d</sup> <sub>171</sub>	56.456 <sup>e</sup> <sub>9</sub>	60.37 <sup>f</sup> <sub>205</sub>	6.574 <sup>g</sup> <sub>5</sub>	26.97 <sup>h</sup> <sub>160</sub>
26	17.295 <sup>a</sup> <sub>3</sub>	83.56 <sup>b</sup> <sub>290</sub>	39.201 <sup>c</sup> <sub>42</sub>	47.43 <sup>d</sup> <sub>180</sub>	56.447 <sup>e</sup> <sub>32</sub>	58.32 <sup>f</sup> <sub>217</sub>	6.579 <sup>g</sup> <sub>43</sub>	25.37 <sup>h</sup> <sub>169</sub>
36	17.298 <sup>a</sup>	80.66 <sup>b</sup>	39.243 <sup>c</sup>	45.63 <sup>d</sup>	56.479 <sup>e</sup>	56.15 <sup>f</sup>	6.622 <sup>g</sup>	23.68 <sup>h</sup>
Mittl. Ort	17.482	73.51	38.644	40.61	56.048	50.35	5.951	18.23
sec $\delta$ , tg $\delta$	1.256	+0.760	1.017	+0.185	1.054	+0.333	1.012	+0.153
$\bar{a}$ , $\bar{a}'$	+2.2	+8.7	+2.9	+8.8	+2.7	+8.9	+2.9	+9.1
$\bar{b}$ , $\bar{b}'$	+0.02	+0.90	+0.01	+0.90	+0.01	+0.90	0.00	+0.89

<sup>1)</sup> Die jährliche Parallaxe ( $\sigma^{\circ}208$ ) ist bereits berücksichtigt.



## Scheinbare Sternörter 1945

Tag	749) $\beta$ Aquilae		748) $\varepsilon$ Pavonis		751) $\delta^1$ Sagittarii		752) $\gamma$ Sagittae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$19^h 52^m$	$+6^\circ 15'$	$19^h 54^m$	$-73^\circ 3'$	$19^h 56^m$	$-35^\circ 25'$	$19^h 56^m$	$+19^\circ 20'$
Jan. I	$34.427$ <sup>58</sup>	$64.18$ <sup>159</sup>	$9.13$ <sup>10</sup>	$37.87$ <sup>290</sup>	$6.687$ <sup>83</sup>	$41.26$ <sup>94</sup>	$16.422$ <sup>41</sup>	$30.40$ <sup>222</sup>
II	$34.485$ <sup>94</sup>	$62.59$ <sup>157</sup>	$9.23$ <sup>25</sup>	$34.97$ <sup>295</sup>	$6.770$ <sup>127</sup>	$40.32$ <sup>102</sup>	$16.463$ <sup>80</sup>	$28.18$ <sup>224</sup>
2I	$34.579$ <sup>128</sup>	$61.02$ <sup>149</sup>	$9.48$ <sup>37</sup>	$32.02$ <sup>293</sup>	$6.897$ <sup>168</sup>	$39.30$ <sup>106</sup>	$16.543$ <sup>115</sup>	$25.94$ <sup>216</sup>
3I	$34.707$ <sup>158</sup>	$59.53$ <sup>135</sup>	$9.85$ <sup>48</sup>	$29.09$ <sup>283</sup>	$7.065$ <sup>205</sup>	$38.24$ <sup>110</sup>	$16.658$ <sup>150</sup>	$23.78$ <sup>200</sup>
Febr. 10	$34.865$ <sup>187</sup>	$58.18$ <sup>114</sup>	$10.33$ <sup>60</sup>	$26.26$ <sup>267</sup>	$7.270$ <sup>239</sup>	$37.14$ <sup>111</sup>	$16.808$ <sup>182</sup>	$21.78$ <sup>176</sup>
20	$35.052$ <sup>213</sup>	$57.04$ <sup>88</sup>	$10.93$ <sup>68</sup>	$23.59$ <sup>243</sup>	$7.509$ <sup>269</sup>	$36.03$ <sup>113</sup>	$16.990$ <sup>210</sup>	$20.02$ <sup>143</sup>
März 2	$35.265$ <sup>236</sup>	$56.16$ <sup>56</sup>	$11.61$ <sup>76</sup>	$21.16$ <sup>216</sup>	$7.778$ <sup>294</sup>	$34.90$ <sup>113</sup>	$17.200$ <sup>235</sup>	$18.59$ <sup>106</sup>
12	$35.501$ <sup>255</sup>	$55.60$ <sup>23</sup>	$12.37$ <sup>82</sup>	$19.00$ <sup>183</sup>	$8.072$ <sup>317</sup>	$33.77$ <sup>110</sup>	$17.435$ <sup>258</sup>	$17.53$ <sup>63</sup>
22	$35.756$ <sup>271</sup>	$55.37$ <sup>13</sup>	$13.19$ <sup>88</sup>	$17.17$ <sup>148</sup>	$8.389$ <sup>337</sup>	$32.67$ <sup>107</sup>	$17.693$ <sup>277</sup>	$16.90$ <sup>18</sup>
Apr. I	$36.027$ <sup>284</sup>	$55.50$ <sup>48</sup>	$14.07$ <sup>90</sup>	$15.69$ <sup>110</sup>	$8.726$ <sup>351</sup>	$31.60$ <sup>101</sup>	$17.970$ <sup>290</sup>	$16.72$ <sup>29</sup>
II	$36.311$ <sup>292</sup>	$55.98$ <sup>82</sup>	$14.97$ <sup>92</sup>	$14.59$ <sup>70</sup>	$9.077$ <sup>360</sup>	$30.59$ <sup>93</sup>	$18.260$ <sup>298</sup>	$17.01$ <sup>73</sup>
2I	$36.603$ <sup>296</sup>	$56.80$ <sup>112</sup>	$15.89$ <sup>93</sup>	$13.89$ <sup>27</sup>	$9.437$ <sup>366</sup>	$29.66$ <sup>82</sup>	$18.558$ <sup>302</sup>	$17.74$ <sup>115</sup>
Mai I	$36.899$ <sup>293</sup>	$57.92$ <sup>139</sup>	$16.82$ <sup>90</sup>	$13.62$ <sup>15</sup>	$9.803$ <sup>364</sup>	$28.84$ <sup>69</sup>	$18.860$ <sup>299</sup>	$18.89$ <sup>153</sup>
II	$37.192$ <sup>285</sup>	$59.31$ <sup>159</sup>	$17.72$ <sup>88</sup>	$13.77$ <sup>59</sup>	$10.167$ <sup>356</sup>	$28.15$ <sup>52</sup>	$19.159$ <sup>289</sup>	$20.42$ <sup>185</sup>
2I	$37.477$ <sup>269</sup>	$60.90$ <sup>176</sup>	$18.60$ <sup>82</sup>	$14.36$ <sup>100</sup>	$10.523$ <sup>340</sup>	$27.63$ <sup>33</sup>	$19.448$ <sup>273</sup>	$22.27$ <sup>210</sup>
3I	$37.746$ <sup>249</sup>	$62.66$ <sup>185</sup>	$19.42$ <sup>74</sup>	$15.36$ <sup>139</sup>	$10.863$ <sup>316</sup>	$27.30$ <sup>14</sup>	$19.721$ <sup>250</sup>	$24.37$ <sup>228</sup>
Juni 10	$37.995$ <sup>222</sup>	$64.51$ <sup>189</sup>	$20.16$ <sup>66</sup>	$16.75$ <sup>175</sup>	$11.179$ <sup>286</sup>	$27.16$ <sup>8</sup>	$19.971$ <sup>222</sup>	$26.65$ <sup>240</sup>
20	$38.217$ <sup>189</sup>	$66.40$ <sup>187</sup>	$20.82$ <sup>55</sup>	$18.50$ <sup>207</sup>	$11.465$ <sup>247</sup>	$27.24$ <sup>28</sup>	$20.193$ <sup>186</sup>	$29.05$ <sup>245</sup>
30	$38.406$ <sup>152</sup>	$68.27$ <sup>180</sup>	$21.37$ <sup>44</sup>	$20.57$ <sup>232</sup>	$11.712$ <sup>204</sup>	$27.52$ <sup>49</sup>	$20.379$ <sup>147</sup>	$31.50$ <sup>244</sup>
Juli 10	$38.558$ <sup>110</sup>	$70.07$ <sup>170</sup>	$21.81$ <sup>30</sup>	$22.89$ <sup>252</sup>	$11.916$ <sup>154</sup>	$28.01$ <sup>67</sup>	$20.526$ <sup>104</sup>	$33.94$ <sup>235</sup>
20	$38.668$ <sup>66</sup>	$71.77$ <sup>155</sup>	$22.11$ <sup>17</sup>	$25.41$ <sup>265</sup>	$12.070$ <sup>101</sup>	$28.68$ <sup>83</sup>	$20.630$ <sup>58</sup>	$36.29$ <sup>222</sup>
29	$38.734$ <sup>22</sup>	$73.32$ <sup>137</sup>	$22.28$ <sup>3</sup>	$28.06$ <sup>267</sup>	$12.171$ <sup>47</sup>	$29.51$ <sup>95</sup>	$20.688$ <sup>13</sup>	$38.51$ <sup>205</sup>
Aug. 8	$38.756$ <sup>21</sup>	$74.69$ <sup>117</sup>	$22.31$ <sup>11</sup>	$30.73$ <sup>262</sup>	$12.218$ <sup>7</sup>	$30.46$ <sup>104</sup>	$20.701$ <sup>31</sup>	$40.56$ <sup>182</sup>
18	$38.735$ <sup>61</sup>	$75.86$ <sup>96</sup>	$22.20$ <sup>25</sup>	$33.35$ <sup>248</sup>	$12.211$ <sup>58</sup>	$31.50$ <sup>107</sup>	$20.670$ <sup>74</sup>	$42.38$ <sup>158</sup>
28	$38.674$ <sup>98</sup>	$76.82$ <sup>74</sup>	$21.95$ <sup>37</sup>	$35.83$ <sup>224</sup>	$12.153$ <sup>104</sup>	$32.57$ <sup>106</sup>	$20.596$ <sup>111</sup>	$43.96$ <sup>130</sup>
Sept. 7	$38.576$ <sup>129</sup>	$77.56$ <sup>51</sup>	$21.58$ <sup>48</sup>	$38.07$ <sup>192</sup>	$12.049$ <sup>144</sup>	$33.63$ <sup>99</sup>	$20.485$ <sup>142</sup>	$45.26$ <sup>100</sup>
17	$38.447$ <sup>150</sup>	$78.07$ <sup>28</sup>	$21.10$ <sup>56</sup>	$39.99$ <sup>152</sup>	$11.905$ <sup>174</sup>	$34.62$ <sup>88</sup>	$20.343$ <sup>166</sup>	$46.26$ <sup>69</sup>
27	$38.297$ <sup>165</sup>	$78.35$ <sup>5</sup>	$20.54$ <sup>61</sup>	$41.51$ <sup>105</sup>	$11.731$ <sup>193</sup>	$35.50$ <sup>74</sup>	$20.177$ <sup>181</sup>	$46.95$ <sup>36</sup>
Okt. 7	$38.132$ <sup>170</sup>	$78.40$ <sup>18</sup>	$19.93$ <sup>65</sup>	$42.56$ <sup>55</sup>	$11.538$ <sup>201</sup>	$36.24$ <sup>55</sup>	$19.996$ <sup>187</sup>	$47.31$ <sup>2</sup>
17	$37.962$ <sup>166</sup>	$78.22$ <sup>40</sup>	$19.28$ <sup>64</sup>	$43.11$ <sup>2</sup>	$11.337$ <sup>198</sup>	$36.79$ <sup>34</sup>	$19.809$ <sup>184</sup>	$47.33$ <sup>31</sup>
27	$37.796$ <sup>153</sup>	$77.82$ <sup>62</sup>	$18.64$ <sup>62</sup>	$43.13$ <sup>53</sup>	$11.139$ <sup>182</sup>	$37.13$ <sup>12</sup>	$19.625$ <sup>172</sup>	$47.02$ <sup>65</sup>
Nov. 6	$37.643$ <sup>133</sup>	$77.20$ <sup>83</sup>	$18.02$ <sup>55</sup>	$42.60$ <sup>106</sup>	$10.957$ <sup>157</sup>	$37.25$ <sup>9</sup>	$19.453$ <sup>152</sup>	$46.37$ <sup>97</sup>
16	$37.510$ <sup>105</sup>	$76.37$ <sup>103</sup>	$17.47$ <sup>47</sup>	$41.54$ <sup>155</sup>	$10.800$ <sup>122</sup>	$37.16$ <sup>30</sup>	$19.301$ <sup>126</sup>	$45.40$ <sup>129</sup>
26	$37.405$ <sup>72</sup>	$75.34$ <sup>121</sup>	$17.00$ <sup>37</sup>	$39.99$ <sup>198</sup>	$10.678$ <sup>82</sup>	$36.86$ <sup>48</sup>	$19.175$ <sup>93</sup>	$44.11$ <sup>158</sup>
Dez. 6	$37.333$ <sup>37</sup>	$74.13$ <sup>137</sup>	$16.63$ <sup>24</sup>	$38.01$ <sup>235</sup>	$10.596$ <sup>36</sup>	$36.38$ <sup>65</sup>	$19.082$ <sup>57</sup>	$42.53$ <sup>183</sup>
16	$37.296$ <sup>1</sup>	$72.76$ <sup>148</sup>	$16.39$ <sup>10</sup>	$35.66$ <sup>263</sup>	$10.560$ <sup>11</sup>	$35.73$ <sup>79</sup>	$19.025$ <sup>20</sup>	$40.70$ <sup>202</sup>
26	$37.297$ <sup>38</sup>	$71.28$ <sup>157</sup>	$16.29$ <sup>2</sup>	$33.03$ <sup>283</sup>	$10.571$ <sup>57</sup>	$34.94$ <sup>89</sup>	$19.005$ <sup>20</sup>	$38.68$ <sup>217</sup>
36	$37.335$	$69.71$	$16.31$	$30.20$	$10.628$	$34.05$	$19.025$	$36.51$
Mittl. Ort	$36.645$	$64.97$	$16.10$	$31.17$	$9.576$	$36.07$	$18.587$	$29.70$
sec $\delta$ , tg $\delta$	$1.006$	$+0.110$	$3.432$	$-3.283$	$1.227$	$-0.711$	$1.060$	$+0.351$
a, a'	$+2.9$	$+9.5$	$+6.9$	$+9.6$	$+3.9$	$+9.7$	$+2.7$	$+9.7$
b, b'	$0.00$	$+0.88$	$-0.10$	$+0.88$	$-0.02$	$+0.87$	$+0.01$	$+0.87$



# Obere Kulmination Greenwich

157\*

Tag	754) $\delta$ Pavonis <sup>1)</sup>		756) $\theta$ Aquilae		759) $\kappa$ Cephei		757) $\beta^1$ $\alpha^1$ Cygni	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	20 <sup>h</sup> 3 <sup>m</sup>	-66° 19'	20 <sup>h</sup> 8 <sup>m</sup>	-0° 58'	20 <sup>h</sup> 10 <sup>m</sup>	+77° 32'	20 <sup>h</sup> 11 <sup>m</sup>	+46° 34'
Jan. I	15.74 <sup>a</sup> <sub>9</sub>	36.54 <sup>b</sup> <sub>260</sub>	25.777 <sup>e</sup> <sub>49</sub>	71.63 <sup>f</sup> <sub>112</sub>	42.01 <sup>g</sup> <sub>38</sub>	55.11 <sup>h</sup> <sub>323</sub>	51.608 <sup>i</sup> <sub>30</sub>	29.52 <sup>j</sup> <sub>30</sub>
II	15.83 <sub>18</sub>	33.94 <sub>263</sub>	25.826 <sub>85</sub>	72.75 <sub>110</sub>	41.63 <sub>19</sub>	51.88 <sub>342</sub>	51.578 <sub>24</sub>	26.45 <sub>319</sub>
2I	16.01 <sub>28</sub>	31.26 <sub>263</sub>	25.911 <sub>117</sub>	73.85 <sub>101</sub>	41.44 <sub>1</sub>	48.46 <sub>349</sub>	51.602 <sub>78</sub>	23.26 <sub>317</sub>
3I	16.29 <sub>36</sub>	28.58 <sub>262</sub>	26.028 <sub>148</sub>	74.86 <sub>89</sub>	41.45 <sub>20</sub>	44.97 <sub>341</sub>	51.680 <sub>131</sub>	20.09 <sub>305</sub>
Febr. 10	16.65 <sub>43</sub>	25.96 <sub>250</sub>	26.176 <sub>177</sub>	75.75 <sub>71</sub>	41.65 <sub>38</sub>	41.56 <sub>321</sub>	51.811 <sub>181</sub>	17.04 <sub>280</sub>
20	17.08 <sub>50</sub>	23.46 <sub>232</sub>	26.353 <sub>203</sub>	76.46 <sub>49</sub>	42.03 <sub>56</sub>	38.35 <sub>289</sub>	51.992 <sub>228</sub>	14.24 <sub>245</sub>
März 2	17.58 <sub>56</sub>	21.14 <sub>210</sub>	26.556 <sub>227</sub>	76.95 <sub>23</sub>	42.59 <sub>71</sub>	35.46 <sub>247</sub>	52.220 <sub>270</sub>	11.79 <sub>200</sub>
12	18.14 <sub>61</sub>	19.04 <sub>183</sub>	26.783 <sub>248</sub>	77.18 <sub>5</sub>	43.30 <sub>83</sub>	32.99 <sub>195</sub>	52.490 <sub>307</sub>	9.79 <sub>148</sub>
22	18.75 <sub>64</sub>	17.21 <sub>153</sub>	27.031 <sub>266</sub>	77.13 <sub>34</sub>	44.13 <sub>92</sub>	31.04 <sub>136</sub>	52.797 <sub>336</sub>	8.31 <sub>90</sub>
Apr. I	19.39 <sub>67</sub>	15.68 <sub>120</sub>	27.297 <sub>281</sub>	76.79 <sub>62</sub>	45.05 <sub>99</sub>	29.68 <sub>73</sub>	53.133 <sub>357</sub>	7.41 <sub>29</sub>
II	20.06 <sub>69</sub>	14.48 <sub>83</sub>	27.578 <sub>292</sub>	76.17 <sub>89</sub>	46.04 <sub>102</sub>	28.95 <sub>9</sub>	53.490 <sub>371</sub>	7.12 <sub>31</sub>
2I	20.75 <sub>69</sub>	13.65 <sub>46</sub>	27.870 <sub>299</sub>	75.28 <sub>114</sub>	47.06 <sub>100</sub>	28.86 <sub>54</sub>	53.861 <sub>376</sub>	7.43 <sub>90</sub>
Mai I	21.44 <sub>68</sub>	13.19 <sub>7</sub>	28.169 <sub>298</sub>	74.14 <sub>133</sub>	48.06 <sub>97</sub>	29.40 <sub>115</sub>	54.237 <sub>369</sub>	8.33 <sub>146</sub>
II	22.12 <sub>67</sub>	13.12 <sub>33</sub>	28.467 <sub>293</sub>	72.81 <sub>148</sub>	49.03 <sub>90</sub>	30.55 <sub>172</sub>	54.606 <sub>355</sub>	9.79 <sub>195</sub>
2I	22.79 <sub>63</sub>	13.45 <sub>72</sub>	28.760 <sub>282</sub>	71.33 <sub>159</sub>	49.93 <sub>80</sub>	32.27 <sub>221</sub>	54.961 <sub>331</sub>	11.74 <sub>238</sub>
3I	23.42 <sub>58</sub>	14.17 <sub>110</sub>	29.042 <sub>262</sub>	69.74 <sub>163</sub>	50.73 <sub>68</sub>	34.48 <sub>263</sub>	55.292 <sub>298</sub>	14.12 <sub>273</sub>
Juni 10	24.00 <sub>51</sub>	15.27 <sub>145</sub>	29.304 <sub>238</sub>	68.11 <sub>163</sub>	51.41 <sub>54</sub>	37.11 <sub>297</sub>	55.590 <sub>258</sub>	16.85 <sub>301</sub>
20	24.51 <sub>45</sub>	16.72 <sub>177</sub>	29.542 <sub>207</sub>	66.48 <sub>158</sub>	51.95 <sub>38</sub>	40.08 <sub>323</sub>	55.848 <sub>210</sub>	19.86 <sub>318</sub>
30	24.96 <sub>36</sub>	18.49 <sub>204</sub>	29.749 <sub>170</sub>	64.90 <sub>149</sub>	52.33 <sub>22</sub>	43.31 <sub>341</sub>	56.058 <sub>157</sub>	23.04 <sub>328</sub>
Juli 10	25.32 <sub>26</sub>	20.53 <sub>225</sub>	29.919 <sub>131</sub>	63.41 <sub>137</sub>	52.55 <sub>5</sub>	46.72 <sub>349</sub>	56.215 <sub>101</sub>	26.32 <sub>331</sub>
20	25.58 <sub>16</sub>	22.78 <sub>239</sub>	30.050 <sub>87</sub>	62.04 <sub>121</sub>	52.60 <sub>12</sub>	50.21 <sub>349</sub>	56.316 <sub>43</sub>	29.63 <sub>324</sub>
29	25.74 <sub>6</sub>	25.17 <sub>247</sub>	30.137 <sub>42</sub>	60.83 <sub>104</sub>	52.48 <sub>29</sub>	53.70 <sub>342</sub>	56.359 <sub>16</sub>	32.87 <sub>310</sub>
Aug. 8	25.80 <sub>4</sub>	27.64 <sub>245</sub>	30.179 <sub>2</sub>	59.79 <sub>85</sub>	52.19 <sub>45</sub>	57.12 <sub>326</sub>	56.343 <sub>74</sub>	35.97 <sub>290</sub>
18	25.76 <sub>15</sub>	30.09 <sub>236</sub>	30.177 <sub>43</sub>	58.94 <sub>66</sub>	51.74 <sub>60</sub>	60.38 <sub>304</sub>	56.269 <sub>128</sub>	38.87 <sub>263</sub>
28	25.61 <sub>23</sub>	32.45 <sub>216</sub>	30.134 <sub>81</sub>	58.28 <sub>47</sub>	51.14 <sub>74</sub>	63.42 <sub>275</sub>	56.141 <sub>176</sub>	41.50 <sub>231</sub>
Sept. 7	25.38 <sub>32</sub>	34.61 <sub>190</sub>	30.053 <sub>114</sub>	57.81 <sub>28</sub>	50.40 <sub>86</sub>	66.17 <sub>239</sub>	55.965 <sub>217</sub>	43.81 <sub>195</sub>
17	25.06 <sub>38</sub>	36.51 <sub>156</sub>	29.939 <sub>139</sub>	57.53 <sub>10</sub>	49.54 <sub>95</sub>	68.56 <sub>199</sub>	55.748 <sub>250</sub>	45.76 <sub>153</sub>
27	24.68 <sub>42</sub>	38.07 <sub>114</sub>	29.800 <sub>155</sub>	57.43 <sub>6</sub>	48.59 <sub>103</sub>	70.55 <sub>154</sub>	55.498 <sub>274</sub>	47.29 <sub>108</sub>
Okt. 7	24.26 <sub>44</sub>	39.21 <sub>69</sub>	29.645 <sub>162</sub>	57.49 <sub>23</sub>	47.56 <sub>108</sub>	72.09 <sub>103</sub>	55.224 <sub>287</sub>	48.37 <sub>61</sub>
17	23.82 <sub>45</sub>	39.90 <sub>21</sub>	29.483 <sub>161</sub>	57.72 <sub>38</sub>	46.48 <sub>110</sub>	73.12 <sub>51</sub>	54.937 <sub>289</sub>	48.98 <sub>11</sub>
27	23.37 <sub>43</sub>	40.11 <sub>30</sub>	29.322 <sub>150</sub>	58.10 <sub>53</sub>	45.38 <sub>110</sub>	73.63 <sub>5</sub>	54.648 <sub>282</sub>	49.09 <sub>40</sub>
Nov. 6	22.94 <sub>38</sub>	39.81 <sub>79</sub>	29.172 <sub>131</sub>	58.63 <sub>66</sub>	44.28 <sub>107</sub>	73.58 <sub>63</sub>	54.366 <sub>263</sub>	48.69 <sub>92</sub>
16	22.56 <sub>33</sub>	39.02 <sub>126</sub>	29.041 <sub>106</sub>	59.29 <sub>78</sub>	43.21 <sub>100</sub>	72.95 <sub>119</sub>	54.103 <sub>237</sub>	47.77 <sub>141</sub>
26	22.23 <sub>24</sub>	37.76 <sub>167</sub>	28.935 <sub>76</sub>	60.07 <sub>91</sub>	42.21 <sub>91</sub>	71.76 <sub>174</sub>	53.866 <sub>201</sub>	46.36 <sub>188</sub>
Dez. 6	21.99 <sub>16</sub>	36.09 <sub>202</sub>	28.859 <sub>42</sub>	60.98 <sub>100</sub>	41.30 <sub>80</sub>	70.02 <sub>225</sub>	53.665 <sub>159</sub>	44.48 <sub>231</sub>
16	21.83 <sub>6</sub>	34.07 <sub>231</sub>	28.817 <sub>7</sub>	61.98 <sub>106</sub>	40.50 <sub>65</sub>	67.77 <sub>269</sub>	53.506 <sub>112</sub>	42.17 <sub>267</sub>
26	21.77 <sub>3</sub>	31.76 <sub>251</sub>	28.810 <sub>31</sub>	63.04 <sub>111</sub>	39.85 <sub>49</sub>	65.08 <sub>305</sub>	53.394 <sub>62</sub>	39.50 <sub>294</sub>
36	21.80	29.25	28.841	64.15	39.36	62.03	53.332	36.56
Mittl. Ort	20.97	29.06	28.015	69.51	46.64	48.26	53.896	25.34
sec $\delta$ , tg $\delta$	2.490	-2.281	1.000	-0.017	4.637	+4.528	1.455	+1.057
a, a'	+5.7	+10.3	+3.1	+10.7	-2.0	+10.8	+1.9	+10.9
b, b'	-0.08	+0.86	0.00	+0.85	+0.16	+0.84	+0.04	+0.84

 1) Die jährliche Parallaxe ( $\alpha''174$ ) ist bereits berücksichtigt.



## Scheinbare Sternörter 1945

Tag	758) 33 Cygni		760) 24 Vulpeculae		761) $\alpha^2$ Capricorni		765) $\gamma$ Cygni	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	20 <sup>h</sup> 12 <sup>m</sup>	+56° 23'	20 <sup>h</sup> 14 <sup>m</sup>	+24° 29'	20 <sup>h</sup> 14 <sup>m</sup>	-12° 42'	20 <sup>h</sup> 20 <sup>m</sup>	+40° 4'
Jan. I	4.656 <sup>a</sup> <sub>72</sub>	61.09 <sup>b</sup> <sub>323</sub>	23.663 <sup>a</sup> <sub>16</sub>	63.44 <sup>b</sup> <sub>237</sub>	57.882 <sup>a</sup> <sub>51</sub>	64.25 <sup>b</sup> <sub>41</sub>	12.989 <sup>a</sup> <sub>21</sub>	50.50 <sup>b</sup> <sub>287</sub>
II	4.584 <sup>c</sup> <sub>3</sub>	57.86 <sup>d</sup> <sub>337</sub>	23.679 <sup>e</sup> <sub>55</sub>	61.07 <sup>f</sup> <sub>242</sub>	57.933 <sup>g</sup> <sub>87</sub>	64.66 <sup>h</sup> <sub>36</sub>	12.968 <sup>i</sup> <sub>26</sub>	47.63 <sup>j</sup> <sub>297</sub>
2I	4.581 <sup>k</sup> <sub>66</sub>	54.49 <sup>l</sup> <sub>338</sub>	23.734 <sup>m</sup> <sub>93</sub>	58.65 <sup>n</sup> <sub>237</sub>	58.020 <sup>o</sup> <sub>120</sub>	65.02 <sup>p</sup> <sub>28</sub>	12.994 <sup>q</sup> <sub>74</sub>	44.66 <sup>r</sup> <sub>297</sub>
3I	4.647 <sup>s</sup> <sub>135</sub>	51.11 <sup>t</sup> <sub>327</sub>	23.827 <sup>u</sup> <sub>130</sub>	56.28 <sup>v</sup> <sub>222</sub>	58.140 <sup>w</sup> <sub>152</sub>	65.30 <sup>x</sup> <sub>17</sub>	13.068 <sup>y</sup> <sub>119</sub>	41.69 <sup>z</sup> <sub>285</sub>
Febr. IO	4.782 <sup>aa</sup> <sub>201</sub>	47.84 <sup>ab</sup> <sub>303</sub>	23.957 <sup>ac</sup> <sub>164</sub>	54.06 <sup>ad</sup> <sub>200</sub>	58.292 <sup>ae</sup> <sub>181</sub>	65.47 <sup>af</sup> <sub>3</sub>	13.187 <sup>ag</sup> <sub>164</sub>	38.84 <sup>ah</sup> <sub>262</sub>
20	4.983 <sup>ai</sup> <sub>262</sub>	44.81 <sup>aj</sup> <sub>268</sub>	24.121 <sup>ak</sup> <sub>196</sub>	52.06 <sup>al</sup> <sub>168</sub>	58.473 <sup>am</sup> <sub>207</sub>	65.50 <sup>an</sup> <sub>13</sub>	13.351 <sup>ao</sup> <sub>206</sub>	36.22 <sup>ap</sup> <sub>229</sub>
März 2	5.245 <sup>aq</sup> <sub>316</sub>	42.13 <sup>ar</sup> <sub>222</sub>	24.317 <sup>as</sup> <sub>226</sub>	50.38 <sup>at</sup> <sub>129</sub>	58.680 <sup>au</sup> <sub>232</sub>	65.37 <sup>av</sup> <sub>31</sub>	13.557 <sup>aw</sup> <sub>243</sub>	33.93 <sup>ax</sup> <sub>186</sub>
12	5.561 <sup>ay</sup> <sub>363</sub>	39.91 <sup>az</sup> <sub>169</sub>	24.543 <sup>ba</sup> <sub>252</sub>	49.09 <sup>bb</sup> <sub>85</sub>	58.912 <sup>bc</sup> <sub>254</sub>	65.06 <sup>bd</sup> <sub>50</sub>	13.800 <sup>be</sup> <sub>277</sub>	32.07 <sup>bf</sup> <sub>136</sub>
22	5.924 <sup>bg</sup> <sub>399</sub>	38.22 <sup>bh</sup> <sub>109</sub>	24.795 <sup>bi</sup> <sub>274</sub>	48.24 <sup>bj</sup> <sub>38</sub>	59.166 <sup>bk</sup> <sub>273</sub>	64.56 <sup>bl</sup> <sub>68</sub>	14.077 <sup>bm</sup> <sub>305</sub>	30.71 <sup>bn</sup> <sub>82</sub>
Apr. I	6.323 <sup>bo</sup> <sub>426</sub>	37.13 <sup>bp</sup> <sub>46</sub>	25.069 <sup>bq</sup> <sub>291</sub>	47.86 <sup>br</sup> <sub>12</sub>	59.439 <sup>bs</sup> <sub>289</sub>	63.88 <sup>bt</sup> <sub>85</sub>	14.382 <sup>bu</sup> <sub>327</sub>	29.89 <sup>bv</sup> <sub>24</sub>
II	6.749 <sup>bv</sup> <sub>441</sub>	36.67 <sup>bw</sup> <sub>17</sub>	25.360 <sup>bx</sup> <sub>303</sub>	47.98 <sup>by</sup> <sub>60</sub>	59.728 <sup>bz</sup> <sub>301</sub>	63.03 <sup>ca</sup> <sub>101</sub>	14.709 <sup>cb</sup> <sub>341</sub>	29.65 <sup>cc</sup> <sub>34</sub>
2I	7.190 <sup>cd</sup> <sub>444</sub>	36.84 <sup>ce</sup> <sub>80</sub>	25.663 <sup>cd</sup> <sub>310</sub>	48.58 <sup>cf</sup> <sub>106</sub>	60.029 <sup>cg</sup> <sub>309</sub>	62.02 <sup>ch</sup> <sub>113</sub>	15.050 <sup>ci</sup> <sub>347</sub>	29.99 <sup>cd</sup> <sub>90</sub>
Mai I	7.634 <sup>ce</sup> <sub>435</sub>	37.64 <sup>cf</sup> <sub>139</sub>	25.973 <sup>ce</sup> <sub>309</sub>	49.64 <sup>cg</sup> <sub>149</sub>	60.338 <sup>ch</sup> <sub>311</sub>	60.89 <sup>ci</sup> <sub>122</sub>	15.397 <sup>ck</sup> <sub>346</sub>	30.89 <sup>cl</sup> <sub>142</sub>
II	8.069 <sup>cl</sup> <sub>414</sub>	39.03 <sup>cm</sup> <sub>192</sub>	26.282 <sup>cm</sup> <sub>301</sub>	51.13 <sup>cn</sup> <sub>185</sub>	60.649 <sup>co</sup> <sub>306</sub>	59.67 <sup>cp</sup> <sub>125</sub>	15.743 <sup>cq</sup> <sub>335</sub>	32.31 <sup>cr</sup> <sub>189</sub>
2I	8.483 <sup>co</sup> <sub>381</sub>	40.95 <sup>cs</sup> <sub>238</sub>	26.583 <sup>co</sup> <sub>287</sub>	52.98 <sup>ct</sup> <sub>215</sub>	60.955 <sup>cu</sup> <sub>296</sub>	58.42 <sup>cv</sup> <sub>126</sub>	16.078 <sup>cw</sup> <sub>317</sub>	34.20 <sup>cx</sup> <sub>230</sub>
3I	8.864 <sup>cu</sup> <sub>339</sub>	43.33 <sup>cx</sup> <sub>277</sub>	26.870 <sup>cu</sup> <sub>264</sub>	55.13 <sup>cy</sup> <sub>239</sub>	61.251 <sup>cv</sup> <sub>278</sub>	57.16 <sup>cz</sup> <sub>122</sub>	16.395 <sup>cy</sup> <sub>289</sub>	36.50 <sup>ca</sup> <sub>263</sub>
Juni IO	9.203 <sup>ca</sup> <sub>287</sub>	46.10 <sup>cb</sup> <sub>308</sub>	27.134 <sup>ca</sup> <sub>236</sub>	57.52 <sup>cc</sup> <sub>255</sub>	61.529 <sup>cb</sup> <sub>254</sub>	55.94 <sup>cd</sup> <sub>114</sub>	16.684 <sup>cc</sup> <sub>255</sub>	39.13 <sup>cd</sup> <sub>288</sub>
20	9.490 <sup>cd</sup> <sub>228</sub>	49.18 <sup>cd</sup> <sub>329</sub>	27.370 <sup>cd</sup> <sub>202</sub>	60.07 <sup>ce</sup> <sub>264</sub>	61.783 <sup>cd</sup> <sub>224</sub>	54.80 <sup>ce</sup> <sub>102</sub>	16.939 <sup>cd</sup> <sub>213</sub>	42.01 <sup>ce</sup> <sub>306</sub>
30	9.718 <sup>ce</sup> <sub>162</sub>	52.47 <sup>ce</sup> <sub>343</sub>	27.572 <sup>ce</sup> <sub>162</sub>	62.71 <sup>cf</sup> <sub>267</sub>	62.007 <sup>cd</sup> <sub>187</sub>	53.78 <sup>cf</sup> <sub>88</sub>	17.152 <sup>ce</sup> <sub>167</sub>	45.07 <sup>ce</sup> <sub>314</sub>
Juli IO	9.880 <sup>ce</sup> <sub>94</sub>	55.90 <sup>cf</sup> <sub>347</sub>	27.734 <sup>ce</sup> <sub>118</sub>	65.38 <sup>cg</sup> <sub>261</sub>	62.194 <sup>cd</sup> <sub>146</sub>	52.90 <sup>cg</sup> <sub>72</sub>	17.319 <sup>ce</sup> <sub>116</sub>	48.21 <sup>ce</sup> <sub>315</sub>
20	9.974 <sup>cf</sup> <sub>25</sub>	59.37 <sup>cf</sup> <sub>343</sub>	27.852 <sup>cf</sup> <sub>73</sub>	67.99 <sup>ch</sup> <sub>250</sub>	62.340 <sup>cd</sup> <sub>102</sub>	52.18 <sup>ch</sup> <sub>55</sub>	17.435 <sup>ce</sup> <sub>62</sub>	51.36 <sup>cf</sup> <sub>309</sub>
29	9.996 <sup>ch</sup> <sub>48</sub>	62.80 <sup>ch</sup> <sub>331</sub>	27.925 <sup>ch</sup> <sub>25</sub>	70.49 <sup>ci</sup> <sub>235</sub>	62.442 <sup>cd</sup> <sub>56</sub>	51.63 <sup>ch</sup> <sub>38</sub>	17.497 <sup>ce</sup> <sub>9</sub>	54.45 <sup>ch</sup> <sub>295</sub>
Aug. 8	9.948 <sup>ci</sup> <sub>117</sub>	66.11 <sup>ci</sup> <sub>311</sub>	27.950 <sup>ci</sup> <sub>22</sub>	72.84 <sup>cj</sup> <sub>213</sub>	62.498 <sup>cd</sup> <sub>10</sub>	51.25 <sup>ci</sup> <sub>22</sub>	17.506 <sup>ce</sup> <sub>44</sub>	57.40 <sup>ci</sup> <sub>276</sub>
18	9.831 <sup>ci</sup> <sub>180</sub>	69.22 <sup>ci</sup> <sub>286</sub>	27.928 <sup>ci</sup> <sub>65</sub>	74.97 <sup>ck</sup> <sub>188</sub>	62.508 <sup>cd</sup> <sub>34</sub>	51.03 <sup>ci</sup> <sub>6</sub>	17.462 <sup>ce</sup> <sub>95</sub>	60.16 <sup>ci</sup> <sub>250</sub>
28	9.651 <sup>ck</sup> <sub>239</sub>	72.08 <sup>ck</sup> <sub>254</sub>	27.863 <sup>ck</sup> <sub>105</sub>	76.85 <sup>cl</sup> <sub>160</sub>	62.474 <sup>cd</sup> <sub>73</sub>	50.97 <sup>ck</sup> <sub>8</sub>	17.367 <sup>ce</sup> <sub>139</sub>	62.66 <sup>ck</sup> <sub>219</sub>
Sept. 7	9.412 <sup>cl</sup> <sub>289</sub>	74.62 <sup>cl</sup> <sub>217</sub>	27.758 <sup>cl</sup> <sub>139</sub>	78.45 <sup>cm</sup> <sub>129</sub>	62.401 <sup>cd</sup> <sub>108</sub>	51.05 <sup>cl</sup> <sub>20</sub>	17.228 <sup>ce</sup> <sub>179</sub>	64.85 <sup>cl</sup> <sub>184</sub>
17	9.123 <sup>cm</sup> <sub>329</sub>	76.79 <sup>cm</sup> <sub>174</sub>	27.619 <sup>cm</sup> <sub>165</sub>	79.74 <sup>cn</sup> <sub>96</sub>	62.293 <sup>cd</sup> <sub>134</sub>	51.25 <sup>cm</sup> <sub>29</sub>	17.049 <sup>ce</sup> <sub>210</sub>	66.69 <sup>cm</sup> <sub>146</sub>
27	8.794 <sup>cn</sup> <sub>358</sub>	78.53 <sup>cn</sup> <sub>127</sub>	27.454 <sup>cn</sup> <sub>184</sub>	80.70 <sup>co</sup> <sub>60</sub>	62.159 <sup>cd</sup> <sub>153</sub>	51.54 <sup>cn</sup> <sub>35</sub>	16.839 <sup>ce</sup> <sub>232</sub>	68.15 <sup>cn</sup> <sub>103</sub>
Okt. 7	8.436 <sup>co</sup> <sub>375</sub>	79.80 <sup>co</sup> <sub>77</sub>	27.270 <sup>co</sup> <sub>193</sub>	81.30 <sup>cp</sup> <sub>23</sub>	62.006 <sup>cd</sup> <sub>162</sub>	51.89 <sup>co</sup> <sub>41</sub>	16.607 <sup>ce</sup> <sub>246</sub>	69.18 <sup>co</sup> <sub>59</sub>
17	8.061 <sup>cp</sup> <sub>381</sub>	80.57 <sup>cp</sup> <sub>25</sub>	27.077 <sup>cp</sup> <sub>194</sub>	81.53 <sup>cq</sup> <sub>14</sub>	61.844 <sup>cd</sup> <sub>161</sub>	52.30 <sup>cp</sup> <sub>44</sub>	16.361 <sup>ce</sup> <sub>248</sub>	69.77 <sup>cp</sup> <sub>12</sub>
27	7.680 <sup>cq</sup> <sub>373</sub>	80.82 <sup>cq</sup> <sub>30</sub>	26.883 <sup>cq</sup> <sub>185</sub>	81.39 <sup>cr</sup> <sub>51</sub>	61.683 <sup>cd</sup> <sub>151</sub>	52.74 <sup>cq</sup> <sub>46</sub>	16.113 <sup>ce</sup> <sub>242</sub>	69.89 <sup>cq</sup> <sub>36</sub>
Nov. 6	7.307 <sup>cr</sup> <sub>354</sub>	80.52 <sup>cr</sup> <sub>85</sub>	26.698 <sup>cr</sup> <sub>168</sub>	80.88 <sup>cs</sup> <sub>89</sub>	61.532 <sup>cd</sup> <sub>133</sub>	53.20 <sup>cr</sup> <sub>47</sub>	15.871 <sup>ce</sup> <sub>226</sub>	69.53 <sup>cr</sup> <sub>84</sub>
16	6.953 <sup>cs</sup> <sub>324</sub>	79.67 <sup>cs</sup> <sub>139</sub>	26.530 <sup>cs</sup> <sub>144</sub>	79.99 <sup>ct</sup> <sub>124</sub>	61.399 <sup>cd</sup> <sub>107</sub>	53.67 <sup>cs</sup> <sub>48</sub>	15.645 <sup>ce</sup> <sub>203</sub>	68.69 <sup>cs</sup> <sub>131</sub>
26	6.629 <sup>ct</sup> <sub>283</sub>	78.28 <sup>ct</sup> <sub>190</sub>	26.386 <sup>ct</sup> <sub>115</sub>	78.75 <sup>cu</sup> <sub>157</sub>	61.292 <sup>cd</sup> <sub>76</sub>	54.15 <sup>ct</sup> <sub>48</sub>	15.442 <sup>ce</sup> <sub>171</sub>	67.38 <sup>ct</sup> <sub>174</sub>
Dez. 6	6.346 <sup>cu</sup> <sub>232</sub>	76.38 <sup>cu</sup> <sub>237</sub>	26.271 <sup>cu</sup> <sub>81</sub>	77.18 <sup>cv</sup> <sub>187</sub>	61.216 <sup>cd</sup> <sub>42</sub>	54.63 <sup>cu</sup> <sub>47</sub>	15.271 <sup>ce</sup> <sub>134</sub>	65.64 <sup>cu</sup> <sub>214</sub>
16	6.114 <sup>cv</sup> <sub>176</sub>	74.01 <sup>cv</sup> <sub>276</sub>	26.190 <sup>cv</sup> <sub>44</sub>	75.31 <sup>cw</sup> <sub>211</sub>	61.174 <sup>cd</sup> <sub>6</sub>	55.10 <sup>cv</sup> <sub>46</sub>	15.137 <sup>ce</sup> <sub>92</sub>	63.50 <sup>cv</sup> <sub>249</sub>
26	5.938 <sup>cw</sup> <sub>112</sub>	71.25 <sup>cw</sup> <sub>308</sub>	26.146 <sup>cw</sup> <sub>6</sub>	73.20 <sup>cx</sup> <sub>229</sub>	61.168 <sup>cd</sup> <sub>32</sub>	55.56 <sup>cw</sup> <sub>43</sub>	15.045 <sup>ce</sup> <sub>48</sub>	61.01 <sup>cw</sup> <sub>274</sub>
36	5.826 <sup>cx</sup>	68.17 <sup>cx</sup>	26.140 <sup>cx</sup>	70.91 <sup>cy</sup>	61.200 <sup>cd</sup>	55.99 <sup>cx</sup>	14.997 <sup>ce</sup>	58.27 <sup>cx</sup>
Mittl. Ort	7.170	55.84	25.786	62.08	60.236	60.28	15.170	46.91
sec $\delta$ , tg $\delta$	1.807	+1.505	1.099	+0.456	1.025	-0.226	1.307	+0.842
a, a'	+1.4	+10.9	+2.6	+11.1	+3.3	+11.1	+2.2	+11.5
b, b'	+0.05	+0.84	+0.02	+0.83	-0.01	+0.83	+0.03	+0.82



Tag	764) α Pavonis		1535) 42 Cygni		767) ♀ Cephei		768) ε Delphini	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	20 <sup>h</sup> 21 <sup>m</sup>	-56° 54'	20 <sup>h</sup> 27 <sup>m</sup>	+36° 15'	20 <sup>h</sup> 28 <sup>m</sup>	+62° 48'	20 <sup>h</sup> 30 <sup>m</sup>	+11° 6'
Jan. I	14.574 <sup>a</sup> <sub>47</sub>	56.49 <sup>b</sup> <sub>215</sub>	12.292 <sup>a</sup> <sub>20</sub>	75.85 <sup>b</sup> <sub>272</sub>	36.96 <sup>a</sup> <sub>15</sub>	38.34 <sup>b</sup> <sub>316</sub>	32.959 <sup>a</sup> <sub>18</sub>	53.88 <sup>b</sup> <sub>169</sub>
II	14.621 <sup>a</sup> <sub>116</sub>	54.34 <sup>b</sup> <sub>229</sub>	12.272 <sup>a</sup> <sub>25</sub>	73.13 <sup>b</sup> <sub>282</sub>	36.81 <sup>a</sup> <sub>6</sub>	35.18 <sup>b</sup> <sub>337</sub>	32.977 <sup>a</sup> <sub>52</sub>	52.19 <sup>b</sup> <sub>171</sub>
2I	14.737 <sup>a</sup> <sub>180</sub>	52.05 <sup>b</sup> <sub>235</sub>	12.297 <sup>a</sup> <sub>68</sub>	70.31 <sup>b</sup> <sub>282</sub>	36.75 <sup>a</sup> <sub>2</sub>	31.81 <sup>b</sup> <sub>343</sub>	33.029 <sup>a</sup> <sub>87</sub>	50.48 <sup>b</sup> <sub>165</sub>
3I	14.917 <sup>a</sup> <sub>240</sub>	49.70 <sup>b</sup> <sub>236</sub>	12.365 <sup>a</sup> <sub>112</sub>	67.49 <sup>b</sup> <sub>272</sub>	36.77 <sup>a</sup> <sub>10</sub>	28.38 <sup>b</sup> <sub>337</sub>	33.116 <sup>a</sup> <sub>119</sub>	48.83 <sup>b</sup> <sub>153</sub>
Febr. 10	15.157 <sup>a</sup> <sub>296</sub>	47.34 <sup>b</sup> <sub>232</sub>	12.477 <sup>a</sup> <sub>154</sub>	64.77 <sup>b</sup> <sub>249</sub>	36.87 <sup>a</sup> <sub>19</sub>	25.01 <sup>b</sup> <sub>319</sub>	33.235 <sup>a</sup> <sub>150</sub>	47.30 <sup>b</sup> <sub>133</sub>
20	15.453 <sup>a</sup> <sub>346</sub>	45.02 <sup>b</sup> <sub>223</sub>	12.631 <sup>a</sup> <sub>193</sub>	62.28 <sup>b</sup> <sub>217</sub>	37.06 <sup>a</sup> <sub>27</sub>	21.82 <sup>b</sup> <sub>288</sub>	33.385 <sup>a</sup> <sub>179</sub>	45.97 <sup>b</sup> <sub>106</sub>
März 2	15.799 <sup>a</sup> <sub>390</sub>	42.79 <sup>b</sup> <sub>210</sub>	12.824 <sup>a</sup> <sub>229</sub>	60.11 <sup>b</sup> <sub>177</sub>	37.33 <sup>a</sup> <sub>34</sub>	18.94 <sup>b</sup> <sub>246</sub>	33.564 <sup>a</sup> <sub>207</sub>	44.91 <sup>b</sup> <sub>76</sub>
12	16.189 <sup>a</sup> <sub>430</sub>	40.69 <sup>b</sup> <sub>192</sub>	13.053 <sup>a</sup> <sub>262</sub>	58.34 <sup>b</sup> <sub>129</sub>	37.67 <sup>a</sup> <sub>41</sub>	16.48 <sup>b</sup> <sub>195</sub>	33.771 <sup>a</sup> <sub>233</sub>	44.15 <sup>b</sup> <sub>40</sub>
22	16.619 <sup>a</sup> <sub>462</sub>	38.77 <sup>b</sup> <sub>171</sub>	13.315 <sup>a</sup> <sub>290</sub>	57.05 <sup>b</sup> <sub>76</sub>	38.08 <sup>a</sup> <sub>45</sub>	14.53 <sup>b</sup> <sub>138</sub>	34.004 <sup>a</sup> <sub>254</sub>	43.75 <sup>b</sup> <sub>2</sub>
Apr. I	17.081 <sup>a</sup> <sub>489</sub>	37.06 <sup>b</sup> <sub>147</sub>	13.605 <sup>a</sup> <sub>311</sub>	56.29 <sup>b</sup> <sub>21</sub>	38.53 <sup>a</sup> <sub>49</sub>	13.15 <sup>b</sup> <sub>75</sub>	34.258 <sup>a</sup> <sub>274</sub>	43.73 <sup>b</sup> <sub>37</sub>
II	17.570 <sup>a</sup> <sub>507</sub>	35.59 <sup>b</sup> <sub>119</sub>	13.916 <sup>a</sup> <sub>327</sub>	56.08 <sup>b</sup> <sub>35</sub>	39.02 <sup>a</sup> <sub>51</sub>	12.40 <sup>b</sup> <sub>10</sub>	34.532 <sup>a</sup> <sub>288</sub>	44.10 <sup>b</sup> <sub>75</sub>
2I	18.077 <sup>a</sup> <sub>519</sub>	34.40 <sup>b</sup> <sub>88</sub>	14.243 <sup>a</sup> <sub>335</sub>	56.43 <sup>b</sup> <sub>88</sub>	39.53 <sup>a</sup> <sub>53</sub>	12.30 <sup>b</sup> <sub>52</sub>	34.820 <sup>a</sup> <sub>297</sub>	44.85 <sup>b</sup> <sub>111</sub>
Mai I	18.596 <sup>a</sup> <sub>520</sub>	33.52 <sup>b</sup> <sub>56</sub>	14.578 <sup>a</sup> <sub>336</sub>	57.31 <sup>b</sup> <sub>139</sub>	40.06 <sup>a</sup> <sub>51</sub>	12.82 <sup>b</sup> <sub>114</sub>	35.117 <sup>a</sup> <sub>300</sub>	45.96 <sup>b</sup> <sub>141</sub>
II	19.116 <sup>a</sup> <sub>512</sub>	32.96 <sup>b</sup> <sub>21</sub>	14.914 <sup>a</sup> <sub>328</sub>	58.70 <sup>b</sup> <sub>185</sub>	40.57 <sup>a</sup> <sub>49</sub>	13.96 <sup>b</sup> <sub>171</sub>	35.417 <sup>a</sup> <sub>298</sub>	47.37 <sup>b</sup> <sub>169</sub>
2I	19.628 <sup>a</sup> <sub>494</sub>	32.75 <sup>b</sup> <sub>14</sub>	15.242 <sup>a</sup> <sub>311</sub>	60.55 <sup>b</sup> <sub>223</sub>	41.06 <sup>a</sup> <sub>46</sub>	15.67 <sup>b</sup> <sub>220</sub>	35.715 <sup>a</sup> <sub>288</sub>	49.06 <sup>b</sup> <sub>190</sub>
3I	20.122 <sup>a</sup> <sub>463</sub>	32.89 <sup>b</sup> <sub>50</sub>	15.553 <sup>a</sup> <sub>287</sub>	62.78 <sup>b</sup> <sub>256</sub>	41.52 <sup>a</sup> <sub>41</sub>	17.87 <sup>b</sup> <sub>264</sub>	36.003 <sup>a</sup> <sub>270</sub>	50.96 <sup>b</sup> <sub>204</sub>
Juni 10	20.585 <sup>a</sup> <sub>423</sub>	33.39 <sup>b</sup> <sub>84</sub>	15.840 <sup>a</sup> <sub>256</sub>	65.34 <sup>b</sup> <sub>279</sub>	41.93 <sup>a</sup> <sub>34</sub>	20.51 <sup>b</sup> <sub>299</sub>	36.273 <sup>a</sup> <sub>247</sub>	53.00 <sup>b</sup> <sub>213</sub>
20	21.008 <sup>a</sup> <sub>371</sub>	34.23 <sup>b</sup> <sub>117</sub>	16.096 <sup>a</sup> <sub>218</sub>	68.13 <sup>b</sup> <sub>296</sub>	42.27 <sup>a</sup> <sub>28</sub>	23.50 <sup>b</sup> <sub>326</sub>	36.520 <sup>a</sup> <sub>218</sub>	55.13 <sup>b</sup> <sub>216</sub>
30	21.379 <sup>a</sup> <sub>310</sub>	35.40 <sup>b</sup> <sub>146</sub>	16.314 <sup>a</sup> <sub>174</sub>	71.09 <sup>b</sup> <sub>304</sub>	42.55 <sup>a</sup> <sub>21</sub>	26.76 <sup>b</sup> <sub>343</sub>	36.738 <sup>a</sup> <sub>182</sub>	57.29 <sup>b</sup> <sub>213</sub>
Juli 10	21.689 <sup>a</sup> <sub>242</sub>	36.86 <sup>b</sup> <sub>170</sub>	16.488 <sup>a</sup> <sub>126</sub>	74.13 <sup>b</sup> <sub>305</sub>	42.76 <sup>a</sup> <sub>12</sub>	30.19 <sup>b</sup> <sub>353</sub>	36.920 <sup>a</sup> <sub>141</sub>	59.42 <sup>b</sup> <sub>205</sub>
20	21.931 <sup>a</sup> <sub>168</sub>	38.56 <sup>b</sup> <sub>190</sub>	16.614 <sup>a</sup> <sub>75</sub>	77.18 <sup>b</sup> <sub>299</sub>	42.88 <sup>a</sup> <sub>3</sub>	33.72 <sup>b</sup> <sub>354</sub>	37.061 <sup>a</sup> <sub>99</sub>	61.47 <sup>b</sup> <sub>192</sub>
29*)	22.099 <sup>a</sup> <sub>89</sub>	40.46 <sup>b</sup> <sub>204</sub>	16.689 <sup>a</sup> <sub>23</sub>	80.17 <sup>b</sup> <sub>285</sub>	42.91 <sup>a</sup> <sub>4</sub>	37.26 <sup>b</sup> <sub>346</sub>	37.160 <sup>a</sup> <sub>54</sub>	63.39 <sup>b</sup> <sub>176</sub>
Aug. 8	22.188 <sup>a</sup> <sub>10</sub>	42.50 <sup>b</sup> <sub>209</sub>	16.712 <sup>a</sup> <sub>27</sub>	83.02 <sup>b</sup> <sub>266</sub>	42.87 <sup>a</sup> <sub>13</sub>	40.72 <sup>b</sup> <sub>332</sub>	37.214 <sup>a</sup> <sub>9</sub>	65.15 <sup>b</sup> <sub>155</sub>
18	22.198 <sup>a</sup> <sub>66</sub>	44.59 <sup>b</sup> <sub>208</sub>	16.685 <sup>a</sup> <sub>76</sub>	85.68 <sup>b</sup> <sub>242</sub>	42.74 <sup>a</sup> <sub>21</sub>	44.04 <sup>b</sup> <sub>309</sub>	37.223 <sup>a</sup> <sub>33</sub>	66.70 <sup>b</sup> <sub>134</sub>
28	22.132 <sup>a</sup> <sub>138</sub>	46.67 <sup>b</sup> <sub>199</sub>	16.609 <sup>a</sup> <sub>121</sub>	88.10 <sup>b</sup> <sub>212</sub>	42.53 <sup>a</sup> <sub>28</sub>	47.13 <sup>b</sup> <sub>281</sub>	37.190 <sup>a</sup> <sub>73</sub>	68.04 <sup>b</sup> <sub>109</sub>
Sept. 7	21.994 <sup>a</sup> <sub>200</sub>	48.66 <sup>b</sup> <sub>181</sub>	16.488 <sup>a</sup> <sub>158</sub>	90.22 <sup>b</sup> <sub>178</sub>	42.25 <sup>a</sup> <sub>33</sub>	49.94 <sup>b</sup> <sub>245</sub>	37.117 <sup>a</sup> <sub>107</sub>	69.13 <sup>b</sup> <sub>85</sub>
17	21.794 <sup>a</sup> <sub>252</sub>	50.47 <sup>b</sup> <sub>156</sub>	16.330 <sup>a</sup> <sub>190</sub>	92.00 <sup>b</sup> <sub>141</sub>	41.92 <sup>a</sup> <sub>39</sub>	52.39 <sup>b</sup> <sub>205</sub>	37.010 <sup>a</sup> <sub>134</sub>	69.98 <sup>b</sup> <sub>58</sub>
27	21.542 <sup>a</sup> <sub>290</sub>	52.03 <sup>b</sup> <sub>125</sub>	16.140 <sup>a</sup> <sub>212</sub>	93.41 <sup>b</sup> <sub>101</sub>	41.53 <sup>a</sup> <sub>43</sub>	54.44 <sup>b</sup> <sub>160</sub>	36.876 <sup>a</sup> <sub>153</sub>	70.56 <sup>b</sup> <sub>32</sub>
Okt. 7	21.252 <sup>a</sup> <sub>311</sub>	53.28 <sup>b</sup> <sub>88</sub>	15.928 <sup>a</sup> <sub>225</sub>	94.42 <sup>b</sup> <sub>58</sub>	41.10 <sup>a</sup> <sub>46</sub>	56.04 <sup>b</sup> <sub>111</sub>	36.723 <sup>a</sup> <sub>164</sub>	70.88 <sup>b</sup> <sub>5</sub>
17	20.941 <sup>a</sup> <sub>317</sub>	54.16 <sup>b</sup> <sub>47</sub>	15.703 <sup>a</sup> <sub>229</sub>	95.00 <sup>b</sup> <sub>14</sub>	40.64 <sup>a</sup> <sub>47</sub>	57.15 <sup>b</sup> <sub>57</sub>	36.559 <sup>a</sup> <sub>166</sub>	70.93 <sup>b</sup> <sub>20</sub>
27	20.624 <sup>a</sup> <sub>306</sub>	54.63 <sup>b</sup> <sub>5</sub>	15.474 <sup>a</sup> <sub>223</sub>	95.14 <sup>b</sup> <sub>32</sub>	40.17 <sup>a</sup> <sub>47</sub>	57.72 <sup>b</sup> <sub>2</sub>	36.393 <sup>a</sup> <sub>160</sub>	70.73 <sup>b</sup> <sub>47</sub>
Nov. 6	20.318 <sup>a</sup> <sub>279</sub>	54.68 <sup>b</sup> <sub>39</sub>	15.251 <sup>a</sup> <sub>210</sub>	94.82 <sup>b</sup> <sub>78</sub>	39.70 <sup>a</sup> <sub>46</sub>	57.74 <sup>b</sup> <sub>55</sub>	36.233 <sup>a</sup> <sub>146</sub>	70.26 <sup>b</sup> <sub>72</sub>
16	20.039 <sup>a</sup> <sub>238</sub>	54.29 <sup>b</sup> <sub>80</sub>	15.041 <sup>a</sup> <sub>187</sub>	94.04 <sup>b</sup> <sub>122</sub>	39.24 <sup>a</sup> <sub>42</sub>	57.19 <sup>b</sup> <sub>112</sub>	36.087 <sup>a</sup> <sub>125</sub>	69.54 <sup>b</sup> <sub>96</sub>
26	19.801 <sup>a</sup> <sub>186</sub>	53.49 <sup>b</sup> <sub>119</sub>	14.854 <sup>a</sup> <sub>158</sub>	92.82 <sup>b</sup> <sub>164</sub>	38.82 <sup>a</sup> <sub>39</sub>	56.07 <sup>b</sup> <sub>166</sub>	35.962 <sup>a</sup> <sub>99</sub>	68.58 <sup>b</sup> <sub>118</sub>
Dez. 6	19.615 <sup>a</sup> <sub>125</sub>	52.30 <sup>b</sup> <sub>154</sub>	14.696 <sup>a</sup> <sub>124</sub>	91.18 <sup>b</sup> <sub>202</sub>	38.43 <sup>a</sup> <sub>33</sub>	54.41 <sup>b</sup> <sub>217</sub>	35.863 <sup>a</sup> <sub>68</sub>	67.40 <sup>b</sup> <sub>137</sub>
16	19.490 <sup>a</sup> <sub>59</sub>	50.76 <sup>b</sup> <sub>183</sub>	14.572 <sup>a</sup> <sub>85</sub>	89.16 <sup>b</sup> <sub>234</sub>	38.10 <sup>a</sup> <sub>26</sub>	52.24 <sup>b</sup> <sub>261</sub>	35.795 <sup>a</sup> <sub>35</sub>	66.03 <sup>b</sup> <sub>153</sub>
26	19.431 <sup>a</sup> <sub>10</sub>	48.93 <sup>b</sup> <sub>205</sub>	14.487 <sup>a</sup> <sub>44</sub>	86.82 <sup>b</sup> <sub>260</sub>	37.84 <sup>a</sup> <sub>20</sub>	49.63 <sup>b</sup> <sub>298</sub>	35.760 <sup>a</sup> <sub>1</sub>	64.50 <sup>b</sup> <sub>164</sub>
36	19.441 <sup>a</sup>	46.88 <sup>b</sup>	14.443 <sup>a</sup>	84.22 <sup>b</sup>	37.64 <sup>a</sup>	46.65 <sup>b</sup>	35.759 <sup>a</sup>	62.86 <sup>b</sup>
Mittl. Ort	18.525	47.46	14.420	72.67	39.66	31.82	35.064	54.70
sec δ, tg δ	1.832	-1.535	1.240	+0.734	2.188	+1.947	1.019	+0.197
a, a'	+4.7	+11.6	+2.3	+12.0	+1.0	+12.1	+2.9	+12.2
b, b'	-0.06	+0.82	+0.03	+0.80	+0.08	+0.80	+0.01	+0.79

\*) Bei Stern 768) lies Juli 30.



Tag	770) 73 Draconis		769) $\alpha$ Indi		1539) 29 Vulpeculae		773) $\nu$ Capricorni	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	20 <sup>h</sup> 32 <sup>m</sup>	+74° 45'	20 <sup>h</sup> 33 <sup>m</sup>	-47° 28'	20 <sup>h</sup> 36 <sup>m</sup>	+21° 0'	20 <sup>h</sup> 36 <sup>m</sup>	-18° 19'
Jan. I	11.52 <sup>36</sup>	67.08 <sup>311</sup>	39.149 <sup>34</sup>	74.91 <sup>165</sup>	1.770 <sup>1</sup>	26.26 <sup>212</sup>	52.859 <sup>33</sup>	67.10 <sup>5</sup>
II	11.16 <sup>21</sup>	63.97 <sup>334</sup>	39.183 <sup>88</sup>	73.26 <sup>180</sup>	1.771 <sup>37</sup>	24.14 <sup>217</sup>	52.892 <sup>68</sup>	67.15 <sup>4</sup>
2I	10.95 <sup>5</sup>	60.63 <sup>346</sup>	39.271 <sup>137</sup>	71.46 <sup>190</sup>	1.808 <sup>73</sup>	21.97 <sup>215</sup>	52.960 <sup>101</sup>	67.11 <sup>15</sup>
3I	10.90 <sup>10</sup>	57.17 <sup>344</sup>	39.408 <sup>186</sup>	69.56 <sup>195</sup>	1.881 <sup>108</sup>	19.82 <sup>203</sup>	53.061 <sup>135</sup>	66.96 <sup>25</sup>
Febr. 10	11.00 <sup>25</sup>	53.73 <sup>329</sup>	39.594 <sup>230</sup>	67.61 <sup>198</sup>	1.989 <sup>142</sup>	17.79 <sup>183</sup>	53.196 <sup>165</sup>	66.71 <sup>38</sup>
20	11.25 <sup>40</sup>	50.44 <sup>302</sup>	39.824 <sup>271</sup>	65.63 <sup>196</sup>	2.131 <sup>175</sup>	15.96 <sup>155</sup>	53.361 <sup>194</sup>	66.33 <sup>52</sup>
März 2	11.65 <sup>53</sup>	47.42 <sup>263</sup>	40.095 <sup>307</sup>	63.67 <sup>190</sup>	2.306 <sup>206</sup>	14.41 <sup>120</sup>	53.555 <sup>221</sup>	65.81 <sup>67</sup>
12	12.18 <sup>65</sup>	44.79 <sup>214</sup>	40.402 <sup>342</sup>	61.77 <sup>182</sup>	2.512 <sup>233</sup>	13.21 <sup>79</sup>	53.776 <sup>247</sup>	65.14 <sup>81</sup>
22	12.83 <sup>73</sup>	42.65 <sup>158</sup>	40.744 <sup>371</sup>	59.95 <sup>170</sup>	2.745 <sup>258</sup>	12.42 <sup>35</sup>	54.023 <sup>269</sup>	64.33 <sup>95</sup>
Apr. I	13.56 <sup>80</sup>	41.07 <sup>97</sup>	41.115 <sup>395</sup>	58.25 <sup>154</sup>	3.003 <sup>279</sup>	12.07 <sup>11</sup>	54.292 <sup>288</sup>	63.38 <sup>108</sup>
II	14.36 <sup>83</sup>	40.10 <sup>33</sup>	41.510 <sup>414</sup>	56.71 <sup>136</sup>	3.282 <sup>295</sup>	12.18 <sup>56</sup>	54.580 <sup>304</sup>	62.30 <sup>118</sup>
2I	15.19 <sup>85</sup>	39.77 <sup>31</sup>	41.924 <sup>428</sup>	55.35 <sup>113</sup>	3.577 <sup>304</sup>	12.74 <sup>100</sup>	54.884 <sup>315</sup>	61.12 <sup>124</sup>
Mai I	16.04 <sup>83</sup>	40.08 <sup>93</sup>	42.352 <sup>432</sup>	54.22 <sup>88</sup>	3.881 <sup>309</sup>	13.74 <sup>141</sup>	55.199 <sup>321</sup>	59.88 <sup>127</sup>
II	16.87 <sup>79</sup>	41.01 <sup>151</sup>	42.784 <sup>430</sup>	53.34 <sup>61</sup>	4.190 <sup>305</sup>	15.15 <sup>175</sup>	55.520 <sup>320</sup>	58.61 <sup>126</sup>
2I	17.66 <sup>72</sup>	42.52 <sup>204</sup>	43.214 <sup>418</sup>	52.73 <sup>31</sup>	4.495 <sup>294</sup>	16.90 <sup>205</sup>	55.840 <sup>313</sup>	57.35 <sup>122</sup>
3I	18.38 <sup>63</sup>	44.56 <sup>249</sup>	43.632 <sup>397</sup>	52.42 <sup>1</sup>	4.789 <sup>277</sup>	18.95 <sup>227</sup>	56.153 <sup>299</sup>	56.13 <sup>112</sup>
Juni 10	19.01 <sup>53</sup>	47.05 <sup>288</sup>	44.029 <sup>367</sup>	52.43 <sup>31</sup>	5.066 <sup>251</sup>	21.22 <sup>243</sup>	56.452 <sup>276</sup>	55.01 <sup>99</sup>
20	19.54 <sup>40</sup>	49.93 <sup>317</sup>	44.396 <sup>326</sup>	52.74 <sup>62</sup>	5.317 <sup>221</sup>	23.65 <sup>253</sup>	56.728 <sup>247</sup>	54.02 <sup>84</sup>
30	19.94 <sup>28</sup>	53.10 <sup>338</sup>	44.722 <sup>279</sup>	53.36 <sup>90</sup>	5.538 <sup>183</sup>	26.18 <sup>254</sup>	56.975 <sup>212</sup>	53.18 <sup>67</sup>
Juli 10	20.22 <sup>14</sup>	56.48 <sup>352</sup>	45.001 <sup>224</sup>	54.26 <sup>117</sup>	5.721 <sup>142</sup>	28.72 <sup>251</sup>	57.187 <sup>172</sup>	52.51 <sup>48</sup>
20	20.36 <sup>1</sup>	60.00 <sup>356</sup>	45.225 <sup>163</sup>	55.43 <sup>139</sup>	5.863 <sup>97</sup>	31.23 <sup>241</sup>	57.359 <sup>127</sup>	52.03 <sup>28</sup>
30	20.35 <sup>14</sup>	63.56 <sup>353</sup>	45.388 <sup>99</sup>	56.82 <sup>155</sup>	5.960 <sup>51</sup>	33.64 <sup>226</sup>	57.486 <sup>81</sup>	51.75 <sup>10</sup>
Aug. 8	20.21 <sup>28</sup>	67.09 <sup>341</sup>	45.487 <sup>34</sup>	58.37 <sup>167</sup>	6.011 <sup>5</sup>	35.90 <sup>206</sup>	57.567 <sup>33</sup>	51.65 <sup>8</sup>
18	19.93 <sup>41</sup>	70.50 <sup>322</sup>	45.521 <sup>29</sup>	60.04 <sup>172</sup>	6.016 <sup>39</sup>	37.96 <sup>183</sup>	57.600 <sup>13</sup>	51.73 <sup>23</sup>
28	19.52 <sup>52</sup>	73.72 <sup>296</sup>	45.492 <sup>89</sup>	61.76 <sup>169</sup>	5.977 <sup>80</sup>	39.79 <sup>157</sup>	57.587 <sup>56</sup>	51.96 <sup>37</sup>
Sept. 7	19.00 <sup>63</sup>	76.68 <sup>264</sup>	45.493 <sup>142</sup>	63.45 <sup>160</sup>	5.897 <sup>116</sup>	41.36 <sup>128</sup>	57.531 <sup>93</sup>	52.33 <sup>46</sup>
17	18.37 <sup>72</sup>	79.32 <sup>226</sup>	45.261 <sup>185</sup>	65.05 <sup>144</sup>	5.781 <sup>144</sup>	42.64 <sup>97</sup>	57.438 <sup>124</sup>	52.79 <sup>52</sup>
27	17.65 <sup>79</sup>	81.58 <sup>182</sup>	45.076 <sup>218</sup>	66.49 <sup>122</sup>	5.637 <sup>164</sup>	43.61 <sup>65</sup>	57.314 <sup>146</sup>	53.31 <sup>55</sup>
Okt. 7	16.86 <sup>84</sup>	83.40 <sup>133</sup>	44.858 <sup>237</sup>	67.71 <sup>94</sup>	5.473 <sup>177</sup>	44.26 <sup>31</sup>	57.168 <sup>159</sup>	53.86 <sup>56</sup>
17	16.02 <sup>88</sup>	84.73 <sup>81</sup>	44.621 <sup>244</sup>	68.65 <sup>63</sup>	5.296 <sup>181</sup>	44.57 <sup>3</sup>	57.009 <sup>162</sup>	54.42 <sup>53</sup>
27	15.14 <sup>88</sup>	85.54 <sup>25</sup>	44.377 <sup>237</sup>	69.28 <sup>28</sup>	5.115 <sup>176</sup>	44.54 <sup>38</sup>	56.847 <sup>156</sup>	54.95 <sup>50</sup>
Nov. 6	14.26 <sup>86</sup>	85.79 <sup>33</sup>	44.140 <sup>217</sup>	69.56 <sup>7</sup>	4.939 <sup>163</sup>	44.16 <sup>71</sup>	56.691 <sup>141</sup>	55.45 <sup>43</sup>
16	13.40 <sup>82</sup>	85.46 <sup>91</sup>	43.923 <sup>186</sup>	69.49 <sup>42</sup>	4.776 <sup>143</sup>	43.45 <sup>104</sup>	56.550 <sup>119</sup>	55.88 <sup>37</sup>
26	12.58 <sup>77</sup>	84.55 <sup>147</sup>	43.737 <sup>145</sup>	69.07 <sup>76</sup>	4.633 <sup>117</sup>	42.41 <sup>136</sup>	56.431 <sup>91</sup>	56.25 <sup>31</sup>
Dez. 6	11.81 <sup>67</sup>	83.08 <sup>201</sup>	43.592 <sup>99</sup>	68.31 <sup>106</sup>	4.516 <sup>88</sup>	41.05 <sup>163</sup>	56.340 <sup>58</sup>	56.56 <sup>23</sup>
16	11.14 <sup>57</sup>	81.07 <sup>249</sup>	43.493 <sup>48</sup>	67.25 <sup>132</sup>	4.428 <sup>54</sup>	39.42 <sup>186</sup>	56.282 <sup>23</sup>	56.79 <sup>17</sup>
26	10.57 <sup>45</sup>	78.58 <sup>289</sup>	43.445 <sup>5</sup>	65.93 <sup>155</sup>	4.374 <sup>19</sup>	37.56 <sup>203</sup>	56.259 <sup>14</sup>	56.96 <sup>8</sup>
36	10.12	75.69	43.450	64.38	4.355	35.53	56.273	57.04
Mittl. Ort sec $\delta$ , tg $\delta$	15.33 3.806	59.40 +3.672	42.402 1.480	65.46 -1.091	3.834 1.071	25.45 +0.384	55.235 1.054	61.17 -0.331
a, a'	-0.8	+12.4	+4.2	+12.5	+2.7	+12.6	+3.4	+12.7
b, b'	+0.15	+0.79	-0.05	+0.78	+0.02	+0.78	-0.01	+0.77



# Obere Kulmination Greenwich

161\*

Tag	774) $\alpha$ Delphini		777) $\alpha$ Cygni		775) $\beta$ Pavonis		780) $\epsilon$ Cygni	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	20 <sup>h</sup> 37 <sup>m</sup>	+15° 42'	20 <sup>h</sup> 39 <sup>m</sup>	+45° 4'	20 <sup>h</sup> 39 <sup>m</sup>	-66° 23'	20 <sup>h</sup> 43 <sup>m</sup>	+33° 45'
Jan. I	2.864 <sup>a</sup> 7	60.76 <sup>b</sup> 188	31.151 <sup>a</sup> 59	63.47 <sup>b</sup> 287	56.65 <sup>a</sup> 1	81.33 <sup>b</sup> 258	56.976 <sup>a</sup> 31	50.86 <sup>b</sup> 254
II	2.871 <sup>a</sup> 42	58.88 <sup>b</sup> 192	31.092 <sup>a</sup> 10	60.60 <sup>b</sup> 303	56.64 <sup>a</sup> 8	78.75 <sup>b</sup> 275	56.945 <sup>a</sup> 11	48.32 <sup>b</sup> 265
2I	2.913 <sup>a</sup> 76	56.96 <sup>b</sup> 188	31.082 <sup>a</sup> 42	57.57 <sup>b</sup> 307	56.72 <sup>a</sup> 17	76.00 <sup>b</sup> 285	56.956 <sup>a</sup> 52	45.67 <sup>b</sup> 268
3I	2.989 <sup>a</sup> 110	55.08 <sup>b</sup> 176	31.124 <sup>a</sup> 93	54.50 <sup>b</sup> 300	56.89 <sup>a</sup> 26	73.15 <sup>b</sup> 287	57.008 <sup>a</sup> 94	42.99 <sup>b</sup> 258
Febr. 10	3.099 <sup>a</sup> 142	53.32 <sup>b</sup> 157	31.217 <sup>a</sup> 142	51.50 <sup>b</sup> 281	57.15 <sup>a</sup> 34	70.28 <sup>b</sup> 283	57.102 <sup>a</sup> 134	40.41 <sup>b</sup> 240
20	3.241 <sup>a</sup> 174	51.75 <sup>b</sup> 129	31.359 <sup>a</sup> 191	48.69 <sup>b</sup> 251	57.49 <sup>a</sup> 41	67.45 <sup>b</sup> 272	57.236 <sup>a</sup> 174	38.01 <sup>b</sup> 211
März 2	3.415 <sup>a</sup> 203	50.46 <sup>b</sup> 96	31.550 <sup>a</sup> 236	46.18 <sup>b</sup> 211	57.90 <sup>a</sup> 48	64.73 <sup>b</sup> 255	57.410 <sup>a</sup> 210	35.90 <sup>b</sup> 172
12	3.618 <sup>a</sup> 229	49.50 <sup>b</sup> 59	31.786 <sup>a</sup> 276	44.07 <sup>b</sup> 162	58.38 <sup>a</sup> 53	62.18 <sup>b</sup> 234	57.620 <sup>a</sup> 244	34.18 <sup>b</sup> 128
22	3.847 <sup>a</sup> 253	48.91 <sup>b</sup> 18	32.062 <sup>a</sup> 310	42.45 <sup>b</sup> 109	58.91 <sup>a</sup> 59	59.84 <sup>b</sup> 208	57.864 <sup>a</sup> 274	32.90 <sup>b</sup> 79
Apr. I	4.100 <sup>a</sup> 274	48.73 <sup>b</sup> 24	32.372 <sup>a</sup> 338	41.36 <sup>b</sup> 51	59.50 <sup>a</sup> 63	57.76 <sup>b</sup> 177	58.138 <sup>a</sup> 298	32.11 <sup>b</sup> 25
II	4.374 <sup>a</sup> 289	48.97 <sup>b</sup> 66	32.710 <sup>a</sup> 358	40.85 <sup>b</sup> 9	60.13 <sup>a</sup> 65	55.99 <sup>b</sup> 143	58.436 <sup>a</sup> 316	31.86 <sup>b</sup> 28
2I	4.663 <sup>a</sup> 299	49.63 <sup>b</sup> 105	33.068 <sup>a</sup> 368	40.94 <sup>b</sup> 67	60.78 <sup>a</sup> 68	54.56 <sup>b</sup> 106	58.752 <sup>a</sup> 329	32.14 <sup>b</sup> 81
Mai I	4.962 <sup>a</sup> 304	50.68 <sup>b</sup> 141	33.436 <sup>a</sup> 370	41.61 <sup>b</sup> 123	61.46 <sup>a</sup> 69	53.50 <sup>b</sup> 66	59.081 <sup>a</sup> 332	32.95 <sup>b</sup> 131
II	5.266 <sup>a</sup> 301	52.09 <sup>b</sup> 172	33.806 <sup>a</sup> 363	42.84 <sup>b</sup> 174	62.15 <sup>a</sup> 67	52.84 <sup>b</sup> 24	59.413 <sup>a</sup> 328	34.26 <sup>b</sup> 175
2I	5.567 <sup>a</sup> 292	53.81 <sup>b</sup> 197	34.169 <sup>a</sup> 345	44.58 <sup>b</sup> 219	62.82 <sup>a</sup> 66	52.60 <sup>b</sup> 18	59.741 <sup>a</sup> 316	36.01 <sup>b</sup> 214
3I	5.859 <sup>a</sup> 275	55.78 <sup>b</sup> 215	34.514 <sup>a</sup> 318	46.77 <sup>b</sup> 257	63.48 <sup>a</sup> 62	52.78 <sup>b</sup> 60	60.057 <sup>a</sup> 296	38.15 <sup>b</sup> 247
Juni 10	6.134 <sup>a</sup> 251	57.93 <sup>b</sup> 228	34.832 <sup>a</sup> 283	49.34 <sup>b</sup> 287	64.10 <sup>a</sup> 57	53.38 <sup>b</sup> 100	60.353 <sup>a</sup> 268	40.62 <sup>b</sup> 270
20	6.385 <sup>a</sup> 222	60.21 <sup>b</sup> 234	35.115 <sup>a</sup> 241	52.21 <sup>b</sup> 309	64.67 <sup>a</sup> 51	54.38 <sup>b</sup> 139	60.621 <sup>a</sup> 233	43.32 <sup>b</sup> 288
30	6.607 <sup>a</sup> 186	62.55 <sup>b</sup> 234	35.356 <sup>a</sup> 192	55.30 <sup>b</sup> 323	65.18 <sup>a</sup> 43	55.77 <sup>b</sup> 173	60.854 <sup>a</sup> 192	46.20 <sup>b</sup> 297
Juli 10	6.793 <sup>a</sup> 145	64.89 <sup>b</sup> 228	35.548 <sup>a</sup> 139	58.53 <sup>b</sup> 329	65.61 <sup>a</sup> 34	57.50 <sup>b</sup> 202	61.046 <sup>a</sup> 146	49.17 <sup>b</sup> 300
20	6.938 <sup>a</sup> 101	67.17 <sup>b</sup> 216	35.687 <sup>a</sup> 83	61.82 <sup>b</sup> 326	66.95 <sup>a</sup> 24	59.52 <sup>b</sup> 225	61.192 <sup>a</sup> 98	52.17 <sup>b</sup> 294
30	7.039 <sup>a</sup> 57	69.33 <sup>b</sup> 201	35.770 <sup>a</sup> 25	65.08 <sup>b</sup> 317	66.19 <sup>a</sup> 14	61.77 <sup>b</sup> 241	61.290 <sup>a</sup> 47	55.11 <sup>b</sup> 283
Aug. 8	7.096 <sup>a</sup> 12	71.34 <sup>b</sup> 181	35.795 <sup>a</sup> 32	68.25 <sup>b</sup> 301	66.33 <sup>a</sup> 4	64.18 <sup>b</sup> 249	61.337 <sup>a</sup> 3	57.94 <sup>b</sup> 265
18	7.108 <sup>a</sup> 32	73.15 <sup>b</sup> 159	35.763 <sup>a</sup> 87	71.26 <sup>b</sup> 278	66.37 <sup>a</sup> 7	66.67 <sup>b</sup> 247	61.334 <sup>a</sup> 51	60.59 <sup>b</sup> 242
28	7.076 <sup>a</sup> 72	74.74 <sup>b</sup> 133	35.676 <sup>a</sup> 136	74.04 <sup>b</sup> 250	66.30 <sup>a</sup> 17	69.14 <sup>b</sup> 237	61.283 <sup>a</sup> 96	63.01 <sup>b</sup> 215
Sept. 7	7.004 <sup>a</sup> 107	76.07 <sup>b</sup> 107	35.540 <sup>a</sup> 180	76.54 <sup>b</sup> 216	66.13 <sup>a</sup> 26	71.51 <sup>b</sup> 218	61.187 <sup>a</sup> 135	65.16 <sup>b</sup> 183
17	6.897 <sup>a</sup> 135	77.14 <sup>b</sup> 78	35.360 <sup>a</sup> 217	78.70 <sup>b</sup> 177	65.87 <sup>a</sup> 33	73.69 <sup>b</sup> 190	61.052 <sup>a</sup> 166	66.99 <sup>b</sup> 148
27	6.762 <sup>a</sup> 156	77.92 <sup>b</sup> 49	35.143 <sup>a</sup> 244	80.47 <sup>b</sup> 136	65.54 <sup>a</sup> 39	75.59 <sup>b</sup> 154	60.886 <sup>a</sup> 191	68.47 <sup>b</sup> 109
Okt. 7	6.606 <sup>a</sup> 168	78.41 <sup>b</sup> 19	34.899 <sup>a</sup> 262	81.83 <sup>b</sup> 90	65.15 <sup>a</sup> 43	77.13 <sup>b</sup> 111	60.695 <sup>a</sup> 207	69.56 <sup>b</sup> 69
17	6.438 <sup>a</sup> 171	78.60 <sup>b</sup> 11	34.637 <sup>a</sup> 271	82.73 <sup>b</sup> 42	64.72 <sup>a</sup> 45	78.24 <sup>b</sup> 64	60.488 <sup>a</sup> 213	70.25 <sup>b</sup> 27
27	6.267 <sup>a</sup> 166	78.49 <sup>b</sup> 41	34.366 <sup>a</sup> 268	83.15 <sup>b</sup> 8	64.27 <sup>a</sup> 44	78.88 <sup>b</sup> 14	60.275 <sup>a</sup> 210	70.52 <sup>b</sup> 17
Nov. 6	6.101 <sup>a</sup> 153	78.08 <sup>b</sup> 70	34.098 <sup>a</sup> 256	83.07 <sup>b</sup> 58	63.83 <sup>a</sup> 42	79.02 <sup>b</sup> 38	60.065 <sup>a</sup> 200	70.35 <sup>b</sup> 61
16	5.948 <sup>a</sup> 133	77.38 <sup>b</sup> 98	33.842 <sup>a</sup> 237	82.49 <sup>b</sup> 109	63.41 <sup>a</sup> 38	78.64 <sup>b</sup> 88	59.865 <sup>a</sup> 181	69.74 <sup>b</sup> 103
26	5.815 <sup>a</sup> 108	76.40 <sup>b</sup> 125	33.605 <sup>a</sup> 208	81.40 <sup>b</sup> 156	63.03 <sup>a</sup> 31	77.76 <sup>b</sup> 135	59.684 <sup>a</sup> 156	68.71 <sup>b</sup> 145
Dez. 6	5.707 <sup>a</sup> 79	75.15 <sup>b</sup> 148	33.397 <sup>a</sup> 173	79.84 <sup>b</sup> 201	62.72 <sup>a</sup> 24	76.41 <sup>b</sup> 178	59.528 <sup>a</sup> 125	67.26 <sup>b</sup> 182
16	5.628 <sup>a</sup> 46	73.67 <sup>b</sup> 167	33.224 <sup>a</sup> 132	77.83 <sup>b</sup> 240	62.48 <sup>a</sup> 15	74.63 <sup>b</sup> 215	59.403 <sup>a</sup> 90	65.44 <sup>b</sup> 215
26	5.582 <sup>a</sup> 12	72.00 <sup>b</sup> 182	33.092 <sup>a</sup> 87	75.43 <sup>b</sup> 271	62.33 <sup>a</sup> 7	72.48 <sup>b</sup> 244	59.313 <sup>a</sup> 53	63.29 <sup>b</sup> 241
36	5.570 <sup>a</sup>	70.18 <sup>b</sup>	33.005 <sup>a</sup>	72.72 <sup>b</sup>	62.26 <sup>a</sup>	70.04 <sup>b</sup>	59.260 <sup>a</sup>	60.88 <sup>b</sup>
Mittl. Ort	4.934	60.87	33.321	58.76	61.63	69.91	59.035	47.84
sec $\delta$ , tg $\delta$	1.039	+0.281	1.416	+1.003	2.498	-2.289	1.203	+0.669
a, a'	+2.8	+12.7	+2.0	+12.9	+5.4	+12.9	+2.4	+13.1
b, b'	+0.01	+0.77	+0.04	+0.77	-0.10	+0.77	+0.03	+0.75



Tag	783) $\eta$ Cephei		781) $\epsilon$ Aquarii		785) $\beta$ Indi		786) $\zeta$ Vulpeculae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	20 <sup>h</sup> 44 <sup>m</sup>	+61° 37'	20 <sup>h</sup> 44 <sup>m</sup>	-9° 41'	20 <sup>h</sup> 50 <sup>m</sup>	-58° 39'	20 <sup>h</sup> 52 <sup>m</sup>	+27° 50'
Jan. I	7.84 <sup>a</sup> <sub>16</sub>	35.99 <sup>b</sup> <sub>302</sub>	39.746 <sup>a</sup> <sub>21</sub>	58.94 <sup>b</sup> <sub>53</sub>	27.674 <sup>a</sup> <sub>7</sub>	59.82 <sup>b</sup> <sub>219</sub>	10.829 <sup>a</sup> <sub>26</sub>	52.94 <sup>b</sup> <sub>230</sub>
II	7.68 <sub>9</sub>	32.97 <sub>325</sub>	39.767 <sub>56</sub>	59.47 <sub>48</sub>	27.667 <sub>60</sub>	57.63 <sub>239</sub>	10.803 <sub>11</sub>	50.64 <sub>241</sub>
2I	7.59 <sub>0</sub>	29.72 <sub>335</sub>	39.823 <sub>87</sub>	59.95 <sub>38</sub>	27.727 <sub>128</sub>	55.24 <sub>252</sub>	10.814 <sub>49</sub>	48.23 <sub>241</sub>
3I	7.59 <sub>7</sub>	26.37 <sub>334</sub>	39.910 <sub>119</sub>	60.33 <sub>26</sub>	27.855 <sub>192</sub>	52.72 <sub>258</sub>	10.863 <sub>87</sub>	45.82 <sub>233</sub>
Febr. 10	7.66 <sub>16</sub>	23.03 <sub>318</sub>	40.029 <sub>149</sub>	60.59 <sub>10</sub>	28.047 <sub>253</sub>	50.14 <sub>259</sub>	10.950 <sub>125</sub>	43.49 <sub>215</sub>
20	7.82 <sub>23</sub>	19.85 <sub>291</sub>	40.178 <sub>178</sub>	60.69 <sub>7</sub>	28.300 <sub>309</sub>	47.55 <sub>254</sub>	11.075 <sub>161</sub>	41.34 <sub>188</sub>
März 2	8.05 <sub>31</sub>	16.94 <sub>252</sub>	40.356 <sub>204</sub>	60.62 <sub>27</sub>	28.609 <sub>362</sub>	45.01 <sub>244</sub>	11.236 <sub>195</sub>	39.46 <sub>152</sub>
12	8.36 <sub>37</sub>	14.42 <sub>204</sub>	40.560 <sub>230</sub>	60.35 <sub>49</sub>	28.971 <sub>408</sub>	42.57 <sub>229</sub>	11.431 <sub>228</sub>	37.94 <sub>110</sub>
22	8.73 <sub>42</sub>	12.38 <sub>148</sub>	40.790 <sub>250</sub>	59.86 <sub>70</sub>	29.379 <sub>449</sub>	40.28 <sub>209</sub>	11.659 <sub>256</sub>	36.84 <sub>64</sub>
Apr. I	9.15 <sub>46</sub>	10.90 <sub>88</sub>	41.044 <sub>273</sub>	59.16 <sub>91</sub>	29.828 <sub>484</sub>	38.19 <sub>186</sub>	11.915 <sub>281</sub>	36.20 <sub>15</sub>
II	9.61 <sub>49</sub>	10.02 <sub>24</sub>	41.317 <sub>290</sub>	58.25 <sub>109</sub>	30.312 <sub>511</sub>	36.33 <sub>159</sub>	12.196 <sub>301</sub>	36.05 <sub>35</sub>
2I	10.10 <sub>50</sub>	9.78 <sub>39</sub>	41.607 <sub>303</sub>	57.16 <sub>125</sub>	30.823 <sub>531</sub>	34.74 <sub>127</sub>	12.497 <sub>313</sub>	36.40 <sub>84</sub>
Mai I	10.60 <sub>51</sub>	10.17 <sub>100</sub>	41.910 <sub>309</sub>	55.91 <sub>137</sub>	31.354 <sub>541</sub>	33.47 <sub>93</sub>	12.810 <sub>320</sub>	37.24 <sub>130</sub>
II	11.11 <sub>49</sub>	11.17 <sub>158</sub>	42.219 <sub>309</sub>	54.54 <sub>145</sub>	31.895 <sub>540</sub>	32.54 <sub>56</sub>	13.130 <sub>318</sub>	38.54 <sub>170</sub>
2I	11.60 <sub>46</sub>	12.75 <sub>210</sub>	42.528 <sub>303</sub>	53.09 <sub>147</sub>	32.435 <sub>529</sub>	31.98 <sub>18</sub>	13.448 <sub>309</sub>	40.24 <sub>206</sub>
3I	12.06 <sub>41</sub>	14.85 <sub>254</sub>	42.831 <sub>290</sub>	51.62 <sub>146</sub>	32.964 <sub>505</sub>	31.80 <sub>21</sub>	13.757 <sub>292</sub>	42.30 <sub>235</sub>
Juni 10	12.47 <sub>37</sub>	17.39 <sub>292</sub>	43.121 <sub>269</sub>	50.16 <sub>139</sub>	33.469 <sub>469</sub>	32.01 <sub>60</sub>	14.049 <sub>267</sub>	44.65 <sub>256</sub>
20	12.84 <sub>30</sub>	20.31 <sub>321</sub>	43.390 <sub>242</sub>	48.77 <sub>129</sub>	33.938 <sub>422</sub>	32.61 <sub>97</sub>	14.316 <sub>235</sub>	47.21 <sub>271</sub>
30	13.14 <sub>23</sub>	23.52 <sub>342</sub>	43.632 <sub>209</sub>	47.48 <sub>116</sub>	34.360 <sub>364</sub>	33.58 <sub>131</sub>	14.551 <sub>198</sub>	49.92 <sub>278</sub>
Juli 10	13.37 <sub>15</sub>	26.94 <sub>354</sub>	43.841 <sub>169</sub>	46.32 <sub>99</sub>	34.724 <sub>296</sub>	34.89 <sub>162</sub>	14.749 <sub>156</sub>	52.70 <sub>279</sub>
20	13.52 <sub>7</sub>	30.48 <sub>358</sub>	44.010 <sub>127</sub>	45.33 <sub>82</sub>	35.020 <sub>222</sub>	36.51 <sub>187</sub>	14.905 <sub>109</sub>	55.49 <sub>273</sub>
30	13.59 <sub>1</sub>	34.06 <sub>353</sub>	44.137 <sub>82</sub>	44.51 <sub>62</sub>	35.242 <sub>142</sub>	38.38 <sub>206</sub>	15.014 <sub>61</sub>	58.22 <sub>261</sub>
Aug. 8	13.58 <sub>9</sub>	37.59 <sub>341</sub>	44.219 <sub>37</sub>	43.89 <sub>43</sub>	35.384 <sub>59</sub>	40.44 <sub>219</sub>	15.075 <sub>14</sub>	60.83 <sub>243</sub>
18	13.49 <sub>16</sub>	41.00 <sub>321</sub>	44.256 <sub>8</sub>	43.46 <sub>25</sub>	35.443 <sub>24</sub>	42.63 <sub>222</sub>	15.089 <sub>32</sub>	63.26 <sub>221</sub>
28	13.33 <sub>24</sub>	44.21 <sub>295</sub>	44.248 <sub>49</sub>	43.21 <sub>9</sub>	35.419 <sub>101</sub>	44.85 <sub>219</sub>	15.057 <sub>76</sub>	65.47 <sub>195</sub>
Sept. 7	13.09 <sub>29</sub>	47.16 <sub>262</sub>	44.199 <sub>85</sub>	43.12 <sub>7</sub>	35.318 <sub>172</sub>	47.04 <sub>205</sub>	14.981 <sub>114</sub>	67.42 <sub>164</sub>
17	12.80 <sub>35</sub>	49.78 <sub>223</sub>	44.114 <sub>116</sub>	43.19 <sub>21</sub>	35.146 <sub>232</sub>	49.09 <sub>184</sub>	14.867 <sub>145</sub>	69.06 <sub>132</sub>
27	12.45 <sub>40</sub>	52.01 <sub>180</sub>	43.998 <sub>137</sub>	43.40 <sub>31</sub>	34.914 <sub>281</sub>	50.93 <sub>156</sub>	14.722 <sub>170</sub>	70.38 <sub>97</sub>
Okt. 7	12.05 <sub>42</sub>	53.81 <sub>132</sub>	43.861 <sub>151</sub>	43.71 <sub>39</sub>	34.633 <sub>312</sub>	52.49 <sub>120</sub>	14.552 <sub>185</sub>	71.35 <sub>60</sub>
17	11.63 <sub>44</sub>	55.13 <sub>80</sub>	43.710 <sub>154</sub>	44.10 <sub>46</sub>	34.321 <sub>328</sub>	53.69 <sub>79</sub>	14.367 <sub>191</sub>	71.95 <sub>21</sub>
27	11.19 <sub>44</sub>	55.93 <sub>25</sub>	43.556 <sub>150</sub>	44.56 <sub>51</sub>	33.993 <sub>327</sub>	54.48 <sub>35</sub>	14.176 <sub>191</sub>	72.16 <sub>18</sub>
Nov. 6	10.75 <sub>43</sub>	56.18 <sub>31</sub>	43.406 <sub>138</sub>	45.07 <sub>55</sub>	33.666 <sub>310</sub>	54.83 <sub>11</sub>	13.985 <sub>181</sub>	71.98 <sub>57</sub>
16	10.32 <sub>42</sub>	55.87 <sub>88</sub>	43.268 <sub>117</sub>	45.62 <sub>57</sub>	33.356 <sub>277</sub>	54.72 <sub>57</sub>	13.804 <sub>164</sub>	71.41 <sub>96</sub>
26	9.90 <sub>37</sub>	54.99 <sub>144</sub>	43.151 <sub>92</sub>	46.19 <sub>58</sub>	33.079 <sub>232</sub>	54.15 <sub>100</sub>	13.640 <sub>141</sub>	70.45 <sub>133</sub>
Dez. 6	9.53 <sub>33</sub>	53.55 <sub>196</sub>	43.059 <sub>62</sub>	46.77 <sub>59</sub>	32.847 <sub>176</sub>	53.15 <sub>140</sub>	13.499 <sub>113</sub>	69.12 <sub>166</sub>
16	9.20 <sub>27</sub>	51.59 <sub>242</sub>	42.997 <sub>30</sub>	47.36 <sub>58</sub>	32.671 <sub>114</sub>	51.75 <sub>176</sub>	13.386 <sub>81</sub>	67.46 <sub>195</sub>
26	8.93 <sub>21</sub>	49.17 <sub>282</sub>	42.967 <sub>4</sub>	47.94 <sub>55</sub>	32.557 <sub>46</sub>	49.99 <sub>205</sub>	13.305 <sub>46</sub>	65.51 <sub>218</sub>
36	8.72	46.35	42.971	48.49	32.511	47.94	13.259	63.33
Mittl. Ort	10.40	29.01	41.976	54.07	31.609	47.86	12.844	50.89
sec $\delta$ , tg $\delta$	2.104	+1.851	1.015	-0.171	1.923	-1.642	1.131	+0.528
$a, a'$	+1.2	+13.2	+3.2	+13.2	+4.7	+13.6	+2.6	+13.7
$b, b'$	+0.08	+0.75	-0.01	+0.75	-0.07	+0.74	+0.02	+0.73



# Obere Kulmination Greenwich

163\*

Tag	788) v Cygni		790) ζ Microscopii		793) 61 Cygni pr <sup>1)</sup>		794) v Aquarii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	20 <sup>h</sup> 55 <sup>m</sup>	+40° 56'	20 <sup>h</sup> 59 <sup>m</sup>	−38° 50'	21 <sup>h</sup> 4 <sup>m</sup>	+38° 28'	21 <sup>h</sup> 6 <sup>m</sup>	−11° 35'
Jan. I	5.167 <sup>62</sup>	81.05 <sup>267</sup>	24.673 <sup>6</sup>	61.80 <sup>114</sup>	23.661 <sup>51</sup>	44.61 <sup>246</sup>	33.788 <sup>2</sup>	50.17 <sup>40</sup>
II	5.105 <sup>18</sup>	78.38 <sup>284</sup>	24.679 <sup>49</sup>	60.66 <sup>131</sup>	23.610 <sup>9</sup>	42.15 <sup>263</sup>	33.790 <sup>35</sup>	50.57 <sup>31</sup>
21	5.087 <sup>28</sup>	75.54 <sup>289</sup>	24.728 <sup>92</sup>	59.35 <sup>145</sup>	23.601 <sup>34</sup>	39.52 <sup>269</sup>	33.825 <sup>67</sup>	50.88 <sup>21</sup>
31	5.115 <sup>75</sup>	72.65 <sup>285</sup>	24.820 <sup>132</sup>	57.90 <sup>158</sup>	23.635 <sup>79</sup>	36.83 <sup>265</sup>	33.892 <sup>98</sup>	51.09 <sup>8</sup>
Febr. 10	5.190 <sup>121</sup>	69.80 <sup>269</sup>	24.952 <sup>171</sup>	56.32 <sup>166</sup>	23.714 <sup>123</sup>	34.18 <sup>248</sup>	33.990 <sup>128</sup>	51.17 <sup>7</sup>
20	5.311 <sup>166</sup>	67.11 <sup>241</sup>	25.123 <sup>208</sup>	54.66 <sup>172</sup>	23.837 <sup>167</sup>	31.70 <sup>223</sup>	34.118 <sup>159</sup>	51.10 <sup>25</sup>
März 2	5.477 <sup>209</sup>	64.70 <sup>204</sup>	25.331 <sup>242</sup>	52.94 <sup>175</sup>	24.004 <sup>208</sup>	29.47 <sup>187</sup>	34.277 <sup>187</sup>	50.85 <sup>45</sup>
12	5.686 <sup>249</sup>	62.66 <sup>159</sup>	25.573 <sup>276</sup>	51.19 <sup>176</sup>	24.212 <sup>247</sup>	27.60 <sup>143</sup>	34.464 <sup>215</sup>	50.40 <sup>64</sup>
22	5.935 <sup>284</sup>	61.07 <sup>108</sup>	25.849 <sup>305</sup>	49.43 <sup>174</sup>	24.459 <sup>281</sup>	26.17 <sup>93</sup>	34.679 <sup>241</sup>	49.76 <sup>85</sup>
Apr. 1	6.219 <sup>313</sup>	59.99 <sup>53</sup>	26.154 <sup>331</sup>	47.69 <sup>167</sup>	24.740 <sup>311</sup>	25.24 <sup>40</sup>	34.920 <sup>265</sup>	48.91 <sup>105</sup>
11	6.532 <sup>335</sup>	59.46 <sup>4</sup>	26.485 <sup>353</sup>	46.02 <sup>158</sup>	25.051 <sup>334</sup>	24.84 <sup>16</sup>	35.185 <sup>284</sup>	47.86 <sup>121</sup>
21	6.867 <sup>349</sup>	59.50 <sup>60</sup>	26.838 <sup>371</sup>	44.44 <sup>145</sup>	25.385 <sup>349</sup>	25.00 <sup>71</sup>	35.469 <sup>300</sup>	46.65 <sup>135</sup>
Mai 1	7.216 <sup>355</sup>	60.10 <sup>114</sup>	27.209 <sup>381</sup>	42.99 <sup>127</sup>	25.734 <sup>356</sup>	25.71 <sup>123</sup>	35.769 <sup>310</sup>	45.30 <sup>145</sup>
11	7.571 <sup>352</sup>	61.24 <sup>164</sup>	27.590 <sup>384</sup>	41.72 <sup>107</sup>	26.090 <sup>355</sup>	26.94 <sup>172</sup>	36.079 <sup>315</sup>	43.85 <sup>152</sup>
21	7.923 <sup>339</sup>	62.88 <sup>209</sup>	27.974 <sup>379</sup>	40.65 <sup>83</sup>	26.445 <sup>345</sup>	28.66 <sup>214</sup>	36.394 <sup>311</sup>	42.33 <sup>152</sup>
31	8.262 <sup>319</sup>	64.97 <sup>245</sup>	28.353 <sup>366</sup>	39.82 <sup>57</sup>	26.790 <sup>325</sup>	30.80 <sup>251</sup>	36.705 <sup>301</sup>	40.81 <sup>150</sup>
Juni 10	8.581 <sup>288</sup>	67.42 <sup>276</sup>	28.719 <sup>343</sup>	39.25 <sup>29</sup>	27.115 <sup>298</sup>	33.31 <sup>280</sup>	37.006 <sup>284</sup>	39.31 <sup>141</sup>
20	8.869 <sup>251</sup>	70.18 <sup>298</sup>	29.062 <sup>313</sup>	38.96 <sup>0</sup>	27.413 <sup>263</sup>	36.11 <sup>302</sup>	37.290 <sup>259</sup>	37.90 <sup>130</sup>
30	9.120 <sup>207</sup>	73.16 <sup>312</sup>	29.375 <sup>274</sup>	38.96 <sup>30</sup>	27.676 <sup>222</sup>	39.13 <sup>316</sup>	37.549 <sup>228</sup>	36.60 <sup>114</sup>
Juli 10	9.327 <sup>159</sup>	76.28 <sup>319</sup>	29.649 <sup>228</sup>	39.26 <sup>57</sup>	27.898 <sup>174</sup>	42.29 <sup>321</sup>	37.777 <sup>190</sup>	35.46 <sup>97</sup>
20	9.486 <sup>106</sup>	79.47 <sup>318</sup>	29.877 <sup>177</sup>	39.83 <sup>82</sup>	28.072 <sup>124</sup>	45.50 <sup>321</sup>	37.967 <sup>149</sup>	34.49 <sup>77</sup>
30	9.592 <sup>51</sup>	82.65 <sup>309</sup>	30.054 <sup>122</sup>	40.65 <sup>104</sup>	28.196 <sup>72</sup>	48.71 <sup>312</sup>	38.116 <sup>105</sup>	33.72 <sup>57</sup>
Aug. 8	9.643 <sup>2</sup>	85.74 <sup>294</sup>	30.176 <sup>65</sup>	41.69 <sup>122</sup>	28.268 <sup>19</sup>	51.83 <sup>297</sup>	38.221 <sup>58</sup>	33.15 <sup>36</sup>
18	9.641 <sup>55</sup>	88.68 <sup>274</sup>	30.241 <sup>8</sup>	42.91 <sup>134</sup>	28.287 <sup>32</sup>	54.80 <sup>276</sup>	38.279 <sup>13</sup>	32.79 <sup>18</sup>
28	9.586 <sup>103</sup>	91.42 <sup>247</sup>	30.249 <sup>46</sup>	44.25 <sup>141</sup>	28.255 <sup>79</sup>	57.56 <sup>250</sup>	38.292 <sup>29</sup>	32.61 <sup>1</sup>
Sept. 7	9.483 <sup>146</sup>	93.89 <sup>216</sup>	30.203 <sup>94</sup>	45.66 <sup>141</sup>	28.176 <sup>122</sup>	60.06 <sup>219</sup>	38.263 <sup>67</sup>	32.62 <sup>16</sup>
17	9.337 <sup>183</sup>	96.05 <sup>179</sup>	30.109 <sup>136</sup>	47.07 <sup>135</sup>	28.054 <sup>158</sup>	62.25 <sup>185</sup>	38.196 <sup>100</sup>	32.78 <sup>30</sup>
27	9.154 <sup>210</sup>	97.84 <sup>140</sup>	29.973 <sup>167</sup>	48.42 <sup>123</sup>	27.896 <sup>185</sup>	64.10 <sup>145</sup>	38.096 <sup>125</sup>	33.08 <sup>39</sup>
Okt. 7	8.944 <sup>230</sup>	99.24 <sup>97</sup>	29.806 <sup>189</sup>	49.65 <sup>105</sup>	27.711 <sup>205</sup>	65.55 <sup>104</sup>	37.971 <sup>142</sup>	33.47 <sup>47</sup>
17	8.714 <sup>240</sup>	100.21 <sup>51</sup>	29.617 <sup>199</sup>	50.70 <sup>83</sup>	27.506 <sup>215</sup>	66.59 <sup>61</sup>	37.829 <sup>149</sup>	33.94 <sup>53</sup>
27	8.474 <sup>241</sup>	100.72 <sup>4</sup>	29.418 <sup>198</sup>	51.53 <sup>57</sup>	27.291 <sup>216</sup>	67.20 <sup>14</sup>	37.680 <sup>149</sup>	34.47 <sup>55</sup>
Nov. 6	8.233 <sup>232</sup>	100.76 <sup>44</sup>	29.220 <sup>186</sup>	52.10 <sup>30</sup>	27.075 <sup>210</sup>	67.34 <sup>32</sup>	37.531 <sup>139</sup>	35.02 <sup>56</sup>
16	8.001 <sup>216</sup>	100.32 <sup>92</sup>	29.034 <sup>164</sup>	52.40 <sup>1</sup>	26.865 <sup>194</sup>	67.02 <sup>78</sup>	37.392 <sup>123</sup>	35.58 <sup>55</sup>
26	7.785 <sup>192</sup>	99.40 <sup>139</sup>	28.870 <sup>134</sup>	52.41 <sup>28</sup>	26.671 <sup>172</sup>	66.24 <sup>122</sup>	37.269 <sup>101</sup>	36.13 <sup>55</sup>
Dez. 6	7.593 <sup>162</sup>	98.01 <sup>181</sup>	28.736 <sup>99</sup>	52.13 <sup>55</sup>	26.499 <sup>144</sup>	65.02 <sup>164</sup>	37.168 <sup>75</sup>	36.68 <sup>51</sup>
16	7.431 <sup>126</sup>	96.20 <sup>219</sup>	28.637 <sup>59</sup>	51.58 <sup>80</sup>	26.355 <sup>111</sup>	63.38 <sup>201</sup>	37.093 <sup>45</sup>	37.19 <sup>48</sup>
26	7.305 <sup>87</sup>	94.01 <sup>251</sup>	28.578 <sup>17</sup>	50.78 <sup>102</sup>	26.244 <sup>73</sup>	61.37 <sup>230</sup>	37.048 <sup>14</sup>	37.67 <sup>43</sup>
36	7.218	91.50	28.561	49.76	26.171	59.07	37.034	38.10
Mittl. Ort	7.234	76.66	27.445	51.25	25.684	40.72	35.965	43.98
sec δ, tg δ	1.324	+0.868	1.284	−0.805	1.277	+0.795	1.021	−0.205
a, a'	+2.2	+13.9	+3.8	+14.1	+2.3	+14.4	+3.3	+14.6
b, b'	+0.04	+0.72	−0.04	+0.7	+0.04	+0.69	−0.01	+0.69

<sup>1)</sup> Die jährliche Parallaxe (0.299) ist bereits berücksichtigt.



## Scheinbare Sternörter 1945

Tag	795) Br 2777 Ceph		797) ζ Cygni		800) α Equulei		803) α Cephei									
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.								
1945	21 <sup>h</sup> 6 <sup>m</sup>	+77° 53'	21 <sup>h</sup> 10 <sup>m</sup>	+29° 59'	21 <sup>h</sup> 13 <sup>m</sup>	+5° 1'	21 <sup>h</sup> 17 <sup>m</sup>	+62° 20'								
Jan. I	33.95 33.34 32.91 32.66 32.61	61 276 310 331 340 336	33.639 33.591 33.579 33.606 33.671	48 12 27 65 104	64.20 61.94 59.54 57.10 54.71	226 240 244 239 224	2.441 2.428 2.446 2.495 2.575	13 18 49 80 111	7.12 5.87 4.63 3.44 2.35	125 124 119 109 91	13.63 13.41 13.25 13.18 13.18	22 16 7 0 9	75.66 72.91 69.85 66.60 63.29	275 306 325 331 324		
Febr. 10	32.75 33.09 33.61 34.29 35.10	34 52 68 81 92	67.27 64.09 61.21 58.73 56.75	318 288 248 198 142	33.775 33.917 34.096 34.311 34.558	142 179 215 247 275	52.47 50.48 48.82 47.56 46.76	199 166 126 80 31	2.686 2.828 3.000 3.201 3.429	142 172 201 228 252	1.44 0.74 0.31 0.17 0.36	70 43 14 19 52	13.27 13.45 13.70 14.02 14.41	18 25 32 39 44	60.05 57.00 54.26 51.93 50.11	305 274 233 182 126
März 2	33.09 33.61 34.29 35.10	52 68 81 92	64.09 61.21 58.73 56.75	288 248 198 142	33.917 34.096 34.311 34.558	179 215 247 275	50.48 48.82 47.56 46.76	166 126 80 31	2.828 3.000 3.201 3.429	172 201 228 252	0.74 0.31 0.17 0.36	43 14 19 52	13.45 13.70 14.02 14.41	25 32 39 44	57.00 54.26 51.93 50.11	274 233 182 126
Apr. I	36.02 37.02 38.05 39.09 40.10	100 103 104 101 95	55.33 54.52 54.35 54.80 55.85	81 17 45 105 162	34.833 35.131 35.445 35.769 36.096	298 314 324 327 319	46.45 46.65 47.34 48.51 50.11	20 69 117 160 198	3.681 3.955 4.244 4.544 4.849	274 289 300 305 302	0.88 1.72 2.86 4.26 5.89	84 114 140 163 181	14.85 15.33 15.84 16.36 16.88	48 51 52 52 50	48.85 48.20 48.18 48.78 49.97	65 2 60 119 174
Mai I	38.05 39.09 40.10	104 101 95	54.35 54.80 55.85	45 105 162	35.445 35.769 36.096	324 327 319	47.34 48.51 50.11	117 160 198	4.244 4.544 4.849	300 305 302	2.86 4.26 5.89	140 163 181	15.84 16.36 16.88	52 52 50	48.18 48.78 49.97	60 119 174
Juni 10	41.05 41.91 42.66 43.27 43.74	86 75 61 47 30	57.47 59.59 62.16 65.09 68.32	212 257 293 323 344	36.415 36.720 37.002 37.255 37.471	305 282 253 216 174	52.09 54.39 56.94 59.66 62.49	230 255 272 283 287	5.151 5.443 5.718 5.968 6.187	292 275 250 219 183	7.70 9.61 11.59 13.57 15.51	191 198 198 194 184	17.38 17.84 18.26 18.62 18.91	46 42 36 29 22	51.71 53.94 56.60 59.60 62.88	223 266 300 328 346
Juli 20	44.04 44.17 44.13 43.92 43.55	13 4 21 37 53	71.76 75.33 78.94 82.52 85.99	357 361 358 347 328	37.645 37.773 37.853 37.885 37.869	128 80 32 16 60	65.36 68.19 70.93 73.51 75.89	283 274 258 238 213	6.370 6.512 6.611 6.666 6.677	142 99 55 11 30	17.35 19.05 20.59 21.93 23.06	170 154 134 113 91	19.13 19.27 19.33 19.31 19.21	14 6 2 10 18	66.34 69.91 73.50 77.03 80.43	357 359 353 340 320
Aug. 8*)	44.13 43.92 43.55	21 37 53	78.94 82.52 85.99	358 347 328	37.853 37.885 37.869	32 16 60	70.93 73.51 75.89	258 238 213	6.611 6.666 6.677	55 11 30	20.59 21.93 23.06	134 113 91	19.33 19.31 19.21	2 10 18	73.50 77.03 80.43	353 340 320
Sept. 7	43.02 42.35 41.55 40.65 39.66	67 80 90 99 106	89.27 92.30 95.01 97.34 99.22	303 271 233 188 138	37.809 37.708 37.574 37.413 37.233	101 134 161 180 190	78.02 79.86 81.38 82.55 83.35	184 152 117 80 41	6.647 6.579 6.481 6.358 6.218	68 98 123 140 149	23.97 24.65 25.11 25.34 25.36	68 46 23 2 18	19.03 18.78 18.48 18.12 17.73	25 30 36 39 42	83.63 86.56 89.14 91.33 93.08	293 258 219 175 125
Okt. 7	40.65 39.66	99 106	97.34 99.22	188 138	37.413 37.233	180 190	82.55 83.35	80 41	6.358 6.218	140 149	25.34 25.36	2 18	18.12 17.73	39 42	91.33 93.08	175 125
Nov. 27	38.60 37.52 36.42 35.34 34.32	108 110 108 102 95	100.60 101.45 101.73 101.41 100.50	85 28 32 91 149	37.043 36.851 36.665 36.492 36.338	192 186 173 154 129	83.76 83.77 83.37 82.56 81.37	1 40 81 119 155	6.069 5.921 5.779 5.651 5.543	148 142 128 108 85	25.18 24.80 24.24 23.51 22.62	38 56 73 89 102	17.31 16.87 16.43 16.01 15.60	44 44 42 41 37	94.33 95.05 95.20 94.78 93.79	72 15 42 99 154
Dez. 6	34.32 33.37 32.53 31.82	95 84 71	100.50 99.01 96.99 94.49	149 202 250	36.338 36.209 36.110 36.043	129 99 67	81.37 79.82 77.96 75.84	155 186 212	5.543 5.458 5.401 5.372	85 57 29	22.62 21.60 20.46 19.26	102 114 120	15.60 15.23 14.91 14.65	37 32 26	93.79 92.25 90.19 87.69	154 206 250
Mittl. Ort	38.01	73.84	35.591	61.65	4.443	9.97	16.01	67.47								
sec δ, tg δ	4.772	+4.666	1.155	+0.577	1.004	+0.088	2.155	+1.909								
a, a'	-1.2	+14.6	+2.6	+14.8	+3.0	+15.0	+1.4	+15.2								
b, b'	+0.23	+0.69	+0.03	+0.67	0.00	+0.67	+0.10	+0.65								

\*) Bei Stern 797), 800) und 803) lies Aug. 9.



Tag	804) $\alpha$ Pegasi		805) $\gamma$ Pavonis <sup>1)</sup>		806) $\zeta$ Capricorni		809) $\beta$ Cephei	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	21 <sup>h</sup> 19 <sup>m</sup>	+19° 33'	21 <sup>h</sup> 21 <sup>m</sup>	-65° 36'	21 <sup>h</sup> 23 <sup>m</sup>	-22° 38'	21 <sup>h</sup> 27 <sup>m</sup>	+70° 18'
Jan. I	30.556 <sup>36</sup>	66.13 <sup>184</sup>	50.92 <sup>10</sup>	75.36 <sup>243</sup>	29.543 <sup>12</sup>	71.64 <sup>21</sup>	54.73 <sup>38</sup>	78.34 <sup>263</sup>
II	30.520 <sup>3</sup>	64.29 <sup>193</sup>	50.82 <sup>2</sup>	72.93 <sup>270</sup>	29.531 <sup>21</sup>	71.43 <sup>36</sup>	54.35 <sup>28</sup>	75.71 <sup>298</sup>
21	30.517 <sup>29</sup>	62.36 <sup>194</sup>	50.80 <sup>7</sup>	70.23 <sup>289</sup>	29.552 <sup>55</sup>	71.07 <sup>51</sup>	54.07 <sup>17</sup>	72.73 <sup>323</sup>
31	30.546 <sup>64</sup>	60.42 <sup>186</sup>	50.87 <sup>15</sup>	67.34 <sup>300</sup>	29.607 <sup>87</sup>	70.56 <sup>66</sup>	53.90 <sup>6</sup>	69.50 <sup>335</sup>
Febr. 10	30.610 <sup>98</sup>	58.56 <sup>172</sup>	51.02 <sup>23</sup>	64.34 <sup>305</sup>	29.694 <sup>120</sup>	69.90 <sup>80</sup>	53.84 <sup>6</sup>	66.15 <sup>334</sup>
20	30.708 <sup>132</sup>	56.84 <sup>148</sup>	51.25 <sup>30</sup>	61.29 <sup>303</sup>	29.814 <sup>152</sup>	69.10 <sup>96</sup>	53.90 <sup>18</sup>	62.81 <sup>319</sup>
März 2	30.840 <sup>166</sup>	55.36 <sup>118</sup>	51.55 <sup>38</sup>	58.26 <sup>294</sup>	29.966 <sup>184</sup>	68.14 <sup>110</sup>	54.08 <sup>29</sup>	59.62 <sup>293</sup>
12	31.006 <sup>198</sup>	54.18 <sup>82</sup>	51.93 <sup>44</sup>	55.32 <sup>278</sup>	30.150 <sup>213</sup>	67.04 <sup>124</sup>	54.37 <sup>40</sup>	56.69 <sup>255</sup>
22	31.204 <sup>229</sup>	53.36 <sup>42</sup>	52.37 <sup>50</sup>	52.54 <sup>259</sup>	30.363 <sup>243</sup>	65.80 <sup>135</sup>	54.77 <sup>49</sup>	54.14 <sup>207</sup>
Apr. I	31.433 <sup>255</sup>	52.94 <sup>1</sup>	52.87 <sup>55</sup>	49.95 <sup>232</sup>	30.606 <sup>269</sup>	64.45 <sup>146</sup>	55.26 <sup>57</sup>	52.07 <sup>153</sup>
II	31.688 <sup>279</sup>	52.95 <sup>44</sup>	53.42 <sup>60</sup>	47.63 <sup>202</sup>	30.875 <sup>292</sup>	62.99 <sup>153</sup>	55.83 <sup>62</sup>	50.54 <sup>93</sup>
21	31.967 <sup>296</sup>	53.39 <sup>86</sup>	54.02 <sup>63</sup>	45.61 <sup>167</sup>	31.167 <sup>312</sup>	61.46 <sup>156</sup>	56.45 <sup>66</sup>	49.61 <sup>31</sup>
Mai I	32.263 <sup>307</sup>	54.25 <sup>125</sup>	54.65 <sup>65</sup>	43.94 <sup>128</sup>	31.479 <sup>325</sup>	59.90 <sup>155</sup>	57.11 <sup>68</sup>	49.30 <sup>32</sup>
II	32.570 <sup>313</sup>	55.50 <sup>162</sup>	55.30 <sup>65</sup>	42.66 <sup>87</sup>	31.804 <sup>333</sup>	58.35 <sup>151</sup>	57.79 <sup>68</sup>	49.62 <sup>93</sup>
21	32.883 <sup>309</sup>	57.12 <sup>192</sup>	55.95 <sup>66</sup>	41.79 <sup>43</sup>	32.137 <sup>333</sup>	56.84 <sup>141</sup>	58.47 <sup>66</sup>	50.55 <sup>150</sup>
31	33.192 <sup>298</sup>	59.04 <sup>216</sup>	56.61 <sup>63</sup>	41.36 <sup>2</sup>	32.470 <sup>325</sup>	55.43 <sup>128</sup>	59.13 <sup>61</sup>	52.05 <sup>203</sup>
Juni 10	33.490 <sup>279</sup>	61.20 <sup>233</sup>	57.24 <sup>60</sup>	41.38 <sup>47</sup>	32.795 <sup>310</sup>	54.15 <sup>110</sup>	59.74 <sup>54</sup>	54.08 <sup>249</sup>
20	33.769 <sup>254</sup>	63.53 <sup>246</sup>	57.84 <sup>55</sup>	41.85 <sup>90</sup>	33.105 <sup>286</sup>	53.05 <sup>91</sup>	60.28 <sup>48</sup>	56.57 <sup>288</sup>
30	34.023 <sup>221</sup>	65.99 <sup>250</sup>	58.39 <sup>48</sup>	42.75 <sup>131</sup>	33.391 <sup>256</sup>	52.14 <sup>68</sup>	60.76 <sup>38</sup>	59.45 <sup>319</sup>
Juli 10	34.244 <sup>183</sup>	68.49 <sup>250</sup>	58.87 <sup>42</sup>	44.06 <sup>168</sup>	33.647 <sup>218</sup>	51.46 <sup>44</sup>	61.14 <sup>29</sup>	62.64 <sup>343</sup>
20	34.427 <sup>141</sup>	70.99 <sup>242</sup>	59.29 <sup>32</sup>	45.74 <sup>199</sup>	33.865 <sup>176</sup>	51.02 <sup>20</sup>	61.43 <sup>18</sup>	66.07 <sup>358</sup>
30	34.568 <sup>97</sup>	73.41 <sup>230</sup>	59.61 <sup>22</sup>	47.73 <sup>224</sup>	34.041 <sup>130</sup>	50.82 <sup>4</sup>	61.61 <sup>8</sup>	69.65 <sup>365</sup>
Aug. 9	34.665 <sup>51</sup>	75.71 <sup>213</sup>	59.83 <sup>13</sup>	49.97 <sup>242</sup>	34.171 <sup>81</sup>	50.86 <sup>25</sup>	61.69 <sup>3</sup>	73.30 <sup>363</sup>
18	34.716 <sup>6</sup>	77.84 <sup>192</sup>	59.96 <sup>2</sup>	52.39 <sup>250</sup>	34.252 <sup>33</sup>	51.11 <sup>45</sup>	61.66 <sup>14</sup>	76.93 <sup>355</sup>
28	34.722 <sup>36</sup>	79.76 <sup>169</sup>	59.98 <sup>8</sup>	54.89 <sup>250</sup>	34.285 <sup>13</sup>	51.56 <sup>61</sup>	61.52 <sup>24</sup>	80.48 <sup>339</sup>
Sept. 7	34.686 <sup>75</sup>	81.45 <sup>143</sup>	59.90 <sup>17</sup>	57.39 <sup>240</sup>	34.272 <sup>55</sup>	52.17 <sup>73</sup>	61.28 <sup>34</sup>	83.87 <sup>315</sup>
17	34.611 <sup>108</sup>	82.88 <sup>113</sup>	59.73 <sup>25</sup>	59.79 <sup>220</sup>	34.217 <sup>92</sup>	52.90 <sup>80</sup>	60.94 <sup>42</sup>	87.02 <sup>284</sup>
27	34.503 <sup>133</sup>	84.01 <sup>84</sup>	59.48 <sup>33</sup>	61.99 <sup>191</sup>	34.125 <sup>121</sup>	53.70 <sup>84</sup>	60.52 <sup>49</sup>	89.86 <sup>247</sup>
Okt. 7	34.370 <sup>152</sup>	84.85 <sup>53</sup>	59.15 <sup>38</sup>	63.90 <sup>155</sup>	34.004 <sup>142</sup>	54.54 <sup>82</sup>	60.03 <sup>55</sup>	92.33 <sup>204</sup>
17	34.218 <sup>162</sup>	85.38 <sup>21</sup>	58.77 <sup>41</sup>	65.45 <sup>111</sup>	33.862 <sup>154</sup>	55.36 <sup>77</sup>	59.48 <sup>60</sup>	94.37 <sup>156</sup>
27	34.056 <sup>164</sup>	85.59 <sup>12</sup>	58.36 <sup>42</sup>	66.56 <sup>62</sup>	33.708 <sup>156</sup>	56.13 <sup>69</sup>	58.88 <sup>62</sup>	95.93 <sup>103</sup>
Nov. 6	33.892 <sup>160</sup>	85.47 <sup>43</sup>	57.94 <sup>42</sup>	67.18 <sup>11</sup>	33.552 <sup>149</sup>	56.82 <sup>57</sup>	58.26 <sup>63</sup>	96.96 <sup>47</sup>
16	33.732 <sup>147</sup>	85.04 <sup>75</sup>	57.52 <sup>40</sup>	67.29 <sup>42</sup>	33.493 <sup>136</sup>	57.39 <sup>45</sup>	57.63 <sup>63</sup>	97.43 <sup>13</sup>
26	33.585 <sup>130</sup>	84.29 <sup>104</sup>	57.12 <sup>35</sup>	66.87 <sup>93</sup>	33.267 <sup>115</sup>	57.84 <sup>30</sup>	57.00 <sup>61</sup>	97.30 <sup>72</sup>
Dez. 6	33.455 <sup>107</sup>	83.25 <sup>132</sup>	56.77 <sup>29</sup>	65.94 <sup>142</sup>	33.152 <sup>89</sup>	58.14 <sup>16</sup>	56.39 <sup>56</sup>	96.58 <sup>130</sup>
16	33.348 <sup>81</sup>	81.93 <sup>155</sup>	56.48 <sup>22</sup>	64.52 <sup>186</sup>	33.063 <sup>61</sup>	58.30 <sup>1</sup>	55.83 <sup>51</sup>	95.28 <sup>186</sup>
26	33.267 <sup>52</sup>	80.38 <sup>174</sup>	56.26 <sup>15</sup>	62.66 <sup>224</sup>	33.002 <sup>28</sup>	58.31 <sup>13</sup>	55.32 <sup>43</sup>	93.42 <sup>234</sup>
36	33.215	78.64	56.11	60.42	32.974	58.18	54.89	91.08
Mittl. Ort	32.475	65.81	55.38	60.02	31.812	62.34	57.48	68.86
sec $\delta$ , tg $\delta$	1.061	+0.355	2.422	-2.206	1.084	-0.417	2.969	+2.796
a, a'	+2.8	+15.3	+4.9	+15.5	+3.4	+15.6	+0.8	+15.8
b, b'	+0.02	+0.64	-0.11	+0.64	-0.02	+0.63	+0.15	+0.62

<sup>1)</sup> Die jährliche Parallaxe ( $\alpha''_{113}$ ) ist bereits berücksichtigt.



Tag	808) $\beta$ Aquarii		811) $\gamma$ Cygni		810) $\nu$ Octantis		815) $\epsilon$ Pegasi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	21 <sup>h</sup> 28 <sup>m</sup>	-5° 48'	21 <sup>h</sup> 34 <sup>m</sup>	+40° 9'	21 <sup>h</sup> 35 <sup>m</sup>	-77° 37'	21 <sup>h</sup> 41 <sup>m</sup>	+9° 37'
Jan. I	37.831 <sup>a</sup> <sub>19</sub>	56.64 <sup>a</sup> <sub>67</sub>	42.592 <sup>a</sup> <sub>99</sub>	61.67 <sup>a</sup> <sub>236</sub>	19.02 <sup>a</sup> <sub>34</sub>	87.26 <sup>a</sup> <sub>277</sub>	27.156 <sup>a</sup> <sub>39</sub>	16.80 <sup>a</sup> <sub>135</sub>
II	37.812 <sup>b</sup> <sub>11</sub>	57.31 <sup>b</sup> <sub>60</sub>	42.493 <sup>b</sup> <sub>61</sub>	59.31 <sup>b</sup> <sub>257</sub>	18.68 <sup>b</sup> <sub>19</sub>	84.49 <sup>b</sup> <sub>308</sub>	27.117 <sup>b</sup> <sub>12</sub>	15.45 <sup>b</sup> <sub>138</sub>
2I	37.823 <sup>c</sup> <sub>41</sub>	57.91 <sup>c</sup> <sub>52</sub>	42.432 <sup>c</sup> <sub>18</sub>	56.74 <sup>c</sup> <sub>270</sub>	18.49 <sup>c</sup> <sub>1</sub>	81.41 <sup>c</sup> <sub>329</sub>	27.105 <sup>c</sup> <sub>17</sub>	14.07 <sup>c</sup> <sub>136</sub>
3I	37.864 <sup>d</sup> <sub>71</sub>	58.43 <sup>d</sup> <sub>39</sub>	42.414 <sup>d</sup> <sub>25</sub>	54.04 <sup>d</sup> <sub>273</sub>	18.48 <sup>d</sup> <sub>15</sub>	78.12 <sup>d</sup> <sub>342</sub>	27.122 <sup>d</sup> <sub>48</sub>	12.71 <sup>d</sup> <sub>127</sub>
Febr. 10	37.935 <sup>e</sup> <sub>102</sub>	58.82 <sup>e</sup> <sub>22</sub>	42.439 <sup>e</sup> <sub>71</sub>	51.31 <sup>e</sup> <sub>263</sub>	18.63 <sup>e</sup> <sub>31</sub>	74.70 <sup>e</sup> <sub>346</sub>	27.170 <sup>e</sup> <sub>80</sub>	11.44 <sup>e</sup> <sub>113</sub>
20	38.037 <sup>f</sup> <sub>132</sub>	59.04 <sup>f</sup> <sub>3</sub>	42.510 <sup>f</sup> <sub>117</sub>	48.68 <sup>f</sup> <sub>244</sub>	18.94 <sup>f</sup> <sub>47</sub>	71.24 <sup>f</sup> <sub>341</sub>	27.250 <sup>f</sup> <sub>113</sub>	10.31 <sup>f</sup> <sub>92</sub>
März 2	38.169 <sup>g</sup> <sub>163</sub>	59.07 <sup>g</sup> <sub>19</sub>	42.627 <sup>g</sup> <sub>163</sub>	46.24 <sup>g</sup> <sub>214</sub>	19.41 <sup>g</sup> <sub>61</sub>	67.83 <sup>g</sup> <sub>330</sub>	27.363 <sup>g</sup> <sub>144</sub>	9.39 <sup>g</sup> <sub>66</sub>
12	38.332 <sup>h</sup> <sub>192</sub>	58.88 <sup>h</sup> <sub>42</sub>	42.790 <sup>h</sup> <sub>207</sub>	44.10 <sup>h</sup> <sub>175</sub>	20.02 <sup>h</sup> <sub>74</sub>	64.53 <sup>h</sup> <sub>311</sub>	27.507 <sup>h</sup> <sub>177</sub>	8.73 <sup>h</sup> <sub>36</sub>
22	38.524 <sup>i</sup> <sub>220</sub>	58.46 <sup>i</sup> <sub>68</sub>	42.997 <sup>i</sup> <sub>247</sub>	42.35 <sup>i</sup> <sub>129</sub>	20.76 <sup>i</sup> <sub>87</sub>	61.42 <sup>i</sup> <sub>285</sub>	27.684 <sup>i</sup> <sub>208</sub>	8.37 <sup>i</sup> <sub>2</sub>
Apr. I	38.744 <sup>j</sup> <sub>246</sub>	57.78 <sup>j</sup> <sub>92</sub>	43.244 <sup>j</sup> <sub>284</sub>	41.06 <sup>j</sup> <sub>79</sub>	21.63 <sup>j</sup> <sub>97</sub>	58.57 <sup>j</sup> <sub>253</sub>	27.892 <sup>j</sup> <sub>236</sub>	8.35 <sup>j</sup> <sub>34</sub>
II	38.990 <sup>k</sup> <sub>270</sub>	56.86 <sup>k</sup> <sub>114</sub>	43.528 <sup>k</sup> <sub>314</sub>	40.27 <sup>k</sup> <sub>25</sub>	22.60 <sup>k</sup> <sub>105</sub>	56.04 <sup>k</sup> <sub>217</sub>	28.128 <sup>k</sup> <sub>261</sub>	8.69 <sup>k</sup> <sub>69</sub>
2I	39.260 <sup>l</sup> <sub>288</sub>	55.72 <sup>l</sup> <sub>134</sub>	43.842 <sup>l</sup> <sub>337</sub>	40.02 <sup>l</sup> <sub>30</sub>	23.65 <sup>l</sup> <sub>112</sub>	53.87 <sup>l</sup> <sub>176</sub>	28.389 <sup>l</sup> <sub>282</sub>	9.38 <sup>l</sup> <sub>103</sub>
Mai I	39.548 <sup>m</sup> <sub>302</sub>	54.38 <sup>m</sup> <sub>151</sub>	44.179 <sup>m</sup> <sub>352</sub>	40.32 <sup>m</sup> <sub>84</sub>	24.77 <sup>m</sup> <sub>116</sub>	52.11 <sup>m</sup> <sub>130</sub>	28.671 <sup>m</sup> <sub>298</sub>	10.41 <sup>m</sup> <sub>134</sub>
II	39.850 <sup>n</sup> <sub>310</sub>	52.87 <sup>n</sup> <sub>162</sub>	44.531 <sup>n</sup> <sub>357</sub>	41.16 <sup>n</sup> <sub>134</sub>	25.93 <sup>n</sup> <sub>118</sub>	50.81 <sup>n</sup> <sub>83</sub>	28.969 <sup>n</sup> <sub>306</sub>	11.75 <sup>n</sup> <sub>161</sub>
2I	40.160 <sup>o</sup> <sub>310</sub>	51.25 <sup>o</sup> <sub>170</sub>	44.888 <sup>o</sup> <sub>354</sub>	42.50 <sup>o</sup> <sub>181</sub>	27.11 <sup>o</sup> <sub>118</sub>	49.98 <sup>o</sup> <sub>33</sub>	29.275 <sup>o</sup> <sub>307</sub>	13.36 <sup>o</sup> <sub>183</sub>
3I	40.470 <sup>p</sup> <sub>303</sub>	49.55 <sup>p</sup> <sub>172</sub>	45.242 <sup>p</sup> <sub>340</sub>	44.31 <sup>p</sup> <sub>220</sub>	28.29 <sup>p</sup> <sub>115</sub>	49.65 <sup>p</sup> <sub>18</sub>	29.582 <sup>p</sup> <sub>302</sub>	15.19 <sup>p</sup> <sub>200</sub>
Juni 10	40.773 <sup>q</sup> <sub>288</sub>	47.83 <sup>q</sup> <sub>170</sub>	45.582 <sup>q</sup> <sub>318</sub>	46.51 <sup>q</sup> <sub>255</sub>	29.44 <sup>q</sup> <sub>109</sub>	49.83 <sup>q</sup> <sub>68</sub>	29.884 <sup>q</sup> <sub>288</sub>	17.19 <sup>q</sup> <sub>211</sub>
20	41.061 <sup>r</sup> <sub>267</sub>	46.13 <sup>r</sup> <sub>161</sub>	45.900 <sup>r</sup> <sub>287</sub>	49.06 <sup>r</sup> <sub>282</sub>	30.53 <sup>r</sup> <sub>100</sub>	50.51 <sup>r</sup> <sub>116</sub>	30.172 <sup>r</sup> <sub>266</sub>	19.30 <sup>r</sup> <sub>216</sub>
30	41.328 <sup>s</sup> <sub>238</sub>	44.52 <sup>s</sup> <sub>150</sub>	46.187 <sup>s</sup> <sub>249</sub>	51.88 <sup>s</sup> <sub>300</sub>	31.53 <sup>s</sup> <sub>90</sub>	51.67 <sup>s</sup> <sub>161</sub>	30.438 <sup>s</sup> <sub>239</sub>	21.46 <sup>s</sup> <sub>216</sub>
Juli 10	41.566 <sup>t</sup> <sub>203</sub>	43.02 <sup>t</sup> <sub>135</sub>	46.436 <sup>t</sup> <sub>204</sub>	54.88 <sup>t</sup> <sub>313</sub>	32.43 <sup>t</sup> <sub>75</sub>	53.28 <sup>t</sup> <sub>201</sub>	30.677 <sup>t</sup> <sub>204</sub>	23.62 <sup>t</sup> <sub>210</sub>
20	41.769 <sup>u</sup> <sub>163</sub>	41.67 <sup>u</sup> <sub>116</sub>	46.640 <sup>u</sup> <sub>156</sub>	58.01 <sup>u</sup> <sub>316</sub>	33.18 <sup>u</sup> <sub>60</sub>	55.29 <sup>u</sup> <sub>236</sub>	30.881 <sup>u</sup> <sub>166</sub>	25.72 <sup>u</sup> <sub>199</sub>
30	41.932 <sup>v</sup> <sub>121</sub>	40.51 <sup>v</sup> <sub>97</sub>	46.796 <sup>v</sup> <sub>104</sub>	61.17 <sup>v</sup> <sub>314</sub>	33.78 <sup>v</sup> <sub>43</sub>	57.65 <sup>v</sup> <sub>262</sub>	31.047 <sup>v</sup> <sub>123</sub>	27.71 <sup>v</sup> <sub>184</sub>
Aug. 9	42.053 <sup>w</sup> <sub>76</sub>	39.54 <sup>w</sup> <sub>75</sub>	46.900 <sup>w</sup> <sub>50</sub>	64.31 <sup>w</sup> <sub>304</sub>	34.21 <sup>w</sup> <sub>24</sub>	60.27 <sup>w</sup> <sub>280</sub>	31.170 <sup>w</sup> <sub>80</sub>	29.55 <sup>w</sup> <sub>166</sub>
18	42.129 <sup>x</sup> <sub>32</sub>	38.79 <sup>x</sup> <sub>54</sub>	46.950 <sup>x</sup> <sub>2</sub>	67.35 <sup>x</sup> <sub>288</sub>	34.45 <sup>x</sup> <sub>5</sub>	63.07 <sup>x</sup> <sub>289</sub>	31.250 <sup>x</sup> <sub>36</sub>	31.21 <sup>x</sup> <sub>146</sub>
28	42.161 <sup>y</sup> <sub>11</sub>	38.25 <sup>y</sup> <sub>34</sub>	46.948 <sup>y</sup> <sub>52</sub>	70.23 <sup>y</sup> <sub>266</sub>	34.50 <sup>y</sup> <sub>13</sub>	65.96 <sup>y</sup> <sub>288</sub>	31.286 <sup>y</sup> <sub>7</sub>	32.67 <sup>y</sup> <sub>123</sub>
Sept. 7	42.150 <sup>z</sup> <sub>49</sub>	37.91 <sup>z</sup> <sub>14</sub>	46.896 <sup>z</sup> <sub>97</sub>	72.89 <sup>z</sup> <sub>239</sub>	34.37 <sup>z</sup> <sub>32</sub>	68.84 <sup>z</sup> <sub>275</sub>	31.279 <sup>z</sup> <sub>45</sub>	33.90 <sup>z</sup> <sub>99</sub>
17	42.101 <sup>aa</sup> <sub>83</sub>	37.77 <sup>aa</sup> <sub>3</sub>	46.799 <sup>aa</sup> <sub>138</sub>	75.28 <sup>aa</sup> <sub>208</sub>	34.05 <sup>aa</sup> <sub>49</sub>	71.59 <sup>aa</sup> <sub>252</sub>	31.234 <sup>aa</sup> <sub>79</sub>	34.89 <sup>aa</sup> <sub>75</sub>
27	42.018 <sup>ab</sup> <sub>110</sub>	37.80 <sup>ab</sup> <sub>18</sub>	46.661 <sup>ab</sup> <sub>171</sub>	77.36 <sup>ab</sup> <sub>172</sub>	33.56 <sup>ab</sup> <sub>63</sub>	74.11 <sup>ab</sup> <sub>219</sub>	31.155 <sup>ab</sup> <sub>106</sub>	35.64 <sup>ab</sup> <sub>50</sub>
Okt. 7	41.908 <sup>ac</sup> <sub>128</sub>	37.98 <sup>ac</sup> <sub>31</sub>	46.490 <sup>ac</sup> <sub>196</sub>	79.08 <sup>ac</sup> <sub>132</sub>	32.93 <sup>ac</sup> <sub>75</sub>	76.30 <sup>ac</sup> <sub>177</sub>	31.049 <sup>ac</sup> <sub>126</sub>	36.14 <sup>ac</sup> <sub>26</sub>
17	41.780 <sup>ad</sup> <sub>140</sub>	38.29 <sup>ad</sup> <sub>43</sub>	46.294 <sup>ad</sup> <sub>213</sub>	80.40 <sup>ad</sup> <sub>90</sub>	32.18 <sup>ad</sup> <sub>83</sub>	78.07 <sup>ad</sup> <sub>127</sub>	30.923 <sup>ad</sup> <sub>140</sub>	36.40 <sup>ad</sup> <sub>2</sub>
27	41.640 <sup>ae</sup> <sub>142</sub>	38.72 <sup>ae</sup> <sub>51</sub>	46.081 <sup>ae</sup> <sub>221</sub>	81.30 <sup>ae</sup> <sub>45</sub>	31.35 <sup>ae</sup> <sub>88</sub>	79.34 <sup>ae</sup> <sub>72</sub>	30.783 <sup>ae</sup> <sub>144</sub>	36.42 <sup>ae</sup> <sub>21</sub>
Nov. 6	41.498 <sup>af</sup> <sub>138</sub>	39.23 <sup>af</sup> <sub>58</sub>	45.860 <sup>af</sup> <sub>221</sub>	81.75 <sup>af</sup> <sub>2</sub>	30.47 <sup>af</sup> <sub>89</sub>	80.06 <sup>af</sup> <sub>14</sub>	30.639 <sup>af</sup> <sub>142</sub>	36.21 <sup>af</sup> <sub>44</sub>
16	41.360 <sup>ag</sup> <sub>125</sub>	39.81 <sup>ag</sup> <sub>64</sub>	45.639 <sup>ag</sup> <sub>214</sub>	81.73 <sup>ag</sup> <sub>49</sub>	29.58 <sup>ag</sup> <sub>86</sub>	80.20 <sup>ag</sup> <sub>47</sub>	30.497 <sup>ag</sup> <sub>134</sub>	35.77 <sup>ag</sup> <sub>65</sub>
26	41.235 <sup>ah</sup> <sub>108</sub>	40.45 <sup>ah</sup> <sub>67</sub>	45.425 <sup>ah</sup> <sub>199</sub>	81.24 <sup>ah</sup> <sub>96</sub>	28.72 <sup>ah</sup> <sub>79</sub>	79.73 <sup>ah</sup> <sub>106</sub>	30.363 <sup>ah</sup> <sub>120</sub>	35.12 <sup>ah</sup> <sub>84</sub>
Dez. 6	41.127 <sup>ai</sup> <sub>86</sub>	41.12 <sup>ai</sup> <sub>70</sub>	45.226 <sup>ai</sup> <sub>178</sub>	80.28 <sup>ai</sup> <sub>140</sub>	27.93 <sup>ai</sup> <sub>70</sub>	78.67 <sup>ai</sup> <sub>161</sub>	30.243 <sup>ai</sup> <sub>101</sub>	34.28 <sup>ai</sup> <sub>102</sub>
16	41.041 <sup>aj</sup> <sub>61</sub>	41.82 <sup>aj</sup> <sub>69</sub>	45.048 <sup>aj</sup> <sub>150</sub>	78.88 <sup>aj</sup> <sub>181</sub>	27.23 <sup>aj</sup> <sub>58</sub>	77.06 <sup>aj</sup> <sub>212</sub>	30.142 <sup>aj</sup> <sub>78</sub>	33.26 <sup>aj</sup> <sub>118</sub>
26	40.980 <sup>ak</sup> <sub>33</sub>	42.51 <sup>ak</sup> <sub>68</sub>	44.898 <sup>ak</sup> <sub>119</sub>	77.07 <sup>ak</sup> <sub>215</sub>	26.65 <sup>ak</sup> <sub>43</sub>	74.94 <sup>ak</sup> <sub>256</sub>	30.064 <sup>ak</sup> <sub>54</sub>	32.08 <sup>ak</sup> <sub>128</sub>
36	40.947 <sup>al</sup>	43.19 <sup>al</sup>	44.779 <sup>al</sup>	74.92 <sup>al</sup>	26.22 <sup>al</sup>	72.38 <sup>al</sup>	30.010 <sup>al</sup>	30.80 <sup>al</sup>
Mittl. Ort	39.858	50.84	44.484	56.80	26.54	70.04	29.022	19.13
sec $\delta$ , tg $\delta$	1.005	-0.102	1.309	+0.844	4.670	-4.562	1.014	+0.169
a, a'	+3.2	+15.8	+2.4	+16.2	+6.7	+16.2	+2.9	+16.5
b, b'	-0.01	+0.61	+0.05	+0.59	-0.25	+0.59	+0.01	+0.57



# Obere Kulmination Greenwich

167\*

Tag	819) $\delta$ Capricorni		821) $\pi^2$ Cygni		823) $\iota 6$ Pegasi		822) $\gamma$ Gruis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$21^h 43^m$	$-16^\circ 22'$	$21^h 44^m$	$+49^\circ 2'$	$21^h 50^m$	$+25^\circ 39'$	$21^h 50^m$	$-37^\circ 37'$
Jan. I	58.357	49.04	43.570	82.77	31.639	57.87	33.824	41.87
II	58.328	49.17	43.420	80.36	31.568	55.99	33.774	40.93
2I	58.329	49.17	43.315	77.67	31.526	53.97	33.762	39.74
3I	58.360	49.03	43.258	74.78	31.517	51.88	33.787	38.32
Febr. 10	58.422	48.74	43.254	71.82	31.542	49.80	33.850	36.72
20	58.515	48.28	43.304	68.90	31.604	47.83	33.952	34.95
März 2	58.639	47.64	43.411	66.14	31.703	46.04	34.092	33.05
12	58.795	46.81	43.573	63.65	31.839	44.53	34.269	31.05
22	58.982	45.81	43.789	61.53	32.012	43.36	34.484	28.98
Apr. I	59.200	44.63	44.055	59.87	32.221	42.59	34.735	26.89
II	59.446	43.29	44.365	58.72	32.464	42.25	35.020	24.80
2I	59.718	41.82	44.712	58.13	32.735	42.37	35.335	22.77
Mai I	60.011	40.24	45.086	58.12	33.029	42.95	35.676	20.84
II	60.321	38.60	45.479	58.68	33.341	43.97	36.037	19.04
2I	60.642	36.95	45.879	59.80	33.662	45.40	36.412	17.44
3I	60.966	35.32	46.275	61.44	33.985	47.19	36.792	16.08
Juni 10	61.286	33.78	46.656	63.54	34.301	49.30	37.168	14.98
20	61.593	32.35	47.013	66.03	34.603	51.05	37.533	14.17
30	61.881	31.08	47.335	68.86	34.881	54.19	37.875	13.69
Juli 10	62.141	30.01	47.614	71.94	35.129	56.84	38.187	13.54
20	62.368	29.15	47.843	75.20	35.341	59.54	38.461	13.71
30	62.555	28.53	48.017	78.56	35.512	62.23	38.689	14.21
Aug. 9	62.699	28.14	48.133	81.94	35.638	64.84	38.867	15.01
18*)	62.797	27.99	48.189	85.27	35.718	67.32	38.991	16.06
28	62.849	28.05	48.186	88.48	35.751	69.64	39.059	17.32
Sept. 7	62.856	28.31	48.126	91.50	35.740	71.73	39.072	18.73
17	62.821	28.74	48.013	94.27	35.688	73.57	39.034	20.24
27	62.750	29.30	47.853	96.73	35.600	75.12	38.950	21.77
Okt. 7	62.649	29.95	47.654	98.84	35.482	76.37	38.827	23.26
17	62.526	30.65	47.423	100.54	35.341	77.29	38.675	24.63
27	62.389	31.37	47.170	101.79	35.184	77.87	38.503	25.83
Nov. 6	62.246	32.07	46.903	102.56	35.018	78.09	38.320	26.80
16	62.106	32.73	46.631	102.83	34.852	77.95	38.138	27.51
26	61.975	33.32	46.363	102.57	34.691	77.45	37.966	27.93
Dez. 6	61.860	33.83	46.108	101.80	34.542	76.60	37.811	28.03
16	61.766	34.25	45.874	100.52	34.410	75.42	37.681	27.83
26	61.696	34.56	45.667	98.77	34.300	73.95	37.580	27.32
36	61.653	34.75	45.495	96.60	34.214	72.22	37.512	26.53
Mittl. Ort	60.436	40.11	45.489	75.99	33.425	56.22	36.272	27.95
sec $\delta$ , tg $\delta$	1.042	-0.294	1.526	+1.153	1.110	+0.481	1.263	-0.771
a, a'	+3.3	+16.6	+2.2	+16.7	+2.7	+16.9	+3.6	+16.9
b, b'	-0.02	+0.56	+0.06	+0.56	+0.03	+0.54	-0.04	+0.54

\*) Bei Stern 823) und 822) lies Aug. 19.



## Scheinbare Sternörter 1945

Tag	827) $\alpha$ Aquarii		830) $\alpha$ Cephei		828) $\iota$ Aquarii		829) $\alpha$ Gruis	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	22 <sup>h</sup> 2 <sup>m</sup>	-0° 35'	22 <sup>h</sup> 3 <sup>m</sup>	+62° 30'	22 <sup>h</sup> 3 <sup>m</sup>	-14° 8'	22 <sup>h</sup> 4 <sup>m</sup>	-47° 13'
Jan. I	55.706 <sup>8</sup> <sub>47</sub>	21.56 <sup>85</sup>	17.99 <sup>30</sup>	70.37 <sup>228</sup>	26.148 <sup>44</sup>	23.54 <sup>24</sup>	43.800 <sup>86</sup>	58.15 <sup>134</sup>
II	55.659 <sup>22</sup>	22.41 <sup>82</sup>	17.69 <sup>23</sup>	68.09 <sup>267</sup>	26.104 <sup>17</sup>	23.78 <sup>11</sup>	43.804 <sup>44</sup>	56.81 <sup>165</sup>
21	55.637 <sup>6</sup>	23.23 <sup>74</sup>	17.46 <sup>16</sup>	65.42 <sup>296</sup>	26.087 <sup>10</sup>	23.89 <sup>4</sup>	43.760 <sup>0</sup>	55.16 <sup>192</sup>
31	55.643 <sup>33</sup>	23.97 <sup>63</sup>	17.30 <sup>9</sup>	62.46 <sup>314</sup>	26.097 <sup>40</sup>	23.85 <sup>19</sup>	43.760 <sup>44</sup>	53.24 <sup>214</sup>
Febr. 10	55.676 <sup>64</sup>	24.60 <sup>48</sup>	17.21 <sup>1</sup>	59.32 <sup>319</sup>	26.137 <sup>70</sup>	23.66 <sup>37</sup>	43.804 <sup>90</sup>	51.10 <sup>231</sup>
20	55.740 <sup>95</sup>	25.08 <sup>27</sup>	17.20 <sup>8</sup>	56.13 <sup>312</sup>	26.207 <sup>102</sup>	23.29 <sup>56</sup>	43.894 <sup>135</sup>	48.79 <sup>244</sup>
März 2	55.835 <sup>127</sup>	25.35 <sup>5</sup>	17.28 <sup>17</sup>	53.01 <sup>291</sup>	26.309 <sup>134</sup>	22.73 <sup>75</sup>	44.029 <sup>181</sup>	46.35 <sup>252</sup>
12	55.962 <sup>159</sup>	25.40 <sup>21</sup>	17.45 <sup>24</sup>	50.10 <sup>260</sup>	26.443 <sup>166</sup>	21.98 <sup>96</sup>	44.210 <sup>225</sup>	43.83 <sup>255</sup>
22	56.121 <sup>191</sup>	25.19 <sup>48</sup>	17.69 <sup>32</sup>	47.50 <sup>218</sup>	26.609 <sup>198</sup>	21.02 <sup>115</sup>	44.435 <sup>268</sup>	41.28 <sup>252</sup>
Apr. I	56.312 <sup>221</sup>	24.71 <sup>76</sup>	18.01 <sup>39</sup>	45.32 <sup>169</sup>	26.807 <sup>229</sup>	19.87 <sup>133</sup>	44.703 <sup>308</sup>	38.76 <sup>245</sup>
II	56.533 <sup>248</sup>	23.95 <sup>103</sup>	18.40 <sup>44</sup>	43.63 <sup>113</sup>	27.036 <sup>257</sup>	18.54 <sup>149</sup>	45.011 <sup>344</sup>	36.31 <sup>233</sup>
21	56.781 <sup>273</sup>	22.92 <sup>128</sup>	18.84 <sup>49</sup>	42.50 <sup>54</sup>	27.293 <sup>281</sup>	17.05 <sup>162</sup>	45.355 <sup>377</sup>	33.98 <sup>216</sup>
Mai I	57.054 <sup>292</sup>	21.64 <sup>150</sup>	19.33 <sup>51</sup>	41.96 <sup>6</sup>	27.574 <sup>301</sup>	15.43 <sup>171</sup>	45.732 <sup>402</sup>	31.82 <sup>193</sup>
II	57.346 <sup>304</sup>	20.14 <sup>168</sup>	19.84 <sup>53</sup>	42.02 <sup>66</sup>	27.875 <sup>314</sup>	13.72 <sup>175</sup>	46.134 <sup>421</sup>	29.89 <sup>167</sup>
21	57.650 <sup>310</sup>	18.46 <sup>181</sup>	20.37 <sup>52</sup>	42.68 <sup>124</sup>	28.189 <sup>321</sup>	11.97 <sup>175</sup>	46.555 <sup>429</sup>	28.22 <sup>135</sup>
31	57.960 <sup>309</sup>	16.65 <sup>188</sup>	20.89 <sup>51</sup>	43.92 <sup>178</sup>	28.510 <sup>320</sup>	10.22 <sup>170</sup>	46.984 <sup>428</sup>	26.87 <sup>101</sup>
Juni 10	58.269 <sup>298</sup>	14.77 <sup>192</sup>	21.40 <sup>47</sup>	45.70 <sup>225</sup>	28.830 <sup>310</sup>	8.52 <sup>159</sup>	47.412 <sup>417</sup>	25.86 <sup>64</sup>
20	58.567 <sup>281</sup>	12.85 <sup>188</sup>	21.87 <sup>43</sup>	47.95 <sup>267</sup>	29.140 <sup>294</sup>	6.93 <sup>145</sup>	47.829 <sup>396</sup>	25.22 <sup>24</sup>
30	58.848 <sup>257</sup>	10.97 <sup>181</sup>	22.30 <sup>38</sup>	50.62 <sup>302</sup>	29.434 <sup>270</sup>	5.48 <sup>127</sup>	48.225 <sup>364</sup>	24.98 <sup>15</sup>
Juli 10	59.105 <sup>225</sup>	9.16 <sup>169</sup>	22.68 <sup>31</sup>	53.64 <sup>328</sup>	29.704 <sup>238</sup>	4.21 <sup>106</sup>	48.589 <sup>323</sup>	25.13 <sup>53</sup>
20	59.330 <sup>189</sup>	7.47 <sup>153</sup>	22.99 <sup>23</sup>	56.92 <sup>348</sup>	29.942 <sup>200</sup>	3.15 <sup>82</sup>	48.912 <sup>273</sup>	25.66 <sup>90</sup>
30	59.519 <sup>149</sup>	5.94 <sup>134</sup>	23.22 <sup>16</sup>	60.40 <sup>358</sup>	30.142 <sup>160</sup>	2.33 <sup>58</sup>	49.185 <sup>217</sup>	26.56 <sup>123</sup>
Aug. 9	59.668 <sup>106</sup>	4.60 <sup>113</sup>	23.38 <sup>8</sup>	63.98 <sup>362</sup>	30.302 <sup>115</sup>	1.75 <sup>34</sup>	49.402 <sup>156</sup>	27.79 <sup>151</sup>
19	59.774 <sup>62</sup>	3.47 <sup>92</sup>	23.46 <sup>0</sup>	67.60 <sup>358</sup>	30.417 <sup>69</sup>	1.41 <sup>11</sup>	49.558 <sup>92</sup>	29.30 <sup>174</sup>
28	59.836 <sup>20</sup>	2.55 <sup>69</sup>	23.46 <sup>8</sup>	71.18 <sup>345</sup>	30.486 <sup>25</sup>	1.30 <sup>11</sup>	49.650 <sup>29</sup>	31.04 <sup>189</sup>
Sept. 7	59.856 <sup>19</sup>	1.86 <sup>47</sup>	23.38 <sup>15</sup>	74.63 <sup>325</sup>	30.511 <sup>16</sup>	1.41 <sup>30</sup>	49.679 <sup>31</sup>	32.93 <sup>197</sup>
17	59.837 <sup>55</sup>	1.39 <sup>25</sup>	23.23 <sup>21</sup>	77.88 <sup>300</sup>	30.495 <sup>54</sup>	1.71 <sup>45</sup>	49.648 <sup>87</sup>	34.90 <sup>197</sup>
27	59.782 <sup>85</sup>	1.14 <sup>7</sup>	23.02 <sup>28</sup>	80.88 <sup>268</sup>	30.441 <sup>85</sup>	2.16 <sup>58</sup>	49.561 <sup>135</sup>	36.87 <sup>187</sup>
Okt. 7	59.697 <sup>107</sup>	1.07 <sup>11</sup>	22.74 <sup>33</sup>	83.56 <sup>228</sup>	30.356 <sup>109</sup>	2.74 <sup>66</sup>	49.426 <sup>173</sup>	38.74 <sup>171</sup>
17	59.590 <sup>123</sup>	1.18 <sup>27</sup>	22.41 <sup>37</sup>	85.84 <sup>183</sup>	30.247 <sup>126</sup>	3.40 <sup>70</sup>	49.253 <sup>202</sup>	40.45 <sup>147</sup>
27	59.467 <sup>131</sup>	1.45 <sup>41</sup>	22.04 <sup>39</sup>	87.67 <sup>135</sup>	30.121 <sup>135</sup>	4.10 <sup>71</sup>	49.051 <sup>217</sup>	41.92 <sup>116</sup>
Nov. 6	59.336 <sup>132</sup>	1.86 <sup>53</sup>	21.65 <sup>42</sup>	89.02 <sup>81</sup>	29.986 <sup>136</sup>	4.81 <sup>70</sup>	48.834 <sup>222</sup>	43.08 <sup>81</sup>
16	59.204 <sup>126</sup>	2.39 <sup>63</sup>	21.23 <sup>42</sup>	89.83 <sup>24</sup>	29.850 <sup>130</sup>	5.51 <sup>65</sup>	48.612 <sup>216</sup>	43.89 <sup>42</sup>
26	59.078 <sup>116</sup>	3.02 <sup>71</sup>	20.81 <sup>41</sup>	90.07 <sup>34</sup>	29.720 <sup>118</sup>	6.16 <sup>58</sup>	48.396 <sup>200</sup>	44.31 <sup>2</sup>
Dez. 6	58.962 <sup>100</sup>	3.73 <sup>78</sup>	20.40 <sup>39</sup>	89.73 <sup>91</sup>	29.602 <sup>101</sup>	6.74 <sup>50</sup>	48.196 <sup>175</sup>	44.33 <sup>38</sup>
16	58.862 <sup>81</sup>	4.51 <sup>82</sup>	20.01 <sup>37</sup>	88.82 <sup>147</sup>	29.501 <sup>80</sup>	7.24 <sup>41</sup>	48.021 <sup>143</sup>	43.95 <sup>78</sup>
26	58.781 <sup>59</sup>	5.33 <sup>84</sup>	19.64 <sup>32</sup>	87.35 <sup>198</sup>	29.421 <sup>57</sup>	7.65 <sup>30</sup>	47.878 <sup>107</sup>	43.17 <sup>115</sup>
36	58.722	6.17	19.32	85.37	29.364	7.95	47.771	42.02
Mittl. Ort	57.541	16.03	20.04	60.88	28.105	14.33	46.550	41.56
sec $\delta$ , tg $\delta$	1.000	-0.010	2.167	+1.922	1.031	-0.252	1.473	-1.081
a, a'	+3.1	+17.5	+1.8	+17.5	+3.2	+17.5	+3.8	+17.6
b, b'	0.00	+0.49	+0.11	+0.49	-0.01	+0.49	-0.06	+0.48



# Obere Kulmination Greenwich

169\*

Tag	834) $\delta$ Pegasi		835) $\pi$ Pegasi		837) $\alpha$ Cephei		836) $\zeta$ Cephei	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$22^h 7^m$	$+5^\circ 55'$	$22^h 7^m$	$+32^\circ 54'$	$22^h 8^m$	$+72^\circ 3'$	$22^h 8^m$	$+57^\circ 55'$
Jan. I	23.692 <sup>5</sup>	32.02 <sup>111</sup>	30.765 <sup>102</sup>	31.17 <sup>194</sup>	42.78 <sup>50</sup>	83.40 <sup>216</sup>	54.620 <sup>243</sup>	55.64 <sup>222</sup>
II	23.637 <sup>55</sup>	30.91 <sup>112</sup>	30.663 <sup>72</sup>	29.23 <sup>215</sup>	42.28 <sup>42</sup>	81.24 <sup>260</sup>	54.377 <sup>193</sup>	53.42 <sup>260</sup>
21	23.608 <sup>29</sup>	29.79 <sup>108</sup>	30.591 <sup>39</sup>	27.08 <sup>229</sup>	41.86 <sup>31</sup>	78.64 <sup>295</sup>	54.184 <sup>137</sup>	50.82 <sup>288</sup>
31	23.605 <sup>3</sup>	28.71 <sup>100</sup>	30.552 <sup>3</sup>	24.79 <sup>234</sup>	41.55 <sup>20</sup>	75.69 <sup>318</sup>	54.047 <sup>72</sup>	47.94 <sup>304</sup>
Febr. 10	23.631 <sup>26</sup>	27.71 <sup>85</sup>	30.549 <sup>37</sup>	22.45 <sup>227</sup>	41.35 <sup>6</sup>	72.51 <sup>328</sup>	53.975 <sup>3</sup>	44.90 <sup>309</sup>
20	23.687 <sup>88</sup>	26.86 <sup>67</sup>	30.586 <sup>78</sup>	20.18 <sup>212</sup>	41.29 <sup>6</sup>	69.23 <sup>325</sup>	53.972 <sup>69</sup>	41.81 <sup>302</sup>
März 2	23.775 <sup>120</sup>	26.19 <sup>43</sup>	30.664 <sup>120</sup>	18.06 <sup>188</sup>	41.35 <sup>20</sup>	65.98 <sup>310</sup>	54.041 <sup>141</sup>	38.79 <sup>281</sup>
12	23.895 <sup>154</sup>	25.76 <sup>14</sup>	30.784 <sup>162</sup>	16.18 <sup>155</sup>	41.55 <sup>32</sup>	62.88 <sup>282</sup>	54.182 <sup>212</sup>	35.98 <sup>250</sup>
22	24.049 <sup>187</sup>	25.62 <sup>16</sup>	30.946 <sup>203</sup>	14.63 <sup>115</sup>	41.87 <sup>43</sup>	60.06 <sup>243</sup>	54.394 <sup>278</sup>	33.48 <sup>210</sup>
Apr. I	24.236 <sup>218</sup>	25.78 <sup>47</sup>	31.149 <sup>241</sup>	13.48 <sup>71</sup>	42.30 <sup>54</sup>	57.63 <sup>196</sup>	54.672 <sup>338</sup>	31.38 <sup>161</sup>
11	24.454 <sup>246</sup>	26.25 <sup>79</sup>	31.390 <sup>274</sup>	12.77 <sup>23</sup>	42.84 <sup>62</sup>	55.67 <sup>142</sup>	55.010 <sup>389</sup>	29.77 <sup>107</sup>
21	24.700 <sup>271</sup>	27.04 <sup>110</sup>	31.664 <sup>302</sup>	12.54 <sup>27</sup>	43.46 <sup>68</sup>	54.25 <sup>83</sup>	55.399 <sup>429</sup>	28.70 <sup>48</sup>
Mai I	24.971 <sup>291</sup>	28.14 <sup>138</sup>	31.966 <sup>323</sup>	12.81 <sup>75</sup>	44.14 <sup>73</sup>	53.42 <sup>22</sup>	55.828 <sup>456</sup>	28.22 <sup>11</sup>
11	25.262 <sup>304</sup>	29.52 <sup>162</sup>	32.289 <sup>335</sup>	13.56 <sup>122</sup>	44.87 <sup>74</sup>	53.20 <sup>40</sup>	56.284 <sup>471</sup>	28.33 <sup>70</sup>
21	25.566 <sup>310</sup>	31.14 <sup>181</sup>	32.624 <sup>340</sup>	14.78 <sup>164</sup>	45.61 <sup>74</sup>	53.60 <sup>99</sup>	56.755 <sup>472</sup>	29.03 <sup>126</sup>
31	25.876 <sup>308</sup>	32.95 <sup>196</sup>	32.964 <sup>335</sup>	16.42 <sup>201</sup>	46.35 <sup>71</sup>	54.59 <sup>155</sup>	57.227 <sup>458</sup>	30.29 <sup>178</sup>
Juni 10	26.184 <sup>299</sup>	34.91 <sup>204</sup>	33.299 <sup>321</sup>	18.43 <sup>234</sup>	47.06 <sup>66</sup>	56.14 <sup>207</sup>	57.685 <sup>434</sup>	32.07 <sup>225</sup>
20	26.483 <sup>281</sup>	36.95 <sup>208</sup>	33.620 <sup>299</sup>	20.77 <sup>258</sup>	47.72 <sup>59</sup>	58.21 <sup>252</sup>	58.119 <sup>396</sup>	34.32 <sup>265</sup>
30	26.764 <sup>258</sup>	39.03 <sup>204</sup>	33.919 <sup>268</sup>	23.35 <sup>276</sup>	48.31 <sup>52</sup>	60.73 <sup>291</sup>	58.515 <sup>349</sup>	36.97 <sup>299</sup>
Juli 10	27.022 <sup>226</sup>	41.07 <sup>198</sup>	34.187 <sup>232</sup>	26.11 <sup>288</sup>	48.83 <sup>42</sup>	63.64 <sup>322</sup>	58.864 <sup>293</sup>	39.96 <sup>324</sup>
20	27.248 <sup>190</sup>	43.05 <sup>185</sup>	34.419 <sup>190</sup>	28.99 <sup>292</sup>	49.25 <sup>32</sup>	66.86 <sup>346</sup>	59.157 <sup>230</sup>	43.20 <sup>342</sup>
30	27.438 <sup>149</sup>	44.90 <sup>170</sup>	34.609 <sup>144</sup>	31.91 <sup>290</sup>	49.57 <sup>21</sup>	70.32 <sup>362</sup>	59.387 <sup>162</sup>	46.62 <sup>352</sup>
Aug. 9	27.587 <sup>108</sup>	46.60 <sup>151</sup>	34.753 <sup>96</sup>	34.81 <sup>281</sup>	49.78 <sup>9</sup>	73.94 <sup>369</sup>	59.549 <sup>92</sup>	50.14 <sup>355</sup>
19	27.695 <sup>64</sup>	48.11 <sup>131</sup>	34.849 <sup>48</sup>	37.62 <sup>268</sup>	49.87 <sup>2</sup>	77.63 <sup>370</sup>	59.641 <sup>22</sup>	53.9 <sup>350</sup>
28	27.759 <sup>21</sup>	49.42 <sup>108</sup>	34.897 <sup>0</sup>	40.30 <sup>248</sup>	49.85 <sup>14</sup>	81.33 <sup>361</sup>	59.663 <sup>47</sup>	57.19 <sup>337</sup>
Sept. 7	27.780 <sup>18</sup>	50.50 <sup>84</sup>	34.897 <sup>43</sup>	42.78 <sup>225</sup>	49.71 <sup>24</sup>	84.94 <sup>347</sup>	59.616 <sup>111</sup>	60.56 <sup>317</sup>
17	27.762 <sup>53</sup>	51.34 <sup>62</sup>	34.854 <sup>82</sup>	45.03 <sup>197</sup>	49.47 <sup>34</sup>	88.41 <sup>323</sup>	59.505 <sup>171</sup>	63.73 <sup>292</sup>
27	27.709 <sup>82</sup>	51.96 <sup>39</sup>	34.772 <sup>117</sup>	47.00 <sup>166</sup>	49.13 <sup>43</sup>	91.64 <sup>293</sup>	59.334 <sup>223</sup>	66.65 <sup>259</sup>
Okt. 7	27.627 <sup>106</sup>	52.35 <sup>17</sup>	34.655 <sup>143</sup>	48.66 <sup>131</sup>	48.70 <sup>51</sup>	94.57 <sup>257</sup>	59.111 <sup>267</sup>	69.24 <sup>221</sup>
17	27.521 <sup>122</sup>	52.52 <sup>4</sup>	34.512 <sup>163</sup>	49.97 <sup>95</sup>	48.19 <sup>58</sup>	97.14 <sup>213</sup>	58.844 <sup>302</sup>	71.45 <sup>177</sup>
27	27.399 <sup>131</sup>	52.48 <sup>23</sup>	34.349 <sup>175</sup>	50.92 <sup>55</sup>	47.61 <sup>63</sup>	99.27 <sup>165</sup>	58.542 <sup>328</sup>	73.22 <sup>130</sup>
Nov. 6	27.268 <sup>133</sup>	52.25 <sup>42</sup>	34.174 <sup>181</sup>	51.47 <sup>14</sup>	46.98 <sup>65</sup>	100.92 <sup>110</sup>	58.214 <sup>342</sup>	74.52 <sup>77</sup>
16	27.135 <sup>129</sup>	51.83 <sup>59</sup>	33.993 <sup>179</sup>	51.61 <sup>26</sup>	46.33 <sup>68</sup>	102.02 <sup>53</sup>	57.872 <sup>348</sup>	75.29 <sup>22</sup>
26	27.006 <sup>119</sup>	51.24 <sup>73</sup>	33.814 <sup>171</sup>	51.35 <sup>67</sup>	45.65 <sup>68</sup>	102.55 <sup>8</sup>	57.524 <sup>343</sup>	75.51 <sup>34</sup>
Dez. 6	26.887 <sup>104</sup>	50.51 <sup>87</sup>	33.643 <sup>158</sup>	50.68 <sup>107</sup>	44.97 <sup>65</sup>	102.47 <sup>68</sup>	57.181 <sup>328</sup>	75.17 <sup>90</sup>
16	26.783 <sup>87</sup>	49.64 <sup>98</sup>	33.485 <sup>139</sup>	49.61 <sup>144</sup>	44.32 <sup>61</sup>	101.79 <sup>127</sup>	56.853 <sup>302</sup>	74.27 <sup>144</sup>
26	26.696 <sup>66</sup>	48.66 <sup>106</sup>	33.346 <sup>116</sup>	48.17 <sup>175</sup>	43.71 <sup>56</sup>	100.52 <sup>184</sup>	56.551 <sup>268</sup>	72.83 <sup>193</sup>
36	26.630	47.60	33.230	46.42	43.15	98.68	56.283	70.90
Mittl. Ort	25.465	35.84	32.476	27.69	45.23	72.52	56.525	46.78
sec $\delta$ , tg $\delta$	1.005	+0.104	1.191	+0.647	3.248	+3.091	1.883	+1.596
a, a'	+3.0	+17.7	+2.7	+17.7	+1.1	+17.7	+2.1	+17.7
b, b'	+0.01	+0.47	+0.04	+0.47	+0.18	+0.47	+0.09	+0.47



Tag	840) ♀ Aquarii		841) α Tucanae		842) γ Aquarii		844) β Lacertae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	22 <sup>h</sup> 13 <sup>m</sup>	-8° 3'	22 <sup>h</sup> 14 <sup>m</sup>	-60° 31'	22 <sup>h</sup> 18 <sup>m</sup>	-1° 39'	22 <sup>h</sup> 21 <sup>m</sup>	+51° 56'
Jan. I	54.095 <sup>a</sup> <sub>52</sub>	36.32 <sup>b</sup> <sub>52</sub>	41.84 <sup>a</sup> <sub>17</sub>	83.68 <sup>b</sup> <sub>187</sub>	47.163 <sup>a</sup> <sub>58</sub>	60.75 <sup>b</sup> <sub>78</sub>	21.785 <sup>a</sup> <sub>203</sub>	78.66 <sup>b</sup> <sub>207</sub>
II	54.043 <sub>27</sub>	36.84 <sub>42</sub>	41.67 <sub>11</sub>	81.81 <sub>223</sub>	47.105 <sub>33</sub>	61.53 <sub>73</sub>	21.582 <sub>163</sub>	76.59 <sub>244</sub>
21	54.016 <sub>1</sub>	37.26 <sub>30</sub>	41.56 <sub>4</sub>	79.58 <sub>255</sub>	47.072 <sub>9</sub>	62.26 <sub>65</sub>	21.419 <sub>118</sub>	74.15 <sub>270</sub>
31	54.015 <sub>27</sub>	37.56 <sub>16</sub>	41.52 <sub>2</sub>	77.03 <sub>278</sub>	47.063 <sub>19</sub>	62.91 <sub>53</sub>	21.301 <sub>66</sub>	71.45 <sub>287</sub>
Febr. 10	54.042 <sub>56</sub>	37.72 <sub>1</sub>	41.54 <sub>8</sub>	74.25 <sub>295</sub>	47.082 <sub>49</sub>	63.44 <sub>37</sub>	21.235 <sub>9</sub>	68.58 <sub>292</sub>
20	54.098 <sub>87</sub>	37.71 <sub>20</sub>	41.62 <sub>14</sub>	71.30 <sub>306</sub>	47.131 <sub>79</sub>	63.81 <sub>19</sub>	21.226 <sub>51</sub>	65.66 <sub>284</sub>
März 2	54.185 <sub>120</sub>	37.51 <sub>42</sub>	41.76 <sub>21</sub>	68.24 <sub>310</sub>	47.210 <sub>112</sub>	64.00 <sub>4</sub>	21.277 <sub>113</sub>	62.82 <sub>267</sub>
12	54.305 <sub>152</sub>	37.09 <sub>64</sub>	41.97 <sub>28</sub>	65.14 <sub>306</sub>	47.322 <sub>144</sub>	63.96 <sub>29</sub>	21.390 <sub>174</sub>	60.15 <sub>237</sub>
22	54.457 <sub>185</sub>	36.45 <sub>88</sub>	42.25 <sub>33</sub>	62.08 <sub>298</sub>	47.466 <sub>178</sub>	63.67 <sub>56</sub>	21.564 <sub>233</sub>	57.78 <sub>198</sub>
Apr. I	54.642 <sub>216</sub>	35.57 <sub>110</sub>	42.58 <sub>39</sub>	59.10 <sub>282</sub>	47.644 <sub>210</sub>	63.11 <sub>82</sub>	21.797 <sub>287</sub>	55.80 <sub>152</sub>
11	54.858 <sub>245</sub>	34.47 <sub>132</sub>	42.97 <sub>44</sub>	56.28 <sub>261</sub>	47.854 <sub>239</sub>	62.29 <sub>109</sub>	22.084 <sub>334</sub>	54.28 <sub>99</sub>
21	55.103 <sub>271</sub>	33.15 <sub>150</sub>	43.41 <sub>48</sub>	53.67 <sub>234</sub>	48.993 <sub>266</sub>	61.20 <sub>132</sub>	22.418 <sub>372</sub>	53.29 <sub>44</sub>
Mai I	55.374 <sub>292</sub>	31.65 <sub>165</sub>	43.89 <sub>52</sub>	51.33 <sub>202</sub>	48.359 <sub>287</sub>	59.88 <sub>154</sub>	22.790 <sub>401</sub>	52.85 <sub>13</sub>
11	55.666 <sub>306</sub>	30.00 <sub>176</sub>	44.41 <sub>54</sub>	49.31 <sub>166</sub>	48.646 <sub>302</sub>	58.34 <sub>170</sub>	23.191 <sub>418</sub>	52.98 <sub>69</sub>
21	55.972 <sub>315</sub>	28.24 <sub>181</sub>	44.95 <sub>56</sub>	47.65 <sub>125</sub>	48.948 <sub>311</sub>	56.64 <sub>183</sub>	23.609 <sub>424</sub>	53.67 <sub>124</sub>
31	56.287 <sub>315</sub>	26.43 <sub>182</sub>	45.51 <sub>56</sub>	46.40 <sub>80</sub>	49.259 <sub>311</sub>	54.81 <sub>190</sub>	24.033 <sub>417</sub>	54.91 <sub>173</sub>
Juni 10	56.602 <sub>307</sub>	24.61 <sub>178</sub>	46.07 <sub>54</sub>	45.60 <sub>36</sub>	49.570 <sub>304</sub>	52.91 <sub>193</sub>	24.450 <sub>399</sub>	56.64 <sub>219</sub>
20	56.909 <sub>292</sub>	22.83 <sub>170</sub>	46.61 <sub>52</sub>	45.24 <sub>11</sub>	49.874 <sub>289</sub>	50.98 <sub>188</sub>	24.849 <sub>371</sub>	58.83 <sub>257</sub>
30	57.201 <sub>269</sub>	21.13 <sub>155</sub>	47.13 <sub>48</sub>	45.35 <sub>58</sub>	50.163 <sub>267</sub>	49.10 <sub>180</sub>	25.220 <sub>332</sub>	61.40 <sub>289</sub>
Juli 10	57.470 <sub>239</sub>	19.58 <sub>138</sub>	47.61 <sub>43</sub>	45.93 <sub>101</sub>	50.430 <sub>238</sub>	47.30 <sub>168</sub>	25.552 <sub>285</sub>	64.29 <sub>313</sub>
20	57.709 <sub>203</sub>	18.20 <sub>118</sub>	48.04 <sub>36</sub>	46.94 <sub>142</sub>	50.668 <sub>203</sub>	45.62 <sub>151</sub>	25.837 <sub>232</sub>	67.42 <sub>331</sub>
30	57.912 <sub>164</sub>	17.02 <sub>96</sub>	48.40 <sub>29</sub>	48.36 <sub>178</sub>	50.871 <sub>163</sub>	44.11 <sub>132</sub>	26.069 <sub>174</sub>	70.73 <sub>339</sub>
Aug. 9	58.076 <sub>121</sub>	16.06 <sub>72</sub>	48.69 <sub>22</sub>	50.14 <sub>208</sub>	51.034 <sub>122</sub>	42.79 <sub>111</sub>	26.243 <sub>114</sub>	74.12 <sub>342</sub>
19	58.197 <sub>77</sub>	15.34 <sub>49</sub>	48.91 <sub>12</sub>	52.22 <sub>230</sub>	51.156 <sub>79</sub>	41.68 <sub>88</sub>	26.357 <sub>52</sub>	77.54 <sub>337</sub>
28	58.274 <sub>33</sub>	14.85 <sub>27</sub>	49.03 <sub>4</sub>	54.52 <sub>244</sub>	51.235 <sub>36</sub>	40.80 <sub>65</sub>	26.409 <sub>8</sub>	80.91 <sub>324</sub>
Sept. 7	58.307 <sub>7</sub>	14.58 <sub>5</sub>	49.07 <sub>4</sub>	56.96 <sub>249</sub>	51.271 <sub>4</sub>	40.15 <sub>43</sub>	26.401 <sub>65</sub>	84.15 <sub>306</sub>
17	58.300 <sub>43</sub>	14.53 <sub>14</sub>	49.03 <sub>12</sub>	59.45 <sub>243</sub>	51.267 <sub>41</sub>	39.72 <sub>21</sub>	26.336 <sub>118</sub>	87.21 <sub>280</sub>
27	58.257 <sub>75</sub>	14.67 <sub>29</sub>	48.91 <sub>19</sub>	61.88 <sub>228</sub>	51.226 <sub>71</sub>	39.51 <sub>3</sub>	26.218 <sub>165</sub>	90.01 <sub>249</sub>
Okt. 7	58.182 <sub>100</sub>	14.96 <sub>43</sub>	48.72 <sub>25</sub>	64.16 <sub>203</sub>	51.155 <sub>95</sub>	39.48 <sub>15</sub>	26.053 <sub>203</sub>	92.50 <sub>213</sub>
17	58.082 <sub>117</sub>	15.39 <sub>53</sub>	48.47 <sub>29</sub>	66.19 <sub>171</sub>	51.060 <sub>113</sub>	39.63 <sub>30</sub>	25.850 <sub>236</sub>	94.63 <sub>172</sub>
27	57.965 <sub>127</sub>	15.92 <sub>59</sub>	48.18 <sub>32</sub>	67.90 <sub>130</sub>	50.947 <sub>124</sub>	39.93 <sub>43</sub>	25.614 <sub>259</sub>	96.35 <sub>126</sub>
Nov. 6	57.838 <sub>130</sub>	16.51 <sub>64</sub>	47.86 <sub>34</sub>	69.20 <sub>84</sub>	50.823 <sub>127</sub>	40.36 <sub>54</sub>	25.355 <sub>273</sub>	97.61 <sub>77</sub>
16	57.708 <sub>126</sub>	17.15 <sub>66</sub>	47.52 <sub>33</sub>	70.04 <sub>34</sub>	50.696 <sub>125</sub>	40.90 <sub>63</sub>	25.082 <sub>280</sub>	98.38 <sub>25</sub>
26	57.582 <sub>116</sub>	17.81 <sub>66</sub>	47.19 <sub>32</sub>	70.38 <sub>17</sub>	50.571 <sub>117</sub>	41.53 <sub>69</sub>	24.802 <sub>277</sub>	98.63 <sub>29</sub>
Dez. 6	57.466 <sub>102</sub>	18.47 <sub>64</sub>	46.87 <sub>28</sub>	70.21 <sub>68</sub>	50.454 <sub>104</sub>	42.22 <sub>74</sub>	24.525 <sub>267</sub>	98.34 <sub>82</sub>
16	57.364 <sub>84</sub>	19.11 <sub>60</sub>	46.59 <sub>25</sub>	69.53 <sub>117</sub>	50.350 <sub>87</sub>	42.96 <sub>77</sub>	24.258 <sub>247</sub>	97.52 <sub>132</sub>
26	57.280 <sub>63</sub>	19.71 <sub>54</sub>	46.34 <sub>20</sub>	68.36 <sub>163</sub>	50.263 <sub>67</sub>	43.73 <sub>77</sub>	24.011 <sub>221</sub>	96.20 <sub>179</sub>
36	57.217	20.25	46.14	66.73	50.196	44.50	23.790	94.41
Mittl. Ort	55.938	28.38	45.14	64.47	48.930	54.49	23.521	70.70
sec δ, tg δ	1.010	-0.142	2.033	-1.770	1.000	-0.029	1.623	+1.278
a, a'	+3.2	+17.9	+4.1	+18.0	+3.1	+18.1	+2.4	+18.2
b, b'	-0.01	+0.45	-0.11	+0.44	0.00	+0.43	+0.08	+0.42



# Obere Kulmination Greenwich

171\*

Tag	848) $\alpha$ Lacertae		850) $\eta$ Aquarii		851) $\beta$ Cephei		852) $\iota$ Lacertae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	22 <sup>h</sup> 38 <sup>m</sup>	+49° 59'	22 <sup>h</sup> 32 <sup>m</sup>	-0° 23'	22 <sup>h</sup> 34 <sup>m</sup>	+73° 21'	22 <sup>h</sup> 36 <sup>m</sup>	+38° 45'
Jan. I	59.531 <sup>194</sup>	65.07 <sup>198</sup>	30.107 <sup>67</sup>	71.76 <sup>80</sup>	22.34 <sup>60</sup>	38.56 <sup>183</sup>	45.746 <sup>141</sup>	53.73 <sup>180</sup>
II	59.337 <sup>159</sup>	63.09 <sup>234</sup>	30.040 <sup>46</sup>	72.56 <sup>77</sup>	21.74 <sup>51</sup>	36.73 <sup>232</sup>	45.605 <sup>115</sup>	51.93 <sup>209</sup>
21	59.178 <sup>117</sup>	60.75 <sup>260</sup>	29.994 <sup>21</sup>	73.33 <sup>69</sup>	21.23 <sup>41</sup>	34.41 <sup>272</sup>	45.490 <sup>83</sup>	49.84 <sup>229</sup>
31	59.061 <sup>69</sup>	58.15 <sup>278</sup>	29.973 <sup>6</sup>	74.02 <sup>58</sup>	20.82 <sup>29</sup>	31.69 <sup>302</sup>	45.407 <sup>46</sup>	47.55 <sup>241</sup>
Febr. 10	58.992 <sup>15</sup>	55.37 <sup>283</sup>	29.979 <sup>33</sup>	74.60 <sup>43</sup>	20.53 <sup>16</sup>	28.67 <sup>319</sup>	45.361 <sup>5</sup>	45.14 <sup>244</sup>
20	58.977 <sup>42</sup>	52.54 <sup>278</sup>	30.012 <sup>65</sup>	75.03 <sup>24</sup>	20.37 <sup>2</sup>	25.48 <sup>324</sup>	45.356 <sup>40</sup>	42.70 <sup>234</sup>
März 2	59.019 <sup>100</sup>	49.76 <sup>260</sup>	30.077 <sup>97</sup>	75.27 <sup>2</sup>	20.35 <sup>12</sup>	22.24 <sup>316</sup>	45.396 <sup>87</sup>	40.36 <sup>216</sup>
12	59.119 <sup>159</sup>	47.16 <sup>232</sup>	30.174 <sup>131</sup>	75.29 <sup>23</sup>	20.47 <sup>26</sup>	19.08 <sup>295</sup>	45.483 <sup>134</sup>	38.20 <sup>188</sup>
22	59.278 <sup>217</sup>	44.84 <sup>194</sup>	30.305 <sup>165</sup>	75.06 <sup>50</sup>	20.73 <sup>39</sup>	16.13 <sup>263</sup>	45.617 <sup>182</sup>	36.32 <sup>152</sup>
Apr. I	59.495 <sup>270</sup>	42.90 <sup>149</sup>	30.470 <sup>199</sup>	74.56 <sup>77</sup>	21.12 <sup>52</sup>	13.50 <sup>220</sup>	45.799 <sup>227</sup>	34.80 <sup>110</sup>
II	59.765 <sup>316</sup>	41.41 <sup>99</sup>	30.669 <sup>230</sup>	73.79 <sup>105</sup>	21.64 <sup>61</sup>	11.30 <sup>170</sup>	46.026 <sup>267</sup>	33.70 <sup>62</sup>
21	60.081 <sup>356</sup>	40.42 <sup>44</sup>	30.899 <sup>258</sup>	72.74 <sup>129</sup>	22.25 <sup>70</sup>	9.60 <sup>115</sup>	46.293 <sup>303</sup>	33.08 <sup>13</sup>
Mai I	60.437 <sup>386</sup>	39.98 <sup>12</sup>	31.157 <sup>281</sup>	71.45 <sup>152</sup>	22.95 <sup>75</sup>	8.45 <sup>56</sup>	46.596 <sup>330</sup>	32.95 <sup>38</sup>
II	60.823 <sup>404</sup>	40.10 <sup>67</sup>	31.438 <sup>299</sup>	69.93 <sup>170</sup>	23.70 <sup>79</sup>	7.89 <sup>4</sup>	46.926 <sup>349</sup>	33.33 <sup>88</sup>
21	61.227 <sup>412</sup>	40.77 <sup>120</sup>	31.737 <sup>309</sup>	68.23 <sup>183</sup>	24.49 <sup>79</sup>	7.93 <sup>65</sup>	47.275 <sup>359</sup>	34.21 <sup>135</sup>
31	61.639 <sup>408</sup>	41.97 <sup>169</sup>	32.046 <sup>312</sup>	66.40 <sup>193</sup>	25.28 <sup>79</sup>	8.58 <sup>123</sup>	47.634 <sup>359</sup>	35.56 <sup>177</sup>
Juni 10	62.047 <sup>393</sup>	43.66 <sup>214</sup>	32.358 <sup>308</sup>	64.47 <sup>196</sup>	26.07 <sup>74</sup>	9.81 <sup>177</sup>	47.993 <sup>349</sup>	37.33 <sup>215</sup>
20	62.440 <sup>367</sup>	45.80 <sup>253</sup>	32.666 <sup>294</sup>	62.51 <sup>195</sup>	26.81 <sup>69</sup>	11.58 <sup>225</sup>	48.342 <sup>331</sup>	39.48 <sup>246</sup>
30	62.807 <sup>332</sup>	48.33 <sup>284</sup>	32.960 <sup>273</sup>	60.56 <sup>187</sup>	27.50 <sup>61</sup>	13.83 <sup>268</sup>	48.673 <sup>303</sup>	41.94 <sup>272</sup>
Juli 10	63.139 <sup>289</sup>	51.17 <sup>308</sup>	33.233 <sup>246</sup>	58.69 <sup>175</sup>	28.11 <sup>52</sup>	16.51 <sup>304</sup>	48.976 <sup>267</sup>	44.66 <sup>290</sup>
20	63.428 <sup>239</sup>	54.25 <sup>325</sup>	33.479 <sup>213</sup>	56.94 <sup>160</sup>	28.63 <sup>41</sup>	19.55 <sup>333</sup>	49.243 <sup>227</sup>	47.56 <sup>301</sup>
30	63.667 <sup>183</sup>	57.50 <sup>335</sup>	33.692 <sup>175</sup>	55.34 <sup>142</sup>	29.04 <sup>31</sup>	22.88 <sup>354</sup>	49.470 <sup>181</sup>	50.57 <sup>306</sup>
Aug. 9	63.850 <sup>125</sup>	60.85 <sup>338</sup>	33.867 <sup>134</sup>	53.92 <sup>120</sup>	29.35 <sup>18</sup>	26.42 <sup>367</sup>	49.651 <sup>131</sup>	53.03 <sup>304</sup>
19	63.975 <sup>67</sup>	64.23 <sup>332</sup>	34.001 <sup>91</sup>	52.72 <sup>97</sup>	29.53 <sup>7</sup>	30.09 <sup>373</sup>	49.782 <sup>82</sup>	56.67 <sup>295</sup>
29	64.042 <sup>9</sup>	67.55 <sup>321</sup>	34.092 <sup>49</sup>	51.75 <sup>75</sup>	29.60 <sup>6</sup>	33.82 <sup>371</sup>	49.864 <sup>32</sup>	59.62 <sup>281</sup>
Sept. 7	64.051 <sup>47</sup>	70.76 <sup>303</sup>	34.141 <sup>9</sup>	51.00 <sup>52</sup>	29.54 <sup>17</sup>	37.53 <sup>361</sup>	49.896 <sup>15</sup>	62.43 <sup>262</sup>
17	64.004 <sup>98</sup>	73.79 <sup>278</sup>	34.150 <sup>28</sup>	50.48 <sup>29</sup>	29.37 <sup>28</sup>	41.14 <sup>344</sup>	49.881 <sup>58</sup>	65.05 <sup>236</sup>
27	63.906 <sup>143</sup>	76.57 <sup>248</sup>	34.122 <sup>60</sup>	50.19 <sup>10</sup>	29.09 <sup>38</sup>	44.58 <sup>318</sup>	49.823 <sup>97</sup>	67.41 <sup>208</sup>
Okt. 7	63.763 <sup>182</sup>	79.05 <sup>213</sup>	34.062 <sup>85</sup>	50.09 <sup>9</sup>	28.71 <sup>48</sup>	47.76 <sup>286</sup>	49.726 <sup>129</sup>	69.49 <sup>175</sup>
17	63.581 <sup>214</sup>	81.18 <sup>173</sup>	33.977 <sup>105</sup>	50.18 <sup>25</sup>	28.23 <sup>55</sup>	50.62 <sup>247</sup>	49.597 <sup>156</sup>	71.24 <sup>138</sup>
27	63.367 <sup>237</sup>	82.91 <sup>129</sup>	33.872 <sup>117</sup>	50.43 <sup>39</sup>	27.68 <sup>62</sup>	53.09 <sup>201</sup>	49.441 <sup>174</sup>	72.62 <sup>98</sup>
Nov. 6	63.130 <sup>252</sup>	84.20 <sup>81</sup>	33.755 <sup>123</sup>	50.82 <sup>51</sup>	27.06 <sup>68</sup>	55.10 <sup>149</sup>	49.267 <sup>186</sup>	73.60 <sup>56</sup>
16	62.878 <sup>260</sup>	85.01 <sup>30</sup>	33.632 <sup>123</sup>	51.33 <sup>61</sup>	26.38 <sup>70</sup>	56.59 <sup>93</sup>	49.081 <sup>192</sup>	74.16 <sup>12</sup>
26	62.618 <sup>259</sup>	85.31 <sup>22</sup>	33.509 <sup>117</sup>	51.94 <sup>69</sup>	25.68 <sup>72</sup>	57.52 <sup>34</sup>	48.889 <sup>192</sup>	74.28 <sup>32</sup>
Dez. 6	62.359 <sup>250</sup>	85.09 <sup>74</sup>	33.392 <sup>107</sup>	52.63 <sup>74</sup>	24.96 <sup>72</sup>	57.86 <sup>28</sup>	48.697 <sup>184</sup>	73.96 <sup>76</sup>
16	62.109 <sup>235</sup>	84.35 <sup>124</sup>	33.285 <sup>93</sup>	53.37 <sup>78</sup>	24.24 <sup>68</sup>	57.58 <sup>88</sup>	48.513 <sup>172</sup>	73.20 <sup>119</sup>
26	61.874 <sup>211</sup>	83.11 <sup>170</sup>	33.192 <sup>76</sup>	54.15 <sup>79</sup>	23.56 <sup>64</sup>	56.70 <sup>147</sup>	48.341 <sup>153</sup>	72.01 <sup>156</sup>
36	61.663	81.41	33.116	54.94	22.92	55.23	48.188	70.45
Mittl. Ort	61.202	57.40	31.797	65.52	24.56	26.94	47.319	48.63
sec $\delta$ , tg $\delta$	1.556	+1.192	1.000	-0.007	3.492	+3.345	1.283	+0.803
a, a'	+2.5	+18.5	+3.1	+18.6	+1.4	+18.7	+2.7	+18.7
b, b'	+0.07	+0.39	0.00	+0.37	+0.21	+0.36	+0.05	+0.36



Tag	855) ζ Pegasi		856) β Gruis		857) η Pegasi		859) λ Pegasi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	22 <sup>h</sup> 38 <sup>m</sup>	+10° 32'	22 <sup>h</sup> 39 <sup>m</sup>	-47° 10'	22 <sup>h</sup> 40 <sup>m</sup>	+29° 55'	22 <sup>h</sup> 43 <sup>m</sup>	+23° 16'
Jan. I	41.438 <sup>a</sup> <sub>79</sub>	34.44 <sup>b</sup> <sub>115</sub>	21.155 <sup>a</sup> <sub>124</sub>	40.83 <sup>b</sup> <sub>114</sub>	23.659 <sup>a</sup> <sub>115</sub>	61.97 <sup>b</sup> <sub>163</sub>	51.181 <sup>a</sup> <sub>101</sub>	33.46 <sup>b</sup> <sub>147</sub>
II	41.359 <sup>a</sup> <sub>58</sub>	33.29 <sup>b</sup> <sub>121</sub>	21.031 <sup>a</sup> <sub>89</sub>	39.69 <sup>b</sup> <sub>150</sub>	23.544 <sup>a</sup> <sub>92</sub>	60.34 <sup>b</sup> <sub>185</sub>	51.080 <sup>a</sup> <sub>80</sub>	31.99 <sup>b</sup> <sub>163</sub>
21	41.301 <sup>a</sup> <sub>34</sub>	32.08 <sup>b</sup> <sub>122</sub>	20.942 <sup>a</sup> <sub>50</sub>	38.19 <sup>b</sup> <sub>182</sub>	23.452 <sup>a</sup> <sub>64</sub>	58.49 <sup>b</sup> <sub>200</sub>	51.000 <sup>a</sup> <sub>55</sub>	30.36 <sup>b</sup> <sub>174</sub>
31	41.267 <sup>a</sup> <sub>8</sub>	30.86 <sup>b</sup> <sub>116</sub>	20.892 <sup>a</sup> <sub>9</sub>	36.37 <sup>b</sup> <sub>210</sub>	23.388 <sup>a</sup> <sub>32</sub>	56.49 <sup>b</sup> <sub>207</sub>	50.945 <sup>a</sup> <sub>26</sub>	28.62 <sup>b</sup> <sub>177</sub>
Febr. 10	41.259 <sup>a</sup> <sub>22</sub>	29.70 <sup>b</sup> <sub>106</sub>	20.883 <sup>a</sup> <sub>35</sub>	34.27 <sup>b</sup> <sub>234</sub>	23.356 <sup>a</sup> <sub>3</sub>	54.42 <sup>b</sup> <sub>205</sub>	50.919 <sup>a</sup> <sub>6</sub>	26.85 <sup>b</sup> <sub>172</sub>
20	41.281 <sup>a</sup> <sub>53</sub>	28.64 <sup>b</sup> <sub>90</sub>	20.918 <sup>a</sup> <sub>81</sub>	31.93 <sup>b</sup> <sub>251</sub>	23.359 <sup>a</sup> <sub>41</sub>	52.37 <sup>b</sup> <sub>194</sub>	50.925 <sup>a</sup> <sub>42</sub>	25.13 <sup>b</sup> <sub>160</sub>
März 2	41.334 <sup>a</sup> <sub>88</sub>	27.74 <sup>b</sup> <sub>67</sub>	20.999 <sup>a</sup> <sub>126</sub>	29.42 <sup>b</sup> <sub>265</sub>	23.400 <sup>a</sup> <sub>83</sub>	50.43 <sup>b</sup> <sub>174</sub>	50.967 <sup>a</sup> <sub>80</sub>	23.53 <sup>b</sup> <sub>139</sub>
12	41.422 <sup>a</sup> <sub>123</sub>	27.07 <sup>b</sup> <sub>40</sub>	21.125 <sup>a</sup> <sub>173</sub>	26.77 <sup>b</sup> <sub>272</sub>	23.483 <sup>a</sup> <sub>125</sub>	48.69 <sup>b</sup> <sub>146</sub>	51.047 <sup>a</sup> <sub>119</sub>	22.14 <sup>b</sup> <sub>112</sub>
22	41.545 <sup>a</sup> <sub>159</sub>	26.67 <sup>b</sup> <sub>10</sub>	21.298 <sup>a</sup> <sub>219</sub>	24.05 <sup>b</sup> <sub>276</sub>	23.608 <sup>a</sup> <sub>167</sub>	47.23 <sup>b</sup> <sub>112</sub>	51.166 <sup>a</sup> <sub>159</sub>	21.02 <sup>b</sup> <sub>79</sub>
Apr. I	41.704 <sup>a</sup> <sub>195</sub>	26.57 <sup>b</sup> <sub>24</sub>	21.517 <sup>a</sup> <sub>264</sub>	21.29 <sup>b</sup> <sub>272</sub>	23.775 <sup>a</sup> <sub>208</sub>	46.11 <sup>b</sup> <sub>72</sub>	51.325 <sup>a</sup> <sub>198</sub>	20.23 <sup>b</sup> <sub>41</sub>
II	41.899 <sup>a</sup> <sub>227</sub>	26.81 <sup>b</sup> <sub>57</sub>	21.781 <sup>a</sup> <sub>307</sub>	18.57 <sup>b</sup> <sub>263</sub>	23.983 <sup>a</sup> <sub>245</sub>	45.39 <sup>b</sup> <sub>28</sub>	51.523 <sup>a</sup> <sub>233</sub>	19.82 <sup>b</sup> <sub>0</sub>
21	42.126 <sup>a</sup> <sub>256</sub>	27.38 <sup>b</sup> <sub>91</sub>	22.088 <sup>a</sup> <sub>345</sub>	15.94 <sup>b</sup> <sub>250</sub>	24.228 <sup>a</sup> <sub>278</sub>	45.11 <sup>b</sup> <sub>18</sub>	51.756 <sup>a</sup> <sub>265</sub>	19.82 <sup>b</sup> <sub>41</sub>
Mai I	42.382 <sup>a</sup> <sub>281</sub>	28.29 <sup>b</sup> <sub>122</sub>	22.433 <sup>a</sup> <sub>378</sub>	13.44 <sup>b</sup> <sub>229</sub>	24.506 <sup>a</sup> <sub>305</sub>	45.29 <sup>b</sup> <sub>63</sub>	52.021 <sup>a</sup> <sub>291</sub>	20.23 <sup>b</sup> <sub>82</sub>
II	42.663 <sup>a</sup> <sub>299</sub>	29.51 <sup>b</sup> <sub>151</sub>	22.811 <sup>a</sup> <sub>403</sub>	11.15 <sup>b</sup> <sub>205</sub>	24.811 <sup>a</sup> <sub>323</sub>	45.92 <sup>b</sup> <sub>106</sub>	52.312 <sup>a</sup> <sub>311</sub>	21.05 <sup>b</sup> <sub>121</sub>
21	42.962 <sup>a</sup> <sub>310</sub>	31.02 <sup>b</sup> <sub>175</sub>	23.214 <sup>a</sup> <sub>420</sub>	9.10 <sup>b</sup> <sub>174</sub>	25.134 <sup>a</sup> <sub>335</sub>	46.98 <sup>b</sup> <sub>148</sub>	52.623 <sup>a</sup> <sub>322</sub>	22.26 <sup>b</sup> <sub>156</sub>
31	43.272 <sup>a</sup> <sub>313</sub>	32.77 <sup>b</sup> <sub>194</sub>	23.634 <sup>a</sup> <sub>427</sub>	7.36 <sup>b</sup> <sub>140</sub>	25.469 <sup>a</sup> <sub>336</sub>	48.46 <sup>b</sup> <sub>184</sub>	52.945 <sup>a</sup> <sub>325</sub>	23.82 <sup>b</sup> <sub>188</sub>
Juni 10	43.585 <sup>a</sup> <sub>309</sub>	34.71 <sup>b</sup> <sub>209</sub>	24.061 <sup>a</sup> <sub>424</sub>	5.96 <sup>b</sup> <sub>101</sub>	25.805 <sup>a</sup> <sub>329</sub>	50.30 <sup>b</sup> <sub>215</sub>	53.270 <sup>a</sup> <sub>320</sub>	25.70 <sup>b</sup> <sub>213</sub>
20	43.894 <sup>a</sup> <sub>295</sub>	36.80 <sup>b</sup> <sub>217</sub>	24.485 <sup>a</sup> <sub>411</sub>	4.95 <sup>b</sup> <sub>62</sub>	26.134 <sup>a</sup> <sub>313</sub>	52.45 <sup>b</sup> <sub>240</sub>	53.590 <sup>a</sup> <sub>305</sub>	27.83 <sup>b</sup> <sub>234</sub>
30	44.189 <sup>a</sup> <sub>275</sub>	38.97 <sup>b</sup> <sub>219</sub>	24.896 <sup>a</sup> <sub>386</sub>	4.33 <sup>b</sup> <sub>19</sub>	26.447 <sup>a</sup> <sub>290</sub>	54.85 <sup>b</sup> <sub>259</sub>	53.895 <sup>a</sup> <sub>284</sub>	30.17 <sup>b</sup> <sub>247</sub>
Juli 10	44.464 <sup>a</sup> <sub>247</sub>	41.16 <sup>b</sup> <sub>217</sub>	25.282 <sup>a</sup> <sub>352</sub>	4.14 <sup>b</sup> <sub>23</sub>	26.737 <sup>a</sup> <sub>258</sub>	57.44 <sup>b</sup> <sub>271</sub>	54.179 <sup>a</sup> <sub>255</sub>	32.64 <sup>b</sup> <sub>254</sub>
20	44.711 <sup>a</sup> <sub>214</sub>	43.33 <sup>b</sup> <sub>209</sub>	25.634 <sup>a</sup> <sub>308</sub>	4.37 <sup>b</sup> <sub>64</sub>	26.995 <sup>a</sup> <sub>221</sub>	60.15 <sup>b</sup> <sub>277</sub>	54.434 <sup>a</sup> <sub>220</sub>	35.18 <sup>b</sup> <sub>256</sub>
30	44.925 <sup>a</sup> <sub>176</sub>	45.42 <sup>b</sup> <sub>197</sub>	25.942 <sup>a</sup> <sub>257</sub>	5.01 <sup>b</sup> <sub>102</sub>	27.216 <sup>a</sup> <sub>179</sub>	62.92 <sup>b</sup> <sub>277</sub>	54.654 <sup>a</sup> <sub>181</sub>	37.74 <sup>b</sup> <sub>252</sub>
Aug. 9	45.101 <sup>a</sup> <sub>135</sub>	47.39 <sup>b</sup> <sub>180</sub>	26.199 <sup>a</sup> <sub>200</sub>	6.03 <sup>b</sup> <sub>136</sub>	27.395 <sup>a</sup> <sub>135</sub>	65.69 <sup>b</sup> <sub>271</sub>	54.835 <sup>a</sup> <sub>138</sub>	40.26 <sup>b</sup> <sub>242</sub>
19	45.236 <sup>a</sup> <sub>93</sub>	49.19 <sup>b</sup> <sub>161</sub>	26.399 <sup>a</sup> <sub>139</sub>	7.39 <sup>b</sup> <sub>165</sub>	27.530 <sup>a</sup> <sub>88</sub>	68.40 <sup>b</sup> <sub>259</sub>	54.973 <sup>a</sup> <sub>94</sub>	42.68 <sup>b</sup> <sub>228</sub>
29	45.329 <sup>a</sup> <sub>50</sub>	50.80 <sup>b</sup> <sub>139</sub>	26.538 <sup>a</sup> <sub>76</sub>	9.04 <sup>b</sup> <sub>187</sub>	27.618 <sup>a</sup> <sub>43</sub>	70.99 <sup>b</sup> <sub>242</sub>	55.067 <sup>a</sup> <sub>51</sub>	44.96 <sup>b</sup> <sub>210</sub>
Sept. 7	45.379 <sup>a</sup> <sub>11</sub>	52.19 <sup>b</sup> <sub>117</sub>	26.614 <sup>a</sup> <sub>14</sub>	10.91 <sup>b</sup> <sub>202</sub>	27.661 <sup>a</sup> <sub>1</sub>	73.41 <sup>b</sup> <sub>221</sub>	55.118 <sup>a</sup> <sub>9</sub>	47.06 <sup>b</sup> <sub>188</sub>
17	45.390 <sup>a</sup> <sub>26</sub>	53.36 <sup>b</sup> <sub>92</sub>	26.628 <sup>a</sup> <sub>43</sub>	12.93 <sup>b</sup> <sub>208</sub>	27.660 <sup>a</sup> <sub>40</sub>	75.62 <sup>b</sup> <sub>197</sub>	55.127 <sup>a</sup> <sub>30</sub>	48.94 <sup>b</sup> <sub>163</sub>
27	45.364 <sup>a</sup> <sub>58</sub>	54.28 <sup>b</sup> <sub>69</sub>	26.585 <sup>a</sup> <sub>95</sub>	15.01 <sup>b</sup> <sub>205</sub>	27.620 <sup>a</sup> <sub>76</sub>	77.59 <sup>b</sup> <sub>168</sub>	55.097 <sup>a</sup> <sub>64</sub>	50.57 <sup>b</sup> <sub>137</sub>
Okt. 7	45.306 <sup>a</sup> <sub>84</sub>	54.97 <sup>b</sup> <sub>45</sub>	26.490 <sup>a</sup> <sub>139</sub>	17.06 <sup>b</sup> <sub>194</sub>	27.544 <sup>a</sup> <sub>105</sub>	79.27 <sup>b</sup> <sub>138</sub>	55.033 <sup>a</sup> <sub>91</sub>	51.94 <sup>b</sup> <sub>108</sub>
17	45.222 <sup>a</sup> <sub>105</sub>	55.42 <sup>b</sup> <sub>21</sub>	26.351 <sup>a</sup> <sub>174</sub>	19.00 <sup>b</sup> <sub>175</sub>	27.439 <sup>a</sup> <sub>129</sub>	80.65 <sup>b</sup> <sub>105</sub>	54.942 <sup>a</sup> <sub>114</sub>	53.02 <sup>b</sup> <sub>78</sub>
27	45.117 <sup>a</sup> <sub>118</sub>	55.63 <sup>b</sup> <sub>2</sub>	26.177 <sup>a</sup> <sub>198</sub>	20.75 <sup>b</sup> <sub>147</sub>	27.310 <sup>a</sup> <sub>145</sub>	81.70 <sup>b</sup> <sub>69</sub>	54.828 <sup>a</sup> <sub>130</sub>	53.80 <sup>b</sup> <sub>47</sub>
Nov. 6	44.999 <sup>a</sup> <sub>126</sub>	55.61 <sup>b</sup> <sub>23</sub>	25.979 <sup>a</sup> <sub>212</sub>	22.22 <sup>b</sup> <sub>114</sub>	27.165 <sup>a</sup> <sub>156</sub>	82.39 <sup>b</sup> <sub>33</sub>	54.698 <sup>a</sup> <sub>140</sub>	54.27 <sup>b</sup> <sub>14</sub>
16	44.873 <sup>a</sup> <sub>123</sub>	55.38 <sup>b</sup> <sub>44</sub>	25.767 <sup>a</sup> <sub>214</sub>	23.36 <sup>b</sup> <sub>76</sub>	27.009 <sup>a</sup> <sub>161</sub>	82.72 <sup>b</sup> <sub>5</sub>	54.558 <sup>a</sup> <sub>143</sub>	54.41 <sup>b</sup> <sub>17</sub>
26	44.746 <sup>a</sup> <sub>127</sub>	54.94 <sup>b</sup> <sub>64</sub>	25.553 <sup>a</sup> <sub>208</sub>	24.12 <sup>b</sup> <sub>35</sub>	26.848 <sup>a</sup> <sub>159</sub>	82.67 <sup>b</sup> <sub>43</sub>	54.415 <sup>a</sup> <sub>142</sub>	54.24 <sup>b</sup> <sub>48</sub>
Dez. 6	44.623 <sup>a</sup> <sub>115</sub>	54.30 <sup>b</sup> <sub>80</sub>	25.345 <sup>a</sup> <sub>193</sub>	24.47 <sup>b</sup> <sub>7</sub>	26.689 <sup>a</sup> <sub>152</sub>	82.24 <sup>b</sup> <sub>79</sub>	54.273 <sup>a</sup> <sub>136</sub>	53.76 <sup>b</sup> <sub>79</sub>
16	44.508 <sup>a</sup> <sub>103</sub>	53.50 <sup>b</sup> <sub>96</sub>	25.152 <sup>a</sup> <sub>170</sub>	24.40 <sup>b</sup> <sub>50</sub>	26.537 <sup>a</sup> <sub>141</sub>	81.45 <sup>b</sup> <sub>113</sub>	54.137 <sup>a</sup> <sub>124</sub>	52.97 <sup>b</sup> <sub>107</sub>
26	44.405 <sup>a</sup> <sub>88</sub>	52.54 <sup>b</sup> <sub>108</sub>	24.982 <sup>a</sup> <sub>141</sub>	23.90 <sup>b</sup> <sub>92</sub>	26.396 <sup>a</sup> <sub>124</sub>	80.32 <sup>b</sup> <sub>144</sub>	54.013 <sup>a</sup> <sub>110</sub>	51.90 <sup>b</sup> <sub>132</sub>
36	44.317 <sup>a</sup>	51.46 <sup>b</sup>	24.841 <sup>a</sup>	22.98 <sup>b</sup>	26.272 <sup>a</sup>	78.88 <sup>b</sup>	53.903 <sup>a</sup>	50.58 <sup>b</sup>
Mittl. Ort	43.040	37.46	23.517	22.10	25.206	59.24	52.718	32.67
sec δ, tg δ	1.017	+0.186	1.471	-1.079	1.154	+0.576	1.089	+0.430
a, a'	+3.0	+18.8	+3.6	+18.8	+2.8	+18.8	+2.9	+18.9
b, b'	+0.01	+0.35	-0.07	+0.34	+0.04	+0.34	+0.03	+0.33



# Obere Kulmination Greenwich

173\*

Tag	860) ε Gruis		863) ι Cephei		1599) 69 G. Gruis		864) λ Aquarii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	22 <sup>h</sup> 45 <sup>m</sup>	-51° 36'	22 <sup>h</sup> 47 <sup>m</sup>	+65° 54'	22 <sup>h</sup> 47 <sup>m</sup>	-39° 26'	22 <sup>h</sup> 49 <sup>m</sup>	-7° 52'
Jan. I	12.096 <sup>152</sup>	43.49 <sup>127</sup>	41.15 <sup>40</sup>	50.04 <sup>175</sup>	52.608 <sup>109</sup>	72.61 <sup>76</sup>	43.080 <sup>75</sup>	30.92 <sup>51</sup>
II	11.944 <sup>112</sup>	42.22 <sup>167</sup>	40.75 <sup>35</sup>	48.29 <sup>222</sup>	52.499 <sup>79</sup>	71.85 <sup>109</sup>	43.005 <sup>56</sup>	31.43 <sup>40</sup>
2I	11.832 <sup>69</sup>	40.55 <sup>201</sup>	40.40 <sup>28</sup>	46.07 <sup>261</sup>	52.420 <sup>47</sup>	70.76 <sup>141</sup>	42.949 <sup>33</sup>	31.83 <sup>28</sup>
3I	11.763 <sup>25</sup>	38.54 <sup>231</sup>	40.12 <sup>20</sup>	43.46 <sup>290</sup>	52.373 <sup>13</sup>	69.35 <sup>168</sup>	42.916 <sup>9</sup>	32.11 <sup>12</sup>
Febr. 10	11.738 <sup>23</sup>	36.23 <sup>255</sup>	39.92 <sup>12</sup>	40.56 <sup>308</sup>	52.360 <sup>24</sup>	67.67 <sup>192</sup>	42.907 <sup>20</sup>	32.23 <sup>5</sup>
20	11.761 <sup>74</sup>	33.68 <sup>273</sup>	39.80 <sup>3</sup>	37.48 <sup>313</sup>	52.384 <sup>62</sup>	65.75 <sup>212</sup>	42.927 <sup>50</sup>	32.18 <sup>25</sup>
März 2	11.835 <sup>124</sup>	30.95 <sup>286</sup>	39.77 <sup>8</sup>	34.35 <sup>305</sup>	52.446 <sup>104</sup>	63.63 <sup>230</sup>	42.977 <sup>82</sup>	31.93 <sup>47</sup>
12	11.959 <sup>175</sup>	28.09 <sup>293</sup>	39.85 <sup>17</sup>	31.30 <sup>285</sup>	52.550 <sup>145</sup>	61.33 <sup>242</sup>	43.059 <sup>116</sup>	31.46 <sup>70</sup>
22	12.134 <sup>226</sup>	25.16 <sup>293</sup>	40.02 <sup>27</sup>	28.45 <sup>254</sup>	52.695 <sup>187</sup>	58.91 <sup>249</sup>	43.175 <sup>151</sup>	30.76 <sup>93</sup>
Apr. I	12.360 <sup>275</sup>	22.23 <sup>288</sup>	40.29 <sup>35</sup>	25.91 <sup>213</sup>	52.882 <sup>229</sup>	56.42 <sup>253</sup>	43.326 <sup>186</sup>	29.83 <sup>116</sup>
II	12.635 <sup>322</sup>	19.35 <sup>277</sup>	40.64 <sup>43</sup>	23.78 <sup>165</sup>	53.111 <sup>268</sup>	53.89 <sup>251</sup>	43.512 <sup>220</sup>	28.67 <sup>138</sup>
2I	12.957 <sup>365</sup>	16.58 <sup>261</sup>	41.07 <sup>49</sup>	22.13 <sup>111</sup>	53.379 <sup>304</sup>	51.38 <sup>244</sup>	43.732 <sup>250</sup>	27.29 <sup>157</sup>
Mai I	13.322 <sup>401</sup>	13.97 <sup>237</sup>	41.56 <sup>55</sup>	21.02 <sup>52</sup>	53.683 <sup>335</sup>	48.94 <sup>231</sup>	43.982 <sup>276</sup>	25.72 <sup>173</sup>
II	13.723 <sup>429</sup>	11.60 <sup>208</sup>	42.11 <sup>57</sup>	20.50 <sup>6</sup>	54.018 <sup>360</sup>	46.63 <sup>213</sup>	44.258 <sup>296</sup>	23.99 <sup>185</sup>
2I	14.152 <sup>448</sup>	9.52 <sup>176</sup>	42.68 <sup>59</sup>	20.56 <sup>65</sup>	54.378 <sup>377</sup>	44.50 <sup>189</sup>	44.554 <sup>310</sup>	22.14 <sup>191</sup>
3I	14.600 <sup>458</sup>	7.76 <sup>138</sup>	43.27 <sup>59</sup>	21.21 <sup>122</sup>	54.755 <sup>385</sup>	42.61 <sup>162</sup>	44.864 <sup>317</sup>	20.23 <sup>193</sup>
Juni 10	15.058 <sup>457</sup>	6.38 <sup>97</sup>	43.86 <sup>57</sup>	22.43 <sup>174</sup>	55.140 <sup>384</sup>	40.99 <sup>129</sup>	45.181 <sup>314</sup>	18.30 <sup>190</sup>
20	15.515 <sup>443</sup>	5.41 <sup>53</sup>	44.43 <sup>53</sup>	24.17 <sup>222</sup>	55.524 <sup>374</sup>	39.70 <sup>94</sup>	45.495 <sup>305</sup>	16.40 <sup>181</sup>
30	15.958 <sup>418</sup>	4.88 <sup>9</sup>	44.96 <sup>48</sup>	26.39 <sup>264</sup>	55.898 <sup>353</sup>	38.76 <sup>57</sup>	45.800 <sup>287</sup>	14.59 <sup>168</sup>
Juli 10	16.376 <sup>383</sup>	4.79 <sup>35</sup>	45.44 <sup>42</sup>	29.03 <sup>300</sup>	56.251 <sup>324</sup>	38.19 <sup>17</sup>	46.087 <sup>262</sup>	12.91 <sup>151</sup>
20	16.759 <sup>337</sup>	5.14 <sup>79</sup>	45.86 <sup>35</sup>	32.03 <sup>327</sup>	56.575 <sup>286</sup>	38.02 <sup>22</sup>	46.349 <sup>230</sup>	11.40 <sup>130</sup>
30	17.096 <sup>283</sup>	5.93 <sup>119</sup>	46.21 <sup>27</sup>	35.30 <sup>347</sup>	56.861 <sup>240</sup>	38.24 <sup>59</sup>	46.579 <sup>194</sup>	10.10 <sup>107</sup>
Aug. 9	17.379 <sup>221</sup>	7.12 <sup>155</sup>	46.48 <sup>19</sup>	38.77 <sup>360</sup>	57.101 <sup>191</sup>	38.83 <sup>93</sup>	46.773 <sup>153</sup>	9.03 <sup>82</sup>
19	17.600 <sup>155</sup>	8.67 <sup>184</sup>	46.67 <sup>11</sup>	42.37 <sup>366</sup>	57.292 <sup>137</sup>	39.76 <sup>124</sup>	46.926 <sup>111</sup>	8.21 <sup>57</sup>
29	17.755 <sup>88</sup>	10.51 <sup>206</sup>	46.78 <sup>2</sup>	46.03 <sup>363</sup>	57.429 <sup>82</sup>	41.00 <sup>148</sup>	47.037 <sup>69</sup>	7.64 <sup>32</sup>
Sept. 7	17.843 <sup>21</sup>	12.57 <sup>221</sup>	46.80 <sup>7</sup>	49.66 <sup>353</sup>	57.511 <sup>27</sup>	42.48 <sup>167</sup>	47.106 <sup>28</sup>	7.32 <sup>10</sup>
17	17.864 <sup>43</sup>	14.78 <sup>227</sup>	46.73 <sup>15</sup>	53.19 <sup>336</sup>	57.538 <sup>23</sup>	44.15 <sup>178</sup>	47.134 <sup>11</sup>	7.22 <sup>12</sup>
27	17.821 <sup>102</sup>	17.05 <sup>222</sup>	46.58 <sup>22</sup>	56.55 <sup>311</sup>	57.515 <sup>69</sup>	45.93 <sup>180</sup>	47.123 <sup>44</sup>	7.34 <sup>30</sup>
Okt. 7	17.719 <sup>151</sup>	19.27 <sup>210</sup>	46.36 <sup>28</sup>	59.66 <sup>280</sup>	57.446 <sup>108</sup>	47.73 <sup>176</sup>	47.079 <sup>72</sup>	7.64 <sup>45</sup>
17	17.568 <sup>190</sup>	21.37 <sup>187</sup>	46.08 <sup>35</sup>	62.46 <sup>241</sup>	57.338 <sup>139</sup>	49.49 <sup>163</sup>	47.007 <sup>94</sup>	8.09 <sup>56</sup>
27	17.378 <sup>220</sup>	23.24 <sup>157</sup>	45.73 <sup>39</sup>	64.87 <sup>197</sup>	57.199 <sup>161</sup>	51.12 <sup>144</sup>	46.913 <sup>109</sup>	8.65 <sup>63</sup>
Nov. 6	17.158 <sup>237</sup>	24.81 <sup>121</sup>	45.34 <sup>42</sup>	66.84 <sup>147</sup>	57.038 <sup>174</sup>	52.56 <sup>118</sup>	46.804 <sup>117</sup>	9.28 <sup>69</sup>
16	16.921 <sup>243</sup>	26.02 <sup>79</sup>	44.92 <sup>46</sup>	68.31 <sup>93</sup>	56.864 <sup>177</sup>	53.74 <sup>87</sup>	46.687 <sup>120</sup>	9.97 <sup>70</sup>
26	16.678 <sup>238</sup>	26.81 <sup>34</sup>	44.46 <sup>46</sup>	69.24 <sup>36</sup>	56.687 <sup>173</sup>	54.61 <sup>53</sup>	46.567 <sup>118</sup>	10.67 <sup>70</sup>
Dez. 6	16.440 <sup>222</sup>	27.15 <sup>12</sup>	44.00 <sup>47</sup>	69.60 <sup>24</sup>	56.514 <sup>161</sup>	55.14 <sup>17</sup>	46.449 <sup>109</sup>	11.37 <sup>67</sup>
16	16.218 <sup>200</sup>	27.03 <sup>59</sup>	43.53 <sup>45</sup>	69.36 <sup>83</sup>	56.353 <sup>144</sup>	55.31 <sup>20</sup>	46.340 <sup>98</sup>	12.04 <sup>61</sup>
26	16.018 <sup>169</sup>	26.44 <sup>103</sup>	43.08 <sup>42</sup>	68.53 <sup>139</sup>	56.209 <sup>121</sup>	55.11 <sup>55</sup>	46.242 <sup>83</sup>	12.65 <sup>54</sup>
36	15.849	25.41	42.66	67.14	56.088	54.56	46.159	13.19
Mittl. Ort	14.559	23.63	42.91	39.16	54.691	55.04	44.733	21.94
sec δ, tg δ	1.610	-1.262	2.450	+2.237	1.295	-0.823	1.010	-0.138
a, a'	+3.6	+19.0	+2.1	+19.1	+3.4	+19.1	+3.1	+19.1
b, b'	-0.08	+0.32	+0.14	+0.31	-0.05	+0.31	-0.01	+0.30



Tag	865) $\rho$ Indi		866) $\delta$ Aquarii		867) $\alpha$ Piscis austr. 1)		869) $\sigma$ Andromedae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	22 <sup>h</sup> 50 <sup>m</sup>	-7° 21'	22 <sup>h</sup> 51 <sup>m</sup>	-16° 6'	22 <sup>h</sup> 54 <sup>m</sup>	-29° 54'	22 <sup>h</sup> 59 <sup>m</sup>	+42° 1'
Jan. I	48.00 <sup>0</sup> <sub>38</sub>	87.70 <sup>0</sup> <sub>193</sub>	42.274 <sup>0</sup> <sub>78</sub>	61.16 <sup>0</sup> <sub>21</sub>	35.087 <sup>0</sup> <sub>92</sub>	66.63 <sup>0</sup> <sub>34</sub>	21.627 <sup>0</sup> <sub>169</sub>	54.55 <sup>0</sup> <sub>162</sub>
II	47.62 <sup>0</sup> <sub>29</sub>	85.77 <sup>0</sup> <sub>239</sub>	42.196 <sup>0</sup> <sub>58</sub>	61.37 <sup>0</sup> <sub>2</sub>	34.995 <sup>0</sup> <sub>69</sub>	66.29 <sup>0</sup> <sub>63</sub>	21.458 <sup>0</sup> <sub>146</sub>	52.93 <sup>0</sup> <sub>195</sub>
2I	47.33 <sup>0</sup> <sub>21</sub>	83.38 <sup>0</sup> <sub>277</sub>	42.138 <sup>0</sup> <sub>35</sub>	61.39 <sup>0</sup> <sub>16</sub>	34.926 <sup>0</sup> <sub>42</sub>	65.66 <sup>0</sup> <sub>89</sub>	21.312 <sup>0</sup> <sub>115</sub>	50.98 <sup>0</sup> <sub>221</sub>
3I	47.12 <sup>0</sup> <sub>12</sub>	80.61 <sup>0</sup> <sub>308</sub>	42.103 <sup>0</sup> <sub>9</sub>	61.23 <sup>0</sup> <sub>35</sub>	34.884 <sup>0</sup> <sub>12</sub>	64.77 <sup>0</sup> <sub>115</sub>	21.197 <sup>0</sup> <sub>80</sub>	48.77 <sup>0</sup> <sub>239</sub>
Febr. 10	47.00 <sup>0</sup> <sub>2</sub>	77.53 <sup>0</sup> <sub>331</sub>	42.094 <sup>0</sup> <sub>19</sub>	60.88 <sup>0</sup> <sub>55</sub>	34.872 <sup>0</sup> <sub>19</sub>	63.62 <sup>0</sup> <sub>139</sub>	21.117 <sup>0</sup> <sub>38</sub>	46.38 <sup>0</sup> <sub>246</sub>
20	46.98 <sup>0</sup> <sub>7</sub>	74.22 <sup>0</sup> <sub>346</sub>	42.113 <sup>0</sup> <sub>51</sub>	60.33 <sup>0</sup> <sub>77</sub>	34.891 <sup>0</sup> <sub>53</sub>	62.23 <sup>0</sup> <sub>160</sub>	21.079 <sup>0</sup> <sub>8</sub>	43.92 <sup>0</sup> <sub>243</sub>
März 2	47.05 <sup>0</sup> <sub>17</sub>	70.76 <sup>0</sup> <sub>352</sub>	42.164 <sup>0</sup> <sub>83</sub>	59.56 <sup>0</sup> <sub>97</sub>	34.944 <sup>0</sup> <sub>90</sub>	60.63 <sup>0</sup> <sub>180</sub>	21.087 <sup>0</sup> <sub>58</sub>	41.49 <sup>0</sup> <sub>229</sub>
12	47.22 <sup>0</sup> <sub>27</sub>	67.24 <sup>0</sup> <sub>352</sub>	42.247 <sup>0</sup> <sub>118</sub>	58.59 <sup>0</sup> <sub>118</sub>	35.034 <sup>0</sup> <sub>127</sub>	58.83 <sup>0</sup> <sub>196</sub>	21.145 <sup>0</sup> <sub>109</sub>	39.20 <sup>0</sup> <sub>206</sub>
22	47.49 <sup>0</sup> <sub>36</sub>	63.72 <sup>0</sup> <sub>344</sub>	42.365 <sup>0</sup> <sub>154</sub>	57.41 <sup>0</sup> <sub>139</sub>	35.161 <sup>0</sup> <sub>166</sub>	56.87 <sup>0</sup> <sub>209</sub>	21.254 <sup>0</sup> <sub>161</sub>	37.14 <sup>0</sup> <sub>174</sub>
Apr. I	47.85 <sup>0</sup> <sub>44</sub>	60.28 <sup>0</sup> <sub>328</sub>	42.519 <sup>0</sup> <sub>189</sub>	56.02 <sup>0</sup> <sub>157</sub>	35.327 <sup>0</sup> <sub>204</sub>	54.78 <sup>0</sup> <sub>220</sub>	21.415 <sup>0</sup> <sub>211</sub>	35.40 <sup>0</sup> <sub>135</sub>
II	48.29 <sup>0</sup> <sub>53</sub>	57.00 <sup>0</sup> <sub>305</sub>	42.708 <sup>0</sup> <sub>223</sub>	54.45 <sup>0</sup> <sub>172</sub>	35.531 <sup>0</sup> <sub>241</sub>	52.58 <sup>0</sup> <sub>225</sub>	21.626 <sup>0</sup> <sub>258</sub>	34.05 <sup>0</sup> <sub>90</sub>
2I	48.82 <sup>0</sup> <sub>60</sub>	53.95 <sup>0</sup> <sub>276</sub>	42.931 <sup>0</sup> <sub>255</sub>	52.73 <sup>0</sup> <sub>185</sub>	35.772 <sup>0</sup> <sub>274</sub>	50.33 <sup>0</sup> <sub>226</sub>	21.884 <sup>0</sup> <sub>298</sub>	33.15 <sup>0</sup> <sub>40</sub>
Mai I	49.42 <sup>0</sup> <sub>66</sub>	51.19 <sup>0</sup> <sub>242</sub>	43.186 <sup>0</sup> <sub>281</sub>	50.88 <sup>0</sup> <sub>194</sub>	36.046 <sup>0</sup> <sub>304</sub>	48.07 <sup>0</sup> <sub>221</sub>	22.182 <sup>0</sup> <sub>331</sub>	32.75 <sup>0</sup> <sub>10</sub>
II	50.08 <sup>0</sup> <sub>71</sub>	48.77 <sup>0</sup> <sub>201</sub>	43.467 <sup>0</sup> <sub>303</sub>	48.94 <sup>0</sup> <sub>197</sub>	36.350 <sup>0</sup> <sub>327</sub>	45.86 <sup>0</sup> <sub>213</sub>	22.513 <sup>0</sup> <sub>355</sub>	32.85 <sup>0</sup> <sub>60</sub>
2I	50.79 <sup>0</sup> <sub>75</sub>	46.76 <sup>0</sup> <sub>156</sub>	43.770 <sup>0</sup> <sub>318</sub>	46.97 <sup>0</sup> <sub>196</sub>	36.677 <sup>0</sup> <sub>344</sub>	43.73 <sup>0</sup> <sub>198</sub>	22.868 <sup>0</sup> <sub>370</sub>	33.45 <sup>0</sup> <sub>109</sub>
3I	51.54 <sup>0</sup> <sub>76</sub>	45.20 <sup>0</sup> <sub>107</sub>	44.088 <sup>0</sup> <sub>324</sub>	45.01 <sup>0</sup> <sub>190</sub>	37.021 <sup>0</sup> <sub>353</sub>	41.75 <sup>0</sup> <sub>179</sub>	23.238 <sup>0</sup> <sub>376</sub>	34.54 <sup>0</sup> <sub>155</sub>
Juni 10	52.30 <sup>0</sup> <sub>76</sub>	44.13 <sup>0</sup> <sub>57</sub>	44.412 <sup>0</sup> <sub>324</sub>	43.11 <sup>0</sup> <sub>178</sub>	37.374 <sup>0</sup> <sub>352</sub>	39.96 <sup>0</sup> <sub>154</sub>	23.614 <sup>0</sup> <sub>369</sub>	36.09 <sup>0</sup> <sub>196</sub>
20	53.06 <sup>0</sup> <sub>74</sub>	43.56 <sup>0</sup> <sub>4</sub>	44.736 <sup>0</sup> <sub>314</sub>	41.33 <sup>0</sup> <sub>162</sub>	37.726 <sup>0</sup> <sub>343</sub>	38.42 <sup>0</sup> <sub>126</sub>	23.983 <sup>0</sup> <sub>354</sub>	38.05 <sup>0</sup> <sub>231</sub>
30	53.80 <sup>0</sup> <sub>70</sub>	43.52 <sup>0</sup> <sub>48</sub>	45.050 <sup>0</sup> <sub>297</sub>	39.71 <sup>0</sup> <sub>142</sub>	38.069 <sup>0</sup> <sub>325</sub>	37.16 <sup>0</sup> <sub>94</sub>	24.337 <sup>0</sup> <sub>330</sub>	40.36 <sup>0</sup> <sub>260</sub>
Juli 10	54.50 <sup>0</sup> <sub>65</sub>	44.00 <sup>0</sup> <sub>98</sub>	45.347 <sup>0</sup> <sub>272</sub>	38.29 <sup>0</sup> <sub>119</sub>	38.394 <sup>0</sup> <sub>298</sub>	36.22 <sup>0</sup> <sub>61</sub>	24.667 <sup>0</sup> <sub>296</sub>	42.96 <sup>0</sup> <sub>284</sub>
20	55.15 <sup>0</sup> <sub>56</sub>	44.98 <sup>0</sup> <sub>146</sub>	45.619 <sup>0</sup> <sub>240</sub>	37.10 <sup>0</sup> <sub>92</sub>	38.692 <sup>0</sup> <sub>265</sub>	35.61 <sup>0</sup> <sub>27</sub>	24.963 <sup>0</sup> <sub>257</sub>	45.80 <sup>0</sup> <sub>299</sub>
30	55.71 <sup>0</sup> <sub>48</sub>	46.44 <sup>0</sup> <sub>188</sub>	45.859 <sup>0</sup> <sub>203</sub>	36.18 <sup>0</sup> <sub>64</sub>	38.957 <sup>0</sup> <sub>225</sub>	35.34 <sup>0</sup> <sub>8</sub>	25.220 <sup>0</sup> <sub>212</sub>	48.79 <sup>0</sup> <sub>309</sub>
Aug. 9	56.19 <sup>0</sup> <sub>37</sub>	48.32 <sup>0</sup> <sub>225</sub>	46.062 <sup>0</sup> <sub>161</sub>	35.54 <sup>0</sup> <sub>36</sub>	39.182 <sup>0</sup> <sub>179</sub>	35.42 <sup>0</sup> <sub>42</sub>	25.432 <sup>0</sup> <sub>163</sub>	51.88 <sup>0</sup> <sub>312</sub>
19	56.56 <sup>0</sup> <sub>25</sub>	50.57 <sup>0</sup> <sub>254</sub>	46.223 <sup>0</sup> <sub>118</sub>	35.18 <sup>0</sup> <sub>9</sub>	39.361 <sup>0</sup> <sub>131</sub>	35.84 <sup>0</sup> <sub>71</sub>	25.595 <sup>0</sup> <sub>112</sub>	55.00 <sup>0</sup> <sub>307</sub>
29	56.81 <sup>0</sup> <sub>14</sub>	53.11 <sup>0</sup> <sub>273</sub>	46.341 <sup>0</sup> <sub>74</sub>	35.09 <sup>0</sup> <sub>17</sub>	39.492 <sup>0</sup> <sub>83</sub>	36.55 <sup>0</sup> <sub>97</sub>	25.707 <sup>0</sup> <sub>61</sub>	58.07 <sup>0</sup> <sub>297</sub>
Sept. 7 <sup>3</sup>	56.95 <sup>0</sup> <sub>1</sub>	55.84 <sup>0</sup> <sub>282</sub>	46.415 <sup>0</sup> <sub>31</sub>	35.26 <sup>0</sup> <sub>40</sub>	39.575 <sup>0</sup> <sub>35</sub>	37.52 <sup>0</sup> <sub>119</sub>	25.768 <sup>0</sup> <sub>13</sub>	61.04 <sup>0</sup> <sub>281</sub>
17	56.96 <sup>0</sup> <sub>11</sub>	58.66 <sup>0</sup> <sub>281</sub>	46.446 <sup>0</sup> <sub>9</sub>	35.66 <sup>0</sup> <sub>59</sub>	39.610 <sup>0</sup> <sub>10</sub>	38.71 <sup>0</sup> <sub>134</sub>	25.781 <sup>0</sup> <sub>34</sub>	63.85 <sup>0</sup> <sub>260</sub>
27	56.85 <sup>0</sup> <sub>22</sub>	61.47 <sup>0</sup> <sub>268</sub>	46.437 <sup>0</sup> <sub>44</sub>	36.25 <sup>0</sup> <sub>74</sub>	39.600 <sup>0</sup> <sub>51</sub>	40.05 <sup>0</sup> <sub>143</sub>	25.747 <sup>0</sup> <sub>75</sub>	66.45 <sup>0</sup> <sub>233</sub>
Okt. 7	56.63 <sup>0</sup> <sub>32</sub>	64.15 <sup>0</sup> <sub>244</sub>	46.393 <sup>0</sup> <sub>74</sub>	36.99 <sup>0</sup> <sub>83</sub>	39.549 <sup>0</sup> <sub>85</sub>	41.48 <sup>0</sup> <sub>145</sub>	25.672 <sup>0</sup> <sub>112</sub>	68.78 <sup>0</sup> <sub>203</sub>
17	56.31 <sup>0</sup> <sub>40</sub>	66.59 <sup>0</sup> <sub>211</sub>	46.319 <sup>0</sup> <sub>97</sub>	37.82 <sup>0</sup> <sub>90</sub>	39.464 <sup>0</sup> <sub>113</sub>	42.93 <sup>0</sup> <sub>139</sub>	25.560 <sup>0</sup> <sub>143</sub>	70.81 <sup>0</sup> <sub>167</sub>
27	55.91 <sup>0</sup> <sub>46</sub>	68.70 <sup>0</sup> <sub>169</sub>	46.222 <sup>0</sup> <sub>113</sub>	38.72 <sup>0</sup> <sub>90</sub>	39.351 <sup>0</sup> <sub>131</sub>	44.32 <sup>0</sup> <sub>129</sub>	25.417 <sup>0</sup> <sub>166</sub>	72.48 <sup>0</sup> <sub>129</sub>
Nov. 6	55.45 <sup>0</sup> <sub>51</sub>	70.39 <sup>0</sup> <sub>119</sub>	46.109 <sup>0</sup> <sub>123</sub>	39.62 <sup>0</sup> <sub>87</sub>	39.220 <sup>0</sup> <sub>143</sub>	45.61 <sup>0</sup> <sub>112</sub>	25.251 <sup>0</sup> <sub>184</sub>	73.77 <sup>0</sup> <sub>87</sub>
16	54.94 <sup>0</sup> <sub>53</sub>	71.58 <sup>0</sup> <sub>64</sub>	45.986 <sup>0</sup> <sub>125</sub>	40.49 <sup>0</sup> <sub>80</sub>	39.077 <sup>0</sup> <sub>147</sub>	46.73 <sup>0</sup> <sub>91</sub>	25.067 <sup>0</sup> <sub>196</sub>	74.64 <sup>0</sup> <sub>42</sub>
26	54.41 <sup>0</sup> <sub>52</sub>	72.22 <sup>0</sup> <sub>7</sub>	45.861 <sup>0</sup> <sub>123</sub>	41.29 <sup>0</sup> <sub>71</sub>	38.930 <sup>0</sup> <sub>144</sub>	47.64 <sup>0</sup> <sub>67</sub>	24.871 <sup>0</sup> <sub>200</sub>	75.06 <sup>0</sup> <sub>3</sub>
Dez. 6	53.89 <sup>0</sup> <sub>51</sub>	72.29 <sup>0</sup> <sub>52</sub>	45.738 <sup>0</sup> <sub>115</sub>	42.00 <sup>0</sup> <sub>58</sub>	38.786 <sup>0</sup> <sub>135</sub>	48.31 <sup>0</sup> <sub>39</sub>	24.671 <sup>0</sup> <sub>200</sub>	75.03 <sup>0</sup> <sub>49</sub>
16	53.38 <sup>0</sup> <sub>46</sub>	71.77 <sup>0</sup> <sub>110</sub>	45.623 <sup>0</sup> <sub>102</sub>	42.58 <sup>0</sup> <sub>44</sub>	38.651 <sup>0</sup> <sub>120</sub>	48.70 <sup>0</sup> <sub>10</sub>	24.471 <sup>0</sup> <sub>191</sub>	74.54 <sup>0</sup> <sub>94</sub>
26	52.92 <sup>0</sup> <sub>41</sub>	70.67 <sup>0</sup> <sub>164</sub>	45.521 <sup>0</sup> <sub>86</sub>	43.02 <sup>0</sup> <sub>29</sub>	38.531 <sup>0</sup> <sub>103</sub>	48.80 <sup>0</sup> <sub>18</sub>	24.280 <sup>0</sup> <sub>178</sub>	73.60 <sup>0</sup> <sub>136</sub>
36	52.51 <sup>0</sup>	69.03 <sup>0</sup>	45.435 <sup>0</sup>	43.31 <sup>0</sup>	38.428 <sup>0</sup>	48.62 <sup>0</sup>	24.102 <sup>0</sup>	72.24 <sup>0</sup>
Mittl. Ort	51.78	65.10	43.987	49.62	36.956	51.07	23.079	48.52
sec $\delta$ , tg $\delta$	2.976	-2.803	1.041	-0.289	1.154	-0.575	1.346	+0.901
a, a'	+4.2	+19.1	+3.2	+19.2	+3.3	+19.2	+2.8	+19.3
b, b'	-0.18	+0.30	-0.02	+0.29	-0.04	+0.28	+0.06	+0.26

1) Die jährliche Parallaxe (0"135) ist bereits berücksichtigt.



Tag	870) $\beta$ Pegasi		871) $\alpha$ Pegasi		873) 88 Aquarii		875) Br 3077 Cass <sup>1)</sup>	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	23 <sup>h</sup> 1 <sup>m</sup>	+27° 46'	23 <sup>h</sup> 1 <sup>m</sup>	+14° 54'	23 <sup>h</sup> 6 <sup>m</sup>	-21° 28'	23 <sup>h</sup> 10 <sup>m</sup>	+56° 51'
Jan. I	4.791 <sub>120</sub>	64.93 <sub>143</sub>	59.654 <sub>96</sub>	30.34 <sub>117</sub>	29.312 <sub>91</sub>	30.14 <sub>3</sub>	35.962 <sub>275</sub>	61.49 <sub>152</sub>
II	4.671 <sub>101</sub>	63.50 <sub>165</sub>	59.558 <sub>80</sub>	29.17 <sub>128</sub>	29.221 <sub>72</sub>	30.17 <sub>19</sub>	35.687 <sub>243</sub>	59.97 <sub>197</sub>
21	4.570 <sub>77</sub>	61.85 <sub>180</sub>	59.478 <sub>58</sub>	27.89 <sub>132</sub>	29.149 <sub>49</sub>	29.98 <sub>43</sub>	35.444 <sub>203</sub>	58.00 <sub>235</sub>
31	4.493 <sub>49</sub>	60.05 <sub>188</sub>	59.420 <sub>33</sub>	26.57 <sub>131</sub>	29.100 <sub>24</sub>	29.55 <sub>65</sub>	35.241 <sub>152</sub>	55.65 <sub>263</sub>
Febr. 10	4.444 <sub>16</sub>	58.17 <sub>187</sub>	59.387 <sub>4</sub>	25.26 <sub>124</sub>	29.076 <sub>4</sub>	28.90 <sub>88</sub>	35.089 <sub>94</sub>	53.02 <sub>280</sub>
20	4.428 <sub>20</sub>	56.30 <sub>179</sub>	59.383 <sub>27</sub>	24.02 <sub>111</sub>	29.080 <sub>35</sub>	28.02 <sub>111</sub>	34.995 <sub>28</sub>	50.22 <sub>286</sub>
März 2	4.448 <sub>60</sub>	54.51 <sub>162</sub>	59.410 <sub>63</sub>	22.91 <sub>90</sub>	29.115 <sub>69</sub>	26.91 <sub>132</sub>	34.967 <sub>43</sub>	47.36 <sub>280</sub>
12	4.508 <sub>103</sub>	52.89 <sub>136</sub>	59.473 <sub>100</sub>	22.01 <sub>65</sub>	29.184 <sub>105</sub>	25.59 <sub>152</sub>	35.010 <sub>115</sub>	44.56 <sub>263</sub>
22	4.611 <sub>145</sub>	51.53 <sub>105</sub>	59.573 <sub>138</sub>	21.36 <sub>36</sub>	29.289 <sub>143</sub>	24.07 <sub>171</sub>	35.125 <sub>187</sub>	41.93 <sub>235</sub>
Apr. I	4.756 <sub>186</sub>	50.48 <sub>68</sub>	59.711 <sub>176</sub>	21.00 <sub>3</sub>	29.432 <sub>179</sub>	22.36 <sub>186</sub>	35.312 <sub>257</sub>	39.58 <sub>197</sub>
II	4.942 <sub>226</sub>	49.80 <sub>28</sub>	59.887 <sub>212</sub>	20.97 <sub>33</sub>	29.611 <sub>216</sub>	20.50 <sub>200</sub>	35.569 <sub>320</sub>	37.61 <sub>152</sub>
21	5.168 <sub>262</sub>	49.52 <sub>16</sub>	60.099 <sub>246</sub>	21.30 <sub>68</sub>	29.827 <sub>250</sub>	18.50 <sub>208</sub>	35.889 <sub>375</sub>	36.09 <sub>101</sub>
Mai I	5.430 <sub>291</sub>	49.68 <sub>59</sub>	60.345 <sub>273</sub>	21.98 <sub>103</sub>	30.077 <sub>280</sub>	16.42 <sub>212</sub>	36.264 <sub>420</sub>	35.08 <sub>47</sub>
II	5.721 <sub>314</sub>	50.27 <sub>100</sub>	60.618 <sub>295</sub>	23.01 <sub>135</sub>	30.357 <sub>304</sub>	14.30 <sub>211</sub>	36.684 <sub>453</sub>	34.61 <sub>9</sub>
21	6.035 <sub>329</sub>	51.27 <sub>139</sub>	60.913 <sub>310</sub>	24.36 <sub>163</sub>	30.661 <sub>321</sub>	12.19 <sub>206</sub>	37.137 <sub>472</sub>	34.70 <sub>65</sub>
31	6.364 <sub>334</sub>	52.66 <sub>175</sub>	61.223 <sub>317</sub>	25.99 <sub>187</sub>	30.982 <sub>332</sub>	10.13 <sub>195</sub>	37.609 <sub>479</sub>	35.35 <sub>118</sub>
Juni 10	6.698 <sub>331</sub>	54.41 <sub>205</sub>	61.540 <sub>316</sub>	27.86 <sub>207</sub>	31.314 <sub>333</sub>	8.18 <sub>178</sub>	38.088 <sub>471</sub>	36.53 <sub>168</sub>
20	7.029 <sub>320</sub>	56.46 <sub>230</sub>	61.856 <sub>306</sub>	29.93 <sub>219</sub>	31.647 <sub>327</sub>	6.40 <sub>157</sub>	38.559 <sub>452</sub>	38.21 <sub>214</sub>
30	7.349 <sub>300</sub>	58.76 <sub>248</sub>	62.162 <sub>288</sub>	32.12 <sub>227</sub>	31.974 <sub>311</sub>	4.83 <sub>133</sub>	39.011 <sub>421</sub>	40.35 <sub>253</sub>
Juli 10	7.649 <sub>272</sub>	61.24 <sub>260</sub>	62.450 <sub>263</sub>	34.39 <sub>229</sub>	32.285 <sub>289</sub>	3.50 <sub>104</sub>	39.432 <sub>380</sub>	42.88 <sub>286</sub>
20	7.921 <sub>239</sub>	63.84 <sub>267</sub>	62.713 <sub>232</sub>	36.68 <sub>225</sub>	32.574 <sub>258</sub>	2.46 <sub>74</sub>	39.812 <sub>329</sub>	45.74 <sub>313</sub>
30	8.160 <sub>199</sub>	66.51 <sub>267</sub>	62.945 <sub>196</sub>	38.93 <sub>217</sub>	32.832 <sub>221</sub>	1.72 <sub>43</sub>	40.141 <sub>272</sub>	48.87 <sub>332</sub>
Aug. 9	8.359 <sub>157</sub>	69.18 <sub>261</sub>	63.141 <sub>157</sub>	41.10 <sub>203</sub>	33.053 <sub>180</sub>	1.29 <sub>11</sub>	40.413 <sub>210</sub>	52.19 <sub>344</sub>
19	8.516 <sub>113</sub>	71.79 <sub>250</sub>	63.298 <sub>115</sub>	43.13 <sub>187</sub>	33.233 <sub>137</sub>	1.18 <sub>18</sub>	40.623 <sub>147</sub>	55.63 <sub>349</sub>
29	8.629 <sub>69</sub>	74.29 <sub>235</sub>	63.413 <sub>73</sub>	45.00 <sub>167</sub>	33.370 <sub>92</sub>	1.36 <sub>46</sub>	40.770 <sub>81</sub>	59.12 <sub>346</sub>
Sept. 7*)	8.698 <sub>26</sub>	76.64 <sub>215</sub>	63.486 <sub>33</sub>	46.67 <sub>145</sub>	33.462 <sub>47</sub>	1.82 <sub>70</sub>	40.851 <sub>17</sub>	62.58 <sub>336</sub>
17	8.724 <sub>14</sub>	78.79 <sub>193</sub>	63.519 <sub>5</sub>	48.12 <sub>122</sub>	33.509 <sub>5</sub>	2.52 <sub>89</sub>	40.868 <sub>44</sub>	65.94 <sub>320</sub>
27	8.710 <sub>50</sub>	80.72 <sub>166</sub>	63.514 <sub>39</sub>	49.34 <sub>97</sub>	33.514 <sub>33</sub>	3.41 <sub>104</sub>	40.824 <sub>101</sub>	69.14 <sub>297</sub>
Okt. 7	8.660 <sub>81</sub>	82.38 <sub>137</sub>	63.475 <sub>66</sub>	50.31 <sub>72</sub>	33.481 <sub>64</sub>	4.45 <sub>111</sub>	40.723 <sub>151</sub>	72.11 <sub>268</sub>
17	8.579 <sub>105</sub>	83.75 <sub>107</sub>	63.409 <sub>90</sub>	51.03 <sub>46</sub>	33.417 <sub>91</sub>	5.56 <sub>115</sub>	40.572 <sub>197</sub>	74.79 <sub>233</sub>
27	8.474 <sub>125</sub>	84.82 <sub>74</sub>	63.319 <sub>107</sub>	51.49 <sub>22</sub>	33.326 <sub>110</sub>	6.71 <sub>111</sub>	40.375 <sub>234</sub>	77.12 <sub>192</sub>
Nov. 6	8.349 <sub>139</sub>	85.56 <sub>40</sub>	63.212 <sub>118</sub>	51.71 <sub>3</sub>	33.216 <sub>122</sub>	7.82 <sub>104</sub>	40.141 <sub>265</sub>	79.04 <sub>146</sub>
16	8.210 <sub>146</sub>	85.96 <sub>5</sub>	63.094 <sub>124</sub>	51.68 <sub>27</sub>	33.094 <sub>128</sub>	8.86 <sub>92</sub>	39.876 <sub>286</sub>	80.50 <sub>95</sub>
26	8.064 <sub>148</sub>	86.01 <sub>29</sub>	62.970 <sub>126</sub>	51.41 <sub>50</sub>	32.966 <sub>128</sub>	9.78 <sub>76</sub>	39.590 <sub>301</sub>	81.45 <sub>43</sub>
Dez. 6	7.916 <sub>146</sub>	85.72 <sub>64</sub>	62.844 <sub>121</sub>	50.91 <sub>72</sub>	32.838 <sub>123</sub>	10.54 <sub>58</sub>	39.289 <sub>305</sub>	81.88 <sub>12</sub>
16	7.770 <sub>139</sub>	85.08 <sub>95</sub>	62.723 <sub>114</sub>	50.19 <sub>90</sub>	32.715 <sub>112</sub>	11.12 <sub>37</sub>	38.984 <sub>300</sub>	81.76 <sub>66</sub>
26	7.631 <sub>127</sub>	84.13 <sub>125</sub>	62.609 <sub>103</sub>	49.29 <sub>107</sub>	32.603 <sub>98</sub>	11.49 <sub>15</sub>	38.684 <sub>287</sub>	81.10 <sub>119</sub>
36	7.504	82.88	62.506	48.22	32.505	11.64	38.397	79.91
Mittl. Ort	6.232	62.88	61.121	32.30	30.988	16.50	37.415	52.04
sec $\delta$ , tg $\delta$	1.130	+0.527	1.035	+0.266	1.075	-0.393	1.829	+1.532
a, a'	+2.9	+19.4	+3.0	+19.4	+3.2	+19.5	+2.6	+19.6
b, b'	+0.03	+0.25	+0.02	+0.25	-0.03	+0.23	+0.10	+0.21

 \*) Die jährliche Parallaxe ( $\sigma=146$ ) ist bereits berücksichtigt.

\*) Bei Stern 875) lies Sept. 8.



Tag	877) $\gamma$ Tucanae		878) $\gamma$ Piscium		879) $\gamma$ Sculptoris		880) $\tau$ Pegasi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$23^h 14^m$	$-58^\circ 31'$	$23^h 14^m$	$+2^\circ 58'$	$23^h 15^m$	$-32^\circ 49'$	$23^h 17^m$	$+23^\circ 26'$
Jan. I	II.514 <sup>234</sup>	97.40 <sup>129</sup>	17.329 <sup>90</sup>	47.37 <sup>83</sup>	49.760 <sup>114</sup>	71.85 <sup>34</sup>	53.295 <sup>118</sup>	21.26 <sup>125</sup>
II	II.280 <sup>194</sup>	96.11 <sup>176</sup>	17.239 <sup>74</sup>	46.54 <sup>82</sup>	49.646 <sup>94</sup>	71.51 <sup>66</sup>	53.177 <sup>103</sup>	20.01 <sup>144</sup>
21	II.086 <sup>148</sup>	94.35 <sup>217</sup>	17.165 <sup>56</sup>	45.72 <sup>76</sup>	49.552 <sup>68</sup>	70.85 <sup>97</sup>	53.074 <sup>83</sup>	18.57 <sup>156</sup>
31	10.938 <sup>97</sup>	92.18 <sup>252</sup>	17.109 <sup>34</sup>	44.96 <sup>68</sup>	49.484 <sup>41</sup>	69.88 <sup>126</sup>	52.991 <sup>57</sup>	17.01 <sup>163</sup>
Febr. 10	10.841 <sup>42</sup>	89.66 <sup>281</sup>	17.075 <sup>7</sup>	44.28 <sup>56</sup>	49.443 <sup>9</sup>	68.62 <sup>153</sup>	52.934 <sup>28</sup>	15.38 <sup>161</sup>
20	10.799 <sup>16</sup>	86.85 <sup>303</sup>	17.068 <sup>22</sup>	43.72 <sup>38</sup>	49.434 <sup>24</sup>	67.09 <sup>177</sup>	52.906 <sup>5</sup>	13.77 <sup>153</sup>
März 2	10.815 <sup>77</sup>	83.82 <sup>319</sup>	17.090 <sup>54</sup>	43.34 <sup>17</sup>	49.458 <sup>62</sup>	65.32 <sup>198</sup>	52.911 <sup>43</sup>	12.24 <sup>137</sup>
12	10.892 <sup>139</sup>	80.63 <sup>328</sup>	17.144 <sup>90</sup>	43.17 <sup>6</sup>	49.520 <sup>101</sup>	63.34 <sup>216</sup>	52.954 <sup>83</sup>	10.87 <sup>114</sup>
22	11.031 <sup>202</sup>	77.35 <sup>329</sup>	17.234 <sup>127</sup>	43.23 <sup>33</sup>	49.621 <sup>142</sup>	61.18 <sup>230</sup>	53.037 <sup>125</sup>	9.73 <sup>85</sup>
Apr. I	11.233 <sup>264</sup>	74.06 <sup>325</sup>	17.361 <sup>164</sup>	43.56 <sup>61</sup>	49.763 <sup>183</sup>	58.88 <sup>241</sup>	53.162 <sup>167</sup>	8.88 <sup>51</sup>
II	11.497 <sup>322</sup>	70.81 <sup>313</sup>	17.525 <sup>200</sup>	44.17 <sup>90</sup>	49.946 <sup>223</sup>	56.47 <sup>246</sup>	53.329 <sup>207</sup>	8.37 <sup>13</sup>
21	11.819 <sup>377</sup>	67.68 <sup>294</sup>	17.725 <sup>233</sup>	45.07 <sup>116</sup>	50.169 <sup>261</sup>	54.01 <sup>246</sup>	53.536 <sup>243</sup>	8.24 <sup>26</sup>
Mai I	12.196 <sup>426</sup>	64.74 <sup>270</sup>	17.958 <sup>262</sup>	46.23 <sup>142</sup>	50.430 <sup>294</sup>	51.55 <sup>242</sup>	53.779 <sup>275</sup>	8.50 <sup>66</sup>
II	12.622 <sup>466</sup>	62.04 <sup>238</sup>	18.220 <sup>286</sup>	47.65 <sup>164</sup>	50.724 <sup>322</sup>	49.13 <sup>231</sup>	54.054 <sup>300</sup>	9.16 <sup>104</sup>
21	13.088 <sup>497</sup>	59.66 <sup>202</sup>	18.506 <sup>304</sup>	49.29 <sup>182</sup>	51.046 <sup>343</sup>	46.82 <sup>215</sup>	54.354 <sup>317</sup>	10.20 <sup>140</sup>
31	13.585 <sup>516</sup>	57.64 <sup>161</sup>	18.810 <sup>313</sup>	51.11 <sup>194</sup>	51.389 <sup>357</sup>	44.67 <sup>193</sup>	54.671 <sup>327</sup>	11.60 <sup>171</sup>
Juni 10	14.101 <sup>523</sup>	56.03 <sup>116</sup>	19.123 <sup>314</sup>	53.05 <sup>203</sup>	51.746 <sup>360</sup>	42.74 <sup>167</sup>	54.998 <sup>328</sup>	13.31 <sup>198</sup>
20	14.624 <sup>516</sup>	54.87 <sup>68</sup>	19.437 <sup>308</sup>	55.08 <sup>204</sup>	52.106 <sup>355</sup>	41.07 <sup>137</sup>	55.326 <sup>319</sup>	15.29 <sup>220</sup>
30	15.140 <sup>497</sup>	54.19 <sup>18</sup>	19.745 <sup>293</sup>	57.12 <sup>202</sup>	52.461 <sup>342</sup>	39.70 <sup>102</sup>	55.645 <sup>302</sup>	17.49 <sup>236</sup>
Juli 10	15.637 <sup>464</sup>	54.01 <sup>32</sup>	20.038 <sup>271</sup>	59.14 <sup>194</sup>	52.803 <sup>319</sup>	38.68 <sup>66</sup>	55.947 <sup>279</sup>	19.85 <sup>246</sup>
20	16.101 <sup>418</sup>	54.33 <sup>80</sup>	20.309 <sup>242</sup>	61.08 <sup>181</sup>	53.122 <sup>287</sup>	38.02 <sup>29</sup>	56.226 <sup>248</sup>	22.31 <sup>250</sup>
30	16.519 <sup>362</sup>	55.13 <sup>125</sup>	20.551 <sup>209</sup>	62.89 <sup>165</sup>	53.409 <sup>249</sup>	37.73 <sup>10</sup>	56.474 <sup>213</sup>	24.81 <sup>248</sup>
Aug. 9	16.881 <sup>296</sup>	56.38 <sup>167</sup>	20.760 <sup>172</sup>	64.54 <sup>145</sup>	53.658 <sup>206</sup>	37.83 <sup>46</sup>	56.687 <sup>173</sup>	27.29 <sup>241</sup>
19	17.177 <sup>222</sup>	58.05 <sup>201</sup>	20.932 <sup>131</sup>	65.99 <sup>124</sup>	53.864 <sup>158</sup>	38.29 <sup>79</sup>	56.860 <sup>131</sup>	29.70 <sup>230</sup>
29	17.399 <sup>145</sup>	60.06 <sup>229</sup>	21.063 <sup>90</sup>	67.23 <sup>100</sup>	54.022 <sup>109</sup>	39.08 <sup>108</sup>	56.991 <sup>88</sup>	32.00 <sup>214</sup>
Sept. 8	17.544 <sup>66</sup>	62.35 <sup>247</sup>	21.153 <sup>51</sup>	68.23 <sup>76</sup>	54.131 <sup>60</sup>	40.16 <sup>133</sup>	57.079 <sup>47</sup>	34.14 <sup>194</sup>
17	17.610 <sup>11</sup>	64.82 <sup>256</sup>	21.204 <sup>13</sup>	68.99 <sup>54</sup>	54.191 <sup>12</sup>	41.49 <sup>150</sup>	57.126 <sup>8</sup>	36.08 <sup>172</sup>
27	17.599 <sup>84</sup>	67.38 <sup>255</sup>	21.217 <sup>21</sup>	69.53 <sup>31</sup>	54.203 <sup>31</sup>	42.99 <sup>161</sup>	57.134 <sup>28</sup>	37.80 <sup>148</sup>
Okt. 7	17.515 <sup>149</sup>	69.93 <sup>243</sup>	21.196 <sup>49</sup>	69.84 <sup>11</sup>	54.172 <sup>68</sup>	44.60 <sup>164</sup>	57.106 <sup>58</sup>	39.28 <sup>121</sup>
17	17.366 <sup>205</sup>	72.36 <sup>222</sup>	21.147 <sup>74</sup>	69.95 <sup>8</sup>	54.104 <sup>100</sup>	46.24 <sup>160</sup>	57.048 <sup>85</sup>	40.49 <sup>93</sup>
27	17.161 <sup>249</sup>	74.58 <sup>190</sup>	21.073 <sup>91</sup>	69.87 <sup>25</sup>	54.004 <sup>124</sup>	47.84 <sup>149</sup>	56.963 <sup>104</sup>	41.42 <sup>63</sup>
Nov. 6	16.912 <sup>281</sup>	76.48 <sup>151</sup>	20.982 <sup>103</sup>	69.62 <sup>39</sup>	53.880 <sup>140</sup>	49.33 <sup>130</sup>	56.859 <sup>120</sup>	42.05 <sup>34</sup>
16	16.631 <sup>299</sup>	77.99 <sup>106</sup>	20.879 <sup>111</sup>	69.23 <sup>52</sup>	53.740 <sup>149</sup>	50.63 <sup>108</sup>	56.739 <sup>130</sup>	42.39 <sup>3</sup>
26	16.332 <sup>304</sup>	79.05 <sup>56</sup>	20.768 <sup>113</sup>	68.71 <sup>62</sup>	53.591 <sup>151</sup>	51.71 <sup>81</sup>	56.609 <sup>134</sup>	42.42 <sup>27</sup>
Dez. 6	16.028 <sup>297</sup>	79.61 <sup>4</sup>	20.655 <sup>110</sup>	68.09 <sup>70</sup>	53.440 <sup>146</sup>	52.52 <sup>50</sup>	56.475 <sup>135</sup>	42.15 <sup>56</sup>
16	15.731 <sup>279</sup>	79.65 <sup>50</sup>	20.545 <sup>104</sup>	67.39 <sup>77</sup>	53.294 <sup>136</sup>	53.02 <sup>17</sup>	56.340 <sup>131</sup>	41.59 <sup>84</sup>
26	15.452 <sup>252</sup>	79.15 <sup>101</sup>	20.441 <sup>94</sup>	66.62 <sup>80</sup>	53.158 <sup>123</sup>	53.19 <sup>15</sup>	56.209 <sup>123</sup>	40.75 <sup>109</sup>
36	15.200	78.14	20.347	65.82	53.035	53.04	56.086	39.66
Mittl. Ort	13.940	74.90	18.781	53.42	51.507	54.70	54.655	20.65
sec $\delta$ , tg $\delta$	1.916	-1.634	1.001	+0.052	1.190	-0.645	1.090	+0.434
a, a'	+3.5	+19.6	+3.1	+19.6	+3.2	+19.7	+3.0	+19.7
b, b'	-0.11	+0.20	0.00	+0.20	-0.04	+0.19	+0.03	+0.18



Tag	882) 4 Cassiopeiae		884) x Piscium		885) 70 Pegasi		888) 248 G. Aquarii	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	23 <sup>h</sup> 22 <sup>m</sup>	+61° 58'	23 <sup>h</sup> 24 <sup>m</sup>	+0° 57'	23 <sup>h</sup> 26 <sup>m</sup>	+12° 27'	23 <sup>h</sup> 32 <sup>m</sup>	-7° 45'
Jan. I	21.61 <sup>a</sup> <sub>36</sub>	61.15 <sup>a</sup> <sub>134</sub>	5.298 <sup>a</sup> <sub>95</sub>	8.56 <sup>a</sup> <sub>76</sub>	20.888 <sup>a</sup> <sub>104</sub>	22.23 <sup>a</sup> <sub>101</sub>	40.418 <sup>a</sup> <sub>98</sub>	78.23 <sup>a</sup> <sub>52</sub>
II	21.25 <sup>a</sup> <sub>32</sub>	59.81 <sup>a</sup> <sub>183</sub>	5.203 <sup>a</sup> <sub>81</sub>	7.80 <sup>a</sup> <sub>72</sub>	20.784 <sup>a</sup> <sub>91</sub>	21.22 <sup>a</sup> <sub>109</sub>	40.320 <sup>a</sup> <sub>84</sub>	78.75 <sup>a</sup> <sub>41</sub>
2I	20.93 <sup>a</sup> <sub>28</sub>	57.98 <sup>a</sup> <sub>225</sub>	5.122 <sup>a</sup> <sub>63</sub>	7.08 <sup>a</sup> <sub>67</sub>	20.693 <sup>a</sup> <sub>74</sub>	20.13 <sup>a</sup> <sub>112</sub>	40.236 <sup>a</sup> <sub>68</sub>	79.16 <sup>a</sup> <sub>26</sub>
3I	20.65 <sup>a</sup> <sub>22</sub>	55.73 <sup>a</sup> <sub>259</sub>	5.059 <sup>a</sup> <sub>42</sub>	6.41 <sup>a</sup> <sub>56</sub>	20.619 <sup>a</sup> <sub>52</sub>	19.01 <sup>a</sup> <sub>112</sub>	40.168 <sup>a</sup> <sub>47</sub>	79.42 <sup>a</sup> <sub>10</sub>
Febr. 10	20.43 <sup>a</sup> <sub>16</sub>	53.14 <sup>a</sup> <sub>283</sub>	5.017 <sup>a</sup> <sub>17</sub>	5.85 <sup>a</sup> <sub>42</sub>	20.567 <sup>a</sup> <sub>25</sub>	17.89 <sup>a</sup> <sub>104</sub>	40.121 <sup>a</sup> <sub>23</sub>	79.52 <sup>a</sup> <sub>9</sub>
20	20.27 <sup>a</sup> <sub>8</sub>	50.31 <sup>a</sup> <sub>294</sub>	5.000 <sup>a</sup> <sub>11</sub>	5.43 <sup>a</sup> <sub>25</sub>	20.542 <sup>a</sup> <sub>4</sub>	16.85 <sup>a</sup> <sub>91</sub>	40.098 <sup>a</sup> <sub>5</sub>	79.43 <sup>a</sup> <sub>28</sub>
März 2	20.19 <sup>a</sup> <sub>0</sub>	47.37 <sup>a</sup> <sub>293</sub>	5.011 <sup>a</sup> <sub>44</sub>	5.18 <sup>a</sup> <sub>4</sub>	20.546 <sup>a</sup> <sub>38</sub>	15.94 <sup>a</sup> <sub>74</sub>	40.103 <sup>a</sup> <sub>37</sub>	79.15 <sup>a</sup> <sub>51</sub>
12	20.19 <sup>a</sup> <sub>9</sub>	44.44 <sup>a</sup> <sub>281</sub>	5.055 <sup>a</sup> <sub>80</sub>	5.14 <sup>a</sup> <sub>19</sub>	20.584 <sup>a</sup> <sub>75</sub>	15.20 <sup>a</sup> <sub>50</sub>	40.140 <sup>a</sup> <sub>72</sub>	78.64 <sup>a</sup> <sub>74</sub>
22	20.28 <sup>a</sup> <sub>18</sub>	41.63 <sup>a</sup> <sub>257</sub>	5.135 <sup>a</sup> <sub>116</sub>	5.33 <sup>a</sup> <sub>45</sub>	20.659 <sup>a</sup> <sub>114</sub>	14.70 <sup>a</sup> <sub>22</sub>	40.212 <sup>a</sup> <sub>109</sub>	77.90 <sup>a</sup> <sub>98</sub>
Apr. I	20.46 <sup>a</sup> <sub>26</sub>	39.06 <sup>a</sup> <sub>223</sub>	5.251 <sup>a</sup> <sub>153</sub>	5.78 <sup>a</sup> <sub>72</sub>	20.773 <sup>a</sup> <sub>153</sub>	14.48 <sup>a</sup> <sub>8</sub>	40.321 <sup>a</sup> <sub>147</sub>	76.92 <sup>a</sup> <sub>121</sub>
II	20.72 <sup>a</sup> <sub>33</sub>	36.83 <sup>a</sup> <sub>180</sub>	5.404 <sup>a</sup> <sub>190</sub>	6.50 <sup>a</sup> <sub>99</sub>	20.926 <sup>a</sup> <sub>192</sub>	14.56 <sup>a</sup> <sub>40</sub>	40.468 <sup>a</sup> <sub>184</sub>	75.71 <sup>a</sup> <sub>143</sub>
2I	21.05 <sup>a</sup> <sub>40</sub>	35.03 <sup>a</sup> <sub>132</sub>	5.594 <sup>a</sup> <sub>225</sub>	7.49 <sup>a</sup> <sub>125</sub>	21.118 <sup>a</sup> <sub>227</sub>	14.96 <sup>a</sup> <sub>73</sub>	40.652 <sup>a</sup> <sub>219</sub>	74.28 <sup>a</sup> <sub>163</sub>
Mai I	21.45 <sup>a</sup> <sub>46</sub>	33.71 <sup>a</sup> <sub>78</sub>	5.819 <sup>a</sup> <sub>256</sub>	8.74 <sup>a</sup> <sub>148</sub>	21.345 <sup>a</sup> <sub>258</sub>	15.69 <sup>a</sup> <sub>105</sub>	40.871 <sup>a</sup> <sub>251</sub>	72.65 <sup>a</sup> <sub>180</sub>
II	21.91 <sup>a</sup> <sub>49</sub>	32.93 <sup>a</sup> <sub>22</sub>	6.075 <sup>a</sup> <sub>281</sub>	10.22 <sup>a</sup> <sub>169</sub>	21.603 <sup>a</sup> <sub>284</sub>	16.74 <sup>a</sup> <sub>135</sub>	41.122 <sup>a</sup> <sub>278</sub>	70.85 <sup>a</sup> <sub>192</sub>
2I	22.40 <sup>a</sup> <sub>52</sub>	32.71 <sup>a</sup> <sub>35</sub>	6.356 <sup>a</sup> <sub>299</sub>	11.91 <sup>a</sup> <sub>184</sub>	21.887 <sup>a</sup> <sub>303</sub>	18.09 <sup>a</sup> <sub>162</sub>	41.400 <sup>a</sup> <sub>299</sub>	68.93 <sup>a</sup> <sub>201</sub>
3I	22.92 <sup>a</sup> <sub>54</sub>	33.06 <sup>a</sup> <sub>91</sub>	6.655 <sup>a</sup> <sub>311</sub>	13.75 <sup>a</sup> <sub>196</sub>	22.190 <sup>a</sup> <sub>314</sub>	19.71 <sup>a</sup> <sub>183</sub>	41.699 <sup>a</sup> <sub>312</sub>	66.92 <sup>a</sup> <sub>204</sub>
Juni 10	23.46 <sup>a</sup> <sub>52</sub>	33.97 <sup>a</sup> <sub>142</sub>	6.966 <sup>a</sup> <sub>313</sub>	15.71 <sup>a</sup> <sub>202</sub>	22.504 <sup>a</sup> <sub>317</sub>	21.54 <sup>a</sup> <sub>201</sub>	42.011 <sup>a</sup> <sub>317</sub>	64.88 <sup>a</sup> <sub>201</sub>
20	23.98 <sup>a</sup> <sub>51</sub>	35.39 <sup>a</sup> <sub>192</sub>	7.279 <sup>a</sup> <sub>309</sub>	17.73 <sup>a</sup> <sub>202</sub>	22.821 <sup>a</sup> <sub>312</sub>	23.55 <sup>a</sup> <sub>213</sub>	42.328 <sup>a</sup> <sub>314</sub>	62.87 <sup>a</sup> <sub>193</sub>
30	24.49 <sup>a</sup> <sub>48</sub>	37.31 <sup>a</sup> <sub>236</sub>	7.588 <sup>a</sup> <sub>296</sub>	19.75 <sup>a</sup> <sub>198</sub>	23.133 <sup>a</sup> <sub>298</sub>	25.68 <sup>a</sup> <sub>219</sub>	42.642 <sup>a</sup> <sub>303</sub>	60.94 <sup>a</sup> <sub>181</sub>
Juli 10	24.97 <sup>a</sup> <sub>44</sub>	39.67 <sup>a</sup> <sub>273</sub>	7.884 <sup>a</sup> <sub>276</sub>	21.73 <sup>a</sup> <sub>189</sub>	23.431 <sup>a</sup> <sub>276</sub>	27.87 <sup>a</sup> <sub>220</sub>	42.945 <sup>a</sup> <sub>284</sub>	59.13 <sup>a</sup> <sub>164</sub>
20	25.41 <sup>a</sup> <sub>38</sub>	42.40 <sup>a</sup> <sub>304</sub>	8.160 <sup>a</sup> <sub>248</sub>	23.62 <sup>a</sup> <sub>174</sub>	23.707 <sup>a</sup> <sub>249</sub>	30.07 <sup>a</sup> <sub>215</sub>	43.229 <sup>a</sup> <sub>258</sub>	57.49 <sup>a</sup> <sub>143</sub>
30	25.79 <sup>a</sup> <sub>31</sub>	45.44 <sup>a</sup> <sub>328</sub>	8.408 <sup>a</sup> <sub>216</sub>	25.36 <sup>a</sup> <sub>156</sub>	23.956 <sup>a</sup> <sub>217</sub>	32.22 <sup>a</sup> <sub>206</sub>	43.487 <sup>a</sup> <sub>227</sub>	56.06 <sup>a</sup> <sub>119</sub>
Aug. 9	26.10 <sup>a</sup> <sub>25</sub>	48.72 <sup>a</sup> <sub>345</sub>	8.624 <sup>a</sup> <sub>179</sub>	26.92 <sup>a</sup> <sub>136</sub>	24.173 <sup>a</sup> <sub>179</sub>	34.28 <sup>a</sup> <sub>192</sub>	43.714 <sup>a</sup> <sub>191</sub>	54.87 <sup>a</sup> <sub>93</sub>
19	26.35 <sup>a</sup> <sub>18</sub>	52.17 <sup>a</sup> <sub>354</sub>	8.803 <sup>a</sup> <sub>140</sub>	28.28 <sup>a</sup> <sub>113</sub>	24.352 <sup>a</sup> <sub>139</sub>	36.20 <sup>a</sup> <sub>176</sub>	43.905 <sup>a</sup> <sub>151</sub>	53.94 <sup>a</sup> <sub>66</sub>
29	26.53 <sup>a</sup> <sub>11</sub>	55.71 <sup>a</sup> <sub>357</sub>	8.943 <sup>a</sup> <sub>100</sub>	29.41 <sup>a</sup> <sub>89</sub>	24.491 <sup>a</sup> <sub>99</sub>	37.96 <sup>a</sup> <sub>155</sub>	44.056 <sup>a</sup> <sub>110</sub>	53.28 <sup>a</sup> <sub>39</sub>
Sept. 8	26.64 <sup>a</sup> <sub>3</sub>	59.28 <sup>a</sup> <sub>352</sub>	9.043 <sup>a</sup> <sub>59</sub>	30.30 <sup>a</sup> <sub>65</sub>	24.590 <sup>a</sup> <sub>59</sub>	39.51 <sup>a</sup> <sub>134</sub>	44.166 <sup>a</sup> <sub>71</sub>	52.89 <sup>a</sup> <sub>13</sub>
17	26.67 <sup>a</sup> <sub>4</sub>	62.80 <sup>a</sup> <sub>339</sub>	9.102 <sup>a</sup> <sub>22</sub>	30.95 <sup>a</sup> <sub>42</sub>	24.649 <sup>a</sup> <sub>22</sub>	40.85 <sup>a</sup> <sub>111</sub>	44.237 <sup>a</sup> <sub>31</sub>	52.76 <sup>a</sup> <sub>10</sub>
27	26.63 <sup>a</sup> <sub>11</sub>	66.19 <sup>a</sup> <sub>320</sub>	9.124 <sup>a</sup> <sub>12</sub>	31.37 <sup>a</sup> <sub>20</sub>	24.671 <sup>a</sup> <sub>13</sub>	41.96 <sup>a</sup> <sub>87</sub>	44.268 <sup>a</sup> <sub>3</sub>	52.86 <sup>a</sup> <sub>30</sub>
Okt. 7	26.52 <sup>a</sup> <sub>17</sub>	69.39 <sup>a</sup> <sub>294</sub>	9.112 <sup>a</sup> <sub>41</sub>	31.57 <sup>a</sup> <sub>1</sub>	24.658 <sup>a</sup> <sub>42</sub>	42.83 <sup>a</sup> <sub>64</sub>	44.265 <sup>a</sup> <sub>35</sub>	53.16 <sup>a</sup> <sub>48</sub>
17	26.35 <sup>a</sup> <sub>22</sub>	72.33 <sup>a</sup> <sub>261</sub>	9.071 <sup>a</sup> <sub>67</sub>	31.56 <sup>a</sup> <sub>18</sub>	24.616 <sup>a</sup> <sub>68</sub>	43.47 <sup>a</sup> <sub>41</sub>	44.230 <sup>a</sup> <sub>61</sub>	53.64 <sup>a</sup> <sub>61</sub>
27	26.13 <sup>a</sup> <sub>27</sub>	74.94 <sup>a</sup> <sub>221</sub>	9.004 <sup>a</sup> <sub>85</sub>	31.38 <sup>a</sup> <sub>33</sub>	24.548 <sup>a</sup> <sub>87</sub>	43.88 <sup>a</sup> <sub>17</sub>	44.169 <sup>a</sup> <sub>81</sub>	54.25 <sup>a</sup> <sub>70</sub>
Nov. 6	25.86 <sup>a</sup> <sub>31</sub>	77.15 <sup>a</sup> <sub>176</sub>	8.919 <sup>a</sup> <sub>99</sub>	31.05 <sup>a</sup> <sub>46</sub>	24.461 <sup>a</sup> <sub>102</sub>	44.05 <sup>a</sup> <sub>4</sub>	44.088 <sup>a</sup> <sub>97</sub>	54.95 <sup>a</sup> <sub>75</sub>
16	25.55 <sup>a</sup> <sub>34</sub>	78.91 <sup>a</sup> <sub>127</sub>	8.820 <sup>a</sup> <sub>108</sub>	30.59 <sup>a</sup> <sub>56</sub>	24.359 <sup>a</sup> <sub>112</sub>	44.01 <sup>a</sup> <sub>25</sub>	43.991 <sup>a</sup> <sub>106</sub>	55.70 <sup>a</sup> <sub>77</sub>
26	25.21 <sup>a</sup> <sub>37</sub>	80.18 <sup>a</sup> <sub>73</sub>	8.712 <sup>a</sup> <sub>111</sub>	30.03 <sup>a</sup> <sub>64</sub>	24.247 <sup>a</sup> <sub>117</sub>	43.76 <sup>a</sup> <sub>44</sub>	43.885 <sup>a</sup> <sub>110</sub>	56.47 <sup>a</sup> <sub>76</sub>
Dez. 6	24.84 <sup>a</sup> <sub>38</sub>	80.91 <sup>a</sup> <sub>16</sub>	8.601 <sup>a</sup> <sub>111</sub>	29.39 <sup>a</sup> <sub>70</sub>	24.130 <sup>a</sup> <sub>117</sub>	43.32 <sup>a</sup> <sub>63</sub>	43.775 <sup>a</sup> <sub>111</sub>	57.23 <sup>a</sup> <sub>73</sub>
16	24.46 <sup>a</sup> <sub>38</sub>	81.07 <sup>a</sup> <sub>42</sub>	8.490 <sup>a</sup> <sub>106</sub>	28.69 <sup>a</sup> <sub>74</sub>	24.013 <sup>a</sup> <sub>115</sub>	42.69 <sup>a</sup> <sub>78</sub>	43.664 <sup>a</sup> <sub>108</sub>	57.96 <sup>a</sup> <sub>65</sub>
26	24.08 <sup>a</sup> <sub>36</sub>	80.65 <sup>a</sup> <sub>97</sub>	8.384 <sup>a</sup> <sub>98</sub>	27.95 <sup>a</sup> <sub>74</sub>	23.898 <sup>a</sup> <sub>107</sub>	41.91 <sup>a</sup> <sub>93</sub>	43.556 <sup>a</sup> <sub>101</sub>	58.61 <sup>a</sup> <sub>57</sub>
36	23.72 <sup>a</sup>	79.68 <sup>a</sup>	8.286 <sup>a</sup>	27.21 <sup>a</sup>	23.791 <sup>a</sup>	40.98 <sup>a</sup>	43.455 <sup>a</sup>	59.18 <sup>a</sup>
Mittl. Ort	22.99	50.54	6.705	15.48	22.235	25.30	41.824	68.21
sec δ, tg δ	2.129	+1.879	1.000	+0.017	1.024	+0.221	1.009	-0.136
a, a'	+2.7	+19.8	+3.1	+19.8	+3.0	+19.8	+3.1	+19.9
b, b'	+0.12	+0.16	0.00	+0.16	+0.01	+0.15	-0.01	+0.12



## Scheinbare Sternörter 1945

Tag	890) $\lambda$ Andromedae		891) $\iota$ Andromedae		893) $\gamma$ Cephei		892) $\iota$ Piscium	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	23 <sup>h</sup> 34 <sup>m</sup>	+46° 9'	23 <sup>h</sup> 35 <sup>m</sup>	+42° 57'	23 <sup>h</sup> 36 <sup>m</sup>	+77° 19'	23 <sup>h</sup> 37 <sup>m</sup>	+5° 19'
Jan. I	50.592 <sup>n</sup> <sub>207</sub>	43.48 <sub>128</sub>	24.653 <sup>n</sup> <sub>190</sub>	54.83 <sub>126</sub>	62.69 <sup>n</sup> <sub>91</sub>	44.26 <sub>91</sub>	5.855 <sup>n</sup> <sub>101</sub>	35.39 <sub>84</sub>
II	50.385 <sub>190</sub>	42.20 <sub>167</sub>	24.463 <sub>174</sub>	53.57 <sub>163</sub>	61.78 <sub>84</sub>	43.35 <sub>150</sub>	5.754 <sub>90</sub>	34.55 <sub>86</sub>
2I	50.195 <sub>166</sub>	40.53 <sub>200</sub>	24.289 <sub>151</sub>	51.94 <sub>193</sub>	60.94 <sub>75</sub>	41.85 <sub>203</sub>	5.664 <sub>75</sub>	33.69 <sub>82</sub>
3I	50.029 <sub>132</sub>	38.53 <sub>226</sub>	24.138 <sub>121</sub>	50.01 <sub>217</sub>	60.19 <sub>63</sub>	39.82 <sub>248</sub>	5.589 <sub>54</sub>	32.87 <sub>76</sub>
Febr. 10	49.897 <sub>92</sub>	36.27 <sub>241</sub>	24.017 <sub>83</sub>	47.84 <sub>230</sub>	59.56 <sub>48</sub>	37.34 <sub>282</sub>	5.535 <sub>31</sub>	32.11 <sub>66</sub>
20	49.805 <sub>45</sub>	33.86 <sub>248</sub>	23.934 <sub>39</sub>	45.54 <sub>235</sub>	59.08 <sub>31</sub>	34.52 <sub>304</sub>	5.504 <sub>2</sub>	31.45 <sub>50</sub>
März 2	49.760 <sub>8</sub>	31.38 <sub>242</sub>	23.895 <sub>10</sub>	43.19 <sub>228</sub>	58.77 <sub>12</sub>	31.48 <sub>314</sub>	5.502 <sub>30</sub>	30.95 <sub>30</sub>
12	49.768 <sub>65</sub>	28.96 <sub>227</sub>	23.905 <sub>63</sub>	40.91 <sub>212</sub>	58.65 <sub>5</sub>	28.34 <sub>312</sub>	5.532 <sub>66</sub>	30.65 <sub>8</sub>
22	49.833 <sub>122</sub>	26.69 <sub>203</sub>	23.968 <sub>118</sub>	38.79 <sub>187</sub>	58.70 <sub>25</sub>	25.22 <sub>296</sub>	5.598 <sub>103</sub>	30.57 <sub>18</sub>
Apr. I	49.955 <sub>179</sub>	24.66 <sub>169</sub>	24.086 <sub>172</sub>	36.92 <sub>154</sub>	58.95 <sub>43</sub>	22.26 <sub>270</sub>	5.701 <sub>142</sub>	30.75 <sub>46</sub>
II	50.134 <sub>234</sub>	22.97 <sub>129</sub>	24.258 <sub>224</sub>	35.38 <sub>114</sub>	59.38 <sub>59</sub>	19.56 <sub>233</sub>	5.843 <sub>181</sub>	31.21 <sub>75</sub>
2I	50.368 <sub>284</sub>	21.68 <sub>83</sub>	24.482 <sub>272</sub>	34.24 <sub>69</sub>	59.97 <sub>73</sub>	17.23 <sub>188</sub>	6.024 <sub>217</sub>	31.96 <sub>104</sub>
Mai I	50.652 <sub>326</sub>	20.85 <sub>35</sub>	24.754 <sub>312</sub>	33.55 <sub>22</sub>	60.70 <sub>85</sub>	15.35 <sub>136</sub>	6.241 <sub>249</sub>	33.00 <sub>130</sub>
II	50.978 <sub>359</sub>	20.50 <sub>15</sub>	25.066 <sub>344</sub>	33.33 <sub>27</sub>	61.55 <sub>94</sub>	13.99 <sub>81</sub>	6.490 <sub>276</sub>	34.30 <sub>153</sub>
2I	51.337 <sub>384</sub>	20.65 <sub>65</sub>	25.410 <sub>368</sub>	33.60 <sub>75</sub>	62.49 <sub>100</sub>	13.18 <sub>23</sub>	6.766 <sub>296</sub>	35.83 <sub>174</sub>
3I	51.721 <sub>396</sub>	21.30 <sub>114</sub>	25.778 <sub>380</sub>	34.35 <sub>122</sub>	63.49 <sub>102</sub>	12.95 <sub>35</sub>	7.062 <sub>310</sub>	37.57 <sub>190</sub>
Juni 10	52.117 <sub>398</sub>	22.44 <sub>158</sub>	26.158 <sub>383</sub>	35.57 <sub>164</sub>	64.51 <sub>102</sub>	13.30 <sub>93</sub>	7.372 <sub>315</sub>	39.47 <sub>201</sub>
20	52.515 <sub>390</sub>	24.02 <sub>198</sub>	26.541 <sub>375</sub>	37.21 <sub>202</sub>	65.53 <sub>99</sub>	14.23 <sub>147</sub>	7.687 <sub>311</sub>	41.48 <sub>205</sub>
30	52.905 <sub>371</sub>	26.00 <sub>234</sub>	26.916 <sub>358</sub>	39.23 <sub>235</sub>	66.52 <sub>93</sub>	15.70 <sub>198</sub>	7.998 <sub>301</sub>	43.53 <sub>206</sub>
Juli 10	53.276 <sub>342</sub>	28.34 <sub>263</sub>	27.274 <sub>330</sub>	41.58 <sub>262</sub>	67.45 <sub>85</sub>	17.68 <sub>243</sub>	8.299 <sub>282</sub>	45.59 <sub>200</sub>
20	53.618 <sub>306</sub>	30.97 <sub>285</sub>	27.604 <sub>296</sub>	44.20 <sub>283</sub>	68.50 <sub>74</sub>	20.11 <sub>283</sub>	8.581 <sub>256</sub>	47.59 <sub>190</sub>
30	53.924 <sub>264</sub>	33.82 <sub>302</sub>	27.900 <sub>256</sub>	47.03 <sub>296</sub>	69.04 <sub>64</sub>	22.94 <sub>317</sub>	8.837 <sub>225</sub>	49.49 <sub>176</sub>
Aug. 9	54.188 <sub>217</sub>	36.84 <sub>311</sub>	28.156 <sub>211</sub>	49.99 <sub>304</sub>	69.68 <sub>50</sub>	26.11 <sub>343</sub>	9.062 <sub>189</sub>	51.25 <sub>157</sub>
19	54.405 <sub>166</sub>	39.95 <sub>314</sub>	28.367 <sub>162</sub>	53.03 <sub>305</sub>	70.18 <sub>36</sub>	29.54 <sub>363</sub>	9.251 <sub>151</sub>	52.82 <sub>138</sub>
29	54.571 <sub>114</sub>	43.09 <sub>310</sub>	28.529 <sub>113</sub>	56.08 <sub>300</sub>	70.54 <sub>21</sub>	33.17 <sub>374</sub>	9.402 <sub>112</sub>	54.20 <sub>115</sub>
Sept. 8	54.685 <sub>64</sub>	46.19 <sub>301</sub>	28.642 <sub>64</sub>	59.08 <sub>290</sub>	70.75 <sub>7</sub>	36.91 <sub>379</sub>	9.514 <sub>72</sub>	55.35 <sub>91</sub>
17	54.749 <sub>14</sub>	49.20 <sub>285</sub>	28.706 <sub>18</sub>	61.98 <sub>273</sub>	70.82 <sub>7</sub>	40.70 <sub>375</sub>	9.586 <sub>35</sub>	56.26 <sub>68</sub>
27	54.763 <sub>33</sub>	52.05 <sub>265</sub>	28.724 <sub>27</sub>	64.71 <sub>251</sub>	70.75 <sub>23</sub>	44.45 <sub>363</sub>	9.621 <sub>1</sub>	56.94 <sub>45</sub>
Okt. 7	54.730 <sub>74</sub>	54.70 <sub>238</sub>	28.697 <sub>67</sub>	67.22 <sub>225</sub>	70.52 <sub>36</sub>	48.08 <sub>344</sub>	9.622 <sub>30</sub>	57.39 <sub>24</sub>
17	54.656 <sub>112</sub>	57.08 <sub>207</sub>	28.630 <sub>102</sub>	69.47 <sub>194</sub>	70.16 <sub>50</sub>	51.52 <sub>317</sub>	9.592 <sub>55</sub>	57.63 <sub>4</sub>
27	54.544 <sub>144</sub>	59.15 <sub>171</sub>	28.528 <sub>131</sub>	71.41 <sub>159</sub>	69.66 <sub>61</sub>	54.69 <sub>282</sub>	9.537 <sub>76</sub>	57.67 <sub>15</sub>
Nov. 6	54.400 <sub>170</sub>	60.86 <sub>131</sub>	28.397 <sub>157</sub>	73.00 <sub>121</sub>	69.05 <sub>72</sub>	57.51 <sub>238</sub>	9.461 <sub>91</sub>	57.52 <sub>30</sub>
16	54.230 <sub>191</sub>	62.17 <sub>88</sub>	28.240 <sub>175</sub>	74.21 <sub>78</sub>	68.33 <sub>81</sub>	59.89 <sub>189</sub>	9.370 <sub>103</sub>	57.22 <sub>45</sub>
26	54.039 <sub>205</sub>	63.05 <sub>43</sub>	28.065 <sub>189</sub>	74.99 <sub>35</sub>	67.52 <sub>87</sub>	61.78 <sub>134</sub>	9.267 <sub>108</sub>	56.77 <sub>57</sub>
Dez. 6	53.834 <sub>214</sub>	63.48 <sub>5</sub>	27.876 <sub>196</sub>	75.34 <sub>10</sub>	66.65 <sub>92</sub>	63.12 <sub>75</sub>	9.159 <sub>110</sub>	56.20 <sub>67</sub>
16	53.620 <sub>217</sub>	63.43 <sub>53</sub>	27.680 <sub>198</sub>	75.24 <sub>55</sub>	65.73 <sub>95</sub>	63.87 <sub>12</sub>	9.049 <sub>109</sub>	55.53 <sub>75</sub>
26	53.403 <sub>211</sub>	62.90 <sub>98</sub>	27.482 <sub>194</sub>	74.69 <sub>98</sub>	64.78 <sub>92</sub>	63.99 <sub>51</sub>	8.940 <sub>103</sub>	54.78 <sub>80</sub>
36	53.192	61.92	27.288	73.71	63.86	63.48	8.837	53.98
Mittl. Ort	51.830	36.31	25.888	48.51	64.15	31.37	7.170	41.04
sec $\delta$ , tg $\delta$	1.444	+1.041	1.367	+0.931	4.558	+4.447	1.004	+0.093
$a, a'$	+2.9	+19.9	+2.9	+19.9	+2.5	+19.9	+3.1	+19.9
$b, b'$	+0.07	+0.11	+0.06	+0.11	+0.30	+0.10	+0.01	+0.10



# Obere Kulmination Greenwich

179\*

Tag	894) $\omega^2$ Aquarii		895) $\gamma$ H. Cephei		896) $\delta$ Sculptoris		898) $\phi$ Pegasi	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$23^h 39^m$	$-14^\circ 50'$	$23^h 45^m$	$+67^\circ 29'$	$23^h 46^m$	$-28^\circ 25'$	$23^h 49^m$	$+18^\circ 48'$
Jan. I	50.845 <sup>a</sup> <sub>103</sub>	69.55 <sup>b</sup> <sub>34</sub>	14.70 <sup>a</sup> <sub>48</sub>	75.94 <sup>b</sup> <sub>96</sub>	2.379 <sup>a</sup> <sub>123</sub>	81.02 <sup>b</sup> <sub>2</sub>	39.965 <sup>a</sup> <sub>121</sub>	52.19 <sup>b</sup> <sub>100</sub>
II	50.742 <sup>a</sup> <sub>90</sub>	69.89 <sup>b</sup> <sub>16</sub>	14.22 <sup>a</sup> <sub>45</sub>	74.98 <sup>b</sup> <sub>152</sub>	2.256 <sup>a</sup> <sub>109</sub>	81.00 <sup>b</sup> <sub>34</sub>	39.844 <sup>a</sup> <sub>111</sub>	51.19 <sup>b</sup> <sub>115</sub>
2I	50.652 <sup>a</sup> <sub>75</sub>	70.05 <sup>b</sup> <sub>5</sub>	13.77 <sup>a</sup> <sub>40</sub>	73.46 <sup>b</sup> <sub>201</sub>	2.147 <sup>a</sup> <sub>91</sub>	80.66 <sup>b</sup> <sub>65</sub>	39.733 <sup>a</sup> <sub>98</sub>	50.04 <sup>b</sup> <sub>124</sub>
3I	50.577 <sup>a</sup> <sub>54</sub>	70.00 <sup>b</sup> <sub>27</sub>	13.37 <sup>a</sup> <sub>33</sub>	71.45 <sup>b</sup> <sub>241</sub>	2.056 <sup>a</sup> <sub>68</sub>	80.01 <sup>b</sup> <sub>94</sub>	39.635 <sup>a</sup> <sub>78</sub>	48.80 <sup>b</sup> <sub>130</sub>
Febr. 10	50.523 <sup>a</sup> <sub>29</sub>	69.73 <sup>b</sup> <sub>48</sub>	13.04 <sup>a</sup> <sub>26</sub>	69.04 <sup>b</sup> <sub>272</sub>	1.988 <sup>a</sup> <sub>41</sub>	79.07 <sup>b</sup> <sub>123</sub>	39.557 <sup>a</sup> <sub>53</sub>	47.50 <sup>b</sup> <sub>129</sub>
20	50.494 <sup>a</sup> <sub>1</sub>	69.25 <sup>b</sup> <sub>72</sub>	12.78 <sup>a</sup> <sub>17</sub>	66.32 <sup>b</sup> <sub>292</sub>	1.947 <sup>a</sup> <sub>11</sub>	77.84 <sup>b</sup> <sub>150</sub>	39.504 <sup>a</sup> <sub>23</sub>	46.21 <sup>b</sup> <sub>120</sub>
März 2	50.493 <sup>a</sup> <sub>30</sub>	68.53 <sup>b</sup> <sub>94</sub>	12.61 <sup>a</sup> <sub>6</sub>	63.40 <sup>b</sup> <sub>300</sub>	1.936 <sup>a</sup> <sub>24</sub>	76.34 <sup>b</sup> <sub>175</sub>	39.481 <sup>a</sup> <sub>11</sub>	45.01 <sup>b</sup> <sub>107</sub>
12	50.523 <sup>a</sup> <sub>66</sub>	67.59 <sup>b</sup> <sub>117</sub>	12.55 <sup>a</sup> <sub>4</sub>	60.40 <sup>b</sup> <sub>295</sub>	1.960 <sup>a</sup> <sub>62</sub>	74.59 <sup>b</sup> <sub>196</sub>	39.492 <sup>a</sup> <sub>50</sub>	43.94 <sup>b</sup> <sub>87</sub>
22	50.589 <sup>a</sup> <sub>103</sub>	66.42 <sup>b</sup> <sub>140</sub>	12.59 <sup>a</sup> <sub>15</sub>	57.45 <sup>b</sup> <sub>278</sub>	2.022 <sup>a</sup> <sub>102</sub>	72.63 <sup>b</sup> <sub>215</sub>	39.542 <sup>a</sup> <sub>92</sub>	43.07 <sup>b</sup> <sub>61</sub>
Apr. I	50.692 <sup>a</sup> <sub>142</sub>	65.02 <sup>b</sup> <sub>160</sub>	12.74 <sup>a</sup> <sub>25</sub>	54.67 <sup>b</sup> <sub>251</sub>	2.124 <sup>a</sup> <sub>143</sub>	70.48 <sup>b</sup> <sub>230</sub>	39.634 <sup>a</sup> <sub>133</sub>	42.46 <sup>b</sup> <sub>31</sub>
II	50.834 <sup>a</sup> <sub>181</sub>	63.42 <sup>b</sup> <sub>178</sub>	12.99 <sup>a</sup> <sub>35</sub>	52.16 <sup>b</sup> <sub>214</sub>	2.267 <sup>a</sup> <sub>185</sub>	68.18 <sup>b</sup> <sub>240</sub>	39.767 <sup>a</sup> <sub>175</sub>	42.15 <sup>b</sup> <sub>1</sub>
2I	51.015 <sup>a</sup> <sub>217</sub>	61.64 <sup>b</sup> <sub>194</sub>	13.34 <sup>a</sup> <sub>43</sub>	50.02 <sup>b</sup> <sub>168</sub>	2.452 <sup>a</sup> <sub>225</sub>	65.78 <sup>b</sup> <sub>247</sub>	39.942 <sup>a</sup> <sub>214</sub>	42.16 <sup>b</sup> <sub>37</sub>
Mai I	51.232 <sup>a</sup> <sub>250</sub>	59.70 <sup>b</sup> <sub>205</sub>	13.77 <sup>a</sup> <sub>52</sub>	48.34 <sup>b</sup> <sub>118</sub>	2.677 <sup>a</sup> <sub>261</sub>	63.31 <sup>b</sup> <sub>248</sub>	40.156 <sup>a</sup> <sub>250</sub>	42.53 <sup>b</sup> <sub>72</sub>
II	51.482 <sup>a</sup> <sub>279</sub>	57.65 <sup>b</sup> <sub>211</sub>	14.29 <sup>a</sup> <sub>57</sub>	47.16 <sup>b</sup> <sub>64</sub>	2.938 <sup>a</sup> <sub>293</sub>	60.83 <sup>b</sup> <sub>243</sub>	40.406 <sup>a</sup> <sub>279</sub>	43.25 <sup>b</sup> <sub>105</sub>
2I	51.761 <sup>a</sup> <sub>301</sub>	55.54 <sup>b</sup> <sub>213</sub>	14.86 <sup>a</sup> <sub>60</sub>	46.52 <sup>b</sup> <sub>7</sub>	3.231 <sup>a</sup> <sub>318</sub>	58.40 <sup>b</sup> <sub>233</sub>	40.685 <sup>a</sup> <sub>302</sub>	44.30 <sup>b</sup> <sub>137</sub>
3I	52.062 <sup>a</sup> <sub>316</sub>	53.41 <sup>b</sup> <sub>210</sub>	15.46 <sup>a</sup> <sub>63</sub>	46.45 <sup>b</sup> <sub>50</sub>	3.549 <sup>a</sup> <sub>336</sub>	56.07 <sup>b</sup> <sub>217</sub>	40.987 <sup>a</sup> <sub>317</sub>	45.67 <sup>b</sup> <sub>165</sub>
Juni 10	52.378 <sup>a</sup> <sub>324</sub>	51.31 <sup>b</sup> <sub>201</sub>	16.09 <sup>a</sup> <sub>64</sub>	46.95 <sup>b</sup> <sub>104</sub>	3.885 <sup>a</sup> <sub>345</sub>	53.90 <sup>b</sup> <sub>195</sub>	41.304 <sup>a</sup> <sub>324</sub>	47.32 <sup>b</sup> <sub>189</sub>
20	52.702 <sup>a</sup> <sub>321</sub>	49.30 <sup>b</sup> <sub>186</sub>	16.73 <sup>a</sup> <sub>62</sub>	47.99 <sup>b</sup> <sub>156</sub>	4.230 <sup>a</sup> <sub>346</sub>	51.95 <sup>b</sup> <sub>169</sub>	41.628 <sup>a</sup> <sub>321</sub>	49.21 <sup>b</sup> <sub>207</sub>
30	53.023 <sup>a</sup> <sub>312</sub>	47.44 <sup>b</sup> <sub>167</sub>	17.35 <sup>a</sup> <sub>59</sub>	49.55 <sup>b</sup> <sub>205</sub>	4.576 <sup>a</sup> <sub>338</sub>	50.26 <sup>b</sup> <sub>138</sub>	41.949 <sup>a</sup> <sub>311</sub>	51.28 <sup>b</sup> <sub>220</sub>
Juli 10	53.335 <sup>a</sup> <sub>295</sub>	45.77 <sup>b</sup> <sub>144</sub>	17.94 <sup>a</sup> <sub>55</sub>	51.60 <sup>b</sup> <sub>247</sub>	4.914 <sup>a</sup> <sub>321</sub>	48.88 <sup>b</sup> <sub>103</sub>	42.260 <sup>a</sup> <sub>292</sub>	53.48 <sup>b</sup> <sub>228</sub>
20	53.630 <sup>a</sup> <sub>269</sub>	44.33 <sup>b</sup> <sub>118</sub>	18.49 <sup>a</sup> <sub>48</sub>	54.07 <sup>b</sup> <sub>284</sub>	5.235 <sup>a</sup> <sub>295</sub>	47.85 <sup>b</sup> <sub>67</sub>	42.552 <sup>a</sup> <sub>268</sub>	55.76 <sup>b</sup> <sub>229</sub>
30	53.899 <sup>a</sup> <sub>238</sub>	43.15 <sup>b</sup> <sub>88</sub>	18.97 <sup>a</sup> <sub>42</sub>	56.91 <sup>b</sup> <sub>314</sub>	5.530 <sup>a</sup> <sub>263</sub>	47.18 <sup>b</sup> <sub>29</sub>	42.820 <sup>a</sup> <sub>236</sub>	58.05 <sup>b</sup> <sub>227</sub>
Aug. 9	54.137 <sup>a</sup> <sub>202</sub>	42.27 <sup>b</sup> <sub>58</sub>	19.39 <sup>a</sup> <sub>35</sub>	60.05 <sup>b</sup> <sub>337</sub>	5.793 <sup>a</sup> <sub>225</sub>	46.89 <sup>b</sup> <sub>9</sub>	43.056 <sup>a</sup> <sub>201</sub>	60.32 <sup>b</sup> <sub>218</sub>
19	54.339 <sup>a</sup> <sub>163</sub>	41.69 <sup>b</sup> <sub>28</sub>	19.74 <sup>a</sup> <sub>26</sub>	63.42 <sup>b</sup> <sub>354</sub>	6.018 <sup>a</sup> <sub>183</sub>	46.98 <sup>b</sup> <sub>44</sub>	43.257 <sup>a</sup> <sub>163</sub>	62.50 <sup>b</sup> <sub>206</sub>
29	54.502 <sup>a</sup> <sub>121</sub>	41.41 <sup>b</sup> <sub>2</sub>	20.00 <sup>a</sup> <sub>17</sub>	66.96 <sup>b</sup> <sub>363</sub>	6.201 <sup>a</sup> <sub>137</sub>	47.42 <sup>b</sup> <sub>77</sub>	43.420 <sup>a</sup> <sub>122</sub>	64.56 <sup>b</sup> <sub>190</sub>
Sept. 8	54.623 <sup>a</sup> <sub>80</sub>	41.43 <sup>b</sup> <sub>28</sub>	20.17 <sup>a</sup> <sub>9</sub>	70.59 <sup>b</sup> <sub>364</sub>	6.338 <sup>a</sup> <sub>91</sub>	48.19 <sup>b</sup> <sub>105</sub>	43.542 <sup>a</sup> <sub>83</sub>	66.46 <sup>b</sup> <sub>171</sub>
17*)	54.703 <sup>a</sup> <sub>39</sub>	41.71 <sup>b</sup> <sub>52</sub>	20.26 <sup>a</sup> <sub>1</sub>	74.23 <sup>b</sup> <sub>358</sub>	6.429 <sup>a</sup> <sub>47</sub>	49.24 <sup>b</sup> <sub>129</sub>	43.625 <sup>a</sup> <sub>45</sub>	68.17 <sup>b</sup> <sub>149</sub>
27	54.742 <sup>a</sup> <sub>3</sub>	42.23 <sup>b</sup> <sub>72</sub>	20.27 <sup>a</sup> <sub>8</sub>	77.81 <sup>b</sup> <sub>345</sub>	6.476 <sup>a</sup> <sub>4</sub>	50.53 <sup>b</sup> <sub>145</sub>	43.670 <sup>a</sup> <sub>10</sub>	69.66 <sup>b</sup> <sub>127</sub>
Okt. 7	54.745 <sup>a</sup> <sub>30</sub>	42.95 <sup>b</sup> <sub>86</sub>	20.19 <sup>a</sup> <sub>16</sub>	81.26 <sup>b</sup> <sub>324</sub>	6.480 <sup>a</sup> <sub>33</sub>	51.98 <sup>b</sup> <sub>155</sub>	43.680 <sup>a</sup> <sub>23</sub>	70.93 <sup>b</sup> <sub>103</sub>
17	54.715 <sup>a</sup> <sub>59</sub>	43.81 <sup>b</sup> <sub>96</sub>	20.03 <sup>a</sup> <sub>23</sub>	84.50 <sup>b</sup> <sub>295</sub>	6.447 <sup>a</sup> <sub>65</sub>	53.53 <sup>b</sup> <sub>157</sub>	43.657 <sup>a</sup> <sub>50</sub>	71.96 <sup>b</sup> <sub>78</sub>
27	54.656 <sup>a</sup> <sub>80</sub>	44.77 <sup>b</sup> <sub>101</sub>	19.80 <sup>a</sup> <sub>30</sub>	87.45 <sup>b</sup> <sub>261</sub>	6.382 <sup>a</sup> <sub>93</sub>	55.10 <sup>b</sup> <sub>153</sub>	43.607 <sup>a</sup> <sub>73</sub>	72.74 <sup>b</sup> <sub>54</sub>
Nov. 6	54.576 <sup>a</sup> <sub>97</sub>	45.78 <sup>b</sup> <sub>100</sub>	19.50 <sup>a</sup> <sub>36</sub>	90.06 <sup>b</sup> <sub>218</sub>	6.289 <sup>a</sup> <sub>112</sub>	56.63 <sup>b</sup> <sub>141</sub>	43.534 <sup>a</sup> <sub>91</sub>	73.28 <sup>b</sup> <sub>28</sub>
16	54.479 <sup>a</sup> <sub>108</sub>	46.78 <sup>b</sup> <sub>95</sub>	19.14 <sup>a</sup> <sub>41</sub>	92.24 <sup>b</sup> <sub>171</sub>	6.177 <sup>a</sup> <sub>127</sub>	58.04 <sup>b</sup> <sub>123</sub>	43.443 <sup>a</sup> <sub>106</sub>	73.56 <sup>b</sup> <sub>3</sub>
26	54.371 <sup>a</sup> <sub>114</sub>	47.73 <sup>b</sup> <sub>86</sub>	18.73 <sup>a</sup> <sub>44</sub>	93.95 <sup>b</sup> <sub>117</sub>	6.050 <sup>a</sup> <sub>134</sub>	59.27 <sup>b</sup> <sub>101</sub>	43.337 <sup>a</sup> <sub>116</sub>	73.59 <sup>b</sup> <sub>21</sub>
Dez. 6	54.257 <sup>a</sup> <sub>115</sub>	48.59 <sup>b</sup> <sub>75</sub>	18.29 <sup>a</sup> <sub>48</sub>	95.12 <sup>b</sup> <sub>60</sub>	5.916 <sup>a</sup> <sub>136</sub>	60.28 <sup>b</sup> <sub>75</sub>	43.221 <sup>a</sup> <sub>121</sub>	73.38 <sup>b</sup> <sub>45</sub>
16	54.142 <sup>a</sup> <sub>113</sub>	49.34 <sup>b</sup> <sub>60</sub>	17.81 <sup>a</sup> <sub>48</sub>	95.72 <sup>b</sup> <sub>1</sub>	5.780 <sup>a</sup> <sub>134</sub>	61.03 <sup>b</sup> <sub>46</sub>	43.100 <sup>a</sup> <sub>124</sub>	72.93 <sup>b</sup> <sub>67</sub>
26	54.029 <sup>a</sup> <sub>106</sub>	49.94 <sup>b</sup> <sub>43</sub>	17.33 <sup>a</sup> <sub>49</sub>	95.73 <sup>b</sup> <sub>58</sub>	5.646 <sup>a</sup> <sub>126</sub>	61.49 <sup>b</sup> <sub>14</sub>	42.976 <sup>a</sup> <sub>121</sub>	72.26 <sup>b</sup> <sub>87</sub>
36	53.923 <sup>a</sup>	50.37 <sup>b</sup>	16.84 <sup>a</sup>	95.15 <sup>b</sup>	5.520 <sup>a</sup>	61.63 <sup>b</sup>	42.855 <sup>a</sup>	71.39 <sup>b</sup>
Mittl. Ort	52.250	57.03	15.90	64.28	3.847	64.13	41.164	53.37
sec $\delta$ , tg $\delta$	1.035	-0.265	2.613	+2.414	1.137	-0.542	1.057	+0.341
a, a'	+3.1	+20.0	+2.9	+20.0	+3.1	+20.0	+3.1	+20.0
b, b'	-0.02	+0.09	+0.16	+0.06	-0.04	+0.06	+0.02	+0.05

\*) Bei Stern 898) lies Sept. 18.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Tag	899) $\rho$ Cassiopeiae		900) $\gamma$ Piscium		902) $\omega$ Piscium		903) $\varepsilon$ Tucanae	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
1945	$23^{\text{h}} 51^{\text{m}}$	$+57^{\circ} 11'$	$23^{\text{h}} 55^{\text{m}}$	$-3^{\circ} 51'$	$23^{\text{h}} 56^{\text{m}}$	$+6^{\circ} 33'$	$23^{\text{h}} 57^{\text{m}}$	$-65^{\circ} 52'$
Jan. I	$36.301$ <sup>304</sup>	$46.18$ <sup>100</sup>	$50.163$ <sup>106</sup>	$49.12$ <sup>63</sup>	$27.888$ <sup>109</sup>	$26.29$ <sup>82</sup>	$2.27$ <sup>39</sup>	$84.26$ <sup>107</sup>
II	$35.997$ <sup>287</sup>	$45.18$ <sup>150</sup>	$50.057$ <sup>97</sup>	$49.75$ <sup>53</sup>	$27.779$ <sup>100</sup>	$25.47$ <sup>83</sup>	$1.88$ <sup>34</sup>	$83.19$ <sup>161</sup>
21	$35.710$ <sup>259</sup>	$43.68$ <sup>193</sup>	$49.960$ <sup>84</sup>	$50.28$ <sup>43</sup>	$27.679$ <sup>89</sup>	$24.64$ <sup>82</sup>	$1.54$ <sup>30</sup>	$81.58$ <sup>210</sup>
31	$35.451$ <sup>218</sup>	$41.75$ <sup>229</sup>	$49.876$ <sup>67</sup>	$50.71$ <sup>28</sup>	$27.590$ <sup>71</sup>	$23.82$ <sup>76</sup>	$1.24$ <sup>25</sup>	$79.48$ <sup>253</sup>
Febr. 10	$35.233$ <sup>167</sup>	$39.46$ <sup>254</sup>	$49.809$ <sup>45</sup>	$50.99$ <sup>12</sup>	$27.519$ <sup>49</sup>	$23.06$ <sup>67</sup>	$0.99$ <sup>17</sup>	$76.95$ <sup>290</sup>
20	$35.066$ <sup>107</sup>	$36.92$ <sup>270</sup>	$49.764$ <sup>18</sup>	$51.11$ <sup>6</sup>	$27.470$ <sup>22</sup>	$22.39$ <sup>53</sup>	$0.82$ <sup>11</sup>	$74.05$ <sup>319</sup>
März 2	$34.959$ <sup>39</sup>	$34.22$ <sup>274</sup>	$49.746$ <sup>12</sup>	$51.05$ <sup>28</sup>	$27.448$ <sup>10</sup>	$21.86$ <sup>35</sup>	$0.71$ <sup>3</sup>	$70.86$ <sup>341</sup>
12	$34.920$ <sup>35</sup>	$31.48$ <sup>266</sup>	$49.758$ <sup>47</sup>	$50.77$ <sup>51</sup>	$27.458$ <sup>45</sup>	$21.51$ <sup>13</sup>	$0.68$ <sup>4</sup>	$67.45$ <sup>355</sup>
22	$34.955$ <sup>111</sup>	$28.82$ <sup>248</sup>	$49.805$ <sup>84</sup>	$50.26$ <sup>76</sup>	$27.503$ <sup>84</sup>	$21.38$ <sup>12</sup>	$0.72$ <sup>13</sup>	$63.90$ <sup>362</sup>
Apr. I	$35.066$ <sup>186</sup>	$26.34$ <sup>220</sup>	$49.889$ <sup>124</sup>	$49.50$ <sup>100</sup>	$27.587$ <sup>124</sup>	$21.50$ <sup>39</sup>	$0.85$ <sup>21</sup>	$60.28$ <sup>360</sup>
II	$35.252$ <sup>256</sup>	$24.14$ <sup>182</sup>	$50.013$ <sup>163</sup>	$48.50$ <sup>124</sup>	$27.711$ <sup>163</sup>	$21.89$ <sup>67</sup>	$1.06$ <sup>30</sup>	$56.68$ <sup>351</sup>
21	$35.508$ <sup>322</sup>	$22.32$ <sup>138</sup>	$50.176$ <sup>200</sup>	$47.26$ <sup>147</sup>	$27.874$ <sup>202</sup>	$22.56$ <sup>96</sup>	$1.36$ <sup>37</sup>	$53.17$ <sup>335</sup>
Mai I	$35.830$ <sup>379</sup>	$20.94$ <sup>90</sup>	$50.376$ <sup>234</sup>	$45.79$ <sup>166</sup>	$28.076$ <sup>236</sup>	$23.52$ <sup>124</sup>	$1.73$ <sup>44</sup>	$49.82$ <sup>312</sup>
II	$36.209$ <sup>423</sup>	$20.04$ <sup>37</sup>	$50.610$ <sup>265</sup>	$44.13$ <sup>183</sup>	$28.312$ <sup>266</sup>	$24.76$ <sup>148</sup>	$2.17$ <sup>50</sup>	$46.70$ <sup>280</sup>
21	$36.632$ <sup>455</sup>	$19.67$ <sup>17</sup>	$50.875$ <sup>288</sup>	$42.30$ <sup>196</sup>	$28.578$ <sup>290</sup>	$26.24$ <sup>169</sup>	$2.67$ <sup>56</sup>	$43.90$ <sup>244</sup>
31	$37.087$ <sup>476</sup>	$19.84$ <sup>69</sup>	$51.163$ <sup>305</sup>	$40.34$ <sup>203</sup>	$28.868$ <sup>306</sup>	$27.93$ <sup>186</sup>	$3.23$ <sup>59</sup>	$41.46$ <sup>201</sup>
Juni 10	$37.563$ <sup>481</sup>	$20.53$ <sup>120</sup>	$51.468$ <sup>314</sup>	$38.31$ <sup>205</sup>	$29.174$ <sup>314</sup>	$29.79$ <sup>198</sup>	$3.82$ <sup>62</sup>	$39.45$ <sup>154</sup>
20	$38.044$ <sup>474</sup>	$21.73$ <sup>168</sup>	$51.782$ <sup>314</sup>	$36.26$ <sup>202</sup>	$29.488$ <sup>314</sup>	$31.77$ <sup>206</sup>	$4.44$ <sup>63</sup>	$37.91$ <sup>103</sup>
30	$38.518$ <sup>455</sup>	$23.41$ <sup>211</sup>	$52.096$ <sup>306</sup>	$34.24$ <sup>193</sup>	$29.802$ <sup>306</sup>	$33.83$ <sup>207</sup>	$5.07$ <sup>63</sup>	$36.88$ <sup>49</sup>
Juli 10	$38.973$ <sup>423</sup>	$25.52$ <sup>249</sup>	$52.402$ <sup>291</sup>	$32.31$ <sup>180</sup>	$30.108$ <sup>290</sup>	$35.90$ <sup>204</sup>	$5.70$ <sup>60</sup>	$36.39$ <sup>5</sup>
20	$39.396$ <sup>383</sup>	$28.01$ <sup>280</sup>	$52.693$ <sup>269</sup>	$30.51$ <sup>162</sup>	$30.398$ <sup>267</sup>	$37.94$ <sup>195</sup>	$6.30$ <sup>56</sup>	$36.44$ <sup>60</sup>
30	$39.779$ <sup>334</sup>	$30.81$ <sup>306</sup>	$52.962$ <sup>240</sup>	$28.89$ <sup>141</sup>	$30.665$ <sup>238</sup>	$39.89$ <sup>182</sup>	$6.86$ <sup>50</sup>	$37.04$ <sup>112</sup>
Aug. 9	$40.113$ <sup>279</sup>	$33.87$ <sup>325</sup>	$53.202$ <sup>207</sup>	$27.48$ <sup>117</sup>	$30.903$ <sup>205</sup>	$41.71$ <sup>165</sup>	$7.36$ <sup>43</sup>	$38.16$ <sup>160</sup>
19	$40.392$ <sup>220</sup>	$37.12$ <sup>336</sup>	$53.409$ <sup>170</sup>	$26.31$ <sup>91</sup>	$31.108$ <sup>168</sup>	$43.36$ <sup>145</sup>	$7.79$ <sup>36</sup>	$39.76$ <sup>202</sup>
29	$40.612$ <sup>157</sup>	$40.48$ <sup>341</sup>	$53.579$ <sup>131</sup>	$25.40$ <sup>65</sup>	$31.276$ <sup>130</sup>	$44.81$ <sup>124</sup>	$8.15$ <sup>26</sup>	$41.78$ <sup>238</sup>
Sept. 8	$40.769$ <sup>95</sup>	$43.89$ <sup>339</sup>	$53.710$ <sup>92</sup>	$24.75$ <sup>38</sup>	$31.406$ <sup>92</sup>	$46.05$ <sup>101</sup>	$8.41$ <sup>16</sup>	$44.16$ <sup>264</sup>
18	$40.864$ <sup>34</sup>	$47.28$ <sup>330</sup>	$53.802$ <sup>55</sup>	$24.37$ <sup>15</sup>	$31.498$ <sup>54</sup>	$47.06$ <sup>77</sup>	$8.57$ <sup>7</sup>	$46.80$ <sup>280</sup>
27	$40.898$ <sup>26</sup>	$50.58$ <sup>314</sup>	$53.857$ <sup>19</sup>	$24.22$ <sup>8</sup>	$31.552$ <sup>19</sup>	$47.83$ <sup>55</sup>	$8.64$ <sup>3</sup>	$49.60$ <sup>287</sup>
Okt. 7	$40.872$ <sup>82</sup>	$53.72$ <sup>292</sup>	$53.876$ <sup>13</sup>	$24.30$ <sup>28</sup>	$31.571$ <sup>11</sup>	$48.38$ <sup>32</sup>	$8.61$ <sup>12</sup>	$52.47$ <sup>280</sup>
17	$40.790$ <sup>132</sup>	$56.64$ <sup>264</sup>	$53.863$ <sup>40</sup>	$24.58$ <sup>44</sup>	$31.560$ <sup>39</sup>	$48.70$ <sup>13</sup>	$8.49$ <sup>21</sup>	$55.27$ <sup>263</sup>
27	$40.658$ <sup>178</sup>	$59.28$ <sup>230</sup>	$53.823$ <sup>62</sup>	$25.02$ <sup>56</sup>	$31.521$ <sup>61</sup>	$48.83$ <sup>7</sup>	$8.28$ <sup>28</sup>	$57.90$ <sup>235</sup>
Nov. 6	$40.480$ <sup>218</sup>	$61.58$ <sup>189</sup>	$53.761$ <sup>81</sup>	$25.58$ <sup>65</sup>	$31.460$ <sup>80</sup>	$48.76$ <sup>23</sup>	$8.00$ <sup>33</sup>	$60.25$ <sup>197</sup>
16	$40.262$ <sup>252</sup>	$63.47$ <sup>143</sup>	$53.680$ <sup>94</sup>	$26.23$ <sup>70</sup>	$31.380$ <sup>93</sup>	$48.53$ <sup>38</sup>	$7.67$ <sup>38</sup>	$62.22$ <sup>151</sup>
26	$40.010$ <sup>279</sup>	$64.90$ <sup>94</sup>	$53.586$ <sup>103</sup>	$26.93$ <sup>74</sup>	$31.287$ <sup>102</sup>	$48.15$ <sup>50</sup>	$7.29$ <sup>41</sup>	$63.73$ <sup>99</sup>
Dez. 6	$39.731$ <sup>297</sup>	$65.84$ <sup>42</sup>	$53.483$ <sup>107</sup>	$27.67$ <sup>73</sup>	$31.185$ <sup>108</sup>	$47.65$ <sup>61</sup>	$6.88$ <sup>42</sup>	$64.72$ <sup>43</sup>
16	$39.434$ <sup>307</sup>	$66.26$ <sup>12</sup>	$53.376$ <sup>109</sup>	$28.40$ <sup>70</sup>	$31.077$ <sup>111</sup>	$47.04$ <sup>71</sup>	$6.46$ <sup>41</sup>	$65.15$ <sup>16</sup>
26	$39.127$ <sup>307</sup>	$66.14$ <sup>66</sup>	$53.267$ <sup>106</sup>	$29.10$ <sup>65</sup>	$30.966$ <sup>108</sup>	$46.33$ <sup>76</sup>	$6.05$ <sup>40</sup>	$64.99$ <sup>74</sup>
36	$38.820$	$65.48$	$53.161$	$29.75$	$30.858$	$45.57$	$5.65$	$64.25$
Mittl. Ort	$37.423$	$36.42$	$51.410$	$39.99$	$29.090$	$31.78$	$4.38$	$59.08$
sec $\delta$ , tg $\delta$	$1.846$	$+1.551$	$1.002$	$-0.067$	$1.007$	$+0.115$	$2.447$	$-2.234$
a, a'	$+3.0$	$+20.0$	$+3.1$	$+20.0$	$+3.1$	$+20.0$	$+3.1$	$+20.0$
b, b'	$+0.10$	$+0.04$	$0.00$	$+0.02$	$+0.01$	$+0.02$	$-0.15$	$+0.01$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

181\*

Na) 43 Hev. Cephei 4<sup>m</sup>52

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	1 <sup>h</sup> 0 <sup>m</sup>	+ 85° 58'	0.01   0.01	1 <sup>h</sup> 0 <sup>m</sup>	+ 85° 57'	0.01   0.01	1 <sup>h</sup> 0 <sup>m</sup>	+ 85° 57'	0.01   0.01	1 <sup>h</sup> 0 <sup>m</sup>	+ 85° 57'	0.01   0.01
1	52.31	0.82	+4 +9	42.88	60.22	-7 +3	36.09	54.82	-8 +1	32.95	45.73	-3 -9
2	52.01	0.90	0 +9	42.59	60.10	-8 -1	35.91	54.56	-8 -3	32.94	45.42	+1 -10
3	51.71	0.97	-3 +8	42.31	59.97	-8 -5	35.73	54.30	-7 -6	32.94	45.11	+4 -9
4	51.40	1.04	-6 +5	42.03	59.84	-7 -8	35.55	54.04	-5 -9	32.94	44.80	+7 -7
5	51.10	1.10	-8 +1	41.75	59.70	-4 -10	35.38	53.77	-2 -10	32.95	44.49	+8 -3
6	50.79	1.15	-8 -2	41.48	59.56	0 -10	35.22	53.50	+2 -10	32.96	44.18	+8 +1
7	50.48	1.19	-7 -6	41.20	59.41	+4 -9	35.06	53.23	+5 -8	*)32.98	43.88	+5 +4
8	50.18	1.23	-5 -8	40.93	59.25	+7 -7	34.91	52.95	+8 -5	33.01	43.57	+1 +6
9	49.87	1.26	-2 -10	40.67	59.09	+9 -3	34.77	52.67	+9 -1	33.04	43.27	-3 +6
10	49.55	1.29	+2 -10	40.40	58.92	+8 +1	34.63	52.39	+7 +3	33.08	42.96	-7 +4
11	49.24	1.31	+5 -8	40.14	58.75	+6 +5	34.49	52.10	+4 +6	33.12	42.66	-9 +1
12	48.93	1.32	+8 -5	39.88	58.57	+2 +7	34.36	51.81	0 +7	33.17	42.36	-9 -3
13	48.62	1.33	+9 -1	39.62	58.39	-2 +7	34.24	51.52	-4 +6	33.22	42.06	-7 -5
14	48.31	1.33	+8 +3	39.37	58.20	-6 +6	34.12	51.23	-8 +4	33.28	41.75	-3 -7
15	47.99	1.32	+5 +6	39.12	58.01	-8 +3	34.00	50.94	-9 0	33.35	41.46	+2 -6
16	47.68	1.31	+1 +8	38.88	57.81	-9 -1	33.89	50.64	-8 -3	33.42	41.16	+6 -3
17	47.38	1.29	-3 +7	38.64	57.61	-7 -4	33.79	50.34	-5 -5	33.50	40.87	+9 0
18	47.07	1.26	-7 +5	38.40	57.40	-4 -6	33.70	50.04	-1 -6	33.58	40.58	+10 +4
19	46.76	1.23	-9 +1	38.17	57.18	+1 -6	33.61	49.74	+3 -5	33.67	40.29	+9 +8
20	46.46	1.19	-8 -3	37.94	56.96	+5 -4	33.52	49.44	+7 -2	33.76	40.00	+6 +10
21	46.15	1.14	-6 -5	37.72	56.74	+8 -1	33.44	49.14	+9 +2	33.86	39.72	+2 +10
22	45.85	1.09	-2 -6	37.50	56.52	+9 +3	33.37	48.83	+9 +5	33.97	39.44	-1 +9
23	45.54	1.03	+2 -6	37.28	56.29	+8 +6	33.30	48.52	+7 +8	34.08	39.16	-4 +7
24	45.24	0.97	+6 -3	37.07	56.05	+6 +8	33.24	48.21	+4 +10	34.20	38.88	-7 +4
25	44.94	0.90	+8 0	36.86	55.82	+3 +9	33.18	47.90	+1 +10	34.32	38.61	-8 0
26	44.64	0.82	+9 +3	36.66	55.57	0 +9	33.13	47.59	-3 +8	34.44	38.33	-8 -3
27	44.34	0.74	+8 +6	36.46	55.33	-4 +7	33.09	47.28	-5 +5	34.57	38.07	-6 -6
28	44.05	0.65	+5 +8	36.27	55.08	-6 +4	33.05	46.97	-7 +2	34.71	37.80	-4 -8
29	43.75	0.55	+2 +9	36.09	54.82	-8 +1	33.01	46.66	-8 -1	34.85	37.54	0 -9
30	43.46	0.45	-2 +8				32.98	46.35	-7 -5	34.99	37.28	+3 -9
31	43.17	0.34	-5 +6				32.96	46.04	-6 -7	35.14	37.03	+6 -7
32	42.88	0.22	-7 +3				32.95	45.73	-3 -9			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+85° 57' 30''	14.188	+14.153	+85° 57' 40''	14.198	+14.163	+85° 58' 0''	14.217	+14.182
40	14.198	+14.163	50	14.208	+14.172	10	14.227	+14.192

$$\alpha_{1945.0} = 1^h 0^m 50^s.01$$

$$\delta_{1945.0} = +85^\circ 57' 47''.62$$

\*) Tag der doppelten unteren Kulmination: April 7.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Na) 43 Hev. Cephei 4<sup>m</sup>52

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	1 <sup>h</sup> 0 <sup>m</sup>	85° 57'	o.or   o.or	1 <sup>h</sup> 0 <sup>m</sup>	85° 57'	o.or   o.or	1 <sup>h</sup> 0 <sup>m</sup>	85° 57'	o.or   o.or	1 <sup>h</sup> 1 <sup>m</sup>	85° 57'	o.or   o.or
		+	in		+	in		+	in		+	in
1	35.14	37.03	+ 6 - 7	41.91	31.17	+ 5 + 5	50.79	30.19	- 6 + 5	0.02	34.28	- 6 - 6
2	35.30	36.78	+ 8 - 4	42.18	31.06	+ 1 + 6	51.10	30.24	- 9 + 2	0.29	34.49	- 2 - 7
3	35.46	36.53	+ 8 0	42.45	30.95	- 4 + 6	51.41	30.30	- 10 - 2	0.57	34.71	+ 3 - 6
4	35.62	36.28	+ 7 + 3	42.73	30.84	- 7 + 3	51.73	30.36	- 8 - 6	0.84	34.93	+ 7 - 4
5	35.79	36.04	+ 3 + 5	43.01	30.75	- 9 0	52.04	30.43	- 5 - 8	1.10	35.15	+ 9 0
6	35.97	35.80	- 1 + 6	43.29	30.66	- 10 - 4	52.34	30.50	0 - 8	1.37	35.38	+ 9 + 4
7	36.15	35.57	- 5 + 5	43.57	30.57	- 7 - 7	52.65	30.58	+ 4 - 6	1.63	35.62	+ 8 + 7
8	36.33	35.34	- 9 + 2	43.86	30.49	- 3 - 8	52.96	30.67	+ 8 - 2	1.89	35.86	+ 5 + 10
9	36.52	35.12	- 10 - 2	44.14	30.42	+ 2 - 7	53.26	30.76	+ 9 + 2	2.15	36.10	+ 1 + 10
10	36.72	34.90	- 9 - 5	44.44	30.35	+ 6 - 4	53.57	30.86	+ 9 + 6	2.40	36.35	- 3 + 9
11	36.92	34.68	- 5 - 7	44.73	30.29	+ 9 0	53.87	30.96	+ 7 + 9	2.66	36.60	- 6 + 6
12	37.12	34.47	- 1 - 7	45.02	30.23	+ 10 + 4	54.18	31.06	+ 3 + 10	2.91	36.85	- 8 + 3
13	37.32	34.26	+ 4 - 5	45.31	30.18	+ 8 + 8	54.48	31.17	- 1 + 10	3.16	37.11	- 8 - 1
14	37.53	34.05	+ 8 - 2	45.61	30.13	+ 5 + 10	54.78	31.29	- 4 + 8	3.40	37.37	- 8 - 5
15	37.74	33.85	+ 10 + 2	45.90	30.09	+ 2 + 11	55.09	31.41	- 7 + 5	3.64	37.64	- 5 - 8
16	37.96	33.65	+ 9 + 6	46.20	30.05	- 2 + 9	55.39	31.54	- 8 + 1	3.88	37.91	- 2 - 9
17	38.18	33.46	+ 7 + 9	46.50	30.02	- 5 + 7	55.69	31.68	- 8 - 3	4.12	38.19	+ 1 - 10
18	38.41	33.27	+ 4 + 11	46.80	30.00	- 7 + 3	55.99	31.82	- 7 - 6	4.35	38.47	+ 5 - 8
19	38.64	33.09	0 + 10	47.11	29.98	- 8 0	56.29	31.96	- 4 - 8	4.58	38.75	+ 8 - 6
20	38.87	32.92	- 3 + 8	47.41	29.97	- 8 - 4	56.58	32.11	- 1 - 9	4.80	39.04	+ 9 - 2
21	39.11	32.75	- 6 + 5	47.72	29.96	- 5 - 7	56.88	32.27	+ 3 - 9	5.02	39.33	+ 8 + 2
22	39.35	32.58	- 8 + 2	48.02	29.96	- 3 - 8	57.17	32.43	+ 6 - 7	5.25	39.62	+ 6 + 5
23	39.59	32.42	- 8 - 2	48.33	29.96	+ 1 - 9	57.47	32.59	+ 8 - 4	5.46	39.92	+ 2 + 7
24	39.83	32.26	- 7 - 5	48.63	29.97	+ 4 - 8	57.76	32.76	+ 9 0	5.68	40.22	- 3 + 7
25	40.08	32.10	- 5 - 7	48.93	29.98	+ 7 - 6	58.05	32.93	+ 7 + 3	5.89	40.52	- 7 + 5
26	40.33	31.95	- 2 - 9	49.24	30.00	+ 8 - 2	58.33	33.11	+ 4 + 6	6.10	40.83	- 9 + 1
27	40.59	31.81	+ 2 - 9	49.55	30.03	+ 8 + 1	58.62	33.29	0 + 7	6.30	41.14	- 9 - 2
28	40.84	31.67	+ 5 - 7	49.86	30.06	+ 6 + 4	58.90	33.48	- 4 + 6	6.50	41.45	- 7 - 5
29	41.11	31.54	+ 8 - 5	50.17	30.10	+ 3 + 6	59.18	33.68	- 8 + 3	6.70	41.77	- 4 - 7
30	41.37	31.41	+ 9 - 1	50.48	30.14	- 2 + 7	59.46	33.88	- 9 0	6.89	42.09	+ 1 - 7
31	41.64	31.29	+ 8 + 2	50.79	30.19	- 6 + 5	59.74	34.08	- 9 - 4	7.08	42.41	+ 6 - 4
32	41.91	31.17	+ 5 + 5				60.02	34.28	- 6 - 6	7.27	42.73	+ 9 - 1

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+85° 57' 20''	14.178	+14.143	+85° 57' 30''	14.188	+14.153	+85° 57' 40''	14.198	+14.163
30	14.188	+14.153	40	14.198	+14.163	50	14.208	+14.172

$$\alpha_{1945.0} = 1^h 0^m / 50^s 01$$

$$\delta_{1945.0} = +85^\circ 57' 47.62$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

183\*

Na) 43 Hev. Cephei 4<sup>m</sup>52

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	<sup>h</sup> <sup>m</sup>	<sup>°</sup> <sup>'</sup>	<sup>o</sup> . <sup>o</sup> r   <sup>o</sup> . <sup>o</sup> r	<sup>h</sup> <sup>m</sup>	<sup>°</sup> <sup>'</sup>	<sup>o</sup> . <sup>o</sup> r   <sup>o</sup> . <sup>o</sup> r	<sup>h</sup> <sup>m</sup>	<sup>°</sup> <sup>'</sup>	<sup>o</sup> . <sup>o</sup> r   <sup>o</sup> . <sup>o</sup> r	<sup>h</sup> <sup>m</sup>	<sup>°</sup> <sup>'</sup>	<sup>o</sup> . <sup>o</sup> r   <sup>o</sup> . <sup>o</sup> r
		<sup>+</sup> in			<sup>+</sup> in			<sup>+</sup> in			<sup>+</sup> in	
1	7.27	42.73	+ 9 - 1	11.02	53.51	+ 7 + 9	10.59	5.63	- 7 + 4	65.88	15.15	- 6 - 5
2	7.45	43.06	+10 + 3	11.08	53.89	+ 4 +11	10.49	5.99	- 8 0	65.66	15.41	- 3 - 7
3	7.63	43.38	+ 9 + 7	11.14	54.27	0 +10	10.40	6.35	- 7 - 3	65.43	15.66	0 - 8
4	7.81	43.72	+ 6 + 9	11.19	54.65	- 4 + 9	10.30	6.70	- 5 - 6	65.20	15.91	+ 3 - 8
5	7.98	44.05	+ 2 +10	11.23	55.03	- 6 + 6	10.19	7.05	- 2 - 8	64.97	16.15	+ 6 - 6
6	8.15	44.39	- 2 + 9	11.27	55.42	- 8 + 2	10.08	7.40	+ 1 - 9	64.73	16.39	+ 8 - 4
7	8.31	44.73	- 5 + 7	11.31 11.34	55.81 56.19	- 8 - 2 - 7 - 5	9.96	7.75	+ 4 - 8	64.49	16.62	+ 8 0
8	8.47	45.08	- 7 + 4	11.36	56.58	- 4 - 8	9.84	8.10	+ 7 - 6	64.25	16.85	+ 7 + 3
9	8.62	45.43	- 8 0	11.38	56.97	- 1 - 9	9.72	8.44	+ 8 - 3	64.00	17.08	+ 4 + 5
10	8.77	45.78	- 8 - 3	11.40	57.35	+ 2 - 9	9.59	8.79	+ 8 0	63.76	17.30	0 + 6
11	8.92	46.12	- 6 - 6	11.41	57.74	+ 5 - 8	9.46	9.12	+ 6 + 3	63.50	17.51	- 5 + 5
12	9.07	46.48	- 3 - 9	11.42	58.13	+ 8 - 5	9.32	9.46	+ 3 + 5	63.25	17.72	- 8 + 2
13	9.21	46.83	0 -10	11.42	58.51	+ 9 - 2	9.18	9.79	- 2 + 5	62.99	17.92	-10 - 2
14	9.35	47.19	+ 3 - 9	11.42	58.89	+ 8 + 1	9.03	10.12	- 6 + 4	62.73	18.12	-10 - 5
15	9.48	47.55	+ 6 - 7	11.41	59.27	+ 5 + 4	8.88	10.44	-10 + 1	62.46	18.31	- 7 - 8
16	9.61	47.91	+ 8 - 4	11.40	59.65	+ 1 + 6	8.72	10.76	-10 - 3	62.19	18.49	- 3 - 9
17	9.73	48.27	+ 8 0	11.38	60.03	- 4 + 5	8.56	11.08	- 9 - 6	61.92	18.67	+ 2 - 8
18	9.85	48.64	+ 7 + 3	11.36	60.41	- 8 + 3	8.40	11.40	- 5 - 8	61.65	18.85	+ 7 - 5
19	9.97	49.01	+ 3 + 6	11.34	60.79	-10 0	8.23	11.71	0 - 8	61.37	19.02	+ 9 0
20	10.08	49.38	- 1 + 6	11.31	61.18	-10 - 4	8.05	12.02	+ 5 - 6	61.10	19.18	+10 + 5
21	10.19	49.74	- 5 + 5	11.28	61.55	- 7 - 7	7.88	12.33	+ 9 - 2	60.82	19.34	+ 8 + 9
22	10.30	50.11	- 9 + 2	11.24	61.93	- 3 - 8	7.69	12.63	+10 + 3	60.53	19.49	+ 5 +11
23	10.40	50.48	-10 - 1	11.19	62.31	+ 2 - 7	7.51	12.93	+10 + 7	60.25	19.63	+ 1 +11
24	10.49	50.86	- 9 - 5	11.15	62.68	+ 7 - 4	7.32	13.22	+ 7 +10	59.96	19.77	- 3 +10
25	10.58	51.23	- 5 - 7	11.09	63.05	+ 9 0	7.12	13.51	+ 3 +12	59.67	19.90	- 6 + 7
26	10.67	51.61	- 1 - 7	11.03	63.43	+10 + 5	6.92	13.79	- 1 +11	59.38	20.02	- 8 + 3
27	10.75	51.99	+ 4 - 5	10.97	63.79	+ 9 + 8	6.72	14.07	- 4 + 9	59.08	20.14	- 8 - 1
28	10.82	52.37	+ 8 - 2	10.90	64.16	+ 6 +11	6.52	14.35	- 7 + 5	58.79	20.26	- 7 - 4
29	10.89	52.75	+10 + 2	10.83	64.53	+ 2 +11	6.31	14.62	- 8 + 2	58.49	20.36	- 4 - 7
30	10.96	53.13	+ 9 + 6	10.75	64.90	- 2 +10	6.10	14.89	- 8 - 2	58.20	20.47	- 1 - 8
31	11.02	53.51	+ 7 + 9	10.67	65.27	- 6 + 7	5.88	15.15	- 6 - 5	57.90	20.56	+ 2 - 8
32				10.59	65.63	- 7 + 4				57.60	20.65	+ 5 - 7

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+85° 57' 40''	14.198	+14.163	+85° 58' 0''	14.217	+14.182	+85° 58' 20''	14.237	+14.202
50	14.208	+14.172	10	14.227	+14.192	30	14.247	+14.212

$$\alpha_{1945.0} = 1^h 0^m 50^s.01$$

$$\delta_{1945.0} = +85^\circ 57' 47''.62$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nb)  $\alpha$  Ursae minoris 2<sup>m</sup>12 var.

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	1 <sup>h</sup> 45 <sup>m</sup>	89° 0'	0.01   0.01	1 <sup>h</sup> 44 <sup>m</sup>	89° 0'	0.01   0.01	1 <sup>h</sup> 44 <sup>m</sup>	89° 0'	0.01   0.01	1 <sup>h</sup> 44 <sup>m</sup>	89° 0'	0.01   0.01
1	58.91	26.70	+18 + 8	80.19	28.30	-27 + 4	48.63	24.51	-30 + 2	28.92	16.25	-14 - 9
2	57.74	26.85	+ 4 + 9	78.94	28.24	-32 + 1	47.70	24.30	-33 - 2	28.64	15.95	- 1 -10
3	56.56	26.99	-10 + 8	77.70	28.18	-33 - 3	46.78	24.08	-30 - 5	28.38	15.64	+13 -10
4	55.37	27.13	-21 + 6	76.46	28.11	-28 - 7	45.88	23.86	-22 - 8	28.14	15.34	+25 - 8
5	54.17	27.26	-30 + 3	75.23	28.04	-17 - 9	45.00	23.63	-10 -10	27.93	15.03	+31 - 4
6	52.96	27.38	-33 - 1	74.00	27.96	- 4 -10	44.14	23.40	+ 5 -11	27.74	14.73	+30 0
7	51.74	27.50	-31 - 4	72.78	27.87	+12 -10	43.29	23.17	+18 - 9	27.58	14.42	+22 + 3
8	50.52	27.61	-23 - 8	71.57	27.78	+25 - 8	42.46	22.93	+29 - 7	27.44	14.11	+ 7 + 6
9	49.29	27.71	-11 -10	70.36	27.68	+33 - 4	41.66	22.69	+33 - 3	27.32	13.80	-10 + 7
10	48.05	27.81	+ 4 -10	69.16	27.58	+33 0	40.87	22.44	+28 + 2	27.23	13.49	-26 + 6
11	46.81	27.90	+18 - 9	67.97	27.47	+26 + 4	40.10	22.19	+17 + 5	27.16	13.19	-36 + 3
12	45.56	27.99	+29 - 6	66.79	27.35	+12 + 7	39.35	21.93	+ 1 + 7	27.11	12.88	-37 - 1
13	44.31	28.07	+34 - 2	65.62	27.23	- 6 + 8	38.62	21.67	-16 + 7	27.09	12.57	-29 - 4
14	43.05	28.14	+31 + 2	64.46	27.10	-21 + 7	37.91	21.41	-29 + 5	27.09	12.27	-14 - 6
15	41.79	28.20	+21 + 6	63.31	26.97	-32 + 4	37.22	21.15	-36 + 2	27.11	11.96	+ 5 - 6
16	40.53	28.26	+ 5 + 8	62.17	26.83	-34 + 1	36.55	20.88	-33 - 2	27.16	11.66	+22 - 5
17	39.26	28.31	-11 + 8	61.04	26.69	-28 - 3	35.91	20.61	-21 - 5	27.23	11.35	+35 - 1
18	37.99	28.35	-25 + 6	59.93	26.54	-15 - 5	35.29	20.34	- 5 - 6	*27.32	11.05	+39 + 3
19	36.71	28.39	-33 + 3	58.83	26.38	+ 2 - 6	34.69	20.07	+13 - 5	27.44	10.74	+35 + 6
20	35.44	28.42	-33 - 1	57.75	26.22	+18 - 5	34.11	19.79	+27 - 3	27.58	10.44	+26 + 9
21	34.16	28.45	-24 - 4	56.68	26.05	+30 - 2	33.55	19.51	+36 0	27.75	10.13	+12 +10
22	32.89	28.47	-10 - 6	55.62	25.88	+36 + 1	33.02	19.22	+37 + 4	27.94	9.83	- 2 +10
23	31.61	28.48	+ 7 - 6	54.58	25.70	+34 + 4	32.51	18.93	+31 + 7	28.15	9.53	-15 + 8
24	30.34	28.49	+21 - 4	53.55	25.52	+27 + 7	32.02	18.64	+20 + 9	28.38	9.24	-25 + 5
25	29.06	28.49	+31 - 2	52.53	25.33	+14 + 9	31.55	18.34	+ 6 + 9	28.63	8.94	-30 + 2
26	27.79	28.48	+35 + 2	51.53	25.13	+ 1 + 9	31.10	18.05	- 8 + 8	28.91	8.64	-31 - 2
27	26.51	28.47	+31 + 5	50.55	24.93	-12 + 8	30.68	17.75	-19 + 7	29.21	8.35	-26 - 5
28	25.24	28.45	+22 + 8	49.58	24.72	-23 + 5	30.28	17.46	-27 + 4	29.53	8.06	-17 - 8
29	23.97	28.42	+ 9 + 9	48.63	24.51	-30 + 2	29.90	17.16	-31 0	29.87	7.78	- 4 - 9
30	22.71	28.39	- 5 + 8				29.55	16.86	-30 - 3	30.23	7.49	+ 9 -10
31	21.45	28.35	-17 + 7				29.22	16.55	-24 - 7	30.62	7.20	+22 - 8
32	20.19	28.30	-27 + 4				28.92	16.25	-14 - 9			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+89° 0' 0''	57.299	+57.290	+89° 0' 10''	57.458	+57.450	+89° 0' 20''	57.619	+57.610
10	57.458	+57.450	20	57.619	+57.610	30	57.780	+57.771

$$\alpha_{1945.0} = 1^h 45^m 36.89$$

$$\delta_{1945.0} = +89^\circ 0' 14.79$$

\*) Tag der doppelten unteren Kulmination: April 18.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

185\*

Nb)  $\alpha$  Ursae minoris 2<sup>m</sup>12 var.

Tag	Mai				Juni				Juli				August					
	AR.		Dekl.		C Glieder		AR.		Dekl.		C Glieder		AR.		Dekl.		C Glieder	
	+ in		o.or   o.or		+ in		o.or   o.or		+ in		o.or   o.or		+ in		o.or   o.or		o.or   o.or	
	1 <sup>h</sup> 44 <sup>m</sup>	88° 59'	o.or	o.or	1 <sup>h</sup> 44 <sup>m</sup>	88° 59'	o.or	o.or	1 <sup>h</sup> 45 <sup>m</sup>	88° 59'	o.or	o.or	1 <sup>h</sup> 46 <sup>m</sup>	88° 59'	o.or	o.or		
1	30.62	67.20	+22	- 8	52.16	59.95	+20	+ 4	25.46	57.03	-21	+ 6	3.94	59.03	-25	- 5		
2	31.03	66.92	+30	- 6	53.12	59.78	+ 5	+ 6	26.68	57.01	-33	+ 3	5.15	59.18	- 9	- 7		
3	31.47	66.64	+32	- 2	54.09	59.61	-13	+ 6	27.91	57.00	-37	- 1	6.36	59.33	+ 9	- 7		
4	31.92	66.37	+27	+ 2	55.07	59.45	-28	+ 5	29.14	56.99	-32	- 4	7.56	59.49	+24	- 5		
5	32.39	66.09	+14	+ 5	56.07	59.29	-37	+ 2	30.38	56.99	-21	- 7	8.75	59.65	+34	- 1		
6	32.88	65.81	- 3	+ 6	57.08	59.14	-38	- 2	31.62	57.00	- 3	- 8	9.94	59.82	+37	+ 2		
7	33.39	65.54	-20	+ 6	58.10	58.99	-30	- 5	32.86	57.01	+15	- 7	11.12	59.99	+31	+ 6		
8	33.93	65.27	-33	+ 4	59.13	58.85	-14	- 7	34.11	57.03	+29	- 4	12.30	60.17	+20	+ 9		
9	34.48	65.01	-39	o	60.18	58.71	+ 5	- 8	35.35	57.05	+36	o	13.47	60.35	+ 5	+10		
10	35.05	64.75	-35	- 3	61.24	58.58	+22	- 6	36.60	57.08	+36	+ 4	14.64	60.54	- 9	+ 9		
11	35.64	64.49	-23	- 6	62.31	58.46	+34	- 2	37.84	57.12	+28	+ 8	15.80	60.73	-21	+ 7		
12	36.25	64.24	- 5	- 7	63.39	58.34	+39	+ 2	39.09	57.16	+15	+10	16.95	60.93	-29	+ 4		
13	36.88	63.99	+14	- 6	64.48	58.22	+34	+ 6	40.34	57.20	o	+10	18.10	61.13	-33	o		
14	37.53	63.74	+29	- 3	65.58	58.11	+24	+ 9	41.60	57.25	-13	+ 9	19.24	61.33	-30	- 3		
15	38.20	63.50	+38	o	66.69	58.01	+ 9	+10	42.85	57.30	-25	+ 6	20.37	61.54	-23	- 7		
16	38.89	63.26	+38	+ 5	67.80	57.91	- 6	+10	44.10	57.36	-31	+ 3	21.49	61.75	-11	- 9		
17	39.59	63.02	+31	+ 8	68.93	57.81	-19	+ 8	45.35	57.42	-32	- 1	22.60	61.97	+ 2	-10		
18	40.31	62.79	+18	+10	70.06	57.72	-27	+ 5	46.60	57.49	-28	- 5	23.71	62.19	+16	- 9		
19	41.05	62.56	+ 3	+10	71.20	57.63	-32	+ 1	47.85	57.57	-18	- 8	24.81	62.42	+27	- 7		
20	41.81	62.33	-11	+ 9	72.35	57.55	-30	- 2	49.10	57.65	- 5	- 9	25.90	62.65	+33	- 3		
21	42.59	62.11	-22	+ 7	73.51	57.48	-23	- 6	50.35	57.74	+ 9	-10	26.97	62.89	+32	o		
22	43.38	61.89	-29	+ 3	74.68	57.41	-12	- 8	51.59	57.83	+22	- 8	28.03	63.13	+23	+ 4		
23	44.19	61.68	-31	o	75.85	57.35	+ 1	- 9	52.84	57.93	+31	- 5	29.09	63.37	+ 8	+ 6		
24	45.02	61.47	-27	- 4	77.03	57.29	+15	- 9	54.08	58.03	+33	- 2	30.14	63.62	- 9	+ 7		
25	45.86	61.26	-19	- 7	78.22	57.24	+26	- 7	55.33	58.14	+29	+ 2	31.18	63.87	-25	+ 6		
26	46.72	61.06	- 8	- 9	79.41	57.19	+32	- 4	56.57	58.25	+18	+ 5	32.20	64.13	-35	+ 3		
27	47.59	60.86	+ 5	- 9	80.61	57.15	+32	o	57.81	58.37	+ 2	+ 7	33.22	64.39	-36	- 1		
28	48.48	60.67	+18	- 8	81.81	57.11	+25	+ 3	59.04	58.49	-15	+ 7	34.23	64.65	-29	- 4		
29	49.38	60.48	+28	- 6	83.02	57.08	+12	+ 6	60.27	58.62	-28	+ 5	35.23	64.92	-15	- 6		
30	50.29	60.30	+32	- 3	84.24	57.05	- 5	+ 7	61.50	58.75	-36	+ 2	36.22	65.19	+ 3	- 7		
31	51.22	60.12	+30	+ 1	85.46	57.03	-21	+ 6	62.72	58.89	-35	- 2	37.20	65.47	+21	- 6		
32	52.16	59.95	+20	+ 4					63.94	59.03	-25	- 5	38.16	65.75	+33	- 2		

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+88° 59' 50''	57.140	+57.131	+89° 0' 0''	57.299	+57.290
60	57.299	+57.290	10	57.458	+57.450

$$\alpha_{1945.0} = 1^h 45^m 36.89$$

$$\delta_{1945.0} = +89^\circ 0' 14.79$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nb)  $\alpha$  Ursae minoris 2<sup>m</sup>12 var.

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			+	in			+	in			+	in
	1 <sup>h</sup> 46 <sup>m</sup>	89° 0'	0.01   0.01	1 <sup>h</sup> 47 <sup>m</sup>	89° 0'	0.01   0.01	1 <sup>h</sup> 46 <sup>m</sup>	89° 0'	0.01   0.01	1 <sup>h</sup> 46 <sup>m</sup>	89° 0'	0.01   0.01
1	38.16	5.75	+33 - 2	0.64	15.57	+31 + 8	67.62	27.69	-28 + 5	55.53	38.26	-24 - 4
2	39.11	6.03	+38 + 1	1.15	15.93	+18 +10	67.52	28.07	-31 + 1	54.82	38.57	-14 - 7
3	40.05	6.32	+35 + 5	1.64	16.30	+ 2 +10	67.39	28.45	-28 - 2	54.09	38.88	- 2 - 8
4	40.98	6.61	+25 + 8	2.11	16.66	-12 + 9	67.24	28.82	-21 - 5	53.34	39.18	+10 - 8
5	41.89	6.90	+11 +10	2.56	17.03	-23 + 7	67.07	29.20	-12 - 8	52.57	39.48	+22 - 7
6	42.79	7.20	- 4 +10	3.00	17.41	-30 + 3	66.88	29.58	+ 1 - 9	51.79	39.77	+30 - 5
7	43.68	7.50	-17 + 8	3.42	17.78	-32 0	66.68	29.95	+14 - 9	50.99	40.06	+32 - 2
8	44.55	7.80	-27 + 5	3.82	18.16	-28 - 4	66.45	30.32	+25 - 7	50.17	40.34	+28 + 1
9	45.41	8.11	-32 + 2	4.20	18.53	-20 - 7	66.20	30.69	+31 - 5	49.33	40.62	+17 + 4
10	46.26	8.42	-31 - 2	4.56	18.91	- 8 - 9	65.93	31.06	+31 - 1	48.47	40.90	+ 1 + 6
11	47.09	8.73	-26 - 5	4.90	19.28	+ 5 -10	65.64	31.43	+24 + 2	47.60	41.17	-17 + 6
12	47.91	9.05	-16 - 8	5.23	19.66	+18 - 9	65.32	31.79	+11 + 5	46.71	41.44	-31 + 4
13	48.72	9.37	- 4 -10	5.54	20.04	+28 - 7	64.98	32.15	- 6 + 6	45.80	41.70	-41 0
14	49.51	9.69	+10 -10	5.83	20.42	+32 - 3	64.63	32.51	-24 + 5	44.88	41.96	-40 - 4
15	50.29	10.02	+23 - 8	6.10	20.80	+29 0	64.25	32.87	-37 + 2	43.94	42.21	-30 - 7
16	51.05	10.35	+31 - 6	6.35	21.18	+19 + 3	63.86	33.23	-41 - 1	42.99	42.46	-13 - 9
17	51.80	10.69	+33 - 2	6.58	21.57	+ 4 + 6	63.45	33.59	-36 - 5	42.02	42.70	+ 7 - 9
18	52.53	11.02	+27 + 2	6.79	21.95	-14 + 6	63.01	33.95	-23 - 8	41.03	42.94	+24 - 6
19	53.25	11.35	+14 + 5	6.99	22.33	-30 + 5	62.55	34.30	- 3 - 8	40.03	43.17	+37 - 2
20	53.95	11.69	- 3 + 7	7.16	22.71	-39 + 2	62.07	34.65	+16 - 7	39.02	43.40	+40 + 3
21	54.64	12.04	-19 + 6	7.45	23.48	-29 - 6	61.58	34.99	+32 - 4	37.99	43.62	+35 + 7
22	55.31	12.38	-32 + 4	7.57	23.87	-12 - 7	61.07	35.33	+40 + 1	36.95	43.83	+23 +10
23	55.97	12.73	-38 + 1	7.67	24.25	+ 7 - 7	60.53	35.67	+40 + 5	35.89	44.04	+ 7 +11
24	56.61	13.07	-34 - 3	7.74	24.63	+25 - 5	59.97	36.01	+31 + 9	34.82	44.25	- 9 +11
25	57.23	13.42	-22 - 6	7.79	25.01	+37 - 1	59.39	36.34	+16 +11	33.74	44.45	-23 + 8
26	57.84	13.78	- 4 - 7	7.83	25.40	+41 + 3	58.80	36.67	0 +11	32.65	44.64	-30 + 5
27	58.43	14.13	+15 - 6	7.85	25.78	+36 + 7	58.19	36.99	-15 +10	31.54	44.83	-31 + 1
28	59.01	14.49	+29 - 4	7.85	26.16	+25 +10	57.55	37.31	-26 + 7	30.42	45.01	-27 - 3
29	59.57	14.84	+38 0	7.82	26.54	+ 9 +11	56.90	37.63	-31 + 3	29.29	45.19	-19 - 6
30	60.11	15.20	+38 + 4	7.77	26.92	- 7 +10	56.22	37.95	-31 - 1	28.15	45.36	- 7 - 8
31	60.64	15.57	+31 + 8	7.70	27.31	-20 + 8	55.53	38.26	-24 - 4	27.00	45.52	+ 7 - 8
32				7.62	27.69	-28 + 5				25.84	45.68	+19 - 8

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+89° 0' 0''	57.299	+57.290	+89° 0' 20''	57.619	+57.610	+89° 0' 40''	57.942	+57.934
10	57.458	+57.450	30	57.780	+57.771	50	58.106	+58.097

$$\alpha_{1945.0} = 1^h 45^m 36^s 39$$

$$\delta_{1945.0} = +89^\circ 0' 14''.29$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

187\*

 Ne) Grb 750 Cepheus 6<sup>m</sup>70

Tag	Januar				Februar				März				April					
	AR.		Dekl.		© Glieder		AR.		Dekl.		© Glieder		AR.		Dekl.		© Glieder	
	h	m	+	in	h	m	o.or	o.or	h	m	o.or	o.or	h	m	+	in	o.or	o.or
	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or	o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or	o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or	o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or	o.or	o.or	o.or
1	32.28	26.42	+8	+4	26.80	33.65	-3	+7	19.66	35.65	-5	+6	12.19	32.37	-8	-5		
2	32.17	26.72	+6	+7	26.57	33.80	-6	+5	19.39	35.63	-7	+4	11.99	32.18	-6	-8		
3	32.05	27.02	+3	+8	26.34	33.95	-8	+2	19.13	35.60	-9	o	11.79	31.99	-3	-10		
4	31.93	27.31	o	+8	26.10	34.09	-9	-1	18.87	35.57	-9	-3	11.60	31.79	o	-10		
5	31.81	27.59	-4	+7	25.86	34.22	-9	-5	18.61	35.53	-8	-7	11.40	31.59	+3	-8		
6	31.68	27.88	-7	+4	25.62	34.35	-7	-8	18.34	35.48	-5	-9	11.22	31.38	+5	-5		
7	31.54	28.16	-8	+1	25.37	34.48	-4	-10	18.08	35.43	-2	-10	11.04	31.17	+6	o		
8	31.40	28.43	-9	-3	25.13	34.59	o	-10	17.83	35.38	+1	-10	10.86	30.96	+5	+4		
9	31.25	28.70	-8	-6	24.88	34.71	+3	-8	17.57	35.32	+5	-7	10.68	30.74	+2	+7		
10	31.10	28.96	-5	-9	24.63	34.81	+6	-5	17.31	35.25	+6	-3	10.52	30.52	-2	+9		
11	30.94	29.22	-2	-10	24.37	34.91	+7	o	17.06	35.18	+6	+2	10.35	30.29	-5	+8		
12	30.78	29.48	+2	-9	24.12	35.01	+6	+4	16.80	35.10	+4	+6	10.19	30.06	-7	+5		
13	30.62	29.74	+5	-7	23.87	35.10	+3	+7	16.55	35.01	+1	+8	10.03	29.83	-8	+1		
14	30.45	29.99	+7	-3	23.61	35.18	o	+9	16.30	34.92	-3	+9	9.87	29.59	-6	-3		
15	30.28	30.24	+7	+2	23.35	35.25	-4	+8	16.05	34.83	-6	+7	9.72	29.36	-3	-6		
16	30.10	30.48	+5	+6	23.09	35.32	-6	+6	15.80	34.72	-7	+3	9.57	29.11	+2	-7		
17	29.92	30.71	+2	+8	22.83	35.39	-7	+2	15.55	34.62	-6	-1	9.43	28.87	+6	-6		
18	29.74	30.95	-2	+9	22.57	35.44	-6	-2	15.31	34.50	-4	-4	9.29	28.62	+9	-4		
19	29.55	31.17	-5	+7	22.31	35.49	-3	-5	15.07	34.38	-1	-6	9.16	28.37	+10	o		
20	29.36	31.39	-7	+4	22.04	35.53	+1	-7	14.83	34.26	+3	-7	9.04	28.11	+10	+3		
21	29.16	31.61	-7	o	21.77	35.57	+4	-6	14.60	34.13	+7	-5	8.92	27.85	+8	+6		
22	28.96	31.82	-5	-3	21.50	35.60	+7	-4	14.37	33.99	+9	-3	8.80	27.59	+5	+8		
23	28.76	32.03	-2	-6	21.24	35.63	+9	-1	14.14	33.85	+10	+1	8.69	27.33	+2	+9		
24	28.56	32.23	+2	-7	20.97	35.65	+9	+2	13.91	33.71	+9	+4	8.58	27.06	-2	+8		
25	28.35	32.43	+5	-6	20.71	35.66	+8	+5	13.68	33.56	+7	+7	8.47	26.80	-5	+6		
26	28.14	32.62	+8	-4	20.45	35.67	+5	+7	13.46	33.40	+4	+8	8.37	26.53	-7	+3		
27	27.92	32.81	+9	o	20.18	35.67	+2	+8	13.24	33.24	o	+8	8.28	26.26	-8	o		
28	27.71	32.99	+8	+3	19.92	35.66	-1	+8	13.02	33.08	-3	+7	8.19	25.99	-8	-4		
29	27.48	33.16	+7	+6	19.66	35.65	-5	+6	12.81	32.91	-6	+5	8.10	25.71	-6	-7		
30	27.26	33.33	+4	+8					12.60	32.73	-8	+2	8.02	25.44	-4	-9		
31	27.03	33.49	+1	+8					12.39	32.55	-9	-2	7.95	25.16	-1	-10		
32	26.80	33.65	-3	+7					12.19	32.37	-8	-5						

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+85° 24' 20"	12.484	+12.444	+85° 24' 30"	12.492	+12.451
30	12.492	+12.451	40	12.499	+12.459

$$\alpha_{1945.0} = 4^h 18^m 22.94$$

$$\delta_{1945.0} = +85^\circ 24' 20.47$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Ne) Grb 750 Cepheus 6<sup>m</sup>70

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or
1	7.95	25.16	- 1 - 10	8.09	16.29	+ 6 + 1	12.52	8.96	o + 8	20.36	4.64	- 8 - 1
2	7.88	24.88	+ 2 - 9	8.17	16.01	+ 4 + 5	12.73	8.76	- 4 + 8	20.64	4.57	- 6 - 4
3	7.81	24.60	+ 5 - 6	8.26	15.74	+ 1 + 7	12.94	8.56	- 7 + 5	20.94	4.51	- 2 - 7
4	7.75	24.32	+ 6 - 2	8.35	15.46	- 3 + 8	13.16	8.37	- 9 + 1	21.23	4.45	+ 2 - 8
5	7.70	24.04	+ 5 + 2	8.45	15.19	- 6 + 7	13.37	8.18	- 8 - 3	21.52	4.39	+ 6 - 6
6	7.65	23.75	+ 3 + 6	8.55	14.92	- 8 + 4	13.60	8.00	- 5 - 6	21.82	4.34	+ 9 - 3
7	7.60	23.47	o + 8	8.66	14.65	- 9 o	13.82	7.82	- 1 - 8	22.12	4.30	+ 10 + 1
8	7.56	23.18	- 4 + 8	8.77	14.39	- 7 - 4	14.05	7.64	+ 3 - 7	22.40	4.26	+ 9 + 4
9	7.53	22.90	- 7 + 6	8.89	14.12	- 3 - 7	14.28	7.47	+ 7 - 5	22.72	4.22	+ 7 + 7
10	7.50	22.61	- 9 + 2	9.01	13.86	+ 1 - 8	14.52	7.30	+ 9 - 2	23.02	4.19	+ 4 + 9
11	7.47	22.32	- 8 - 2	9.14	13.60	+ 5 - 7	14.76	7.14	+ 10 + 2	23.32	4.16	o + 9
12	7.45	22.03	- 5 - 5	9.27	13.34	+ 9 - 4	15.00	6.98	+ 9 + 6	23.63	4.14	- 3 + 8
13	7.43	21.74	- 1 - 7	9.40	13.08	+ 10 o	15.25	6.82	+ 6 + 8	23.93	4.12	- 6 + 5
14	7.42	21.45	+ 4 - 7	9.54	12.83	+ 10 + 4	15.49	6.67	+ 2 + 9	24.23	4.10	- 8 + 2
15	7.42	21.16	+ 8 - 5	9.68	12.58	+ 8 + 7	15.74	6.52	- 1 + 9	24.54	4.09	- 8 - 2
16	7.42	20.87	+ 10 - 2	9.83	12.33	+ 5 + 9	16.00	6.37	- 4 + 7	24.85	4.09	- 8 - 6
17	7.42	20.58	+ 11 + 2	9.98	12.09	+ 1 + 9	16.25	6.23	- 7 + 4	25.16	4.09	- 5 - 9
18	7.43	20.29	+ 9 + 5	10.14	11.84	- 2 + 8	16.51	6.09	- 8 o	25.47	4.09	- 2 - 10
19	7.45	20.00	+ 7 + 8	10.30	11.60	- 5 + 6	16.77	5.96	- 8 - 4	25.78	4.10	+ 1 - 10
20	7.47	19.71	+ 3 + 9	10.46	11.36	- 7 + 2	17.03	5.83	- 6 - 7	26.09	4.12	+ 4 - 8
21	7.49	19.42	o + 9	10.63	11.13	- 8 - 1	17.30	5.71	- 4 - 9	26.40	4.14	+ 6 - 4
22	7.52	19.13	- 4 + 7	10.80	10.90	- 7 - 5	17.56	5.59	- 1 - 10	26.72	4.16	+ 7 o
23	7.55	18.84	- 6 + 4	10.97	10.67	- 5 - 8	17.83	5.47	+ 3 - 9	27.03	4.19	+ 5 + 4
24	7.59	18.55	- 7 + 1	11.15	10.44	- 2 - 10	18.10	5.36	+ 5 - 6	27.34	4.22	+ 2 + 7
25	7.64	18.27	- 8 - 3	11.33	10.22	+ 1 - 10	18.38	5.25	+ 7 - 2	27.65	4.26	- 1 + 9
26	7.69	17.98	- 7 - 6	11.52	10.00	+ 4 - 8	18.65	5.15	+ 6 + 2	27.97	4.30	- 5 + 8
27	*7.74	17.70	- 4 - 9	11.71	9.79	+ 6 - 5	18.93	5.05	+ 4 + 6	28.28	4.35	- 7 + 5
28	7.80	17.41	- 2 - 10	11.91	9.57	+ 7 - 1	19.21	4.96	+ 1 + 8	28.59	4.40	- 8 + 1
29	7.87	17.13	+ 2 - 9	12.11	9.37	+ 6 + 3	19.49	4.88	- 3 + 8	28.90	4.46	- 6 - 3
30	7.94	16.85	+ 4 - 7	12.31	9.16	+ 3 + 6	19.78	4.80	- 6 + 7	29.21	4.52	- 3 - 6
31	8.01	16.57	+ 6 - 4	12.52	8.96	o + 8	20.07	4.72	- 8 + 4	29.53	4.58	+ 1 - 8
32	8.09	16.29	+ 6 + 1				20.36	4.64	- 8 - 1	29.84	4.65	+ 5 - 7

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+85° 24' 0''	12.469	+12.429	+85° 24' 10''	12.477	+12.436	+85° 24' 20''	12.484	+12.444
10	12.477	+12.436	20	12.484	+12.444	30	12.492	+12.451

$$\alpha_{1945.0} = 4^h 18^m 22.94$$

$$\delta_{1945.0} = +85^\circ 24' 20.47$$

\*) Tag der doppelten unteren Kulmination: Mai 27.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

189\*

No) Grb 750 Cepheus 6<sup>m</sup>70

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or	4 <sup>h</sup> 18 <sup>m</sup>	85° 24'	o.or   o.or
1	29.84	4.65	+ 5 - 7	38.84	8.87	+10 + 2	46.23	16.91	+ 1 +10	50.00	27.29	- 7 0
2	30.15	4.73	+ 8 - 5	39.12	9.07	+ 9 + 5	46.41	17.22	- 2 + 8	50.05	27.63	- 7 - 4
3	30.47	4.81	+10 - 1	39.39	9.28	+ 6 + 8	46.59	17.53	- 5 + 6	50.09	27.98	- 5 - 6
4	30.78	4.89	+10 + 3	39.67	9.49	+ 3 + 9	46.77	17.84	- 7 + 2	50.13	28.33	- 3 - 9
5	31.09	4.98	+ 8 + 6	39.94	9.71	0 + 9	46.95	18.16	- 7 - 1	50.16	28.68	0 - 9
6	31.40	5.08	+ 5 + 8	40.21	9.93	- 4 + 7	47.11	18.47	- 7 - 5	50.19	29.02	+ 2 - 9
7	31.71	5.18	+ 2 + 9	40.48	10.16	- 6 + 4	47.28	18.80	- 5 - 8	50.21	29.37	+ 5 - 6
8	32.01	5.28	- 2 + 8	40.74	10.39	- 8 + 1	47.44	19.12	- 3 - 9	50.23	29.72	+ 6 - 3
9	32.32	5.39	- 5 + 6	41.00	10.62	- 8 - 3	47.60	19.44	0 -10	50.24	30.06	+ 6 + 1
10	32.63	5.50	- 7 + 3	41.26	10.86	- 7 - 6	47.76	19.77	+ 3 - 8	50.25	30.41	+ 4 + 5
11	32.94	5.61	- 8 0	41.52	11.10	- 5 - 9	47.91	20.10	+ 5 - 5	50.25	30.75	0 + 7
12	33.24	5.73	- 8 - 4	41.78	11.34	- 2 -10	48.06	20.43	+ 6 - 2	50.25	31.09	- 4 + 8
13	33.55	5.86	- 6 - 7	42.03	11.59	+ 1 -10	48.20	20.76	+ 5 + 2	50.24	31.44	- 7 + 6
14	33.85	5.99	- 4 - 9	42.28	11.84	+ 4 - 8	48.34	21.09	+ 2 + 6	50.22	31.78	-10 + 3
15	34.16	6.12	- 1 -10	42.52	12.10	+ 6 - 4	48.47	21.42	- 2 + 8	50.20	32.11	-10 - 1
16	34.46	6.26	+ 3 - 9	42.77	12.35	+ 6 0	48.59	21.76	- 5 + 8	50.17	32.45	- 8 - 5
17	34.76	6.41	+ 5 - 6	43.00	12.62	+ 4 + 4	48.71	22.10	- 8 + 5	50.14	32.79	- 4 - 8
18	35.06	6.56	+ 6 - 2	43.24	12.88	+ 1 + 7	48.83	22.44	-10 + 1	50.10	33.13	+ 1 - 9
19	35.36	6.71	+ 6 + 2	43.47	13.15	- 3 + 8	48.95	22.78	- 9 - 3	50.06	33.46	+ 6 - 7
20	35.66	6.87	+ 3 + 6	43.70	13.42	- 6 + 7	49.06	23.12	- 6 - 6	50.02	33.80	+ 9 - 4
21	35.96	7.03	0 + 8	43.93	13.69	- 8 + 4	49.16	23.46	- 1 - 8	49.97	34.13	+11 + 1
22	36.25	7.19	- 4 + 8	44.16	13.97	- 9 0	49.26	23.81	+ 4 - 8	49.91	34.45	+10 + 5
23	36.55	7.36	- 6 + 6	44.38	14.25	- 6 - 4	49.36	24.15	+ 8 - 5	49.85	34.78	+ 8 + 8
24	36.84	7.53	- 8 + 2	44.60	14.53	- 3 - 7	49.45	24.50	+11 - 1	49.78	35.10	+ 4 +10
25	37.13	7.71	- 7 - 2	44.81	14.82	+ 2 - 8	49.53	24.84	+11 + 3	49.71	35.42	+ 1 +10
26	37.42	7.90	- 5 - 5	45.03	15.11	+ 6 - 7	49.61 49.69	25.19 25.54	+ 9 +71 + 7 +91	49.63	35.74	- 3 + 8
27	37.70	8.08	0 - 7	45.23	15.40	+ 9 - 4	49.76	25.89	+ 3 +10	49.55	36.05	- 5 + 5
28	37.99	8.27	+ 4 - 7	45.44	15.70	+11 0	49.83	26.24	- 1 + 9	49.46	36.37	- 7 + 2
29	38.27	8.47	+ 8 - 5	45.64	16.00	+11 + 4	49.89	26.59	- 4 + 7	49.37	36.68	- 7 - 2
30	38.56	8.67	+10 - 2	45.84	16.30	+ 8 + 7	49.95	26.94	- 6 + 4	49.28	36.99	- 6 - 5
31	38.84	8.87	+10 + 2	46.03	16.60	+ 5 + 9	50.00	27.29	- 7 0	49.18	37.29	- 4 - 8
32				46.23	16.91	+ 1 +10				49.07	37.59	- 1 - 9

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+85° 24' 0''	12.469	+ 12.429	+85° 24' 10''	12.477	+ 12.436	+85° 24' 30''	12.492	+ 12.451
10	12.477	+ 12.436	20	12.484	+ 12.444	40	12.499	+ 12.459

$$\alpha_{1945.0} = 4^h 18^m 22.94$$

$$\delta_{1945.0} = +85^\circ 24' 20.47$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nd) 51. Hev. Cephei 5<sup>m</sup>26

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 8'	in o.or   o.or	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 8'	in o.or   o.or	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 8'	in o.or   o.or	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 8'	in o.or   o.or
1	46.04	2.98	+11 -6	46.88	13.35	+ 3 +8	40.67	20.92	o +8	28.99	24.96	-14 + 1
2	46.21	3.29	+13 -3	46.76	13.66	- 2 +8	40.35	21.13	- 5 +8	28.58	24.99	-15 - 2
3	46.36	3.61	+13 +1	46.63	13.97	- 7 +7	40.02	21.34	-10 +6	28.17	25.02	-13 - 6
4	46.51	3.93	+10 +4	46.50	14.28	-12 +5	39.69	21.55	-14 +3	27.75	25.05	- 9 - 8
5	46.64	4.25	+ 6 +7	46.36	14.59	-15 +2	39.36	21.75	-15 o	27.34	25.07	- 3 - 8
6	46.77	4.57	+ 1 +8	46.20	14.89	-15 -2	39.02	21.94	-15 -4	26.93	25.08	+ 2 - 7
7	46.89	4.90	- 4 +8	46.04	15.19	-13 -5	38.68	22.13	-12 -7	26.52	25.09	+ 7 - 4
8	47.00	5.22	- 9 +6	45.88	15.49	- 9 -8	38.33	22.31	- 6 -9	26.11	25.09	+ 9 o
9	47.11	5.55	-13 +4	45.70	15.78	- 3 -9	37.98	22.48	- 1 -8	25.71	25.08	+ 8 + 4
10	47.20	5.87	-14 o	45.51	16.07	+ 3 -8	37.62	22.65	+ 5 -6	25.30	25.07	+ 5 + 8
11	47.28	6.20	-14 -3	45.32	16.36	+ 8 -5	37.25	22.82	+ 9 -2	24.89	25.05	+ 1 +10
12	47.35	6.53	-11 -6	45.12	16.65	+11 -1	36.88	22.98	+10 +2	24.49	25.02	- 4 + 9
13	47.42	6.86	- 6 -9	44.92	16.93	+11 +4	36.51	23.13	+ 8 +6	24.08	24.99	- 8 + 6
14	47.48	7.19	o -9	44.70	17.22	+ 8 +7	36.14	23.28	+ 4 +9	23.68	24.95	- 9 + 1
15	47.53	7.52	+ 6 -7	44.48	17.49	+ 3 +9	35.77	23.42	- 1 +9	23.28	24.91	- 8 - 3
16	47.57	7.85	+10 -3	44.25	17.76	- 2 +9	35.39	23.56	- 5 +7	22.88	24.86	- 4 - 7
17	47.60	8.18	+11 +1	44.02	18.03	- 6 +6	35.01	23.69	- 8 +4	22.48	24.81	+ 1 - 9
18	47.62	8.50	+10 +5	43.77	18.30	- 8 +2	34.62	23.82	- 8 -1	22.09	24.75	+ 7 - 9
19	47.63	8.83	+ 6 +8	43.52	18.55	- 8 -2	34.24	23.94	- 6 -5	21.70	24.68	+12 - 7
20	47.63	9.16	+ 1 +9	43.27	18.81	- 5 -6	33.84	24.05	- 2 -8	21.31	24.61	+15 - 4
21	47.63	9.49	- 4 +8	43.00	19.06	o -8	33.45	24.16	+ 4 -9	20.92	24.53	+15 o
22	47.61	9.81	- 8 +5	42.73	19.31	+ 5 -9	33.05	24.26	+ 9 -8	20.54	24.45	+13 + 3
23	47.59	10.14	- 9 +1	42.46	19.56	+ 9 -7	32.65	24.36	+12 -6	20.16	24.36	+ 9 + 6
24	47.56	10.47	- 8 -3	42.18	19.80	+12 -5	32.25	24.45	+14 -3	19.78	24.27	+ 5 + 7
25	47.52	10.80	- 4 -7	41.89	20.03	+13 -1	31.84	24.54	+14 +1	19.40	24.18	o + 8
26	47.47	11.12	+ 1 -9	41.59	20.26	+12 +2	31.44	24.62	+11 +4	19.03	24.07	- 5 + 7
27	47.42	11.45	+ 6 -8	41.29	20.49	+ 9 +5	31.04	24.69	+ 7 +6	18.66	23.96	-10 + 5
28	47.35	11.77	+10 -6	40.98	20.71	+ 5 +7	30.63	24.76	+ 2 +8	18.30	23.85	-13 + 2
29	47.27	12.09	+12 -4	40.67	20.92	o +8	30.22	24.82	- 3 +8	17.93	23.73	-14 - 1
30	47.19	12.41	+13 o	40.32	21.13	- 1 +8	29.81	24.87	- 8 +7	17.58	23.60	-13 - 5
31	47.09	12.72	+11 +3	40.00	21.34	- 2 +8	29.40	24.92	-12 +4	17.22	23.47	-10 - 7
32	46.99	13.04	+ 8 +6	39.67	21.55	- 3 +8	28.99	24.96	-14 +1			
33	46.88	13.35	+ 3 +8									

$\delta$	$\delta$	$\delta$	$\delta$	$\delta$	$\delta$	$\delta$	$\delta$	$\delta$	$\delta$
+87° 8'	sec $\delta$	tg $\delta$	+87° 8' 10"	sec $\delta$	tg $\delta$	+87° 8' 20"	sec $\delta$	tg $\delta$	
10	20.015	+ 19.970	20	20.034	+ 20.009	30	20.053	+ 20.029	

$$\alpha_{1945.0} = 7^h 15^m 29^s.63$$

$$\delta_{1945.0} = +87^\circ 8' 7''.60$$



Na) 51 Hev. Cephei 5<sup>m</sup>26

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 8'	0.01   0.01	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 8'	0.01   0.01	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 7'	0.01   0.01	7 <sup>h</sup> 15 <sup>m</sup>	+ 87° 7'	0.01   0.01
1	17.22	23.47	-10 - 7	8.80	17.16	+ 8 - 3	6.70	68.41	+ 6 + 7	11.38	58.97	-10 + 4
2	16.87	23.33	- 5 - 9	8.62	16.90	+ 9 + 1	6.74	68.10	+ 1 + 9	11.64	58.68	-11 0
3	16.52	23.19	0 - 8	8.46	16.63	+ 8 + 5	6.79	67.79	- 4 + 9	11.90	58.39	- 9 - 4
4	16.18	23.04	+ 5 - 6	8.30	16.37	+ 4 + 8	6.85	67.47	- 9 + 7	12.17	58.11	- 4 - 7
5	15.84	22.89	+ 8 - 2	8.14	16.10	- 1 + 10	6.92	67.16	-11 + 3	12.45	57.83	+ 1 - 9
6	15.51	22.74	+ 9 + 3	8.00	15.82	- 6 + 9	6.99	66.85	-11 - 2	12.74	57.55	+ 7 - 8
7	15.18	22.58	+ 6 + 7	7.86	15.55	-10 + 6	7.07	66.54	- 8 - 6	13.03	57.27	+12 - 6
8	14.86	22.41	+ 2 + 9	7.73	15.27	-11 + 1	7.16	66.23	- 3 - 8	13.32	57.00	+14 - 3
9	14.54	22.24	- 3 + 10	7.60	14.99	-10 - 3	7.26	65.92	+ 3 - 9	13.63	56.73	+14 + 1
10	14.23	22.07	- 8 + 7	7.49	14.71	- 5 - 7	7.36	65.61	+ 9 - 8	13.94	56.46	+12 + 4
11	13.92	21.89	-10 + 4	7.38	14.42	+ 1 - 9	*) 7.47	65.30	+13 - 5	14.25	56.19	+ 8 + 7
12	13.62	21.70	-10 - 1	7.28	14.13	+ 7 - 9	7.59	64.99	+15 - 1	14.57	55.93	+ 3 + 8
13	13.32	21.51	- 7 - 5	7.18	13.85	+12 - 7	7.71	64.68	+14 + 2	14.89	55.66	- 3 + 8
14	13.03	21.32	- 2 - 8	7.09	13.56	+15 - 4	7.84	64.36	+11 + 5	15.22	55.40	- 8 + 7
15	12.74	21.12	+ 4 - 10	7.01	13.27	+15 0	7.98	64.05	+ 6 + 8	15.56	55.15	-12 + 4
16	12.46	20.92	+10 - 8	6.93	12.97	+13 + 4	8.12	63.75	+ 1 + 8	15.90	54.89	-14 + 1
17	12.19	20.71	+14 - 6	6.86	12.68	+ 9 + 6	8.27	63.44	- 5 + 8	16.24	54.64	-14 - 3
18	11.92	20.50	+16 - 2	6.80	12.38	+ 4 + 8	8.43	63.13	- 9 + 6	16.60	54.39	-12 - 6
19	11.65	20.29	+15 + 2	6.75	12.08	- 1 + 8	8.60	62.83	-12 + 3	16.96	54.14	- 7 - 8
20	11.40	20.07	+12 + 5	6.71	11.78	- 7 + 7	8.78	62.52	-14 - 1	17.32	53.90	- 2 - 9
21	11.15	19.85	+ 7 + 7	6.67	11.48	-11 + 4	8.96	62.22	-13 - 4	17.69	53.66	+ 3 - 7
22	10.90	19.62	+ 2 + 8	6.64	11.18	-13 + 1	9.15	61.92	- 9 - 7	18.06	53.42	+ 8 - 4
23	10.66	19.39	- 3 + 8	6.62	10.87	-13 - 2	9.34	61.61	- 5 - 9	18.44	53.18	+10 0
24	10.43	19.16	- 8 + 6	6.60	10.57	-11 - 6	9.54	61.31	+ 1 - 8	18.82	52.95	+ 9 + 4
25	10.20	18.92	-11 + 3	6.59	10.27	- 7 - 8	9.75	61.01	+ 6 - 6	19.21	52.72	+ 6 + 8
26	9.98	18.68	-13 0	6.59	9.96	- 2 - 9	9.96	60.72	+ 9 - 3	19.60	52.50	+ 1 + 9
27	9.77	18.43	-13 - 3	6.60	9.65	+ 3 - 8	10.18	60.42	+10 + 2	20.00	52.27	- 4 + 8
28	9.56	18.19	-10 - 6	6.61	9.34	+ 7 - 5	10.41	60.13	+ 8 + 6	20.40	52.06	- 8 + 6
29	9.36	17.93	- 6 - 8	6.63	9.03	+ 9 - 1	10.64	59.84	+ 4 + 8	20.81	51.84	-10 + 2
30	9.17	17.68	- 1 - 8	6.66	8.72	+ 9 + 3	10.88	59.55	- 1 + 9	21.22	51.63	- 9 - 3
31	8.98	17.42	+ 4 - 7	6.70	8.41	+ 6 + 7	11.13	59.26	- 6 + 8	21.63	51.42	- 6 - 7
32	8.80	17.16	+ 8 - 3				11.38	58.97	-10 + 4	22.05	51.21	0 - 9

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+87° 7' 50''	19.976	+19.951	+87° 8' 0''	19.995	+19.970	+87° 8' 20''	20.034	+20.009
60	19.995	+19.970	10	20.015	+19.990	30	20.053	+20.029

$$\alpha_{1945.0} = 7^h 15^m 29.63$$

$$\delta_{1945.0} = +87^\circ 8' 7.60$$

\*) Tag der doppelten unteren Kulmination: Juli 11.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nd) 51 Hev. Cephei 5<sup>m</sup>26

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	7 <sup>h</sup> 15 <sup>m</sup>	87° 7'	in	7 <sup>h</sup> 15 <sup>m</sup>	87° 7'	in	7 <sup>h</sup> 15 <sup>m</sup>	87° 7'	in	7 <sup>h</sup> 16 <sup>m</sup>	87° 7'	in
1	22.05	51.21	o — 9	36.24	46.84	+14 — 6	52.30	46.63	+10 + 7	6.11	50.95	— 4 + 7
2	22.48	51.01	+ 6 — 9	36.75	46.76	+15 — 2	52.80	46.70	+ 4 + 8	6.50	51.17	— 8 + 5
3	22.90	50.81	+11 — 7	37.26	46.69	+15 + 2	53.31	46.78	— 1 + 8	6.89	51.39	—11 + 2
4	23.34	50.61	+14 — 4	37.78	46.62	+12 + 5	53.81	46.86	— 6 + 6	7.27	51.62	—12 — 1
5	23.77	50.42	+15 0	38.29	46.55	+ 7 + 7	54.31	46.95	—10 + 4	7.64	51.85	—11 — 5
6	24.21	50.23	+13 + 3	38.81	46.49	+ 2 + 8	54.81	47.04	—12 + 1	8.01	52.08	— 9 — 7
7	24.66	50.05	+10 + 6	39.33	46.44	— 3 + 8	55.30	47.14	—13 — 2	8.37	52.32	— 5 — 8
8	25.11	49.87	+ 5 + 8	39.85	46.39	— 8 + 6	55.79	47.24	—11 — 6	8.73	52.56	0 — 8
9	25.56	49.70	0 + 8	40.37	46.34	—12 + 3	56.28	47.35	— 8 — 8	9.08	52.81	+ 4 — 6
10	26.01	49.53	— 5 + 7	40.89	46.30	—13 0	56.77	47.46	— 4 — 9	9.43	53.06	+ 8 — 3
11	26.47	49.36	—10 + 5	41.42	46.26	—13 — 4	57.25	47.58	+ 1 — 8	9.77	53.31	+ 8 + 2
12	26.93	49.19	—13 + 2	41.94	46.23	—11 — 7	57.74	47.70	+ 5 — 5	10.10	53.57	+ 7 + 6
13	27.40	49.03	—14 — 1	42.46	46.20	— 7 — 8	58.21	47.83	+ 8 — 1	10.42	53.83	+ 3 + 9
14	27.87	48.87	—13 — 5	42.98	46.18	— 2 — 9	58.69	47.96	+ 8 + 4	10.74	54.09	— 3 +10
15	28.34	48.72	—10 — 8	43.51	46.16	+ 3 — 7	59.16	48.10	+ 5 + 7	11.05	54.36	— 8 + 9
16	28.81	48.57	— 5 — 9	44.03	46.15	+ 7 — 3	59.63	48.25	0 +10	11.35	54.63	—12 + 5
17	29.29	48.43	0 — 8	44.55	46.14	+ 8 + 1	60.09	48.40	— 5 +10	11.64	54.90	—13 + 1
18	29.77	48.29	+ 5 — 6	45.07	46.14	+ 7 + 5	60.55	48.55	—10 + 8	11.93	55.18	—11 — 4
19	30.26	48.15	+ 9 — 2	45.59	46.14	+ 4 + 9	61.01	48.71	—12 + 3	12.21	55.46	— 6 — 8
20	30.74	48.01	+ 9 + 3	46.11	46.14	— 1 +10	61.46	48.87	—12 — 2	12.49	55.74	+ 1 —10
21	31.23	47.88	+ 7 + 7	46.63	46.15	— 7 + 9	61.91	49.03	— 8 — 6	12.76	56.03	+ 8 — 9
22	31.72	47.76	+ 3 + 9	47.15	46.17	—10 + 6	62.35	49.20	— 2 — 9	13.01	56.32	+13 — 7
23	32.22	47.64	— 2 +10	47.67	46.19	—11 + 1	62.79	49.38	+ 5 —10	13.26	56.61	+16 — 3
24	32.71	47.52	— 7 + 8	48.19	46.22	— 9 — 4	63.22	49.56	+11 — 8	13.51	56.91	+16 + 1
25	33.21	47.41	—10 + 3	48.71	46.25	— 5 — 8	63.65	49.74	+15 — 5	13.74	57.20	+14 + 5
26	33.71	47.31	—10 — 1	49.22	46.29	+ 2 —10	64.07	49.93	+17 — 1	13.96	57.50	+ 9 + 7
27	34.21	47.21	— 7 — 5	49.73	46.33	+ 8 — 9	64.49	50.13	+16 + 3	14.18	57.80	+ 4 + 8
28	34.72	47.11	— 2 — 8	50.25	46.38	+13 — 7	64.90	50.33	+12 + 6	14.39	58.11	— 2 + 8
29	35.23	47.02	+ 4 — 9	50.76	46.44	+16 — 4	65.31	50.53	+ 7 + 8	14.59	58.42	— 7 + 6
30	35.74	46.93	+10 — 8	51.28	46.50	+16 0	65.71	50.74	+ 1 + 8	14.79	58.72	—10 + 3
31	36.24	46.84	+14 — 6	51.79	46.56	+14 + 4	66.11	50.95	— 4 + 7	14.98	59.04	—12 0
32				52.30	46.63	+10 + 7				15.16	59.35	—12 — 4

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+87° 7' 40''	19.957	+ 19.932	+87° 7' 50''	19.976	+19.951
50	19.976	+ 19.951	60	19.995	+19.970

$$\alpha_{1915.0} = 7^h 15^m 29^s.63$$

$$\delta_{1945.0} = +87^\circ 8' 7''.60$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

193\*

Ne) I Hev. Draconis 4<sup>m</sup>58

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	+ o.or   o.or	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	+ o.or   o.or	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	+ o.or   o.or	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	+ o.or   o.or
1	27.53	8.80	+3 -9	30.59	16.42	+4 +2	30.93	25.37	+2 +7	28.74	33.48	-5 +6
2	27.67	8.98	+4 -7	30.64	16.72	+3 +5	30.90	25.67	o +8	28.64	33.68	-6 +3
3	27.80	9.17	+5 -4	30.69	17.02	+1 +8	30.86	25.97	-2 +9	28.54	33.88	-6 o
4	27.93	9.36	+5 o	30.74	17.31	-1 +9	30.82	26.27	-4 +8	28.43	34.07	-5 -3
5	28.06	9.56	+3 +3	30.79	17.62	-3 +9	30.78	26.57	-5 +5	28.32	34.26	-3 -6
6	28.19	9.76	+2 +6	30.83	17.92	-5 +7	30.74	26.87	-6 +2	28.21	34.45	o -7
7	28.32	9.97	o +8	30.87	18.22	-6 +4	30.69	27.16	-5 -2	28.10	34.62	+2 -6
8	28.44	10.18	-2 +9	30.91	18.53	-6 o	30.64	27.45	-4 -5	27.99	34.80	+3 -3
9	28.56	10.40	-4 +8	30.94	18.84	-5 -3	30.59	27.74	-2 -7	27.88	34.97	+4 +1
10	28.68	10.62	-5 +6	30.97	19.14	-3 -6	30.53	28.02	+1 -7	27.76	35.13	+4 +5
11	28.79	10.85	-6 +2	31.00	19.46	o -8	30.47	28.30	+3 -5	27.64	35.29	+2 +8
12	28.90	11.08	-5 -2	31.02 31.04	19.77 20.08	+2 -7 +4 -4	30.41	28.58	+4 -2	27.52	35.44	o +9
13	29.01	11.32	-4 -5	31.06	20.40	+5 -1	30.35	28.86	+4 +2	27.40	35.59	-2 +8
14	29.12	11.56	-2 -7	31.08	20.71	+4 +3	30.29	29.14	+3 +5	27.28	35.73	-3 +4
15	29.22	11.80	+1 -8	31.09	21.03	+3 +6	30.22	29.41	+2 +8	27.17	35.87	-4 o
16	29.32	12.05	+3 -6	31.10	21.34	+1 +8	30.15	29.68	o +8	27.05	36.00	-3 -4
17	29.42	12.30	+4 -3	31.10	21.65	-1 +7	30.08	29.94	-2 +6	26.92	36.13	-1 -8
18	29.52	12.55	+4 +1	31.11	21.96	-3 +4	30.01	30.20	-3 +2	26.80	36.25	+1 -10
19	29.61	12.81	+3 +4	31.10	22.28	-3 +1	29.93	30.46	-3 -2	26.68	36.36	+3 -10
20	29.70	13.07	+2 +7	31.10	22.59	-3 -3	29.85	30.72	-2 -6	26.55	36.47	+4 -9
21	29.79	13.33	o +8	31.09	22.90	-2 -7	29.77	30.97	o -9	26.43	36.57	+5 -6
22	29.88	13.60	-2 +7	31.08	23.22	o -9	29.69	31.22	+1 -10	26.30	36.67	+5 -2
23	29.96	13.87	-3 +4	31.07	23.53	+2 -9	29.60	31.46	+3 -9	26.18	36.76	+4 +1
24	30.04	14.14	-3 o	31.06	23.84	+3 -8	29.51	31.70	+4 -7	26.05	36.85	+3 +4
25	30.12	14.42	-3 -4	31.04	24.15	+4 -6	29.42	31.94	+5 -4	25.93	36.94	+1 +7
26	30.20	14.70	-1 -7	31.02	24.46	+5 -3	29.33	32.17	+5 -1	25.80	37.01	-1 +8
27	30.27	14.98	o -9	30.99	24.76	+4 +1	29.24	32.40	+4 +3	25.67	37.08	-3 +8
28	30.34	15.26	+2 -9	30.97	25.07	+3 +4	29.14	32.62	+2 +6	25.55	37.15	-4 +6
29	30.41	15.55	+4 -7	30.93	25.37	+2 +7	29.05	32.84	o +8	25.42	37.21	-5 +4
30	30.47	15.84	+5 -5				28.95	33.06	-1 +8	25.28	37.26	-5 +1
31	30.53	16.13	+5 -1				28.85	33.27	-3 +8	25.15	37.31	-5 -3
32	30.59	16.42	+4 +2				28.74	33.48	-5 +6			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+81° 34' 0''	6.819	+6.745	+81° 34' 10''	6.821	+6.747	+81° 34' 30''	6.825	+6.752
10	6.821	+6.747	20	6.823	+6.749	40	6.827	+6.754

$$\alpha_{1945.0} = 9^h 29^m 24.66$$

$$\delta_{1945.0} = +81^\circ 34' 19.82$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Ne) I Hev. Draconis 4<sup>m</sup>58

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	o.or   o.or	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	o.or   o.or	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	o.or   o.or	9 <sup>h</sup> 29 <sup>m</sup>	81° 34'	o.or   o.or
		+	in		+	in		+	in		+	in
1	25.15	37.31	-5 -3	21.32	36.00	+2 -5	18.70	30.16	+4 +4	17.82	20.94	-3 +7
2	25.02	37.35	-3 -5	21.21	35.87	+3 -2	18.64	29.90	+2 +7	17.83	20.61	-4 +4
3	24.89	37.39	-1 -7	21.10	35.74	+4 +2	18.58	29.64	0 +9	17.83	20.29	-4 -1
4	24.76	37.42	+1 -6	20.99	35.60	+3 +6	18.52	29.38	-2 +9	17.84	19.96	-3 -5
5	24.63	37.44	+3 -4	20.89	35.46	+1 +8	18.46	29.11	-3 +6	17.86	19.62	-1 -8
6	24.50	37.46	+4 -1	20.78	35.31	0 +9	18.41	28.84	-4 +3	17.87	19.29	+1 -10
7	24.37	37.48	+4 +3	20.68	35.16	-2 +8	18.36	28.57	-4 -2	17.89	18.96	+3 -9
8	24.24	37.49	+3 +7	20.58	35.00	-4 +5	18.31	28.29	-2 -6	17.91	18.62	+4 -7
9	24.11	37.49	+1 +9	20.48	34.83	-4 0	18.27	28.01	0 -9	17.93	18.29	+5 -4
10	23.99	37.49	-1 +9	20.38	34.66	-3 -4	18.23	27.73	+2 -10	17.96	17.95	+5 0
11	23.86	37.48	-3 +7	20.29	34.49	-1 -8	18.19	27.44	+4 -9	17.98	17.61	+4 +3
12	23.73	37.46	-4 +3	20.19	34.31	+1 -10	18.15	27.15	+5 -6	18.01	17.26	+3 +6
13	23.60	37.44	-4 -2	20.10	34.13	+3 -10	18.11	26.87	+5 -3	18.04	16.92	+1 +8
14	23.47	37.42	-2 -7	20.00	33.95	+4 -8	18.07	26.57	+5 +1	*)18.07	16.58	-2 +8
15	23.34	37.38	0 -9	19.91	33.76	+5 -5	18.04	26.28	+4 +4	18.11	16.24	-3 +7
16	23.22	37.35	+2 -11	19.82	33.57	+5 -1	18.01	25.98	+2 +7	18.14	15.90	-5 +5
17	23.09	37.30	+4 -10	19.73	33.37	+4 +2	17.98	25.68	0 +8	18.18	15.57	-6 +2
18	22.97	37.25	+5 -7	19.65	33.16	+3 +5	17.96	25.38	-2 +8	18.23	15.23	-5 -1
19	22.84	37.20	+5 -4	19.56	32.96	+1 +7	17.94	25.08	-4 +7	18.27	14.89	-4 -4
20	22.72	37.14	+5 0	19.48	32.75	-1 +8	17.92	24.77	-5 +4	18.32	14.56	-2 -6
21	22.60	37.07	+4 +3	19.40	32.53	-3 +7	17.90	24.46	-5 +1	18.37	14.22	0 -7
22	22.48	37.00	+2 +6	19.32	32.31	-4 +5	17.88	24.15	-5 -3	18.41	13.88	+2 -6
23	22.36	36.93	0 +8	19.24	32.09	-5 +3	17.86	23.84	-3 -6	18.47	13.54	+4 -3
24	22.24	36.85	-2 +8	19.17	31.86	-5 -1	17.85	23.52	-1 -7	18.52	13.20	+4 0
25	22.12	36.76	-4 +7	19.10	31.63	-4 -4	17.84	23.21	+1 -7	18.58	12.87	+4 +4
26	22.00	36.67	-5 +5	19.03	31.40	-3 -6	17.83	22.89	+3 -5	18.64	12.53	+2 +7
27	21.89	36.57	-5 +1	18.96	31.16	0 -7	17.82	22.57	+4 -2	18.70	12.19	0 +8
28	21.77	36.47	-5 -2	18.89	30.92	+2 -7	17.82	22.25	+4 +2	18.76	11.85	-2 +8
29	21.66	36.36	-4 -5	18.82	30.67	+3 -4	17.81	21.92	+3 +6	18.83	11.52	-3 +5
30	21.54	36.25	-2 -7	18.76	30.42	+4 0	17.82	21.60	+1 +8	18.90	11.18	-4 +1
31	21.43	36.13	0 -7	18.70	30.16	+4 +4	17.82	21.27	-1 +9	18.97	10.84	-3 -4
32	21.32	36.00	+2 -5				17.82	20.94	-3 +7	19.04	10.51	-2 -7

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+81° 34' 10''	6.821	+6.747	+81° 34' 20''	6.823	+6.749	+81° 34' 30''	6.825	+6.752
20	6.823	+6.749	30	6.825	+6.752	40	6.827	+6.754

$$\alpha_{1945.0} = 9^h 29^m 24.66$$

$$\delta_{1945.0} = +81^\circ 34' 19.782$$

\*) Tag der doppelten unteren Kulmination: Aug. 14.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

195\*

Ne) i Hev. Draconis 4<sup>m</sup>58

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	9 <sup>h</sup> 29 <sup>m</sup>	+ 81° 34'	0.01   0.01	9 <sup>h</sup> 29 <sup>m</sup>	+ 81° 33'	0.01   0.01	9 <sup>h</sup> 29 <sup>m</sup>	+ 81° 33'	0.01   0.01	9 <sup>h</sup> 29 <sup>m</sup>	+ 81° 33'	0.01   0.01
1	19.04	10.51	-2 -7	22.11	61.20	+4 -10	26.80	54.36	+5 +2	32.07	52.04	0 +7
2	19.11	10.18	0 -10	22.24	60.93	+5 -7	26.97	54.20	+3 +5	32.25	52.05	-2 +7
3	19.18	9.84	+2 -10	22.37	60.65	+6 -4	27.14	54.06	+1 +7	32.42	52.07	-4 +5
4	19.26	9.51	+4 -9	22.51	60.39	+5 0	27.31	53.91	-1 +7	32.60	52.09	-5 +3
5	19.34	9.18	+5 -6	22.64	60.12	+4 +4	27.48	53.77	-3 +7	32.77	52.11	-5 0
6	19.42	8.85	+5 -2	22.78	59.86	+2 +6	27.65	53.64	-4 +5	32.94	52.15	-4 -3
7	19.51	8.52	+5 +2	22.92	59.60	0 +8	27.83	53.51	-5 +2	33.11	52.19	-3 -5
8	19.60	8.20	+3 +5	23.06	59.35	-2 +8	28.00	53.39	-5 -1	33.28	52.23	-1 -7
9	19.69	7.87	+1 +7	23.20	59.10	-3 +7	28.17	53.27	-4 -4	33.45	52.28	0 -7
10	19.78	7.55	-1 +8	23.34	58.85	-5 +5	28.34	53.15	-3 -6	33.62	52.33	+2 -5
11	19.87	7.22	-3 +8	23.48	58.60	-6 +2	28.52	53.05	-1 -7	33.79	52.40	+3 -1
12	19.97	6.90	-4 +6	23.63	58.36	-5 -1	28.69	52.94	+1 -6	33.96	52.46	+3 +3
13	20.06	6.58	-5 +4	23.77	58.12	-4 -4	28.87	52.85	+3 -3	34.12	52.54	+3 +7
14	20.16	6.27	-5 +1	23.92	57.88	-2 -6	29.04	52.76	+4 0	34.29	52.62	+1 +10
15	20.26	5.95	-5 -3	24.07	57.65	0 -7	29.22	52.67	+3 +5	34.45	52.70	-1 +11
16	20.36	5.64	-3 -6	24.22	57.42	+2 -5	29.40	52.59	+2 +8	34.62	52.79	-3 +9
17	20.47	5.33	-1 -7	24.38	57.20	+3 -2	29.58	52.52	0 +10	34.78	52.89	-5 +5
18	20.57	5.02	+1 -6	24.53	56.98	+4 +2	29.76	52.45	-2 +10	34.94	52.99	-5 0
19	20.68	4.71	+3 -4	24.69	56.77	+3 +6	29.94	52.38	-4 +7	35.10	53.09	-4 -4
20	20.79	4.40	+4 -1	24.85	56.56	+1 +9	30.12	52.32	-4 +3	35.26	53.20	-2 -8
21	20.90	4.10	+4 +3	25.00	56.35	-1 +9	30.30	52.27	-4 -2	35.42	53.32	+1 -11
22	21.01	3.80	+3 +7	25.16	56.15	-3 +8	30.48	52.22	-2 -7	35.57	53.44	+3 -10
23	21.13	3.50	+1 +9	25.32	55.95	-4 +4	30.65	52.18	0 -10	35.73	53.57	+5 -8
24	21.25	3.20	-1 +9	25.48	55.76	-4 0	30.83	52.14	+2 -11	35.88	53.71	+6 -5
25	21.37	2.91	-3 +6	25.64	55.57	-3 -5	31.01	52.11	+4 -10	36.03	53.85	+6 -1
26	21.49	2.62	-4 +2	25.81	55.38	-1 -9	31.19	52.08	+6 -7	36.18	53.99	+5 +3
27	21.61	2.33	-4 -2	25.97	55.20	+1 -11	31.36	52.06	+6 -3	36.33	54.14	+3 +6
28	21.73	2.04	-2 -6	26.13	55.02	+3 -11	31.54	52.05	+5 +1	36.47	54.30	+1 +7
29	21.86	1.76	0 -9	26.30	54.85	+5 -9	31.72	52.04	+4 +4	36.62	54.46	-1 +7
30	21.99	1.48	+2 -10	26.47	54.68	+6 -5	31.90	52.04	+2 +6	36.76	54.63	-3 +6
31	22.11	1.20	+4 -10	26.63	54.52	+6 -1	32.07	52.04	0 +7	36.90	54.80	-4 +4
32				26.80	54.36	+5 +2				37.04	54.97	-5 +1

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+81° 33' 50"	6.816	+6.743	+81° 34' 0"	6.819	+6.745	+81° 34' 10"	6.821	+6.747
60	6.819	+6.745	10	6.821	+6.747	20	6.823	+6.749

$$\alpha_{1945.0} = 9^h 29^m 24.66$$

$$\delta_{1945.0} = +81^\circ 34' 19.82$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

N/) 30 Hev. Camelopardalis 5<sup>m</sup>34

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	10 <sup>h</sup> 24 <sup>m</sup>	82° 50'	0.01   0.01	10 <sup>h</sup> 24 <sup>m</sup>	82° 50'	0.01   0.01	10 <sup>h</sup> 24 <sup>m</sup>	82° 50'	0.01   0.01	10 <sup>h</sup> 24 <sup>m</sup>	82° 50'	0.01   0.01
1	35.36	10.92	+2 -9	39.85	17.00	+5 0	41.41	25.68	+3 +5	39.94	34.82	-5 +8
2	35.54	11.03	+4 -8	39.95	17.27	+4 +4	41.41	26.00	+1 +8	39.85	35.07	-6 +5
3	35.71	11.16	+5 -5	40.05	17.54	+2 +7	41.41	26.31	-2 +9	39.76	35.32	-6 +2
4	35.89	11.29	+5 -2	40.14	17.81	0 +9	41.40	26.63	-4 +9	39.66	35.57	-6 -1
5	36.06	11.42	+4 +2	40.24	18.08	-3 +9	41.40	26.94	-5 +7	39.56	35.81	-4 -4
6	36.24	11.56	+3 +5	40.32	18.36	-5 +8	41.38	27.26	-6 +4	39.45	36.05	-1 -6
7	36.41	11.71	+1 +8	40.41	18.64	-6 +6	41.37	27.57	-6 +1	39.35	36.28	+1 -6
8	36.57	11.86	-1 +9	40.49	18.93	-6 +2	41.35	27.88	-5 -3	39.24	36.51	+3 -4
9	36.74	12.02	-3 +9	40.57	19.21	-6 -1	41.33	28.20	-3 -5	39.13	36.74	+5 -1
10	36.90	12.18	-5 +7	40.64	19.51	-4 -5	41.30	28.51	0 -7	39.02	36.96	+5 +3
11	37.06	12.35	-6 +4	40.71	19.80	-1 -7	41.27	28.81	+2 -6	38.90	37.18	+3 +6
12	37.22	12.53	-6 0	40.78	20.10	+1 -7	41.24	29.12	+4 -3	38.78	37.39	+1 +8
13	37.37	12.71	-5 -3	40.84	20.40	+4 -5	41.20	29.43	+5 0	38.66	37.60	-1 +8
14	37.53	12.89	-3 -6	40.91	20.70	+5 -2	41.16	29.74	+5 +4	38.54	37.80	-3 +5
15	37.68	13.08	0 -7	40.96	21.00	+5 +1	41.12	30.04	+3 +6	38.42	38.00	-4 +1
16	37.83	13.27	+2 -7	41.02	21.30	+4 +5	41.08	30.34	+1 +7	38.29	38.20	-4 -3
17	37.97	13.47	+4 -4	41.07	21.61	+2 +7	41.03	30.64	-2 +6	38.17	38.38	-3 -7
18	38.12	13.68	+5 -1	41.12	21.91	0 +7	40.98	30.94	-3 +3	38.04	38.57	0 -10
19	38.26	13.88	+5 +3	41.16	22.22	-2 +5	40.92	31.23	-4 -1	37.91	38.75	+2 -11
20	38.40	14.10	+3 +6	41.20	22.53	-4 +2	40.87	31.52	-3 -5	37.78	38.92	+4 -10
21	38.54	14.32	+1 +7	41.24	22.85	-4 -2	40.80	31.81	-2 -8	37.65	39.09	+5 -7
22	38.67	14.54	-1 +7	41.27	23.16	-3 -6	40.74	32.10	0 -10	37.51	39.25	+5 -4
23	38.80	14.77	-3 +5	41.30	23.48	-1 -8	40.67	32.38	+2 -10	37.37	39.41	+5 0
24	38.93	15.00	-4 +1	41.33	23.79	+1 -9	40.60	32.66	+4 -8	37.24	39.57	+4 +3
25	39.06	15.24	-4 -3	41.35	24.11	+3 -9	40.53	32.95	+5 -6	37.10	39.72	+2 +6
26	39.18	15.47	-3 -6	41.37 41.38	24.42 24.74	+4 -7 +5 -4	40.45	33.22	+5 -2	36.96	39.86	0 +8
27	39.30	15.72	-1 -9	41.40	25.05	+5 -1	40.37	33.50	+5 +1	36.82	40.00	-2 +8
28	39.42	15.97	+1 -9	41.40	25.37	+4 +2	40.29	33.77	+3 +4	36.68	40.13	-4 +8
29	39.53	16.22	+3 -8	41.41	25.68	+3 +5	40.21	34.04	+1 +7	36.54	40.26	-5 +6
30	39.64	16.47	+4 -6				40.12	34.30	-1 +8	36.40	40.38	-6 +3
31	39.75	16.74	+5 -3				40.04	34.56	-3 +9	36.25	40.49	-6 0
32	39.85	17.00	+5 0				39.94	34.82	-5 +8			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+82° 50' 10"	8.019	+7.956	+82° 50' 20"	8.022	+7.959	+82° 50' 40"	8.028	+7.966
20	8.022	+7.959	30	8.025	+7.962	50	8.031	+7.969

$$\alpha_{1945.0} = 10^{\text{h}} 24^{\text{m}} 33^{\text{s}}.34$$

$$\delta_{1945.0} = +82^{\circ} 50' 23''.60$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

197\*

Nf) 30 Hev. Camelopardalis 5<sup>m</sup>34

Tag	Mai			Juni				Juli				August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder		
		+ 82° 50'	in 0.01 0.01	10 <sup>h</sup> 24 <sup>m</sup>	+ 82° 50'	in 0.01 0.01	10 <sup>h</sup> 24 <sup>m</sup>	+ 82° 50'	in 0.01 0.01	10 <sup>h</sup> 24 <sup>m</sup>	+ 82° 50'	in 0.01 0.01		
1	36.25	40.49	-6 0	31.62	41.28	+2 -6	27.75	37.03	+5 +2	25.45	28.60	-2 +8		
2	36.11	40.60	-5 -3	31.47	41.22	+3 -4	27.64	36.81	+4 +6	25.41	28.28	-4 +5		
3	35.97	40.71	-2 -5	31.33	41.15	+4 0	27.54	36.59	+1 +8	25.37	27.96	-5 +1		
4	35.82	40.81	0 -6	31.18	41.07	+4 +4	27.43	36.37	-1 +9	25.34	27.64	-4 -3		
5	35.67	40.90	+2 -5	31.04	40.99	+3 +7	27.33	36.14	-3 +7	25.31	27.31	-2 -7		
6	35.53	40.99	+4 -2	30.90	40.90	+1 +9	27.24	35.91	-4 +4	25.28	26.98	0 -9		
7	35.38	41.07	+5 +1	30.75	40.81	-2 +9	27.14	35.67	-5 0	25.26	26.65	+2 -10		
8	35.23	41.15	+4 +5	30.61	40.71	-4 +6	27.05	35.43	-4 -5	25.24	26.31	+4 -9		
9	35.08	41.22	+2 +8	30.48	40.61	-5 +2	26.96	35.18	-2 -8	25.22	25.97	+5 -6		
10	34.93	41.29	0 +9	30.34	40.50	-4 -3	26.87	34.93	+1 -10	25.20	25.63	+6 -3		
11	34.77	41.35	-2 +7	30.20	40.38	-3 -7	26.79	34.68	+3 -10	25.18	25.29	+5 +1		
12	34.62	41.40	-4 +4	30.06	40.26	-1 -10	26.70	34.42	+5 -8	25.17	24.95	+4 +4		
13	34.47	41.45	-4 0	29.92	40.13	+2 -11	26.62	34.16	+6 -5	25.16	24.61	+2 +7		
14	34.32	41.49	-3 -5	29.79	40.00	+4 -10	26.53	33.90	+6 -1	25.15	24.26	-1 +8		
15	34.16	41.53	-2 -9	29.66	39.87	+5 -7	26.45	33.63	+5 +2	25.14	23.92	-3 +8		
16	34.01	41.56	+1 -11	29.53	39.73	+6 -4	26.38	33.36	+3 +5	25.14	23.57	-5 +7		
17	33.86	41.59	+3 -11	29.40	39.58	+5 0	26.30	33.09	+1 +7	25.14	23.22	-6 +5		
18	33.71	41.61	+5 -9	29.27	39.43	+4 +4	26.23	32.81	-1 +8	25.14	22.87	-6 +1		
19	33.56	41.62	+6 -6	29.14	39.28	+2 +6	26.16	32.53	-4 +8	25.14	22.52	-5 -2		
20	33.41	41.63	+6 -2	29.02	39.12	0 +8	26.09	32.25	-5 +6	25.15	22.16	-3 -5		
21	33.26	41.63	+5 +2	28.90	38.95	-2 +8	26.03	31.96	-6 +3	25.16	21.81	-1 -7		
22	33.11	41.63	+3 +5	28.78	38.78	-4 +7	25.96	31.67	-6 0	25.17	21.45	+1 -7		
23	32.96	41.62	+1 +7	28.65	38.61	-5 +5	25.90	31.38	-4 -4	25.18	21.10	+4 -5		
24	32.80	41.61	-1 +8	28.54	38.43	-6 +1	25.84	31.08	-2 -6	25.20	20.75	+5 -1		
25	32.65	41.59	-3 +8	28.42	38.24	-5 -2	25.78	30.79	0 -7	25.22	20.39	+5 +3		
26	32.50	41.56	-5 +6	28.30	38.05	-4 -5	25.73	30.48	+2 -6	25.24	20.03	+3 +6		
27	32.35	41.53	-6 +4	28.19	37.86	-1 -6	25.67	30.18	+4 -3	25.27	19.67	+1 +8		
28	32.20	41.49	-6 0	28.08	37.66	+1 -7	25.62	29.87	+5 0	*)25.30	19.31	-1 +8		
29	32.06	41.45	-5 -3	27.96	37.45	+3 -5	25.58	29.56	+4 +4	25.33	18.95	-3 +6		
30	31.91	41.40	-3 -5	27.86	37.24	+4 -2	25.53	29.24	+3 +7	25.36	18.59	-4 +2		
31	31.76	41.34	-1 -6	27.75	37.03	+5 +2	25.49	28.92	0 +8	25.39	18.23	-4 -2		
32	31.62	41.28	+2 -6				25.45	28.60	-2 +8	25.43	17.87	-3 -6		

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+82° 50' 10"	8.019	+7.956	+82° 50' 20"	8.022	+7.959	+82° 50' 40"	8.028	+7.966
20	8.022	+7.959	30	8.025	+7.962	50	8.031	+7.969

$$\alpha_{1945.0} = 10^h 24^m 33^s 34$$

$$\delta_{1945.0} = +82^\circ 50' 23''.60$$

\*) Tag der doppelten unteren Kulmination: Aug. 28.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nf) 30 Hev. Camelopardalis 5<sup>m</sup>34

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	10 <sup>h</sup> 24 <sup>m</sup>	82° 50'	o.or   o.or	10 <sup>h</sup> 24 <sup>m</sup>	82° 49'	o.or   o.or	10 <sup>h</sup> 24 <sup>m</sup>	82° 49'	o.or   o.or	10 <sup>h</sup> 24 <sup>m</sup>	82° 49'	o.or   o.or
		+	in		+	in		+	in		+	in
1	25.43	17.87	-3 - 6	27.71	67.30	+3 -10	32.18	58.33	+6 0	37.93	53.55	+1 + 7
2	25.47	17.51	-1 - 9	27.82	66.96	+5 - 9	32.36	58.10	+4 + 3	38.13	53.48	-1 + 7
3	25.51	17.15	+1 -10	27.93	66.63	+6 - 5	32.53	57.88	+2 + 6	38.33	53.41	-3 + 6
4	25.56	16.79	+3 - 9	28.05	66.31	+6 - 2	32.71	57.65	0 + 7	38.54	53.35	-5 + 5
5	25.60	16.43	+5 - 7	28.17	65.98	+5 + 2	32.89	57.44	-2 + 7	38.74	53.29	-5 + 2
6	25.65	16.07	+6 - 4	28.29	65.66	+3 + 5	33.07	57.23	-4 + 6	38.94	53.25	-5 - 1
7	25.71	15.71	+5 0	28.42	65.34	+1 + 7	33.25	57.02	-5 + 4	39.14	53.20	-4 - 4
8	25.76	15.35	+4 + 3	28.55	65.02	-1 + 8	33.44	56.82	-6 + 2	39.34	53.17	-3 - 6
9	25.82	14.99	+2 + 6	28.68	64.71	-3 + 8	33.63	56.62	-6 - 1	39.55	53.14	0 - 6
10	25.88	14.63	0 + 8	28.81	64.40	-5 + 6	33.81	56.43	-4 - 4	39.75	53.11	+2 - 5
11	25.94	14.27	-2 + 8	28.94	64.08	-6 + 4	34.00	56.24	-2 - 6	39.95	53.09	+4 - 3
12	26.00	13.91	-4 + 8	29.07	63.78	-6 + 1	34.19	56.05	0 - 6	40.16	53.07	+4 + 1
13	26.07	13.55	-5 + 6	29.21	63.47	-5 - 2	34.38	55.87	+3 - 4	40.36	53.07	+4 + 5
14	26.14	13.19	-6 + 3	29.35	63.17	-3 - 5	34.57	55.70	+4 - 1	40.56	53.07	+2 + 9
15	26.21	12.83	-6 0	29.49	62.87	-1 - 6	34.76	55.53	+4 + 3	40.76	53.07	0 +10
16	26.29	12.48	-5 - 4	29.63	62.58	+1 - 5	34.95	55.36	+3 + 7	40.96	53.08	-3 + 9
17	26.37	12.13	-2 - 6	29.78	62.29	+4 - 3	35.15	55.20	+1 + 9	41.15	53.10	-4 + 7
18	26.45	11.77	0 - 6	29.93	62.00	+5 0	35.34	55.05	-1 +10	41.35	53.13	-5 + 2
19	26.53	11.42	+3 - 5	30.08	61.72	+4 + 4	35.53	54.90	-3 + 8	41.55	53.16	-5 - 3
20	26.61	11.07	+4 - 2	30.23	61.43	+3 + 7	35.73	54.76	-5 + 4	41.75	53.19	-3 - 7
21	26.70	10.71	+5 + 1	30.38	61.15	+1 + 9	35.92	54.62	-5 - 1	41.95	53.23	0 -10
22	26.79	10.37	+4 + 5	30.54	60.88	-2 + 8	36.12	54.49	-4 - 6	42.14	53.28	+2 -11
23	26.88	10.02	+2 + 8	30.69	60.60	-4 + 5	36.32	54.36	-2 - 9	42.34	53.34	+5 -10
24	26.98	9.67	0 + 8	30.85	60.33	-5 + 1	36.51	54.24	+1 -11	42.53	53.40	+6 - 7
25	27.07	9.33	-2 + 7	31.01	60.07	-4 - 3	36.71	54.13	+4 -11	42.72	53.47	+6 - 3
26	27.17	8.99	-4 + 4	31.17	59.81	-2 - 8	36.92	54.02	+6 - 9	42.91	53.54	+6 + 1
27	27.28	8.64	-4 - 1	31.34	59.56	0 -11	37.12	53.92	+6 - 5	43.10	53.62	+4 + 4
28	27.38	8.31	-3 - 5	31.50	59.31	+2 -11	37.32	53.82	+6 - 2	43.28	53.71	+2 + 6
29	27.49	7.97	-2 - 9	31.67	59.06	+4 -10	37.52	53.72	+5 + 2	43.47	53.80	0 + 7
30	27.60	7.63	+1 -10	31.84	58.81	+6 - 7	37.73	53.64	+3 + 5	43.65	53.90	-3 + 7
31	27.71	7.30	+3 -10	32.01	58.57	+6 - 4	37.93	53.55	+1 + 7	43.83	54.00	-4 + 5
32				32.18	58.33	+6 0				44.01	54.11	-5 + 3

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+82° 49' 50''	8.013	+7.950	+82° 50' 0''	8.016	+7.953	+82° 50' 10''	8.019	+7.956
60	8.016	+7.953	10	8.019	+7.956	20	8.022	+7.959

$$\alpha_{1945.0} = 10^h 24^m 33^s.34$$

$$\delta_{1945.0} = +82^\circ 50' 23''.60$$



Ng)  $\epsilon$  Ursae minoris 4.<sup>m</sup>40

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	<sup>a.or</sup>   <sup>b.or</sup>	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	<sup>a.or</sup>   <sup>b.or</sup>	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	<sup>a.or</sup>   <sup>b.or</sup>	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	<sup>a.or</sup>   <sup>b.or</sup>
		+   in			+   in			+   in			+   in	
I	24.24	46.93	-3 -1	27.33	37.90	0 -8	31.62	34.13	+1 -8	36.47	35.88	+3 +2
2	24.30	46.58	-2 -4	27.47	37.69	+2 -7	31.79	34.09	+2 -6	36.60	36.04	+2 +6
3	24.36	46.24	-1 -7	27.61	37.48	+2 -5	31.95	34.06	+3 -3	36.74	36.20	+1 +9
4	24.42	45.90	0 -8	27.74	37.27	+3 -2	32.11	34.03	+3 0	36.88	36.36	0 +10
5	24.49	45.56	+1 -8	27.89	37.07	+3 +2	32.28	34.01	+3 +4	37.01	36.53	-1 +10
6	24.56	45.23	+2 -7	28.03	36.88	+3 +6	32.44	33.99	+2 +7	37.14	36.71	-2 +7
7	24.63	44.89	+3 -4	28.17	36.69	+2 +9	32.61	33.99	+1 +10	37.27	36.89	-2 +3
8	24.71	44.57	+3 0	28.32	36.51	0 +10	32.77	33.99	0 +10	37.40	37.07	-2 -1
9	24.79	44.24	+3 +3	28.47	36.33	-1 +10	32.93	33.99	-1 +9	37.53	37.26	-1 -5
10	24.88	43.92	+2 +7	28.61	36.16	-2 +7	33.10	34.00	-2 +6	37.66	37.46	0 -8
11	24.96	43.60	+1 +9	28.77	36.00	-2 +4	33.26	34.02	-2 +1	37.78	37.66	+1 -9
12	25.06	43.29	0 +10	28.92	35.84	-2 -1	33.41	34.05	-2 -3	37.90	37.86	+2 -7
13	25.15	42.98	-1 +9	29.07	35.69	-2 -5	33.57	34.08	-1 -7	38.02	38.07	+3 -4
14	25.24	42.67	-2 +6	29.22	35.54	0 -8	33.73	34.12	0 -9	38.14	38.28	+2 0
15	25.34	42.37	-2 +2	29.38	35.40	+1 -9	33.89	34.16	+1 -8	38.26	38.50	+1 +4
16	25.44	42.07	-2 -3	29.53	35.27	+2 -8	34.05	34.21	+2 -6	38.37	38.72	0 +7
17	25.54	41.78	-1 -6	29.69	35.14	+3 -5	34.21	34.27	+2 -2	38.48	38.95	-1 +7
18	25.64	41.49	0 -8	29.84	35.02	+2 -1	34.37	34.34	+2 +2	38.59	39.18	-3 +6
19	25.75	41.20	+1 -8	30.00	34.91	+1 +3	34.52	34.41	+1 +5	38.69	39.42	-3 +4
20	25.86	40.92	+2 -6	30.16	34.80	0 +6	34.68	34.48	-1 +7	38.80	39.66	-4 0
21	25.97	40.64	+2 -3	30.32	34.70	-1 +7	34.83	34.57	-2 +7	38.90	39.90	-3 -4
22	26.08	40.37	+2 +1	30.48	34.61	-2 +7	34.99	34.66	-3 +5	39.00	40.15	-2 -7
23	26.20	40.10	+1 +4	30.64	34.52	-3 +4	35.14	34.76	-3 +2	39.09	40.40	-1 -8
24	26.31	39.83	0 +7	30.81	34.44	-3 +1	35.29	34.86	-3 -1	39.19	40.65	0 -8
25	26.43	39.57	-1 +7	30.97	34.37	-3 -2	35.44	34.97	-3 -4	39.28	40.91	+1 -7
26	26.55	39.32	-2 +6	31.14	34.30	-2 -5	35.60	35.08	-2 -7	39.37	41.17	+2 -5
27	26.68	39.07	-3 +3	31.30	34.24	-1 -7	35.74	35.20	0 -8	39.46	41.43	+3 -2
28	26.80	38.82	-3 0	31.46	34.18	0 -8	35.89	35.33	+1 -8	39.54	41.70	+3 +1
29	26.93	38.58	-3 -3	31.62	34.13	+1 -8	36.04	35.46	+2 -7	39.63	41.97	+2 +4
30	27.06	38.35	-2 -6				36.18	35.59	+2 -4	39.71	42.25	+2 +8
31	27.19	38.12	-1 -8				36.32	35.74	+3 -1	39.78	42.52	+1 +10
32	27.33	37.90	0 -8				36.47	35.88	+3 +2			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+82° 7' 30"	7.299	+7.230	+82° 7' 40"	7.301	+7.232
40	7.301	+7.232	50	7.304	+7.235

$$\alpha_{1945.0} = 16^h 51^m 31.65$$

$$\delta_{1945.0} = +82^\circ 7' 51.16$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Ng) ε Ursae minoris 4<sup>m</sup>40

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	+ in o.or   o.or	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	+ in o.or   o.or	16 <sup>h</sup> 51 <sup>m</sup>	82° 8'	+ in o.or   o.or	16 <sup>h</sup> 51 <sup>m</sup>	82° 8'	+ in o.or   o.or
1	39.78	42.52	+1 +10	40.84	51.96	-2 +2	39.28	1.03	+1 -9	35.52	7.32	+2 +2
2	39.86	42.81	o +10	40.83	52.27	-2 -2	39.19	1.29	+2 -8	35.38	7.46	+1 +5
3	39.93	43.09	-1 +8	40.82	52.58	-1 -6	39.10	1.54	+3 -5	35.22	7.60	o +8
4	40.00	43.37	-2 +5	40.80 40.78	52.90 53.21	o -8 +2 -8	39.01	1.80	+3 -1	35.07	7.73	-1 +8
5	40.07	43.66	-2 +1	40.76	53.52	+3 -7	38.91	2.04	+2 +3	34.92	7.85	-3 +6
6	40.13	43.95	-1 -3	40.74	53.83	+3 -3	38.81	2.29	+1 +7	34.76	7.97	-3 +3
7	40.19	44.24	o -7	40.71	54.14	+3 +1	38.71	2.53	-1 +8	34.60	8.08	-3 -1
8	40.25	44.53	+1 -8	40.68	54.44	+2 +5	38.60	2.77	-2 +7	34.45	8.19	-3 -5
9	40.31	44.83	+2 -8	40.65	54.75	o +7	38.49	3.00	-3 +5	34.28	8.29	-2 -8
10	40.36	45.13	+3 -5	40.62	55.06	-1 +8	38.38	3.23	-3 +1	34.12	8.39	-1 -9
11	40.42	45.43	+3 -1	40.58	55.36	-3 +6	38.27	3.46	-3 -3	33.96	8.49	+1 -9
12	40.46	45.73	+2 +3	40.54	55.66	-3 +3	38.16	3.69	-2 -6	33.80	8.58	+2 -7
13	40.51	46.04	+1 +6	40.50	55.97	-4 o	38.04	3.91	-1 -8	33.64	8.67	+3 -5
14	40.56	46.34	-1 +8	40.45	56.26	-3 -4	37.93	4.12	o -9	33.47	8.75	+3 -1
15	40.60	46.65	-2 +7	40.40	56.56	-2 -7	37.81	4.34	+1 -8	33.31	8.82	+3 +3
16	40.64	46.96	-3 +5	40.35	56.86	-1 -9	37.69	4.55	+2 -6	33.14	8.90	+2 +6
17	40.67	47.26	-4 +2	40.30	57.15	o -9	37.57	4.75	+3 -3	32.98	8.96	+1 +9
18	40.70	47.57	-3 -2	40.24	57.44	+1 -8	37.44	4.95	+3 o	32.81	9.02	o +10
19	40.73	47.88	-3 -6	40.19	57.74	+2 -5	37.32	5.14	+2 +4	32.64	9.08	-1 +9
20	40.76	48.19	-2 -8	40.12	58.02	+3 -2	37.19	5.33	+2 +7	32.47	9.13	-2 +7
21	40.78	48.50	o -9	40.06	58.31	+3 +2	37.06	5.52	+1 +9	32.30	9.18	-2 +3
22	40.80	48.82	+1 -8	39.99	58.59	+2 +5	36.93	5.71	o +10	32.13	9.22	-2 -1
23	40.81	49.13	+2 -7	39.93	58.88	+1 +8	36.80	5.89	-1 +8	31.96	9.26	-1 -5
24	40.83	49.45	+2 -4	39.85	59.15	o +10	36.66	6.06	-2 +5	31.79	9.29	o -8
25	40.84	49.76	+3 o	39.78	59.43	-1 +9	36.53	6.24	-2 +1	31.62	9.31	+1 -9
26	40.85	50.08	+2 +3	39.70	59.70	-2 +7	36.39	6.41	-2 -3	31.45	9.34	+2 -7
27	40.86	50.39	+2 +6	39.62	59.97	-2 +4	36.25	6.57	-1 -7	31.27	9.35	+3 -4
28	40.86	50.70	+1 +9	39.54	60.24	-2 o	36.11	6.73	o -8	31.09	9.36	+3 o
29	40.86	51.02	o +10	39.46	60.51	-1 -4	35.96	6.88	+2 -8	30.92	9.37	+2 +4
30	40.86	51.33	-1 +9	39.37	60.77	o -7	35.82	7.03	+3 -6	30.74	9.37	o +7
31	40.85	51.64	-2 +6	39.28	61.03	+1 -9	35.67	7.18	+3 -3	30.57	9.37	-1 +8
32	40.84	51.96	-2 +2				35.52	7.32	+2 +2	30.39	9.36	-2 +7

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
+82° 7' 40"	7.301	+7.232	+82° 7' 50"	7.304	+7.235	+82° 8' 0"	7.306	+7.238
50	7.304	+7.235	60	7.306	+7.238	10	7.309	+7.240

$$\alpha_{1945.0} = 16^h 51^m 31^s.65$$

$$\delta_{1945.0} = +82^\circ 7' 51''.16$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

201\*

Ng) ε Ursae minoris 4<sup>m</sup>40

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
		+	in		+	in		+	in		+	in
	16 <sup>h</sup> 51 <sup>m</sup>	82° 8'	o.oI   o.oI	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	o.oI   o.oI	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	o.oI   o.oI	16 <sup>h</sup> 51 <sup>m</sup>	82° 7'	o.oI   o.oI
1	30.39	9.36	-2 + 7	25.17	66.75	-3 - 2	20.67	59.62	o - 9	18.29	49.57	+2 - 3
2	30.22	9.34	-3 + 4	25.00	66.59	-3 - 6	20.56	59.33	+1 - 7	18.25	49.21	+2 + 1
3	30.04	9.32	-3 o	24.83	66.42	-2 - 8	20.44	59.03	+2 - 5	18.22	48.84	+2 + 4
4	29.86	9.30	-3 - 3	24.67	66.25	o - 9	20.33	58.73	+2 - 1	*18.19	48.47	+1 + 7
5	29.69	9.27	-2 - 7	24.51	66.07	+1 - 9	20.22	58.42	+2 + 2	18.16	48.10	o + 9
6	29.51	9.23	-1 - 8	24.35	65.89	+2 - 7	20.11	58.12	+2 + 5	18.14	47.73	-1 + 9
7	29.33	9.19	o - 9	24.19	65.70	+2 - 4	20.01	57.80	+1 + 8	18.12	47.36	-1 + 8
8	29.16	9.15	+1 - 8	24.03	65.51	+3 o	19.91	57.49	o + 9	18.10	46.99	-2 + 6
9	28.98	9.10	+2 - 6	23.87	65.31	+2 + 3	19.81	57.17	-1 + 10	18.08	46.62	-2 + 2
10	28.80	9.05	+3 - 2	23.71	65.11	+2 + 7	19.71	56.85	-1 + 8	18.07	46.25	-2 - 2
11	28.63	8.99	+3 + 1	23.55	64.91	+1 + 9	19.62	56.53	-2 + 4	18.06	45.88	-1 - 6
12	28.45	8.92	+2 + 5	23.40	64.70	o + 10	19.53	56.20	-2 o	18.05	45.51	+1 - 8
13	28.27	8.85	+2 + 8	23.25	64.49	-1 + 9	19.44	55.87	-1 - 4	18.05	45.14	+2 - 8
14	28.10	8.78	+1 + 10	23.10	64.27	-2 + 7	19.35	55.54	o - 7	18.05	44.77	+3 - 6
15	27.92	8.70	o + 10	22.95	64.05	-2 + 3	19.27	55.21	+1 - 9	18.06	44.40	+3 - 2
16	27.74	8.61	-1 + 8	22.80	63.82	-2 - 2	19.18	54.87	+2 - 8	18.06	44.03	+3 + 2
17	27.57	8.52	-2 + 5	22.65	63.58	-1 - 5	19.11	54.53	+3 - 5	18.08	43.66	+2 + 6
18	27.39	8.43	-2 + 1	22.51	63.34	+1 - 8	19.03	54.19	+3 - 1	18.09	43.29	o + 8
19	27.22	8.33	-1 - 4	22.37	63.10	+2 - 9	18.95	53.85	+2 + 4	18.10	42.92	-1 + 9
20	27.04	8.23	o - 7	22.23	62.86	+3 - 7	18.88	53.50	+1 + 7	18.12	42.55	-3 + 7
21	26.87	8.12	+1 - 9	22.09	62.61	+3 - 3	18.81	53.15	-1 + 8	18.14	42.18	-4 + 3
22	26.69	8.00	+2 - 8	21.95	62.36	+3 + 1	18.74	52.80	-2 + 8	18.17	41.82	-4 - 1
23	26.52	7.88	+3 - 6	21.82	62.10	+1 + 5	18.68	52.45	+3 + 5	18.20	41.45	-3 - 5
24	26.35	7.76	+3 - 2	21.68	61.84	o + 8	18.62	52.09	-4 + 1	18.23	41.09	-2 - 8
25	26.17	7.63	+2 + 3	21.55	61.58	-2 + 8	18.57	51.74	-4 - 3	18.26	40.73	-1 - 10
26	26.00	7.49	+1 + 6	21.42	61.31	-3 + 6	18.51	51.38	-3 - 7	18.30	40.37	+1 - 10
27	25.84	7.35	-1 + 8	21.29	61.04	-4 + 3	18.47	51.02	-2 - 9	18.34	40.01	+2 - 7
28	25.67	7.21	-2 + 7	21.16	60.76	-4 - 1	18.42	50.66	o - 10	18.39	39.66	+2 - 4
29	25.50	7.06	-3 + 5	21.04	60.48	-3 - 5	18.37	50.30	+1 - 9	18.44	39.30	+2 - 1
30	25.33	6.91	-4 + 2	20.91	60.20	-2 - 8	18.33	49.93	+2 - 6	18.48	38.95	+2 + 3
31	25.17	6.75	-3 - 2	20.79	59.91	-1 - 9	18.29	49.57	+2 - 3	18.54	38.60	+2 + 6
32				20.67	59.62	o - 9				18.59	38.25	+1 + 9

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
+82° 7' 30"	7.299	+7.230	+82° 7' 40"	7.301	+7.232	+82° 8' 0"	7.306	+7.238
40	7.301	+7.232	50	7.304	+7.235	10	7.309	+7.240

$$\alpha_{1945.0} = 16^h 51^m 31.65$$

$$\delta_{1945.0} = +82^\circ 7' 51.716$$

\*) Tag der doppelten unteren Kulmination: Dez. 4.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nh)  $\delta$  Ursae minoris 4<sup>m</sup>44

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	17 <sup>h</sup> 49 <sup>m</sup>	+ 86° 36'	o.oi   o.oi	17 <sup>h</sup> 49 <sup>m</sup>	+ 86° 36'	o.oi   o.oi	17 <sup>h</sup> 49 <sup>m</sup>	+ 86° 36'	o.oi   o.oi	17 <sup>h</sup> 50 <sup>m</sup>	+ 86° 36'	o.oi   o.oi
1	39.01	38.56	-9 +1	43.15	28.65	-1 -8	51.49	23.05	+1 -8	2.63	22.38	+9 0
2	39.04	38.21	-8 -2	43.39	28.38	+2 -8	51.84	22.93	+4 -7	2.97	22.46	+9 +4
3	39.08	37.86	-6 -5	43.63	28.11	+5 -6	52.19	22.82	+7 -5	3.32	22.55	+7 +7
4	39.12	37.51	-3 -7	43.88	27.85	+8 -4	52.54	22.72	+9 -2	3.67	22.64	+5 +9
5	39.17	37.16	0 -8	44.13	27.60	+10 0	52.89	22.62	+10 +2	4.01	22.74	+1 +10
6	39.23	36.81	+3 -8	44.39	27.35	+9 +3	53.24	22.53	+9 +5	4.35	22.84	-2 +8
7	39.29	36.47	+7 -6	44.65	27.10	+8 +7	53.60	22.44	+7 +8	4.69	22.95	-5 +5
8	39.36	36.13	+9 -2	44.92	26.86	+5 +9	53.96	22.36	+3 +10	5.02	23.06	-6 0
9	39.44	35.79	+9 +1	45.19	26.63	+1 +10	54.32	22.29	0 +9	5.35	23.18	-5 -4
10	39.53	35.45	+8 +5	45.47	26.40	-2 +8	54.68	22.22	-4 +7	5.67	23.31	-3 -8
11	39.62	35.11	+6 +8	45.75	26.17	-5 +5	55.04	22.16	-6 +3	6.00	23.44	+1 -9
12	39.72	34.77	+3 +9	46.04	25.95	-7 +1	55.40	22.11	-6 -2	6.31	23.58	+4 -9
13	39.83	34.44	-1 +9	46.33	25.73	-6 -4	55.77	22.06	-5 -6	6.63	23.72	+6 -6
14	39.94	34.11	-4 +7	46.62	25.52	-4 -7	56.14	22.02	-2 -8	6.95	23.87	+7 -2
15	40.06	33.78	-7 +3	46.92	25.32	-1 -9	56.51	21.98	+2 -9	7.26	24.02	+6 +3
16	40.19	33.45	-7 -1	47.22	25.12	+2 -9	56.87	21.96	+4 -7	7.56	24.18	+2 +6
17	40.32	33.13	-6 -5	47.53	24.92	+5 -6	57.24	21.93	+6 -4	7.87	24.34	-1 +8
18	40.47	32.81	-3 -8	47.84	24.73	+6 -2	57.60	21.92	+6 0	8.17	24.51	-5 +8
19	40.62	32.49	+1 -9	48.16	24.55	+5 +2	57.96	21.91	+4 +4	8.46	24.68	-9 +6
20	40.77	32.18	+4 -8	48.48	24.37	+3 +5	58.33	21.91	+1 +7	8.75	24.86	-10 +3
21	40.94	31.87	+6 -5	48.80	24.20	0 +8	58.69	21.91	-3 +8	9.03	25.05	-10 -1
22	41.11	31.56	+6 -1	49.13	24.04	-4 +8	59.05	21.93	-7 +7	9.31	25.24	-8 -4
23	41.29	31.25	+5 +3	49.46	23.88	-7 +6	59.42	21.94	-9 +4	9.59	25.43	-6 <sup>1</sup> / <sub>7</sub>
24	41.47	30.94	+2 +6	49.79	23.72	-9 +3	59.78	21.97	-10 +1	9.86	25.63	-2 -8
25	41.66	30.64	-1 +8	50.12	23.57	-9 0	60.14	22.00	-9 -2	10.13	25.83	+1 -8
26	41.85	30.34	-5 +7	50.46	23.43	-8 -3	60.50	22.03	-7 -5	10.40	26.04	+4 -7
27	42.05	30.05	-7 +5	50.80	23.30	-6 -6	60.86	22.07	-4 -7	10.66	26.25	+7 -4
28	42.26	29.76	-9 +2	51.14	23.17	-3 -8	61.22	22.12	-1 -8	10.91	26.46	+8 -1
29	42.47	29.48	-9 -1	51.49	23.05	+1 -8	61.57	22.18	+2 -7	11.16	26.68	+9 +3
30	42.69	29.20	-7 -4				61.93	22.24	+5 -6	11.41	26.90	+8 +6
31	42.92	28.92	-4 -7				62.28	22.31	+8 -3	11.65	27.13	+5 +8
32	43.15	28.65	-1 -8				62.63	22.38	+9 0			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+86° 36' 20''	16.889	+16.860	+86° 36' 30''	16.903	+16.873
30	16.903	+16.873	40	16.917	+16.887

$$\alpha_{1945.0} = 17^{\text{h}} 49^{\text{m}} 55^{\text{s}}.54$$

$$\delta_{1945.0} = +86^{\circ} 36' 39''.33$$



(Nh)  $\delta$  Ursae minoris 4<sup>m</sup>44

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	+ in		o.or   o.or	+ in		o.or   o.or	+ in		o.or   o.or	+ in		o.or   o.or
	17 <sup>h</sup> 50 <sup>m</sup>	86° 36'		17 <sup>h</sup> 50 <sup>m</sup>	86° 36'		17 <sup>h</sup> 50 <sup>m</sup>	86° 36'		17 <sup>h</sup> 49 <sup>m</sup>	86° 36'	
1	11.65	27.13	+ 5 + 8	16.23	35.68	- 5 + 4	14.75	45.21	o - 9	67.58	53.18	+7 o
2	11.88	27.36	+ 2 +10	16.28	35.99	- 6 - 1	14.60	45.51	+ 3 - 9	67.27	53.39	+6 + 4
3	12.11	27.60	- 1 + 9	16.32	36.31	- 4 - 5	14.45	45.80	+ 6 - 6	66.96	53.60	+2 + 7
4	12.34	27.84	- 4 + 6	16.36	36.62	- 2 - 8	14.29	46.09	+ 8 - 3	66.64	53.80	-1 + 8
5	12.56	28.08	- 5 + 2	16.39	36.93	+ 2 - 9	14.12	46.38	+ 7 + 2	66.32	54.00	-5 + 8
6	12.77	28.33	- 5 - 2	16.41	37.25	+ 5 - 8	13.95	46.67	+ 5 + 6	65.99	54.19	-8 + 5
7	12.98	28.57	- 3 - 6	16.43	37.56	+ 8 - 5	13.77	46.95	+ 1 + 8	65.66	54.38	-9 + 1
8	13.18	28.83	o - 9	16.44	37.87	+ 8 - 1	13.59	47.23	- 3 + 8	65.32	54.56	-9 - 3
9	13.37	29.08	+ 3 - 9	16.44	38.18	+ 7 + 3	13.40	47.51	- 7 + 7	64.98	54.74	-7 - 6
10	13.56	29.34	+ 6 - 7	16.44	38.49	+ 3 + 7	13.20	47.79	- 9 + 4	64.64	54.92	-5 - 8
11	13.75	29.60	+ 8 - 3	16.43	38.79	- 1 + 9	13.00	48.06	-10 o	64.29	55.10	-1 - 9
12	13.93	29.87	+ 7 + 1	16.41	39.10	- 5 + 8	12.80	48.33	- 9 - 4	63.94	55.27	+2 - 8
13	14.10	30.14	+ 5 + 5	16.39	39.41	- 8 + 6	12.59	48.60	- 7 - 7	63.59	55.43	+6 - 6
14	14.27	30.41	+ 1 + 8	16.35	39.73	-10 + 2	12.37	48.87	- 3 - 8	63.23	55.60	+8 - 3
15	14.43	30.68	- 3 + 8	16.33	40.04	-10 - 2	12.15	49.14	o - 9	62.87	55.76	+9 + 1
16	14.59	30.96	- 7 + 7	16.29	40.35	- 8 - 5	11.92	49.40	+ 4 - 7	62.51	55.91	+8 + 4
17	14.74	31.24	-10 + 4	16.24	40.66	- 6 - 8	11.69	49.66	+ 7 - 5	62.14	56.06	+6 + 7
18	14.88	31.52	-11 o	16.18	40.97	- 2 - 9	11.45	49.92	+ 8 - 2	61.77	56.20	+4 + 9
19	15.02	31.81	-10 - 3	16.12	41.28	+ 2 - 8	11.21	50.17	+ 9 + 2	61.40	56.34	o +10
20	15.15	32.09	- 7 - 6	16.06	41.59	+ 5 - 6	10.96	50.42	+ 7 + 6	61.02	56.48	-3 + 8
21	15.27	32.38	- 4 - 8	15.98	41.89	+ 7 - 3	10.70	50.67	+ 5 + 8	60.64	56.61	-6 + 5
22	15.39	32.67	o - 8	15.90	42.20	+ 8 o	10.44	50.92	+ 2 + 9	60.26	56.74	-6 o
23	15.50	32.97	+ 3 - 7	15.82	42.51	+ 8 + 4	10.18	51.16	- 1 + 9	59.87	56.87	-6 - 4
24	15.61	33.26	+ 6 - 5	15.72	42.82	+ 6 + 7	9.91	51.40	- 4 + 6	59.48	56.99	-3 - 8
25	15.71	33.56	+ 8 - 2	15.63	43.12	+ 4 + 9	9.64	51.63	- 6 + 3	59.09	57.10	o - 9
26	15.80	33.86	+ 8 + 1	15.52	43.43	o +10	9.36	51.86	- 6 - 2	58.70	57.21	+4 - 9
27	15.89	34.16	+ 7 + 5	15.41	43.73	- 3 + 8	9.08	52.09	- 5 - 6	58.30	57.32	+6 - 6
28	15.97	34.46	+ 6 + 8	15.29	44.03	- 5 + 5	8.79	52.32	- 2 - 8	57.91	57.42	+7 - 2
29	16.05	34.76	+ 3 + 9	15.17	44.33	- 6 + 1	8.49	52.54	+ 2 - 9	57.50	57.51	+6 + 3
30	16.12	35.06	o + 9	15.03	44.62	- 6 - 3	8.19	52.76	+ 5 - 8	57.10	57.60	+3 + 6
31	16.18	35.37	- 3 + 7	14.90	44.92	- 3 - 7	7.89	52.97	+ 7 - 4	56.70	57.69	-1 + 8
32	16.23	35.68	- 5 + 4	14.75	45.21	o - 9	7.58	53.18	+ 7 o	56.29	57.77	-4 + 8

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+86° 36' 20"	16.889	+16.860	+86° 36' 30"	16.903	+16.873	+86° 36' 50"	16.931	+16.901
30	16.903	+16.873	40	16.917	+16.887	60	16.945	+16.915

$$\alpha_{1945.0} = 17^h 49^m 55^s.54$$

$$\delta_{1945.0} = +86^\circ 36' 39''.33$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nh)  $\delta$  Ursae minoris 4<sup>m</sup>44

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			+      in			+      in			+      in			+      in
	17 <sup>h</sup> 49 <sup>m</sup>	86° 36'	o.oi   o.oi	17 <sup>h</sup> 49 <sup>m</sup>	86° 36'	o.oi   o.oi	17 <sup>h</sup> 49 <sup>m</sup>	86° 36'	o.oi   o.oi	17 <sup>h</sup> 49 <sup>m</sup>	86° 36'	o.oi   o.oi
1	56.29	57.77	- 4 + 8	43.58	57.99	-11 0	31.25	53.59	- 2 - 9	22.81	45.41	+ 6 - 5
2	55.88	57.85	- 8 + 6	43.15	57.92	-10 - 4	30.90	53.37	+ 1 - 8	22.61	45.09	+ 7 - 1
3	55.47	57.92	- 9 + 3	42.72	57.84	- 7 - 7	30.55	53.15	+ 4 - 6	22.43	44.77	+ 7 + 3
4	55.06	57.99	-10 - 1	42.30	57.76	- 4 - 8	30.21	52.92	+ 7 - 3	22.25	44.44	+ 6 + 6
5	54.64	58.05	- 8 - 5	41.88	57.68	0 - 9	29.87	52.69	+ 8 0	22.07	44.11	+ 4 + 8
6	54.23	58.11	- 6 - 7	41.46	57.59	+ 3 - 8	29.54	52.46	+ 8 + 4	21.90	43.78	+ 2 + 9
7	53.81	58.16	- 2 - 9	41.04	57.49	+ 6 - 5	29.21	52.22	+ 6 + 7	21.74	43.45	- 1 + 9
8	53.39	58.21	+ 1 - 9	40.62	57.39	+ 8 - 2	28.88	51.98	+ 4 + 9	21.59	43.11	- 4 + 7
9	52.97	58.25	+ 4 - 7	40.20	57.29	+ 8 + 2	28.56	51.74	+ 1 + 9	21.44	42.77	- 5 + 3
10	52.55	58.29	+ 7 - 4	39.78	57.18	+ 8 + 5	28.24	51.49	- 2 + 8	21.30	42.44	- 5 - 1
11	52.13	58.33	+ 8 - 1	39.37	57.07	+ 6 + 8	27.93	51.23	- 4 + 6	21.16	42.10	- 4 - 5
12	51.70	58.36	+ 9 + 3	38.95	56.95	+ 3 + 9	27.62	50.98	- 5 + 2	21.04	41.76	- 1 - 8
13	51.28	58.38	+ 7 + 6	38.54	56.83	0 + 10	27.32	50.71	- 5 - 3	20.92	41.41	+ 3 - 9
14	50.85	58.40	+ 5 + 9	38.14	56.70	- 3 + 7	27.02	50.45	- 2 - 7	20.80	41.07	+ 7 - 8
15	50.43	58.42	+ 2 + 10	37.73	56.57	- 5 + 4	26.73	50.18	+ 1 - 9	20.70	40.72	+ 9 - 5
16	50.00	58.43	- 1 + 9	37.33	56.43	- 5 0	26.45	49.90	+ 5 - 9	20.60	40.37	+ 9 0
17	49.57	58.43	- 4 + 6	36.93	56.28	- 4 - 5	26.17	49.62	+ 8 - 7	20.51	40.02	+ 7 + 4
18	49.14	58.43	- 6 + 2	36.53	56.13	- 1 - 8	25.89	49.34	+ 9 - 3	20.43	39.67	+ 4 + 8
19	48.71	58.43	- 6 - 2	36.14	55.98	+ 2 - 9	25.62	49.06	+ 8 + 2	*)20.35	39.32	- 1 + 9
20	48.28	58.42	- 4 - 6	35.74	55.83	+ 5 - 8	25.35	48.77	+ 5 + 6	20.28	38.96	- 6 + 8
21	47.85	58.41	- 1 - 9	35.35	55.67	+ 8 - 5	25.09	48.48	+ 1 + 9	20.22	38.61	- 9 + 5
22	47.42	58.39	+ 3 - 9	34.96	55.50	+ 8 - 1	24.84	48.19	- 4 + 9	20.16	38.25	-11 + 1
23	46.99	58.36	+ 6 - 7	34.57	55.33	+ 6 + 4	24.59	47.89	- 8 + 7	20.12	37.90	-11 - 3
24	46.57	58.33	+ 7 - 3	34.19	55.16	+ 3 + 7	24.34	47.59	-11 + 4	20.08	37.55	- 9 - 6
25	46.14	58.30	+ 7 + 1	33.81	54.98	- 2 + 9	24.11	47.29	-11 - 1	20.04	37.20	- 5 - 9
26	45.71	58.26	+ 5 + 5	33.44	54.79	- 6 + 8	23.87	46.98	-10 - 5	20.02	36.84	- 2 - 9
27	45.28	58.21	+ 1 + 8	33.06	54.60	- 9 + 6	23.65	46.67	- 7 - 8	20.00	36.49	+ 2 - 8
28	44.86	58.16	- 3 + 8	32.70	54.41	-11 + 2	23.43	46.36	- 4 - 9	19.99	36.14	+ 5 - 6
29	44.43	58.11	- 7 + 7	32.33	54.21	-11 - 2	23.22	46.05	0 - 9	19.98	35.79	+ 7 - 2
30	44.00	58.05	-10 + 4	31.97	54.01	- 9 - 6	23.01	45.73	+ 3 - 7	19.99	35.43	+ 7 + 1
31	43.58	57.99	-11 0	31.61	53.80	- 6 - 8	22.81	45.41	+ 6 - 5	20.00	35.08	+ 7 + 5
32				31.25	53.59	- 2 - 9				20.01	34.73	+ 5 + 8

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+86° 36' 30"	16.903	+16.873	+86° 36' 40"	16.917	+16.887	+86° 36' 50"	16.931	+16.901
40	16.917	+16.887	50	16.931	+16.901	60	16.945	+16.915

$$\alpha_{1945.0} = 17^{\text{h}} 49^{\text{m}} 55^{\text{s}}.54$$

$$\delta_{1945.0} = +86^{\circ} 36' 39''.33$$

\*) Tag der doppelten unteren Kulmination: Dez. 19.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

205\*

N<sub>i</sub>) λ Ursae minoris 6<sup>m</sup>55

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	18 <sup>h</sup> 26 <sup>m</sup>	+ 89° 2'	in o.or   o.or	18 <sup>h</sup> 26 <sup>m</sup>	+ 89° 2'	in o.or   o.or	18 <sup>h</sup> 27 <sup>m</sup>	+ 89° 2'	in o.or   o.or	18 <sup>h</sup> 28 <sup>m</sup>	+ 89° 2'	in o.or   o.or
1	50.95	54.30	-35 +2	58.42	44.13	-10 -8	23.58	37.51	- 3 -8	1.64	35.27	+36 -1
2	50.80	53.96	-35 -1	59.06	43.83	+ 3 -8	24.71	37.35	+11 -8	2.89	35.30	+37 +3
3	50.68	53.62	-29 -4	59.72	43.54	+17 -7	25.85	37.19	+24 -6	4.14	35.33	+34 +6
4	50.59	53.28	-19 -7	60.40	43.25	+29 -5	27.00	37.04	+34 -3	5.39	35.37	+25 +8
5	50.52	52.94	- 5 -8	61.10	42.97	+37 -2	28.16	36.89	+39 0	6.63	35.42	+11 +9
6	50.48	52.59	+ 9 -8	61.82	42.69	+39 +2	29.33	36.75	+38 +4	7.86	35.47	- 3 +8
7	50.46	52.25	+22 -6	62.57	42.41	+35 +5	30.51	36.62	+31 +7	9.09	35.53	-15 +5
8	50.47	51.91	+32 -4	63.34	42.14	+25 +8	31.70	36.49	+19 +9	10.31	35.59	-22 +1
9	50.51	51.57	+37 0	64.13	41.87	+11 +9	32.90	36.37	+ 4 +9	11.53	35.66	-22 -4
10	50.57	51.23	+36 +4	64.94	41.61	- 5 +9	34.11	36.25	-10 +7	12.74	35.74	-15 -7
11	50.65	50.89	+29 +7	65.76	41.35	-18 +6	35.32	36.14	-21 +4	13.94	35.82	- 3 -9
12	50.77	50.55	+17 +9	66.60	41.10	-26 +2	36.54	36.04	-26 -1	15.13	35.91	+10 -9
13	50.91	50.21	+ 2 +9	67.47	40.85	-27 -3	37.77	35.94	-23 -5	16.31	36.00	+21 -7
14	51.08	49.88	-13 +8	68.35	40.60	-21 -7	39.00	35.85	-13 -8	17.48	36.10	+26 -3
15	51.27	49.54	-24 +4	69.25	40.36	- 9 -9	40.24	35.77	0 -9	18.64	36.20	+23 +2
16	51.49	49.21	-29 0	70.17	40.12	+ 4 -9	41.48	35.69	+13 -8	19.80	36.31	+14 +6
17	51.74	48.87	-26 -4	71.11	39.89	+16 -7	42.73	35.62	+21 -5	20.95	36.43	- 1 +8
18	52.01	48.54	-17 -7	72.07	39.66	+22 -3	43.98	35.55	+23 -1	22.09	36.55	-17 +9
19	52.31	48.21	- 4 -9	73.04	39.44	+22 +1	45.23	35.49	+18 +4	23.22	36.67	-30 +7
20	52.63	47.88	+10 -8	74.03	39.22	+15 +5	46.49	35.44	+ 7 +7	24.33	36.80	-38 +4
21	52.97	47.55	+20 -6	75.03	39.01	+ 3 +7	47.75	35.39	- 7 +8	25.43	36.94	-40 0
22	53.35	47.22	+25 -2	76.05	38.80	-11 +8	49.02	35.35	-21 +8	26.52	37.08	-36 -3
23	53.75	46.90	+22 +3	77.09	38.60	-23 +7	50.28	35.31	-32 +6	27.60	37.23	-27 -6
24	54.17	46.59	+13 +6	78.14	38.40	-32 +5	51.54	35.28	-37 +3	28.67	37.38	-15 -7
25	54.62	46.27	0 +8	79.20	38.21	-35 +1	52.81	35.26	-37 -1	29.72	37.54	- 1 -8
26	55.09	45.96	-14 +8	80.28	38.03	-33 -2	54.07	35.24	-31 -4	30.76	37.70	+12 -7
27	55.59	45.64	-25 +6	81.37	37.85	-26 -5	55.34	35.23	-21 -6	31.78	37.87	+23 -5
28	56.11	45.33	-33 +4	82.47	37.68	-16 -7	56.60	35.23	- 8 -7	32.79	38.04	+31 -2
29	56.65	45.03	-35 0	83.58	37.51	- 3 -8	57.87	35.23	+ 5 -8	33.79	38.22	+35 +1
30	57.22	44.73	-31 -3				59.13	35.24	+18 -7	34.77	38.40	+33 +5
31	57.80	44.43	-23 -6				60.39	35.25	+29 -4	35.74	38.59	+26 +7
32	58.42	44.13	-10 -8				61.64	35.27	+36 -1			

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
+89° 2' 30"	59.790	+59.781	+89° 2' 40"	59.964	+59.955	+89° 2' 50"	60.138	+60.130
40	59.964	+59.955	50	60.138	+60.130	60	60.314	+60.306

α<sub>1945.0</sub> = 18<sup>h</sup> 27<sup>m</sup> 46<sup>s</sup>.96

δ<sub>1945.0</sub> = +89° 2' 52".77



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Ni)  $\lambda$  Ursae minoris 6<sup>m</sup>55

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	18 <sup>h</sup> 28 <sup>m</sup>	89° 2'	o.or   o.or	18 <sup>h</sup> 28 <sup>m</sup>	89° 2'	o.or   o.or	18 <sup>h</sup> 28 <sup>m</sup>	89° 2'	o.or   o.or	18 <sup>h</sup> 27 <sup>m</sup>	89° 3'	o.or   o.or
	"	+	in	"	+	in	"	+	in	"	+	in
1	35.74	38.59	+26 +7	56.63	46.25	-18 +5	56.85	55.75	-6 -9	96.11	4.57	+29 -1
2	36.69	38.78	+15 +9	56.98	46.54	-23 0	56.49	56.06	+8 -9	95.13	4.81	+25 +3
3	37.62	38.98	+2 +9	57.30	46.83	-21 -4	56.12	56.36	+22 -7	94.13	5.06	+14 +7
4	38.54	39.18	-11 +7	57.61	47.13	-12 -7	55.72	56.67	+30 -4	93.12	5.31	0 +9
5	39.44	39.38	-20 +3	57.89	47.43	+1 -9	55.29	56.97	+30 +1	92.09	5.55	-16 +8
6	40.32	39.59	-22 -1	58.14	47.73	+15 -9	54.85	57.28	+23 +5	91.04	5.79	-29 +6
7	41.19	39.80	-18 -6	58.38	48.03	+27 -6	54.39	57.58	+10 +8	89.97	6.02	-37 +3
8	42.04	40.02	-7 -8	58.59	48.33	+31 -2	53.90	57.88	-6 +9	88.89	6.25	-38 -1
9	42.87	40.24	+7 -9	58.78	48.64	+28 +2	53.39	58.18	-22 +8	87.79	6.48	-33 -5
10	43.68	40.46	+20 -8	58.95	48.94	+18 +6	52.86	58.48	-33 +5	86.68	6.70	-23 -7
11	44.48	40.69	+28 -5	59.09	49.25	+2 +9	52.31	58.78	-39 +1	85.55	6.92	-10 -8
12	45.26	40.92	+29 0	59.21	49.55	-15 +9	51.73	59.07	-38 -2	84.41	7.14	+5 -8
13	46.02	41.16	+22 +4	59.31	49.86	-30 +7	51.14	59.37	-30 -6	83.25	7.35	+18 -7
14	46.76	41.40	+8 +8	59.38	50.16	-39 +4	50.53	59.66	-18 -8	82.08	7.56	+29 -4
15	47.48	41.64	-8 +9	59.43	50.47	-41 0	49.90	59.96	-4 -9	80.89	7.76	+35 -1
16	48.18	41.89	-24 +8	59.46	50.78	-36 -4	49.25	60.25	+10 -8	79.69	7.96	+36 +3
17	48.86	42.14	-36 +6	59.47	51.09	-27 -7	48.57	60.53	+22 -6	78.48	8.16	+31 +6
18	49.53	42.40	-41 +2	59.45	51.40	-13 -8	47.87	60.81	+31 -3	77.25	8.36	+21 +9
19	50.17	42.66	-40 -2	59.41	51.71	+1 -8	47.15	61.10	+35 +1	76.01	8.55	+7 +9
20	50.79	42.93	-33 -5	59.35	52.03	+15 -7	46.42	61.38	+33 +4	74.75	8.74	-7 +8
21	51.39	43.19	-21 -7	59.27	52.34	+25 -5	45.67	61.66	+25 +7	73.48	8.92	-19 +5
22	51.97	43.46	-7 -8	59.16	52.65	+32 -1	44.89	61.93	+14 +9	72.20	9.10	-25 +1
23	52.54	43.72	+7 -8	59.03	52.96	+33 +2	44.10	62.20	0 +9	70.90	9.28	-25 -3
24	53.08	43.99	+19 -6	58.88	53.27	+29 +6	43.28	62.48	-14 +7	69.59	9.45	-17 -7
25	53.60	44.27	+28 -3	58.71	53.58	+20 +8	42.45	62.75	-23 +4	68.27	9.62	-5 -9
26	54.10	44.55	+33 0	58.51	53.89	+8 +9	41.60	63.02	-26 -1	66.94	9.78	+9 -9
27	54.58	44.82	+32 +3	58.29	54.20	-5 +8	40.73	63.28	-23 -5	65.60	9.94	+21 -7
28	55.03	45.10	+27 +7	58.05	54.51	-17 +6	39.84	63.54	-13 -8	64.24	10.10	+27 -3
29	55.46	45.38	+17 +8	57.78	54.82	-24 +2	38.93	63.80	+1 -9	62.87	10.25	+26 +2
30	55.88	45.67	+4 +9	57.49	55.13	-24 -2	38.01	64.06	+15 -8	61.49	10.40	+17 +6
31	56.27	45.96	-9 +8	57.18	55.44	-18 -6	37.07	64.32	+25 -5	60.10	10.54	+4 +8
32	56.63	46.25	-18 +5	56.85	55.75	-6 -9	36.11	64.57	+29 -1	58.70	10.68	-12 +9

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+89° 2' 30"	59.790	+59.781	+89° 2' 50"	60.138	+60.130	+89° 3' 10"	60.491	+60.483
40	59.964	+59.955	60	60.314	+60.306	20	60.669	+60.661

$$\alpha_{1945.0} = 18^h 27^m 46^s.96$$

$$\delta_{1945.0} = +89^\circ 2' 52''.77$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

207\*

Ni)  $\lambda$  Ursae minoris 6<sup>m</sup>55

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	18 <sup>h</sup> 27 <sup>m</sup>	+	in	18 <sup>h</sup> 26 <sup>m</sup>	+	in	18 <sup>h</sup> 25 <sup>m</sup>	+	in	18 <sup>h</sup> 25 <sup>m</sup>	+	in
	89° 3'	o.or	o.or	89° 3'	o.or	o.or	89° 3'	o.or	o.or	89° 2'	o.or	o.or
1	58.70	10.68	-12 +9	73.58	12.74	-41 + 2	86.79	10.25	-14 - 8	51.18	63.55	+19 - 5
2	57.29	10.81	-26 +7	72.02	12.73	-40 - 2	85.39	10.09	+ 1 - 8	50.27	63.26	+27 - 2
3	55.87	10.94	-35 +4	70.46	12.72	-32 - 5	84.00	9.93	+14 - 7	49.37	62.97	+30 + 1
4	54.45	11.07	-39 0	68.90	12.71	-21 - 7	82.63	9.76	+24 - 4	48.50	62.68	+29 + 5
5	53.02	11.19	-36 -3	67.34	12.69	- 7 - 8	81.27	9.59	+30 - 1	47.65	62.38	+22 + 7
6	51.58	11.31	-27 -6	65.78	12.66	+ 7 - 8	79.92	9.41	+32 + 2	46.83	62.08	+13 + 9
7	50.13	11.42	-15 -8	64.22	12.63	+19 - 6	78.58	9.23	+29 + 6	46.03	61.78	+ 1 + 9
8	48.67	11.53	- 1 -9	62.66	12.60	+28 - 3	77.26	9.04	+22 + 8	45.25	61.48	-10 + 7
9	47.20	11.64	+13 -7	61.11	12.56	+33 0	75.95	8.85	+11 + 9	44.49	61.17	-19 + 4
10	45.72	11.74	+24 -5	59.56	12.51	+34 + 4	74.65	8.65	- 1 + 8	43.76	60.86	-22 0
11	44.24	11.83	+33 -2	58.01	12.46	+29 + 7	73.37	8.45	-12 + 6	43.05	60.55	-18 - 5
12	42.75	11.92	+36 +1	56.47	12.40	+19 + 9	72.10	8.24	-20 + 2	42.36	60.24	- 8 - 8
13	41.26	12.01	+34 +5	54.93	12.34	+ 7 + 9	70.85	8.03	-20 - 2	41.70	59.93	+ 6 -10
14	39.76	12.09	+26 +8	53.39	12.28	- 6 + 8	69.61	7.81	-14 - 6	41.06	59.61	+21 - 9
15	38.25	12.17	+15 +9	51.85	12.21	-16 + 5	68.39	7.59	- 2 - 9	40.44	59.29	+32 - 6
16	36.74	12.24	+ 1 +9	50.32	12.13	-21 0	67.18	7.37	+12 -10	39.85	58.96	+36 - 2
17	35.22	12.31	-12 +7	48.80	12.05	-20 - 4	65.99	7.14	+25 - 8	39.28	58.64	+32 + 3
18	33.69	12.37	-21 +3	47.28	11.97	-11 - 8	64.81	6.91	+33 - 4	38.74	58.32	+20 + 7
19	32.16	12.43	-24 -2	45.77	11.88	+ 2 -10	63.65	6.67	+33 0	38.22	57.99	+ 2 + 9
20	30.63	12.48	-19 -6	44.27	11.78	+16 - 9	62.51	6.43	+24 + 5	37.73	57.66	-17 + 9
21	29.09	12.53	- 8 -9	42.77	11.68	+27 - 6	61.39	6.19	+ 9 + 8	37.26	57.32	-33 + 7
22	27.55	12.57	+ 5 -9	41.28	11.57	+31 - 2	60.28	5.94	- 9 +10	36.82	56.99	-42 + 3
23	26.01	12.61	+18 -8	39.79	11.46	+26 + 3	59.19	5.69	-27 + 8	36.41	56.66	-44 - 1
24	24.46	12.64	+26 -4	38.31	11.35	+15 + 7	58.12	5.44	-40 + 5	36.02	56.32	-38 - 5
25	22.91	12.67	+28 0	36.84	11.23	- 1 + 9	57.07	5.18	-45 + 1	35.65	55.98	-27 - 8
26	21.35	12.69	+21 +4	35.38	11.10	-19 + 9	56.04	4.92	-43 - 3	35.31	55.64	-12 - 9
27	19.80	12.71	+ 8 +8	33.93	10.97	-33 + 7	55.03	4.65	-34 - 6	35.00	55.30	+ 3 - 8
28	18.24	12.73	- 8 +9	32.48	10.84	-42 + 4	54.03	4.38	-21 - 8	*)34.71	54.96	+16 - 6
29	16.69	12.74	-24 +8	31.04	10.70	-43 0	53.06	4.11	- 6 - 9	34.45	54.62	+25 - 3
30	15.13	12.74	-35 +6	29.62	10.55	-38 - 4	52.11	3.83	+ 8 - 8	34.21	54.28	+29 0
31	13.58	12.74	-41 +2	28.20	10.40	-27 - 7	51.18	3.55	+19 - 5	34.00	53.94	+29 + 3
32				26.79	10.25	-14 - 8				33.82	53.60	+24 + 7

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+89° 2' 50"	60.138	+60.130	+89° 3' 0"	60.314	+60.306	+89° 3' 10"	60.491	+60.483
60	60.314	+60.306	10	60.491	+60.483	20	60.669	+60.661

$$\alpha_{1945.0} = 18^h 27^m 46^s.96$$

$$\delta_{1945.0} = +89^\circ 2' 52.77''$$

\*) Tag der doppelten unteren Kulmination: Dez. 28.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nk) 76 Draconis 5<sup>m</sup>69

Tag	Januar			Februar				März			April				
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder		AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder		
	20 <sup>h</sup> 46 <sup>m</sup>	82° 19'	+	20 <sup>h</sup> 46 <sup>m</sup>	82° 19'	+	in	20 <sup>h</sup> 46 <sup>m</sup>	82° 19'	+	in	20 <sup>h</sup> 46 <sup>m</sup>	82° 19'	+	in
	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi	o.oi
I	35.34	54.46	-2 +7	33.50	44.69	-3 -5		34.39	35.52	-2 -6		37.84	28.32	+2 -6	
2	35.24	54.19	-3 +4	33.49	44.35	-2 -7		34.47	35.22	-1 -8		37.99	28.17	+3 -3	
3	35.14	53.91	-3 0	33.48	44.01	-1 -8		34.55	34.93	0 -9		38.13	28.03	+4 0	
4	35.04	53.63	-3 -3	33.48	43.66	0 -8		34.63	34.64	+1 -7		38.28	27.89	+4 +4	
5	34.94	53.35	-3 -6	33.47	43.32	+2 -7		34.71	34.35	+3 -5		38.42	27.76	+3 +6	
6	34.85	53.06	-2 -8	33.48	42.98	+3 -4		34.80	34.07	+4 -2		38.57	27.63	+2 +7	
7	34.76	52.77	0 -9	33.48	42.64	+4 0		34.89	33.79	+4 +2		38.72	27.51	0 +6	
8	34.67	52.47	+1 -8	33.49	42.30	+4 +3		34.98	33.52	+4 +5		38.87	27.40	-1 +4	
9	34.59	52.18	+2 -6	33.50	41.97	+3 +6		35.08	33.25	+3 +7		39.02	27.29	-3 0	
10	34.51	51.87	+3 -2	33.52	41.63	+2 +8		35.17	32.98	+1 +7		39.17	27.19	-3 -4	
11	34.43	51.57	+4 +1	33.54	41.29	0 +7		35.27	32.72	0 +6		39.32	27.10	-3 -8	
12	34.36	51.26	+4 +5	33.56	40.96	-1 +5		35.38	32.46	-2 +3		39.48	27.01	-2 -9	
13	34.29	50.95	+3 +7	33.58	40.62	-3 +1		35.48	32.21	-3 -1		39.63	26.93	0 -8	
14	34.22	50.64	+1 +8	33.61	40.29	-3 -3		35.59	31.96	-3 -5		39.78	26.85	+1 -6	
15	34.15	50.33	0 +7	33.64	39.96	-3 -6		35.70	31.71	-3 -8		39.94	26.78	+2 -1	
16	34.09	50.01	-2 +4	33.67	39.63	-2 -8		35.80	31.47	-1 -9		40.09	26.71	+3 +3	
17	34.02	49.69	-3 0	33.71	39.30	-1 -8		35.92	31.24	0 -7		40.24	26.65	+2 +7	
18	33.97	49.37	-3 -4	33.75	38.97	+1 -6		36.03	31.01	+1 -4		40.40	26.60	+1 +10	
19	33.91	49.05	-3 -7	33.80	38.64	+2 -2		36.15	30.78	+2 +1		40.56	26.56	0 +10	
20	33.86	48.72	-2 -8	33.84	38.32	+3 +2		36.27	30.56	+2 +5		40.72	26.52	-2 +9	
21	33.81	48.40	0 -7	33.90	38.00	+2 +6		36.39	30.35	+2 +8		40.88	26.48	-3 +6	
22	33.77	48.06	+1 -5	33.95	37.68	+2 +9		36.51	30.14	+1 +10		41.04	26.46	-3 +2	
23	33.73	47.73	+2 -1	34.00	37.36	+1 +9		36.64	29.93	0 +10		41.20	26.44	-3 -1	
24	33.69	47.40	+3 +3	34.06	37.04	-1 +9		36.77	29.73	-2 +8		41.36	26.42	-3 -4	
25	33.65	47.06	+2 +7	34.12	36.73	-2 +6		36.90	29.53	-3 +4		41.52	26.41	-2 -7	
26	33.62	46.73	+1 +9	34.18	36.42	-3 +3		37.03	29.34	-3 +1		41.68	26.41	-1 -8	
27	33.59	46.39	0 +9	34.25	36.12	-3 0		37.16	29.16	-3 -2		41.84	26.42	0 -8	
28	33.57	46.05	-1 +8	34.32	35.81	-3 -4		37.29	28.98	-3 -5		42.00	26.43	+1 -6	
29	33.54	45.72	-2 +5	34.39	35.52	-2 -6		37.43	28.81	-2 -7		42.16	26.44	+3 -4	
30	33.53	45.38	-3 +2					37.56	28.64	-1 -8		42.32	26.47	+4 -1	
31	33.51	45.03	-3 -2					37.70	28.48	+1 -8		42.47	26.50	+4 +3	
32	33.50	44.69	-3 -5					37.84	28.32	+2 -6					

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
+82° 19' 20"	7.485	+7.418	+82° 19' 30"	7.488	+7.421	+82° 19' 50"	7.493	+7.426
30	7.488	+7.421	40	7.490	+7.423	60	7.496	+7.429

$$\alpha_{1945.0} = 20^h 46^m 41^s 53$$

$$\delta_{1945.0} = +82^\circ 19' 45'' 67$$

\*) Tag der doppelten unteren Kulmination: Febr. 1.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

209\*

Nk) 76 Draconis 5<sup>m</sup>69

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	20 <sup>h</sup> 46 <sup>m</sup>	+ 82° 19'	o.or   in	20 <sup>h</sup> 46 <sup>m</sup>	+ 82° 19'	o.or   in	20 <sup>h</sup> 46 <sup>m</sup>	+ 82° 19'	o.or   in	20 <sup>h</sup> 46 <sup>m</sup>	+ 82° 19'	o.or   in
1	42.47	26.50	+4 +3	47.02	30.30	o +6	49.95	38.29	-3 -3	50.66	48.86	o -8
2	42.63	26.54	+4 +5	47.15	30.51	-1 +3	50.01	38.61	-3 -7	50.64	49.22	+2 -5
3	42.79	26.58	+3 +7	47.28	30.72	-3 -1	50.07	38.93	-2 -9	50.62 50.59	49.57 49.93	+3 -1 +3 +4
4	42.95	26.62	+1 +7	47.40	30.94	-3 -5	50.13	39.24	-1 -9	50.56	50.28	+2 +7
5	43.11	26.68	o +5	47.52	31.16	-3 -8	50.18	39.57	+1 -7	50.53	50.63	+1 +9
6	43.27	26.73	-2 +2	47.64	31.39	-2 -10	50.23	39.89	+2 -4	50.50	50.99	o +9
7	43.42	26.80	-3 -2	47.76	31.62	o -9	50.28	40.22	+3 +1	50.46	51.34	-2 +8
8	43.58	26.87	-3 -6	47.87	31.86	+1 -6	50.33	40.55	+3 +5	50.42	51.68	-3 +5
9	43.73	26.95	-2 -9	47.99	32.10	+3 -2	50.37	40.88	+2 +8	50.38	52.03	-4 +1
10	43.89	27.03	-1 -10	48.10	32.34	+3 +3	50.42	41.21	+1 +10	50.34	52.38	-4 -3
11	44.04	27.13	+1 -8	48.21	32.59	+3 +7	50.46	41.55	-1 +9	50.30	52.73	-3 -6
12	44.19	27.22	+2 -4	48.32	32.84	+2 +10	50.49	41.89	-2 +7	50.25	53.09	-2 -8
13	44.34	27.33	+3 +1	48.43	33.09	o +10	50.52	42.23	-3 +3	50.20	53.43	-1 -8
14	44.49	27.44	+3 +5	48.53	33.35	-2 +9	50.56	42.56	-4 -1	50.14	53.78	+1 -7
15	44.64	27.55	+2 +9	48.64	33.61	-3 +6	50.58	42.91	-3 -4	50.09	54.13	+2 -5
16	44.79	27.67	+1 +10	48.74	33.88	-4 +2	50.61	43.25	-3 -7	50.03	54.47	+3 -3
17	44.94	27.79	-1 +10	48.83	34.15	-4 -2	50.63	43.59	-1 -8	49.97	54.81	+4 +1
18	45.09	27.92	-2 +7	48.93	34.42	-3 -5	50.65	43.94	o -8	49.91	55.16	+4 +4
19	45.24	28.06	-3 +4	49.02	34.70	-2 -7	50.67	44.29	+1 -7	49.84	55.49	+3 +7
20	45.38	28.20	-4 o	49.11	34.98	-1 -8	50.69	44.64	+3 -4	49.77	55.83	+2 +8
21	45.52	28.35	-4 -3	49.20	35.27	o -7	50.70	44.99	+4 -1	49.70	56.17	o +7
22	45.67	28.50	-3 -6	49.28	35.56	+2 -5	50.71	45.34	+4 +3	49.63	56.50	-1 +4
23	45.81	28.66	-2 -7	49.37	35.85	+3 -3	50.72	45.69	+3 +6	49.55	56.84	-3 o
24	45.95	28.82	o -8	49.45	36.14	+4 +1	50.72	46.04	+2 +8	49.47	57.17	-3 -4
25	46.09	28.99	+1 -7	49.53	36.44	+4 +4	50.72	46.38	+1 +8	49.39	57.50	-3 -7
26	46.23	29.16	+2 -5	49.60	36.74	+3 +7	50.72	46.73	-1 +6	49.31	57.83	-2 -9
27	46.37	29.34	+3 -2	49.68	37.04	+2 +8	50.72	47.09	-2 +3	49.22	58.15	-1 -8
28	46.50	29.52	+4 +2	49.75	37.35	o +7	50.71	47.44	-3 -1	49.14	58.48	+1 -6
29	46.64	29.71	+4 +5	49.82	37.66	-1 +5	50.70	47.79	-3 -5	49.04	58.80	+2 -2
30	46.77	29.90	+3 +7	49.89	37.97	-2 +1	50.69	48.15	-3 -8	48.95	59.12	+3 +3
31	46.90	30.10	+2 +8	49.95	38.29	-3 -3	50.68	48.50	-1 -9	48.86	59.44	+3 +7
32	47.02	30.30	o +6				50.66	48.86	o -8	48.76	59.76	+2 +9

— δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
+82° 19' 20"	7.485	+7.418	+82° 19' 30"	7.488	+7.421	+82° 19' 50"	7.493	+7.426
30	7.488	+7.421	40	7.490	+7.423	60	7.496	+7.429

$$\alpha_{1945.0} = 20^{\text{h}} 46^{\text{m}} 41.53$$

$$\delta_{1945.0} = +82^{\circ} 19' 45.67$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Nk) 76 Draconis 5<sup>m</sup>69

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder
		+	in		+	in		+	in		+	in
	20 <sup>h</sup> 46 <sup>m</sup>	82° 19'	◊.or   ◊.or	20 <sup>h</sup> 46 <sup>m</sup>	82° 20'	◊.or   ◊.or	20 <sup>h</sup> 46 <sup>m</sup>	82° 20'	◊.or   ◊.or	20 <sup>h</sup> 46 <sup>m</sup>	82° 20'	◊.or   ◊.or
1	48.76	59.76	+2 +9	44.91	7.83	-2 +8	39.64	12.21	-3 -5	34.36	11.44	0 -7
2	48.66	60.07	0 +10	44.76	8.05	-3 +4	39.46	12.27	-2 -7	34.20	11.32	+1 -6
3	48.56	60.38	-1 +9	44.60	8.26	-4 0	39.28	12.32	-1 -8	34.04	11.20	+2 -3
4	48.46	60.69	-3 +6	44.44	8.46	-4 -3	39.10	12.37	0 -7	33.88	11.07	+3 0
5	48.35	60.99	-3 +2	44.28	8.66	-3 -6	38.92	12.41	+2 -5	33.72	10.94	+4 +3
6	48.24	61.30	-4 -2	44.12	8.86	-2 -8	38.74	12.45	+3 -2	33.56	10.80	+3 +6
7	48.13	61.60	-3 -5	43.96	9.05	0 -8	38.56	12.48	+4 +1	33.40	10.65	+3 +7
8	48.02	61.90	-3 -7	43.80	9.23	+1 -7	38.38	12.50	+4 +4	33.25	10.50	+1 +7
9	47.90	62.19	-1 -8	43.63	9.41	+2 -5	38.20	12.52	+3 +6	33.10	10.35	0 +6
10	47.78	62.48	0 -8	43.47	9.59	+3 -2	38.01	12.53	+2 +7	32.94	10.19	-2 +3
11	47.66	62.77	+2 -6	43.30	9.76	+4 +2	37.83	12.54	+1 +7	32.79	10.02	-3 -2
12	47.54	63.06	+3 -4	43.13	9.93	+4 +5	37.65	12.54	-1 +5	32.64	9.85	-3 -6
13	47.42	63.34	+4 -1	42.97	10.09	+3 +7	37.47	12.53	-2 +1	32.50	9.67	-2 -9
14	47.29	63.62	+4 +3	42.80	10.25	+2 +7	37.29	12.52	-3 -4	32.35	9.49	-1 -11
15	47.17	63.90	+4 +6	42.63	10.40	0 +6	37.12	12.51	-3 -8	32.21	9.30	0 -10
16	47.04	64.17	+3 +7	42.46	10.55	-1 +3	36.94	12.48	-2 -10	32.07	9.11	+2 -6
17	46.91	64.44	+1 +7	42.29	10.69	-3 -1	36.76	12.45	-1 -10	31.93	8.91	+3 -2
18	46.77	64.71	-1 +5	42.11	10.83	-3 -5	36.59	12.42	+1 -8	31.79	8.70	+3 +4
19	46.64	64.97	-2 +2	41.94	10.96	-3 -8	36.41	12.38	+2 -4	31.65	8.49	+3 +8
20	46.51	65.23	-3 -2	41.77	11.09	-2 -10	36.24	12.33	+3 +1	31.52	8.28	+1 +10
21	46.37	65.49	-3 -6	41.60	11.22	0 -9	36.06	12.28	+3 +6	31.38	8.07	0 +11
22	46.23	65.74	-2 -9	41.42	11.33	+2 -6	35.89	12.22	+2 +10	31.25	7.85	-2 +9
23	46.09	65.99	-1 -9	41.25	11.45	+3 -1	35.72	12.16	0 +11	31.13	7.62	-3 +5
24	45.95	66.23	+1 -7	41.07	11.55	+3 +4	35.54	12.09	-1 +10	31.00	7.39	-4 +1
25	45.80	66.47	+2 -4	40.90	11.65	+2 +8	35.37	12.01	-3 +7	30.88	7.15	-4 -3
26	45.66	66.71	+3 +1	40.72	11.75	+1 +10	35.21	11.93	-4 +3	30.76	6.91	-3 -6
27	45.51	66.94	+3 +6	40.54	11.84	0 +11	35.04	11.84	-4 0	30.64	6.66	-2 -7
28	45.36	67.17	+2 +9	40.36	11.92	-2 +9	34.87	11.75	-4 -4	30.53	6.41	-1 -8
29	45.21	67.39	+1 +10	40.18	12.00	-3 +6	34.70	11.65	-3 -6	30.42	6.16	+1 -6
30	45.06	67.61	-1 +10	40.00	12.08	-4 +2	34.53	11.55	-2 -7	30.30	5.90	+2 -4
31	44.91	67.83	-2 +8	39.82	12.15	-4 -2	34.36	11.44	0 -7	30.20	5.64	+3 -1
32				39.64	12.21	-3 -5				30.09	5.37	+4 +2

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
+82° 19' 50"	7.493	+7.426	+82° 20' 0"	7.496	+7.429	+82° 20' 10"	7.498	+7.431
60	7.496	+7.429	10	7.498	+7.431	20	7.501	+7.434

$$\alpha_{1945.0} = 20^{\text{h}} 46^{\text{m}} 41.53$$

$$\delta_{1945.0} = +82^{\circ} 19' 45.67$$



Sa) 4 G. Octantis 5<sup>m</sup>63

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	1 <sup>h</sup> 40 <sup>m</sup>	85° 3'	in 0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 3'	in 0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 3'	in 0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	in 0.01   0.01
1	25.18	20.49	-2 + 8	17.35	18.06	+6 + 4	11.37	11.38	+6 + 2	7.38	60.74	+1 - 9
2	24.93	20.51	+1 + 9	17.11	17.89	+6 0	11.19	11.08	+6 - 2	7.31	60.36	-2 -10
3	24.67	20.52	+3 + 8	16.87	17.72	+5 - 3	11.02	10.77	+4 - 5	7.24	59.99	-4 -10
4	24.42	20.52	+5 + 6	16.63	17.53	+4 - 7	10.85	10.46	+2 - 8	7.17	59.61	-6 - 8
5	24.16	20.52	+6 + 3	16.40	17.35	+1 - 9	10.68	10.15	0 -10	7.11	59.23	-6 - 4
6	23.90	20.51	+6 - 1	16.16	17.15	-1 -10	10.51	9.84	-3 -11	7.05	58.86	-6 0
7	23.65	20.49	+5 - 5	15.93	16.95	-4 -10	10.35	9.52	-5 - 9	7.00	58.48	-3 + 3
8	23.39	20.47	+3 - 8	15.70	16.75	-6 - 8	10.19	9.20	-6 - 6	6.95	58.10	0 + 6
9	23.13	20.44	0 -10	15.47	16.54	-6 - 4	10.03	8.88	-6 - 2	6.91	57.72	+3 + 7
10	22.88	20.40	-2 -10	15.24	16.32	-6 0	9.88	8.55	-5 + 2	6.87	57.34	+6 + 5
11	22.62	20.36	-5 - 9	15.02	16.10	-4 + 4	9.73	8.22	-2 + 5	6.83	56.95	+7 + 3
12	22.37	20.31	-6 - 6	14.79	15.88	-1 + 7	9.58	7.89	+1 + 7	6.80	56.57	+6 - 1
13	22.11	20.26	-6 - 2	14.57	15.65	+2 + 8	9.44	7.55	+4 + 7	6.77	56.19	+4 - 4
14	21.85	20.20	-5 + 2	14.35	15.42	+5 + 7	9.30	7.21	+6 + 5	6.74	55.80	+1 - 6
15	21.59	20.13	-3 + 6	14.14	15.18	+6 + 4	9.16	6.87	+7 + 2	6.72	55.42	-2 - 6
16	21.34	20.06	+1 + 8	13.92	14.94	+6 0	9.03	6.53	+6 - 2	6.70	55.03	-5 - 4
17	21.08	19.98	+3 + 8	13.71	14.69	+4 - 3	8.90	6.18	+3 - 5	*)6.69	54.65	-6 - 1
18	20.83	19.89	+6 + 6	13.50	14.44	+2 - 5	8.77	5.83	0 - 6	6.68	54.27	-6 + 3
19	20.57	19.80	+7 + 2	13.29	14.18	-1 - 6	8.65	5.48	-3 - 5	6.67	53.89	-5 + 6
20	20.32	19.70	+6 - 1	13.09	13.92	-4 - 5	8.53	5.13	-5 - 3	6.67	53.50	-3 + 9
21	20.07	19.59	+4 - 4	12.89	13.65	-6 - 2	8.41	4.77	-6 0	6.67	53.12	0 +10
22	19.82	19.48	+1 - 6	12.69	13.38	-6 + 1	8.30	4.41	-6 + 4	6.68	52.74	+2 + 9
23	19.57	19.36	-2 - 6	12.49	13.11	-5 + 5	8.19	4.05	-4 + 7	6.69	52.36	+4 + 8
24	19.32	19.24	-5 - 4	12.29	12.83	-3 + 7	8.08	3.69	-2 + 9	6.70	51.98	+5 + 5
25	19.07	19.12	-6 - 1	12.10	12.55	-1 + 9	7.98	3.33	+1 + 9	6.72	51.59	+6 + 2
26	18.82	18.98	-6 + 2	11.91	12.26	+1 + 9	7.88	2.96	+3 + 8	6.74	51.21	+5 - 2
27	18.57	18.84	-5 + 5	11.73	11.97	+3 + 8	7.79	2.60	+5 + 6	6.77	50.84	+4 - 5
28	18.32	18.70	-3 + 8	11.54	11.68	+5 + 5	7.70	2.23	+6 + 3	6.80	50.46	+2 - 8
29	18.08	18.55	0 + 9	11.37	11.38	+6 + 2	7.61	1.86	+6 0	6.83	50.08	-1 - 9
30	17.84	18.39	+2 + 8				7.53	1.49	+5 - 3	6.87	49.71	-3 -10
31	17.59	18.23	+4 + 7				7.45	1.11	+3 - 7	6.91	49.33	-5 - 8
32	17.35	18.06	+6 + 4				7.38	0.74	+1 - 9			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-85° 2' 40"	11.576	-11.533	-85° 3' 0"	11.589	-11.546	-85° 3' 20"	11.602	-11.559
50	11.583	-11.540	10	11.596	-11.553	30	11.609	-11.566

$$\alpha_{1945.0} = 1^h 40^m 22.41$$

$$\delta_{1945.0} = -85^\circ 2' 53.758$$

\*) Tag der doppelten unteren Kulmination: April 17.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sa) 4 G. Octantis 5<sup>m</sup>63

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	0.01   0.01
		—	in		—	in		—	in		—	in
1	6.91	49.33	-5 - 8	10.06	38.76	-3 + 4	15.98	31.75	+5 + 6	23.59	29.46	+3 - 5
2	6.96	48.96	-6 - 6	10.22	38.46	0 + 6	16.21	31.59	+7 + 3	23.84	29.48	0 - 7
3	7.01	48.59	-6 - 2	10.38	38.17	+3 + 6	16.44	31.43	+7 - 1	24.09	29.51	-3 - 7
4	7.06	48.22	-4 + 2	10.54	37.88	+6 + 4	16.67	31.29	+5 - 4	24.34	29.54	-5 - 5
5	7.12	47.85	-2 + 5	10.71	37.60	+7 + 1	16.91	31.14	+3 - 7	24.58	29.58	-6 - 1
6	7.18	47.48	+2 + 6	10.88	37.32	+6 - 2	17.15	31.01	-1 - 8	24.83	29.62	-6 + 3
7	7.24	47.12	+4 + 6	11.05	37.04	+4 - 6	17.39	30.88	-4 - 7	25.07	29.67	-4 + 6
8	7.31	46.75	+7 + 4	11.23	36.77	+1 - 8	17.63	30.75	-6 - 4	25.32	29.72	-2 + 9
9	7.38	46.39	+7 0	11.41	36.50	-2 - 7	17.87	30.63	7 0	25.56	29.78	+1 +10
10	7.46	46.03	+6 - 4	11.59	36.24	-5 - 5	18.11	30.52	-6 + 4	25.80	29.85	+3 + 9
11	7.54	45.68	+3 - 6	11.78	35.98	-6 - 2	18.36	30.41	-4 + 8	26.04	29.92	+5 + 7
12	7.63	45.32	0 - 7	11.97	35.72	-6 + 2	18.60	30.31	-1 +10	26.28	30.00	+6 + 4
13	7.71	44.96	-4 - 6	12.16	35.47	-5 + 6	18.85	30.21	+2 +10	26.52	30.09	+6 0
14	7.80	44.61	-6 - 3	12.35	35.22	-3 + 9	19.09	30.12	+4 + 9	26.75	30.18	+5 - 4
15	7.90	44.26	-7 + 1	12.54	34.97	0 +10	19.34	30.03	+6 + 6	26.98	30.27	+3 - 7
16	7.99	43.92	-6 + 5	12.74	34.74	+3 +10	19.59	29.95	+6 + 2	27.21	30.37	0 - 9
17	8.10	43.57	-4 + 8	12.94	34.50	+5 + 8	19.83	29.88	+6 - 1	27.44	30.48	-2 -10
18	8.20	43.23	-1 +10	13.14	34.27	+6 + 5	20.08	29.81	+4 - 5	27.67	30.59	-4 - 9
19	8.31	42.89	+1 +10	13.35	34.05	+6 + 1	20.34	29.75	+2 - 8	27.90	30.71	-6 - 7
20	8.43	42.55	+4 + 9	13.56	33.83	+5 - 3	20.59	29.69	-1 - 9	28.12	30.84	-6 - 3
21	8.55	42.22	+5 + 6	13.77	33.62	+3 - 6	20.84	29.64	-3 - 9	28.35	30.97	-6 0
22	8.67	41.89	+6 + 3	13.98	33.41	+1 - 8	21.09	29.59	-5 - 8	28.57	31.10	-3 + 4
23	8.79	41.56	+6 0	14.19	33.21	-2 - 9	21.34	29.55	-6 - 5	28.79	31.24	0 + 7
24	8.92	41.24	+4 - 4	14.40	33.01	-4 - 9	21.59	29.52	-6 - 2	29.00	31.38	+3 + 7
25	9.05	40.91	+2 - 7	14.62	32.81	-6 - 7	21.84	29.49	-5 + 2	29.22	31.53	+5 + 6
26	9.18	40.60	0 - 9	14.84	32.62	-7 - 4	22.09	29.47	-2 + 5	29.43	31.69	+7 + 3
27	9.32	40.28	-3 - 9	15.06	32.44	-6 0	22.34	29.46	+1 + 7	29.64	31.85	+6 - 1
28	9.46	39.97	-5 - 8	15.29	32.26	-4 + 3	22.59	29.45	+4 + 7	29.85	32.02	+4 - 4
29	9.61	39.66	-6 - 6	15.52	32.08	-1 + 6	22.84	29.44	+6 + 5	30.05	32.19	+2 - 6
30	9.75	39.36	-6 - 3	15.75	31.91	+2 + 7	23.09	29.44	+7 + 1	30.25	32.37	-2 - 7
31	9.91	39.06	-5 + 1	15.98	31.75	+5 + 6	23.34	29.45	+6 - 2	30.45	32.55	-5 - 5
32	10.06	38.76	-3 + 4				23.59	29.46	+3 - 5	30.65	32.74	-6 - 2

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-85° 2' 20"	11.563	-11.520	-85° 2' 30"	11.570	-11.527	-85° 2' 40"	11.576	-11.533
30	11.570	-11.527	40	11.576	-11.533	50	11.583	-11.540

$$\alpha_{1945.0} = 1^h 40^m 22.41$$

$$\delta_{1945.0} = -85^\circ 2' 53.58$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

213\*

Sa) 4 G. Octantis 5<sup>m</sup>63

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	⊖ Glieder	AR.	Dekl.	⊖ Glieder	AR.	Dekl.	⊖ Glieder	AR.	Dekl.	⊖ Glieder
	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	in 0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	in 0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	in 0.01   0.01	1 <sup>h</sup> 40 <sup>m</sup>	85° 2'	in 0.01   0.01
1	30.65	32.74	-6 - 2	34.88	40.23	-4 + 8	35.07	50.17	+6 + 5	31.05	57.89	+4 - 4
2	30.84	32.93	-7 + 2	34.96	40.53	-2 + 10	34.99	50.47	+6 + 1	30.86	58.08	+1 - 7
3	31.03	33.12	-5 + 5	35.04	40.83	+1 + 10	34.92	50.77	+5 - 2	30.66	58.27	-1 - 8
4	31.22	33.32	-3 + 8	35.11	41.13	+4 + 9	34.84	51.07	+3 - 5	30.46	58.45	-3 - 9
5	31.40	33.53	0 + 10	35.17	41.43	+5 + 7	34.75	51.36	+1 - 8	30.26	58.63	-5 - 7
6	31.58	33.74	+2 + 10	35.23	41.73	+6 + 3	34.66	51.65	-2 - 9	30.06	58.80	-6 - 5
7	31.76	33.95	+4 + 8	35.29	42.04	+6 0	34.56	51.94	-4 - 9	29.85	58.97	-6 - 2
8	31.93	34.17	+6 + 5	35.34	42.35	+4 - 4	34.46	52.23	-6 - 7	29.64	59.13	-5 + 1
9	32.10	34.40	+6 + 2	35.38	42.66	+2 - 7	34.36	52.52	-6 - 4	29.43	59.29	-2 + 4
10	32.27	34.63	+5 - 2	35.42	42.97	0 - 9	34.25	52.80	-6 - 1	29.22	59.45	+1 + 6
11	32.43	34.86	+4 - 5	35.46	43.28	-3 - 10	34.14	53.08	-4 + 2	29.00	59.59	+4 + 6
12	32.60	35.09	+2 - 8	35.49	43.59	-5 - 9	34.02	53.35	-1 + 5	28.78	59.73	+6 + 4
13	32.75	35.33	-1 - 10	35.52	43.90	-6 - 7	33.90	53.63	+2 + 6	28.56	59.87	+7 0
14	32.90	35.57	-3 - 10	35.54	44.22	-6 - 3	33.77	53.89	+5 + 5	28.34	60.00	+7 - 4
15	33.05	35.82	-6 - 8	35.56	44.53	-5 0	33.64	54.16	+7 + 2	28.11	60.12	+4 - 7
16	33.20	36.07	-6 - 5	35.57	44.85	-3 + 4	33.51	54.42	+7 - 1	27.88	60.24	+1 - 9
17	33.33	36.33	-6 - 2	35.58	45.16	0 + 6	33.37	54.68	+5 - 5	27.65	60.35	-3 - 9
18	33.47	36.59	-4 + 2	35.58	45.48	+4 + 6	33.23	54.94	+3 - 8	27.42	60.46	-5 - 6
19	33.60	36.85	-2 + 5	35.57	46.12	+7 + 1	33.09	55.19	-1 - 8	27.19	60.56	-7 - 2
20	33.73	37.11	+2 + 7	35.56	46.44	+6 - 2	32.94	55.44	-4 - 7	26.95	60.66	-7 + 3
21	33.86	37.38	+5 + 6	35.55	46.75	+4 - 6	32.79	55.68	-7 - 3	26.71	60.75	-5 + 7
22	33.98	37.65	+7 + 4	35.53	47.07	+1 - 7	32.63	55.92	-7 + 1	26.47	60.83	-2 + 10
23	34.10	37.92	+7 0	35.50	47.38	-3 - 7	32.47	56.16	-6 + 6	26.23	60.90	+1 + 11
24	34.21	38.20	+6 - 3	35.47	47.70	-5 - 5	32.30	56.39	-4 + 9	25.99	60.97	+3 + 10
25	34.32	38.48	+3 - 6	35.44	48.01	-7 - 1	32.13	56.62	-1 + 11	25.75	61.04	+6 + 8
26	34.42	38.77	-1 - 7	35.40	48.32	-7 + 3	31.96	56.84	+2 + 11	25.50	61.09	+6 + 4
27	34.52	39.05	-4 - 6	35.35	48.63	-5 + 7	31.78	57.06	+4 + 10	25.25	61.14	+6 + 1
28	34.62	39.35	-6 - 3	35.30	48.94	-3 + 10	31.60	57.27	+6 + 7	25.00	61.19	+4 - 3
29	34.71	39.64	-7 + 1	35.25	49.25	0 + 11	31.42	57.48	+6 + 3	24.75	61.23	+2 - 6
30	34.80	39.93	-6 + 5	35.19	49.56	+3 + 10	31.24	57.69	+5 - 1	24.50	61.26	0 - 8
31	34.88	40.23	-4 + 8	35.13	49.87	+5 + 8	31.05	57.89	+4 - 4	24.25	61.28	-3 - 9
32				35.07	50.17	+6 + 5				24.00	61.30	-5 - 8

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
-85° 2' 30"	11.570	-11.527	-85° 2' 40"	11.576	-11.533	-85° 3' 0"	11.589	-11.546
40	11.576	-11.533	50	11.583	-11.540	10	11.596	-11.553

$$\alpha_{1945.0} = 1^h 40^m 22.41$$

$$\delta_{1945.0} = -85^\circ 2' 53.58$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sb)  $\xi$  Mensae 5<sup>m</sup>85

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	5 <sup>h</sup> 5 <sup>m</sup>	82° 33'	0.01   0.01	5 <sup>h</sup> 5 <sup>m</sup>	82° 33'	0.01   0.01	5 <sup>h</sup> 4 <sup>m</sup>	82° 33'	0.01   0.01	5 <sup>h</sup> 4 <sup>m</sup>	82° 33'	0.01   0.01
		—	in		—	in		—	in		—	in
1	14.68	3.49	-3 + 2	10.48	10.39	+1 + 8	65.34	12.54	+2 + 7	59.50	10.07	+3 - 4
2	14.58	3.77	-2 + 6	10.31	10.54	+2 + 6	65.15	12.54	+3 + 5	59.32	9.91	+2 - 7
3	14.48	4.05	-1 + 8	10.15	10.69	+3 + 4	64.95	12.53	+3 + 2	59.14	9.75	+1 - 9
4	14.38	4.33	0 + 8	9.97	10.83	+3 0	64.76	12.52	+3 - 1	58.97	9.58	0 - 10
5	14.27	4.60	+1 + 8	9.80	10.96	+3 - 4	64.56	12.51	+3 - 5	58.79	9.41	-1 - 9
6	14.16	4.87	+3 + 5	9.63	11.08	+3 - 7	64.37	12.49	+2 - 8	58.62	9.24	-2 - 6
7	14.05	5.14	+3 + 2	9.45	11.20	+2 - 9	64.17	12.46	+1 - 10	58.45	9.05	-2 - 2
8	13.93	5.40	+3 - 1	9.27	11.32	0 - 10	63.98	12.42	-1 - 10	58.28	8.87	-2 + 3
9	13.82	5.66	+3 - 5	9.10	11.43	-1 - 9	63.79	12.38	-2 - 8	58.12	8.68	-1 + 7
10	13.70	5.91	+2 - 8	8.91	11.53	-2 - 6	63.60	12.34	-2 - 4	57.95	8.48	0 + 9
11	13.58	6.16	+1 - 10	8.73	11.63	-3 - 2	63.40	12.29	-2 + 1	57.79	8.28	+2 + 9
12	13.45	6.40	-1 - 10	8.55	11.73	-2 + 3	63.21	12.23	-2 + 5	57.63	8.07	+3 + 6
13	13.32	6.65	-2 - 8	8.37	11.82	-1 + 7	63.02	12.17	0 + 8	57.47	7.86	+3 + 2
14	13.20	6.89	-2 - 4	8.18	11.91	0 + 9	62.83	12.10	+1 + 9	57.31	7.65	+2 - 2
15	13.06	7.12	-2 0	8.00	11.99	+1 + 9	62.63	12.03	+2 + 8	57.15	7.44	+1 - 6
16	12.93	7.35	-2 + 5	7.81	12.06	+2 + 7	62.44	11.96	+3 + 5	57.00	7.22	0 - 8
17	12.79	7.58	-1 + 8	7.63	12.13	+2 + 3	62.25	11.88	+2 0	56.85	7.00	-2 - 8
18	12.65	7.80	0 + 9	7.44	12.20	+2 - 1	62.06	11.79	+1 - 3	56.70	6.77	-3 - 6
19	12.51	8.01	+2 + 8	7.25	12.25	+1 - 5	61.87	11.70	0 - 6	56.55	6.54	-4 - 2
20	12.37	8.22	+2 + 5	7.06	12.30	0 - 7	61.69	11.61	-1 - 7	56.40	6.30	-4 + 1
21	12.22	8.43	+2 + 1	6.87	12.35	-2 - 7	61.50	11.51	-2 - 7	56.25	6.06	-3 + 5
22	12.07	8.63	+2 - 2	6.68	12.39	-3 - 6	61.31	11.40	-3 - 4	56.11	5.82	-2 + 7
23	11.92	8.83	+1 - 6	6.49	12.43	-3 - 3	61.13	11.29	-4 - 1	55.96	5.57	-1 + 8
24	11.77	9.02	0 - 7	6.31	12.47	-3 0	60.94	11.17	-3 + 2	55.82	5.32	+1 + 8
25	11.61	9.21	-2 - 7	6.12	12.49	-3 + 3	60.76	11.05	-3 + 5	55.68	5.07	+2 + 7
26	11.46	9.40	-3 - 5	5.92	12.51	-2 + 6	60.58	10.93	-2 + 7	55.55	4.81	+3 + 4
27	11.30	9.57	-3 - 2	5.73	12.53	-1 + 8	60.39	10.80	0 + 8	55.41	4.55	+3 + 1
28	11.14	9.75	-3 + 1	5.54	12.54	0 + 8	60.21	10.66	+1 + 8	55.28	4.29	+3 - 2
29	10.98	9.92	-3 + 4	5.34	12.54	+2 + 7	60.03	10.52	+2 + 6	55.15	4.02	+2 - 6
30	10.81	10.08	-2 + 7				59.85	10.38	+3 + 3	55.02	3.75	+2 - 8
31	10.65	10.24	0 + 8				59.67	10.23	+3 0	54.90	3.48	0 - 10
32	10.48	10.39	+1 + 8				59.50	10.07	+3 - 4			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-82° 33' 0''	7.712	-7.647	-82° 33' 10''	7.715	-7.650
10	7.715	-7.650	20	7.718	-7.653

$$\alpha_{1945.0} = 5^h 5^m 3^s.36$$

$$\delta_{1945.0} = -82^\circ 32' 50''.25$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

215\*

Sb)  $\xi$  Mensae 5<sup>m</sup>8<sub>5</sub>

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	5 <sup>h</sup> 4 <sup>m</sup>	82° 32'	in o.or   o.or	5 <sup>h</sup> 4 <sup>m</sup>	82° 32'	in o.or   o.or	5 <sup>h</sup> 4 <sup>m</sup>	82° 32'	in o.or   o.or	5 <sup>h</sup> 4 <sup>m</sup>	82° 32'	in o.or   o.or
1	54.90	63.48	o -10	52.27	53.74	-2 -1	52.27	43.46	o + 8	54.86	34.44	+3 +1
2	54.78	63.20	-1 -9	52.23	53.40	-2 + 4	52.31	43.13	+2 + 9	54.98	34.20	+2 - 3
3	54.66	62.92	-2 - 7	52.18	53.06	-1 + 7	52.36	42.80	+3 + 7	55.10	33.97	+1 - 7
4	54.54	62.64	-2 - 3	52.15	52.72	+1 + 9	52.41	42.47	+3 + 3	55.23	33.74	o - 8
5	54.42	62.36	-2 + 1	52.11	52.38	+2 + 8	52.47	42.14	+3 - 1	55.36	33.52	-2 - 7
6	54.31	62.07	-1 + 5	52.08	52.03	+3 + 5	52.52	41.82	+2 - 5	55.49	33.30	-3 - 5
7	54.20	61.78	o + 8	52.05	51.69	+3 + 1	52.58	41.50	o - 8	55.62	33.09	-3 - 1
8	54.09	61.48	+1 + 9	52.03	51.34	+2 - 3	52.64	41.18	-1 - 8	55.75	32.89	-3 + 3
9	53.99	61.19	+3 + 7	52.01	51.00	+1 - 6	52.70	40.87	-2 - 7	55.88	32.69	-2 + 6
10	53.89	60.88	+3 + 4	51.99	50.65	o - 8	52.77	40.56	-3 - 4	56.02	32.49	-1 + 8
11	53.79	60.58	+3 o	51.98	50.30	-2 - 8	52.84	40.25	-4 o	56.16	32.29	o + 9
12	53.69	60.27	+2 - 4	51.96	49.95	-3 - 6	52.91	39.94	-3 + 4	56.29	32.10	+1 + 8
13	53.59	59.96	o - 7	51.95	49.61	-4 - 2	52.98	39.63	-2 + 7	56.43	31.92	+2 + 6
14	53.50	59.66	-1 - 8	51.94	49.25	-4 + 2	53.06	39.33	-1 + 8	56.57	31.74	+3 + 3
15	53.41	59.34	-3 - 7	51.94	48.91	-3 + 5	53.14	39.03	o + 9	56.72	31.57	+3 o
16	53.32	59.03	-4 - 4	51.94	48.57	-2 + 8	53.22	38.73	+1 + 8	56.86	31.40	+3 - 4
17	53.23	58.71	-4 o	51.94	48.22	o + 9	53.31	38.44	+2 + 5	57.01	31.24	+2 - 7
18	53.15	58.39	-3 + 4	51.94	47.87	+1 + 8	53.39	38.15	+3 + 2	57.16	31.08	+1 - 9
19	53.07	58.07	-2 + 7	51.95	47.53	+2 + 7	53.48	37.86	+3 - 2	57.31	30.93	o -10
20	52.99	57.75	-1 + 8	51.96	47.18	+3 + 4	53.57	37.58	+2 - 6	57.46	30.79	-1 - 8
21	52.91	57.42	o + 9	51.98	46.84	+3 o	53.67	37.30	+2 - 8	57.61	30.65	-2 - 5
22	52.84	57.09	+1 + 8	51.99	46.49	+3 - 3	53.76	37.02	o -10	57.77	30.51	-2 - 1
23	52.77	56.76	+2 + 5	52.01	46.15	+2 - 7	53.86	36.74	-1 - 9	57.92	30.39	-2 + 3
24	52.70	56.44	o + 2	52.03	45.81	+1 - 9	53.96	36.47	-2 - 7	58.07	30.26	-1 + 7
25	52.63	56.10	+3 - 1	52.05	45.47	o -10	54.07	36.20	-2 - 4	58.23	30.15	o + 9
26	52.57	55.77	+3 - 5	52.08	45.13	-1 - 9	54.17	35.94	-2 + 1	58.39	30.04	+2 + 9
27	52.51	55.44	+2 - 7	52.11	44.79	-2 - 6	54.28	35.68	-2 + 5	58.55	29.93	+3 + 6
28	52.46	55.10	+1 - 9	52.15	44.45	-2 - 2	54.39	35.42	-1 + 8	58.71	29.83	+3 + 2
29	52.40	54.76	o - 9	52.19	44.12	-2 + 2	54.50	35.17	+1 + 9	58.87	29.74	+2 - 2
30	52.36	54.43	-2 - 8	52.23	43.79	-1 + 6	54.62	34.92	+2 + 8	59.03	29.65	+1 - 6
31	52.31	54.08	-2 - 5	52.27	43.46	o + 8	54.74	34.68	+3 + 5	59.19	29.57	o - 8
32	52.27	53.74	-2 - 1				54.86	34.44	+3 + 1	59.35	29.49	-2 - 8

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-82° 32' 20"	7.701	-7.636	-82° 32' 40"	7.707	-7.642	-82° 33' 0"	7.712	-7.647
30	7.704	-7.639	50	7.710	-7.644	10	7.715	-7.650

$$\alpha_{1945.0} = 5^h 5^m 33.36$$

$$\delta_{1945.0} = -82^\circ 32' 50.25$$

\*) Tag der doppelten unteren Kulmination: Juni 8.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sb)  $\xi$  Mensae 5<sup>m</sup>85

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	—		in	—		in	—		in	—		in
	5 <sup>h</sup> 4 <sup>m</sup>	82° 32'	o.or   o.or	5 <sup>h</sup> 5 <sup>m</sup>	82° 32'	o.or   o.or	5 <sup>h</sup> 5 <sup>m</sup>	82° 32'	o.or   o.or	5 <sup>h</sup> 5 <sup>m</sup>	82° 32'	o.or   o.or
1	59.35	29.49	-2 - 8	4.27	30.10	-4 0	8.28	36.22	0 + 9	9.85	45.56	+2 + 5
2	59.51	29.42	-3 - 6	4.43	30.22	-3 + 4	8.38	36.49	+1 + 9	9.85	45.89	+3 + 1
3	59.67	29.35	-4 - 3	4.58	30.34	-2 + 7	8.47	36.77	+2 + 7	9.85	46.22	+2 - 2
4	59.84	29.30	-4 + 1	4.73	30.47	-1 + 8	8.56	37.05	+2 + 4	9.85	46.56	+2 - 6
5	60.00	29.25	-3 + 5	4.88	30.60	0 + 9	8.65	37.33	+3 0	9.84	46.89	+1 - 8
6	60.17	29.20	-2 + 7	5.03	30.74	+1 + 8	8.73	37.62	+2 - 3	9.83	47.22	0 - 9
7	60.33	29.16	-1 + 9	5.18	30.88	+2 + 6	8.81	37.91	+2 - 6	9.82 9.80	47.56 47.89	-1 - 9 -2 - 7
8	60.50	29.13	+1 + 9	5.33	31.03	+3 + 2	8.89	38.21	+1 - 9	9.78	48.23	-2 - 4
9	60.67	29.11	+2 + 7	5.47	31.19	+3 - 1	8.97	38.51	0 - 10	9.76	48.56	-2 0
10	60.84	29.09	+3 + 4	5.61	31.35	+3 - 5	9.04	38.80	-1 - 9	9.73	48.89	-1 + 4
11	61.00	29.07	+3 + 1	5.76	31.52	+2 - 8	9.11	39.11	-2 - 6	9.70	49.22	0 + 7
12	61.17	29.06	+3 - 3	5.90	31.69	+1 - 10	9.18	39.41	-2 - 3	9.66	49.55	+1 + 9
13	61.34	29.06	+2 - 6	6.04	31.87	0 - 10	9.24	39.72	-2 + 2	9.63	49.88	+3 + 8
14	61.50	29.07	+1 - 9	6.17	32.05	-1 - 8	9.30	40.03	-1 + 6	9.58	50.21	+3 + 5
15	61.67	29.08	0 - 10	6.31	32.24	-2 - 5	9.36	40.34	+1 + 8	9.54	50.53	+4 + 1
16	61.84	29.10	-1 - 9	6.44	32.44	-2 - 1	9.41	40.65	+2 + 9	9.49	50.85	+3 - 4
17	62.00	29.12	-2 - 7	6.57	32.64	-2 + 4	9.46	40.97	+3 + 7	9.44	51.17	+1 - 7
18	62.17	29.15	-2 - 3	6.70	32.85	0 + 7	9.51	41.29	+3 + 3	9.39	51.49	0 - 9
19	62.33	29.19	-2 + 1	6.83	33.06	+1 + 9	9.56	41.61	+3 - 1	9.34	51.81	-2 - 8
20	62.50	29.23	-1 + 5	6.96	33.27	+2 + 8	9.60	41.93	+2 - 5	9.28	52.13	-3 - 5
21	62.66	29.28	0 + 8	7.08	33.49	+3 + 5	9.64	42.25	0 - 8	9.22	52.45	-4 - 1
22	62.83	29.33	+1 + 9	7.20	33.72	+3 + 1	9.68	42.57	-1 - 9	9.15	52.76	-4 + 3
23	62.99	29.39	+2 + 7	7.32	33.95	+2 - 3	9.71	42.90	-3 - 7	9.09	53.07	-3 + 7
24	63.15	29.46	+3 + 4	7.44	34.18	+1 - 7	9.74	43.22	-4 - 4	9.01	53.38	-2 + 9
25	63.32	29.53	+3 0	7.55	34.42	0 - 8	9.76	43.55	-4 + 1	8.94	53.68	0 + 10
26	63.48	29.61	+2 - 4	7.66	34.67	-2 - 8	9.79	43.88	-4 + 5	8.86	53.98	+1 + 9
27	63.63	29.70	0 - 7	7.77	34.92	-3 - 6	9.80	44.22	-3 + 8	8.78	54.28	+2 + 6
28	63.79	29.79	-1 - 8	7.88	35.17	-4 - 2	9.82	44.55	-1 + 9	8.70	54.58	+2 + 3
29	63.95	29.89	-3 - 7	7.98	35.43	-4 + 2	9.83	44.89	0 + 9	8.61	54.88	+3 - 1
30	64.11	29.99	-4 - 4	8.08	35.69	-3 + 6	9.84	45.22	+1 + 8	8.53	55.17	+2 - 4
31	64.27	30.10	-4 0	8.18	35.95	-2 + 8	9.85	45.56	+2 + 5	8.43	55.46	+1 - 7
32				8.28	36.22	0 + 9				8.34	55.74	0 - 9

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-82° 32' 20''	7.701	-7.636	-82° 32' 30''	7.704	-7.639	-82° 32' 50''	7.710	-7.644
30	7.704	-7.639	40	7.707	-7.642	60	7.712	-7.647

$$\alpha_{1945.0} = 5^h 5^m 3^s.36$$

$$\delta_{1945.0} = -82^\circ 32' 50''.25$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

217\*

Sc) ζ Octantis 5<sup>m</sup>38

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	9 <sup>h</sup> 5 <sup>m</sup>	85° 26'	in o.or   o.or	9 <sup>h</sup> 5 <sup>m</sup>	85° 26'	in o.or   o.or	9 <sup>h</sup> 5 <sup>m</sup>	85° 26'	in o.or   o.or	9 <sup>h</sup> 5 <sup>m</sup>	85° 27'	in o.or   o.or
1	22.78	31.50	-2 -8	24.22	42.56	-6 +3	21.39	53.03	-3 +7	14.80	1.89	+5 +5
2	22.91	31.83	-4 -6	24.19	42.94	-5 +6	21.23	53.36	-1 +8	14.54	2.11	+7 +2
3	23.02	32.16	-6 -3	24.15	43.32	-3 +8	21.06	53.69	+2 +8	14.28	2.33	+8 -1
4	23.13	32.49	-6 +1	24.11	43.69	0 +9	20.89	54.02	+4 +7	14.02	2.55	+7 -4
5	23.24	32.82	-5 +4	24.07	44.07	+3 +8	20.72	54.35	+6 +5	13.76	2.77	+5 -6
6	23.34	33.16	-4 +7	{ 24.02 44.44 +5 +6 23.96 44.81 +7 +3 }			20.54	54.67	+8 +1	13.49	2.98	+2 -7
7	23.43	33.50	-2 +8	23.90	45.19	+8 -1	20.36	55.00	+8 -3	13.22	3.18	-1 -5
8	23.52	33.84	+1 +8	23.83	45.56	+7 -4	20.17	55.31	+6 -6	12.95	3.38	-4 -2
9	23.61	34.19	+3 +7	23.76	45.92	+5 -7	19.99	55.63	+4 -7	12.68	3.57	-6 +1
10	23.69	34.53	+6 +5	23.68	46.29	+2 -8	19.79	55.94	0 -7	12.41	3.76	-6 +5
11	23.76	34.88	+7 +1	23.60	46.66	-1 -7	19.60	56.25	-3 -5	12.14	3.94	-4 +8
12	23.83	35.23	+7 -3	23.52	47.03	-4 -4	19.40	56.55	-5 -1	11.86	4.12	-2 +9
13	23.90	35.59	+6 -6	23.43	47.40	-6 0	19.20	56.85	-6 +3	11.59	4.29	+1 +7
14	23.96	35.94	+4 -8	23.34	47.76	-6 +4	19.00	57.15	-6 +6	11.31	4.46	+3 +4
15	24.02	36.30	0 -8	23.24	48.13	-5 +7	18.79	57.45	-4 +8	11.03	4.63	+5 -1
16	24.07	36.66	-3 -6	23.14	48.49	-3 +8	18.58	57.74	-1 +8	10.75	4.79	+5 -5
17	24.12	37.02	-5 -2	23.03	48.85	0 +7	18.37	58.03	+2 +5	10.47	4.94	+4 -8
18	24.16	37.38	-6 +2	22.92	49.21	+3 +4	18.15	58.31	+4 +2	10.18	5.09	+1 -10
19	24.20	37.75	-6 +5	22.80	49.56	+4 0	17.93	58.59	+5 -3	9.90	5.24	-1 -10
20	24.23	38.11	-4 +8	22.68	49.92	+5 -4	17.70	58.87	+4 -6	9.61	5.38	-4 -8
21	24.25	38.48	-2 +8	22.55	50.27	+4 -7	17.48	59.14	+3 -9	9.32	5.51	-6 -5
22	24.27	38.85	+1 +6	22.42	50.62	+2 -9	17.24	59.41	0 -10	9.03	5.64	-6 -1
23	24.29	39.22	+3 +3	22.29	50.98	-1 -9	17.01	59.67	-2 -9	8.74	5.77	-6 +2
24	24.30	39.59	+5 -1	22.15	51.32	-3 -8	16.78	59.93	-5 -7	8.46	5.89	-5 +5
25	24.31	39.96	+5 -5	22.01	51.67	-5 -5	16.54	60.19	-6 -3	8.17	6.01	-3 +7
26	24.31	40.32	+3 -8	21.86	52.01	-6 -2	16.30	60.45	-6 0	7.88	6.12	-1 +8
27	24.31	40.69	+1 -9	21.71	52.35	-6 +2	16.05	60.70	-6 +3	7.59	6.22	+2 +7
28	24.30	41.07	-1 -9	21.55	52.69	-5 +5	15.81	60.94	-4 +6	7.30	6.32	+4 +6
29	24.29	41.44	-4 -7	21.39	53.03	-3 +7	15.56	61.19	-2 +8	7.00	6.42	+6 +3
30	24.27	41.81	-5 -4				15.31	61.42	0 +8	6.71	6.50	+7 0
31	24.25	42.19	-6 0				15.06	61.66	+3 +7	6.42	6.58	+7 -4
32	24.22	42.56	-6 +3				14.80	61.89	+5 +5			

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
-85° 26' 30''	12.583	-12.543	-85° 26' 40''	12.590	-12.551	-85° 27' 0''	12.606	-12.566
40	12.590	-12.551	50	12.598	-12.558	10	12.613	-12.574

$$\alpha_{1945.0} = 9^h 5^m 4^s.31$$

$$\delta_{1945.0} = -85^\circ 26' 45''.80$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sc) ζ Octantis 5<sup>m</sup>38

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	9 <sup>h</sup> 4 <sup>m</sup>	—	in	9 <sup>h</sup> 4 <sup>m</sup>	—	in	9 <sup>h</sup> 4 <sup>m</sup>	—	in	9 <sup>h</sup> 4 <sup>m</sup>	—	in
	85° 27'	o.or   o.or		85° 27'	o.or   o.or		85° 26'	o.or   o.or		85° 26'	o.or   o.or	
1	66.42	6.58	+7 -4	57.48	6.54	-2 -5	50.39	61.83	-6 +4	46.32	53.40	+2 +7
2	66.12	6.66	+6 -6	57.21	6.45	-4 -2	50.29	61.60	-5 +8	46.26	53.09	+4 +3
3	65.82	6.74	+3 -7	56.93	6.36	-5 +2	50.01	61.38	-2 +9	46.20	52.79	+5 -1
4	65.53	6.81	o -6	56.67	6.26	-5 +6	49.82	61.14	+1 +9	46.15	52.48	+5 -6
5	65.23	6.87	-3 -4	56.40	6.16	-4 +9	49.64	60.91	+3 +6	46.10	52.16	+3 -9
6	64.94	6.93	-5 o	56.14	6.05	-1 +10	49.47	60.67	+5 +2	46.06	51.85	+1 -10
7	64.64	6.98	-6 +4	55.88	5.94	+2 +8	49.29	60.43	+6 -3	46.02	51.54	-2 -9
8	64.35	7.02	-5 +8	55.62	5.82	+4 +4	49.13	60.18	+5 -7	*45.99	51.22	-5 -7
9	64.05	7.06	-3 +9	55.36	5.70	+5 o	48.96	59.93	+2 -9	45.96	50.91	-6 -3
10	63.76	7.10	o +9	55.11	5.57	+5 -5	48.80	59.68	o -10	45.94	50.59	-7 o
11	63.46	7.13	+3 +6	54.86	5.44	+4 -8	48.65	59.42	-3 -8	45.92	50.27	-6 +4
12	63.17	7.15	+5 +2	54.61	5.30	+1 -10	48.50	59.16	-5 -6	45.91	49.96	-5 +6
13	62.88	7.17	+5 -3	54.36	5.16	-2 -10	48.35	58.90	-7 -2	45.90	49.64	-2 +8
14	62.58	7.19	+4 -7	54.12	5.02	-5 -8	48.20	58.64	-7 +2	45.89	49.32	o +8
15	62.29	7.20	+2 -10	53.88	4.87	-6 -4	48.06	58.37	-6 +5	45.90	49.01	+3 +7
16	62.00	7.20	o -10	53.64	4.71	-7 o	47.92	58.10	-4 +7	45.90	48.69	+5 +5
17	61.71	7.20	-3 -9	53.40	4.55	-7 +3	47.79	57.82	-1 +8	45.91	48.37	+7 +2
18	61.42	7.20	-5 -6	53.17	4.39	-5 +6	47.66	57.55	+1 +8	45.93	48.06	+7 -2
19	61.13	7.18	-7 -3	52.93	4.22	-3 +8	47.54	57.26	+4 +6	45.95	47.74	+7 -5
20	60.84	7.17	-7 +1	52.71	4.04	o +8	47.42	56.98	+6 +3	45.98	47.43	+5 -7
21	60.56	7.14	-6 +4	52.48	3.86	+2 +7	47.30	56.69	+7 o	46.01	47.11	+2 -7
22	60.27	7.11	-4 +6	52.26	3.68	+5 +5	47.19	56.40	+7 -4	46.05	46.79	-1 -6
23	59.98	7.08	-2 +8	52.03	3.49	+6 +2	47.08	56.12	+6 -6	46.09	46.48	-4 -3
24	59.70	7.04	+1 +7	51.82	3.30	+7 -2	46.97	55.82	+3 -8	46.13	46.17	-6 +1
25	59.41	7.00	+3 +6	51.60	3.10	+7 -5	46.87	55.53	o -7	46.18	45.86	-6 +5
26	59.13	6.95	+5 +4	51.39	2.90	+5 -7	46.78	55.23	-3 -5	46.24	45.55	-5 +8
27	58.85	6.90	+7 +1	51.18	2.69	+2 -8	46.69	54.93	-5 -1	46.30	45.24	-2 +9
28	58.57	6.84	+7 -3	50.98	2.48	-1 -6	46.61	54.63	-6 +3	46.36	44.93	+1 +8
29	58.30	6.77	+6 -5	50.78	2.27	-3 -4	46.53	54.33	-5 +6	46.43	44.63	+3 +5
30	58.02	6.70	+4 -7	50.58	2.05	-5 o	46.46	54.02	-4 +9	46.51	44.33	+5 o
31	57.75	6.62	+1 -7	50.39	1.83	-6 +4	46.39	53.71	-1 +9	46.59	44.03	+5 -4
32	57.48	6.54	-2 -5				46.32	53.40	+2 +7	46.67	43.72	+4 -8

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
-85° 26' 40"	12.590	-12.551	-85° 26' 50"	12.598	-12.558	-85° 27' 00"	12.606	-12.566
50	12.598	-12.558	60	12.606	-12.566	10	12.613	-12.574

$$\alpha_{1945.0} = 9^h 5^m 4.31$$

$$\delta_{1945.0} = -85^\circ 26' 45.780$$

\*) Tag der doppelten unteren Kulmination: Aug. 8.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

219\*

Sc) ζ Octantis 5<sup>m</sup>38

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder.	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	9 <sup>h</sup> 4 <sup>m</sup>	85° 26'	in o.or   o.or	9 <sup>h</sup> 4 <sup>m</sup>	85° 26'	in o.or   o.or	9 <sup>h</sup> 4 <sup>m</sup>	85° 26'	in o.or   o.or	9 <sup>h</sup> 5 <sup>m</sup>	85° 26'	in o.or   o.or
1	46.67	43.72	+4 - 8	51.23	36.11	-3 - 9	58.89	32.84	-7 + 3	6.71	35.47	-1 + 7
2	46.76	43.43	+2 -10	51.44	35.91	-5 - 6	59.16	32.84	-5 + 6	6.95	35.66	+1 + 7
3	46.85	43.13	-1 -10	51.65	35.73	-7 - 2	59.43	32.84	-3 + 7	7.18	35.85	+4 + 5
4	46.95	42.84	-4 - 8	51.87	35.55	-7 + 1	59.70	32.84	0 + 7	7.41	36.04	+6 + 2
5	47.05	42.55	-6 - 5	52.09	35.37	-6 + 4	59.97	32.86	+2 + 6	7.64	36.24	+7 - 1
6	47.16	42.26	-7 - 1	52.32	35.20	-4 + 7	60.24	32.88	+5 + 4	7.86	36.45	+7 - 4
7	47.28	41.97	-7 + 3	52.54	35.04	-2 + 8	60.51	32.91	+6 + 2	8.08	36.66	+6 - 6
8	47.40	41.69	-6 + 6	52.78	34.88	+1 + 8	60.78	32.94	+7 - 1	8.30	36.88	+4 - 7
9	47.52	41.41	-3 + 8	53.01	34.73	+3 + 6	61.05	32.98	+7 - 4	8.52	37.10	+1 - 7
10	47.65	41.13	-1 + 8	53.24	34.58	+6 + 4	61.32	33.02	+5 - 6	8.73	37.33	-2 - 5
11	47.78	40.85	+2 + 8	53.48	34.44	+7 + 1	61.59	33.08	+3 - 7	8.94	37.56	-4 - 1
12	47.91	40.58	+4 + 6	53.72	34.30	+7 - 2	61.86	33.14	0 - 6	9.14	37.80	-5 + 3
13	48.05	40.31	+6 + 3	53.96	34.17	+7 - 5	62.13	33.20	-3 - 3	9.34	38.05	-5 + 7
14	48.19	40.05	+7 0	54.20	34.05	+5 - 7	62.40	33.27	-5 + 1	9.54	38.29	-3 +10
15	48.34	39.78	+7 - 4	54.45	33.93	+2 - 7	62.66	33.35	-5 + 5	9.74	38.55	0 +10
16	48.49	39.53	+6 - 6	54.70	33.81	-1 - 5	62.92	33.44	-4 + 9	9.93	38.81	+3 + 8
17	48.65	39.27	+3 - 7	54.95	33.71	-4 - 2	63.19	33.53	-2 +10	10.12	39.07	+5 + 5
18	48.81	39.02	0 - 6	55.20	33.61	-5 + 3	63.45	33.63	+1 +10	10.30	39.34	+6 0
19	48.97	38.77	-3 - 4	55.46	33.51	-5 + 7	63.71	33.73	+4 + 7	10.48	39.61	+6 - 5
20	49.14	38.52	-5 0	55.71	33.42	-4 + 9	63.97	33.84	+6 + 2	10.66	39.89	+4 - 9
21	49.31	38.28	-6 + 4	55.97	33.33	-1 +10	64.23	33.96	+6 - 3	10.83	40.17	+1 -11
22	49.48	38.05	-5 + 7	56.23	33.26	+2 + 8	64.49	34.08	+5 - 8	11.00	40.46	-2 -10
23	49.66	37.81	-3 + 9	56.49	33.19	+4 + 4	64.74	34.21	+2 -10	11.16	40.75	-5 - 8
24	49.84	37.58	0 + 9	56.75	33.12	+6 - 1	65.00	34.35	-1 -11	11.32	41.04	-7 - 4
25	50.03	37.36	+3 + 6	57.01	33.06	+5 - 6	65.25	34.49	-4 - 9	11.47	41.34	-8 0
26	50.22	37.14	+5 + 2	57.27	33.01	+4 - 9	65.50	34.64	-6 - 6	11.62	41.64	-7 + 4
27	50.42	36.93	+5 - 3	57.54	32.97	+1 -11	65.74	34.80	-8 - 2	11.77	41.95	-5 + 6
28	50.62	36.72	+4 - 7	57.81	32.93	-2 -10	65.99	34.96	-7 + 2	11.91	42.26	-2 + 7
29	50.82	36.51	+2 -10	58.08	32.90	-5 - 8	66.23	35.13	-6 + 5	12.05	42.57	0 + 7
30	51.02	36.31	0 -10	58.35	32.87	-7 - 4	66.47	35.30	-4 + 7	12.18	42.89	+3 + 6
31	51.23	36.11	-3 - 9	58.62	32.85	-7 0	66.71	35.47	-1 + 7	12.31	43.21	+5 + 3
32				58.89	32.84	-7 + 3				12.44	43.53	+6 0

δ	sec δ	tg δ	δ	sec δ	tg δ
-85° 26' 30''	12.583	-12.543	-85° 26' 40''	12.590	-12.551
40	12.590	-12.551	50	12.598	-12.558

$$\alpha_{1945.0} = 9^h 5^m 43.1$$

$$\delta_{1945.0} = -85^\circ 26' 45.780$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sd)  $\iota$  Octantis  $5^m 38$

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	in			in			in			in		
	12 <sup>h</sup> 48 <sup>m</sup>	84° 49'	o.oi   o.oi	12 <sup>h</sup> 49 <sup>m</sup>	84° 49'	o.oi   o.oi	12 <sup>h</sup> 49 <sup>m</sup>	84° 49'	o.oi   o.oi	12 <sup>h</sup> 49 <sup>m</sup>	84° 49'	o.oi   o.oi
1	58.60	3.80	+4 - 8	6.06	9.09	-5 - 4	10.94	17.69	-6 - 2	13.32	29.29	-3 + 9
2	58.85	3.88	+2 - 9	6.27	9.35	-6 - 1	11.06	18.05	-6 + 2	13.34	29.67	-1 + 10
3	59.11	3.97	-1 - 8	6.48	9.61	-6 + 3	11.19	18.40	-6 + 5	13.35	30.05	+2 + 9
4	59.37	4.06	-4 - 6	6.69	9.87	-6 + 6	11.31	18.76	-5 + 8	13.37	30.43	+4 + 7
5	59.62	4.16	-5 - 3	6.89	10.14	-4 + 9	11.43	19.12	-3 + 10	13.38	30.82	+6 + 4
6	59.88	4.27	-6 + 1	7.09	10.41	-2 + 10	11.55	19.48	0 + 10	13.39	31.58	+5 - 3
7	60.14	4.38	-6 + 4	7.29	10.69	+1 + 10	11.66	19.84	+3 + 9	13.38	31.96	+3 - 5
8	60.39	4.50	-5 + 7	7.49	10.97	+4 + 8	11.77	20.21	+5 + 6	13.38	32.34	-1 - 6
9	60.64	4.63	-3 + 9	7.68	11.25	+6 + 4	11.87	20.57	+6 + 3	13.37	32.71	-4 - 5
10	60.89	4.76	0 + 10	7.88	11.54	+7 + 1	11.98	20.94	+6 - 1	13.35	33.09	-6 - 2
11	61.14	4.90	+3 + 9	8.06	11.83	+6 - 3	12.07	21.31	+4 - 5	13.33	33.47	-7 + 1
12	61.39	5.05	+5 + 6	8.25	12.13	+4 - 6	12.17	21.68	+1 - 6	13.31	33.84	-6 + 4
13	61.64	5.20	+7 + 2	8.43	12.43	0 - 7	12.26	22.05	-2 - 6	13.29	34.21	-4 + 6
14	61.89	5.35	+7 - 2	8.62	12.74	-3 - 6	12.35	22.43	-5 - 5	13.26	34.59	-1 + 6
15	62.14	5.51	+5 - 5	8.79	13.04	-6 - 4	12.44	22.80	-7 - 2	13.23	34.96	+3 + 5
16	62.38	5.68	+2 - 7	8.97	13.36	-7 0	12.52	23.18	-7 + 2	13.20	35.33	+6 + 1
17	62.63	5.85	-1 - 7	9.14	13.67	-6 + 3	12.60	23.56	-5 + 5	13.16	35.69	+7 - 2
18	62.87	6.03	-4 - 5	9.31	13.99	-4 + 5	12.67	23.93	-2 + 6	13.12	36.06	+7 - 6
19	63.11	6.22	-6 - 3	9.47	14.31	-1 + 6	12.74	24.31	+1 + 5	13.07	36.42	+6 - 9
20	63.35	6.41	-7 + 1	9.63	14.64	+2 + 5	12.81	24.69	+4 + 3	13.03	36.78	+3 - 10
21	63.58	6.60	-6 + 4	9.79	14.97	+5 + 2	12.87	25.07	+6 0	12.97	37.14	0 - 10
22	63.82	6.80	-3 + 6	9.94	15.30	+7 - 1	12.93	25.45	+7 - 4	12.92	37.50	-2 - 8
23	64.05	7.01	0 + 6	10.09	15.63	+7 - 5	12.98	25.84	+7 - 7	12.86	37.86	-4 - 5
24	64.28	7.22	+3 + 4	10.24	15.97	+6 - 7	13.03	26.22	+5 - 9	12.80	38.22	-6 - 2
25	64.52	7.44	+5 + 1	10.39	16.31	+4 - 9	13.08	26.60	+2 - 10	12.73	38.57	-6 + 2
26	64.74	7.66	+7 - 2	10.53	16.65	+1 - 9	13.13	26.99	-1 - 9	12.67	38.92	-6 + 5
27	64.97	7.88	+7 - 5	10.67	17.00	-2 - 8	13.17	27.37	-3 - 7	12.59	39.27	-4 + 8
28	65.19	8.12	+5 - 8	10.80	17.34	-4 - 5	13.21	27.76	-5 - 4	12.52	39.61	-2 + 9
29	65.41	8.35	+3 - 9	10.94	17.69	-6 - 2	13.24	28.14	-6 0	12.44	39.96	+1 + 9
30	65.63	8.59	0 - 9				13.27	28.52	-6 + 3	12.36	40.30	+4 + 8
31	65.85	8.84	-3 - 7				13.30	28.90	-5 + 6	12.27	40.64	+6 + 5
32	66.06	9.09	-5 - 4				13.32	29.29	-3 + 9			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-84° 49' 0''	11.069	-11.024	-84° 49' 20''	11.081	-11.036	-84° 49' 40''	11.093	-11.047
10	11.075	-11.030	30	11.087	-11.042	50	11.099	-11.053

$$\alpha_{1945.0} = 12^h 48^m 58^s.78$$

$$\delta_{1945.0} = -84^\circ 49' 30''.88$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

221\*

 Sd) t Octantis 5<sup>m</sup>38

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	in			in			in			in		
12 <sup>h</sup> 49 <sup>m</sup>	84°49'	o.or   o.or	12 <sup>h</sup> 49 <sup>m</sup>	84°49'	o.or   o.or	12 <sup>h</sup> 48 <sup>m</sup>	84°49'	o.or   o.or	12 <sup>h</sup> 48 <sup>m</sup>	84°49'	o.or   o.or	
1	12.27	40.64	+6 +5	8.16	49.48	+2 -6	62.13	53.93	-6 -3	55.28	53.33	-3 +7
2	12.18	40.97	+6 +2	7.99	49.70	-1 -6	61.91	54.00	-7 0	55.07	53.22	0 +7
3	12.09	41.30	+6 -2	7.81	49.92	-4 -4	61.69	54.06	-7 +4	54.86	53.11	+4 +5
4	12.00	41.64	+4 -5	7.63	50.13	-7 -1	61.47	54.11	-5 +7	54.65	52.99	+6 +2
5	11.90	41.96	+1 -6	7.45	50.34	-8 +2	61.25	54.16	-2 +8	54.45	52.86	+7 -2
6	11.80	42.29	-2 -5	7.27	50.54	-7 +6	61.03	54.20	+2 +7	54.24	52.73	+7 -6
7	11.70	42.61	-5 -3	7.08	50.74	-4 +8	60.81	54.24	+5 +4	54.04	52.60	+5 -9
8	11.59	42.93	-7 0	6.89	50.93	-1 +8	60.58	54.27	+7 0	53.84	52.45	+2 -10
9	11.48	43.24	-7 +4	6.70	51.12	+3 +6	60.35	54.30	+7 -4	53.65	52.30	-1 -9
10	11.37	43.55	-6 +6	6.51	51.30	+6 +2	60.13	54.32	+6 -8	53.45	52.15	-3 -7
11	11.25	43.86	-3 +7	6.31	51.48	+7 -2	59.90	54.33	+4 -10	53.25	52.00	-5 -4
12	11.13	44.16	+1 +6	6.12	51.66	+7 -6	59.68	54.34	+1 -10	53.06	51.84	-6 0
13	11.01	44.47	+5 +4	5.92	51.83	+5 -9	59.45	54.34	-2 -9	52.87	51.67	-6 +3
14	10.89	44.77	+7 0	5.72	51.99	+3 -10	59.23	54.34	-4 -6	52.68	51.50	-5 +6
15	10.76	45.06	+8 -4	5.52	52.15	0 -10	59.00	54.33	-6 -3	52.50	51.33	-3 +9
16	10.63	45.36	+7 -8	5.32	52.30	-3 -8	58.78	54.32	-6 +1	52.31	51.15	-1 +9
17	10.50	45.65	+4 -10	5.11	52.44	-5 -5	58.56	54.30	-6 +5	52.13	50.96	+2 +9
18	10.36	45.93	+2 -11	4.91	52.58	-6 -1	58.34	54.27	-4 +7	51.96	50.77	+5 +7
19	10.22	46.21	-1 -9	4.70	52.72	-6 +2	58.11	54.24	-2 +9	51.78	50.58	+6 +3
20	10.08	46.48	-4 -7	4.49	52.85	-5 +5	57.89	54.20	+1 +9	51.61	50.38	+7 0
21	9.93	46.75	-5 -3	4.28	52.97	-3 +8	57.67	54.16	+4 +8	51.44	50.18	+5 -4
22	9.78	47.02	-6 0	4.07	53.09	-1 +9	57.45	54.11	+6 +5	51.27	49.97	+3 -6
23	9.63	47.29	-6 +4	3.86	53.21	+2 +8	57.23	54.06	+7 +2	51.10	49.76	0 -7
24	9.48	47.55	-4 +6	3.65	53.32	+5 +7	57.00	54.00	+6 -2	50.94	49.54	-4 -5
25	9.32	47.80	-2 +8	3.43	53.42	+6 +4	56.78	53.94	+5 -5	50.78	49.32	-6 -3
26	9.16	48.06	0 +9	3.22	53.52	+7 0	56.57	53.87	+2 -7	50.62	49.10	-7 +1
27	9.00	48.31	+3 +8	3.00	53.62	+6 -3	56.35	53.79	-2 -7	50.47	48.87	-6 +4
28	8.84	48.55	+5 +6	2.79	53.70	+4 -6	56.13	53.71	-5 -4	50.32	48.64	-4 +7
29	8.67	48.79	+6 +3	2.57	53.79	0 -6	55.92	53.62	-7 -1	50.17	48.40	-1 +7
30	8.51	49.02	+6 -1	2.35	53.86	-3 -5	55.70	53.53	-7 +2	50.03	48.16	+3 +6
31	8.33	49.25	+5 -4	2.13	53.93	-6 -3	55.49	53.43	-6 +6	49.89	47.92	+6 +2
32	8.16	49.48	+2 -6				55.28	53.33	-3 +7	49.75	47.67	+7 -1

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-84° 49' 40''	11.093	-11.047	-84° 49' 50''	11.099	-11.053
50	11.099	-11.053	60	11.105	-11.059

$$\alpha_{1945.0} = 12^{\text{h}} 48^{\text{m}} 58^{\text{s}}.78$$

$$\delta_{1945.0} = -84^{\circ} 49' 30''.78$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sd)  $\iota$  Octantis  $5^m 38$

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	♁ Glieder	AR.	Dekl.	♁ Glieder	AR.	Dekl.	♁ Glieder	AR.	Dekl.	♁ Glieder
	12 <sup>h</sup> 48 <sup>m</sup>	84° 49'	in		12 <sup>h</sup> 48 <sup>m</sup>	84° 49'	in		12 <sup>h</sup> 48 <sup>m</sup>	84° 49'	in	
			o.or	o.or			o.or	o.or			o.or	o.or
1	49.75	47.67	+7	-1	47.45	39.07	+4	-10	49.27	29.99	-5	-5
2	49.61	47.42	+7	-5	47.44	38.76	+1	-10	49.40	29.73	-6	-1
3	49.48	47.17	+6	-8	47.43	38.45	-1	-9	49.53	29.48	-6	+2
4	49.36	46.91	+3	-10	47.43	38.15	-4	-7	49.67	29.23	-5	+5
5	49.23	46.65	0	-10	47.43	37.84	-6	-3	49.81	28.99	-3	+7
6	49.12	46.38	-3	-8	47.44	37.53	-6	0	49.96	28.75	-1	+8
7	49.00	46.12	-5	-5	47.46	37.22	-6	+4	50.11	28.51	+2	+8
8	48.89	45.84	-6	-2	47.48	36.92	-4	+6	50.26	28.28	+4	+7
9	48.79	45.57	-6	+2	47.50	36.61	-2	+8	50.41	28.05	+6	+4
10	48.68	45.30	-6	+5	47.53	36.30	0	+9	50.57	27.82	+7	+1
11	48.58	45.02	-4	+8	47.56	35.99	+3	+8	50.74	27.60	+6	-2
12	48.49	44.74	-2	+9	47.59	35.69	+5	+6	50.90	27.38	+3	-4
13	48.39	44.46	+1	+9	47.63	35.38	+6	+3	51.08	27.17	0	-5
14	48.30	44.18	+4	+8	47.68	35.08	+6	0	51.25	26.96	-3	-4
15	48.22	43.89	+6	+5	47.73	34.78	+5	-3	51.43	26.76	-6	-2
16	48.14	43.60	+7	+2	47.78	34.48	+2	-5	51.62	26.57	-8	+1
17	48.07	43.31	+6	-2	47.84	34.19	-1	-6	51.81	26.38	-8	+5
18	48.00	43.02	+4	-5	47.91	33.89	-5	-4	52.00	26.19	-6	+8
19	47.93	42.72	+1	-6	47.98	33.60	-7	-1	52.19	26.00	-2	+9
20	47.86	42.43	-2	-6	48.05	33.31	-8	+2	52.39	25.82	+2	+7
21	47.80	42.13	-5	-3	48.13	33.02	-7	+6	52.58	25.65	+5	+4
22	47.74	41.83	-7	0	48.21	32.73	-4	+8	52.79	25.48	+7	0
23	47.69	41.53	-7	+3	48.30	32.44	0	+7	52.99	25.32	+8	-5
24	47.65	41.23	-5	+6	48.39	32.16	+3	+5	53.20	25.17	+7	-9
25	47.60	40.92	-2	+7	48.49	31.88	+6	+1	53.41	25.02	+4	-11
26	47.57	40.62	+1	+6	48.59	31.60	+8	-3	53.63	24.87	+1	-11
27	47.54	40.31	+5	+3	48.69	31.33	+8	-7	53.85	24.73	-2	-10
28	47.51	40.00	+7	0	48.80	31.06	+6	-10	54.07	24.60	-5	-7
29	47.49	39.69	+7	-4	48.91	30.79	+3	-11	54.29	24.47	-6	-3
30	47.47	39.38	+7	-8	49.03	30.52	0	-11	54.51	24.34	-6	0
31	47.45	39.07	+4	-10	49.15	30.25	-3	-8	54.73	24.22	-6	+4
32					49.27	29.99	-5	-5				

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-84° 49' 20''	11.081	-11.036	-84° 49' 30''	11.087	-11.042	-84° 49' 40''	11.093	-11.047
30	11.087	-11.042	40	11.093	-11.047	50	11.099	-11.053

$$\alpha_{1945.0} = 12^h 48^m 58.78$$

$$\delta_{1945.0} = -84^\circ 49' 30.88$$

\*) Tag der doppelten unteren Kulmination: Okt. 3.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

223\*

Se) 20 G. Octantis 6<sup>m</sup>52

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	14 <sup>h</sup> 58 <sup>m</sup>	87° 55'	in o.or   o.or	14 <sup>h</sup> 58 <sup>m</sup>	87° 55'	in o.or   o.or	14 <sup>h</sup> 59 <sup>m</sup>	87° 55'	in o.or   o.or	14 <sup>h</sup> 59 <sup>m</sup>	87° 55'	in o.or   o.or
1	33.82	18.05	+16 - 5	54.03	17.20	- 7 - 7	12.35	21.01	-10 - 6	28.58	29.22	-14 + 6
2	34.41	17.94	+11 - 7	54.70	17.27	-13 - 5	12.96	21.22	-14 - 3	29.00	29.53	- 9 + 9
3	35.02	17.83	+ 4 - 8	55.38	17.34	-16 - 2	13.56	21.43	-17 0	29.42	29.85	- 3 +10
4	35.63	17.73	- 3 - 8	56.05	17.41	-17 + 2	14.16	21.65	-16 + 4	29.82	30.17	+ 3 +10
5	36.25	17.63	- 9 - 6	56.73	17.49	-16 + 6	14.76	21.87	-13 + 8	30.21	30.49	+ 9 + 8
6	36.86	17.54	-14 - 3	57.41	17.58	-11 + 9	15.35	22.09	- 8 +10	30.60	30.81	+13 + 5
7	37.49	17.45	-17 0	58.08	17.67	- 5 +10	15.93	22.32	- 1 +11	30.98	31.14	+13 + 1
8	38.12	17.37	-16 + 4	58.75	17.77	+ 3 +10	16.51	22.55	+ 6 +10	31.34	31.47	+10 - 3
9	38.75	17.30	-14 + 7	59.42	17.87	+ 9 + 8	17.09	22.79	+11 + 7	31.70	31.80	+ 3 - 6
10	39.38	17.23	- 8 + 9	60.09	17.98	+14 + 5	17.66	23.03	+14 + 3	32.06	32.13	- 5 - 7
11	40.03	17.17	- 1 +10	60.76	18.10	+15 0	18.22	23.28	+13 - 1	32.40	32.47	-12 - 7
12	40.67	17.11	+ 6 + 9	61.43	18.22	+12 - 4	18.78	23.53	+ 8 - 5	32.73	32.81	-17 - 4
13	41.32	17.06	+12 + 6	62.10	18.35	+ 6 - 7	19.33	23.78	+ 1 - 8	33.06	33.15	-17 0
14	41.97	17.02	+15 + 3	62.76	18.48	- 2 - 8	19.87	24.04	- 7 - 8	33.38	33.49	-13 + 3
15	42.62	16.98	+14 - 1	63.42	18.61	- 9 - 7	20.41	24.30	-13 - 6	33.69	33.83	- 6 + 6
16	43.28	16.94	+10 - 5	64.08	18.75	-14 - 5	20.95	24.56	-16 - 3	34.00	34.17	+ 3 + 6
17	43.94	16.92	+ 3 - 8	64.73	18.90	-15 - 1	21.48	24.83	-15 + 1	34.29	34.51	+11 + 5
18	44.60	16.90	- 4 - 8	65.39	19.05	-13 + 2	22.00	25.10	-10 + 4	34.57	34.86	+18 + 2
19	45.26	16.88	-11 - 6	66.04	19.20	- 7 + 5	22.51	25.38	- 2 + 6	34.85	35.20	+20 - 1
20	45.93	16.87	-15 - 3	66.68	19.36	+ 1 + 6	23.02	25.65	+ 7 + 6	35.12	35.55	+19 - 5
21	46.59	16.87	-15 0	67.33	19.53	+ 9 + 6	23.52	25.94	+14 + 4	35.37	35.90	+15 - 8
22	47.27	16.87	-11 + 4	67.97	19.70	+15 + 3	24.02	26.22	+19 + 1	35.62	36.26	+ 8 - 9
23	47.94	16.88	- 5 + 6	68.61	19.87	+18 0	24.51	26.51	+19 - 2	35.86	36.61	+ 1 - 9
24	48.62	16.89	+ 3 + 6	69.24	20.05	+18 - 3	24.99	26.80	+17 - 6	36.09	36.96	- 5 - 8
25	49.30	16.91	+10 + 5	69.87	20.23	+15 - 6	25.46	27.09	+12 - 8	36.32	37.31	-11 - 5
26	49.98	16.94	+16 + 2	70.50	20.42	+ 9 - 8	25.92	27.39	+ 5 - 9	36.53	37.67	-14 - 2
27	50.66	16.97	+18 - 1	71.12	20.61	+ 2 - 8	26.38	27.69	- 2 - 8	36.73	38.02	-15 + 1
28	51.33	17.00	+17 - 4	71.74	20.81	- 4 - 8	26.83	27.99	- 8 - 7	36.93	38.38	-14 + 5
29	52.01	17.04	+12 - 7	72.35	21.01	-10 - 6	27.28	28.29	-13 - 4	37.11	38.73	-11 + 8
30	52.68	17.09	+ 6 - 8				27.72	28.60	-16 - 1	37.29	39.09	- 5 + 9
31	53.36	17.14	0 - 8				28.15	28.91	-16 + 3	37.45	39.45	+ 1 +10
32	54.03	17.20	- 7 - 7				28.58	29.22	-14 + 6			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-87° 55' 10''	27.545	-27.527	-87° 55' 20''	27.582	-27.563	-87° 55' 30''	27.618	-27.600
20	27.582	-27.563	30	27.618	-27.600	40	27.655	-27.637

$$\alpha_{1945.0} = 14^h 59^m 03.04$$

$$\delta_{1945.0} = -87^\circ 55' 41.62$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Se) 20 G. Octantis 6<sup>m</sup>52

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	14 <sup>h</sup> 59 <sup>m</sup>	87° 55'	in o.or   o.or	14 <sup>h</sup> 59 <sup>m</sup>	87° 55'	in o.or   o.or	14 <sup>h</sup> 59 <sup>m</sup>	87° 55'	in o.or   o.or	14 <sup>h</sup> 58 <sup>m</sup>	87° 56'	in o.or   o.or
1	37.45	39.45	+1 +10	37.74	50.63	+9 -4	29.47	59.17	-10 -7	74.42	4.00	-12 +5
2	37.61	39.81	+8 +9	37.59	50.96	+2 -6	29.07	59.40	-16 -4	73.87	4.07	-5 +7
3	37.75	40.17	+12 +6	37.43	51.28	-6 -7	28.66	59.63	-18 0	73.31	4.13	+4 +7
4	37.89	40.53	+14 +2	37.27	51.61	-13 -6	28.25	59.85	-16 +3	72.76	4.19	+12 +5
5	38.02	40.89	+12 -2	37.09	51.93	-18 -3	27.83	60.06	-10 +6	72.20	4.24	+17 +2
6	38.14	41.24	+6 -5	36.90	52.24	-19 +1	27.40	60.27	-2 +8	71.64	4.29	+19 -1
7	38.25 38.35	41.60 41.96	-1 -7 -9 -7	36.71	52.56	-14 +5	26.97	60.48	+7 +7	71.08	4.33	+17 -5
8	38.44	42.32	-16 -5	36.51	52.87	-7 +7	26.53	60.68	+14 +4	70.51	4.37	+12 -8
9	38.52	42.67	-19 -1	36.29	53.18	+2 +7	26.08	60.87	+18 +1	69.95	4.40	+5 -9
10	38.59	43.03	-17 +2	36.07	53.49	+11 +6	25.63	61.06	+19 -3	69.38	4.42	-2 -9
11	38.65	43.38	-11 +5	35.84	53.79	+17 +3	25.17	61.25	+16 -7	68.81	4.44	-8 -7
12	38.70	43.74	-2 +7	35.60	54.09	+20 -1	24.70	61.43	+10 -9	68.24	4.45	-13 -4
13	38.74	44.10	+7 +7	35.36	54.39	+19 -5	24.23	61.61	+3 -10	67.67	4.46	-16 -1
14	38.78	44.45	+15 +4	35.10	54.69	+14 -8	23.76	61.78	-4 -9	67.10	4.46	-16 +3
15	38.80	44.80	+20 +1	34.84	54.98	+7 -10	23.28	61.95	-11 -6	66.54	4.45	-13 +6
16	38.82	45.16	+20 -3	34.56	55.27	0 -10	22.79	62.11	-15 -3	65.97	4.44	-8 +9
17	38.82	45.51	+17 -7	34.28	55.55	-7 -8	22.30	62.27	-16 0	65.40	4.43	-2 +10
18	38.82	45.86	+11 -9	33.99	55.84	-12 -5	21.81	62.42	-15 +4	64.83	4.40	+5 +10
19	38.80	46.21	+4 -10	33.69	56.11	-15 -2	21.31	62.57	-11 +7	64.27	4.37	+11 +8
20	38.78	46.56	-3 -9	33.38	56.39	-15 +2	20.80	62.71	-5 +9	63.70	4.34	+14 +4
21	38.74	46.90	-9 -7	33.06	56.66	-13 +5	20.29	62.85	+2 +10	63.13	4.30	+14 0
22	38.70	47.25	-13 -4	32.74	56.93	-8 +8	19.77	62.98	+8 +9	62.57	4.26	+11 -4
23	38.65	47.60	-15 0	32.41	57.20	-2 +9	19.25	63.11	+13 +6	62.00	4.20	+4 -7
24	38.59	47.94	-14 +3	32.07	57.46	+4 +9	18.73	63.23	+15 +2	61.44	4.15	-4 -8
25	38.52	48.28	-11 +6	31.72	57.72	+10 +8	18.20	63.35	+14 -2	60.89	4.08	-11 -7
26	38.43	48.62	-6 +8	31.37	57.97	+14 +5	17.67	63.46	+9 -5	60.33	4.01	-16 -4
27	38.34	48.96	0 +9	31.01	58.22	+14 +1	17.14	63.56	+1 -7	59.78	3.94	-17 0
28	38.24	49.30	+6 +9	30.63	58.46	+12 -3	16.60	63.66	-6 -7	59.23	3.86	-14 +3
29	38.13	49.64	+11 +7	30.25	58.70	+6 -6	16.06	63.75	-13 -6	58.68	3.77	-7 +6
30	38.01	49.97	+14 +3	29.87	58.94	-2 -7	15.52	63.84	-17 -3	58.14	3.68	+2 +7
31	37.88	50.30	+13 0	29.47	59.17	-10 -7	14.97	63.92	-17 +1	57.60	3.58	+10 +6
32	37.74	50.63	+9 -4				14.42	64.00	-12 +5	57.06	3.48	+16 +3

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-87° 55' 30"	27.618	-27.600	-87° 55' 40"	27.655	-27.637	-87° 56' 0"	27.730	-27.712
40	27.655	-27.637	50	27.693	-27.675	10	27.767	-27.749

$$\alpha_{1945.0} = 14^{\text{h}} 59^{\text{m}} 05.04$$

$$\delta_{1945.0} = -87^{\circ} 55' 41.62$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

225\*

Se) 20 G. Octantis 6<sup>m</sup>52

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder
	14 58 <sup>m</sup>	87° 55'	in ◊.or   ◊.or	14 58 <sup>m</sup>	87° 55'	in ◊.or   ◊.or	14 58 <sup>m</sup>	87° 55'	in ◊.or   ◊.or	14 58 <sup>m</sup>	87° 55'	in ◊.or   ◊.or
1	57.06	63.48	+16 + 3	43.47	58.02	+17 - 7	37.88	49.10	- 7 - 8	43.06	40.32	-15 0
2	56.52	63.38	+19 0	43.13	57.77	+11 - 9	37.88	48.79	-12 - 5	43.41	40.06	-13 + 4
3	55.99	63.26	+18 - 4	42.80	57.52	+ 4 -10	37.90	48.49	-14 - 2	43.77	39.81	- 9 + 7
4	55.47	63.14	+14 - 7	42.49	57.26	- 3 - 9	37.92	48.18	-14 + 2	44.13	39.56	- 3 + 9
5	54.94	63.02	+ 8 - 9	42.18	57.00	- 9 - 7	*)37.96	47.87	-12 + 5	44.51	39.32	+ 2 + 9
6	54.43	62.89	+ 1 - 9	41.88	56.74	-13 - 4	38.01	47.56	- 8 + 8	44.90	39.07	+ 8 + 8
7	53.91	62.75	- 6 - 8	41.59	56.47	-15 0	38.07	47.26	- 2 + 9	45.30	38.84	+12 + 6
8	53.40	62.61	-12 - 6	41.32	56.20	-14 + 3	38.15	46.95	+ 4 + 9	45.71	38.60	+14 + 3
9	52.90	62.46	-15 - 2	41.05	55.93	-12 + 6	38.23	46.64	+ 9 + 8	46.13	38.37	+12 - 1
10	52.40	62.31	-16 + 1	40.79	55.66	- 7 + 9	38.33	46.33	+13 + 5	46.55	38.14	+ 7 - 4
11	51.90	62.15	-14 + 5	40.54	55.38	- 1 +10	38.44	46.02	+13 + 2	46.99	37.91	0 - 6
12	51.41	61.99	-10 + 8	40.30	55.10	+ 6 + 9	38.56	45.72	+11 - 2	47.43	37.69	- 2 - 7
13	50.93	61.83	- 5 +10	40.08	54.81	+11 + 7	38.69	45.42	+ 5 - 5	47.89	37.48	-16 - 5
14	50.46	61.65	+ 2 +10	39.85	54.53	+13 + 4	38.84	45.12	- 3 - 7	48.35	37.27	-20 - 2
15	49.99	61.48	+ 8 + 9	39.66	54.24	+13 0	38.99	44.82	-12 - 6	48.82	37.07	-20 + 2
16	49.53	61.30	+13 + 6	39.46	53.95	+ 8 - 4	39.16	44.52	-18 - 4	49.30	36.87	-15 + 6
17	49.07	61.11	+14 + 2	39.28	53.66	+ 1 - 6	39.35	44.22	-20 0	49.79	36.68	- 7 + 8
18	48.62	60.92	+12 - 2	39.10	53.36	- 7 - 7	39.54	43.93	-18 + 4	50.29	36.49	+ 3 + 8
19	48.18	60.72	+ 7 - 5	38.94	53.06	-14 - 6	39.74	43.64	-11 + 7	50.80	36.30	+12 + 6
20	47.74	60.52	- 1 - 7	38.79	52.76	-18 - 3	39.96	43.34	- 2 + 8	51.31	36.12	+19 + 3
21	47.31	60.31	- 9 - 7	38.65	52.46	-18 + 1	40.18	43.06	+ 8 + 7	51.83	35.94	+21 - 2
22	46.89	60.10	-15 - 5	38.52	52.16	-14 + 5	40.42	42.77	+16 + 4	52.36	35.77	+19 - 6
23	46.48	59.89	-18 - 2	38.41	51.86	- 6 + 7	40.67	42.49	+21 0	52.89	35.61	+14 - 9
24	46.07	59.67	-16 + 2	38.30	51.56	+ 4 + 7	40.93	42.21	+21 - 4	53.43	35.44	+ 6 -11
25	45.67	59.45	-10 + 5	38.21	51.26	+13 + 6	41.20	41.93	+17 - 8	53.98	35.29	- 2 -10
26	45.29	59.22	- 2 + 7	38.13	50.95	+19 + 2	41.49	41.65	+11 -10	54.54	35.14	- 8 - 8
27	44.91	58.99	+ 8 + 6	38.06	50.64	+21 - 2	41.78	41.38	+ 3 -11	55.11	34.99	-13 - 5
28	44.53	58.75	+15 + 4	38.00	50.34	+20 - 6	42.09	41.11	- 4 - 9	55.68	34.85	-14 - 1
29	44.17	58.51	+20 + 1	37.95	50.03	+15 - 9	42.40	40.84	-10 - 7	56.26	34.71	-14 + 2
30	43.81	58.27	+20 - 3	37.91	49.72	+ 7 -10	42.73	40.58	-14 - 4	56.84	34.58	-10 + 6
31	43.47	58.02	+17 - 7	37.89	49.41	0 -10	43.06	40.32	-15 0	57.42	34.46	- 5 + 8
32				37.88	49.10	- 7 - 8				58.02	34.34	+ 1 + 9

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
-87° 55' 30"	27.618	-27.600	-87° 55' 40"	27.655	-27.637	-87° 56' 0"	27.730	-27.712
40	27.655	-27.637	50	27.693	-27.675	10	27.767	-27.749

$$\alpha_{1945.0} = 14^h 59^m 04.0^s$$

$$\delta_{1945.0} = -87^\circ 55' 41.62''$$

\*) Tag der doppelten unteren Kulmination: Nov. 5.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sf) 26 G. Octantis 6<sup>m</sup>13

Tag	Januar				Februar				März				April					
	AR.		Dekl.		C Glieder		AR.		Dekl.		C Glieder		AR.		Dekl.		C Glieder	
	16 <sup>h</sup> 39 <sup>m</sup>	86° 16'	o.or	o.or	16 <sup>h</sup> 39 <sup>m</sup>	86° 16'	o.or	o.or	16 <sup>h</sup> 39 <sup>m</sup>	86° 16'	o.or	o.or	16 <sup>h</sup> 40 <sup>m</sup>	86° 16'	o.or	o.or		
		—	in			—	in			—	in			—	in			
1	34.36	6.32	+11	-2	44.25	1.08	o	-8	55.23	0.42	-3	-7	7.06	4.14	-10	+3		
2	34.61	6.09	+9	-5	44.63	0.99	-4	-7	55.63	0.47	-7	-6	7.41	4.33	-9	+6		
3	34.87	5.86	+6	-7	45.01	0.90	-8	-5	56.03	0.52	-9	-3	7.76	4.52	-7	+9		
4	35.13	5.63	+2	-8	45.38	0.82	-10	-2	56.43	0.58	-11	+1	8.11	4.71	-3	+10		
5	35.40	5.41	-2	-8	45.76	0.74	-11	+2	56.83	0.64	-11	+4	8.45	4.91	+1	+10		
6	35.68	5.19	-6	-6	46.14	0.67	-10	+6	57.23	0.71	-9	+8	8.79	5.12	+5	+7		
7	35.96	4.98	-9	-3	46.53	0.60	-7	+9	57.62	0.78	-5	+10	9.13	5.32	+7	+3		
8	36.24	4.77	-11	o	46.91	0.54	-3	+10	58.02	0.86	-1	+10	9.46	5.54	+7	-1		
9	36.53	4.56	-11	+4	47.30	0.48	+1	+10	58.41	0.95	+3	+9	9.79	5.75	+5	-5		
10	36.83	4.36	-9	+7	47.69	0.43	+5	+7	58.81	1.03	+6	+5	10.11	5.97	+1	-8		
11	37.13	4.16	-5	+9	48.08	0.38	+8	+3	59.20	1.13	+8	+1	10.44	6.20	-3	-9		
12	37.43	3.97	-1	+10	48.47	0.34	+8	-1	59.59	1.23	+7	-3	10.75	6.43	-7	-7		
13	37.74	3.78	+4	+9	48.86	0.30	+6	-5	59.98	1.33	+4	-7	11.07	6.66	-9	-4		
14	38.05	3.59	+7	+5	49.25	0.27	+3	-8	60.37	1.44	o	-9	11.39	6.89	-9	o		
15	38.36	3.41	+9	+1	49.65	0.25	-1	-9	60.76	1.55	-4	-8	11.70	7.13	-6	+4		
16	38.68	3.23	+8	-3	50.04	0.23	-5	-8	61.15	1.67	-7	-6	12.00	7.37	-1	+7		
17	39.00	3.06	+5	-7	50.44	0.21	-8	-4	61.53	1.79	-8	-2	12.31	7.61	+4	+7		
18	39.33	2.90	+1	-8	50.83	0.20	-8	-1	61.91	1.91	-7	+2	12.61	7.86	+8	+6		
19	39.66	2.73	-3	-8	51.23	0.20	-6	+3	62.29	2.04	-4	+5	12.90	8.11	+12	+3		
20	39.99	2.58	-7	-6	51.63	0.20	-2	+6	62.67	2.18	+1	+7	13.19	8.36	+12	o		
21	40.33	2.43	-8	-3	52.03	0.20	+2	+7	63.05	2.32	+6	+7	13.47	8.62	+11	-4		
22	40.67	2.28	-8	+1	52.43	0.21	+7	+6	63.43	2.46	+9	+5	13.75	8.88	+9	-7		
23	41.02	2.14	-5	+5	52.83	0.22	+10	+4	63.80	2.61	+12	+2	14.03	9.14	+5	-8		
24	41.37	2.00	-1	+7	53.23	0.24	+11	+1	64.17	2.77	+12	-2	14.30	9.40	+1	-8		
25	41.71	1.87	+4	+7	53.63	0.27	+11	-3	64.54	2.93	+10	-5	14.57	9.67	-3	-7		
26	42.07	1.74	+7	+6	54.03	0.30	+8	-6	64.91	3.09	+7	-7	14.84	9.94	-7	-5		
27	42.42	1.62	+10	+3	54.43	0.33	+5	-7	65.28	3.25	+3	-8	15.10	10.21	-9	-2		
28	42.78	1.50	+11	o	54.83	0.37	+1	-8	65.64	3.42	-1	-8	15.36	10.49	-10	+1		
29	43.14	1.39	+10	-4	55.23	0.42	-3	-7	66.00	3.59	-5	-6	15.61	10.76	-9	+5		
30	43.51	1.28	+7	-6					66.36	3.77	-8	-4	15.86	11.04	-7	+8		
31	43.88	1.18	+4	-8					66.71	3.95	-10	-1	16.10	11.33	-4	+10		
32	44.25	1.08	o	-8					67.06	4.14	-10	+3						

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-86° 16' 0"	15.358	-15.325	-86° 16' 10"	15.369	-15.337
10	15.369	-15.337	20	15.381	-15.348

$\alpha_{1945.0} = 16^h 39^m 58^s.34$ 
 $\delta_{1945.0} = -86^\circ 16' 21''.74$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

227\*

Sj) 26 G. Octantis 6<sup>m</sup>13

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	16 <sup>h</sup> 40 <sup>m</sup>	86° 16'	in 0.or   0.or	16 <sup>h</sup> 40 <sup>m</sup>	86° 16'	in 0.or   0.or	16 <sup>h</sup> 40 <sup>m</sup>	86° 16'	in 0.or   0.or	16 <sup>h</sup> 40 <sup>m</sup>	86° 16'	in 0.or   0.or
1	16.10	11.33	- 4 +10	21.24 21.32	20.97 21.30	+ 7 +2 + 7 -2	21.11	30.86	- 2 - 8	15.86	38.61	- 9 + 2
2	16.34	11.61	0 +10	21.40	21.63	+ 4 - 6	21.02	31.16	- 7 - 7	15.62	38.80	- 6 + 5
3	16.58	11.90	+ 4 + 8	21.47	21.96	0 - 8	20.92	31.45	- 9 - 4	15.38	38.99	- 1 + 8
4	16.81	12.19	+ 6 + 5	21.53	22.29	- 5 - 8	20.82	31.74	-10 0	15.13	39.17	+ 4 + 8
5	17.04	12.48	+ 7 + 1	21.59	22.62	- 8 - 6	20.71	32.03	- 8 + 4	14.88	39.34	+ 8 + 6
6	17.26	12.78	+ 6 - 4	21.64	22.94	-10 - 3	20.59	32.31	- 4 + 7	14.62	39.51	+11 + 2
7	17.48	13.08	+ 2 - 7	21.68	23.27	-10 + 1	20.47	32.60	+ 1 + 8	14.37	39.68	+11 - 2
8	17.69	13.38	- 2 - 8	21.72	23.60	- 7 + 5	20.35	32.88	+ 6 + 7	14.10	39.84	+10 - 5
9	17.90	13.68	- 6 - 8	21.76	23.93	- 2 + 7	20.21	33.15	+10 + 5	13.84	39.99	+ 7 - 8
10	18.10	13.98	- 9 - 5	21.79	24.25	+ 3 + 8	20.07	33.43	+12 + 1	13.57	40.14	+ 3 - 9
11	18.29	14.28	-10 - 1	21.81	24.58	+ 8 + 6	19.93	33.70	+11 - 3	13.30	40.29	- 1 - 8
12	18.48	14.59	- 8 + 3	21.83	24.91	+11 + 3	19.78	33.97	+ 9 - 6	13.03	40.43	- 5 - 7
13	18.67	14.90	- 4 + 6	21.84	25.23	+12 - 1	19.63	34.24	+ 6 - 8	12.75	40.57	- 8 - 4
14	18.86	15.21	+ 1 + 8	21.85	25.55	+11 - 5	19.48	34.50	+ 2 - 9	12.47	40.70	-10 - 1
15	19.04	15.51	+ 6 + 7	21.85	25.88	+ 8 - 8	19.32	34.76	- 3 - 8	12.19	40.82	-10 + 3
16	19.21	15.83	+10 + 5	21.85	26.20	+ 4 - 9	19.15	35.02	- 6 - 6	11.90	40.94	- 8 + 7
17	19.38	16.14	+13 + 1	21.84	26.52	0 - 9	18.98	35.27	- 9 - 3	11.62	41.06	- 6 + 9
18	19.54	16.45	+12 - 3	21.82	26.84	- 4 - 7	18.80	35.52	-10 + 1	11.33	41.16	- 2 +10
19	19.69	16.77	+10 - 6	21.80	27.16	- 7 - 5	18.62	35.77	- 9 + 5	11.04	41.26	+ 2 + 9
20	19.84	17.09	+ 7 - 8	21.77	27.47	- 9 - 1	18.43	36.01	- 7 + 8	10.74	41.36	+ 6 + 7
21	19.99	17.40	+ 3 - 9	21.74	27.79	- 9 + 2	18.24	36.25	- 4 +10	10.44	41.45	+ 8 + 3
22	20.13	17.73	- 2 - 8	21.70	28.11	- 8 + 6	18.05	36.49	0 +10	10.15	41.54	+ 8 - 1
23	20.26	18.05	- 5 - 6	21.66	28.42	- 6 + 8	17.85	36.72	+ 4 + 8	9.85	41.63	+ 5 - 6
24	20.39	18.37	- 8 - 3	21.61	28.73	- 2 +10	17.64	36.95	+ 7 + 5	9.55	41.70	+ 2 - 8
25	20.52	18.69	- 9 0	21.56	29.04	+ 2 + 9	17.43	37.17	+ 8 + 1	9.24	41.77	- 3 - 9
26	20.64	19.01	- 9 + 4	21.50	29.35	+ 5 + 7	17.22	37.39	+ 7 - 3	8.94	41.84	- 7 - 7
27	20.75	19.34	- 7 + 7	21.43	29.65	+ 7 + 4	17.01	37.60	+ 4 - 7	8.63	41.90	- 9 - 4
28	20.86	19.66	- 5 + 9	21.36	29.96	+ 8 0	16.79	37.81	0 - 8	8.32	41.95	- 9 0
29	20.97	19.99	- 1 +10	21.28	30.26	+ 6 - 5	16.56	38.02	- 5 - 8	8.01	42.00	- 6 + 4
30	21.06	20.31	+ 3 + 9	21.20	30.56	+ 2 - 7	16.33	38.22	- 8 - 6	7.70	42.04	- 2 + 7
31	21.16	20.64	+ 6 + 6	21.11	30.86	- 2 - 8	16.10	38.42	-10 - 2	7.39	42.08	+ 3 + 8
32	{ 21.24 21.32	{ 20.97 21.30	{ + 7 + 2 + 7 - 2				15.86	38.61	- 9 + 2	7.07	42.11	+ 7 + 7

δ	sec δ	tg δ	δ	sec δ	tg δ	δ	sec δ	tg δ
-86° 16' 10"	15.369	-15.337	-86° 16' 20"	15.381	-15.348	-86° 16' 40"	15.404	-15.371
20	15.381	-15.348	30	15.392	-15.360	50	15.415	-15.383

$$\alpha_{1945.0} = 16^h 39^m 58.34$$

$$\delta_{1945.0} = -86^\circ 16' 21.74$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sf) 26 G. Octantis 6<sup>m</sup>13

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	in			in			in			in		
	16 <sup>h</sup> 39 <sup>m</sup>	86° 16'	o.oi   o.oi	16 <sup>h</sup> 39 <sup>m</sup>	86° 16'	o.oi   o.oi	16 <sup>h</sup> 39 <sup>m</sup>	86° 16'	o.oi   o.oi	16 <sup>h</sup> 39 <sup>m</sup>	86° 16'	o.oi   o.oi
1	67.07	42.11	+ 7 + 7	57.96	40.31	+12 - 3	51.31	33.64	o - 9	*) 50.18	24.68	- 8 - 3
2	66.76	42.13	+11 + 4	57.68	40.17	+10 - 6	51.18	33.37	- 4 - 7	50.24	24.37	- 8 + 1
3	66.44	42.15	+12 o	57.41	40.02	+ 7 - 8	51.06	33.09	- 7 - 5	50.32	24.07	- 8 + 5
4	66.13	42.16	+11 - 4	57.14	39.86	+ 2 - 9	50.94	32.81	- 8 - 1	50.40	23.76	- 6 + 7
5	65.82	42.17	+ 8 - 7	56.87	39.70	- 2 - 8	50.83	32.53	- 9 + 2	50.48	23.46	- 3 + 9
6	65.51	42.17	+ 5 - 9	56.61	39.53	- 5 - 6	50.72	32.24	- 8 + 6	50.57	23.16	+ 1 + 9
7	65.19	42.17	o - 9	56.35	39.36	- 8 - 3	50.62	31.95	- 5 + 8	50.67	22.86	+ 4 + 8
8	64.88	42.16	- 4 - 8	56.09	39.18	- 9 o	50.53	31.66	- 2 +10	50.78	22.56	+ 6 + 5
9	64.57	42.14	- 7 - 5	55.84	39.00	- 9 + 4	50.44	31.37	+ 1 + 9	50.89	22.26	+ 7 + 1
10	64.26	42.12	- 9 - 2	55.59	38.82	- 8 + 7	50.36	31.08	+ 4 + 7	51.01	21.96	+ 6 - 3
11	63.94	42.09	-10 + 2	55.34	38.63	- 5 + 9	50.28	30.78	+ 6 + 4	51.13	21.67	+ 3 - 6
12	63.63	42.05	- 9 + 5	55.10	38.43	- 1 +10	50.21	30.49	+ 7 o	51.26	21.38	- 1 - 8
13	63.32	42.01	- 7 + 8	54.86	38.23	+ 2 + 9	50.15	30.19	+ 5 - 4	51.40	21.09	- 6 - 8
14	63.01	41.97	- 4 +10	54.63	38.03	+ 5 + 6	50.10	29.89	+ 1 - 7	51.55	20.80	-10 - 6
15	62.70	41.92	o +10	54.40	37.82	+ 7 + 3	50.05	29.59	- 3 - 8	51.70	20.51	-12 - 2
16	62.39	41.86	+ 4 + 8	54.18	37.60	+ 6 - 2	50.00	29.28	- 8 - 7	51.85	20.22	-11 + 3
17	62.08	41.80	+ 6 + 5	53.97	37.38	+ 4 - 6	49.97	28.98	-11 - 4	52.02	19.94	- 7 + 6
18	61.78	41.73	+ 7 o	53.76	37.16	o - 8	49.94	28.67	-11 o	52.19	19.66	- 2 + 9
19	61.47	41.65	+ 6 - 4	53.55	36.93	- 5 - 8	49.91	28.36	- 9 + 4	52.37	19.38	+ 3 + 8
20	61.16	41.57	+ 3 - 7	53.34	36.70	- 9 - 6	49.90	28.05	- 5 + 7	52.55	19.10	+ 9 + 6
21	60.86	41.49	- 1 - 9	53.14	36.47	-10 - 3	49.89	27.75	+ 1 + 8	52.74	18.83	+12 + 2
22	60.56	41.39	- 6 - 8	52.95	36.23	- 9 + 2	49.88	27.44	+ 7 + 8	52.93	18.56	+13 - 2
23	60.26	41.30	- 9 - 5	52.76	35.99	- 6 + 5	49.89	27.13	+11 + 5	53.13	18.29	+12 - 6
24	59.96	41.19	-10 - 1	52.58	35.74	- 1 + 8	49.90	26.82	+13 o	53.34	18.03	+ 8 - 9
25	59.67	41.08	- 8 + 3	52.40	35.49	+ 4 + 8	49.92	26.52	+13 - 4	53.55	17.77	+ 4 -10
26	59.38	40.97	- 4 + 6	52.23	35.24	+ 9 + 6	49.94	26.21	+10 - 7	53.77	17.51	- 1 - 9
27	59.09	40.85	+ 1 + 8	52.06	34.98	+12 + 3	49.98	25.91	+ 7 - 9	53.99	17.26	- 5 - 7
28	58.80	40.72	+ 6 + 7	51.90	34.72	+13 - 1	50.02	25.60	+ 2 -10	54.22	17.01	- 7 - 4
29	58.52	40.59	+10 + 5	51.75	34.45	+12 - 5	50.07	25.29	- 2 - 9	54.45	16.76	- 8 o
30	58.24	40.45	+12 + 1	51.60	34.18	+ 9 - 8	50.12	24.98	- 6 - 6	54.69	16.52	- 8 + 3
31	57.96	40.31	+12 - 3	51.45	33.91	+ 5 -10	50.18	24.68	- 8 - 3	54.94	16.28	- 6 + 6
32				51.31	33.64	o - 9				55.19	16.04	- 4 + 9

$\delta$	$\sec \delta$	$\operatorname{tg} \delta$	$\delta$	$\sec \delta$	$\operatorname{tg} \delta$	$\delta$	$\sec \delta$	$\operatorname{tg} \delta$
-86° 16' 10"	15.369	-15.337	-86° 16' 20"	15.381	-15.348	-86° 16' 40"	15.404	-15.371
20	15.381	-15.348	30	15.392	-15.360	50	15.415	-15.383

$$\alpha_{1945.0} = 16^{\text{h}} 39^{\text{m}} 58^{\text{s}}.34$$

$$\delta_{1945.0} = -86^{\circ} 16' 21''.74$$

\*) Tag der doppelten unteren Kulmination: Dez. 1.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

229\*

 Sg)  $\chi$  Octantis 5<sup>m</sup>22

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	18 <sup>h</sup> 22 <sup>m</sup>	—	in	18 <sup>h</sup> 22 <sup>m</sup>	—	in	18 <sup>h</sup> 22 <sup>m</sup>	—	in	18 <sup>h</sup> 22 <sup>m</sup>	—	in
	87° 39'	o.or   o.or		87° 39'	o.or   o.or		87° 39'	o.or   o.or		87° 39'	o.or   o.or	
1	5.11	15.67	+16 +2	15.32	6.83	+ 4 -8	30.37	1.66	+ 1 -8	49.85	0.11	-16 -1
2	5.30	15.36	+16 -1	15.78	6.59	- 2 -8	30.98	1.54	- 6 -8	50.48	0.14	-17 +3
3	5.50	15.04	+13 -5	16.25	6.35	- 8 -7	31.58	1.42	-11 -6	51.11	0.17	-15 +6
4	5.71	14.73	+ 8 -7	16.72	6.12	-14 -5	32.19	1.31	-16 -3	51.74	0.20	-11 +8
5	5.93	14.41	+ 2 -8	17.20	5.89	-17 -2	32.80	1.20	-18 0	52.37	0.24	- 5 +9
6	6.16	14.10	- 5 -8	17.68	5.67	-18 +2	33.41	1.10	-17 +4	53.00	0.29	+ 2 +8
7	6.40	13.79	-11 -6	18.18	5.45	-16 +5	34.02	1.00	-14 +7	53.62	0.34	+ 8 +5
8	6.65	13.49	-15 -4	18.68	5.23	-11 +8	34.64	0.90	- 8 +9	54.25	0.39	+10 +1
9	6.91	13.18	-17 0	19.18	5.02	- 4 +9	35.26	0.82	- 1 +9	54.87	0.45	+10 -4
10	7.18	12.88	-17 +4	19.69	4.81	+ 3 +9	35.88	0.73	+ 5 +7	55.49	0.52	+ 6 -7
11	7.46	12.58	-13 +7	20.21	4.61	+ 9 +6	36.51	0.65	+10 +3	56.11	0.59	+ 1 -9
12	7.75	12.28	- 7 +9	20.74	4.41	+12 +2	37.14	0.58	+12 -1	56.73	0.66	- 5 -9
13	8.05	11.98	0 +9	21.27	4.21	+12 -3	37.77	0.51	+10 -5	57.34	0.74	-10 -6
14	8.36	11.68	+ 6 +7	21.80	4.02	+ 9 -7	38.40	0.45	+ 5 -8	57.95	0.82	-12 -2
15	8.67	11.39	+11 +4	22.34	3.83	+ 4 -9	39.04	0.39	- 1 -9	58.57	0.91	-11 +2
16	8.99	11.10	+13 0	22.89	3.65	- 2 -9	39.68	0.33	- 6 -8	59.17	1.00	- 6 +6
17	9.32	10.81	+12 -4	23.44	3.47	- 8 -7	40.32	0.28	-10 -5	59.78	1.09	+ 1 +8
18	9.67	10.53	+ 7 -7	23.99	3.30	-11 -3	40.96	0.24	-11 0	60.38	1.19	+ 8 +9
19	10.02	10.24	+ 1 -9	24.55	3.13	-10 +1	41.59	0.20	- 8 +4	60.98	1.30	+14 +7
20	10.38	9.96	- 5 -8	25.12	2.96	- 7 +5	42.23	0.16	- 3 +7	61.57	1.41	+18 +4
21	10.75	9.69	-10 -5	25.69	2.80	- 1 +8	42.86	0.13	+ 4 +8	62.16	1.52	+19 0
22	11.12	9.41	-12 -1	26.26	2.64	+ 5 +8	43.50	0.11	+10 +8	62.75	1.64	+16 -3
23	11.51	9.14	-10 +3	26.84	2.48	+11 +7	44.13	0.09	+15 +6	63.33	1.77	+12 -6
24	11.90	8.87	- 6 +6	27.42	2.33	+15 +5	44.76	0.07	+17 +2	63.91	1.90	+ 6 -8
25	12.30	8.60	0 +8	28.00	2.19	+16 +1	45.40	0.06	+17 -1	64.49	2.03	0 -8
26	12.71	8.34	+ 7 +8	28.59	2.05	+15 -2	46.04	0.05	+14 -4	65.06	2.17	- 6 -7
27	13.13	8.08	+12 +6	29.18	1.91	+12 -5	46.68	0.05	+ 9 -7	65.63	2.31	-11 -5
28	13.55	7.82	+15 +3	29.78	1.78	+ 7 -7	47.31	0.05	+ 3 -8	66.19	2.45	-15 -2
29	13.98	7.57	+16 0	30.37	1.66	+ 1 -8	47.95	0.06	- 3 -8	66.75	2.60	-16 +1
30	14.42	7.32	+14 -3				48.58	0.07	- 9 -7	67.30	2.75	-15 +5
31	14.87	7.07	+10 -6				49.22	0.09	-14 -4	67.85	2.91	-12 +8
32	15.32	6.83	+ 4 -8				49.85	0.11	-16 -1			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-87° 39' 0''	24.388	-24.368	-87° 39' 10''	24.417	-24.396
10	24.417	-24.396	20	24.446	-24.425

$$\alpha_{1945.0} = 18^h 22^m 50^s.02$$

$$\delta_{1945.0} = -87^\circ 39' 19''.91$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sg)  $\chi$  Octantis 5<sup>m</sup>22

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder	AR.	Dekl.	◊ Glieder
	18 <sup>h</sup> 23 <sup>m</sup>	87° 39'	◊.or   ◊.or	18 <sup>h</sup> 23 <sup>m</sup>	87° 39'	◊.or   ◊.or	18 <sup>h</sup> 23 <sup>m</sup>	87° 39'	◊.or   ◊.or	18 <sup>h</sup> 23 <sup>m</sup>	87° 39'	◊.or   ◊.or
		—	in		—	in		—	in		—	in
1	7.85	2.9I	-12 + 8	22.03	9.63	+ 9 + 4	28.89	18.82	+ 2 - 9	26.92	28.23	-13 - 1
2	8.39	3.07	- 6 + 9	22.38	9.90	+11 0	28.97	19.13	- 4 - 9	26.71	28.51	-11 + 3
3	8.93	3.24	0 + 9	22.72	10.17	+10 - 4	29.04	19.45	-10 - 7	26.49	28.79	- 6 + 7
4	9.47	3.41	+ 5 + 7	23.05	10.44	+ 5 - 8	29.10	19.76	-14 - 4	26.26	29.06	+ 1 + 9
5	10.00	3.58	+ 9 + 3	23.38	10.71	- 1 - 9	29.14	20.08	-14 + 1	26.02	29.33	+ 8 + 8
6	10.52	3.76	+10 - 1	23.70	10.99	- 8 - 9	29.18	20.39	-10 + 5	25.78	29.60	+14 + 6
7	11.04	3.94	+ 8 - 6	24.00	11.27	-13 - 6	29.21	20.70	- 4 + 8	25.53	29.86	+17 + 3
8	11.56	4.12	+ 3 - 9	24.30	11.55	-15 - 2	29.23	21.01	+ 3 + 9	25.27	30.12	+17 - 1
9	12.07	4.31	- 4 -10	24.60	11.84	-13 + 3	29.24	21.33	+10 + 8	25.00	30.38	+15 - 5
10	12.57	4.50	-10 - 8	24.88	12.13	- 8 + 6	29.24	21.64	+16 + 5	24.72	30.63	+10 - 7
11	13.07	4.70	-13 - 4	25.15	12.42	0 + 9	29.23	21.95	+18 + 1	24.43	30.88	+ 4 - 8
12	13.56	4.90	-13 0	25.42	12.71	+ 7 + 9	29.22	22.26	+17 - 3	24.14	31.13	- 3 - 8
13	14.04	5.11	-10 + 4	25.68	13.00	+14 + 7	29.19	22.57	+14 - 6	23.84	31.33	- 9 - 7
14	14.52	5.32	- 3 + 8	25.93	13.29	+18 + 4	29.16	22.89	+ 8 - 8	23.53	31.62	-14 - 4
15	15.00	5.53	+ 4 + 9	26.17	13.59	+19 0	29.11	23.20	+ 1 - 9	23.22	31.86	-16 - 1
16	15.47	5.75	+11 + 8	26.41	13.89	+17 - 4	29.06	23.50	- 5 - 8	22.90	32.09	-16 + 3
17	15.93	5.96	+17 + 5	26.63	14.19	+12 - 7	28.99	23.81	-11 - 6	22.57	32.32	-14 + 6
18	16.38	6.19	+19 + 2	26.84	14.49	+ 6 - 8	28.92	24.12	-15 - 3	22.23	32.54	- 9 + 9
19	16.83	6.41	+18 - 2	27.05	14.79	- 1 - 8	28.84	24.42	-16 + 1	21.88	32.76	- 3 + 9
20	17.27	6.64	+15 - 5	27.24	15.09	- 7 - 7	28.74	24.73	-15 + 5	21.53	32.98	+ 4 + 8
21	17.71	6.87	+ 9 - 7	27.43	15.40	-12 - 4	28.64	25.03	-11 + 8	21.17	33.20	+ 9 + 5
22	18.14	7.11	+ 3 - 8	27.61	15.71	-15 - 1	28.53	25.33	- 6 + 9	20.80	33.41	+12 + 1
23	18.56	7.35	- 4 - 8	27.78	16.02	-15 + 3	28.41	25.64	+ 1 + 9	20.43	33.61	+11 - 3
24	18.98	7.59	- 9 - 6	27.95	16.32	-13 + 6	28.28	25.93	+ 7 + 7	20.05	33.81	+ 7 - 7
25	19.38	7.83	-13 - 3	28.10	16.63	- 9 + 8	28.14	26.23	+11 + 4	19.67	34.01	+ 2 - 9
26	19.78	8.08	-15 0	28.24	16.94	- 3 + 9	27.99	26.52	+12 - 1	19.28	34.20	- 5 - 9
27	20.18	8.33	-15 + 4	28.37	17.25	+ 3 + 8	27.84	26.81	+10 - 5	18.88	34.38	-10 - 6
28	20.56	8.58	-12 + 7	28.50 28.61	17.56 17.88	+ 8 + 6 +11 + 2	27.67	27.10	+ 5 - 8	18.48	34.56	-13 - 3
29	20.94	8.84	- 7 + 9	28.71	18.19	+11 - 2	27.50	27.39	- 1 - 9	18.07	34.74	-12 + 2
30	21.31	9.10	- 2 + 9	28.81	18.50	+ 8 - 6	27.31	27.67	- 7 - 8	17.66	34.91	- 8 + 6
31	21.68	9.36	+ 4 + 8	28.89	18.82	+ 2 - 9	27.12	27.95	-12 - 5	17.24	35.08	- 1 + 8
32	22.03	9.63	+ 9 + 4				26.92	28.23	-13 - 1	16.81	35.25	+ 6 + 9

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-87° 39' 0''	24.388	-24.368	-87° 39' 10''	24.417	-24.396	-87° 39' 30''	24.475	-24.454
10	24.417	-24.396	20	24.446	-24.425	40	24.504	-24.483

$$\alpha_{1945.0} = 18^h 22^m 50^s.02$$

$$\delta_{1945.0} = -87^\circ 39' 19''.91$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

231\*

Sg)  $\chi$  Octantis  $5^m 22$

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	in			in			in			in		
18 <sup>h</sup> 23 <sup>m</sup>	87° 39'	0.01   0.01	18 <sup>h</sup> 22 <sup>m</sup>	87° 39'	0.01   0.01	18 <sup>h</sup> 22 <sup>m</sup>	87° 39'	0.01   0.01	18 <sup>h</sup> 22 <sup>m</sup>	87° 39'	0.01   0.01	
1	16.81	35.25	+ 6 + 9	62.41	37.58	+19 + 2	48.00	34.41	+ 6 - 8	39.73	26.87	- 9 - 5
2	16.38	35.41	+12 + 7	61.91	37.56	+18 - 2	47.61	34.22	- 1 - 8	39.59	26.57	-13 - 2
3	15.94	35.56	+17 + 4	61.41	37.54	+15 - 6	47.22	34.02	- 7 - 7	39.47	26.27	-14 + 2
4	15.50	35.71	+18 0	60.91	37.52	+ 9 - 8	46.84	33.82	-11 - 4	39.36	25.96	-13 + 5
5	15.06	35.85	+16 - 3	60.41	37.49	+ 3 - 8	46.47	33.62	-14 - 1	39.26	25.65	-10 + 7
6	14.61	35.99	+12 - 6	59.91	37.45	- 4 - 8	46.11	33.41	-15 + 3	39.17	25.34	- 5 + 9
7	14.16	36.12	+ 6 - 8	59.41	37.40	- 9 - 6	45.75	33.19	-13 + 6	39.09	25.03	0 + 9
8	13.70	36.24	0 - 9	58.92	37.35	-13 - 3	45.40	32.97	- 9 + 8	39.02	24.71	+ 5 + 7
9	13.24	36.36	- 6 - 7	58.42	37.29	-15 0	45.06	32.75	- 4 + 9	38.96	24.40	+ 9 + 4
10	12.77	36.48	-11 - 5	57.92	37.23	-15 + 4	44.72	32.52	+ 1 + 8	38.91	24.08	+10 0
11	12.31	36.59	-15 - 2	57.43	37.16	-13 + 7	44.40	32.29	+ 6 + 6	38.87	23.76	+ 8 - 5
12	11.83	36.69	-16 + 2	56.94	37.09	- 8 + 9	44.08	32.05	+ 9 + 2	38.84	23.45	+ 3 - 8
13	11.36	36.79	-15 + 5	56.45	37.01	- 3 + 9	43.77	31.81	+ 9 - 2	38.82	23.13	- 3 -10
14	10.88	36.88	-12 + 8	55.97	36.92	+ 3 + 8	43.47	31.56	+ 6 - 6	38.81	22.81	-10 - 9
15	10.40	36.97	- 6 +10	55.49	36.83	+ 8, + 5	43.18	31.31	0 - 9	38.82	22.49	-15 - 6
16	9.91	37.05	0 + 9	55.02	36.74	+10 0	42.89	31.06	- 6 -10	38.83	22.17	-17 - 1
17	9.42	37.13	+ 6 + 7	54.54	36.63	+ 9 - 4	42.62	30.80	-12 - 8	38.85	21.84	-15 + 3
18	8.93	37.20	+10 + 3	54.08	36.52	+ 5 - 8	42.35	30.54	-15 - 4	38.89	21.52	- 9 + 7
19	8.43	37.26	+11 - 2	53.61	36.41	- 1 -10	42.09	30.28	-15 + 1	38.93	21.20	0 + 9
20	7.92	37.32	+ 9 - 6	53.15	36.29	- 8 - 9	41.84	30.01	-11 + 5	38.99	20.87	+ 8 + 9
21	7.42	37.37	+ 3 - 9	52.69	36.17	-13 - 6	41.60	29.74	- 4 + 8	39.05	20.55	+15 + 7
22	6.92	37.42	- 3 -10	52.24	36.03	-14 - 2	41.37	29.47	+ 5 +10	39.13	20.23	+20 + 3
23	6.41	37.46	- 9 - 8	51.79	35.90	-12 + 3	41.15	29.19	+13 +*8	39.22	19.91	+20 - 1
24	5.91	37.49	-12 - 4	51.35	35.75	- 7 + 7	40.94	28.91	+19 + 5	39.31	19.58	+17 - 5
25	5.41	37.52	-13 0	50.91	35.60	+ 1 + 9	40.73	28.63	+21 + 1	39.42	19.26	+12 - 8
26	4.91	37.55	- 9 + 5	50.48	35.45	+ 9 + 9	40.54	28.34	+19 - 3	39.54	18.94	+ 5 - 9
27	4.41	37.56	- 3 + 8	50.05	35.29	+16 + 7	40.36	28.05	+15 - 6	*)39.67	18.62	- 2 - 8
28	3.92	37.57	+ 4 + 9	49.63	35.12	+20 + 3	40.19	27.76	+ 9 - 8	39.81	18.30	- 7 - 6
29	3.42	37.58	+11 + 8	49.21	34.95	+20 - 1	40.02	27.47	+ 2 - 9	39.96	17.98	-12 - 3
30	2.92	37.58	+17 + 5	48.80	34.77	+17 - 4	39.87	27.17	- 4 - 8	40.12	17.66	-14 0
31	2.41	37.58	+19 + 2	48.39	34.59	+12 - 7	39.73	26.87	- 9 - 5	40.29	17.34	-14 + 4
32				48.00	34.41	+ 6 - 8				40.47	17.02	-11 + 7

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-87° 39' 10''	24.417	-24.396	-87° 39' 20''	24.446	-24.425	-87° 39' 30''	24.475	-24.454
20	24.446	-24.425	30	24.475	-24.454	40	24.504	-24.483

$$\alpha_{1945.0} = 18^h 22^m 50^s.02$$

$$\delta_{1945.0} = -87^\circ 39' 19''.91$$

\*) Tag der doppelten unteren Kulmination: Dez. 27.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sk)  $\alpha$  Octantis 5<sup>m</sup>48

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	—		in	—		in	—		in	—		in
	20 <sup>h</sup> 6 <sup>m</sup>	89° 9'	o.oi   o.oi	20 <sup>h</sup> 6 <sup>m</sup>	89° 9'	o.oi   o.oi	20 <sup>h</sup> 7 <sup>m</sup>	89° 8'	o.oi   o.oi	20 <sup>h</sup> 7 <sup>m</sup>	89° 8'	o.oi   o.oi
1	32.70	21.14	+35 +6	39.84	10.42	+25 -6	6.58	61.70	+17 -7	51.51	55.06	-38 -5
2	32.52	20.80	+40 +3	40.49	10.08	+11 -8	7.82	61.43	+1 -8	53.12	54.91	-46 -2
3	32.37	20.47	+40 -1	41.17	9.75	-6 -8	9.08	61.16	-16 -8	54.74	54.77	-48 +2
4	32.24	20.13	+33 -4	41.87	9.41	-23 -8	10.36	60.90	-32 -7	56.37	54.63	-42 +5
5	32.15	19.79	+20 -7	42.60	9.08	-38 -6	11.65	60.64	-43 -4	58.00	54.50	-29 +7
6	32.08	19.44	+5 -8	43.35	8.74	-47 -3	12.96	60.38	-49 0	59.64	54.37	-10 +8
7	32.03	19.10	-13 -8	44.12	8.41	-49 +1	14.28	60.13	-47 +3	61.28	54.25	+8 +6
8	32.02	18.76	-29 -7	44.92	8.08	-43 +5	15.62	59.88	-37 +6	62.93	54.13	+24 +3
9	32.03	18.41	-41 -4	45.73	7.76	-29 +7	16.97	59.63	-21 +8	64.58	54.02	+32 -1
10	32.07	18.07	-46 -1	46.57	7.43	-10 +8	18.34	59.39	-1 +8	66.24	53.91	+30 -5
11	32.14	17.72	-44 +3	47.44	7.10	+9 +7	19.72	59.15	+18 +5	67.90	53.81	+20 -8
12	32.24	17.37	-35 +6	48.32	6.78	+26 +4	21.12	58.91	+30 +2	69.57	53.71	+4 -9
13	32.36	17.02	-19 +8	49.23	6.46	+36 0	22.53	58.68	+35 -2	71.24	53.61	-12 -8
14	32.51	16.67	+1 +8	50.16	6.15	+36 -4	23.96	58.45	+29 -6	72.91	53.52	-24 -5
15	32.69	16.32	+19 +6	51.11	5.83	+26 -7	25.40	58.23	+17 -8	74.59	53.44	-30 0
16	32.90	15.97	+32 +3	52.09	5.51	+11 -9	26.85	58.01	0 -9	76.27	53.36	-26 +4
17	33.14	15.62	+37 -1	53.09	5.20	-6 -8	28.31	57.79	-15 -7	77.94	53.28	-14 +8
18	33.40	15.27	+32 -5	54.11	4.90	-19 -5	29.78	57.58	-25 -3	79.62	53.21	+3 +10
19	33.69	14.92	+20 -8	55.15	4.60	-26 -1	31.27	57.37	-27 +2	81.30	53.15	+21 +10
20	34.01	14.57	+3 -8	56.21	4.29	-26 +3	32.77	57.17	-21 +6	82.99	53.09	+35 +8
21	34.35	14.22	-13 -7	57.29	3.99	-17 +7	34.28	56.97	-8 +9	84.67	53.03	+44 +5
22	*)34.72	13.88	-25 -4	58.38	3.69	-3 +9	35.80	56.77	+9 +10	86.36	52.98	+46 +1
23	35.11	13.53	-29 0	59.50	3.39	+13 +9	37.33	56.58	+25 +9	88.04	52.93	+40 -2
24	35.53	13.18	-25 +4	60.63	3.10	+27 +8	38.86	56.39	+37 +6	89.72	52.89	+30 -5
25	35.98	12.83	-14 +7	61.78	2.81	+37 +5	40.41	56.21	+42 +3	91.39	52.85	+15 -7
26	36.45	12.48	+1 +9	62.95	2.53	+41 +2	41.97	56.03	+42 -1	93.07	52.82	-1 -8
27	36.95	12.14	+17 +9	64.14	2.25	+38 -2	43.54	55.86	+35 -4	94.75	52.80	-17 -7
28	37.48	11.79	+30 +7	65.35	1.97	+30 -5	45.12	55.69	+23 -6	96.42	52.78	-31 -5
29	38.03	11.45	+38 +4	66.58	1.70	+17 -7	46.70	55.52	+8 -8	98.10	52.77	-41 -3
30	38.61	11.11	+40 0				48.30	55.36	-8 -8	99.77	52.76	-46 +1
31	39.21	10.76	+35 -3				49.90	55.21	-25 -7	101.44	52.76	-43 +4
32	39.84	10.42	+25 -6				51.51	55.06	-38 -5			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-89° 8' 50"	67.190	-67.182	-89° 9' 0"	67.409	-67.402	-89° 9' 20"	67.853	-67.846
60	67.409	-67.402	10	67.630	-67.623	30	68.077	-68.069

$$\alpha_{1945.0} = 20^h 8^m 31^s.59$$

$$\delta_{1945.0} = -89^\circ 9' 13''.06$$

\*) Tag der doppelten unteren Kulmination: Jan. 22.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

233\*

Sh)  $\sigma$  Octantis 5<sup>m</sup>48

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	20 <sup>h</sup> 8 <sup>m</sup>	—	in	20 <sup>h</sup> 9 <sup>m</sup>	—	in	20 <sup>h</sup> 10 <sup>m</sup>	—	in	20 <sup>h</sup> 10 <sup>m</sup>	—	n
	89° 8'	0.01	0.01	89° 8'	0.01	0.01	89° 9'	0.01	0.01	89° 9'	0.01	0.01
1	41.44	52.76	-43 + 4	29.76	55.04	+13 + 6	4.14	1.29	+31 - 4	18.99	10.67	-32 - 4
2	43.10	52.76	-33 + 7	31.15	55.19	+25 + 3	4.98	1.56	+22 - 7	19.03	10.98	-34 0
3	44.76	52.76	-17 + 8	32.53	55.35	+31 - 2	5.80	1.83	+ 7 - 9	19.04	11.29	-28 + 5
4	46.42	52.77	+ 1 + 7	33.89	55.51	+27 - 6	6.60	2.10	-11 - 9	19.03	11.60	-15 + 8
5	48.07	52.79	+17 + 5	35.24	55.67	+15 - 9	7.37	2.37	-26 - 6	18.99	11.91	+ 3 + 9
6	49.72	52.81	+28 + 1	36.57	55.84	- 1 -10	8.12	2.64	-35 - 3	18.92	12.22	+21 + 9
7	51.36	52.83	+30 - 3	37.89	56.01	-18 - 9	8.84	2.91	-34 + 2	18.83	12.53	+36 + 6
8	52.99	52.86	+23 - 7	39.19	56.19	-31 - 5	9.54	3.19	-25 + 6	18.71	12.84	+44 + 3
9	54.62	52.89	+ 9 -10	40.48	56.37	-35 - 1	10.22	3.47	- 9 + 9	18.56	13.15	+45 - 1
10	56.24	52.93	- 8 -10	41.75	56.55	-31 + 4	10.87	3.76	+10 + 9	18.39	13.46	+38 - 4
11	57.86	52.97	-23 - 7	43.00	56.74	-19 + 8	11.50	4.04	+28 + 8	18.19	13.76	+25 - 7
12	59.47	53.02	-32 - 3	44.24	56.93	+ 1 +10	12.10	4.32	+41 + 5	17.96	14.07	+ 9 - 8
13	61.08	53.08	-32 + 2	45.46	57.13	+20 +10	12.68	4.61	+46 + 2	17.71	14.37	- 8 - 8
14	62.68	53.14	-23 + 6	46.66	57.33	+36 + 7	13.24	4.90	+43 - 2	17.43	14.68	-25 - 7
15	64.27	53.20	- 7 + 9	47.84	57.54	+46 + 4	13.77	5.20	+34 - 5	17.13	14.98	-38 - 4
16	65.85	53.27	+12 +10	49.00	57.75	+48 0	14.28	5.49	+20 - 8	16.80	15.28	-45 - 1
17	67.42	53.35	+30 + 9	50.15	57.96	+41 - 3	14.76	5.78	+ 3 - 8	16.44	15.58	-46 + 3
18	68.99	53.43	+42 + 6	51.28	58.17	+29 - 6	15.22	6.08	-15 - 8	16.06	15.88	-38 + 6
19	70.55	53.52	+48 + 3	52.39	58.39	+13 - 8	15.65	6.38	-30 - 6	15.65	16.18	-24 + 8
20	72.09	53.61	+45 - 1	53.48	58.61	- 4 - 8	16.06	6.68	-41 - 3	15.22	16.47	- 6 + 8
21	73.62	53.70	+36 - 4	54.55	58.84	-21 - 7	16.44	6.98	-45 + 1	14.76	16.76	+12 + 7
22	75.14	53.80	+22 - 7	55.60	59.07	-34 - 4	16.79	7.28	-42 + 4	14.27	17.05	+26 + 4
23	76.66	53.90	+ 6 - 8	56.63	59.30	-41 - 1	17.12	7.58	-31 + 7	13.76	17.34	+34 - 1
24	78.16	54.01	-11 - 8	57.64	59.54	-43 + 2	17.43	7.89	-15 + 8	13.22	17.63	+32 - 5
25	79.65	54.12	-26 - 6	58.63	59.78	-38 + 5	17.70 17.95	8.20 8.51	+ 3 + 8 +19 + 6	12.66	17.91	+22 - 8
26	81.13	54.24	-37 - 3	59.60	60.02	-25 + 8	18.18	8.82	+31 + 2	12.08	18.19	+ 6 - 9
27	82.60	54.36	-42 0	60.56	60.27	- 9 + 8	18.38	9.13	+34 - 2	11.47	18.46	-12 - 8
28	84.06	54.49	-42 + 3	61.49	60.52	+ 9 + 7	18.56	9.43	+29 - 6	10.84	18.74	-25 - 5
29	85.51	54.62	-34 + 6	62.40	60.77	+23 + 4	18.70	9.74	+15 - 8	10.18	19.02	-32 - 1
30	86.94	54.76	-21 + 8	63.28	61.03	+32 0	18.82	10.05	- 1 - 9	9.50	19.29	-29 + 4
31	88.36	54.90	- 4 + 8	64.14	61.29	+31 - 4	18.92	10.36	-18 - 8	8.80	19.56	-19 + 8
32	89.76	55.04	+13 + 6				18.99	10.67	-32 - 4	8.07	19.83	- 2 + 10

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-89° 8' 50''	67.190	-67.182	-89° 9' 0''	67.409	-67.402	-89° 9' 10''	67.630	-67.623
60	67.409	-67.402	10	67.630	-67.623	20	67.853	-67.846

$\alpha_{1945.0} = 20^h 8^m 31^s.59$

$\delta_{1945.0} = -89^\circ 9' 13''.06$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sh)  $\sigma$  Octantis  $5^m 48$

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
			in			in			in			in
	$20^h 9^m$	$89^\circ 9'$	$0.01$   $0.01$	$20^h 8^m$	$89^\circ 9'$	$0.01$   $0.01$	$20^h 8^m$	$89^\circ 9'$	$0.01$   $0.01$	$20^h 7^m$	$89^\circ 9'$	$0.01$   $0.01$
1	68.07	19.83	- 2 +10	96.88	25.89	+42 + 6	54.21	27.01	+32 - 6	77.77	22.49	-12 - 7
2	67.32	20.09	+16 +10	95.59	26.02	+47 + 2	52.83	26.95	+14 - 8	76.81	22.26	-25 - 5
3	66.54	20.35	+32 + 8	94.29	26.14	+45 - 1	51.46	26.88	- 3 - 8	75.86	22.02	-37 - 2
4	65.74	20.60	+42 + 5	92.98	26.26	+36 - 5	50.09	26.80	-20 - 6	74.94	21.77	-40 + 1
5	64.92	20.85	+45 + 1	91.66	26.37	+23 - 7	48.73	26.72	-32 - 4	74.04	21.52	-38 + 4
6	64.08	21.10	+41 - 3	90.33	26.47	+ 6 - 8	47.38	26.63	-40 - 1	73.16	21.27	-30 + 7
7	63.22	21.34	+31 - 6	88.99	26.57	-11 - 8	46.04	26.53	-43 + 2	72.30	21.01	-17 + 8
8	62.34	21.58	+16 - 8	87.64	26.66	-26 - 6	44.71	26.43	-39 + 5	71.47	20.75	- 1 + 8
9	61.43	21.82	- 1 - 8	86.29	26.75	-38 - 3	43.38	26.32	-28 + 7	70.66	20.48	+14 + 5
10	60.50	22.05	-18 - 7	84.93	26.83	-44 0	42.07	26.21	-13 + 8	69.88	20.21	+25 + 2
11	59.55	22.28	-33 - 5	83.56	26.90	-45 + 3	40.77	26.09	+ 3 + 7	69.12	19.94	+29 - 3
12	58.58	22.50	-43 - 2	82.19	26.97	-37 + 6	39.48	25.96	+18 + 4	68.38	19.66	+24 - 7
13	57.60	22.72	-47 + 1	80.81	27.03	-24 + 8	38.20	25.83	+27 0	67.67	19.38	+10 -10
14	56.60	22.94	-43 + 4	79.42	27.08	- 7 + 8	36.93	25.69	+27 - 4	66.98	19.10	- 7 -11
15	55.57	23.15	-33 + 7	78.03	27.13	+10 + 6	35.68	25.55	+19 - 8	66.31	18.81	-25 - 9
16	54.52	23.36	-16 + 8	76.63	27.17	+24 + 3	34.44	25.40	+ 4 -10	65.68	18.52	-38 - 5
17	53.46	23.56	+ 2 + 7	75.23	27.21	+30 - 2	33.21	25.24	-14 -10	65.07	18.22	-41 0
18	52.38	23.76	+19 + 5	73.83	27.24	+27 - 6	32.00	25.08	-30 - 7	64.48	17.92	-34 + 5
19	51.28	23.96	+30 + 1	72.42	27.27	+16 - 9	30.80	24.91	-38 - 3	63.92	17.62	-18 + 8
20	50.16	24.15	+32 - 3	71.01	27.29	- 1 -10	29.62	24.74	-36 + 2	63.38	17.32	+ 3 +10
21	49.03	24.34	+25 - 7	69.60	27.30	-18 - 8	28.45	24.56	-25 + 7	62.87	17.01	+25 +10
22	47.88	24.52	+11 - 9	68.19	27.31	-31 - 5	27.30	24.38	- 6 +10	62.39	16.70	+42 + 7
23	46.71	24.69	- 6 - 9	66.79	27.31	-35 0	26.17	24.19	+15 +11	61.93	16.38	+51 + 4
24	45.53	24.86	-21 - 7	65.38	27.30	-29 + 5	25.05	24.00	+35 + 9	61.50	16.06	+51 - 1
25	44.33	25.02	-31 - 3	63.98	27.29	-15 + 9	23.95	23.80	+48 + 6	61.09	15.74	+44 - 4
26	43.12	25.18	-31 + 2	62.58	27.27	+ 5 +10	22.87	23.60	+53 + 2	60.72	15.41	+30 - 7
27	41.90	25.33	-22 + 6	61.17	27.24	+24 +10	21.81	23.39	+49 - 2	60.37	15.09	+11 - 8
28	40.65	25.48	- 6 + 9	59.77	27.21	+40 + 8	20.77	23.17	+37 - 5	60.04	14.77	- 6 - 7
29	39.41	25.62	+12 +10	58.37	27.17	+49 + 4	19.75	22.95	+22 - 7	59.74	14.44	-22 - 6
30	38.15	25.76	+29 + 9	56.98	27.12	+50 0	18.75	22.72	+ 4 - 8	59.47	14.10	-33 - 3
31	36.88	25.89	+42 + 6	55.59	27.07	+43 - 4	17.77	22.49	-12 - 7	59.22	13.77	-39 0
32				54.21	27.01	+32 - 6				59.01	13.43	-39 + 4

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
$-89^\circ 9' 10''$	67.630	-67.623	$-89^\circ 9' 20''$	67.853	-67.846
20	67.853	-67.846	30	68.077	-68.069

$$\alpha_{1945.0} = 20^h 8^m 31.59$$

$$\delta_{1945.0} = -89^\circ 9' 13.06$$



Si)  $\beta$  Octantis 4<sup>m</sup>34

Tag	Januar			Februar			März			April		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	in			in			in			in		
22 <sup>h</sup> 40 <sup>m</sup>	81° 40'	o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 40'	o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 40'	o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 39'	o.or   o.or	
1	25.78	37.74	+3 +9	23.54	29.00	+4 -2	23.36	18.89	+3 -4	25.24	67.66	-3 -9
2	25.68	37.52	+4 +7	23.50	28.66	+3 -5	*)23.39	18.51	+2 -7	25.34	67.32	-5 -7
3	25.58	37.30	+5 +4	23.46	28.32	+1 -8	23.42	18.14	0 -9	25.44	66.99	-5 -5
4	25.48	37.07	+4 +1	23.43	27.98	-1 -9	23.45	17.77	-2 -9	25.54	66.65	-5 -1
5	25.39	36.84	+3 -3	23.40	27.64	-3 -9	23.48	17.39	-4 -9	25.64	66.32	-4 +2
6	25.29	36.61	+2 -6	23.37	27.29	-5 -8	23.52	17.02	-5 -7	25.74	65.99	-2 +5
7	25.20	36.37	0 =8	23.34	26.94	-5 -5	23.56	16.64	-5 -3	25.84	65.67	0 +6
8	25.11	36.12	-2 -9	23.32	26.59	-5 -1	23.60	16.27	-5 0	25.95	65.35	+2 +6
9	25.02	35.87	-4 -9	23.30	26.24	-4 +2	23.64	15.90	-4 +4	26.05	65.03	+4 +3
10	24.94	35.62	-5 -7	23.28	25.88	-2 +5	23.69	15.52	-1 +6	26.16	64.71	+4 0
11	24.85	35.36	-5 -3	23.26	25.52	0 +7	23.74	15.15	+1 +7	26.27	64.40	+4 -4
12	24.77	35.09	-5 +1	23.25	25.16	+2 +7	23.79	14.79	+3 +5	26.39	64.09	+2 -7
13	24.69	34.82	-3 +4	23.24	24.80	+4 +5	23.84	14.42	+4 +2	26.50	63.79	0 -8
14	24.61	34.55	-1 +7	23.23	24.44	+5 +1	23.90	14.05	+4 -1	26.61	63.49	-2 -7
15	24.53	34.27	+1 +8	23.22	24.07	+4 -3	23.95	13.68	+4 -5	26.73	63.18	-3 -4
16	24.45	33.99	+3 +6	23.21	23.71	+3 -6	24.01	13.31	+2 -7	26.85	62.89	-4 0
17	24.37	33.71	+4 +3	23.21	23.34	+1 -7	24.07	12.94	0 -7	26.97	62.59	-3 +5
18	24.30	33.42	+4 0	23.21	22.98	-1 -7	24.14	12.58	-2 -5	27.09	62.30	-2 +8
19	24.23	33.13	+4 -4	23.21	22.61	-3 -4	24.20	12.22	-3 -2	27.22	62.01	0 +10
20	24.16	32.83	+2 -6	23.22	22.24	-3 -1	24.27	11.86	-3 +2	27.34	61.73	+2 +11
21	24.10	32.53	0 -7	23.23	21.87	-3 +3	24.34	11.50	-2 +6	27.47	61.45	+4 +9
22	24.04	32.22	-2 -6	23.24	21.50	-2 +7	24.41	11.14	-1 +9	27.60	61.17	+5 +6
23	23.98	31.91	-3 -3	23.25	21.13	0 +9	24.49	10.78	+1 +10	27.73	60.90	+5 +3
24	23.92	31.60	-4 0	23.26	20.75	+1 +10	24.57	10.43	+3 +10	27.86	60.63	+4 -1
25	23.86	31.29	-3 +4	23.27	20.38	+3 +9	24.64	10.07	+4 +8	27.99	60.36	+3 -4
26	23.81	30.97	-2 +7	23.29	20.00	+4 +6	24.72	9.72	+4 +5	28.12	60.10	+1 -6
27	23.76	30.65	0 +9	23.31	19.63	+4 +3	24.80	9.37	+4 +2	28.26	59.84	0 -8
28	23.71	30.33	+2 +9	23.33	19.26	+4 0	24.89	9.02	+4 -2	28.39	59.59	-2 -8
29	23.66	30.00	+3 +8	23.36	18.89	+3 -4	24.97	8.68	+2 -5	28.53	59.34	-4 -7
30	23.62	29.67	+4 +5				25.06	8.33	+1 -7	28.67	59.10	-5 -5
31	23.58	29.34	+4 +2				25.15	7.99	-1 -9	28.81	58.86	-5 -2
32	23.54	29.00	+4 -2				25.24	7.65	-3 -9			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-81° 39' 50"	6.898	-6.825	-81° 40' 10"	6.902	-6.829	-81° 40' 30"	6.907	-6.834
60	6.900	-6.827	20	6.904	-6.832	40	6.909	-6.836

$$\alpha_{1945.0} = 22^{\text{h}} 40^{\text{m}} 33.87$$

$$\delta_{1945.0} = -81^{\circ} 40' 15.25$$

\*) Tag der doppelten unteren Kulmination: März 2.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Si)  $\beta$  Octantis 4<sup>m</sup>34

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	22 <sup>h</sup> 40 <sup>m</sup>	81° 39'	in o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 39'	in o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 39'	in o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 39'	in o.or   o.or
1	28.81	58.86	-5 - 2	33.64	53.68	o + 6	38.49	53.45	+4 + 1	42.51	58.11	o - 8
2	28.95	58.62	-5 + 1	33.81	53.60	+2 + 5	38.64	53.53	+4 - 3	42.61	58.33	-2 - 7
3	29.10	58.39	-3 + 4	33.98	53.52	+4 + 3	38.79	53.61	+3 - 7	42.71	58.56	-4 - 4
4	29.25	58.16	-1 + 6	34.14	53.44	+4 - 1	38.95	53.70	o - 9	42.81	58.79	-4 o
5	29.39	57.93	+1 + 6	34.31	53.37	+3 - 5	39.09	53.79	-2 - 9	42.90	59.02	-3 + 5
6	29.54	57.71	+3 + 4	34.47	53.30	+2 - 8	39.24	53.89	-3 - 6	42.99	59.26	-1 + 8
7	29.69	57.50	+4 + 1	34.64	53.24	o - 9	39.39	53.99	-4 - 2	43.08	59.50	+1 + 10
8	29.84	57.29	+4 - 3	34.80	53.19	-2 - 8	39.53	54.10	-4 + 2	43.17	59.74	+2 + 10
9	29.99	57.08	+3 - 6	34.97	53.14	-4 - 5	39.67	54.21	-3 + 6	43.25	59.99	+4 + 8
10	30.14	56.88	+1 - 9	35.13	53.10	-4 o	39.82	54.33	-1 + 9	43.33	60.24	+5 + 5
11	30.29	56.69	-1 - 9	35.30	53.06	-3 + 4	39.95	54.45	+1 + 10	43.41	60.49	+5 + 1
12	30.45	56.50	-3 - 6	35.46	53.03	-2 + 8	40.09	54.58	+3 + 9	43.49	60.75	+4 - 2
13	30.60	56.31	-4 - 2	35.63	53.00	o + 10	40.23	54.71	+5 + 7	43.56	61.00	+3 - 5
14	30.75	56.13	-4 + 2	35.79	52.98	+2 + 11	40.37	54.85	+5 + 4	43.64	61.27	+1 - 8
15	30.91	55.95	-3 + 7	35.96	52.96	+4 + 9	40.50	54.99	+4 o	43.71	61.53	-1 - 9
16	31.06	55.77	-1 + 10	36.12	52.95	+5 + 6	40.63	55.13	+3 - 4	43.77	61.80	-3 - 8
17	31.22	55.60	+1 + 11	36.28	52.95	+5 + 2	40.76	55.29	+2 - 6	43.84	62.07	-5 - 7
18	31.38	55.44	+3 + 10	36.45	52.95	+4 - 1	40.89	55.44	o - 8	43.90	62.34	-5 - 4
19	31.53	55.28	+5 + 8	36.61	52.95	+3 - 5	41.02	55.60	-2 - 8	43.96	62.61	-5 o
20	31.69	55.13	+5 + 5	36.76	52.97	+1 - 7	41.15	55.77	-4 - 7	44.02	62.89	-4 + 3
21	31.86	54.98	+5 + 1	36.92	52.99	-1 - 8	41.27	55.94	-5 - 5	44.07	63.17	-2 + 6
22	32.02	54.84	+4 - 3	37.08	53.01	-3 - 8	41.39	56.12	-5 - 2	44.12	63.45	o + 7
23	32.18	54.70	+2 - 6	37.24	53.04	-4 - 6	41.51	56.30	-5 + 1	44.17	63.73	+2 + 6
24	32.34	54.56	o - 7	37.40	53.07	-5 - 4	41.64	56.48	-3 + 5	44.22	64.02	+4 + 4
25	32.50	54.43	-2 - 8	37.56	53.10	-5 o	41.75	56.67	-1 + 7	44.26	64.30	+4 o
26	32.66	54.31	-3 - 8	37.72	53.15	-4 + 3	41.87	56.86	+1 + 7	44.30	64.591	+4 - 4
27	32.82	54.19	-5 - 6	37.87	53.20	-2 + 5	41.98	57.06	+3 + 5	44.34	64.88	+3 - 7
28	32.98	54.08	-5 - 3	38.03	53.25	o + 7	42.09	57.26	+4 + 2	44.37	65.17	o - 8
29	33.14	53.97	-5 o	38.18	53.31	+2 + 7	42.20	57.47	+4 - 1	44.40	65.47	-2 - 8
30	33.31	53.87	-4 + 4	38.34	53.38	+3 + 4	42.31	57.68	+3 - 5	44.43	65.76	-3 - 5
31	33.48	53.77	-2 + 6	38.49	53.45	+4 + 1	42.41	57.89	+2 - 8	44.46	66.06	-4 - 1
32	33.64	53.68	o + 6				42.51	58.11	o - 8	44.48 44.50	66.36 66.65	-4 + 4 -2 + 7

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-81° 39' 50"	6.898	-6.825	-81° 40' 0"	6.900	-6.827
60	6.900	-6.827	10	6.902	-6.829

$$\alpha_{1945.0} = 22^{\text{h}} 40^{\text{m}} 33.87$$

$$\delta_{1945.0} = -81^{\circ} 40' 15.25$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

237\*

Si)  $\beta$  Octantis 4<sup>m</sup>34

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	22 <sup>h</sup> 40 <sup>m</sup>	81° 40'	in a.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 40'	in o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 40'	in o.or   o.or	22 <sup>h</sup> 40 <sup>m</sup>	81° 40'	in o.or   o.or
1	44.48 44.50	6.36 6.65	-4 + 4 +2 + 7	43.86	15.54	+3 +10	40.93	22.37	+4 -1	36.96	24.20	0 -7
2	44.52	6.95	0 +10	43.79	15.82	+5 +8	40.81	22.51	+3 -4	36.82	24.16	-2 -7
3	44.54	7.25	+2 +10	43.73	16.09	+5 +4	40.69	22.65	+1 -7	36.69	24.12	-4 -6
4	44.55	7.55	+4 +9	43.66	16.36	+5 +1	40.56	22.79	-1 -7	36.55	24.08	-5 -4
5	44.56	7.85	+5 +6	43.59	16.62	+4 -3	40.44	22.92	-3 -7	36.42	24.02	-5 -1
6	44.57	8.16	+5 +3	43.52	16.89	+2 -6	40.31	23.04	-4 -6	36.29	23.96	-4 +2
7	44.57	8.46	+4 -1	43.45	17.14	0 -8	40.18	23.16	-5 -4	36.16	23.89	-3 +4
8	44.57	8.76	+3 -4	43.37	17.40	-2 -8	40.05	23.27	-5 -1	36.03	23.82	-1 +6
9	44.57	9.07	+2 -7	43.29	17.65	-3 -7	39.92	23.38	-4 +2	35.90	23.74	+1 +6
10	44.57	9.38	0 -8	43.21	17.90	-5 -6	39.79	23.48	-3 +5	35.77	23.66	+2 +5
11	44.56	9.68	-2 -8	43.13	18.15	-5 -3	39.66	23.58	-1 +6	35.64	23.57	+4 +1
12	44.55	9.98	-4 -7	43.05	18.40	-5 0	39.53	23.67	+1 +6	35.51	23.47	+4 -2
13	44.54	10.29	-5 -5	42.96	18.64	-4 +3	39.40	23.75	+3 +3	35.38	23.37	+3 -6
14	44.52	10.59	-5 -2	42.87	18.87	-2 +5	39.27	23.83	+4 0	35.25	23.26	+1 -9
15	44.51	10.89	-5 +1	42.78	19.11	0 +6	39.13	23.90	+4 -4	35.13	23.14	-1 -10
16	44.49	11.19	-3 +4	42.68	19.33	+2 +5	38.99	23.96	+2 -8	35.01	23.02	-3 -9
17	44.46	11.49	-1 +6	42.58	19.56	+4 +2	38.86	24.02	0 -10	34.88	22.89	-4 -5
18	44.44	11.78	+1 +6	42.48	19.78	+4 -2	38.72	24.07	-2 -9	34.76	22.75	-5 0
19	44.41	12.08	+3 +4	42.38	19.99	+3 -5	38.58	24.12	-3 -7	34.64	22.61	-3 +4
20	44.38	12.38	+4 +1	42.28	20.20	+2 -8	38.45	24.16	-4 -2	34.51	22.47	-2 +9
21	44.34	12.68	+4 -2	42.18	20.41	0 -9	38.31	24.20	-4 +3	34.39	22.32	+1 +11
22	44.31	12.97	+3 -6	42.07	20.61	-2 -8	38.18	24.23	-3 +7	34.27	22.16	+3 +11
23	44.27	13.26	+1 -8	41.96	20.81	-4 -4	38.04	24.25	0 +10	34.16	21.99	+5 +9
24	44.22	13.55	-1 -8	41.85	21.00	-4 0	37.91	24.26	+2 +12	34.04	21.82	+6 +6
25	44.18	13.84	-3 -6	41.74	21.19	-3 +5	37.77	24.27	+4 +11	33.93	21.65	+5 +2
26	44.13	14.13	-4 -2	41.63	21.37	-1 +9	37.64	24.28	+5 +8	33.82	21.47	+4 -2
27	44.08	14.42	-4 +2	41.52	21.55	+1 +11	37.50	24.27	+6 +4	33.71	21.28	+3 -5
28	44.03	14.70	-3 +7	41.40	21.72	+3 +11	37.37	24.26	+5 0	33.60	21.09	+1 -7
29	43.97	14.98	-1 +10	41.28	21.89	+4 +10	37.23	24.25	+4 -3	33.49	20.90	-1 -7
30	43.91	15.26	+1 +11	41.17	22.05	+5 +6	37.09	24.23	+2 -6	33.38	20.70	-3 -7
31	43.86	15.54	+3 +10	41.05	22.21	+5 +3	36.96	24.20	0 -7	33.28	20.49	-4 -5
32				40.93	22.37	+4 -1				33.18	20.28	-5 -2

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-81° 40' 0''	6.900	-6.827	-81° 40' 10''	6.902	-6.829	-81° 40' 20''	6.904	-6.832
10	6.902	-6.829	20	6.904	-6.832	30	6.907	-6.834

$$\alpha_{1945.0} = 22^h 40^m 33.87$$

$$\delta_{1945.0} = -81^\circ 40' 15.25$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sk)  $\tau$  Octantis 5<sup>m</sup>56

Tag	Januar			Februar			März			April		
	AR.	Dekl.	♁ Glieder	AR.	Dekl.	♁ Glieder	AR.	Dekl.	♁ Glieder	AR.	Dekl.	♁ Glieder
	23 <sup>h</sup> 20 <sup>m</sup>	87° 47'	in ♁.01   ♁.01	23 <sup>h</sup> 20 <sup>m</sup>	87° 47'	in ♁.01   ♁.01	23 <sup>h</sup> 20 <sup>m</sup>	87° 47'	in ♁.01   ♁.01	23 <sup>h</sup> 20 <sup>m</sup>	87° 46'	in ♁.01   ♁.01
1	16.58	31.11	+ 3 +9	4.70	22.96	+14 - 1	0.42	12.82	+13 - 3	3.54	60.98	- 5 - 9
2	16.10	30.92	+ 9 +8	4.44	22.63	+12 - 4	0.40	12.43	+10 - 6	3.78	60.61	-11 - 8
3	15.63	30.73	+13 +5	4.18	22.30	+ 8 - 7	0.38	12.05	+ 5 - 8	4.02	60.25	-16 - 6
4	15.16	30.53	+14 +2	3.93	21.97	+ 2 - 9	0.37	11.66	- 1 - 9	4.27	59.89	-18 - 3
5	14.70	30.33	+14 - 2	3.69	21.63	- 4 -10	0.37	11.27	- 8 - 9	4.53	59.53	-17 + 1
6	14.25	30.12	+11 - 5	3.45	21.29	-11 - 9	0.37	10.88	-14 - 8	4.79	59.17	-12 + 4
7	13.80	29.90	+ 6 - 8	3.23	20.94	-15 - 7	0.39	10.50	-17 - 5	5.06	58.82	- 5 + 6
8	13.36	29.68	0 - 9	3.01	20.60	-18 - 3	0.41	10.11	-18 - 1	5.34	58.47	+ 4 + 6
9	12.92	29.46	- 7 - 9	2.80	20.24	-17 + 1	0.44	9.72	-15 + 2	5.63	58.12	+11 + 4
10	12.49	29.22	-13 - 8	2.60	19.89	-12 + 4	0.48	9.33	- 9 + 5	5.92	57.77	+15 + 1
11	12.06	28.99	-16 - 5	2.40	19.53	- 5 + 7	0.53	8.95	- 1 + 6	6.22	57.43	+16 - 3
12	11.64	28.74	-17 - 1	2.22	19.17	+ 3 + 7	*)0.59	8.56	+ 7 + 6	6.53	57.09	+12 - 6
13	11.23	28.49	-15 + 3	2.04	18.81	+10 + 6	0.66	8.18	+13 + 4	6.85	56.75	+ 6 - 7
14	10.82	28.24	- 9 + 6	1.88	18.45	+15 + 3	0.74	7.79	+16 0	7.17	56.41	- 2 - 7
15	10.42	27.98	- 2 + 7	1.72	18.08	+16 - 1	0.82	7.40	+15 - 3	7.50	56.07	- 8 - 5
16	10.02	27.72	+ 6 + 7	1.57	17.72	+13 - 4	0.91	7.02	+10 - 6	7.84	55.74	-13 - 1
17	9.63	27.46	+12 + 5	1.43	17.35	+ 7 - 6	1.01	6.63	+ 3 - 7	8.18	55.41	-14 + 3
18	9.25	27.19	+15 + 1	1.29	16.98	0 - 6	1.12	6.24	- 4 - 6	8.53	55.09	-11 + 7
19	8.88	26.91	+15 - 2	1.17	16.61	- 7 - 5	1.24	5.86	-10 - 3	8.89	54.76	- 6 +10
20	8.51	26.63	+11 - 5	1.06	16.23	-12 - 2	1.37	5.48	-13 + 1	9.25	54.45	+ 1 +11
21	8.15	26.35	+ 4 - 7	0.96	15.86	-13 + 2	1.51	5.10	-13 + 5	9.62	54.14	+ 7 +10
22	7.80	26.06	- 3 - 6	0.86	15.48	-11 + 6	1.65	4.72	- 9 + 8	10.00	53.82	+12 + 7
23	7.46	25.76	- 9 - 4	0.77	15.10	- 7 + 8	1.81	4.34	- 3 +10	10.38	53.51	+14 + 4
24	7.12	25.47	-12 - 1	0.69	14.72	- 1 +10	1.97	3.96	+ 3 +10	10.77	53.20	+15 + 1
25	6.79	25.17	-13 + 3	0.62	14.35	+ 5 + 9	2.14	3.58	+ 9 + 9	11.16	52.90	+13 - 3
26	6.47	24.87	-10 + 6	0.55	13.97	+10 + 7	2.31	3.20	+13 + 6	11.57	52.60	+ 9 - 6
27	6.15	24.56	- 5 + 9	0.50	13.58	+13 + 4	2.50	2.83	+14 + 3	11.97	52.30	+ 3 - 8
28	5.85	24.25	+ 1 + 9	0.46	13.20	+14 + 1	2.69	2.45	+14 - 1	12.39	52.01	- 3 - 9
29	5.55	23.93	+ 7 + 8	0.42	12.82	+13 - 3	2.89	2.08	+11 - 4	12.81	51.72	- 9 - 8
30	5.26	23.61	+12 + 6				3.10	1.71	+ 7 - 7	13.23	51.44	-14 - 7
31	4.98	23.29	+14 + 3				3.32	1.34	+ 1 - 9	13.66	51.16	-17 - 4
32	4.70	22.96	+14 - 1				3.54	0.98	- 5 - 9			

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-87° 46' 50"	25.822	-25.802	-87° 47' 10"	25.887	-25.867	-87° 47' 30"	25.952	-25.932
60	25.854	-25.835	20	25.919	-25.900	40	25.984	-25.965

$$\alpha_{1945.0} = 23^{\text{h}} 20^{\text{m}} 37^{\text{s}}.25$$

$$\delta_{1945.0} = -87^{\circ} 47' 6''.26$$

\*) Tag der doppelten unteren Kulmination: März 12.



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

239\*

Sk)  $\tau$  Octantis  $5^m 56$

Tag	Mai			Juni			Juli			August		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	in			in			in			in		
	$23^h 20^m$	$87^\circ 46'$	$\begin{matrix} \text{a.oi} &   & \text{o.oi} \\ \text{---} &   & \text{---} \end{matrix}$	$23^h 20^m$	$87^\circ 46'$	$\begin{matrix} \text{a.oi} &   & \text{o.oi} \\ \text{---} &   & \text{---} \end{matrix}$	$23^h 20^m$	$87^\circ 46'$	$\begin{matrix} \text{a.oi} &   & \text{o.oi} \\ \text{---} &   & \text{---} \end{matrix}$	$23^h 21^m$	$87^\circ 46'$	$\begin{matrix} \text{a.oi} &   & \text{o.oi} \\ \text{---} &   & \text{---} \end{matrix}$
1	13.66	51.16	-17 - 4	29.32	44.70	- 3 + 6	46.44	43.19	+14 + 2	2.06	46.83	+ 3 - 8
2	14.10	50.89	-17 0	29.88	44.57	+ 5 + 6	47.00	43.23	+16 - 2	2.48	47.03	- 5 - 7
3	14.54	50.62	-14 + 3	30.44	44.44	+11 + 4	47.56	43.27	+13 - 5	2.89	47.23	-11 - 5
4	14.99	50.35	- 8 + 5	31.00	44.32	+15 0	48.12	43.32	+ 7 - 8	3.30	47.43	-14 - 1
5	15.44	50.09	0 + 6	31.57	44.21	+15 - 4	48.67	43.37	0 - 8	3.70	47.64	-14 + 3
6	15.90	49.83	+ 7 + 5	32.13	44.10	+10 - 7	49.22	43.43	- 7 - 7	4.09	47.85	-10 + 7
7	16.36	49.57	+13 + 2	32.70	44.00	+ 5 - 9	49.77	43.50	-13 - 4	4.47	48.07	- 4 +10
8	16.83	49.32	+16 - 2	33.27	43.90	- 3 - 8	50.31	43.57	-15 + 1	4.85	48.30	+ 3 +10
9	17.30	49.07	+14 - 5	33.84	43.81	-10 - 6	50.85	43.64	-13 + 5	5.22	48.52	+ 9 + 9
10	17.78	48.83	+ 9 - 8	34.42	43.72	-14 - 2	51.39	43.73	- 8 + 8	5.58	48.75	+14 + 6
11	18.27	48.59	+ 1 - 8	34.99	43.64	-15 + 3	51.92	43.82	- 1 +10	5.93	48.99	+16 + 3
12	18.76	48.36	- 6 - 7	35.57	43.57	-11 + 7	52.45	43.91	+ 6 +10	6.28	49.23	+15 - 1
13	19.25	48.13	-12 - 3	36.15	43.50	- 5 +10	52.98	44.01	+11 + 8	6.62	49.47	+12 - 4
14	19.75	47.90	-14 + 1	36.72	43.43	+ 2 +11	53.50	44.11	+15 + 5	6.95	49.72	+ 7 - 7
15	20.25	47.68	-13 + 5	37.30	43.37	+ 8 +10	54.02	44.22	+16 + 2	7.27	49.96	0 - 9
16	20.75	47.47	- 8 + 9	37.88	43.32	+14 + 7	54.54	44.33	+14 - 2	7.58	50.22	- 6 - 9
17	21.26	47.26	- 2 +11	38.45	43.27	+16 + 4	55.05	44.45	+10 - 5	7.89	50.47	-12 - 8
18	21.77	47.05	+ 5 +11	39.03	43.23	+16 0	55.55	44.57	+ 5 - 8	8.18	50.73	-16 - 5
19	22.29	46.85	+11 + 9	39.61	43.19	+13 - 3	56.05	44.70	- 2 - 9	8.47	50.99	-18 - 2
20	22.81	46.66	+15 + 6	40.18	43.16	+ 8 - 6	56.55	44.84	- 9 - 8	8.74	51.26	-16 + 2
21	23.34	46.47	+15 + 2	40.76	43.14	+ 2 - 8	57.04	44.98	-14 - 7	9.01	51.53	-11 + 5
22	23.87	46.28	+14 - 1	41.33	43.12	- 5 - 8	57.52	45.12	-17 - 4	9.27	51.80	- 4 + 7
23	24.40	46.10	+11 - 4	41.91	43.10	-11 - 7	58.00	45.27	-17 0	9.53	52.07	+ 4 + 7
24	24.94	45.92	+ 6 - 7	42.48	43.09	-15 - 5	58.48	45.42	-14 + 3	9.77	52.35	+11 + 5
25	25.47	45.75	- 1 - 8	43.05	43.09	-17 - 2	58.95	45.58	- 8 + 6	10.00	52.63	+15 + 2
26	26.02	45.58	- 7 - 8	43.62	43.09	-16 + 1	59.42	45.74	- 1 + 7	10.22	52.91	+16 - 2
27	26.56	45.42	-12 - 7	44.19	43.10	-12 + 4	59.87	45.91	+ 7 + 6	10.44	53.20	+12 - 5
28	27.11	45.26	-16 - 4	44.75	43.12	- 6 + 6	60.32	46.08	+13 + 4	10.64	53.48	+ 6 - 8
29	27.66	45.11	-17 - 1	45.32	43.14	+ 2 + 7	60.77	46.26	+16 0	10.83	53.77	- 2 - 8
30	28.21	44.97	-15 + 2	45.88	43.16	+ 9 + 5	61.21	46.45	+15 - 4	11.02	54.06	- 8 - 6
31	28.76	44.83	-10 + 5	46.44	43.19	+14 + 2	61.64	46.64	+10 - 7	11.19	54.36	-13 - 2
32	29.32	44.70	- 3 + 6				62.06	46.83	+ 3 - 8	11.36	54.65	-15 + 2

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
$-87^\circ 46' 40''$	25.790	$-25.770$	$-87^\circ 46' 50''$	25.822	$-25.802$
50	25.822	$-25.802$	60	25.854	$-25.835$

$$\alpha_{1945.0} = 23^h 20^m 37.25$$

$$\delta_{1945.0} = -87^\circ 47' 6.26$$



# Scheinbare Sternörter 1945

## Obere Kulmination Greenwich

Sk)  $\tau$  Octantis 5<sup>m</sup>56

Tag	September			Oktober			November			Dezember		
	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder	AR.	Dekl.	© Glieder
	23 <sup>h</sup> 21 <sup>m</sup>	—	in	23 <sup>h</sup> 21 <sup>m</sup>	—	in	23 <sup>h</sup> 20 <sup>m</sup>	—	in	23 <sup>h</sup> 20 <sup>m</sup>	—	in
	87° 46'	o.or   o.or		87° 47'	o.or   o.or		87° 47'	o.or   o.or		87° 47'	o.or   o.or	
1	11.36	54.65	-15 + 2	11.40	4.14	+ 5 +11	62.04	11.94	+16 0	47.06	15.03	+ 4 - 7
2	11.52	54.95	-12 + 6	11.24	4.44	+11 + 9	61.61	12.12	+13 - 3	46.52	15.03	- 2 - 7
3	11.66	55.25	- 7 + 9	11.06	4.74	+15 + 6	61.18	12.30	+ 8 - 6	45.98	15.03	- 9 - 7
4	11.80	55.55	0 +10	10.88	5.03	+16 + 2	60.74	12.48	+ 1 - 7	45.43	15.03	-13 - 5
5	11.92	55.85	+ 7 +10	10.68	5.32	+15 - 1	60.29	12.65	- 5 - 8	44.89	15.01	-16 - 3
6	12.04	56.15	+12 + 7	10.48	5.61	+11 - 5	59.83	12.81	-10 - 7	44.36	14.99	-17 0
7	12.14	56.45	+16 + 4	10.27	5.89	+ 6 - 7	59.37	12.97	-15 - 5	43.82	14.96	-14 + 3
8	12.24	56.76	+16 + 1	10.04	6.17	- 1 - 8	58.90	13.13	-17 - 2	43.28	14.93	- 9 + 5
9	12.32	57.07	+14 - 3	9.81	6.45	- 7 - 8	58.43	13.28	-17 + 1	42.73	14.89	- 2 + 6
10	12.39	57.38	+ 9 - 6	9.57	6.73	-12 - 7	57.95	13.42	-13 + 3	42.19	14.85	+ 6 + 5
11	12.46 12.51	57.69 58.00	+ 3 - 8 - 3 - 9	9.31	7.01	-16 - 5	57.47	13.56	- 7 + 5	41.65	14.80	+12 + 3
12	12.56	58.31	-10 - 8	9.05	7.28	-18 - 2	56.99	13.69	+ 1 + 6	41.11	14.74	+15 - 1
13	12.59	58.62	-15 - 7	8.78	7.55	-16 + 2	56.50	13.82	+ 8 + 4	40.57	14.67	+15 - 5
14	12.61	58.93	-18 - 4	8.50	7.81	-11 + 4	56.00	13.94	+14 + 1	40.04	14.60	+11 - 8
15	12.63	59.24	-18 0	8.22	8.08	- 4 + 6	55.50	14.05	+16 - 3	39.50	14.52	+ 3 -10
16	12.63	59.55	-14 + 3	7.92	8.33	+ 5 + 5	55.00	14.16	+13 - 6	38.97	14.44	- 5 - 9
17	12.62	59.86	- 8 + 5	7.61	8.59	+11 + 3	54.49	14.26	+ 8 - 9	38.44	14.35	-12 - 6
18	12.60	60.17	0 + 6	7.29	8.84	+15 0	53.97	14.36	0 - 9	37.91	14.25	-16 - 2
19	12.57	60.48	+ 8 + 5	6.97	9.09	+16 - 4	53.46	14.45	- 8 - 8	37.38	14.15	-15 + 3
20	12.53	60.79	+14 + 3	6.64	9.34	+11 - 7	52.94	14.54	-14 - 4	36.86	14.04	-11 + 8
21	12.48	61.10	+16 - 1	6.30	9.58	+ 4 - 9	52.42	14.61	-15 + 1	36.34	13.92	- 4 +11
22	12.42	61.41	+14 - 5	5.95	9.81	- 4 - 8	51.89	14.68	-14 + 6	35.82	13.80	+ 4 +12
23	12.35	61.72	+ 9 - 7	5.60	10.05	-10 - 5	51.37	14.75	- 8 +10	35.31	13.67	+11 +10
24	12.27	62.02	+ 1 - 8	5.23	10.28	-14 - 1	50.84	14.81	- 1 +12	34.80	13.54	+16 + 7
25	12.18	62.33	- 6 - 6	4.86	10.50	-14 + 4	50.31	14.86	+ 7 +11	34.29	13.40	+18 + 4
26	12.07	62.63	-12 - 3	4.48	10.72	-11 + 8	49.78	14.90	+13 + 9	33.79	13.25	+16 0
27	11.96	62.94	-14 + 1	4.09	10.93	- 5 +11	49.24	14.94	+17 + 6	33.29	13.09	+12 - 4
28	11.84	63.24	-13 + 5	3.70	11.14	+ 2 +11	48.70	14.97	+17 + 2	32.79	12.93	+ 6 - 6
29	11.70	63.54	- 8 + 9	3.29	11.35	+ 9 +10	48.15	15.00	+15 - 2	32.30	12.77	0 - 7
30	11.56	63.84	- 2 +11	2.88	11.55	+14 + 7	47.61	15.02	+10 - 5	31.81	12.60	- 6 - 7
31	11.40	64.14	+ 5 +11	2.47	11.75	+17 + 4	47.06	15.03	+ 4 - 7	31.32	12.42	-12 - 6
32				2.04	11.94	+16 0				30.84	12.24	-16 - 4

$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$	$\delta$	sec $\delta$	tg $\delta$
-87° 46' 50''	25.822	-25.802	-87° 47' 0''	25.854	-25.835	-87° 47' 10''	25.887	-25.867
60	25.854	-25.835	10	25.887	-25.867	20	25.919	-25.900

$$\alpha_{1945.0} = 23^{\text{h}} 20^{\text{m}} 37.25$$

$$\delta_{1945.0} = -87^{\circ} 47' 6.26$$



Koordinaten der scheinbaren Örter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod. Nutationsgl. *)		
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5				
	x	y	x	y	x	y	x	y	in x	in y	
1945									Einh. o/or		
Jan.	0	-393.67	+78.83	-195.27	+863.75	-1175.28	-345.97	+47.86	-313.77	- 8	+5
	1	393.68	78.48	195.28	863.41	1175.29	346.32	48.00	314.08	- 9	+2
	2	393.68	78.14	195.28	863.06	1175.29	346.67	48.13	314.39	- 9	-1
	3	393.67	77.80	195.27	862.72	1175.28	347.01	48.27	314.70	- 7	-5
	4	393.66	77.45	195.26	862.38	1175.27	347.35	48.42	315.01	- 5	-7
	5	-393.64	+77.11	-195.24	+862.04	-1175.25	-347.69	+48.58	-315.32	- 1	-8
	6	393.62	76.78	195.22	861.70	1175.23	348.03	48.75	315.62	+ 2	-8
	7	393.59	76.44	195.19	861.37	1175.20	348.37	48.92	315.92	+ 6	-6
	8	393.55	76.10	195.15	861.03	1175.16	348.71	49.10	316.22	+ 8	-4
	9	393.51	75.76	195.11	860.69	1175.12	349.05	49.28	316.52	+10	0
	10	-393.46	+75.43	-195.06	+860.36	-1175.07	-349.39	+49.46	-316.82	+ 9	+4
	11	393.40	75.09	195.00	860.03	1175.01	349.72	49.66	317.11	+ 7	+7
	12	393.34	74.76	194.94	859.70	1174.95	350.05	49.85	317.40	+ 4	+9
	13	393.27	74.43	194.87	859.37	1174.88	350.38	50.06	317.68	0	+9
	14	393.19	74.10	194.80	859.04	1174.81	350.71	50.27	317.97	- 3	+8
	15	-393.11	+73.78	-194.72	+858.71	-1174.73	-351.04	+50.48	-318.24	- 6	+5
	16	393.02	73.45	194.63	858.39	1174.64	351.37	50.70	318.52	- 7	0
	17	392.92	73.13	194.53	858.07	1174.54	351.69	50.93	318.79	- 7	-4
	18	392.82	72.81	194.43	857.75	1174.44	352.01	51.16	319.06	- 4	-7
	19	392.71	72.49	194.33	857.43	1174.34	352.33	51.39	319.33	- 1	-9
	20	-392.60	+72.17	-194.22	+857.11	-1174.22	-352.65	+51.63	-319.59	+ 3	-8
	21	392.48	71.86	194.10	856.80	1174.10	352.97	51.88	319.85	+ 5	-6
	22	392.35	71.55	193.97	856.49	1173.98	353.28	52.13	320.11	+ 7	-2
	23	392.22	71.24	193.84	856.18	1173.85	353.59	52.38	320.36	+ 6	+2
	24	392.08	70.94	193.71	855.88	1173.71	353.89	52.64	320.61	+ 3	+6
	25	-391.94	+70.64	-193.56	+855.58	-1173.57	-354.20	+52.91	-320.86	0	+8
	26	391.79	70.34	193.41	855.28	1173.41	354.49	53.18	321.10	- 4	+8
	27	391.63	70.05	193.25	854.99	1173.26	354.79	53.45	321.34	- 7	+6
	28	391.47	69.76	193.09	854.70	1173.09	355.08	53.73	321.58	- 9	+3
	29	391.31	69.47	192.93	854.41	1172.93	355.37	54.01	321.81	- 9	0
30	-391.14	+69.18	-192.76	+854.12	-1172.76	-355.66	+54.30	-322.04	- 8	-3	
31	390.96	68.90	192.58	853.84	1172.58	355.94	54.59	322.27	- 6	-6	
Febr.	1	390.78	68.62	192.40	853.56	1172.40	356.22	54.88	322.49	- 3	-8
	2	390.59	68.35	192.21	853.29	1172.21	356.49	55.18	322.70	+ 1	-8
	3	390.39	68.08	192.01	853.02	1172.01	356.76	55.48	322.92	+ 4	-7
	4	-390.19	+67.82	-191.81	+852.76	-1171.81	-357.02	+55.79	-323.12	+ 7	-5
	5	389.99	67.56	191.61	852.50	1171.61	357.28	56.10	323.33	+10	-2
	6	-389.78	+67.30	-191.40	+852.24	-1171.40	-357.54	+56.42	-323.53	+10	+2
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25			

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



Koordinaten der scheinbaren Örtter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod. Nutationsgl. *)	
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5		in x	in y
1945	x	y	x	y	x	y	x	y	Einh.	o/or
Febr. 6	-389.78	+67.30	-191.40	+852.24	-1171.40	-357.54	+56.42	-323.53	+10	+ 2
7	389.56	67.05	191.18	851.99	1171.18	357.79	56.74	323.72	+ 9	+ 6
9	389.34	66.80	190.96	851.74	1170.96	358.04	57.06	323.91	+ 6	+ 8
10	389.12	66.56	190.74	851.50	1170.74	358.28	57.38	324.10	+ 3	+10
11	388.89	66.32	190.51	851.26	1170.51	358.52	57.71	324.29	- 1	+ 9
12	-388.66	+66.08	-190.28	+851.02	-1170.28	-358.76	+58.04	-324.47	- 5	+ 6
13	388.42	65.86	190.04	850.80	1170.04	358.98	58.38	324.64	- 7	+ 2
14	388.18	65.63	189.80	850.57	1169.80	359.21	58.71	324.81	- 7	- 2
15	387.93	65.41	189.56	850.35	1169.56	359.43	59.06	324.97	- 5	- 6
16	387.68	65.20	189.31	850.14	1169.31	359.64	59.40	325.13	- 2	- 9
17	-387.43	+64.99	-189.06	+849.93	-1169.06	-359.85	+59.75	-325.28	+ 1	- 9
18	387.17	64.79	188.80	849.73	1168.80	360.05	60.10	325.43	+ 4	- 7
19	386.91	64.59	188.54	849.53	1168.54	360.25	60.45	325.58	+ 6	- 4
20	386.65	64.40	188.28	849.34	1168.28	360.44	60.80	325.72	+ 6	+ 1
21	386.38	64.21	188.01	849.15	1168.01	360.63	61.16	325.86	+ 4	+ 5
22	-386.11	+64.03	-187.74	+848.97	-1167.74	-360.81	+61.52	-325.99	+ 1	+ 7
23	385.83	63.85	187.46	848.80	1167.46	360.99	61.88	326.12	- 3	+ 8
24	385.56	63.68	187.19	848.63	1167.19	361.16	62.25	326.24	- 6	+ 7
25	385.27	63.52	186.90	848.46	1166.90	361.32	62.61	326.36	- 8	+ 5
26	384.99	63.36	186.62	848.31	1166.62	361.48	62.98	326.47	- 9	+ 1
27	-384.70	+63.21	-186.33	+848.16	-1166.33	-361.63	+63.35	-326.58	- 9	- 2
28	384.41	63.06	186.04	848.01	1166.04	361.78	63.73	326.68	- 7	- 5
März 1	384.12	62.92	185.75	847.87	1165.75	361.92	64.10	326.78	- 4	- 7
2	383.83	62.78	185.46	847.73	1165.45	362.06	64.47	326.87	- 1	- 8
3	383.53	62.65	185.16	847.60	1165.15	362.19	64.85	326.96	+ 3	- 8
4	-383.23	+62.52	-184.86	+847.48	-1164.85	-362.32	+65.23	-327.05	+ 6	- 6
5	382.93	62.41	184.56	847.36	1164.55	362.43	65.61	327.12	+ 9	- 3
6	382.63	62.30	184.26	847.25	1164.24	362.54	65.99	327.20	+10	0
7	382.32	62.19	183.95	847.15	1163.94	362.65	66.37	327.27	+10	+ 4
8	382.02	62.09	183.65	847.05	1163.63	362.75	66.75	327.33	+ 8	+ 7
9	-381.70	+62.00	-183.33	+846.96	-1163.32	-362.84	+67.14	-327.39	+ 5	+ 9
10	381.39	61.92	183.02	846.88	1163.01	362.92	67.53	327.44	+ 1	+10
11	381.08	61.84	182.71	846.80	1162.70	363.00	67.92	327.49	- 3	+ 8
12	380.77	61.76	182.40	846.72	1162.39	363.08	68.32	327.53	- 5	+ 4
13	380.45	61.69	182.08	846.65	1162.08	363.15	68.71	327.57	- 6	0
14	-380.14	+61.63	-181.77	+846.59	-1161.76	-363.21	+69.10	-327.61	- 6	- 5
15	379.82	61.58	181.45	846.54	1161.45	363.26	69.49	327.64	- 3	- 8
Mittl. Ort	-379.51	+61.53	-181.14	+846.49	-1161.13	-363.31	+69.88	-327.66	0	- 9
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25		

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



Koordinaten der scheinbaren Örtter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod. Nutationsgl. *)			
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5		in $\alpha$	in $\gamma$		
1945	$x$	$y$	$x$	$y$	$x$	$y$	$x$	$y$	Einh.	o/Or		
März	15	-379.51	+61.53	-181.14	+846.49	-1161.13	-363.31	+69.88	-327.66	0	-9	
	16	379.19	61.49	180.82	846.45	1160.82	363.35	70.26	327.68	+4	-8	
	17	378.87	61.45	180.50	846.41	1160.50	363.39	70.65	327.70	+6	-5	
	18	378.55	61.42	180.18	846.38	1160.18	363.42	71.04	327.71	+6	-1	
	19	378.23	61.40	179.86	846.36	1159.86	363.44	71.42	327.71	+5	+3	
	20	-377.91	+61.38	-179.54	+846.34	-1159.54	-363.46	+71.81	-327.71	+2	+7	
	21	377.58	61.37	179.22	846.33	1159.22	363.47	72.20	327.70	-2	+8	
	22	377.26	61.36	178.90	846.32	1158.90	363.48	72.60	327.69	-6	+8	
	23	376.94	61.36	178.59	846.32	1158.58	363.48	72.99	327.68	-8	+6	
	23	376.63	61.37	178.27	846.33	1158.27	363.47	73.37	327.66	-10	+2	
	24	-376.31	+61.39	-177.96	+846.35	-1157.95	-363.46	+73.76	-327.63	-10	-1	
	25	376.00	61.41	177.64	846.37	1157.64	363.44	74.15	327.60	-8	-4	
	26	375.69	61.43	177.33	846.39	1157.32	363.41	74.53	327.57	-5	-7	
	27	375.38	61.47	177.02	846.43	1157.01	363.38	74.92	327.53	-2	-8	
	28	375.07	61.51	176.71	846.47	1156.70	363.34	75.30	327.48	+1	-8	
	29	-374.75	+61.55	-176.40	+846.51	-1156.39	-363.30	+75.69	-327.43	+5	-7	
	30	374.43	61.60	176.09	846.56	1156.07	363.25	76.08	327.38	+7	-4	
	31	374.12	61.66	175.78	846.62	1155.77	363.19	76.46	327.32	+9	-1	
	April	1	373.81	61.72	175.47	846.68	1155.46	363.13	76.84	327.25	+9	+3
		2	373.51	61.79	175.17	846.75	1155.15	363.06	77.22	327.18	+8	+6
		3	-373.20	+61.87	-174.86	+846.83	-1154.85	-362.98	+77.60	-327.11	+6	+9
		4	372.91	61.95	174.56	846.91	1154.55	362.90	77.98	327.03	+3	+10
		5	372.61	62.03	174.26	846.99	1154.24	362.82	78.36	326.94	-1	+9
		6	372.32	62.12	173.97	847.08	1153.95	362.73	78.73	326.85	-4	+6
		7	372.03	62.22	173.67	847.18	1153.65	362.63	79.10	326.76	-6	+2
		8	-371.73	+62.32	-173.37	+847.28	-1153.35	-362.53	+79.48	-326.66	-6	-3
		9	371.44	62.43	173.08	847.39	1153.06	362.42	79.85	326.56	-4	-7
		10	371.14	62.54	172.79	847.50	1152.77	362.31	80.22	326.46	0	-9
		11	370.86	62.66	172.51	847.62	1152.48	362.19	80.59	326.35	+3	-9
12		370.58	62.79	172.23	847.75	1152.20	362.06	80.95	326.23	+6	-7	
13	-370.30	+62.92	-171.95	+847.88	-1151.92	-361.93	+81.32	-326.11	+7	-3		
14	370.02	63.05	171.67	848.01	1151.65	361.80	81.68	325.99	+6	+2		
15	369.76	63.20	171.40	848.16	1151.37	361.65	82.03	325.86	+4	+6		
16	369.49	63.35	171.13	848.31	1151.11	361.50	82.39	325.72	0	+8		
17	369.23	63.50	170.87	848.46	1150.84	361.35	82.74	325.58	-4	+8		
18	-368.96	+63.66	-170.60	+848.62	-1150.57	-361.19	+83.09	-325.44	-8	+7		
19	368.70	63.82	170.34	848.78	1150.31	361.03	83.45	325.29	-10	+4		
20	-368.44	+63.98	-170.08	+848.94	-1150.05	-360.87	+83.79	-325.14	-11	0		
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25				

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



Koordinaten der scheinbaren Örter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod.		
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5		Nutationsgl.*		
1945	x	y	x	y	x	y	x	y	in x	in y	
										Einh.	o"/or
April	20	-368.44	+63.98	-170.08	+848.94	-1150.05	-360.87	+83.79	-325.14	-11	0
	21	368.18	64.15	169.83	849.11	1149.80	360.70	84.14	324.98	-9	-3
	22	367.93	64.33	169.58	849.29	1149.55	360.52	84.48	324.82	-7	-6
	23	367.69	64.51	169.34	849.47	1149.31	360.34	84.82	324.66	-4	-8
	24	367.45	64.70	169.10	849.66	1149.07	360.16	85.15	324.49	0	-8
	25	-367.21	+64.89	-168.86	+849.85	-1148.83	-359.97	+85.48	-324.32	+3	-7
	26	366.98	65.09	168.63	850.05	1148.60	359.77	85.81	324.14	+6	-5
	27	366.76	65.29	168.40	850.25	1148.37	359.57	86.13	323.96	+8	-2
	28	366.53	65.49	168.17	850.45	1148.14	359.37	86.45	323.78	+9	+1
	29	366.30	65.70	167.95	850.66	1147.92	359.16	86.77	323.59	+8	+5
Mai	30	-366.08	+65.91	-167.73	+850.87	-1147.70	-358.95	+87.09	-323.40	+7	+8
	1	365.87	66.13	167.52	851.08	1147.49	358.73	87.40	323.20	+4	+9
	2	365.66	66.35	167.32	851.30	1147.28	358.51	87.71	323.00	0	+9
	3	365.46	66.57	167.11	851.52	1147.08	358.29	88.02	322.80	-3	+7
	4	365.26	66.80	166.92	851.75	1146.88	358.06	88.32	322.59	-5	+4
	5	-365.07	+67.03	-166.73	+851.98	-1146.69	-357.83	+88.62	-322.38	-6	-1
	6	364.89	67.27	166.54	852.22	1146.50	357.59	88.92	322.16	-4	-5
	7	364.71	67.51	166.36	852.46	1146.32	357.35	89.21	321.94	-2	-8
	8	364.53	67.75	166.18	852.70	1146.14	357.11	89.50	321.72	+2	-9
	9	364.35	67.99	166.00	852.94	1145.97	356.87	89.78	321.49	+5	-8
	10	-364.18	+68.24	-165.83	+853.19	-1145.80	-356.62	+90.07	-321.26	+8	-5
	11	364.02	68.49	165.67	853.44	1145.63	356.37	90.34	321.03	+8	0
	12	363.86	68.75	165.51	853.70	1145.48	356.11	90.61	320.79	+6	+4
	13	363.71	69.00	165.36	853.95	1145.32	355.86	90.88	320.55	+2	+7
	14	363.56	69.27	165.21	854.22	1145.17	355.59	91.15	320.31	-2	+9
	15	-363.42	+69.53	-165.07	+854.48	-1145.03	-355.33	+91.40	-320.06	-6	+8
	16	363.29	69.80	164.94	854.75	1144.89	355.06	91.66	319.81	-9	+5
	17	363.16	70.07	164.81	855.02	1144.76	354.79	91.91	319.56	-11	+2
18	363.03	70.34	164.68	855.29	1144.63	354.52	92.16	319.31	-10	-2	
19	362.91	70.61	164.56	855.56	1144.51	354.25	92.40	319.05	-9	-5	
20	-362.79	+70.89	-164.45	+855.84	-1144.39	-353.97	+92.64	-318.79	-5	-8	
21	362.68	71.17	164.34	856.12	1144.28	353.69	92.88	318.53	-2	-8	
22	362.58	71.45	164.23	856.40	1144.17	353.41	93.11	318.26	+2	-8	
23	362.48	71.73	164.13	856.68	1144.07	353.13	93.33	317.99	+5	-6	
24	362.38	72.02	164.04	856.97	1143.98	352.84	93.55	317.72	+7	-3	
25	-362.30	+72.30	-163.95	+857.25	-1143.89	-352.56	+93.77	-317.44	+8	0	
26	362.22	72.60	163.87	857.55	1143.81	352.26	93.98	317.16	+8	+4	
27	-362.14	+72.89	-163.80	+857.84	-1143.73	-351.97	+94.18	-316.88	+7	+7	
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25			

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



Koordinaten der scheinbaren Örter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod. Nutationsgl.*)		
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5		in x	in y	
1945	x	y	x	y	x	y	x	y	Einh.	α <sup>o</sup> 01	
Mai	27	-362.14	+72.89	-163.80	+857.84	-1143.73	-351.97	+94.18	-316.88	+ 7	+7
	28	362.07	73.18	163.73	858.13	1143.66	351.68	94.38	316.60	+ 4	+9
	29	362.00	73.47	163.66	858.43	1143.59	351.38	94.58	316.32	+ 1	+9
	30	361.94	73.76	163.60	858.72	1143.53	351.09	94.77	316.03	- 2	+8
	31	361.89	74.06	163.55	859.01	1143.48	350.79	94.95	315.74	- 5	+5
Juni	1	-361.84	+74.36	-163.50	+859.31	-1143.43	-350.49	+95.13	-315.45	- 6	+1
	2	361.79	74.66	163.46	859.61	1143.38	350.20	95.31	315.15	- 5	-4
	3	361.76	74.96	163.42	859.91	1143.35	349.90	95.48	314.86	- 3	-7
	4	361.72	75.26	163.39	860.21	1143.31	349.59	95.64	314.56	0	-9
	5	361.70	75.56	163.37	860.51	1143.29	349.29	95.80	314.26	+ 4	-9
	6	-361.68	+75.87	-163.35	+860.81	-1143.27	-348.99	+95.96	-313.95	+ 7	-6
	7	361.67	76.18	163.34	861.11	1143.25	348.69	96.11	313.65	+ 8	-2
	8	361.66	76.48	163.33	861.41	1143.24	348.39	96.26	313.34	+ 7	+2
	9	361.65	76.79	163.33	861.71	1143.24	348.09	96.40	313.04	+ 5	+6
	10	361.66	77.09	163.33	862.02	1143.24	347.79	96.53	312.73	+ 1	+8
	11	-361.67	+77.40	-163.34	+862.32	-1143.25	-347.48	+96.66	-312.42	- 4	+9
	12	361.68	77.70	163.36	862.63	1143.27	347.18	96.78	312.11	- 8	+7
	13	361.70	78.01	163.38	862.93	1143.29	346.87	96.90	311.79	-10	+3
	14	361.73	78.31	163.41	863.24	1143.31	346.57	97.01	311.48	-11	0
	15	361.76	78.62	163.44	863.55	1143.34	346.26	97.11	311.16	- 9	-4
	16	-361.80	+78.92	-163.48	+863.86	-1143.38	-345.95	+97.21	-310.84	- 7	-7
	17	361.84	79.23	163.52	864.17	1143.42	345.64	97.31	310.52	- 3	-8
	18	361.89	79.53	163.57	864.47	1143.47	345.34	97.40	310.21	0	-8
	19	361.95	79.84	163.63	864.78	1143.52	345.03	97.48	309.89	+ 4	-7
	20	362.01	80.14	163.69	865.08	1143.58	344.73	97.56	309.57	+ 7	-5
	21	-362.07	+80.44	-163.76	+865.38	-1143.65	-344.43	+97.63	-309.25	+ 8	-1
22	362.14	80.75	163.83	865.69	1143.72	344.12	97.70	308.93	+ 8	+3	
23	362.22	81.05	163.91	865.99	1143.79	343.82	97.76	308.61	+ 7	+6	
24	362.30	81.34	163.99	866.28	1143.88	343.53	97.82	308.29	+ 5	+8	
25	362.39	81.64	164.08	866.58	1143.97	343.23	97.87	307.96	+ 2	+9	
26	-362.49	+81.94	-164.18	+866.88	-1144.06	-342.93	+97.91	-307.64	- 2	+9	
27	362.59	82.24	164.28	867.18	1144.16	342.63	97.95	307.31	- 5	+6	
28	362.69	82.54	164.38	867.48	1144.26	342.33	97.98	306.99	- 6	+3	
29	362.80	82.84	164.49	867.77	1144.37	342.03	98.01	306.66	- 6	-2	
30	362.92	83.13	164.61	868.07	1144.49	341.74	98.03	306.34	- 5	-6	
Juli	1	-363.04	+83.42	-164.73	+868.36	-1144.61	-341.45	+98.05	-306.02	- 1	-8
	2	363.17	83.71	164.86	868.65	1144.73	341.16	98.06	305.69	+ 2	-9
	3	-363.30	+84.00	-164.99	+868.94	-1144.87	-340.87	+98.06	-305.37	+ 6	-7
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25			

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



Koordinaten der scheinbaren Örter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod. Nutationsgl. *)		
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5				
1945	x	y	x	y	x	y	x	y	in x	in y	
									Einh. 0 <sup>o</sup> 1		
Juli	3	-363.30	+84.00	-164.99	+868.94	-1144.87	-340.87	+98.06	-305.37	+ 6	-7
	4	363.44	84.29	165.13	869.22	1145.00	340.58	98.06	305.06	+ 8	-4
	5	363.59	84.58	165.28	869.51	1145.15	340.29	98.05	304.74	+ 8	0
	6	363.74	84.86	165.43	869.79	1145.30	340.01	98.04	304.42	+ 6	+5
	7	363.89	85.15	165.58	870.08	1145.45	339.72	98.02	304.10	+ 3	+8
	8	-364.05	+85.43	-165.74	+870.36	-1145.61	-339.44	+98.00	-303.78	- 2	+9
	9	364.21	85.71	165.91	870.64	1145.77	339.16	97.97	303.46	- 6	+8
	10	364.38	85.99	166.08	870.92	1145.94	338.88	97.93	303.14	- 9	+5
	11	364.56	86.26	166.25	871.19	1146.11	338.61	97.89	302.83	-10	+1
	12	364.73	86.54	166.43	871.47	1146.29	338.23	97.85	302.51	-10	-3
	13	-364.92	+86.81	-166.62	+871.74	-1146.47	-337.96	+97.79	-302.20	- 8	-6
	14	365.11	87.07	166.81	872.00	1146.66	337.70	97.74	301.89	- 5	-8
	15	365.30	87.34	167.00	872.27	1146.85	337.43	97.67	301.59	- 1	-9
	16	365.50	87.60	167.20	872.53	1147.05	337.27	97.60	301.28	+ 3	-8
	17	365.70	87.86	167.40	872.80	1147.25	337.00	97.53	300.97	+ 6	-6
	18	-365.91	+88.12	-167.61	+873.06	-1147.46	-336.74	+97.45	-300.66	+ 8	-3
	19	366.12	88.38	167.82	873.32	1147.67	336.48	97.36	300.36	+ 9	+1
	20	366.33	88.63	168.04	873.57	1147.88	336.23	97.27	300.06	+ 8	+5
	21	366.56	88.88	168.26	873.82	1148.10	335.98	97.17	299.76	+ 6	+8
	22	366.78	89.13	168.49	874.07	1148.33	335.73	97.07	299.47	+ 3	+9
	23	-367.01	+89.38	-168.72	+874.32	-1148.56	-335.48	+96.96	-299.17	0	+9
	24	367.25	89.62	168.96	874.56	1148.79	335.24	96.85	298.88	- 4	+7
	25	367.49	89.86	169.20	874.80	1149.03	335.00	96.73	298.59	- 6	+4
	26	367.74	90.10	169.45	875.03	1149.28	334.77	96.60	298.31	- 7	0
	27	367.99	90.34	169.70	875.26	1149.53	334.54	96.47	298.02	- 5	-5
	28	-368.24	+90.57	-169.95	+875.50	-1149.78	-334.30	+96.33	-297.74	- 3	-8
	29	368.49	90.80	170.21	875.72	1150.03	334.08	96.19	297.46	0	-9
	30	368.75	91.02	170.47	875.95	1150.29	333.85	96.05	297.18	+ 4	-8
	31	369.02	91.24	170.73	876.17	1150.56	333.63	95.90	296.91	+ 7	-6
Aug.	1	369.28	91.46	171.00	876.39	1150.82	333.41	95.74	296.64	+ 8	-1
	2	-369.56	+91.68	-171.27	+876.60	-1151.10	-333.20	+95.58	-296.37	+ 7	+3
	3	369.83	91.89	171.55	876.81	1151.37	332.99	95.42	296.11	+ 4	+7
	4	370.11	92.10	171.83	877.02	1151.65	332.78	95.25	295.85	0	+8
	5	370.40	92.30	172.12	877.22	1151.94	332.58	95.07	295.59	- 4	+8
	6	370.69	92.50	172.41	877.42	1152.23	332.38	94.89	295.33	- 8	+6
	7	-370.98	+92.70	-172.70	+877.62	-1152.52	-332.18	+94.71	-295.08	- 9	+3
	8	371.28	92.90	173.00	877.82	1152.81	331.98	94.52	294.83	-10	-1
	9	-371.57	+93.09	-173.29	+878.01	-1153.11	-331.79	+94.33	-294.59	- 8	-5
Mittl. Ort		-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25		

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



Koordinaten der scheinbaren Örtter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1 Gr. 10 <sup>m</sup> 56		BD +89° 3 Gr. 9 <sup>m</sup> 06		BD +89° 37 Gr. 10 <sup>m</sup> 06		CPD -89° 38 Gr. 9 <sup>m</sup> 5		Kurzperiod. Nutationsgl. *)		
	x	y	x	y	x	y	x	y	in x	in y	
1945											
Aug.											
9	-371.57	+93.09	-173.29	+878.01	-1153.11	-331.79	+94.33	-294.59	- 8	- 5	
10	371.88	93.28	173.60	878.20	1153.41	331.60	94.13	294.35	- 6	- 7	
11	372.18	93.46	173.90	878.38	1153.72	331.42	93.93	294.12	- 2	- 8	
12	372.49	93.64	174.21	878.56	1154.02	331.24	93.72	293.89	+ 1	- 8	
13	372.80	93.81	174.52	878.73	1154.34	331.07	93.51	293.66	+ 5	- 7	
14	-373.12	+93.98	-174.84	+878.90	-1154.65	-330.90	+93.29	-293.44	+ 7	- 4	
15	373.44	94.15	175.16	879.07	1154.97	330.73	93.07	293.22	+ 9	- 1	
16	373.76	94.31	175.48	879.23	1155.29	330.57	92.85	293.00	+ 9	+ 3	
17	374.09	94.47	175.80	879.39	1155.61	330.41	92.63	292.79	+ 8	+ 7	
18	374.42	94.63	176.13	879.55	1155.94	330.25	92.40	292.58	+ 5	+ 9	
19	-374.75	+94.78	-176.46	+879.70	-1156.26	-330.10	+92.17	-292.37	+ 2	+10	
20	375.08	94.93	176.79	879.85	1156.60	329.95	91.93	292.18	- 2	+ 8	
21	375.42	95.07	177.13	879.99	1156.93	329.81	91.69	291.98	- 5	+ 6	
22	375.76	95.21	177.47	880.13	1157.27	329.67	91.44	291.79	- 6	+ 2	
23	376.10	95.34	177.81	880.26	1157.61	329.54	91.18	291.61	- 6	- 3	
24	-376.44	+95.47	-178.16	+880.39	-1157.96	-329.41	+90.92	-291.43	- 4	- 7	
25	376.79	95.60	178.51	880.52	1158.31	329.28	90.66	291.26	- 1	- 9	
26	377.14	95.73	178.86	880.64	1158.66	329.16	90.40	291.09	+ 3	- 9	
27	377.48	95.85	179.21	880.76	1159.00	329.04	90.14	290.92	+ 6	- 7	
28	377.84	95.96	179.56	880.87	1159.36	328.92	89.87	290.76	+ 7	- 3	
29	-378.19	+96.07	-179.91	+880.98	-1159.71	-328.81	+89.61	-290.61	+ 7	+ 1	
30	378.55	96.18	180.27	881.08	1160.07	328.71	89.33	290.46	+ 4	+ 5	
31	378.91	96.28	180.63	881.18	1160.43	328.61	89.06	290.31	+ 1	+ 8	
Sept.											
1	379.27	96.37	180.99	881.28	1160.79	328.51	88.78	290.18	- 3	+ 9	
2	379.63	96.46	181.36	881.37	1161.15	328.42	88.50	290.04	- 7	+ 7	
3	-380.00	+96.55	-181.73	+881.46	-1161.52	-328.34	+88.21	-289.92	- 9	+ 4	
4	380.37	96.63	182.10	881.54	1161.89	328.26	87.92	289.80	-10	0	
5	380.74	96.71	182.47	881.62	1162.26	328.18	87.63	289.68	- 9	- 4	
6	381.10	96.78	182.83	881.70	1162.62	328.11	87.34	289.57	- 7	- 7	
7	381.48	96.85	183.21	881.77	1163.00	328.04	87.05	289.47	- 4	- 8	
8	-381.85	+96.92	-183.58	+881.83	-1163.37	-327.97	+86.75	-289.37	0	- 9	
9	382.22	96.98	183.95	881.89	1163.74	327.91	86.46	289.27	+ 3	- 8	
10	382.60	97.03	184.33	881.95	1164.12	327.86	86.16	289.18	+ 6	- 5	
11	382.98	97.08	184.71	882.00	1164.50	327.81	85.86	289.10	+ 8	- 2	
12	383.35	97.13	185.08	882.04	1164.87	327.76	85.56	289.02	+ 9	+ 2	
13	-383.74	+97.17	-185.47	+882.08	-1165.26	-327.72	+85.26	-288.95	+ 8	+ 5	
14	384.12	97.20	185.85	882.12	1165.64	327.69	84.95	288.89	+ 7	+ 8	
15	-384.50	+97.23	-186.23	+882.15	-1166.02	-327.66	+84.64	-288.83	+ 3	+10	
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25			

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



## Polnahe Sterne 1945

Koordinaten der scheinbaren Örter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod. Nutationsgl. *)		
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5		in x	in y	
1945	x	y	x	y	x	y	x	y	Einh.	α <sup>o</sup> or	
Sept.	15	-384.50	+97.23	-186.23	+882.15	-1166.02	-327.66	+84.64	-288.83	+ 3	+10
	16	384.88	97.26	186.61	882.18	1166.40	327.63	84.34	288.77	0	+ 9
	17	385.26	97.28	186.99	882.20	1166.78	327.61	84.03	288.72	- 3	+ 7
	18	385.64	97.30	187.37	882.22	1167.16	327.59	83.72	288.68	- 5	+ 3
	19	386.03	97.31	187.76	882.23	1167.55	327.58	83.41	288.65	- 6	- 1
	20	-386.41	+97.32	-188.14	+882.24	-1167.93	-327.57	+83.10	-288.62	- 5	- 5
	21	386.80	97.32	188.53	882.24	1168.32	327.57	82.79	288.60	- 2	- 8
	22	387.18	97.32	188.91	882.24	1168.70	327.57	82.48	288.58	+ 2	- 9
	23	387.57	97.31	189.30	882.23	1169.09	327.58	82.16	288.57	+ 5	- 8
	24	387.96	97.30	189.69	882.22	1169.48	327.59	81.85	288.57	+ 6	- 5
Okt.	25	-388.35	+97.28	-190.08	+882.20	-1169.87	-327.61	+81.54	-288.57	+ 7	0
	26	388.75	97.26	190.47	882.18	1170.26	327.63	81.22	288.57	+ 6	+ 4
	27	389.14	97.24	190.86	882.16	1170.65	327.65	80.91	288.59	+ 2	+ 7
	28	389.53	97.21	191.25	882.13	1171.03	327.68	80.60	288.61	- 2	+ 9
	29	389.91	97.17	191.63	882.09	1171.42	327.72	80.29	288.63	- 6	+ 8
	30	-390.30	+97.13	-192.02	+882.05	-1171.80	-327.76	+79.98	-288.66	- 9	+ 5
	1	390.68	97.09	192.40	882.01	1172.19	327.80	79.67	288.70	-11	+ 2
	2	391.06	97.04	192.79	881.96	1172.57	327.85	79.36	288.75	-10	- 2
	3	391.44	96.98	193.17	881.90	1172.95	327.91	79.06	288.80	- 8	- 6
	4	391.82	96.92	193.55	881.84	1173.33	327.97	78.75	288.86	- 5	- 8
	5	-392.21	+96.86	-193.93	+881.78	-1173.71	-328.03	+78.44	-288.92	- 2	- 9
	6	392.59	96.79	194.32	881.71	1174.09	328.10	78.14	288.99	+ 2	- 8
	7	392.97	96.72	194.70	881.64	1174.48	328.18	77.84	289.07	+ 5	- 6
	8	393.35	96.64	195.08	881.56	1174.86	328.26	77.54	289.15	+ 7	- 3
	9	393.73	96.55	195.46	881.47	1175.23	328.34	77.24	289.24	+ 9	0
	10	-394.11	+96.47	-195.84	+881.39	-1175.61	-328.43	+76.94	-289.33	+ 8	+ 4
	11	394.49	96.37	196.21	881.29	1175.99	328.53	76.64	289.43	+ 7	+ 7
	12	394.86	96.27	196.59	881.19	1176.36	328.63	76.35	289.53	+ 5	+ 9
13	395.23	96.17	196.97	881.09	1176.74	328.73	76.06	289.64	+ 2	+10	
14	395.60	96.06	197.34	880.98	1177.11	328.84	75.77	289.76	- 2	+ 8	
15	-395.98	+95.95	-197.72	+880.87	-1177.49	-328.95	+75.48	-289.88	- 4	+ 5	
16	396.35	95.83	198.09	880.75	1177.86	329.07	75.19	290.01	- 5	+ 1	
17	396.73	95.71	198.46	880.63	1178.23	329.19	74.91	290.14	- 5	- 4	
18	397.09	95.58	198.82	880.51	1178.59	329.32	74.63	290.28	- 3	- 8	
19	397.46	95.45	199.19	880.37	1178.96	329.45	74.35	290.42	+ 1	- 9	
20	-397.82	+95.31	-199.55	+880.24	-1179.32	-329.59	+74.08	-290.57	+ 4	- 9	
21	398.18	95.17	199.91	880.10	1179.68	329.73	73.81	290.73	+ 7	- 6	
22	-398.53	+95.02	-200.27	+879.95	-1180.04	-329.88	+73.54	-290.89	+ 8	- 2	
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25			

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



Koordinaten der scheinbaren Örter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod. Nutationsgl. *)		
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5		in x	in y	
1945	x	y	x	y	x	y	x	y	Einh.	o/oi	
Okt.	22	-398.53	+95.02	-200.27	+879.95	-1180.04	-329.88	+73.54	-290.89	+ 8	- 2
	23	398.88	94.87	200.62	879.80	1180.39	330.03	73.28	291.06	+ 7	+ 3
	24	399.23	94.71	200.97	879.64	1180.74	330.19	73.02	291.23	+ 4	+ 6
	25	399.59	94.55	201.32	879.48	1181.09	330.35	72.76	291.40	0	+ 9
	26	399.94	94.39	201.68	879.32	1181.45	330.51	72.51	291.58	- 5	+ 9
	27	-400.29	+94.22	-202.02	+879.15	-1181.79	-330.68	+72.26	-291.77	- 9	+ 7
	28	400.64	94.05	202.37	878.98	1182.14	330.85	72.01	291.96	-11	+ 3
	29	400.98	93.87	202.71	878.80	1182.48	331.03	71.77	292.15	-11	- 1
	30	401.32	93.69	203.05	878.62	1182.82	331.21	71.53	292.35	-10	- 5
	31	401.65	93.50	203.38	878.43	1183.15	331.40	71.30	292.56	- 7	- 7
	Nov.	1	-401.98	+93.31	-203.71	+878.24	-1183.48	-331.60	+71.07	-292.77	- 3
2		402.30	93.11	204.04	878.04	1183.81	331.80	70.85	292.99	0	- 8
3		402.62	92.91	204.36	877.84	1184.13	332.00	70.63	293.22	+ 4	- 7
4		402.95	92.71	204.69	877.64	1184.46	332.20	70.41	293.45	+ 6	- 4
5		403.27	92.50	205.01	877.43	1184.78	332.41	70.20	293.68	+ 8	- 1
6		-403.59	+92.29	-205.32	+877.22	-1185.09	-332.63	+69.99	-293.91	+ 8	+ 2
7		403.91	92.07	205.64	877.00	1185.41	332.84	69.79	294.15	+ 7	+ 6
8		404.21	91.85	205.94	876.78	1185.71	333.07	69.60	294.39	+ 5	+ 8
9		404.52	91.62	206.25	876.55	1186.02	333.29	69.40	294.64	+ 2	+ 9
10		404.82	91.39	206.55	876.32	1186.32	333.52	69.22	294.89	- 1	+ 9
11		-405.11	+91.16	-206.84	+876.09	-1186.61	-333.76	+69.04	-295.15	- 3	+ 7
12		405.40	90.92	207.13	875.85	1186.90	334.00	68.86	295.41	- 5	+ 3
13		405.68	90.68	207.42	875.61	1187.19	334.24	68.69	295.67	- 5	- 2
14		405.97	90.44	207.71	875.37	1187.48	334.48	68.52	295.94	- 3	- 6
15		406.26	90.19	207.99	875.12	1187.76	334.73	68.36	296.20	0	- 9
16		-406.54	+89.94	-208.27	+874.87	-1188.04	-334.98	+68.21	-296.48	+ 3	-10
17		406.81	89.68	208.54	874.61	1188.31	335.24	68.06	296.75	+ 7	- 8
18		407.08	89.42	208.81	874.35	1188.58	335.50	67.91	297.03	+ 9	- 4
19	407.34	89.15	209.07	874.09	1188.84	335.77	67.77	297.31	+ 9	0	
20	407.60	88.88	209.33	873.82	1189.10	336.04	67.64	297.60	+ 6	+ 5	
21	-407.85	+88.61	-209.58	+873.55	-1189.35	-336.31	+67.51	-297.89	+ 2	+ 8	
22	408.09	88.33	209.83	873.27	1189.60	336.59	67.39	298.18	- 2	+ 9	
23	408.33	88.05	210.07	872.99	1189.84	336.87	67.28	298.48	- 7	+ 8	
24	408.58	87.77	210.31	872.71	1190.08	337.15	67.17	298.77	-10	+ 5	
25	408.82	87.49	210.55	872.43	1190.32	337.44	67.07	299.07	-12	+ 1	
26	-409.05	+87.20	-210.78	+872.14	-1190.55	-337.72	+66.97	-299.37	-11	- 3	
27	409.27	86.91	211.01	871.85	1190.77	338.02	66.88	299.68	- 9	- 7	
28	-409.49	+86.61	-211.23	+871.56	-1190.99	-338.31	+66.80	-299.98	- 5	- 9	
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25			

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



## Polnake Sterne 1945

Koordinaten der scheinbaren Örter für 12<sup>h</sup> Sternzeit Greenwich

Tag	BD +89° 1		BD +89° 3		BD +89° 37		CPD -89° 38		Kurzperiod.	
	Gr. 10 <sup>m</sup> 56		Gr. 9 <sup>m</sup> 06		Gr. 10 <sup>m</sup> 06		Gr. 9 <sup>m</sup> 5		Nutationsgl. *)	
1945	x	y	x	y	x	y	x	y	in x	in y
									Einh.	o/oi
Nov. 28	-409.49	+86.61	-211.23	+871.56	-1190.99	-338.31	+66.80	-299.98	- 5	-9
29	409.71	86.32	211.44	871.26	1191.21	338.61	66.72	300.29	- 1	-9
30	409.91	86.01	211.65	870.96	1191.41	338.91	66.65	300.60	+ 2	-8
Dez. 1	410.11	85.71	211.85	870.66	1191.62	339.22	66.59	300.91	+ 5	-6
2	410.30	85.40	212.05	870.35	1191.81	339.53	66.53	301.23	+ 7	-2
3	-410.49	+85.09	-212.24	+870.04	-1192.00	-339.84	+66.48	-301.55	+ 8	+2
4	410.68	84.78	212.43	869.73	1192.19	340.15	66.43	301.87	+ 7	+5
5	410.86	84.47	212.61	869.42	1192.37	340.46	66.39	302.19	+ 5	+7
6	411.04	84.16	212.78	869.11	1192.54	340.78	66.36	302.50	+ 3	+9
7	411.21	83.84	212.95	868.79	1192.71	341.10	66.34	302.82	0	+9
8	-411.37	+83.52	-213.12	+868.47	-1192.88	-341.42	+66.32	-303.15	- 3	+7
9	411.53	83.20	213.28	868.15	1193.04	341.74	66.30	303.47	- 5	+4
10	411.68	82.87	213.43	867.83	1193.19	342.07	66.30	303.79	- 6	0
11	411.82	82.54	213.58	867.50	1193.34	342.39	66.30	304.12	- 5	-4
12	411.96	82.21	213.72	867.17	1193.48	342.73	66.31	304.44	- 2	-8
13	-412.09	+81.88	-213.85	+866.84	-1193.61	-343.06	+66.32	-304.77	+ 2	-9
14	412.22	81.55	213.98	866.51	1193.74	343.39	66.34	305.10	+ 6	-9
15	412.34	81.21	214.10	866.18	1193.86	343.72	66.36	305.43	+ 9	-6
16	412.46	80.88	214.22	865.85	1193.98	344.05	66.39	305.76	+10	-2
17	412.57	80.54	214.33	865.51	1194.09	344.39	66.43	306.08	+ 8	+3
18	-412.67	+80.20	-214.43	+865.18	-1194.19	-344.73	+66.48	-306.41	+ 5	+7
19	412.76	79.87	214.53	864.84	1194.29	345.07	66.53	306.73	+ 1	+9
20	412.85	79.53	214.62	864.50	1194.38	345.41	66.59	307.06	- 4	+9
21	412.94	79.18	214.70	864.16	1194.46	345.75	66.65	307.38	- 8	+7
22	413.01	78.84	214.78	863.82	1194.54	346.09	66.72	307.70	-11	+3
23	-413.08	+78.50	-214.85	+863.47	-1194.61	-346.44	+66.80	-308.02	-11	-1
24	413.15	78.16	214.92	863.13	1194.68	346.78	66.88	308.35	-10	-5
25	413.20	77.81	214.98	862.79	1194.73	347.12	66.97	308.67	- 7	-8
26	413.26	77.47	215.03	862.45	1194.79	347.46	67.07	308.99	- 3	-9
27	413.30	77.13	215.07	862.11	1194.83	347.81	67.17	309.31	+ 1	-9
28	-413.34	+76.78	-215.11	+861.76	-1194.87	-348.15	+67.28	-309.63	+ 4	-7
29	413.37	76.44	215.15	861.42	1194.90	348.50	67.40	309.95	+ 6	-3
30	413.40	76.10	215.17	861.07	1194.93	348.84	67.52	310.27	+ 8	0
31	413.41	75.75	215.19	860.73	1194.94	349.19	67.65	310.58	+ 7	+4
32	-413.43	+75.41	-215.20	+860.38	-1194.96	-349.54	+67.79	-310.89	+ 6	+7
Mittl. Ort	-379.87	+78.45	-181.54	+863.38	-1161.46	-346.41	+74.47	-307.25		

\*) Die Vorzeichen gelten für die drei nördlichen Sterne, für den südlichen sind sie umzukehren.



zur Reduktion auf den scheinbaren Ort

$$A = t - (0.34213 + 0.00034 T) \sin \Omega + 0.00415 \sin 2 \Omega - 0.02525 \sin 2 L_{\odot} \\ + 0.00250 \sin M_{\odot} - 0.00099 \sin (2 L_{\odot} + M_{\odot}) + 0.00042 \sin (2 L_{\odot} - M_{\odot}) \\ + 0.00024 \sin (2 L_{\odot} - \Omega) + 0.00010 \sin (2 L_{\oplus} - 2 M_{\oplus} - \Omega) \\ + 0.00008 \sin (2 L_{\oplus} - 2 L_{\oplus} + 2 M_{\oplus})$$

$$A' = -0.00405 \sin 2 L_{\oplus} + 0.00135 \sin M_{\oplus} - 0.00067 \sin (2 L_{\oplus} - \Omega) \\ - 0.00052 \sin (2 L_{\oplus} + M_{\oplus}) + 0.00030 \sin (2 L_{\oplus} - 2 L_{\odot} - M_{\oplus}) \\ + 0.00022 \sin (2 L_{\oplus} - M_{\oplus}) + 0.00012 \sin (2 L_{\oplus} - 2 L_{\odot}) \\ + 0.00012 \sin (M_{\oplus} + \Omega) + 0.00012 \sin (M_{\oplus} - \Omega) \\ - 0.00010 \sin (4 L_{\oplus} - 2 L_{\odot} - M_{\oplus}) - 0.00008 \sin (2 L_{\oplus} + M_{\oplus} - \Omega)$$

$$B = -(9.210 + 0.001 T) \cos \Omega + 0.090 \cos 2 \Omega - 0.551 \cos 2 L_{\odot} \\ - 0.022 \cos (2 L_{\odot} + M_{\odot}) + 0.009 \cos (2 L_{\odot} - M_{\odot}) \\ + 0.007 \cos (2 L_{\odot} - \Omega) + 0.003 \cos (2 L_{\oplus} - 2 M_{\oplus} - \Omega)$$

$$B' = -0.089 \cos 2 L_{\oplus} - 0.018 \cos (2 L_{\oplus} - \Omega) - 0.011 \cos (2 L_{\oplus} + M_{\oplus}) \\ + 0.005 \cos (2 L_{\oplus} - M_{\oplus}) + 0.003 \cos (M_{\oplus} + \Omega) - 0.003 \cos (M_{\oplus} - \Omega) \\ - 0.002 \cos (4 L_{\oplus} - 2 L_{\odot} - M_{\oplus}) - 0.002 \cos (2 L_{\oplus} + M_{\oplus} - \Omega)$$

$$C = -20.47 \cos \odot \cos \varepsilon$$

$$D = -20.47 \sin \odot$$

$$E = -(0.0029 - 0.0004 T) \sin \Omega$$

$T$  Zeit seit 1900.0 in Einheiten von 100 tropischen Jahren,

$t$  Zeit seit Beginn des annus fictus in Bruchteilen des tropischen Jahres;

$t = 0$  für 1945 Januar  $0.7124$  Welt-Zeit.

$$\begin{array}{l|l} a = m + \frac{1}{15} n \sin \alpha \operatorname{tg} \delta & a' = n \cos \alpha \\ b = \frac{1}{15} \cos \alpha \operatorname{tg} \delta & b' = -\sin \alpha \\ c = \frac{1}{15} \cos \alpha \sec \delta & c' = \operatorname{tg} \varepsilon \cos \delta - \sin \alpha \sin \delta \\ d = \frac{1}{15} \sin \alpha \sec \delta & d' = \cos \alpha \sin \delta \end{array}$$

Für 1945.0 gilt:  $m = +3.0732$ ,  $n = +20.043$ ,  $\varepsilon = 23^{\circ} 26' 47.17$

$$\alpha_{\text{app.}} = \alpha_{1945.0} + t \mu_{\alpha} + Aa + Bb + Cc + Dd + E + [A'a + B'b]$$

$$\delta_{\text{app.}} = \delta_{1945.0} + t \mu_{\delta} + Aa' + Bb' + Cc' + Dd' + [A'a' + B'b']$$

$\mu_{\alpha}$ ,  $\mu_{\delta}$  jährliche Eigenbewegung in Rektaszension, bez. Deklination.

Setzt man

$$\begin{array}{l|l|l} f = mA + E & f' = mA' & i = C \operatorname{tg} \varepsilon \\ g \sin G = B & g' \sin G' = B' & h \sin H = C \\ g \cos G = nA & g' \cos G' = nA' & h \cos H = D, \end{array}$$

so wird:

$$\alpha_{\text{app.}} = \alpha_{1945.0} + t \mu_{\alpha} + f + \frac{1}{15} g \sin (G + \alpha) \operatorname{tg} \delta + \frac{1}{15} h \sin (H + \alpha) \sec \delta \\ + [f' + \frac{1}{15} g' \sin (G' + \alpha) \operatorname{tg} \delta]$$

$$\delta_{\text{app.}} = \delta_{1945.0} + t \mu_{\delta} + g \cos (G + \alpha) + h \cos (H + \alpha) \sin \delta + i \cos \delta \\ + [g' \cos (G' + \alpha)]$$



Tag	0 <sup>h</sup> Welt-Zeit								
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>
1945									
Jan. 0	<sup>h</sup> 6.6	— <sup>a</sup> 0.0020	— <sup>b</sup> 0.987	0.8623	<sup>h</sup> <sup>m</sup> 10 7.2	1.3102	<sup>h</sup> <sup>m</sup> 23 26.2	0.1153 <sub>n</sub>	—1.304
1	6.7	+0.0008	0.976	0.8581	10 6.6	1.3100	23 22.4	0.1602 <sub>n</sub>	1.446
2	6.8	0.0035	0.965	0.8539	10 5.9	1.3098	23 18.6	0.2011 <sub>n</sub>	1.589
3	6.8	0.0063	0.954	0.8496	10 5.3	1.3095	23 14.9	0.2383 <sub>n</sub>	1.731
4	6.9	0.0090	0.943	0.8453	10 4.7	1.3093	23 11.1	0.2723 <sub>n</sub>	1.872
5	6.9	0.0117	0.933	0.8410	10 4.1	1.3090	23 7.3	0.3036 <sub>n</sub>	2.012
6	7.0	0.0145	—0.922	0.8366	10 3.5	1.3088	23 3.5	0.3328 <sub>n</sub>	—2.152
7	7.1	0.0172	0.911	0.8322	10 2.9	1.3085	22 59.8	0.3602 <sub>n</sub>	2.292
8	7.1	0.0200	0.901	0.8277	10 2.4	1.3081	22 56.0	0.3856 <sub>n</sub>	2.430
9	7.2	0.0227	0.890	0.8232	10 1.8	1.3077	22 52.2	0.4090 <sub>n</sub>	2.568
10	7.3	0.0254	0.880	0.8186	10 1.3	1.3073	22 48.4	0.4322 <sub>n</sub>	2.705
11	7.4	0.0282	0.869	0.8140	10 0.7	1.3069	22 44.6	0.4536 <sub>n</sub>	2.842
12	7.4	0.0309	—0.859	0.8094	10 0.2	1.3065	22 40.8	0.4738 <sub>n</sub>	—2.977
13	7.5	0.0336	0.849	0.8047	9 59.7	1.3060	22 36.9	0.4930 <sub>n</sub>	3.112
14	7.5	0.0364	0.839	0.8000	9 59.2	1.3056	22 33.1	0.5112 <sub>n</sub>	3.245
15	7.6	0.0391	0.828	0.7952	9 58.7	1.3051	22 29.3	0.5285 <sub>n</sub>	3.377
16	7.7	0.0419	0.818	0.7904	9 58.2	1.3047	22 25.4	0.5451 <sub>n</sub>	3.508
17	7.7	0.0446	0.808	0.7856	9 57.7	1.3042	22 21.6	0.5609 <sub>n</sub>	3.638
18	7.8	0.0473	—0.799	0.7807	9 57.3	1.3036	22 17.7	0.5760 <sub>n</sub>	—3.767
19	7.9	0.0501	0.789	0.7758	9 56.9	1.3031	22 13.8	0.5905 <sub>n</sub>	3.895
20	7.9	0.0528	0.779	0.7709	9 56.5	1.3026	22 9.9	0.6043 <sub>n</sub>	4.021
21	8.0	0.0555	0.769	0.7659	9 56.1	1.3020	22 6.1	0.6176 <sub>n</sub>	4.146
22	8.1	0.0583	0.760	0.7609	9 55.7	1.3015	22 2.2	0.6304 <sub>n</sub>	4.270
23	8.1	0.0610	0.750	0.7559	9 55.3	1.3009	21 58.2	0.6428 <sub>n</sub>	4.393
24	8.2	0.0638	—0.741	0.7508	9 54.9	1.3003	21 54.3	0.6546 <sub>n</sub>	—4.514
25	8.3	0.0665	0.732	0.7457	9 54.6	1.2997	21 50.4	0.6659 <sub>n</sub>	4.633
26	8.3	0.0692	0.723	0.7406	9 54.3	1.2991	21 46.5	0.6769 <sub>n</sub>	4.752
27	8.4	0.0720	0.714	0.7355	9 54.0	1.2985	21 42.5	0.6874 <sub>n</sub>	4.868
28	8.5	0.0747	0.705	0.7303	9 53.7	1.2979	21 38.5	0.6976 <sub>n</sub>	4.984
29	8.5	0.0774	0.696	0.7251	9 53.4	1.2972	21 34.6	0.7072 <sub>n</sub>	5.096
30	8.6	0.0802	—0.687	0.7199	9 53.1	1.2966	21 30.6	0.7167 <sub>n</sub>	—5.208
31	8.7	0.0829	0.678	0.7147	9 52.8	1.2959	21 26.6	0.7257 <sub>n</sub>	5.318
Febr. 1	8.7	0.0857	0.670	0.7094	9 52.5	1.2953	21 22.6	0.7346 <sub>n</sub>	5.427
2	8.8	0.0884	0.661	0.7041	9 52.3	1.2947	21 18.6	0.7430 <sub>n</sub>	5.533
3	8.9	0.0911	0.653	0.6988	9 52.1	1.2940	21 14.6	0.7511 <sub>n</sub>	5.638
4	8.9	0.0939	0.644	0.6935	9 51.8	1.2934	21 10.6	0.7590 <sub>n</sub>	5.741
5	9.0	0.0966	—0.636	0.6882	9 51.6	1.2927	21 6.5	0.7666 <sub>n</sub>	—5.843
6	9.1	0.0994	0.628	0.6829	9 51.4	1.2920	21 2.5	0.7739 <sub>n</sub>	5.942
7	9.1	0.1021	0.620	0.6775	9 51.2	1.2913	20 58.4	0.7810 <sub>n</sub>	6.040
8	9.2	0.1048	0.612	0.6721	9 51.0	1.2907	20 54.3	0.7878 <sub>n</sub>	6.135
9	9.2	0.1076	0.604	0.6667	9 50.8	1.2900	20 50.2	0.7944 <sub>n</sub>	6.229
10	9.3	0.1103	—0.597	0.6613	9 50.6	1.2894	20 46.1	0.8008 <sub>n</sub>	—6.321



Tag	0 <sup>h</sup> Welt-Zeit										
	<i>f'</i>	<i>g'</i>	<i>G'</i>	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	<i>j</i>	<i>k</i>
1945	in o.oor	in o.or	<sup>h</sup>	—"	—"	in o.or	23° 26'	—"	in o.or	in o.oor	
Jan. 0	+11	+ 9	2.7	—0.10	—16.03	+18	47.17	—3.44	— 6	32	89
1	+14	9	1.2	+0.04	15.99	+23	47.17	3.43	— 3	31	89
2	+14	9	23.7	0.18	15.95	+23	47.17	3.41	+ 1	31	89
3	+12	9	22.3	0.32	15.91	+20	47.17	3.39	+ 4	31	89
4	+ 8	8	20.6	0.45	15.87	+14	47.17	3.38	+ 7	31	89
5	+ 3	8	18.9	0.59	15.84	+ 5	47.17	3.36	+ 8	30	89
6	— 3	+ 8	17.3	+0.73	—15.80	— 4	47.17	—3.34	+ 8	30	89
7	— 8	8	15.5	0.87	15.76	—13	47.16	3.32	+ 7	30	89
8	—12	9	13.9	1.00	15.73	—20	47.16	3.30	+ 4	29	89
9	—14	9	12.3	1.14	15.69	—24	47.16	3.28	+ 1	29	89
10	—15	10	10.8	1.28	15.66	—24	47.16	3.26	— 3	29	89
11	—12	10	9.4	1.42	15.63	—20	47.16	3.24	— 6	28	88
12	— 8	+10	8.0	+1.55	—15.60	—12	47.16	—3.22	— 9	28	88
13	— 2	10	6.4	1.69	15.57	— 3	47.16	3.20	—10	28	88
14	+ 4	9	4.8	1.83	15.54	+ 7	47.16	3.17	— 8	27	88
15	+ 9	8	2.8	1.97	15.51	+14	47.15	3.15	— 5	27	88
16	+10	7	0.5	2.10	15.48	+17	47.15	3.13	— 1	27	88
17	+10	7	22.1	2.24	15.45	+16	47.15	3.10	+ 3	27	88
18	+ 7	+ 8	20.3	+2.38	—15.43	+12	47.15	—3.08	+ 7	26	88
19	+ 2	9	18.6	2.52	15.41	+ 4	47.15	3.05	+ 9	26	88
20	— 3	9	17.0	2.66	15.39	— 6	47.15	3.03	+ 8	26	88
21	— 8	8	15.4	2.79	15.37	—13	47.15	3.00	+ 6	25	87
22	—10	7	13.4	2.93	15.35	—16	47.15	2.98	+ 3	25	87
23	— 9	6	11.0	3.07	15.33	—15	47.14	2.95	— 2	25	87
24	— 6	+ 6	8.5	+3.21	—15.32	—10	47.14	—2.92	— 5	25	87
25	— 1	7	6.3	3.34	15.30	— 1	47.14	2.90	— 8	24	87
26	+ 5	8	4.5	3.48	15.29	+ 8	47.14	2.87	— 8	24	87
27	+10	9	3.1	3.62	15.28	+16	47.14	2.84	— 7	24	87
28	+13	9	1.7	3.76	15.27	+21	47.14	2.82	— 4	23	87
29	+14	9	0.3	3.89	15.26	+23	47.14	2.79	— 1	23	87
30	+13	+ 9	22.7	+4.03	—15.26	+21	47.14	—2.76	+ 3	23	86
Febr. 31	+10	8	21.2	4.17	15.25	+16	47.13	2.73	+ 6	23	86
1	+ 5	8	19.5	4.31	15.25	+ 8	47.13	2.70	+ 8	22	86
2	— 1	8	17.8	4.44	15.25	— 1	47.13	2.68	+ 8	22	86
3	— 6	8	16.0	4.58	15.25	—10	47.13	2.65	+ 7	22	86
4	—11	9	14.4	4.72	15.25	—18	47.13	2.62	+ 5	22	86
5	—14	+ 9	12.9	+4.86	—15.25	—23	47.13	—2.59	+ 2	21	86
6	—15	10	11.4	4.99	15.26	—25	47.13	2.56	— 2	21	85
7	—14	10	10.0	5.13	15.26	—23	47.13	2.53	— 5	21	85
8	—10	10	8.6	5.27	15.27	—17	47.12	2.51	— 8	21	85
9	— 5	10	7.2	5.41	15.28	— 8	47.12	2.48	—10	20	85
10	+ 1	+ 9	5.6	+5.55	—15.29	+ 2	47.12	—2.45	— 9	20	85



Tag	0 <sup>h</sup> Welt-Zeit										
	Stara- zeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>		
1945											
Febr.	10	<sup>h</sup> 9.3	<sup>a</sup> 0.1103	<sup>n</sup> -0.597	0.6613	<sup>h</sup> 9 50.6	1.2894	<sup>h</sup> 20 46.1	0.8008 <sub>n</sub>	-6.321	
	11	9.4	0.1130	0.589	0.6559	9 50.5	1.2887	20 42.0	0.8069 <sub>n</sub>	6.411	
	12	9.4	0.1158	0.581	0.6505	9 50.3	1.2881	20 37.9	0.8128 <sub>n</sub>	6.499	
	13	9.5	0.1185	0.574	0.6451	9 50.2	1.2874	20 33.8	0.8185 <sub>n</sub>	6.584	
	14	9.6	0.1213	0.567	0.6397	9 50.0	1.2868	20 29.6	0.8240 <sub>n</sub>	6.668	
	15	9.6	0.1240	0.559	0.6343	9 49.9	1.2861	20 25.5	0.8292 <sub>n</sub>	6.749	
	16	9.7	0.1267	-0.552	0.6289	9 49.7	1.2855	20 21.3	0.8343 <sub>n</sub>	-6.828	
	17	9.8	0.1295	0.545	0.6234	9 49.6	1.2849	20 17.1	0.8392 <sub>n</sub>	6.905	
	18	9.8	0.1322	0.538	0.6180	9 49.4	1.2843	20 12.9	0.8439 <sub>n</sub>	6.980	
	19	9.9	0.1349	0.531	0.6125	9 49.2	1.2837	20 8.7	0.8484 <sub>n</sub>	7.053	
	20	10.0	0.1377	0.525	0.6071	9 49.0	1.2831	20 4.5	0.8527 <sub>n</sub>	7.124	
	21	10.0	0.1404	0.518	0.6016	9 48.9	1.2825	20 0.3	0.8568 <sub>n</sub>	7.192	
	22	10.1	0.1432	-0.511	0.5962	9 48.8	1.2819	19 56.1	0.8608 <sub>n</sub>	-7.258	
	23	10.2	0.1459	0.504	0.5908	9 48.6	1.2814	19 51.9	0.8646 <sub>n</sub>	7.322	
	24	10.2	0.1486	0.498	0.5854	9 48.4	1.2809	19 47.6	0.8682 <sub>n</sub>	7.383	
	25	10.3	0.1514	0.492	0.5800	9 48.1	1.2803	19 43.4	0.8717 <sub>n</sub>	7.443	
	26	10.4	0.1541	0.485	0.5746	9 47.9	1.2798	19 39.1	0.8751 <sub>n</sub>	7.500	
	27	10.4	0.1568	0.479	0.5692	9 47.6	1.2793	19 34.9	0.8782 <sub>n</sub>	7.554	
	März	28	10.5	0.1596	-0.473	0.5638	9 47.4	1.2789	19 30.6	0.8812 <sub>n</sub>	-7.606
		1	10.6	0.1623	0.467	0.5583	9 47.1	1.2784	19 26.3	0.8840 <sub>n</sub>	7.656
		2	10.6	0.1651	0.460	0.5529	9 46.8	1.2780	19 22.0	0.8867 <sub>n</sub>	7.703
		3	10.7	0.1678	0.454	0.5475	9 46.5	1.2775	19 17.7	0.8892 <sub>n</sub>	7.748
		4	10.8	0.1705	0.448	0.5421	9 46.1	1.2771	19 13.4	0.8916 <sub>n</sub>	7.791
		5	10.8	0.1733	0.443	0.5368	9 45.7	1.2767	19 9.1	0.8938 <sub>n</sub>	7.831
		6	10.9	0.1760	-0.437	0.5315	9 45.3	1.2764	19 4.8	0.8959 <sub>n</sub>	-7.869
		7	11.0	0.1788	0.431	0.5263	9 44.9	1.2761	19 0.5	0.8979 <sub>n</sub>	7.905
		8	11.0	0.1815	0.425	0.5210	9 44.4	1.2758	18 56.2	0.8997 <sub>n</sub>	7.938
9		11.1	0.1842	0.419	0.5158	9 43.9	1.2755	18 51.9	0.9013 <sub>n</sub>	7.968	
10		11.2	0.1870	0.414	0.5105	9 43.3	1.2752	18 47.5	0.9029 <sub>n</sub>	7.996	
11		11.2	0.1897	0.408	0.5053	9 42.7	1.2749	18 43.2	0.9043 <sub>n</sub>	8.022	
12		11.3	0.1924	-0.402	0.5000	9 42.0	1.2747	18 38.9	0.9055 <sub>n</sub>	-8.045	
13		11.4	0.1952	0.397	0.4948	9 41.3	1.2745	18 34.6	0.9067 <sub>n</sub>	8.066	
14		11.4	0.1979	0.391	0.4895	9 40.6	1.2743	18 30.2	0.9077 <sub>n</sub>	8.085	
15		11.5	0.2007	0.386	0.4843	9 39.8	1.2741	18 25.9	0.9085 <sub>n</sub>	8.101	
16	11.5	0.2034	0.380	0.4791	9 39.0	1.2740	18 21.6	0.9092 <sub>n</sub>	8.114		
17	11.6	0.2061	0.375	0.4739	9 38.1	1.2739	18 17.2	0.9099 <sub>n</sub>	8.126		
18	11.7	0.2089	-0.369	0.4687	9 37.1	1.2738	18 12.9	0.9103 <sub>n</sub>	-8.134		
19	11.7	0.2116	0.363	0.4635	9 36.1	1.2738	18 8.5	0.9106 <sub>n</sub>	8.140		
20	11.8	0.2143	0.358	0.4584	9 35.0	1.2737	18 4.2	0.9108 <sub>n</sub>	8.143		
21	11.8	0.2171	0.352	0.4533	9 33.8	1.2737	17 59.9	0.9108 <sub>n</sub>	8.144		
22	11.9	0.2198	0.347	0.4481	9 32.6	1.2737	17 55.6	0.9108 <sub>n</sub>	8.143		
23	12.0	0.2226	-0.341	0.4430	9 31.3	1.2737	17 51.2	0.9106 <sub>n</sub>	-8.140		



Tag	0 <sup>a</sup> Welt-Zeit										
	<i>f'</i>	<i>g'</i>	<i>G'</i>	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	<i>j</i>	<i>k</i>
1945	in o.oor	in o.or				in o.or	23° 26'		in o.or	in o.oor	
Febr. 10	+ 1	+ 9	5.6	+ 5.55	-15.29	+ 2	47.12	-2.45	- 9	20	85
11	+ 7	8	3.8	5.68	15.31	+11	47.12	2.43	- 7	20	85
12	+10	7	1.4	5.82	15.32	+17	47.12	2.40	- 3	20	85
13	+11	7	22.9	5.96	15.34	+18	47.12	2.37	+ 2	19	85
14	+ 8	8	20.8	6.10	15.35	+14	47.12	2.34	+ 6	19	84
15	+ 4	9	19.1	6.23	15.37	+ 7	47.11	2.32	+ 9	19	84
16	- 1	+ 9	17.6	+ 6.37	-15.39	- 2	47.11	-2.29	+ 9	19	84
17	- 6	8	16.0	6.51	15.41	-10	47.11	2.26	+ 7	18	84
18	- 9	7	14.2	6.65	15.44	-15	47.11	2.24	+ 4	18	84
19	- 9	6	11.7	6.78	15.46	-15	47.11	2.21	0	18	84
20	- 7	6	9.0	6.92	15.49	-11	47.11	2.19	- 4	18	84
21	- 2	7	6.6	7.06	15.52	- 3	47.11	2.16	- 7	17	84
22	+ 4	+ 8	4.8	+ 7.20	-15.55	+ 7	47.11	-2.14	- 8	17	84
23	+ 9	9	3.4	7.33	15.58	+15	47.10	2.12	- 7	17	83
24	+13	9	2.0	7.47	15.61	+21	47.10	2.09	- 5	17	83
25	+14	9	0.6	7.61	15.64	+23	47.10	2.07	- 2	17	83
26	+14	9	23.2	7.75	15.67	+22	47.10	2.05	+ 2	16	83
27	+11	9	21.7	7.88	15.71	+18	47.10	2.03	+ 5	16	83
28	+ 7	+ 8	20.1	+ 8.02	-15.75	+11	47.10	-2.00	+ 7	16	83
März 1	+ 1	8	18.4	8.16	15.78	+ 2	47.10	1.98	+ 8	16	83
2	- 4	8	16.7	8.30	15.82	- 7	47.10	1.96	+ 8	16	83
3	- 9	9	15.0	8.44	15.86	-15	47.09	1.94	+ 6	15	83
4	-13	9	13.4	8.57	15.90	-22	47.09	1.92	+ 3	15	83
5	-15	10	11.9	8.71	15.94	-25	47.09	1.90	0	15	83
6	-15	+11	10.5	+ 8.85	-15.98	-24	47.09	-1.89	- 4	15	83
7	-12	11	9.2	8.99	16.03	-20	47.09	1.87	- 7	15	82
8	- 8	11	7.9	9.12	16.07	-12	47.09	1.85	- 9	15	82
9	- 2	10	6.4	9.26	16.11	- 3	47.09	1.83	-10	14	82
10	+ 4	8	4.7	9.40	16.15	+ 7	47.09	1.82	- 8	14	82
11	+ 8	7	2.5	9.54	16.20	+13	47.08	1.80	- 4	14	82
12	+10	+ 7	23.9	+ 9.67	-16.24	+16	47.08	-1.79	0	14	82
13	+ 8	7	21.3	9.81	16.29	+14	47.08	1.78	+ 5	14	82
14	+ 5	9	19.5	9.95	16.34	+ 8	47.08	1.76	+ 8	14	82
15	0	9	17.9	10.09	16.38	- 1	47.08	1.75	+ 9	13	82
16	- 5	9	16.5	10.22	16.43	- 9	47.08	1.74	+ 8	13	82
17	- 9	8	14.9	10.36	16.48	-14	47.08	1.73	+ 5	13	82
18	-10	+ 6	12.6	+10.50	-16.53	-16	47.07	-1.72	+ 1	13	82
19	- 7	6	9.8	10.64	16.57	-12	47.07	1.71	- 3	13	82
20	- 3	7	7.1	10.78	16.62	- 5	47.07	1.70	- 6	13	82
21	+ 3	8	5.1	10.91	16.67	+ 5	47.07	1.69	- 8	12	82
22	+ 9	10	3.6	11.05	16.72	+14	47.07	1.68	- 8	12	82
23	+13	+10	2.3	+11.19	-16.76	+21	47.07	-1.68	- 6	12	82



## Reduktionsgrößen 1945

Tag	0 <sup>h</sup> Welt-Zeit									
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>	
1945										
März	<sup>h</sup>	<sup>a</sup>	<sup>s</sup>		<sup>h m</sup>		<sup>h m</sup>		<sup>h</sup>	
23	12.0	0.2226	-0.341	0.4430	9 31.3	1.2737	17 51.2	0.9106 <sub>n</sub>	-8.140	
24	12.1	0.2253	0.336	0.4379	9 29.9	1.2738	17 46.9	0.9103 <sub>n</sub>	8.134	
25	12.1	0.2280	0.330	0.4328	9 28.4	1.2739	17 42.6	0.9098 <sub>n</sub>	8.125	
26	12.2	0.2308	0.325	0.4277	9 26.8	1.2740	17 38.3	0.9092 <sub>n</sub>	8.114	
27	12.3	0.2335	0.319	0.4226	9 25.2	1.2742	17 34.0	0.9085 <sub>n</sub>	8.101	
28	12.3	0.2362	0.314	0.4175	9 23.5	1.2743	17 29.7	0.9077 <sub>n</sub>	8.085	
29	12.4	0.2390	-0.308	0.4124	9 21.7	1.2745	17 25.4	0.9067 <sub>n</sub>	-8.066	
30	12.5	0.2417	0.302	0.4074	9 19.7	1.2747	17 21.1	0.9056 <sub>n</sub>	8.046	
31	12.5	0.2445	0.297	0.4024	9 17.7	1.2749	17 16.8	0.9043 <sub>n</sub>	8.023	
April	1	12.6	0.2472	0.291	0.3973	9 15.5	1.2752	17 12.5	0.9029 <sub>n</sub>	7.997
2	12.7	0.2499	0.285	0.3923	9 13.3	1.2754	17 8.3	0.9014 <sub>n</sub>	7.969	
3	12.7	0.2527	0.279	0.3873	9 10.9	1.2757	17 4.0	0.8998 <sub>n</sub>	7.939	
4	12.8	0.2554	-0.273	0.3824	9 8.4	1.2760	16 59.7	0.8981 <sub>n</sub>	-7.908	
5	12.9	0.2582	0.268	0.3775	9 5.8	1.2763	16 55.5	0.8961 <sub>n</sub>	7.872	
6	12.9	0.2609	0.262	0.3726	9 3.1	1.2767	16 51.3	0.8940 <sub>n</sub>	7.835	
7	13.0	0.2636	0.256	0.3677	9 0.3	1.2771	16 47.0	0.8918 <sub>n</sub>	7.795	
8	13.1	0.2664	0.250	0.3629	8 57.4	1.2775	16 42.8	0.8895 <sub>n</sub>	7.754	
9	13.1	0.2691	0.244	0.3581	8 54.3	1.2779	16 38.6	0.8871 <sub>n</sub>	7.711	
10	13.2	0.2718	-0.238	0.3534	8 51.1	1.2783	16 34.4	0.8845 <sub>n</sub>	-7.664	
11	13.3	0.2746	0.232	0.3488	8 47.8	1.2788	16 30.2	0.8817 <sub>n</sub>	7.616	
12	13.3	0.2773	0.225	0.3442	8 44.4	1.2792	16 26.1	0.8788 <sub>n</sub>	7.565	
13	13.4	0.2801	0.219	0.3397	8 40.8	1.2797	16 21.9	0.8758 <sub>n</sub>	7.512	
14	13.5	0.2828	0.212	0.3353	8 37.0	1.2802	16 17.7	0.8726 <sub>n</sub>	7.458	
15	13.5	0.2855	0.206	0.3309	8 33.1	1.2807	16 13.6	0.8693 <sub>n</sub>	7.401	
16	13.6	0.2883	-0.200	0.3265	8 29.0	1.2812	16 9.5	0.8658 <sub>n</sub>	-7.342	
17	13.7	0.2910	0.193	0.3223	8 24.9	1.2818	16 5.4	0.8622 <sub>n</sub>	7.281	
18	13.7	0.2937	0.186	0.3182	8 20.6	1.2823	16 1.3	0.8584 <sub>n</sub>	7.217	
19	13.8	0.2965	0.180	0.3142	8 16.1	1.2829	15 57.2	0.8544 <sub>n</sub>	7.152	
20	13.8	0.2992	0.173	0.3103	8 11.5	1.2834	15 53.1	0.8503 <sub>n</sub>	7.084	
21	13.9	0.3020	0.166	0.3066	8 6.7	1.2840	15 49.0	0.8460 <sub>n</sub>	7.015	
22	14.0	0.3047	-0.159	0.3030	8 1.8	1.2846	15 45.0	0.8415 <sub>n</sub>	-6.943	
23	14.0	0.3074	0.152	0.2997	7 56.7	1.2852	15 40.9	0.8369 <sub>n</sub>	6.869	
24	14.1	0.3102	0.145	0.2966	7 51.5	1.2858	15 36.9	0.8321 <sub>n</sub>	6.794	
25	14.2	0.3129	0.137	0.2936	7 46.2	1.2864	15 32.9	0.8272 <sub>n</sub>	6.717	
26	14.2	0.3156	0.130	0.2908	7 40.7	1.2870	15 28.9	0.8220 <sub>n</sub>	6.638	
27	14.3	0.3184	0.123	0.2883	7 35.1	1.2876	15 24.9	0.8167 <sub>n</sub>	6.557	
28	14.4	0.3211	-0.115	0.2861	7 29.4	1.2882	15 21.0	0.8112 <sub>n</sub>	-6.474	
29	14.4	0.3239	0.108	0.2841	7 23.6	1.2889	15 17.0	0.8054 <sub>n</sub>	6.389	
30	14.5	0.3266	0.100	0.2823	7 17.6	1.2895	15 13.1	0.7995 <sub>n</sub>	6.303	
Mai	1	14.6	0.3293	0.092	0.2808	7 11.5	1.2901	15 9.1	0.7934 <sub>n</sub>	6.215
2	14.6	0.3321	0.085	0.2796	7 5.2	1.2908	15 5.2	0.7871 <sub>n</sub>	6.125	
3	14.7	0.3348	-0.077	0.2787	6 58.9	1.2914	15 1.3	0.7805 <sub>n</sub>	-6.033	



Tag	0 <sup>h</sup> Welt-Zeit										
	$f'$	$g'$	$G'$	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	$j$	$h$
1945	in o.oor	in o.oi	<sup>h</sup>	in o.oi		in o.oi	23° 26'		in o.oi	in o.oor	
März 23	+13	+10	2.3	+11.19	-16.76	+21	47.07	-1.68	- 6	12	82
24	+15	10	1.0	11.33	16.81	+25	47.07	1.67	- 3	12	82
25	+15	10	23.6	11.46	16.86	+24	47.07	1.66	+ 1	12	82
26	+12	9	22.1	11.60	16.91	+20	47.06	1.66	+ 4	12	82
27	+ 8	9	20.6	11.74	16.95	+14	47.06	1.65	+ 7	12	82
28	+ 3	8	19.0	11.88	17.00	+ 5	47.06	1.65	+ 8	11	82
29	- 2	+ 8	17.3	+12.01	-17.04	- 4	47.06	-1.65	+ 8	11	82
30	- 7	8	15.6	12.15	17.09	-12	47.06	1.64	+ 7	11	82
31	-12	9	14.0	12.29	17.13	-19	47.06	1.64	+ 4	11	82
April 1	-14	9	12.4	12.43	17.18	-23	47.06	1.64	+ 1	11	82
2	-15	10	10.9	12.56	17.22	-24	47.06	1.64	- 3	11	82
3	-13	10	9.6	12.70	17.27	-21	47.05	1.64	- 6	11	82
4	- 9	+10	8.3	+12.84	-17.31	-15	47.05	-1.64	- 9	11	82
5	- 4	10	7.0	12.98	17.35	- 6	47.05	1.64	-10	10	82
6	+ 2	9	5.5	13.11	17.39	+ 3	47.05	1.65	- 9	10	83
7	+ 6	7	3.6	13.25	17.43	+10	47.05	1.65	- 6	10	83
8	+ 9	6	0.9	13.39	17.47	+15	47.05	1.65	- 1	10	83
9	+ 8	6	22.0	13.53	17.51	+14	47.05	1.65	+ 3	10	83
10	+ 6	+ 8	19.8	+13.67	-17.55	+ 9	47.05	-1.66	+ 7	10	83
11	+ 1	9	18.2	13.80	17.58	+ 1	47.04	1.66	+ 9	10	83
12	- 5	10	16.7	13.94	17.62	- 8	47.04	1.67	+ 9	10	83
13	- 9	9	15.2	14.08	17.65	-15	47.04	1.67	+ 7	10	83
14	-11	7	13.4	14.22	17.68	-17	47.04	1.68	+ 3	9	83
15	- 9	6	10.8	14.35	17.72	-15	47.04	1.68	- 2	9	83
16	- 5	+ 7	8.1	+14.49	-17.75	- 9	47.04	-1.69	- 6	9	83
17	+ 1	8	5.8	14.63	17.78	+ 1	47.04	1.69	- 8	9	84
18	+ 7	9	4.0	14.77	17.81	+12	47.04	1.70	- 8	9	84
19	+12	10	2.6	14.90	17.84	+20	47.03	1.71	- 7	9	84
20	+16	11	1.2	15.04	17.86	+25	47.03	1.72	- 3	9	84
21	+16	11	0.0	15.18	17.89	+27	47.03	1.72	0	9	84
22	+14	+10	22.6	+15.32	-17.91	+23	47.03	-1.73	+ 4	9	84
23	+10	9	21.1	15.45	17.93	+17	47.03	1.74	+ 6	9	84
24	+ 5	9	19.6	15.59	17.95	+ 9	47.03	1.75	+ 8	9	84
25	0	8	17.9	15.73	17.97	0	47.03	1.76	+ 8	9	84
26	- 6	8	16.2	15.87	17.99	- 9	47.02	1.77	+ 7	9	85
27	-10	8	14.5	16.00	18.01	-16	47.02	1.78	+ 5	9	85
28	-13	+ 9	12.7	+16.14	-18.02	-21	47.02	-1.79	+ 2	9	85
29	-14	9	11.3	16.28	18.04	-22	47.02	1.80	- 2	9	85
30	-12	10	9.9	16.42	18.05	-20	47.02	1.81	- 5	8	85
Mai 1	-10	10	8.6	16.56	18.06	-16	47.02	1.82	- 8	8	85
2	- 5	10	7.3	16.69	18.07	- 8	47.02	1.83	- 9	8	85
3	+ 1	+ 9	5.9	+16.83	-18.08	+ 1	47.02	-1.84	- 9	8	85



Tag	0 <sup>a</sup> Welt-Zeit									
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>	
1945										
Mai	3	<sup>h</sup> 14.7	<sup>a</sup> 0.3348	-0.077	0.2787	<sup>h</sup> 6 58.9	1.2914	<sup>h</sup> 15 <sup>m</sup> 1.3	0.7805 <sub>n</sub>	-6.033
	4	14.8	0.3375	0.069	0.2782	6 52.5	1.2920	14 57.4	0.7738 <sub>n</sub>	5.940
	5	14.8	0.3403	0.060	0.2779	6 46.0	1.2927	14 53.6	0.7667 <sub>n</sub>	5.844
	6	14.9	0.3430	0.052	0.2779	6 39.5	1.2933	14 49.7	0.7595 <sub>n</sub>	5.748
	7	15.0	0.3458	0.044	0.2782	6 32.9	1.2939	14 45.8	0.7520 <sub>n</sub>	5.649
	8	15.0	0.3485	0.036	0.2789	6 26.3	1.2945	14 42.0	0.7443 <sub>n</sub>	5.550
	9	15.1	0.3512	-0.027	0.2799	6 19.6	1.2952	14 38.2	0.7362 <sub>n</sub>	-5.448
	10	15.2	0.3540	0.019	0.2813	6 12.9	1.2958	14 34.4	0.7279 <sub>n</sub>	5.345
	11	15.2	0.3567	0.010	0.2829	6 6.1	1.2964	14 30.6	0.7194 <sub>n</sub>	5.241
	12	15.3	0.3595	-0.002	0.2849	5 59.3	1.2970	14 26.8	0.7105 <sub>n</sub>	5.135
	13	15.4	0.3622	+0.007	0.2873	5 52.6	1.2976	14 23.0	0.7014 <sub>n</sub>	5.028
	14	15.4	0.3649	0.016	0.2900	5 45.9	1.2982	14 19.2	0.6919 <sub>n</sub>	4.919
	15	15.5	0.3677	+0.025	0.2930	5 39.2	1.2988	14 15.5	0.6821 <sub>n</sub>	-4.809
	16	15.6	0.3704	0.034	0.2963	5 32.5	1.2994	14 11.7	0.6719 <sub>n</sub>	4.698
	17	15.6	0.3731	0.043	0.2999	5 25.8	1.2999	14 8.0	0.6613 <sub>n</sub>	4.585
	18	15.7	0.3759	0.052	0.3040	5 19.2	1.3005	14 4.3	0.6504 <sub>n</sub>	4.471
	19	15.8	0.3786	0.062	0.3083	5 12.7	1.3011	14 0.6	0.6392 <sub>n</sub>	4.357
	20	15.8	0.3814	0.071	0.3129	5 6.2	1.3016	13 56.9	0.6274 <sub>n</sub>	4.240
	21	15.9	0.3841	+0.080	0.3177	4 59.8	1.3021	13 53.2	0.6152 <sub>n</sub>	-4.123
	22	16.0	0.3868	0.090	0.3226	4 53.5	1.3026	13 49.5	0.6026 <sub>n</sub>	4.005
	23	16.0	0.3896	0.099	0.3278	4 47.3	1.3032	13 45.9	0.5894 <sub>n</sub>	3.885
	24	16.1	0.3923	0.109	0.3331	4 41.1	1.3037	13 42.2	0.5758 <sub>n</sub>	3.765
	25	16.1	0.3950	0.119	0.3387	4 35.0	1.3041	13 38.6	0.5615 <sub>n</sub>	3.643
	26	16.2	0.3978	0.128	0.3445	4 29.1	1.3046	13 34.9	0.5465 <sub>n</sub>	3.520
	27	16.3	0.4005	+0.138	0.3505	4 23.3	1.3051	13 31.3	0.5310 <sub>n</sub>	-3.396
	28	16.3	0.4033	0.148	0.3566	4 17.6	1.3055	13 27.7	0.5148 <sub>n</sub>	3.272
29	16.4	0.4060	0.158	0.3628	4 12.0	1.3059	13 24.1	0.4978 <sub>n</sub>	3.146	
30	16.5	0.4087	0.168	0.3692	4 6.5	1.3063	13 20.5	0.4800 <sub>n</sub>	3.020	
31	16.5	0.4115	0.178	0.3757	4 1.1	1.3067	13 16.9	0.4613 <sub>n</sub>	2.893	
Juni	1	16.6	0.4142	0.188	0.3823	3 55.8	1.3071	13 13.3	0.4419 <sub>n</sub>	2.766
	2	16.7	0.4169	+0.198	0.3890	3 50.6	1.3075	13 9.7	0.4213 <sub>n</sub>	-2.638
	3	16.7	0.4197	0.208	0.3957	3 45.5	1.3078	13 6.2	0.3993 <sub>n</sub>	2.508
	4	16.8	0.4224	0.219	0.4025	3 40.6	1.3082	13 2.6	0.3762 <sub>n</sub>	2.378
	5	16.9	0.4252	0.229	0.4093	3 35.7	1.3085	12 59.0	0.3518 <sub>n</sub>	2.248
	6	16.9	0.4279	0.239	0.4161	3 30.9	1.3088	12 55.5	0.3257 <sub>n</sub>	2.117
	7	17.0	0.4306	0.250	0.4230	3 26.2	1.3091	12 51.9	0.2978 <sub>n</sub>	1.985
	8	17.1	0.4334	+0.260	0.4298	3 21.6	1.3093	12 48.4	0.2679 <sub>n</sub>	-1.853
	9	17.1	0.4361	0.271	0.4367	3 17.2	1.3096	12 44.9	0.2358 <sub>n</sub>	1.721
	10	17.2	0.4389	0.281	0.4435	3 12.9	1.3098	12 41.3	0.2009 <sub>n</sub>	1.588
	11	17.3	0.4416	0.292	0.4504	3 8.6	1.3100	12 37.8	0.1626 <sub>n</sub>	1.454
	12	17.3	0.4443	-0.302	0.4573	3 4.5	1.3102	12 34.3	0.1206 <sub>n</sub>	1.320
	13	17.4	0.4471	+0.313	0.4643	3 0.4	1.3104	12 30.8	0.0737 <sub>n</sub>	-1.185



Tag	0 <sup>h</sup> Welt-Zeit										
	f'	g'	G'	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	j	k
1945	in o.oor	in o.or	<sup>b</sup>			in o.or	23° 26'		in o.or	in o.oor	
Mai	3	+ 1	+ 9	5.9	+16.83	-18.08	+ 1	47.02	-1.84	- 9	8   85
	4	+ 5	7	4.3	16.97	18.09	+ 8	47.01	1.85	- 7	8   85
	5	+ 8	6	1.9	17.11	18.09	+13	47.01	1.86	- 3	8   86
	6	+ 8	6	23.0	17.24	18.09	+14	47.01	1.87	+ 1	8   86
	7	+ 6	7	20.3	17.38	18.10	+10	47.01	1.88	+ 6	8   86
	8	+ 2	9	18.5	17.52	18.10	+ 3	47.01	1.89	+ 9	8   86
	9	- 4	+10	17.0	+17.66	-18.10	- 7	47.01	-1.90	+ 9	8   86
	10	- 9	10	15.5	17.79	18.10	-15	47.01	1.91	+ 8	8   86
	11	-12	9	13.9	17.93	18.10	-19	47.01	1.92	+ 4	8   86
	12	-12	8	11.9	18.07	18.09	-19	47.00	1.93	0	8   86
	13	- 8	7	9.3	18.21	18.09	-14	47.00	1.94	- 5	9   87
	14	- 3	8	6.9	18.34	18.08	- 4	47.00	1.95	- 8	9   87
	15	+ 4	+ 9	4.8	+18.48	-18.07	+ 7	47.00	-1.96	- 9	9   87
	16	+10	10	3.2	18.62	18.06	+17	47.00	1.96	- 8	9   87
	17	+15	11	1.8	18.76	18.05	+24	47.00	1.97	- 5	9   87
	18	+17	11	0.4	18.90	18.04	+27	47.00	1.98	- 1	9   87
	19	+16	11	23.1	19.03	18.02	+26	47.00	1.99	+ 3	9   87
	20	+13	10	21.6	19.17	18.01	+21	46.99	2.00	+ 6	9   87
	21	+ 8	+ 9	20.1	+19.31	-17.99	+12	46.99	-2.01	+ 8	9   87
	22	+ 2	8	18.5	19.45	17.97	+ 3	46.99	2.01	+ 8	9   88
	23	- 4	8	16.8	19.58	17.95	- 6	46.99	2.02	+ 8	9   88
	24	- 8	8	15.0	19.72	17.93	-14	46.99	2.03	+ 5	9   88
	25	-12	8	13.2	19.86	17.91	-19	46.99	2.03	+ 3	10   88
	26	-13	9	11.6	20.00	17.89	-21	46.99	2.04	- 1	10   88
	27	-12	+ 9	10.1	+20.13	-17.87	-20	46.99	-2.05	- 4	10   88
	28	-10	10	8.7	20.27	17.84	-16	46.98	2.05	- 7	10   88
	29	- 6	10	7.5	20.41	17.82	- 9	46.98	2.06	- 9	10   88
	30	0	9	6.1	20.55	17.79	- 1	46.98	2.06	- 9	10   88
	31	+ 5	8	4.6	20.68	17.77	+ 7	46.98	2.06	- 7	10   88
Juni	1	+ 8	7	2.6	20.82	17.74	+13	46.98	2.07	- 4	11   88
	2	+ 9	+ 6	0.0	+20.96	-17.71	+15	46.98	-2.07	0	11   89
	3	+ 8	7	21.2	21.10	17.68	+12	46.98	2.07	+ 4	11   89
	4	+ 3	8	19.1	21.23	17.65	+ 6	46.97	2.07	+ 8	11   89
	5	- 2	9	17.5	21.37	17.62	- 3	46.97	2.07	+ 9	11   89
	6	- 8	10	16.0	21.51	17.59	-12	46.97	2.07	+ 8	11   89
	7	-11	9	14.5	21.65	17.56	-19	46.97	2.07	+ 6	12   89
	8	-13	+ 8	12.6	+21.79	-17.52	-21	46.97	-2.07	+ 1	12   89
	9	-11	8	10.3	21.92	17.49	-17	46.97	2.07	- 3	12   89
	10	- 5	8	7.9	22.06	17.46	- 9	46.97	2.07	- 7	12   89
	11	+ 1	8	5.8	22.20	17.42	+ 1	46.97	2.07	- 8	12   89
	12	+ 7	9	4.0	22.34	17.39	+12	46.96	2.07	- 8	13   89
	13	+13	+10	2.4	+22.47	-17.35	+21	46.96	-2.06	- 6	13   89



Tag	0 <sup>a</sup> Welt-Zeit								
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>
1945									
Juni 13	<sup>h</sup> 17.4	<sup>a</sup> 0.4471	<sup>s</sup> +0.313	0.4643	<sup>h</sup> 3 <sup>m</sup> 0.4	1.3104	<sup>h</sup> 12 <sup>m</sup> 30.8	0.0737 <sub>n</sub>	-1.185
14	17.5	0.4498	0.323	0.4712	2 56.4	1.3106	12 27.2	0.0210 <sub>n</sub>	1.051
15	17.5	0.4525	0.334	0.4780	2 52.5	1.3107	12 23.7	9.961 <sub>n</sub>	0.916
16	17.6	0.4553	0.345	0.4849	2 48.7	1.3108	12 20.2	9.8932 <sub>n</sub>	0.782
17	17.7	0.4580	0.355	0.4918	2 44.9	1.3109	12 16.7	9.8102 <sub>n</sub>	0.646
18	17.7	0.4608	0.366	0.4985	2 41.2	1.3110	12 13.2	9.7084 <sub>n</sub>	0.511
19	17.8	0.4635	+0.377	0.5052	2 37.6	1.3111	12 9.7	9.5752 <sub>n</sub>	-0.376
20	17.9	0.4662	0.387	0.5119	2 34.1	1.3111	12 6.2	9.3802 <sub>n</sub>	0.240
21	17.9	0.4690	0.398	0.5185	2 30.7	1.3111	12 2.7	9.0212 <sub>n</sub>	-0.105
22	18.0	0.4717	0.409	0.5251	2 27.3	1.3111	11 59.2	8.4914	+0.031
23	18.1	0.4744	0.419	0.5317	2 24.0	1.3111	11 55.7	9.2227	0.167
24	18.1	0.4772	0.430	0.5381	2 20.8	1.3111	11 52.2	9.4800	0.302
25	18.2	0.4799	+0.441	0.5445	2 17.6	1.3110	11 48.7	9.6415	+0.438
26	18.3	0.4827	0.452	0.5508	2 14.5	1.3109	11 45.2	9.7582	0.573
27	18.3	0.4854	0.462	0.5571	2 11.4	1.3109	11 41.7	9.8506	0.709
28	18.4	0.4881	0.473	0.5633	2 8.4	1.3108	11 38.2	9.9258	0.843
29	18.4	0.4909	0.483	0.5694	2 5.5	1.3106	11 34.7	9.9903	0.978
30	18.5	0.4936	0.494	0.5755	2 2.6	1.3105	11 31.2	0.0465	1.113
Juli 1	18.6	0.4963	+0.504	0.5816	1 59.7	1.3103	11 27.6	0.0959	+1.247
2	18.6	0.4991	0.515	0.5876	1 56.9	1.3101	11 24.1	0.1399	1.380
3	18.7	0.5018	0.526	0.5936	1 54.2	1.3099	11 20.6	0.1798	1.513
4	18.8	0.5046	0.536	0.5994	1 51.5	1.3097	11 17.1	0.2164	1.646
5	18.8	0.5073	0.547	0.6052	1 48.9	1.3095	11 13.6	0.2502	1.779
6	18.9	0.5100	0.557	0.6109	1 46.3	1.3092	11 10.1	0.2813	1.911
7	19.0	0.5128	+0.567	0.6165	1 43.8	1.3089	11 6.5	0.3101	+2.042
8	19.0	0.5155	0.578	0.6220	1 41.3	1.3087	11 3.0	0.3371	2.173
9	19.1	0.5183	0.588	0.6275	1 38.9	1.3084	10 59.4	0.3623	2.303
10	19.2	0.5210	0.598	0.6328	1 36.5	1.3080	10 55.9	0.3861	2.433
11	19.2	0.5237	0.608	0.6381	1 34.2	1.3077	10 52.3	0.4086	2.562
12	19.3	0.5265	0.618	0.6433	1 31.9	1.3073	10 48.8	0.4299	2.691
13	19.4	0.5292	+0.629	0.6485	1 29.6	1.3070	10 45.2	0.4499	+2.818
14	19.4	0.5319	0.639	0.6537	1 27.3	1.3066	10 41.7	0.4691	2.945
15	19.5	0.5347	0.649	0.6588	1 25.1	1.3062	10 38.1	0.4873	3.071
16	19.6	0.5374	0.659	0.6638	1 22.9	1.3058	10 34.5	0.5046	3.196
17	19.6	0.5402	0.668	0.6688	1 20.8	1.3053	10 30.9	0.5211	3.320
18	19.7	0.5429	0.678	0.6736	1 18.7	1.3049	10 27.3	0.5369	3.443
19	19.8	0.5456	+0.688	0.6784	1 16.7	1.3044	10 23.7	0.5522	+3.566
20	19.8	0.5484	0.698	0.6831	1 14.7	1.3040	10 20.1	0.5668	3.688
21	19.9	0.5511	0.707	0.6877	1 12.7	1.3035	10 16.5	0.5807	3.808
22	20.0	0.5538	0.717	0.6923	1 10.8	1.3030	10 12.8	0.5941	3.927
23	20.0	0.5566	0.726	0.6969	1 8.9	1.3025	10 9.2	0.6070	4.046
24	20.1	0.5593	+0.736	0.7014	1 7.0	1.3019	10 5.5	0.6194	+4.163



Tag		0 <sup>h</sup> Welt-Zeit										
		<i>f'</i>	<i>g'</i>	<i>G'</i>	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	<i>j</i>	<i>k</i>
1945		in "0.00r	in "0.01				23° 26'			in "0.01	in 0.00r	
Juni	13	+13	+10	2.4	+22.47	-17.35	+21	46.96	-2.06	- 6	13	89
	14	+16	11	1.0	22.61	17.32	+26	46.96	2.06	- 3	13	89
	15	+16	11	23.5	22.75	17.28	+26	46.96	2.06	+ 1	13	89
	16	+14	10	22.1	22.89	17.24	+23	46.96	2.05	+ 5	13	89
	17	+ 9	9	20.6	23.02	17.21	+15	46.96	2.05	+ 7	14	89
	18	+ 4	9	19.1	23.16	17.17	+ 6	46.96	2.04	+ 9	14	89
	19	- 2	+ 8	17.4	+23.30	-17.13	- 3	46.96	-2.03	+ 8	14	89
	20	- 7	8	15.7	23.44	17.10	-12	46.95	2.03	+ 7	14	89
	21	-11	8	13.8	23.57	17.06	-18	46.95	2.02	+ 4	14	89
	22	-13	8	12.0	23.71	17.02	-21	46.95	2.01	0	15	89
	23	-13	9	10.5	23.85	16.98	-21	46.95	2.00	- 3	15	89
	24	-11	9	9.1	23.99	16.95	-17	46.95	1.99	- 7	15	89
	25	- 6	+ 9	7.7	+24.12	-16.91	-10	46.95	-1.98	- 9	15	89
	26	- 1	9	6.3	24.26	16.87	- 2	46.95	1.97	- 9	16	89
	27	+ 4	9	4.9	24.40	16.84	+ 6	46.95	1.96	- 8	16	89
	28	+ 8	7	3.1	24.54	16.80	+13	46.94	1.95	- 5	16	89
	29	+10	7	0.7	24.68	16.76	+16	46.94	1.93	- 1	16	89
	30	+ 9	7	22.2	24.81	16.73	+15	46.94	1.92	+ 3	16	89
Juli	1	+ 6	+ 8	19.9	+24.95	-16.69	+ 9	46.94	-1.90	+ 7	17	89
	2	0	9	18.1	25.09	16.66	+ 1	46.94	1.89	+ 9	17	89
	3	- 5	9	16.6	25.23	16.62	- 9	46.94	1.88	+ 9	17	89
	4	-10	9	15.0	25.36	16.59	-16	46.94	1.86	+ 7	17	89
	5	-12	8	13.2	25.50	16.56	-20	46.94	1.84	+ 3	18	89
	6	-12	8	11.2	25.64	16.52	-19	46.93	1.83	- 2	18	89
	7	- 8	+ 8	8.9	+25.78	-16.49	-13	46.93	-1.81	- 6	18	89
	8	- 2	8	6.7	25.91	16.46	- 3	46.93	1.79	- 8	18	89
	9	+ 4	9	4.7	26.05	16.43	+ 7	46.93	1.77	- 8	19	89
	10	+10	10	3.1	26.19	16.40	+17	46.93	1.76	- 7	19	89
	11	+14	10	1.5	26.33	16.37	+23	46.93	1.74	- 4	19	89
	12	+16	10	0.0	26.46	16.34	+26	46.93	1.72	0	19	89
	13	+14	+10	22.6	+26.60	-16.31	+23	46.92	-1.70	+ 4	19	88
	14	+11	10	21.1	26.74	16.29	+18	46.92	1.68	+ 7	20	88
	15	+ 6	9	19.6	26.88	16.26	+ 9	46.92	1.65	+ 8	20	88
	16	0	8	17.9	27.02	16.24	- 1	46.92	1.63	+ 8	20	88
	17	- 6	8	16.2	27.15	16.21	-10	46.92	1.61	+ 7	20	88
	18	-10	8	14.4	27.29	16.19	-17	46.92	1.59	+ 5	21	88
	19	-13	+ 9	12.6	+27.43	-16.17	-21	46.92	-1.57	+ 1	21	88
	20	-14	9	11.0	27.57	16.15	-22	46.92	1.54	- 2	21	88
	21	-12	10	9.5	27.70	16.13	-19	46.91	1.52	- 6	21	88
	22	- 8	10	8.1	27.84	16.11	-13	46.91	1.50	- 8	21	88
	23	- 3	10	6.8	27.98	16.09	- 5	46.91	1.47	-10	22	88
	24	+ 2	+ 9	5.4	+28.12	-16.07	+ 4	46.91	-1.45	- 9	22	87



Tag	0 <sup>h</sup> Welt-Zeit										
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>		
1945											
Juli	24	<sup>h</sup> 20.1	<sup>a</sup> 0.5593	+ <sup>n</sup> 0.736	0.7014	<sup>h</sup> <sup>m</sup> 1 7.0	1.3019	<sup>h</sup> <sup>m</sup> 10 5.5	0.6194	+4.163	
	25	20.2	0.5621	0.745	0.7058	1 5.1	1.3014	10 1.9	0.6313	4.279	
	26	20.2	0.5648	0.754	0.7101	1 3.3	1.3009	9 58.2	0.6429	4.394	
	27	20.3	0.5675	0.763	0.7144	1 1.5	1.3003	9 54.5	0.6540	4.508	
	28	20.4	0.5703	0.773	0.7186	0 59.7	1.2997	9 50.8	0.6646	4.620	
	29	20.4	0.5730	0.782	0.7228	0 58.0	1.2992	9 47.1	0.6750	4.731	
	30	20.5	0.5757	+0.791	0.7269	0 56.3	1.2986	9 43.4	0.6849	+4.841	
	31	20.6	0.5785	0.799	0.7310	0 54.6	1.2981	9 39.7	0.6946	4.950	
	Aug.	1	20.6	0.5812	0.808	0.7350	0 53.0	1.2975	9 36.0	0.7040	5.058
		2	20.7	0.5840	0.817	0.7389	0 51.4	1.2968	9 32.2	0.7129	5.163
3		20.7	0.5867	0.825	0.7428	0 49.8	1.2962	9 28.5	0.7216	5.268	
4		20.8	0.5894	0.834	0.7466	0 48.2	1.2956	9 24.7	0.7301	5.371	
5		20.9	0.5922	+0.842	0.7504	0 46.7	1.2950	9 20.9	0.7382	+5.473	
6		20.9	0.5949	0.851	0.7541	0 45.2	1.2944	9 17.1	0.7461	5.573	
7		21.0	0.5976	0.859	0.7577	0 43.7	1.2938	9 13.3	0.7537	5.671	
8		21.1	0.6004	0.867	0.7613	0 42.3	1.2932	9 9.5	0.7610	5.768	
9		21.1	0.6031	0.876	0.7648	0 40.9	1.2925	9 5.7	0.7681	5.863	
10		21.2	0.6059	0.884	0.7683	0 39.5	1.2919	9 1.8	0.7751	5.958	
11	21.3	0.6086	+0.891	0.7717	0 38.1	1.2913	8 58.0	0.7818	+6.050		
12	21.3	0.6113	0.899	0.7751	0 36.8	1.2906	8 54.1	0.7882	6.141		
13	21.4	0.6141	0.907	0.7785	0 35.5	1.2900	8 50.2	0.7944	6.229		
14	21.5	0.6168	0.915	0.7818	0 34.2	1.2894	8 46.3	0.8004	6.316		
15	21.5	0.6196	0.922	0.7850	0 32.9	1.2888	8 42.4	0.8062	6.401		
16	21.6	0.6223	0.930	0.7882	0 31.7	1.2882	8 38.5	0.8119	6.485		
17	21.7	0.6250	+0.937	0.7914	0 30.5	1.2875	8 34.6	0.8173	+6.566		
18	21.7	0.6278	0.945	0.7945	0 29.4	1.2869	8 30.7	0.8226	6.646		
19	21.8	0.6305	0.952	0.7976	0 28.2	1.2863	8 26.7	0.8276	6.724		
20	21.9	0.6332	0.960	0.8006	0 27.1	1.2857	8 22.8	0.8326	6.801		
21	21.9	0.6360	0.967	0.8036	0 26.0	1.2851	8 18.8	0.8373	6.875		
22	22.0	0.6387	0.974	0.8065	0 24.9	1.2846	8 14.8	0.8418	6.947		
23	22.1	0.6415	+0.981	0.8094	0 23.9	1.2840	8 10.8	0.8462	+7.018		
24	22.1	0.6442	0.988	0.8123	0 22.9	1.2834	8 6.8	0.8505	7.087		
25	22.2	0.6469	0.994	0.8151	0 21.9	1.2828	8 2.7	0.8545	7.154		
26	22.3	0.6497	1.001	0.8179	0 20.9	1.2823	7 58.7	0.8584	7.218		
27	22.3	0.6524	1.008	0.8206	0 20.0	1.2818	7 54.6	0.8622	7.281		
28	22.4	0.6551	1.015	0.8233	0 19.1	1.2812	7 50.5	0.8658	7.341		
29	22.5	0.6579	+1.021	0.8259	0 18.2	1.2807	7 46.5	0.8692	+7.399		
30	22.5	0.6606	1.028	0.8285	0 17.3	1.2802	7 42.4	0.8725	7.456		
31	22.6	0.6634	1.034	0.8311	0 16.5	1.2797	7 38.3	0.8756	7.510		
Sept.	1	22.7	0.6661	1.041	0.8337	0 15.7	1.2793	7 34.2	0.8786	7.562	
	2	22.7	0.6688	1.047	0.8362	0 14.9	1.2788	7 30.1	0.8815	7.612	
	3	22.8	0.6716	+1.053	0.8387	0 14.1	1.2784	7 26.0	0.8842	+7.660	



Tag	0 <sup>h</sup> Welt-Zeit											
	$f'$	$g'$	$G'$	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	$j$	$k$	
1945	in o.oor	in o.oi	<sup>h</sup>			in o.oi	23° 26'		in o.oi	in o.oor		
Juli	24	+ 2	+ 9	5.4	+28.12	-16.07	+ 4	46.91	-1.45	- 9	22 87	
	25	+ 7	8	3.9	28.25	16.06	+12	46.91	1.42	- 6	22 87	
	26	+10	7	1.5	28.39	16.05	+16	46.91	1.40	- 3	22 87	
	27	+10	7	22.9	28.53	16.03	+17	46.91	1.37	+ 2	23 87	
	28	+ 8	8	20.7	28.67	16.02	+12	46.91	1.35	+ 6	23 87	
	29	+ 3	9	18.8	28.80	16.01	+ 5	46.90	1.32	+ 9	23 87	
	30	- 3	+ 9	17.2	+28.94	-16.00	- 5	46.90	-1.30	+ 9	23 87	
	31	- 8	9	15.7	29.08	16.00	-13	46.90	1.27	+ 7	23 87	
	Aug.	1	-11	8	14.0	29.22	15.99	-18	46.90	1.25	+ 4	24 87
		2	-11	7	11.8	29.35	15.98	-19	46.90	1.22	0	24 86
3		- 9	7	9.4	29.49	15.98	-14	46.90	1.19	- 5	24 86	
4		- 4	8	7.2	29.63	15.98	- 6	46.90	1.17	- 8	24 86	
5		+ 3	+ 9	5.2	+29.77	-15.98	+ 4	46.90	-1.14	- 9	25 86	
6		+ 9	9	3.6	29.91	15.98	+14	46.89	1.11	- 8	25 86	
7		+13	10	2.1	30.04	15.98	+21	46.89	1.09	- 5	25 86	
8		+15	10	0.5	30.18	15.98	+25	46.89	1.06	- 1	25 86	
9		+15	10	23.0	30.32	15.99	+24	46.89	1.03	+ 3	25 86	
10		+12	10	21.5	30.46	15.99	+19	46.89	1.01	+ 6	26 85	
11		+ 7	+ 9	19.9	+30.59	-16.00	+11	46.89	-0.98	+ 8	26 85	
12		+ 1	9	18.4	30.73	16.01	+ 2	46.89	0.95	+ 9	26 85	
13		- 4	8	16.7	30.87	16.02	- 7	46.89	0.93	+ 8	26 85	
14		- 9	8	14.9	31.01	16.03	-15	46.88	0.90	+ 6	26 85	
15		-13	9	13.3	31.14	16.04	-21	46.88	0.87	+ 3	27 85	
16		-14	9	11.5	31.28	16.06	-23	46.88	0.85	- 1	27 85	
17		-13	+10	10.1	+31.42	-16.07	-22	46.88	-0.82	- 5	27 85	
18	-10	10	8.8	31.56	16.09	-17	46.88	0.80	- 8	27 85		
19	- 6	10	7.4	31.69	16.11	- 9	46.88	0.77	-10	27 84		
20	0	9	6.0	31.83	16.13	0	46.88	0.75	- 9	28 84		
21	+ 5	8	4.4	31.97	16.15	+ 8	46.87	0.72	- 8	28 84		
22	+ 9	7	2.4	32.11	16.17	+14	46.87	0.70	- 4	28 84		
23	+10	+ 7	23.8	+32.24	-16.19	+17	46.87	-0.67	0	28 84		
24	+ 9	7	21.3	32.38	16.22	+14	46.87	0.65	+ 5	28 84		
25	+ 5	8	19.4	32.52	16.24	+ 7	46.87	0.62	+ 8	28 84		
26	- 1	9	17.8	32.66	16.27	- 1	46.87	0.60	+ 9	29 84		
27	- 6	9	16.3	32.80	16.30	-10	46.87	0.58	+ 8	29 84		
28	-10	8	14.6	32.93	16.33	-16	46.87	0.55	+ 5	29 83		
29	-11	+ 7	12.5	+33.07	-16.36	-18	46.86	-0.53	+ 1	29 83		
30	- 9	7	10.0	33.21	16.39	-15	46.86	0.51	- 3	29 83		
31	- 5	7	7.6	33.35	16.42	- 8	46.86	0.49	- 7	30 83		
Sept.	1	+ 2	8	5.5	33.48	16.46	+ 3	46.86	0.47	- 8	30 83	
	2	+ 8	9	3.9	33.62	16.49	+13	46.86	0.45	- 8	30 83	
	3	+12	+10	2.4	+33.76	-16.52	+20	46.86	-0.43	- 6	30 83	



## Reduktionsgrößen 1945

Tag	0 <sup>h</sup> Welt-Zeit									
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>	
1945										
Sept.	3	<sup>h</sup> 22.8	<sup>a</sup> 0.6716	<sup>a</sup> +1.053	0.8387	<sup>h</sup> <sup>m</sup> 0 14.1	1.2784	<sup>h</sup> <sup>m</sup> 7 26.0	0.8842	+7.660
	4	22.8	0.6743	1.059	0.8412	0 13.4	1.2779	7 21.8	0.8868	7.706
	5	22.9	0.6770	1.066	0.8436	0 12.7	1.2775	7 17.7	0.8892	7.749
	6	23.0	0.6798	1.072	0.8461	0 12.0	1.2772	7 13.5	0.8916	7.791
	7	23.0	0.6825	1.078	0.8485	0 11.3	1.2768	7 9.4	0.8938	7.830
	8	23.1	0.6853	1.084	0.8508	0 10.6	1.2764	7 5.2	0.8958	7.866
	9	23.2	0.6880	+1.090	0.8531	0 10.0	1.2761	7 1.0	0.8977	+7.901
	10	23.2	0.6907	1.096	0.8555	0 9.4	1.2758	6 56.8	0.8995	7.934
	11	23.3	0.6935	1.102	0.8578	0 8.9	1.2755	6 52.6	0.9011	7.964
	12	23.4	0.6962	1.108	0.8601	0 8.3	1.2752	6 48.4	0.9026	7.991
	13	23.4	0.6990	1.113	0.8623	0 7.8	1.2750	6 44.2	0.9040	8.017
	14	23.5	0.7017	1.119	0.8645	0 7.3	1.2747	6 40.0	0.9053	8.040
	15	23.6	0.7044	+1.125	0.8667	0 6.9	1.2745	6 35.7	0.9064	+8.061
	16	23.6	0.7072	1.131	0.8689	0 6.4	1.2744	6 31.5	0.9074	8.080
	17	23.7	0.7099	1.137	0.8711	0 6.0	1.2742	6 27.3	0.9083	8.096
	18	23.8	0.7126	1.142	0.8733	0 5.6	1.2741	6 23.0	0.9090	8.110
	19	23.8	0.7154	1.148	0.8754	0 5.2	1.2739	6 18.8	0.9097	8.122
	20	23.9	0.7181	1.154	0.8776	0 4.8	1.2738	6 14.5	0.9101	8.131
	21	0.0	0.7209	+1.159	0.8797	0 4.5	1.2738	6 10.2	0.9105	+8.137
	22	0.0	0.7236	1.165	0.8818	0 4.2	1.2737	6 6.0	0.9107	8.142
23	0.1	0.7263	1.171	0.8839	0 3.9	1.2737	6 1.7	0.9108	8.144	
24	0.2	0.7291	1.177	0.8860	0 3.6	1.2737	5 57.4	0.9108	8.143	
25	0.2	0.7318	1.182	0.8881	0 3.4	1.2737	5 53.2	0.9107	8.141	
26	0.3	0.7345	1.188	0.8902	0 3.2	1.2738	5 48.9	0.9104	8.136	
27	0.4	0.7373	+1.194	0.8922	0 3.0	1.2739	5 44.6	0.9100	+8.129	
28	0.4	0.7400	1.199	0.8943	0 2.8	1.2740	5 40.3	0.9096	8.120	
29	0.5	0.7428	1.205	0.8963	0 2.6	1.2741	5 36.1	0.9089	8.107	
30	0.6	0.7455	1.211	0.8984	0 2.5	1.2742	5 31.8	0.9081	8.092	
Okt.	1	0.6	0.7482	1.217	0.9004	0 2.4	1.2744	5 27.5	0.9072	8.076
	2	0.7	0.7510	1.222	0.9025	0 2.3	1.2746	5 23.3	0.9062	8.057
	3	0.8	0.7537	+1.228	0.9045	0 2.2	1.2748	5 19.0	0.9050	+8.035
	4	0.8	0.7564	1.234	0.9066	0 2.1	1.2750	5 14.7	0.9037	8.011
	5	0.9	0.7592	1.240	0.9087	0 2.1	1.2753	5 10.4	0.9022	7.984
	6	1.0	0.7619	1.246	0.9107	0 2.1	1.2756	5 6.2	0.9006	7.955
	7	1.0	0.7647	1.252	0.9128	0 2.1	1.2759	5 1.9	0.8989	7.923
	8	1.1	0.7674	1.258	0.9149	0 2.1	1.2762	4 57.7	0.8971	7.890
	9	1.1	0.7701	+1.264	0.9170	0 2.1	1.2766	4 53.4	0.8951	+7.854
	10	1.2	0.7729	1.270	0.9190	0 2.1	1.2769	4 49.2	0.8930	7.816
	11	1.3	0.7756	1.276	0.9211	0 2.2	1.2773	4 44.9	0.8908	7.776
	12	1.3	0.7784	1.282	0.9232	0 2.2	1.2777	4 40.7	0.8883	7.732
	13	1.4	0.7811	1.289	0.9254	0 2.3	1.2781	4 36.4	0.8858	7.687
	14	1.5	0.7838	+1.295	0.9275	0 2.4	1.2786	4 32.2	0.8830	+7.639



Tag	0 <sup>h</sup> Welt-Zeit										
	<i>f'</i>	<i>g'</i>	<i>G'</i>	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	<i>j</i>	<i>k</i>
1945	in "oor	in "oi				in "oi	23° 26'		in "oi	in o.oor	
Sept. 3	+12	+10	2.4	+33.76	-16.52	+20	46.86	-0.43	-6	30	83
4	+15	10	0.9	33.90	16.56	+25	46.86	0.41	-2	30	83
5	+15	10	23.4	34.03	16.59	+25	46.86	0.39	+2	30	83
6	+13	10	22.0	34.17	16.63	+21	46.85	0.37	+5	31	83
7	+9	9	20.5	34.31	16.67	+14	46.85	0.35	+7	31	83
8	+3	9	19.0	34.45	16.71	+6	46.85	0.33	+9	31	82
9	-2	+8	17.3	+34.58	-16.75	-4	46.85	-0.31	+8	31	82
10	-7	8	15.6	34.72	16.79	-12	46.85	0.30	+7	31	82
11	-11	8	13.9	34.86	16.83	-19	46.85	0.28	+4	31	82
12	-14	9	12.1	35.00	16.87	-22	46.85	0.26	0	32	82
13	-14	10	10.6	35.13	16.91	-23	46.85	0.25	-3	32	82
14	-12	10	9.2	35.27	16.96	-19	46.84	0.23	-7	32	82
15	-8	+10	8.0	+35.41	-17.00	-13	46.84	-0.22	-9	32	82
16	-3	10	6.7	35.55	17.04	-4	46.84	0.21	-10	32	82
17	+3	9	5.2	35.69	17.09	+4	46.84	0.19	-9	32	82
18	+7	7	3.4	35.82	17.13	+11	46.84	0.18	-6	33	82
19	+9	6	0.8	35.96	17.18	+15	46.84	0.17	-1	33	82
20	+9	7	22.0	36.10	17.22	+14	46.84	0.16	+3	33	82
21	+5	+8	19.7	+36.24	-17.26	+9	46.84	-0.15	+7	33	82
22	0	9	18.1	36.37	17.31	0	46.83	0.14	+9	33	82
23	-5	10	16.6	36.51	17.35	-8	46.83	0.13	+9	33	82
24	-9	9	15.2	36.65	17.40	-15	46.83	0.12	+7	34	82
25	-11	8	13.3	36.79	17.44	-19	46.83	0.12	+3	34	82
26	-10	7	10.9	36.92	17.49	-17	46.83	0.11	-2	34	82
27	-6	+7	8.2	+37.06	-17.53	-10	46.83	-0.10	-6	34	82
28	0	8	6.0	37.20	17.58	0	46.83	0.10	-8	34	82
29	+7	10	4.2	37.34	17.62	+11	46.82	0.09	-9	34	82
30	+12	10	2.7	37.47	17.66	+20	46.82	0.09	-7	35	82
Okt. 1	+16	11	1.3	37.61	17.71	+25	46.82	0.08	-4	35	82
2	+16	11	23.9	37.75	17.75	+27	46.82	0.08	0	35	82
3	+14	+10	22.5	+37.89	-17.79	+24	46.82	-0.08	+4	35	82
4	+11	10	20.9	38.03	17.83	+17	46.82	0.08	+7	35	82
5	+5	9	19.5	38.16	17.88	+9	46.82	0.08	+8	35	82
6	0	8	17.9	38.30	17.92	-1	46.82	0.07	+8	36	82
7	-6	8	16.1	38.44	17.96	-9	46.81	0.07	+7	36	82
8	-10	8	14.4	38.58	18.00	-16	46.81	0.08	+5	36	82
9	-12	+8	12.7	+38.71	-18.03	-20	46.81	-0.08	+2	36	83
10	-13	9	11.1	38.85	18.07	-22	46.81	0.08	-2	36	83
11	-12	10	9.6	38.99	18.11	-20	46.81	0.08	-6	36	83
12	-9	10	8.4	39.13	18.14	-15	46.81	0.08	-8	37	83
13	-5	10	7.1	39.26	18.18	-7	46.81	0.09	-10	37	83
14	+1	+9	5.9	+39.40	-18.21	+1	46.81	-0.09	-9	37	83



Tag	0 <sup>h</sup> Welt-Zeit								
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>
1945									
Okt. 14	<sup>h</sup> 1.5	<sup>n</sup> 0.7838	<sup>n</sup> +1.295	0.9275	<sup>h</sup> <sup>m</sup> 2.4	1.2786	<sup>h</sup> <sup>m</sup> 4 32.2	0.8830	+ <sup>n</sup> 7.639
15	1.5	0.7866	1.301	0.9297	2.5	1.2790	4 28.0	0.8802	7.589
16	1.6	0.7893	1.308	0.9318	2.6	1.2795	4 23.8	0.8771	7.536
17	1.7	0.7920	1.314	0.9340	2.8	1.2800	4 19.6	0.8740	7.482
18	1.7	0.7948	1.321	0.9362	2.9	1.2805	4 15.4	0.8707	7.425
19	1.8	0.7975	1.328	0.9384	3.1	1.2810	4 11.2	0.8672	7.366
20	1.9	0.8003	+1.334	0.9406	3.2	1.2815	4 7.0	0.8636	+7.305
21	1.9	0.8030	1.341	0.9428	3.4	1.2821	4 2.8	0.8598	7.241
22	2.0	0.8057	1.348	0.9450	3.6	1.2827	3 58.7	0.8559	7.176
23	2.1	0.8085	1.355	0.9473	3.8	1.2832	3 54.5	0.8517	7.108
24	2.1	0.8112	1.362	0.9496	3.9	1.2838	3 50.3	0.8474	7.037
25	2.2	0.8139	1.370	0.9519	4.1	1.2844	3 46.2	0.8429	6.965
26	2.3	0.8167	+1.377	0.9542	4.3	1.2850	3 42.0	0.8382	+6.890
27	2.3	0.8194	1.384	0.9565	4.6	1.2856	3 37.9	0.8334	6.814
28	2.4	0.8222	1.392	0.9588	4.8	1.2863	3 33.8	0.8283	6.735
29	2.5	0.8249	1.399	0.9611	5.0	1.2869	3 29.7	0.8231	6.654
30	2.5	0.8276	1.407	0.9634	5.2	1.2875	3 25.6	0.8177	6.572
31	2.6	0.8304	1.414	0.9658	5.5	1.2881	3 21.5	0.8120	6.486
Nov. 1	2.7	0.8331	+1.422	0.9682	5.7	1.2888	3 17.5	0.8061	+6.399
2	2.7	0.8358	1.430	0.9707	5.9	1.2894	3 13.4	0.8000	6.310
3	2.8	0.8386	1.438	0.9731	6.1	1.2901	3 9.3	0.7937	6.219
4	2.9	0.8413	1.446	0.9756	6.4	1.2907	3 5.3	0.7872	6.126
5	2.9	0.8441	1.454	0.9780	6.6	1.2914	3 1.3	0.7804	6.031
6	3.0	0.8468	1.463	0.9805	6.8	1.2920	2 57.2	0.7734	5.935
7	3.1	0.8495	+1.471	0.9830	7.0	1.2927	2 53.2	0.7661	+5.836
8	3.1	0.8523	1.480	0.9855	7.3	1.2934	2 49.2	0.7586	5.736
9	3.2	0.8550	1.488	0.9880	7.5	1.2940	2 45.2	0.7507	5.633
10	3.3	0.8578	1.497	0.9905	7.7	1.2947	2 41.2	0.7426	5.529
11	3.3	0.8605	1.506	0.9931	7.9	1.2953	2 37.3	0.7342	5.423
12	3.4	0.8632	1.514	0.9957	8.1	1.2959	2 33.3	0.7256	5.316
13	3.4	0.8660	+1.523	0.9982	8.3	1.2966	2 29.4	0.7166	+5.207
14	3.5	0.8687	1.533	1.0008	8.5	1.2972	2 25.4	0.7072	5.096
15	3.6	0.8714	1.542	1.0034	8.7	1.2978	2 21.5	0.6975	4.983
16	3.6	0.8742	1.551	1.0061	8.9	1.2985	2 17.5	0.6874	4.869
17	3.7	0.8769	1.560	1.0087	9.1	1.2991	2 13.6	0.6771	4.754
18	3.8	0.8797	1.570	1.0113	9.2	1.2997	2 9.7	0.6662	4.637
19	3.8	0.8824	+1.579	1.0139	9.4	1.3003	2 5.8	0.6549	+4.518
20	3.9	0.8851	1.589	1.0166	9.5	1.3008	2 1.9	0.6433	4.398
21	4.0	0.8879	1.599	1.0192	9.7	1.3014	1 58.0	0.6310	4.276
22	4.0	0.8906	1.609	1.0219	9.8	1.3020	1 54.2	0.6184	4.153
23	4.1	0.8933	1.619	1.0246	9.9	1.3025	1 50.4	0.6052	4.029
24	4.2	0.8961	+1.629	1.0273	10.0	1.3031	1 46.5	0.5915	+3.904



Tag	0 <sup>h</sup> Welt-Zeit										
	$f'$	$g'$	$G'$	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	$j$	$k$
1945	in o.oor	in o.or	h	"	"	in o.or	23° 26'	"	in o.or	in o.oor	
Okt. 14	+ 1	+ 9	5.9	+39.40	-18.21	+ 1	46.81	-0.09	- 9	37	83
15	+ 5	7	4.2	39.54	18.25	+ 8	46.80	0.09	- 6	37	83
16	+ 8	6	1.5	39.68	18.28	+13	46.80	0.10	- 2	37	83
17	+ 8	6	22.5	39.81	18.31	+14	46.80	0.10	+ 2	38	83
18	+ 6	8	20.0	39.95	18.34	+10	46.80	0.11	+ 7	38	83
19	+ 1	9	18.3	40.09	18.37	+ 2	46.80	0.12	+ 9	38	83
20	- 4	+10	17.0	+40.23	-18.40	- 7	46.80	-0.12	+10	38	83
21	- 9	10	15.5	40.36	18.42	-15	46.80	0.13	+ 8	38	84
22	-12	9	14.0	40.50	18.44	-20	46.80	0.14	+ 5	39	84
23	-12	8	11.9	40.64	18.47	-20	46.79	0.15	0	39	84
24	- 8	7	9.3	40.78	18.49	-14	46.79	0.15	- 5	39	84
25	- 3	8	6.8	40.92	18.51	- 4	46.79	0.16	- 8	39	84
26	+ 5	+10	4.7	+41.05	-18.53	+ 8	46.79	-0.17	- 9	39	84
27	+11	11	3.2	41.19	18.55	+18	46.79	0.18	- 8	40	84
28	+16	11	1.7	41.33	18.56	+26	46.79	0.19	- 5	40	84
29	+17	11	0.3	41.47	18.58	+29	46.79	0.20	- 1	40	84
30	+16	11	22.9	41.60	18.59	+27	46.79	0.21	+ 3	40	85
31	+13	10	21.4	41.74	18.60	+21	46.78	0.22	+ 7	40	85
Nov. 1	+ 8	+10	20.0	+41.88	-18.61	+12	46.78	-0.23	+ 8	41	85
2	+ 2	9	18.5	42.02	18.62	+ 3	46.78	0.24	+ 9	41	85
3	- 4	8	16.8	42.15	18.63	- 6	46.78	0.25	+ 8	41	85
4	- 8	8	15.0	42.29	18.63	-13	46.78	0.26	+ 5	41	85
5	-11	8	13.2	42.43	18.64	-18	46.78	0.27	+ 2	41	85
6	-12	8	11.3	42.57	18.64	-20	46.78	0.28	- 1	42	86
7	-12	+ 9	9.9	+42.70	-18.64	-19	46.77	-0.29	- 5	42	86
8	- 9	10	8.6	42.84	18.64	-15	46.77	0.31	- 8	42	86
9	- 5	10	7.4	42.98	18.63	- 9	46.77	0.32	- 9	42	86
10	- 1	9	6.2	43.12	18.63	- 1	46.77	0.33	- 9	43	86
11	+ 4	8	4.8	43.25	18.62	+ 6	46.77	0.34	- 8	43	86
12	+ 7	6	2.8	43.39	18.62	+12	46.77	0.35	- 4	43	86
13	+ 8	+ 5	23.9	+43.53	-18.61	+13	46.77	-0.36	0	43	86
14	+ 7	6	20.8	43.67	18.60	+11	46.77	0.37	+ 5	44	87
15	+ 2	8	18.7	43.81	18.58	+ 4	46.76	0.38	+ 8	44	87
16	- 3	9	17.2	43.94	18.57	- 5	46.76	0.39	+ 9	44	87
17	- 9	10	15.8	44.08	18.56	-15	46.76	0.40	+ 9	44	87
18	-13	10	14.3	44.22	18.54	-21	46.76	0.41	+ 6	45	87
19	-14	+ 9	12.5	+44.36	-18.52	-23	46.76	-0.42	+ 1	45	87
20	-12	8	10.4	44.49	18.50	-19	46.76	0.43	- 3	45	87
21	- 6	8	7.9	44.63	18.48	-10	46.76	0.44	- 7	46	87
22	+ 1	9	5.7	44.77	18.45	+ 2	46.76	0.45	- 9	46	87
23	+ 8	10	3.8	44.91	18.43	+14	46.75	0.46	- 9	46	88
24	+14	+11	2.2	+45.04	-18.40	+23	46.75	-0.47	- 6	46	88



Tag	0 <sup>h</sup> Welt-Zeit								
	Sternzeit Greenw.	<i>t</i>	<i>f</i>	log <i>g</i>	<i>G</i>	log <i>h</i>	<i>H</i>	log <i>i</i>	<i>i</i>
1945									
Nov. 24	<sup>h</sup> 4.2	<sup>a</sup> 0.8961	<sup>s</sup> +1.629	1.0273	<sup>h m</sup> 0 10.0	1.3031	<sup>h m</sup> 1 46.5	0.5915	<sup>h</sup> +3.904
25	4.2	0.8988	1.639	1.0300	0 10.1	1.3036	1 42.6	0.5771	3.777
26	4.3	0.9016	1.649	1.0327	0 10.2	1.3041	1 38.8	0.5622	3.649
27	4.4	0.9043	1.659	1.0354	0 10.3	1.3046	1 34.9	0.5465	3.520
28	4.4	0.9070	1.669	1.0381	0 10.4	1.3051	1 31.1	0.5301	3.389
29	4.5	0.9098	1.680	1.0408	0 10.5	1.3055	1 27.3	0.5130	3.258
30	4.6	0.9125	+1.690	1.0435	0 10.5	1.3060	1 23.5	0.4950	+3.126
Dez. 1	4.6	0.9152	1.701	1.0462	0 10.6	1.3064	1 19.7	0.4760	2.992
2	4.7	0.9180	1.712	1.0489	0 10.6	1.3068	1 15.9	0.4561	2.858
3	4.8	0.9207	1.722	1.0516	0 10.6	1.3072	1 12.1	0.4350	2.723
4	4.8	0.9235	1.733	1.0543	0 10.6	1.3076	1 8.3	0.4128	2.587
5	4.9	0.9262	1.744	1.0570	0 10.6	1.3080	1 4.5	0.3890	2.449
6	5.0	0.9289	+1.754	1.0596	0 10.6	1.3083	1 0.8	0.3638	+2.311
7	5.0	0.9317	1.765	1.0623	0 10.6	1.3087	0 57.0	0.3369	2.172
8	5.1	0.9344	1.776	1.0650	0 10.5	1.3090	0 53.2	0.3081	2.033
9	5.2	0.9371	1.788	1.0677	0 10.5	1.3093	0 49.4	0.2769	1.892
10	5.2	0.9399	1.799	1.0704	0 10.4	1.3095	0 45.7	0.2433	1.751
11	5.3	0.9426	1.810	1.0731	0 10.3	1.3098	0 41.9	0.2068	1.610
12	5.4	0.9454	+1.821	1.0757	0 10.2	1.3100	0 38.2	0.1667	+1.468
13	5.4	0.9481	1.832	1.0784	0 10.1	1.3102	0 34.4	0.1225	1.326
14	5.5	0.9508	1.843	1.0810	0 10.0	1.3104	0 30.7	0.0730	1.183
15	5.6	0.9536	1.855	1.0837	0 9.9	1.3106	0 26.9	0.0170	1.040
16	5.6	0.9563	1.866	1.0863	0 9.7	1.3107	0 23.2	9.9528	0.897
17	5.7	0.9591	1.877	1.0889	0 9.6	1.3108	0 19.5	9.8768	0.753
18	5.8	0.9618	+1.888	1.0915	0 9.4	1.3109	0 15.7	9.7839	+0.608
19	5.8	0.9645	1.900	1.0941	0 9.3	1.3110	0 12.0	9.6665	0.464
20	5.9	0.9673	1.911	1.0966	0 9.1	1.3111	0 8.2	9.5038	0.319
21	5.9	0.9700	1.922	1.0992	0 8.9	1.3111	0 4.5	9.2405	0.174
22	6.0	0.9727	1.934	1.1017	0 8.7	1.3111	0 0.8	8.4624	+0.029
23	6.1	0.9755	1.945	1.1042	0 8.5	1.3111	23 57.0	9.0607 <sup>n</sup>	-0.115
24	6.1	0.9782	+1.957	1.1067	0 8.2	1.3111	23 53.3	9.4150 <sup>n</sup>	-0.260
25	6.2	0.9810	1.968	1.1092	0 8.0	1.3110	23 49.6	9.6064 <sup>n</sup>	0.404
26	6.3	0.9837	1.979	1.1117	0 7.8	1.3109	23 45.8	9.7396 <sup>n</sup>	0.549
27	6.3	0.9864	1.991	1.1142	0 7.5	1.3109	23 42.1	9.8407 <sup>n</sup>	0.693
28	6.4	0.9892	2.002	1.1166	0 7.2	1.3108	23 38.3	9.9227 <sup>n</sup>	0.837
29	6.5	0.9919	2.013	1.1191	0 7.0	1.3106	23 34.6	9.9917 <sup>n</sup>	0.981
30	6.5	0.9946	+2.025	1.1215	0 6.7	1.3105	23 30.8	0.0512 <sup>n</sup>	-1.125
31	6.6	0.9974	2.036	1.1239	0 6.4	1.3103	23 27.1	0.1035 <sup>n</sup>	1.269
32	6.7	1.0001	+2.047	1.1262	0 6.1	1.3101	23 23.3	0.1495 <sup>n</sup>	-1.411



Tag	0 <sup>h</sup> Welt-Zeit										
	<i>f'</i>	<i>g'</i>	<i>G'</i>	Allgemeine Präzession seit 1945.0	$\Delta\psi$	$\Delta\psi'$	Mittlere Schiefe	$\Delta\varepsilon$	$\Delta\varepsilon'$	<i>j</i>	<i>k</i>
1945	in o.oor	in o.or	h	"	"	in o.or	23° 26'		in o.or	in o.oor	
Nov. 24	+14	+11	2.2	+45.04	-18.40	+23	46.75	-0.47	- 6	46	88
25	+18	12	0.8	45.18	18.38	+29	46.75	0.47	- 2	47	88
26	+18	12	23.3	45.32	18.35	+29	46.75	0.48	+ 2	47	88
27	+15	11	22.0	45.46	18.32	+24	46.75	0.49	+ 6	47	88
28	+10	10	20.6	45.59	18.28	+16	46.75	0.49	+ 8	48	88
29	+ 4	9	19.1	45.73	18.25	+ 7	46.75	0.50	+ 9	48	88
30	- 2	+ 8	17.5	+45.87	-18.22	- 3	46.75	-0.51	+ 8	48	88
Dez. 1	- 7	8	15.7	46.01	18.18	-11	46.74	0.51	+ 6	49	88
2	-10	7	13.7	46.15	18.15	-16	46.74	0.52	+ 3	49	88
3	-12	8	11.9	46.28	18.11	-19	46.74	0.52	0	49	88
4	-11	8	10.2	46.42	18.07	-19	46.74	0.52	- 4	49	89
5	- 9	9	8.7	46.56	18.03	-15	46.74	0.53	- 7	50	89
6	- 6	+ 9	7.6	+46.70	-18.00	- 9	46.74	-0.53	- 9	50	89
7	- 1	9	6.3	46.83	17.95	- 2	46.74	0.53	- 9	50	89
8	+ 3	8	5.0	46.97	17.91	+ 6	46.73	0.53	- 8	51	89
9	+ 7	7	3.3	47.11	17.86	+11	46.73	0.53	- 5	51	89
10	+ 9	6	0.9	47.25	17.82	+14	46.73	0.53	- 1	51	89
11	+ 8	6	22.0	47.38	17.78	+13	46.73	0.53	+ 3	52	89
12	+ 4	+ 7	19.4	+47.52	-17.73	+ 7	46.73	-0.53	+ 7	52	89
13	- 1	9	17.7	47.66	17.69	- 2	46.73	0.53	+ 9	52	89
14	- 7	10	16.2	47.80	17.64	-12	46.73	0.52	+ 9	53	89
15	-12	10	14.7	47.93	17.59	-20	46.73	0.52	+ 7	53	89
16	-15	10	13.2	48.07	17.55	-24	46.72	0.52	+ 3	53	89
17	-14	9	11.3	48.21	17.50	-22	46.72	0.51	- 2	54	89
18	- 9	+ 9	9.0	+48.35	-17.45	-15	46.72	-0.51	- 6	54	89
19	- 3	9	6.8	48.48	17.40	- 5	46.72	0.50	- 9	54	89
20	+ 5	10	4.7	48.62	17.35	+ 8	46.72	0.49	- 9	54	89
21	+12	11	3.0	48.76	17.31	+19	46.72	0.49	- 7	55	89
22	+16	11	1.3	48.90	17.26	+26	46.72	0.48	- 4	55	89
23	+17	11	23.9	49.04	17.21	+29	46.72	0.47	0	55	89
24	+16	+11	22.4	+49.17	-17.16	+26	46.71	-0.46	+ 5	56	89
25	+12	11	21.0	49.31	17.11	+19	46.71	0.45	+ 8	56	89
26	+ 6	10	19.6	49.45	17.06	+10	46.71	0.44	+ 9	56	89
27	0	9	18.0	49.59	17.02	0	46.71	0.43	+ 9	57	89
28	- 5	8	16.3	49.72	16.97	- 9	46.71	0.41	+ 7	57	89
29	- 9	7	14.4	49.86	16.92	-15	46.71	0.40	+ 4	57	89
30	-12	+ 8	12.3	+50.00	-16.88	-20	46.71	-0.39	+ 1	58	89
31	-12	8	10.6	50.14	16.83	-19	46.71	0.37	- 3	58	89
32	-10	+ 9	9.2	+50.27	-16.78	-16	46.70	-0.36	- 6	58	89



## Reduktionsgrößen 1945

für 12<sup>h</sup> Sternzeit Greenwich

Welt-Zeit.	$t$	A	A'	B	B'	C	D	
1945								
Jan.	0.224	-0.0013	-0.31943	+38I	+3.437	+53	-3.080	+20.192
	1.221	+0.0014	0.31590	+454	3.422	+22	3.408	20.129
	2.218	0.0041	0.31237	+448	3.406	-12	3.735	20.060
	3.215	0.0069	0.30886	+371	3.390	-46	4.061	19.985
	4.213	0.0096	0.30536	+236	3.373	-69	4.386	19.904
	5.210	0.0123	0.30188	+64	3.355	-79	4.709	19.816
	6.207	0.0150	-0.29842	-119	+3.337	-79	-5.031	+19.722
	7.204	0.0178	0.29497	-286	3.318	-63	5.351	19.622
	8.202	0.0205	0.29154	-410	3.298	-36	5.669	19.515
	9.199	0.0232	0.28814	-475	3.278	-3	5.986	19.402
	10.196	0.0260	0.28475	-461	3.257	+35	6.301	19.283
	11.194	0.0287	0.28138	-369	3.236	+68	6.614	19.158
	12.191	0.0314	-0.27803	-212	+3.215	+89	-6.925	+19.027
	13.188	0.0342	0.27470	-23	3.193	+94	7.234	18.890
	14.185	0.0369	0.27140	+166	3.171	+78	7.540	18.747
	15.183	0.0396	0.26812	+306	3.148	+45	7.843	18.599
	16.180	0.0423	0.26486	+364	3.124	+2	8.144	18.445
	17.177	0.0451	0.26163	+329	3.100	-41	8.442	18.285
	18.174	0.0478	-0.25843	+209	+3.075	-72	-8.738	+18.119
	19.172	0.0505	0.25526	+39	3.050	-88	9.031	17.947
	20.169	0.0533	0.25211	-138	3.024	-82	9.321	17.769
	21.166	0.0560	0.24899	-269	2.999	-57	9.609	17.586
	22.164	0.0587	0.24589	-324	2.973	-19	9.894	17.398
	23.161	0.0615	0.24282	-287	2.947	+21	10.175	17.204
	24.158	0.0642	-0.23978	-171	+2.920	+56	-10.453	+17.005
	25.155	0.0669	0.23677	-2	2.893	+75	10.727	16.801
	26.153	0.0697	0.23380	+180	2.866	+77	10.998	16.592
	27.150	0.0724	0.23086	+331	2.839	+62	11.266	16.377
	28.147	0.0751	0.22795	+426	2.811	+34	11.530	16.157
	29.144	0.0778	0.22507	+450	2.784	0	11.790	15.932
	30.142	0.0806	-0.22223	+401	+2.756	-34	-12.046	+15.702
	31.139	0.0833	0.21941	+289	2.728	-60	12.299	15.468
Febr.	1.136	0.0860	0.21662	+132	2.700	-76	12.548	15.229
	2.133	0.0888	0.21386	-47	2.672	-81	12.793	14.985
	3.131	0.0915	0.21114	-222	2.644	-71	13.033	14.737
	4.128	0.0942	0.20845	-372	2.616	-50	13.269	14.484
	5.125	0.0970	-0.20579	-473	+2.588	-17	-13.501	+14.226
	6.123	0.0997	0.20316	-498	2.560	+21	13.729	13.964
	7.120	0.1024	0.20057	-444	2.532	+55	13.953	13.698
	8.117	0.1051	0.19800	-315	2.504	+84	14.173	13.428
	9.114	0.1079	0.19547	-132	2.476	+96	14.388	13.154
	10.112	0.1106	-0.19297	+67	+2.448	+89	-14.598	+12.876



# Reduktionsgrößen 1945

271\*

für 12<sup>h</sup> Sternzeit Greenwich

Welt-Zeit	<i>t</i>	<i>A</i>	<i>A'</i>	<i>B</i>	<i>B'</i>	<i>C</i>	<i>D</i>		
1945									
Febr.	10.112	0.1106	-0.19297 <sub>247</sub>	in 0.00001 + 67	+2.448 <sub>27</sub>	in 0.001 +89	-14.598 <sub>206</sub>	+12.876 <sub>282</sub>	
	11.109	0.1133	0.19050 <sub>244</sub>	+237	2.421 <sub>27</sub>	+62	14.804 <sub>201</sub>	12.594 <sub>286</sub>	
	12.106	0.1161	0.18806 <sub>241</sub>	+338	2.394 <sub>27</sub>	+22	15.005 <sub>196</sub>	12.308 <sub>290</sub>	
	13.103	0.1188	0.18565 <sub>238</sub>	+346	2.367 <sub>27</sub>	-24	15.201 <sub>192</sub>	12.018 <sub>293</sub>	
	14.101	0.1215	0.18327 <sub>235</sub>	+264	2.340 <sub>26</sub>	-64	15.393 <sub>187</sub>	11.725 <sub>297</sub>	
	15.098	0.1243	0.18092 <sub>232</sub>	+110	2.314 <sub>27</sub>	-87	15.580 <sub>182</sub>	11.428 <sub>301</sub>	
	16.095	0.1270	-0.17860 <sub>229</sub>	- 64	+2.287 <sub>26</sub>	-90	-15.762 <sub>177</sub>	+11.127 <sub>304</sub>	
	17.093	0.1297	0.17631 <sub>226</sub>	-214	2.261 <sub>26</sub>	-70	15.939 <sub>172</sub>	10.823 <sub>307</sub>	
	18.090	0.1325	0.17405 <sub>223</sub>	-295	2.235 <sub>25</sub>	-35	16.111 <sub>166</sub>	10.516 <sub>310</sub>	
	19.087	0.1352	0.17182 <sub>221</sub>	-290	2.210 <sub>25</sub>	+ 6	16.277 <sub>162</sub>	10.206 <sub>313</sub>	
	20.084	0.1379	0.16961 <sub>218</sub>	-198	2.185 <sub>24</sub>	+46	16.439 <sub>157</sub>	9.893 <sub>315</sub>	
	21.082	0.1406	0.16743 <sub>215</sub>	- 40	2.161 <sub>24</sub>	+72	16.596 <sub>151</sub>	9.578 <sub>318</sub>	
	22.079	0.1434	-0.16528 <sub>213</sub>	+144	+2.137 <sub>24</sub>	+79	-16.747 <sub>146</sub>	+ 9.260 <sub>321</sub>	
	23.076	0.1461	0.16315 <sub>210</sub>	+305	2.113 <sub>23</sub>	+69	16.893 <sub>141</sub>	8.939 <sub>324</sub>	
	24.073	0.1488	0.16105 <sub>208</sub>	+421	2.090 <sub>23</sub>	+45	17.034 <sub>136</sub>	8.615 <sub>326</sub>	
	25.071	0.1516	0.15897 <sub>206</sub>	+463	2.067 <sub>22</sub>	+13	17.170 <sub>131</sub>	8.289 <sub>329</sub>	
	26.068	0.1543	0.15691 <sub>204</sub>	+432	2.045 <sub>22</sub>	-22	17.301 <sub>125</sub>	7.960 <sub>331</sub>	
	27.065	0.1570	0.15487 <sub>202</sub>	+340	2.023 <sub>22</sub>	-50	17.426 <sub>119</sub>	7.629 <sub>333</sub>	
	28.063	0.1598	-0.15285 <sub>200</sub>	+198	+2.001 <sub>21</sub>	-71	-17.545 <sub>114</sub>	+ 7.296 <sub>335</sub>	
	März	1.060	0.1625	0.15085 <sub>198</sub>	+ 30	1.980 <sub>20</sub>	-80	17.659 <sub>109</sub>	6.961 <sub>337</sub>
		2.057	0.1652	0.14887 <sub>195</sub>	-147	1.960 <sub>20</sub>	-75	17.768 <sub>103</sub>	6.624 <sub>339</sub>
3.054		0.1679	0.14692 <sub>194</sub>	-306	1.940 <sub>19</sub>	-59	17.871 <sub>98</sub>	6.285 <sub>341</sub>	
4.052		0.1707	0.14498 <sub>192</sub>	-428	1.921 <sub>18</sub>	-31	17.969 <sub>93</sub>	5.944 <sub>343</sub>	
5.049		0.1734	0.14306 <sub>191</sub>	-492	1.903 <sub>18</sub>	+ 3	18.062 <sub>87</sub>	5.601 <sub>344</sub>	
6.046		0.1761	-0.14115 <sub>189</sub>	-480	+1.885 <sub>17</sub>	+40	-18.149 <sub>81</sub>	+ 5.257 <sub>345</sub>	
7.043		0.1789	0.13926 <sub>188</sub>	-389	1.868 <sub>17</sub>	+73	18.230 <sub>76</sub>	4.912 <sub>347</sub>	
8.041		0.1816	0.13738 <sub>186</sub>	-235	1.851 <sub>16</sub>	+92	18.306 <sub>70</sub>	4.565 <sub>348</sub>	
9.038		0.1843	0.13552 <sub>185</sub>	- 47	1.835 <sub>16</sub>	+95	18.376 <sub>65</sub>	4.217 <sub>349</sub>	
10.035		0.1871	0.13367 <sub>184</sub>	+136	1.819 <sub>15</sub>	+76	18.441 <sub>59</sub>	3.868 <sub>350</sub>	
11.032		0.1898	0.13183 <sub>183</sub>	+271	1.804 <sub>14</sub>	+40	18.500 <sub>53</sub>	3.518 <sub>351</sub>	
12.030		0.1925	-0.13000 <sub>182</sub>	+323	+1.790 <sub>14</sub>	- 4	-18.553 <sub>48</sub>	+ 3.167 <sub>351</sub>	
13.027		0.1953	0.12818 <sub>181</sub>	+280	1.776 <sub>13</sub>	-48	18.601 <sub>42</sub>	2.816 <sub>352</sub>	
14.024		0.1980	0.12637 <sub>181</sub>	+155	1.763 <sub>13</sub>	-79	18.643 <sub>36</sub>	2.464 <sub>353</sub>	
15.022		0.2007	0.12456 <sub>180</sub>	- 14	1.750 <sub>12</sub>	-92	18.679 <sub>31</sub>	2.111 <sub>353</sub>	
16.019		0.2034	0.12276 <sub>180</sub>	-179	1.738 <sub>11</sub>	-82	18.710 <sub>25</sub>	1.758 <sub>354</sub>	
17.016		0.2062	0.12096 <sub>179</sub>	-288	1.727 <sub>10</sub>	-52	18.735 <sub>20</sub>	1.404 <sub>354</sub>	
18.013		0.2089	-0.11917 <sub>179</sub>	-312	+1.717 <sub>10</sub>	- 9	-18.755 <sub>14</sub>	+ 1.050 <sub>354</sub>	
19.011		0.2116	0.11738 <sub>179</sub>	-239	1.707 <sub>9</sub>	+32	18.769 <sub>8</sub>	0.696 <sub>354</sub>	
20.008		0.2144	0.11559 <sub>179</sub>	- 94	1.698 <sub>8</sub>	+65	18.777 <sub>2</sub>	+ 0.342 <sub>353</sub>	
21.005		0.2171	0.11380 <sub>179</sub>	+ 95	1.690 <sub>7</sub>	+80	18.779 <sub>3</sub>	- 0.011 <sub>354</sub>	
22.002	0.2198	0.11201 <sub>180</sub>	+279	1.683 <sub>7</sub>	+77	18.776 <sub>9</sub>	0.365 <sub>353</sub>		
23.000	0.2226	-0.11021	+419	+1.676	+56	-18.767	- 0.718		



# Reduktionsgrößen 1945

für 12<sup>b</sup> Sternzeit Greenwich

Welt-Zeit	<i>t</i>	<i>A</i>	<i>A'</i>	<i>B</i>	<i>B'</i>	<i>C</i>	<i>D</i>	
1945								
März	23.000	0.2226	—0.11021 179	in 0.00001 +419	in " 0.001 +1.676 6	+56	—18.767 14	— 0.718 353
	23.997	0.2253	0.10842 180	+490	1.670 6	+24	18.753 19	1.071 352
	24.994	0.2280	0.10662 180	+482	1.664 5	—11	18.734 25	1.423 352
	25.992	0.2307	0.10482 180	+402	1.659 5	—43	18.709 31	1.775 351
	26.989	0.2335	0.10302 182	+269	1.654 4	—66	18.678 37	2.126 350
	27.986	0.2362	0.10120 182	+107	1.650 3	—77	18.641 42	2.476 349
	28.983	0.2389	—0.09938 183	— 68	+1.647 2	—77	—18.599 47	— 2.825 348
	29.981	0.2417	0.09755 184	—230	1.645 2	—66	18.552 53	3.173 347
	30.978	0.2444	0.09571 185	—365	1.643 1	—41	18.499 58	3.520 346
	31.975	0.2471	0.09386 186	—450	1.642 1	—10	18.441 64	3.866 345
April	1.972	0.2499	0.09200 188	—471	1.641 0	+27	18.377 69	4.211 343
	2.970	0.2526	0.09012 189	—419	1.641 0	+60	18.308 74	4.554 342
	3.967	0.2553	—0.08823 191	—301	+1.641 1	+86	—18.234 80	— 4.896 340
	4.964	0.2581	0.08632 192	—134	1.642 2	+96	18.154 85	5.236 338
	5.961	0.2608	0.08440 194	+ 49	1.644 2	+85	18.069 90	5.574 337
	6.959	0.2635	0.08246 195	+199	1.646 3	+57	17.979 95	5.911 335
	7.956	0.2662	0.08051 197	+285	1.649 3	+16	17.884 101	6.246 332
	8.953	0.2690	0.07854 199	+280	1.652 4	—31	17.783 106	6.578 330
	9.951	0.2717	—0.07655 200	+183	+1.656 4	—68	—17.677 111	— 6.908 328
	10.948	0.2744	0.07455 203	+ 25	1.660 5	—92	17.566 116	7.236 326
11.945	0.2772	0.07252 205	—150	1.665 5	—91	17.450 121	7.562 323	
12.942	0.2799	0.07047 207	—289 <sup>m</sup>	1.670 6	—67	17.329 126	7.885 321	
13.940	0.2826	0.06840 209	—348	1.676 6	—29	17.203 130	8.206 318	
14.937	0.2854	0.06631 212	—310	1.682 6	+16	17.073 135	8.524 316	
15.934	0.2881	—0.06419 214	—182	+1.688 6	+55	—16.938 140	— 8.840 313	
16.931	0.2908	0.06205 216	+ 10	1.694 7	+78	16.798 145	9.153 310	
17.929	0.2935	0.05989 218	+216	1.701 7	+84	16.653 150	9.463 308	
18.926	0.2963	0.05771 221	+395	1.708 8	+68	16.503 155	9.771 305	
19.923	0.2990	0.05550 223	+502	1.716 8	+38	16.348 160	10.076 301	
20.921	0.3017	0.05327 226	+526	1.724 9	+ 2	16.188 165	10.377 298	
21.918	0.3045	—0.05101 229	+468	+1.733 8	—34	—16.023 169	—10.675 295	
22.915	0.3072	0.04872 231	+346	1.741 9	—60	15.854 173	10.970 291	
23.912	0.3099	0.04641 234	+186	1.750 9	—77	15.681 177	11.261 288	
24.910	0.3127	0.04407 237	+ 10	1.759 9	—81	15.504 181	11.549 284	
25.907	0.3154	0.04170 240	—161	1.768 9	—71	15.323 186	11.833 281	
26.904	0.3181	0.03930 242	—302	1.777 10	—51	15.137 190	12.114 278	
27.901	0.3209	—0.03688 245	—399	+1.787 9	—20	—14.947 194	—12.392 274	
28.899	0.3236	0.03443 248	—439	1.796 10	+13	14.753 198	12.666 270	
29.896	0.3263	0.03195 251	—416	1.806 10	+48	14.555 203	12.936 266	
30.893	0.3290	0.02944 253	—325	1.816 10	+76	14.352 207	13.202 262	
Mai	1.890	0.3318	0.02691 256	—179	1.826 10	+93	14.145 211	13.464 258
	2.888	0.3345	—0.02435	— 10	+1.836	+91	—13.934	—13.722



# Reduktionsgrößen 1945

273\*

für 12<sup>h</sup> Sternzeit Greenwich

Welt-Zeit	<i>t</i>	<i>A</i>	<i>A'</i>	<i>B</i>	<i>B'</i>	<i>C</i>	<i>D</i>	
1945								
Mai	2.888	0.3345	in 0.00001	in "	in 0.001	in "	in "	
	2.888	0.3345	-0.02435 <sup>259</sup>	-10	+1.836 <sup>11</sup>	+91	-13.934 <sup>214</sup>	-13.722 <sup>254</sup>
	3.885	0.3372	0.02176 <sup>262</sup>	+148	1.847 <sup>10</sup>	+71	13.720 <sup>218</sup>	13.976 <sup>250</sup>
	4.882	0.3400	0.01914 <sup>264</sup>	+258	1.857 <sup>10</sup>	+36	13.502 <sup>222</sup>	14.226 <sup>246</sup>
	5.880	0.3427	0.01650 <sup>267</sup>	+281	1.867 <sup>10</sup>	-9	13.280 <sup>226</sup>	14.472 <sup>242</sup>
	6.877	0.3454	0.01383 <sup>271</sup>	+218	1.877 <sup>10</sup>	-52	13.054 <sup>229</sup>	14.714 <sup>238</sup>
	7.874	0.3482	0.01112 <sup>273</sup>	+75	1.887 <sup>10</sup>	-82	12.825 <sup>232</sup>	14.952 <sup>233</sup>
	8.871	0.3509	-0.00839 <sup>276</sup>	-102	+1.897 <sup>10</sup>	-93	-12.593 <sup>236</sup>	-15.185 <sup>229</sup>
	9.869	0.3536	0.00563 <sup>278</sup>	-270	1.907 <sup>10</sup>	-81	12.357 <sup>240</sup>	15.414 <sup>224</sup>
	10.866	0.3563	0.00285 <sup>281</sup>	-374	1.917 <sup>9</sup>	-47	12.117 <sup>243</sup>	15.638 <sup>220</sup>
	11.863	0.3591	-0.00004 <sup>284</sup>	-383	1.926 <sup>10</sup>	-4	11.874 <sup>246</sup>	15.858 <sup>216</sup>
	12.860	0.3618	+0.00280 <sup>286</sup>	-289	1.936 <sup>9</sup>	+39	11.628 <sup>249</sup>	16.074 <sup>211</sup>
	13.858	0.3645	0.00566 <sup>290</sup>	-113	1.945 <sup>9</sup>	+72	11.379 <sup>252</sup>	16.285 <sup>206</sup>
	14.855	0.3673	+0.00856 <sup>292</sup>	+104	+1.954 <sup>9</sup>	+86	-11.127 <sup>256</sup>	-16.491 <sup>201</sup>
	15.852	0.3700	0.01148 <sup>295</sup>	+311	1.963 <sup>9</sup>	+79	10.871 <sup>259</sup>	16.692 <sup>196</sup>
	16.850	0.3727	0.01443 <sup>297</sup>	+465	1.972 <sup>8</sup>	+53	10.612 <sup>261</sup>	16.888 <sup>191</sup>
	17.847	0.3755	0.01740 <sup>300</sup>	+536	1.980 <sup>9</sup>	+17	10.351 <sup>264</sup>	17.079 <sup>187</sup>
	18.844	0.3782	0.02040 <sup>302</sup>	+519	1.989 <sup>8</sup>	-21	10.087 <sup>266</sup>	17.266 <sup>182</sup>
	19.841	0.3809	0.02342 <sup>305</sup>	+423	1.997 <sup>8</sup>	-54	9.821 <sup>269</sup>	17.448 <sup>177</sup>
	20.839	0.3837	+0.02647 <sup>307</sup>	+269	+2.005 <sup>8</sup>	-75	-9.552 <sup>272</sup>	-17.625 <sup>172</sup>
	21.836	0.3864	0.02954 <sup>309</sup>	+89	2.013 <sup>7</sup>	-83	9.280 <sup>275</sup>	17.797 <sup>167</sup>
	22.833	0.3891	0.03263 <sup>312</sup>	-92	2.020 <sup>7</sup>	-78	9.005 <sup>277</sup>	17.964 <sup>162</sup>
	23.830	0.3918	0.03575 <sup>314</sup>	-247	2.027 <sup>6</sup>	-60	8.728 <sup>279</sup>	18.126 <sup>156</sup>
	24.828	0.3946	0.03889 <sup>316</sup>	-358	2.033 <sup>6</sup>	-31	8.449 <sup>281</sup>	18.282 <sup>151</sup>
	25.825	0.3973	0.04205 <sup>318</sup>	-416	2.039 <sup>6</sup>	+2	8.168 <sup>284</sup>	18.433 <sup>146</sup>
	26.822	0.4000	+0.04523 <sup>321</sup>	-407	+2.045 <sup>5</sup>	+36	-7.884 <sup>286</sup>	-18.579 <sup>141</sup>
	27.819	0.4028	0.04844 <sup>322</sup>	-334	2.050 <sup>5</sup>	+67	7.598 <sup>288</sup>	18.720 <sup>135</sup>
	28.817	0.4055	0.05166 <sup>324</sup>	-204	2.055 <sup>4</sup>	+87	7.310 <sup>290</sup>	18.855 <sup>130</sup>
	29.814	0.4082	0.05490 <sup>326</sup>	-44	2.059 <sup>4</sup>	+92	7.020 <sup>291</sup>	18.985 <sup>125</sup>
	30.811	0.4110	0.05816 <sup>327</sup>	+119	2.063 <sup>3</sup>	+79	6.729 <sup>293</sup>	19.110 <sup>120</sup>
	31.809	0.4137	0.06143 <sup>329</sup>	+242	2.066 <sup>3</sup>	+49	6.436 <sup>295</sup>	19.230 <sup>115</sup>
Juni	1.806	0.4164	+0.06472 <sup>331</sup>	+297	+2.069 <sup>2</sup>	+8	-6.141 <sup>297</sup>	-19.345 <sup>109</sup>
	2.803	0.4191	0.06803 <sup>333</sup>	+263	2.071 <sup>2</sup>	-35	5.844 <sup>299</sup>	19.454 <sup>104</sup>
	3.800	0.4219	0.07136 <sup>334</sup>	+145	2.073 <sup>1</sup>	-71	5.545 <sup>300</sup>	19.558 <sup>98</sup>
	4.798	0.4246	0.07470 <sup>336</sup>	-26	2.074 <sup>1</sup>	-90	5.245 <sup>301</sup>	19.656 <sup>92</sup>
	5.795	0.4273	0.07806 <sup>337</sup>	-210	2.075 <sup>0</sup>	-87	4.944 <sup>302</sup>	19.748 <sup>87</sup>
	6.792	0.4301	0.08143 <sup>338</sup>	-355	2.075 <sup>0</sup>	-64	4.642 <sup>304</sup>	19.835 <sup>81</sup>
	7.789	0.4328	+0.08481 <sup>339</sup>	-416	+2.075 <sup>1</sup>	-24	-4.338 <sup>305</sup>	-19.916 <sup>76</sup>
	8.787	0.4355	0.08820 <sup>340</sup>	-369	2.074 <sup>1</sup>	+21	4.033 <sup>306</sup>	19.992 <sup>70</sup>
	9.784	0.4383	0.09160 <sup>341</sup>	-233	2.073 <sup>2</sup>	+60	3.727 <sup>307</sup>	20.062 <sup>65</sup>
	10.781	0.4410	0.09501 <sup>342</sup>	-30	2.071 <sup>3</sup>	+84	3.420 <sup>308</sup>	20.127 <sup>59</sup>
	11.779	0.4437	0.09843 <sup>344</sup>	+193	2.068 <sup>3</sup>	+85	3.112 <sup>308</sup>	20.186 <sup>54</sup>
	12.776	0.4465	+0.10187	+383	+2.065	+68	-2.804	-20.240



## Reduktionsgrößen 1945

für 12<sup>h</sup> Sternzeit Greenwich

Welt-Zeit	<i>t</i>	<i>A</i>	<i>A'</i>	<i>B</i>	<i>B'</i>	<i>C</i>	<i>D</i>			
1945										
Juni	12.776	0.4465	+0.10187	in 0.00001	+383	+2.065	+68	in 0.001	-2.804	-20.240
	13.773	0.4492	0.10531		+499	2.061	+34		2.495	20.288
	14.770	0.4519	0.10876		+528	2.057	-4		2.185	20.330
	15.768	0.4546	0.11221		+469	2.052	-42		1.875	20.367
	16.765	0.4574	0.11566		+340	2.047	-70		1.564	20.398
	17.762	0.4601	0.11911		+167	2.041	-84		1.253	20.424
	18.759	0.4628	+0.12257		-20	+2.034	-84		-0.942	-20.444
	19.757	0.4656	0.12603		-193	2.027	-72		0.631	20.458
	20.754	0.4683	0.12950		-327	2.019	-45		0.319	20.466
	21.751	0.4710	0.13297		-404	2.010	-11		-0.007	20.469
	22.749	0.4738	0.13644		-418	2.001	+25		+0.305	20.466
	23.746	0.4765	0.13991		-366	1.991	+58		0.617	20.458
	24.743	0.4792	+0.14337		-248	+1.981	+84		+0.929	-20.444
	25.740	0.4819	0.14683		-86	1.970	+94		1.240	20.425
	26.738	0.4847	0.15028		+80	1.959	+86		1.551	20.400
	27.735	0.4874	0.15373		+225	1.947	+61		1.861	20.369
	28.732	0.4901	0.15718		+312	1.935	+25		2.171	20.332
	29.729	0.4929	0.16062		+311	1.922	-19		2.480	20.290
	30.727	0.4956	+0.16406		+226	+1.908	-58		+2.789	-20.242
Juli	1.724	0.4983	0.16748		+68	1.894	-84		3.097	20.189
	2.721	0.5011	0.17090		-119	1.879	-90		3.404	20.130
	3.718	0.5038	0.17431		-288	1.864	-73		3.710	20.066
	4.716	0.5065	0.17770		-390	1.848	-39		4.015	19.996
	5.713	0.5093	0.18108		-398	1.831	+2		4.319	19.921
	6.710	0.5120	+0.18445		-394	+1.814	+45		+4.622	-19.840
	7.708	0.5147	0.18781		-134	1.797	+75		4.923	19.754
	8.705	0.5174	0.19115		+78	1.779	+85		5.223	19.662
	9.702	0.5202	0.19448		+280	1.761	+76		5.521	19.564
	10.699	0.5229	0.19779		+433	1.742	+49		5.818	19.461
	11.697	0.5256	0.20109		+503	1.723	+12		6.113	19.353
	12.694	0.5284	+0.20437		+485	+1.703	-26		+6.407	-19.240
	13.691	0.5311	0.20763		+388	1.683	-58		6.699	19.122
	14.688	0.5338	0.21088		+233	1.662	-78		6.989	18.998
	15.686	0.5366	0.21410		+49	1.641	-87		7.277	18.869
	16.683	0.5393	0.21731		-133	1.619	-79		7.563	18.735
	17.680	0.5420	0.22050		-290	1.597	-58		7.848	18.596
	18.678	0.5447	+0.22366		-396	+1.574	-27		+8.131	-18.452
	19.675	0.5475	0.22681		-440	1.551	+10		8.411	18.302
	20.672	0.5502	0.22994		-410	1.528	+46		8.689	18.147
	21.669	0.5529	0.23305		-314	1.505	+76		8.964	17.987
	22.667	0.5557	0.23613		-162	1.481	+92		9.237	17.822
	23.664	0.5584	+0.23919		+15	+1.457	+92		+9.507	-17.652



# Reduktionsgrößen 1945

275\*

für 12<sup>h</sup> Sternzeit Greenwich

Welt-Zeit	<i>t</i>	<i>A</i>	<i>A'</i>	<i>B</i>	<i>B'</i>	<i>C</i>	<i>D</i>	
1945								
Juli	23.664	0.5584 <sup>a</sup>	+0.23919 <sub>304</sub>	in 0.00001 + 15	+1.457 <sub>25</sub>	+92	+ 9.507 <sub>268</sub>	-17.652 <sub>175</sub>
	24.661	0.5611	0.24223 <sub>301</sub>	+180	1.432 <sub>25</sub>	+73	9.775 <sub>265</sub>	17.477 <sub>180</sub>
	25.658	0.5639	0.24524 <sub>298</sub>	+297	1.407 <sub>25</sub>	+41	10.040 <sub>263</sub>	17.297 <sub>185</sub>
	26.656	0.5666	0.24822 <sub>296</sub>	+337	1.382 <sub>25</sub>	- 3	10.303 <sub>260</sub>	17.112 <sub>189</sub>
	27.653	0.5693	0.25118 <sub>294</sub>	+284	1.357 <sub>26</sub>	-46	10.563 <sub>257</sub>	16.923 <sub>194</sub>
	28.650	0.5721	0.25412 <sub>291</sub>	+155	1.331 <sub>25</sub>	-77	10.820 <sub>254</sub>	16.729 <sub>198</sub>
	29.647	0.5748	+0.25703 <sub>289</sub>	- 23	+1.306 <sub>26</sub>	-90	+11.074 <sub>251</sub>	-16.531 <sub>203</sub>
	30.645	0.5775	0.25992 <sub>287</sub>	-200	1.280 <sub>26</sub>	-84	11.325 <sub>248</sub>	16.328 <sub>207</sub>
	31.642	0.5802	0.26279 <sub>284</sub>	-332	1.254 <sub>26</sub>	-56	11.573 <sub>244</sub>	16.121 <sub>212</sub>
	Aug.	1.639	0.5830	0.26563 <sub>281</sub>	-379	1.228 <sub>26</sub>	-13	11.817 <sub>241</sub>
2.637		0.5857	0.26844 <sub>279</sub>	-327	1.202 <sub>27</sub>	+29	12.058 <sub>238</sub>	15.692 <sub>221</sub>
3.634		0.5884	0.27123 <sub>275</sub>	-188	1.175 <sub>26</sub>	+65	12.296 <sub>235</sub>	15.471 <sub>225</sub>
4.631		0.5912	+0.27398 <sub>273</sub>	+ 5	+1.149 <sub>27</sub>	+83	+12.531 <sub>232</sub>	-15.246 <sub>230</sub>
5.628		0.5939	0.27671 <sub>270</sub>	+208	1.122 <sub>26</sub>	+81	12.763 <sub>228</sub>	15.016 <sub>234</sub>
6.626		0.5966	0.27941 <sub>268</sub>	+374	1.096 <sub>27</sub>	+61	12.991 <sub>224</sub>	14.782 <sub>238</sub>
7.623		0.5994	0.28209 <sub>265</sub>	+472	1.069 <sub>26</sub>	+27	13.215 <sub>221</sub>	14.544 <sub>242</sub>
8.620		0.6021	0.28474 <sub>262</sub>	+488	1.043 <sub>27</sub>	-11	13.436 <sub>217</sub>	14.302 <sub>247</sub>
9.617		0.6048	0.28736 <sub>259</sub>	+422	1.016 <sub>27</sub>	-48	13.653 <sub>213</sub>	14.055 <sub>251</sub>
10.615		0.6075	+0.28995 <sub>257</sub>	+290	+0.989 <sub>26</sub>	-73	+13.866 <sub>210</sub>	-13.804 <sub>255</sub>
11.612	0.6103	0.29252 <sub>254</sub>	+118	0.963 <sub>27</sub>	-84	14.076 <sub>206</sub>	13.549 <sub>258</sub>	
12.609	0.6130	0.29506 <sub>251</sub>	- 66	0.936 <sub>26</sub>	-83	14.282 <sub>202</sub>	13.291 <sub>262</sub>	
13.607	0.6157	0.29757 <sub>249</sub>	-236	0.910 <sub>26</sub>	-69	14.484 <sub>198</sub>	13.029 <sub>266</sub>	
14.604	0.6185	0.30006 <sub>246</sub>	-369	0.884 <sub>26</sub>	-40	14.682 <sub>194</sub>	12.763 <sub>269</sub>	
15.601	0.6212	0.30252 <sub>243</sub>	-441	0.858 <sub>26</sub>	- 6	14.876 <sub>190</sub>	12.494 <sub>273</sub>	
16.598	0.6239	+0.30495 <sub>241</sub>	-448	+0.832 <sub>25</sub>	+32	+15.066 <sub>185</sub>	-12.221 <sub>277</sub>	
17.596	0.6267	0.30736 <sub>238</sub>	-381	0.807 <sub>25</sub>	+65	15.251 <sub>181</sub>	11.944 <sub>280</sub>	
18.593	0.6294	0.30974 <sub>236</sub>	-250	0.782 <sub>25</sub>	+88	15.432 <sub>177</sub>	11.664 <sub>283</sub>	
19.590	0.6321	0.31210 <sub>233</sub>	- 80	0.757 <sub>25</sub>	+96	15.609 <sub>173</sub>	11.381 <sub>286</sub>	
20.587	0.6349	0.31443 <sub>231</sub>	+ 99	0.732 <sub>25</sub>	+84	15.782 <sub>169</sub>	11.095 <sub>290</sub>	
21.585	0.6376	0.31674 <sub>228</sub>	+244	0.707 <sub>25</sub>	+57	15.951 <sub>164</sub>	10.805 <sub>293</sub>	
22.582	0.6403	+0.31902 <sub>226</sub>	+322	+0.682 <sub>24</sub>	+16	+16.115 <sub>159</sub>	-10.512 <sub>297</sub>	
23.579	0.6430	0.32128 <sub>224</sub>	+310	0.658 <sub>24</sub>	-30	16.274 <sub>155</sub>	10.215 <sub>300</sub>	
24.576	0.6458	0.32352 <sub>221</sub>	+211	0.634 <sub>24</sub>	-67	16.429 <sub>150</sub>	9.915 <sub>303</sub>	
25.574	0.6485	0.32573 <sub>219</sub>	+ 51	0.610 <sub>24</sub>	-90	16.579 <sub>146</sub>	9.612 <sub>305</sub>	
26.571	0.6512	0.32792 <sub>217</sub>	-129	0.586 <sub>23</sub>	-90	16.725 <sub>141</sub>	9.307 <sub>307</sub>	
27.568	0.6540	0.33009 <sub>215</sub>	-278	0.563 <sub>23</sub>	-66	16.866 <sub>136</sub>	9.000 <sub>310</sub>	
28.566	0.6567	+0.33224 <sub>212</sub>	-356	+0.540 <sub>22</sub>	-30	+17.002 <sub>132</sub>	- 8.690 <sub>313</sub>	
29.563	0.6594	0.33436 <sub>210</sub>	-336	0.518 <sub>22</sub>	+14	17.134 <sub>127</sub>	8.377 <sub>315</sub>	
30.560	0.6622	0.33646 <sub>209</sub>	-222	0.496 <sub>21</sub>	+54	17.261 <sub>122</sub>	8.062 <sub>318</sub>	
31.557	0.6649	0.33855 <sub>207</sub>	- 44	0.475 <sub>21</sub>	+81	17.383 <sub>117</sub>	7.744 <sub>320</sub>	
Sept.	1.555	0.6676	0.34062 <sub>204</sub>	+159	0.454 <sub>20</sub>	+86	17.500 <sub>112</sub>	7.424 <sub>323</sub>
	2.552	0.6703	+0.34266	+344	+0.434	+71	+17.612	- 7.101



## Reduktionsgrößen 1945

für 12<sup>b</sup> Sternzeit Greenwich

Welt-Zeit	<i>t</i>	<i>A</i>	<i>A'</i>	<i>B</i>	<i>B'</i>	<i>C</i>	<i>D</i>	
1945								
Sept.	2.552	0.6703	+0.34266 <sub>203</sub>	in 0.0001 +344	+0.434 <sub>20</sub>	+71	+17.612 <sub>108</sub>	-7.101 <sub>325</sub>
	3.549	0.6731	0.34469 <sub>201</sub>	+462	0.414 <sub>20</sub>	+41	17.720 <sub>103</sub>	6.776 <sub>327</sub>
	4.546	0.6758	0.34670 <sub>199</sub>	+503	0.394 <sub>19</sub>	+3	17.823 <sub>97</sub>	6.449 <sub>329</sub>
	5.544	0.6785	0.34869 <sub>198</sub>	+457	0.375 <sub>19</sub>	-35	17.920 <sub>92</sub>	6.120 <sub>330</sub>
	6.541	0.6813	0.35067 <sub>196</sub>	+344	0.356 <sub>18</sub>	-65	18.012 <sub>87</sub>	5.790 <sub>332</sub>
	7.538	0.6840	0.35263 <sub>195</sub>	+187	0.338 <sub>18</sub>	-82	18.099 <sub>82</sub>	5.458 <sub>334</sub>
	8.536	0.6867	+0.35458 <sub>194</sub>	+9	+0.320 <sub>17</sub>	-87	+18.181 <sub>77</sub>	-5.124 <sub>336</sub>
	9.533	0.6895	0.35652 <sub>192</sub>	-169	0.303 <sub>17</sub>	-75	18.258 <sub>72</sub>	4.788 <sub>338</sub>
	10.530	0.6922	0.35844 <sub>191</sub>	-313	0.286 <sub>16</sub>	-51	18.330 <sub>67</sub>	4.450 <sub>339</sub>
	11.527	0.6949	0.36035 <sub>191</sub>	-413	0.270 <sub>15</sub>	-20	18.397 <sub>61</sub>	4.111 <sub>340</sub>
	12.525	0.6977	0.36226 <sub>189</sub>	-450	0.255 <sub>15</sub>	+16	18.458 <sub>56</sub>	3.771 <sub>341</sub>
	13.522	0.7004	0.36415 <sub>189</sub>	-421	0.240 <sub>14</sub>	+51	18.514 <sub>51</sub>	3.430 <sub>342</sub>
	14.519	0.7031	+0.36604 <sub>187</sub>	-325	+0.226 <sub>13</sub>	+79	+18.565 <sub>45</sub>	-3.088 <sub>344</sub>
	15.516	0.7058	0.36791 <sub>187</sub>	-174	0.213 <sub>13</sub>	+96	18.610 <sub>40</sub>	2.744 <sub>345</sub>
	16.514	0.7086	0.36978 <sub>186</sub>	+2	0.200 <sub>12</sub>	+93	18.650 <sub>35</sub>	2.399 <sub>346</sub>
	17.511	0.7113	0.37164 <sub>186</sub>	+161	0.188 <sub>12</sub>	+71	18.685 <sub>29</sub>	2.053 <sub>346</sub>
	18.508	0.7140	0.37350 <sub>185</sub>	+272	0.176 <sub>11</sub>	+34	18.714 <sub>24</sub>	1.707 <sub>347</sub>
	19.505	0.7168	0.37535 <sub>185</sub>	+301	0.165 <sub>11</sub>	-11	18.738 <sub>18</sub>	1.360 <sub>347</sub>
	20.503	0.7195	+0.37720 <sub>185</sub>	+239	+0.154 <sub>10</sub>	-54	+18.756 <sub>13</sub>	-1.013 <sub>348</sub>
	21.500	0.7222	0.37905 <sub>184</sub>	+98	0.144 <sub>9</sub>	-83	18.769 <sub>8</sub>	0.665 <sub>349</sub>
	22.497	0.7250	0.38089 <sub>185</sub>	-78	0.135 <sub>8</sub>	-93	18.777 <sub>2</sub>	-0.316 <sub>349</sub>
	23.495	0.7277	0.38274 <sub>184</sub>	-243	0.127 <sub>8</sub>	-81	18.779 <sub>3</sub>	+0.033 <sub>349</sub>
	24.492	0.7304	0.38458 <sub>184</sub>	-350	0.119 <sub>7</sub>	-47	18.776 <sub>9</sub>	0.382 <sub>350</sub>
	25.489	0.7331	0.38642 <sub>185</sub>	-364	0.112 <sub>6</sub>	-2	18.767 <sub>14</sub>	0.732 <sub>349</sub>
	26.486	0.7359	+0.38827 <sub>185</sub>	-274	+0.106 <sub>6</sub>	+41	+18.753 <sub>19</sub>	+1.081 <sub>349</sub>
27.484	0.7386	0.39012 <sub>186</sub>	-102	0.100 <sub>5</sub>	+73	18.734 <sub>25</sub>	1.430 <sub>349</sub>	
28.481	0.7413	0.39198 <sub>186</sub>	+107	0.095 <sub>5</sub>	+85	18.709 <sub>31</sub>	1.779 <sub>348</sub>	
29.478	0.7441	0.39384 <sub>187</sub>	+310	0.090 <sub>4</sub>	+78	18.678 <sub>36</sub>	2.127 <sub>348</sub>	
30.475	0.7468	0.39571 <sub>188</sub>	+461	0.086 <sub>3</sub>	+53	18.642 <sub>41</sub>	2.475 <sub>347</sub>	
Okt.	1.473	0.7495	0.39759 <sub>189</sub>	+531	0.083 <sub>3</sub>	+16	18.601 <sub>47</sub>	2.822 <sub>346</sub>
	2.470	0.7523	+0.39948 <sub>190</sub>	+511	+0.080 <sub>2</sub>	-22	+18.554 <sub>53</sub>	+3.168 <sub>346</sub>
	3.467	0.7550	0.40138 <sub>190</sub>	+415	0.078 <sub>2</sub>	-56	18.501 <sub>58</sub>	3.514 <sub>345</sub>
	4.465	0.7577	0.40328 <sub>192</sub>	+262	0.076 <sub>1</sub>	-77	18.443 <sub>64</sub>	3.859 <sub>344</sub>
	5.462	0.7605	0.40520 <sub>193</sub>	+87	0.075 <sub>1</sub>	-86	18.379 <sub>69</sub>	4.203 <sub>343</sub>
	6.459	0.7632	0.40713 <sub>195</sub>	-93	0.074 <sub>0</sub>	-80	18.310 <sub>74</sub>	4.546 <sub>342</sub>
	7.456	0.7659	0.40908 <sub>197</sub>	-247	0.074 <sub>1</sub>	-61	18.236 <sub>80</sub>	4.888 <sub>341</sub>
	8.454	0.7686	+0.41105 <sub>198</sub>	-362	+0.075 <sub>1</sub>	-32	+18.156 <sub>85</sub>	+5.229 <sub>340</sub>
	9.451	0.7714	0.41303 <sub>200</sub>	-423	0.076 <sub>2</sub>	+2	18.071 <sub>90</sub>	5.569 <sub>338</sub>
	10.448	0.7741	0.41503 <sub>201</sub>	-421	0.078 <sub>3</sub>	+37	17.981 <sub>96</sub>	5.907 <sub>337</sub>
	11.445	0.7768	0.41704 <sub>203</sub>	-358	0.081 <sub>3</sub>	+69	17.885 <sub>102</sub>	6.244 <sub>335</sub>
	12.443	0.7796	0.41907 <sub>205</sub>	-232	0.084 <sub>4</sub>	+90	17.783 <sub>107</sub>	6.579 <sub>333</sub>
	13.440	0.7823	+0.42112	-76	+0.088	+96	+17.676	+6.912







## Reduktionsgrößen 1945

für 12<sup>h</sup> Sternzeit Greenwich

Welt-Zeit	<i>t</i>	<i>A</i>	<i>A'</i>	<i>B</i>	<i>B'</i>	<i>C</i>	<i>D</i>
1945			in 0.00001		in 0.001		
Nov. 23.328	0.8942	+0.52858 <sub>326</sub>	+345	+0.461 <sub>8</sub>	+80	+9.197 <sub>290</sub>	+17.847 <sub>173</sub>
24.325	0.8970	0.53184 <sub>328</sub>	+511	0.469 <sub>8</sub>	+50	8.907 <sub>293</sub>	18.020 <sub>168</sub>
25.323	0.8997	0.53512 <sub>331</sub>	+581	0.477 <sub>7</sub>	+9	8.614 <sub>295</sub>	18.188 <sub>163</sub>
26.320	0.9024	0.53843 <sub>334</sub>	+549	0.484 <sub>7</sub>	-33	8.319 <sub>298</sub>	18.351 <sub>157</sub>
27.317	0.9052	0.54177 <sub>336</sub>	+435	0.491 <sub>6</sub>	-66	8.021 <sub>301</sub>	18.508 <sub>151</sub>
28.314	0.9079	0.54513 <sub>339</sub>	+261	0.497 <sub>6</sub>	-85	7.720 <sub>303</sub>	18.659 <sub>145</sub>
29.312	0.9106	+0.54852 <sub>341</sub>	+72	+0.503 <sub>5</sub>	-90	+7.417 <sub>305</sub>	+18.804 <sub>140</sub>
30.309	0.9134	0.55193 <sub>343</sub>	-108	0.508 <sub>5</sub>	-78	7.112 <sub>308</sub>	18.944 <sub>134</sub>
Dez. 1.306	0.9161	0.55536 <sub>345</sub>	-253	0.513 <sub>4</sub>	-55	6.804 <sub>310</sub>	19.078 <sub>128</sub>
2.303	0.9188	0.55881 <sub>348</sub>	-346	0.517 <sub>4</sub>	-21	6.494 <sub>312</sub>	19.206 <sub>122</sub>
3.301	0.9215	0.56229 <sub>350</sub>	-380	0.521 <sub>3</sub>	+15	6.182 <sub>314</sub>	19.328 <sub>116</sub>
4.298	0.9243	0.56579 <sub>351</sub>	-355	0.524 <sub>3</sub>	+47	5.868 <sub>316</sub>	19.444 <sub>110</sub>
5.295	0.9270	+0.56930 <sub>353</sub>	-272	+0.527 <sub>2</sub>	+73	+5.552 <sub>318</sub>	+19.554 <sub>104</sub>
6.293	0.9297	0.57283 <sub>355</sub>	-144	0.529 <sub>2</sub>	+89	5.234 <sub>320</sub>	19.658 <sub>98</sub>
7.290	0.9325	0.57638 <sub>357</sub>	+4	0.531 <sub>1</sub>	+91	4.914 <sub>321</sub>	19.756 <sub>92</sub>
8.287	0.9352	0.57995 <sub>358</sub>	+147	0.532 <sub>0</sub>	+74	4.593 <sub>323</sub>	19.848 <sub>85</sub>
9.284	0.9379	0.58353 <sub>360</sub>	+248	0.532 <sub>0</sub>	+43	4.270 <sub>324</sub>	19.933 <sub>79</sub>
10.282	0.9407	0.58713 <sub>361</sub>	+280	0.532 <sub>1</sub>	+1	3.946 <sub>325</sub>	20.012 <sub>73</sub>
11.279	0.9434	+0.59074 <sub>363</sub>	+227	+0.531 <sub>2</sub>	-42	+3.621 <sub>326</sub>	+20.085 <sub>67</sub>
12.276	0.9461	0.59437 <sub>364</sub>	+93	0.529 <sub>2</sub>	-77	3.295 <sub>328</sub>	20.152 <sub>60</sub>
13.273	0.9489	0.59801 <sub>365</sub>	-92	0.527 <sub>3</sub>	-92	2.967 <sub>329</sub>	20.212 <sub>54</sub>
14.271	0.9516	0.60166 <sub>366</sub>	-283	0.524 <sub>3</sub>	-89	2.638 <sub>330</sub>	20.266 <sub>48</sub>
15.268	0.9543	0.60532 <sub>366</sub>	-425	0.521 <sub>4</sub>	-60	2.308 <sub>331</sub>	20.314 <sub>41</sub>
16.265	0.9570	0.60898 <sub>367</sub>	-477	0.517 <sub>5</sub>	-16	1.977 <sub>331</sub>	20.355 <sub>35</sub>
17.262	0.9598	+0.61265 <sub>368</sub>	-419	+0.512 <sub>6</sub>	+30	+1.646 <sub>332</sub>	+20.390 <sub>29</sub>
18.260	0.9625	0.61633 <sub>368</sub>	-258	0.506 <sub>6</sub>	+70	1.314 <sub>332</sub>	20.419 <sub>22</sub>
19.257	0.9652	0.62001 <sub>368</sub>	-30	0.500 <sub>7</sub>	+89	0.982 <sub>332</sub>	20.441 <sub>16</sub>
20.254	0.9680	0.62369 <sub>369</sub>	+215	0.493 <sub>8</sub>	+89	0.650 <sub>333</sub>	20.457 <sub>9</sub>
21.252	0.9707	0.62738 <sub>369</sub>	+420	0.485 <sub>9</sub>	+66	+0.317 <sub>333</sub>	20.466 <sub>3</sub>
22.249	0.9734	0.63107 <sub>369</sub>	+543	0.476 <sub>9</sub>	+28	-0.016 <sub>332</sub>	20.469 <sub>4</sub>
23.246	0.9762	+0.63476 <sub>369</sub>	+566	+0.467 <sub>10</sub>	-14	-0.348 <sub>333</sub>	+20.465 <sub>10</sub>
24.243	0.9789	0.63845 <sub>369</sub>	+490	0.457 <sub>11</sub>	-53	0.681 <sub>333</sub>	20.455 <sub>16</sub>
25.241	0.9816	0.64214 <sub>368</sub>	+341	0.446 <sub>11</sub>	-81	1.014 <sub>332</sub>	20.439 <sub>22</sub>
26.238	0.9843	0.64582 <sub>368</sub>	+153	0.435 <sub>12</sub>	-93	1.346 <sub>332</sub>	20.417 <sub>29</sub>
27.235	0.9871	0.64950 <sub>367</sub>	-39	0.423 <sub>13</sub>	-86	1.678 <sub>332</sub>	20.388 <sub>36</sub>
28.232	0.9898	0.65317 <sub>367</sub>	-203	0.410 <sub>13</sub>	-65	2.010 <sub>331</sub>	20.352 <sub>42</sub>
29.230	0.9925	+0.65684 <sub>366</sub>	-318	+0.397 <sub>14</sub>	-34	-2.341 <sub>330</sub>	+20.310 <sub>49</sub>
30.227	0.9953	0.66050 <sub>365</sub>	-374	0.383 <sub>15</sub>	0	2.671 <sub>329</sub>	20.261 <sub>54</sub>
31.224	0.9980	0.66415 <sub>364</sub>	-367	0.368 <sub>15</sub>	+36	3.000 <sub>329</sub>	20.207 <sub>61</sub>
32.221	1.0007	0.66779 <sub>363</sub>	-297	0.353 <sub>16</sub>	+68	3.329 <sub>327</sub>	20.146 <sub>68</sub>
33.219	1.0035	0.67142 <sub>361</sub>	-177	0.337 <sub>17</sub>	+87	3.656 <sub>326</sub>	20.078 <sub>74</sub>
34.216	1.0062	+0.67503	-31	+0.320	+93	-3.982	+20.004



# Reduktionsgrößen 1945

279\*

für 12<sup>h</sup> Sternzeit Greenwich

Welt-Zeit	t	log A	log B	log C	log D	E	
<b>1945</b>							
Jan.	0.2	—0.0013	9.50438 <sub>n</sub>	0.53618	0.48855 <sub>n</sub>	1.30518	—0.0025
	10.2	+0.0260	9.45446 <sub>n</sub>	0.51282	0.79941 <sub>n</sub>	1.28517	25
	20.2	0.0533	9.40159 <sub>n</sub>	0.48058	0.96946 <sub>n</sub>	1.24966	25
	30.1	0.0806	9.34680 <sub>n</sub>	0.44028	1.08084 <sub>n</sub>	1.19596	25
Febr.	9.1	0.1079	9.29108 <sub>n</sub>	0.39375	1.15800 <sub>n</sub>	1.11906	26
	19.1	0.1352	9.23507 <sub>n</sub>	0.34439	1.21157 <sub>n</sub>	1.00886	—0.0026
März	1.1	0.1625	9.17855 <sub>n</sub>	0.29667	1.24697 <sub>n</sub>	0.84267	26
	11.0	0.1898	9.12001 <sub>n</sub>	0.25624	1.26717 <sub>n</sub>	0.54630	26
	21.0	0.2171	9.05614 <sub>n</sub>	0.22789	1.27367 <sub>n</sub>	8.04139 <sub>n</sub>	26
	31.0	0.2444	8.98096 <sub>n</sub>	0.21564	1.26715 <sub>n</sub>	0.54654 <sub>n</sub>	26
April	10.0	0.2717	8.88395 <sub>n</sub>	0.21906	1.24741 <sub>n</sub>	0.83935 <sub>n</sub>	—0.0026
	19.9	0.2990	8.74429 <sub>n</sub>	0.23452	1.21346 <sub>n</sub>	1.00329 <sub>n</sub>	26
	29.9	0.3263	8.50447 <sub>n</sub>	0.25672	1.16301 <sub>n</sub>	1.11180 <sub>n</sub>	26
Mai	9.9	0.3536	7.75051 <sub>n</sub>	0.28035	1.09191 <sub>n</sub>	1.18792 <sub>n</sub>	26
	19.8	0.3809	8.36959	0.30038	0.99216 <sub>n</sub>	1.24175 <sub>n</sub>	26
Juni	29.8	0.4082	8.73957	0.31366	0.84634 <sub>n</sub>	1.27841 <sub>n</sub>	—0.0026
	8.8	0.4355	8.94547	0.31681	0.60563 <sub>n</sub>	1.30086 <sub>n</sub>	26
	18.8	0.4628	9.08838	0.30835	9.97405 <sub>n</sub>	1.31057 <sub>n</sub>	26
	28.7	0.4901	9.19640	0.28668	0.33666	1.30818 <sub>n</sub>	26
Juli	8.7	0.5174	9.28137	0.25018	0.71792	1.29363 <sub>n</sub>	26
	18.7	0.5447	9.34959	0.19700	0.91014	1.26604 <sub>n</sub>	—0.0026
Aug.	28.7	0.5721	9.40504	0.12418	1.03423	1.22347 <sub>n</sub>	26
	7.6	0.5994	9.45039	0.02898	1.12107	1.16268 <sub>n</sub>	26
	17.6	0.6267	9.48765	9.90687	1.18330	1.07715 <sub>n</sub>	27
	27.6	0.6540	9.51863	9.75051	1.22701	0.95424 <sub>n</sub>	27
Sept.	6.5	0.6813	9.54490	9.55145	1.25556	0.76268 <sub>n</sub>	—0.0027
	16.5	0.7086	9.56794	9.30103	1.27068	0.38003 <sub>n</sub>	27
	26.5	0.7359	9.58913	9.02531	1.27307	0.03383	27
Okt.	6.5	0.7632	9.60973	8.86923	1.26269	0.65763	27
	16.4	0.7905	9.63080	9.00432	1.23865	0.89757	27
Nov.	26.4	0.8178	9.65304	9.24304	1.19912	1.04277	—0.0027
	5.4	0.8451	9.67682	9.44404	1.14063	1.14158	27
	15.4	0.8724	9.70207	9.58771	1.05687	1.21128	27
	25.3	0.8997	9.72845	9.67852	0.93520	1.25978	27
Dez.	5.3	0.9270	9.75534	9.72181	0.74445	1.29124	27
	15.3	0.9543	9.78199	9.71684	0.36324	1.30780	—0.0027
	25.2	0.9816	9.80763	9.64933	0.00604 <sub>n</sub>	1.31046	27
	35.2	1.0089	9.83163	9.48144	0.63417 <sub>n</sub>	1.29938	—0.0027



## Übertragung mittlerer Sternörter

von dem Äquinoktium  $t_1$  auf  $t_2 = 1945.0$ 

$t_1$	$m^s(t_2-t_1)$	$n^s(t_2-t_1)$	$n''(t_2-t_1)$	$\log n^s(t_2-t_1)$	$\log n''(t_2-t_1)$
1755	+9 43.567	+253.981	+3809.71	2.404801	3.580892
1790	7 56.119	207.179	3107.69	2.316346	3.492438
1800	7 25.415	193.809	2907.13	2.287374	3.463465
1810	6 54.709	180.439	2706.58	2.256331	3.432421
1825	6 8.647	160.385	2405.77	2.205164	3.381254
1830	+5 53.292	+153.701	+2305.51	2.186677	3.362767
1835	5 37.937	147.016	2205.25	2.167364	3.343458
1840	5 22.581	140.332	2104.98	2.147157	3.323248
1845	5 7.224	133.649	2004.73	2.125966	3.302056
1850	4 51.868	126.965	1904.47	2.103684	3.279774
1855	+4 36.510	+120.281	+1804.22	2.080197	3.256290
1860	4 21.153	113.598	1703.96	2.055370	3.231460
1865	4 5.794	106.914	1603.71	2.029034	3.205126
1870	3 50.436	100.231	1503.46	2.001002	3.177092
1875	3 35.077	93.548	1403.22	1.971035	3.147126
1880	+3 19.717	+ 86.865	+1302.98	1.93885	3.114937
1885	3 4.357	80.182	1202.73	1.90408	3.080168
1890	2 48.997	73.500	1102.49	1.86629	3.042375
1895	2 33.636	66.817	1002.26	1.82489	3.000980
1900	2 18.274	60.135	902.02	1.77913	2.955216
1905	+2 2.912	+ 53.453	+ 801.79	1.72797	2.90406
1910	1 47.550	46.771	701.56	1.66998	2.84606
1915	1 32.187	40.089	601.33	1.60303	2.77911
1920	1 16.824	33.407	501.10	1.52384	2.69992
1925	1 1.460	26.725	400.88	1.42692	2.60301
1930	+0 46.096	+ 20.044	+ 300.65	1.30198	2.47806
1935	30.731	13.362	200.43	1.12587	2.30196
1940	+ 15.366	+ 6.681	+ 100.22	0.82484	2.00095
1945	0.000	0.000	0.00	—	—
1950	— 15.366	— 6.681	— 100.21	0.82484 <sub>n</sub>	2.00091 <sub>n</sub>

Sind  $\alpha_1, \delta_1$  die Koordinaten für  $t_1$  und  $\alpha_2, \delta_2$  jene für  $t_2 = 1945.0$ , ist ferner  $\alpha', \delta'$  der genäherte Sternort für die Zeit

$$\frac{1}{2}(t_1 + t_2),$$

so ist

$$\alpha_2 = \alpha_1 + m^s(t_2 - t_1) + [n^s(t_2 - t_1)] \sin \alpha' \operatorname{tg} \delta'$$

$$\delta_2 = \delta_1 + [n''(t_2 - t_1)] \cos \alpha'$$



## Übertragung mittlerer Polsternörter

von dem Äquinoktium  $t_1$  auf  $t_2 = 1945.0$

$t_1$	$90^\circ - (N)$		$(m) + (N) - 90^\circ$		$(n)$
1755	+72' 55.45	+4 <sup>m</sup> 51.697 <sup>a</sup>	+72' 58.31	+4 <sup>m</sup> 51.887 <sup>a</sup>	+63' 29.42
1790	59 30.00	3 58.000	59 31.91	3 58.127	51 47.53
1800	55 39.83	3 42.655	55 41.50	3 42.766	48 27.00
1810	51 49.64	3 27.309	51 51.08	3 27.405	45 6.48
1825	46 4.31	3 4.287	46 5.45	3 4.363	40 5.70
1830	+44 9.19	+2 56.613	+44 10.24	+2 56.683	+38 25.44
1835	42 14.07	2 48.938	42 15.03	2 49.002	36 45.19
1840	40 18.94	2 41.263	40 19.81	2 41.321	35 4.94
1845	38 23.80	2 33.587	38 24.59	2 33.640	33 24.68
1850	36 28.66	2 25.911	36 29.38	2 25.958	31 44.43
1855	+34 33.52	+2 18.235	+34 34.16	+2 18.277	+30 4.18
1860	32 38.37	2 10.558	32 38.94	2 10.596	28 23.94
1865	30 43.21	2 2.881	30 43.72	2 2.915	26 43.69
1870	28 48.05	1 55.203	28 48.50	1 55.233	25 3.45
1875	26 52.89	1 47.526	26 53.27	1 47.552	23 23.20
1880	+24 57.71	+1 39.848	+24 58.05	+1 39.870	+21 42.96
1885	23 2.54	1 32.169	23 2.82	1 32.188	20 2.72
1890	21 7.36	1 24.490	21 7.59	1 24.506	18 22.49
1895	19 12.17	1 16.811	19 12.37	1 16.824	16 42.25
1900	17 16.98	1 9.132	17 17.14	1 9.142	15 2.02
1905	+15 21.78	+1 1.452	+15 21.90	+1 1.460	+13 21.79
1910	13 26.57	0 53.772	13 26.67	0 53.778	11 41.56
1915	11 31.37	0 46.091	11 31.44	0 46.096	10 1.33
1920	9 36.15	0 38.410	9 36.20	0 38.413	8 21.10
1925	7 40.93	0 30.729	7 40.96	0 30.731	6 40.88
1930	+ 5 45.71	+0 23.047	+ 5 45.72	+0 23.048	+ 5 0.66
1935	3 50.48	0 15.365	3 50.49	0 15.366	3 20.43
1940	+ 1 55.24	+0 7.683	+ 1 55.24	+0 7.683	+ 1 40.22
1945	0 0.00	0 0.000	0 0.00	0 0.000	0 0.00
1950	- 1 55.25	-0 7.683	- 1 55.25	-0 7.683	- 1 40.21

Sind  $\alpha_1, \delta_1$  die Koordinaten für  $t_1$  und  $\alpha_2, \delta_2$  jene für  $t_2 = 1945.0$ , so hat man zur Reduktion von dem Äquinoktium  $t_1$  auf  $t_2$ :

$$\begin{aligned}
 \alpha_1 &= \alpha_1 + [90^\circ - (N)] \\
 p_1 &= \left( \operatorname{tang} \delta_1 + \cos \alpha_1 \operatorname{tang} \frac{1}{2}(n) \right) \sin(n) \\
 \operatorname{tang} \Delta \alpha_1 &= \frac{p_1 \sin \alpha_1}{1 - p_1 \cos \alpha_1} \\
 \alpha_2 &= \alpha_1 + [(m) + (N) - 90^\circ] + \Delta \alpha_1 \\
 \operatorname{tang} \frac{1}{2}(\delta_2 - \delta_1) &= \\
 \cos \left( \alpha_1 + \frac{1}{2} \Delta \alpha_1 \right) \sec \frac{1}{2} \Delta \alpha_1 \operatorname{tang} \frac{1}{2}(n) &
 \end{aligned}$$

zur Reduktion von dem Äquinoktium  $t_2$  auf  $t_1$ :

$$\begin{aligned}
 \alpha_2 &= \alpha_2 - [(m) + (N) - 90^\circ] \\
 p_2 &= - \left( \operatorname{tang} \delta_2 - \cos \alpha_2 \operatorname{tang} \frac{1}{2}(n) \right) \sin(n) \\
 \operatorname{tang} \Delta \alpha_2 &= \frac{p_2 \sin \alpha_2}{1 - p_2 \cos \alpha_2} \\
 \alpha_1 &= \alpha_2 - [90^\circ - (N)] + \Delta \alpha_2 \\
 \operatorname{tang} \frac{1}{2}(\delta_1 - \delta_2) &= \\
 - \cos \left( \alpha_2 + \frac{1}{2} \Delta \alpha_2 \right) \sec \frac{1}{2} \Delta \alpha_2 \operatorname{tang} \frac{1}{2}(n) &
 \end{aligned}$$



Reduktion von Koordinatendifferenzen  
scheinbarer Örter auf Differenzen mittlerer Örter  
für den Jahresanfang.

Sind  $\Delta\alpha$  und  $\Delta\delta$  die gemessenen Koordinatendifferenzen der scheinbaren Örter im Sinne Objekt minus Stern,  $d\Delta\alpha$  und  $d\Delta\delta$  die an ihnen anzubringenden Korrekturen, um Koordinatendifferenzen zu erhalten, die sich auf das mittlere Äquinoktium des Jahresanfangs beziehen, so wird

$$\begin{aligned}d\Delta\alpha &= (d\Delta\alpha)_1 + (d\Delta\alpha)_2 \\d\Delta\delta &= (d\Delta\delta)_1 + (d\Delta\delta)_2,\end{aligned}$$

wobei

$$\begin{aligned}(d\Delta\alpha)_1 &= -j \cos(G + \alpha) \frac{\operatorname{tg} \delta}{15} \Delta\alpha^m - j \sin(G + \alpha) \frac{\sec^2 \delta}{225} \Delta\delta' \\(d\Delta\alpha)_2 &= -k \cos(H + \alpha) \frac{\sec \delta}{15} \Delta\alpha^m - k \sin(H + \alpha) \frac{\operatorname{tg} \delta \sec \delta}{225} \Delta\delta' \\(d\Delta\delta)_1 &= j \sin(G + \alpha) \Delta\alpha^m \\(d\Delta\delta)_2 &= k \sin(H + \alpha) \sin \delta \Delta\alpha^m - k \cos(H + \alpha) \frac{\cos \delta}{15} \Delta\delta' \\&\quad + [0.0003 i \sin \delta \Delta\delta']\end{aligned}$$

Hierin bezeichnen  $(d\Delta\alpha)_1$  und  $(d\Delta\delta)_1$  den Einfluß der Präzession und Nutation,  $(d\Delta\alpha)_2$  und  $(d\Delta\delta)_2$  den Einfluß der Aberration.

Die Größen  $G$ ,  $H$ ,  $j$ ,  $k$ ,  $i$  sind auf S. 252\*—269\* zu finden. Die Faktoren  $\frac{i}{15} \operatorname{tg} \delta$ ,  $\frac{i}{225} \sec^2 \delta$ ,  $\frac{i}{15} \sec \delta$ ,  $\frac{i}{225} \operatorname{tg} \delta \sec \delta$ ,  $\sin \delta$ ,  $\frac{i}{15} \cos \delta$  entnehme man der Zusammenstellung auf S. 283\*. Die numerischen Werte der Funktionen sinus und cosinus sind auf S. 284\* enthalten.  $\Delta\alpha^m$  bedeutet die in Zeitminuten ausgedrückte gemessene Rektaszensionsdifferenz,  $\Delta\delta'$  ist die in Bogenminuten ausgedrückte gemessene Deklinationsdifferenz. Die Größen  $d\Delta\alpha$  und  $d\Delta\delta$  ergeben sich in Zeit- bzw. Bogensekunden. Das in eckige Klammern gesetzte Glied  $0.0003 i \sin \delta \Delta\delta'$  in der Formel für  $(d\Delta\delta)_2$  beträgt für  $\Delta\delta' = 10'$  im Maximum  $0.02$  und kann daher in den meisten Fällen unberücksichtigt bleiben.



$\delta$	$\frac{1}{15} \text{tg } \delta$	$\frac{1}{225} \text{sec}^2 \delta$	$\frac{1}{15} \text{sec } \delta$	$\frac{1}{225} \text{tg } \delta \text{sec } \delta$	$\sin \delta$	$\frac{1}{15} \cos \delta$	$\text{tg } \delta$	$\frac{1}{15} \text{sec}^2 \delta$	$\delta$
0°	0.000	0.004	0.067	0.000	0.00	0.07	0.00	0.07	0°
5	0.006	0.004	0.067	0.000	0.09	0.07	0.09	0.07	5
10	0.012	0.005	0.068	0.001	0.17	0.07	0.18	0.07	10
15	0.018	0.005	0.069	0.001	0.26	0.06	0.27	0.07	15
20	0.024	0.005	0.071	0.002	0.34	0.06	0.36	0.08	20
25	0.031	0.005	0.074	0.002	0.42	0.06	0.47	0.08	25
30	0.038	0.006	0.077	0.003	0.50	0.06	0.58	0.09	30
35	0.047	0.007	0.081	0.004	0.57	0.05	0.70	0.10	35
40	0.056	0.008	0.087	0.005	0.64	0.05	0.84	0.11	40
40	0.056	0.008	0.087	0.005	0.64	0.05	0.84	0.11	40
42	0.060	0.008	0.090	0.005	0.67	0.05	0.90	0.12	42
44	0.064	0.009	0.093	0.006	0.69	0.05	0.97	0.13	44
46	0.069	0.009	0.096	0.007	0.72	0.05	1.04	0.14	46
48	0.074	0.010	0.100	0.007	0.74	0.04	1.11	0.15	48
50	0.079	0.011	0.104	0.008	0.77	0.04	1.19	0.16	50
52	0.085	0.012	0.108	0.009	0.79	0.04	1.28	0.18	52
54	0.092	0.013	0.113	0.010	0.81	0.04	1.38	0.19	54
56	0.099	0.014	0.119	0.012	0.83	0.04	1.48	0.21	56
58	0.107	0.016	0.126	0.013	0.85	0.04	1.60	0.24	58
60	0.115	0.018	0.133	0.015	0.87	0.03	1.73	0.27	60
60	0.115	0.018	0.133	0.015	0.87	0.03	1.73	0.27	60
61	0.120	0.019	0.138	0.017	0.87	0.03	1.80	0.28	61
62	0.125	0.020	0.142	0.018	0.88	0.03	1.88	0.30	62
63	0.131	0.022	0.147	0.019	0.89	0.03	1.96	0.32	63
64	0.137	0.023	0.152	0.021	0.90	0.03	2.05	0.35	64
65	0.143	0.025	0.158	0.023	0.91	0.03	2.14	0.37	65
66	0.150	0.027	0.164	0.025	0.91	0.03	2.25	0.40	66
67	0.157	0.029	0.171	0.027	0.92	0.03	2.36	0.44	67
68	0.165	0.032	0.178	0.029	0.93	0.02	2.48	0.48	68
69	0.174	0.035	0.186	0.032	0.93	0.02	2.61	0.52	69
70	0.183	0.038	0.195	0.036	0.94	0.02	2.75	0.57	70
71	0.194	0.042	0.205	0.040	0.95	0.02	2.90	0.63	71
72	0.205	0.047	0.216	0.044	0.95	0.02	3.08	0.70	72
73	0.218	0.052	0.228	0.050	0.96	0.02	3.27	0.78	73
74	0.232	0.058	0.242	0.056	0.96	0.02	3.49	0.88	74
75	0.249	0.066	0.258	0.064	0.97	0.02	3.73	1.00	75
75.0	0.249	0.066	0.258	0.064	0.97	0.02	3.73	1.00	75.0
75.5	0.258	0.071	0.266	0.069	0.97	0.02	3.87	1.06	75.5
76.0	0.267	0.076	0.276	0.074	0.97	0.02	4.01	1.14	76.0
76.5	0.278	0.082	0.286	0.079	0.97	0.02	4.17	1.22	76.5
77.0	0.289	0.088	0.296	0.086	0.97	0.01	4.33	1.32	77.0
77.5	0.301	0.095	0.308	0.093	0.98	0.01	4.51	1.42	77.5
78.0	0.314	0.103	0.321	0.101	0.98	0.01	4.70	1.54	78.0
78.5	0.328	0.112	0.334	0.110	0.98	0.01	4.92	1.68	78.5
79.0	0.343	0.122	0.349	0.120	0.98	0.01	5.14	1.83	79.0
79.5	0.360	0.134	0.366	0.132	0.98	0.01	5.40	2.01	79.5
80.0	0.378	0.147	0.384	0.145	0.98	0.01	5.67	2.21	80.0



## Sinus

	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	
0 <sup>m</sup>	0.000	0.259	0.500	0.707	0.866	0.966	60
1	0.004	0.263	0.504	0.710	0.868	0.967	59
2	0.009	0.267	0.508	0.713	0.870	0.968	58
3	0.013	0.271	0.511	0.716	0.872	0.969	57
4	0.017	0.276	0.515	0.719	0.875	0.970	56
5	0.022	0.280	0.519	0.722	0.877	0.971	55
6	0.026	0.284	0.522	0.725	0.879	0.972	54
7	0.031	0.288	0.526	0.728	0.881	0.973	53
8	0.035	0.292	0.530	0.731	0.883	0.974	52
9	0.039	0.297	0.534	0.734	0.885	0.975	51
10	0.044	0.301	0.537	0.737	0.887	0.976	50
11	0.048	0.305	0.541	0.740	0.889	0.977	49
12	0.052	0.309	0.545	0.743	0.891	0.978	48
13	0.057	0.313	0.548	0.746	0.893	0.979	47
14	0.061	0.317	0.552	0.749	0.895	0.980	46
15	0.065	0.321	0.556	0.752	0.897	0.981	45
16	0.070	0.326	0.559	0.755	0.899	0.982	44
17	0.074	0.330	0.563	0.758	0.901	0.982	43
18	0.078	0.334	0.566	0.760	0.903	0.983	42
19	0.083	0.338	0.570	0.763	0.904	0.984	41
20	0.087	0.342	0.574	0.766	0.906	0.985	40
21	0.092	0.346	0.577	0.769	0.908	0.986	39
22	0.096	0.350	0.581	0.772	0.910	0.986	38
23	0.100	0.354	0.584	0.774	0.912	0.987	37
24	0.105	0.358	0.588	0.777	0.914	0.988	36
25	0.109	0.362	0.591	0.780	0.915	0.988	35
26	0.113	0.367	0.595	0.783	0.917	0.989	34
27	0.118	0.371	0.598	0.785	0.919	0.990	33
28	0.122	0.375	0.602	0.788	0.921	0.990	32
29	0.126	0.379	0.605	0.791	0.922	0.991	31
30	0.131	0.383	0.609	0.793	0.924	0.991	30
31	0.135	0.387	0.612	0.796	0.926	0.992	29
32	0.139	0.391	0.616	0.799	0.927	0.993	28
33	0.143	0.395	0.619	0.801	0.929	0.993	27
34	0.148	0.399	0.623	0.804	0.930	0.994	26
35	0.152	0.403	0.626	0.806	0.932	0.994	25
36	0.156	0.407	0.629	0.809	0.934	0.995	24
37	0.161	0.411	0.633	0.812	0.935	0.995	23
38	0.165	0.415	0.636	0.814	0.937	0.995	22
39	0.169	0.419	0.639	0.817	0.938	0.996	21
40	0.174	0.423	0.643	0.819	0.940	0.996	20
41	0.178	0.427	0.646	0.822	0.941	0.997	19
42	0.182	0.431	0.649	0.824	0.943	0.997	18
43	0.187	0.434	0.653	0.827	0.944	0.997	17
44	0.191	0.438	0.656	0.829	0.946	0.998	16
45	0.195	0.442	0.659	0.831	0.947	0.998	15
46	0.199	0.446	0.663	0.834	0.948	0.998	14
47	0.204	0.450	0.666	0.836	0.950	0.998	13
48	0.208	0.454	0.669	0.839	0.951	0.999	12
49	0.212	0.458	0.672	0.841	0.952	0.999	11
50	0.216	0.462	0.676	0.843	0.954	0.999	10
51	0.221	0.466	0.679	0.846	0.955	0.999	9
52	0.225	0.469	0.682	0.848	0.956	0.999	8
53	0.229	0.473	0.685	0.850	0.958	1.000	7
54	0.233	0.477	0.688	0.853	0.959	1.000	6
55	0.238	0.481	0.692	0.855	0.960	1.000	5
56	0.242	0.485	0.695	0.857	0.961	1.000	4
57	0.246	0.489	0.698	0.859	0.962	1.000	3
58	0.250	0.492	0.701	0.862	0.964	1.000	2
59	0.255	0.496	0.704	0.864	0.965	1.000	1
60	0.259	0.500	0.707	0.866	0.966	1.000	0 <sup>m</sup>

5<sup>h</sup>4<sup>h</sup>3<sup>h</sup>2<sup>h</sup>1<sup>h</sup>0<sup>h</sup>

## Cosinus



Übertragung von Rektaszensions- und Deklinationsdifferenzen  
vom mittleren Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0

$\alpha$	$a_1$	$a_2$	$d_1$	$\alpha$	$\alpha$	$a_1$	$a_2$	$d_1$	$\alpha$
<sup>h</sup> 0	+0.0292+	+0.0000-	-0.000+	<sup>h</sup> 24	<sup>h</sup> 6	-0.0000-	+0.0292-	-0.437+	<sup>h</sup> 18
0	0291	0013	019	0	0	0013	0291	437	0
10	0290	0025	038	50	10	0025	0290	436	50
20	0289	0038	057	40	20	0038	0289	434	40
30	0287	0051	076	30	30	0051	0287	431	30
40	0285	0063	095	20	40	0063	0285	427	20
50				10	50				10
1 0	+0.0282+	+0.0075-	-0.113+	23 0	7 0	-0.0075-	+0.0282-	-0.422+	17 0
10	0278	0088	132	50	10	0088	0278	417	50
20	0274	0100	150	40	20	0100	0274	411	40
30	0269	0112	167	30	30	0112	0269	404	30
40	0264	0123	185	20	40	0123	0264	396	20
50	0259	0135	202	10	50	0135	0259	388	10
2 0	+0.0252+	+0.0146-	-0.219+	22 0	8 0	-0.0146-	+0.0252-	-0.379+	16 0
10	0246	0157	235	50	10	0157	0246	369	50
20	0239	0167	251	40	20	0167	0239	358	40
30	0231	0177	266	30	30	0177	0231	347	30
40	0223	0187	281	20	40	0187	0223	335	20
50	0215	0197	295	10	50	0197	0215	322	10
3 0	+0.0206+	+0.0206-	-0.309+	21 0	9 0	-0.0206-	+0.0206-	-0.309+	15 0
10	0197	0215	322	50	10	0215	0197	295	50
20	0187	0223	335	40	20	0223	0187	281	40
30	0177	0231	347	30	30	0231	0177	266	30
40	0167	0239	358	20	40	0239	0167	251	20
50	0157	0246	369	10	50	0246	0157	235	10
4 0	+0.0146+	+0.0252-	-0.379+	20 0	10 0	-0.0252-	+0.0146-	-0.219+	14 0
10	0135	0259	388	50	10	0259	0135	202	50
20	0123	0264	396	40	20	0264	0123	185	40
30	0112	0269	404	30	30	0269	0112	167	30
40	0100	0274	411	20	40	0274	0100	150	20
50	0088	0278	417	10	50	0278	0088	132	10
5 0	+0.0075+	+0.0282-	-0.422+	19 0	11 0	-0.0282-	+0.0075-	-0.113+	13 0
10	0063	0285	427	50	10	0285	0063	095	50
20	0051	0287	431	40	20	0287	0051	076	40
30	0038	0289	434	30	30	0289	0038	057	30
40	0025	0290	436	20	40	0290	0025	038	20
50	0013	0291	437	10	50	0291	0013	019	10
6 0	+0.0000+	+0.0292-	-0.437+	18 0	12 0	-0.0292-	+0.0000-	-0.000+	12 0

Für  $\alpha$  zwischen  $12^h$  und  $24^h$  gelten die Vorzeichen zur Rechten.

$$\Delta \alpha_{1950.0} = \Delta \alpha_{1945.0} + a_1 \cdot \operatorname{tg} \delta \cdot \Delta \alpha^m + a_2 \cdot \frac{1}{15} \sec^2 \delta \cdot \Delta \delta';$$

$$\Delta \delta_{1950.0} = \Delta \delta_{1945.0} + d_1 \cdot \Delta \alpha^m$$

$\Delta \alpha^m$  bedeutet die Rektaszensionsdifferenz in Zeitminuten,  $\Delta \delta'$  ist die Deklinationsdifferenz in Bogenminuten.

Die Werte von  $\operatorname{tg} \delta$  und  $\frac{1}{15} \sec^2 \delta$  sind auf S. 283\* enthalten.



## Reduktionsgrößen 1945

Reduktion vom mittleren Äquinoktium 1950.0 auf das jedesmalige  
wahre Äquinoktium

0 <sup>h</sup> Welt-Zeit	<i>f</i>	log <i>g</i>	<i>G</i>	0 <sup>h</sup> Welt-Zeit	<i>f</i>	log <i>g</i>	<i>G</i>
1945				1945			
Jan. 0	-16.353	2.02812	11 <sup>h</sup> 52 <sup>m</sup> 36 <sup>s</sup>	Juni 29	-14.883	1.98707	11 <sup>h</sup> 55 <sup>m</sup> 26 <sup>s</sup>
5	16.299	2.02667	11 52 46	Juli 4	14.830	1.98551	11 55 36
10	16.246	2.02525	11 52 57	9	14.778	1.98398	11 55 47
15	16.195	2.02386	11 53 10	14	14.728	1.98249	11 56 0
20	16.145	2.02252	11 53 25	19	14.678	1.98102	11 56 15
25	-16.098	2.02122	11 53 41	24	-14.631	1.97959	11 56 31
30	16.053	2.02000	11 53 58	29	14.585	1.97822	11 56 49
Febr. 4	16.010	2.01884	11 54 15	Aug. 3	14.541	1.97690	11 57 7
9	15.970	2.01773	11 54 33	8	14.499	1.97565	11 57 26
14	15.933	2.01670	11 54 50	13	14.459	1.97444	11 57 45
19	-15.898	2.01572	11 55 6	18	-14.421	1.97331	11 58 4
24	15.864	2.01480	11 55 22	23	14.386	1.97222	11 58 22
März 1	15.833	2.01392	11 55 36	28	14.352	1.97119	11 58 39
6	15.803	2.01310	11 55 48	Sept. 2	14.319	1.97022	11 58 55
11	15.774	2.01231	11 55 59	7	14.288	1.96927	11 59 10
16	-15.746	2.01152	11 56 7	12	-14.259	1.96836	11 59 21
21	15.718	2.01077	11 56 13	17	14.230	1.96748	11 59 31
26	15.691	2.01000	11 56 17	22	14.201	1.96660	11 59 39
31	15.663	2.00922	11 56 19	27	14.173	1.96573	11 59 45
April 5	15.634	2.00842	11 56 18	Okt. 2	14.144	1.96485	11 59 48
10	-15.604	2.00758	11 56 16	7	-14.114	1.96394	11 59 49
15	15.572	2.00670	11 56 12	12	14.084	1.96300	11 59 48
20	15.539	2.00577	11 56 7	17	14.052	1.96201	11 59 44
25	15.504	2.00479	11 56 1	22	14.018	1.96097	11 59 39
30	15.466	2.00375	11 55 54	27	13.982	1.95985	11 59 33
Mai 5	-15.427	2.00263	11 55 46	Nov. 1	-13.944	1.95867	11 59 25
10	15.385	2.00148	11 55 38	6	13.904	1.95740	11 59 17
15	15.341	2.00024	11 55 31	11	13.861	1.95606	11 59 8
20	15.295	1.99894	11 55 24	16	13.815	1.95463	11 59 0
25	15.248	1.99758	11 55 19	21	13.767	1.95314	11 58 53
30	-15.198	1.99617	11 55 14	26	-13.717	1.95156	11 58 46
Juni 4	15.148	1.99473	11 55 11	Dez. 1	13.665	1.94991	11 58 41
9	15.096	1.99323	11 55 11	6	13.612	1.94820	11 58 38
14	15.043	1.99172	11 55 11	11	13.556	1.94643	11 58 37
19	14.989	1.99017	11 55 14	16	13.500	1.94463	11 58 39
24	-14.936	1.98861	11 55 19	21	-13.444	1.94280	11 58 44
29	14.883	1.98707	11 55 26	26	13.387	1.94096	11 58 51
Juli 4	-14.830	1.98551	11 55 36	31	-13.330	1.93911	11 59 1

Die mit den vorstehend gegebenen Größen *f*, log *g* und *G* berechnete Reduktion vom mittleren Äquinoktium 1950.0 auf das wahre Äquinoktium der Epoche bedarf noch einer Verbesserung, die von dem Einfluß der Variatio saecularis herrührt und auf Seite 287\* enthalten ist.

Es wird somit: Red. in  $\alpha = f + \frac{1}{15} g \sin(G + \alpha) \operatorname{tg} \delta + \text{Korr. nach S. 287}^*$

Red. in  $\delta = \frac{1}{15} g \cos(G + \alpha) + \text{Korr. nach S. 287}^*$







## Übertragung von Sternörtertern vom mittleren

$\alpha$	$0^h, 12^h$		$1^h, 13^h$		$2^h, 14^h$		$3^h, 15^h$		$4^h, 16^h$		$5^h, 17^h$		$\alpha$
m	+A—	+D—	+A—	+D—	+A—	+D—	+A—	+D—	+A—	+D—	+A—	+D—	m
0	0.004	100.21	1.733	96.78	3.344	86.76	4.727	70.82	5.788	50.06	6.454	25.88	0
1	0.033	100.21	1.761	96.67	3.369	86.54	4.748	70.51	5.803	49.68	6.462	25.46	1
2	0.062	100.21	1.789	96.56	3.394	86.32	4.768	70.20	5.817	49.30	6.469	25.04	2
3	0.091	100.21	1.817	96.44	3.419	86.10	4.788	69.89	5.831	48.92	6.476	24.62	3
4	0.120	100.20	1.845	96.32	3.444	85.87	4.808	69.57	5.845	48.54	6.483	24.19	4
5	0.150	100.19	1.873	96.20	3.469	85.65	4.828	69.26	5.859	48.16	6.490	23.77	5
6	0.179	100.18	1.901	96.08	3.494	85.42	4.848	68.94	5.873	47.78	6.497	23.35	6
7	0.208	100.17	1.929	95.95	3.519	85.19	4.868	68.62	5.887	47.39	6.504	22.92	7
8	0.237	100.15	1.957	95.82	3.543	84.96	4.888	68.30	5.901	47.00	6.511	22.49	8
9	0.266	100.13	1.985	95.69	3.568	84.73	4.908	67.98	5.915	46.62	6.518	22.07	9
10	0.295	100.11	2.013	95.56	3.593	84.50	4.928	67.66	5.928	46.23	6.524	21.64	10
11	0.324	100.09	2.041	95.43	3.618	84.26	4.948	67.34	5.941	45.84	6.530	21.21	11
12	0.353	100.07	2.068	95.29	3.642	84.02	4.967	67.01	5.954	45.45	6.536	20.78	12
13	0.383	100.05	2.096	95.16	3.667	83.78	4.987	66.69	5.967	45.06	6.542	20.36	13
14	0.412	100.03	2.124	95.02	3.691	83.54	5.007	66.36	5.980	44.67	6.548	19.93	14
15	0.441	100.00	2.152	94.88	3.715	83.30	5.026	66.03	5.993	44.28	6.554	19.50	15
16	0.470	99.97	2.179	94.74	3.739	83.05	5.045	65.70	6.006	43.88	6.559	19.07	16
17	0.499	99.94	2.207	94.60	3.763	82.81	5.064	65.37	6.019	43.49	6.565	18.64	17
18	0.528	99.91	2.235	94.45	3.787	82.56	5.083	65.04	6.032	43.10	6.570	18.21	18
19	0.557	99.87	2.262	94.30	3.811	82.31	5.102	64.71	6.045	42.70	6.575	17.78	19
20	0.586	99.83	2.289	94.15	3.835	82.06	5.120	64.37	6.057	42.30	6.580	17.35	20
21	0.615	99.79	2.317	94.00	3.859	81.81	5.139	64.04	6.069	41.91	6.585	16.92	21
22	0.644	99.75	2.344	93.85	3.883	81.56	5.158	63.70	6.081	41.51	6.590	16.49	22
23	0.673	99.71	2.371	93.70	3.907	81.30	5.176	63.36	6.093	41.11	6.595	16.06	23
24	0.702	99.66	2.398	93.54	3.930	81.04	5.194	63.02	6.105	40.71	6.599	15.62	24
25	0.731	99.61	2.425	93.38	3.954	80.78	5.213	62.68	6.117	40.31	6.604	15.19	25
26	0.760	99.56	2.452	93.22	3.978	80.52	5.231	62.34	6.129	39.91	6.608	14.76	26
27	0.789	99.51	2.479	93.06	4.001	80.26	5.249	62.00	6.140	39.51	6.612	14.33	27
28	0.818	99.46	2.506	92.90	4.024	80.00	5.267	61.65	6.151	39.11	6.616	13.89	28
29	0.847	99.41	2.533	92.74	4.047	79.74	5.285	61.31	6.163	38.71	6.620	13.46	29
30	0.876	99.35	2.560	92.57	4.070	79.48	5.303	60.97	6.174	38.31	6.624	13.03	30
31	0.905	99.29	2.587	92.40	4.093	79.21	5.321	60.62	6.185	37.90	6.628	12.60	31
32	0.934	99.23	2.614	92.23	4.116	78.94	5.338	60.27	6.196	37.49	6.632	12.16	32
33	0.963	99.17	2.641	92.06	4.139	78.67	5.356	59.92	6.207	37.09	6.636	11.73	33
34	0.992	99.11	2.668	91.89	4.162	78.40	5.373	59.57	6.218	36.68	6.639	11.30	34
35	1.021	99.04	2.695	91.71	4.185	78.13	5.390	59.22	6.228	36.27	6.642	10.86	35
36	1.049	98.97	2.721	91.53	4.207	77.85	5.407	58.86	6.238	35.86	6.645	10.42	36
37	1.078	98.90	2.748	91.35	4.230	77.57	5.424	58.51	6.249	35.45	6.648	9.99	37
38	1.107	98.83	2.775	91.17	4.253	77.29	5.441	58.15	6.259	35.04	6.651	9.56	38
39	1.136	98.76	2.801	90.99	4.275	77.01	5.458	57.79	6.269	34.63	6.654	9.12	39
40	1.164	98.68	2.827	90.80	4.297	76.73	5.475	57.43	6.279	34.22	6.656	8.68	40
41	1.193	98.60	2.854	90.62	4.320	76.45	5.492	57.07	6.289	33.81	6.659	8.25	41
42	1.222	98.52	2.880	90.43	4.342	76.17	5.509	56.71	6.299	33.40	6.661	7.81	42
43	1.250	98.44	2.906	90.24	4.364	75.89	5.525	56.35	6.309	32.99	6.663	7.37	43
44	1.278	98.36	2.932	90.05	4.386	75.60	5.541	55.99	6.318	32.57	6.665	6.93	44
45	1.306	98.28	2.958	89.86	4.408	75.31	5.557	55.63	6.328	32.16	6.667	6.49	45
46	1.335	98.19	2.984	89.67	4.430	75.02	5.573	55.27	6.337	31.75	6.669	6.05	46
47	1.364	98.10	3.010	89.47	4.452	74.73	5.589	54.90	6.346	31.34	6.671	5.62	47
48	1.393	98.01	3.036	89.27	4.473	74.44	5.605	54.53	6.355	30.92	6.672	5.19	48
49	1.422	97.92	3.062	89.07	4.495	74.15	5.621	54.17	6.364	30.51	6.674	4.76	49
50	1.451	97.83	3.088	88.87	4.517	73.85	5.637	53.80	6.373	30.09	6.675	4.32	50
51	1.479	97.73	3.114	88.67	4.538	73.55	5.653	53.43	6.382	29.67	6.676	3.88	51
52	1.507	97.63	3.140	88.46	4.559	73.25	5.668	53.06	6.390	29.25	6.677	3.44	52
53	1.536	97.53	3.166	88.25	4.581	72.95	5.684	52.69	6.399	28.83	6.678	3.01	53
54	1.564	97.43	3.192	88.04	4.602	72.65	5.699	52.32	6.407	28.41	6.679	2.57	54
55	1.592	97.33	3.217	87.83	4.623	72.35	5.714	51.95	6.415	27.99	6.680	2.13	55
56	1.620	97.22	3.242	87.62	4.644	72.05	5.729	51.57	6.423	27.57	6.680	1.69	56
57	1.649	97.11	3.268	87.41	4.665	71.75	5.744	51.20	6.431	27.15	6.681	1.26	57
58	1.677	97.00	3.294	87.20	4.686	71.44	5.759	50.82	6.439	26.73	6.681	0.82	58
59	1.705	96.89	3.319	86.98	4.707	71.13	5.774	50.44	6.447	26.31	6.681	0.38	59
60	1.733	96.78	3.344	86.76	4.727	70.82	5.788	50.06	6.454	25.88	6.681	—	60



# Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0 289\*

α	6 <sup>h</sup> , 18 <sup>h</sup>		7 <sup>h</sup> , 19 <sup>h</sup>		8 <sup>h</sup> , 20 <sup>h</sup>		9 <sup>h</sup> , 21 <sup>h</sup>		10 <sup>h</sup> , 22 <sup>h</sup>		11 <sup>h</sup> , 23 <sup>h</sup>		α
m	+ A -	- D +	+ A -	- D +	+ A -	- D +	+ A -	- D +	+ A -	- D +	+ A -	- D +	m
0	6.681	0.06	6.452	25.99	5.784	50.16	4.721	70.90	3.337	86.82	1.726	96.81	0
1	6.681	0.49	6.445	26.42	5.770	50.54	4.701	71.21	3.312	87.04	1.698	96.92	1
2	6.681	0.92	6.437	26.84	5.755	50.92	4.680	71.52	3.287	87.26	1.670	97.03	2
3	6.681	1.36	6.429	27.26	5.740	51.29	4.659	71.83	3.262	87.47	1.642	97.14	3
4	6.680	1.80	6.421	27.68	5.725	51.66	4.638	72.13	3.236	87.68	1.613	97.25	4
5	6.680	2.24	6.413	28.10	5.710	52.04	4.617	72.43	3.211	87.89	1.585	97.36	5
6	6.679	2.68	6.405	28.52	5.695	52.41	4.596	72.73	3.185	88.10	1.557	97.46	6
7	6.678	3.12	6.397	28.94	5.680	52.78	4.575	73.03	3.159	88.31	1.528	97.56	7
8	6.677	3.55	6.388	29.35	5.664	53.15	4.554	73.33	3.133	88.51	1.499	97.66	8
9	6.676	3.99	6.380	29.77	5.649	53.52	4.533	73.63	3.108	88.72	1.471	97.76	9
10	6.675	4.43	6.371	30.19	5.633	53.89	4.512	73.93	3.082	88.92	1.443	97.86	10
11	6.674	4.87	6.362	30.61	5.617	54.26	4.490	74.22	3.056	89.12	1.414	97.95	11
12	6.672	5.30	6.353	31.02	5.601	54.63	4.468	74.51	3.030	89.32	1.385	98.04	12
13	6.670	5.74	6.344	31.44	5.585	55.00	4.446	74.80	3.004	89.52	1.357	98.13	13
14	6.668	6.18	6.335	31.86	5.569	55.37	4.424	75.09	2.978	89.72	1.329	98.22	14
15	6.666	6.62	6.326	32.27	5.553	55.73	4.402	75.38	2.952	89.91	1.300	98.30	15
16	6.664	7.05	6.316	32.68	5.537	56.09	4.380	75.67	2.925	90.10	1.271	98.38	16
17	6.662	7.49	6.307	33.10	5.521	56.45	4.358	75.96	2.899	90.29	1.243	98.46	17
18	6.660	7.93	6.297	33.51	5.505	56.81	4.336	76.24	2.873	90.48	1.214	98.54	18
19	6.658	8.36	6.287	33.92	5.488	57.17	4.314	76.52	2.847	90.67	1.185	98.62	19
20	6.655	8.79	6.277	34.33	5.471	57.53	4.292	76.80	2.820	90.85	1.156	98.70	20
21	6.653	9.23	6.267	34.74	5.454	57.89	4.270	77.08	2.794	91.03	1.128	98.78	21
22	6.650	9.67	6.257	35.15	5.437	58.25	4.248	77.36	2.768	91.21	1.099	98.85	22
23	6.647	10.10	6.247	35.56	5.420	58.60	4.225	77.64	2.741	91.39	1.070	98.92	23
24	6.644	10.53	6.236	35.97	5.403	58.95	4.202	77.91	2.714	91.57	1.041	98.99	24
25	6.641	10.97	6.226	36.38	5.386	59.30	4.179	78.19	2.688	91.75	1.013	99.06	25
26	6.638	11.41	6.215	36.79	5.369	59.65	4.156	78.46	2.661	91.93	0.984	99.13	26
27	6.635	11.84	6.204	37.19	5.351	60.00	4.133	78.73	2.634	92.10	0.955	99.19	27
28	6.631	12.27	6.193	37.59	5.333	60.35	4.110	79.00	2.607	92.27	0.926	99.25	28
29	6.627	12.71	6.182	38.00	5.316	60.70	4.087	79.27	2.580	92.44	0.898	99.31	29
30	6.623	13.14	6.171	38.41	5.298	61.05	4.064	79.54	2.553	92.61	0.869	99.37	30
31	6.619	13.57	6.160	38.81	5.280	61.40	4.041	79.81	2.526	92.78	0.840	99.42	31
32	6.615	14.00	6.148	39.21	5.262	61.74	4.018	80.07	2.499	92.94	0.811	99.47	32
33	6.611	14.44	6.137	39.61	5.244	62.09	3.995	80.33	2.472	93.10	0.782	99.52	33
34	6.607	14.87	6.126	40.01	5.226	62.43	3.972	80.59	2.445	93.26	0.753	99.57	34
35	6.603	15.30	6.114	40.41	5.208	62.77	3.948	80.85	2.418	93.42	0.724	99.62	35
36	6.598	15.73	6.102	40.81	5.190	63.11	3.924	81.11	2.391	93.58	0.695	99.67	36
37	6.594	16.17	6.090	41.21	5.172	63.45	3.901	81.37	2.364	93.74	0.666	99.72	37
38	6.589	16.60	6.078	41.61	5.154	63.79	3.877	81.62	2.337	93.89	0.637	99.76	38
39	6.584	17.03	6.066	42.01	5.135	64.13	3.853	81.87	2.310	94.04	0.608	99.80	39
40	6.579	17.46	6.053	42.40	5.116	64.46	3.829	82.12	2.282	94.19	0.579	99.84	40
41	6.574	17.89	6.041	42.80	5.097	64.80	3.805	82.37	2.255	94.34	0.550	99.88	41
42	6.569	18.32	6.029	43.20	5.078	65.13	3.781	82.62	2.228	94.49	0.521	99.91	42
43	6.563	18.75	6.016	43.59	5.059	65.46	3.757	82.87	2.200	94.63	0.492	99.94	43
44	6.557	19.18	6.003	43.98	5.040	65.79	3.733	83.11	2.172	94.77	0.463	99.97	44
45	6.552	19.61	5.990	44.38	5.021	66.12	3.709	83.36	2.145	94.91	0.433	100.00	45
46	6.546	20.04	5.977	44.77	5.002	66.45	3.685	83.60	2.117	95.05	0.404	100.03	46
47	6.540	20.47	5.964	45.16	4.982	66.78	3.661	83.84	2.089	95.19	0.375	100.06	47
48	6.534	20.89	5.951	45.55	4.962	67.10	3.636	84.08	2.061	95.33	0.346	100.08	48
49	6.528	21.32	5.938	45.94	4.943	67.43	3.612	84.32	2.034	95.46	0.317	100.10	49
50	6.522	21.75	5.925	46.33	4.923	67.75	3.587	84.56	2.006	95.59	0.288	100.12	50
51	6.516	22.18	5.911	46.72	4.903	68.07	3.562	84.79	1.978	95.72	0.259	100.14	51
52	6.509	22.60	5.897	47.10	4.883	68.39	3.537	85.02	1.950	95.85	0.229	100.15	52
53	6.503	23.03	5.883	47.49	4.863	68.71	3.513	85.25	1.922	95.98	0.200	100.17	53
54	6.496	23.46	5.869	47.88	4.843	69.03	3.488	85.48	1.894	96.11	0.171	100.18	54
55	6.489	23.88	5.855	48.26	4.823	69.34	3.463	85.71	1.866	96.23	0.142	100.19	55
56	6.482	24.30	5.841	48.64	4.803	69.65	3.438	85.93	1.838	96.35	0.113	100.20	56
57	6.475	24.73	5.827	49.02	4.783	69.97	3.413	86.16	1.810	96.47	0.084	100.21	57
58	6.468	25.15	5.813	49.40	4.763	70.28	3.388	86.38	1.782	96.59	0.055	100.21	58
59	6.460	25.57	5.799	49.78	4.742	70.59	3.362	86.60	1.754	96.70	0.026	100.21	59
60	6.452	25.99	5.784	50.16	4.721	70.90	3.337	86.82	1.726	96.81	—	100.21	60



Übertragung von Sternörter von dem mittleren Äquinoktium 1945.0  
auf das Normaläquinoktium 1950.0

$\alpha$	$B$	$\alpha$	$\alpha$	$B$	$\alpha$	$C$	$\Delta C$	$P$	$C$	$\Delta C$	$P$
<sup>h</sup> <sup>m</sup> 0 0	+15.366	<sup>h</sup> <sup>m</sup> 12 0	<sup>h</sup> <sup>m</sup> 6 0	+15.366	<sup>h</sup> <sup>m</sup> 18 0	0	e 0.000	e 0.0000	350 <sup>s</sup>	e 0.076	e 0.1909
10	15.366	10	10	15.366	10	10	000	0055	360	082	1963
20	15.366	20	20	15.366	20	20	000	0109	370	089	2018
30	15.366	30	30	15.366	30	30	000	0164	380	097	2072
40	15.366	40	40	15.366	40	40	000	0218	390	104	2127
50	15.366	50	50	15.366	50	50	e 0.000	e 0.0273	400	e 0.113	e 0.2181
1 0	+15.366	13 0	7 0	+15.367	19 0	60	000	0327	410	121	2236
10	15.366	10	10	15.367	10	70	001	0382	420	131	2290
20	15.366	20	20	15.367	20	80	001	0436	430	140	2345
30	15.366	30	30	15.367	30	90	001	0491	440	150	2399
40	15.366	40	40	15.367	40	100	e 0.002	e 0.0545	450	e 0.161	e 0.2454
50	15.365	50	50	15.367	50	110	002	0600	460	172	2508
2 0	+15.365	14 0	8 0	+15.367	20 0	120	003	0654	470	183	2563
10	15.365	10	10	15.367	10	130	004	0709	480	195	2617
20	15.365	20	20	15.367	20	140	005	0764	490	207	2672
30	15.365	30	30	15.367	30	150	e 0.006	e 0.0818	500	e 0.220	e 0.2726
40	15.365	40	40	15.367	40	160	007	0873	510	234	2781
50	15.365	50	50	15.367	50	170	009	0927	520	248	2835
3 0	+15.365	15 0	9 0	+15.367	21 0	180	010	0982	530	262	2890
10	15.365	10	10	15.367	10	190	012	1036	540	277	2944
20	15.365	20	20	15.367	20	200	e 0.014	e 0.1091	550	e 0.293	e 0.2999
30	15.365	30	30	15.367	30	210	016	1145	560	309	3053
40	15.365	40	40	15.367	40	220	019	1200	570	326	3107
50	15.365	50	50	15.367	50	230	022	1254	580	344	3162
4 0	+15.365	16 0	10 0	+15.367	22 0	240	025	1309	590	362	3216
10	15.365	10	10	15.367	10	250	e 0.028	e 0.1363	600	e 0.380	e 0.3271
20	15.366	20	20	15.367	20	260	031	1418	610	400	3325
30	15.366	30	30	15.367	30	270	035	1473	620	420	3380
40	15.366	40	40	15.367	40	280	039	1527	630	440	3434
50	15.366	50	50	15.367	50	290	043	1582	640	462	3489
5 0	+15.366	17 0	11 0	+15.367	23 0	300	e 0.048	e 0.1636	650	e 0.484	e 0.3543
10	15.366	10	10	15.366	10	310	053	1691	660	506	3598
20	15.366	20	20	15.366	20	320	058	1745	670	529	3652
30	15.366	30	30	15.366	30	330	063	1800	680	553	3707
40	15.366	40	40	15.366	40	340	069	1854	690	578	3761
50	15.366	50	50	15.366	50	350	e 0.076	e 0.1909	700	e 0.604	e 0.3815

e bedeutet: Vorzeichen entgegengesetzt dem Vorzeichen des Arguments.

$$\alpha_{1950} = \alpha_{1945} + B + C + \Delta C, \text{ wobei } C = A \cdot \operatorname{tg}(\delta_{1945} + D)$$

$$\delta_{1950} = \delta_{1945} + D + R, \text{ wobei } R = A \cdot P$$

$A$  und  $D$  sind aus der Tafel S. 288\* u. 289\* mit dem Argument  $\alpha_{1945}$  zu entnehmen. Für die Werte von  $\alpha$  zwischen  $0^h$  und  $12^h$  gelten die Vorzeichen zur Linken, für die Werte von  $\alpha$  zwischen  $12^h$  und  $24^h$  die Vorzeichen zur Rechten.  $B$ ,  $\Delta C$  und  $P$  sind in der obenstehenden Tafel enthalten. Die Vorzeichen von  $\Delta C$  und  $P$  sind dem Vorzeichen von  $C$  entgegengesetzt.



**Finsternisse, Sternbedeckungen,  
Mösting A, Trabanten**

---

Konstellationen, Hilfstabeln

**1945**



Im Jahre 1945 finden zwei Sonnenfinsternisse und zwei Mondfinsternisse statt.

I. Ringförmige Sonnenfinsternis 1945 Januar 14  
unsichtbar in Berlin

Konjunktion in Rektaszension . . . . .	Jan. 14,	<sup>h</sup> 4 <sup>m</sup> 57 <sup>s</sup> 19.4	Welt-Zeit
Rektaszension des Mondes . . . . .		<sup>h</sup> 19 <sup>m</sup> 42 <sup>s</sup> 11.58	
Stündliche Änderung . . . . .		2 30.10	
Rektaszension der Sonne . . . . .		19 42 11.58	
Stündliche Änderung . . . . .		10.78	
Deklination des Mondes . . . . .		-21° 51' 8.0"	
Stündliche Änderung . . . . .		+ 2 48.9	
Deklination der Sonne . . . . .		-21° 22' 9.9"	
Stündliche Änderung . . . . .		+ 26.2	
Äquatorialhorizontalparallaxe des Mondes		58' 39.7"	
„ „ der Sonne		8.9	
Halbmesser des Mondes . . . . .		15' 58.3"	
„ „ der Sonne . . . . .		16' 15.6"	

	Welt-Zeit	Westl. Länge v. Greenwich	Geogr. Breite
	<sup>h</sup> <sup>m</sup>	<sup>o</sup> <sup>'</sup>	<sup>o</sup> <sup>'</sup>
Anfang der Finsternis . . . . .	Jan. 14, 2 22.0	312 0	-21 13
Beginn der zentralen Verfinsternung	„ 3 27.2	333 21	-31 21
Zentrale Verfinsternung im wahren Mittag . . . . .	„ 4 57.3	252 5	-51 18
Ende der zentralen Verfinsternung .	„ 6 35.4	176 45	-23 37
Ende der Finsternis . . . . .	„ 7 40.5	197 32	-13 22

Verlauf der Zentrallinie

Welt-Zeit	Westl. Länge von Greenwich	Geogr. Breite	Dauer der ringförm. Verfinsternung	Welt-Zeit	Westl. Länge von Greenwich	Geogr. Breite	Dauer der ringförm. Verfinsternung
<sup>h</sup> <sup>m</sup>	<sup>o</sup> <sup>'</sup>	<sup>o</sup> <sup>'</sup>	<sup>s</sup>	<sup>h</sup> <sup>m</sup>	<sup>o</sup> <sup>'</sup>	<sup>o</sup> <sup>'</sup>	<sup>s</sup>
3 27.2	333 21	-31 21	—	5 0	250 29.9	-51 10.0	14.9
3 30	320 43.5	-36 34.0	52.7	5 10	244 42.0	-50 28.2	14.8
3 40	306 33.6	-42 14.6	43.0	5 20	239 2.6	-49 27.7	15.5
3 50	297 15.0	-45 29.8	36.4	5 30	233 29.6	-48 8.7	16.9
4 0	289 23.0	-47 46.7	30.9	5 40	227 59.6	-46 30.7	19.0
4 10	282 12.3	-49 25.0	26.4	5 50	222 26.6	-44 32.4	22.0
4 20	275 25.4	-50 33.2	22.7	6 0	216 41.3	-42 11.1	25.8
4 30	268 54.3	-51 15.6	19.6	6 10	210 26.9	-39 20.6	30.5
4 40	262 35.5	-51 34.8	17.3	6 20	203 7.3	-35 46.8	36.5
4 50	256 27.6	-51 32.5	15.7	6 30	192 43.9	-30 40.9	44.8
5 0	250 29.9	-51 10.0	14.9	6 35.4	176 45	-23 37	—

Die Finsternis ist sichtbar im südwestlichen Teil des Stillen Ozeans, im Südlichen Eismeer, auf Neuseeland, in Australien, im östlichen Teil von Neuguinea, im südlichen Teil des Indischen Ozeans, auf Madagaskar und im südöstlichen Teil von Afrika.



Elemente der ringförmigen Sonnenfinsternis 1945 Januar 14

Welt-Zeit	$x$	$y$	$\log \sin d$	$\log \cos d$	$\mu$	$f^{(a)}$	$f^{(i)}$
2 <sup>h</sup> 20 <sup>m</sup>	-1.448571	-0.600911	9.561895 <sub>n</sub>	9.969014	212° 45' 16.1"	+0.551088	+0.005144
30	1.356514	0.594260	9.561872 <sub>n</sub>	9.969018	215 15 14.6	0.551079	0.005135
40	1.264453	0.587599	9.561849 <sub>n</sub>	9.969021	217 45 13.2	0.551069	0.005125
50	1.172389	0.580927	9.561825 <sub>n</sub>	9.969025	220 15 11.8	0.551058	0.005114
3 0	-1.080322	-0.574245	9.561802 <sub>n</sub>	9.969028	222 45 10.4	+0.551047	+0.005103
10	0.988252	0.567553	9.561779 <sub>n</sub>	9.969032	225 15 9.0	0.551035	0.005091
20	0.896179	0.560851	9.561756 <sub>n</sub>	9.969035	227 45 7.5	0.551022	0.005078
30	0.804103	0.554138	9.561733 <sub>n</sub>	9.969039	230 15 6.1	0.551009	0.005065
40	0.712024	0.547415	9.561709 <sub>n</sub>	9.969043	232 45 4.7	0.550995	0.005051
50	0.619944	0.540682	9.561686 <sub>n</sub>	9.969046	235 15 3.2	0.550980	0.005037
4 0	-0.527862	-0.533939	9.561663 <sub>n</sub>	9.969050	237 45 1.8	+0.550965	+0.005022
10	0.435778	0.527186	9.561640 <sub>n</sub>	9.969053	240 15 0.4	0.550949	0.005006
20	0.343693	0.520423	9.561617 <sub>n</sub>	9.969057	242 44 58.9	0.550932	0.004989
30	0.251607	0.513650	9.561594 <sub>n</sub>	9.969060	245 14 57.5	0.550915	0.004972
40	0.159520	0.506866	9.561571 <sub>n</sub>	9.969064	247 44 56.1	0.550897	0.004954
50	-0.067432	0.500072	9.561548 <sub>n</sub>	9.969067	250 14 54.6	0.550879	0.004936
5 0	+0.024656	-0.493268	9.561524 <sub>n</sub>	9.969071	252 44 53.2	+0.550860	+0.004917
10	0.116745	0.486454	9.561501 <sub>n</sub>	9.969075	255 14 51.8	0.550840	0.004897
20	0.208834	0.479631	9.561478 <sub>n</sub>	9.969078	257 44 50.4	0.550820	0.004877
30	0.300922	0.472798	9.561455 <sub>n</sub>	9.969082	260 14 48.9	0.550799	0.004856
40	0.393010	0.465954	9.561431 <sub>n</sub>	9.969085	262 44 47.5	0.550777	0.004834
50	0.485097	0.459100	9.561408 <sub>n</sub>	9.969089	265 14 46.1	0.550754	0.004812
6 0	+0.577184	-0.452236	9.561385 <sub>n</sub>	9.969092	267 44 44.7	+0.550731	+0.004789
10	0.669269	0.445363	9.561361 <sub>n</sub>	9.969096	270 14 43.3	0.550707	0.004765
20	0.761353	0.438479	9.561338 <sub>n</sub>	9.969099	272 44 41.8	0.550682	0.004741
30	0.853436	0.431585	9.561315 <sub>n</sub>	9.969103	275 14 40.4	0.550657	0.004716
40	0.945517	0.424681	9.561292 <sub>n</sub>	9.969107	277 44 39.0	0.550631	0.004690
50	1.037596	0.417768	9.561269 <sub>n</sub>	9.969110	280 14 37.5	0.550605	0.004664
7 0	+1.129672	-0.410845	9.561246 <sub>n</sub>	9.969114	282 44 36.1	+0.550578	+0.004637
10	1.221746	0.403912	9.561222 <sub>n</sub>	9.969117	285 14 34.7	0.550550	0.004609
20	1.313817	0.396969	9.561199 <sub>n</sub>	9.969121	287 44 33.3	0.550522	0.004581
30	1.405886	0.390016	9.561176 <sub>n</sub>	9.969124	290 14 31.8	0.550493	0.004552
40	1.497952	0.383053	9.561152 <sub>n</sub>	9.969128	292 44 30.4	0.550463	0.004523
50	+1.590014	-0.376081	9.561129 <sub>n</sub>	9.969131	295 14 29.0	+0.550432	+0.004493

Welt-Zeit	$x'$	$y'$	$\log \operatorname{tang} f^{(a)}$	$\log \operatorname{tang} f^{(i)}$
2 <sup>h</sup> 0 <sup>m</sup>	+0.0092048	+0.0006626	7.67704	7.67487
3 0	0.0092069	0.0006687	7.67704	7.67487
4 0	0.0092083	0.0006748	7.67703	7.67486
5 0	0.0092089	0.0006809	7.67703	7.67486
6 0	0.0092086	0.0006869	7.67703	7.67486
7 0	0.0092075	0.0006928	7.67703	7.67486
8 0	+0.0092056	+0.0006987	7.67703	7.67486



II. Partielle Mondfinsternis 1945 Juni 25  
 unsichtbar in Berlin.

Opposition in Rektaszension . . . . .	Juni 25,	<sup>h</sup> 15 <sup>m</sup> 9 <sup>s</sup> 34.5	Welt-Zeit
Rektaszension des Mondes . . . . .		<sup>h</sup> 18 <sup>m</sup> 15 <sup>s</sup> 59.03	
Stündliche Änderung . . . . .		2 19.21	
Rektaszension der Sonne . . . . .		6 15 59.03	
Stündliche Änderung . . . . .		10.38	
Deklination des Mondes . . . . .		−22° 53′ 25.9″	
Stündliche Änderung . . . . .		− 2 3.2	
Deklination der Sonne . . . . .		+23 23 41.7	
Stündliche Änderung . . . . .		− 4.0	
Äquatorialhorizontalparallaxe des Mondes . .		56′ 13.9″	
„ der Sonne . . . . .		8.7	
Halbmesser des Mondes . . . . .		15′ 18.6″	
„ der Sonne . . . . .		15 44.0	
Eintritt des Mondes in den Halbschatten . .	Juni 25,	<sup>h</sup> 12 <sup>m</sup> 25.6	Welt-Zeit
Eintritt des Mondes in den Kernschatten . .	„	13 37.3	„
Mitte der Finsternis . . . . .	„	15 13.9	„
Austritt des Mondes aus dem Kernschatten	„	16 50.7	„
Austritt des Mondes aus dem Halbschatten	„	18 2.3	„

Der Mond steht zu den Zeiten der ersten und letzten Berührung mit dem Kernschatten im Zenit der Orte, deren geographische Lage ist:

204° 32′ westliche Länge von Greenwich, 22° 50′ südliche Breite

251 10 „ „ „ „ 22 57 „ „

Positionswinkel des Eintritts . . . . . = 126°

„ „ Austritts . . . . . = 242

Größe der Finsternis in Einheiten des Monddurchmessers . . = 0.865

Der Anfang der Finsternis ist sichtbar im Stillen Ozean, in Australien und Polynesien, im Südlichen Eismeer, im östlichen Teil des Indischen Ozeans, auf den Sunda-Inseln und im südöstlichen Teil Asiens. Das Ende ist sichtbar im westlichen Teil des Stillen Ozeans, im westlichen Teil von Polynesien, in Australien, im Südlichen Eismeer, im Indischen Ozean, an der Ostküste Afrikas, auf den Sunda-Inseln und in Asien mit Ausnahme des nördlichen Teiles.



## III. Totale Sonnenfinsternis 1945 Juli 9 in Berlin sichtbar als partielle Finsternis.

Konjunktion in Rektaszension . . . . .	Juli 9, <sup>h</sup> 13 <sup>m</sup> 25 <sup>s</sup> 8.9	Welt-Zeit	
Rektaszension des Mondes . . . . .	7 13 29.47		
Stündliche Änderung . . . . .	2 29.19		
Rektaszension der Sonne . . . . .	7 13 29.47		
Stündliche Änderung . . . . .	10.23		
Deklination des Mondes . . . . .	+23 4 56.7		
Stündliche Änderung . . . . .	— 1 11.1		
Deklination der Sonne . . . . .	+22 22 16.2		
Stündliche Änderung . . . . .	— 17.9		
Äquatorialhorizontalparallaxe des Mondes . . . . .	58 9.0		
„ der Sonne . . . . .	8.7		
Halbmesser des Mondes . . . . .	15 49.9		
„ der Sonne . . . . .	15 43.9		
	Welt-Zeit	Westl. Länge v. Greenwich	
Anfang der Finsternis . . . . .	Juli 9, <sup>h</sup> 10 <sup>m</sup> 59.6	<sup>o</sup> 86 <sup>'</sup> 6	<sup>o</sup> +27 <sup>'</sup> 38
Beginn der zentralen Verfinsterung	„ 12 13.8	115 57	+44 23
Zentrale Verfinsterung im wahren Mittag . . . . .	„ 13 25.1	20 2	+70 3
Ende der zentralen Verfinsterung .	„ 14 40.9	287 27	+41 43
Ende der Finsternis . . . . .	„ 15 55.2	316 35	+24 48

### Verlauf der Zentrallinie

Welt-zeit	Westl. Länge von Greenwich	Geogr. Breite	Dauer der Totalität	Welt-zeit	Westl. Länge von Greenwich	Geogr. Breite	Dauer der Totalität
<sup>h</sup> 12 <sup>m</sup> 13.8	<sup>o</sup> 115 57	+44 23	<sup>m</sup> —	<sup>h</sup> 13 <sup>m</sup> 30	<sup>o</sup> 13 50.1	+69 51.0	<sup>m</sup> 15.5
12 15	107 44.8	+48 12.4	0 29.7	13 35	7 36.0	+69 27.4	1 14.9
12 20	97 15.5	+53 16.1	0 40.2	13 40	1 34.4	+68 52.8	1 14.0
12 25	90 27.1	+56 26.5	0 46.9	13 45	355 47.8	+68 7.5	1 12.8
12 30	84 38.1	+58 57.2	0 52.3	13 50	350 17.2	+67 12.0	1 11.2
12 35	79 12.8	+61 4.2	0 56.8	13 55	345 2.3	+66 6.8	1 9.3
12 40	73 55.3	+62 53.9	1 0.6	14 0	340 1.8	+64 52.1	1 7.0
12 45	68 36.4	+64 29.4	1 3.9	14 5	335 13.2	+63 27.9	1 4.3
12 50	63 10.7	+65 52.2	1 6.7	14 10	330 33.0	+61 53.9	1 1.2
12 55	57 34.4	+67 3.2	1 9.1	14 15	325 56.8	+60 9.0	0 57.6
13 0	51 45.5	+68 2.7	1 11.2	14 20	321 18.6	+58 11.8	0 53.5
13 5	45 43.9	+68 50.6	1 12.8	14 25	316 28.6	+55 58.7	0 48.8
13 10	39 30.7	+69 26.7	1 14.0	14 30	311 11.5	+53 23.3	0 43.3
13 15	33 8.4	+69 50.9	1 14.9	14 35	304 48.2	+50 8.8	0 36.3
13 20	26 41.0	+70 3.0	1 15.5	14 40	294 14.3	+44 52.0	0 25.1
13 25	20 13.3	+70 3.0	1 15.7	14 40.9	287 27	+41 43	—
13 30	13 50.1	+69 51.0	1 15.5				

Die Finsternis ist sichtbar in Asien mit Ausnahme des östlichen und südlichen Teiles, im nördlichen Afrika, in Europa, im Nördlichen Eismeer, in Grönland, im nördlichen Teil des Atlantischen Ozeans, in Nordamerika mit Ausnahme von Kalifornien und des westlichsten Teiles von Alaska und im westlichen Teil von Mittelamerika.



## Elemente der totalen Sonnenfinsternis 1945 Juli 9

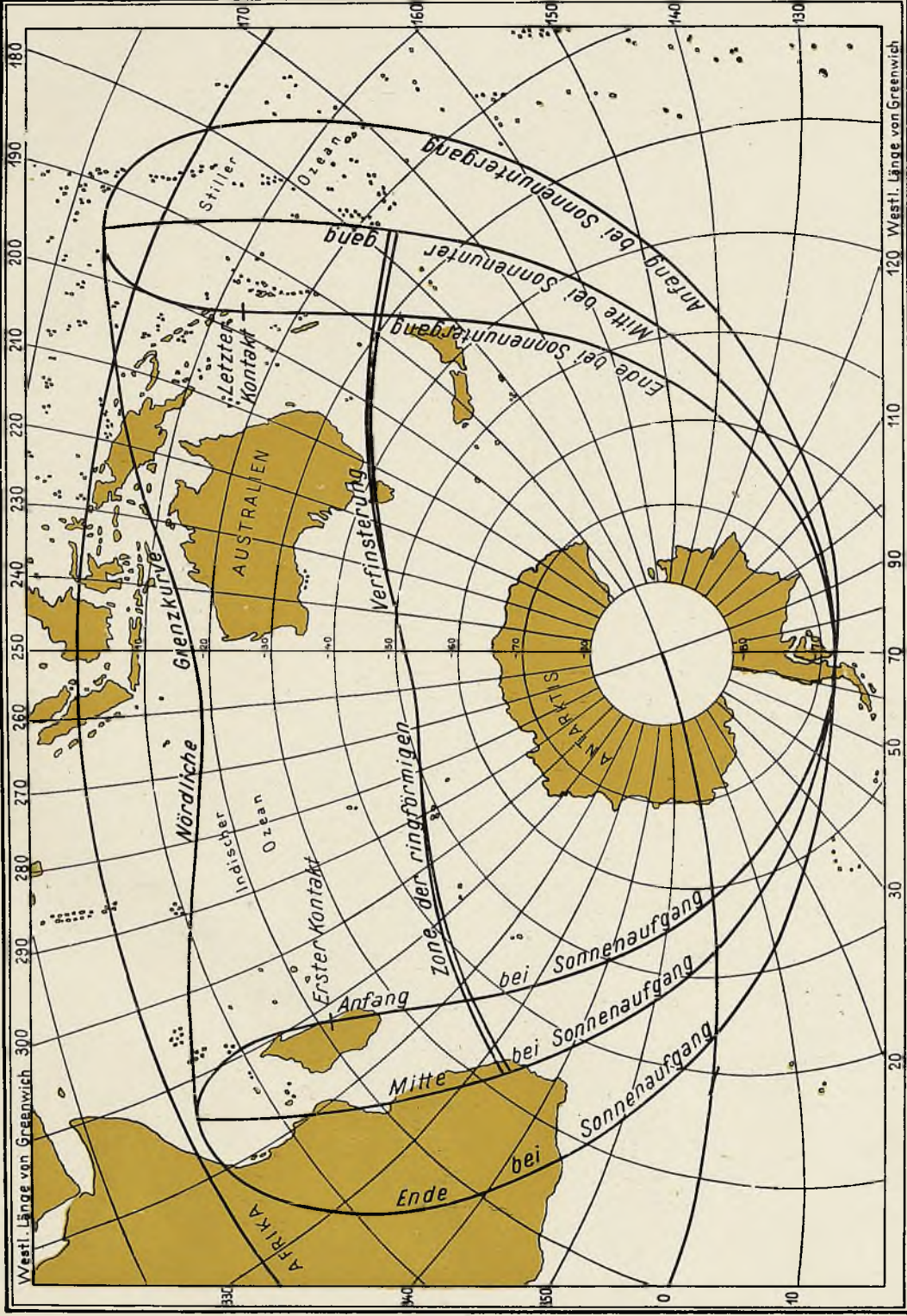
Welt-Zeit	$x$	$y$	$\log \sin d$	$\log \cos d$	$\mu$	$f^{(a)}$	$f^{(b)}$
<sup>h</sup> 10 <sup>m</sup> 50	-1.424662	+0.773128	9.580677	9.965984	341° 14' 43.2"	+0.543769	-0.002136
11 0	1.332843	0.770791	9.580662	9.965987	343 44 43.1	+0.543798	-0.002107
10	1.241022	0.768443	9.580646	9.965989	346 14 43.0	0.543827	0.002078
20	1.149200	0.766085	9.580631	9.965992	348 44 42.9	0.543855	0.002050
30	1.057376	0.763717	9.580616	9.965994	351 14 42.8	0.543882	0.002023
40	0.965551	0.761339	9.580601	9.965997	353 44 42.7	0.543909	0.001996
50	0.873724	0.758950	9.580586	9.966000	356 14 42.6	0.543935	0.001970
12 0	-0.781896	+0.756551	9.580571	9.966002	358 44 42.6	+0.543961	-0.001945
10	0.690068	0.754142	9.580556	9.966005	1 14 42.5	0.543986	0.001920
20	0.598239	0.751723	9.580541	9.966008	3 44 42.4	0.544010	0.001896
30	0.506410	0.749293	9.580526	9.966010	6 14 42.3	0.544034	0.001873
40	0.414581	0.746853	9.580511	9.966013	8 44 42.2	0.544057	0.001850
50	0.322752	0.744403	9.580496	9.966015	11 14 42.1	0.544079	0.001828
13 0	-0.230924	+0.741942	9.580480	9.966018	13 44 42.1	+0.544101	-0.001806
10	0.139096	0.739471	9.580465	9.966020	16 14 42.0	0.544122	0.001785
20	-0.047269	0.736990	9.580450	9.966023	18 44 41.9	0.544142	0.001765
30	+0.044556	0.734499	9.580435	9.966025	21 14 41.8	0.544162	0.001745
40	0.136380	0.731997	9.580420	9.966028	23 44 41.7	0.544181	0.001726
50	0.228203	0.729485	9.580405	9.966031	26 14 41.6	0.544200	0.001708
14 0	+0.320025	+0.726963	9.580390	9.966033	28 44 41.6	+0.544218	-0.001690
10	0.411845	0.724431	9.580374	9.966036	31 14 41.5	0.544235	0.001673
20	0.503662	0.721888	9.580359	9.966038	33 44 41.4	0.544252	0.001656
30	0.595477	0.719335	9.580344	9.966041	36 14 41.3	0.544268	0.001640
40	0.687289	0.716772	9.580329	9.966043	38 44 41.2	0.544283	0.001625
50	0.779099	0.714198	9.580313	9.966046	41 14 41.1	0.544298	0.001610
15 0	+0.870905	+0.711614	9.580298	9.966049	43 44 41.1	+0.544312	-0.001596
10	0.962708	0.709020	9.580282	9.966051	46 14 41.0	0.544326	0.001583
20	1.054508	0.706415	9.580267	9.966054	48 44 40.9	0.544339	0.001570
30	1.146304	0.703800	9.580252	9.966057	51 14 40.8	0.544351	0.001558
40	1.238096	0.701175	9.580237	9.966059	53 44 40.7	0.544363	0.001546
50	1.329884	0.698540	9.580222	9.966062	56 14 40.6	0.544374	0.001535
16 0	+1.421668	+0.695894	9.580206	9.966064	58° 44' 40.6"	+0.544384	-0.001525

Welt-Zeit	$x'$	$y'$	$\log \operatorname{tang} f^{(a)}$	$\log \operatorname{tang} f^{(b)}$
<sup>h</sup> 10 <sup>m</sup> 0	+0.0091804	-0.0002281	7.66266	7.66049
11 0	0.0091820	0.0002343	7.66266	7.66049
12 0	0.0091828	0.0002404	7.66266	7.66049
13 0	0.0091828	0.0002466	7.66266	7.66049
14 0	0.0091821	0.0002527	7.66266	7.66049
15 0	0.0091805	0.0002589	7.66266	7.66049
16 0	+0.0091782	-0.0002651	7.66266	7.66049



# Ringförmige Sonnenfinsternis

1945 Januar 14



120 Westl. Länge von Greenwich

20

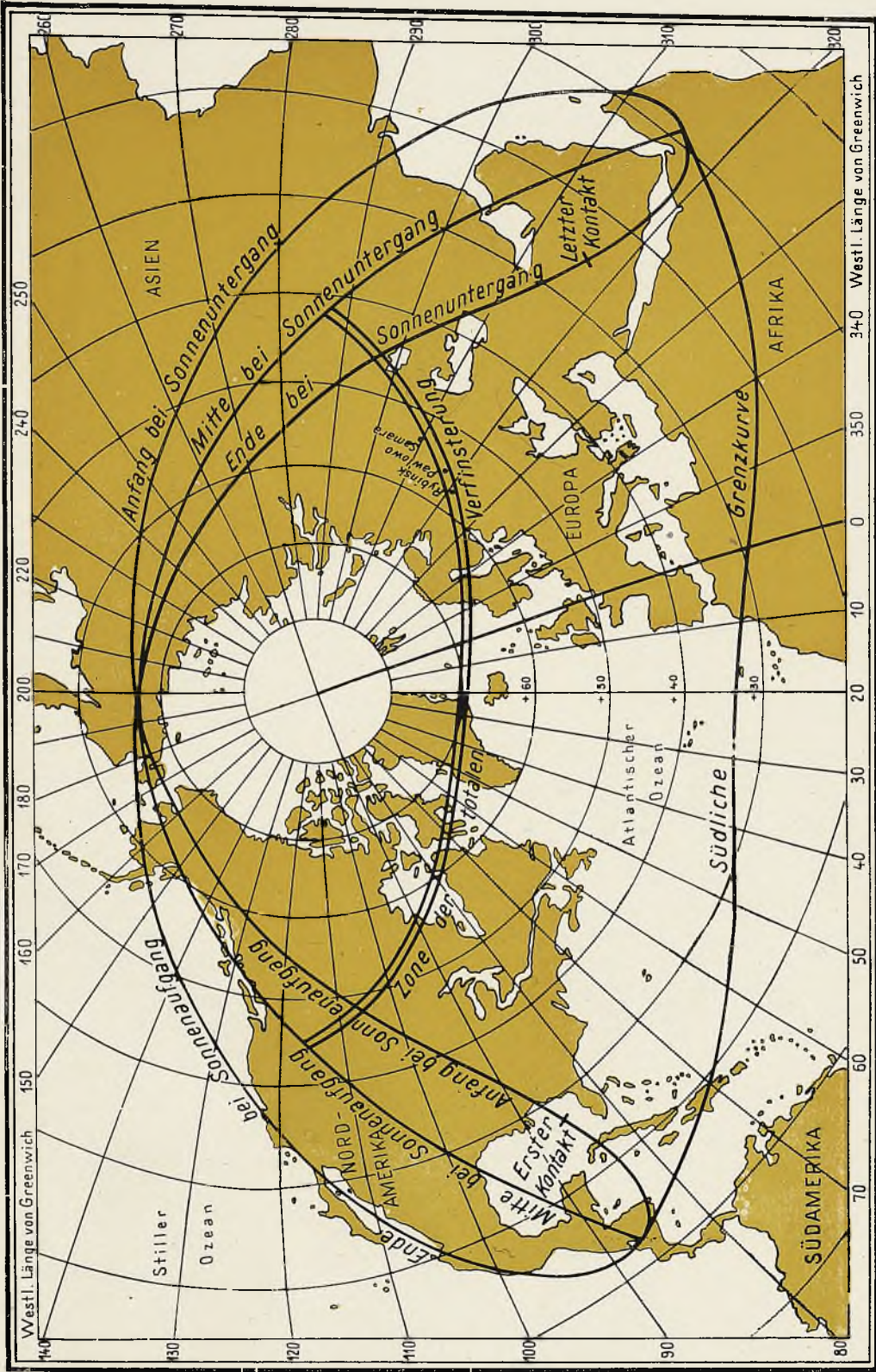






# Totale Sonnenfinsternis

1945 Juli 9









## Sonnenfinsternis 1945 Juli 9

Geographische Breite	Anfang der Finsternis										Größe Phase					Geographische Breite
	Östliche Länge von Greenwich										Östl. Länge von Greenwich					
	20 <sup>m</sup>	30 <sup>m</sup>	40 <sup>m</sup>	50 <sup>m</sup>	60 <sup>m</sup>	70 <sup>m</sup>	80 <sup>m</sup>	90 <sup>m</sup>	100 <sup>m</sup>	20 <sup>m</sup>	30 <sup>m</sup>	40 <sup>m</sup>	50 <sup>m</sup>	60 <sup>m</sup>		
	Welt-Zeit										Welt-Zeit					
	12 <sup>h</sup> m	12 <sup>h</sup> m	12 <sup>h</sup> m	12 <sup>h</sup> m	12 <sup>h</sup> m	12 <sup>h</sup> m	12 <sup>h</sup> m	12 <sup>h</sup> m	13 <sup>h</sup> m	13 <sup>h</sup> m	13 <sup>h</sup> m	14 <sup>h</sup> m	14 <sup>h</sup> m	14 <sup>h</sup> m		
44°	69.1	72.7	76.1	79.3	82.3	85.0	87.6	89.9	32.1	78.7	82.2	25.4	28.4	31.1	44°	
45	66.6	70.2	73.6	76.8	79.8	82.6	85.2	87.6	29.8	77.2	80.6	23.8	26.7	29.3	45	
46	64.2	67.8	71.2	74.4	77.5	80.3	82.9	85.4	27.6	75.6	79.0	22.1	25.0	27.6	46	
47	61.9	65.5	68.9	72.1	75.2	78.0	80.7	83.2	25.4	74.1	77.4	20.5	23.3	25.9	47	
48	59.7	63.3	66.7	69.9	73.0	75.8	78.5	81.0	23.3	72.5	75.8	18.8	21.6	24.2	48	
49	57.7	61.2	64.6	67.8	70.9	73.7	76.4	78.9	21.2	71.0	74.2	17.2	20.0	22.5	49	
50	55.7	59.2	62.6	65.8	68.8	71.6	74.3	76.9	19.2	69.5	72.7	15.6	18.3	20.8	50	
51	53.8	57.3	60.6	63.8	66.8	69.6	72.3	74.9	17.2	68.0	71.1	14.0	16.7	19.1	51	
52	52.0	55.4	58.7	61.9	64.9	67.7	70.4	72.9	15.3	66.6	69.6	12.4	15.1	17.5	52	
53	50.3	53.7	57.0	60.1	63.1	65.9	68.5	71.0	13.4	65.1	68.1	10.9	13.4	15.8	53	
54	48.7	52.1	55.3	58.4	61.3	64.1	66.7	69.2	11.6	63.7	66.6	9.3	11.8	14.2	54	
55	47.3	50.5	53.7	56.7	59.6	62.4	65.0	67.4	9.8	62.3	65.1	7.8	10.2	12.5	55	
56	45.9	49.1	52.2	55.1	58.0	60.7	63.3	65.7	8.0	60.9	63.7	6.2	8.6	10.9	56	
57	44.6	47.8	50.8	53.7	56.5	59.1	61.6	64.0	6.3	59.5	62.2	4.7	7.1	9.2	57	
58	43.5	46.5	49.4	52.3	55.0	57.6	60.1	62.4	4.7	58.2	60.8	3.2	5.5	7.6	58	
59	42.4	45.3	48.2	51.0	53.6	56.1	58.6	60.9	3.1	56.8	59.4	1.7	3.9	6.0	59	
60	41.4	44.3	47.0	49.7	52.3	54.7	57.1	59.4	1.6	55.5	58.0	0.2	2.4	4.4	60	

### Winkel P

### Betrag der größten Phase

44°	311.3	310.3	309.2	308.0	306.8	305.6	304.3	302.9	301.5	0.45	0.47	0.49	0.51	0.53	44°
46	307.5	306.6	305.6	304.5	303.4	302.3	301.1	299.9	298.6	0.50	0.52	0.54	0.56	0.58	46
48	303.8	303.0	302.1	301.1	300.2	299.1	298.0	296.9	295.7	0.55	0.57	0.59	0.61	0.63	48
50	300.2	299.5	298.7	297.9	297.0	296.0	295.0	294.0	292.8	0.60	0.62	0.64	0.65	0.67	50
52	296.8	296.1	295.4	294.7	293.9	293.0	292.1	291.1	290.1	0.65	0.67	0.68	0.70	0.72	52
54	293.5	292.9	292.3	291.6	290.9	290.1	289.3	288.4	287.4	0.70	0.71	0.73	0.75	0.76	54
56	290.3	289.8	289.3	288.7	288.0	287.3	286.5	285.7	284.8	0.74	0.76	0.77	0.79	0.81	56
58	287.3	286.8	286.3	285.8	285.2	284.5	283.8	283.1	282.3	0.79	0.80	0.82	0.83	0.85	58
60	284.4	284.0	283.5	283.0	282.5	281.9	281.2	280.5	279.8	0.84	0.85	0.86	0.88	0.89	60

### Winkel Q

44°	277.3	273.1	269.2	265.6	262.3	259.3	256.6	254.2	252.2	.	.	.	.	.	44°
46	277.7	273.5	269.6	266.0	262.7	259.7	257.0	254.5	252.4	.	.	.	.	.	46
48	277.8	273.7	269.9	266.3	263.0	260.0	257.3	254.8	252.6	.	.	.	.	.	48
50	277.6	273.7	269.9	266.5	263.2	260.2	257.5	255.0	252.8	.	.	.	.	.	50
52	277.2	273.4	269.8	266.5	263.3	260.4	257.7	255.2	253.0	.	.	.	.	.	52
54	276.6	273.0	269.5	266.3	263.3	260.5	257.9	255.4	253.2	.	.	.	.	.	54
56	275.7	272.3	269.1	266.1	263.2	260.5	258.0	255.6	253.4	.	.	.	.	.	56
58	274.5	271.4	268.5	265.7	263.0	260.4	258.0	255.8	253.6	.	.	.	.	.	58
60	273.1	270.3	267.7	265.1	262.6	260.3	258.0	255.9	253.8	.	.	.	.	.	60



## Sonnen- und Mondfinsternisse 1945

Sonnenfinsternis 1945 Juli 9

Geographische Breite	Größe Phase					Ende der Finsternis										Geographische Breite
	Östl. Länge von Greenwich					Östliche Länge von Greenwich										
	60 <sup>m</sup>	70 <sup>m</sup>	80 <sup>m</sup>	90 <sup>m</sup>	100 <sup>m</sup>	20 <sup>m</sup>	30 <sup>m</sup>	40 <sup>m</sup>	50 <sup>m</sup>	60 <sup>m</sup>	70 <sup>m</sup>	80 <sup>m</sup>	90 <sup>m</sup>	100 <sup>m</sup>		
	Welt-Zeit					Welt-Zeit										
	14 <sup>h</sup> m	14 <sup>h</sup> m	14 <sup>h</sup> m	14 <sup>h</sup> m	14 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m	15 <sup>h</sup> m		
44°	31.1	33.5	35.6	37.5	39.1	22.5	25.7	28.6	31.2	33.5	35.5	37.2	38.7	39.8	44°	
45	29.3	31.7	33.9	35.7	37.4	21.9	25.0	27.7	30.3	32.5	34.5	36.1	37.5	38.6	45	
46	27.6	30.0	32.1	34.0	35.6	21.2	24.2	26.9	29.3	31.5	33.4	35.0	36.3	37.4	46	
47	25.9	28.3	30.4	32.2	33.9	20.5	23.4	26.0	28.3	30.4	32.2	33.8	35.1	36.2	47	
48	24.2	26.5	28.6	30.5	32.1	19.7	22.5	25.0	27.2	29.3	31.0	32.6	33.9	34.9	48	
49	22.5	24.8	26.9	28.7	30.4	18.9	21.5	24.0	26.1	28.1	29.8	31.3	32.6	33.6	49	
50	20.8	23.1	25.2	27.0	28.6	18.0	20.5	22.9	25.0	26.9	28.6	30.0	31.2	32.2	50	
51	19.1	21.4	23.4	25.3	26.9	17.0	19.5	21.8	23.8	25.6	27.3	28.6	29.8	30.8	51	
52	17.5	19.7	21.7	23.5	25.1	16.0	18.4	20.6	22.6	24.3	25.9	27.2	28.4	29.3	52	
53	15.8	18.0	20.0	21.8	23.4	15.0	17.3	19.4	21.3	23.0	24.5	25.8	26.9	27.8	53	
54	14.2	16.3	18.3	20.0	21.6	13.9	16.1	18.1	19.9	21.6	23.1	24.3	25.4	26.3	54	
55	12.5	14.6	16.6	18.3	19.9	12.7	14.8	16.8	18.5	20.2	21.6	22.8	23.9	24.7	55	
56	10.9	12.9	14.8	16.6	18.1	11.5	13.5	15.4	17.1	18.7	20.0	21.2	22.3	23.1	56	
57	9.2	11.3	13.1	14.8	16.4	10.2	12.2	14.0	15.6	17.2	18.5	19.6	20.6	21.4	57	
58	7.6	9.6	11.4	13.1	14.6	8.8	10.8	12.5	14.1	15.6	16.9	18.0	18.9	19.7	58	
59	6.0	7.9	9.7	11.4	12.9	7.4	9.3	11.0	12.5	14.0	15.2	16.3	17.2	18.0	59	
60	4.4	6.3	8.0	9.6	11.1	6.0	7.8	9.4	10.9	12.3	13.5	14.6	15.5	16.2	60	
	Betrag der größten Phase					Winkel P										
44°	0.53	0.56	0.58	0.61	0.63	65.3	66.9	68.5	70.1	71.7	73.2	74.7	76.2	77.7	44°	
46	0.58	0.60	0.63	0.65	0.67	68.3	69.9	71.3	72.8	74.3	75.7	77.2	78.6	80.0	46	
48	0.63	0.65	0.67	0.69	0.71	71.2	72.7	74.0	75.4	76.8	78.1	79.5	80.8	82.2	48	
50	0.67	0.69	0.71	0.74	0.76	74.0	75.4	76.6	77.9	79.2	80.5	81.7	83.0	84.3	50	
52	0.72	0.74	0.76	0.78	0.80	76.7	78.0	79.1	80.3	81.5	82.7	83.9	85.1	86.3	52	
54	0.76	0.78	0.80	0.82	0.84	79.3	80.4	81.5	82.7	83.8	84.9	86.0	87.1	88.2	54	
56	0.81	0.82	0.84	0.86	0.87	81.8	82.8	83.8	84.9	85.9	86.9	88.0	89.0	90.1	56	
58	0.85	0.86	0.88	0.90	0.91	84.1	85.1	86.0	87.0	87.9	88.9	89.9	90.9	91.9	58	
60	0.89	0.90	0.92	0.93	0.95	86.3	87.2	88.1	89.0	89.9	90.8	91.7	92.6	93.6	60	
	Winkel Q															
44°	.	.	.	.	.	14.6	15.9	17.4	18.9	20.4	22.0	23.7	25.5	27.3	44°	
46	.	.	.	.	.	20.3	21.4	22.7	24.0	25.4	26.8	28.4	30.0	31.7	46	
48	.	.	.	.	.	25.9	26.8	27.9	29.0	30.3	31.6	33.0	34.4	36.0	48	
50	.	.	.	.	.	31.3	32.1	33.0	34.0	35.1	36.2	37.5	38.8	40.3	50	
52	.	.	.	.	.	36.6	37.3	38.0	38.9	39.8	40.8	41.9	43.1	44.5	52	
54	.	.	.	.	.	41.8	42.3	42.9	43.6	44.4	45.3	46.3	47.4	48.6	54	
56	.	.	.	.	.	46.9	47.3	47.8	48.3	49.0	49.8	50.6	51.6	52.7	56	
58	.	.	.	.	.	51.8	52.1	52.5	52.9	53.5	54.2	54.9	55.8	56.7	58	
60	.	.	.	.	.	56.6	56.8	57.1	57.4	57.9	58.5	59.1	59.9	60.7	60	



IV. Totale Mondfinsternis 1945 Dezember 18—19  
sichtbar in Berlin.

Opposition in Rektaszension . . . . .	Dez. 19,	<sup>h</sup> 2 <sup>m</sup> 16 <sup>s</sup> 37.8	Welt-Zeit
Rektaszension des Mondes . . . . .		<sup>h</sup> 5 <sup>m</sup> 46 <sup>s</sup> 10.33	
Stündliche Änderung . . . . .		2 40.11	
Rektaszension der Sonne . . . . .		17 46 10.33	
Stündliche Änderung . . . . .		11.09	
Deklination des Mondes . . . . .		+23° 7' 8.9"	
Stündliche Änderung . . . . .		+ 4 17.9	
Deklination der Sonne . . . . .		-23 24 28.9	
Stündliche Änderung . . . . .		- 3.6	
Äquatorialhorizontalparallaxe des Mondes		60' 27.3"	
„ „ der Sonne		8.9	
Halbmesser des Mondes . . . . .		16' 27.6"	
„ „ der Sonne . . . . .		16 15.4	
Eintritt des Mondes in den Halbschatten . . . . .	Dez. 18,	<sup>h</sup> 23 <sup>m</sup> 38.4	Welt-Zeit
Eintritt des Mondes in den Kernschatten . . . . .	„ 19,	0 37.5	„
Anfang der totalen Verfinsternung . . . . .	„	1 40.5	„
Mitte der Finsternis . . . . .	„	2 20.3	„
Ende der totalen Verfinsternung . . . . .	„	3 0.2	„
Austritt des Mondes aus dem Kernschatten	„	4 3.1	„
Austritt des Mondes aus dem Halbschatten	„	5 2.2	„

Der Mond steht zu den Zeiten der ersten und letzten Berührung mit dem Kernschatten im Zenit der Orte, deren geographische Lage ist:

11° 12' westliche Länge von Greenwich, 23° 0' nördliche Breite

60 26 „ „ „ „ 23 15 „ „

Positionswinkel des Eintritts . . . . . = 67°

„ „ Austritts . . . . . = 279

Größe der Finsternis in Einheiten des Monddurchmessers . . = 1.348

Der Anfang der Finsternis ist sichtbar im westlichsten Teil Asiens, in Europa, in Afrika, im Nördlichen Eismeer, in Grönland, im Atlantischen Ozean, im Osten Nordamerikas, in Mittel- und Südamerika mit Ausnahme des südlichsten Teiles. Das Ende ist sichtbar in Europa mit Ausnahme des östlichen Teiles, in Afrika mit Ausnahme des südlichsten und östlichen Teiles, im Atlantischen Ozean, im Nördlichen Eismeer, in Grönland, in Nordamerika mit Ausnahme von Alaska, in Mittel- und Südamerika und im östlichen Teil des Stillen Ozeans.



Mittlere Örter der Sterne, die im Jahre 1945 in Mitteleuropa  
vom Monde bedeckt werden

Name	Gr.	AR. 1945.0	Jährliche Eigenbew.	Dekl. 1945.0	Jährliche Eigenbew.
33 Piscium	<sup>m</sup> 4.7	<sup>h</sup> <sup>m</sup> <sup>s</sup> 0 2 31.171	-0.0009	- 6° 0' 54.33	+0.100
24 B. Ceti	6.0	0 7 29.875	+0.0026	- 5 33 14.98	-0.026
20 Ceti	4.9	0 50 11.719	+0.0005	- 1 26 33.17	-0.013
ξ <sup>2</sup> Ceti	4.3	2 25 13.841	+0.0025	+ 8 12 52.42	-0.005
μ Ceti	4.4	2 41 57.901	+0.0194	+ 9 52 59.10	-0.028
147 B. Arietis	5.8	3 3 22.262	+0.0003	+12 58 34.90	-0.059
85 H. <sup>1</sup> Tauri	6.0	4 17 13.102	+0.0080	+18 36 44.68	-0.032
δ Tauri	3.9	4 19 45.542	+0.0074	+17 24 54.56	-0.028
64 Tauri	4.8	4 20 55.302	+0.0080	+17 19 5.30	-0.041
234 B. Tauri	6.0	4 21 44.547	+0.0074	+18 55 1.71	-0.039
68 Tauri	4.2	4 22 18.222	+0.0078	+17 48 14.06	-0.024
ε Tauri	3.6	4 25 24.066	+0.0076	+19 3 36.46	-0.034
1 Tauri	5.3	5 4 32.896	-0.0040	+20 20 51.56	-0.033
ο Tauri	4.8	5 24 19.729	0.0000	+21 53 30.58	-0.008
ζ Tauri	3.0	5 34 21.337	+0.0001	+21 6 38.97	-0.022
BD + 20°1105 <i>m</i>	5.9	5 45 5.284	+0.0007	+20 51 7.79	-0.008
1 Geminorum	4.3	6 0 46.534	-0.0007	+23 16 5.28	-0.104
14 B. Geminorum	6.0	6 6 13.395	-0.0009	+22 12 3.28	-0.002
3 Geminorum <i>m</i>	5.8	6 6 23.531	0.0900	+23 7 27.30	-0.005
η Geminorum <i>sq</i>	3.2-4.2	6 11 33.393	-0.0051	+22 31 28.50	-0.013
μ Geminorum	3.2	6 19 37.941	+0.0038	+22 32 37.01	-0.116
36 B. Geminorum	6.0	6 22 12.296	-0.0008	+23 21 33.79	-0.009
d Geminorum	5.2	6 48 15.255	-0.0011	+21 49 40.29	-0.037
87 B. Geminorum	5.8	6 48 39.627	-0.0036	+23 40 7.05	-0.007
44 Geminorum	5.9	7 1 59.725	-0.0006	+22 43 17.32	-0.019
δ Geminorum	3.5	7 16 50.345	-0.0021	+22 5 7.17	-0.015
58 Geminorum	6.0	7 20 9.908	-0.0021	+23 3 10.29	-0.043
63 Geminorum	5.3	7 24 28.534	-0.0045	+21 33 33.74	-0.122
μ Cancri	5.4	8 4 31.762	+0.0011	+21 44 34.82	-0.070
49 B. Cancri	5.9	8 17 8.613	+0.0039	+20 55 21.49	-0.051
η Cancri	5.5	8 29 31.816	-0.0034	+20 37 45.77	-0.050
8 Leonis	5.9	9 34 0.654	-0.0010	+16 41 7.60	-0.003
37 Leonis	5.7	10 13 43.716	-0.0014	+14 0 11.97	-0.019
ν Virginis	4.2	11 43 1.925	-0.0014	+ 6 50 15.59	-0.187
ε Virginis	5.1	12 17 33.283	-0.0199	+ 3 37 7.19	-0.071
80 Virginis	5.8	13 32 39.430	+0.0016	- 5 7 0.33	+0.073
ψ Ophiuchi	4.6	16 20 52.817	-0.0014	-19 54 37.12	-0.052
131 B. Scorpii	5.6	16 38 39.443	+0.0018	-19 49 14.28	+0.042
21 G. Sagittarii	5.7	17 58 34.340	-0.0004	-22 46 50.66	-0.015
1 Sagittarii	5.1	18 8 21.889	+0.0013	-23 42 51.25	-0.029
49 Sagittarii	5.6	19 22 10.010	-0.0011	-24 4 18.44	-0.004
17 Capricorni	5.9	20 42 58.792	+0.0012	-21 42 54.84	-0.010
χ Capricorni	5.3	21 5 24.741	+0.0011	-21 24 57.09	-0.058
φ Capricorni	5.4	21 12 30.222	+0.0010	-20 52 51.93	+0.004
ε Capricorni	4.7	21 34 0.199	+0.0005	-19 42 48.22	+0.010
κ Capricorni	4.8	21 39 35.352	+0.0099	-19 7 4.68	-0.005
τ Aquarii	4.2	22 46 40.861	-0.0010	-13 53 0.06	-0.031
30 Piscium	4.7	23 59 8.323	+0.0030	- 6 19 10.92	-0.035



Elemente der in Mitteleuropa sichtbaren Sternbedeckungen

Name	Stern				Konjunktion in Rektaszension					Alter d. Monate
	Gr.	$\Delta\alpha$	$\Delta\delta$	$\delta$ app.	Welt-Zeit	Stundenw. H	Y	$\alpha'$	$\gamma'$	
J a n u a r										
30 Piscium	<sup>m</sup> 4.7	-1.4 <sup>a</sup>	-11.0 <sup>"</sup>	- 6 <sup>o</sup> 19.4 <sup>'</sup>	18 <sup>d</sup> 16 <sup>h</sup> 22.0 <sup>m</sup>	+0 <sup>h</sup> 13.7 <sup>m</sup>	+0.8521	0.5596	+0.2223	<sup>d</sup> 4.5
33 Piscium	4.7	-1.39	-10.9	- 6 1.1	18 17. 52.8	+1 41.4	+0.8829	0.5591	+0.2230	4.5
24 B. Ceti	6.0	-1.37	-10.9	- 5 33.4	18 20. 6.8	+3 50.8	+0.9185	0.5585	+0.2240	4.6
20 Ceti	4.9	-1.12	-10.1	- 1 26.7	19 15 25.7	-1 29.8	+1.1526	0.5545	+0.2276	5.4
$\mu$ Ceti	4.4	-0.51	- 6.5	+ 9 52.9	21 18 16.7	-0 22.3	+0.7648	0.5573	+0.2000	7.6
$\delta$ Tauri	3.9	-0.03	- 4.0	+17 24.8	23 13 26.3	-6 43.4	+0.4478	0.5695	+0.1380	9.4
64 Tauri	4.8	-0.02	- 4.1	+17 19.0	23 13 56.4	-6 14.4	+0.6173	0.5697	+0.1371	9.4
68 Tauri	4.2	-0.02	- 3.9	+17 48.2	23 14 32.2	-5 39.8	+0.1964	0.5698	+0.1360	9.4
BD + 20° 1105 m	5.9	+0.30	- 3.4	+20 51.1	25 1 47.8	+4 18.7	+0.6067	0.5772	+0.0644	10.9
d Geminorum	5.2	+0.47	- 3.6	+21 49.6	26 4 27.5	+5 59.6	+0.5101	0.5765	+0.0045	12.0
63 Geminorum	5.3	+0.54	- 3.9	+21 33.5	26 19 53.8	-3 7.7	+0.6006	0.5730	-0.0299	12.6
8 Leonis	5.9	+0.53	- 4.6	+16 41.1	29 6 3.3	+5 1.8	+0.7594	0.5449	-0.1381	15.1
37 Leonis	5.7	+0.46	- 4.5	+14 0.1	30 1 17.9	-0 20.1	+0.7757	0.5339	-0.1630	15.9
F e b r u a r										
$\xi^2$ Ceti	<sup>m</sup> 4.3	-0.99 <sup>"</sup>	- 8.5 <sup>"</sup>	+ 8 <sup>o</sup> 12.7 <sup>'</sup>	17 <sup>d</sup> 16 <sup>h</sup> 47.6 <sup>m</sup>	+0 <sup>h</sup> 11.6 <sup>m</sup>	+1.0496	0.5620	+0.2100	<sup>d</sup> 5.0
$\mu$ Ceti	4.4	-0.91	- 7.8	+ 9 52.9	18 0 11.5	+7 19.9	+0.8930	0.5626	+0.2021	5.3
$\delta$ Tauri	3.9	-0.42	- 4.5	+17 24.8	19 18 52.2	+0 29.9	+0.5790	0.5691	+0.1376	7.1
64 Tauri	4.8	-0.41	- 4.6	+17 19.0	19 19 22.3	+0 58.9	+0.7479	0.5693	+0.1367	7.1
68 Tauri	4.2	-0.41	- 4.4	+17 48.2	19 19 58.0	+1 33.3	+0.3279	0.5694	+0.1356	7.1
63 Geminorum	5.3	+0.43	- 3.0	+21 33.5	23 2 0.3	+4 46.2	+0.6791	0.5673	-0.0307	10.4
M ä r z										
21 G. Sagittarii	<sup>m</sup> 5.7	-0.81 <sup>"</sup>	+ 1.6 <sup>"</sup>	-20 <sup>o</sup> 46.8 <sup>'</sup>	8 <sup>d</sup> 5 <sup>h</sup> 59.9 <sup>m</sup>	-0 <sup>h</sup> 56.4 <sup>m</sup>	+0.8529	0.5665	-0.0498	<sup>d</sup> 23.6
8 Leonis	5.9	+0.61	- 3.5	+16 41.1	24 18 41.9	-2 44.7	+0.8970	0.5378	-0.1397	10.6
80 Virginis	5.8	+0.93	- 5.2	- 5 7.1	30 0 49.0	-0 15.5	+0.8161	0.5071	-0.2081	15.8
A p r i l										
131 B. Scorpiae	<sup>m</sup> 5.6	+0.45 <sup>"</sup>	0.0 <sup>"</sup>	-19 <sup>o</sup> 49.2 <sup>'</sup>	3 <sup>d</sup> 0 <sup>h</sup> 37.1 <sup>m</sup>	-3 <sup>h</sup> 17.6 <sup>m</sup>	+0.4747	0.5421	-0.1170	<sup>d</sup> 19.8
$\zeta$ Tauri	3.0	-1.00	- 3.0	+21 6.6	16 16 51.2	+0 54.7	+0.6313	0.5878	+0.0757	4.2
d Geminorum	5.2	-0.64	- 1.4	+21 49.6	17 22 58.2	+5 52.8	+1.0931	0.5795	+0.0028	5.5
$\eta$ Cancri	5.5	-0.08	- 0.6	+20 37.8	19 18 29.9	-0 9.7	+0.3882	0.5562	-0.0912	7.3
8 Leonis	5.9	+0.27	- 1.7	+16 41.1	21 0 28.8	+4 49.7	+1.1428	0.5375	-0.1410	8.5
37 Leonis	5.7	+0.47	- 2.6	+14 0.2	21 20 1.1	-0 14.6	+1.0697	0.5266	-0.1661	9.3
$\nu$ Virginis	4.2	+0.84	- 4.6	+ 6 50.2	23 18 44.7	-2 52.5	+0.2188	0.5084	-0.2039	11.3
M a i										
1 Sagittarii	<sup>m</sup> 5.1	+0.84 <sup>"</sup>	+ 2.1 <sup>"</sup>	-23 <sup>o</sup> 42.8 <sup>'</sup>	1 <sup>d</sup> 23 <sup>h</sup> 22.9 <sup>m</sup>	-4 <sup>h</sup> 7.5 <sup>m</sup>	+1.1467	0.5614	-0.0412	<sup>d</sup> 19.5
$\mu$ Geminorum	3.2	-1.09	- 1.7	+22 32.6	14 20 35.6	+5 44.8	+0.3376	0.5932	+0.0329	3.1
$\delta$ Geminorum	3.5	-0.85	- 0.4	+22 5.1	15 19 34.7	+3 50.5	+0.9080	0.5835	-0.0246	4.0
49 B. Cancri	5.9	-0.55	+ 0.4	+20 55.4	16 20 52.1	+4 11.7	+0.7804	0.5675	-0.0814	5.1
$\nu$ Virginis	4.2	+0.61	- 2.7	+ 6 50.2	21 1 5.7	+5 15.9	+0.4263	0.5076	-0.2049	9.2
J u n i										
80 Virginis	<sup>m</sup> 5.8	+0.98 <sup>"</sup>	- 3.4 <sup>"</sup>	- 5 <sup>o</sup> 7.1 <sup>'</sup>	19 <sup>d</sup> 20 <sup>h</sup> 26.9 <sup>m</sup>	+0 <sup>h</sup> 45.0 <sup>m</sup>	+1.0348	0.5033	-0.2115	<sup>d</sup> 9.7
J u l i										
24 B. Ceti	<sup>m</sup> 6.0	+0.68 <sup>"</sup>	+ 6.7 <sup>"</sup>	- 5 <sup>o</sup> 33.1 <sup>'</sup>	2 <sup>d</sup> 0 <sup>h</sup> 6.8 <sup>m</sup>	-5 <sup>h</sup> 22.0 <sup>m</sup>	+0.6964	0.5492	+0.2295	<sup>d</sup> 21.8
1 Sagittarii	5.1	+2.18	+ 1.8	-23 42.8	22 20 6.5	-2 1.1	+1.0042	0.5695	+0.0435	13.2
30 Piscium	4.7	+1.52	+11.7	- 6 19.0	29 2 0.2	-1 33.5	+0.6548	0.5541	+0.2297	19.5
33 Piscium	4.7	+1.50	+11.6	- 6 0.7	29 3 32.3	-0 4.6	+0.7001	0.5538	+0.2305	19.5
20 Ceti	4.0	+1.28	+10.1	- 1 26.4	30 1 18.2	-3 2.7	+1.1782	0.5512	+0.2361	20.2



## Sternbedeckungen 1945

## Elemente der in Mitteleuropa sichtbaren Sternbedeckungen

Name	Stern				Konjunktion in Rektaszension					Alber d. Monat
	Gr.	$\Delta\alpha$	$\Delta\delta$	$\delta$ app.	Welt-Zeit	Stundenw. H	Y	$\alpha'$	$y'$	
August										
$\mu$ Ceti	<sup>m</sup> 4.4	<sup>a</sup> +0.77	<sup>"</sup> + 4.8	<sup>o</sup> + 9 53.1	<sup>d</sup> 1 3 58.4	<sup>h</sup> -2 6.0	+1.2486	0.5594	+0.2090	<sup>d</sup> 22.6
$\zeta$ Tauri	3.0	-0.01	- 0.6	+21 6.6	4 4 58.0	-3 46.8	+0.8886	0.5855	+0.0779	25.6
Venus	-3.6	—	—	+21 29.1	4 15 45.8	+6 36.2	+1.2106	0.5405	+0.0498	26.1
17 Capricorni	5.9	+2.43	+ 9.2	-21 42.8	21 21 58.7	-0 44.9	+0.9377	0.5813	+0.1090	13.9
68 Tauri	4.2	+1.15	+ 3.6	+17 48.3	30 4 41.5	-1 8.8	+1.1417	0.5759	+0.1422	22.2
14 B. Geminorum	6.0	+0.65	- 0.2	+22 12.1	31 23 32.9	-7 54.2	+0.7315	0.5825	+0.0453	24.0
September										
$\eta$ Geminorum <i>sq</i>	<sup>m</sup> 3.2-4.2	<sup>a</sup> +0.62	<sup>"</sup> - 0.4	<sup>o</sup> +22 31.5	<sup>d</sup> 1 1 44.0	<sup>h</sup> -5 48.2	+0.4897	0.5825	+0.0399	<sup>d</sup> 24.1
$\mu$ Geminorum	3.2	+0.59	- 0.6	+22 32.6	1 5 2.5	-2 37.1	+0.5895	0.5823	+0.0319	24.2
$\mu$ Caneri	5.4	+0.13	- 1.1	+21 44.6	3 0 45.4	-8 32.0	+0.5336	0.5707	-0.0716	26.0
80 Virginis	5.8	+0.12	+ 0.5	- 5 7.0	9 19 52.8	+5 34.1	+0.6751	0.5048	-0.2142	3.2
49 Sagittarii	5.6	+1.97	+ 3.4	-24 4.3	16 21 53.6	+2 13.3	+0.8712	0.5710	+0.0311	10.3
47 B. Arietis	5.8	+2.20	+10.3	+12 58.8	25 2 36.6	-0 12.6	+0.4448	0.5757	+0.2040	18.5
1 Tauri	5.3	+1.79	+ 3.2	+20 20.9	27 4 18.2	-0 24.0	+0.9708	0.5858	+0.1061	20.6
14 B. Geminorum	6.0	+1.50	+ 0.1	+22 12.1	28 5 9.8	-0 30.0	+0.9805	0.5853	+0.0451	21.6
Mars	0.7	—	—	+23 21.0	28 23 38.8	-6 43.4	+0.2058	0.5595	-0.0001	22.4
44 Geminorum	5.9	+1.20	- 1.9	+22 43.3	29 3 52.6	-2 39.2	+0.8333	0.5798	-0.0115	22.6
Oktober										
$\psi$ Ophiuchi	<sup>m</sup> 4.6	<sup>a</sup> +0.54	<sup>"</sup> - 0.8	<sup>o</sup> -19 54.6	<sup>d</sup> 10 18 48.7	<sup>h</sup> +3 43.8	+0.7561	0.5312	-0.1337	<sup>d</sup> 4.6
$\alpha$ Capricorni	4.8	+2.11	+ 8.8	-19 6.9	16 17 24.5	-2 35.7	+1.1376	0.5654	+0.1588	10.5
$\tau$ Aquarii	4.2	+2.30	+12.2	-13 52.8	17 22 34.4	+1 31.9	+1.1549	0.5635	+0.2071	11.7
85 H. <sup>1</sup> Tauri	6.0	+2.69	+ 7.1	+18 36.9	23 18 9.1	-8 1.0	+0.4581	0.5939	+0.1536	17.6
24 B. Tauri	6.0	+2.69	+ 6.8	+18 55.1	23 19 55.8	-6 18.6	+0.4267	0.5943	+0.1495	17.6
$\epsilon$ Tauri	3.6	+2.68	+ 6.6	+19 3.7	23 21 21.9	+4 55.8	+0.4980	0.5946	+0.1463	17.7
0 Tauri	4.8	+2.54	+ 2.4	+21 53.6	24 20 19.8	-6 53.1	+0.4089	0.5971	+0.0897	18.6
87 B. Geminorum	5.8	+2.17	- 2.9	+23 40.1	26 5 18.5	+0 46.6	+0.1392	0.5900	+0.0022	20.0
Mars	0.3	—	—	+22 20.6	27 5 24.6	-0 2.8	+0.8335	0.5621	-0.0564	21.0
November										
$\epsilon$ Capricorni	<sup>m</sup> 4.7	<sup>a</sup> +1.68	<sup>"</sup> + 6.5	<sup>o</sup> -19 42.7	<sup>d</sup> 12 22 45.7	<sup>h</sup> +4 38.4	+1.1574	0.5557	+0.1521	<sup>d</sup> 7.9
30 Piscium	4.7	+2.31	+13.1	- 6 19.0	15 16 17.9	-4 3.8	+0.5848	0.5531	+0.2378	10.7
33 Piscium	4.7	+2.32	+13.4	- 6 0.7	15 17 49.5	-2 35.2	+0.6423	0.5533	+0.2389	10.7
24 B. Ceti	6.0	+2.34	+13.4	- 5 33.0	15 20 4.4	-0 25.0	+0.7174	0.5536	+0.2403	10.8
20 Ceti	4.9	+2.52	+14.3	- 1 26.3	16 15 12.7	-5 56.2	+1.2904	0.5581	+0.2477	11.6
1 Geminorum	4.3	+3.18	- 0.6	+23 16.1	21 20 32.3	-5 26.6	+0.1765	0.6062	+0.0545	16.9
3 Geminorum <i>m</i>	5.8	+3.16	- 0.9	+23 7.4	21 22 39.5	-3 24.7	+0.4297	0.6060	+0.0485	16.9
$\eta$ Geminorum <i>sq</i>	3.2-4.2	+3.13	- 1.2	+22 31.5	22 0 36.5	-1 32.6	+1.1187	0.6056	+0.0430	17.0
36 B. Geminorum	6.0	+3.12	- 2.1	+23 21.5	22 4 38.2	+2 19.2	+0.4360	0.6047	+0.0316	17.2
58 Geminorum	6.0	+2.88	- 6.2	+23 3.1	23 2 52.9	-0 20.4	+0.7690	0.5951	-0.0299	18.1
Mars	-0.2	—	—	+21 47.8	24 3 20.1	-0 50.2	+0.5807	0.5734	-0.0909	19.1
v Virginis	4.2	+1.25	-10.0	+ 6 50.1	28 2 42.1	-4 34.4	+0.7264	0.5090	-0.2143	23.1
Dezember										
$\chi$ Capricorni	<sup>m</sup> 5.3	<sup>a</sup> +1.23	<sup>"</sup> + 4.2	<sup>o</sup> -21 24.9	<sup>d</sup> 9 15 42.4	<sup>h</sup> -0 11.0	+1.0550	0.5554	+0.1272	<sup>d</sup> 4.9
$\varphi$ Capricorni	5.4	+1.26	+ 4.5	-20 52.8	9 18 53.4	+2 53.4	+0.9002	0.5546	+0.1333	5.0
30 Piscium	4.7	+2.03	+11.0	- 6 19.0	12 23 54.8	+5 20.8	+0.4780	0.5424	+0.2338	8.2
c Virginis	5.1	+1.94	-14.8	+ 3 36.9	26 4 39.1	-1 21.2	+0.2661	0.5058	-0.2222	21.4



## Ein- und Austritte für Berlin-Babelsberg

Tag	Stern	Größe	Phase	Welt-Zeit	$P$	$a$	$b$	Alter des Mondes
1945								
Jan. 18	30 Piscium	<sup>m</sup> 4.7	E.	16 <sup>h</sup> 8.0 <sup>m</sup>	80°	<sup>m</sup> -1.4	<sup>m</sup> -0.2	<sup>d</sup> 4.5
18	33 Piscium	4.7	E.	18 11.4	116	-1.5	-2.6	4.6
19	20 Ceti	4.9	E.	14 39.4	131	-2.8	-1.1	5.4
21	$\mu$ Ceti	4.4	E.	17 47.5	89	-1.6	0.0	7.5
25	+ 20° 1105 <i>m</i>	5.9	E.	2 24.1	73	-0.2	-1.1	10.9
26	63 Geminorum	5.3	E.	18 33.9	98	-0.9	+1.2	12.6
Febr. 19	$\delta$ Tauri	3.9	E.	18 44.0	86	-1.4	-0.5	7.1
19	64 Tauri	4.8	E.	19 33.0	130	-1.4	-3.3	7.1
19	68 Tauri	4.2	E.	20 25.9	35	-0.8	+0.8	7.2
23	63 Geminorum	5.3	E.	2 37.5	71	-0.1	-1.2	10.4
April 19	$\eta$ Cancri	5.5	E.	18 8.8	67	-1.8	+0.8	7.3
21	8 Leonis	5.9	E.	1 21.3	151	+0.5	-2.1	8.6
Mai 15	$\delta$ Geminorum	3.5	E.	20 17.2	136	+0.2	-2.3	4.0
16	49 B. Cancri	5.9	E.	21 27.7	93	-0.1	-1.5	5.1
Juni 19	80 Virginis	5.8	E.	20 34.0	130	-1.1	-1.6	9.7
Juli 22	$\iota$ Sagittarii	5.1	E.	19 6.2	116	-1.0	+0.6	13.2
29	30 Piscium	4.7	A.	2 21.1	295	-2.2	-0.6	19.5
29	33 Piscium	4.7	A.	4 29.9	253	-1.2	-0.4	19.6
30	20 Ceti	4.9	A.	0 46.3	202	-0.5	+2.1	20.4
Aug. 4	$\zeta$ Tauri	3.0	A.	4 21.6	209	-0.1	+2.9	25.6
21	17 Capricorni	5.9	E.	21 24.5	73	-1.4	+0.4	13.9
Sept. 25	147 B. Arietis	5.8	A.	3 30.1	273	-1.4	-0.9	18.5
Okt. 16	$\kappa$ Capricorni	4.8	E.	16 10.8	101	-1.0	+1.2	10.5
Nov. 15	24 B. Ceti	6.0	E.	19 46.9	44	-1.0	+0.8	10.8
21	3 Geminorum <i>m</i>	5.8	A.	22 22.4	299	-1.3	+0.2	16.9
24	Mars	-0.2	E.	2 45.8	118	-1.4	-0.8	19.1
24	Mars	-0.2	A.	4 0.5	268	-1.5	-0.3	19.2
28	$\nu$ Virginis	4.2	A.	2 7.0	249	-0.7	+2.8	23.1
Dez. 9	$\chi$ Capricorni	5.3	E.	15 18.3	100	-1.8	-0.3	4.8

## Ein- und Austritte für Königsberg

Tag	Stern	Größe	Phase	Welt-Zeit	$P$	$a$	$b$	Alter des Mondes
1945								
Jan. 18	30 Piscium	<sup>m</sup> 4.7	E.	16 <sup>h</sup> 16.8 <sup>m</sup>	83°	<sup>m</sup> -1.2	<sup>m</sup> -0.6	<sup>d</sup> 4.5
18	33 Piscium	4.7	E.	18 15.1	116	-1.2	-2.7	4.6
21	$\mu$ Ceti	4.4	E.	17 58.6	90	-1.5	-0.4	7.5
25	+ 20° 1105 <i>m</i>	5.9	E.	2 23.0	61	-0.1	-1.0	10.9
26	63 Geminorum	5.3	E.	18 43.2	97	-1.0	+1.1	12.6
Febr. 19	$\delta$ Tauri	3.9	E.	18 52.6	81	-1.2	-0.6	7.1
19	64 Tauri	4.8	E.	19 35.4	120	-1.0	-2.5	7.1
19	68 Tauri	4.2	E.	20 36.6	21	-1.0	+1.7	7.2
23	63 Geminorum	5.3	E.	2 35.4	61	0.0	-1.1	10.4
April 19	$\eta$ Cancri	5.5	E.	18 24.9	51	-2.0	+1.4	7.3
Mai 15	$\delta$ Geminorum	3.5	E.	20 10.8	124	+0.2	-2.0	4.0
16	49 B. Cancri	5.9	E.	21 24.6	84	0.0	-1.4	5.1



## Ein- und Austritte für Königsberg

Tag	Stern	Größe	Phase	Welt-Zeit	<i>P</i>	<i>a</i>	<i>b</i>	Alter des Mondes
1945								
Juni 19	80 Virginis	<sup>m</sup> 5.8	E.	<sup>h</sup> 20 <sup>m</sup> 38.3	<sup>o</sup> 122	<sup>m</sup> -1.0	<sup>m</sup> -1.6	<sup>d</sup> 9.7
Juli 22	1 Sagittarii	5.1	E.	19 15.7	107	-1.2	+0.6	13.2
29	33 Piscium	4.7	A.	4 36.6	251	-0.9	-0.6	19.6
30	20 Ceti	4.9	A.	0 54.6	197	-0.5	+2.0	20.4
Aug. 4	ζ Tauri	3.0	A.	4 29.5	206	-0.2	+3.1	25.6
21	17 Capricorni	5.9	E.	21 34.9	74	-1.3	0.0	13.9
31	14 B. Geminorum	6.0	A.	23 1.5	293	+0.1	+1.1	24.0
Sept. 1	η Geminorum	3.2-4.2	A.	0 57.7	336	-1.9	-1.7	24.0
25	147 B. Arietis	5.8	A.	3 37.3	277	-1.2	-1.3	18.6
Okt. 16	κ Capricorni	4.8	E.	16 21.4	100	-1.2	+1.0	10.5
27	Mars	0.3	E.	5 43.1	165	-0.3	-4.9	21.0
27	Mars	0.3	A.	6 14.8	217	-2.1	+2.1	21.1
Nov. 15	24 B. Ceti	6.0	E.	19 55.5	48	-0.9	+0.5	10.8
21	3 Geminorum <i>m</i>	5.8	A.	22 32.3	299	-1.3	0.0	16.9
23	58 Geminorum	6.0	A.	3 37.4	222	-1.9	+1.5	18.2
24	Mars	-0.2	E.	2 54.3	107	-1.4	-0.7	19.1
24	Mars	-0.2	A.	4 9.2	280	-1.2	-1.0	19.2
28	ν Virginis	4.2	A.	2 18.7	261	-0.9	+2.0	23.1
Dez. 9	χ Capricorni	5.3	E.	15 29.6	104	-1.6	-0.8	4.8

## Ein- und Austritte für Straßburg

Tag	Stern	Größe	Phase	Welt-Zeit	<i>P</i>	<i>a</i>	<i>b</i>	Alter des Mondes
1945								
Jan. 18	30 Piscium	<sup>m</sup> 4.7	E.	<sup>h</sup> 16 <sup>m</sup> 0.1	<sup>o</sup> 81	<sup>m</sup> -1.6	<sup>m</sup> 0.0	<sup>d</sup> 4.5
18	33 Piscium	4.7	E.	18 13.8	126	-2.3	-3.7	4.6
19	20 Ceti	4.9	E.	14 28.1	129	-2.9	-0.8	5.4
21	μ Ceti	4.4	E.	17 38.1	93	-1.8	+0.4	7.5
25	+ 20° 1105 <i>m</i>	5.9	E.	2 27.8	87	-0.2	-1.3	10.9
26	63 Geminorum	5.3	E.	18 25.2	104	-0.8	+0.7	12.6
Febr. 19	δ Tauri	3.9	E.	18 37.5	96	-1.8	-0.7	7.1
19	68 Tauri	4.2	E.	20 16.9	50	-1.3	+0.5	7.1
23	63 Geminorum	5.3	E.	2 41.9	83	-0.1	-1.3	10.4
April 2	131 B. Scorpil	5.6	A.	23 46.7	343	+0.2	-1.0	19.8
19	η Cancri	5.5	E.	17 57.0	84	-1.9	+0.4	7.2
21	8 Leonis	5.9	E.	1 32.8	161	+0.6	-2.2	8.6
Mai 15	δ Geminorum	3.5	E.	20 28.7	153	+0.5	-2.9	4.1
16	49 B. Cancri	5.9	E.	21 33.3	103	-0.1	-1.6	5.1
Juni 19	80 Virginis	5.8	E.	20 34.3	140	-1.1	-1.8	9.7
Juli 22	1 Sagittarii	5.1	E.	18 59.1	127	-0.8	+0.4	13.2
29	30 Piscium	4.7	A.	2 10.7	295	-2.4	-0.4	19.5
29	33 Piscium	4.7	A.	4 24.3	250	-1.4	-0.1	19.6
30	20 Ceti	4.9	A.	0 35.4	202	-0.5	+2.3	20.4



## Ein- und Austritte für Straßburg

Tag	Stern	Größe	Phase	Welt-Zeit	P	a	b	Alter des Mondes
1945								
Aug. 4	ζ Tauri	<sup>m</sup> 3.0	A.	<sup>h</sup> <sup>m</sup> 4 10.4	<sup>o</sup> 205	<sup>m</sup> +0.2	<sup>m</sup> +3.0	<sup>d</sup> 25.6
21	17 Capricorni	5.9	E.	21 14.4	74	-1.6	+0.7	13.9
Sept. 16	49 Sagittarii	5.6	E.	22 15.6	93	-1.1	-1.3	10.3
25	147 B Arietis	5.8	A.	3 24.6	265	-1.6	-0.3	18.5
Okt. 16	κ Capricorni	4.8	E.	16 1.3	107	-0.9	+0.9	10.5
Nov. 15	24 B Ceti	6.0	E.	19 37.3	44	-1.1	+1.1	10.8
21	3 Geminorum <i>m</i>	5.8	A.	22 14.2	294	-1.2	+0.5	16.9
24	Mars	-0.2	E.	2 41.8	132	-1.5	-1.4	19.1
24	Mars	-0.2	A.	3 50.7	251	-1.9	+0.8	19.2
28	ν Virginis	4.2	A.	1 49.6	225	-0.4	+5.5	23.1
Dez. 9	χ Capricorni	5.3	E.	15 9.2	100	-1.9	-0.1	4.8

## Ein- und Austritte für Wien

Tag	Stern	Größe	Phase	Welt-Zeit	P	a	b	Alter des Mondes
1945								
Jan. 18	30 Piscium	<sup>m</sup> 4.7	E.	<sup>h</sup> <sup>m</sup> 16 15.1	<sup>o</sup> 94	<sup>m</sup> -1.8	<sup>m</sup> -0.7	<sup>d</sup> 4.5
21	μ Ceti	4.4	E.	17 55.3	106	-2.1	-1.0	7.5
25	+ 20° 1105 <i>m</i>	5.9	E.	2 29.3	80	0.0	-1.1	10.9
26	63 Geminorum	5.3	E.	18 33.5	113	-1.2	+0.6	12.6
Febr. 19	δ Tauri	3.9	E.	18 52.6	101	-1.6	-1.3	7.1
19	68 Tauri	4.2	E.	20 27.1	51	-1.2	+0.2	7.2
23	63 Geminorum	5.3	E.	2 42.2	75	+0.1	-1.1	10.4
April 2	131 B Scorpil	5.6	A.	23 42.6	2	+1.2	-3.2	19.8
19	η Cancri	5.5	E.	18 13.3	79	-1.9	+0.1	7.3
Mai 15	δ Geminorum	3.5	E.	20 25.8	142	+0.4	-2.4	4.1
16	49 B Cancri	5.9	E.	21 33.9	97	0.0	-1.5	5.1
Juni 19	80 Virginis	5.8	E.	20 45.1	132	-1.2	-1.8	9.7
Juli 22	1 Sagittarii	5.1	E.	19 7.6	119	-1.2	+0.4	13.2
29	30 Piscium	4.7	A.	2 30.0	278	-2.0	-0.3	19.5
29	33 Piscium	4.7	A.	4 34.7	239	-1.1	0.0	19.6
30	20 Ceti	4.9	A.	0 38.6	191	-0.4	+2.5	20.4
Aug. 4	ζ Tauri	3.0	A.	4 5.7	185	+1.0	+5.1	25.6
21	17 Capricorni	5.9	E.	21 27.9	79	-1.6	+0.2	13.9
Sept. 1	η Geminorum <i>sq</i>	3.2-4.2	A.	0 55.1	316	-0.8	+0.1	24.0
25	147 B Arietis	5.8	A.	3 37.5	257	-1.4	-0.4	18.6
Okt. 16	κ Capricorni	4.8	E.	16 10.0	106	-1.2	+1.0	10.5
Nov. 15	24 B Ceti	6.0	E.	19 47.3	56	-1.3	+0.6	10.8
21	3 Geminorum <i>m</i>	5.8	A.	22 24.6	283	-1.3	+0.6	16.9
24	Mars	-0.2	E.	2 55.6	131	-1.5	-1.6	19.1
24	Mars	-0.2	A.	4 6.7	257	-1.8	0.0	19.2
28	ν Virginis	4.2	A.	1 53.4	224	-1.0	+6.3	23.1
Dez. 9	χ Capricorni	5.3	E.	15 26.6	110	-2.1	-0.8	4.8



O <sup>h</sup> Welt-Zeit	Mondbewegung				Lage des Mondäquators gegen den Erdäquator			
	$\Omega$	$L_C$	$\bar{\omega}_C$	$M_C$	$i$	$\Delta$	$\Omega'$	$\Delta - \bar{\omega}$
1945								
Jan. -1	103.9125	97.9291	5.20	92.73	23.986 <sub>13</sub>	292.189 <sub>518</sub>	356.417 <sub>13</sub>	3.281 <sub>12</sub>
+9	108.3829	229.6930	6.31	223.38	23.973 <sub>13</sub>	291.671 <sub>518</sub>	356.404 <sub>13</sub>	3.293 <sub>12</sub>
19	107.8534	1.4570	7.43	354.03	23.960 <sub>13</sub>	291.153 <sub>518</sub>	356.391 <sub>12</sub>	3.305 <sub>12</sub>
29	107.3238	133.2210	8.54	124.68	23.947 <sub>14</sub>	290.635 <sub>518</sub>	356.379 <sub>12</sub>	3.317 <sub>11</sub>
Febr. 8	106.7943	264.9849	9.65	255.33	23.933 <sub>13</sub>	290.117 <sub>518</sub>	356.367 <sub>12</sub>	3.328 <sub>11</sub>
18	106.2648	36.7489	10.77	25.98	23.920 <sub>14</sub>	289.599 <sub>519</sub>	356.355 <sub>12</sub>	3.339 <sub>11</sub>
28	105.7352	168.5129	11.88	156.63	23.906 <sub>13</sub>	289.080 <sub>519</sub>	356.343 <sub>11</sub>	3.350 <sub>11</sub>
März 10	105.2057	300.2768	13.00	287.28	23.893 <sub>14</sub>	288.561 <sub>519</sub>	356.332 <sub>11</sub>	3.361 <sub>10</sub>
20	104.6762	72.0408	14.11	57.93	23.879 <sub>13</sub>	288.042 <sub>520</sub>	356.321 <sub>11</sub>	3.371 <sub>10</sub>
30	104.1466	203.8048	15.22	188.58	23.866 <sub>14</sub>	287.522 <sub>520</sub>	356.310 <sub>11</sub>	3.381 <sub>10</sub>
April 9	103.6171	335.5687	16.34	319.23	23.852 <sub>13</sub>	287.002 <sub>520</sub>	356.299 <sub>10</sub>	3.391 <sub>9</sub>
19	103.0875	107.3327	17.45	89.88	23.839 <sub>14</sub>	286.482 <sub>520</sub>	356.289 <sub>10</sub>	3.400 <sub>9</sub>
29	102.5580	239.0967	18.57	220.53	23.825 <sub>14</sub>	285.962 <sub>521</sub>	356.279 <sub>10</sub>	3.409 <sub>9</sub>
Mai 9	102.0285	10.8606	19.68	351.18	23.811 <sub>13</sub>	285.441 <sub>521</sub>	356.269 <sub>9</sub>	3.418 <sub>9</sub>
19	101.4989	142.6246	20.79	121.83	23.798 <sub>14</sub>	284.920 <sub>521</sub>	356.260 <sub>9</sub>	3.427 <sub>8</sub>
29	100.9694	274.3886	21.91	252.48	23.784 <sub>14</sub>	284.399 <sub>521</sub>	356.251 <sub>8</sub>	3.435 <sub>8</sub>
Juni 8	100.4398	46.1525	23.02	23.13	23.770 <sub>13</sub>	283.878 <sub>522</sub>	356.243 <sub>8</sub>	3.443 <sub>8</sub>
18	99.9103	177.9165	24.14	153.78	23.757 <sub>14</sub>	283.356 <sub>522</sub>	356.235 <sub>8</sub>	3.451 <sub>7</sub>
28	99.3808	309.6805	25.25	284.43	23.743 <sub>14</sub>	282.834 <sub>522</sub>	356.227 <sub>8</sub>	3.458 <sub>7</sub>
Juli 8	98.8512	81.4444	26.36	55.08	23.729 <sub>14</sub>	282.312 <sub>523</sub>	356.219 <sub>7</sub>	3.465 <sub>7</sub>
18	98.3217	213.2084	27.48	185.73	23.715 <sub>14</sub>	281.789 <sub>523</sub>	356.212 <sub>7</sub>	3.472 <sub>7</sub>
28	97.7921	344.9724	28.59	316.38	23.701 <sub>14</sub>	281.266 <sub>523</sub>	356.205 <sub>7</sub>	3.479 <sub>6</sub>
Aug. 7	97.2626	116.7363	29.71	87.03	23.687 <sub>14</sub>	280.743 <sub>524</sub>	356.198 <sub>6</sub>	3.485 <sub>6</sub>
17	96.7331	248.5003	30.82	217.68	23.673 <sub>14</sub>	280.219 <sub>524</sub>	356.192 <sub>6</sub>	3.491 <sub>6</sub>
27	96.2035	20.2643	31.93	348.33	23.659 <sub>14</sub>	279.695 <sub>524</sub>	356.186 <sub>6</sub>	3.497 <sub>6</sub>
Sept. 6	95.6740	152.0282	33.05	118.98	23.645 <sub>14</sub>	279.171 <sub>524</sub>	356.180 <sub>6</sub>	3.503 <sub>5</sub>
16	95.1444	283.7922	34.16	249.63	23.631 <sub>14</sub>	278.647 <sub>525</sub>	356.174 <sub>5</sub>	3.508 <sub>5</sub>
26	94.6149	55.5562	35.28	20.28	23.617 <sub>14</sub>	278.122 <sub>525</sub>	356.169 <sub>5</sub>	3.513 <sub>5</sub>
Okt. 6	94.0854	187.3201	36.39	150.93	23.603 <sub>14</sub>	277.597 <sub>525</sub>	356.164 <sub>5</sub>	3.518 <sub>4</sub>
16	93.5558	319.0841	37.50	281.58	23.589 <sub>14</sub>	277.072 <sub>525</sub>	356.159 <sub>4</sub>	3.522 <sub>4</sub>
26	93.0263	90.8481	38.62	52.23	23.575 <sub>14</sub>	276.547 <sub>526</sub>	356.155 <sub>4</sub>	3.526 <sub>4</sub>
Nov. 5	92.4967	222.6120	39.73	182.88	23.561 <sub>14</sub>	276.021 <sub>526</sub>	356.151 <sub>4</sub>	3.530 <sub>3</sub>
15	91.9672	354.3760	40.85	313.53	23.547 <sub>14</sub>	275.495 <sub>526</sub>	356.147 <sub>3</sub>	3.533 <sub>3</sub>
25	91.4377	126.1400	41.96	84.18	23.533 <sub>15</sub>	274.969 <sub>527</sub>	356.144 <sub>3</sub>	3.536 <sub>3</sub>
Dez. 5	90.9081	257.9039	43.08	214.83	23.518 <sub>14</sub>	274.442 <sub>527</sub>	356.141 <sub>2</sub>	3.539 <sub>3</sub>
15	90.3786	29.6679	44.19	345.48	23.504 <sub>14</sub>	273.915 <sub>527</sub>	356.139 <sub>2</sub>	3.542 <sub>2</sub>
25	89.8491	161.4319	45.30	116.13	23.490 <sub>15</sub>	273.388 <sub>527</sub>	356.137 <sub>2</sub>	3.544 <sub>2</sub>
35	89.3195	293.1959	46.42	246.78	23.475	272.861	356.135	3.546



Tag	0 <sup>h</sup> Welt-Zeit									
	$\alpha_c - \alpha_k$			$\delta_c - \delta_k$			log sin $p_k$			
1945										
Jan.	0	-10.87	+0.63	+0.11	+ 70.8	-13.6	-2.0	8.21825	-484	- 7
	1	-10.24	+0.71	+0.08	+ 57.2	-15.5	-1.9	8.21341	-455	+ 29
	2	- 9.53	+0.80	+0.09	+ 41.7	-16.8	-1.3	8.20886	-392	+ 63
	3	- 8.73	+0.89	+0.09	+ 24.9	-17.3	-0.5	8.20494	-299	+119
	4	- 7.84	+0.99	+0.10	+ 7.6	-16.5	+0.8	8.20195	-180	+137
	5	- 6.85	+1.09	+0.11	- 23.4	-14.5	+3.5	8.19972	+ 99	+142
	6	- 5.76	+1.20	+0.09	- 34.4	-11.0	+5.1	8.20071	+238	+139
	7	- 4.56	+1.29	+0.09	- 40.3	- 5.9	+5.9	8.20309		+125
8	- 3.27									
Jan.	21	-12.37	-0.36	+0.33	+108.3	- 1.9	-1.0	8.23687	-276	- 29
	22	-12.73	-0.03	+0.28	+106.4	- 2.9	-1.4	8.23411	-305	- 22
	23	-12.76	+0.25	+0.21	+103.5	- 4.3	-1.9	8.23106	-327	- 19
	24	-12.51	+0.46	+0.15	+ 99.2	- 6.2	-2.4	8.22779	-346	- 16
	25	-12.05	+0.61	+0.06	+ 84.4	-11.1	-2.2	8.22433	-362	- 14
	26	-11.44	+0.67	0.00	+ 73.3	-13.3	-1.8	8.21695	-382	+ 8
	27	-10.77	+0.69	+0.03	+ 60.0	-15.1	-1.2	8.21313	-374	+ 26
	28	-10.08	+0.72	+0.06	+ 44.9	-16.3	-0.5	8.20939	-348	+ 49
	29	- 9.39	+0.78	+0.11	+ 28.6	-16.8	+0.5	8.20591	-299	+ 72
	30	- 8.67	+0.89	+0.15	+ 11.8	-16.3	+1.5	8.20292	-227	+ 93
	31	- 7.89	+1.04	+0.15	- 4.5	-14.8	+2.8	8.20065	-134	+114
Febr.	1	- 7.00	+1.19	+0.14	-19.3	-12.0	+4.3	8.19931	- 20	+130
	2	- 5.96	+1.33	+0.11	- 31.3	- 7.7	+5.6	8.19911	+110	+136
	3	- 4.77	+1.44	0.00	- 39.0	- 2.1	+6.8	8.20021	+246	+134
	4	- 3.44	+1.44	-0.16	- 41.1	+ 4.7	+7.6	8.20267	+380	+122
	5	- 2.00			- 36.4			8.20647		
	6	- 0.56								
Febr.	19	-14.17	+0.13		+ 97.8	- 2.7	-1.1	8.23428	-499	+ 8
	20	-14.04	+0.49	+0.36	+ 95.1	- 3.8	-2.2	8.22929	-491	+ 27
	21	-13.55	+0.75	+0.15	+ 91.3	- 6.0	-2.8	8.22438	-464	+ 36
	22	-12.80	+0.90	+0.02	+ 85.3	- 8.8	-2.9	8.21974	-428	+ 40
	23	-11.90	+0.92	-0.03	+ 76.5	-11.7	-2.3	8.21548	-388	+ 40
	24	-10.98	+0.89	-0.04	+ 64.8	-14.0	-1.6	8.21158	-348	+ 41
	25	-10.09	+0.85	0.00	+ 50.8	-15.6	-0.7	8.20810	-307	+ 46
	26	- 9.24	+0.85	+0.04	+ 35.2	-16.3	+0.3	8.20503	-261	+ 52
	27	- 8.39	+0.89	+0.10	+ 18.9	-16.0	+1.2	8.20242	-209	+ 62
	28	- 7.50	+0.99	+0.14	+ 2.9	-14.8	+2.4	8.20033	-147	+ 76
	29	- 6.51	+1.13	+0.17	-11.9	-12.4	+3.7	8.19886	- 71	+ 92
März	1	- 5.38	+1.30	+0.16	- 24.3	- 8.7	+4.8	8.19815	+ 21	+105
	2	- 4.08	+1.46	+0.09	- 33.0	- 3.9	+6.1	8.19836	+126	+116
	3	- 2.62	+1.55	-0.02	- 36.9	+ 2.2	+7.1	8.19962	+242	+122
	4	- 1.07	+1.53	-0.22	- 34.7	+ 9.3	+7.4	8.20204	+364	+122
	5	+ 0.46	+1.31	-0.47	- 25.4	+16.7	+6.7	8.20568	+486	+109
	6	+ 1.77	+0.84	-0.73	- 8.7	+23.4	+4.7	8.21054	+595	+ 83
	7	+ 2.61			+14.7			8.21649		
	8									



Tag	0 <sup>h</sup> Welt-Zeit								
	$\alpha_C - \alpha_k$			$\delta_C - \delta_k$			$\log \sin p_k$		
1945									
März	21	-14.37	+0.81	"	+ 84.1	- 6.2	"	8.22417	-595
	22	-13.56	+0.99	+0.18	+ 77.9	- 9.1	-2.9	8.21822	+ 67
	23	-12.57	+1.04	+0.05	+ 68.8	-11.9	-2.8	8.21294	+ 79
	24	-11.53	+1.02	-0.02	+ 56.9	-14.2	-2.3	8.20845	+ 82
	25	-10.51	+0.99	-0.03	+ 42.7	-15.4	-1.2	8.20478	+ 79
	26	- 9.52	+0.99	0.00	+ 27.3	-15.6	-0.2	8.20190	+ 76
	27	- 8.53	+1.03	+0.04	+ 11.7	-14.7	+0.9	8.19978	+ 71
	28	- 7.50	+1.13	+0.10	- 3.0	-12.6	+2.1	8.19837	+ 70
	29	- 6.37	+1.25	+0.12	-15.6	- 9.3	+3.3	8.19766	+ 71
	30	- 5.12	+1.39	+0.14	-24.9	- 4.9	+4.4	8.19766	+ 74
	31	- 3.73	+1.51	+0.12	-29.8	+ 0.5	+5.4	8.19840	+ 81
April	1	- 2.22	+1.55	+0.04	-29.3	+ 7.0	+6.5	8.19995	+ 89
	2	- 0.67	+1.46	-0.09	-22.3	+13.9	+6.9	8.20239	+ 97
	3	+ 0.79	+1.16	-0.30	- 8.4	+20.6	+6.7	8.20580	+100
	4	+ 1.95	+0.63	-0.53	+12.2	+25.9	+5.3	8.21021	+ 96
	5	+ 2.58	-0.10	-0.73	+38.1	+28.5	+2.6	8.21558	+ 83
	6	+ 2.48	-0.90	-0.80	+66.6	+27.7	-0.8	8.22178	+ 59
	7	+ 1.58	-0.71		+ 94.3		-4.7	8.22857	+ 22
April	19	-13.81	+0.89	"	+ 69.8	- 9.5	-2.6	8.21893	-610
	20	-12.92	+1.00	+0.11	+ 60.3	-12.1	-1.9	8.21283	+ 96
	21	-11.92	+1.04	+0.04	+ 48.2	-14.0	-0.8	8.20769	+108
	22	-10.88	+1.06	+0.02	+ 34.2	-14.8	+0.4	8.20363	+109
	23	- 9.82	+1.10	+0.05	+ 19.4	-12.8	+2.9	8.20066	+106
	24	- 8.72	+1.15	+0.09	- 7.8	- 9.9	+4.1	8.19875	+ 97
	25	- 7.57	+1.24	+0.10	-17.7	+ 5.8	+5.1	8.19781	+ 86
	26	- 6.33	+1.43	+0.03	-24.2	+ 5.4	+6.1	8.19773	+ 76
	27	- 4.99	+1.46	-0.06	-18.8	+11.9	+6.3	8.19841	+ 69
	28	- 3.56	+1.18	-0.39	+11.3	+23.4	+5.2	8.19978	+ 66
	29	- 2.10	+0.79	-0.57	+34.7	+26.6	+3.2	8.20181	+ 64
	30	+ 0.48	+0.22	-0.64	+61.3	+27.0	-2.9	8.20448	+ 64
Mai	1	+ 1.27	-1.01	-0.45	+112.4	+18.6	-7.3	8.20779	+ 65
	2	+ 1.49	-0.42	-0.59	+ 88.3	+24.1	-5.5	8.21175	+ 66
	3	+ 1.07	-1.46	-0.24	+131.0			8.21637	+ 62
	4	+ 0.06	-1.82	+0.98	+ 37.8	-13.5	-0.3	8.21637	+524
	5	- 1.40	+1.07	+0.08	+ 10.5	-12.9	+2.4	8.22161	+571
	6	- 1.40	+1.15	+0.08	- 2.4	-10.5	+3.7	8.22732	+594
	7	- 1.96	+1.23	+0.09	-12.9	- 6.8	+4.9	8.23326	- 12
	19	-11.82	+1.32	+0.07	-19.7	- 1.9	+5.8	8.20824	-432
	20	-10.84	+1.40	-0.08	-21.6	+ 3.9	+6.4	8.20392	+125
	21	- 9.77	+1.32	-0.08	-17.7	+10.3	+6.2	8.20085	+126
	22	- 8.62	+1.32	-0.21	- 7.4			8.19994	+121
	23	- 7.39	+1.39	+0.01	-21.6	+ 3.9	+6.4	8.19844	+107
	24	- 6.07	+1.40	-0.08	-17.7	+10.3	+6.2	8.19891	+ 91
	25	- 4.68	+1.32	-0.21	- 7.4			8.20029	+ 74
	26	- 3.28	+1.32	-0.21	- 7.4			8.20241	+ 59
	27	- 1.96	+1.32	-0.21	- 7.4			8.20512	+ 45



Tag	0 <sup>h</sup> Welt-Zeit										
	$\alpha_c - \alpha_k$			$\delta_c - \delta_k$			log sin $p_k$				
1945											
Mai	27	- 1.96	+1.11	-0.21	- 7.4	+16.5	+6.2	8.20512	+316	+ 45	
	28	- 0.85	+0.73	-0.38	+ 9.1	+21.6	+5.1	8.20828	+351	+ 35	
	29	- 0.12	+0.22	-0.51	+ 30.7	+24.8	+3.2	8.21179	+379	+ 28	
	30	+ 0.10	-0.34	-0.56	+ 55.5	+25.5	+0.7	8.21558	+403	+ 24	
	31	- 0.24	-0.83	-0.49	+ 81.0	+23.3	-2.2	8.21961	+423	+ 20	
Juni	1	- 1.07	-1.17	-0.34	+104.3	+18.9	-4.4	8.22384	+436	+ 13	
	2	- 2.24	-1.32	-0.15	+123.2	+13.0	-5.9	8.22820	+438	+ 2	
	3	- 3.56	-1.34	-0.02	+136.2	+ 6.6	-6.4	8.23258	+423	- 15	
	4	- 4.90		+0.07	+142.8		-6.4	8.23681		- 39	
Juni	18	- 9.26	+1.18	+0.13	+ 0.9	-10.9	+3.0	8.20146	-164	+134	
	19	- 8.08	+1.31	+0.08	- 10.0	- 7.9	+4.5	8.19982	- 30	+125	
	20	- 6.77	+1.39	+0.02	- 17.9	- 3.4	+5.6	8.19952	+ 96	+110	
	21	- 5.38	+1.41	-0.07	- 21.3	+ 2.2	+6.3	8.20048	+206	+ 88	
	22	- 3.97	+1.34	-0.22	- 19.1	+ 8.5	+6.4	8.20254	+294	+ 64	
	23	- 2.63	+1.12	-0.40	- 10.6	+14.9	+5.6	8.20548	+358	+ 39	
	24	- 1.51	+0.72	-0.55	+ 4.3	+20.5	+3.5	8.20906	+397	+ 15	
	25	- 0.79	+0.17	-0.60	+ 24.8	+24.0	+0.8	8.21303	+412	- 6	
	26	- 0.62	-0.43	-0.52	+ 48.8	+24.8	-2.1	8.21715	+406	- 21	
	27	- 1.05	-0.95	-0.33	+ 73.6	+22.7	-4.5	8.22121	+385	- 31	
	28	- 2.00	-1.28	-0.09	+ 96.3	+18.2	-5.6	8.22506	+354	- 37	
	29	- 3.28	-1.37	+0.08	+114.5	+12.6	-5.7	8.22860	+317	- 40	
	30	- 4.65	-1.29	+0.17	+127.1	+ 6.9	-5.3	8.23177	+277	- 44	
	Juli	1	- 5.94	-1.12	+0.19	+134.0	+ 1.6	-4.7	8.23454	+233	- 47
2		- 7.06	-0.93	+0.17	+135.6	- 3.1	-3.8	8.23687	+186	- 59	
3		- 7.99	-0.76	+0.12	+132.5	- 6.9	-3.0	8.23873	+127	- 76	
4		- 8.75			+125.6			8.24000			
Juli	17	- 7.15	+1.39	+0.08	- 16.0	- 4.8	+5.0	8.20014	+ 2	+137	
	18	- 5.76	+1.47	-0.02	- 20.8	+ 0.2	+6.1	8.20016	+139	+125	
	19	- 4.29	+1.45	-0.17	- 20.6	+ 6.3	+6.7	8.20155	+264	+108	
	20	- 2.84	+1.28	-0.37	- 14.3	+13.0	+6.1	8.20419	+372	+ 80	
	21	- 1.56	+0.91	-0.57	- 1.3	+19.1	+4.5	8.20791	+452	+ 47	
	22	- 0.65	+0.34	-0.71	+ 17.8	+23.6	+1.8	8.21243	+499	+ 11	
	23	- 0.31	-0.37	-0.67	+ 41.4	+25.4	-1.9	8.21742	+510	- 26	
	24	- 0.68	-1.04	-0.48	+ 66.8	+23.5	-4.7	8.22252	+484	- 58	
	25	- 1.72	-1.52	-0.19	+ 90.3	+18.8	-6.3	8.22736	+426	- 82	
	26	- 3.24	-1.71	+0.08	+109.1	+12.5	-6.5	8.23162	+344	- 96	
	27	- 4.95	-1.63	+0.23	+121.6	+ 6.0	-5.5	8.23506	+248	- 97	
	28	- 6.58	-1.40	+0.29	+127.6	+ 0.5	-4.0	8.23754	+151	- 91	
	29	- 7.98	-1.11	+0.28	+128.1	- 3.5	-2.9	8.23905	+ 60	- 79	
	30	- 9.09	-0.83	+0.24	+124.6	- 6.4	-1.9	8.23965	- 19	- 68	
	31	- 9.92	-0.59	+0.20	+118.2	- 8.3	-1.1	8.23946	- 87	- 60	
	Aug.	1	-10.51	-0.39	+0.15	+109.9	- 9.4	-0.7	8.23859	-147	- 52
		2	-10.90			+100.5			8.23712		



Tag	0 <sup>h</sup> Welt-Zeit								
	$\alpha_c - \alpha_k$			$\delta_c - \delta_k$			$\log \sin p_k$		
1945									
Aug. 16	- 3.02	"	"	- 15.5	"	"	8.20161		
17	- 1.52	+1.50	-0.26	- 5.0	+10.5	+6.5	8.20465	+304	+123
18	- 0.28	+1.24	-0.50	+ 12.0	+17.0	+5.6	8.20892	+427	+100
19	+ 0.46	+0.74	-0.71	+ 34.6	+22.6	+3.3	8.21419	+527	+ 66
20	+ 0.49	+0.03	-0.80	+ 60.5	+25.9	-0.2	8.22012	+593	+ 25
21	- 0.28	-0.77	-0.70	+ 86.2	+25.7	-4.1	8.22630	+618	- 22
22	- 1.75	-1.47	-0.44	+107.8	+21.6	-6.8	8.23226	+596	- 73
23	- 3.66	-1.91	-0.12	+122.6	+14.8	-8.0	8.23749	+523	-116
24	- 5.69	-2.03	+0.13	+129.4	+ 6.8	-7.2	8.24156	+407	-147
25	- 7.59	-1.90	+0.26	+129.0	- 0.4	-5.3	8.24416	+260	-160
26	- 9.23	-1.64	+0.33	+123.3	- 5.7	-3.1	8.24516	+100	-152
27	-10.54	-1.31	+0.33	+114.5	- 8.8	-1.1	8.24464	- 52	-131
28	-11.52	-0.98	+0.31	+104.6	- 9.9	+0.1	8.24281	-183	-102
29	-12.19	-0.67	+0.28	+ 94.8	- 9.8	+0.8	8.23996	-285	- 68
30	-12.58	-0.39	+0.25	+ 85.8	- 9.0	+0.7	8.23643	-353	- 38
31	-12.72	-0.14	+0.20	+ 77.5	- 8.3	+0.3	8.23252	-391	- 18
Sept.									
15	+ 0.75	"	"	+ 30.0	"	"	8.20847		
16	+ 1.34	+0.59	-0.74	+ 55.1	+25.1	+1.8	8.21402	+555	+ 90
17	+ 1.19	-0.15	-0.80	+ 82.0	+26.9	-1.9	8.22047	+645	+ 51
18	+ 0.24	-0.95	-0.65	+107.0	+25.0	-5.5	8.22743	+696	+ 1
19	- 1.36	-1.60	-0.40	+126.5	+19.5	-8.3	8.23440	+697	- 58
20	- 3.36	-2.00	-0.13	+137.7	+11.2	-9.0	8.24079	+639	-119
21	- 5.49	-2.13	+0.08	+139.9	+ 2.2	-8.0	8.24599	+520	-172
22	- 7.54	-2.05	+0.20	+134.1	- 5.8	-5.7	8.24947	+348	-204
23	- 9.39	-1.85	+0.26	+122.6	-11.5	-2.4	8.25091	+144	-211
24	-10.98	-1.59	+0.29	+108.7	-13.9	+0.2	8.25024	- 67	-191
25	-12.28	-1.30	+0.32	+ 95.0	-13.7	+2.1	8.24766	-258	-153
26	-13.26	-0.98	+0.35	+ 83.4	-11.6	+2.6	8.24355	-411	-103
27	-13.89	-0.63	+0.37	+ 74.4	- 9.0	+2.1	8.23841	-514	- 52
28	-14.15	-0.26	+0.35	+ 67.5	- 6.9	+0.9	8.23275	-566	- 7
29	-14.06	+0.09	+0.27	+ 61.5	- 6.0	-0.3	8.22702	-573	+ 25
Okt.									
14	+ 1.48	"	"	+ 77.3	"	"	8.21286		
15	+ 1.20	-0.28	-0.65	+103.7	+26.4	-3.3	8.21912	+626	+ 73
16	+ 0.27	-0.93	-0.50	+126.8	+23.1	-6.3	8.22611	+699	+ 32
17	- 1.16	-1.43	-0.32	+143.6	+16.8	-8.5	8.23342	+731	- 24
18	- 2.91	-1.75	-0.13	+151.9	+ 8.3	-9.3	8.24049	+707	- 89
19	- 4.79	-1.88	-0.01	+150.9	- 1.0	-8.5	8.24667	+618	-153
20	- 6.68	-1.89	+0.05	+141.4	- 9.5	-6.1	8.25132	+465	-207
21	- 8.52	-1.84	+0.10	+125.8	-15.6	-2.7	8.25390	+258	-239
22	-10.26	-1.74	+0.14	+107.5	-18.3	+0.8	8.25409	+ 19	-239



Tag	0 <sup>h</sup> Welt-Zeit									
	$\alpha_c - \alpha_k$			$\delta_c - \delta_k$			log sin $p_k$			
1945										
Okt.	22	-10.26	-1.60	+0.14	+107.5	-17.5	+0.8	8.25409	-220	-239
	23	-11.86	-1.36	+0.24	+ 90.0	-14.1	+3.4	8.25189	-426	-206
	24	-13.22	-1.01	+0.35	+ 75.9	- 9.7	+4.4	8.24763	-578	-152
	25	-14.23	-0.56	+0.45	+ 66.2	- 6.3	+3.4	8.24185	-668	- 90
	26	-14.79	-0.09	+0.47	+ 59.9	- 4.8	+1.5	8.23517	-695	- 27
	27	-14.88	+0.32	+0.41	+ 55.1	- 5.1	-0.3	8.22822	-672	+ 23
	28	-14.56	+0.61	+0.29	+ 50.0	- 6.5	-1.4	8.22150	-611	+ 61
	29	-13.95		+0.20	+ 43.5		-1.7	8.21539		+ 84
	Nov.									
13	- 0.59	-1.11		+141.2	+13.3		8.22406	+665	+ 8	
14	- 1.70	-1.26	-0.15	+154.5	+ 5.4	-7.9	8.23071	+673	+ 8	
15	- 2.96	-1.35	-0.09	+159.9	- 3.3	-8.7	8.23744	+628	- 45	
16	- 4.31	-1.42	-0.07	+156.6	-11.3	-8.0	8.24372	+522	-106	
17	- 5.73	-1.48	-0.06	+145.3	-17.5	-6.2	8.24894	+356	-166	
18	- 7.21	-1.57	-0.09	+127.8	-20.8	-3.3	8.25250	+141	-215	
19	- 8.78	-1.64	-0.07	+107.0	-20.3	+0.5	8.25391	- 98	-239	
20	-10.42	-1.59	+0.05	+ 86.7	-16.5	+3.8	8.25293	-330	-232	
21	-12.01	-1.36	+0.23	+ 70.2	-11.2	+5.3	8.24963	-523	-193	
22	-13.37	-0.92	+0.44	+ 59.0	- 6.7	+4.5	8.24440	-659	-136	
23	-14.29	-0.39	+0.53	+ 52.3	- 4.3	+2.4	8.23781	-727	- 68	
24	-14.68	+0.10	+0.49	+ 48.0	- 4.4	-0.1	8.23054	-731	- 4	
25	-14.58	+0.49	+0.39	+ 43.6	- 5.9	-1.5	8.22323	-682	+ 49	
26	-14.09	+0.78	+0.29	+ 37.7	- 7.6	-1.7	8.21641	-596	+ 86	
27	-13.31	+0.99	+0.21	+ 30.1	- 8.7	-1.1	8.21045	-487	+109	
28	-12.32		+0.15	+ 21.4		-0.1	8.20558		+119	
Dez.										
12	- 3.06	-0.60		+155.8	+ 1.7		8.22888	+535	- 17	
13	- 3.86	-0.79	+0.01	+157.5	- 5.5	-7.2	8.23423	+518	- 60	
14	- 4.65	-0.83	-0.04	+152.0	-12.2	-6.7	8.23941	+458	-108	
15	- 5.48	-0.94	-0.11	+139.8	-17.7	-5.5	8.24399	+350	-155	
16	- 6.42	-1.12	-0.18	+122.1	-20.8	-3.1	8.24749	+195	-190	
17	- 7.54	-1.34	-0.22	+101.3	-20.7	+0.1	8.24944	+ 5	-206	
18	- 8.88	-1.48	-0.14	+ 80.6	-17.5	+3.2	8.24949	-201	-191	
19	-10.36	-1.42	+0.06	+ 63.1	-12.3	+5.2	8.24748	-392	-155	
20	-11.78	-1.12	+0.30	+ 50.8	- 7.5	+4.8	8.24356	-547	-104	
21	-12.90	-0.65	+0.47	+ 43.3	- 4.6	+2.9	8.23809	-651	- 42	
22	-13.55	-0.14	+0.51	+ 38.7	- 4.1	+0.5	8.23158	-693	+ 15	
23	-13.69	+0.30	+0.44	+ 34.6	- 5.1	-1.0	8.22465	-678	+ 64	
24	-13.39	+0.65	+0.35	+ 29.5	- 6.6	-1.5	8.21787	-614	+100	
25	-12.74	+0.93	+0.28	+ 22.9	- 7.4	-0.8	8.21173	-514	+123	
26	-11.81	+1.14	+0.18	+ 15.5	- 7.2	+1.7	8.20659	-391	+134	
27	-10.67			+ 8.3			8.20268			







Verfinsterungen: E. Eintritte, A. Austritte (in Welt-Zeit)

TRABANT II			TRABANT II			TRABANT III			TRABANT III						
Febr.	4	<sup>h</sup> 12 <sup>m</sup> 57.9	E.	Juli	28	<sup>h</sup> 18 <sup>m</sup> 58.6	A.	Febr.	10	<sup>h</sup> 10 <sup>m</sup> 9.3	E.	Okt.	19	<sup>h</sup> 5 <sup>m</sup> 36.8	E.
	8	2 16.0	E.		Aug.	1	8 15.7		A.	17	14 6.8		E.	26	9 34.8
	11	15 33.4	E.		4	21 32.8	A.		24	18 4.8	E.	Nov.	2	13 32.8	E.
	15	4 51.4	E.		.8	10 49.9	A.	März	3	22 3.6	E.		9	17 31.5	E.
	18	18 8.8	E.		12	0 7.0	A.		11	2 2.3	E.		16	21 29.6	E.
	22	7 26.8	E.		15	13 24.0	A.		18	9 7.3	A.		17	0 4.7	A.
	25	20 44.1	E.		19	2 41.2	A.		25	13 4.9	A.		24	1 27.6	E.
März	1	10 2.1	E.					April	1	17 2.4	A.		24	4 1.8	A.
	4	23 19.6	E.						8	21 0.3	A.	Dez.	1	5 25.0	E.
	8	12 37.5	E.						16	0 58.3	A.		1	7 58.3	A.
	12	1 54.9	E.	Okt.	18	<sup>h</sup> 9 <sup>m</sup> 50.4	E.		23	1 55.6	E.		8	9 22.2	E.
	15	18 1.3	A.		21	23 7.7	E.		23	4 57.4	A.		8	11 54.5	A.
	19	7 18.6	A.		25	12 25.0	E.		30	5 55.1	E.		15	13 19.5	E.
	22	20 36.3	A.		29	1 42.3	E.		30	8 56.0	A.		15	15 51.0	A.
	26	9 53.6	A.	Nov.	1	14 59.8	E.	Mai	7	9 55.0	E.		22	17 17.0	E.
	29	23 11.2	A.		5	4 17.1	E.		7	12 55.0	A.		22	19 47.4	A.
April	2	12 28.6	A.		8	17 34.6	E.		14	13 54.2	E.		29	21 15.1	E.
	6	1 46.2	A.		12	6 51.9	E.		14	16 53.3	A.		29	23 44.6	A.
	9	15 3.5	A.		15	20 9.5	E.		21	17 53.2	E.				
	13	4 21.1	A.		19	9 26.8	E.		21	20 51.5	A.				
	16	17 38.4	A.		22	22 44.5	E.		28	21 52.6	E.				
	20	6 55.9	A.		26	12 1.8	E.		29	0 49.9	A.				
	23	20 13.3	A.		30	1 19.5	E.	Juni	5	1 52.1	E.				
	27	9 30.7	A.	Dez.	3	14 36.8	E.		5	4 48.5	A.				
	30	22 48.1	A.		7	3 54.6	E.		12	5 52.4	E.				
Mai	4	12 5.5	A.		10	17 11.9	E.		12	8 47.9	A.				
	8	1 22.8	A.		14	6 29.8	E.		12	8 47.9	A.				
	11	14 40.2	A.		17	19 47.1	E.		19	9 52.3	E.	Jan.	16	<sup>h</sup> 18 <sup>m</sup> 11.3	E.
	15	3 57.6	A.		17	9 5.1	E.		19	12 46.9	A.		16	21 38.6	A.
	18	17 14.8	A.		21	22 22.4	E.		26	13 52.3	E.	Febr.	2	12 11.8	E.
	22	6 32.2	A.		24	11 40.5	E.		26	16 46.0	A.		2	15 30.5	A.
	25	19 49.5	A.		28	0 57.8	E.		3	17 51.6	E.		19	6 13.8	E.
	29	9 6.8	A.		32			Juli	3	20 44.4	A.		19	9 23.3	A.
Juni	1	22 24.0	A.						10	21 50.8	E.	März	8	0 15.9	E.
	5	11 41.3	A.						11	0 42.6	A.		24	18 19.3	E.
	9	0 58.5	A.						18	1 50.3	E.		24	21 7.9	A.
	12	14 15.8	A.						18	4 41.0	A.	April	10	12 24.3	E.
	16	3 32.9	A.						25	5 49.4	E.		10	15 1.3	A.
	19	16 50.1	A.						25	8 39.4	A.		27	6 29.5	E.
	23	6 7.3	A.						1	9 49.5	E.		27	8 54.1	A.
	26	19 24.5	A.						1	12 38.6	A.	Mai	14	0 36.1	E.
	30	8 41.6	A.						8	13 49.1	E.		14	2 46.3	A.
Juli	3	21 58.8	A.						8	16 37.3	A.		30	18 44.3	E.
	7	11 15.9	A.						15	17 48.8	E.		30	20 38.5	A.
	11	0 33.0	A.						15	20 35.9	A.	Juni	16	12 53.2	E.
	14	13 50.1	A.										16	14 28.6	A.
	18	3 7.3	A.									Juli	3	7 4.7	E.
	21	16 24.4	A.										3	8 16.1	A.
	25	5 41.4	A.										20	1 23.4	E.
													20	1 58.6	A.

TRABANT IV



$\text{O}^h$ Welt-Zeit	$\alpha$	$\beta$	$p_\alpha$	$a$	$b$	$U'$	$B'$	$P'$
1945								
Jan. —1	20.71	18.98	0.00	46.64	—20.27	290.747	—25.815	—9.595
+7	20.68	18.95	0.00	46.57	20.32	291.076	25.777	9.742
15	20.59	18.88	+0.01	46.38	20.32	291.405	25.738	9.889
23	20.46	18.76	0.01	46.09	20.27	291.734	25.699	10.035
31	20.29	18.60	0.02	45.70	20.17	292.063	25.659	10.181
Febr. 8	20.08	18.41	+0.03	45.22	—20.02	292.391	—25.618	—10.326
16	19.84	18.20	0.04	44.68	19.83	292.719	25.577	10.471
24	19.58	17.96	0.04	44.10	19.60	293.047	25.535	10.615
März 4	19.30	17.71	0.05	43.48	19.35	293.374	25.492	10.759
12	19.02	17.45	0.05	42.85	19.08	293.701	25.448	10.903
20	18.74	17.19	+0.06	42.22	—18.80	294.028	—25.404	—11.046
28	18.47	16.94	0.06	41.59	18.51	294.355	25.359	11.189
April 5	18.20	16.70	0.05	40.99	18.22	294.681	25.313	11.331
13	17.95	16.46	0.05	40.42	17.93	295.007	25.266	11.473
21	17.71	16.24	0.04	39.89	17.65	295.333	25.219	11.615
29	17.49	16.04	+0.04	39.40	—17.38	295.658	—25.171	—11.756
Mai 7	17.29	15.86	0.03	38.96	17.12	295.983	25.122	11.897
15	17.12	15.69	0.03	38.56	16.88	296.308	25.073	12.037
23	16.97	15.55	0.02	38.22	16.65	296.633	25.023	12.177
31	16.84	15.43	0.01	37.94	16.43	296.957	24.972	12.316
Juni 8	16.74	15.33	+0.01	37.71	—16.23	297.281	—24.921	—12.455
16	16.66	15.26	0.00	37.53	16.04	297.605	24.869	12.593
24	16.61	15.20	0.00	37.41	15.87	297.929	24.816	12.731
Juli 2	16.58	15.17	0.00	37.34	15.72	298.252	24.762	12.869
10	16.58	15.16	0.00	37.33	15.59	298.575	24.708	13.006
18	16.60	15.18	0.00	37.38	—15.47	298.897	—24.653	—13.142
26	16.65	15.22	0.00	37.49	15.37	299.219	24.597	13.278
Aug. 3	16.72	15.28	—0.01	37.65	15.30	299.541	24.541	13.414
11	16.81	15.36	0.01	37.87	15.25	299.862	24.484	13.549
19	16.93	15.46	0.02	38.14	15.21	300.183	24.426	13.684
27	17.08	15.59	—0.02	38.47	—15.20	300.504	—24.368	—13.818
Sept. 4	17.25	15.74	0.03	38.85	15.22	300.824	24.309	13.952
12	17.44	15.91	0.04	39.28	15.26	301.144	24.249	14.085
20	17.65	16.10	0.04	39.76	15.33	301.464	24.189	14.217
28	17.88	16.31	0.05	40.28	15.43	301.783	24.128	14.349
Okt. 6	16.13	16.53	—0.05	40.83	—15.55	302.102	—24.066	—14.480
14	18.39	16.76	0.06	41.42	15.70	302.421	24.004	14.611
22	18.66	17.01	0.06	42.04	15.88	302.740	23.941	14.742
30	18.94	17.26	0.05	42.66	16.09	303.058	23.878	14.872
Nov. 7	19.22	17.52	0.05	43.29	16.32	303.376	23.814	15.002
15	19.49	17.77	—0.05	43.91	—16.57	303.693	—23.749	—15.131
23	19.75	18.01	0.04	44.49	16.84	304.010	23.684	15.259
Dez. 1	19.99	18.23	0.03	45.03	17.12	304.327	23.618	15.387
9	20.20	18.42	0.02	45.51	17.40	304.643	23.551	15.514
17	20.38	18.59	0.01	45.91	17.67	304.959	23.484	15.641
25	20.52	18.72	—0.01	46.22	17.92	305.274	23.416	15.767
33	20.61	18.81	0.00	46.42	—18.14	305.589	—23.347	—15.893



# Saturn und Saturnsring 1945

315\*

0 <sup>h</sup> Welt-Zeit	U	B	P	log $\frac{(\Delta)}{\Delta}$	0 <sup>h</sup> Welt-Zeit	U	B	P	log $\frac{(\Delta)}{\Delta}$
1945.					1945				
Jan. —1	332.261	—25.751	—6.428	0.07386	Juli 2	339.405	—24.900	—6.793	9.97727
+3	331.901	25.812	6.407	0.07366	6	339.964	24.791	6.815	9.97714
7	331.545	25.872	6.387	0.07318	10	340.522	24.679	6.837	9.97718
11	331.196	25.931	6.367	0.07243	14	341.078	24.565	6.857	9.97738
15	330.857	25.988	6.347	0.07141	18	341.632	24.450	6.877	9.97775
19	330.532	—26.043	—6.328	0.07014	22	342.181	—24.334	—6.896	9.97828
23	330.223	26.095	6.309	0.06863	26	342.724	24.216	6.914	9.97897
27	329.934	26.144	6.291	0.06688	30	343.260	24.098	6.931	9.97983
31	329.666	26.189	6.275	0.06492	Aug. 3	343.789	23.979	6.947	9.98084
Febr. 4	329.423	26.231	6.260	0.06275	7	344.309	23.860	6.962	9.98201
8	329.206	—26.270	—6.247	0.06040	11	344.818	—23.742	—6.976	9.98334
12	329.017	26.305	6.236	0.05788	15	345.316	23.624	6.989	9.98483
16	328.858	26.336	6.226	0.05521	19	345.801	23.508	7.002	9.98646
20	328.730	26.363	6.218	0.05240	23	346.272	23.393	7.013	9.98824
24	328.634	26.386	6.212	0.04947	27	346.729	23.281	7.023	9.99016
28	328.570	—26.405	—6.208	0.04645	31	347.170	—23.171	—7.032	9.99222
März 4	328.539	26.420	6.207	0.04336	Sept. 4	347.594	23.065	7.041	9.99442
8	328.541	26.431	6.207	0.04020	8	348.000	22.962	7.049	9.99675
12	328.576	26.437	6.210	0.03700	12	348.386	22.862	7.057	9.99920
16	328.645	26.439	6.215	0.03377	16	348.752	22.767	7.064	0.00177
20	328.746	—26.437	—6.222	0.03053	20	349.096	—22.678	—7.070	0.00444
24	328.879	26.431	6.231	0.02730	24	349.417	22.594	7.075	0.00722
28	329.044	26.421	6.242	0.02409	28	349.714	22.516	7.080	0.01009
April 1	329.239	26.406	6.255	0.02091	Okt. 2	349.986	22.444	7.084	0.01304
5	329.463	26.387	6.270	0.01778	6	350.233	22.379	7.087	0.01607
9	329.716	—26.364	—6.286	0.01470	10	350.453	—22.321	—7.090	0.01917
13	329.997	26.336	6.304	0.01169	14	350.645	22.271	7.093	0.02231
17	330.304	26.304	6.323	0.00877	18	350.809	22.229	7.095	0.02549
21	330.637	26.268	6.344	0.00594	22	350.943	22.195	7.097	0.02869
25	330.993	26.227	6.366	0.00320	26	351.048	22.170	7.098	0.03190
29	331.372	—26.182	—6.389	0.00057	30	351.122	—22.154	—7.099	0.03511
Mai 3	331.772	26.132	6.413	9.99805	Nov. 3	351.166	22.147	7.100	0.03830
7	332.191	26.078	6.437	9.99566	7	351.179	22.148	7.100	0.04146
11	332.629	26.020	6.462	9.99339	11	351.161	22.159	7.100	0.04456
15	333.085	25.957	6.488	9.99125	15	351.112	22.179	7.100	0.04758
19	333.556	—25.890	—6.514	9.98925	19	351.033	—22.208	—7.099	0.05051
23	334.042	25.819	6.540	9.98739	23	350.924	22.245	7.098	0.05334
27	334.541	25.744	6.566	9.98568	27	350.786	22.291	7.097	0.05604
31	335.051	25.665	6.593	9.98412	Dez. 1	350.619	22.345	7.095	0.05859
Juni 4	335.572	25.581	6.620	9.98271	5	350.425	22.407	7.093	0.06098
8	336.102	—25.494	—6.646	9.98145	9	350.206	—22.476	—7.090	0.06319
12	336.640	25.403	6.672	9.98035	13	349.963	22.551	7.087	0.06520
16	337.185	25.309	6.697	9.97941	17	349.698	22.632	7.084	0.06700
20	337.735	25.212	6.722	9.97863	21	349.414	22.718	7.080	0.06857
24	338.289	25.111	6.746	9.97801	25	349.113	22.808	7.075	0.06990
28	338.846	25.007	6.770	9.97756	29	348.797	22.902	7.070	0.07098
Juli 2	339.405	—24.900	—6.793	9.97727	33	348.470	—22.998	—7.065	0.07180



## Saturnstrabanten 1945

0 <sup>h</sup> Welt-Zeit		L	M	L	M	L	L	M	L	M
		MIMAS		ENCELADUS		TETHYS	DIONE		RHEA	
1945		°	°	°	°	°	°	°	°	°
Jan.	—9	334.490	144.11	146.878	287.7	9.463	3.837	44.0	43.502	242.6
	+7	326.272	119.88	30.589	166.0	180.634	308.394	347.2	238.542	77.7
	23	318.055	95.65	274.300	44.3	351.805	252.952	290.4	73.581	272.7
Febr.	8	309.838	71.42	158.012	282.6	162.977	197.509	233.6	268.621	107.8
	24	301.622	47.19	41.726	160.9	334.148	142.067	176.8	103.660	302.8
März	12	293.407	22.96	285.441	39.2	145.319	86.624	120.0	298.700	137.8
	28	285.192	358.73	169.156	277.5	316.490	31.181	63.3	133.739	332.9
April	13	276.978	334.50	52.872	155.8	127.661	335.739	6.5	328.779	167.9
	29	268.764	310.27	296.590	34.1	298.832	280.296	309.7	163.818	2.9
Mai	15	260.550	286.05	180.308	272.4	110.003	224.853	252.9	358.858	197.9
Sept.	20	194.863	92.25	330.079	19.0	39.370	141.308	158.6	119.174	318.2
Okt.	6	186.654	68.02	213.803	257.3	210.541	85.864	101.8	314.213	153.2
	22	178.446	43.80	97.527	135.6	21.712	30.421	45.0	149.253	348.2
Nov.	7	170.239	19.58	341.251	13.9	192.882	334.978	348.2	344.292	183.2
	23	162.032	355.36	224.975	252.3	4.053	279.535	291.4	179.332	18.2
Dez.	9	153.826	331.14	108.699	130.6	175.224	224.091	234.6	14.371	213.3
	25	145.620	306.92	352.423	8.9	346.394	168.648	177.9	209.411	48.3
	41	137.415	282.70	236.147	247.2	157.565	113.205	121.1	44.451	243.3

0 <sup>h</sup> Welt-Zeit		L	M	L	M	e	log a	L	M
		TITAN		HYPERION			JAPETUS		
1945		°	°	°	°			°	°
Jan.	—9	210.064	28.31	60.090	237.32	0.12311	2.32982	42.456	88.21
	+7	211.297	29.52	332.052	149.98	0.12282	2.32970	115.066	160.81
	23	212.530	30.73	244.109	62.74	0.12261	2.32962	187.675	233.42
Febr.	8	213.763	31.94	156.229	335.57	0.12250	2.32957	260.285	306.02
	24	214.995	33.15	68.377	248.42	0.12248	2.32956	332.894	18.62
März	12	216.228	34.36	340.518	161.27	0.12255	2.32958	45.504	91.22
	28	217.461	35.57	252.620	74.08	0.12272	2.32964	118.113	163.82
April	13	218.694	36.78	164.649	346.81	0.12297	2.32974	190.722	236.43
	29	219.926	37.99	76.571	259.43	0.12331	2.32988	263.332	309.03
Mai	15	221.159	39.19	348.357	171.91	0.12373	2.33004	335.941	21.63
Sept.	20	231.021	48.87	355.633	184.37	0.12821	2.33178	196.817	242.45
Okt.	6	232.254	50.08	265.598	94.94	0.12870	2.33198	269.426	315.05
	22	233.486	51.29	175.386	5.31	0.12912	2.33215	342.035	27.65
Nov.	7	234.719	52.50	85.019	275.52	0.12947	2.33230	54.645	100.25
	23	235.952	53.71	354.523	185.60	0.12974	2.33242	127.254	172.85
Dez.	9	237.184	54.92	263.929	95.58	0.12992	2.33250	199.864	245.46
	25	238.417	56.13	173.268	5.49	0.13000	2.33255	272.473	318.06
	41	239.650	57.33	82.575	275.36	0.12999	2.33256	345.082	30.66



## Bewegung der mittleren Länge $L$ und der mittleren Anomalie $M$

Zeit	Mimas		Enceladus		Tethys		Dione		Rhea		Titan		Japetus	
	$L$	$M$	$L$	$M$	$L$	$L$	$M$	$L$	$M$	$L$	$M$	$L$	$M$	
d														
1	21.9868	20.986	262.7324	262.39	190.6982	131.5348	131.45	79.6900	79.69	22.5770	22.576	4.5381	4.537	
2	43.9735	41.971	165.4648	164.79	21.3964	263.0696	262.90	159.3799	159.38	45.1541	45.151	9.0762	9.075	
3	65.9603	62.957	68.1972	67.18	212.0946	34.6044	34.35	239.0699	239.06	67.7311	67.727	13.6143	13.612	
4	87.9470	83.943	330.9296	329.58	42.7928	166.1393	165.80	318.7599	318.75	90.3081	90.302	18.1524	18.150	
5	109.9338	104.928	233.6620	231.97	233.4910	297.6741	297.25	38.4498	38.44	112.8852	112.878	22.6905	22.687	
6	131.9205	125.914	136.3944	134.36	64.1891	69.2089	68.70	118.1398	118.13	135.4622	135.454	27.2286	27.225	
7	153.9073	146.899	39.1268	36.76	254.8873	200.7437	200.15	197.8298	197.81	158.0392	158.029	31.7667	31.762	
8	175.8940	167.885	301.8592	299.15	85.5855	332.2785	331.60	277.5197	277.50	180.6162	180.602	36.3047	36.300	
9	197.8808	188.871	204.5917	201.54	276.2837	103.8133	103.05	357.2097	357.19	203.1933	203.181	40.8428	40.837	
10	219.8675	209.856	107.3241	103.94	106.9819	235.3481	234.50	76.8997	76.88	225.7703	225.756	45.3809	45.375	
11	241.8543	230.842	10.0565	6.33	297.6801	6.8829	5.95	156.5897	156.56	248.3473	248.332	49.9190	49.912	
12	263.8410	251.828	272.7889	268.72	128.3783	138.4178	137.40	236.2796	236.25	270.9244	270.907	54.4571	54.450	
13	285.8278	272.813	175.5213	171.12	319.0765	269.9526	268.85	315.9696	315.94	293.5014	293.483	58.9952	58.987	
14	307.8145	293.799	78.2537	73.51	149.7747	41.4874	40.30	35.6596	35.63	316.0784	316.059	63.5333	63.525	
15	329.8013	314.784	340.9861	335.91	340.4729	173.0222	171.75	115.3495	115.31	338.6555	338.634	68.0714	68.062	
16	351.7880	335.770	243.7185	238.30	171.1710	304.5570	303.20	195.0395	195.00	361.2325	361.210	72.6095	72.600	
d														
0.1	38.1987	38.099	26.2732	26.24	19.0698	13.1535	13.14	7.9690	7.97	2.2577	2.258	0.4538	0.454	
0.2	76.3974	76.197	52.5465	52.48	38.1396	26.3070	26.29	15.9380	15.94	4.5154	4.515	0.9076	0.907	
0.3	114.5960	114.296	78.8197	78.72	57.2095	39.4604	39.43	23.9070	23.91	6.7731	6.773	1.3614	1.361	
0.4	152.7947	152.394	105.0930	104.96	76.2793	52.6139	52.58	31.8760	31.88	9.0308	9.030	1.8152	1.815	
0.5	190.9934	190.493	131.3662	131.20	95.3491	65.7674	65.72	39.8450	39.84	11.2885	11.288	2.2690	2.269	
0.6	229.1921	228.591	157.6394	157.44	114.4189	78.9209	78.87	47.8140	47.81	13.5462	13.545	2.7229	2.722	
0.7	267.3907	266.690	183.9127	183.68	133.4887	92.0744	92.01	55.7830	55.78	15.8039	15.803	3.1767	3.176	
0.8	305.5894	304.789	210.1859	209.92	152.5586	105.2279	105.16	63.7520	63.75	18.0616	18.060	3.6305	3.630	
0.9	343.7881	342.887	236.4592	236.15	171.6284	118.3813	118.30	71.7210	71.72	20.3193	20.318	4.0843	4.084	
1.0	381.9868	380.986	262.7324	262.39	190.6982	131.5348	131.45	79.6900	79.69	22.5770	22.576	4.5381	4.537	
d														
0.01	3.8199	3.810	2.6273	2.62	1.9070	1.3153	1.31	0.7969	0.80	0.2258	0.226	0.0454	0.045	
0.02	7.6397	7.620	5.2546	5.25	3.8140	2.6307	2.63	1.5938	1.59	0.4515	0.452	0.0908	0.091	
0.03	11.4596	11.420	7.8820	7.87	5.7209	3.9460	3.94	2.3907	2.39	0.6773	0.677	0.1361	0.136	
0.04	15.2795	15.239	10.5093	10.50	7.6279	5.2614	5.26	3.1876	3.19	0.9031	0.903	0.1815	0.181	
0.05	19.0993	19.049	13.1366	13.12	9.5349	6.5767	6.57	3.9845	3.98	1.1289	1.129	0.2269	0.227	
0.06	22.9192	22.859	15.7639	15.74	11.4419	7.8921	7.89	4.7814	4.78	1.3546	1.355	0.2723	0.272	
0.07	26.7391	26.669	18.3913	18.37	13.3489	9.2074	9.20	5.5783	5.58	1.5804	1.580	0.3177	0.318	
0.08	30.5589	30.479	21.0186	20.99	15.2559	10.5228	10.52	6.3752	6.38	1.8062	1.806	0.3630	0.363	
0.09	34.3788	34.289	23.6459	23.62	17.1628	11.8381	11.83	7.1721	7.17	2.0319	2.032	0.4084	0.408	
0.10	38.1987	38.099	26.2732	26.24	19.0698	13.1535	13.14	7.9690	7.97	2.2577	2.258	0.4538	0.454	
d														
0.001	0.3820	0.381	0.2627	0.26	0.1907	0.1315	0.13	0.0797	0.08	0.0226	0.023	0.0045	0.005	
0.002	0.7640	0.762	0.5255	0.52	0.3814	0.2631	0.26	0.1594	0.16	0.0452	0.045	0.0091	0.009	
0.003	1.1460	1.143	0.7882	0.79	0.5721	0.3946	0.39	0.2391	0.24	0.0677	0.068	0.0136	0.014	
0.004	1.5279	1.524	1.0509	1.05	0.7628	0.5261	0.53	0.3188	0.32	0.0903	0.090	0.0182	0.018	
0.005	1.9099	1.905	1.3137	1.31	0.9535	0.6577	0.66	0.3984	0.40	0.1129	0.113	0.0227	0.023	
0.006	2.2919	2.286	1.5764	1.57	1.1442	0.7892	0.79	0.4781	0.48	0.1355	0.135	0.0272	0.027	
0.007	2.6739	2.667	1.8391	1.84	1.3349	0.9207	0.92	0.5578	0.56	0.1580	0.158	0.0318	0.032	
0.008	3.0559	3.048	2.1019	2.10	1.5256	1.0523	1.05	0.6375	0.64	0.1806	0.181	0.0363	0.036	
0.009	3.4379	3.429	2.3646	2.36	1.7163	1.1838	1.18	0.7172	0.72	0.2032	0.203	0.0408	0.041	
0.010	3.8199	3.810	2.6273	2.62	1.9070	1.3153	1.31	0.7969	0.80	0.2258	0.226	0.0454	0.045	



0 <sup>h</sup> Welt-Zeit	♄					γ	N	J	ω
	Mimas	Encel.	Tethys	Dione	Rhea	Rhea	Saturnsring		
1945									
Jan. —9	97.1	55.7	277.3	146.5	181.2	21.80	128.205	6.712	41.644
+7	81.1	49.0	274.1	145.1	180.7	21.79	128.207	6.711	41.642
23	65.1	42.4	270.9	143.8	180.3	21.77	128.209	6.711	41.641
Febr. 8	49.1	35.7	267.8	142.4	179.9	21.76	128.210	6.711	41.640
24	33.1	29.0	264.6	141.0	179.5	21.75	128.212	6.711	41.639
März 12	17.1	22.3	261.4	139.7	179.1	21.74	128.214	6.711	41.637
28	1.1	15.6	258.3	138.3	178.6	21.73	128.216	6.710	41.636
April 13	345.1	8.9	255.1	137.0	178.2	21.72	128.218	6.710	41.635
29	329.1	2.2	251.9	135.6	177.8	21.71	128.220	6.710	41.633
Mai 15	313.1	355.5	248.8	134.2	177.4	21.69	128.221	6.710	41.632
31	297.1	348.8	245.6	132.9	176.9	21.68	128.223	6.710	41.631
Juni 16	281.1	342.1	242.4	131.5	176.5	21.67	128.225	6.709	41.630
Juli 2	265.1	335.4	239.3	130.2	176.1	21.66	128.227	6.709	41.628
18	249.1	328.8	236.1	128.8	175.7	21.65	128.229	6.709	41.627
Aug. 3	233.1	322.1	232.9	127.4	175.3	21.64	128.231	6.709	41.626
19	217.1	315.4	229.8	126.1	174.8	21.63	128.232	6.709	41.624
Sept. 4	201.1	308.7	226.6	124.7	174.4	21.61	128.234	6.708	41.623
20	185.1	302.0	223.4	123.4	174.0	21.60	128.236	6.708	41.622
Okt. 6	169.1	295.3	220.3	122.0	173.6	21.59	128.238	6.708	41.620
22	153.1	288.6	217.1	120.6	173.2	21.58	128.240	6.708	41.619
Nov. 7	137.1	281.9	213.9	119.3	172.7	21.57	128.242	6.708	41.618
23	121.1	275.2	210.8	117.9	172.3	21.56	128.244	6.708	41.617
Dez. 9	105.1	268.5	207.6	116.6	171.9	21.55	128.245	6.707	41.615
25	89.1	261.8	204.4	115.2	171.5	21.53	128.247	6.707	41.614
41	73.1	255.2	201.3	113.8	171.1	21.52	128.249	6.707	41.613

$\log \frac{1}{1+\zeta}$ , in Einheiten der 5. Dezimale

u - U		Mimas	Encel.	Tethys	Dione	Rhea	u - U	
0°	360°	-6+	-7+	-9+	-11+	-16+	180°	180°
10	350	-6+	-7+	-9+	-11+	-16+	170	190
20	340	-5+	-7+	-8+	-11+	-15+	160	200
30	330	-5+	-6+	-8+	-10+	-14+	150	210
40	320	-4+	-6+	-7+	-9+	-12+	140	220
50	310	-3+	-5+	-6+	-8+	-10+	130	230
60	300	-3+	-4+	-4+	-6+	-8+	120	240
70	290	-2+	-3+	-3+	-4+	-6+	110	250
80	280	-1+	-1+	-2+	-2+	-3+	100	260
90	270	0	0	0	0	0	90	270



# Saturnstrabanten 1945

319\*

Oh Welt-Zeit	TITAN			HYPERION			JAPETUS			
	U	B	P	U	B	P	U	B	P	
1945										
Jan.	—1	336.421	—25.318	—6.652	332.125	—25.830	—6.542	50.246	—11.586	— 9.949
	+7	335.709	25.442	6.618	331.413	25.952	6.501	49.598	11.748	10.089
	15	335.025	25.560	6.584	330.729	26.069	6.461	48.977	11.904	10.221
	23	334.395	25.669	6.552	330.099	26.177	6.423	48.405	12.049	10.342
	31	333.842	25.766	6.523	329.547	26.272	6.388	47.904	12.179	10.448
Febr.	8	333.386	—25.849	—6.499	329.091	—26.353	—6.360	47.491	—12.290	—10.535
	16	333.041	25.916	6.481	328.747	26.419	6.339	47.180	12.379	10.601
	24	332.819	25.966	6.469	328.527	26.470	6.325	46.980	12.444	10.644
März	4	332.726	26.000	6.465	328.437	26.504	6.320	46.897	12.484	10.663
	12	332.764	26.018	6.468	328.479	26.521	6.324	46.934	12.498	10.657
	20	332.934	—26.018	—6.479	328.653	—26.521	—6.337	47.091	—12.486	—10.626
	28	333.232	26.000	6.497	328.955	26.503	6.358	47.364	12.449	10.572
April	5	333.652	25.964	6.521	329.379	26.468	6.387	47.747	12.387	10.495
	13	334.185	25.911	6.551	329.918	26.416	6.423	48.233	12.301	10.396
	21	334.823	25.840	6.586	330.562	26.346	6.465	48.815	12.192	10.276
	29	335.556	—25.751	—6.625	331.301	—26.258	—6.511	49.483	—12.062	—10.136
Mai	7	336.373	25.644	6.666	332.125	26.153	6.561	50.228	11.912	9.978
	15	337.264	25.520	6.709	333.023	26.030	6.614	51.041	11.743	9.803
	23	338.218	25.379	6.753	333.985	25.890	6.668	51.913	11.557	9.613
	31	339.224	25.221	6.798	334.998	25.733	6.722	52.833	11.355	9.409
Juni	8	340.272	—25.047	—6.841	336.054	—25.560	—6.776	53.792	—11.140	— 9.194
	16	341.351	24.859	6.883	337.142	25.372	6.829	54.782	10.914	8.970
	24	342.452	24.657	6.922	338.250	25.171	6.880	55.792	10.678	8.738
Juli	2	343.564	24.443	6.959	339.370	24.958	6.928	56.815	10.435	8.500
	10	344.678	24.220	6.993	340.492	24.734	6.973	57.841	10.186	8.258
	18	345.784	—23.988	—7.024	341.605	—24.503	—7.015	58.862	— 9.934	— 8.015
	26	346.872	23.751	7.051	342.701	24.266	7.053	59.869	9.682	7.773
Aug.	3	347.934	23.512	7.074	343.770	24.027	7.088	60.853	9.432	7.534
	11	348.960	23.273	7.094	344.803	23.787	7.118	61.806	9.188	7.301
	19	349.941	23.037	7.111	345.790	23.550	7.144	62.719	8.951	7.076
	27	350.867	—22.809	—7.125	346.723	—23.320	—7.167	63.584	— 8.724	— 6.861
Sept.	4	351.730	22.591	7.136	347.592	23.101	7.187	64.391	8.511	6.660
	12	352.520	22.387	7.144	348.388	22.896	7.203	65.131	8.314	6.474
	20	353.228	22.202	7.150	349.101	22.710	7.216	65.795	8.137	6.307
	28	353.845	22.038	7.154	349.724	22.546	7.226	66.376	7.983	6.160
Okt.	6	354.363	—21.900	—7.157	350.247	—22.407	—7.234	66.865	— 7.854	— 6.036
	14	354.775	21.792	7.159	350.663	22.298	7.240	67.253	7.753	5.938
	22	355.073	21.716	7.161	350.965	22.221	7.245	67.534	7.683	5.866
	30	355.253	21.674	7.162	351.148	22.178	7.248	67.704	7.645	5.823
Nov.	7	355.311	21.668	7.163	351.209	22.172	7.249	67.759	7.640	5.810
	15	355.245	—21.698	—7.163	351.146	—22.203	—7.249	67.697	— 7.669	— 5.826
	23	355.058	21.765	7.163	350.962	22.270	7.248	67.521	7.731	5.872
Dez.	1	354.756	21.866	7.163	350.661	22.370	7.245	67.236	7.825	5.945
	9	354.346	21.997	7.162	350.253	22.501	7.241	66.850	7.948	6.044
	17	353.841	22.153	7.160	349.750	22.658	7.235	66.375	8.096	6.166
	25	353.260	22.330	7.157	349.170	22.835	7.227	65.829	8.264	6.305
	33	352.621	—22.521	—7.153	348.532	—23.026	—7.217	65.230	— 8.447	— 6.457



0 <sup>h</sup> Welt-Zeit	HYPERION		0 <sup>h</sup> Welt-Zeit	HYPERION		0 <sup>h</sup> Welt-Zeit	HYPERION	
	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$		$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$		$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$
1945			1945			1945		
Jan. 1	-16.8 <sup>a</sup> + 2.8	- 26 <sup>b</sup> -62 <sup>c</sup>	März 20	+10.7 <sup>a</sup> - 9.9	+ 86 <sup>b</sup> + 7 <sup>c</sup>	Okt. 16	+15.8 <sup>a</sup> - 1.0	- 4 <sup>b</sup> +49 <sup>c</sup>
3	-14.0 + 7.7	- 88 -32	22	+ 0.8 -10.1	+ 93 -36	18	+14.8 - 6.6	+ 45 +31
5	- 6.3 + 9.7	-120 + 3	24	- 9.3 - 5.5	+ 57 -63	20	+ 8.2 -10.4	+ 76 - 4
7	+ 3.4 + 8.8	-117 +33	26	-14.8 + 1.1	- 6 -61	22	+ 2.2 - 9.4	+ 72 -40
9	+12.2 + 5.7	- 84 +53	28	-13.7 + 6.0	- 67 -37	24	-11.6 - 4.4	+ 32 -55
11	+17.9 + 1.1	- 31 +62	30	- 7.7 + 8.3	-104 - 6	26	-16.0 + 1.3	- 23 -48
13	+19.0 - 4.7	+ 31 +52	April 1	+ 0.6 + 8.1	-110 +23	28	-14.7 + 5.6	- 71 -28
15	+14.3 - 9.8	+ 83 +20	3	+ 8.7 + 6.0	- 87 +43	30	- 9.1 + 8.1	- 99 - 3
17	+ 4.5 -11.7	+103 -25	5	+14.7 + 2.2	- 44 +54	Nov. 1	- 1.0 + 8.3	-102 +22
19	- 7.2 - 8.0	+ 78 -64	7	+16.9 - 2.6	+ 10 +51	3	+ 7.3 + 6.6	- 80 -41
21	-15.2 - 0.9	+ 14 -71	9	+14.3 - 7.5	+ 61 +28	5	+13.9 + 2.8	- 39 +51
23	-16.1 + 5.4	- 57 -49	11	+ 6.8 -10.1	+ 89 - 9	7	+16.7 - 2.8	+ 12 +48
25	-10.7 + 8.9	-106 -16	13	- 3.3 - 8.5	+ 80 -48	9	+13.9 - 8.5	+ 60 +22
27	- 1.8 + 9.4	-122 +17	15	-11.8 - 2.8	+ 32 -63	11	+ 5.4 -11.2	+ 82 -17
29	+ 7.6 + 7.5	-105 +44	17	-14.6 + 3.0	- 31 -51	13	- 5.8 - 8.4	+ 65 -50
31	+15.1 + 3.7	- 61 +58	19	-11.6 + 6.9	- 82 -24	15	-14.2 - 2.7	+ 15 -57
Febr. 2	+18.8 - 1.6	- 3 +59	21	- 4.7 + 8.2	-106 + 5	17	-16.9 + 3.0	- 42 -44
4	+17.2 - 7.1	+ 56 +40	23	+ 3.5 + 7.2	-101 +30	19	-13.9 + 6.9	- 86 -21
6	+10.1 -11.0	+ 96 0	25	+10.7 + 4.6	- 71 +47	21	- 7.0 + 8.7	-107 + 5
8	- 0.9 -10.4	+ 96 -44	27	+15.3 + 0.6	- 24 +52	23	+ 1.7 + 8.4	-102 +30
10	-11.3 - 4.8	+ 52 -70	29	+15.9 - 4.3	+ 28 +43	25	+10.1 + 5.8	- 72 +48
12	-16.1 + 2.2	- 18 -63	Mai 1	+11.6 - 8.5	+ 71 +16	27	+15.9 + 1.1	- 24 +54
14	-13.9 + 7.2	- 81 -34	3	+ 3.1	+ 87	29	+17.0 - 5.0	+ 30 +44
16	- 6.7 + 9.2	-115 0				Dez. 1	+12.0 -10.2	+ 74 +11
18	+ 2.5 + 8.5	-115 +29				3	+ 1.8 -11.2	+ 85 -32
20	+11.0 + 5.8	- 86 +50	Sept. 18	- 5.3 + 7.8	- 97 + 7	5	- 9.4 - 6.9	+ 53 -57
22	+16.8 + 1.4	- 36 +59	20	+ 2.5 + 7.3	- 90 +28	7	-16.3 - 0.7	- 4 -57
24	+18.2 - 3.9	+ 23 +52	22	+ 9.8 + 4.8	- 62 +44	9	+17.0 + 4.8	- 61 -39
26	+14.3 - 8.9	+ 75 +24	24	+14.6 + 0.6	- 18 +49	11	-12.2 + 8.0	-100 -12
28	+ 5.4 -11.1	+ 99 -19	26	+15.2 - 4.8	+ 31 +37	13	- 4.2 + 9.1	-112 +14
März 2	- 5.7 - 8.1	+ 80 -58	28	+10.4 - 9.3	+ 68 + 8	15	+ 4.9 + 7.9	- 98 +38
4	-13.8 - 1.6	+ 22 -68	30	+ 1.1 - 9.9	+ 76 -30	17	+12.8 + 4.6	- 60 +54
6	-15.4 + 4.5	- 46 -50	Okt. 2	- 8.8 - 5.9	+ 46 -52	19	+17.4 - 0.9	- 6 +55
8	-10.9 + 8.1	- 96 -19	4	-14.7 - 0.3	- 6 -50	21	+16.5 - 7.3	+ 49 +36
10	- 2.8 + 8.8	-115 +12	6	-15.0 + 4.4	- 56 -34	23	+ 9.2 -11.5	+ 85 - 3
12	+ 6.0 + 7.3	-103 +38	8	-10.6 + 7.2	- 90 -10	25	- 2.3 -10.5	+ 82 -45
14	+13.3 + 4.0	- 65 +54	10	- 3.4 + 8.2	-100 +14	27	-12.8 - 4.8	+ 37 -62
16	+17.3 - 0.7	- 11 +56	12	+ 4.8 + 7.0	- 86 +34	29	-17.6 + 1.5	- 25 -54
18	+16.6 - 5.9	+ 45 +41	14	+11.8 + 4.0	- 52 +48	31	-16.1 + 6.3	- 79 -32
20	+10.7	+ 86	16	+15.8	- 4	33	- 9.8	-111



0 <sup>h</sup> Welt-Zeit	JAPETUS		0 <sup>h</sup> Welt-Zeit	JAPETUS		0 <sup>h</sup> Welt-Zeit	JAPETUS	
	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$		$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$		$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$
1945			1945			1945		
Jan. 1	+29.6 <sup>a</sup> +4.8	- 25 <sup>"</sup> +25 <sup>"</sup>	März 20	+25.4 <sup>a</sup> +4.4	- 32 <sup>"</sup> +23 <sup>"</sup>	Okt. 16	-35.0 <sup>a</sup> -1.9	- 24 <sup>"</sup> -14 <sup>"</sup>
3	+34.4 +3.9	o +25	22	+29.8 +3.6	- 9 +24	18	-36.9 -0.9	- 38 <sup>"</sup> -13 <sup>"</sup>
5	+38.3 +3.0	+ 25 +25	24	+33.4 +2.8	+ 15 +23	20	-37.8 o.o	- 51 <sup>"</sup> -11 <sup>"</sup>
7	+41.3 +2.0	+ 50 +24	26	+36.2 +2.0	+ 38 +22	22	-37.8 +1.1	- 62 <sup>"</sup> -10 <sup>"</sup>
9	+43.3 +1.0	+ 74 +22	28	+38.2 +1.1	+ 60 +21	24	-36.7 +2.0	- 72 <sup>"</sup> - 8 <sup>"</sup>
11	+44.3 -0.1	+ 96 +20	30	+39.3 +0.2	+ 81 +18	26	-34.7 +3.0	- 80 <sup>"</sup> - 7 <sup>"</sup>
13	+44.2 -1.1	+116 +17	April 1	+39.5 -0.7	+ 99 +16	28	-31.7 +3.8	- 87 <sup>"</sup> - 4 <sup>"</sup>
15	+43.1 -2.2	+133 +14	3	+38.8 -1.5	+115 +13	30	-27.9 +4.5	- 91 <sup>"</sup> - 2 <sup>"</sup>
17	+40.9 -3.2	+147 +11	5	+37.3 -2.4	+128 +10	Nov. 1	-23.4 +5.2	- 93 <sup>"</sup> + 1 <sup>"</sup>
19	+37.7 -4.1	+158 + 7	7	+34.9 -3.1	+138 + 7	3	-18.2 +5.7	- 92 <sup>"</sup> + 3 <sup>"</sup>
21	+33.6 -4.9	+165 + 2	9	+31.8 -3.8	+145 + 4	5	-12.5 +6.0	- 89 <sup>"</sup> + 5 <sup>"</sup>
23	+28.7 -5.6	+167 - 2	11	+28.0 -4.5	+149 o	7	- 6.5 +6.3	- 84 <sup>"</sup> + 7 <sup>"</sup>
25	+23.1 -6.1	+165 - 5	13	+23.5 -5.0	+149 - 3	9	- 0.2 +6.3	- 77 <sup>"</sup> + 9 <sup>"</sup>
27	+17.0 -6.5	+160 -10	15	+18.5 -5.3	+146 - 7	11	+ 6.1 +6.2	- 68 <sup>"</sup> +11 <sup>"</sup>
29	+10.5 -6.8	+150 -13	17	+13.2 -5.6	+139 -10	13	+12.3 +6.0	- 57 <sup>"</sup> +12 <sup>"</sup>
31	+ 3.7 -6.9	+137 -17	19	+ 7.6 -5.8	+129 -13	15	+18.3 +5.6	- 45 <sup>"</sup> +14 <sup>"</sup>
Febr. 2	- 3.2 -6.7	+120 -20	21	+ 1.8 -5.8	+116 -15	17	+23.9 +5.1	- 31 <sup>"</sup> +14 <sup>"</sup>
4	- 9.9 -6.4	+100 -23	23	- 4.0 -5.6	+101 -18	19	+29.0 +4.4	- 17 <sup>"</sup> +15 <sup>"</sup>
6	-16.3 -5.9	+ 77 -25	25	- 9.6 -5.4	+ 83 -19	21	+33.4 +3.7	- 2 <sup>"</sup> +15 <sup>"</sup>
8	-22.2 -5.3	+ 52 -26	27	-15.0 -4.9	+ 64 -21	23	+37.1 +2.8	+ 13 <sup>"</sup> +15 <sup>"</sup>
10	-27.5 -4.5	+ 26 -27	29	-19.9 -4.4	+ 43 -22	25	+39.9 +1.9	+ 28 <sup>"</sup> +15 <sup>"</sup>
12	-32.0 -3.6	- 1 -26	Mai 1	-24.3 -3.8	+ 21 -22	27	+41.8 +0.9	+ 43 <sup>"</sup> +14 <sup>"</sup>
14	-35.6 -2.6	- 27 -26	3	-28.1	- 1	29	+42.7 o.o	+ 57 <sup>"</sup> +12 <sup>"</sup>
16	-38.2 -1.5	- 53 -24				Dez. 1	+42.7 -1.1	+ 69 <sup>"</sup> +11 <sup>"</sup>
18	-39.7 -0.4	- 77 -22				3	+41.6 -2.1	+ 80 <sup>"</sup> +10 <sup>"</sup>
20	-40.1 +0.7	- 99 -19	Sept. 18	+32.3 <sup>a</sup> -3.2	+ 88 <sup>"</sup> + 3 <sup>"</sup>	5	+39.5 -3.1	+ 90 <sup>"</sup> + 7 <sup>"</sup>
22	-39.4 +1.8	-118 -16	20	+29.1 -3.9	+ 91 + 2	7	+36.4 -4.0	+ 97 <sup>"</sup> + 5 <sup>"</sup>
24	-37.6 +2.8	-134 -12	22	+25.2 -4.5	+ 93 o	9	+32.4 -4.8	+102 <sup>"</sup> + 3 <sup>"</sup>
26	-34.8 +3.7	-146 - 7	24	+20.7 -5.1	+ 93 - 2	11	+27.6 -5.6	+105 <sup>"</sup> o
28	-31.1 +4.5	-153 - 3	26	+15.6 -5.5	+ 91 - 5	13	+22.0 -6.2	+105 <sup>"</sup> - 3 <sup>"</sup>
März 2	-26.6 +5.2	-156 o	28	+10.1 -5.8	+ 86 - 7	15	+15.8 -6.6	+102 <sup>"</sup> - 5 <sup>"</sup>
4	-21.4 +5.7	-156 + 5	30	+ 4.3 -6.0	+ 79 - 9	17	+ 9.2 -6.9	+ 97 <sup>"</sup> - 8 <sup>"</sup>
6	-15.7 +6.0	-151 + 8	Okt. 2	- 1.7 -5.9	+ 70 -10	19	+ 2.3 -6.9	+ 89 <sup>"</sup> -11 <sup>"</sup>
8	- 9.7 +6.2	-143 +12	4	- 7.6 -5.8	+ 60 -12	21	- 4.6 -6.8	+ 78 <sup>"</sup> -13 <sup>"</sup>
10	- 3.5 +6.3	-131 +15	6	-13.4 -5.5	+ 48 -13	23	-11.4 -6.6	+ 65 <sup>"</sup> -15 <sup>"</sup>
12	+ 2.8 +6.2	-116 +18	8	-18.9 -5.0	+ 35 -14	25	-18.0 -6.1	+ 50 <sup>"</sup> -16 <sup>"</sup>
14	+ 9.0 +5.9	- 98 +21	10	-23.9 -4.5	+ 21 -15	27	-24.1 -5.5	+ 34 <sup>"</sup> -18 <sup>"</sup>
16	+14.9 +5.5	- 77 +22	12	-28.4 -3.7	+ 6 -15	29	-29.6 -4.6	+ 16 <sup>"</sup> -18 <sup>"</sup>
18	+20.4 +5.0	- 55 +23	14	-32.1 -2.9	- 9 -15	31	-34.2 -3.7	- 2 <sup>"</sup> -19 <sup>"</sup>
20	+25.4	- 32	16	-35.0	- 24	33	-37.9	- 21 <sup>"</sup>



## Östliche Elongationen (in Welt-Zeit)

## MIMAS

Jan.	<sup>h</sup>	Febr.	<sup>h</sup>	April	<sup>h</sup>	Okt.	<sup>h</sup>	Nov.	<sup>h</sup>	
	0	16	16.8	4	22.7	3	21.4	20	0.2	
	1	17	15.4	5	21.3	4	20.0	20	22.9	
	2	18	14.0	6	19.9	5	18.6	21	21.5	
	3	19	12.7	7	18.6	6	17.2	22	20.1	
	4	20	11.3	8	17.2	7	15.8	23	18.7	
	5	21	9.9	9	15.8	8	14.4	24	17.3	
	6	22	8.5	10	14.4	9	13.0	25	15.9	
	7	23	7.1	11	13.1	10	11.6	26	14.5	
	8	24	5.7	12	11.7	11	10.3	27	13.1	
	9	25	4.3	13	10.3	12	8.9	28	11.8	
	10	26	2.9	14	8.9	13	7.5	29	10.4	
	11	27	1.5	15	7.5	14	6.1	30	9.0	
	12	28	0.2	16	6.2	15	4.8	Dez.	1	7.6
	12	März	22.8	17	4.8	16	3.4	2	6.2	
	13	2	21.4	18	3.4	17	2.0	3	4.8	
	14	2	20.0	19	2.0	18	0.6	4	3.4	
	15	3	18.6	20	0.7	18	23.2	5	2.0	
	16	4	17.2	20	23.3	19	21.9	6	0.7	
	17	5	15.8	21	21.9	20	20.5	6	23.3	
	18	6	14.4	22	20.5	21	19.1	7	21.9	
	19	7	13.1	23	19.2	22	17.7	8	20.5	
	20	8	11.7	24	17.8	23	16.3	9	19.1	
	21	9	10.3	25	16.4	24	14.9	10	17.7	
	22	10	8.9	26	15.0	25	13.5	11	16.3	
	23	11	7.5	27	13.7	26	12.1	12	14.9	
	24	12	6.1	28	12.3	27	10.8	13	13.5	
	25	13	4.7	29	10.9	28	9.4	14	12.2	
	26	14	3.3	30	9.5	29	8.0	15	10.8	
	27	15	1.9	Mai	1	30	6.6	16	9.4	
	28	16	0.6	2	6.8	31	5.3	17	8.0	
	28	17	23.2	3	5.4	Nov.	1	18	6.7	
	29	18	21.8			2	2.5	19	5.3	
	30	18	20.4			3	1.1	20	3.9	
	31	19	19.1			3	23.7	21	2.5	
Febr.	1	20	17.7	Sept.	18	4	22.4	22	1.1	
	2	21	16.3	19	19.5	5	21.0	22	23.8	
	3	22	14.9	20	18.1	6	19.6	23	22.4	
	4	23	13.5	21	16.7	7	18.2	24	21.0	
	5	24	12.2	22	15.3	8	16.8	25	19.6	
	6	24	10.8	22	13.9	9	16.8	26	18.2	
	7	25	9.4	23	12.5	10	15.4	27	16.8	
	8	26	8.0	24	11.1	11	14.0	27	16.8	
	9	27	6.6	25	9.8	12	12.6	28	15.4	
	10	28	5.2	26	8.4	12	11.3	29	14.0	
	11	29	3.8	27	7.0	13	9.9	30	12.7	
	12	30	2.4	28	5.6	14	8.5	31	11.3	
	13	31	1.1	29	4.3	15	7.1	32	9.9	
	13	April	23.7	30	2.9	16	5.8			
	14	2	22.3	Okt.	1	17	4.4			
	15	3	20.9	2	1.5	18	3.0			
		4		2	0.1	19	1.6			
					22.7					



Östliche Elongationen (in Welt-Zeit)

ENCELADUS		ENCELADUS		ENCELADUS		ENCELADUS		TETHYS	
Jan.	0 <sup>h</sup> 7.5	März	4 <sup>h</sup> 8.1			Nov.	18 <sup>h</sup> 9.4	Jan.	12 <sup>h</sup> 2.0
	1 16.4		5 16.9				19 18.3		13 23.3
	3 1.3		7 1.8	Sept.	19 <sup>h</sup> 2.4		21 3.1		15 20.6
	4 10.2		8 10.7		20 11.3		22 12.0		17 17.8
	5 19.0		9 19.6		21 20.2		23 20.9		19 15.1
	7 3.9		11 4.5		23 5.1		25 5.8		21 12.4
	8 12.8		12 13.4		24 14.0		26 14.6		23 9.7
	9 21.6		13 22.3		25 22.9		27 23.5		25 7.0
	11 6.5		15 7.2		27 7.8		29 8.4		27 4.3
	12 15.4		16 16.1		28 16.7		30 17.3		29 1.6
	14 0.3		18 1.0		30 1.5	Dez.	2 2.1		30 22.9
	15 9.1		19 9.9	Okt.	1 10.4		3 11.0	Febr.	1 20.2
	16 18.0		20 18.8		2 19.3		4 19.9		3 17.5
	18 2.9		22 3.6		4 4.2		6 4.8		5 14.8
	19 11.8		23 12.5		5 13.1		7 13.6		7 12.1
	20 20.6		24 21.4		6 22.0		8 22.5		9 9.4
	22 5.5		26 6.3		8 6.9		10 7.4		11 6.7
	23 14.4		27 15.2		9 15.8		11 16.3		13 4.0
	24 23.3		29 0.1		11 0.7		13 1.1		15 1.3
	26 8.2		30 9.0		12 9.5		14 10.0		16 22.6
	27 17.1		31 17.9		13 18.4		15 18.9		18 19.9
	29 1.9	April	2 2.8		15 3.3		17 3.8		20 17.2
	30 10.8		3 11.7		16 12.2		18 12.6		22 14.5
Febr.	31 19.7		4 20.6		17 21.1		19 21.5		24 11.8
	2 4.6		6 5.4		19 6.0		21 6.4		26 9.1
	3 13.5		7 14.3		20 14.8		22 15.3		28 6.4
	4 22.4		8 23.2		21 23.7		24 0.1	März	2 3.7
	6 7.2		10 8.1		23 8.6		25 9.0		4 1.0
	7 16.1		11 17.0		24 17.5		26 17.9		5 22.4
	9 1.0		13 1.9		26 2.4		28 2.7		7 19.7
	10 9.9		14 10.8		27 11.2		29 11.6		9 17.0
	11 18.8		15 19.7		28 20.1		30 20.5		11 14.3
	13 3.6		17 4.6		30 5.0		32 5.4		13 11.6
	14 12.5		18 13.5		31 13.9	TETHYS			15 8.9
	15 21.4		19 22.4	Nov.	1 22.8				17 6.3
	17 6.3		21 7.3		3 7.7		19 3.6		
	18 15.2		22 16.2		4 16.5		21 0.9		
	20 0.1		24 1.1		6 1.4		22 22.2		
	21 8.9		25 10.0		7 10.3		24 19.5		
	22 17.8		26 18.9		8 19.2		26 16.9		
	24 2.7		28 3.8		10 4.1	Jan.	0 <sup>h</sup> 18.3	28 14.2	
	25 11.6		29 12.7		11 13.0		2 15.6	30 11.5	
	26 20.5		30 21.6		12 21.8		4 12.8	April	1 8.8
	28 5.4	Mai	2 6.5		14 6.7		6 10.1		3 6.2
März	1 14.3		3 15.4		15 15.6		8 7.4		5 3.5
	2 23.2				17 0.5		10 4.7		7 0.8



## Östliche Elongationen (in Welt-Zeit)

TETHYS		TETHYS		DIONE		DIONE		RHEA										
April	8	<sup>h</sup> 22.1	Nov.	12	<sup>h</sup> 3.0	Febr.	4	<sup>h</sup> 6.3	Okt.	16	<sup>h</sup> 23.1	Febr.	14	<sup>h</sup> 10.9				
	10	19.5		14	0.3		6	23.9		19	16.8		18	23.3				
	12	16.8		15	21.6		9	17.6		22	10.5		23	11.6				
	14	14.1		17	18.9		12	11.3		25	4.2		28	0.0				
	16	11.4		19	16.2		15	5.0		27	21.9		März	4	12.4			
	18	8.8		21	13.5		17	22.6		30	15.6			9	0.9			
	20	6.1		23	10.8		20	16.3		Nov.	2		9.2	13	13.3			
	22	3.4		25	8.1		23	9.9			5		2.9	18	1.8			
	24	0.7		27	5.4		26	3.6			7		20.6	22	14.3			
	25	22.0		29	2.7		28	21.3			10		14.3	27	2.7			
	27	19.4		Dez.	1		0.0	März			3		15.0	13	8.0	31	15.2	
	29	16.7			2		21.3				6		8.7	16	1.6		April	5
	Mai	1			14.0		4				18.6		9	2.4	18	19.3		9
3		11.4	6		15.9	11	20.1		21		12.9	14	4.8					
			8		13.2	14	13.8		24		6.6	18	17.3					
			10		10.5	17	7.5		27		0.3	23	5.8					
			12		7.8	20	1.2		29		18.0	27	18.4					
Sept.	18	<sup>h</sup> 9.0	14		5.1	22	18.9		Dez.		2	11.6	Mai	2	6.9			
	20	6.3	16		2.4	25	12.6				5	5.3						
	22	3.6	17		23.7	28	6.3			7	22.9							
	24	0.9	19		20.9	31	0.0			10	16.6							
	25	22.3	21		18.2	April	2			17.7	13	10.2		Sept.	19	<sup>h</sup> 13.1		
27	19.6	23	15.5		5		11.5			16	3.9	24			1.6			
29	16.9	25	12.8	8	5.2		18	21.5		28	14.1							
Okt.	1	14.2	27	10.1	10		23.0	21		15.2	Okt.	3			2.7			
	3	11.6	29	7.4	13		16.7	24		8.8		7			15.2			
	5	8.9	31	4.7	16		10.4	27		2.5		12			3.7			
	7	6.2	33	1.9	19		4.1	29		20.1		16			16.2			
	9	3.5			21		21.9	32		13.7		21			4.6			
	11	0.8			24		15.6					25			17.1			
	12	22.1			27		9.4			30		5.5						
	14	19.4	DIONE		30		3.1			Nov.		3	18.0					
	16	16.8	Jan.	2	<sup>h</sup> 10.5		Mai	2	20.8			8	6.4					
	18	14.1		5	4.1			Sept.	19			<sup>h</sup> 13.9	12		18.8			
	20	11.4		7	21.8	22			7.6			RHEA	17	7.2				
	22	8.7		10	15.4	25			1.3				Jan.	0	<sup>h</sup> 7.6			
	24	6.0		13	9.1	27			19.0					4	19.9	21	19.5	
26	3.3	16		2.7	30	12.7			9		8.2			26	7.9			
28	0.6	18		20.4	3	6.5			13		20.5			30	20.3			
29	21.9	21		14.0	6	0.2			18		8.9			Dez.	5	8.6		
31	19.2	24		7.7	8	17.9			22		21.2				9	21.0		
Nov.	2	16.5		27	1.3	11			11.6		27				9.5	14	9.3	
	4	13.8		29	19.0	14			5.3		31				21.8	18	21.7	
	6	11.1		Febr.	1	12.6									5	10.2	23	10.0
	8	8.4								9	22.5				27	22.3		
	10	5.7								32	10.6							



## Elongationen und Konjunktionen (in Welt-Zeit)

TITAN		TITAN		HYPERION			
Jan.	0 <sup>h</sup> 18.1 Östl. El.	Okt.	31 <sup>h</sup> 13.8 Östl. El.	Sept.	19 <sup>h</sup> 15.1 Ob. Konj.		
	4 15.7 Unt. Konj.	Nov.	4 10.5 Unt. Konj.		25 21.6 Östl. El.		
	8 10.4 Westl. El.		8 6.2 Westl. El.		30 9.5 Unt. Konj.		
	12 11.3 Ob. Konj.		12 8.9 Ob. Konj.	Okt.	4 20.7 Westl. El.		
	16 15.3 Östl. El.		16 12.4 Östl. El.		11 2.1 Ob. Konj.		
	20 13.1 Unt. Konj.		20 9.0 Unt. Konj.		17 7.6 Östl. El.		
	24 7.8 Westl. El.		24 4.6 Westl. El.		21 18.7 Unt. Konj.		
	28 8.6 Ob. Konj.		28 7.1 Ob. Konj.		26 6.2 Westl. El.		
Febr.	1 12.8 Öst. El.	Dez.	2 10.5 Östl. El.	Nov.	1 12.1 Ob. Konj.		
	5 10.7 Unt. Konj.		6 7.0 Unt. Konj.		7 16.8 Östl. El.		
	9 5.5 Westl. El.		10 2.5 Westl. El.		12 3.3 Unt. Konj.		
	13 6.3 Ob. Konj.		14 4.8 Ob. Konj.		16 14.9 Westl. El.		
	17 10.7 Östl. El.		18 8.2 Östl. El.		22 20.9 Ob. Konj.		
	21 8.8 Unt. Konj.		22 4.6 Unt. Konj.		29 1.1 Östl. El.		
	25 3.7 Westl. El.		26 0.0 Westl. El.	Dez.	3 11.4 Unt. Konj.		
März	1 4.6 Ob. Konj.		30 2.2 Ob. Konj.		7 22.8 Westl. El.		
	5 9.1 Östl. El.	HYPERION			14 4.5 Ob. Konj.		
	9 7.4 Unt. Konj.				20 8.6 Östl. El.		
	13 2.4 West. El.				24 18.8 Unt. Konj.		
	17 3.5 Ob. Konj.				29 5.9 Westl. El.		
	21 8.1 Östl. El.						
	25 6.5 Unt. Konj.			Jan.	1 <sup>h</sup> 1.6 Westl. El.		
	29 1.6 Westl. El.				6 13.3 Ob. Konj.		
April	2 2.9 Ob. Konj.				13 0.4 Östl. El.		
	6 7.7 Östl. El.				17 22.5 Unt. Konj.		
	10 6.1 Unt. Konj.				22 3.5 Westl. El.		
	14 1.3 Westl. El.		27 14.8 Ob. Konj.				
	18 2.8 Ob. Konj.	Febr.	3 2.2 Östl. El.	JAPETUS			
	22 7.7 Östl. El.		8 0.7 Unt. Konj.				
	26 6.1 Unt. Konj.		12 5.8 Westl. El.				
	30 1.5 Westl. El.		17 17.3 Ob. Konj.				
Mai	4 3.2 Ob. Konj.		24 5.0 Östl. El.			Jan.	12 <sup>h</sup> 10.1 Östl. El.
		März	1 3.7 Unt. Konj.			Febr.	1 14.5 Unt. Konj.
			5 9.0 Westl. El.				20 12.6 Westl. El.
			10 21.2 Ob. Konj.			März	11 15.6 Ob. Konj.
			17 9.3 Östl. El.			April	1 9.1 Östl. El.
Sept.	21 <sup>h</sup> 8.2 Westl. El.		22 7.8 Unt. Konj.				22 4.3 Unt. Konj.
	25 11.1 Ob. Konj.		26 13.4 Westl. El.				
	29 15.1 Östl. El.	April	1 2.8 Ob. Konj.				
Okt.	3 12.1 Unt. Konj.		7 15.1 Östl. El.	Okt.	1 <sup>h</sup> 16.3 Unt. Konj.		
	7 8.0 Westl. El.		12 13.1 Unt. Konj.		20 18.6 Westl. El.		
	11 10.9 Ob. Konj.		16 19.1 Westl. El.	Nov.	9 6.8 Ob. Konj.		
	15 14.7 Östl. El.		22 9.9 Ob. Konj.		29 22.7 Östl. El.		
	19 11.5 Unt. Konj.		28 22.4 Östl. El.	Dez.	19 21.8 Unt. Konj.		
	23 7.3 Westl. El.	Mai	3 19.4 Unt. Konj.				
	27 10.2 Ob. Konj.						



Welt-Zeit			Welt-Zeit						
1945			1945						
	h	m		h	m				
Jan.	1	23	♁ i. kleinst. Abst. v. ☉	April	3	11	♀ stationär in AR.		
	2	13	♀ stationär in AR.		9	19	7	♂ ♂ ☾	
	4	20	21		♂ ♂ ☾	12	10	54	♀ ♂ ☾
	5	14	30		♄ ♂ ☾	12	12	58	♀ ♂ ☾
	8	10			♄ stationär in AR.	13	2		♀ untere ♂ ☉
	12	8	12		♀ ♂ ☾	13	23		♀ untere ♂ ☉
	12	20			♃ stationär in AR.	15	17	16	♁ ♂ ☾
	12	21	2		♂ ♂ ☾	17	12	52	♄ ♂ ☾
	13	3			♀ gr. westl. El. 23° 40'	23	5	50	♃ ♂ ☾
	14	—			☉ ringf. Finsternis	24	13	53	♄ ♂ ☾
	17	14	1		♀ ♂ ☾	25	23		♀ stationär in AR.
	23	18	8		♁ ♂ ☾	26	18		♀ ♂ ♀, ♀ 6° 15' S.
	25	17	34		♄ ♂ ☾				
	26	15			♀ ♂ ♂, ♀ 0° 22' N.				
	Febr.		h		m	Mai		h	m
1		3	29	1	18			♀ im Aphel	
1		22	13	4	12			♀ stationär in AR.	
2		18		8	16		0	♂ ♂ ☾	
2		23		9	10		53	♀ ♂ ☾	
2		23		9	17			♂ im Perihel	
10		21	38	9	23		2	♀ ♂ ☾	
11		19	10	11	12			♀ gr. westl. El. 26° 13'	
15		20	7	13	6		7	♁ ♂ ☾	
15		23		15	2		31	♄ ♂ ☾	
19		23	8	15	6			♃ stationär in AR.	
21		21	3	20	10		53	♃ ♂ ☾	
28		0		21	15			♀ im größten Glanze	
28	5	43	21	19	12	♄ ♂ ☾			
28	17								
März		h	m	Juni		h	m		
	1	4	26		4	6		♁ ♂ ☉	
	5	22			6	11	51	♂ ♂ ☾	
	10	8			6	21	17	♀ ♂ ☾	
	11	21	3		9	13	55	♀ ♂ ☾	
	14	3			9	19	4	♁ ♂ ☾	
	14	21	56		11	1		♀ ♂ ♂, ♀ 0° 11' N.	
	16	10	30		11	18	2	♄ ♂ ☾	
	18	18			14	17		♀ im Perihel	
	19	6	34		15	10		♄ stationär in AR.	
	20	23	38		16	1		♀ obere ♂ ☉	
	21	2	54		16	21	22	♃ ♂ ☾	
	24	14			18	2	9	♄ ♂ ☾	
	26	9			20	23		♀ im Aphel	
	26	17			21	18	52	Sommersanfang	
27	5	13	24	11		♀ ♂ ♄, ♀ 2° 12' N.			
28	9	21	24	18		♀ gr. westl. El. 45° 46'			
			25	—		☾ partielle Finsternis			



Welt-Zeit			Welt-Zeit				
1945			1945				
	h	m		h	m		
Juli	5	6 26	♂ ♂ ☾	Okt.	1	17	♀ obere ♂ ☉
	5	10	♁ i. größt. Abst. v. ☉		1	21	♀ ♂ ♃, ♃ 0° 14' N.
	6	2 27	♀ ♂ ☾		2	1	♃ ♂ ☉
	6	20	♃ ♂ ☉		3	11 39	♀ ♂ ☾
	7	6 23	♁ ♂ ☾		5	13 54	♃ ♂ ☾
	9	—	☉ totale Finsternis		5	18 27	♃ ♂ ☾
	9	9 29	♃ ♂ ☾		6	8 5	♀ ♂ ☾
	11	10 17	♀ ♂ ☾		11	8	♀ im Perihel
	14	12 12	♃ ♂ ☾		24	12 18	♁ ♂ ☾
	15	10 41	♃ ♂ ☾		24	16	♀ im Aphel
22	10	♀ ♂ ♁, ♀ 2° 36' S.	24	20	♀ ♂ ♃, ♀ 0° 11' N.		
23	20	♀ gr. östl. El. 27° 1'	26	7	♂ ♂ ♃, ♂ 1° 24' N.		
28	17	♀ im Aphel	27	4 48	♃ ♂ ☾		
			27	5 25	♂ ♂ ☾		
			30	8	♀ ♂ ♃, ♀ 0° 31' N.		
Aug.	2	23 7	♂ ♂ ☾	Nov.	1	21 41	♃ ♂ ☾
	3	15 17	♀ ♂ ☾		2	12 19	♃ ♂ ☾
	4	15 46	♀ ♂ ☾		2	19 51	♀ ♂ ☾
	5	22	♀ stationär in AR.		6	16	♃ stationär in AR.
	5	23 22	♃ ♂ ☾		6	17 7	♀ ♂ ☾
	9	6 50	♀ ♂ ☾		17	20	♀ gr. östl. El. 22° 25'
	11	5 38	♃ ♂ ☾		20	21 29	♁ ♂ ☾
	11	20 5	♃ ♂ ☾		23	13 6	♃ ♂ ☾
	17	15	♂ ♂ ♁, ♂ 0° 24' S.		24	3 21	♂ ♂ ☾
	19	17	♀ untere ♂ ☉		27	14	♀ stationär in AR.
	22	4	♀ ♂ ♃, ♀ 0° 41' S.		29	5 18	♃ ♂ ☾
	29	14	♀ stationär in AR.		30	5 25	♃ ♂ ☾
	30	22 11	♁ ♂ ☾				
31	13 7	♂ ♂ ☾					
Sept.	2	10 57	♃ ♂ ☾	Dez.	3	9 21	♀ ♂ ☾
	3	10 41	♀ ♂ ☾		5	5 23	♀ ♂ ☾
	4	21 49	♀ ♂ ☾		5	19	♂ stationär in AR.
	6	13	♀ gr. westl. El. 18° 1'		7	12	♀ untere ♂ ☉
	8	0 4	♃ ♂ ☾		7	16	♀ im Perihel
	8	5 22	♃ ♂ ☾		7	21	♁ ♂ ☉
	10	16	♀ im Perihel		13	3	♀ ♂ ♀, ♀ 2° 8' N.
	23	3	♃ ♂ ♃, ♃ 0° 20' S.		17	7	♀ stationär in AR.
	23	7	♁ stationär in AR.		18	6 52	♁ ♂ ☾
	23	9 50	Herbstanfang		18	22	♃ im Aphel
	27	4 39	♁ ♂ ☾		19	—	☾ totale Finsternis
	28	23 39	♂ ♂ ☾		20	21 17	♃ ♂ ☾
	29	20 26	♃ ♂ ☾		21	12 5	♂ ♂ ☾
	30	8	♃ ♂ ☉		22	5 4	Wintersanfang
	30	23	♀ ♂ ♃, ♀ 0° 1' S.		26	13 24	♃ ♂ ☾
			26	15	♀ gr. westl. El. 22° 12'		
			27	21 18	♃ ♂ ☾		



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Jan.	0	h 4 34 m 4	h 5 2 m 2	h 5 23 m 5	h 5 42 m 5	h 5 59 m 5	h 6 17 m 6	h 6 35 m 6	h 6 56 m 6	h 7 22 m 7	h 7 39 m 7	h 7 59 m 7	h 8 25 m 8	h 9 3 m 9	h 10 8 m 10
	1	4 35	5 2	5 24	5 43	6 0	6 17	6 35	6 56	7 22	7 39	7 59	8 25	9 3	10 7
	2	4 36	5 3	5 25	5 43	6 0	6 17	6 36	6 56	7 22	7 39	7 59	8 25	9 2	10 6
	3	4 37	5 4	5 25	5 44	6 1	6 18	6 36	6 56	7 22	7 39	7 59	8 25	9 2	10 5
	4	4 37	5 4	5 26	5 44	6 1	6 18	6 36	6 57	7 22	7 39	7 58	8 24	9 1	10 3
	5	4 38	5 5	5 26	5 45	6 2	6 19	6 36	6 57	7 22	7 39	7 58	8 24	9 0	10 1
	6	4 39	5 6	5 27	5 46	6 2	6 19	6 37	6 57	7 22	7 38	7 58	8 23	8 59	10 0
	7	4 40	5 7	5 28	5 46	6 3	6 19	6 37	6 57	7 22	7 38	7 58	8 23	8 59	9 58
	8	4 41	5 8	5 28	5 47	6 3	6 20	6 37	6 57	7 22	7 38	7 57	8 22	8 58	9 56
	9	4 42	5 9	5 29	5 47	6 4	6 20	6 37	6 57	7 22	7 38	7 57	8 22	8 56	9 54
	10	4 43	5 9	5 30	5 48	6 4	6 20	6 38	6 57	7 22	7 37	7 56	8 21	8 55	9 51
	11	4 44	5 10	5 31	5 48	6 4	6 21	6 38	6 57	7 22	7 37	7 56	8 20	8 54	9 49
	12	4 45	5 11	5 31	5 49	6 5	6 21	6 38	6 57	7 22	7 37	7 55	8 19	8 53	9 47
	13	4 46	5 12	5 32	5 49	6 5	6 21	6 38	6 57	7 21	7 36	7 55	8 18	8 51	9 44
	14	4 47	5 13	5 32	5 50	6 5	6 21	6 38	6 57	7 21	7 36	7 54	8 17	8 50	9 42
	15	4 49	5 14	5 33	5 50	6 6	6 22	6 38	6 57	7 21	7 35	7 53	8 16	8 49	9 39
	16	4 50	5 14	5 34	5 51	6 6	6 22	6 38	6 57	7 20	7 35	7 52	8 15	8 47	9 37
	17	4 51	5 15	5 34	5 51	6 6	6 22	6 38	6 57	7 20	7 34	7 52	8 14	8 45	9 34
	18	4 52	5 16	5 35	5 52	6 7	6 22	6 38	6 56	7 19	7 33	7 51	8 13	8 44	9 31
	19	4 53	5 17	5 36	5 52	6 7	6 22	6 38	6 56	7 19	7 33	7 50	8 12	8 42	9 29
	20	4 54	5 18	5 36	5 53	6 7	6 22	6 38	6 56	7 18	7 32	7 49	8 10	8 40	9 26
	21	4 55	5 19	5 37	5 53	6 8	6 22	6 38	6 56	7 18	7 31	7 48	8 9	8 38	9 23
	22	4 57	5 20	5 38	5 54	6 8	6 23	6 38	6 55	7 17	7 30	7 47	8 8	8 36	9 20
	23	4 58	5 20	5 38	5 54	6 8	6 23	6 38	6 55	7 16	7 30	7 46	8 6	8 34	9 17
	24	4 59	5 21	5 39	5 55	6 9	6 23	6 38	6 55	7 16	7 29	7 45	8 5	8 32	9 14
	25	5 0	5 22	5 40	5 55	6 9	6 23	6 37	6 54	7 15	7 28	7 43	8 3	8 30	9 11
	26	5 1	5 23	5 40	5 55	6 9	6 23	6 37	6 54	7 14	7 27	7 42	8 2	8 28	9 8
	27	5 3	5 24	5 41	5 56	6 9	6 23	6 37	6 53	7 13	7 26	7 41	8 0	8 26	9 5
	28	5 4	5 25	5 42	5 56	6 10	6 23	6 37	6 53	7 12	7 25	7 40	7 59	8 24	9 2
	29	5 5	5 26	5 42	5 57	6 10	6 23	6 37	6 52	7 12	7 24	7 38	7 57	8 22	8 58
	30	5 6	5 27	5 43	5 57	6 10	6 23	6 36	6 52	7 11	7 23	7 37	7 55	8 20	8 55
	31	5 7	5 28	5 43	5 57	6 10	6 23	6 36	6 51	7 10	7 22	7 36	7 54	8 17	8 52
Febr.	1	5 9	5 28	5 44	5 58	6 10	6 23	6 36	6 51	7 9	7 20	7 34	7 52	8 15	8 49
	2	5 10	5 29	5 45	5 58	6 10	6 23	6 35	6 50	7 8	7 19	7 33	7 50	8 13	8 46
	3	5 11	5 30	5 45	5 58	6 10	6 22	6 35	6 50	7 7	7 18	7 31	7 48	8 10	8 42
	4	5 12	5 31	5 46	5 59	6 11	6 22	6 35	6 49	7 6	7 17	7 30	7 46	8 8	8 39
	5	5 14	5 32	5 46	5 59	6 11	6 22	6 34	6 48	7 5	7 16	7 28	7 44	8 5	8 36
	6	5 15	5 33	5 47	5 59	6 11	6 22	6 34	6 47	7 4	7 14	7 27	7 42	8 3	8 32
	7	5 16	5 34	5 47	6 0	6 11	6 22	6 34	6 47	7 3	7 13	7 25	7 40	8 0	8 29
	8	5 17	5 34	5 48	6 0	6 11	6 22	6 33	6 46	7 2	7 12	7 24	7 38	7 58	8 26
	9	5 19	5 35	5 49	6 0	6 11	6 21	6 33	6 45	7 1	7 10	7 22	7 36	7 55	8 22
	10	5 20	5 36	5 49	6 0	6 11	6 21	6 32	6 44	7 0	7 9	7 20	7 34	7 53	8 19



# Sonnenuntergang 1945

329\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Jan.	0	19 32	19 5	18 43	18 24	18 7	17 50	17 31	17 11	16 44	16 28	16 8	15 41	15 3	13 58
	1	19 32	19 5	18 43	18 24	18 7	17 50	17 32	17 11	16 45	16 29	16 9	15 42	15 5	14 0
	2	19 32	19 5	18 44	18 25	18 8	17 51	17 33	17 12	16 46	16 30	16 10	15 43	15 6	14 3
	3	19 32	19 5	18 44	18 25	18 8	17 51	17 33	17 13	16 47	16 31	16 11	15 45	15 8	14 5
	4	19 32	19 5	18 44	18 25	18 9	17 52	17 34	17 14	16 48	16 32	16 12	15 46	15 9	14 7
	5	19 32	19 5	18 44	18 26	18 9	17 52	17 35	17 14	16 49	16 33	16 13	15 47	15 11	14 10
	6	19 32	19 6	18 45	18 26	18 10	17 53	17 35	17 15	16 50	16 34	16 14	15 49	15 13	14 13
	7	19 32	19 6	18 45	18 27	18 10	17 53	17 36	17 16	16 51	16 35	16 15	15 50	15 15	14 15
	8	19 32	19 6	18 45	18 27	18 10	17 54	17 37	17 17	16 52	16 36	16 17	15 52	15 17	14 18
	9	19 32	19 6	18 45	18 27	18 11	17 55	17 37	17 17	16 53	16 37	16 18	15 53	15 18	14 21
	10	19 32	19 6	18 45	18 28	18 11	17 55	17 38	17 18	16 54	16 38	16 19	15 55	15 20	14 24
	11	19 32	19 6	18 45	18 28	18 12	17 56	17 39	17 19	16 55	16 39	16 21	15 56	15 23	14 27
	12	19 31	19 6	18 45	18 28	18 12	17 56	17 39	17 20	16 56	16 41	16 22	15 58	15 25	14 30
	13	19 31	19 6	18 46	18 28	18 12	17 57	17 40	17 21	16 57	16 42	16 23	16 0	15 27	14 34
	14	19 31	19 5	18 46	18 29	18 13	17 57	17 40	17 22	16 58	16 43	16 25	16 1	15 29	14 37
	15	19 30	19 5	18 46	18 29	18 13	17 58	17 41	17 23	16 59	16 44	16 26	16 3	15 31	14 40
	16	19 30	19 5	18 46	18 29	18 14	17 58	17 42	17 23	17 0	16 46	16 28	16 5	15 33	14 44
	17	19 29	19 5	18 46	18 29	18 14	17 59	17 42	17 24	17 1	16 47	16 29	16 7	15 36	14 47
	18	19 29	19 5	18 46	18 29	18 14	17 59	17 43	17 25	17 2	16 48	16 31	16 9	15 38	14 50
	19	19 28	19 4	18 46	18 29	18 15	18 0	17 44	17 26	17 3	16 49	16 32	16 10	15 40	14 54
	20	19 28	19 4	18 46	18 29	18 15	18 0	17 44	17 27	17 5	16 51	16 34	16 12	15 43	14 57
	21	19 27	19 4	18 46	18 30	18 15	18 0	17 45	17 28	17 6	16 52	16 36	16 14	15 45	15 1
	22	19 26	19 3	18 45	18 30	18 15	18 1	17 46	17 29	17 7	16 53	16 37	16 16	15 48	15 4
	23	19 26	19 3	18 45	18 30	18 16	18 1	17 46	17 29	17 8	16 55	16 39	16 18	15 50	15 8
	24	19 25	19 3	18 45	18 30	18 16	18 2	17 47	17 30	17 9	16 56	16 40	16 20	15 53	15 11
	25	19 24	19 2	18 45	18 30	18 16	18 2	17 48	17 31	17 10	16 58	16 42	16 22	15 55	15 15
	26	19 23	19 2	18 45	18 30	18 16	18 3	17 48	17 32	17 12	16 59	16 44	16 24	15 58	15 18
	27	19 23	19 1	18 45	18 30	18 16	18 3	17 49	17 33	17 13	17 0	16 45	16 26	16 0	15 22
	28	19 22	19 1	18 44	18 30	18 17	18 3	17 49	17 34	17 14	17 2	16 47	16 28	16 3	15 25
	29	19 21	19 0	18 44	18 30	18 17	18 4	17 50	17 35	17 15	17 3	16 49	16 30	16 5	15 29
30	19 20	19 0	18 44	18 30	18 17	18 4	17 51	17 35	17 16	17 5	16 50	16 32	16 8	15 33	
31	19 19	18 59	18 43	18 30	18 17	18 4	17 51	17 36	17 17	17 6	16 52	16 34	16 11	15 36	
Febr.	1	19 18	18 59	18 43	18 30	18 17	18 5	17 52	17 37	17 19	17 7	16 54	16 37	16 13	
	2	19 17	18 58	18 43	18 29	18 17	18 5	17 52	17 38	17 20	17 9	16 55	16 39	16 16	
	3	19 16	18 57	18 42	18 29	18 17	18 6	17 53	17 39	17 21	17 10	16 57	16 41	16 19	
	4	19 15	18 57	18 42	18 29	18 18	18 6	17 54	17 40	17 22	17 12	16 59	16 43	16 21	
	5	19 14	18 56	18 42	18 29	18 18	18 6	17 54	17 40	17 24	17 13	17 1	16 45	16 24	
	6	19 13	18 55	18 41	18 29	18 18	18 6	17 55	17 41	17 25	17 15	17 2	16 47	16 27	
	7	19 12	18 54	18 41	18 29	18 18	18 7	17 55	17 42	17 26	17 16	17 4	16 49	16 29	
	8	19 11	18 54	18 40	18 29	18 18	18 7	17 56	17 43	17 27	17 17	17 6	16 51	16 32	
	9	19 9	18 53	18 40	18 28	18 18	18 7	17 56	17 44	17 28	17 19	17 7	16 53	16 34	
	10	19 8	18 52	18 39	18 28	18 18	18 8	17 57	17 45	17 30	17 20	17 9	16 55	16 37	



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Febr. 10	5 20	5 36	5 49	6 0	6 11	6 21	6 32	6 44	7 0	7 9	7 20	7 34	7 53	8 19	9 0
11	5 21	5 37	5 50	6 1	6 11	6 21	6 32	6 44	6 59	7 8	7 18	7 32	7 50	8 15	8 55
12	5 22	5 38	5 50	6 1	6 11	6 21	6 31	6 43	6 57	7 6	7 17	7 30	7 47	8 12	8 50
13	5 24	5 39	5 51	6 1	6 11	6 21	6 31	6 42	6 56	7 5	7 15	7 28	7 45	8 8	8 45
14	5 25	5 39	5 51	6 1	6 11	6 20	6 30	6 41	6 55	7 3	7 13	7 26	7 42	8 5	8 40
15	5 26	5 40	5 52	6 2	6 11	6 20	6 30	6 41	6 54	7 2	7 12	7 24	7 39	8 1	8 36
16	5 27	5 41	5 52	6 2	6 11	6 20	6 29	6 40	6 52	7 0	7 10	7 21	7 37	7 58	8 31
17	5 28	5 42	5 53	6 2	6 11	6 19	6 28	6 39	6 51	6 59	7 8	7 19	7 34	7 54	8 26
18	5 29	5 43	5 53	6 2	6 11	6 19	6 28	6 38	6 50	6 57	7 6	7 17	7 31	7 51	8 21
19	5 31	5 43	5 54	6 2	6 11	6 19	6 27	6 37	6 48	6 56	7 4	7 15	7 28	7 47	8 16
20	5 32	5 44	5 54	6 3	6 11	6 18	6 27	6 36	6 47	6 54	7 2	7 12	7 26	7 44	8 12
21	5 33	5 45	5 54	6 3	6 10	6 18	6 26	6 35	6 46	6 52	7 0	7 10	7 23	7 40	8 7
22	5 34	5 46	5 55	6 3	6 10	6 18	6 25	6 34	6 44	6 51	6 58	7 8	7 20	7 37	8 2
23	5 35	5 46	5 55	6 3	6 10	6 17	6 25	6 33	6 43	6 49	6 56	7 5	7 17	7 33	7 57
24	5 36	5 47	5 56	6 3	6 10	6 17	6 24	6 32	6 42	6 47	6 54	7 3	7 14	7 30	7 53
25	5 38	5 48	5 56	6 3	6 10	6 16	6 23	6 31	6 40	6 46	6 52	7 1	7 11	7 26	7 48
26	5 39	5 49	5 57	6 3	6 10	6 16	6 23	6 30	6 39	6 44	6 50	6 58	7 9	7 23	7 43
27	5 40	5 49	5 57	6 3	6 10	6 16	6 22	6 29	6 37	6 42	6 48	6 56	7 6	7 19	7 39
28	5 41	5 50	5 57	6 4	6 9	6 15	6 21	6 28	6 36	6 41	6 46	6 54	7 3	7 15	7 34
März 1	5 42	5 51	5 58	6 4	6 9	6 15	6 20	6 27	6 34	6 39	6 44	6 51	7 0	7 12	7 29
2	5 43	5 51	5 58	6 4	6 9	6 14	6 19	6 26	6 33	6 37	6 42	6 49	6 57	7 8	7 24
3	5 44	5 52	5 58	6 4	6 9	6 14	6 19	6 24	6 31	6 35	6 40	6 46	6 54	7 4	7 20
4	5 45	5 53	5 59	6 4	6 9	6 13	6 18	6 23	6 30	6 34	6 38	6 44	6 51	7 1	7 15
5	5 46	5 53	5 59	6 4	6 8	6 13	6 17	6 22	6 28	6 32	6 36	6 41	6 48	6 57	7 11
6	5 48	5 54	6 0	6 4	6 8	6 12	6 16	6 21	6 27	6 30	6 34	6 39	6 45	6 54	7 6
7	5 49	5 55	6 0	6 4	6 8	6 12	6 16	6 20	6 25	6 28	6 32	6 36	6 42	6 50	7 1
8	5 50	5 56	6 0	6 4	6 8	6 11	6 15	6 19	6 24	6 26	6 30	6 34	6 39	6 46	6 57
9	5 51	5 56	6 0	6 4	6 8	6 11	6 14	6 18	6 22	6 25	6 28	6 31	6 36	6 43	6 52
10	5 52	5 57	6 1	6 4	6 7	6 10	6 13	6 16	6 20	6 23	6 26	6 29	6 33	6 39	6 47
11	5 53	5 58	6 1	6 4	6 7	6 10	6 12	6 15	6 19	6 21	6 23	6 26	6 30	6 35	6 43
12	5 54	5 58	6 1	6 4	6 7	6 9	6 11	6 14	6 17	6 19	6 21	6 24	6 27	6 32	6 38
13	5 55	5 59	6 2	6 4	6 6	6 8	6 11	6 13	6 16	6 16	6 19	6 21	6 24	6 28	6 34
14	5 56	5 59	6 2	6 4	6 6	6 8	6 10	6 12	6 14	6 14	6 17	6 19	6 21	6 24	6 29
15	5 57	6 0	6 2	6 4	6 6	6 7	6 9	6 11	6 12	6 13	6 15	6 16	6 18	6 21	6 24
16	5 58	6 1	6 3	6 4	6 6	6 7	6 8	6 9	6 11	6 12	6 13	6 14	6 15	6 17	6 20
17	5 59	6 1	6 3	6 4	6 5	6 6	6 7	6 8	6 9	6 10	6 10	6 11	6 12	6 13	6 15
18	6 0	6 2	6 3	6 4	6 5	6 6	6 6	6 7	6 8	6 8	6 8	6 9	6 9	6 10	6 11
19	6 1	6 3	6 3	6 4	6 5	6 5	6 5	6 6	6 6	6 6	6 6	6 6	6 6	6 6	6 6
20	6 2	6 3	6 4	6 4	6 4	6 5	6 5	6 5	6 4	6 4	6 4	6 4	6 3	6 2	6 1
21	6 3	6 4	6 4	6 4	6 4	6 4	6 4	6 3	6 3	6 2	6 2	6 1	6 0	5 59	5 57
22	6 4	6 5	6 4	6 4	6 4	6 3	6 3	6 2	6 1	6 0	6 0	5 59	5 57	5 55	5 52
23	6 5	6 5	6 5	6 4	6 4	6 3	6 2	6 1	6 0	5 59	5 57	5 56	5 54	5 51	5 47



# Sonnenuntergang 1945

331\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Febr. 10	19 <sup>h</sup> 8 <sup>m</sup>	18 <sup>h</sup> 52 <sup>m</sup>	18 <sup>h</sup> 39 <sup>m</sup>	18 <sup>h</sup> 28 <sup>m</sup>	18 <sup>h</sup> 18 <sup>m</sup>	18 <sup>h</sup> 8 <sup>m</sup>	17 <sup>h</sup> 57 <sup>m</sup>	17 <sup>h</sup> 45 <sup>m</sup>	17 <sup>h</sup> 30 <sup>m</sup>	17 <sup>h</sup> 20 <sup>m</sup>	17 <sup>h</sup> 9 <sup>m</sup>	16 <sup>h</sup> 55 <sup>m</sup>	16 <sup>h</sup> 37 <sup>m</sup>	16 <sup>h</sup> 11 <sup>m</sup>	15 <sup>h</sup> 30 <sup>m</sup>
11	19 7	18 51	18 39	18 28	18 18	18 8	17 57	17 45	17 31	17 22	17 11	16 57	16 40	16 15	15 35
12	19 6	18 51	18 38	18 28	18 18	18 8	17 58	17 46	17 32	17 23	17 13	17 0	16 42	16 18	15 40
13	19 4	18 50	18 38	18 27	18 18	18 8	17 58	17 47	17 33	17 25	17 14	17 0	16 45	16 22	15 45
14	19 3	18 49	18 37	18 27	18 18	18 8	17 59	17 48	17 34	17 26	17 16	17 4	16 48	16 25	15 50
15	19 2	18 48	18 37	18 27	18 18	18 9	17 59	17 48	17 35	17 27	17 18	17 6	16 50	16 28	15 54
16	19 1	18 47	18 36	18 26	18 18	18 9	18 0	17 49	17 37	17 29	17 20	17 8	16 53	16 32	15 59
17	18 59	18 46	18 35	18 26	18 18	18 9	18 0	17 50	17 38	17 30	17 21	17 10	16 56	16 35	16 4
18	18 58	18 45	18 35	18 26	18 18	18 9	18 1	17 51	17 39	17 32	17 23	17 12	16 58	16 39	16 9
19	18 57	18 44	18 34	18 25	18 17	18 9	18 1	17 51	17 40	17 33	17 25	17 14	17 1	16 42	16 13
20	18 55	18 43	18 33	18 25	18 17	18 9	18 1	17 52	17 41	17 35	17 26	17 16	17 3	16 45	16 18
21	18 54	18 42	18 33	18 25	18 17	18 10	18 2	17 53	17 42	17 36	17 28	17 18	17 6	16 49	16 23
22	18 52	18 41	18 32	18 24	18 17	18 10	18 2	17 54	17 44	17 37	17 30	17 20	17 8	16 52	16 27
23	18 51	18 40	18 32	18 24	18 17	18 10	18 3	17 54	17 45	17 39	17 32	17 23	17 11	16 55	16 32
24	18 50	18 39	18 31	18 23	18 17	18 10	18 3	17 55	17 46	17 40	17 33	17 25	17 14	16 59	16 36
25	18 48	18 38	18 30	18 23	18 17	18 10	18 4	17 56	17 47	17 41	17 35	17 27	17 16	17 2	16 40
26	18 47	18 37	18 29	18 23	18 16	18 10	18 4	17 57	17 48	17 43	17 37	17 29	17 19	17 5	16 45
27	18 45	18 36	18 29	18 22	18 16	18 10	18 4	17 57	17 49	17 44	17 38	17 31	17 21	17 8	16 49
28	18 44	18 35	18 28	18 22	18 16	18 10	18 5	17 58	17 50	17 46	17 40	17 33	17 24	17 12	16 53
März 1	18 42	18 34	18 27	18 21	18 16	18 11	18 5	17 59	17 52	17 47	17 42	17 35	17 26	17 15	16 58
2	18 41	18 33	18 26	18 21	18 16	18 11	18 5	17 59	17 53	17 48	17 43	17 37	17 29	17 18	17 2
3	18 39	18 32	18 25	18 20	18 15	18 11	18 6	18 0	17 54	17 50	17 45	17 39	17 31	17 21	17 6
4	18 38	18 30	18 25	18 20	18 15	18 11	18 6	18 1	17 55	17 51	17 47	17 41	17 34	17 24	17 10
5	18 36	18 29	18 24	18 19	18 15	18 11	18 7	18 2	17 56	17 52	17 48	17 43	17 37	17 28	17 15
6	18 35	18 28	18 23	18 19	18 15	18 11	18 7	18 2	17 57	17 54	17 50	17 45	17 39	17 31	17 19
7	18 33	18 27	18 22	18 18	18 14	18 11	18 7	18 3	17 58	17 55	17 51	17 47	17 42	17 34	17 23
8	18 31	18 26	18 21	18 18	18 14	18 11	18 7	18 4	17 59	17 56	17 53	17 49	17 44	17 37	17 27
9	18 30	18 25	18 21	18 17	18 14	18 11	18 8	18 4	18 0	17 58	17 55	17 51	17 47	17 40	17 31
10	18 28	18 24	18 20	18 17	18 14	18 11	18 8	18 5	18 1	17 59	17 56	17 53	17 49	17 43	17 35
11	18 27	18 22	18 19	18 16	18 13	18 11	18 8	18 5	18 2	18 0	17 58	17 55	17 52	17 47	17 40
12	18 25	18 21	18 18	18 16	18 13	18 11	18 9	18 6	18 3	18 2	18 0	17 57	17 54	17 50	17 44
13	18 24	18 20	18 17	18 15	18 13	18 11	18 9	18 7	18 4	18 3	18 1	17 59	17 56	17 53	17 48
14	18 22	18 19	18 16	18 15	18 13	18 11	18 9	18 7	18 5	18 4	18 3	18 1	17 59	17 56	17 52
15	18 20	18 18	18 16	18 14	18 12	18 11	18 10	18 8	18 6	18 6	18 4	18 3	18 1	17 59	17 56
16	18 19	18 16	18 15	18 14	18 12	18 11	18 10	18 8	18 7	18 7	18 6	18 5	18 4	18 2	18 0
17	18 17	18 15	18 14	18 13	18 12	18 11	18 10	18 9	18 8	18 8	18 8	18 7	18 6	18 5	18 4
18	18 16	18 14	18 13	18 12	18 11	18 11	18 10	18 10	18 10	18 9	18 9	18 9	18 9	18 8	18 8
19	18 14	18 13	18 12	18 12	18 11	18 11	18 11	18 10	18 11	18 11	18 11	18 11	18 11	18 11	18 12
20	18 12	18 12	18 11	18 11	18 11	18 11	18 11	18 11	18 12	18 12	18 12	18 13	18 14	18 15	18 16
21	18 11	18 10	18 10	18 11	18 11	18 11	18 11	18 12	18 13	18 13	18 14	18 15	18 16	18 18	18 20
22	18 9	18 9	18 9	18 10	18 10	18 11	18 12	18 12	18 14	18 15	18 16	18 17	18 18	18 21	18 24
23	18 7	18 8	18 9	18 9	18 10	18 11	18 12	18 13	18 15	18 16	18 17	18 19	18 21	18 24	18 29



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
März	23	6 <sup>h</sup> 5 <sup>m</sup>	6 <sup>h</sup> 5 <sup>m</sup>	6 <sup>h</sup> 5 <sup>m</sup>	6 <sup>h</sup> 4 <sup>m</sup>	6 <sup>h</sup> 4 <sup>m</sup>	6 <sup>h</sup> 3 <sup>m</sup>	6 <sup>h</sup> 2 <sup>m</sup>	6 <sup>h</sup> 1 <sup>m</sup>	6 <sup>h</sup> 0 <sup>m</sup>	5 <sup>h</sup> 59 <sup>m</sup>	5 <sup>h</sup> 57 <sup>m</sup>	5 <sup>h</sup> 56 <sup>m</sup>	5 <sup>h</sup> 54 <sup>m</sup>	5 <sup>h</sup> 51 <sup>m</sup>	5 <sup>h</sup> 47 <sup>m</sup>
	24	6 7	6 6	6 5	6 4	6 3	6 2	6 1	6 0	5 58	5 57	5 55	5 53	5 51	5 48	5 43
	25	6 8	6 6	6 5	6 4	6 3	6 2	6 0	5 59	5 56	5 55	5 53	5 51	5 48	5 44	5 38
	26	6 9	6 7	6 5	6 4	6 3	6 1	5 59	5 57	5 55	5 53	5 51	5 48	5 45	5 40	5 33
	27	6 10	6 8	6 6	6 4	6 2	6 0	5 58	5 56	5 53	5 51	5 49	5 46	5 42	5 37	5 29
	28	6 11	6 8	6 6	6 4	6 2	6 0	5 58	5 55	5 51	5 49	5 47	5 43	5 39	5 33	5 24
	29	6 12	6 9	6 6	6 4	6 2	5 59	5 57	5 54	5 50	5 47	5 44	5 41	5 36	5 29	5 19
	30	6 13	6 9	6 6	6 4	6 1	5 59	5 56	5 53	5 48	5 46	5 42	5 38	5 33	5 25	5 15
	31	6 14	6 10	6 7	6 4	6 1	5 58	5 55	5 51	5 47	5 44	5 40	5 36	5 30	5 22	5 10
	April	1	6 15	6 11	6 7	6 4	6 1	5 58	5 54	5 50	5 45	5 42	5 38	5 33	5 27	5 18
2		6 16	6 11	6 7	6 4	6 1	5 57	5 53	5 49	5 43	5 40	5 36	5 31	5 24	5 14	5 1
3		6 17	6 12	6 8	6 4	6 0	5 56	5 52	5 48	5 42	5 38	5 34	5 28	5 21	5 11	4 56
4		6 18	6 12	6 8	6 4	6 0	5 56	5 52	5 47	5 40	5 36	5 31	5 25	5 18	5 7	4 51
5		6 19	6 13	6 8	6 4	6 0	5 55	5 51	5 45	5 39	5 34	5 29	5 23	5 15	5 3	4 46
6		6 20	6 13	6 8	6 4	5 59	5 55	5 50	5 44	5 37	5 33	5 27	5 20	5 12	5 0	4 42
7		6 21	6 14	6 9	6 4	5 59	5 54	5 49	5 43	5 35	5 31	5 25	5 18	5 9	4 56	4 37
8		6 22	6 15	6 9	6 4	5 59	5 54	5 48	5 42	5 34	5 29	5 23	5 15	5 6	4 52	4 32
9		6 23	6 15	6 9	6 4	5 58	5 53	5 47	5 41	5 32	5 27	5 21	5 13	5 3	4 49	4 27
10		6 24	6 16	6 9	6 4	5 58	5 53	5 46	5 40	5 31	5 25	5 19	5 10	5 0	4 45	4 22
11	6 25	6 16	6 10	6 4	5 58	5 52	5 46	5 38	5 29	5 23	5 16	5 8	4 57	4 41	4 18	
12	6 26	6 17	6 10	6 4	5 58	5 51	5 45	5 37	5 28	5 22	5 14	5 5	4 54	4 37	4 13	
13	6 27	6 18	6 10	6 4	5 57	5 51	5 44	5 36	5 26	5 20	5 12	5 3	4 51	4 34	4 8	
14	6 28	6 18	6 10	6 4	5 57	5 50	5 43	5 35	5 24	5 18	5 10	5 1	4 48	4 30	4 3	
15	6 29	6 19	6 11	6 4	5 57	5 50	5 42	5 34	5 23	5 16	5 8	4 58	4 45	4 26	3 58	
16	6 30	6 20	6 11	6 4	5 57	5 49	5 42	5 33	5 21	5 14	5 6	4 56	4 42	4 23	3 53	
17	6 31	6 20	6 11	6 4	5 56	5 49	5 41	5 31	5 20	5 13	5 4	4 53	4 39	4 19	3 48	
18	6 32	6 21	6 12	6 4	5 56	5 48	5 40	5 30	5 19	5 11	5 2	4 51	4 36	4 15	3 43	
19	6 33	6 21	6 12	6 4	5 56	5 48	5 39	5 29	5 17	5 9	5 0	4 48	4 33	4 12	3 38	
20	6 34	6 22	6 12	6 4	5 56	5 47	5 39	5 28	5 16	5 8	4 58	4 46	4 30	4 8	3 33	
21	6 35	6 23	6 13	6 4	5 55	5 47	5 38	5 27	5 14	5 6	4 56	4 44	4 27	4 4	3 28	
22	6 36	6 23	6 13	6 4	5 55	5 47	5 37	5 26	5 13	5 4	4 54	4 41	4 24	4 1	3 22	
23	6 37	6 24	6 13	6 4	5 55	5 46	5 36	5 25	5 11	5 3	4 52	4 39	4 22	3 57	3 17	
24	6 38	6 24	6 14	6 4	5 55	5 46	5 36	5 24	5 10	5 1	4 50	4 37	4 19	3 53	3 12	
25	6 39	6 25	6 14	6 4	5 55	5 45	5 35	5 23	5 9	4 59	4 48	4 34	4 16	3 50	3 7	
26	6 40	6 26	6 14	6 4	5 55	5 45	5 34	5 23	5 7	4 58	4 46	4 32	4 13	3 46	3 2	
27	6 41	6 26	6 14	6 4	5 54	5 44	5 34	5 22	5 6	4 56	4 45	4 30	4 10	3 42	2 56	
28	6 41	6 27	6 15	6 4	5 54	5 44	5 33	5 21	5 5	4 55	4 43	4 28	4 7	3 39	2 51	
29	6 42	6 27	6 15	6 4	5 54	5 44	5 32	5 20	5 3	4 53	4 41	4 25	4 5	3 35	2 45	
30	6 43	6 28	6 15	6 4	5 54	5 43	5 32	5 19	5 2	4 52	4 39	4 23	4 2	3 31	2 39	
Mai	1	6 44	6 29	6 16	6 4	5 54	5 43	5 31	5 18	5 1	4 50	4 37	4 21	3 59	3 28	2 33
	2	6 45	6 29	6 16	6 4	5 54	5 43	5 31	5 17	4 59	4 49	4 35	4 19	3 56	3 24	2 28
	3	6 46	6 30	6 16	6 5	5 53	5 42	5 30	5 16	4 58	4 47	4 34	4 17	3 54	3 20	2 22



# Sonnenuntergang 1945

333\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
März	23	18 7	18 8	18 9	18 9	18 10	18 11	18 12	18 13	18 15	18 16	18 17	18 19	18 21	18 24	18 29
	24	18 6	18 7	18 8	18 9	18 10	18 11	18 12	18 13	18 16	18 17	18 19	18 21	18 23	18 27	18 33
	25	18 4	18 6	18 7	18 8	18 9	18 11	18 12	18 14	18 17	18 18	18 20	18 23	18 26	18 30	18 37
	26	18 3	18 4	18 6	18 8	18 9	18 11	18 13	18 15	18 18	18 20	18 22	18 25	18 28	18 33	18 41
	27	18 1	18 3	18 5	18 7	18 9	18 11	18 13	18 15	18 19	18 21	18 23	18 27	18 31	18 36	18 45
	28	17 59	18 2	18 4	18 7	18 8	18 11	18 13	18 16	18 20	18 22	18 25	18 28	18 33	18 39	18 49
	29	17 58	18 1	18 3	18 6	18 8	18 11	18 13	18 17	18 21	18 23	18 26	18 30	18 35	18 43	18 53
	30	17 56	18 0	18 3	18 5	18 8	18 11	18 14	18 17	18 22	18 25	18 28	18 32	18 38	18 46	18 57
	31	17 54	17 58	18 2	18 5	18 8	18 11	18 14	18 18	18 23	18 26	18 30	18 34	18 40	18 49	19 1
	April	1	17 53	17 57	18 1	18 4	18 7	18 11	18 14	18 18	18 24	18 27	18 31	18 36	18 43	18 52
2		17 51	17 56	18 0	18 4	18 7	18 11	18 14	18 19	18 25	18 28	18 33	18 38	18 45	18 55	19 9
3		17 50	17 55	17 59	18 3	18 7	18 11	18 15	18 19	18 26	18 30	18 34	18 40	18 48	18 58	19 14
4		17 48	17 54	17 58	18 3	18 6	18 10	18 15	18 20	18 27	18 31	18 36	18 42	18 50	19 1	19 18
5		17 46	17 52	17 57	18 2	18 6	18 10	18 15	18 21	18 28	18 32	18 37	18 44	18 53	19 4	19 22
6		17 45	17 51	17 57	18 1	18 6	18 10	18 16	18 21	18 29	18 34	18 39	18 46	18 55	19 8	19 26
7		17 43	17 50	17 56	18 1	18 6	18 10	18 16	18 22	18 30	18 35	18 41	18 48	18 58	19 11	19 30
8		17 42	17 49	17 55	18 0	18 5	18 10	18 16	18 22	18 31	18 36	18 42	18 50	19 0	19 14	19 35
9		17 40	17 48	17 54	18 0	18 5	18 10	18 16	18 23	18 32	18 37	18 44	18 52	19 2	19 17	19 39
10		17 39	17 47	17 53	17 59	18 5	18 10	18 17	18 24	18 33	18 39	18 45	18 54	19 5	19 20	19 43
11		17 37	17 46	17 52	17 59	18 4	18 10	18 17	18 24	18 34	18 40	18 47	18 56	19 7	19 23	19 48
12		17 36	17 44	17 52	17 58	18 4	18 10	18 17	18 25	18 35	18 41	18 48	18 58	19 10	19 27	19 52
13		17 34	17 43	17 51	17 58	18 4	18 11	18 18	18 26	18 36	18 42	18 50	19 0	19 12	19 30	19 56
14		17 33	17 42	17 50	17 57	18 4	18 11	18 18	18 26	18 37	18 44	18 52	19 2	19 15	19 33	20 1
15		17 31	17 41	17 49	17 57	18 3	18 11	18 18	18 27	18 38	18 45	18 53	19 4	19 17	19 36	20 5
16		17 30	17 40	17 48	17 56	18 3	18 11	18 18	18 28	18 39	18 46	18 55	19 5	19 20	19 39	20 10
17		17 28	17 39	17 48	17 56	18 3	18 11	18 19	18 28	18 40	18 47	18 56	19 7	19 22	19 43	20 15
18		17 27	17 38	17 47	17 55	18 3	18 11	18 19	18 29	18 41	18 49	18 58	19 9	19 25	19 46	20 19
19	17 25	17 37	17 46	17 55	18 2	18 11	18 19	18 29	18 42	18 50	18 59	19 11	19 27	19 49	20 24	
20	17 24	17 36	17 45	17 54	18 2	18 11	18 20	18 30	18 43	18 51	19 1	19 13	19 30	19 52	20 29	
21	17 23	17 35	17 45	17 54	18 2	18 11	18 20	18 31	18 44	18 52	19 3	19 15	19 32	19 56	20 33	
22	17 21	17 34	17 44	17 53	18 2	18 11	18 20	18 31	18 45	18 54	19 4	19 17	19 35	19 59	20 38	
23	17 20	17 33	17 43	17 53	18 2	18 11	18 21	18 32	18 46	18 55	19 6	19 19	19 37	20 2	20 43	
24	17 18	17 32	17 43	17 52	18 2	18 11	18 21	18 32	18 47	18 56	19 7	19 21	19 39	20 6	20 48	
25	17 17	17 31	17 42	17 52	18 1	18 11	18 21	18 33	18 48	18 57	19 9	19 23	19 42	20 9	20 53	
26	17 16	17 30	17 41	17 52	18 1	18 11	18 22	18 34	18 49	18 59	19 10	19 25	19 44	20 12	20 58	
27	17 14	17 29	17 41	17 51	18 1	18 11	18 22	18 34	18 50	19 0	19 12	19 27	19 47	20 16	21 3	
28	17 13	17 28	17 40	17 51	18 1	18 11	18 22	18 35	18 51	19 1	19 13	19 29	19 49	20 19	21 9	
29	17 12	17 27	17 39	17 51	18 1	18 11	18 23	18 35	18 52	19 2	19 15	19 31	19 52	20 22	21 14	
30	17 11	17 26	17 39	17 50	18 1	18 11	18 23	18 36	18 53	19 4	19 17	19 33	19 54	20 26	21 20	
Mai	1	17 9	17 25	17 38	17 50	18 1	18 11	18 23	18 37	18 54	19 5	19 18	19 35	19 57	20 29	21 25
	2	17 8	17 24	17 38	17 49	18 0	18 12	18 24	18 37	18 55	19 6	19 20	19 36	19 59	20 33	21 31
	3	17 7	17 24	17 37	17 49	18 0	18 12	18 24	18 38	18 56	19 7	19 21	19 38	20 2	20 36	21 37



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Mai 3	6 <sup>h</sup> 46 <sup>m</sup>	6 <sup>h</sup> 30 <sup>m</sup>	6 <sup>h</sup> 16 <sup>m</sup>	6 <sup>h</sup> 5 <sup>m</sup>	5 <sup>h</sup> 53 <sup>m</sup>	5 <sup>h</sup> 42 <sup>m</sup>	5 <sup>h</sup> 30 <sup>m</sup>	5 <sup>h</sup> 16 <sup>m</sup>	4 <sup>h</sup> 58 <sup>m</sup>	4 <sup>h</sup> 47 <sup>m</sup>	4 <sup>h</sup> 34 <sup>m</sup>	4 <sup>h</sup> 17 <sup>m</sup>	3 <sup>h</sup> 54 <sup>m</sup>	3 <sup>h</sup> 20 <sup>m</sup>	2 <sup>h</sup> 22 <sup>m</sup>
4	6 47	6 31	6 17	6 5	5 53	5 42	5 29	5 15	4 57	4 46	4 32	4 15	3 51	3 17	2 15
5	6 48	6 31	6 17	6 5	5 53	5 41	5 29	5 14	4 56	4 44	4 30	4 12	3 48	3 13	2 9
6	6 49	6 32	6 18	6 5	5 53	5 41	5 28	5 13	4 55	4 43	4 29	4 10	3 46	3 9	2 3
7	6 50	6 32	6 18	6 5	5 53	5 41	5 28	5 13	4 53	4 42	4 27	4 8	3 43	3 6	1 56
8	6 51	6 33	6 18	6 5	5 53	5 41	5 27	5 12	4 52	4 40	4 25	4 6	3 41	3 2	1 49
9	6 52	6 34	6 19	6 5	5 53	5 40	5 27	5 11	4 51	4 39	4 24	4 4	3 38	2 58	1 42
10	6 53	6 34	6 19	6 6	5 53	5 40	5 26	5 10	4 50	4 38	4 22	4 2	3 35	2 55	1 35
11	6 54	6 35	6 19	6 6	5 53	5 40	5 26	5 10	4 49	4 36	4 21	4 0	3 33	2 51	1 27
12	6 55	6 36	6 20	6 6	5 53	5 40	5 25	5 9	4 48	4 35	4 19	3 59	3 30	2 48	1 18
13	6 56	6 36	6 20	6 6	5 53	5 39	5 25	5 8	4 47	4 34	4 18	3 57	3 28	2 44	1 9
14	6 57	6 37	6 21	6 6	5 53	5 39	5 24	5 8	4 46	4 33	4 16	3 55	3 26	2 40	0 59
15	6 58	6 37	6 21	6 6	5 53	5 39	5 24	5 7	4 45	4 31	4 15	3 53	3 23	2 37	0 46
16	6 59	6 38	6 21	6 7	5 53	5 39	5 24	5 6	4 44	4 30	4 13	3 51	3 21	2 33	0 30
17	7 0	6 39	6 22	6 7	5 53	5 39	5 23	5 6	4 43	4 29	4 12	3 50	3 19	2 30	
18	7 1	6 39	6 22	6 7	5 53	5 38	5 23	5 5	4 42	4 28	4 11	3 48	3 16	2 26	
19	7 1	6 40	6 23	6 7	5 53	5 38	5 23	5 5	4 42	4 27	4 9	3 46	3 14	2 23	
20	7 2	6 41	6 23	6 8	5 53	5 38	5 22	5 4	4 41	4 26	4 8	3 45	3 12	2 19	
21	7 3	6 41	6 23	6 8	5 53	5 38	5 22	5 3	4 40	4 25	4 7	3 43	3 10	2 16	
22	7 4	6 42	6 24	6 8	5 53	5 38	5 22	5 3	4 39	4 24	4 6	3 42	3 8	2 13	
23	7 5	6 42	6 24	6 8	5 53	5 38	5 22	5 3	4 39	4 23	4 5	3 40	3 6	2 9	
24	7 6	6 43	6 25	6 9	5 53	5 38	5 21	5 2	4 38	4 22	4 3	3 39	3 4	2 6	
25	7 7	6 44	6 25	6 9	5 53	5 38	5 21	5 2	4 37	4 22	4 2	3 37	3 2	2 2	
26	7 7	6 44	6 25	6 9	5 53	5 38	5 21	5 1	4 37	4 21	4 1	3 36	3 0	1 59	
27	7 8	6 45	6 26	6 9	5 53	5 38	5 21	5 1	4 36	4 20	4 0	3 35	2 58	1 56	
28	7 9	6 45	6 26	6 9	5 54	5 38	5 20	5 0	4 35	4 19	3 59	3 33	2 56	1 52	
29	7 10	6 46	6 26	6 10	5 54	5 38	5 20	5 0	4 35	4 19	3 59	3 32	2 55	1 49	
30	7 11	6 46	6 27	6 10	5 54	5 38	5 20	5 0	4 34	4 18	3 58	3 31	2 53	1 46	
31	7 11	6 47	6 27	6 10	5 54	5 38	5 20	5 0	4 34	4 17	3 57	3 30	2 51	1 43	
Juni 1	7 12	6 47	6 28	6 10	5 54	5 38	5 20	4 59	4 33	4 17	3 56	3 29	2 50	1 39	
2	7 13	6 48	6 28	6 11	5 54	5 38	5 20	4 59	4 33	4 16	3 55	3 28	2 48	1 36	
3	7 13	6 48	6 28	6 11	5 54	5 38	5 20	4 59	4 33	4 16	3 55	3 27	2 47	1 33	
4	7 14	6 49	6 29	6 11	5 54	5 38	5 20	4 59	4 32	4 15	3 54	3 26	2 46	1 30	
5	7 15	6 49	6 29	6 11	5 55	5 38	5 20	4 58	4 32	4 15	3 53	3 25	2 44	1 28	
6	7 15	6 50	6 29	6 12	5 55	5 38	5 20	4 58	4 32	4 14	3 53	3 24	2 43	1 25	
7	7 16	6 50	6 30	6 12	5 55	5 38	5 20	4 58	4 31	4 14	3 52	3 24	2 42	1 22	
8	7 16	6 51	6 30	6 12	5 55	5 38	5 20	4 58	4 31	4 14	3 52	3 23	2 41	1 19	
9	7 17	6 51	6 31	6 12	5 55	5 38	5 20	4 58	4 31	4 13	3 52	3 23	2 40	1 17	
10	7 18	6 52	6 31	6 13	5 56	5 38	5 20	4 58	4 31	4 13	3 51	3 22	2 39	1 14	
11	7 18	6 52	6 31	6 13	5 56	5 38	5 20	4 58	4 31	4 13	3 51	3 22	2 38	1 12	
12	7 19	6 52	6 32	6 13	5 56	5 39	5 20	4 58	4 31	4 13	3 51	3 21	2 38	1 10	
13	7 19	6 53	6 32	6 14	5 56	5 39	5 20	4 58	4 30	4 13	3 50	3 21	2 37	1 8	



Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Mai	3	17 7	17 24	17 37	17 49	18 0	18 12	18 24	18 38	18 56	19 7	19 21	19 38	20 2	20 36	21 37
	4	17 6	17 23	17 37	17 49	18 0	18 12	18 24	18 39	18 57	19 9	19 23	19 40	20 4	20 40	21 43
	5	17 5	17 22	17 36	17 48	18 0	18 12	18 25	18 39	18 58	19 10	19 24	19 42	20 7	20 43	21 49
	6	17 4	17 21	17 35	17 48	18 0	18 12	18 25	18 40	18 59	19 11	19 26	19 44	20 9	20 47	21 56
	7	17 2	17 20	17 35	17 48	18 0	18 12	18 26	18 41	19 0	19 12	19 27	19 46	20 12	20 50	22 3
	8	17 1	17 20	17 34	17 47	18 0	18 12	18 26	18 42	19 1	19 13	19 29	19 48	20 14	20 54	22 10
	9	17 0	17 19	17 34	17 47	18 0	18 13	18 26	18 42	19 2	19 15	19 30	19 50	20 16	20 57	22 17
	10	16 59	17 18	17 33	17 47	18 0	18 13	18 27	18 43	19 3	19 16	19 32	19 52	20 19	21 1	22 25
	11	16 58	17 17	17 33	17 47	18 0	18 13	18 27	18 44	19 4	19 17	19 33	19 53	20 21	21 4	22 34
	12	16 57	17 17	17 33	17 46	18 0	18 13	18 28	18 44	19 5	19 18	19 34	19 55	20 24	21 8	22 43
	13	16 56	17 16	17 32	17 46	18 0	18 13	18 28	18 45	19 6	19 19	19 36	19 57	20 26	21 11	22 53
	14	16 55	17 15	17 32	17 46	18 0	18 14	18 28	18 46	19 7	19 21	19 37	19 59	20 28	21 15	23 6
	15	16 54	17 15	17 31	17 46	18 0	18 14	18 29	18 46	19 8	19 22	19 39	20 1	20 31	21 18	23 22
	16	16 53	17 14	17 31	17 46	18 0	18 14	18 29	18 47	19 9	19 23	19 40	20 2	20 33	21 22	
	17	16 53	17 14	17 31	17 46	18 0	18 14	18 29	18 47	19 10	19 24	19 42	20 4	20 36	21 26	
	18	16 52	17 13	17 30	17 45	18 0	18 14	18 30	18 48	19 11	19 25	19 43	20 6	20 38	21 29	
	19	16 51	17 13	17 30	17 45	18 0	18 15	18 30	18 49	19 12	19 26	19 44	20 8	20 40	21 33	
	20	16 50	17 12	17 30	17 45	18 0	18 15	18 31	18 49	19 13	19 27	19 46	20 9	20 42	21 36	
	21	16 49	17 12	17 30	17 45	18 0	18 15	18 31	18 50	19 14	19 29	19 47	20 11	20 45	21 40	
	22	16 49	17 11	17 29	17 45	18 0	18 15	18 32	18 51	19 14	19 30	19 48	20 13	20 47	21 44	
23	16 48	17 11	17 29	17 45	18 0	18 16	18 32	18 51	19 15	19 31	19 49	20 14	20 49	21 47		
24	16 47	17 10	17 29	17 45	18 0	18 16	18 32	18 52	19 16	19 32	19 51	20 16	20 51	21 51		
25	16 47	17 10	17 29	17 45	18 0	18 16	18 33	18 52	19 17	19 33	19 52	20 17	20 53	21 54		
26	16 46	17 10	17 28	17 45	18 1	18 16	18 33	18 53	19 18	19 34	19 53	20 19	20 55	21 58		
27	16 46	17 9	17 28	17 45	18 1	18 16	18 34	18 54	19 19	19 35	19 54	20 20	20 57	22 1		
28	16 45	17 9	17 28	17 45	18 1	18 17	18 34	18 54	19 19	19 36	19 56	20 22	20 59	22 5		
29	16 44	17 9	17 28	17 45	18 1	18 17	18 34	18 55	19 20	19 36	19 57	20 23	21 1	22 8		
30	16 44	17 8	17 28	17 45	18 1	18 17	18 35	18 55	19 21	19 37	19 58	20 25	21 3	22 12		
31	16 43	17 8	17 28	17 45	18 1	18 18	18 35	18 56	19 22	19 38	19 59	20 26	21 5	22 15		
Juni	1	16 43	17 8	17 28	17 45	18 1	18 18	18 36	18 56	19 22	19 39	20 0	20 27	21 7	22 18	
	2	16 43	17 8	17 28	17 45	18 1	18 18	18 36	18 57	19 23	19 40	20 1	20 29	21 8	22 22	
	3	16 42	17 7	17 28	17 45	18 2	18 18	18 36	18 58	19 24	19 41	20 2	20 30	21 10	22 25	
	4	16 42	17 7	17 27	17 45	18 2	18 19	18 37	18 58	19 24	19 41	20 3	20 31	21 12	22 28	
	5	16 42	17 7	17 27	17 45	18 2	18 19	18 37	18 59	19 25	19 42	20 4	20 32	21 13	22 32	
	6	16 41	17 7	17 27	17 45	18 2	18 19	18 37	18 59	19 26	19 43	20 5	20 33	21 15	22 35	
	7	16 41	17 7	17 27	17 45	18 2	18 19	18 38	18 59	19 26	19 44	20 5	20 34	21 16	22 38	
	8	16 41	17 7	17 27	17 45	18 3	18 20	18 38	19 0	19 27	19 44	20 6	20 35	21 18	22 41	
	9	16 41	17 7	17 27	17 46	18 3	18 20	18 39	19 0	19 27	19 45	20 7	20 36	21 19	22 43	
	10	16 41	17 7	17 28	17 46	18 3	18 20	18 39	19 1	19 28	19 46	20 8	20 37	21 20	22 46	
	11	16 41	17 7	17 28	17 46	18 3	18 20	18 39	19 1	19 28	19 46	20 8	20 38	21 21	22 49	
	12	16 41	17 7	17 28	17 46	18 3	18 21	18 39	19 1	19 29	19 47	20 9	20 39	21 22	22 51	
	13	16 41	17 7	17 28	17 46	18 4	18 21	18 40	19 2	19 29	19 47	20 10	20 39	21 23	22 53	



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Juni 13	7 19	6 53	6 32	6 14	5 56	5 39	5 20	4 58	4 30	4 13	3 50	3 21	2 37	1 8	
14	7 19	6 53	6 32	6 14	5 56	5 39	5 20	4 58	4 30	4 13	3 50	3 21	2 37	1 6	
15	7 20	6 53	6 32	6 14	5 57	5 39	5 20	4 58	4 30	4 12	3 50	3 20	2 36	1 5	
16	7 20	6 54	6 33	6 14	5 57	5 39	5 20	4 58	4 30	4 12	3 50	3 20	2 36	1 3	
17	7 21	6 54	6 33	6 15	5 57	5 39	5 20	4 58	4 30	4 12	3 50	3 20	2 36	1 2	
18	7 21	6 54	6 33	6 15	5 57	5 40	5 21	4 58	4 31	4 13	3 50	3 20	2 35	1 1	
19	7 21	6 55	6 34	6 15	5 57	5 40	5 21	4 58	4 31	4 13	3 50	3 20	2 35	1 1	
20	7 22	6 55	6 34	6 15	5 58	5 40	5 21	4 59	4 31	4 13	3 50	3 20	2 35	1 0	
21	7 22	6 55	6 34	6 15	5 58	5 40	5 21	4 59	4 31	4 13	3 50	3 20	2 35	1 0	
22	7 22	6 55	6 34	6 16	5 58	5 41	5 21	4 59	4 31	4 13	3 51	3 21	2 36	1 0	
23	7 22	6 56	6 34	6 16	5 58	5 41	5 22	4 59	4 32	4 13	3 51	3 21	2 36	1 1	
24	7 22	6 56	6 35	6 16	5 59	5 41	5 22	5 0	4 32	4 14	3 51	3 21	2 36	1 1	
25	7 23	6 56	6 35	6 16	5 59	5 41	5 22	5 0	4 32	4 14	3 52	3 22	2 37	1 2	
26	7 23	6 56	6 35	6 16	5 59	5 41	5 22	5 0	4 32	4 14	3 52	3 22	2 37	1 4	
27	7 23	6 56	6 35	6 17	5 59	5 42	5 23	5 1	4 33	4 15	3 52	3 22	2 38	1 5	
28	7 23	6 56	6 35	6 17	5 59	5 42	5 23	5 1	4 33	4 15	3 53	3 23	2 39	1 7	
29	7 23	6 56	6 35	6 17	6 0	5 42	5 23	5 1	4 34	4 16	3 53	3 24	2 40	1 9	
30	7 23	6 56	6 35	6 17	6 0	5 42	5 24	5 2	4 34	4 16	3 54	3 24	2 40	1 11	
Juli 1	7 23	6 56	6 36	6 17	6 0	5 43	5 24	5 2	4 35	4 17	3 55	3 25	2 41	1 13	
2	7 22	6 56	6 36	6 17	6 0	5 43	5 24	5 3	4 35	4 17	3 55	3 26	2 42	1 15	
3	7 22	6 56	6 36	6 18	6 0	5 43	5 25	5 3	4 36	4 18	3 56	3 27	2 44	1 18	
4	7 22	6 56	6 36	6 18	6 1	5 43	5 25	5 3	4 36	4 18	3 57	3 28	2 45	1 21	
5	7 22	6 56	6 36	6 18	6 1	5 44	5 25	5 4	4 37	4 19	3 57	3 28	2 46	1 24	
6	7 22	6 56	6 36	6 18	6 1	5 44	5 26	5 4	4 37	4 20	3 58	3 29	2 48	1 27	
7	7 22	6 56	6 36	6 18	6 1	5 44	5 26	5 5	4 38	4 20	3 59	3 30	2 49	1 30	
8	7 21	6 56	6 36	6 18	6 1	5 44	5 26	5 5	4 38	4 21	4 0	3 32	2 50	1 33	
9	7 21	6 56	6 36	6 18	6 1	5 45	5 27	5 6	4 39	4 22	4 1	3 33	2 52	1 36	
10	7 21	6 56	6 36	6 18	6 2	5 45	5 27	5 6	4 40	4 23	4 2	3 34	2 54	1 39	
11	7 20	6 55	6 36	6 18	6 2	5 45	5 27	5 7	4 40	4 24	4 3	3 35	2 55	1 42	
12	7 20	6 55	6 35	6 18	6 2	5 45	5 28	5 7	4 41	4 24	4 4	3 36	2 57	1 46	
13	7 19	6 55	6 35	6 18	6 2	5 46	5 28	5 8	4 42	4 25	4 5	3 38	2 59	1 49	
14	7 19	6 55	6 35	6 18	6 2	5 46	5 28	5 8	4 42	4 26	4 6	3 39	3 1	1 53	
15	7 18	6 54	6 35	6 18	6 2	5 46	5 29	5 9	4 43	4 27	4 7	3 40	3 3	1 56	
16	7 18	6 54	6 35	6 18	6 2	5 46	5 29	5 9	4 44	4 28	4 8	3 42	3 4	1 59	
17	7 17	6 54	6 35	6 18	6 2	5 47	5 30	5 10	4 45	4 29	4 9	3 43	3 6	2 3	
18	7 17	6 53	6 35	6 18	6 2	5 47	5 30	5 10	4 45	4 30	4 10	3 45	3 8	2 6	
19	7 16	6 53	6 34	6 18	6 3	5 47	5 30	5 11	4 46	4 31	4 11	3 46	3 10	2 10	
20	7 15	6 53	6 34	6 18	6 3	5 47	5 31	5 11	4 47	4 32	4 13	3 48	3 13	2 13	
21	7 15	6 52	6 34	6 18	6 3	5 47	5 31	5 12	4 48	4 33	4 14	3 49	3 15	2 17	
22	7 14	6 52	6 34	6 18	6 3	5 48	5 31	5 13	4 49	4 34	4 15	3 51	3 17	2 21	
23	7 13	6 51	6 33	6 18	6 3	5 48	5 32	5 13	4 50	4 35	4 16	3 52	3 19	2 24	
24	7 13	6 51	6 33	6 17	6 3	5 48	5 32	5 14	4 51	4 36	4 18	3 54	3 21	2 28	



# Sonnenuntergang 1945

337\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	c°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Juni 13	16 41	17 7	17 28	17 46	18 4	18 21	18 40	19 2	19 29	19 47	20 10	20 39	21 23	22 53		
14	16 41	17 7	17 28	17 46	18 4	18 21	18 40	19 2	19 30	19 48	20 10	20 40	21 24	22 55		
15	16 41	17 7	17 28	17 47	18 4	18 21	18 40	19 2	19 30	19 48	20 11	20 40	21 25	22 57		
16	16 41	17 7	17 28	17 47	18 4	18 22	18 41	19 3	19 31	19 49	20 11	20 41	21 26	22 59		
17	16 41	17 7	17 28	17 47	18 4	18 22	18 41	19 3	19 31	19 49	20 12	20 42	21 26	23 0		
18	16 41	17 7	17 29	17 47	18 5	18 22	18 41	19 3	19 31	19 49	20 12	20 42	21 27	23 1		
19	16 41	17 8	17 29	17 47	18 5	18 22	18 41	19 4	19 32	19 50	20 12	20 42	21 27	23 2		
20	16 41	17 8	17 29	17 47	18 5	18 23	18 42	19 4	19 32	19 50	20 13	20 43	21 28	23 3		
21	16 41	17 8	17 29	17 48	18 5	18 23	18 42	19 4	19 32	19 50	20 13	20 43	21 28	23 3		
22	16 42	17 8	17 29	17 48	18 6	18 23	18 42	19 4	19 32	19 50	20 13	20 43	21 28	23 3		
23	16 42	17 8	17 30	17 48	18 6	18 23	18 42	19 5	19 32	19 51	20 13	20 43	21 28	23 3		
24	16 42	17 9	17 30	17 48	18 6	18 24	18 43	19 5	19 33	19 51	20 13	20 43	21 28	23 2		
25	16 42	17 9	17 30	17 49	18 6	18 24	18 43	19 5	19 33	19 51	20 13	20 43	21 28	23 2		
26	16 43	17 9	17 30	17 49	18 6	18 24	18 43	19 5	19 33	19 51	20 13	20 43	21 28	23 1		
27	16 43	17 10	17 31	17 49	18 7	18 24	18 43	19 5	19 33	19 51	20 13	20 43	21 27	22 59		
28	16 43	17 10	17 31	17 49	18 7	18 24	18 43	19 5	19 33	19 51	20 13	20 43	21 27	22 58		
29	16 44	17 10	17 31	17 50	18 7	18 24	18 43	19 5	19 33	19 51	20 13	20 43	21 26	22 56		
30	16 44	17 11	17 32	17 50	18 7	18 24	18 43	19 5	19 33	19 51	20 13	20 42	21 26	22 54		
Juli 1	16 45	17 11	17 32	17 50	18 7	18 25	18 43	19 5	19 33	19 50	20 13	20 42	21 25	22 52		
2	16 45	17 11	17 32	17 50	18 8	18 25	18 43	19 5	19 33	19 50	20 12	20 41	21 24	22 50		
3	16 46	17 12	17 33	17 51	18 8	18 25	18 44	19 5	19 32	19 50	20 12	20 41	21 24	22 48		
4	16 46	17 12	17 33	17 51	18 8	18 25	18 44	19 5	19 32	19 50	20 12	20 40	21 23	22 45		
5	16 47	17 13	17 33	17 51	18 8	18 25	18 44	19 5	19 32	19 49	20 11	20 40	21 22	22 43		
6	16 48	17 13	17 34	17 51	18 8	18 25	18 44	19 5	19 32	19 49	20 11	20 39	21 21	22 40		
7	16 48	17 13	17 34	17 52	18 8	18 25	18 44	19 5	19 31	19 49	20 10	20 38	21 20	22 37		
8	16 49	17 14	17 34	17 52	18 9	18 25	18 44	19 4	19 31	19 48	20 9	20 38	21 18	22 35		
9	16 49	17 14	17 35	17 52	18 9	18 25	18 43	19 4	19 31	19 48	20 9	20 37	21 17	22 32		
10	16 50	17 15	17 35	17 52	18 9	18 25	18 43	19 4	19 30	19 47	20 8	20 36	21 16	22 29		
11	16 51	17 15	17 35	17 53	18 9	18 25	18 43	19 4	19 30	19 47	20 7	20 35	21 14	22 26		
12	16 51	17 16	17 36	17 53	18 9	18 25	18 43	19 4	19 30	19 46	20 7	20 34	21 13	22 22		
13	16 52	17 16	17 36	17 53	18 9	18 25	18 43	19 3	19 29	19 46	20 6	20 33	21 11	22 19		
14	16 53	17 17	17 36	17 53	18 9	18 25	18 43	19 3	19 29	19 45	20 5	20 32	21 10	22 16		
15	16 53	17 17	17 37	17 53	18 9	18 25	18 43	19 3	19 28	19 44	20 4	20 30	21 8	22 13		
16	16 54	17 18	17 37	17 54	18 10	18 25	18 43	19 2	19 27	19 43	20 3	20 29	21 6	22 10		
17	16 55	17 18	17 37	17 54	18 10	18 25	18 42	19 2	19 27	19 43	20 2	20 28	21 4	22 6		
18	16 56	17 19	17 38	17 54	18 10	18 25	18 42	19 2	19 26	19 42	20 1	20 27	21 2	22 3		
19	16 57	17 20	17 38	17 54	18 10	18 25	18 42	19 1	19 25	19 41	20 0	20 25	21 0	22 0		
20	16 57	17 20	17 39	17 55	18 10	18 25	18 42	19 1	19 25	19 40	19 59	20 24	20 58	21 56		
21	16 58	17 21	17 39	17 55	18 10	18 25	18 41	19 0	19 24	19 39	19 58	20 22	20 56	21 53		
22	16 59	17 21	17 39	17 55	18 10	18 25	18 41	19 0	19 23	19 38	19 57	20 21	20 54	21 49		
23	17 0	17 22	17 40	17 55	18 10	18 25	18 41	18 59	19 23	19 37	19 56	20 19	20 52	21 46		
24	17 1	17 23	17 40	17 55	18 10	18 25	18 40	18 59	19 22	19 36	19 54	20 18	20 50	21 42		



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Juli 24	7 <sup>h</sup> 13 <sup>m</sup>	6 <sup>h</sup> 51 <sup>m</sup>	6 <sup>h</sup> 33 <sup>m</sup>	6 <sup>h</sup> 17 <sup>m</sup>	6 <sup>h</sup> 3 <sup>m</sup>	5 <sup>h</sup> 48 <sup>m</sup>	5 <sup>h</sup> 32 <sup>m</sup>	5 <sup>h</sup> 14 <sup>m</sup>	4 <sup>h</sup> 51 <sup>m</sup>	4 <sup>h</sup> 36 <sup>m</sup>	4 <sup>h</sup> 18 <sup>m</sup>	3 <sup>h</sup> 54 <sup>m</sup>	3 <sup>h</sup> 21 <sup>m</sup>	2 <sup>h</sup> 28 <sup>m</sup>	
25	7 12	6 50	6 33	6 17	6 3	5 48	5 33	5 14	4 51	4 37	4 19	3 56	3 23	2 31	
26	7 11	6 49	6 32	6 17	6 3	5 48	5 33	5 15	4 52	4 38	4 20	3 57	3 25	2 35	
27	7 10	6 49	6 32	6 17	6 3	5 49	5 33	5 16	4 53	4 39	4 22	3 59	3 28	2 38	
28	7 9	6 48	6 32	6 17	6 3	5 49	5 34	5 16	4 54	4 40	4 23	4 1	3 30	2 42	0 22 <sup>m</sup>
29	7 8	6 48	6 31	6 17	6 3	5 49	5 34	5 17	4 55	4 41	4 24	4 2	3 32	2 45	0 46 <sup>m</sup>
30	7 7	6 47	6 31	6 16	6 3	5 49	5 34	5 17	4 56	4 42	4 26	4 4	3 35	2 49	1 1
31	7 6	6 46	6 30	6 16	6 3	5 49	5 35	5 18	4 57	4 43	4 27	4 6	3 37	2 52	1 12
Aug. 1	7 5	6 46	6 30	6 16	6 3	5 49	5 35	5 19	4 58	4 45	4 29	4 8	3 39	2 56	1 22
2	7 4	6 45	6 29	6 16	6 3	5 50	5 35	5 19	4 59	4 46	4 30	4 10	3 42	2 59	1 31
3	7 3	6 44	6 29	6 15	6 3	5 50	5 36	5 20	5 0	4 47	4 31	4 11	3 44	3 3	1 39
4	7 2	6 44	6 28	6 15	6 3	5 50	5 36	5 20	5 1	4 48	4 33	4 13	3 46	3 6	1 47
5	7 1	6 43	6 28	6 15	6 2	5 50	5 37	5 21	5 1	4 49	4 34	4 15	3 49	3 10	1 54
6	7 0	6 42	6 27	6 14	6 2	5 50	5 37	5 22	5 2	4 50	4 36	4 17	3 51	3 13	2 1
7	6 59	6 41	6 27	6 14	6 2	5 50	5 37	5 22	5 3	4 51	4 37	4 19	3 54	3 16	2 8
8	6 58	6 40	6 26	6 14	6 2	5 50	5 38	5 23	5 4	4 53	4 38	4 20	3 56	3 20	2 14
9	6 56	6 39	6 26	6 13	6 2	5 50	5 38	5 24	5 5	4 54	4 40	4 22	3 58	3 23	2 20
10	6 55	6 39	6 25	6 13	6 2	5 51	5 38	5 24	5 6	4 55	4 41	4 24	4 1	3 27	2 26
11	6 54	6 38	6 24	6 13	6 2	5 51	5 39	5 25	5 7	4 56	4 43	4 26	4 3	3 30	2 32
12	6 53	6 37	6 24	6 12	6 2	5 51	5 39	5 25	5 8	4 57	4 44	4 28	4 6	3 33	2 38
13	6 51	6 36	6 23	6 12	6 2	5 51	5 39	5 26	5 9	4 59	4 46	4 30	4 8	3 37	2 43
14	6 50	6 35	6 23	6 12	6 1	5 51	5 39	5 27	5 10	5 0	4 47	4 32	4 11	3 40	2 49
15	6 49	6 34	6 22	6 11	6 1	5 51	5 40	5 27	5 11	5 1	4 49	4 33	4 13	3 43	2 54
16	6 48	6 33	6 21	6 11	6 1	5 51	5 40	5 28	5 12	5 2	4 50	4 35	4 15	3 47	2 59
17	6 46	6 32	6 21	6 10	6 1	5 51	5 40	5 28	5 13	5 3	4 52	4 37	4 18	3 50	3 4
18	6 45	6 31	6 19	6 10	6 1	5 51	5 41	5 29	5 14	5 5	4 53	4 39	4 20	3 53	3 9
19	6 43	6 30	6 19	6 9	6 0	5 51	5 41	5 29	5 15	5 6	4 55	4 41	4 23	3 56	3 14
20	6 42	6 29	6 18	6 9	6 0	5 51	5 41	5 30	5 16	5 7	4 56	4 43	4 25	4 0	3 19
21	6 41	6 28	6 18	6 8	6 0	5 51	5 41	5 31	5 17	5 8	4 58	4 45	4 27	4 3	3 24
22	6 39	6 27	6 17	6 8	6 0	5 51	5 42	5 31	5 18	5 9	4 59	4 46	4 30	4 6	3 28
23	6 38	6 26	6 16	6 7	5 59	5 51	5 42	5 32	5 19	5 11	5 1	4 48	4 32	4 9	3 33
24	6 36	6 25	6 15	6 7	5 59	5 51	5 42	5 32	5 20	5 12	5 2	4 50	4 35	4 12	3 38
25	6 35	6 24	6 15	6 6	5 59	5 51	5 42	5 33	5 21	5 13	5 4	4 52	4 37	4 16	3 42
26	6 33	6 23	6 14	6 6	5 59	5 51	5 43	5 33	5 21	5 14	5 5	4 54	4 39	4 19	3 47
27	6 32	6 22	6 13	6 5	5 58	5 51	5 43	5 34	5 22	5 15	5 7	4 56	4 42	4 22	3 51
28	6 30	6 20	6 12	6 5	5 58	5 51	5 43	5 34	5 23	5 16	5 8	4 58	4 44	4 25	3 56
29	6 29	6 19	6 11	6 4	5 58	5 51	5 43	5 35	5 24	5 18	5 10	5 0	4 47	4 28	4 0
30	6 27	6 18	6 11	6 4	5 57	5 51	5 44	5 36	5 25	5 19	5 11	5 2	4 49	4 31	4 4
31	6 26	6 17	6 10	6 3	5 57	5 51	5 44	5 36	5 26	5 20	5 13	5 3	4 51	4 35	4 9
Sept. 1	6 24	6 16	6 9	6 3	5 57	5 51	5 44	5 37	5 27	5 21	5 14	5 5	4 54	4 38	4 13
2	6 23	6 15	6 8	6 2	5 56	5 51	5 44	5 37	5 28	5 22	5 16	5 7	4 56	4 41	4 17
3	6 21	6 13	6 7	6 1	5 56	5 51	5 45	5 38	5 29	5 24	5 17	5 9	4 58	4 44	4 21



# Sonnenuntergang 1945

339\*

Mittlere Ortszeit

Meridian von Greenwich

Tag		Geographische Breite															
		-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																	
Juli	24	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	
	25	17 1	17 23	17 40	17 55	18 10	18 25	18 40	18 58	19 22	19 36	19 54	20 18	20 50	21 42		
	26	17 2	17 24	17 41	17 56	18 10	18 24	18 40	18 58	19 20	19 34	19 52	20 14	20 46	21 35		
	27	17 3	17 24	17 41	17 56	18 10	18 24	18 39	18 57	19 19	19 33	19 50	20 13	20 43	21 32	23 52	
	28	17 4	17 25	17 41	17 56	18 10	18 24	18 39	18 56	19 18	19 32	19 49	20 11	20 41	21 28	23 28	
	29	17 5	17 25	17 42	17 56	18 10	18 24	18 38	18 56	19 17	19 31	19 48	20 9	20 39	21 25	23 13	
	30	17 6	17 26	17 42	17 56	18 10	18 23	18 38	18 55	19 16	19 30	19 46	20 7	20 36	21 21	23 2	
	31	17 7	17 27	17 43	17 57	18 10	18 23	18 38	18 54	19 15	19 29	19 45	20 6	20 34	21 18	22 52	
	Aug.	1	17 8	17 27	17 43	17 57	18 10	18 23	18 37	18 53	19 14	19 27	19 43	20 4	20 31	21 14	22 42
		2	17 9	17 28	17 43	17 57	18 10	18 23	18 37	18 53	19 13	19 26	19 42	20 2	20 29	21 10	22 34
3		17 10	17 28	17 44	17 57	18 10	18 22	18 36	18 52	19 12	19 25	19 40	20 0	20 26	21 7	22 26	
4		17 10	17 29	17 44	17 57	18 10	18 22	18 36	18 51	19 11	19 23	19 39	19 58	20 24	21 3	22 19	
5		17 11	17 29	17 44	17 57	18 9	18 22	18 35	18 50	19 10	19 22	19 37	19 56	20 21	21 0	22 12	
6		17 12	17 30	17 45	17 57	18 9	18 21	18 35	18 49	19 9	19 21	19 35	19 54	20 19	20 56	22 5	
7		17 13	17 31	17 45	17 57	18 9	18 21	18 34	18 49	19 8	19 19	19 34	19 52	20 16	20 52	21 58	
8		17 14	17 31	17 45	17 58	18 9	18 21	18 33	18 48	19 6	19 18	19 32	19 50	20 14	20 49	21 52	
9		17 15	17 32	17 46	17 58	18 9	18 20	18 33	18 47	19 5	19 16	19 30	19 47	20 11	20 45	21 46	
10		17 16	17 32	17 46	17 58	18 9	18 20	18 32	18 46	19 4	19 15	19 28	19 45	20 8	20 42	21 40	
11		17 17	17 33	17 46	17 58	18 9	18 20	18 32	18 45	19 3	19 13	19 27	19 43	20 5	20 38	21 34	
12		17 18	17 34	17 46	17 58	18 8	18 19	18 31	18 44	19 1	19 12	19 25	19 41	20 3	20 34	21 28	
13		17 19	17 34	17 47	17 58	18 8	18 19	18 30	18 43	19 0	19 10	19 23	19 39	20 0	20 31	21 22	
14		17 20	17 35	17 47	17 58	18 8	18 18	18 30	18 42	18 59	19 9	19 21	19 36	19 57	20 27	21 16	
15		17 21	17 35	17 47	17 58	18 8	18 18	18 29	18 42	18 57	19 7	19 19	19 34	19 54	20 23	21 11	
16		17 22	17 36	17 48	17 58	18 8	18 18	18 28	18 41	18 56	19 6	19 17	19 32	19 51	20 20	21 5	
17		17 23	17 36	17 48	17 58	18 7	18 17	18 27	18 40	18 54	19 4	19 15	19 30	19 49	20 16	21 0	
18		17 23	17 37	17 48	17 58	18 7	18 17	18 27	18 39	18 53	19 2	19 13	19 27	19 46	20 12	20 55	
19	17 24	17 38	17 48	17 58	18 7	18 16	18 26	18 38	18 52	19 1	19 11	19 25	19 43	20 8	20 49		
20	17 25	17 38	17 49	17 58	18 7	18 16	18 25	18 37	18 50	18 59	19 9	19 23	19 40	20 5	20 44		
21	17 26	17 39	17 49	17 58	18 6	18 15	18 25	18 36	18 49	18 57	19 7	19 20	19 37	20 1	20 39		
22	17 27	17 39	17 49	17 58	18 6	18 15	18 24	18 34	18 47	18 56	19 6	19 18	19 34	19 57	20 34		
23	17 28	17 40	17 49	17 58	18 6	18 14	18 23	18 33	18 46	18 54	19 4	19 16	19 31	19 54	20 29		
24	17 29	17 40	17 50	17 58	18 6	18 14	18 22	18 32	18 44	18 52	19 2	19 13	19 29	19 50	20 24		
25	17 30	17 41	17 50	17 58	18 5	18 13	18 21	18 31	18 43	18 51	18 59	19 11	19 26	19 46	20 19		
26	17 31	17 41	17 50	17 58	18 5	18 13	18 21	18 30	18 41	18 49	18 57	19 8	19 23	19 43	20 14		
27	17 32	17 42	17 50	17 58	18 5	18 12	18 20	18 29	18 40	18 47	18 55	19 6	19 20	19 39	20 9		
28	17 33	17 42	17 51	17 58	18 5	18 12	18 19	18 28	18 38	18 45	18 53	19 4	19 17	19 35	20 4		
29	17 34	17 43	17 51	17 58	18 4	18 11	18 18	18 26	18 37	18 43	18 51	19 1	19 14	19 32	19 59		
30	17 35	17 44	17 51	17 58	18 4	18 10	18 17	18 25	18 35	18 42	18 49	18 59	19 11	19 28	19 54		
31	17 36	17 44	17 51	17 58	18 4	18 10	18 17	18 24	18 34	18 40	18 47	18 56	19 8	19 24	19 49		
Sept.	1	17 36	17 45	17 52	17 58	18 3	18 9	18 16	18 23	18 32	18 38	18 45	18 54	19 5	19 20	19 44	
	2	17 37	17 45	17 52	17 58	18 3	18 9	18 15	18 22	18 31	18 36	18 43	18 51	19 2	19 17	19 39	
	3	17 38	17 46	17 52	17 58	18 3	18 8	18 14	18 20	18 29	18 34	18 41	18 49	18 59	19 13	19 35	



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Sept. 3	6 21 <sup>h m</sup>	6 13 <sup>h m</sup>	6 7 <sup>h m</sup>	6 1 <sup>h m</sup>	5 56 <sup>h m</sup>	5 51 <sup>h m</sup>	5 45 <sup>h m</sup>	5 38 <sup>h m</sup>	5 29 <sup>h m</sup>	5 24 <sup>h m</sup>	5 17 <sup>h m</sup>	5 9 <sup>h m</sup>	4 58 <sup>h m</sup>	4 44 <sup>h m</sup>	4 21 <sup>h m</sup>	
4	6 20	6 12	6 6	6 1	5 56	5 51	5 45	5 38	5 30	5 25	5 19	5 11	5 1	4 47	4 26	
5	6 18	6 11	6 5	6 0	5 55	5 51	5 45	5 39	5 31	5 26	5 20	5 13	5 3	4 50	4 30	
6	6 16	6 10	6 5	6 0	5 55	5 50	5 45	5 39	5 32	5 27	5 22	5 15	5 5	4 53	4 34	
7	6 15	6 9	6 4	5 59	5 55	5 50	5 45	5 40	5 33	5 29	5 23	5 17	5 8	4 56	4 38	
8	6 13	6 7	6 3	5 58	5 55	5 50	5 46	5 41	5 34	5 30	5 25	5 18	5 10	4 59	4 42	
9	6 12	6 6	6 2	5 58	5 54	5 50	5 46	5 41	5 35	5 31	5 26	5 20	5 13	5 2	4 46	
10	6 10	6 5	6 1	5 57	5 54	5 50	5 46	5 42	5 36	5 32	5 28	5 22	5 15	5 5	4 50	
11	6 8	6 4	6 0	5 57	5 53	5 50	5 46	5 42	5 37	5 33	5 29	5 24	5 17	5 8	4 54	
12	6 7	6 3	5 59	5 56	5 53	5 50	5 47	5 43	5 38	5 34	5 31	5 26	5 20	5 11	4 58	
13	6 5	6 1	5 58	5 55	5 53	5 50	5 47	5 43	5 39	5 36	5 32	5 28	5 22	5 14	5 2	
14	6 3	6 0	5 57	5 55	5 52	5 50	5 47	5 43	5 39	5 37	5 34	5 30	5 24	5 17	5 6	
15	6 2	5 59	5 56	5 54	5 52	5 50	5 47	5 44	5 40	5 38	5 35	5 31	5 27	5 20	5 10	
16	6 0	5 58	5 56	5 53	5 52	5 50	5 47	5 45	5 41	5 39	5 37	5 33	5 29	5 23	5 14	
17	5 58	5 56	5 55	5 53	5 51	5 50	5 48	5 46	5 42	5 40	5 38	5 35	5 31	5 26	5 18	
18	5 57	5 55	5 54	5 52	5 51	5 50	5 48	5 46	5 43	5 42	5 40	5 37	5 34	5 29	5 22	
19	5 55	5 54	5 53	5 52	5 51	5 49	5 48	5 47	5 44	5 43	5 41	5 39	5 36	5 32	5 26	
20	5 53	5 53	5 52	5 51	5 50	5 49	5 48	5 47	5 45	5 44	5 43	5 41	5 38	5 35	5 30	
21	5 52	5 51	5 51	5 50	5 50	5 49	5 49	5 48	5 46	5 45	5 44	5 43	5 41	5 38	5 34	
22	5 50	5 50	5 50	5 50	5 50	5 49	5 49	5 48	5 47	5 46	5 46	5 45	5 43	5 41	5 38	
23	5 48	5 49	5 49	5 49	5 49	5 49	5 49	5 49	5 48	5 48	5 47	5 46	5 46	5 44	5 42	
24	5 47	5 48	5 48	5 48	5 49	5 49	5 49	5 49	5 49	5 49	5 49	5 48	5 48	5 47	5 46	
25	5 45	5 46	5 47	5 48	5 49	5 49	5 49	5 50	5 50	5 50	5 50	5 50	5 50	5 50	5 50	
26	5 44	5 45	5 46	5 47	5 48	5 49	5 50	5 50	5 51	5 51	5 52	5 52	5 53	5 53	5 54	
27	5 42	5 44	5 45	5 47	5 48	5 49	5 50	5 51	5 52	5 52	5 53	5 54	5 55	5 56	5 58	
28	5 40	5 43	5 45	5 46	5 48	5 49	5 50	5 52	5 53	5 54	5 55	5 56	5 57	5 59	6 2	
29	5 39	5 41	5 44	5 45	5 47	5 49	5 50	5 52	5 54	5 55	5 56	5 58	6 0	6 2	6 6	
30	5 37	5 40	5 43	5 45	5 47	5 49	5 51	5 53	5 55	5 56	5 58	6 0	6 2	6 5	6 10	
Okt. 1	5 35	5 39	5 42	5 44	5 47	5 49	5 51	5 53	5 56	5 57	5 59	6 2	6 4	6 8	6 14	
2	5 34	5 38	5 41	5 44	5 46	5 49	5 51	5 54	5 57	5 59	6 1	6 3	6 7	6 11	6 18	
3	5 32	5 37	5 40	5 43	5 46	5 49	5 51	5 54	5 58	6 0	6 2	6 5	6 9	6 14	6 22	
4	5 30	5 35	5 39	5 42	5 46	5 49	5 51	5 55	5 59	6 1	6 4	6 7	6 12	6 17	6 26	
5	5 29	5 34	5 38	5 42	5 45	5 48	5 52	5 56	6 0	6 2	6 5	6 9	6 14	6 20	6 30	
6	5 27	5 33	5 37	5 41	5 45	5 48	5 52	5 56	6 1	6 4	6 7	6 11	6 16	6 23	6 34	
7	5 26	5 32	5 37	5 41	5 45	5 48	5 52	5 57	6 2	6 5	6 8	6 13	6 19	6 27	6 38	
8	5 24	5 31	5 36	5 40	5 44	5 48	5 53	5 57	6 3	6 6	6 10	6 15	6 21	6 30	6 42	
9	5 22	5 29	5 35	5 40	5 44	5 48	5 53	5 58	6 4	6 7	6 12	6 17	6 24	6 33	6 46	
10	5 21	5 28	5 34	5 39	5 44	5 48	5 53	5 59	6 5	6 9	6 13	6 19	6 26	6 36	6 50	
11	5 19	5 27	5 33	5 39	5 44	5 48	5 53	5 59	6 6	6 10	6 15	6 21	6 29	6 39	6 54	
12	5 18	5 26	5 33	5 38	5 43	5 48	5 54	6 0	6 7	6 11	6 16	6 23	6 31	6 42	6 59	
13	5 16	5 25	5 32	5 38	5 43	5 48	5 54	6 0	6 8	6 13	6 18	6 25	6 34	6 45	7 3	
14	5 15	5 24	5 31	5 37	5 43	5 49	5 54	6 1	6 9	6 14	6 20	6 27	6 36	6 48	7 7	



# Sonnenuntergang 1945

341\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Sept. 3	17 <sup>h</sup> 38 <sup>m</sup>	17 <sup>h</sup> 46 <sup>m</sup>	17 <sup>h</sup> 52 <sup>m</sup>	17 <sup>h</sup> 58 <sup>m</sup>	18 <sup>h</sup> 3 <sup>m</sup>	18 <sup>h</sup> 8 <sup>m</sup>	18 <sup>h</sup> 14 <sup>m</sup>	18 <sup>h</sup> 20 <sup>m</sup>	18 <sup>h</sup> 29 <sup>m</sup>	18 <sup>h</sup> 34 <sup>m</sup>	18 <sup>h</sup> 41 <sup>m</sup>	18 <sup>h</sup> 49 <sup>m</sup>	18 <sup>h</sup> 59 <sup>m</sup>	19 <sup>h</sup> 13 <sup>m</sup>	19 <sup>h</sup> 35 <sup>m</sup>
4	17 39	17 46	17 52	17 58	18 2	18 7	18 13	18 19	18 28	18 33	18 39	18 46	18 56	19 9	19 30
5	17 40	17 47	17 52	17 57	18 2	18 7	18 12	18 18	18 26	18 31	18 36	18 43	18 53	19 6	19 25
6	17 41	17 47	17 53	17 57	18 2	18 6	18 11	18 17	18 24	18 29	18 34	18 41	18 50	19 2	19 20
7	17 42	17 48	17 53	17 57	18 1	18 6	18 10	18 16	18 23	18 27	18 32	18 38	18 47	18 58	19 15
8	17 43	17 48	17 53	17 57	18 1	18 5	18 10	18 14	18 21	18 25	18 30	18 36	18 44	18 55	19 11
9	17 44	17 49	17 53	17 57	18 1	18 4	18 9	18 13	18 19	18 23	18 28	18 33	18 41	18 51	19 6
10	17 45	17 50	17 53	17 57	18 0	18 4	18 8	18 12	18 18	18 21	18 25	18 31	18 38	18 47	19 1
11	17 46	17 50	17 54	17 57	18 0	18 3	18 7	18 11	18 16	18 19	18 23	18 28	18 35	18 43	18 56
12	17 47	17 51	17 54	17 57	18 0	18 3	18 6	18 9	18 14	18 17	18 21	18 26	18 32	18 40	18 52
13	17 48	17 51	17 54	17 57	17 59	18 2	18 5	18 8	18 13	18 16	18 19	18 23	18 29	18 36	18 47
14	17 49	17 52	17 54	17 57	17 59	18 1	18 4	18 7	18 11	18 14	18 17	18 21	18 26	18 32	18 42
15	17 50	17 52	17 55	17 57	17 59	18 1	18 3	18 6	18 10	18 12	18 15	18 18	18 23	18 29	18 38
16	17 50	17 53	17 55	17 57	17 58	18 0	18 2	18 4	18 8	18 10	18 12	18 15	18 20	18 25	18 33
17	17 51	17 53	17 55	17 57	17 58	17 59	18 1	18 3	18 6	18 8	18 10	18 13	18 16	18 21	18 28
18	17 52	17 54	17 55	17 57	17 58	17 59	18 0	18 2	18 5	18 6	18 8	18 10	18 13	18 18	18 24
19	17 53	17 54	17 55	17 56	17 57	17 58	18 0	18 1	18 3	18 4	18 6	18 8	18 10	18 14	18 19
20	17 54	17 55	17 56	17 56	17 57	17 58	17 59	17 59	18 1	18 2	18 4	18 5	18 7	18 10	18 15
21	17 55	17 55	17 56	17 56	17 56	17 57	17 58	17 58	18 0	18 0	18 1	18 3	18 4	18 7	18 10
22	17 56	17 56	17 56	17 56	17 56	17 56	17 57	17 57	17 58	17 59	17 59	18 0	18 1	18 3	18 5
23	17 57	17 57	17 56	17 56	17 56	17 56	17 56	17 56	17 56	17 57	17 57	17 57	17 58	17 59	18 1
24	17 58	17 57	17 56	17 56	17 55	17 55	17 55	17 54	17 55	17 55	17 55	17 55	17 55	17 55	17 56
25	17 59	17 58	17 57	17 56	17 55	17 54	17 54	17 53	17 53	17 53	17 53	17 52	17 52	17 52	17 51
26	18 0	17 58	17 57	17 56	17 55	17 54	17 53	17 52	17 51	17 51	17 50	17 50	17 49	17 48	17 47
27	18 1	17 59	17 57	17 56	17 54	17 53	17 52	17 51	17 50	17 49	17 48	17 47	17 46	17 44	17 42
28	18 2	17 59	17 57	17 56	17 54	17 53	17 51	17 50	17 48	17 47	17 46	17 45	17 43	17 41	17 38
29	18 3	18 0	17 58	17 56	17 54	17 52	17 50	17 48	17 47	17 45	17 44	17 42	17 40	17 37	17 33
30	18 4	18 0	17 58	17 56	17 53	17 51	17 49	17 47	17 45	17 44	17 42	17 40	17 37	17 33	17 28
Okt. 1	18 5	18 1	17 58	17 56	17 53	17 51	17 49	17 46	17 43	17 42	17 40	17 37	17 34	17 30	17 24
2	18 6	18 2	17 58	17 55	17 53	17 50	17 48	17 45	17 42	17 40	17 37	17 34	17 31	17 26	17 19
3	18 7	18 2	17 59	17 55	17 52	17 50	17 47	17 44	17 40	17 38	17 35	17 32	17 28	17 22	17 14
4	18 8	18 3	17 59	17 55	17 52	17 49	17 46	17 42	17 38	17 36	17 33	17 29	17 25	17 19	17 10
5	18 9	18 3	17 59	17 55	17 52	17 49	17 45	17 41	17 37	17 34	17 31	17 27	17 22	17 15	17 5
6	18 10	18 4	17 59	17 55	17 51	17 48	17 44	17 40	17 35	17 32	17 29	17 24	17 19	17 12	17 1
7	18 11	18 5	18 0	17 55	17 51	17 47	17 43	17 39	17 34	17 30	17 27	17 22	17 16	17 8	16 56
8	18 12	18 5	18 0	17 55	17 51	17 47	17 43	17 38	17 32	17 29	17 24	17 19	17 13	17 4	16 51
9	18 13	18 6	18 0	17 55	17 51	17 46	17 42	17 37	17 30	17 27	17 22	17 17	17 10	17 1	16 47
10	18 14	18 7	18 0	17 55	17 50	17 46	17 41	17 35	17 29	17 25	17 20	17 14	17 7	16 57	16 42
11	18 15	18 7	18 1	17 55	17 50	17 45	17 40	17 34	17 27	17 23	17 18	17 12	17 4	16 53	16 38
12	18 16	18 8	18 1	17 55	17 50	17 45	17 39	17 33	17 26	17 21	17 16	17 10	17 1	16 50	16 33
13	18 17	18 9	18 1	17 55	17 50	17 44	17 38	17 32	17 24	17 20	17 14	17 7	16 58	16 46	16 28
14	18 18	18 9	18 2	17 55	17 50	17 44	17 38	17 31	17 23	17 18	17 12	17 5	16 55	16 42	16 24



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Okt. 14	5 15	5 24	5 31	5 37	5 43	5 49	5 54	6 1	6 9	6 14	6 20	6 27	6 36	6 48	7 7
15	5 13	5 23	5 30	5 37	5 43	5 49	5 55	6 2	6 10	6 15	6 21	6 29	6 38	6 52	7 11
16	5 12	5 22	5 29	5 36	5 42	5 49	5 55	6 2	6 11	6 17	6 23	6 31	6 41	6 55	7 16
17	5 10	5 20	5 29	5 36	5 42	5 49	5 55	6 3	6 12	6 18	6 24	6 33	6 43	6 58	7 20
18	5 9	5 19	5 28	5 35	5 42	5 49	5 56	6 4	6 13	6 19	6 26	6 35	6 46	7 1	7 24
19	5 7	5 18	5 27	5 35	5 42	5 49	5 56	6 4	6 14	6 20	6 28	6 37	6 48	7 4	7 29
20	5 6	5 17	5 26	5 34	5 42	5 49	5 57	6 5	6 15	6 22	6 29	6 39	6 51	7 8	7 33
21	5 4	5 16	5 26	5 34	5 41	5 49	5 57	6 6	6 17	6 23	6 31	6 41	6 53	7 11	7 37
22	5 3	5 15	5 25	5 33	5 41	5 49	5 57	6 6	6 18	6 24	6 33	6 43	6 56	7 14	7 42
23	5 2	5 14	5 24	5 33	5 41	5 49	5 58	6 7	6 19	6 26	6 34	6 45	6 58	7 17	7 46
24	5 0	5 13	5 24	5 33	5 41	5 49	5 58	6 8	6 20	6 27	6 36	6 47	7 1	7 21	7 51
25	4 59	5 12	5 23	5 32	5 41	5 49	5 58	6 9	6 21	6 28	6 38	6 49	7 3	7 24	7 55
26	4 58	5 11	5 22	5 32	5 41	5 50	5 59	6 9	6 22	6 30	6 39	6 51	7 6	7 27	8 0
27	4 56	5 10	5 22	5 31	5 41	5 50	5 59	6 10	6 23	6 31	6 41	6 53	7 9	7 30	8 5
28	4 55	5 9	5 21	5 31	5 41	5 50	6 0	6 11	6 24	6 33	6 43	6 55	7 11	7 34	8 9
29	4 53	5 8	5 20	5 31	5 41	5 50	6 0	6 12	6 25	6 34	6 44	6 57	7 14	7 37	8 14
30	4 52	5 8	5 20	5 30	5 40	5 50	6 1	6 12	6 27	6 35	6 46	6 59	7 16	7 41	8 19
31	4 51	5 7	5 19	5 30	5 40	5 50	6 1	6 13	6 28	6 37	6 47	7 1	7 19	7 44	8 24
Nov. 1	4 50	5 6	5 19	5 30	5 40	5 51	6 1	6 14	6 29	6 38	6 49	7 3	7 21	7 47	8 29
2	4 48	5 5	5 18	5 30	5 40	5 51	6 2	6 15	6 30	6 39	6 51	7 5	7 24	7 51	8 34
3	4 47	5 4	5 18	5 29	5 40	5 51	6 2	6 15	6 31	6 41	6 52	7 7	7 26	7 54	8 39
4	4 46	5 3	5 17	5 29	5 40	5 51	6 3	6 16	6 32	6 42	6 54	7 9	7 29	7 58	8 44
5	4 45	5 3	5 17	5 29	5 40	5 52	6 3	6 17	6 33	6 43	6 56	7 11	7 32	8 1	8 49
6	4 44	5 2	5 16	5 29	5 40	5 52	6 4	6 18	6 34	6 45	6 57	7 13	7 34	8 4	8 55
7	4 43	5 1	5 16	5 29	5 40	5 52	6 4	6 19	6 36	6 46	6 59	7 15	7 37	8 8	9 0
8	4 42	5 0	5 15	5 28	5 40	5 52	6 5	6 19	6 37	6 48	7 1	7 17	7 39	8 11	9 5
9	4 41	5 0	5 15	5 28	5 40	5 53	6 5	6 20	6 38	6 49	7 2	7 19	7 42	8 15	9 11
10	4 40	4 59	5 15	5 28	5 41	5 53	6 6	6 21	6 39	6 50	7 4	7 21	7 44	8 18	9 17
11	4 39	4 58	5 14	5 28	5 41	5 53	6 6	6 22	6 40	6 52	7 6	7 23	7 47	8 22	9 23
12	4 38	4 58	5 14	5 28	5 41	5 54	6 7	6 22	6 41	6 53	7 7	7 25	7 50	8 25	9 29
13	4 37	4 57	5 14	5 28	5 41	5 54	6 8	6 23	6 42	6 55	7 9	7 27	7 52	8 29	9 35
14	4 36	4 57	5 13	5 28	5 41	5 54	6 8	6 24	6 44	6 56	7 11	7 29	7 55	8 32	9 41
15	4 35	4 56	5 13	5 28	5 41	5 55	6 9	6 25	6 45	6 57	7 12	7 31	7 57	8 36	9 47
16	4 34	4 56	5 13	5 28	5 41	5 55	6 9	6 26	6 46	6 59	7 14	7 33	8 0	8 39	9 54
17	4 33	4 55	5 13	5 28	5 41	5 55	6 10	6 26	6 47	7 0	7 16	7 35	8 2	8 43	10 1
18	4 33	4 55	5 12	5 28	5 42	5 56	6 11	6 27	6 48	7 1	7 17	7 37	8 5	8 46	10 8
19	4 32	4 54	5 12	5 28	5 42	5 56	6 11	6 28	6 49	7 3	7 19	7 39	8 7	8 50	10 16
20	4 31	4 54	5 12	5 28	5 42	5 56	6 12	6 29	6 51	7 4	7 20	7 41	8 9	8 53	10 24
21	4 31	4 54	5 12	5 28	5 42	5 57	6 12	6 30	6 52	7 5	7 22	7 43	8 12	8 56	10 33
22	4 30	4 53	5 12	5 28	5 43	5 57	6 13	6 31	6 53	7 7	7 23	7 45	8 14	9 0	10 42
23	4 29	4 53	5 12	5 28	5 43	5 58	6 14	6 31	6 54	7 8	7 25	7 47	8 17	9 3	10 52
24	4 29	4 53	5 12	5 28	5 43	5 58	6 14	6 32	6 55	7 9	7 26	7 49	8 19	9 7	11 5



# Sonnenuntergang 1945

343\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Okt. 14	18 18 <sup>h</sup> 18 <sup>m</sup> 18 <sup>h</sup> 9 <sup>m</sup>	18 2	17 55	17 50	17 44	17 38	17 31	17 23	17 18	17 12	17 5	16 55	16 42	16 24	16 24
15	18 19	18 10	18 2	17 55	17 49	17 43	17 37	17 30	17 21	17 16	17 10	17 2	16 52	16 39	16 19
16	18 21	18 10	18 2	17 56	17 49	17 43	17 36	17 29	17 20	17 14	17 8	17 0	16 50	16 35	16 14
17	18 22	18 11	18 3	17 56	17 49	17 42	17 35	17 28	17 18	17 13	17 6	16 57	16 47	16 32	16 10
18	18 23	18 12	18 3	17 56	17 49	17 42	17 35	17 27	17 17	17 11	17 4	16 55	16 44	16 28	16 5
19	18 24	18 13	18 4	17 56	17 49	17 41	17 34	17 26	17 15	17 9	17 2	16 53	16 41	16 25	16 0
20	18 25	18 13	18 4	17 56	17 48	17 41	17 33	17 25	17 14	17 8	17 0	16 50	16 38	16 21	15 55
21	18 26	18 14	18 4	17 56	17 48	17 41	17 33	17 24	17 13	17 6	16 58	16 48	16 35	16 18	15 51
22	18 27	18 15	18 5	17 56	17 48	17 40	17 32	17 23	17 11	17 4	16 56	16 46	16 32	16 14	15 46
23	18 28	18 15	18 5	17 56	17 48	17 40	17 31	17 22	17 10	17 3	16 54	16 43	16 30	16 10	15 41
24	18 29	18 16	18 5	17 56	17 48	17 39	17 31	17 21	17 8	17 1	16 52	16 41	16 27	16 7	15 36
25	18 30	18 17	18 6	17 56	17 48	17 39	17 30	17 20	17 7	16 59	16 50	16 39	16 24	16 3	15 32
26	18 32	18 18	18 6	17 57	17 48	17 39	17 29	17 19	17 6	16 58	16 48	16 37	16 21	16 0	15 27
27	18 33	18 18	18 7	17 57	17 47	17 38	17 29	17 18	17 4	16 56	16 47	16 34	16 19	15 56	15 22
28	18 34	18 19	18 7	17 57	17 47	17 38	17 28	17 17	17 3	16 55	16 45	16 32	16 16	15 53	15 17
29	18 35	18 20	18 8	17 57	17 47	17 38	17 28	17 16	17 2	16 53	16 43	16 30	16 13	15 49	15 12
30	18 36	18 21	18 8	17 57	17 47	17 37	17 27	17 15	17 1	16 52	16 41	16 28	16 10	15 46	15 7
31	18 37	18 21	18 9	17 58	17 47	17 37	17 26	17 14	16 59	16 50	16 39	16 26	16 8	15 43	15 2
Nov. 1	18 38	18 22	18 9	17 58	17 47	17 37	17 26	17 13	16 58	16 49	16 38	16 24	16 5	15 39	14 57
2	18 40	18 23	18 9	17 58	17 47	17 37	17 25	17 13	16 57	16 47	16 36	16 22	16 3	15 36	14 52
3	18 41	18 24	18 10	17 58	17 47	17 36	17 25	17 12	16 56	16 46	16 34	16 20	16 0	15 32	14 47
4	18 42	18 25	18 10	17 58	17 47	17 36	17 24	17 11	16 55	16 45	16 33	16 18	15 57	15 29	14 42
5	18 43	18 25	18 11	17 59	17 47	17 36	17 24	17 10	16 54	16 43	16 31	16 16	15 55	15 25	14 37
6	18 44	18 26	18 11	17 59	17 47	17 36	17 23	17 10	16 53	16 42	16 29	16 14	15 52	15 22	14 32
7	18 46	18 27	18 12	17 59	17 47	17 36	17 23	17 9	16 52	16 41	16 28	16 12	15 50	15 19	14 26
8	18 47	18 28	18 13	17 59	17 47	17 35	17 23	17 8	16 51	16 40	16 26	16 10	15 48	15 16	14 21
9	18 48	18 29	18 13	18 0	17 47	17 35	17 22	17 8	16 50	16 38	16 25	16 8	15 45	15 12	14 16
10	18 49	18 29	18 14	18 0	17 48	17 35	17 22	17 7	16 49	16 37	16 23	16 6	15 43	15 9	14 10
11	18 50	18 30	18 14	18 0	17 48	17 35	17 22	17 7	16 48	16 36	16 22	16 4	15 40	15 6	14 5
12	18 51	18 31	18 15	18 1	17 48	17 35	17 21	17 6	16 47	16 35	16 20	16 2	15 38	15 2	13 59
13	18 53	18 32	18 15	18 1	17 48	17 35	17 21	17 5	16 46	16 34	16 19	16 1	15 36	14 59	13 53
14	18 54	18 33	18 16	18 1	17 48	17 35	17 21	17 5	16 45	16 33	16 18	15 59	15 34	14 56	13 47
15	18 55	18 34	18 17	18 2	17 48	17 35	17 20	17 4	16 44	16 32	16 16	15 57	15 31	14 53	13 41
16	18 56	18 34	18 17	18 2	17 48	17 35	17 20	17 4	16 43	16 31	16 15	15 56	15 29	14 50	13 35
17	18 57	18 35	18 18	18 3	17 49	17 35	17 20	17 3	16 43	16 30	16 14	15 54	15 27	14 47	13 28
18	18 58	18 36	18 18	18 3	17 49	17 35	17 20	17 3	16 42	16 29	16 13	15 53	15 25	14 44	13 21
19	19 0	18 37	18 19	18 3	17 49	17 35	17 20	17 3	16 41	16 28	16 12	15 51	15 23	14 41	13 14
20	19 1	18 38	18 20	18 4	17 49	17 35	17 20	17 2	16 40	16 27	16 11	15 50	15 21	14 38	13 7
21	19 2	18 39	18 20	18 4	17 50	17 35	17 19	17 2	16 40	16 26	16 10	15 48	15 19	14 35	12 59
22	19 3	18 39	18 21	18 5	17 50	17 35	17 19	17 1	16 39	16 25	16 9	15 47	15 17	14 32	12 50
23	19 4	18 40	18 22	18 5	17 50	17 35	17 19	17 1	16 39	16 25	16 8	15 46	15 16	14 29	12 40
24	19 5	18 41	18 22	18 6	17 50	17 35	17 19	17 1	16 38	16 24	16 7	15 44	15 14	14 26	12 28



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Nov. 24	4 29	4 53	5 12	5 28	5 43	5 58	6 14	6 32	6 55	7 9	7 26	7 49	8 19	9 7	11 5
25	4 28	4 52	5 11	5 28	5 43	5 59	6 15	6 33	6 56	7 10	7 28	7 50	8 21	9 10	11 23
26	4 28	4 52	5 11	5 28	5 44	5 59	6 15	6 34	6 57	7 12	7 29	7 52	8 24	9 13	
27	4 27	4 52	5 11	5 28	5 44	6 0	6 16	6 35	6 58	7 13	7 31	7 54	8 26	9 17	
28	4 27	4 52	5 11	5 29	5 44	6 0	6 17	6 36	6 59	7 14	7 32	7 56	8 28	9 20	
29	4 26	4 52	5 12	5 29	5 45	6 1	6 17	6 36	7 0	7 15	7 34	7 57	8 30	9 23	
30	4 26	4 52	5 12	5 29	5 45	6 1	6 18	6 37	7 1	7 17	7 35	7 59	8 32	9 26	
Dez. 1	4 26	4 51	5 12	5 29	5 45	6 2	6 19	6 38	7 2	7 18	7 36	8 1	8 34	9 29	
2	4 25	4 51	5 12	5 30	5 46	6 2	6 19	6 39	7 3	7 19	7 38	8 2	8 36	9 32	
3	4 25	4 51	5 12	5 30	5 46	6 3	6 20	6 40	7 4	7 20	7 39	8 4	8 38	9 35	
4	4 25	4 51	5 12	5 30	5 47	6 3	6 20	6 40	7 5	7 21	7 40	8 5	8 40	9 38	
5	4 25	4 51	5 12	5 30	5 47	6 4	6 21	6 41	7 6	7 22	7 41	8 7	8 42	9 41	
6	4 25	4 51	5 12	5 31	5 47	6 4	6 22	6 42	7 7	7 23	7 43	8 8	8 44	9 44	
7	4 25	4 52	5 13	5 31	5 48	6 5	6 22	6 43	7 8	7 24	7 44	8 10	8 46	9 47	
8	4 25	4 52	5 13	5 31	5 48	6 5	6 23	6 43	7 9	7 25	7 45	8 11	8 47	9 49	
9	4 25	4 52	5 13	5 32	5 49	6 6	6 24	6 44	7 10	7 26	7 46	8 12	8 49	9 52	
10	4 25	4 52	5 13	5 32	5 49	6 6	6 24	6 45	7 11	7 27	7 47	8 13	8 51	9 54	
11	4 25	4 52	5 14	5 33	5 50	6 7	6 25	6 46	7 12	7 28	7 48	8 15	8 52	9 56	
12	4 25	4 52	5 14	5 33	5 50	6 7	6 25	6 46	7 12	7 29	7 49	8 16	8 53	9 58	
13	4 25	4 53	5 14	5 33	5 51	6 8	6 26	6 47	7 13	7 30	7 50	8 17	8 55	10 0	
14	4 25	4 53	5 15	5 34	5 51	6 8	6 27	6 48	7 14	7 30	7 51	8 18	8 56	10 2	
15	4 25	4 53	5 15	5 34	5 51	6 9	6 27	6 48	7 15	7 31	7 52	8 19	8 57	10 4	
16	4 26	4 54	5 16	5 35	5 52	6 9	6 28	6 49	7 15	7 32	7 53	8 20	8 58	10 6	
17	4 26	4 54	5 16	5 35	5 52	6 10	6 28	6 49	7 16	7 33	7 53	8 20	8 59	10 7	
18	4 26	4 54	5 16	5 36	5 53	6 10	6 29	6 50	7 17	7 33	7 54	8 21	9 0	10 8	
19	4 27	4 55	5 17	5 36	5 53	6 11	6 29	6 51	7 17	7 34	7 55	8 22	9 1	10 9	
20	4 27	4 55	5 17	5 36	5 54	6 11	6 30	6 51	7 18	7 35	7 55	8 23	9 2	10 10	
21	4 27	4 56	5 18	5 37	5 54	6 12	6 30	6 52	7 18	7 35	7 56	8 23	9 2	10 11	
22	4 28	4 56	5 18	5 37	5 55	6 12	6 31	6 52	7 19	7 36	7 56	8 24	9 3	10 11	
23	4 28	4 57	5 19	5 38	5 55	6 13	6 31	6 53	7 19	7 36	7 57	8 24	9 3	10 12	
24	4 29	4 57	5 19	5 39	5 56	6 13	6 32	6 53	7 20	7 37	7 57	8 25	9 3	10 12	
25	4 30	4 58	5 20	5 39	5 56	6 14	6 32	6 53	7 20	7 37	7 58	8 25	9 4	10 12	
26	4 30	4 58	5 20	5 40	5 57	6 14	6 33	6 54	7 21	7 37	7 58	8 25	9 4	10 12	
27	4 31	4 59	5 21	5 40	5 57	6 15	6 33	6 54	7 21	7 38	7 58	8 25	9 4	10 12	
28	4 32	5 0	5 22	5 41	5 58	6 15	6 34	6 55	7 21	7 38	7 59	8 25	9 4	10 11	
29	4 32	5 0	5 22	5 41	5 58	6 16	6 34	6 55	7 21	7 38	7 59	8 25	9 4	10 10	
30	4 33	5 1	5 23	5 42	5 59	6 16	6 34	6 55	7 22	7 38	7 59	8 25	9 4	10 10	
31	4 34	5 1	5 23	5 42	5 59	6 17	6 35	6 56	7 22	7 38	7 59	8 25	9 3	10 9	
32	4 35	5 2	5 24	5 43	6 0	6 17	6 35	6 56	7 22	7 39	7 59	8 25	9 3	10 8	



# Sonnenuntergang 1945

345\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Nov. 24	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
25	19 5	18 41	18 22	18 6	17 50	17 35	17 19	17 1	16 38	16 24	16 7	15 44	15 14	14 26	12 28
26	19 6	18 42	18 23	18 6	17 51	17 35	17 19	17 1	16 38	16 23	16 6	15 43	15 12	14 23	12 10
27	19 7	18 43	18 23	18 7	17 51	17 35	17 19	17 0	16 37	16 23	16 5	15 42	15 10	14 21	
28	19 9	18 44	18 24	18 7	17 51	17 36	17 19	17 0	16 37	16 22	16 4	15 41	15 9	14 18	
29	19 10	18 44	18 25	18 8	17 52	17 36	17 19	17 0	16 36	16 22	16 3	15 40	15 7	14 16	
30	19 11	18 45	18 25	18 8	17 52	17 36	17 19	17 0	16 36	16 21	16 3	15 39	15 6	14 13	
Dez. 1	19 12	18 46	18 26	18 8	17 52	17 36	17 19	17 0	16 36	16 21	16 2	15 38	15 5	14 11	
2	19 13	18 47	18 27	18 9	17 53	17 36	17 19	17 0	16 36	16 20	16 1	15 37	15 3	14 8	
3	19 14	18 48	18 27	18 9	17 53	17 37	17 20	17 0	16 35	16 20	16 1	15 36	15 2	14 6	
4	19 15	18 48	18 28	18 10	17 54	17 37	17 20	17 0	16 35	16 20	16 0	15 36	15 1	14 4	
5	19 16	18 49	18 29	18 10	17 54	17 37	17 20	17 0	16 35	16 19	16 0	15 35	15 0	14 2	
6	19 17	18 50	18 29	18 11	17 54	17 38	17 20	17 0	16 35	16 19	15 59	15 34	14 59	14 0	
7	19 18	18 51	18 30	18 11	17 55	17 38	17 20	17 0	16 35	16 19	15 59	15 34	14 58	13 58	
8	19 19	18 52	18 30	18 12	17 55	17 38	17 20	17 0	16 35	16 19	15 59	15 33	14 57	13 56	
9	19 19	18 52	18 31	18 12	17 56	17 39	17 21	17 0	16 35	16 19	15 59	15 33	14 56	13 54	
10	19 20	18 53	18 32	18 13	17 56	17 39	17 21	17 1	16 35	16 18	15 58	15 32	14 55	13 53	
11	19 21	18 54	18 32	18 14	17 57	17 40	17 21	17 1	16 35	16 18	15 58	15 32	14 55	13 51	
12	19 22	18 55	18 33	18 14	17 57	17 40	17 22	17 1	16 35	16 18	15 58	15 32	14 54	13 50	
13	19 23	18 55	18 34	18 15	17 58	17 40	17 22	17 1	16 35	16 19	15 58	15 32	14 54	13 49	
14	19 24	18 56	18 34	18 15	17 58	17 41	17 22	17 2	16 35	16 19	15 58	15 31	14 53	13 48	
15	19 24	18 57	18 35	18 16	17 58	17 41	17 23	17 2	16 36	16 19	15 58	15 31	14 53	13 47	
16	19 25	18 57	18 35	18 16	17 59	17 42	17 23	17 2	16 36	16 19	15 58	15 31	14 53	13 46	
17	19 26	18 58	18 36	18 17	17 59	17 42	17 24	17 2	16 36	16 19	15 59	15 32	14 53	13 46	
18	19 26	18 58	18 36	18 17	18 0	17 42	17 24	17 3	16 36	16 20	15 59	15 32	14 53	13 45	
19	19 27	18 59	18 37	18 18	18 0	17 43	17 24	17 3	16 37	16 20	15 59	15 32	14 53	13 45	
20	19 28	19 0	18 37	18 18	18 1	17 43	17 25	17 4	16 37	16 20	15 59	15 32	14 53	13 45	
21	19 28	19 0	18 38	18 19	18 1	17 44	17 25	17 4	16 38	16 21	16 0	15 33	14 54	13 45	
22	19 29	19 1	18 38	18 19	18 2	17 44	17 26	17 5	16 38	16 21	16 0	15 33	14 54	13 45	
23	19 29	19 1	18 39	18 20	18 2	17 45	17 26	17 5	16 38	16 22	16 1	15 34	14 55	13 46	
24	19 30	19 2	18 39	18 20	18 3	17 45	17 27	17 6	16 39	16 22	16 1	15 34	14 55	13 47	
25	19 30	19 2	18 40	18 21	18 3	17 46	17 27	17 6	16 40	16 23	16 2	15 35	14 56	13 47	
26	19 31	19 2	18 40	18 21	18 4	17 46	17 28	17 7	16 40	16 23	16 3	15 35	14 57	13 48	
27	19 31	19 3	18 41	18 22	18 4	17 47	17 28	17 7	16 41	16 24	16 3	15 36	14 57	13 50	
28	19 31	19 3	18 41	18 22	18 5	17 47	17 29	17 8	16 41	16 25	16 4	15 37	14 58	13 51	
29	19 32	19 4	18 42	18 23	18 5	17 48	17 30	17 9	16 42	16 25	16 5	15 38	14 59	13 52	
30	19 32	19 4	18 42	18 23	18 6	17 49	17 30	17 9	16 43	16 26	16 6	15 39	15 1	13 54	
31	19 32	19 4	18 42	18 23	18 6	17 49	17 31	17 10	16 43	16 27	16 6	15 40	15 2	13 56	
32	19 32	19 5	18 43	18 24	18 7	17 50	17 31	17 11	16 44	16 28	16 7	15 41	15 3	13 58	
32	19 32	19 5	18 43	18 24	18 7	17 50	17 32	17 11	16 45	16 29	16 8	15 42	15 4	14 0	



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Jan. 0	h m 21 12	h m 20 49	h m 20 30	h m 20 14	h m 19 58	h m 19 43	h m 19 27	h m 19 8	h m 18 44	h m 18 29	h m 18 10	h m 17 46	h m 17 13	h m 16 20	h m —	h m —
1	21 51	21 31	21 15	21 1	20 48	20 35	20 21	20 5	19 44	19 31	19 16	18 56	18 29	17 48	16 28	—
2	22 24	22 9	21 56	21 45	21 35	21 25	21 13	21 0	20 45	20 35	20 23	20 8	19 47	19 18	18 29	—
3	22 54	22 43	22 34	22 26	22 19	22 12	22 4	21 55	21 44	21 36	21 28	21 18	21 4	20 45	20 15	—
4	23 21	23 15	23 10	23 5	23 1	22 57	22 53	22 48	22 42	22 38	22 33	22 28	22 20	22 10	21 55	—
5	23 46	23 45	23 44	23 43	23 42	23 42	23 41	23 40	23 39	23 38	23 37	23 36	23 35	23 33	23 30	—
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	0 11	0 15	0 18	0 21	0 23	0 26	0 28	0 31	0 36	0 38	0 41	0 45	0 49	0 56	1 5	—
8	0 38	0 46	0 53	0 59	1 5	1 11	1 18	1 25	1 34	1 39	1 46	1 54	2 5	2 20	2 44	—
9	1 6	1 19	1 30	1 40	1 49	1 58	2 8	2 19	2 33	2 41	2 52	3 5	3 23	3 48	4 28	—
10	1 38	1 56	2 11	2 23	2 35	2 47	3 0	3 15	3 34	3 46	4 0	4 18	4 43	5 19	6 25	—
11	2 15	2 38	2 55	3 11	3 26	3 40	3 56	4 14	4 37	4 51	5 9	5 31	6 3	6 53	9 19	—
12	3 0	3 24	3 45	4 2	4 18	4 35	4 53	5 13	5 39	5 55	6 15	6 41	7 19	8 22	—	—
13	3 51	4 18	4 39	4 57	5 14	5 32	5 51	6 12	6 39	6 55	7 17	7 45	8 24	9 33	—	—
14	4 51	5 17	5 38	5 56	6 12	6 29	6 47	7 8	7 34	7 50	8 11	8 37	9 14	10 16	—	—
15	5 58	6 21	6 40	6 56	7 11	7 26	7 42	8 0	8 24	8 38	8 56	9 18	9 49	10 37	12 23	—
16	7 8	7 27	7 42	7 56	8 8	8 20	8 33	8 49	9 7	9 19	9 33	9 50	10 14	10 48	11 44	—
17	8 20	8 34	8 44	8 54	9 3	9 12	9 21	9 32	9 45	9 53	10 3	10 16	10 31	10 53	11 27	—
18	9 32	9 39	9 45	9 51	9 56	10 1	10 6	10 12	10 20	10 25	10 30	10 36	10 45	10 57	11 14	—
19	10 42	10 44	10 45	10 46	10 47	10 48	10 49	10 50	10 51	10 52	10 53	10 55	10 57	10 59	11 3	—
20	11 52	11 48	11 44	11 40	11 38	11 34	11 31	11 27	11 23	11 20	11 17	11 13	11 8	11 1	10 52	—
21	13 2	12 51	12 42	12 34	12 27	12 21	12 14	12 5	11 55	11 49	11 41	11 32	11 21	11 4	10 41	—
22	14 11	13 54	13 41	13 30	13 19	13 9	12 58	12 45	12 29	12 20	12 8	11 54	11 35	11 9	10 28	—
23	15 18	14 57	14 40	14 26	14 12	13 58	13 44	13 28	13 7	12 55	12 39	12 20	11 54	11 16	10 8	—
24	16 23	15 59	15 39	15 22	15 6	14 50	14 33	14 14	13 50	13 36	13 17	12 53	12 20	11 29	9 5	—
25	17 24	16 58	16 36	16 18	16 1	15 44	15 26	15 5	14 39	14 23	14 2	13 35	12 58	11 55	—	—
26	18 19	17 52	17 31	17 13	16 56	16 39	16 20	15 59	15 33	15 16	14 55	14 28	13 50	12 43	—	—
27	19 6	18 42	18 22	18 5	17 49	17 33	17 16	16 56	16 31	16 15	15 55	15 30	14 54	13 55	—	—
28	19 48	19 26	19 9	18 54	18 39	18 25	18 10	17 53	17 31	17 17	17 0	16 39	16 8	15 22	13 37	—
29	20 23	20 6	19 51	19 39	19 28	19 16	19 3	18 49	18 31	18 20	18 7	17 50	17 26	16 53	15 53	—
30	20 54	20 41	20 31	20 22	20 13	20 4	19 55	19 44	19 31	19 23	19 13	19 1	18 45	18 22	17 45	—
31	21 22	21 14	21 7	21 2	20 56	20 51	20 45	20 38	20 30	20 25	20 19	20 11	20 1	19 48	19 27	—
Febr. 1	21 48	21 45	21 42	21 40	21 38	21 36	21 34	21 31	21 28	21 26	21 24	21 21	21 17	21 12	21 4	—
2	22 13	22 15	22 16	22 17	22 18	22 20	22 21	22 23	22 25	22 26	22 27	22 29	22 31	22 35	22 39	—
3	22 39	22 45	22 51	22 55	22 59	23 4	23 9	23 15	23 22	23 26	23 31	23 38	23 46	23 58	—	—
4	23 5	23 17	23 26	23 34	23 42	23 50	23 58	—	—	—	—	—	—	—	—	0 16
5	23 35	23 51	—	—	—	—	—	0 8	0 20	0 27	0 36	0 47	1 2	1 23	1 56	—
6	—	—	0 4	0 16	0 27	0 38	0 49	1 2	1 19	1 29	1 42	1 58	2 20	2 51	3 44	—
7	0 9	0 29	0 46	1 0	1 13	1 27	1 42	1 58	2 19	2 32	2 49	3 10	3 38	4 22	5 53	—
8	0 49	1 13	1 32	1 49	2 5	2 20	2 37	2 56	3 21	3 37	3 56	4 21	4 56	5 53	—	—
9	1 36	2 2	2 23	2 41	2 58	3 15	3 34	3 55	4 21	4 37	4 59	5 27	6 6	7 14	—	—
10	2 32	2 58	3 20	3 38	3 56	4 13	4 32	4 52	5 19	5 36	5 57	6 24	7 3	8 10	—	—



# Monduntergang 1945

347\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Jan. 0	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1	6 12	6 37	6 57	7 15	7 31	7 48	8 6	8 25	8 49	9 5	9 24	9 49	10 23	11 19	— —
2	7 13	7 35	7 53	8 8	8 23	8 37	8 53	9 10	9 31	9 46	10 2	10 22	10 51	11 34	12 55
3	8 13	8 32	8 46	8 59	9 11	9 23	9 36	9 50	10 7	10 19	10 32	10 48	11 10	11 41	12 33
4	9 13	9 27	9 38	9 47	9 56	10 5	10 15	10 26	10 39	10 47	10 56	11 8	11 24	11 45	12 18
5	10 12	10 20	10 27	10 34	10 40	10 45	10 51	10 58	11 6	11 12	11 18	11 25	11 35	11 48	12 7
6	11 9	11 13	11 16	11 19	11 22	11 24	11 26	11 29	11 33	11 35	11 37	11 40	11 44	11 50	12 57
7	12 6	12 5	12 4	12 3	12 2	12 1	12 0	11 59	11 58	11 57	11 56	11 55	11 53	11 51	12 48
8	13 3	12 57	12 52	12 47	12 43	12 39	12 34	12 29	12 23	12 19	12 15	12 9	12 2	11 52	12 38
9	14 2	13 51	13 42	13 34	13 26	13 19	13 11	13 2	12 51	12 45	12 36	12 25	12 13	11 55	12 28
10	15 2	14 46	14 33	14 22	14 11	14 1	13 49	13 36	13 21	13 11	12 59	12 44	12 25	11 58	12 14
11	16 4	15 43	15 27	15 12	14 58	14 46	14 32	14 15	13 55	13 42	13 27	13 8	12 42	12 4	10 55
12	17 6	16 42	16 23	16 6	15 50	15 35	15 18	14 59	14 35	14 20	14 2	13 38	13 5	12 14	9 47
13	18 7	17 41	17 20	17 2	16 45	16 28	16 9	15 49	15 23	15 6	14 46	14 19	13 41	12 37	— —
14	19 5	18 39	18 18	17 59	17 42	17 25	17 7	16 45	16 18	16 0	15 40	15 12	14 33	13 24	— —
15	19 58	19 34	19 14	18 57	18 40	18 24	18 7	17 47	17 22	17 5	16 46	16 20	15 43	14 43	— —
16	20 44	20 24	20 7	19 52	19 38	19 24	19 9	18 52	18 31	18 17	18 0	17 38	17 9	16 23	14 40
17	21 25	21 9	20 56	20 45	20 34	20 23	20 11	19 58	19 42	19 32	19 19	19 3	18 41	18 9	17 16
18	22 1	21 51	21 43	21 35	21 28	21 21	21 14	21 5	20 54	20 47	20 39	20 29	20 15	19 56	19 27
19	22 34	22 30	22 26	22 23	22 20	22 17	22 14	22 10	22 5	22 2	21 59	21 54	21 48	21 41	21 29
20	23 6	23 8	23 9	23 10	23 11	23 12	23 13	23 14	23 16	23 17	23 18	23 19	23 21	23 23	23 27
21	23 37	23 45	23 51	23 56	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	0 1	0 6	0 11	0 18	0 25	0 30	0 36	0 43	0 52	1 5	1 24
23	0 10	0 23	0 34	0 43	0 52	1 1	1 11	1 21	1 34	1 43	1 53	2 6	2 22	2 46	3 24
24	0 46	1 5	1 19	1 32	1 44	1 56	2 9	2 24	2 43	2 55	3 9	3 27	3 51	4 27	5 33
25	1 26	1 49	2 7	2 23	2 38	2 52	3 8	3 27	3 50	4 5	4 22	4 44	5 16	6 6	8 28
26	2 12	2 38	2 58	3 16	3 33	3 49	4 6	4 27	4 53	5 9	5 29	5 55	6 32	7 35	— —
27	3 4	3 30	3 52	4 10	4 27	4 44	5 2	5 24	5 51	6 7	6 28	6 56	7 34	8 41	— —
28	4 0	4 26	4 47	5 5	5 22	5 38	5 56	6 17	6 42	6 58	7 18	7 44	8 21	9 20	— —
29	4 59	5 23	5 42	5 58	6 14	6 29	6 45	7 4	7 27	7 41	7 59	8 22	8 53	9 41	11 27
30	6 0	6 20	6 36	6 50	7 3	7 16	7 30	7 46	8 5	8 17	8 32	8 50	9 15	9 50	10 52
31	7 0	7 16	7 29	7 40	7 50	8 0	8 11	8 23	8 38	8 47	8 58	9 12	9 30	9 56	10 35
Febr. 1	8 0	8 11	8 19	8 27	8 34	8 41	8 48	8 57	9 7	9 13	9 21	9 30	9 42	9 59	10 23
2	8 58	9 4	9 8	9 12	9 16	9 20	9 24	9 29	9 34	9 37	9 41	9 46	9 52	10 1	10 13
3	9 55	9 56	9 57	9 57	9 57	9 58	9 58	9 59	9 59	10 0	10 0	10 1	10 1	10 2	10 3
4	10 52	10 48	10 44	10 41	10 39	10 36	10 33	10 29	10 25	10 22	10 19	10 15	10 10	10 3	9 54
5	11 50	11 40	11 33	11 26	11 19	11 14	11 8	11 0	10 51	10 46	10 39	10 30	10 20	10 5	9 43
6	12 48	12 34	12 23	12 13	12 3	11 54	11 44	11 33	11 19	11 10	11 0	10 47	10 31	10 7	9 32
7	13 48	13 29	13 14	13 1	12 49	12 37	12 24	12 9	11 51	11 39	11 25	11 8	10 45	10 12	9 16
8	14 49	14 26	14 8	13 52	13 37	13 23	13 7	12 49	12 27	12 13	11 56	11 34	11 5	10 20	8 46
9	15 50	15 24	15 4	14 46	14 29	14 13	13 56	13 35	13 10	12 54	12 34	12 9	11 33	10 35	— —
10	16 49	16 22	16 1	15 42	15 25	15 8	14 49	14 28	14 1	13 44	13 23	12 55	12 16	11 8	— —
11	17 44	17 18	16 58	16 40	16 23	16 6	15 48	15 27	15 1	14 44	14 23	13 56	13 17	12 10	— —



Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Febr. 10	<sup>h</sup> 2 <sup>m</sup> 32	<sup>h</sup> 2 <sup>m</sup> 58	<sup>h</sup> 3 <sup>m</sup> 20	<sup>h</sup> 3 <sup>m</sup> 38	<sup>h</sup> 3 <sup>m</sup> 56	<sup>h</sup> 4 <sup>m</sup> 13	<sup>h</sup> 4 <sup>m</sup> 32	<sup>h</sup> 4 <sup>m</sup> 52	<sup>h</sup> 5 <sup>m</sup> 19	<sup>h</sup> 5 <sup>m</sup> 36	<sup>h</sup> 5 <sup>m</sup> 57	<sup>h</sup> 6 <sup>m</sup> 24	<sup>h</sup> 7 <sup>m</sup> 3	<sup>h</sup> 8 <sup>m</sup> 10	<sup>h</sup> — <sup>m</sup> —
11	3 35	4 0	4 20	4 37	4 54	5 10	5 27	5 47	6 12	6 27	6 46	7 11	7 45	8 40	—
12	4 45	5 7	5 24	5 39	5 53	6 6	6 21	6 38	6 59	7 12	7 28	7 48	8 15	8 55	10 9
13	5 58	6 15	6 28	6 39	6 50	7 0	7 11	7 24	7 40	7 50	8 2	8 16	8 35	9 3	9 46
14	7 13	7 23	7 31	7 38	7 45	7 52	7 59	8 7	8 17	8 23	8 30	8 39	8 51	9 7	9 30
15	8 27	8 31	8 34	8 36	8 38	8 41	8 44	8 47	8 51	8 53	8 56	9 0	9 4	9 10	9 18
16	9 40	9 37	9 35	9 33	9 31	9 30	9 28	9 26	9 24	9 22	9 20	9 18	9 16	9 12	9 8
17	10 52	10 43	10 35	10 29	10 23	10 17	10 11	10 4	9 56	9 51	9 45	9 37	9 28	9 15	8 56
18	12 2	11 48	11 35	11 25	11 15	11 6	10 56	10 44	10 30	10 22	10 11	9 58	9 41	9 18	8 43
19	13 11	12 51	12 35	12 21	12 8	11 56	11 43	11 27	11 7	10 55	10 41	10 23	9 59	9 24	8 25
20	14 17	13 53	13 34	13 18	13 2	12 47	12 31	12 12	11 49	11 35	11 17	10 54	10 23	9 35	7 49
21	15 19	14 53	14 32	14 14	13 57	13 40	13 22	13 1	12 35	12 19	11 59	11 33	10 56	9 56	—
22	16 15	15 48	15 26	15 8	14 51	14 34	14 16	13 54	13 27	13 10	12 49	12 22	11 43	10 35	—
23	17 4	16 38	16 18	16 0	15 43	15 27	15 10	14 49	14 23	14 8	13 47	13 20	12 43	11 39	—
24	17 46	17 24	17 5	16 49	16 34	16 20	16 4	15 45	15 22	15 7	14 49	14 26	13 54	13 3	—
25	18 23	18 4	17 49	17 35	17 22	17 10	16 57	16 41	16 22	16 10	15 55	15 36	15 10	14 32	13 21
26	18 55	18 40	18 29	18 18	18 8	17 59	17 48	17 37	17 22	17 12	17 1	16 47	16 28	16 2	15 17
27	19 24	19 14	19 6	18 59	18 52	18 46	18 39	18 31	18 21	18 15	18 7	17 58	17 46	17 29	17 3
28	19 50	19 45	19 41	19 38	19 34	19 31	19 28	19 24	19 19	19 16	19 12	19 8	19 2	18 54	18 42
März 1	20 15	20 15	20 15	20 15	20 15	20 16	20 16	20 16	20 16	20 16	20 16	20 16	20 16	20 17	20 18
2	20 41	20 45	20 50	20 53	20 56	21 0	21 4	21 8	21 13	21 16	21 20	21 25	21 32	21 40	21 53
3	21 7	21 16	21 24	21 32	21 39	21 45	21 52	22 0	22 11	22 17	22 25	22 34	22 47	23 5	23 32
4	21 35	21 49	22 1	22 11	22 21	22 31	22 42	22 54	23 9	23 19	23 30	23 44	—	—	—
5	22 6	22 25	22 40	22 54	23 7	23 19	23 32	23 48	—	—	—	—	—	0 3	0 31
6	22 43	23 5	23 24	23 40	23 55	—	—	—	0 8	0 20	0 35	0 54	1 21	2 0	3 14
7	23 25	23 51	—	—	—	0 10	0 26	0 44	1 8	1 23	1 41	2 4	2 37	3 30	—
8	—	—	0 11	0 29	0 46	1 3	1 21	1 41	2 7	2 23	2 44	3 11	3 49	4 55	—
9	0 16	0 42	1 4	1 22	1 40	1 57	2 16	2 38	3 5	3 21	3 43	4 11	4 51	6 3	—
10	1 14	1 40	2 1	2 19	2 37	2 53	3 11	3 32	3 58	4 14	4 35	5 2	5 39	6 42	—
11	2 19	2 43	3 2	3 18	3 34	3 49	4 5	4 24	4 47	5 1	5 19	5 42	6 13	7 1	8 52
12	3 31	3 50	4 5	4 19	4 32	4 44	4 57	5 12	5 31	5 42	5 56	6 14	6 38	7 11	8 8
13	4 45	4 59	5 10	5 19	5 27	5 36	5 46	5 57	6 10	6 18	6 27	6 39	6 55	7 17	7 50
14	6 1	6 8	6 14	6 19	6 24	6 28	6 33	6 39	6 45	6 49	6 54	7 1	7 9	7 20	7 35
15	7 16	7 17	7 17	7 17	7 18	7 18	7 18	7 19	7 19	7 19	7 20	7 20	7 21	7 22	7 23
16	8 32	8 26	8 20	8 16	8 12	8 8	8 3	7 58	7 53	7 49	7 45	7 40	7 33	7 24	7 11
17	9 46	9 34	9 23	9 14	9 6	8 58	8 49	8 39	8 27	8 20	8 11	8 0	7 46	7 27	6 59
18	10 59	10 40	10 25	10 13	10 1	9 49	9 36	9 22	9 4	8 53	8 40	8 24	8 2	7 31	6 41
19	12 8	11 45	11 27	11 11	10 56	10 41	10 26	10 8	9 45	9 32	9 15	8 53	8 24	7 39	6 13
20	13 13	12 47	12 26	12 8	11 51	11 35	11 18	10 57	10 31	10 15	9 55	9 30	8 54	7 56	—
21	14 12	13 45	13 23	13 4	12 46	12 29	12 11	11 49	11 22	11 5	10 44	10 17	9 37	8 28	—
22	15 3	14 37	14 16	13 58	13 40	13 23	13 5	12 44	12 17	12 1	11 40	11 13	10 34	9 26	—
23	15 47	15 23	15 4	14 48	14 32	14 16	13 59	13 40	13 16	13 0	12 41	12 17	11 42	10 46	—



Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Febr. 10	17 44	17 18	16 58	16 40	16 23	16 6	15 48	15 27	15 1	14 44	14 23	13 56	13 17	12 10	—
11	18 34	18 11	17 53	17 37	17 22	17 7	16 50	16 31	16 8	15 53	15 34	15 10	14 37	13 43	—
12	19 18	19 0	18 45	18 32	18 19	18 7	17 54	17 39	17 19	17 6	16 52	16 34	16 8	15 30	14 19
13	19 57	19 45	19 34	19 25	19 16	19 7	18 58	18 47	18 33	18 25	18 15	18 2	17 45	17 21	16 42
14	20 33	20 26	20 20	20 15	20 10	20 6	20 1	19 55	19 48	19 42	19 38	19 31	19 22	19 10	18 52
15	21 6	21 5	21 5	21 4	21 4	21 3	21 3	21 2	21 1	21 1	21 0	21 0	20 59	20 57	20 55
16	21 38	21 44	21 48	21 52	21 56	22 0	22 4	22 8	22 14	22 18	22 22	22 27	22 33	22 43	22 57
17	22 12	22 23	22 32	22 41	22 49	22 56	23 4	23 14	23 26	23 32	23 41	23 53	—	—	—
18	22 47	23 4	23 18	23 29	23 40	23 52	—	—	—	—	—	—	0 7	0 28	1 0
19	23 26	23 48	—	—	—	—	0 4	0 18	0 35	0 46	0 59	1 16	1 38	2 11	3 7
20	—	—	0 5	0 20	0 34	0 48	1 3	1 21	1 43	1 57	2 14	2 35	3 5	3 51	5 36
21	0 10	0 35	0 55	1 12	1 29	1 45	2 2	2 22	2 47	3 3	3 23	3 48	4 24	5 24	—
22	0 59	1 26	1 47	2 5	2 23	2 40	2 58	3 19	3 46	4 3	4 24	4 51	5 30	6 37	—
23	1 53	2 20	2 41	2 59	3 16	3 33	3 52	4 13	4 39	4 55	5 16	5 43	6 21	7 24	—
24	2 51	3 16	3 35	3 53	4 9	4 24	4 41	5 1	5 25	5 40	5 59	6 23	6 56	7 48	—
25	3 51	4 12	4 29	4 44	4 58	5 12	5 27	5 43	6 4	6 17	6 33	6 53	7 20	8 0	9 14
26	4 51	5 8	5 22	5 34	5 45	5 56	6 8	6 22	6 38	6 48	7 1	7 17	7 37	8 6	8 53
27	5 50	6 3	6 13	6 22	6 30	6 38	6 46	6 57	7 9	7 16	7 25	7 36	7 50	8 10	8 39
28	6 49	6 56	7 2	7 8	7 13	7 18	7 23	7 29	7 36	7 41	7 46	7 52	8 0	8 12	8 28
März 1	7 47	7 49	7 51	7 53	7 55	7 56	7 58	8 0	8 2	8 3	8 5	8 7	8 9	8 13	8 18
2	8 44	8 41	8 39	8 37	8 35	8 34	8 32	8 30	8 27	8 25	8 23	8 21	8 18	8 14	8 8
3	9 41	9 33	9 27	9 21	9 16	9 12	9 7	9 0	8 52	8 48	8 42	8 36	8 27	8 15	7 58
4	10 39	10 26	10 16	10 7	9 59	9 51	9 42	9 32	9 19	9 12	9 3	8 51	8 37	8 17	7 46
5	11 37	11 20	11 6	10 54	10 43	10 32	10 20	10 6	9 49	9 39	9 26	9 10	8 49	8 20	7 32
6	12 37	12 15	11 58	11 43	11 29	11 15	11 0	10 44	10 23	10 10	9 54	9 33	9 6	8 25	7 9
7	13 36	13 11	12 52	12 35	12 19	12 3	11 46	11 26	11 2	10 47	10 28	10 3	9 30	8 36	—
8	14 34	14 8	13 47	13 28	13 11	12 54	12 35	12 14	11 48	11 31	11 10	10 43	10 4	8 58	—
9	15 30	15 3	14 42	14 24	14 6	13 49	13 30	13 9	12 42	12 25	12 3	11 35	10 55	9 44	—
10	16 22	15 57	15 37	15 20	15 3	14 47	14 29	14 9	13 44	13 28	13 8	12 42	12 5	11 2	—
11	17 8	16 47	16 30	16 15	16 1	15 47	15 32	15 15	14 53	14 39	14 22	14 0	13 30	12 43	10 56
12	17 49	17 33	17 20	17 9	16 58	16 47	16 35	16 22	16 6	15 55	15 42	15 26	15 5	14 33	13 39
13	18 26	18 16	18 8	18 1	17 54	17 47	17 40	17 31	17 21	17 14	17 6	16 56	16 43	16 25	15 57
14	19 1	18 57	18 54	18 52	18 50	18 47	18 44	18 41	18 37	18 34	18 31	18 28	18 23	18 16	18 6
15	19 34	19 37	19 39	19 41	19 43	19 45	19 47	19 49	19 52	19 54	19 56	19 58	20 2	20 6	20 13
16	20 8	20 17	20 25	20 31	20 37	20 44	20 51	20 58	21 7	21 13	21 20	21 28	21 40	21 56	22 20
17	20 44	20 59	21 11	21 22	21 32	21 42	21 53	22 5	22 21	22 31	22 42	22 56	23 16	23 44	—
18	21 23	21 43	22 0	22 14	22 28	22 41	22 55	23 11	23 32	23 45	—	—	—	—	0 32
19	22 6	22 30	22 50	23 7	23 23	23 39	23 56	—	—	—	0 1	0 22	0 49	1 32	2 58
20	22 55	23 21	23 43	—	—	—	—	0 15	0 40	0 55	1 14	1 39	2 14	3 11	—
21	23 48	—	—	0 1	0 18	0 35	0 54	1 15	1 42	1 59	2 20	2 47	3 26	4 35	—
22	—	0 15	0 37	0 55	1 13	1 30	1 49	2 10	2 37	2 54	3 15	3 43	4 22	5 30	—
23	0 45	1 11	1 31	1 49	2 6	2 22	2 40	3 0	3 25	3 41	4 1	4 26	5 1	5 58	—



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
März 23	15 47	15 23	15 4	14 48	14 32	14 16	13 59	13 40	13 16	13 0	12 41	12 17	11 42	10 46	h m	
24	16 25	16 5	15 48	15 34	15 20	15 7	14 53	14 36	14 15	14 2	13 46	13 26	12 58	12 15	10 48	
25	16 58	16 42	16 29	16 17	16 6	15 56	15 45	15 31	15 15	15 5	14 52	14 36	14 15	13 45	12 53	
26	17 27	17 16	17 7	16 58	16 50	16 43	16 35	16 25	16 14	16 7	15 58	15 47	15 33	15 12	14 41	
27	17 54	17 47	17 42	17 37	17 33	17 29	17 24	17 19	17 12	17 8	17 3	16 57	16 49	16 38	16 21	
28	18 19	18 18	18 16	18 15	18 14	18 13	18 12	18 11	18 9	18 8	18 7	18 6	18 4	18 2	17 58	
29	18 44	18 47	18 50	18 53	18 55	18 57	19 0	19 3	19 7	19 9	19 12	19 15	19 19	19 25	19 34	
30	19 10	19 18	19 25	19 31	19 37	19 42	19 48	19 55	20 4	20 10	20 16	20 24	20 35	20 50	21 12	
31	19 37	19 50	20 1	20 10	20 19	20 28	20 38	20 48	21 2	21 11	21 21	21 34	21 51	22 16	22 55	
April 1	20 7	20 24	20 39	20 51	21 3	21 15	21 28	21 43	22 1	22 13	22 27	22 44	23 9	23 44	—	
2	20 41	21 2	21 20	21 35	21 50	22 4	22 20	22 38	23 0	23 14	23 32	23 54	—	—	0 49	
3	21 20	21 45	22 5	22 23	22 39	22 55	23 12	23 33	23 59	—	—	—	—	0 26	1 15	
4	22 6	22 33	22 55	23 14	23 31	23 48	—	—	—	0 15	0 35	1 2	1 39	2 42	—	
5	23 0	23 27	23 49	—	—	—	0 7	0 29	0 56	1 13	1 35	2 3	2 44	3 57	—	
6	—	—	—	0 7	0 25	0 42	1 1	1 23	1 50	2 7	2 29	2 56	3 36	4 47	—	
7	0 1	0 26	0 46	1 4	1 20	1 36	1 53	2 14	2 39	2 54	3 14	3 39	4 14	5 11	—	
8	1 8	1 29	1 47	2 2	2 16	2 30	2 45	3 2	3 23	3 36	3 53	4 13	4 41	5 22	6 40	
9	2 19	2 36	2 49	3 0	3 11	3 22	3 34	3 47	4 3	4 13	4 25	4 40	5 0	5 28	6 13	
10	3 32	3 43	3 52	3 59	4 6	4 13	4 21	4 29	4 39	4 45	4 53	5 2	5 15	5 31	5 55	
11	4 48	4 52	4 55	4 58	5 1	5 3	5 6	5 9	5 13	5 15	5 18	5 22	5 27	5 33	5 42	
12	6 4	6 1	5 58	5 56	5 54	5 53	5 51	5 49	5 46	5 45	5 43	5 41	5 38	5 34	5 29	
13	7 20	7 10	7 3	6 56	6 49	6 43	6 36	6 29	6 20	6 15	6 8	6 0	5 50	5 36	5 16	
14	8 36	8 20	8 7	7 56	7 45	7 35	7 24	7 12	6 57	6 48	6 36	6 23	6 4	5 39	5 0	
15	9 50	9 29	9 11	8 57	8 43	8 29	8 15	7 58	7 37	7 24	7 9	6 49	6 23	5 45	4 36	
16	11 0	10 35	10 14	9 57	9 40	9 24	9 7	8 47	8 22	8 7	7 48	7 23	6 50	5 56	—	
17	12 4	11 36	11 15	10 56	10 38	10 21	10 2	9 40	9 13	8 57	8 35	8 7	7 28	6 20	—	
18	13 0	12 32	12 11	11 52	11 34	11 17	10 58	10 36	10 9	9 52	9 30	9 2	8 22	7 9	—	
19	13 47	13 22	13 2	12 44	12 27	12 11	11 54	11 33	11 7	10 51	10 31	10 5	9 28	8 25	—	
20	14 27	14 5	13 48	13 32	13 17	13 3	12 48	12 30	12 8	11 54	11 36	11 14	10 43	9 55	7 55	
21	15 2	14 44	14 30	14 17	14 5	13 53	13 40	13 26	13 8	12 57	12 43	12 25	12 1	11 26	10 23	
22	15 32	15 18	15 8	14 58	14 49	14 41	14 32	14 21	14 7	13 59	13 49	13 36	13 20	12 56	12 17	
23	15 59	15 50	15 44	15 38	15 32	15 27	15 21	15 14	15 6	15 1	14 54	14 47	14 36	14 22	14 1	
24	16 24	16 21	16 18	16 16	16 13	16 11	16 9	16 6	16 3	16 1	15 59	15 56	15 52	15 47	15 39	
25	16 49	16 50	16 52	16 53	16 54	16 56	16 58	16 59	17 0	17 1	17 3	17 5	17 7	17 11	17 15	
26	17 14	17 20	17 26	17 31	17 36	17 40	17 45	17 51	17 58	18 3	18 8	18 14	18 23	18 35	18 53	
27	17 40	17 51	18 1	18 10	18 18	18 25	18 34	18 44	18 56	19 3	19 13	19 24	19 40	20 1	20 35	
28	18 9	18 25	18 39	18 50	19 1	19 12	19 24	19 38	19 55	20 6	20 19	20 35	20 57	21 30	22 25	
29	18 41	19 2	19 19	19 34	19 48	20 1	20 15	20 33	20 55	21 8	21 25	21 46	22 16	23 1	—	
30	19 19	19 43	20 3	20 20	20 36	20 52	21 9	21 29	21 54	22 10	22 30	22 55	23 32	—	0 41	
Mai 1	20 3	20 29	20 51	21 10	21 27	21 44	22 3	22 25	22 52	23 9	23 31	23 59	—	0 32	—	
2	20 53	21 21	21 43	22 2	22 20	22 37	22 56	23 18	23 46	—	—	—	—	0 40	1 54	
3	21 51	22 17	22 38	22 57	23 14	23 31	23 49	—	—	0 2	0 26	0 55	1 36	2 52	—	



Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
März	23	h m 0 45	h m 1 11	h m 1 31	h m 1 49	h m 2 6	h m 2 22	h m 2 40	h m 3 0	h m 3 25	h m 3 41	h m 4 1	h m 4 26	h m 5 1	h m 5 58	h m — —
	24	1 44	2 7	2 25	2 41	2 56	3 10	3 26	3 44	4 6	4 20	4 37	4 58	5 28	6 12	7 40
	25	2 44	3 3	3 18	3 31	3 43	3 55	4 8	4 23	4 41	4 52	5 6	5 23	5 46	6 18	7 13
	26	3 43	3 57	4 9	4 19	4 28	4 37	4 47	4 58	5 12	5 20	5 30	5 43	5 59	6 22	6 56
	27	4 42	4 51	4 59	5 5	5 11	5 17	5 24	5 31	5 40	5 45	5 52	6 0	6 10	6 24	6 44
	28	5 40	5 44	5 47	5 50	5 53	5 56	5 59	6 2	6 6	6 8	6 11	6 14	6 19	6 25	6 33
	29	6 37	6 36	6 35	6 35	6 34	6 33	6 33	6 32	6 31	6 30	6 29	6 28	6 27	6 25	6 23
	30	7 34	7 28	7 23	7 19	7 15	7 11	7 7	7 2	6 55	6 52	6 48	6 42	6 35	6 26	6 12
	31	8 32	8 21	8 12	8 4	7 56	7 49	7 42	7 33	7 22	7 15	7 7	6 57	6 44	6 27	6 1
	April	1	9 30	9 14	9 2	8 50	8 40	8 30	8 19	8 6	7 50	7 41	7 29	7 14	6 56	6 29
2		10 29	10 9	9 53	9 39	9 25	9 12	8 58	8 42	8 22	8 9	7 54	7 35	7 10	6 32	5 26
3		11 29	11 4	10 45	10 29	10 13	9 58	9 41	9 22	8 59	8 44	8 25	8 2	7 30	6 40	4 28
4		12 26	12 0	11 39	11 21	11 4	10 47	10 28	10 7	9 41	9 25	9 4	8 37	7 59	6 55	— —
5		13 22	12 55	12 33	12 14	11 56	11 39	11 20	10 58	10 31	10 14	9 52	9 23	8 42	7 29	— —
6		14 13	13 47	13 26	13 8	12 51	12 34	12 15	11 54	11 28	11 11	10 50	10 22	9 42	8 32	— —
7		15 0	14 37	14 18	14 2	13 46	13 31	13 15	12 56	12 32	12 17	11 58	11 33	10 59	10 4	— —
8		15 42	15 23	15 8	14 55	14 42	14 30	14 17	14 1	13 41	13 29	13 14	12 54	12 28	11 49	10 34
9		16 20	16 6	15 56	15 46	15 37	15 28	15 18	15 7	14 53	14 45	14 34	14 21	14 3	13 38	12 57
10		16 54	16 47	16 42	16 37	16 32	16 27	16 21	16 15	16 8	16 3	15 57	15 50	15 41	15 28	15 9
11		17 28	17 27	17 27	17 26	17 26	17 25	17 25	17 24	17 23	17 23	17 22	17 22	17 20	17 19	17 17
12		18 1	18 7	18 12	18 16	18 20	18 24	18 29	18 34	18 39	18 43	18 48	18 53	19 0	19 10	19 25
13		18 37	18 49	18 59	19 8	19 16	19 24	19 33	19 43	19 56	20 4	20 13	20 25	20 41	21 3	21 38
14		19 14	19 33	19 47	20 0	20 13	20 25	20 38	20 53	21 11	21 23	21 37	21 55	22 19	22 56	— —
15		19 57	20 20	20 39	20 55	21 10	21 25	21 41	22 0	22 24	22 38	22 56	23 20	23 52	— —	0 2
16		20 45	21 12	21 33	21 51	22 8	22 25	22 43	23 4	23 31	23 48	— —	— —	— —	0 44	— —
17		21 39	22 6	22 28	22 47	23 5	23 23	23 42	— —	— —	— —	0 9	0 35	1 15	2 22	— —
18	22 36	23 3	23 24	23 43	— —	— —	— —	0 3	0 31	0 48	1 10	1 38	2 19	3 32	— —	
19	23 36	— —	— —	— —	0 0	0 17	0 35	0 56	1 23	1 39	2 0	2 27	3 5	4 8	— —	
20	— —	0 1	0 20	0 37	0 53	1 8	1 24	1 43	2 7	2 22	2 40	3 3	3 35	4 25	6 26	
21	0 37	0 57	1 13	1 28	1 41	1 54	2 8	2 24	2 44	2 56	3 11	3 30	3 55	4 32	5 37	
22	1 37	1 53	2 5	2 17	2 28	2 37	2 48	3 1	3 16	3 26	3 37	3 51	4 10	4 36	5 16	
23	2 35	2 47	2 55	3 3	3 11	3 18	3 26	3 34	3 44	3 51	3 59	4 8	4 20	4 37	5 2	
24	3 33	3 39	3 44	3 48	3 52	3 56	4 0	4 5	4 10	4 14	4 18	4 23	4 29	4 38	4 50	
25	4 31	4 31	4 32	4 33	4 33	4 34	4 34	4 35	4 35	4 36	4 36	4 37	4 37	4 38	4 39	
26	5 28	5 24	5 20	5 17	5 14	5 11	5 8	5 4	5 0	4 57	4 54	4 50	4 45	4 38	4 28	
27	6 26	6 16	6 8	6 2	5 56	5 49	5 42	5 35	5 26	5 20	5 13	5 4	4 53	4 39	4 17	
28	7 24	7 10	6 58	6 48	6 38	6 29	6 19	6 7	5 53	5 44	5 34	5 21	5 4	4 39	4 2	
29	8 24	8 4	7 49	7 36	7 24	7 11	6 57	6 42	6 23	6 12	5 58	5 40	5 16	4 42	3 43	
30	9 23	9 0	8 41	8 25	8 10	7 55	7 39	7 21	6 58	6 44	6 27	6 4	5 34	4 47	3 4	
Mai	1	10 22	9 56	9 35	9 17	9 0	8 43	8 25	8 5	7 39	7 23	7 2	6 36	5 59	4 58	— —
	2	11 18	10 50	10 29	10 10	9 52	9 34	9 15	8 53	8 26	8 8	7 46	7 18	6 37	5 22	— —
	3	12 10	11 43	11 22	11 3	10 46	10 28	10 9	9 47	9 20	9 2	8 40	8 12	7 30	6 15	— —



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Mai	3	21 51	22 17	22 38	22 57	23 14	23 31	23 49	— —	— —	0 2	0 26	0 55	1 36	2 52	— —
	4	22 54	23 17	23 36	23 53	— —	— —	— —	0 10	0 36	0 52	1 13	1 40	2 18	3 22	— —
	5	— —	— —	— —	— —	0 8	0 23	0 39	0 58	1 21	1 35	1 53	2 16	2 47	3 35	5 23
	6	0 1	0 20	0 36	0 49	1 1	1 14	1 27	1 42	2 1	2 12	2 26	2 44	3 7	3 41	4 37
	7	1 12	1 25	1 36	1 46	1 55	2 3	2 12	2 23	2 36	2 44	2 54	3 6	3 22	3 44	4 17
	8	2 24	2 31	2 37	2 42	2 47	2 52	2 57	3 3	3 10	3 14	3 19	3 26	3 34	3 45	4 2
	9	3 37	3 38	3 38	3 39	3 39	3 40	3 40	3 41	3 42	3 42	3 43	3 44	3 45	3 47	3 48
	10	4 52	4 46	4 41	4 37	4 33	4 29	4 25	4 20	4 15	4 11	4 7	4 2	3 56	3 48	3 35
	11	6 8	5 55	5 45	5 36	5 27	5 19	5 11	5 1	4 49	4 42	4 33	4 22	4 8	3 49	3 21
	12	7 24	7 5	6 50	6 37	6 25	6 12	5 59	5 45	5 27	5 16	5 3	4 46	4 24	3 52	3 1
	13	8 38	8 14	7 55	7 38	7 23	7 8	6 52	6 33	6 10	5 56	5 38	5 16	4 46	3 59	2 22
	14	9 47	9 20	8 58	8 40	8 22	8 5	7 47	7 26	6 59	6 43	6 22	5 56	5 17	4 15	— —
	15	10 49	10 21	9 59	9 39	9 21	9 3	8 44	8 22	7 54	7 37	7 15	6 46	6 5	4 50	— —
	16	11 41	11 15	10 54	10 35	10 18	10 1	9 43	9 21	8 54	8 38	8 16	7 48	7 9	5 58	— —
	17	12 26	12 2	11 43	11 27	11 11	10 55	10 39	10 20	9 56	9 41	9 22	8 57	8 23	7 28	— —
	18	13 3	12 44	12 28	12 14	12 0	11 47	11 34	11 18	10 58	10 45	10 29	10 10	9 43	9 2	7 43
	19	13 34	13 20	13 8	12 57	12 47	12 37	12 26	12 13	11 58	11 49	11 37	11 23	11 3	10 35	9 48
	20	14 3	13 53	13 45	13 37	13 30	13 24	13 17	13 8	12 58	12 51	12 43	12 34	12 21	12 3	11 36
	21	14 28	14 23	14 19	14 16	14 13	14 9	14 5	14 1	13 56	13 53	13 49	13 44	13 38	13 29	13 17
	22	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53	14 53
23	15 18	15 23	15 27	15 30	15 33	15 37	15 41	15 45	15 50	15 53	15 57	16 2	16 9	16 17	16 30	
24	15 43	15 53	16 2	16 9	16 16	16 22	16 29	16 38	16 48	16 55	17 3	17 12	17 25	17 43	18 11	
25	16 11	16 26	16 38	16 49	16 59	17 9	17 20	17 32	17 47	17 57	18 9	18 23	18 43	19 12	19 59	
26	16 42	17 1	17 17	17 31	17 44	17 57	18 11	18 27	18 47	19 0	19 16	19 35	20 2	20 43	22 4	
27	17 18	17 42	18 0	18 17	18 33	18 48	19 4	19 23	19 48	20 3	20 22	20 46	21 21	22 17	— —	
28	18 0	18 27	18 48	19 6	19 23	19 40	19 58	20 20	20 47	21 3	21 25	21 53	22 33	23 45	— —	
29	18 49	19 17	19 39	19 58	20 16	20 34	20 53	21 15	21 43	22 0	22 23	22 52	23 35	— —	— —	
30	19 45	20 12	20 34	20 53	21 10	21 27	21 46	22 8	22 35	22 52	23 14	23 42	— —	0 54	— —	
31	20 46	21 11	21 31	21 48	22 4	22 20	22 37	22 57	23 21	23 36	23 56	— —	0 22	1 32	— —	
Juni	1	21 52	22 13	22 29	22 44	22 58	23 11	23 25	23 42	— —	— —	— —	0 20	0 54	1 47	— —
	2	23 0	23 16	23 28	23 39	23 49	23 59	— —	— —	0 2	0 14	0 30	0 50	1 16	1 54	3 3
	3	— —	— —	— —	— —	— —	— —	— —	— —	0 10	0 23	0 38	0 59	1 13	1 57	2 38
	4	0 9	0 19	0 27	0 34	0 41	0 47	0 53	1 1	1 11	1 17	1 24	1 32	1 43	1 59	2 21
	5	1 20	1 24	1 26	1 29	1 31	1 33	1 36	1 39	1 42	1 44	1 47	1 50	1 54	1 59	2 8
	6	2 32	2 29	2 26	2 24	2 22	2 20	2 18	2 16	2 13	2 12	2 10	2 7	2 4	2 0	1 55
	7	3 45	3 35	3 28	3 21	3 14	3 8	3 2	2 54	2 45	2 39	2 33	2 25	2 15	2 1	1 41
	8	4 59	4 43	4 30	4 19	4 8	3 58	3 47	3 35	3 20	3 11	3 0	2 46	2 28	2 3	1 24
	9	6 13	5 52	5 34	5 20	5 6	4 52	4 38	4 21	4 0	3 47	3 31	3 12	2 46	2 7	0 58
	10	7 25	6 59	6 39	6 21	6 4	5 48	5 31	5 10	4 45	4 30	4 11	3 46	3 11	2 17	— —
	11	8 31	8 4	7 41	7 22	7 4	6 46	6 27	6 6	5 38	5 21	4 59	4 31	3 50	2 40	— —
	12	9 30	9 2	8 40	8 21	8 3	7 45	7 26	7 4	6 36	6 19	5 57	5 28	4 47	3 31	— —
	13	10 19	9 54	9 34	9 16	8 59	8 43	8 26	8 5	7 39	7 23	7 2	6 36	5 59	4 55	— —



# Monduntergang 1945

353\*

Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Mai	3	12 10	11 43	11 22	11 3	10 46	10 28	10 9	9 47	9 20	9 2	8 40	8 12	7 30	6 15	—
	4	12 58	12 33	12 13	11 56	11 39	11 23	11 6	10 45	10 20	10 4	9 44	9 18	8 40	7 37	—
	5	13 40	13 19	13 2	12 47	12 33	12 19	12 4	11 47	11 25	11 12	10 55	10 33	10 3	9 17	7 32
	6	14 18	14 2	13 49	13 38	13 27	13 16	13 4	12 51	12 34	12 24	12 11	11 55	11 34	11 2	10 9
	7	14 52	14 42	14 33	14 26	14 19	14 12	14 5	13 56	13 45	13 39	13 31	13 21	13 7	12 49	12 20
	8	15 24	15 20	15 17	15 14	15 11	15 9	15 6	15 2	14 58	14 55	14 52	14 48	14 43	14 36	14 25
	9	15 56	15 59	16 1	16 3	16 5	16 6	16 8	16 10	16 12	16 14	16 16	16 18	16 21	16 24	16 31
	10	16 30	16 39	16 46	16 53	16 59	17 4	17 10	17 18	17 28	17 33	17 40	17 49	18 0	18 15	18 39
	11	17 6	17 21	17 33	17 44	17 54	18 4	18 15	18 28	18 44	18 53	19 5	19 20	19 40	20 9	20 57
	12	17 46	18 7	18 24	18 38	18 52	19 6	19 21	19 38	19 59	20 13	20 29	20 49	21 18	22 3	23 37
	13	18 32	18 57	19 17	19 35	19 51	20 8	20 25	20 45	21 11	21 27	21 47	22 13	22 50	23 51	—
	14	19 24	19 52	20 14	20 33	20 51	21 8	21 27	21 49	22 17	22 34	22 56	23 25	—	—	—
	15	20 22	20 50	21 12	21 31	21 49	22 6	22 25	22 47	23 15	23 31	23 53	—	—	0 6	1 20
	16	21 23	21 49	22 9	22 27	22 44	23 0	23 17	23 38	—	—	—	—	0 22	1 2	2 13
	17	22 25	22 48	23 5	23 21	23 36	23 50	—	—	0 3	0 19	0 39	1 4	1 39	2 35	—
	18	23 27	23 45	23 59	—	—	—	0 5	0 23	0 44	0 57	1 14	1 35	2 3	2 46	4 6
	19	—	—	—	0 12	0 24	0 35	0 47	1 1	1 19	1 29	1 42	1 58	2 19	2 50	3 39
	20	0 27	0 40	0 50	1 0	1 9	1 17	1 26	1 36	1 48	1 56	2 5	2 16	2 31	2 51	3 22
	21	1 26	1 34	1 40	1 46	1 51	1 56	2 1	2 7	2 15	2 19	2 25	2 32	2 40	2 52	3 9
	22	2 23	2 26	2 28	2 30	2 32	2 34	2 36	2 38	2 40	2 41	2 43	2 45	2 48	2 52	2 57
	23	3 20	3 18	3 16	3 14	3 12	3 11	3 9	3 7	3 4	3 3	3 1	2 59	2 56	2 52	2 46
	24	4 18	4 10	4 4	3 59	3 54	3 48	3 43	3 37	3 29	3 25	3 19	3 12	3 4	2 52	2 34
	25	5 17	5 4	4 53	4 44	4 36	4 28	4 19	4 8	3 56	3 49	3 39	3 27	3 13	2 52	2 21
	26	6 16	5 58	5 44	5 32	5 20	5 9	4 57	4 42	4 25	4 15	4 2	3 45	3 24	2 53	2 3
	27	7 16	6 54	6 37	6 21	6 6	5 53	5 38	5 20	4 59	4 46	4 29	4 8	3 39	2 57	1 34
	28	8 16	7 50	7 30	7 13	6 56	6 40	6 23	6 2	5 37	5 21	5 2	4 37	4 1	3 4	—
	29	9 14	8 47	8 25	8 6	7 48	7 31	7 13	6 50	6 22	6 5	5 43	5 15	4 35	3 22	—
	30	10 9	9 41	9 19	9 0	8 42	8 24	8 5	7 43	7 15	6 58	6 35	6 5	5 23	4 4	—
	31	10 57	10 31	10 11	9 53	9 36	9 19	9 1	8 40	8 13	7 56	7 35	7 8	6 28	5 19	—
Juni	1	11 41	11 18	11 0	10 45	10 30	10 15	9 59	9 40	9 17	9 2	8 44	8 21	7 48	6 55	—
	2	12 19	12 1	11 47	11 34	11 22	11 10	10 58	10 43	10 24	10 12	9 58	9 40	9 16	8 39	7 33
	3	12 54	12 41	12 31	12 22	12 14	12 6	11 57	11 46	11 33	11 25	11 15	11 3	10 47	10 23	9 47
	4	13 25	13 19	13 14	13 9	13 4	13 0	12 56	12 50	12 43	12 39	12 34	12 27	12 19	12 8	11 51
	5	13 56	13 56	13 56	13 55	13 55	13 55	13 55	13 54	13 54	13 53	13 53	13 53	13 52	13 51	13 50
	6	14 27	14 33	14 38	14 43	14 47	14 51	14 55	15 0	15 6	15 9	15 14	15 20	15 27	15 37	15 53
	7	15 1	15 13	15 23	15 32	15 40	15 48	15 57	16 7	16 20	16 28	16 37	16 49	17 4	17 27	18 2
	8	15 37	15 56	16 10	16 23	16 35	16 47	17 0	17 15	17 34	17 46	18 0	18 18	18 42	19 19	20 25
	9	16 20	16 43	17 2	17 18	17 33	17 48	18 5	18 24	18 47	19 2	19 21	19 44	20 17	21 11	—
	10	17 9	17 36	17 57	18 16	18 33	18 50	19 8	19 30	19 57	20 14	20 35	21 3	21 43	22 53	—
	11	18 5	18 33	18 55	19 15	19 33	19 51	20 10	20 32	21 0	21 17	21 40	22 9	22 50	—	—
	12	19 5	19 33	19 54	20 13	20 31	20 48	21 6	21 27	21 54	22 11	22 32	22 59	23 37	0 6	—
	13	20 9	20 33	20 52	21 9	21 25	21 40	21 57	22 16	22 39	22 54	23 12	23 35	—	0 41	—







Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Juni 13	h m 20 9	h m 20 33	h m 20 52	h m 21 9	h m 21 25	h m 21 40	h m 21 57	h m 22 16	h m 22 39	h m 22 54	h m 23 12	h m 23 35	h m — —	h m 0 41	h m — —
14	21 13	21 33	21 49	22 3	22 16	22 29	22 42	22 58	23 17	23 29	23 44	— —	0 7	0 56	2 50
15	22 15	22 30	22 42	22 53	23 3	23 13	23 23	23 35	23 49	23 58	— —	0 2	0 27	1 2	2 2
16	23 15	23 25	23 33	23 40	23 47	23 53	— —	— —	— —	— —	0 9	0 23	0 40	1 5	1 42
17	— —	— —	— —	— —	— —	— —	0 0	0 8	0 18	0 24	0 31	0 39	0 50	1 5	1 28
18	0 14	0 18	0 22	0 26	0 29	0 32	0 35	0 39	0 44	0 46	0 49	0 53	0 59	1 6	1 15
19	1 11	1 11	1 10	1 10	1 10	1 9	1 9	1 9	1 8	1 8	1 7	1 7	1 6	1 5	1 4
20	2 9	2 3	1 58	1 54	1 50	1 47	1 43	1 38	1 32	1 29	1 25	1 20	1 14	1 5	0 52
21	3 7	2 56	2 47	2 39	2 32	2 25	2 18	2 9	1 58	1 52	1 44	1 34	1 22	1 5	0 39
22	4 6	3 50	3 37	3 26	3 15	3 5	2 55	2 42	2 26	2 16	2 5	1 51	1 32	1 6	0 24
23	5 6	4 45	4 29	4 15	4 1	3 48	3 34	3 18	2 58	2 46	2 30	2 11	1 46	1 8	0 1
24	6 6	5 42	5 23	5 6	4 50	4 34	4 18	3 59	3 35	3 20	3 1	2 37	2 5	1 13	— —
25	7 6	6 39	6 18	5 59	5 41	5 24	5 6	4 44	4 18	4 2	3 40	3 12	2 33	1 27	— —
26	8 3	7 35	7 13	6 54	6 36	6 18	5 59	5 36	5 8	4 51	4 28	3 59	3 16	1 58	— —
27	8 54	8 28	8 6	7 48	7 30	7 13	6 55	6 33	6 5	5 48	5 26	4 58	4 17	3 2	— —
28	9 40	9 17	8 58	8 41	8 25	8 10	7 53	7 33	7 9	6 54	6 34	6 9	5 34	4 35	— —
29	10 21	10 2	9 46	9 32	9 19	9 6	8 52	8 36	8 16	8 4	7 48	7 28	7 1	6 19	4 58
30	10 57	10 43	10 31	10 21	10 11	10 2	9 52	9 40	9 25	9 16	9 4	8 50	8 31	8 4	7 20
Juli															
1	11 29	11 20	11 14	11 8	11 2	10 56	10 50	10 43	10 34	10 28	10 22	10 14	10 3	9 48	9 26
2	11 59	11 57	11 55	11 54	11 52	11 50	11 48	11 46	11 44	11 42	11 40	11 38	11 35	11 31	11 25
3	12 29	12 33	12 36	12 39	12 42	12 44	12 47	12 50	12 54	12 56	12 59	13 3	13 7	13 14	13 23
4	13 1	13 11	13 19	13 26	13 33	13 40	13 47	13 55	14 5	14 11	14 19	14 29	14 41	14 59	15 26
5	13 35	13 51	14 4	14 15	14 26	14 36	14 47	15 1	15 17	15 27	15 40	15 55	16 16	16 46	17 37
6	14 14	14 35	14 52	15 7	15 21	15 35	15 50	16 7	16 29	16 42	16 59	17 20	17 50	18 36	20 17
7	14 59	15 24	15 44	16 2	16 19	16 35	16 52	17 13	17 39	17 55	18 15	18 42	19 18	20 21	— —
8	15 50	16 18	16 40	16 59	17 17	17 35	17 54	18 16	18 44	19 2	19 24	19 52	20 34	21 49	— —
9	16 49	17 17	17 39	17 58	18 16	18 34	18 53	19 14	19 42	19 59	20 21	20 49	21 30	22 40	— —
10	17 51	18 17	18 38	18 55	19 12	19 29	19 46	20 6	20 31	20 47	21 7	21 32	22 7	23 2	— —
11	18 56	19 18	19 35	19 51	20 6	20 19	20 34	20 52	21 13	21 26	21 42	22 3	22 31	23 12	— —
12	20 0	20 17	20 31	20 43	20 55	21 6	21 18	21 31	21 48	21 58	22 11	22 26	22 47	23 16	0 29
13	21 2	21 14	21 24	21 32	21 40	21 48	21 56	22 6	22 18	22 26	22 34	22 45	22 58	23 17	0 46
14	22 2	22 8	22 14	22 19	22 23	22 28	22 33	22 39	22 45	22 49	22 54	23 0	23 7	23 18	23 33
15	23 0	23 2	23 3	23 4	23 5	23 6	23 7	23 9	23 10	23 11	23 12	23 14	23 15	23 18	23 21
16	23 58	23 54	23 51	23 49	23 46	23 44	23 42	23 39	23 36	23 33	23 30	23 27	23 23	23 17	23 9
17	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	23 54	23 48	23 41	23 31	23 17
18	0 55	0 47	0 39	0 33	0 27	0 22	0 16	0 9	0 0	— —	— —	23 56	23 40	23 17	22 43
19	1 54	1 40	1 29	1 19	1 10	1 1	0 51	0 40	0 27	0 18	0 8	— —	23 52	23 19	22 23
20	2 53	2 34	2 20	2 6	1 54	1 42	1 30	1 15	0 57	0 46	0 32	0 14	— —	23 23	21 48
21	3 53	3 30	3 12	2 56	2 41	2 27	2 11	1 53	1 31	1 17	0 59	0 38	0 8	23 32	— —
22	4 54	4 27	4 7	3 49	3 32	3 15	2 57	2 37	2 11	1 55	1 35	1 8	0 32	23 54	— —
23	5 52	5 24	5 2	4 43	4 25	4 7	3 48	3 26	2 58	2 41	2 19	1 50	1 9	— —	— —
24	6 46	6 19	5 57	5 38	5 20	5 3	4 44	4 21	3 53	3 36	3 14	2 44	2 2	0 43	— —



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Juli 24	16 <sup>h</sup> 26 <sup>m</sup>	16 <sup>h</sup> 53 <sup>m</sup>	17 <sup>h</sup> 14 <sup>m</sup>	17 <sup>h</sup> 32 <sup>m</sup>	17 <sup>h</sup> 50 <sup>m</sup>	18 <sup>h</sup> 7 <sup>m</sup>	18 <sup>h</sup> 25 <sup>m</sup>	18 <sup>h</sup> 47 <sup>m</sup>	19 <sup>h</sup> 13 <sup>m</sup>	19 <sup>h</sup> 30 <sup>m</sup>	19 <sup>h</sup> 51 <sup>m</sup>	20 <sup>h</sup> 18 <sup>m</sup>	20 <sup>h</sup> 57 <sup>m</sup>	22 <sup>h</sup> 3 <sup>m</sup>	—	—
25	17 31	17 55	18 14	18 30	18 46	19 1	19 17	19 36	19 59	20 14	20 32	20 55	21 27	22 15	—	—
26	18 40	18 59	19 14	19 28	19 41	19 53	20 6	20 21	20 40	20 52	21 6	21 23	21 47	22 21	{	0 <sup>h</sup> 10 <sup>m</sup> 23 18
27	19 51	20 4	20 15	20 24	20 33	20 42	20 51	21 2	21 16	21 24	21 34	21 46	22 2	22 23	22 56	
28	21 1	21 9	21 15	21 20	21 25	21 30	21 35	21 41	21 48	21 53	21 58	22 4	22 13	22 24	22 41	
29	22 12	22 13	22 14	22 15	22 15	22 16	22 17	22 18	22 19	22 19	22 20	22 21	22 23	22 25	22 27	
30	23 23	23 17	23 13	23 9	23 5	23 2	22 58	22 54	22 49	22 46	22 43	22 38	22 32	22 25	22 14	
31	—	—	—	—	23 56	23 49	23 41	23 32	23 21	23 14	23 6	22 56	22 43	22 26	22 0	
Aug. 1	0 33	0 22	0 12	0 4	—	—	—	—	23 55	23 45	23 33	23 17	22 57	22 28	21 42	
2	1 44	1 27	1 13	1 0	0 49	0 38	0 26	0 12	—	—	—	23 43	23 15	22 32	21 12	
3	2 55	2 32	2 14	1 58	1 43	1 29	1 13	0 56	0 35	0 21	0 4	—	23 42	22 43	—	
4	4 3	3 36	3 15	2 57	2 40	2 23	2 5	1 45	1 19	1 3	0 43	0 18	—	23 9	—	
5	5 5	4 37	4 15	3 55	3 37	3 20	3 2	2 39	2 11	1 53	1 31	1 3	0 22	—	—	
6	6 1	5 33	5 11	4 52	4 34	4 17	3 58	3 36	3 8	2 51	2 29	2 1	1 20	0 4	—	
7	6 49	6 24	6 4	5 46	5 29	5 13	4 56	4 36	4 10	3 55	3 35	3 9	2 32	1 31	—	
8	7 29	7 8	6 51	6 36	6 22	6 8	5 53	5 36	5 14	5 1	4 44	4 22	3 53	3 7	1 26	
9	8 3	7 47	7 33	7 22	7 11	7 0	6 48	6 34	6 18	6 7	5 54	5 38	5 16	4 44	3 50	
10	8 33	8 22	8 12	8 4	7 56	7 49	7 41	7 31	7 20	7 13	7 4	6 53	6 38	6 18	5 46	
11	9 0	8 54	8 49	8 44	8 40	8 36	8 31	8 26	8 20	8 16	8 11	8 6	7 58	7 47	7 31	
12	9 25	9 24	9 24	9 23	9 22	9 21	9 21	9 20	9 19	9 18	9 17	9 16	9 15	9 14	9 12	
13	9 50	9 54	9 57	10 0	10 3	10 6	10 9	10 12	10 17	10 20	10 23	10 27	10 32	10 39	10 50	
14	10 15	10 24	10 32	10 38	10 44	10 51	10 58	11 5	11 14	11 20	11 28	11 36	11 48	12 4	12 29	
15	10 42	10 56	11 7	11 17	11 27	11 36	11 46	11 58	12 13	12 22	12 33	12 46	13 5	13 31	14 14	
16	11 12	11 30	11 45	11 58	12 11	12 23	12 36	12 52	13 11	13 24	13 39	13 57	14 23	15 2	16 14	
17	11 46	12 9	12 27	12 43	12 58	13 13	13 29	13 48	14 11	14 26	14 44	15 8	15 41	16 34	—	
18	12 26	12 52	13 13	13 31	13 48	14 5	14 23	14 44	15 11	15 27	15 48	16 16	16 55	18 5	—	
19	13 14	13 42	14 4	14 23	14 41	14 59	15 18	15 40	16 8	16 26	16 49	17 18	18 1	19 22	—	
20	14 9	14 37	14 59	15 18	15 36	15 53	16 12	16 35	17 2	17 20	17 42	18 10	18 51	20 5	—	
21	15 12	15 38	15 58	16 16	16 32	16 48	17 5	17 26	17 51	18 7	18 27	18 52	19 27	20 23	—	
22	16 21	16 42	16 59	17 14	17 28	17 42	17 57	18 14	18 34	18 47	19 3	19 24	19 51	20 31	21 45	
23	17 32	17 49	18 2	18 13	18 23	18 33	18 44	18 57	19 13	19 22	19 34	19 49	20 8	20 34	21 16	
24	18 45	18 55	19 3	19 10	19 17	19 23	19 30	19 38	19 47	19 53	20 0	20 9	20 20	20 36	20 58	
25	19 59	20 2	20 4	20 7	20 9	20 11	20 13	20 16	20 19	20 21	20 24	20 27	20 31	20 36	20 43	
26	21 11	21 8	21 5	21 3	21 0	20 58	20 56	20 54	20 51	20 49	20 47	20 44	20 41	20 36	20 30	
27	22 24	22 14	22 6	21 59	21 52	21 46	21 40	21 32	21 22	21 16	21 10	21 2	20 51	20 37	20 16	
28	23 36	23 20	23 7	22 56	22 46	22 35	22 24	22 12	21 56	21 47	21 36	21 22	21 3	20 38	19 58	
29	—	—	—	23 54	23 40	23 26	23 11	22 54	22 34	22 21	22 6	21 46	21 20	20 41	19 32	
30	0 47	0 26	0 8	—	—	—	—	23 42	23 17	23 1	22 42	22 17	21 43	20 49	—	
31	1 56	1 30	1 10	0 52	0 35	0 19	0 2	—	—	23 49	23 27	22 59	22 18	21 8	—	
Sept. 1	3 0	2 32	2 9	1 50	1 32	1 14	0 56	0 34	0 6	—	—	23 52	23 10	21 51	—	
2	3 57	3 29	3 6	2 47	2 29	2 11	1 52	1 29	1 1	0 44	0 21	—	—	23 11	—	
3	4 46	4 20	3 59	3 41	3 24	3 7	2 49	2 28	2 1	1 45	1 24	0 56	0 18	—	—	



Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
July	24	6 46	6 19	5 57	5 38	5 20	5 3	4 44	4 21	3 53	3 36	3 14	2 44	2 2	0 43	—
	25	7 36	7 11	6 50	6 33	6 16	6 0	5 43	5 22	4 56	4 40	4 19	3 52	3 14	2 9	—
	26	8 19	7 58	7 41	7 26	7 12	6 58	6 43	6 25	6 3	5 49	5 32	5 11	4 40	3 53	2 1
	27	8 57	8 41	8 28	8 17	8 6	7 55	7 44	7 30	7 13	7 3	6 50	6 34	6 12	5 41	4 46
	28	9 31	9 21	9 13	9 5	8 58	8 51	8 43	8 35	8 24	8 18	8 10	8 0	7 46	7 28	6 59
	29	10 2	9 58	9 55	9 52	9 49	9 46	9 43	9 40	9 35	9 32	9 29	9 25	9 20	9 12	9 1
	30	10 33	10 35	10 37	10 38	10 39	10 41	10 42	10 44	10 46	10 47	10 48	10 50	10 53	10 56	11 1
	31	11 4	11 12	11 18	11 24	11 30	11 35	11 41	11 48	11 56	12 2	12 8	12 16	12 26	12 40	13 2
Aug.	1	11 36	11 50	12 2	12 12	12 22	12 31	12 41	12 53	13 7	13 16	13 27	13 41	13 59	14 26	15 8
	2	12 13	12 32	12 48	13 2	13 15	13 28	13 42	13 58	14 18	14 31	14 46	15 5	15 32	16 13	17 32
	3	12 55	13 19	13 38	13 55	14 10	14 26	14 43	15 3	15 27	15 42	16 2	16 27	17 1	17 59	—
	4	13 42	14 10	14 31	14 50	15 8	15 25	15 43	16 5	16 33	16 50	17 12	17 40	18 20	19 33	—
	5	14 37	15 5	15 28	15 47	16 5	16 23	16 42	17 4	17 32	17 49	18 12	18 41	19 22	20 38	—
	6	15 37	16 4	16 26	16 44	17 1	17 18	17 37	17 58	18 24	18 40	19 1	19 28	20 5	21 8	—
	7	16 40	17 4	17 23	17 40	17 55	18 10	18 26	18 45	19 8	19 22	19 40	20 3	20 34	21 21	23 3
	8	17 45	18 4	18 20	18 33	18 46	18 58	19 11	19 27	19 46	19 57	20 11	20 29	20 52	21 26	22 23
	9	18 48	19 2	19 14	19 24	19 34	19 43	19 53	20 4	20 18	20 26	20 36	20 49	21 6	21 28	22 3
	10	19 49	19 58	20 5	20 12	20 18	20 24	20 30	20 37	20 46	20 52	20 58	21 5	21 15	21 29	21 49
	11	20 48	20 52	20 55	20 58	21 1	21 3	21 5	21 8	21 12	21 14	21 16	21 20	21 24	21 29	21 36
	12	21 47	21 45	21 44	21 43	21 42	21 41	21 40	21 38	21 37	21 36	21 34	21 33	21 31	21 29	21 25
	13	22 44	22 38	22 32	22 27	22 22	22 18	22 13	22 8	22 1	21 57	21 52	21 46	21 39	21 28	21 13
	14	23 42	23 30	23 21	23 12	23 4	22 57	22 49	22 39	22 27	22 20	22 11	22 1	21 47	21 28	20 59
	15	—	—	—	23 59	23 48	23 37	23 25	23 12	22 55	22 45	22 33	22 17	21 57	21 29	20 42
	16	0 41	0 24	0 10	—	—	—	—	23 48	23 27	23 14	22 58	22 38	22 11	21 31	20 17
	17	1 40	1 19	1 2	0 47	0 33	0 19	0 4	—	—	23 49	23 30	23 5	22 31	21 37	—
	18	2 40	2 15	1 55	1 38	1 21	1 5	0 48	0 29	0 4	—	—	23 41	23 1	21 51	—
	19	3 38	3 11	2 49	2 30	2 12	1 55	1 37	1 15	0 47	0 31	0 9	—	23 46	22 25	—
	20	4 34	4 6	3 44	3 25	3 7	2 49	2 30	2 7	1 39	1 23	0 59	0 29	—	23 37	—
	21	5 26	4 59	4 38	4 20	4 2	3 45	3 27	3 5	2 38	2 21	1 59	1 31	0 51	—	—
	22	6 12	5 49	5 30	5 14	4 59	4 44	4 27	4 8	3 44	3 29	3 10	2 46	2 12	1 16	—
	23	6 53	6 35	6 20	6 7	5 54	5 42	5 29	5 13	4 54	4 43	4 28	4 9	3 44	3 5	1 54
	24	7 29	7 16	7 6	6 57	6 48	6 40	6 31	6 20	6 7	5 58	5 48	5 36	5 19	4 55	4 17
	25	8 2	7 56	7 50	7 46	7 42	7 37	7 32	7 27	7 20	7 16	7 11	7 4	6 56	6 44	6 27
	26	8 33	8 33	8 33	8 33	8 33	8 33	8 33	8 33	8 33	8 33	8 33	8 32	8 32	8 32	8 31
	27	9 5	9 11	9 16	9 21	9 25	9 29	9 34	9 39	9 46	9 50	9 54	10 0	10 8	10 19	10 35
	28	9 37	9 50	10 0	10 9	10 18	10 26	10 35	10 45	10 58	11 6	11 16	11 28	11 44	12 6	12 42
	29	10 13	10 31	10 46	10 59	11 11	11 23	11 36	11 51	12 10	12 22	12 36	12 54	13 19	13 55	15 2
	30	10 53	11 16	11 35	11 51	12 6	12 21	12 38	12 57	13 20	13 35	13 53	14 17	14 50	15 43	—
	31	11 39	12 6	12 27	12 46	13 3	13 20	13 38	14 0	14 27	14 44	15 5	15 32	16 12	17 23	—
Sept.	1	12 31	12 59	13 22	13 41	13 59	14 17	14 36	14 59	15 27	15 44	16 7	16 36	17 19	18 37	—
	2	13 29	13 56	14 18	14 38	14 56	15 13	15 31	15 53	16 21	16 38	16 59	17 27	18 7	19 15	—
	3	14 30	14 55	15 16	15 33	15 49	16 5	16 22	16 42	17 6	17 21	17 40	18 5	18 38	19 31	—



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Sept. 3	4 46 <sup>h m</sup>	4 20 <sup>h m</sup>	3 59 <sup>h m</sup>	3 41 <sup>h m</sup>	3 24 <sup>h m</sup>	3 7 <sup>h m</sup>	2 49 <sup>h m</sup>	2 28 <sup>h m</sup>	2 1 <sup>h m</sup>	1 45 <sup>h m</sup>	1 24 <sup>h m</sup>	0 56 <sup>h m</sup>	0 18 <sup>h m</sup>	—	—	
4	5 28	5 5	4 47	4 31	4 16	4 1	3 45	3 26	3 3	2 49	2 31	2 8	1 35	0 44	—	
5	6 4	5 45	5 30	5 18	5 6	4 53	4 40	4 25	4 7	3 56	3 41	3 22	2 58	2 21	1 15	
6	6 34	6 21	6 10	6 1	5 52	5 43	5 33	5 22	5 9	5 1	4 50	4 37	4 20	3 56	3 17	
7	7 2	6 54	6 47	6 41	6 35	6 30	6 25	6 18	6 9	6 4	5 58	5 50	5 40	5 27	5 5	
8	7 27	7 24	7 22	7 20	7 18	7 16	7 14	7 12	7 9	7 7	7 5	7 2	6 59	6 54	6 47	
9	7 52	7 54	7 56	7 58	8 0	8 1	8 3	8 5	8 7	8 8	8 10	8 13	8 16	8 20	8 26	
10	8 17	8 24	8 30	8 35	8 40	8 46	8 51	8 57	9 5	9 10	9 16	9 23	9 32	9 45	10 5	
11	8 43	8 55	9 5	9 14	9 23	9 31	9 40	9 50	10 3	10 11	10 21	10 33	10 49	11 12	11 48	
12	9 11	9 28	9 42	9 54	10 6	10 17	10 29	10 44	11 1	11 12	11 26	11 43	12 6	12 41	13 41	
13	9 43	10 4	10 21	10 37	10 52	11 5	11 20	11 38	12 0	12 14	12 32	12 54	13 24	14 12	16 11	
14	10 20	10 45	11 5	11 22	11 39	11 55	12 13	12 33	12 59	13 15	13 36	14 2	14 40	15 44	—	
15	11 3	11 31	11 52	12 12	12 30	12 47	13 6	13 28	13 56	14 13	14 36	15 5	15 48	17 9	—	
16	11 54	12 23	12 45	13 4	13 22	13 40	14 0	14 23	14 51	15 9	15 32	16 1	16 45	18 7	—	
17	12 53	13 20	13 41	14 0	14 17	14 34	14 52	15 14	15 41	15 58	16 19	16 47	17 25	18 32	—	
18	13 58	14 22	14 41	14 57	15 13	15 28	15 44	16 3	16 26	16 41	16 59	17 22	17 53	18 42	20 34	
19	15 8	15 27	15 42	15 55	16 8	16 20	16 33	16 48	17 6	17 18	17 32	17 49	18 12	18 45	19 41	
20	16 21	16 34	16 44	16 53	17 2	17 10	17 19	17 30	17 43	17 51	18 0	18 11	18 26	18 47	19 19	
21	17 35	17 42	17 47	17 51	17 56	18 0	18 5	18 10	18 16	18 20	18 25	18 30	18 37	18 47	19 2	
22	18 50	18 50	18 49	18 49	18 49	18 49	18 48	18 48	18 48	18 48	18 48	18 48	18 48	18 47	18 47	
23	20 5	19 58	19 52	19 47	19 42	19 37	19 32	19 27	19 20	19 16	19 11	19 5	18 57	18 47	18 32	
24	21 21	21 7	20 56	20 46	20 37	20 28	20 18	20 7	19 54	19 46	19 36	19 24	19 9	18 48	18 16	
25	22 35	22 15	21 59	21 45	21 32	21 20	21 7	20 51	20 32	20 20	20 5	19 47	19 24	18 49	17 52	
26	23 47	23 22	23 2	22 45	22 29	22 14	21 58	21 38	21 14	20 59	20 40	20 17	19 44	18 54	16 51	
27	—	—	—	23 45	23 27	23 10	22 51	22 29	22 2	21 45	21 23	20 55	20 15	19 7	—	
28	0 54	0 26	0 4	—	—	—	23 47	23 24	22 56	22 38	22 15	21 45	21 2	19 41	—	
29	1 54	1 25	1 3	0 43	0 24	0 6	—	—	23 55	23 38	23 16	22 47	22 6	20 51	—	
30	2 46	2 19	1 57	1 38	1 20	1 3	0 44	0 22	—	—	—	23 57	23 22	22 24	—	
Okt. 1	3 29	3 5	2 46	2 29	2 13	1 57	1 40	1 21	0 56	0 41	0 22	—	—	—	22 39	
2	4 6	3 46	3 30	3 16	3 2	2 49	2 35	2 19	1 59	1 46	1 30	1 11	0 43	0 1	—	
3	4 38	4 23	4 10	4 0	3 50	3 40	3 29	3 16	3 1	2 51	2 39	2 25	2 5	1 37	0 50	
4	5 6	4 56	4 48	4 40	4 33	4 27	4 20	4 12	4 2	3 55	3 48	3 38	3 26	3 8	2 41	
5	5 31	5 27	5 23	5 19	5 16	5 13	5 10	5 6	5 1	4 58	4 55	4 50	4 45	4 37	4 25	
6	5 56	5 56	5 57	5 57	5 58	5 58	5 58	5 59	5 59	6 0	6 0	6 1	6 2	6 3	6 5	
7	6 20	6 25	6 30	6 34	6 38	6 42	6 46	6 51	6 57	7 1	7 6	7 11	7 19	7 29	7 44	
8	6 45	6 56	7 5	7 13	7 20	7 27	7 35	7 44	7 55	8 2	8 11	8 22	8 36	8 55	9 26	
9	7 12	7 28	7 41	7 52	8 3	8 13	8 24	8 37	8 54	9 4	9 17	9 32	9 53	10 24	11 15	
10	7 42	8 2	8 19	8 33	8 47	9 0	9 14	9 31	9 53	10 6	10 22	10 43	11 11	11 55	13 27	
11	8 17	8 41	9 0	9 17	9 33	9 49	10 6	10 26	10 51	11 6	11 26	11 52	12 28	13 28	—	
12	8 57	9 24	9 46	10 5	10 23	10 40	10 59	11 21	11 48	12 6	12 28	12 56	13 39	14 58	—	
13	9 44	10 13	10 35	10 55	11 14	11 32	11 51	12 14	12 43	13 2	13 25	13 54	14 40	16 8	—	
14	10 38	11 6	11 29	11 48	12 6	12 24	12 43	13 6	13 34	13 52	14 14	14 43	15 25	16 42	—	



Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Sept. 3	14 30	14 55	15 16	15 33	15 49	16 5	16 22	16 42	17 6	17 21	17 40	18 5	18 38	19 31	—
4	15 34	15 53	16 12	16 26	16 40	16 54	17 9	17 25	17 45	17 57	18 13	18 33	18 59	19 38	20 46
5	16 37	16 53	17 6	17 17	17 28	17 39	17 50	18 3	18 18	18 28	18 40	18 54	19 13	19 40	20 22
6	17 38	17 49	17 58	18 6	18 14	18 21	18 29	18 37	18 48	18 55	19 2	19 11	19 24	19 41	20 6
7	18 38	18 44	18 49	18 53	18 57	19 0	19 3	19 8	19 14	19 17	19 21	19 26	19 32	19 40	19 52
8	19 37	19 37	19 37	19 38	19 38	19 38	19 38	19 39	19 39	19 39	19 39	19 39	19 39	19 40	19 40
9	20 35	20 30	20 26	20 22	20 19	20 16	20 12	20 8	20 3	20 0	19 57	19 52	19 47	19 39	19 28
10	21 33	21 23	21 14	21 7	21 0	20 54	20 47	20 38	20 28	20 22	20 15	20 6	19 54	19 38	19 15
11	22 31	22 16	22 3	21 53	21 43	21 33	21 22	21 10	20 55	20 46	20 35	20 21	20 3	19 38	18 58
12	23 29	23 10	22 54	22 40	22 27	22 14	22 0	21 45	21 25	21 13	20 58	20 40	20 15	19 39	18 37
13	—	—	23 45	23 29	23 14	22 58	22 42	22 23	21 59	21 45	21 27	21 4	20 32	19 42	17 42
14	0 28	0 4	—	—	—	23 45	23 27	23 6	22 39	22 22	22 2	21 35	20 56	19 51	—
15	1 27	1 0	0 38	0 20	0 2	—	—	23 55	23 26	23 9	22 46	22 16	21 33	20 13	—
16	2 22	1 54	1 32	1 13	0 55	0 37	0 18	—	—	—	23 40	23 11	22 28	21 6	—
17	3 15	2 47	2 25	2 6	1 48	1 31	1 12	0 49	0 21	0 3	—	—	23 41	22 35	—
18	4 3	3 38	3 17	3 0	2 43	2 27	2 9	1 48	1 23	1 7	0 46	0 19	—	—	22 32
19	4 45	4 25	4 8	3 53	3 39	3 25	3 10	2 52	2 31	2 17	2 0	1 38	1 8	0 21	—
20	5 23	5 8	4 55	4 44	4 33	4 23	4 12	3 59	3 42	3 32	3 20	3 4	2 43	2 12	1 20
21	5 58	5 48	5 41	5 34	5 27	5 21	5 14	5 6	4 56	4 50	4 42	4 33	4 20	4 3	3 36
22	6 30	6 28	6 25	6 23	6 21	6 19	6 17	6 14	6 11	6 9	6 6	6 3	5 59	5 54	5 46
23	7 2	7 6	7 9	7 12	7 14	7 16	7 19	7 22	7 26	7 28	7 31	7 34	7 39	7 44	7 53
24	7 35	7 45	7 54	8 1	8 8	8 15	8 23	8 31	8 41	8 47	8 55	9 5	9 18	9 36	10 4
25	8 11	8 27	8 40	8 52	9 3	9 14	9 26	9 39	9 56	10 6	10 19	10 36	10 57	11 29	12 24
26	8 50	9 12	9 30	9 45	10 0	10 14	10 29	10 47	11 10	11 24	11 41	12 3	12 34	13 22	15 25
27	9 35	10 1	10 22	10 40	10 57	11 14	11 32	11 53	12 19	12 36	12 57	13 24	14 3	15 11	—
28	10 26	10 55	11 17	11 37	11 55	12 13	12 32	12 55	13 23	13 41	14 4	14 33	15 16	16 38	—
29	11 23	11 51	12 14	12 33	12 52	13 10	13 29	13 51	14 19	14 37	14 59	15 28	16 10	17 25	—
30	12 23	12 50	13 11	13 29	13 46	14 3	14 21	14 41	15 7	15 23	15 43	16 9	16 45	17 44	—
Okt. 1	13 26	13 49	14 7	14 23	14 38	14 52	15 7	15 25	15 47	16 1	16 18	16 39	17 8	17 51	19 15
2	14 29	14 47	15 1	15 14	15 26	15 37	15 49	16 4	16 21	16 32	16 45	17 1	17 23	17 53	18 43
3	15 30	15 43	15 53	16 3	16 11	16 19	16 28	16 39	16 51	16 59	17 8	17 19	17 34	17 54	18 24
4	16 30	16 38	16 44	16 49	16 54	16 59	17 4	17 10	17 18	17 22	17 27	17 34	17 42	17 53	18 9
5	17 29	17 31	17 33	17 35	17 37	17 38	17 39	17 41	17 43	17 44	17 45	17 47	17 49	17 52	17 56
6	18 27	18 24	18 21	18 19	18 17	18 15	18 13	18 10	18 7	18 4	18 2	18 0	17 56	17 51	17 43
7	19 25	19 17	19 10	19 4	18 58	18 52	18 46	18 40	18 31	18 26	18 20	18 12	18 3	17 50	17 30
8	20 23	20 10	19 59	19 49	19 40	19 31	19 22	19 11	18 57	18 49	18 39	18 27	18 11	17 49	17 14
9	21 22	21 3	20 48	20 36	20 24	20 11	19 58	19 44	19 26	19 15	19 1	18 44	18 21	17 48	16 54
10	22 21	21 58	21 39	21 24	21 9	20 54	20 38	20 20	19 58	19 44	19 27	19 5	18 35	17 50	16 16
11	23 19	22 52	22 31	22 13	21 56	21 40	21 22	21 1	20 35	20 19	19 58	19 32	18 55	17 54	—
12	—	23 46	23 24	23 5	22 47	22 29	22 9	21 47	21 18	21 0	20 38	20 9	19 26	18 7	—
13	0 15	—	—	23 57	23 38	23 20	23 1	22 38	22 9	21 51	21 28	20 57	20 13	18 44	—
14	1 8	0 39	0 17	—	—	—	—	23 56	23 34	23 6	22 49	22 27	21 58	21 17	20 0



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Okt. 14	10 38	11 6	11 29	11 48	12 6	12 24	12 43	13 6	13 34	13 52	14 14	14 43	15 25	16 42	h m	
15	11 39	12 5	12 25	12 43	13 0	13 16	13 34	13 54	14 20	14 36	14 56	15 21	15 57	16 55	—	
16	12 45	13 7	13 24	13 39	13 53	14 7	14 22	14 39	15 1	15 14	15 30	15 50	16 18	16 59	18 15	
17	13 55	14 11	14 24	14 36	14 47	14 57	15 8	15 21	15 37	15 47	15 59	16 13	16 33	17 0	17 43	
18	15 7	15 18	15 26	15 33	15 40	15 46	15 53	16 1	16 11	16 17	16 24	16 33	16 45	17 0	17 23	
19	16 22	16 25	16 28	16 30	16 32	16 34	16 37	16 40	16 43	16 45	16 47	16 50	16 54	16 59	17 7	
20	17 38	17 34	17 31	17 28	17 25	17 23	17 21	17 18	17 15	17 13	17 10	17 7	17 3	16 59	16 52	
21	18 55	18 44	18 35	18 28	18 21	18 14	18 7	17 58	17 48	17 41	17 34	17 25	17 14	16 58	16 35	
22	20 12	19 55	19 41	19 29	19 17	19 6	18 54	18 41	18 24	18 14	18 2	17 46	17 26	16 58	16 14	
23	21 29	21 5	20 47	20 31	20 16	20 1	19 45	19 27	19 5	18 51	18 34	18 13	17 44	17 1	15 36	
24	22 41	22 14	21 52	21 33	21 16	20 59	20 41	20 19	19 53	19 36	19 15	18 49	18 11	17 8	—	
25	23 46	23 17	22 54	22 34	22 15	21 57	21 38	21 15	20 46	20 28	20 5	19 35	18 52	17 30	—	
26	—	—	23 52	23 32	23 14	22 56	22 37	22 14	21 45	21 28	21 5	20 35	19 52	18 28	—	
27	0 43	0 14	—	—	—	23 52	23 34	23 14	22 48	22 32	22 11	21 44	21 7	20 0	—	
28	1 30	1 4	0 44	0 26	0 9	—	—	—	23 51	23 37	23 20	22 58	22 28	21 41	19 47	
29	2 9	1 47	1 30	1 15	1 0	0 46	0 31	0 13	—	—	—	—	23 51	23 19	22 22	
30	2 42	2 25	2 12	2 0	1 48	1 37	1 25	1 11	0 54	0 43	0 30	0 14	—	—	—	
31	3 11	2 59	2 49	2 41	2 33	2 25	2 17	2 7	1 55	1 47	1 39	1 27	1 13	0 52	0 19	
Nov. 1	3 36	3 30	3 25	3 20	3 15	3 11	3 6	3 1	2 55	2 49	2 46	2 40	2 32	2 21	2 4	
2	4 1	3 59	3 59	3 58	3 57	3 56	3 55	3 54	3 53	3 52	3 51	3 50	3 49	3 47	3 45	
3	4 25	4 28	4 32	4 35	4 37	4 40	4 43	4 47	4 51	4 54	4 57	5 1	5 6	5 13	5 23	
4	4 49	4 58	5 6	5 12	5 18	5 25	5 32	5 39	5 49	5 55	6 2	6 11	6 23	6 39	7 4	
5	5 15	5 29	5 41	5 51	6 0	6 10	6 21	6 33	6 47	6 56	7 8	7 22	7 41	8 8	8 51	
6	5 44	6 3	6 18	6 32	6 45	6 57	7 11	7 27	7 46	7 58	8 14	8 33	8 59	9 39	10 55	
7	6 17	6 40	6 59	7 15	7 30	7 46	8 3	8 21	8 45	9 0	9 19	9 44	10 18	11 13	—	
8	6 55	7 22	7 43	8 1	8 19	8 36	8 54	9 16	9 44	10 0	10 22	10 51	11 32	12 47	—	
9	7 40	8 8	8 31	8 51	9 9	9 27	9 47	10 10	10 39	10 57	11 21	11 51	12 36	14 8	—	
10	8 31	9 0	9 22	9 42	10 1	10 19	10 39	11 2	11 31	11 49	12 12	12 42	13 27	14 53	—	
11	9 28	9 55	10 17	10 35	10 53	11 10	11 28	11 50	12 17	12 34	12 55	13 23	14 1	15 8	—	
12	10 31	10 55	11 13	11 30	11 45	12 0	12 16	12 35	12 59	13 13	13 31	13 54	14 25	15 14	17 4	
13	11 37	11 56	12 11	12 24	12 37	12 49	13 2	13 17	13 35	13 47	14 1	14 18	14 41	15 15	16 10	
14	12 46	12 59	13 9	13 19	13 28	13 36	13 45	13 56	14 9	14 17	14 26	14 38	14 53	15 14	15 46	
15	13 57	14 4	14 9	14 14	14 19	14 23	14 28	14 33	14 40	14 44	14 49	14 55	15 3	15 13	15 28	
16	15 9	15 9	15 9	15 10	15 10	15 10	15 10	15 10	15 10	15 10	15 10	15 11	15 11	15 12	15 13	
17	16 24	16 18	16 12	16 7	16 2	15 58	15 53	15 48	15 42	15 38	15 33	15 27	15 20	15 11	14 57	
18	17 41	17 27	17 16	17 6	16 57	16 48	16 38	16 28	16 15	16 8	15 58	15 46	15 31	15 10	14 39	
19	18 59	18 39	18 23	18 9	17 55	17 42	17 28	17 13	16 54	16 42	16 27	16 9	15 45	15 10	14 12	
20	20 16	19 51	19 30	19 12	18 56	18 40	18 23	18 3	17 38	17 23	17 4	16 40	16 6	15 14	—	
21	21 28	20 59	20 36	20 17	19 58	19 40	19 21	18 58	18 30	18 13	17 50	17 21	16 40	15 25	—	
22	22 31	22 2	21 38	21 19	21 0	20 41	20 21	19 58	19 29	19 10	18 47	18 17	17 32	16 1	—	
23	23 24	22 57	22 35	22 16	21 58	21 41	21 22	21 0	20 33	20 16	19 54	19 25	18 43	17 26	—	
24	—	23 44	23 25	23 9	22 53	22 38	22 22	22 3	21 39	21 24	21 5	20 40	20 6	19 11	—	



Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Okt. 14	h m 1 8	h m 0 39	h m 0 17	h m — —	h m — —	h m — —	h m 23 56	h m 23 34	h m 23 6	h m 22 49	h m 22 27	h m 21 58	h m 21 17	h m 20 0	h m — —
15	1 56	1 29	1 8	0 49	0 31	0 14	— —	— —	— —	23 55	23 35	23 11	22 36	21 39	— —
16	2 39	2 16	1 57	1 41	1 25	1 10	0 54	0 34	0 10	— —	— —	— —	— —	23 27	22 13
17	3 18	2 59	2 44	2 31	2 18	2 6	1 53	1 37	1 18	1 6	0 51	0 32	0 6	— —	— —
18	3 53	3 40	3 30	3 21	3 12	3 3	2 54	2 43	2 29	2 21	2 11	1 58	1 41	1 16	0 38
19	4 25	4 19	4 14	4 9	4 4	4 0	3 55	3 49	3 42	3 38	3 33	3 26	3 18	3 6	2 48
20	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57	4 57
21	5 29	5 36	5 42	5 47	5 52	5 56	6 1	6 7	6 14	6 18	6 23	6 30	6 38	6 50	7 8
22	6 4	6 17	6 28	6 38	6 47	6 56	7 6	7 17	7 31	7 39	7 50	8 3	8 21	8 46	9 27
23	6 42	7 2	7 18	7 32	7 45	7 58	8 12	8 28	8 48	9 1	9 17	9 36	10 3	10 45	12 7
24	7 26	7 51	8 11	8 28	8 45	9 1	9 18	9 38	10 3	10 19	10 39	11 5	11 41	12 43	— —
25	8 16	8 45	9 7	9 26	9 44	10 2	10 21	10 44	11 13	11 31	11 53	12 22	13 5	14 27	— —
26	9 13	9 42	10 6	10 25	10 44	11 3	11 22	11 45	12 14	12 32	12 55	13 25	14 9	15 33	— —
27	10 14	10 42	11 4	11 23	11 41	11 59	12 18	12 39	13 6	13 22	13 44	14 12	14 51	15 57	— —
28	11 18	11 42	12 2	12 19	12 35	12 50	13 6	13 25	13 49	14 4	14 22	14 45	15 16	16 6	18 1
29	12 22	12 41	12 57	13 11	13 24	13 37	13 51	14 6	14 25	14 37	14 51	15 9	15 33	16 8	17 7
30	13 24	13 38	13 50	14 1	14 11	14 20	14 30	14 42	14 56	15 5	15 15	15 28	15 45	16 8	16 44
31	14 24	14 33	14 41	14 48	14 54	15 0	15 7	15 14	15 23	15 28	15 35	15 43	15 53	16 7	16 28
Nov. 1	15 23	15 27	15 30	15 33	15 36	15 38	15 41	15 44	15 48	15 50	15 53	15 56	16 0	16 6	16 14
2	16 21	16 19	16 18	16 17	16 17	16 16	16 15	16 13	16 12	16 11	16 10	16 8	16 6	16 4	16 1
3	17 19	17 12	17 6	17 2	16 58	16 53	16 48	16 42	16 36	16 32	16 27	16 21	16 13	16 3	15 47
4	18 17	18 5	17 55	17 47	17 39	17 31	17 23	17 13	17 1	16 54	16 45	16 34	16 20	16 1	15 32
5	19 16	18 58	18 45	18 33	18 21	18 10	17 59	17 45	17 28	17 18	17 5	16 50	16 29	16 0	15 12
6	20 15	19 53	19 35	19 21	19 7	18 52	18 37	18 20	17 59	17 46	17 29	17 9	16 41	16 0	14 42
7	21 13	20 48	20 27	20 10	19 54	19 37	19 19	18 59	18 34	18 18	17 59	17 34	16 59	16 2	— —
8	22 10	21 42	21 20	21 11	20 43	20 25	20 6	19 43	19 15	18 58	18 36	18 7	17 25	16 9	— —
9	23 4	22 35	22 12	21 52	21 34	21 15	20 55	20 32	20 3	19 45	19 21	18 50	18 5	16 34	— —
10	23 53	23 25	23 3	22 44	22 26	22 8	21 50	21 26	20 57	20 39	20 16	19 46	19 2	17 35	— —
11	— —	— —	23 52	23 34	23 17	23 1	22 44	22 23	21 57	21 41	21 20	20 54	20 15	19 9	— —
12	0 37	0 12	— —	— —	— —	23 56	23 41	23 23	23 2	22 48	22 31	22 9	21 39	20 53	19 5
13	1 16	0 55	0 38	0 24	0 10	— —	— —	— —	— —	23 59	23 47	23 31	23 9	22 39	21 46
14	1 51	1 35	1 23	1 11	1 0	0 50	0 39	0 26	0 9	— —	— —	— —	— —	— —	23 57
15	2 23	2 13	2 5	1 58	1 51	1 45	1 38	1 29	1 19	1 12	1 5	0 56	0 43	0 25	— —
16	2 53	2 50	2 47	2 45	2 43	2 40	2 37	2 34	2 31	2 29	2 26	2 22	2 18	2 12	2 2
17	3 24	3 27	3 30	3 32	3 34	3 36	3 38	3 41	3 44	3 46	3 49	3 52	3 55	4 0	4 8
18	3 56	4 6	4 14	4 21	4 28	4 35	4 42	4 50	5 0	5 6	5 14	5 24	5 36	5 54	6 20
19	4 32	4 48	5 2	5 14	5 25	5 36	5 48	6 1	6 18	6 28	6 41	6 57	7 19	7 51	8 47
20	5 13	5 35	5 53	6 9	6 24	6 39	6 55	7 13	7 35	7 49	8 8	8 31	9 2	9 53	— —
21	6 1	6 28	6 50	7 8	7 26	7 43	8 1	8 23	8 50	9 7	9 29	9 57	10 38	11 52	— —
22	6 56	7 26	7 49	8 9	8 28	8 46	9 5	9 29	9 58	10 16	10 40	11 11	11 56	13 25	— —
23	7 58	8 27	8 50	9 10	9 29	9 47	10 6	10 29	10 57	11 15	11 38	12 7	12 50	14 6	— —
24	9 4	9 30	9 51	10 9	10 26	10 42	10 59	11 20	11 46	12 2	12 22	12 47	13 22	14 19	— —



Tag	Geographische Breite															
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°	
1945																
Nov. 24	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
25	0 8	—	—	23 57	23 44	23 31	23 18	23 3	21 39	21 24	21 5	20 40	20 6	19 11	—	—
26	0 44	0 25	0 10	—	—	—	—	—	23 46	23 37	23 27	23 14	22 56	22 31	21 50	19 41
27	1 15	1 1	0 50	0 40	0 31	0 22	0 12	0 0	—	—	—	—	—	—	—	23 41
28	1 41	1 33	1 26	1 20	1 14	1 9	1 3	0 56	0 47	0 41	0 35	0 28	0 17	0 3	—	—
29	2 6	2 3	2 0	1 58	1 56	1 54	1 52	1 49	1 46	1 44	1 42	1 39	1 36	1 30	1 24	—
30	2 30	2 32	2 34	2 35	2 36	2 38	2 40	2 42	2 44	2 45	2 47	2 49	2 52	2 56	3 2	—
Dez. 1	2 54	3 1	3 7	3 12	3 17	3 22	3 27	3 34	3 42	3 47	3 53	4 0	4 9	4 22	4 42	—
2	3 19	3 31	3 42	3 51	4 0	4 8	4 17	4 27	4 40	4 48	4 58	5 10	5 27	5 50	6 26	—
3	3 47	4 4	4 18	4 30	4 42	4 54	5 6	5 21	5 39	5 50	6 4	6 22	6 46	7 21	8 23	—
4	4 18	4 40	4 58	5 13	5 27	5 42	5 57	6 16	6 39	6 53	7 11	7 33	8 5	8 55	—	—
5	4 55	5 20	5 41	5 59	6 15	6 32	6 50	7 11	7 38	7 54	8 15	8 42	9 22	10 31	—	—
6	5 37	6 5	6 28	6 47	7 5	7 24	7 43	8 6	8 35	8 53	9 16	9 46	10 31	12 0	—	—
7	6 26	6 55	7 19	7 38	7 57	8 16	8 36	8 59	9 28	9 46	10 10	10 41	11 27	12 59	—	—
8	7 22	7 50	8 12	8 32	8 50	9 7	9 26	9 49	10 17	10 34	10 56	11 25	12 6	13 21	—	—
9	8 23	8 48	9 8	9 25	9 41	9 58	10 15	10 34	10 59	11 15	11 34	11 58	12 32	13 27	—	—
10	9 27	9 48	10 5	10 19	10 33	10 46	11 0	11 17	11 37	11 49	12 5	12 24	12 50	13 29	14 37	—
11	10 34	10 49	11 1	11 12	11 22	11 32	11 43	11 55	12 10	12 20	12 31	12 44	13 2	13 28	14 8	—
12	11 42	11 51	11 59	12 5	12 11	12 18	12 25	12 32	12 41	12 47	12 53	13 1	13 12	13 27	13 48	—
13	12 51	12 54	12 56	12 58	13 0	13 2	13 4	13 7	13 10	13 12	13 14	13 17	13 20	13 25	13 32	—
14	14 2	13 58	13 55	13 53	13 50	13 48	13 46	13 43	13 40	13 38	13 35	13 32	13 29	13 24	13 16	—
15	15 15	15 5	14 56	14 49	14 42	14 35	14 28	14 20	14 11	14 5	13 58	13 49	13 38	13 23	13 0	—
16	16 30	16 13	16 0	15 48	15 37	15 26	15 14	15 1	14 45	14 35	14 23	14 8	13 49	13 22	12 39	—
17	17 47	17 24	17 5	16 50	16 35	16 20	16 5	15 47	15 25	15 12	14 55	14 34	14 5	13 23	12 3	—
18	19 1	18 34	18 12	17 53	17 36	17 19	17 0	16 39	16 13	15 56	15 35	15 8	14 31	13 29	—	—
19	20 10	19 41	19 18	18 58	18 39	18 20	18 0	17 37	17 8	16 50	16 27	15 56	15 13	13 48	—	—
20	21 10	20 41	20 18	19 59	19 40	19 22	19 3	18 40	18 11	17 53	17 30	17 0	16 15	14 48	—	—
21	22 0	21 34	21 14	20 56	20 39	20 22	20 4	19 44	19 18	19 2	18 41	18 14	17 36	16 29	—	—
22	22 41	22 20	22 2	21 48	21 34	21 20	21 5	20 47	20 26	20 13	19 56	19 34	19 4	18 18	16 34	—
23	23 14	22 58	22 45	22 34	22 24	22 13	22 1	21 48	21 32	21 22	21 9	20 53	20 32	20 1	19 9	—
24	23 43	23 33	23 24	23 17	23 10	23 2	22 54	22 46	22 35	22 28	22 20	22 10	21 56	21 38	21 9	—
25	—	—	—	23 56	23 53	23 49	23 45	23 41	23 36	23 33	23 29	23 24	23 18	23 9	22 56	—
26	0 9	0 4	0 0	—	—	—	—	—	—	—	—	—	—	—	—	—
27	0 34	0 34	0 34	0 34	0 34	0 34	0 35	0 35	0 35	0 35	0 35	0 36	0 36	0 36	0 37	—
28	0 57	1 3	1 7	1 11	1 15	1 19	1 23	1 27	1 33	1 37	1 41	1 46	1 53	2 3	2 17	—
29	1 22	1 33	1 41	1 49	1 56	2 3	2 11	2 20	2 31	2 38	2 46	2 57	3 11	3 29	3 59	—
30	1 49	2 4	2 17	2 28	2 39	2 49	3 1	3 14	3 30	3 40	3 52	4 8	4 29	4 59	5 50	—
31	2 18	2 39	2 55	3 9	3 23	3 37	3 51	4 8	4 29	4 42	4 58	5 19	5 48	6 32	8 5	—



Mittlere Ortszeit

Meridian von Greenwich

Tag	Geographische Breite														
	-40°	-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°	+45°	+50°	+55°	+60°	+65°	+70°
1945															
Nov. 24	9 4	9 30	9 51	10 9	10 26	10 42	10 59	11 20	11 46	12 2	12 22	12 47	13 22	14 19	— —
25	10 10	10 31	10 49	11 4	11 18	11 32	11 48	12 4	12 26	12 39	12 55	13 15	13 42	14 23	15 37
26	11 14	11 31	11 44	11 56	12 7	12 18	12 30	12 43	12 59	13 9	13 21	13 36	13 55	14 23	15 7
27	12 16	12 27	12 37	12 45	12 53	13 0	13 8	13 16	13 27	13 34	13 42	13 52	14 5	14 22	14 48
28	13 16	13 22	13 26	13 31	13 35	13 39	13 43	13 47	13 53	13 56	14 0	14 5	14 12	14 20	14 33
29	14 14	14 15	14 15	14 15	14 15	14 16	14 16	14 17	14 17	14 17	14 17	14 18	14 18	14 18	14 19
30	15 12	15 7	15 3	14 59	14 56	14 53	14 50	14 46	14 41	14 38	14 34	14 30	14 24	14 17	14 6
Dez. 1	16 10	16 0	15 51	15 44	15 37	15 30	15 23	15 15	15 5	14 59	14 52	14 42	14 31	14 15	13 51
2	17 8	16 53	16 40	16 30	16 20	16 9	15 58	15 46	15 31	15 22	15 11	14 57	14 39	14 13	13 33
3	18 7	17 47	17 31	17 17	17 4	16 51	16 37	16 21	16 1	15 49	15 34	15 15	14 50	14 12	13 8
4	19 7	18 42	18 23	18 6	17 50	17 35	17 19	16 59	16 34	16 19	16 0	15 37	15 5	14 13	— —
5	20 5	19 38	19 16	18 57	18 39	18 22	18 3	17 41	17 14	16 57	16 35	16 7	15 27	14 17	— —
6	21 1	20 32	20 9	19 49	19 30	19 12	18 52	18 29	18 0	17 42	17 18	16 47	16 2	14 33	— —
7	21 52	21 23	21 0	20 41	20 22	20 4	19 44	19 21	18 52	18 34	18 10	17 40	16 54	15 22	— —
8	22 38	22 11	21 50	21 32	21 14	20 57	20 39	20 18	19 50	19 33	19 12	18 44	18 3	16 49	— —
9	23 18	22 55	22 37	22 21	22 6	21 51	21 35	21 17	20 53	20 38	20 20	19 57	19 24	18 31	— —
10	23 53	23 35	23 21	23 8	22 57	22 45	22 32	22 17	21 59	21 48	21 33	21 15	20 51	20 14	19 9
11	— —	— —	— —	23 54	23 46	23 38	23 29	23 19	23 6	22 58	22 48	22 37	22 21	21 58	21 23
12	0 25	0 13	0 3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	23 52	23 41
13	0 54	0 48	0 43	0 39	0 35	0 31	0 26	0 21	0 14	0 11	0 6	0 0	— —	— —	— —
14	1 23	1 24	1 24	1 24	1 24	1 24	1 24	1 24	1 24	1 24	1 24	1 24	1 25	1 25	1 25
15	1 53	2 0	2 5	2 10	2 14	2 19	2 24	2 29	2 36	2 40	2 45	2 51	2 59	3 11	3 29
16	2 26	2 39	2 49	2 59	3 8	3 16	3 26	3 37	3 50	3 59	4 9	4 21	4 38	5 2	5 41
17	3 2	3 22	3 37	3 51	4 4	4 17	4 31	4 46	5 6	5 18	5 34	5 53	6 19	7 0	8 18
18	3 46	4 11	4 30	4 47	5 4	5 20	5 37	5 57	6 22	6 38	6 58	7 23	7 59	9 1	— —
19	4 37	5 5	5 28	5 48	6 6	6 24	6 44	7 6	7 34	7 52	8 15	8 45	9 28	10 53	— —
20	5 36	6 6	6 29	6 49	7 8	7 27	7 47	8 10	8 39	8 57	9 21	9 52	10 36	12 3	— —
21	6 42	7 10	7 32	7 51	8 9	8 27	8 46	9 7	9 35	9 52	10 13	10 41	11 21	12 27	— —
22	7 50	8 14	8 34	8 50	9 6	9 21	9 38	9 57	10 20	10 34	10 52	11 15	11 47	12 34	14 20
23	8 57	9 17	9 32	9 46	9 58	10 10	10 23	10 39	10 57	11 8	11 22	11 40	12 3	12 36	13 31
24	10 2	10 16	10 27	10 37	10 46	10 55	11 4	11 15	11 28	11 36	11 46	11 58	12 14	12 35	13 8
25	11 5	11 13	11 19	11 25	11 31	11 36	11 42	11 48	11 56	12 0	12 6	12 13	12 22	12 34	12 51
26	12 5	12 7	12 9	12 11	12 13	12 14	12 16	12 18	12 21	12 22	12 24	12 26	12 29	12 32	12 37
27	13 3	13 0	12 58	12 56	12 54	12 52	12 49	12 47	12 45	12 44	12 41	12 38	12 35	12 30	12 23
28	14 1	13 53	13 46	13 40	13 34	13 29	13 23	13 17	13 9	13 4	12 58	12 50	12 41	12 28	12 9
29	14 59	14 46	14 35	14 25	14 16	14 8	13 58	13 47	13 34	13 26	13 16	13 4	12 48	12 26	11 53
30	15 58	15 39	15 25	15 12	15 0	14 48	14 35	14 20	14 2	13 51	13 37	13 20	12 58	12 25	11 31
31	16 57	16 34	16 16	16 0	15 45	15 31	15 16	14 57	14 34	14 20	14 3	13 41	13 11	12 25	10 50



Präzession in Länge $p_\lambda$										Präz. in Br. $p_\beta$		
Länge $\lambda$	Breite $\beta$									Länge $\lambda$	Präzession $p_\beta$	
	0°	+1°	+2°	+3°	+4°	+5°	+6°	+7°	+8°			+9°
0°	50".268	".259	".251	".243	".235	50".227	".218	".210	".202	".193	0°	+0.046 <sub>81</sub>
10	.268	.260	.252	.244	.236	.228	.220	.212	.204	.196	10	+0.127 <sub>76</sub>
20	.268	.260	.253	.245	.238	.230	.223	.215	.208	.200	20	+0.203 <sub>71</sub>
30	.268	.261	.254	.247	.241	.234	.227	.220	.214	.207	30	+0.274 <sub>62</sub>
40	50.268	.262	.256	.250	.244	50.239	.233	.227	.221	.215	40	+0.336 <sub>52</sub>
50	.268	.263	.258	.254	.249	.244	.240	.235	.230	.225	50	+0.388 <sub>41</sub>
60	.268	.264	.261	.257	.254	.250	.247	.244	.240	.237	60	+0.429 <sub>27</sub>
70	.268	.265	.263	.261	.259	.257	.255	.253	.251	.249	70	+0.456 <sub>13</sub>
80	50.268	.267	.266	.266	.265	50.264	.264	.263	.262	.262	80	+0.469 <sub>1</sub>
90	.268	.268	.269	.270	.271	.272	.272	.273	.274	.275	90	+0.468 <sub>15</sub>
100	.268	.270	.272	.274	.276	.279	.281	.283	.285	.288	100	+0.453 <sub>28</sub>
110	.268	.271	.275	.278	.282	.285	.289	.292	.296	.300	110	+0.425 <sub>42</sub>
120	50.268	.272	.277	.282	.287	50.291	.296	.301	.306	.311	120	+0.383 <sub>54</sub>
130	.268	.273	.279	.285	.291	.297	.303	.309	.315	.321	130	+0.329 <sub>63</sub>
140	.268	.274	.281	.288	.295	.301	.308	.315	.322	.329	140	+0.266 <sub>71</sub>
150	.268	.275	.282	.290	.297	.305	.313	.320	.328	.335	150	+0.195 <sub>78</sub>
160	50.268	.275	.283	.291	.299	50.307	.315	.323	.332	.340	160	+0.117 <sub>81</sub>
170	.268	.276	.284	.292	.300	.309	.317	.325	.333	.342	170	+0.036 <sub>82</sub>
180	.268	.276	.284	.292	.300	.308	.317	.325	.333	.342	180	-0.046 <sub>81</sub>
190	.268	.275	.283	.291	.299	.307	.315	.323	.331	.339	190	-0.127 <sub>76</sub>
200	50.268	.275	.282	.290	.297	50.305	.312	.320	.327	.335	200	-0.203 <sub>71</sub>
210	.268	.274	.281	.288	.294	.301	.308	.315	.321	.328	210	-0.274 <sub>62</sub>
220	.268	.273	.279	.285	.291	.296	.302	.308	.314	.320	220	-0.336 <sub>52</sub>
230	.268	.272	.277	.281	.286	.291	.295	.300	.305	.310	230	-0.388 <sub>41</sub>
240	50.268	.271	.274	.278	.281	50.285	.288	.291	.295	.298	240	-0.429 <sub>27</sub>
250	.268	.270	.272	.274	.276	.278	.280	.282	.284	.286	250	-0.456 <sub>13</sub>
260	.268	.268	.269	.269	.270	.271	.271	.272	.273	.273	260	-0.469 <sub>1</sub>
270	.268	.267	.266	.265	.264	.263	.263	.262	.261	.260	270	-0.468 <sub>15</sub>
280	50.268	.265	.263	.261	.259	50.256	.254	.252	.250	.247	280	-0.453 <sub>28</sub>
290	.268	.264	.260	.257	.253	.250	.246	.243	.239	.235	290	-0.425 <sub>42</sub>
300	.268	.263	.258	.253	.248	.244	.239	.234	.229	.224	300	-0.383 <sub>54</sub>
310	.268	.262	.256	.250	.244	.238	.232	.226	.220	.214	310	-0.329 <sub>63</sub>
320	50.268	.261	.254	.247	.240	50.234	.227	.220	.213	.206	320	-0.266 <sub>71</sub>
330	.268	.260	.253	.245	.238	.230	.222	.215	.207	.200	330	-0.195 <sub>78</sub>
340	.268	.260	.252	.244	.236	.228	.220	.212	.203	.195	340	-0.117 <sub>81</sub>
350	.268	.259	.251	.243	.235	.226	.218	.210	.202	.193	350	-0.036 <sub>82</sub>
360	50.268	.259	.251	.243	.235	50.227	.218	.210	.202	.193	360	+0.046



Präzession in Länge $p_\lambda$											Präz. in Br. $p_\beta$	
Länge $\lambda$	Breite $\beta$										Länge $\lambda$	Präzession $p_\beta$
	$0^\circ$	$-1^\circ$	$-2^\circ$	$-3^\circ$	$-4^\circ$	$-5^\circ$	$-6^\circ$	$-7^\circ$	$-8^\circ$	$-9^\circ$		
0	50.268	.276	.284	.292	.300	50.308	.317	.325	.333	.342	0	+0.046 <sub>81</sub>
10	.268	.275	.283	.291	.299	.307	.315	.323	.331	.339	10	+0.127 <sub>76</sub>
20	.268	.275	.282	.290	.297	.305	.312	.320	.327	.335	20	+0.203 <sub>71</sub>
30	.268	.274	.281	.288	.294	.301	.308	.315	.321	.328	30	+0.274 <sub>62</sub>
40	50.268	.273	.279	.285	.291	50.296	.302	.308	.314	.320	40	+0.336 <sub>52</sub>
50	.268	.272	.277	.281	.286	.291	.295	.300	.305	.310	50	+0.388 <sub>41</sub>
60	.268	.271	.274	.278	.281	.285	.288	.291	.295	.298	60	+0.429 <sub>27</sub>
70	.268	.270	.272	.274	.276	.278	.280	.282	.284	.286	70	+0.456 <sub>13</sub>
80	50.268	.268	.269	.269	.270	50.271	.271	.272	.273	.273	80	+0.469 <sub>1</sub>
90	.268	.267	.266	.265	.264	.263	.263	.262	.261	.260	90	+0.468 <sub>15</sub>
100	.268	.265	.263	.261	.259	.256	.254	.252	.250	.247	100	+0.453 <sub>28</sub>
110	.268	.264	.260	.257	.253	.250	.246	.243	.239	.235	110	+0.425 <sub>42</sub>
120	50.268	.263	.258	.253	.248	50.244	.239	.234	.229	.224	120	+0.383 <sub>54</sub>
130	.268	.262	.256	.250	.244	.238	.232	.226	.220	.214	130	+0.329 <sub>63</sub>
140	.268	.261	.254	.247	.240	.234	.227	.220	.216	.206	140	+0.266 <sub>71</sub>
150	.268	.260	.253	.245	.238	.230	.222	.215	.207	.200	150	+0.195 <sub>78</sub>
160	50.268	.260	.252	.244	.236	50.228	.220	.212	.203	.195	160	+0.117 <sub>81</sub>
170	.268	.259	.251	.243	.235	.226	.218	.210	.202	.193	170	+0.036 <sub>82</sub>
180	.268	.259	.251	.243	.235	.227	.218	.210	.202	.193	180	-0.046 <sub>81</sub>
190	.268	.260	.252	.244	.236	.228	.220	.212	.204	.196	190	-0.127 <sub>76</sub>
200	50.268	.260	.253	.245	.238	50.230	.223	.215	.208	.200	200	-0.203 <sub>71</sub>
210	.268	.261	.254	.247	.241	.234	.227	.220	.214	.207	210	-0.274 <sub>62</sub>
220	.268	.262	.256	.250	.244	.239	.233	.227	.221	.215	220	-0.336 <sub>51</sub>
230	.268	.263	.258	.254	.249	.244	.240	.235	.230	.225	230	-0.388 <sub>41</sub>
240	50.268	.264	.261	.257	.254	50.250	.247	.244	.240	.237	240	-0.429 <sub>27</sub>
250	.268	.265	.263	.261	.259	.257	.255	.253	.251	.249	250	-0.456 <sub>13</sub>
260	.268	.267	.266	.266	.265	.264	.264	.263	.262	.262	260	-0.469 <sub>1</sub>
270	.268	.268	.269	.270	.271	.272	.272	.273	.274	.275	270	-0.468 <sub>15</sub>
280	50.268	.270	.272	.274	.276	50.279	.281	.283	.285	.288	280	-0.453 <sub>28</sub>
290	.268	.271	.275	.278	.282	.285	.289	.292	.296	.300	290	-0.425 <sub>42</sub>
300	.268	.272	.277	.282	.287	.291	.296	.301	.306	.311	300	-0.383 <sub>54</sub>
310	.268	.273	.279	.285	.291	.297	.303	.309	.315	.321	310	-0.329 <sub>63</sub>
320	50.268	.274	.281	.288	.295	50.301	.308	.315	.322	.329	320	-0.266 <sub>71</sub>
330	.268	.275	.282	.290	.297	.305	.313	.320	.328	.335	330	-0.195 <sub>78</sub>
340	.268	.275	.283	.291	.299	.307	.315	.323	.332	.340	340	-0.117 <sub>81</sub>
350	.268	.276	.284	.292	.300	.309	.317	.325	.333	.342	350	-0.036 <sub>82</sub>
360	50.268	.276	.284	.292	.300	50.308	.317	.325	.333	.342	360	+0.046



Präzession in Rektaszension ( $p_\alpha$ ) und Deklination ( $p_\delta$ )

$\alpha \backslash \delta$	$p_\alpha$													$p_\delta$	
	+60°	+50°	+40°	+30°	+20°	+10°	0°	-10°	-20°	-30°	-40°	-50°	-60°		
0	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	+20.0
1	3.67	3.48	3.36	3.27	3.20	3.13	3.07	3.01	2.95	2.87	2.78	2.66	2.47	+19.4	
2	4.23	3.87	3.63	3.46	3.32	3.19	3.07	2.95	2.83	2.69	2.51	2.28	1.92	+17.4	
3	4.71	4.20	3.87	3.62	3.42	3.24	3.07	2.91	2.73	2.53	2.28	1.95	1.44	+14.2	
4	5.08	4.45	4.04	3.74	3.49	3.28	3.07	2.87	2.65	2.41	2.10	1.69	1.07	+10.0	
5	5.31	4.61	4.16	3.82	3.54	3.30	3.07	2.84	2.60	2.33	1.99	1.53	0.84	+ 5.2	
6	5.39	4.67	4.19	3.84	3.56	3.31	3.07	2.84	2.59	2.30	1.95	1.48	0.76	0.0	
7	5.31	4.61	4.16	3.82	3.54	3.30	3.07	2.84	2.60	2.33	1.99	1.53	0.84	- 5.2	
8	5.08	4.45	4.04	3.74	3.49	3.28	3.07	2.87	2.65	2.41	2.10	1.69	1.07	-10.0	
9	4.71	4.20	3.87	3.62	3.42	3.24	3.07	2.91	2.73	2.53	2.28	1.95	1.44	-14.2	
10	4.23	3.87	3.63	3.46	3.32	3.19	3.07	2.95	2.83	2.69	2.51	2.28	1.92	-17.4	
11	3.67	3.48	3.36	3.27	3.20	3.13	3.07	3.01	2.95	2.87	2.78	2.66	2.47	-19.4	
12	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	-20.0	
13	2.47	2.66	2.78	2.87	2.95	3.01	3.07	3.13	3.20	3.27	3.36	3.48	3.67	-19.4	
14	1.92	2.28	2.51	2.69	2.83	2.95	3.07	3.19	3.32	3.46	3.63	3.87	4.23	-17.4	
15	1.44	1.95	2.28	2.53	2.73	2.91	3.07	3.24	3.42	3.62	3.87	4.20	4.71	-14.2	
16	1.07	1.69	2.10	2.41	2.65	2.87	3.07	3.28	3.49	3.74	4.04	4.45	5.08	-10.0	
17	0.84	1.53	1.99	2.33	2.60	2.84	3.07	3.30	3.54	3.82	4.16	4.61	5.31	- 5.2	
18	0.76	1.48	1.95	2.30	2.59	2.84	3.07	3.31	3.56	3.84	4.19	4.67	5.39	0.0	
19	0.84	1.53	1.99	2.33	2.60	2.84	3.07	3.30	3.54	3.82	4.16	4.61	5.31	+ 5.2	
20	1.07	1.69	2.10	2.41	2.65	2.87	3.07	3.28	3.49	3.74	4.04	4.45	5.08	+10.0	
21	1.44	1.95	2.28	2.53	2.73	2.91	3.07	3.24	3.42	3.62	3.87	4.20	4.71	+14.2	
22	1.92	2.28	2.51	2.69	2.83	2.95	3.07	3.19	3.32	3.46	3.63	3.87	4.23	+17.4	
23	2.47	2.66	2.78	2.87	2.95	3.01	3.07	3.13	3.20	3.27	3.36	3.48	3.67	+19.4	
24	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	+20.0	

Präzessionswerte und Schiefe der Ekliptik

Zeit	$m$	$n$	$n$	$\psi$	$\log \pi$	$\Pi$	$\varepsilon$
1900.0	3.07234	20.0468	1.33646	50.2564	9.67309	173° 57.06	23° 27' 8".26
1905.0	3.07243	20.0464	1.33643	50.2575	9.67305	173 59.80	23 27 5.92
1910.0	3.07252	20.0460	1.33640	50.2586	9.67302	174 2.53	23 27 3.57
1915.0	3.07262	20.0456	1.33637	50.2597	9.67299	174 5.27	23 27 1.23
1920.0	3.07271	20.0451	1.33634	50.2608	9.67296	174 8.01	23 26 58.89
1925.0	3.07280	20.0447	1.33632	50.2620	9.67293	174 10.75	23 26 56.54
1930.0	3.07289	20.0443	1.33629	50.2631	9.67290	174 13.49	23 26 54.20
1935.0	3.07299	20.0439	1.33626	50.2642	9.67287	174 16.23	23 26 51.86
1940.0	3.07308	20.0434	1.33623	50.2653	9.67284	174 18.97	23 26 49.52
1945.0	3.07317	20.0430	1.33620	50.2664	9.67281	174 21.71	23 26 47.17
1950.0	3.07327	20.0426	1.33617	50.2675	9.67278	174 24.45	23 26 44.83



Verwandlung von Minuten und Sekunden in Dezimalteile des Grades und umgekehrt 367\*

ρ' 0.0	0.000	3' 0.0	0.050	0.000	0.00000	1.800	0.00050
3.6	01	3.6	51	036	01	836	51
7.2	02	7.2	52	072	02	872	52
10.8	03	10.8	53	108	03	908	53
14.4	04	14.4	54	144	04	944	54
0 18.0	0.005	3 18.0	0.055	0.180	0.00005	1.980	0.00055
21.6	06	21.6	56	216	06	2.016	56
25.2	07	25.2	57	252	07	052	57
28.8	08	28.8	58	288	08	088	58
32.4	09	32.4	59	324	09	124	59
0 36.0	0.010	3 36.0	0.060	0.360	0.00010	2.160	0.00060
39.6	11	39.6	61	396	11	196	61
43.2	12	43.2	62	432	12	232	62
46.8	13	46.8	63	468	13	268	63
50.4	14	50.4	64	504	14	304	64
54.0	0.015	54.0	0.065	0.540	0.00015	2.340	0.00065
0 57.6	16	3 57.6	66	576	16	376	66
I 1.2	17	4 1.2	67	612	17	412	67
4.8	18	4.8	68	648	18	448	68
8.4	19	8.4	69	684	19	484	69
I 12.0	0.020	4 12.0	0.070	0.720	0.00020	2.520	0.00070
15.6	21	15.6	71	756	21	556	71
19.2	22	19.2	72	792	22	592	72
22.8	23	22.8	73	828	23	628	73
26.4	24	26.4	74	864	24	664	74
I 30.0	0.025	4 30.0	0.075	0.900	0.00025	2.700	0.00075
33.6	26	33.6	76	936	26	736	76
37.2	27	37.2	77	0.972	27	772	77
40.8	28	40.8	78	1.008	28	808	78
44.4	29	44.4	79	044	29	844	79
I 48.0	0.030	4 48.0	0.080	1.080	0.00030	2.880	0.00080
51.6	31	51.6	81	116	31	916	81
55.2	32	55.2	82	152	32	952	82
I 58.8	33	4 58.8	83	188	33	2.988	83
2 2.4	34	5 2.4	84	224	34	3.024	84
6.0	0.035	6.0	0.085	1.260	0.00035	060	0.00085
9.6	36	9.6	86	296	36	096	86
13.2	37	13.2	87	332	37	132	87
16.8	38	16.8	88	368	38	168	88
20.4	39	20.4	89	404	39	204	89
2 24.0	0.040	5 24.0	0.090	1.440	0.00040	3.240	0.00090
27.6	41	27.6	91	476	41	276	91
31.2	42	31.2	92	512	42	312	92
34.8	43	34.8	93	548	43	348	93
38.4	44	38.4	94	584	44	384	94
2 42.0	0.045	5 42.0	0.095	1.620	0.00045	3.420	0.00095
45.6	46	45.6	96	656	46	456	96
49.2	47	49.2	97	692	47	492	97
52.8	48	52.8	98	728	48	528	98
2 56.4	49	5 56.4	99	764	49	564	99
3 0.0	0.050	6 0.0	0.100	1.800	0.00050	3.600	0.00100



368\* **Verwandlung von mittlerer Zeit in Sternzeit**

Red.	0 <sup>m</sup>	1 <sup>m</sup>	2 <sup>m</sup>	3 <sup>m</sup>	Red.		Red.	
a	h m s	h m s	h m s	h m s	a	m s	a	m s
0	0 0 0	6 5 15	12 10 29	18 15 44	0.00	0 0	0.50	3 3
1	0 6 5	6 11 20	12 16 34	18 21 49	0.01	0 4	0.51	3 6
2	0 12 10	6 17 25	12 22 40	18 27 54	0.02	0 7	0.52	3 10
3	0 18 16	6 23 30	12 28 45	18 33 59	0.03	0 11	0.53	3 14
4	0 24 21	6 29 36	12 34 50	18 40 5	0.04	0 15	0.54	3 17
5	0 30 26	6 35 41	12 40 55	18 46 10	0.05	0 18	0.55	3 21
6	0 36 31	6 41 46	12 47 1	18 52 15	0.06	0 22	0.56	3 25
7	0 42 37	6 47 51	12 53 6	18 58 20	0.07	0 26	0.57	3 28
8	0 48 42	6 53 56	12 59 11	19 4 26	0.08	0 29	0.58	3 32
9	0 54 47	7 0 2	13 5 16	19 10 31	0.09	0 33	0.59	3 35
10	1 0 52	7 6 7	13 11 21	19 16 36	0.10	0 37	0.60	3 39
11	1 6 58	7 12 12	13 17 27	19 22 41	0.11	0 40	0.61	3 43
12	1 13 3	7 18 17	13 23 32	19 28 47	0.12	0 44	0.62	3 46
13	1 19 8	7 24 23	13 29 37	19 34 52	0.13	0 47	0.63	3 50
14	1 25 13	7 30 28	13 35 42	19 40 57	0.14	0 51	0.64	3 54
15	1 31 19	7 36 33	13 41 48	19 47 2	0.15	0 55	0.65	3 57
16	1 37 24	7 42 38	13 47 53	19 53 7	0.16	0 58	0.66	4 1
17	1 43 29	7 48 44	13 53 58	19 59 13	0.17	1 2	0.67	4 5
18	1 49 34	7 54 49	14 0 3	20 5 18	0.18	1 6	0.68	4 8
19	1 55 40	8 0 54	14 6 9	20 11 23	0.19	1 9	0.69	4 12
20	2 1 45	8 6 59	14 12 14	20 17 28	0.20	1 13	0.70	4 16
21	2 7 50	8 13 5	14 18 19	20 23 34	0.21	1 17	0.71	4 19
22	2 13 55	8 19 10	14 24 24	20 29 39	0.22	1 20	0.72	4 23
23	2 20 1	8 25 15	14 30 30	20 35 44	0.23	1 24	0.73	4 27
24	2 26 6	8 31 20	14 36 35	20 41 49	0.24	1 28	0.74	4 30
25	2 32 11	8 37 26	14 42 40	20 47 55	0.25	1 31	0.75	4 34
26	2 38 16	8 43 31	14 48 45	20 54 0	0.26	1 35	0.76	4 38
27	2 44 22	8 49 36	14 54 51	21 0 5	0.27	1 39	0.77	4 41
28	2 50 27	8 55 41	15 0 56	21 6 10	0.28	1 42	0.78	4 45
29	2 56 32	9 1 47	15 7 1	21 12 16	0.29	1 46	0.79	4 49
30	3 2 37	9 7 52	15 13 6	21 18 21	0.30	1 50	0.80	4 52
31	3 8 43	9 13 57	15 19 12	21 24 26	0.31	1 53	0.81	4 56
32	3 14 48	9 20 2	15 25 17	21 30 31	0.32	1 57	0.82	4 59
33	3 20 53	9 26 8	15 31 22	21 36 37	0.33	2 1	0.83	5 3
34	3 26 58	9 32 13	15 37 27	21 42 42	0.34	2 4	0.84	5 7
35	3 33 3	9 38 18	15 43 33	21 48 47	0.35	2 8	0.85	5 10
36	3 39 9	9 44 23	15 49 38	21 54 52	0.36	2 11	0.86	5 14
37	3 45 14	9 50 28	15 55 43	22 0 58	0.37	2 15	0.87	5 18
38	3 51 19	9 56 34	16 1 48	22 7 3	0.38	2 19	0.88	5 21
39	3 57 24	10 2 39	16 7 54	22 13 8	0.39	2 22	0.89	5 25
40	4 3 30	10 8 44	16 13 59	22 19 13	0.40	2 26	0.90	5 29
41	4 9 35	10 14 49	16 20 4	22 25 19	0.41	2 30	0.91	5 32
42	4 15 40	10 20 55	16 26 9	22 31 24	0.42	2 33	0.92	5 36
43	4 21 45	10 27 0	16 32 14	22 37 29	0.43	2 37	0.93	5 40
44	4 27 51	10 33 5	16 38 20	22 43 34	0.44	2 41	0.94	5 43
45	4 33 56	10 39 10	16 44 25	22 49 39	0.45	2 44	0.95	5 47
46	4 40 1	10 45 16	16 50 30	22 55 45	0.46	2 48	0.96	5 51
47	4 46 6	10 51 21	16 56 35	23 1 50	0.47	2 52	0.97	5 54
48	4 52 12	10 57 26	17 2 41	23 7 55	0.48	2 55	0.98	5 58
49	4 58 17	11 3 31	17 8 46	23 14 0	0.49	2 59	0.99	6 2
50	5 4 22	11 9 37	17 14 51	23 20 6	0.50	3 3	1.00	6 5
51	5 10 27	11 15 42	17 20 56	23 26 11				
52	5 16 33	11 21 47	17 27 2	23 32 16				
53	5 22 38	11 27 52	17 33 7	23 38 21				
54	5 28 43	11 33 58	17 39 12	23 44 27				
55	5 34 48	11 40 3	17 45 17	23 50 32				
56	5 40 54	11 46 8	17 51 23	23 56 37				
57	5 46 59	11 52 13	17 57 28	24 2 42				
58	5 53 4	11 58 19	18 3 33	24 8 48				
59	5 59 9	12 4 24	18 9 38	24 14 53				

Die Reduktion  
ist zur mittleren Zeit  
zu addieren.



# Verwandlung von Sternzeit in mittlere Zeit 369\*

Red.	0 <sup>m</sup>			1 <sup>m</sup>			2 <sup>m</sup>			3 <sup>m</sup>			Red.	Red.				
	h	m	s	h	m	s	h	m	s	h	m	s		h	m	s		
0	0	0	0	6	6	15	12	12	29	18	18	44	0.00	0	0	0.50	3	3
1	0	6	6	6	12	21	12	18	35	18	24	50	0.01	0	4	0.51	3	7
2	0	12	12	6	18	27	12	24	42	18	30	56	0.02	0	7	0.52	3	10
3	0	18	19	6	24	33	12	30	48	18	37	2	0.03	0	11	0.53	3	14
4	0	24	25	6	30	40	12	36	54	18	43	9	0.04	0	15	0.54	3	18
5	0	30	31	6	36	46	12	43	0	18	49	15	0.05	0	18	0.55	3	21
6	0	36	37	6	42	52	12	49	7	18	55	21	0.06	0	22	0.56	3	25
7	0	42	44	6	48	58	12	55	13	19	1	27	0.07	0	26	0.57	3	29
8	0	48	50	6	55	4	13	1	19	19	7	34	0.08	0	29	0.58	3	32
9	0	54	56	7	1	11	13	7	25	19	13	40	0.09	0	33	0.59	3	36
10	1	1	2	7	7	17	13	13	31	19	19	46	0.10	0	37	0.60	3	40
11	1	7	9	7	13	23	13	19	38	19	25	52	0.11	0	40	0.61	3	43
12	1	13	15	7	19	29	13	25	44	19	31	59	0.12	0	44	0.62	3	47
13	1	19	21	7	25	36	13	31	50	19	38	5	0.13	0	48	0.63	3	51
14	1	25	27	7	31	42	13	37	56	19	44	11	0.14	0	51	0.64	3	54
15	1	31	34	7	37	48	13	44	3	19	50	17	0.15	0	55	0.65	3	58
16	1	37	40	7	43	54	13	50	9	19	56	23	0.16	0	59	0.66	4	2
17	1	43	46	7	50	1	13	56	15	20	2	30	0.17	1	2	0.67	4	5
18	1	49	52	7	56	7	14	2	21	20	8	36	0.18	1	6	0.68	4	9
19	1	55	59	8	2	13	14	8	28	20	14	42	0.19	1	10	0.69	4	13
20	2	2	5	8	8	19	14	14	34	20	20	48	0.20	1	13	0.70	4	16
21	2	8	11	8	14	26	14	20	40	20	26	55	0.21	1	17	0.71	4	20
22	2	14	17	8	20	32	14	26	46	20	33	1	0.22	1	21	0.72	4	24
23	2	20	24	8	26	38	14	32	53	20	39	7	0.23	1	24	0.73	4	27
24	2	26	30	8	32	44	14	38	59	20	45	13	0.24	1	28	0.74	4	31
25	2	32	36	8	38	51	14	45	5	20	51	20	0.25	1	32	0.75	4	35
26	2	38	42	8	44	57	14	51	11	20	57	26	0.26	1	35	0.76	4	38
27	2	44	49	8	51	3	14	57	18	21	3	32	0.27	1	39	0.77	4	42
28	2	50	55	8	57	9	15	3	24	21	9	38	0.28	1	43	0.78	4	46
29	2	57	1	9	3	16	15	9	30	21	15	45	0.29	1	46	0.79	4	49
30	3	3	7	9	9	22	15	15	36	21	21	51	0.30	1	50	0.80	4	53
31	3	9	14	9	15	28	15	21	43	21	27	57	0.31	1	54	0.81	4	57
32	3	15	20	9	21	34	15	27	49	21	34	3	0.32	1	57	0.82	5	0
33	3	21	26	9	27	41	15	33	55	21	40	10	0.33	2	1	0.83	5	4
34	3	27	32	9	33	47	15	40	1	21	46	16	0.34	2	5	0.84	5	8
35	3	33	38	9	39	53	15	46	8	21	52	22	0.35	2	8	0.85	5	11
36	3	39	45	9	45	59	15	52	14	21	58	28	0.36	2	12	0.86	5	15
37	3	45	51	9	52	5	15	58	20	22	4	35	0.37	2	16	0.87	5	19
38	3	51	57	9	58	12	16	4	26	22	10	41	0.38	2	19	0.88	5	22
39	3	58	3	10	4	18	16	10	33	22	16	47	0.39	2	23	0.89	5	26
40	4	4	10	10	10	24	16	16	39	22	22	53	0.40	2	26	0.90	5	30
41	4	10	16	10	16	30	16	22	45	22	29	0	0.41	2	30	0.91	5	33
42	4	16	22	10	22	37	16	28	51	22	35	6	0.42	2	34	0.92	5	37
43	4	22	28	10	28	43	16	34	57	22	41	12	0.43	2	37	0.93	5	41
44	4	28	35	10	34	49	16	41	4	22	47	18	0.44	2	41	0.94	5	44
45	4	34	41	10	40	55	16	47	10	22	53	24	0.45	2	45	0.95	5	48
46	4	40	47	10	47	2	16	53	16	22	59	31	0.46	2	48	0.96	5	52
47	4	46	53	10	53	8	16	59	22	23	5	37	0.47	2	52	0.97	5	55
48	4	53	0	10	59	14	17	5	29	23	11	43	0.48	2	56	0.98	5	59
49	4	59	6	11	5	20	17	11	35	23	17	49	0.49	2	59	0.99	6	3
50	5	5	12	11	11	27	17	17	41	23	23	56	0.50	3	3	1.00	6	6
51	5	11	18	11	17	33	17	23	47	23	30	2						
52	5	17	25	11	23	39	17	29	54	23	36	8						
53	5	23	31	11	29	45	17	36	0	23	42	14						
54	5	29	37	11	35	52	17	42	6	23	48	21						
55	5	35	43	11	41	58	17	48	12	23	54	27						
56	5	41	50	11	48	4	17	54	19	24	0	33						
57	5	47	56	11	54	10	18	0	25	24	6	39						
58	5	54	2	12	0	17	18	6	31	24	12	46						
59	6	0	8	12	6	23	18	12	37	24	18	52						

Die Reduktion  
ist von der Sternzeit  
zu subtrahieren.



Red.	0 <sup>m</sup>	1 <sup>m</sup>	2 <sup>m</sup>	3 <sup>m</sup>	Red.	Red.	Red.	Red.
0	l m s 0 0 0.0	h m s 6 5 14.5	h m s 12 10 29.1	h m s 18 15 43.6	0	0.00	0 0.0	0.50
1	6 5.2	11 19.8	16 34.3	21 48.8	1	01	3.7	51 3 2.6
2	12 10.5	17 25.0	22 39.6	27 54.1	2	02	7.3	52 9.9
3	18 15.7	23 30.3	28 44.8	33 59.3	3	03	11.0	53 13.6
4	24 21.0	29 35.5	34 50.0	40 4.6	4	04	14.6	54 17.2
5	30 26.2	35 40.7	40 55.3	46 9.8	5	0.05	18.3	0.55 20.9
6	36 31.5	41 46.0	47 0.5	52 15.1	6	06	21.9	56 24.5
7	42 36.7	47 51.2	53 5.8	18 58 20.3	7	07	25.6	57 28.2
8	48 41.9	6 53 56.5	12 59 11.0	19 4 25.5	8	08	29.2	58 31.8
9	0 54 47.2	7 0 1.7	13 5 16.2	10 30.8	9	09	32.9	59 35.5
10	1 0 52.4	6 7.0	11 21.5	16 36.0	10	0.10	36.5	0.60 39.1
11	6 57.7	12 12.2	17 26.7	22 41.3	11	11	40.2	61 42.8
12	13 2.9	18 17.4	23 32.0	28 46.5	12	12	43.8	62 46.5
13	19 8.1	24 22.7	29 37.2	34 51.8	13	13	47.5	63 50.1
14	25 13.4	30 27.9	35 42.5	40 57.0	14	14	51.1	64 53.8
15	31 18.6	36 33.2	41 47.7	47 2.2	15	0.15	54.8	0.65 3 57.4
16	37 23.9	42 38.4	47 52.9	53 7.5	16	16	0 58.4	66 4 1.1
17	43 29.1	48 43.7	13 53 58.2	19 59 12.7	17	17	1 2.1	67 4.7
18	49 34.4	7 54 48.9	14 0 3.4	20 5 18.0	18	18	5.7	68 8.4
19	1 55 39.6	8 0 54.1	6 8.7	11 23.2	19	19	9.4	69 12.0
20	2 1 44.8	6 59.4	12 13.9	17 28.4	20	0.20	13.0	0.70 15.7
21	7 50.1	13 4.6	18 19.2	23 33.7	21	21	16.7	71 19.3
22	13 55.3	19 9.9	24 24.4	29 38.9	22	22	20.4	72 23.0
23	20 0.6	25 15.1	30 29.6	35 44.2	23	23	24.0	73 26.6
24	26 5.8	31 20.3	36 34.9	41 49.4	24	24	27.7	74 30.3
25	32 11.1	37 25.6	42 40.1	47 54.7	25	0.25	31.3	0.75 33.9
26	38 16.3	43 30.8	48 45.4	20 53 59.9	26	26	35.0	76 37.6
27	44 21.5	49 36.1	14 54 50.6	21 0 5.1	27	27	38.6	77 41.2
28	50 26.8	8 55 41.3	15 0 55.9	6 10.4	28	28	42.3	78 44.9
29	2 56 32.0	9 1 46.6	7 1.1	12 15.6	29	29	45.9	79 48.5
30	3 2 37.3	7 51.8	13 6.3	18 20.9	30	0.30	49.6	0.80 52.2
31	8 42.5	13 57.0	19 11.6	24 26.1	31	31	53.2	81 55.8
32	14 47.8	20 2.3	25 16.8	30 31.4	32	32	1 56.9	82 4 59.5
33	20 53.0	26 7.5	31 22.1	36 36.6	33	33	2 0.5	83 5 3.2
34	26 58.2	32 12.8	37 27.3	42 41.8	34	34	4.2	84 6.8
35	33 3.5	38 18.0	43 32.5	48 47.1	35	0.35	7.8	0.85 10.5
36	39 8.7	44 23.3	49 37.8	21 54 52.3	36	36	11.5	86 14.1
37	45 14.0	50 28.5	15 55 43.0	22 0 57.6	37	37	15.1	87 17.8
38	51 19.2	9 56 33.7	16 1 48.3	7 2.8	38	38	18.8	88 21.4
39	3 57 24.4	10 2 39.0	7 53.5	13 8.0	39	39	22.4	89 25.1
40	4 3 29.7	8 44.2	13 58.8	19 13.3	40	0.40	26.1	0.90 28.7
41	9 34.9	14 49.5	20 4.0	25 18.5	41	41	29.7	91 32.4
42	15 40.2	20 54.7	26 9.2	31 23.8	42	42	33.4	92 36.0
43	21 45.4	27 0.0	32 14.5	37 29.0	43	43	37.1	93 39.7
44	27 50.7	33 5.2	38 19.7	43 34.3	44	44	40.7	94 43.3
45	33 55.9	39 10.4	44 25.0	49 39.5	45	0.45	44.4	0.95 47.0
46	40 1.1	45 15.7	50 30.2	22 55 44.7	46	46	48.0	96 50.6
47	46 6.4	51 20.9	16 56 35.5	23 1 50.0	47	47	51.7	97 54.3
48	52 11.6	10 57 26.2	17 2 40.7	7 55.2	48	48	55.3	98 5 57.9
49	4 58 16.9	11 3 31.4	8 45.9	14 0.5	49	0.49	2 59.0	0.99 6 1.6
50	5 4 22.1	9 36.6	14 51.2	20 5.7	50	Red.	Red.	Red.
51	10 27.4	15 41.9	20 56.4	26 11.0	51	0.000	0.003	0.006
52	16 32.6	21 47.1	27 1.7	32 16.2	52	0.2	1.3	2.4
53	22 37.8	27 52.4	33 6.9	38 21.4	53	001	004	007
54	28 43.1	33 57.6	39 12.1	44 26.7	54	0.5	1.6	2.7
55	34 48.3	40 2.9	45 17.4	50 31.9	55	002	005	008
56	40 53.6	46 8.1	51 22.6	23 56 37.2	56	0.9	2.0	3.1
57	46 58.8	52 13.3	17 57 27.9	24 2 42.4	57	003	006	009
58	53 4.0	11 58 18.6	18 3 33.1	8 47.7	58	1.3	2.4	3.5
59	5 59 9.3	12 4 23.8	18 9 38.4	24 14 52.9	59	0.004	0.007	0.010

Die Reduktion ist zur mittleren Zeit zu addieren.

3.8



# Verwandlung von Sternzeit in mittlere Zeit

371\*

Red.	0 <sup>m</sup>			1 <sup>m</sup>			2 <sup>m</sup>			3 <sup>m</sup>			Red.	Red.			Red.	Red.			
	h	m	s	h	m	s	h	m	s	h	m	s		h	m	s		h	m	s	h
0	0	0	0.0	6	6	14.5	12	12	29.1	18	18	43.6	0	0	0.00	0	0	0.50	3	3	3.1
1	6	6	2.2	12	20	8	18	35	3	24	49	9	1	01	3	7	51	6	6	8	
2	12	12	5	18	27	0	24	41	6	30	56	1	2	02	7	3	52	10	4	0	
3	18	18	7	24	33	3	30	47	8	37	2	3	3	03	11	0	53	14	1	1	
4	24	25	0	30	39	5	36	54	0	43	8	4	4	04	14	6	54	17	8	0	
5	30	31	2	36	45	7	43	0	3	49	14	5	5	05	18	3	0	21	4	0	
6	36	37	5	42	52	0	49	6	5	18	55	21	6	06	22	0	56	25	1	0	
7	42	43	7	48	58	2	12	55	12	19	1	27	7	07	25	6	57	28	8	0	
8	48	49	9	6	55	4	13	1	19	0	7	33	8	08	29	3	58	32	4	0	
9	54	56	2	7	1	10	7	25	3	13	39	8	9	09	33	0	59	36	1	0	
10	1	1	2	7	17	0	13	31	5	19	46	0	10	10	36	6	0	39	7	0	
11	7	8	7	13	23	2	19	37	7	25	52	3	11	11	40	3	61	43	4	0	
12	13	14	9	19	29	4	25	44	0	31	58	5	12	12	43	9	62	47	1	0	
13	19	21	1	25	35	7	31	50	2	38	4	8	13	13	47	6	63	50	7	0	
14	25	27	4	31	41	9	37	56	5	44	11	0	14	14	51	3	64	54	4	0	
15	31	33	6	37	48	2	44	2	7	50	17	2	15	0	15	54	9	58	1	0	
16	37	39	9	43	54	4	50	8	9	19	56	23	16	16	58	6	66	4	1	7	
17	43	46	1	50	0	7	13	56	15	20	2	29	17	17	1	2	67	5	4	0	
18	49	52	4	7	56	6	14	2	21	4	36	0	18	18	5	9	68	9	0	0	
19	55	58	6	8	2	13	1	8	27	7	42	2	19	19	9	6	69	12	7	0	
20	2	2	4	8	19	4	14	33	9	20	48	5	20	0	20	13	70	16	4	0	
21	8	11	1	14	25	6	20	40	2	26	54	7	21	21	16	9	71	20	0	0	
22	14	17	3	20	31	9	26	46	4	33	0	9	22	22	20	6	72	23	7	0	
23	20	23	6	26	38	1	32	52	6	39	7	2	23	23	24	2	73	27	4	0	
24	26	29	8	32	44	4	38	58	9	45	13	4	24	24	27	9	74	31	0	0	
25	32	36	1	38	50	6	45	5	1	51	19	7	25	0	25	31	6	34	7	0	
26	38	42	3	44	56	8	51	11	4	20	57	25	26	26	35	2	76	38	3	0	
27	44	48	5	51	3	1	14	57	17	21	3	32	27	27	38	9	77	42	0	0	
28	50	54	8	8	57	9	15	3	23	9	38	4	28	28	42	5	78	45	7	0	
29	2	57	1	9	3	15	6	9	30	15	44	6	29	29	46	2	79	49	3	0	
30	3	3	7	9	21	8	15	36	3	21	50	9	30	0	30	49	80	53	0	0	
31	9	13	5	15	28	0	21	42	6	27	57	1	31	31	53	5	81	4	56	7	0
32	15	19	8	21	34	3	27	48	8	34	3	4	32	32	57	2	82	5	0	3	
33	21	26	0	27	40	5	33	55	1	40	9	6	33	33	0	9	83	4	0	0	
34	27	32	2	33	46	8	40	1	3	46	15	8	34	34	4	5	84	7	6	0	
35	33	38	5	39	53	0	46	7	6	52	22	1	35	0	35	8	85	11	3	0	
36	39	44	7	45	59	3	52	13	8	21	58	28	36	36	11	8	86	15	0	0	
37	45	51	0	52	5	5	15	58	20	22	4	34	37	37	15	5	87	18	6	0	
38	51	57	2	9	58	11	16	4	26	10	40	8	38	38	19	2	88	22	3	0	
39	3	58	3	10	4	18	10	32	5	16	47	1	39	39	22	8	89	26	0	0	
40	4	4	9	10	24	2	16	38	8	22	53	3	40	0	40	26	90	29	6	0	
41	10	15	9	16	30	5	22	45	0	28	59	5	41	41	30	2	91	33	3	0	
42	16	22	2	22	36	7	28	51	2	35	5	8	42	42	33	8	92	36	9	0	
43	22	28	4	28	43	0	34	57	5	41	12	0	43	43	37	5	93	40	6	0	
44	28	34	7	34	49	2	41	3	7	47	18	3	44	44	41	1	94	44	3	0	
45	34	40	9	40	55	4	47	10	0	53	24	5	45	0	45	44	8	47	9	0	
46	40	47	1	47	1	7	53	16	2	22	59	30	46	46	48	5	96	51	6	0	
47	46	53	4	53	7	9	16	59	22	23	5	37	47	47	52	1	97	55	3	0	
48	52	59	6	10	59	14	17	5	28	11	43	2	48	48	55	8	98	5	58	9	0
49	4	59	5	11	5	20	11	34	9	17	49	5	49	0	49	59	99	6	2	6	
50	5	5	12	11	26	7	17	41	2	23	55	7	50	Red.	Red.	Red.					
51	11	18	4	17	32	9	23	47	4	30	2	0	51	0.000	0.003	0.006					
52	17	24	6	23	39	1	29	53	7	36	8	2	52	0.2	1.3	2.4					
53	23	30	8	29	45	4	35	59	9	42	14	5	53	001	004	007					
54	29	37	1	35	51	6	42	6	2	48	20	7	54	0.5	1.6	2.7					
55	35	43	3	41	57	9	48	12	4	23	54	26	55	002	005	008					
56	41	49	6	48	4	1	17	54	18	24	0	33	56	0.9	2.0	3.1					
57	47	55	8	11	54	10	18	0	24	9	39	4	57	003	006	009					
58	5	54	2	12	0	16	6	31	1	12	45	7	58	1.3	2.4	3.5					
59	6	0	8	12	6	22	18	12	37	24	18	51	59	0.004	0.007	0.010					

Die Reduktion ist von der Sternzeit zu subtrahieren.



372\* Verwandlung von Stunden, Minuten und Sekunden

	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>		
m	d	d	d	d	d	d	s	d
0	0.000000	0.041667	0.083333	0.125000	0.166667	0.208333	0	0.000000
1	000694	042361	084028	125694	167361	209028	1	000012
2	001389	043056	084722	126389	168056	209722	2	000023
3	002083	043750	085417	127083	168750	210417	3	000035
4	002778	044444	086111	127778	169444	211111	4	000046
5	0.003472	0.045139	0.086806	0.128472	0.170139	0.211806	5	0.000058
6	004167	045833	087500	129167	170833	212500	6	000069
7	004861	046528	088194	129861	171528	213194	7	000081
8	005556	047222	088889	130556	172222	213889	8	000093
9	006250	047917	089583	131250	172917	214583	9	000104
10	0.006944	0.048611	0.090278	0.131944	0.173611	0.215278	10	0.000116
11	007639	049306	090972	132639	174306	215972	11	000127
12	008333	050000	091667	133333	175000	216667	12	000139
13	009028	050694	092361	134028	175694	217361	13	000150
14	009722	051389	093056	134722	176389	218056	14	000162
15	0.010417	0.052083	0.093750	0.135417	0.177083	0.218750	15	0.000174
16	011111	052778	094444	136111	177778	219444	16	000185
17	011806	053472	095139	136806	178472	220139	17	000197
18	012500	054167	095833	137500	179167	220833	18	000208
19	013194	054861	096528	138194	179861	221528	19	000220
20	0.013889	0.055561	0.097222	0.138889	0.180556	0.222222	20	0.000231
21	014583	056250	097917	139583	181250	222917	21	000243
22	015278	056944	098611	140278	181944	223611	22	000255
23	015972	057639	099306	140972	182639	224306	23	000266
24	016667	058333	100000	141667	183333	225000	24	000278
25	0.017361	0.059028	0.100694	0.142361	0.184028	0.225694	25	0.000289
26	018056	059722	101389	143056	184722	226389	26	000301
27	018750	060417	102083	143750	185417	227083	27	000313
28	019444	061111	102778	144444	186111	227778	28	000324
29	020139	061806	103472	145139	186806	228472	29	000336
30	0.020833	0.062500	0.104167	0.145833	0.187500	0.229167	30	0.000347
31	021528	063194	104861	146528	188194	229861	31	000359
32	022222	063889	105556	147222	188889	230556	32	000370
33	022917	064583	106250	147917	189583	231250	33	000382
34	023611	065278	106944	148611	190278	231944	34	000394
35	0.024306	0.065972	0.107639	0.149306	0.190972	0.232639	35	0.000405
36	025000	066667	108333	150000	191667	233333	36	000417
37	025694	067361	109028	150694	192361	234028	37	000428
38	026389	068056	109722	151389	193056	234722	38	000440
39	027083	068750	110417	152083	193750	235417	39	000451
40	0.027778	0.069444	0.111111	0.152778	0.194444	0.236111	40	0.000463
41	028472	070139	111806	153472	195139	236806	41	000475
42	029167	070833	112500	154167	195833	237500	42	000486
43	029861	071528	113194	154861	196528	238194	43	000498
44	030556	072222	113889	155556	197222	238889	44	000509
45	0.031250	0.072917	0.114583	0.156250	0.197917	0.239583	45	0.000521
46	031944	073611	115278	156944	198611	240278	46	000532
47	032639	074306	115972	157639	199306	240972	47	000544
48	033333	075000	116667	158333	200000	241667	48	000556
49	034028	075694	117361	159028	200694	242361	49	000567
50	0.034722	0.076389	0.118056	0.159722	0.201389	0.243056	50	0.000579
51	035417	077083	118750	160417	202083	243750	51	000590
52	036111	077778	119444	161111	202778	244444	52	000602
53	036806	078472	120139	161806	203472	245139	53	000613
54	037500	079167	120833	162500	204167	245833	54	000625
55	0.038194	0.079861	0.121528	0.163194	0.204861	0.246528	55	0.000637
56	038889	080556	122222	163889	205556	247222	56	000648
57	039583	081250	122917	164583	206250	247917	57	000660
58	040278	081944	123611	165278	206944	248611	58	000671
59	0.040972	0.082639	0.124306	0.165972	0.207639	0.249306	59	0.000683



	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>		
0 <sup>m</sup>	d 0.250000	d 0.291667	d 0.333333	d 0.375000	d 0.416667	d 0.458333	0	d 0.000000
1	250694	292361	334028	375694	417361	459028	1	000012
2	251389	293056	334722	376389	418056	459722	2	000023
3	252083	293750	335477	377083	418750	460417	3	000035
4	252778	294444	336111	377778	419444	461111	4	000046
5	0.253472	0.295139	0.336806	0.378472	0.420139	0.461806	5	0.000058
6	254167	295833	337500	379167	420833	462500	6	000069
7	254861	296528	338194	379861	421528	463194	7	000081
8	255556	297222	338889	380556	422222	463889	8	000093
9	256250	297917	339583	381250	422917	464583	9	000104
10	0.256944	0.298611	0.340278	0.381944	0.423611	0.465278	10	0.000116
11	257639	299306	340972	382639	424306	465972	11	000127
12	258333	300000	341667	383333	425000	466667	12	000139
13	259028	300694	342361	384028	425694	467361	13	000150
14	259722	301389	343056	384722	426389	468056	14	000162
15	0.260417	0.302083	0.343750	0.385417	0.427083	0.468750	15	0.000174
16	261111	302778	344444	386111	427778	469444	16	000185
17	261806	303472	345139	386806	428472	470139	17	000197
18	262500	304167	345833	387500	429167	470833	18	000208
19	263194	304861	346528	388194	429861	471528	19	000220
20	0.263889	0.305556	0.347222	0.388889	0.430556	0.472222	20	0.000231
21	264583	306250	347917	389583	431250	472917	21	000243
22	265278	306944	348611	390278	431944	473611	22	000255
23	265972	307639	349306	390972	432639	474306	23	000266
24	266667	308333	350000	391667	433333	475000	24	000278
25	0.267361	0.309028	0.350694	0.392361	0.434028	0.475694	25	0.000289
26	268056	309722	351389	393056	434722	476389	26	000301
27	268750	310417	352083	393750	435417	477083	27	000313
28	269444	311111	352778	394444	436111	477778	28	000324
29	270139	311806	353472	395139	436806	478472	29	000336
30	0.270833	0.312500	0.354167	0.395833	0.437500	0.479167	30	0.000347
31	271528	313194	354861	396528	438194	479861	31	000359
32	272222	313889	355556	397222	438889	480556	32	000370
33	272917	314583	356250	397917	439583	481250	33	000382
34	273611	315278	356944	398611	440278	481944	34	000394
35	0.274306	0.315972	0.357639	0.399306	0.440972	0.482639	35	0.000405
36	275000	316667	358333	400000	441667	483333	36	000417
37	275694	317361	359028	400694	442361	484028	37	000428
38	276389	318056	359722	401389	443056	484722	38	000440
39	277083	318750	360417	402083	443750	485417	39	000451
40	0.277778	0.319444	0.361111	0.402778	0.444444	0.486111	40	0.000463
41	278472	320139	361806	403472	445139	486806	41	000475
42	279167	320833	362500	404167	445833	487500	42	000486
43	279861	321528	363194	404861	446528	488194	43	000498
44	280556	322222	363889	405556	447222	488889	44	000509
45	0.281250	0.322917	0.364583	0.406250	0.447917	0.489583	45	0.000521
46	281944	323611	365278	406944	448611	490278	46	000532
47	282639	324306	365972	407639	449306	490972	47	000544
48	283333	325000	366667	408333	450000	491667	48	000556
49	284028	325694	367361	409028	450694	492361	49	000567
50	0.284722	0.326389	0.368056	0.409722	0.451389	0.493056	50	0.000579
51	285417	327083	368750	410417	452083	493750	51	000590
52	286111	327778	369444	411111	452778	494444	52	000602
53	286806	328472	370139	411806	453472	495139	53	000613
54	287500	329167	370833	412500	454167	495833	54	000625
55	0.288194	0.329861	0.371528	0.413194	0.454861	0.496528	55	0.000637
56	288889	330556	372222	413889	455556	497222	56	000648
57	289583	331250	372917	414583	456250	497917	57	000660
58	290278	331944	373611	415278	456944	498611	58	000671
59	0.290972	0.332639	0.374306	0.415972	0.457639	0.499306	59	0.000683



I. Anzahl der am o. Januar, 12<sup>h</sup> Welt-Zeit, seit Anfang der Periode verfloßenen Tage

Jahr n. Chr.	0	100	200	300	400	500	600	700	800	900
	17	17	17	18	18	19	19	19	20	20
0	21057	57582	94107	30632	67157	03682	40207	76732	13257	49782
4	22518	59043	95568	32093	68618	05143	41668	78193	14718	51243
8	23979	60504	97029	33554	70079	06604	43129	79654	16179	52704
12	25440	61965	98490	35015	71540	08065	44590	81115	17640	54165
16	26901	63426	<u>99951</u>	36476	73001	09526	46051	82576	19101	55626
20	28362	64887	01412	37937	74462	10987	47512	84037	20562	57087
24	29823	66348	02873	39398	75923	12448	48973	85498	22023	58548
28	31284	67809	04334	40859	77384	13909	50434	86959	23484	60009
32	32745	69270	05795	42320	78845	15370	51895	88420	24945	61470
36	34206	70731	07256	43781	80306	16831	53356	89881	26406	62931
40	35667	72192	08717	45242	81767	18292	54817	91342	27867	64392
44	37128	73653	10178	46703	83228	19753	56278	92803	29328	65853
48	38589	75114	11639	48164	84689	21214	57739	94264	30789	67314
52	40050	76575	13100	49625	86150	22675	59200	95725	32250	68775
56	41511	78036	14561	51086	87611	24136	60661	97186	33711	70236
60	42972	79497	16022	52547	89072	25597	62122	<u>98647</u>	35172	71697
64	44433	80958	17483	54008	90533	27058	63583	00108	36633	73158
68	45894	82419	18944	55469	91994	28519	65044	01569	38094	74619
72	47355	83880	20405	56930	93455	29980	66505	03030	39555	76080
76	48816	85341	21866	58391	94916	31441	67966	04491	41016	77541
80	50277	86802	23327	59852	96377	32902	69427	05952	42477	79002
84	51738	88263	24788	61313	97838	34363	70888	07413	43938	80463
88	53199	89724	26249	62774	<u>99299</u>	35824	72349	08874	45399	81924
92	54660	91185	27710	64235	00760	37285	73810	10335	46860	83385
96	56121	92646	29171	65696	02221	38746	75271	11796	48321	84846
100	57582	94107	30632	67157	03682	40207	76732	13257	49782	86307
	17	17	18	18	19	19	19	20	20	20

Ia. Anzahl der am o. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Schaltperiode verfloßenen Tage

Jahr	Jan. o	Febr. o	März o	April o	Mai o	Juni o	Juli o	Aug. o	Sept. o	Okt. o	Nov. o	Dez. o
0	0	31	60	91	121	152	182	213	244	274	305	335
1	366	397	425	456	486	517	547	578	609	639	670	700
2	731	762	790	821	851	882	912	943	974	1004	1035	1065
3	1096	1127	1155	1186	1216	1247	1277	1308	1339	1369	1400	1430



I. Anzahl der am o. Januar, 12<sup>h</sup> Welt-Zeit, seit Anfang der Periode verfloßenen Tage

Jahr n. Chr.	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900
	20	21	21	21	22	22	23	23	23	24
0	86307	22832	59357	95882	32407	68932	05447	41971 <sup>1)</sup>	78495 <sup>1)</sup>	15019 <sup>1)</sup>
4	87768	24293	60818	97343	33868	70393	06908	43432	79956	16480
8	89229	25754	62279	98804	35329	71854	08369	44893	81417	17941
12	90690	27215	63740	00265	36790	73315	09830	46354	82878	19402
16	92151	28676	65201	01726	38251	74776	11291	47815	84339	20863
20	93612	30137	66662	03187	39712	76237	12752	49276	85800	22324
24	95073	31598	68123	04648	41173	77698	14213	50737	87261	23785
28	96534	33059	69584	06109	42634	79159	15674	52198	88722	25246
32	97995	34520	71045	07570	44095	80620	17135	53659	90183	26707
36	99456	35981	72506	09031	45556	82081	18596	55120	91644	28168
40	00917	37442	73967	10492	47017	83542	20057	56581	93105	29629
44	02378	38903	75428	11953	48478	85003	21518	58042	94566	31090
48	03839	40364	76889	13414	49939	86464	22979	59503	96027	32551
52	05300	41825	78350	14875	51400	87925	24440	60964	97488	34012
56	06761	43286	79811	16336	52861	89386	25901	62425	98949	35473
60	08222	44747	81272	17797	54322	90847	27362	63886	00410	36934
64	09683	46208	82733	19258	55783	92308	28823	65347	01871	38395
68	11144	47669	84194	20719	57244	93769	30284	66808	03332	39856
72	12605	49130	85655	22180	58705	95230	31745	68269	04793	41317
76	14066	50591	87116	23641	60166	96691	33206	69730	06254	42778
80	15527	52052	88577	25102	61627	98152	34667	71191	07715	44239
84	16988	53513	90038	26563	63088	99603	36128	72652	09176	45700
88	18449	54974	91499	28024	64549	01064	37589	74113	10637	47161
92	19910	56435	92960	29485	66010	02525	39050	75574	12098	48622
96	21371	57896	94421	30946	67471	03986	40511	77035	13559	50083
100	22832	59357	95882	32407	68932	05447	41971 <sup>1)</sup>	78495 <sup>1)</sup>	15019 <sup>1)</sup>	51544
	21	21	21	22	22	23	23	23	24	24

<sup>1)</sup> Die Zahlen geben die am —1. Jan. seit Anfang der Periode verfloßenen Tage.

Ia. Anzahl der am o. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Schaltperiode verfloßenen Tage

Jahr	Jan. o	Febr. o	März o	April o	Mai o	Juni o	Juli o	Aug. o	Sept. o	Okt. o	Nov. o	Dez. o
0	0 <sup>2)</sup>	31 <sup>2)</sup>	60	91	121	152	182	213	244	274	305	335
1	366	397	425	456	486	517	547	578	609	639	670	700
2	731	762	790	821	851	882	912	943	974	1004	1035	1065
3	1096	1127	1155	1186	1216	1247	1277	1308	1339	1369	1400	1430

Von 1582 Okt. 15 bis 1583 Dez. 31 sind die Zahlen der Tafel Ia um 10 zu verkleinern.

<sup>2)</sup> In den Jahren 1700, 1800, 1900 um 1 zu vergrößern.



## Julianische Periode

II. Anzahl der am o. eines jeden Monats, 12<sup>b</sup> Welt-Zeit, seit Beginn der Periode  
verflossenen Tage

Jahr n. Chr.	Januar	Febr.	März	April	Mai	Juni	Juli	Aug.	Sept.	Okt.	Nov.	Dez.	
1860	2400	410	441	470	501	531	562	592	623	654	684	715	745
1861		776	807	835	866	896	927	957	988	*019	*049	*080	*110
1862	2401	141	172	200	231	261	292	322	353	384	414	445	475
1863		506	537	565	596	626	657	687	718	749	779	810	840
1864		871	902	931	962	992	*023	*053	*084	*115	*145	*176	*206
1865	2402	237	268	296	327	357	388	418	449	480	510	541	571
1866		602	633	661	692	722	753	783	814	845	875	906	936
1867		967	998	*026	*057	*087	*118	*148	*179	*210	*240	*271	*301
1868	2403	332	363	392	423	453	484	514	545	576	606	637	667
1869		698	729	757	788	818	849	879	910	941	971	*002	*032
1870	2404	063	094	122	153	183	214	244	275	306	336	367	397
1871		428	459	487	518	548	579	609	640	671	701	732	762
1872		793	824	853	884	914	945	975	*006	*037	*067	*098	*128
1873	2405	159	190	218	249	279	310	340	371	402	432	463	493
1874		524	555	583	614	644	675	705	736	767	797	828	858
1875		889	920	948	979	*009	*040	*070	*101	*132	*162	*193	*223
1876	2406	254	285	314	345	375	406	436	467	498	528	559	589
1877		620	651	679	710	740	771	801	832	863	893	924	954
1878		985	*016	*044	*075	*105	*136	*166	*197	*228	*258	*289	*319
1879	2407	350	381	409	440	470	501	531	562	593	623	654	684
1880		715	746	775	806	836	867	897	928	959	989	*020	*050
1881	2408	081	112	140	171	201	232	262	293	324	354	385	415
1882		446	477	505	536	566	597	627	658	689	719	750	780
1883		811	842	870	901	931	962	992	*023	*054	*084	*115	*145
1884	2409	176	207	236	267	297	328	358	389	420	450	481	511
1885		542	573	601	632	662	693	723	754	785	815	846	876
1886		907	938	966	997	*027	*058	*088	*119	*150	*180	*211	*241
1887	2410	272	303	331	362	392	423	453	484	515	545	576	606
1888		637	668	697	728	758	789	819	850	881	911	942	972
1889	2411	003	034	062	093	123	154	184	215	246	276	307	337
1890		368	399	427	458	488	519	549	580	611	641	672	702
1891		733	764	792	823	853	884	914	945	976	*006	*037	*067
1892	2412	098	129	158	189	219	250	280	311	342	372	403	433
1893		464	495	523	554	584	615	645	676	707	737	768	798
1894		829	860	888	919	949	980	*010	*041	*072	*102	*133	*163
1895	2413	194	225	253	284	314	345	375	406	437	467	498	528
1896		559	590	619	650	680	711	741	772	803	833	864	894
1897		925	956	984	*015	*045	*076	*106	*137	*168	*198	*229	*259
1898	2414	290	321	349	380	410	441	471	502	533	563	594	624
1899		655	686	714	745	775	806	836	867	898	928	959	989



## Julianische Periode

II. Anzahl der am o. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Periode  
verflossenen Tage

Jahr n. Chr.	Januar	Febr.	März	April	Mai	Juni	Juli	Aug.	Sept.	Okt.	Nov.	Dez.	
1900	2415	020	051	079	110	140	171	201	232	263	293	324	354
1901		385	416	444	475	505	536	566	597	628	658	689	719
1902		750	781	809	840	870	901	931	962	993	*023	*054	*084
1903	2416	115	146	174	205	235	266	296	327	358	388	419	449
1904		480	511	540	571	601	632	662	693	724	754	785	815
1905		846	877	905	936	966	997	*027	*058	*089	*119	*150	*180
1906	2417	211	242	270	301	331	362	392	423	454	484	515	545
1907		576	607	635	666	696	727	757	788	819	849	880	910
1908		941	972	*001	*032	*062	*093	*123	*154	*185	*215	*246	*276
1909	2418	307	338	366	397	427	458	488	519	550	580	611	641
1910		672	703	731	762	792	823	853	884	915	945	976	*006
1911	2419	037	068	096	127	157	188	218	249	280	310	341	371
1912		402	433	462	493	523	554	584	615	646	676	707	737
1913		768	799	827	858	888	919	949	980	*011	*041	*072	*102
1914	2420	133	164	192	223	253	284	314	345	376	406	437	467
1915		498	529	557	588	618	649	679	710	741	771	802	832
1916		863	894	923	954	984	*015	*045	*076	*107	*137	*168	*198
1917	2421	229	260	288	319	349	380	410	441	472	502	533	563
1918		594	625	653	684	714	745	775	806	837	867	898	928
1919		959	990	*018	*049	*079	*110	*140	*171	*202	*232	*263	*293
1920	2422	324	355	384	415	445	476	506	537	568	598	629	659
1921		690	721	749	780	810	841	871	902	933	963	994	*024
1922	2423	055	086	114	145	175	206	236	267	298	328	359	389
1923		420	451	479	510	540	571	601	632	663	693	724	754
1924		785	816	845	876	906	937	967	998	*029	*059	*090	*120
1925	2424	151	182	210	241	271	302	332	363	394	424	455	485
1926		516	547	575	606	636	667	697	728	759	789	820	850
1927		881	912	940	971	*001	*032	*062	*093	*124	*154	*185	*215
1928	2425	246	277	306	337	367	398	428	459	490	520	551	581
1929		612	643	671	702	732	763	793	824	855	885	916	946
1930		977	*008	*036	*067	*097	*128	*158	*189	*220	*250	*281	*311
1931	2426	342	373	401	432	462	493	523	554	585	615	646	676
1932		707	738	767	798	828	859	889	920	951	981	*012	*042
1933	2427	073	104	132	163	193	224	254	285	316	346	377	407
1934		438	469	497	528	558	589	619	650	681	711	742	772
1935		803	834	862	893	923	954	984	*015	*046	*076	*107	*137
1936	2428	168	199	228	259	289	320	350	381	412	442	473	503
1937		534	565	593	624	654	685	715	746	777	807	838	868
1938		899	930	958	989	*019	*050	*080	*111	*142	*172	*203	*233
1939	2429	264	295	323	354	384	415	445	476	507	537	568	598



## Julianische Periode

II. Anzahl der am o. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Periode  
verflossenen Tage

Jahr n. Chr.	Januar o	Febr. o	März o	April o	Mai o	Juni o	Juli o	Aug. o	Sept. o	Okt. o	Nov. o	Dez. o	
1940	2429	629	660	689	720	750	781	811	842	873	903	934	964
1941		995	*026	*054	*085	*115	*146	*176	*207	*238	*268	*299	*329
1942	2430	360	391	419	450	480	511	541	572	603	633	664	694
1943		725	756	784	815	845	876	906	937	968	998	*029	*059
1944	2431	090	121	150	181	211	242	272	303	334	364	395	425
1945		456	487	515	546	576	607	637	668	699	729	760	790
1946		821	852	880	911	941	972	*002	*033	*064	*094	*125	*155
1947	2432	186	217	245	276	306	337	367	398	429	459	490	520
1948		551	582	611	642	672	703	733	764	795	825	856	886
1949		917	948	976	*007	*037	*068	*098	*129	*160	*190	*221	*251
1950	2433	282	313	341	372	402	433	463	494	525	555	586	616
1951		647	678	706	737	767	798	828	859	890	920	951	981
1952	2434	012	043	072	103	133	164	194	225	256	286	317	347
1953		378	409	437	468	498	529	559	590	621	651	682	712
1954		743	774	802	833	863	894	924	955	986	*016	*047	*077
1955	2435	108	139	167	198	228	259	289	320	351	381	412	442
1956		473	504	533	564	594	625	655	686	717	747	778	808
1957		839	870	898	929	959	990	*020	*051	*082	*112	*143	*173
1958	2436	204	235	263	294	324	355	385	416	447	477	508	538
1959		569	600	628	659	689	720	750	781	812	842	873	903
1960		934	965	994	*025	*055	*086	*116	*147	*178	*208	*239	*269
1961	2437	300	331	359	390	420	451	481	512	543	573	604	634
1962		665	696	724	755	785	816	846	877	908	938	969	999
1963	2438	030	061	089	120	150	181	211	242	273	303	334	364
1964		395	426	455	486	516	547	577	608	639	669	700	730
1965		761	792	820	851	881	912	942	973	*004	*034	*065	*095
1966	2439	126	157	185	216	246	277	307	338	369	399	430	460
1967		491	522	550	581	611	642	672	703	734	764	795	825
1968		856	887	916	947	977	*008	*038	*069	*100	*130	*161	*191
1969	2440	222	253	281	312	342	373	403	434	465	495	526	556
1970		587	618	646	677	707	738	768	799	830	860	891	921
1971		952	983	*011	*042	*072	*103	*133	*164	*195	*225	*256	*286
1972	2441	317	348	377	408	438	469	499	530	561	591	622	652
1973		683	714	742	773	803	834	864	895	926	956	987	*017
1974	2442	048	079	107	138	168	199	229	260	291	321	352	382
1975		413	444	472	503	533	564	594	625	656	686	717	747
1976		778	809	838	869	899	930	960	991	*022	*052	*083	*113
1977	2443	144	175	203	234	264	295	325	356	387	417	448	478
1978		509	540	568	599	629	660	690	721	752	782	813	843
1979	2443	874	905	933	964	994	*025	*055	*086	*117	*147	*178	*208



zur Berechnung der geozentrischen Koordinaten

$$\rho \sin \varphi' = s \sin \varphi; \quad \rho \cos \varphi' = c \cos \varphi$$

φ	log s	log c	φ	log s	log c
± 0	9.9970705	0.0000000	± 40	9.9976745	0.0006040
1	.9970709	.0000004	41	.9976997	.0006292
2	.9970723	.0000018	42	.9977251	.0006546
3	.9970745	.0000040	43	.9977506	.0006801
4	.9970776	.0000071	44	.9977761	.0007056
5	9.9970816	0.0000111	45	9.9978016	0.0007311
6	.9970865	.0000160	46	.9978272	.0007567
7	.9970922	.0000217	47	.9978527	.0007822
8	.9970988	.0000283	48	.9978782	.0008077
9	.9971062	.0000357	49	.9979036	.0008331
10	9.9971145	0.0000440	50	9.9979288	0.0008583
11	.9971237	.0000532	51	.9979540	.0008835
12	.9971336	.0000631	52	.9979789	.0009084
13	.9971444	.0000739	53	.9980036	.0009331
14	.9971560	.0000855	54	.9980281	.0009576
15	9.9971683	0.0000978	55	9.9980523	0.0009818
16	.9971814	.0001109	56	.9980762	.0010057
17	.9971953	.0001248	57	.9980997	.0010292
18	.9972099	.0001394	58	.9981229	.0010524
19	.9972253	.0001548	59	.9981457	.0010752
20	9.9972413	0.0001708	60	9.9981681	0.0010976
21	.9972581	.0001876	61	.9981901	.0011196
22	.9972755	.0002050	62	.9982116	.0011411
23	.9972935	.0002230	63	.9982325	.0011620
24	.9973122	.0002417	64	.9982530	.0011825
25	9.9973314	0.0002609	65	9.9982729	0.0012024
26	.9973512	.0002807	66	.9982922	.0012217
27	.9973716	.0003011	67	.9983110	.0012405
28	.9973925	.0003220	68	.9983291	.0012586
29	.9974139	.0003434	69	.9983466	.0012761
30	9.9974358	0.0003653	70	9.9983634	0.0012929
31	.9974581	.0003876	71	.9983795	.0013090
32	.9974808	.0004103	72	.9983949	.0013244
33	.9975040	.0004335	73	.9984096	.0013391
34	.9975275	.0004570	74	.9984236	.0013531
35	9.9975513	0.0004808	75	9.9984368	0.0013663
36	.9975754	.0005049	76	.9984492	.0013787
37	.9975999	.0005294	77	.9984609	.0013904
38	.9976245	.0005540	78	.9984717	.0014012
39	.9976494	.0005789	79	.9984817	.0014112
40	9.9976745	0.0006040	80	9.9984909	0.0014204



$\delta \backslash \varphi$	+30°	+32°	+34°	+36°	+38°	+40°	+42°	+44°	+46°	+48°	+50°
0	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
-30	4 45.4	4 38.8	4 31.8	4 24.4	4 16.5	4 8.1	3 58.9	3 48.9	3 37.9	3 25.7	3 11.8
29	4 48.6	4 42.3	4 35.6	4 28.6	4 21.1	4 13.0	4 4.3	3 54.9	3 44.5	3 33.0	3 20.1
28	4 51.7	4 45.7	4 39.3	4 32.6	4 25.5	4 17.8	4 9.6	4 0.7	3 50.9	3 40.1	3 28.0
27	4 54.7	4 49.0	4 42.9	4 36.5	4 29.8	4 22.5	4 14.7	4 6.2	3 57.0	3 46.9	3 35.5
26	4 57.7	4 52.2	4 46.5	4 40.4	4 33.9	4 27.1	4 19.7	4 11.7	4 3.0	3 53.4	3 42.8
25	5 0.6	4 55.4	4 49.9	4 44.2	4 38.0	4 31.5	4 24.5	4 16.9	4 8.7	3 59.7	3 49.7
24	5 3.5	4 58.5	4 53.3	4 47.8	4 42.0	4 35.8	4 29.2	4 22.0	4 14.3	4 5.8	3 56.5
23	5 6.3	5 1.6	4 56.6	4 51.4	4 45.9	4 40.1	4 33.8	4 27.0	4 19.7	4 11.8	4 3.0
22	5 9.0	5 4.6	4 59.9	4 55.0	4 49.7	4 44.2	4 38.3	4 31.9	4 25.0	4 17.5	4 9.3
21	5 11.7	5 7.5	5 3.1	4 58.4	4 53.5	4 48.3	4 42.7	4 36.7	4 30.2	4 23.2	4 15.4
-20	5 14.4	5 10.4	5 6.2	5 1.8	4 57.2	4 52.3	4 47.0	4 41.3	4 35.3	4 28.7	4 21.4
19	5 17.0	5 13.3	5 9.3	5 5.2	5 0.8	4 56.2	4 51.2	4 45.9	4 40.2	4 34.0	4 27.3
18	5 19.6	5 16.1	5 12.4	5 8.5	5 4.4	5 0.0	4 55.4	4 50.4	4 45.1	4 39.3	4 33.0
17	5 22.2	5 18.9	5 15.4	5 11.7	5 7.9	5 3.8	4 59.5	4 54.9	4 49.9	4 44.5	4 38.6
16	5 24.7	5 21.6	5 18.4	5 14.9	5 11.4	5 7.5	5 3.5	4 59.2	4 54.6	4 49.5	4 44.1
15	5 27.2	5 24.3	5 21.3	5 18.1	5 14.8	5 11.2	5 7.5	5 3.5	4 59.2	4 54.5	4 49.5
14	5 29.7	5 27.0	5 24.2	5 21.3	5 18.2	5 14.9	5 11.4	5 7.7	5 3.7	4 59.5	4 54.8
13	5 32.1	5 29.7	5 27.1	5 24.4	5 21.5	5 18.5	5 15.3	5 11.9	5 8.2	5 4.3	5 0.0
12	5 34.6	5 32.3	5 29.9	5 27.4	5 24.8	5 22.1	5 19.1	5 16.0	5 12.6	5 9.0	5 5.1
11	5 37.0	5 34.9	5 32.7	5 30.5	5 28.1	5 25.6	5 22.9	5 20.1	5 17.0	5 13.7	5 10.2
-10	5 39.4	5 37.5	5 35.5	5 33.5	5 31.3	5 29.1	5 26.7	5 24.1	5 21.4	5 18.4	5 15.2
9	5 41.7	5 40.1	5 38.3	5 36.5	5 34.6	5 32.5	5 30.4	5 28.1	5 25.7	5 23.0	5 20.2
8	5 44.1	5 42.6	5 41.1	5 39.5	5 37.8	5 36.0	5 34.1	5 32.1	5 29.9	5 27.6	5 25.1
7	5 46.4	5 45.2	5 43.8	5 42.4	5 41.0	5 39.4	5 37.8	5 36.0	5 34.2	5 32.2	5 30.0
6	5 48.8	5 47.7	5 46.6	5 45.4	5 44.1	5 42.8	5 41.4	5 40.0	5 38.4	5 36.7	5 34.9
5	5 51.1	5 50.2	5 49.3	5 48.3	5 47.3	5 46.2	5 45.1	5 43.9	5 42.6	5 41.2	5 39.7
4	5 53.4	5 52.7	5 52.0	5 51.2	5 50.4	5 49.6	5 48.7	5 47.8	5 46.8	5 45.7	5 44.5
3	5 55.8	5 55.2	5 54.7	5 54.1	5 53.6	5 53.0	5 52.3	5 51.6	5 50.9	5 50.1	5 49.3
2	5 58.1	5 57.7	5 57.4	5 57.1	5 56.7	5 56.3	5 55.9	5 55.5	5 55.1	5 54.6	5 54.1
-1	6 0.4	6 0.2	6 0.1	6 0.0	5 59.8	5 59.7	5 59.5	5 59.4	5 59.2	5 59.0	5 58.9
0	6 2.7	6 2.7	6 2.8	6 2.9	6 2.9	6 3.0	6 3.1	6 3.2	6 3.4	6 3.5	6 3.6
+1	6 5.0	6 5.2	6 5.5	6 5.8	6 6.1	6 6.4	6 6.7	6 7.1	6 7.5	6 7.9	6 8.4
2	6 7.3	6 7.7	6 8.2	6 8.7	6 9.2	6 9.8	6 10.3	6 11.0	6 11.6	6 12.4	6 13.2
3	6 9.6	6 10.3	6 10.9	6 11.6	6 12.3	6 13.1	6 14.0	6 14.8	6 15.8	6 16.8	6 18.0
4	6 11.9	6 12.8	6 13.6	6 14.5	6 15.5	6 16.5	6 17.6	6 18.7	6 20.0	6 21.3	6 22.8
5	6 14.3	6 15.3	6 16.4	6 17.5	6 18.6	6 19.9	6 21.2	6 22.6	6 24.2	6 25.8	6 27.6
6	6 16.6	6 17.8	6 19.1	6 20.4	6 21.8	6 23.3	6 24.9	6 26.6	6 28.4	6 30.4	6 32.5
7	6 19.0	6 20.4	6 21.8	6 23.4	6 25.0	6 26.7	6 28.6	6 30.5	6 32.6	6 34.9	6 37.4
8	6 21.3	6 22.9	6 24.6	6 26.4	6 28.2	6 30.2	6 32.3	6 34.5	6 36.9	6 39.5	6 42.3
9	6 23.7	6 25.5	6 27.4	6 29.4	6 31.4	6 33.7	6 36.0	6 38.5	6 41.2	6 44.1	6 47.3
10	6 26.1	6 28.1	6 30.2	6 32.4	6 34.7	6 37.2	6 39.8	6 42.5	6 45.6	6 48.8	6 52.3
+11	6 28.5	6 30.7	6 33.0	6 35.4	6 38.0	6 40.7	6 43.6	6 46.6	6 49.9	6 53.5	6 57.4
12	6 31.0	6 33.4	6 35.9	6 38.5	6 41.3	6 44.3	6 47.4	6 50.8	6 54.4	6 58.3	7 2.5
13	6 33.4	6 36.0	6 38.8	6 41.6	6 44.7	6 47.9	6 51.3	6 54.9	6 58.9	7 3.1	7 7.8
14	6 35.9	6 38.7	6 41.7	6 44.8	6 48.0	6 51.5	6 55.2	6 59.2	7 3.4	7 8.0	7 13.1
15	6 38.4	6 41.4	6 44.6	6 47.9	6 51.5	6 55.2	6 59.2	7 3.5	7 8.1	7 13.0	7 18.5
16	6 41.0	6 44.2	6 47.6	6 51.2	6 54.9	6 58.9	7 3.2	7 7.8	7 12.7	7 18.1	7 23.9
17	6 43.5	6 47.0	6 50.6	6 54.4	6 58.5	7 2.7	7 7.3	7 12.2	7 17.5	7 23.3	7 29.5
18	6 46.1	6 49.8	6 53.7	6 57.7	7 2.0	7 6.6	7 11.5	7 16.7	7 22.4	7 28.5	7 35.3
19	6 48.8	6 52.7	6 56.8	7 1.1	7 5.7	7 10.5	7 15.7	7 21.3	7 27.4	7 33.9	7 41.1
20	6 51.5	6 55.6	6 59.9	7 4.5	7 9.4	7 14.5	7 20.1	7 26.0	7 32.4	7 39.4	7 47.1
+21	6 54.2	6 58.6	7 3.1	7 8.0	7 13.1	7 18.6	7 24.5	7 30.8	7 37.6	7 45.1	7 53.3
22	6 56.9	7 1.6	7 6.4	7 11.5	7 17.0	7 22.8	7 29.0	7 35.7	7 42.9	7 50.9	7 59.6
23	6 59.8	7 4.6	7 9.7	7 15.1	7 20.9	7 27.0	7 33.6	7 40.7	7 48.4	7 56.8	8 6.1
24	7 2.6	7 7.7	7 13.1	7 18.8	7 24.9	7 31.3	7 38.3	7 45.8	7 54.0	8 2.9	8 12.9
25	7 5.6	7 10.9	7 16.6	7 22.6	7 29.0	7 35.8	7 43.1	7 51.1	7 59.8	8 9.3	8 19.9
26	7 8.5	7 14.2	7 20.1	7 26.4	7 33.2	7 40.4	7 48.1	7 56.5	8 5.7	8 15.8	8 27.1
27	7 11.6	7 17.5	7 23.8	7 30.4	7 37.5	7 45.0	7 53.2	8 2.1	8 11.8	8 22.6	8 34.7
28	7 14.7	7 20.9	7 27.5	7 34.4	7 41.9	7 49.9	7 58.5	8 7.9	8 18.2	8 29.7	8 42.6
29	7 17.9	7 24.4	7 31.3	7 38.6	7 46.4	7 54.8	8 3.9	8 13.9	8 24.8	8 37.1	8 51.0
+30	7 21.2	7 28.0	7 35.2	7 42.9	7 51.1	7 59.9	8 9.5	8 20.1	8 31.7	8 44.8	8 59.7



φ	+50°	+51°	+52°	+53°	+54°	+55°	+56°	+57°	+58°	+59°	+60°
0°	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
-30	3 11.8	3 4.1	2 55.8	2 46.8	2 36.9	2 25.9	2 13.5	1 59.3	1 42.4	1 21.1	0 49.7
29	3 20.1	3 12.9	3 5.3	2 57.0	2 48.0	2 38.1	2 27.1	2 14.7	2 0.4	1 43.4	1 21.9
28	3 28.0	3 21.3	3 14.2	3 6.6	2 58.3	2 49.3	2 39.4	2 28.4	2 15.9	2 1.6	1 44.5
27	3 35.5	3 29.3	3 22.7	3 15.7	3 8.0	2 59.8	2 50.8	2 40.8	2 29.8	2 17.3	2 2.9
26	3 42.8	3 37.0	3 30.8	3 24.2	3 17.2	3 9.6	3 1.4	2 52.4	2 42.4	2 31.3	2 18.8
25	3 49.7	3 44.3	3 38.6	3 32.4	3 25.9	3 18.9	3 11.3	3 3.1	2 54.1	2 44.1	2 33.0
24	3 56.5	3 51.4	3 46.0	3 40.3	3 34.3	3 27.8	3 20.8	3 13.2	3 5.0	2 56.0	2 46.0
23	4 3.0	3 58.2	3 53.2	3 47.9	3 42.3	3 36.2	3 29.8	3 22.8	3 15.3	3 7.1	2 58.0
22	4 9.3	4 4.9	4 0.2	3 55.2	3 50.0	3 44.3	3 38.4	3 31.9	3 25.0	3 17.5	3 9.3
21	4 15.4	4 11.3	4 6.9	4 2.3	3 57.4	3 52.2	3 46.6	3 40.7	3 34.3	3 27.4	3 19.9
-20	4 21.4	4 17.5	4 13.5	4 9.1	4 4.6	3 59.8	3 54.6	3 49.1	3 43.2	3 36.9	3 30.0
19	4 27.3	4 23.7	4 19.9	4 15.8	4 11.6	4 7.1	4 2.3	3 57.2	3 51.8	3 45.9	3 39.6
18	4 33.0	4 29.6	4 26.1	4 22.3	4 18.4	4 14.2	4 9.8	4 5.1	4 0.1	3 54.7	3 48.9
17	4 38.6	4 35.4	4 32.1	4 28.7	4 25.0	4 21.1	4 17.0	4 12.7	4 8.1	4 3.1	3 57.8
16	4 44.1	4 41.2	4 38.1	4 34.9	4 31.5	4 27.9	4 24.1	4 20.1	4 15.9	4 11.3	4 6.4
15	4 49.5	4 46.8	4 43.9	4 41.0	4 37.8	4 34.5	4 31.0	4 27.4	4 23.4	4 19.3	4 14.8
14	4 54.8	4 52.3	4 49.7	4 46.9	4 44.1	4 41.0	4 37.8	4 34.4	4 30.8	4 27.0	4 22.9
13	5 0.0	4 57.7	4 55.3	4 52.8	4 50.2	4 47.4	4 44.5	4 41.4	4 38.1	4 34.6	4 30.9
12	5 5.1	5 3.0	5 0.9	4 58.6	4 56.2	4 53.7	4 51.0	4 48.2	4 45.2	4 42.0	4 38.7
11	5 10.2	5 8.3	5 6.4	5 4.3	5 2.1	4 59.8	4 57.4	4 54.9	4 52.2	4 49.3	4 46.3
-10	5 15.2	5 13.5	5 11.8	5 9.9	5 7.9	5 5.9	5 3.7	5 1.5	4 59.1	4 56.5	4 53.8
9	5 20.2	5 18.7	5 17.1	5 15.5	5 13.7	5 11.9	5 10.0	5 8.0	5 5.8	5 3.6	5 1.2
8	5 25.1	5 23.8	5 22.4	5 21.0	5 19.5	5 17.9	5 16.2	5 14.4	5 12.5	5 10.6	5 8.5
7	5 30.0	5 28.9	5 27.7	5 26.4	5 25.1	5 23.8	5 22.3	5 20.8	5 19.2	5 17.5	5 15.7
6	5 34.9	5 33.9	5 32.9	5 31.8	5 30.7	5 29.6	5 28.4	5 27.1	5 25.7	5 24.3	5 22.8
5	5 39.7	5 38.9	5 38.1	5 37.2	5 36.3	5 35.4	5 34.4	5 33.4	5 32.2	5 31.1	5 29.9
4	5 44.5	5 43.9	5 43.3	5 42.6	5 41.9	5 41.2	5 40.4	5 39.6	5 38.7	5 37.8	5 36.9
3	5 49.3	5 48.9	5 48.4	5 47.9	5 47.4	5 46.9	5 46.3	5 45.8	5 45.2	5 44.5	5 43.8
2	5 54.1	5 53.8	5 53.5	5 53.3	5 52.9	5 52.6	5 52.3	5 52.0	5 51.6	5 51.2	5 50.8
-1	5 58.9	5 58.8	5 58.7	5 58.6	5 58.4	5 58.3	5 58.2	5 58.1	5 58.0	5 57.9	5 57.7
0	6 3.6	6 3.7	6 3.8	6 3.9	6 4.0	6 4.1	6 4.2	6 4.3	6 4.4	6 4.5	6 4.7
+1	6 8.4	6 8.6	6 8.9	6 9.2	6 9.5	6 9.8	6 10.1	6 10.4	6 10.8	6 11.2	6 11.6
2	6 13.2	6 13.6	6 14.0	6 14.5	6 15.0	6 15.5	6 16.0	6 16.6	6 17.2	6 17.8	6 18.5
3	6 18.0	6 18.6	6 19.2	6 19.8	6 20.5	6 21.2	6 22.0	6 22.8	6 23.6	6 24.6	6 25.5
4	6 22.8	6 23.5	6 24.4	6 25.2	6 26.1	6 27.0	6 28.0	6 29.0	6 30.1	6 31.3	6 32.5
5	6 27.6	6 28.6	6 29.6	6 30.6	6 31.7	6 32.8	6 34.0	6 35.3	6 36.6	6 38.1	6 39.6
6	6 32.5	6 33.6	6 34.8	6 36.0	6 37.3	6 38.7	6 40.1	6 41.6	6 43.2	6 44.9	6 46.7
7	6 37.4	6 38.7	6 40.0	6 41.5	6 43.0	6 44.6	6 46.2	6 48.0	6 49.8	6 51.8	6 53.9
8	6 42.3	6 43.8	6 45.3	6 47.0	6 48.7	6 50.5	6 52.4	6 54.4	6 56.5	6 58.8	7 1.2
9	6 47.3	6 48.9	6 50.7	6 52.6	6 54.5	6 56.5	6 58.7	7 0.9	7 3.3	7 5.9	7 8.6
10	6 52.3	6 54.1	6 56.1	6 58.2	7 0.3	7 2.6	7 5.0	7 7.5	7 10.2	7 13.1	7 16.2
+11	6 57.4	6 59.4	7 1.6	7 3.9	7 6.3	7 8.8	7 11.4	7 14.2	7 17.2	7 20.4	7 23.8
12	7 2.5	7 4.8	7 7.2	7 9.7	7 12.3	7 15.1	7 18.0	7 21.1	7 24.3	7 27.8	7 31.5
13	7 7.8	7 10.2	7 12.8	7 15.5	7 18.4	7 21.4	7 24.6	7 28.0	7 31.6	7 35.4	7 39.5
14	7 13.1	7 15.7	7 18.6	7 21.5	7 24.6	7 27.9	7 31.4	7 35.1	7 39.0	7 43.2	7 47.7
15	7 18.5	7 21.4	7 24.4	7 27.6	7 31.0	7 34.6	7 38.3	7 42.4	7 46.6	7 51.2	7 56.1
16	7 23.9	7 27.1	7 30.4	7 33.8	7 37.5	7 41.4	7 45.4	7 49.8	7 54.4	7 59.4	8 4.7
17	7 29.5	7 32.9	7 36.5	7 40.2	7 44.1	7 48.3	7 52.7	7 57.4	8 2.5	8 7.9	8 13.7
18	7 35.3	7 38.9	7 42.7	7 46.7	7 50.9	7 55.4	8 0.2	8 5.3	8 10.8	8 16.6	8 23.0
19	7 41.1	7 45.0	7 49.1	7 53.4	7 57.9	8 2.8	8 7.9	8 13.4	8 19.4	8 25.7	8 32.6
20	7 47.1	7 51.3	7 55.6	8 0.3	8 5.2	8 10.4	8 15.9	8 21.9	8 28.3	8 35.2	8 42.8
+21	7 53.3	7 57.7	8 2.4	8 7.3	8 12.6	8 18.2	8 24.2	8 30.8	8 37.6	8 45.2	8 53.5
22	7 59.6	8 4.3	8 9.4	8 14.7	8 20.3	8 26.4	8 32.8	8 39.7	8 47.4	8 55.7	9 4.8
23	8 6.1	8 11.2	8 16.6	8 22.3	8 28.3	8 34.9	8 41.9	8 49.5	8 57.7	9 6.8	9 16.9
24	8 12.9	8 18.3	8 24.0	8 30.2	8 36.7	8 43.8	8 51.4	8 59.6	9 8.7	9 18.8	9 30.0
25	8 19.9	8 25.7	8 31.8	8 38.4	8 45.5	8 53.1	9 1.4	9 10.5	9 20.5	9 31.7	9 44.4
26	8 27.1	8 33.4	8 40.0	8 47.0	8 54.7	9 3.0	9 12.1	9 22.1	9 33.2	9 45.9	10 0.6
27	8 34.7	8 41.4	8 48.5	8 56.1	9 4.4	9 13.5	9 23.5	9 34.6	9 47.3	10 1.9	10 19.5
28	8 42.6	8 49.8	8 57.5	9 5.8	9 14.8	9 24.8	9 35.9	9 48.5	10 3.1	10 20.5	10 42.9
29	8 51.0	8 58.7	9 7.0	9 16.1	9 26.0	9 37.1	9 49.6	10 4.1	10 21.5	10 43.7	11 18.1
+30	8 59.7	9 8.1	9 17.2	9 27.1	9 38.2	9 50.7	10 5.1	10 22.3	10 44.4	11 18.5	-



## Reduktionstafel

für den Auf- und Untergang der Sonne

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen  
für den Untergang.

Tag	Geographische Breite											
	+30°	+32°	+34°	+36°	+38°	+40°	+42°	+44°	+46°	+48°	+50°	
1945												
Jan.	1	$\mp 62.6^m$	$\mp 57.9^m$	$\mp 53.0^m$	$\mp 47.9^m$	$\mp 42.5^m$	$\mp 36.7^m$	$\mp 30.5^m$	$\mp 23.8^m$	$\mp 16.5^m$	$\mp 8.7^m$	0.0
	11	$\mp 58.5$	$\mp 54.0$	$\mp 49.5$	$\mp 44.6$	$\mp 39.6$	$\mp 34.1$	$\mp 28.3$	$\mp 22.0$	$\mp 15.4$	$\mp 8.0$	0.0
	21	$\mp 52.1$	$\mp 48.1$	$\mp 44.0$	$\mp 39.7$	$\mp 35.2$	$\mp 30.3$	$\mp 25.1$	$\mp 19.6$	$\mp 13.7$	$\mp 7.1$	0.0
	31	$\mp 44.3$	$\mp 40.9$	$\mp 37.3$	$\mp 33.6$	$\mp 29.8$	$\mp 25.7$	$\mp 21.2$	$\mp 16.5$	$\mp 11.5$	$\mp 6.0$	0.0
Febr.	10	$\mp 35.5$	$\mp 32.8$	$\mp 29.9$	$\mp 26.9$	$\mp 23.8$	$\mp 20.5$	$\mp 16.9$	$\mp 13.1$	$\mp 9.1$	$\mp 4.8$	0.0
	20	$\mp 26.2$	$\mp 24.2$	$\mp 22.0$	$\mp 19.8$	$\mp 17.5$	$\mp 15.1$	$\mp 12.4$	$\mp 9.6$	$\mp 6.6$	$\mp 3.5$	0.0
März	2	$\mp 16.6$	$\mp 15.3$	$\mp 13.9$	$\mp 12.5$	$\mp 11.0$	$\mp 9.5$	$\mp 7.8$	$\mp 6.0$	$\mp 4.1$	$\mp 2.2$	0.0
	12	$\mp 6.9$	$\mp 6.4$	$\mp 5.8$	$\mp 5.2$	$\mp 4.5$	$\mp 3.9$	$\mp 3.2$	$\mp 2.5$	$\mp 1.7$	$\mp 0.9$	0.0
	22	$\pm 2.8$	$\pm 2.6$	$\pm 2.4$	$\pm 2.3$	$\pm 2.0$	$\pm 1.7$	$\pm 1.4$	$\pm 1.1$	$\pm 0.8$	$\pm 0.3$	0.0
April	1	$\pm 12.4$	$\pm 11.5$	$\pm 10.5$	$\pm 9.6$	$\pm 8.5$	$\pm 7.2$	$\pm 6.0$	$\pm 4.7$	$\pm 3.3$	$\pm 1.6$	0.0
	11	$\pm 22.1$	$\pm 20.4$	$\pm 18.7$	$\pm 16.9$	$\pm 14.9$	$\pm 12.7$	$\pm 10.5$	$\pm 8.3$	$\pm 5.7$	$\pm 2.9$	0.0
	21	$\pm 31.6$	$\pm 29.1$	$\pm 26.7$	$\pm 24.1$	$\pm 21.2$	$\pm 18.2$	$\pm 15.1$	$\pm 11.8$	$\pm 8.2$	$\pm 4.2$	0.0
Mai	1	$\pm 40.7$	$\pm 37.6$	$\pm 34.4$	$\pm 31.1$	$\pm 27.5$	$\pm 23.6$	$\pm 19.7$	$\pm 15.3$	$\pm 10.7$	$\pm 5.5$	0.0
	11	$\pm 49.3$	$\pm 45.6$	$\pm 41.7$	$\pm 37.7$	$\pm 33.4$	$\pm 28.7$	$\pm 23.9$	$\pm 18.6$	$\pm 13.0$	$\pm 6.7$	0.0
	21	$\pm 56.9$	$\pm 52.8$	$\pm 48.3$	$\pm 43.5$	$\pm 38.7$	$\pm 33.3$	$\pm 27.7$	$\pm 21.7$	$\pm 15.1$	$\pm 7.8$	0.0
Juni	31	$\pm 63.0$	$\pm 58.5$	$\pm 53.6$	$\pm 48.4$	$\pm 43.0$	$\pm 37.1$	$\pm 30.9$	$\pm 24.2$	$\pm 16.8$	$\pm 8.8$	0.0
	10	$\pm 67.2$	$\pm 62.3$	$\pm 57.2$	$\pm 51.7$	$\pm 45.9$	$\pm 39.6$	$\pm 33.0$	$\pm 25.9$	$\pm 18.0$	$\pm 9.5$	0.0
	20	$\pm 68.8$	$\pm 63.8$	$\pm 58.6$	$\pm 52.9$	$\pm 47.0$	$\pm 40.7$	$\pm 33.9$	$\pm 26.6$	$\pm 18.5$	$\pm 9.8$	0.0
Juli	30	$\pm 67.8$	$\pm 62.8$	$\pm 57.8$	$\pm 52.2$	$\pm 46.4$	$\pm 40.1$	$\pm 33.4$	$\pm 26.2$	$\pm 18.2$	$\pm 9.6$	0.0
	10	$\pm 64.4$	$\pm 59.6$	$\pm 54.7$	$\pm 49.4$	$\pm 43.9$	$\pm 37.9$	$\pm 31.5$	$\pm 24.8$	$\pm 17.2$	$\pm 9.1$	0.0
	20	$\pm 58.7$	$\pm 54.3$	$\pm 49.9$	$\pm 45.0$	$\pm 40.0$	$\pm 34.5$	$\pm 28.6$	$\pm 22.4$	$\pm 15.6$	$\pm 8.2$	0.0
Aug.	30	$\pm 51.5$	$\pm 47.6$	$\pm 43.7$	$\pm 39.3$	$\pm 35.0$	$\pm 30.1$	$\pm 25.0$	$\pm 19.5$	$\pm 13.5$	$\pm 7.1$	0.0
	9	$\pm 43.3$	$\pm 40.0$	$\pm 36.6$	$\pm 32.9$	$\pm 29.2$	$\pm 25.2$	$\pm 20.9$	$\pm 16.3$	$\pm 11.3$	$\pm 5.9$	0.0
	19	$\pm 34.4$	$\pm 31.8$	$\pm 29.0$	$\pm 26.1$	$\pm 23.1$	$\pm 20.0$	$\pm 16.6$	$\pm 12.8$	$\pm 8.9$	$\pm 4.7$	0.0
	29	$\pm 25.1$	$\pm 23.2$	$\pm 21.2$	$\pm 19.1$	$\pm 16.8$	$\pm 14.6$	$\pm 12.1$	$\pm 9.3$	$\pm 6.5$	$\pm 3.4$	0.0
Sept.	8	$\pm 15.7$	$\pm 14.4$	$\pm 13.2$	$\pm 11.9$	$\pm 10.5$	$\pm 9.1$	$\pm 7.5$	$\pm 5.8$	$\pm 4.0$	$\pm 2.1$	0.0
	18	$\pm 6.2$	$\pm 5.6$	$\pm 5.1$	$\pm 4.6$	$\pm 4.1$	$\pm 3.6$	$\pm 2.9$	$\pm 2.3$	$\pm 1.6$	$\pm 0.9$	0.0
	28	$\mp 3.5$	$\mp 3.2$	$\mp 2.9$	$\mp 2.6$	$\mp 2.3$	$\mp 1.9$	$\mp 1.6$	$\mp 1.2$	$\mp 0.9$	$\mp 0.4$	0.0
Okt.	8	$\mp 13.1$	$\mp 12.0$	$\mp 10.9$	$\mp 9.9$	$\mp 8.7$	$\mp 7.4$	$\mp 6.1$	$\mp 4.8$	$\mp 3.3$	$\mp 1.6$	0.0
	18	$\mp 22.6$	$\mp 20.8$	$\mp 19.0$	$\mp 17.1$	$\mp 15.1$	$\mp 12.9$	$\mp 10.6$	$\mp 8.3$	$\mp 5.7$	$\mp 2.9$	0.0
Nov.	28	$\mp 31.9$	$\mp 29.4$	$\mp 26.9$	$\mp 24.2$	$\mp 21.4$	$\mp 18.3$	$\mp 15.1$	$\mp 11.8$	$\mp 8.2$	$\mp 4.2$	0.0
	7	$\mp 40.8$	$\mp 37.7$	$\mp 34.5$	$\mp 31.1$	$\mp 27.5$	$\mp 23.5$	$\mp 19.5$	$\mp 15.2$	$\mp 10.5$	$\mp 5.5$	0.0
	17	$\mp 49.1$	$\mp 45.4$	$\mp 41.5$	$\mp 37.5$	$\mp 33.0$	$\mp 28.4$	$\mp 23.6$	$\mp 18.4$	$\mp 12.8$	$\mp 6.7$	0.0
Dez.	27	$\mp 56.1$	$\mp 51.8$	$\mp 47.4$	$\mp 42.8$	$\mp 37.9$	$\mp 32.6$	$\mp 27.2$	$\mp 21.2$	$\mp 14.7$	$\mp 7.7$	0.0
	7	$\mp 61.2$	$\mp 56.6$	$\mp 51.8$	$\mp 46.8$	$\mp 41.5$	$\mp 35.8$	$\mp 29.8$	$\mp 23.2$	$\mp 16.1$	$\mp 8.5$	0.0
	17	$\mp 63.9$	$\mp 59.1$	$\mp 54.1$	$\mp 48.9$	$\mp 43.3$	$\mp 37.4$	$\mp 31.1$	$\mp 24.3$	$\mp 16.9$	$\mp 8.9$	0.0
	27	$\mp 63.9$	$\mp 59.1$	$\mp 54.1$	$\mp 48.9$	$\mp 43.3$	$\mp 37.4$	$\mp 31.1$	$\mp 24.3$	$\mp 16.9$	$\mp 8.9$	0.0
	37	$\mp 61.0$	$\mp 56.4$	$\mp 51.6$	$\mp 46.6$	$\mp 41.3$	$\mp 35.6$	$\mp 29.6$	$\mp 23.2$	$\mp 16.1$	$\mp 8.4$	0.0



für den Auf- und Untergang der Sonne

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen  
für den Untergang.

Tag	Geographische Breite											
	+50°	+51°	+52°	+53°	+54°	+55°	+56°	+57°	+58°	+59°	+60°	
1945												
Jan.	I	<sup>m</sup> 0.0	<sup>m</sup> ±4.7	<sup>m</sup> ± 9.6	<sup>m</sup> ±14.8	<sup>m</sup> ±20.5	<sup>m</sup> ±26.4	<sup>m</sup> ±32.8	<sup>m</sup> ±39.5	<sup>m</sup> ±46.9	<sup>m</sup> ±55.0	<sup>m</sup> ±63.8
	II	0.0	±4.4	± 8.9	±13.8	±18.7	±24.3	±30.1	±36.3	±43.0	±50.3	±58.1
	2I	0.0	±3.8	± 7.9	±12.1	±16.5	±21.2	±26.3	±31.7	±37.3	±43.5	±50.2
Febr.	3I	0.0	±3.2	± 6.6	±10.0	±13.7	±17.7	±21.9	±26.3	±30.9	±36.0	±41.4
	10	0.0	±2.5	± 5.2	± 7.9	±10.8	±14.0	±17.2	±20.6	±24.2	±28.1	±32.3
März	20	0.0	±1.8	± 3.8	± 5.7	± 7.8	±10.1	±12.5	±14.9	±17.5	±20.3	±23.2
	2	0.0	±1.2	± 2.4	± 3.6	± 4.9	± 6.3	± 7.8	± 9.3	±10.9	±12.6	±14.3
	12	0.0	±0.5	± 1.0	± 1.4	± 2.0	± 2.6	± 3.2	± 3.8	± 4.3	± 5.1	± 5.8
April	22	0.0	∓0.2	∓ 0.4	∓ 0.7	∓ 0.9	∓ 1.2	∓ 1.5	∓ 1.7	∓ 2.1	∓ 2.4	∓ 2.8
	I	0.0	∓0.9	∓ 1.8	∓ 2.8	∓ 3.9	∓ 4.9	∓ 6.1	∓ 7.3	∓ 8.6	∓10.0	∓11.3
Mai	II	0.0	∓1.5	∓ 3.2	∓ 5.0	∓ 6.9	∓ 8.7	∓10.7	∓12.9	∓15.2	∓17.6	∓20.1
	2I	0.0	∓2.2	∓ 4.6	∓ 7.2	∓ 9.9	∓12.6	∓15.5	∓18.6	∓22.0	∓25.4	∓29.2
	I	0.0	∓3.0	∓ 6.1	∓ 9.4	∓12.9	∓16.5	∓20.3	∓24.4	∓28.8	∓33.4	∓38.4
	II	0.0	∓3.6	∓ 7.4	∓11.5	∓15.8	∓20.3	∓25.0	∓30.2	∓35.8	∓41.6	∓47.9
Juni	2I	0.0	∓4.2	∓ 8.7	∓13.4	∓18.5	∓23.9	∓29.6	∓35.8	∓42.5	∓49.6	∓57.4
	3I	0.0	∓4.7	∓ 9.8	∓15.2	∓20.9	∓27.1	∓33.6	∓40.7	∓48.3	∓56.7	∓65.9
	10	0.0	∓5.1	∓10.6	∓16.4	∓22.6	∓29.2	∓36.4	∓44.2	∓52.6	∓61.9	∓72.3
	20	0.0	∓5.3	∓10.9	∓16.9	∓23.3	∓30.2	∓37.5	∓45.6	∓54.4	∓64.0	∓75.1
Juli	30	0.0	∓5.2	∓10.7	∓16.6	∓22.9	∓29.6	∓36.9	∓44.7	∓53.3	∓62.7	∓73.5
	10	0.0	∓4.9	∓10.1	∓15.6	∓21.5	∓27.7	∓34.4	∓41.7	∓49.6	∓58.4	∓67.8
	20	0.0	∓4.4	∓ 9.1	∓14.0	∓19.2	∓24.8	∓30.8	∓37.2	∓44.1	∓51.6	∓59.9
Aug.	30	0.0	∓3.8	∓ 7.9	∓12.0	∓16.5	∓21.3	∓26.4	∓31.9	∓37.6	∓43.9	∓50.7
	9	0.0	∓3.2	∓ 6.5	∓ 9.9	∓13.7	∓17.6	∓21.8	∓26.2	∓30.8	∓35.8	∓41.2
	19	0.0	∓2.5	∓ 5.1	∓ 7.7	∓10.7	∓13.7	∓17.0	∓20.4	∓24.0	∓27.8	∓32.0
	29	0.0	∓1.8	∓ 3.7	∓ 5.6	∓ 7.7	∓ 9.9	∓12.2	∓14.7	∓17.2	∓20.0	∓22.9
Sept.	8	0.0	∓1.2	∓ 2.3	∓ 3.5	∓ 4.8	∓ 6.1	∓ 7.6	∓ 9.1	∓10.6	∓12.4	∓14.2
	18	0.0	∓0.5	∓ 0.9	∓ 1.4	∓ 1.9	∓ 2.4	∓ 3.0	∓ 3.6	∓ 4.2	∓ 4.9	∓ 5.6
	28	0.0	±0.2	± 0.5	± 0.7	± 1.0	± 1.3	± 1.5	± 1.8	± 2.2	± 2.5	± 2.8
Okt.	8	0.0	±0.9	± 1.8	± 2.9	± 3.9	± 5.0	± 6.1	± 7.2	± 8.6	± 9.9	±11.2
	18	0.0	±1.6	± 3.2	± 5.0	± 6.8	± 8.7	±10.6	±12.7	±15.1	±17.4	±19.9
Nov.	28	0.0	±2.2	± 4.6	± 7.1	± 9.7	±12.5	±15.3	±18.3	±21.7	±25.0	±28.7
	7	0.0	±2.9	± 6.0	± 9.2	±12.7	±16.2	±20.0	±23.9	±28.3	±32.8	±37.8
	17	0.0	±3.6	± 7.3	±11.3	±15.5	±19.8	±24.5	±29.5	±34.9	±40.5	±46.7
Dez.	27	0.0	±4.1	± 8.4	±13.1	±18.0	±23.1	±28.6	±34.5	±40.8	±47.7	±55.1
	7	0.0	±4.6	± 9.3	±14.5	±19.8	±25.7	±31.9	±38.4	±45.6	±53.3	±61.7
	17	0.0	±4.8	± 9.8	±15.2	±20.9	±27.0	±33.5	±40.5	±48.2	±56.4	±65.7
	27	0.0	±4.8	± 9.8	±15.2	±20.9	±27.0	±33.5	±40.5	±48.2	±56.4	±65.5
	37	0.0	±4.6	± 9.3	±14.4	±19.8	±25.5	±31.7	±38.2	±45.3	±53.1	±61.5



## Reduktionstafel

für den Auf- und Untergang des Mondes

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen  
für den Untergang.

t*)		Geographische Breite										
		+30°	+32°	+34°	+36°	+38°	+40°	+42°	+44°	+46°	+48°	+50°
h	m	m	m	m	m	m	m	m	m	m	m	m
3	20	∓94.6	∓87.9	∓80.9	∓73.4	∓65.5	∓56.9	∓47.6	∓37.5	∓26.4	∓14.0	0.0
3	30	∓88.5	∓82.2	∓75.6	∓68.5	∓61.0	∓52.9	∓44.2	∓34.8	∓24.4	∓12.9	0.0
3	40	∓82.5	∓76.5	∓70.3	∓63.7	∓56.6	∓49.1	∓41.0	∓32.2	∓22.5	∓11.9	0.0
3	50	∓76.6	∓71.0	∓65.2	∓59.0	∓52.4	∓45.3	∓37.8	∓29.6	∓20.7	∓10.9	0.0
4	0	∓70.8	∓65.6	∓60.1	∓54.4	∓48.2	∓41.7	∓34.7	∓27.2	∓18.9	∓9.9	0.0
4	10	∓65.1	∓60.3	∓55.2	∓49.9	∓44.2	∓38.2	∓31.7	∓24.8	∓17.3	∓9.0	0.0
4	20	∓59.5	∓55.0	∓50.3	∓45.5	∓40.3	∓34.8	∓28.9	∓22.5	∓15.7	∓8.2	0.0
4	30	∓54.0	∓49.9	∓45.6	∓41.2	∓36.5	∓31.4	∓26.1	∓20.4	∓14.1	∓7.4	0.0
4	40	∓48.4	∓44.8	∓40.9	∓36.9	∓32.7	∓28.2	∓23.3	∓18.2	∓12.6	∓6.6	0.0
4	50	∓43.0	∓39.8	∓36.4	∓32.7	∓29.0	∓24.9	∓20.7	∓16.1	∓11.2	∓5.8	0.0
5	0	∓37.7	∓34.8	∓31.8	∓28.6	∓25.3	∓21.8	∓18.1	∓14.1	∓9.8	∓5.0	0.0
5	10	∓32.4	∓29.9	∓27.3	∓24.6	∓21.7	∓18.7	∓15.5	∓12.1	∓8.4	∓4.3	0.0
5	20	∓27.1	∓25.0	∓22.8	∓20.6	∓18.2	∓15.6	∓12.9	∓10.1	∓7.0	∓3.6	0.0
5	30	∓21.9	∓20.2	∓18.4	∓16.6	∓14.7	∓12.6	∓10.4	∓8.1	∓5.6	∓2.9	0.0
5	40	∓16.7	∓15.4	∓14.0	∓12.6	∓11.2	∓9.6	∓7.9	∓6.2	∓4.3	∓2.2	0.0
5	50	∓11.5	∓10.6	∓9.7	∓8.7	∓7.7	∓6.6	∓5.5	∓4.2	∓2.9	∓1.5	0.0
6	0	∓6.4	∓5.8	∓5.4	∓4.8	∓4.2	∓3.6	∓3.0	∓2.3	∓1.6	∓0.9	0.0
6	10	∓1.2	∓1.1	∓1.0	∓0.9	∓0.8	∓0.7	∓0.6	∓0.4	∓0.3	∓0.2	0.0
6	20	±4.0	±3.7	±3.4	±3.0	±2.6	±2.3	±1.9	±1.5	±1.0	±0.5	0.0
6	30	±9.1	±8.4	±7.7	±6.9	±6.1	±5.3	±4.4	±3.4	±2.4	±1.2	0.0
6	40	±14.3	±13.2	±12.0	±10.8	±9.6	±8.2	±6.8	±5.3	±3.7	±1.9	0.0
6	50	±19.5	±18.0	±16.4	±14.8	±13.1	±11.2	±9.3	±7.2	±5.0	±2.6	0.0
7	0	±24.7	±22.8	±20.9	±18.8	±16.6	±14.2	±11.8	±9.1	±6.3	±3.3	0.0
7	10	±30.0	±27.7	±25.3	±22.8	±20.1	±17.3	±14.3	±11.1	±7.7	±4.0	0.0
7	20	±35.3	±32.6	±29.7	±26.8	±23.7	±20.3	±16.8	±13.1	±9.1	±4.7	0.0
7	30	±40.6	±37.5	±34.3	±30.9	±27.3	±23.4	±19.4	±15.1	±10.5	±5.5	0.0
7	40	±45.9	±42.5	±38.9	±35.0	±31.0	±26.6	±22.1	±17.2	±12.0	±6.2	0.0
7	50	±51.4	±47.6	±43.5	±39.2	±34.7	±29.9	±24.8	±19.3	±13.5	±7.0	0.0
8	0	±56.9	±52.7	±48.2	±43.5	±38.5	±33.2	±27.6	±21.5	±15.0	±7.8	0.0
8	10	±62.5	±57.9	±53.0	±47.9	±42.4	±36.6	±30.4	±23.8	±16.6	±8.6	0.0
8	20	±68.2	±63.2	±57.9	±52.3	±46.4	±40.1	±33.3	±26.1	±18.2	±9.5	0.0
8	30	±74.0	±68.5	±62.9	±56.9	±50.5	±43.7	±36.4	±28.5	±19.8	±10.5	0.0
8	40	±79.8	±74.0	±67.9	±61.5	±54.7	±47.3	±39.5	±30.9	±21.6	±11.4	0.0
8	50	±85.8	±79.6	±73.1	±66.3	±59.0	±51.1	±42.7	±33.5	±23.5	±12.5	0.0
9	0	±91.9	±85.3	±78.4	±71.2	±63.4	±55.0	±46.0	±36.3	±25.5	±13.5	0.0

\*) t ist beim Aufgang der Zeitunterschied zwischen Aufgang und Kulmination,  
beim Untergang der Zeitunterschied zwischen Kulmination und Untergang.



# Reduktionstafel

385\*

für den Auf- und Untergang des Mondes

Das obere Vorzeichen gilt für den Aufgang, das untere Vorzeichen  
für den Untergang.

<i>t</i> *)		Geographische Breite										
		+50°	+51°	+52°	+53°	+54°	+55°	+56°	+57°	+58°	+59°	+60°
<i>h</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>
3	20	0.0	±7.7	±16.1	±25.2	±35.1	±46.1	±58.4	±72.5	±89.1	±109.7	±138.1
3	30	0.0	±7.1	±14.7	±22.9	±31.8	±41.6	±52.4	±64.5	±78.3	±94.5	±114.3
3	40	0.0	±6.5	±13.4	±20.9	±28.9	±37.6	±47.2	±57.7	±69.4	±82.7	±98.2
3	50	0.0	±5.9	±12.2	±19.0	±26.2	±34.0	±42.5	±51.7	±61.9	±73.3	±86.1
4	0	0.0	±5.4	±11.1	±17.2	±23.7	±30.8	±38.2	±46.3	±55.2	±65.0	±76.0
4	10	0.0	±4.9	±10.1	±15.6	±21.4	±27.7	±34.4	±41.6	±49.4	±57.9	±67.3
4	20	0.0	±4.5	±9.1	±14.0	±19.2	±24.8	±30.8	±37.2	±44.0	±51.5	±59.6
4	30	0.0	±4.0	±8.1	±12.5	±17.2	±22.2	±27.5	±33.1	±39.1	±45.7	±52.7
4	40	0.0	±3.5	±7.3	±11.2	±15.3	±19.7	±24.3	±29.3	±34.5	±40.2	±46.3
4	50	0.0	±3.1	±6.4	±9.8	±13.4	±17.3	±21.4	±25.6	±30.2	±35.1	±40.4
5	0	0.0	±2.7	±5.5	±8.5	±11.6	±15.0	±18.5	±22.2	±26.1	±30.3	±34.8
5	10	0.0	±2.3	±4.7	±7.2	±10.0	±12.8	±15.7	±18.9	±22.2	±25.7	±29.5
5	20	0.0	±2.0	±3.9	±6.0	±8.3	±10.7	±13.1	±15.7	±18.4	±21.3	±24.4
5	30	0.0	±1.6	±3.2	±4.8	±6.7	±8.5	±10.5	±12.6	±14.8	±17.1	±19.6
5	40	0.0	±1.2	±2.4	±3.7	±5.0	±6.5	±7.9	±9.5	±11.2	±13.0	±14.8
5	50	0.0	±0.8	±1.7	±2.6	±3.4	±4.4	±5.5	±6.5	±7.7	±8.9	±10.2
6	0	0.0	±0.5	±0.9	±1.4	±1.9	±2.4	±3.0	±3.6	±4.2	±4.9	±5.6
6	10	0.0	±0.1	±0.2	±0.2	±0.4	±0.5	±0.6	±0.7	±0.8	±0.9	±1.1
6	20	0.0	∓0.3	∓0.6	∓0.9	∓1.2	∓1.5	∓1.9	∓2.3	∓2.6	∓3.0	∓3.5
6	30	0.0	∓0.6	∓1.3	∓2.0	∓2.7	∓3.5	∓4.3	∓5.2	∓6.0	∓7.0	∓8.0
6	40	0.0	∓1.0	∓2.1	∓3.1	∓4.3	∓5.5	∓6.8	∓8.1	∓9.5	∓11.0	∓12.6
6	50	0.0	∓1.3	∓2.9	∓4.3	∓5.9	∓7.5	∓9.4	∓11.2	∓13.1	∓15.1	∓17.3
7	0	0.0	∓1.7	∓3.6	∓5.5	∓7.5	∓9.6	∓11.9	∓14.3	∓16.7	∓19.3	∓22.2
7	10	0.0	∓2.1	∓4.4	∓6.7	∓9.2	∓11.7	∓14.5	∓17.4	∓20.4	∓23.7	∓27.1
7	20	0.0	∓2.5	∓5.1	∓7.9	∓10.8	∓13.8	∓17.1	∓20.6	∓24.2	∓28.1	∓32.3
7	30	0.0	∓2.9	∓6.0	∓9.2	∓12.6	∓16.1	∓19.9	∓24.0	∓28.2	∓32.8	∓37.7
7	40	0.0	∓3.3	∓6.9	∓10.6	∓14.4	∓18.5	∓22.9	∓27.5	∓32.4	∓37.8	∓43.4
7	50	0.0	∓3.8	∓7.7	∓12.0	∓16.3	∓21.0	∓25.9	∓31.3	∓36.9	∓43.0	∓49.6
8	0	0.0	∓4.2	∓8.7	∓13.4	∓18.3	∓23.7	∓29.2	∓35.3	∓41.7	∓48.7	∓56.3
8	10	0.0	∓4.7	∓9.6	∓14.9	∓20.4	∓26.4	∓32.6	∓39.5	∓46.8	∓54.8	∓63.5
8	20	0.0	∓5.2	∓10.6	∓16.4	∓22.6	∓29.2	∓36.3	∓44.0	∓52.3	∓61.5	∓71.6
8	30	0.0	∓5.7	∓11.7	∓18.1	∓25.0	∓32.4	∓40.4	∓49.1	∓58.6	∓69.1	∓81.0
8	40	0.0	∓6.3	∓12.9	∓19.9	∓27.6	∓35.8	∓44.9	∓54.9	∓65.7	∓77.9	∓92.1
8	50	0.0	∓6.8	∓14.1	∓21.9	∓30.5	∓39.7	∓49.8	∓61.2	∓73.8	∓88.5	∓106.1
9	0	0.0	∓7.4	∓15.4	∓24.1	∓33.7	∓44.1	∓55.3	∓68.4	∓83.6	∓101.4	∓125.9

\*) *t* ist beim Aufgang der Zeitunterschied zwischen Aufgang und Kulmination,  
beim Untergang der Zeitunterschied zwischen Kulmination und Untergang.



## zur Berechnung der optischen Mondlibration

$\lambda - \Omega$	$\Delta\lambda$	$a$	$B$	$\lambda - \Omega$	$\lambda - \Omega$	$\Delta\lambda$	$a$	$B$	$\lambda - \Omega$
0	+0.0+	-0.0269+	0 0.0+	180	45	+0.6+	-0.0190+	-1 5.3+	225
1	0.0	268	0 1.6	181	46	0.6	187	1 6.4	226
2	0.0	268	0 3.2	182	47	0.6	183	1 7.5	227
3	0.1	268	0 4.8	183	48	0.6	180	1 8.6	228
4	0.1	268	0 6.4	184	49	0.6	176	1 9.7	229
5	+0.1+	-0.0268+	0 8.0+	185	50	+0.6+	-0.0173+	-1 10.7+	230
6	0.1	267	0 9.7	186	51	0.6	169	1 11.8	231
7	0.1	267	0 11.3	187	52	0.6	165	1 12.8	232
8	0.2	266	0 12.9	188	53	0.6	162	1 13.8	233
9	0.2	265	0 14.4	189	54	0.6	158	1 14.7	234
10	+0.2+	-0.0264+	0 16.0+	190	55	+0.6+	-0.0154+	-1 15.6+	235
11	0.2	264	0 17.6	191	56	0.6	150	1 16.5	236
12	0.2	263	0 19.2	192	57	0.6	146	1 17.4	237
13	0.3	262	0 20.8	193	58	0.6	142	1 18.3	238
14	0.3	261	0 22.3	194	59	0.5	138	1 19.2	239
15	+0.3+	-0.0259+	0 23.9+	195	60	+0.5+	-0.0134+	-1 20.0+	240
16	0.3	258	0 25.5	196	61	0.5	130	1 20.8	241
17	0.3	257	0 27.0	197	62	0.5	126	1 21.5	242
18	0.4	255	0 28.5	198	63	0.5	122	1 22.3	243
19	0.4	254	0 30.1	199	64	0.5	118	1 23.0	244
20	+0.4+	-0.0252+	0 31.6+	200	65	+0.5+	-0.0114+	-1 23.7+	245
21	0.4	251	0 33.1	201	66	0.5	109	1 24.4	246
22	0.4	249	0 34.6	202	67	0.4	105	1 25.0	247
23	0.4	247	0 36.1	203	68	0.4	101	1 25.6	248
24	0.5	245	0 37.6	204	69	0.4	96	1 26.2	249
25	+0.5+	-0.0243+	0 39.0+	205	70	+0.4+	-0.0092+	-1 26.8+	250
26	0.5	241	0 40.5	206	71	0.4	87	1 27.3	251
27	0.5	239	0 41.9	207	72	0.4	83	1 27.8	252
28	0.5	237	0 43.4	208	73	0.3	79	1 28.3	253
29	0.5	235	0 44.8	209	74	0.3	74	1 28.8	254
30	+0.5+	-0.0233+	0 46.2+	210	75	+0.3+	-0.0070+	-1 29.2+	255
31	0.5	230	0 47.6	211	76	0.3	65	1 29.6	256
32	0.6	228	0 48.9	212	77	0.3	60	1 30.0	257
33	0.6	225	0 50.3	213	78	0.2	56	1 30.3	258
34	0.6	223	0 51.6	214	79	0.2	51	1 30.6	259
35	+0.6+	-0.0220+	0 53.0+	215	80	+0.2+	-0.0047+	-1 30.9+	260
36	0.6	217	0 54.3	216	81	0.2	42	1 31.2	261
37	0.6	214	0 55.6	217	82	0.2	37	1 31.4	262
38	0.6	212	0 56.9	218	83	0.1	33	1 31.6	263
39	0.6	209	0 58.1	219	84	0.1	28	1 31.8	264
40	+0.6+	-0.0206+	0 59.4+	220	85	+0.1+	-0.0023+	-1 32.0+	265
41	0.6	203	1 0.6	221	86	0.1	19	1 32.1	266
42	0.6	200	1 1.8	222	87	0.1	14	1 32.2	267
43	0.6	196	1 3.0	223	88	0.0	9	1 32.3	268
44	0.6	193	1 4.1	224	89	0.0	5	1 32.3	269
45	+0.6+	-0.0190+	-1 5.3+	225	90	+0.0+	-0.0000+	-1 32.3+	270

$$l' = \lambda + \Delta\lambda - a(B - \beta) - L_{\odot}; \quad b' = B - \beta$$

$l', b'$  = Optische Libration der Mondmitte in selenographischer Länge und Breite.

$\lambda, \beta$  = Länge und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.

$L_{\odot}$  = Mittlere Länge des Mondes,  $\Omega$  = Mondknoten.



## zur Berechnung der optischen Mondlibration

$\lambda - \Omega$	$\Delta\lambda$	$a$	$B$	$\lambda - \Omega$	$\lambda - \Omega$	$\Delta\lambda$	$a$	$B$	$\lambda - \Omega$
90	-0.0	+0.0000	-1 32.3+	270	135	-0.6	+0.0190	-1 5.3+	315
91	0.0	05	1 32.3	271	136	0.6	193	1 4.1	316
92	0.0	09	1 32.3	272	137	0.6	196	1 3.0	317
93	0.1	14	1 32.2	273	138	0.6	200	1 1.8	318
94	0.1	19	1 32.1	274	139	0.6	203	1 0.6	319
95	-0.1	+0.0023	-1 32.0+	275	140	-0.6	+0.0206	-0 59.4+	320
96	0.1	28	1 31.8	276	141	0.6	209	0 58.1	321
97	0.1	33	1 31.6	277	142	0.6	212	0 56.9	322
98	0.2	37	1 31.4	278	143	0.6	214	0 55.6	323
99	0.2	42	1 31.2	279	144	0.6	217	0 54.3	324
100	-0.2	+0.0047	-1 30.9+	280	145	-0.6	+0.0220	-0 53.0+	325
101	0.2	51	1 30.6	281	146	0.6	223	0 51.6	326
102	0.2	56	1 30.3	282	147	0.6	225	0 50.3	327
103	0.3	60	1 30.0	283	148	0.6	228	0 48.9	328
104	0.3	65	1 29.6	284	149	0.5	230	0 47.6	329
105	-0.3	+0.0070	-1 29.2+	285	150	-0.5	+0.0233	-0 46.2+	330
106	0.3	74	1 28.8	286	151	0.5	235	0 44.8	331
107	0.3	79	1 28.5	287	152	0.5	237	0 43.4	332
108	0.4	83	1 27.8	288	153	0.5	239	0 41.9	333
109	0.4	87	1 27.3	289	154	0.5	241	0 40.5	334
110	-0.4	+0.0092	-1 26.8+	290	155	-0.5	+0.0243	-0 39.0+	335
111	0.4	096	1 26.2	291	156	0.5	245	0 37.6	336
112	0.4	101	1 25.6	292	157	0.4	247	0 36.1	337
113	0.4	105	1 25.0	293	158	0.4	249	0 34.6	338
114	0.5	109	1 24.4	294	159	0.4	251	0 33.1	339
115	-0.5	+0.0114	-1 23.7+	295	160	-0.4	+0.0252	-0 31.6+	340
116	0.5	118	1 23.0	296	161	0.4	254	0 30.1	341
117	0.5	122	1 22.3	297	162	0.4	255	0 28.5	342
118	0.5	126	1 21.5	298	163	0.3	257	0 27.0	343
119	0.5	130	1 20.8	299	164	0.3	258	0 25.5	344
120	-0.5	+0.0134	-1 20.0+	300	165	-0.3	+0.0259	-0 23.9+	345
121	0.5	138	1 19.2	301	166	0.3	261	0 22.3	346
122	0.6	142	1 18.3	302	167	0.3	262	0 20.8	347
123	0.6	146	1 17.4	303	168	0.2	263	0 19.2	348
124	0.6	150	1 16.5	304	169	0.2	264	0 17.6	349
125	-0.6	+0.0154	-1 15.6+	305	170	-0.2	+0.0264	-0 16.0+	350
126	0.6	158	1 14.7	306	171	0.2	265	0 14.4	351
127	0.6	162	1 13.8	307	172	0.2	266	0 12.9	352
128	0.6	165	1 12.8	308	173	0.1	267	0 11.3	353
129	0.6	169	1 11.8	309	174	0.1	267	0 9.7	354
130	-0.6	+0.0173	-1 10.7+	310	175	-0.1	+0.0268	-0 8.0+	355
131	0.6	176	1 9.7	311	176	0.1	268	0 6.4	356
132	0.6	180	1 8.6	312	177	0.1	268	0 4.8	357
133	0.6	183	1 7.5	313	178	0.0	268	0 3.2	358
134	0.6	187	1 6.4	314	179	0.0	268	0 1.6	359
135	-0.6	+0.0190	-1 5.3+	315	180	-0.0	+0.0269	-0 0.0+	360

$$l' = \lambda + \Delta\lambda - a(B - \beta) - L_C; \quad b' = B - \beta$$

$l', b'$  = Optische Libration der Mondmitte in selenographischer Länge und Breite.

$\lambda, \beta$  = Länge und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.

$L_C$  = Mittlere Länge des Mondes,  $\Omega$  = Mondknoten.



## Koordinaten der Sternwarten

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. $\rho$ incl. Seehöhe
Abastumani (Mt. Kanobili)	1700 <sup>m</sup>	+41° 43'	- 2 51 <sup>m</sup>	- 28.1	+41° 32'	9.999471
Abbadia . . . . .	69	+43 22 52.2	+ 0 7 0.1	+ 1.15	+43 11 17.8	9.999317
Ábo . . . . .	—	+60 26 56.8	- 1 29 6.30	- 14.64	+60 16 58.8	9.998894
Adelaide . . . . .	41	-34 55 35.1	- 9 14 19.90	- 91.06	-34 44 42.7	9.999526
Albany (Neue Sternw.) <sup>1)</sup>	40	+42 39 12.8	+ 4 55 7.12	+ 48.48	+42 27 39.7	9.999334
Algier (Neue Sternw.) <sup>2)</sup>	345	+36 48 4.8	- 0 12 8.47	- 1.99	+36 36 58.1	9.999497
Allegheny (Neue Sternw.)	370	+40 28 58.1	+ 5 20 5.39	+ 52.59	+40 17 31.4	9.999411
Allegheny (Alte Sternw.)	349	+40 27 41.6	+ 5 20 2.97	+ 52.58	+40 16 15.0	9.999411
Amherst (Neue Sternw.)	110	+42 21 56.5	+ 4 50 5.98	+ 47.66	+42 10 24.0	9.999346
Ann Arbor . . . . .	282	+42 16 48.7	+ 5 34 55.27	+ 55.02	+42 5 16.4	9.999360
Arcturi Zentr. d. Sternw. <sup>3)</sup>	184	+43 45 14.4	- 0 45 1.30	- 7.39	+43 33 39.5	9.999316
Arequipa <sup>4)</sup> . . . . .	2451	-16 22 28.0	+ 4 46 11.73	+ 47.02	-16 16 12.7	0.000052
Armagh . . . . .	64	+54 21 11	+ 0 26 35.48	+ 4.37	+54 10 11.4	9.999041
Athen . . . . .	110	+37 58 15.5	- 1 34 52.2	- 15.58	+37 47 1.2	9.999456
Bamberg (Reimeis-Sternw.)	288	+49 53 6.4	- 0 43 33.57	- 7.15	+49 41 40.3	9.999167
Barcelona <sup>5)</sup> . . . . .	415	+41 24 59.3	- 0 8 30.2	- 1.41	+41 13 29.4	9.999391
Bayreuth (Haus d. Erziehung)	354	+49 56 46	- 0 46 18.4	- 7.61	+49 45 20	9.999170
Belgrad . . . . .	250	+44 48 8	- 1 22 3.8	- 13.48	+44 36 32	9.999294
Bergedorf Mer.-Kr. . . . .	41	+53 28 46.9	- 0 40 57.74	- 6.73	+53 17 40.8	9.999060
Berkeley . . . . .	94	+37 52 23.5	+ 8 9 2.91	+ 80.34	+37 41 9.8	9.999458
Berlin-Babelsberg <sup>6)</sup>	82	+52 24 24.2	- 0 52 25.49	- 8.61	+52 13 11.1	9.999089
Berlin (Urania) <sup>7)</sup> . . . . .	47	+52 31 30.7	- 0 53 27.40	- 8.78	+52 20 18.3	9.999084
Bern (Astronom. Institut)	563	+46 57 12.7	- 0 29 42.88	- 4.88	+46 45 38.5	9.999260
Besançon . . . . .	312	+47 14 59.0	- 0 23 57.1	- 3.93	+47 3 25.3	9.999236
Blaca . . . . .	280	+43 17 37	- 1 6 8.0	- 10.86	+43 6 3	9.999334
Bloemfontein <small>Filiale Obs. Univ. Michig.</small>	1490	-29 5 45	- 1 44 57	- 17.24	-28 55 55	9.999758
Bloemfontein <small>Boyden Stat. d. Harv. Obs.</small>	1379	-29 12	- 1 45 57	- 17.40	-29 2	9.999748
Bogota . . . . .	2640	+ 4 35 55.2	+ 4 56 19.51	+ 48.68	+ 4 34 4.4	0.000111
Bologna Zentr. d. Sternw.	84	+44 29 52.8	- 0 45 24.48	- 7.46	+44 18 17.3	9.999290
Bombay (Colaba) . . . . .	19	+18 53 36.2	- 4 51 15.60	- 47.85	+18 46 31.1	9.999849
Bonn Zentr. d. Sternw. . . . .	62	+50 43 45.0	- 0 28 23.18	- 4.66	+50 32 22.7	9.999130
Bordeaux (Floirac) . . . . .	73	+44 50 7.2	+ 0 2 6.56	+ 0.35	+44 38 31.6	9.999281
Bosque Alegre . . . . . <small>(Filiale v. Cordoba, Reflektor)</small>	1250	-31 35 53	+ 4 18 11.2	+ 42.41	-31 25 33	9.999686
Boston (University) <sup>8)</sup> . . . . .	31	+42 20 58	+ 4 44 19.1	+ 46.71	+42 9 25.6	9.999341
Breslau Zentr. d. Sternw. . . . .	147	+51 6 56.5	- 1 8 8.72	- 11.19	+50 55 36.1	9.999126
Breslau Neue Sternw. <sup>9)</sup> . . . . .	117	+51 6 42.1	- 1 8 21.22	- 11.23	+50 55 21.7	9.999130
Brisbane . . . . .	51	-27 28 23.0	-10 12 6.48	-100.55	-27 18 54.6	9.999694
Brüssel <small>(Alte Sternw.) Pass. Instr.</small>	56	+50 51 10.7	- 0 17 28.71	- 2.87	+50 39 49.0	9.999126
Brüssel (Uccle) Mer.-Kr. . . . .	105	+50 47 54.6	- 0 17 26.05	- 2.86	+50 36 32.7	9.999131
Budapest Univ.-Sternw. . . . .	110	+47 29 34.7	- 1 16 15.4	- 12.53	+47 18 1.5	9.999215
Budapest-Svábhegy . . . . .	470	+47 29 58.6	- 1 15 51.41	- 12.46	+47 18 25.4	9.999240

<sup>1)</sup> Dudley Observatory, seit Juni 1893. Alte Sternwarte 37°0 nördlich, 7°10 östlich. — <sup>2)</sup> Alte Sternwarte 3/8 südlich, 8° östlich. — <sup>3)</sup> Seit Oktober 1872, früher in Florenz. — <sup>4)</sup> 1927 geschlossen und nach Bloemfontein verlegt. — <sup>5)</sup> J. Comas Solá. — <sup>6)</sup> Die Koordinaten beziehen sich auf die Mitte der großen Kuppel, in der der große Refraktor aufgestellt ist. Die frühere Sternwarte in Berlin (seit 1835) lag 5° 52' 5 nördlich und 1° 9' 31 östlich. — <sup>7)</sup> Übungsternwarte der Universität. — <sup>8)</sup> Die alte Sternwarte lag 42' östlich, 34' 5 nördlich. — <sup>9)</sup> Geogr. Breite des Vertikalkreises, Länge des Durchgangsinstruments



Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. $\rho$ incl. Seehöhe
Budapest <sup>1)</sup> . . . . .	110	+47° 28' 49"	-1° 16' 13.7"	-12.53	+47° 17' 16"	9.999215
Bukarest (Mil. Geogr. Inst.)	85	+44 24 34.2	-1 44 27.01	-17.16	+44 12 58.7	9.999292
Cambridge Engl. . . . .	28	+52 12 51.6	-0 0 22.75	-0.06	+52 1 37.3	9.999090
Cambridge Mass. <sup>2)</sup> . . . . .	24	+42 22 47.6	+4 44 31.05	+46.74	+42 11 15.1	9.999340
Cap d. gut. Hoffnung	10	-33 56 6.8	-1 13 54.60	-12.14	-33 45 23.2	9.999547
Caracas (Observ. Cajigal) .	1042	+10 30 24.3	+4 27 42.61	+43.98	+10 26 15.6	0.000023
Castel Gandolfo . . . . .	—	+41 44 48	-0 50 36.4	- 8.31	+41 33 17	9.999354
Catania . . . . .	47	+37 30 13.3	-1 0 20.60	- 9.91	+37 19 1.9	9.999466
Charkow . . . . .	139	+50 0 9.9	-2 24 55.72	-23.81	+49 48 44.4	9.999153
Charlottenburg, <sup>Techn.</sup> <sup>Hochsch.</sup>	60	+52 30 48.7	-0 53 20.5	- 8.76	+52 19 36.2	9.999085
Charlottesville <sup>3)</sup> . . . . .	259	+38 2 1.2	+5 14 5.33	+51.60	+37 50 46.5	9.999464
Christiania (Oslo) Mer.-Kr.	25	+59 54 43.7	-0 42 53.51	- 7.04	+59 44 39.2	9.998908
Cincinnati (Alte Sternw.) .	—	+39 6 26.5	+5 37 59.09	+55.52	+38 55 6.0	9.999421
Cincinnati (Neue Sternw.) <sup>4)</sup>	247	+39 8 19.8	+5 37 41.40	+55.47	+38 56 59.1	9.999437
Cleveland (Case Obs.) . . .	215	+41 30 14.5	+5 26 25.86	+53.63	+41 18 44.3	9.999375
Coimbra . . . . .	99	+40 12 24.5	+0 33 43.1	+ 5.54	+40 0 58.9	9.999400
Columbia Missouri <sup>5)</sup> . . . .	225	+38 56 12	+6 9 18.37	+60.67	+38 44 52.3	9.999442
Cordoba . . . . .	434	-31 25 15.5	+4 16 47.16	+42.18	-31 14 57.5	9.999635
Danzig (Naturf. Ges.) . . . .	30	+54 21 18.0	-1 14 39.6	-12.26	+54 10 18.4	9.999036
Danzig (Städt. Sternw.) . . .	30	+54 21 37.9	-1 14 36.5	-12.26	+54 10 38.3	9.999036
Delaware (Perkins Obs.) . . .	270	+40 15 4	+5 32 13.33	+54.58	+40 3 38	9.999410
Denver <sup>6)</sup> . . . . .	1644	+39 40 36.4	+6 59 47.72	+68.96	+39 29 13.1	9.999519
Dorpat ( <sup>Tartu, Jurjew</sup> <sup>Mer.-Kr.</sup> ) . . . . .	67	+58 22 47.2	-1 46 53.18	-17.56	+58 12 25.1	9.998946
Dresden (Geodät. Inst.) . . . .	168	+51 1 49.3	-0 54 55.1	- 9.02	+50 50 28.5	9.999130
Dresden (Mathem. Salon) . . . .	—	+51 3 14.7	-0 54 55.83	- 9.02	+50 51 54.0	9.999117
Dublin (Dunsink Obs.) . . . .	86	+53 23 13.1	+0 25 21.1	+ 4.17	+53 12 6.4	9.999065
Düsseldorf (Bilk) . . . . .	46	+51 12 25.0	-0 27 2.69	- 4.44	+51 1 5.1	9.999117
Dunlap Obs. (Toronto) . . . . .	244	+43 51 46	+5 17 41.3	+52.19	+43 40 11	9.999317
Durban . . . . .	79	-29 50 46.6	-2 4 1.18	-20.37	-29 40 47.0	9.999645
Durham . . . . .	108	+54 46 6.2	+0 6 19.75	+ 1.04	+54 35 9.8	9.999033
Edinburgh . . . . .	146	+55 55 30	+0 12 44.1	+ 2.09	+55 44 43.5	9.999008
Edinburgh (Blackf. Hill) . . . .	134	+55 55 28.0	+0 12 44.0	+ 2.09	+55 44 41.5	9.999007
Evanston (Dearborn Obs.) <sup>7)</sup> .	175	+42 3 27.2	+5 50 41.8	+57.61	+41 51 55.4	9.999358
Faenza (Urania Lamonia) . . . .	45	+44 17 2	-0 47 33.9	- 7.81	+44 5 27	9.999293
Flagstaff (Lowell Obs.) . . . .	2210	+35 12 30.5	+7 26 44.6	+73.39	+35 1 35.8	9.999667
Florenz (Alte Sternw.) <sup>8)</sup> . . . .	73	+43 46 4.1	-0 44 59.6	- 7.39	+43 34 29.2	9.999308
Florenz (Mil. Geogr. Inst.) . . . .	72	+43 46 49.4	-0 45 2.5	- 7.40	+43 35 14.5	9.999308
Frankfurt a. M. . . . .	121	+50 7 0	-0 34 36.3	- 5.70	+49 55 34.6	9.999149
Genf Mer.-Kr. . . . .	406	+46 11 59.3	-0 24 36.53	- 4.04	+46 0 24.1	9.999269
Genua ( <sup>Mar. Sternw.</sup> <sup>Mer.-Kr.</sup> ) . . . . .	108	+44 25 8.1	-0 35 41.28	- 5.86	+44 13 32.6	9.999294
Georgetown D. C. . . . .	62	+38 54 26.2	+5 8 18.33	+50.65	+38 43 6.7	9.999430
Glasgow Schottl. . . . .	55	+55 52 42.1	+0 17 10.55	+ 2.82	+55 41 55.2	9.999003

<sup>1)</sup> Observ. der Kgl. Josef-Technischen Hochschule. — <sup>2)</sup> Harvard College Observatory. — <sup>3)</sup> Leander Mc. Cornick Observatory, University of Virginia. — <sup>4)</sup> Mount Lookout seit 1873. — <sup>5)</sup> Laws Observatory. — <sup>6)</sup> University Park, Chamberlin Observatory. — <sup>7)</sup> Früher 6<sup>2</sup> nördl., 0<sup>5</sup> westl. — <sup>8)</sup> 1872 nach Arcetri verlegt.



## Koordinaten der Sternwarten

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. ρ incl. Seehöhe
Göttingen Mer.-Kr. . . . .	161 <sup>m</sup>	+51° 31' 48.2"	−0° 39' 46.22"	− 6.53	+51° 20' 30.0"	9.999117
Gotha (Neue Sternw.) <sup>1)</sup> Zentr. d. St. . . . .	322	+50° 56' 37.9"	−0° 42' 50.51"	− 7.04	+50° 45' 16.7"	9.999142
Graz . . . . .	375	+47° 4' 37.2"	−1° 1' 47.71"	−10.15	+46° 53' 3.2"	9.999244
Greenwich Transit Circle . . . . .	47	+51° 28' 38.2"	0° 0' 0.00"	0.00	+51° 17' 19.7"	9.999110
Groningen . . . . .	4	+53° 13' 13.8"	−0° 26' 15.11"	− 4.31	+53° 2' 6.0"	9.999064
Grünwald <sup>2)</sup> . . . . .	599	+48° 2' 7"	−0° 46' 6.55"	− 7.58	+47° 50' 35"	9.999235
Hamburg (Alte Sternw.) <sup>3)</sup> Mer.-Kr. . . . .	25	+53° 33' 6.0"	−0° 39' 53.60"	− 6.55	+53° 22' 0.4"	9.999057
Hamburg (D. Seewarte) . . . . .	30	+53° 32' 51.8"	−0° 39' 53.42"	− 6.55	+53° 21' 46.2"	9.999058
Hannover N. H. . . . .	183	+43° 42' 15.3"	+4° 49' 8.00"	+47.50	+43° 30' 40.5"	9.999317
Haverford . . . . .	116	+40° 0' 40.1"	+5° 1' 12.7"	+49.48	+39° 49' 15.4"	9.999406
Heidelberg (Wolfs Sternw.) . . . . .	126	+49° 24' 35"	−0° 34' 48.4"	− 5.72	+49° 13' 7"	9.999159
Heidelberg (Königst.) Mer.-Kr. . . . .	570	+49° 23' 54.6"	−0° 34' 53.13"	− 5.73	+49° 12' 26.8"	9.999198
Helsingfors Mer.-Kr. . . . .	33	+60° 9' 42.3"	−1° 39' 49.10"	−16.40	+59° 59' 40.8"	9.998903
Helwan . . . . .	115	+29° 51' 31.1"	−2° 5' 21.77"	−20.59	+29° 41' 31.4"	9.999648
Herrsching (München) . . . . .	534	+47° 59' 55"	−0° 44' 43.6"	− 7.35	+47° 48' 23"	9.999231
Hongkong . . . . .	33	+22° 18' 13.2"	−7° 36' 41.25"	−75.02	+22° 10' 5.8"	9.999793
Hyderabad-Deccan <sup>4)</sup> . . . . .	554	+17° 25' 54.3"	−5° 13' 48.98"	+51.55	+17° 19' 17.7"	9.999907
Innsbruck . . . . .	605	+47° 16' 6.5"	−0° 45' 31.42"	− 7.48	+47° 4' 32.8"	9.999254
Istanbul (Univ. Sternw.) . . . . .	65	+41° 0' 45"	−1° 55' 52"	−19.03	+40° 49' 16"	9.999377
Jena (Univers.) Zentr. d. St. . . . .	164	+50° 55' 35.6"	−0° 46' 20.22"	− 7.61	+50° 44' 14.3"	9.999131
Jena (Winkler) . . . . .	174	+50° 56' 15.7"	−0° 46' 20.73"	− 7.61	+50° 44' 54.5"	9.999132
Johannesburg . . . . .	1786	−26° 10' 52.1"	−1° 52' 17.9"	−18.45	−26° 1' 42.0"	9.999839
Johannesburg (Fil. d. Yale Observ.) . . . . .	1741	−26° 11' 14"	−1° 52' 7"	−18.42	−26° 2' 4"	9.999836
Kairo . . . . .	—	+30° 4' 38.2"	−2° 5' 8.80"	−20.56	+29° 54' 35.8"	9.999635
Kalocsa <sup>5)</sup> . . . . .	102	+46° 31' 42.4"	−1° 15' 54.34"	−12.47	+46° 20' 7.6"	9.999239
Karlsruhe <sup>6)</sup> . . . . .	110	+49° 0' 29.6"	−0° 33' 35.40"	− 5.52	+48° 49' 0.4"	9.999177
Kasan (Univers.) . . . . .	79	+55° 47' 24.3"	−3° 16' 29.03"	−32.28	+55° 36' 36.6"	9.999007
Kasan (Engelhardt) . . . . .	98	+55° 50' 20.5"	−3° 15' 15.74"	−32.08	+55° 39' 33.2"	9.999007
Kew . . . . .	10	+51° 28' 6"	+0° 1' 15.1"	+ 0.21	+51° 16' 47.5"	9.999108
Kiel Neuer Mer.-Kr. . . . .	52	+54° 20' 27.6"	−0° 40' 35.45"	− 6.67	+54° 9' 27.9"	9.999040
Kiel Alter Mer.-Kr. . . . .	47	+54° 20' 28.5"	−0° 40' 35.57"	− 6.67	+54° 9' 28.8"	9.999040
Kiew Mer.-Kr. . . . .	184	+50° 27' 11.8"	−2° 2' 0.56"	−20.04	+50° 15' 48.3"	9.999145
Kitab . . . . .	658	+39° 8' 1.7"	−4° 27' 31.7"	−43.95	+38° 56' 41.0"	9.999465
Kodaikanal . . . . .	2343	+10° 13' 50"	−5° 9' 52.0"	−50.94	+10° 9' 47.6"	0.000114
Königsberg (Reps. Mer.-Kr. <sup>7)</sup> ) . . . . .	22	+54° 42' 50.6"	−1° 21' 58.98"	−13.47	+54° 31' 53.8"	9.999029
Konstanz <sup>8)</sup> . . . . .	420	+47° 39' 43.6"	−0° 36' 42.01"	− 6.03	+47° 28' 10.7"	9.999232
Kopenhagen (Neue <sup>9)</sup> Sternw.) . . . . .	14	+55° 41' 12.6"	−0° 50' 18.69"	− 8.26	+55° 30' 24.0"	9.999005
Kopenhagen (Urania- Sternw.) . . . . .	10	+55° 41' 19.2"	−0° 50' 9.11"	− 8.24	+55° 30' 30.6"	9.999005
Krakau Mer.-Kr. . . . .	221	+50° 3' 51.9"	−1° 19' 50.28"	−13.11	+49° 52' 26.7"	9.999158
Kremsmünster Mer.-Kr. . . . .	384	+48° 3' 23.1"	−0° 56' 31.58"	− 9.28	+47° 51' 51.1"	9.999219

<sup>1)</sup> Seit 1857, früher Seeberg. — <sup>2)</sup> Privatsternwarte von Ph. Fauth. — <sup>3)</sup> 1909 nach Bergedorf verlegt. — <sup>4)</sup> Nizamiya Observatory. — <sup>5)</sup> Erzbischöfl. Haynaldsche Sternwarte. — <sup>6)</sup> 1896 nach Heidelberg verlegt. — <sup>7)</sup> Nach 1898, vor 1898 0°01 westlich. — <sup>8)</sup> Privatsternwarte von B. Leiner. — <sup>9)</sup> Seit 1861 Nov. 11. Alte Sternwarte 20°3 südlich, 0°03 westlich.



Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. ρ incl. Seehöhe
Kyoto (Aströn. Inst.) . . .	55 <sup>m</sup>	+35° 1' 37".1	-9° 3' 7.0	-89.22	+34° 50' 43.9	9.999525
Kyoto (Kwasan Observ.) . .	220	+34 59 40.3	-9 3 10.24	-89.23	+34 48 47.4	9.999537
Ladd Observ. (Providence)	69	+41 50 15.6	+4 45 35.95	+46.92	+41 38 44.4	9.999357
La Plata Mer.-Kr. Gautier	17	-34 54 30.3	+3 51 43.74	+38.07	-34 43 38.1	9.999525
Leiden (Neue Sternw.) <sup>1)</sup>	6	+52 9 19.8	-0 17 56.15	-2.94	+51 58 5.2	9.999090
Leipzig (Neue Sternw.) <sup>2)</sup> Zentr.	119	+51 20 5.9	-0 49 33.93	-8.14	+51 8 46.7	9.999119
Lembang (Bosscha St.) . .	1300	-6 49 29.1	-7 10 27.81	-70.71	-6 46 45.5	0.000068
Lemberg (Univ.-Sternwarte)	330	+49 49 57.6	-1 36 7.13	-15.79	+49 38 31.4	9.999171
Lemberg (Techn. Hochsch.) Pass. Instr.	340	+49 50 11.2	-1 36 3.40	-15.78	+49 38 45.0	9.999171
Leningrad (Petersburg) (Akad.)	20	+59 56 29.7	-2 1 13.35	-19.91	+59 46 25.5	9.998907
Leningrad (Petersburg) (Univers.)	4	+59 56 32.0	-2 1 11.3	-19.91	+59 46 27.8	9.998906
Lissabon (Tapada) . . .	94	+38 42 30.5	+0 36 44.68	+6.04	+38 31 12.0	9.999437
Lissabon (Mar. Sternw.) . .	—	+38 42 17.6	+0 36 33.6	+6.01	+38 30 59.2	9.999431
Liverpool (Neue Sternw.) <sup>3)</sup>	62	+53 24 4.8	+0 12 17.33	+2.02	+53 12 58.2	9.999063
London (Mill Hill) (Obs. of Univ.)	82	+51 36 46.3	+0 0 57.77	+0.16	+51 25 28.6	9.999109
Lourenço Marques . . .	60	-25 58 5.5	-2 10 22.63	-21.42	-25 48 58.9	9.999725
Lübeck (Navig.-Sch.) . . .	19	+53 51 31.1	-0 42 45.6	-7.02	+53 40 27.8	9.999049
Lund Zentr. d. Sternw. . .	34	+55 41 51.6	-0 52 44.97	-8.66	+55 31 3.1	9.999006
Lüttich Ougrée . . . . .	128	+50 37 6	-0 22 12	-3.65	+50 25 43	9.999137
Lyon . . . . .	299	+45 41 40.8	-0 19 8.5	-3.14	+45 30 5.3	9.999274
Madison (Washburn Observ.)	292	+43 4 36.8	+5 57 37.90	+58.75	+42 53 2.9	9.999340
Madras . . . . .	7	+13 4 8.0	-5 20 59.65	-52.73	+12 59 2.5	9.999926
Madrid Zentr. d. Sternw. . .	656	+40 24 30.1	+0 14 45.09	+2.43	+40 13 3.7	9.999433
Mailand, Brera . . . . .	120	+45 27 59.2	-0 36 45.89	-6.04	+45 16 23.6	9.999268
Manila . . . . .	3	+14 35 25	-8 3 50	-79.48	+14 29 47	9.999908
Mannheim Zentr. d. Sternw.	98	+49 29 11.0	-0 33 50.42	-5.56	+49 17 43.5	9.999164
Marburg . . . . .	248	+50 48 46.9	-0 35 4.9	-5.76	+50 37 25.0	9.999141
Mare Island Calif. . . . .	18	+38 5 55.8	+8 9 5.63	+80.35	+37 54 40.8	9.999447
Markree (Col. Cooper) . . .	45	+54 10 31.7	+0 33 48.4	+5.56	+53 59 30.7	9.999043
Marseille (Neue Sternw.) <sup>4)</sup> Mer.-Kr.	75	+43 18 19.1	-0 21 34.56	-3.54	+43 6 44.8	9.999320
McDonald Observatory (Fort Davis)	2070	+30 40 13	+6 56 6.3	+68.36	+30 30 4	9.999763
McMath-Hulbert Obs. (Lake Angelus)	296	+42 39 47.7	+5 33 3.3	+54.71	+42 28 14.5	9.999351
Melbourne . . . . .	28	-37 49 53.4	-9 39 54.17	-95.26	-37 38 39.9	9.999454
Merate (Filiale v. Mailand, Brera)	380	+45 41 54.1	-0 37 42.85	-6.20	+45 30 18.6	9.999279
Meudon . . . . .	162	+48 48 18	-0 8 55.5	-1.46	+48 36 48	9.999185
Middletown, Conn. . . . .	70	+41 33 18	+4 50 38.2	+47.74	+41 21 47.6	9.999364
Mizusawa . . . . .	61	+39 8 3.4	-9 24 31.46	-92.74	+38 56 42.7	9.999424
Modena . . . . .	63	+44 38 52.8	-0 43 42.8	-7.18	+44 27 17.2	9.999285
Montreal . . . . .	57	+45 30 20	+4 54 18.63	+48.35	+45 18 44.4	9.999263
Mt. Hamilton (Lick Obs.) Mer.-Kr.	1283	+37 20 25.3	+8 6 34.86	+79.94	+37 9 14.9	9.999552
Mt. Wilson, Calif. . . . .	1742	+34 12 59.5	+7 52 14.33	+77.57	+34 2 13.3	9.999659

<sup>1)</sup> Seit 1860. Alte Sternwarte 82° nördlich, 0°42 östlich. — <sup>2)</sup> Seit 1861. Alte Sternwarte 14°2 nördlich, 4°20 westlich. — <sup>3)</sup> Alte Sternwarte 44°0 nördlich, 17°1 östlich. — <sup>4)</sup> Seit 1866. Alte Sternwarte 30°1 südlich, 6°2 westlich;



## Koordinaten der Sternwarten

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. $\rho$ incl. Seehöhe
Moskau Mer.-Kr. . . .	142 <sup>m</sup>	+55° 45' 19.5"	-2° 30' 17.03"	-24.69	+55° 34' 31.5"	9.999012
Mundenheim <sup>1)</sup> . . . .	—	+49 27 30	-0 33 44	- 5.54	+49 16 2	9.999158
München (West-Kuppel) .	529	+48 8 45.5	-0 46 26.02	- 7.63	+47 57 13.8	9.999227
Münster . . . . .	75	+51 57 45.8	-0 30 29.66	- 5.01	+51 46 30.0	9.999100
Nashville (Vanderbilt Obs.)	174	+36 8 58.2	+5 47 12.81	+57.04	+35 57 56.1	9.999506
Neapel (Capo di Monte) .	154	+40 51 45.7	-0 57 1.40	- 9.37	+40 40 17.6	9.999387
Neuchâtel Refraktor . .	488	+46 59 49.5	-0 27 49.77	- 4.57	+46 48 15.4	9.999254
New Haven (Neue Stw.) <sup>2)</sup>	40	+41 19 22.3	+4 51 40.58	+47.92	+41 7 52.7	9.999368
New York (Rutherford) .	—	+40 43 48.5	+4 55 56.66	+48.62	+40 32 20.9	9.999380
New York (Columb. Obs.)	—	+40 45 23.1	+4 55 53.73	+48.61	+40 33 55.4	9.999379
Nikolajew Mer.-Kr. . .	55	+46 58 19.3	-2 7 53.98	-21.01	+46 46 45.1	9.999225
Nizza Kl. Mer.-Kr. <sup>3)</sup> . .	378	+43 43 16.9	-0 29 12.15	- 4.79	+43 31 42.0	9.999330
Northfield (Goodsell Obs.)	290	+44 27 41.4	+6 12 35.84	+61.21	+44 16 5.9	9.999305
Oakland Californ. <sup>4)</sup> .	99	+37 47	+8 8 48	+80.30	+37 35 47	9.999460
Oak Ridge <sup>(Filiale d.)</sup> (Harvard Obs.)	183	+42 30 13	+4 46 14.2	+47.02	+42 18 40	9.999347
Odessa (Univ.-Stw.) Mer.-Kr.	55	+46 28 36.2	-2 3 2.05	-20.21	+46 17 1.3	9.999237
Odessa (Filiale Pulkowa) .	—	+46 28 36.0	-2 3 2.19	-20.21	+46 17 1.1	9.999234
Oslo (Christiania) Mer.-Kr.	25	+59 54 43.7	-0 42 53.51	- 7.04	+59 44 39.2	9.998908
Ottawa Mer.-Kr. . . .	85	+45 23 39.1	+5 2 51.98	+49.75	+45 12 3.5	9.999267
Oxford (Radcl. Obs.) . .	65	+51 45 33.9	+0 5 3.0	+ 0.83	+51 34 17.0	9.999104
Oxford (Univers.) . . .	64	+51 45 34.2	+0 5 0.4	+ 0.82	+51 34 17.3	9.999104
Oxford, Mississippi . .	140	+34 22 12.6	+5 58 7.18	+58.83	+34 11 25.1	9.999546
Padua . . . . .	38	+45 24 1.9	-0 47 29.15	- 7.80	+45 12 26.3	9.999261
Palermo . . . . .	72	+38 6 44.0	-0 53 25.87	- 8.78	+37 55 28.9	9.999451
Paris (Obs. nat.) Mer. Cassini	59	+48 50 11.2	-0 9 20.93	- 1.53	+48 38 41.5	9.999177
Paris (Montsouris) westl. Mer.	—	+48 49 18.0	-0 9 20.6	- 1.53	+48 37 48.2	9.999174
Peking . . . . .	—	+39 54 23.0	-7 45 52.87	-76.53	+39 42 58.7	9.999401
Perkins Obs. (Delaware)	270	+40 15 4	+5 32 13.33	+54.58	+40 3 38	9.999410
Perth, West-Austr. . .	60	-31 57 10.7	-7 43 21.62	-76.12	-31 46 46.9	9.999597
Petersburg <sup>(Leningrad)</sup> (Akademie)	20	+59 56 29.7	-2 1 13.35	-19.91	+59 46 25.5	9.998907
Petersburg <sup>(Leningrad)</sup> (Univers.)	4	+59 56 32.0	-2 1 11.3	-19.91	+59 46 27.8	9.998906
Philadelphia <sup>5)</sup> . . . .	74	+39 58 2.1	+5 1 6.88	+49.47	+39 46 37.5	9.999404
Pic du Midi <sup>(Filiale v.)</sup> (Toulouse)	2850	+42 56 31.5	-0 0 34.29	- 0.09	+42 44 57.8	9.999518
Plonsk <sup>6)</sup> . . . . .	—	+52 37 40.0	-1 21 31.9	-13.39	+52 26 28.2	9.999078
Pola . . . . .	32	+44 51 48.6	-0 55 23.07	- 9.10	+44 40 12.9	9.999277
Porto Alegre <sup>7)</sup> Mer.-Kr.	—	-30 1 51	+3 24 53.2	+33.66	-29 51 49	9.999036
Posen . . . . .	85	+52 23 48.6	-1 7 30.60	-11.09	+52 12 35.4	9.999090

<sup>1)</sup> Dr. Max Münder. — <sup>2)</sup> Yale University. Alte Sternwarte 45°8' südlich, 1°58' westlich. — <sup>3)</sup> Herr R. Bischofsheim. — <sup>4)</sup> Chabot Observatory. — <sup>5)</sup> Flower Obs. (Univ. of Pennsylvania). — <sup>6)</sup> Dr. Jedrzejewicz; 1898 nach Warschau verlegt. — <sup>7)</sup> Observatorio Regional do Rio Grande do Sul.



Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich - östlich	Korr. der Sternzeit	Geoz. Breite	Log. ρ incl. Seehöhe
Potsdam (Astrophys. Obs.).	97 <sup>m</sup>	+52° 22' 56.0"	— 0 <sup>h</sup> 52 <sup>m</sup> 15.86	— 8.59	+52° 11' 42.7"	9.999091
Potsdam (Geod. Inst.) Turm	99	+52 22 54.8	— 0 52 16.11	— 8.59	+52 11 41.5	9.999091
Potsdam (Geod. Inst.) . . . Östl. Meridianh.	99	+52 22 54	— 0 52 16.058	— 8.586	+52 11 41	9.99909
Poughkeepsie <sup>1)</sup> . . . . .	61	+41 41 18	+ 4 55 35.2	+48.56	+41 29 47	9.999360
Prag (Univ.-Stw.) Turm . . .	197	+50 5 16.0	— 0 57 40.29	+9.47	+49 53 50.9	9.999155
Princeton N. J. (N.Stw.) <sup>2)</sup>	75	+40 20 55.8	+ 4 58 39.44	+49.06	+40 9 29.7	9.999395
Providence (Ladd. Observ.)	69	+41 50 15.6	+ 4 45 35.95	+46.92	+41 38 44.4	9.999357
Pulkowa Zentr. d. Stw. . . .	75	+59 46 18.5	— 2 1 18.57	—19.93	+59 36 12.3	9.998914
Pulsnitz <sup>9)</sup> . . . . .	284	+51 10 54.6	— 0 56 4.18	— 9.21	+50 59 34.6	9.999134
Quebec Canada . . . . .	90	+46 47 59.2	+ 4 44 52.71	+46.80	+46 36 24.8	9.999231
Quito . . . . .	2846	— 0 14 0	+ 5 13 58.20	+51.58	— 0 13 54	0.000194
Riga (Polytechnikum) Turm	—	+56 57 7	— 1 36 28.11	—15.84	+56 46 30	9.998974
Rio de Janeiro . . . . .	63	—22 54 23.7	+ 2 52 41.52	+28.37	—22 46 6.0	9.999784
Rio de Janeiro (N. Stw.)	33	—22 53 42.1	+ 2 52 53.6	+28.40	—22 45 24.7	9.999782
Rom (Coll. Rom.) Mer.-Kr.	59	+41 53 53.6	— 0 49 55.36	— 8.19	+41 42 22.3	9.999354
Rom (Capitol) Mer.-Kr. . . .	65	+41 53 33.2	— 0 49 56.34	— 8.20	+41 42 1.9	9.999355
Rom (Vatican) Mer.-Kr. <sup>8)</sup>	100	+41 54 12.4	— 0 49 48.26	— 8.18	+41 42 41.1	9.999357
Rousdon . . . . .	157	+50 42 38	+ 0 11 58.9	+ 1.96	+50 31 16	9.999137
Rugby . . . . .	119	+52 22 30	+ 0 5 2.0	+ 0.83	+52 11 16.7	9.999093
St. Louis Missouri . . . . .	—	+38 38 3.6	+ 6 0 49.15	+59.28	+38 26 45.5	9.999433
Saltsjöbaden (Stockholms Observator.)	55	+59 16 18	— 1 13 14	—12.03	+59 6 6	9.998924
San Fernando . . . . .	30	+36 27 42.0	+ 0 24 49.30	+ 4.08	+36 16 37.7	9.999488
San Francisco <sup>3)</sup> . . . . .	—	+37 47 28.0	+ 8 9 42.81	+80.45	+37 36 14.8	9.999453
Santiago de Chile (N. St.)	580	—33 33 44.2	+ 4 42 46.0	+46.44	—33 23 4.1	9.999595
Santiago de Chile (A. St.)	619	—33 26 25.4	+ 4 42 36.9	+46.42	—33 15 46.4	9.999600
Sendai (Durchg.-Instr.) . . .	36	+38 15 14.9	— 9 23 29.49	—92.57	+38 3 59.0	9.999444
Sétif . . . . .	1120	+36 11 10	— 0 21 38.6	— 3.55	+36 0 7.7	9.999569
Simeis . . . . .	360	+44 24 11.6	— 2 15 59.38	—22.34	+44 12 36.1	9.999312
Sofia (Mil. Geogr. Jnst.) . . .	555	+42 41 51	— 1 33 19.87	—15.33	+42 30 18	9.999368
Sofia (Universitätssternwarte)	572	+42 41 1.7	— 1 33 23.3	—15.34	+42 29 28.5	9.999369
Sonneberg (Erbisbühl) . . . .	640	+50 22 41.4	— 0 44 46.19	— 7.36	+50 11 17.5	9.999178
South Hadley . . . . .	76	+42 15 18.2	+ 4 50 19	+47.69	+42 3 45.9	9.999346
Stalina bad (Tadjik Observ.)	—	+38 33 30	— 4 35 6.2	—45.19	+38 22 12	9.999434
Stará Dala <sup>4)</sup> . . . . .	113	+47 52 27.3	— 1 12 45.49	—11.95	+47 40 54.9	9.999206
Stockholm (Alte St., M.-Kr. <sup>5)</sup> )	44	+59 20 32.7	— 1 12 13.97	—11.86	+59 10 21.4	9.998922
Stonyhurst . . . . .	116	+53 50 40.0	+ 0 9 52.7	+ 1.62	+53 39 36.5	9.999056
Straßburg (N.St.), M.-Kr. <sup>6)</sup>	144	+48 35 0.4	— 0 31 4.53	— 5.10	+48 23 29.9	9.999190
Stuttgart (Schwäb. Sternw.)	344	+48 47 0.7	— 0 36 47.39	— 6.04	+48 35 30.8	9.999198
Swarthmore (Sproul Obs.) Refraktor	63	+39 54 16.2	+ 5 1 25.62	+49.52	+39 42 51.9	9.999405
Sydney . . . . .	44	—33 51 41.1	—10 4 49.54	—99.36	—33 40 58.2	9.999551
Sydney (Riverview Coll. Obs.)	42	—33 49 45.7	—10 4 37.99	—99.33	—33 39 3.1	9.999552
Tacubaya <sup>7)</sup> . . . . .	2311	+19 24 17.9	+ 6 36 46.71	+65.18	+19 17 3.0	9.999997
Tartu (Dorpat, Jurjew) Mer.-Kr.	67	+58 22 47.2	— 1 46 53.19	—17.56	+58 12 25.1	9.998946
Taschkent Mer.-Kr. . . . .	475	+41 19 31.6	— 4 37 10.88	—45.53	+41 8 2.0	9.999397

<sup>1)</sup> Vassar College. — <sup>2)</sup> Alte Sternwarte 2/0 nördlich, 1<sup>94</sup> östlich; 65<sup>m</sup>. — <sup>3)</sup> Davidson Observatory. —

<sup>4)</sup> Früher O-Gyalla. — <sup>5)</sup> Neue Sternwarte seit 1931 in Saltsjöbaden. — <sup>6)</sup> Seit Anfang 1881. — <sup>7)</sup> Seit März 1883, früher in Chapultepec. — <sup>8)</sup> 1933 nach Castel Gandolfo verlegt. — <sup>9)</sup> Privatsternwarte des Herrn Classen.



## Koordinaten der Sternwarten

Name	See- höhe	Geogr. Breite	Länge von Greenwich + westlich — östlich	Korr. der Sternzeit	Geoz. Breite	Log. $\rho$ incl. Seehöhe
Teramo (Cerulli) . . . . .	398 <sup>m</sup>	+42° 39' 27"	— 0° 54' 55.8"	— 9.02	+42° 27' 54"	9.999358
Tokio Mer.-Kr. . . . .	57	+35 40 19	— 9 18 9.90	— 91.69	+35 29 21	9.999509
Toronto (Univ. Obs.) . . . . .	110	+43 39 46.0	+ 5 17 34.70	+ 52.17	+43 28 11.2	9.999313
Toronto (Dunlap Obs.) . . . . .	244	+43 51 46	+ 5 17 41.3	+ 52.19	+43 40 11	9.999317
Tortosa (Ebro-Stw.) M.-Kr.	54	+40 49 14	— 0 1 58	— 0.32	+40 37 46	9.999382
Toulouse Mer.-Kr. . . . .	195	+43 36 44.0	— 0 5 51.01	— 0.96	+43 25 9.3	9.999329
Triest (R. Oss. Astr.) . . . . .	68	+45 38 35.5	— 0 55 4.92	— 9.05	+45 27 0.0	9.999259
Tsingtau (Met.-astr. Stat.) . . . . .	—	+36 4 11.3	— 8 1 16.21	— 79.06	+35 53 9.8	9.999496
Tucson Arizona (Steward Obs.) . . . . .	757	+32 13 59.4	+ 7 23 47.68	+ 72.90	+32 3 32.6	9.999638
Turin Mer.-Kr. . . . .	276	+45 4 7.9	— 0 30 47.15	— 5.06	+44 52 32.2	9.999288
Turin (Pino Torinese) . . . . .	618	+45 2 16.3	— 0 31 6.52	— 5.11	+44 50 40.6	9.999312
Turku (Spiegelteleskop) . . . . .	28	+60 27 8.7	— 1 28 55.03	— 14.61	+60 17 10.7	9.998896
Uppsala (N. Stw.) Pass.-Instr.	21	+59 51 29.4	— 1 10 30.13	— 11.58	+59 41 24.2	9.998909
Urbana Ill. . . . .	236	+40 6 20.2	+ 5 52 53.90	+ 57.97	+39 54 55.1	9.999412
Utrecht. . . . .	12	+52 5 9.5	— 0 20 31.6	— 3.37	+51 53 54.4	9.999093
Valkenburg (Ignatius Coll.) . . . . .	100	+50 52 29.3	— 0 23 19.91	— 3.83	+50 41 7.8	9.999129
Venedig . . . . .	15	+45 26 10.5	— 0 49 22.12	— 8.11	+45 14 34.9	9.999261
Victoria B.C. (Dominion Obs.) . . . . .	229	+48 31 15.7	+ 8 13 40.17	+ 81.18	+48 19 45.0	9.999197
Warschau <sup>1)</sup> Zentr. d. Stw.	121	+52 13 4.6	— 1 24 7.25	— 13.82	+52 1 50.3	9.999097
Warschau <sup>2)</sup> . . . . .	—	+52 13 10	— 1 24 4.8	— 13.81	+52 1 56	9.999088
Warschau (Techn.Hochsch.) . . . . .	144	+52 13 21.0	— 1 24 2.4	— 13.81	+52 2 6.8	9.999098
Washington (Alte Stw.) . . . . .	31	+38 53 38.9	+ 5 8 12.13	+ 50.63	+38 42 19.4	9.999428
Washington (Neue Stw.) . . . . .	82	+38 55 14.0	+ 5 8 15.78	+ 50.64	+38 43 54.4	9.999431
Washington (Kath. Univ.) . . . . .	—	+38 56 14.8	+ 5 8 0.0	+ 50.60	+38 44 55.1	9.999425
Wellington Transit Instr. <sup>3)</sup> . . . . .	127	—41 17 3.8	—11 39 4.27	—114.84	—41 5 34.3	9.999375
West Point N. Y. (N.Stw.) <sup>4)</sup> . . . . .	170	+41 23 22.1	+ 4 55 50.6	+ 48.60	+41 11 52.3	9.999375
Wien (Alte Sternw.) . . . . .	167	+48 12 35.5	— 1 5 31.61	— 10.76	+48 1 3.9	9.999201
Wien (Josephstadt) <sup>5)</sup> . . . . .	214	+48 12 53.8	— 1 5 25.17	— 10.74	+48 1 22.2	9.999204
Wien (Neue Sternw.) Zentr.	240	+48 13 55.3	— 1 5 21.35	— 10.73	+48 2 23.8	9.999205
Wien (Ottakring) <sup>6)</sup> . . . . .	285	+48 12 46.7	— 1 5 10.97	— 10.71	+48 1 15.1	9.999209
Wien (Mil. Geogr. Inst. . . . .	211	+48 12 40.5	— 1 5 26.24	— 10.75	+48 1 8.9	9.999203
Wien (Techn. Hochschule) . . . . .	198	+48 11 58.3	— 1 5 29.76	— 10.76	+48 0 26.7	9.999204
Wilhelmshaven Mer.-Kr. . . . .	9	+53 31 52.1	— 0 32 35.15	— 5.35	+53 20 46.4	9.999057
Williams-Bay Wisc. <sup>7)</sup> . . . . .	334	+42 34 12.6	+ 5 54 13.24	+ 58.19	+42 22 39.6	9.999356
Williamstown Mass. . . . .	213	+42 42 49	+ 4 52 53.5	+ 48.12	+42 31 16	9.999344
Wilna Pass.-Instr. . . . .	122	+54 40 59.1	— 1 41 8.76	— 16.61	+54 30 2.1	9.999036
Windhuk . . . . .	1685	—22 35 26.6	— 1 8 15.07	— 11.21	—22 27 14.3	9.999901
Wolfersdorf . . . . .	279	+50 47 20.0	— 0 46 50.94	— 7.70	+50 35 58.0	9.999143
Würzburg (Neue Univ.- Sternw. Zentr.) . . . . .	207	+49 47 19.0	— 0 39 44.71	— 6.53	+49 35 52.7	9.999163
Zô-sè China . . . . .	100	+31 5 47.6	— 8 4 44.75	— 79.63	+30 55 33.2	9.999619
Zürich Meridian-Kreis . . . . .	468	+47 22 38.3	— 0 34 12.3	— 5.62	+47 11 4.8	9.999242

<sup>1)</sup> Universitäts-Sternwarte. — <sup>2)</sup> Dr. Jedrzejewicz; seit 1898, früher in Plonsk. — <sup>3)</sup> Dominion Observatory. —

<sup>4)</sup> Seit 1883. Alte Sternwarte 9' nördlich, 12' östlich. — <sup>5)</sup> von Oppolzers Sternwarte. — <sup>6)</sup> v. Kuffner. — <sup>7)</sup> Yerkes Observatory.



Normalzeit = Mittl. Ortszeit des Meridians	Bezeichnung	Staaten
östl. Gr. $\frac{h}{m}$ 11 30	—	Neuseeland
10 0	Ostaustralische Z.	Victoria, Neu Süd-Wales, Queensland, Tasmanien, Neu-Guinea
9 30	Südaustralische Z.	Süd-Australien
9 0	Mittl. Japan-Z.	Japan, Mandschukuo, Korea
8 0	Chinesische Küsten-Z.	Ostküste von China, Philippinen, Celebes, West- Australien
7 30	Java-Zeit	Bali, Borneo, Java, Lombok
7 0	Südchinesische Küsten-Z.	Südküste von China, Franz. Indochina, Thailand
5 30	—	Indien, Ceylon
4 0	—	Europ. Rußland*) von 40° bis 52° 30' östl. Länge
3 0	—	Europ. Rußland*) westl. von 40° östl. Länge
2 45	—	Deutsch-Ostafrika
2 0	Osteuropäische Z.	Finnland, Bulgarien, Rumänien, Griechen- land, Türkei, Palästina, Ägypten, Süd-Afrika, Deutsch-Südwest-Afrika
1 0	Mittleuropäische Z. (M. E. Z.)	Norwegen, Schweden, Dänemark, Deutschland, Ungarn, Schweiz, Italien, Protektorat Böhmen und Mähren, Slowakei, Kroatien, Kamerun
0 20	Amsterdamsche Zeit	Niederlande
$\frac{h}{m}$ 0 0	Westeuropäische Z. (Greenwich Z.)	Belgien, Frankreich, Großbritannien und Irland, Portugal, Spanien, Gibraltar, Algerien
westl. Gr. $\frac{h}{m}$ 1 0	—	Island, Madeira, Kanarische Inseln
2 0	—	Azoren, Kap Verdesche Inseln, Grönland-Scores- bysund
3 0	—	Ost-Brasilien, Grönland - Westküste und Ang- magsalik, Argentinien (1. Nov. — Ende Febr.), Uruguay (Nov. — März)
3 30	—	Uruguay (April — Okt.)
4 0	Intercolonial St. Time	Mittel-Brasilien, Argentinien (1. März — 31. Okt.), Canada (Küste), Paraguay, Chile, Bolivien
4 30	—	Venezuela
5 0	Eastern St. Time	Canada (Quebec, Ontario zwisch. 68° u. 90° westl.), Verein. Staat. (Ost-Zone), Panama, Peru; Ecuador, West-Brasilien, Columbien
6 0	Central St. Time	Zentral-Zone von Canada u. v. d. Verein. Staaten, Mexico, mit Ausnahme des nördl. Teiles
7 0	Mountain St. Time	Gebirgszone von Canada u. v. d. Verein. Staaten
8 0	Pacific St. Time	Vereinigte Staaten (Pacifische Küste), Britisch Columbien, nördl. Mexico
9 0	—	Alaska östl. von 141° westl. Länge
10 0	—	Alaska zwischen 141° und 162° westl. Länge
10 30	—	Hawaii (Sandwich Inseln)
11 0	—	Alaska westl. von 162°, Aläuten, Samoa

\*) Im Gebiet der Sowjet-Republiken sind alle Uhren 1 Stunde vorgestellt.



## Besondere Erläuterungen zu den Angaben und zum Gebrauch des Jahrbuchs.

Das Jahrbuch gibt die Örter der *Planeten* in geozentrischen und in heliozentrischen Koordinaten. Die Zeitpunkte, für die sie gelten, sind in Welt-Zeit ausgedrückt, wenn nicht ausdrücklich eine andere Zeit angegeben wird. **Welt-Zeit ist identisch mit Bürgerlicher Zeit Greenwich.** Der bürgerliche Tag beginnt um Mitternacht, die Welt-Zeit-Stunden sind von  $0^h$  bis  $24^h$  durchgezählt. Die Beziehung zu der bis zum Jahrgang 1924 (einschließlich) im Jahrbuch verwendeten Mittleren Zeit Greenwich besteht darin, daß der astronomische mittlere Tag erst am Mittag des bürgerlichen Tages, also  $12^h$  nach dessen Anfang beginnt. Somit ist 1925 Jan. 1,  $0^h$  Welt-Zeit gleich 1924 Dez. 31,  $12^h$  Mittlere Zeit Greenwich.

Die Örter der *Fixsterne* sind gegeben als »Mittlere Sternörter«, bezogen auf das mittlere Äquinoktium des Jahresanfangs, und in Ephemeridenform als »Scheinbare Sternörter«, bezogen auf das instantane wahre Äquinoktium.

Zur Erläuterung ist im einzelnen folgendes zu bemerken:

### Sonnenephemeride (S. 2—29 und 100—108).

Der erste Teil der Sonnenephemeride (S. 2—19) gibt auf den linken Seiten für  $0^h$  Welt-Zeit an jedem Tage:

- 1) Die Zeitgleichung = Wahre Zeit *minus* Mittlere Zeit.
- 2) Die geozentrischen, äquatorialen Koordinaten  $\alpha$ ,  $\delta$  des scheinbaren Sonnenorts, bezogen auf das jedesmalige wahre Äquinoktium, zugleich mit der ersten Differenzenreihe. Diese Angaben sind direkt mit den Beobachtungen vergleichbar. Die Nutationsglieder kurzer Periode sind, wie im Vorwort erwähnt, in den Koordinaten nicht enthalten.
- 3) Die halbe Durchgangsdauer (in Sternzeit) der Sonnenscheibe durch den Meridian.
- 4) Den geozentrischen Halbmesser der Sonnenscheibe, d. i. der Winkel, unter dem der Sonnenhalbmesser vom Erdmittelpunkt aus erscheint.

Die rechten Seiten geben:

- 1) Die Julianische Zeit, d. i. die Anzahl der seit Beginn der Julianischen Periode verflossenen mittleren Sonnentage.
- 2) Die Sternzeit für  $0^h$  Welt-Zeit. In ihr sind, wie im Vorwort erwähnt, nur die langperiodischen Glieder der Nutation enthalten.

Um für einen Erdort der westlichen Längendifferenz  $\Delta\lambda$  (in Stunden) gegen Greenwich die Sternzeit in seiner mittleren Mitternacht zu erhalten, ist zu diesen Angaben hinzuzulegen:  $9^s8565 \Delta\lambda$ . Diese Werte finden sich unter der Überschrift: »Korr. der Sternzeit« im Verzeichnis der Sternwarten.

- 3) Die Nutation in Rektaszension getrennt nach langperiodischen und kurzperiodischen Gliedern.



4) Die geozentrischen ekliptikalen Koordinaten  $\lambda, \beta$  der Sonne, bezogen auf das mittlere Äquinoktium des Jahresanfangs, sowie die Entfernung  $R$  der Erde von der Sonne. Diese Angaben finden bei Bahnrechnungen u. dergl. Verwendung.

5) Die bürgerlichen Ortszeiten des Aufgangs und Untergangs der Sonne für einen Ort des Nullmeridians in  $+ 50^\circ$  Breite; sie sind mit der Horizontalrefraktion  $34'$  berechnet und gelten für den oberen Rand der Sonne. Um daraus für einen beliebigen anderen Ort zwischen  $+30^\circ$  und  $+60^\circ$  geographischer Breite die entsprechenden Angaben zu erhalten, ist die Tabelle S. 382\*, 383\* zu benutzen.

Auf S. 20–28 folgen, bezogen auf das mittlere Äquinoktium des Jahresanfangs, die rechtwinkligen, geozentrischen, äquatorialen Sonnenkoordinaten für  $0^h$  Welt-Zeit mit ihren ersten und zweiten Differenzen. Die gleichen Koordinaten, jedoch bezogen auf das Normaläquinoktium 1950.0, werden auf S. 100–108 gegeben.

Die Werte von  $X, Y, Z$  sind auf 6 Dezimalen gegeben. Die Ephemeriden bieten jedoch die Möglichkeit, die Sonnenkoordinaten auch auf 7 Dezimalen zu entnehmen. Zu diesem Zwecke füge man an die 6-stelligen Werte eine Null an und vereinige sie algebraisch mit den Werten von  $\Delta X, \Delta Y, \Delta Z$ . Ein ausführliches Beispiel hierfür ist im Jahrgang 1933, S. 362\* gegeben.

Die gleichen Vorschriften gelten für die auf das Normaläquinoktium 1950.0 bezogenen Sonnenkoordinaten auf S. 100–108.

Am Fuß der Seite 28 finden sich die Zeiten für die Anfänge der Jahreszeiten und für die Erdnähe und Erdferne der Sonne.

Die Seite 29 enthält die Aberration, Parallaxe, mittlere Länge  $L_\odot$  und mittlere Anomalie  $M_\odot$  der Sonne im Intervall von je 10 Tagen.

### Mondephemeride (S. 30–48).

Die Mondephemeride (S. 30–47) gibt auf den linken Seiten für  $0^h$  Welt-Zeit:

- 1) Die scheinbare Rektaszension und Deklination des Mondmittelpunktes mit den ersten Differenzen.
- 2) Die Äquatorial-Horizontalparallaxe  $p_\odot$  des Mondes.
- 3) Den geozentrischen Mondhalbmesser  $r_\odot$ , d. i. der Winkel, unter dem der Mondhalbmesser vom Erdmittelpunkt aus erscheint.
- 4) Die Länge und Breite des Mondes, abgekürzt auf  $0^\circ 001$ .

Die rechten Seiten enthalten:

1) Für den oberen Durchgang des Mondes durch den Meridian von Greenwich die genäherten Angaben für die Rektaszension, Deklination und Parallaxe des Mondmittelpunktes, sowie die bürgerliche Greenwicher Zeit dieses Durchgangs, nebst den Änderungen für  $1^h$  westlicher Längendifferenz.

2) Die bürgerlichen Ortszeiten des Aufgangs und Untergangs des Mondes für einen Ort des Nullmeridians in  $+ 50^\circ$  Breite nebst Änderung



für  $1^h$  westlicher Längendifferenz; sie sind mit der Horizontalrefraktion  $34'$  berechnet und gelten für den oberen Rand des Mondes. Um daraus für einen beliebigen anderen Ort zwischen  $+30^\circ$  und  $+60^\circ$  geographischer Breite die entsprechenden Angaben zu erhalten, ist die Tabelle S. 384\*, 385\* zu benutzen.

Seite 48 enthält die Zeitangaben für die Phasen, die Erdnähe und Erdferne des Mondes.

### Ephemeriden der Großen Planeten (S. 49—99 und 109—112).

Die geozentrischen Örter der Planeten sind für Merkur, Venus, Mars, Jupiter, Saturn von Tag zu Tag, für Uranus, Neptun und Pluto von 4 zu 4 Tagen für  $0^h$  Welt-Zeit mit ihren ersten Differenzen gegeben. Für die Planeten Merkur bis Neptun sind scheinbare, auf das momentane wahre Äquinoktium bezogene Örter gegeben. Die Örter von Pluto sind auf das mittlere Äquinoktium 1950.0 bezogen und sind nicht wegen Aberration korrigiert. Zur bequemeren Vergleichung der Beobachtungen mit der Ephemeride sind bei diesem Planeten Fixsternaberration und Lichtzeit in besonderen Spalten angeführt. Die letzte Spalte gibt die bürgerliche Zeit (Greenwich) der oberen Kulmination in Greenwich.

Die Örter von Pluto sind nach den Elementen XIX von E. C. Bower, Lick Observatory Bulletin 437, unter Berücksichtigung der Störungen durch Jupiter, Saturn, Uranus und Neptun berechnet.

Die scheinbaren Halbmesser in der Einheit der Entfernung sind:

Merkur . . . . .	3.34	Saturn (äquat.) . . . . .	83.33
Venus . . . . .	8.41	» (polar) . . . . .	74.57
Mars . . . . .	4.68	Uranus . . . . .	34.28
Jupiter (äquat.) . . . . .	98.47	Neptun . . . . .	36.56
» (polar) . . . . .	91.91		

Die heliozentrischen Ephemeriden der Planeten (S. 109—112) geben den Log. des Radiusvector, die Länge, deren Reduktion auf die Bahn und die Breite bezogen auf das mittlere Äquinoktium 1950.0.

$\Omega$  und  $i$  stellen die Bahnlage für die Epoche 1950.0 und das Normal-äquinoktium 1950.0 dar.

Die Genauigkeit und Ausführlichkeit dieser heliozentrischen Angaben sind ihrem Hauptzweck, zur Berechnung der speziellen Störungen zu dienen, angepaßt.

Die beigegeführten Werte der Planetenmassen sind die den Tafeln von Newcomb und von Hill zugrunde liegenden. Für die Erde ist noch besonders zu erwähnen, daß die Masse von »Erde + Mond« gegeben ist, Radiusvector und heliozentrische Länge sich auf den Schwerpunkt des Systems »Erde + Mond« beziehen.

### Mittlere Örter von 1535 Fixsternen (S. 2\*—40\*).

Die mittleren Örter der 1535 Fixsterne sind aus den Angaben des Dritten Fundamentalkatalogs des Berliner Astronomischen Jahrbuchs



(I. Teil: Veröffentlichungen des *Astronomischen Rechen-Institut* Nr. 54, II. Teil: Abhandlungen der *Preußischen Akademie der Wissenschaften* Jahrg. 1938, Phys. math. Klasse Nr. 3) abgeleitet worden. Die in Teil I durch ein † gekennzeichneten Sterne sind von 1944 ab weggelassen worden. Die in Teil II enthaltenen Zusatzsterne sind durch ihre Nummern, die alle über 1000 liegen, leicht zu erkennen. Die zusätzlichen Polsterne sind mit den griechischen Buchstaben  $\alpha$ — $\pi$  bezeichnet. Die Örter aller Polsterne sind durch trigonometrische Übertragung erhalten worden. Die jährlichen Veränderungen gelten für die Mitte des Jahres. Ein \* vor dem Namen weist auf eine Anmerkung am Fuß der Seite hin.

Unter Gr. stehen die visuellen Größen, welche aus dem „Henry Draper Catalogue (Harvard Annals, Vol. 91—99)“ entnommen sind. Bei einigen weiten Doppelsternen ist an Stelle der im H. D. C. angegebenen Gesamthelligkeit die Helligkeit der hellen Komponente angeführt. Bei Veränderlichen sind die Grenzen der Helligkeit angegeben; beziehen sich diese auf photographische Größen, so sind sie durch kursiven Druck kenntlich gemacht.

Die Spektren sind aus dem Draper Katalog übernommen worden. Zusammengesetzte Spektren sind durch + gekennzeichnet. In anderen Fällen beziehen sich, wo 2 Spektren gegeben sind, diese auf die Komponenten eines Doppelsterns.

### Scheinbare Örter von 584 Fixsternen (S. 41\*—250\*).

Die scheinbaren Rektaszensionen und Deklinationen der Fixsterne sind für den Moment der oberen Kulmination im Meridian von Greenwich gegeben.

Die Ephemeriden der 560 Sterne mit Deklinationen kleiner als  $80^\circ$ , deren scheinbare Örter von 10 zu 10 Sterntagen gegeben sind, enthalten die kurzperiodischen Mondglieder der Nutation nicht. Das Datum des Tages, an welchem zwei Kulminationen stattfinden, ist in kleinem Druck vor der Rektaszensionsspalte angeführt.

Die jährliche Parallaxe ist bei folgenden Sternen berücksichtigt, bei denen sie hinreichend verbürgt erscheint, nämlich:

Nr. 10 $\zeta$ Tucanae	mit 0".133	Nr. 538 $\alpha$ Centauri	mit 0".756
Nr. 11 $\beta$ Hydri	» 0.143	Nr. 667 $\mu$ Herculis	» 0.109
Nr. 59 $\tau$ Ceti	» 0.298	Nr. 695 $\chi$ Draconis	» 0.119
Nr. 127 $\epsilon$ Eridani	» 0.305	Nr. 699 $\alpha$ Lyrae	» 0.121
Nr. 257 $\alpha$ Canis maj.	» 0.377	Nr. 745 $\alpha$ Aquilae	» 0.208
Nr. 291 $\alpha$ Canis min.	» 0.291	Nr. 754 $\delta$ Pavonis	» 0.174
Nr. 295 $\beta$ Geminor.	» 0.100	Nr. 793 $\delta$ Cygni	» 0.299
Nr. 445 $\beta$ Virginis	» 0.101	Nr. 805 $\gamma$ Pavonis	» 0.113
Nr. 470 $\beta$ Canum ven.	» 0.108	Nr. 867 $\alpha$ Piscis austr.	» 0.135
Nr. 492 $\beta$ Comae	» 0.121	Nr. 875 Br 3077 Cass.	» 0.146
Nr. 513 $\eta$ Bootis	» 0.112		



Von den im B. J. nicht mit Ephemeriden versehenen Sternen des FK 3 besitzen noch folgende hinreichend verbürgte Parallaxen:

Nr. 119	82 G. Eridani	0".159	Nr. 1073	268. G. Ceti	0".147
Nr. 135	δ Eridani	0.112	Nr. 1093	× Ceti	0.106
Nr. 217	γ Leporis	0.122	Nr. 1134	π <sup>3</sup> Orionis	0.128
Nr. 239	α Mensae	0.118	Nr. 1300	61 Ursae maj.	0.109
Nr. 825	ε Indi	0.288	Nr. 1307	Grb 1830 U Maj	0.108
Nr. 1019	96 G. Pisc.	0.148	Nr. 1345	61 Virginis	0.116
Nr. 1030	μ Cassiop.	0.130	Nr. 1391	33 G. Librae	0.172

Die Ephemeriden der auf S. 2\*—40\* eingeklammerten Sterne findet man in «Apparent Places of Fundamental Stars». H. M. Stationary Office, London.

Es folgen die scheinbaren Örter von 20 Polsternen für jede obere Kulmination. Sie enthalten die kurzperiodischen Mondglieder nicht, jedoch sind deren Werte in besonderen Spalten gegeben.

Am Fuße der Ephemeriden ist der mittlere Ort eines jeden Sternes für den Anfang des Jahres und die Werte von  $\sec \delta$  und  $\operatorname{tg} \delta$  angegeben, welche bei der Reduktion der Meridianbeobachtungen nach der hierfür am zweckmäßigsten erscheinenden Besselschen Formel gebraucht werden. Ferner sind hier die Größen  $a, b, a', b'$  enthalten, mit deren Hilfe die Nutationsglieder kurzer Periode leicht berechnet werden können. Man erhält  $A'a + B'b$  in Zeitsekunden,  $A'a' + B'b'$  in Bogensekunden.

Auf den Seiten 241\*—250\* sind die rechtwinkligen Koordinaten der scheinbaren Örter von vier polnahen Sternen gegeben. Sie beziehen sich auf ein Koordinatensystem, dessen positive  $x$ -Achse nach dem Frühlingspunkt und dessen positive  $y$ -Achse nach dem Punkt  $\alpha = 6^h, \delta = 0^\circ$  gerichtet ist. Der Zusammenhang zwischen  $x, y$  und  $\alpha, \delta$  ist gegeben durch die Beziehungen:  $x = \cos \delta \cos \alpha, y = \cos \delta \sin \alpha$ . Die Angaben gelten für 12<sup>h</sup> Sternzeit Greenwich und enthalten die kurzperiodischen Mondglieder der Nutation nicht, deren Werte jedoch in der letzten Spalte einer jeden Seite unter der Überschrift »Kurzperiod. Nutationsgl.« gegeben sind.

Als Quellen für die Koordinaten und Eigenbewegungen dieser vier Sterne sind benutzt worden:

für BD + 89° 1: L. Courvoisier: Neue Position und Eigenbewegung des Polsterns BD + 89° 1. Astron. Nachr. Bd. 273, S. 87.

für BD + 89° 3 und + 89° 37: L. Courvoisier: Beobachtungen der Polsterne BD + 89° 3 und BD + 89° 37 am Vertikalkreis 1914—1926. Veröff. der Universitäts-Sternwarte zu Berlin-Babelsberg, Band XII, Heft 2.

für CPD — 89° 38: Cape Annals Bd. XI, II, 244 für den Ort und eine briefliche Mitteilung für die Eigenbewegung.

Damit werden die mittleren Örter für 1945.0:

Name	Gr.	$x$	Jährl. Veränd. 1945.5	Jährliche Eigenbew.	$y$	Jährl. Veränd. 1945.5	Jährliche Eigenbew.
BD+89° 1	10.56	— 379".87	—20.071	—0.011	+ 78".45	—0.097	—0.010
BD+89° 3	9.06	— 181.54	—20.242	—0.006	+863.38	—0.049	—0.006
BD+89° 37	10.06	—1161.46	—19.976	—0.011	—346.41	—0.247	+0.015
CPD—89° 38	9.5	+ 74.47	+20.140	+0.027	—307.25	+0.050	+0.031



## Reduktionsgrößen (S. 251\*—290\*).

Auf die scheinbaren Örter der Sterne folgt S. 251\* eine Zusammenstellung der Werte, mit welchen die Reduktionsgrößen der darauf folgenden Tafeln berechnet sind, und der Formeln für die Reduktion auf den scheinbaren Ort.

Die Größen zur »Reduktion auf den scheinbaren Ort« sind in ihrer *ersten* Form:  $A, B, C, D, E; A', B'$  gegeben für 12<sup>h</sup> Sternzeit des Meridians von Greenwich:

1) Auf S. 279\* im Intervall von 10 Sterntagen.

Diese Tafel soll zur Berechnung von Sternephemeriden für die Epochen der Meridiandurchgänge dienen. Wegen ihrer logarithmischen Form und des großen Intervalls ist die Tafel zur Interpolation nicht geeignet. Man wird deshalb zweckmäßig die Interpolation erst nach der Summierung der einzelnen unmittelbar für die Epochen der Tafel berechneten Glieder vornehmen.

2) Auf S. 270\*—278\* für jeden Sterntag. Hier sind die numerischen Werte von  $A, B, C$  und  $D$  mit ihren Differenzen gegeben und die kurzperiodischen Nutationsglieder  $A'$  und  $B'$  mit angeführt.

Beiden Tafeln ist in einer Spalte die dem festen Sternzeitmoment jedesmal entsprechende Welt-Zeit vorangestellt; man wird hiernach auf jeden beliebigen Zeitpunkt, gegeben durch Datum, Sternzeit und Längendifferenz gegen Greenwich, übergehen können. Eine weitere Spalte gibt die seit Beginn des *annus fictus* verflossene Zeit in Bruchteilen des tropischen Jahres.

Die Reduktionsgrößen der *zweiten* Form:  $f, \log g, G, \log h, H, \log i$  und  $i$ , sowie  $f', g'$  und  $G'$  sind auf S. 252\*—269\* von Tag zu Tag für 0<sup>h</sup> Welt-Zeit gegeben.

Auch hier findet sich eine Spalte,  $t$  überschrieben, welche die seit Beginn des *annus fictus* verflossene Zeit in Bruchteilen des tropischen Jahres gibt. Ferner ist die Sternzeit Greenwich für 0<sup>h</sup> Welt-Zeit gegeben.

Die Seiten mit ungerader Seitenzahl enthalten außer den schon erwähnten  $f', g', G'$  noch folgende Größen:

- a)  $\psi$  = Allgemeine Präzession seit Jahresanfang.
- b)  $\Delta\psi$  = Langperiodische Glieder der Nutation in Länge.
- c)  $\Delta\psi'$  = Kurzperiodische Glieder der Nutation in Länge.
- d)  $\varepsilon$  = Mittlere Schiefe der Ekliptik.
- e)  $\Delta\varepsilon$  = Langperiodische Glieder der Nutation in Schiefe.
- f)  $\Delta\varepsilon'$  = Kurzperiodische Glieder der Nutation in Schiefe.
- g) Die Koeffizienten  $j$  und  $k$  der Formeln auf S. 282\*.

Die wahre Schiefe erhält man durch Addition der Gesamtnutation ( $\Delta\varepsilon + \Delta\varepsilon'$ ) zu der mittleren Schiefe.

Auf S. 280\* findet sich eine Tafel der Hilfsgrößen zur Berechnung der Präzession von verschiedenen mittleren Äquinoktien bis 1945.0.

S. 281\* enthält eine Tafel der Hilfsgrößen zur Übertragung der Polsternörter von verschiedenen mittleren Äquinoktien auf das mittlere Äquinoktium 1945.0.



Auf S. 282\* sind die Formeln zusammengestellt, mit welchen bei Anschlußbeobachtungen die gemessenen Koordinatendifferenzen der scheinbaren Örter in solche der mittleren Örter für den Jahresanfang übergeführt werden. Die in diesen Formeln auftretenden Koeffizienten  $j$  und  $k$  sind auf den Seiten 253\*—269\* enthalten und haben die Bedeutung

$$\begin{aligned} j &= 15 g \operatorname{arc} r' \\ k &= 15 h \operatorname{arc} r', \end{aligned}$$

wobei  $g$  und  $h$  die auf den Seiten 252\*—268\* gegebenen Reduktionsgrößen sind.

S. 283\* enthält eine Zusammenstellung der von der Deklination abhängenden Faktoren der Formeln auf S. 282\*.

S. 284\* enthält eine Tafel der numerischen Werte der Funktionen Sinus und Cosinus für in Zeit ausgedrückte Winkel. Ihre Benutzung erleichtert die Berechnung der Formeln auf S. 282\*.

Die Seite 285\* enthält eine Tafel zur Übertragung von Rektaszensions- und Deklinationsdifferenzen vom mittleren Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0. Man findet die auf das Normaläquinoktium 1950.0 bezogene Koordinatendifferenz, indem man an die auf das mittlere Äquinoktium 1945.0 bezogene Rektaszensionsdifferenz die differentielle Präzession  $\Delta p_{\alpha}^s$  und an die Deklinationsdifferenz die differentielle Präzession  $\Delta p_{\delta}^s$  anbringt:

$$\begin{aligned} \Delta p_{\alpha}^s &= a_1 \operatorname{tg} \delta \cdot \Delta \alpha^m + a_2 \frac{1}{15} \sec^2 \delta \cdot \Delta \delta', \\ \Delta p_{\delta}^s &= d_1 \cdot \Delta \alpha^m. \end{aligned}$$

Die Koeffizienten  $a_1$ ,  $a_2$  und  $d_1$  sind in der Tafel auf S. 285\* enthalten und haben die Bedeutung:

$$\begin{aligned} a_1 &= (n) \operatorname{arc} r' \cos \alpha \\ a_2 &= (n) \operatorname{arc} r' \sin \alpha \\ d_1 &= -15 (n) \operatorname{arc} r' \sin \alpha. \end{aligned}$$

$\Delta \alpha^m$  und  $\Delta \delta'$  sind die auf das mittlere Äquinoktium 1945.0 bezogenen Rektaszensions- und Deklinationsdifferenzen in Zeit- bez. Bogenminuten. Nach den angegebenen Formeln findet man die differentielle Präzession für Rektaszension in Zeitsekunden, diejenige für Deklination in Bogensekunden.

Die auf Seite 286\* gegebenen Größen  $f$ ,  $\log g$  und  $G$  dienen zur Übertragung der Örter von dem *mittleren* Normaläquinoktium 1950.0 auf das *jedemalige wahre* Äquinoktium. Die Berücksichtigung des Einflusses der Variatio saecularis bei dieser Übertragung ist durch die Tafeln auf S. 287\* gegeben. Diese enthalten in der ersten Reihe einer jeden Vertikalspalte die Werte von  $0.125 \times \text{Var. saec.}$  für die mit den Argumenten  $\alpha$  und  $\delta$  gegebenen Örter. Die an zweiter Stelle stehenden Zahlen einer jeden Vertikalspalte sind die einjährigen Änderungen von  $0.125 \times \text{Var. saec.}$  und sind, wenn erforderlich, bei der Entnahme des Einflusses der Variatio saecularis für den in Frage kommenden Bruchteil des Jahres zu berücksichtigen.



Eine Tafel zur Übertragung von Sternörterern vom mittleren Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0 befindet sich auf den Seiten 288\*—290\*.

Die hier tabulierten Größen sind gerechnet nach den Formeln:

$$A = (n^s) \sin a$$

$$D = (n^n) \cos a$$

$$B = (m^s) - 0.00001818 (n^s)^2 \sin 2a$$

$$\Delta C = \arccos C - C; \quad C = A \operatorname{tg} (\delta_{1945.0} + D)$$

$$P = -15 \operatorname{tg} \frac{1}{2} \psi; \quad \operatorname{tg} \psi = \sin (n) \sin a \operatorname{tg} (\delta_{1945.0} + D)$$

$$a = \alpha_{1945.0} + 90^\circ - (N)$$

Wegen der Größen  $(m)$ ,  $(n)$ ,  $(N)$  vgl. S. [5] der „Grundbegriffe der Sphärischen Astronomie“ im Jahrbuch für 1916. Falls die auf S. 290\* gegebene Tafel für  $\Delta C$  und  $P$  nicht ausreicht, berechne man die Größen nach den vorstehend gegebenen Formeln oder benutze die weiterreichende Tafel in Veröff. d. Astronom. Rechen-Instituts Nr. 49.

### Sonnen- und Mondfinsternisse (S. 292\*—299\*).

Bei der Berechnung der Finsternisse des Jahres 1945 sind die Örter von Sonne und Mond um folgende Beträge verbessert worden:

1945	Jan. 14	Sonne:	$\Delta \alpha + 0.07$	$\Delta \delta + 0.2$	Mond:	$\Delta \alpha - 0.07$	$\Delta \delta - 0.6$
	Juni 25	„	+0.07	0.0	„	-0.07	-0.4
	Juli 9	„	+0.07	-0.1	„	-0.08	-0.5
	Dez. 18-19	„	+0.08	0.0	„	-0.08	-0.6

Die bei den Sonnenfinsternissen gegebenen Besselschen Elemente dienen in der folgenden Weise zur Vorausberechnung der Phasenzeiten und der Positionswinkel der Kontakte:

Mit einer Ausgangszeit  $T$  (siehe weiter unten) entnimmt man der Elemententabelle die Werte:

$x, y, \log \sin d, \log \cos d, \mu, l$  ( $l^{(a)}$  für äußere,  $l^{(i)}$  für innere Berührung),  $\log \operatorname{tang} f$  ( $f^{(a)}$  für äußere,  $f^{(i)}$  für innere Berührung),  $x'$  und  $y'$ .

Mit ihnen rechnet man das folgende Formelsystem durch:

$$(1) \begin{cases} \xi = c \cos \varphi \sin (\mu - \lambda) \\ \eta = s \sin \varphi \cos d - c \cos \varphi \sin d \cos (\mu - \lambda) \\ \zeta = s \sin \varphi \sin d + c \cos \varphi \cos d \cos (\mu - \lambda) \\ \xi' = [7.6398 - 10] c \cos \varphi \cos (\mu - \lambda) \\ \eta' = [7.6398 - 10] \xi \sin d, \end{cases}$$

worin  $\varphi$  die geographische Breite,  $\lambda$  die westliche Länge (von Greenwich) des Beobachtungsortes bezeichnen,  $s$  und  $c$  aus der Tafel auf S. 379\* zu entnehmen sind.

$$(2) \begin{cases} m \sin M = x - \xi \\ m \cos M = y - \eta \\ n \sin N = x' - \xi' \\ n \cos N = y' - \eta' \end{cases} \begin{cases} m > 0 \\ n > 0 \end{cases}$$



Nun berechnet man aus:

$$(3) L = l - \zeta \operatorname{tang} f$$

$L^{(a)}$  mit  $l^{(a)}$  und  $f^{(a)}$ ,  $L^{(i)}$  mit  $l^{(i)}$  und  $f^{(i)}$ ; dann aus:

$$(4) \sin \psi = \frac{m \sin (M - N)^1}{L}$$

mit  $L^{(a)}$  und  $L^{(i)}$  je zwei Werte  $\psi^{(a_1)}$ ,  $\psi^{(a_2)}$  und  $\psi^{(i_1)}$ ,  $\psi^{(i_2)}$ , von denen der eine zum Eintritt der Erde in den Halb- oder Kernschatten-Kegel, der andere zu ihrem Austritt aus ihm gehört. Diesen vier Werten  $\psi^{(a_1)}$ ,  $\psi^{(a_2)}$  und  $\psi^{(i_1)}$ ,  $\psi^{(i_2)}$  entsprechen vier Werte  $\tau^{(a_1)}$ ,  $\tau^{(a_2)}$  und  $\tau^{(i_1)}$ ,  $\tau^{(i_2)}$  (in Zeitminuten) nach

$$(5) \tau = -\frac{m \cos (M - N)}{n} + \frac{L \cos \psi}{n},$$

um welche die Ausgangszeit  $T$  zu verbessern ist, um die Zeit der gesuchten Phase zu erhalten. Ist  $T$  die gesuchte Phasenzeit, so wird  $\tau = 0$  werden. Man muß daher das Formelsystem (1) bis (5) mit steigenden Näherungen so lange durchrechnen, bis dieser Fall eintritt, d. h. bis das Formelsystem sich schließt. Zu diesem Zweck beginnt man mit einem Näherungswert  $T_1$ , für den man, wenn kein besserer bekannt sein sollte, eine beliebige Zeit nahe der Mitte der Finsternis nehmen mag, und rechnet die erste genäherte Korrektur  $\tau_1$ ; dann wiederholt man die Rechnung mit  $T_2 = T_1 + \tau_1$ , dann mit  $T_3 = T_2 + \tau_2 = T_1 + \tau_1 + \tau_2$  usf. bis sich  $\tau_n = 0$  ergibt.  $T_n$  ist dann die gesuchte Welt-Zeit des Kontaktes, die durch Hinzufügung der Längendifferenz in mittlere Ortszeit zu verwandeln ist. Die Rechnung ist für jede Berührung gesondert durchzuführen.

Die Positionswinkel der einzelnen Phasen, in üblicher Weise vom Punkt größter Deklination nach Osten gezählt, folgen aus den Werten der letzten Näherung (Größen mit dem Index  $n$ ) nach

$$P = N + \psi.$$

Will man den Winkelabstand  $Q$  vom Punkte der größten Höhe haben, so hat man von  $P$  noch den parallaktischen Winkel  $\gamma$  abzuziehen, der aus

$$\left. \begin{aligned} p \sin \gamma &= \xi \\ p \cos \gamma &= \eta \end{aligned} \right\} p > 0$$

folgt, also

$$Q = P - \gamma.$$

Um die Zeit der größten Phase,  $T_{\max}$ , zu erhalten, hat man die beiden Formelsysteme (1) und (2) mit einem Näherungswerte  $\bar{T}_1$  durchzurechnen, daraus  $\bar{T}_2 = \bar{T}_1 - \frac{m \cos (M - N)}{n}$  zu entnehmen und die Rechnung so lange fortzusetzen, bis die Korrektur der Ausgangszeit 0 wird. Als Näherungswert  $\bar{T}_1$  wählt man zweckmäßig das Mittel der beiden Werte von  $T_2$  für die Berührungszeiten.

<sup>1)</sup> Wird der Winkel  $\psi$  bei der ersten Näherungsrechnung imaginär, so rechne man  $\tau$  unter der Annahme  $\psi = 90^\circ$  aus  $\tau = -\frac{m \cos (M - N)}{n}$ ; bleibt  $\psi$  auch in der weiteren Rechnung imaginär, so deutet dies an, daß an dem betreffenden Orte keine Sonnenfinsternis stattfindet.



Die Größe der Verfinsterung  $i$ , in Teilen des Sonnendurchmessers ausgedrückt, ergibt sich dann aus:

$$i = \frac{L^{(\alpha)} - m}{2 L^{(\alpha)} - 0.5459}$$

worin  $L^{(\alpha)}$  und  $m$  die zur Zeit  $T_{\max}$  gehörigen Werte bedeuten.

### Sternbedeckungen (S. 300\*—305\*).

Auf den Seiten 300\*—302\* sind Angaben über die Sternbedeckungen enthalten, die in Mitteleuropa sichtbar sind.

Die Seite 300\* enthält die mittleren Örter der Sterne, die vom Monde bedeckt werden. Auf den Seiten 301\*—302\* sind die Bessel'schen Elemente der Sternbedeckungen gegeben, wobei die Auswahl auf Sterne beschränkt wurde, die heller als 6<sup>m</sup>0 sind. Die Formeln zur Berechnung der Berührungszeiten eines Sternes mit dem Mondrande mit Hilfe dieser Elemente sind auf S. 356\* des Jahrgangs 1937 gegeben.

Für Berlin-Babelsberg, Königsberg, Straßburg und Wien ist auf S. 303\*—305\* außer der genäherten Welt-Zeit des Ein- oder Austrittes auch der Positionswinkel  $P$  des Sternes für die Zeiten der Berührung mit dem Mondrande angeführt. Die Rechnungen für diese Vorausberechnungen sind von der Hamburger Sternwarte in Bergedorf ausgeführt worden.

Die Größen  $a$  und  $b$  ermöglichen die Vorausberechnung der genäherten Ein- oder Austrittszeiten für andere Orte innerhalb Deutschlands, die nicht allzuweit von diesen vier Hauptpunkten entfernt sind. Bezeichnen  $\lambda$  und  $\varphi$  die geographischen Koordinaten des Beobachtungsortes,  $\lambda_0$  und  $\varphi_0$  diejenigen des ihm am nächsten gelegenen Hauptpunktes, so ist die gesuchte Berührungszeit gleich der für den Hauptpunkt geltenden  $+ a (\lambda - \lambda_0) + b (\varphi - \varphi_0)$ . Hierbei sind die Differenzen  $\lambda - \lambda_0$  und  $\varphi - \varphi_0$  in Einheiten des Grades unter Mitnahme der Zehntelgrade auszudrücken, damit sich die Korrektion in Zeitminuten ergibt.

### Mondbewegung und Lage des Mondäquators gegen den Erdäquator (S. 306\*).

Auf S. 306\* finden sich:

- $\Omega$ , Aufsteigender Knoten der Mondbahn auf der Ekliptik,
- $L_{\odot}$ , Mittlere Länge des Mondes,
- $\tilde{\omega}$ , Mittlere Länge des Perigäums,
- $M_{\odot}$ , Mittlere Anomalie des Mondes,
- $i$ , Neigung des Mondäquators gegen den Erdäquator,
- $\Delta_1$ , Stück des Mondäquators zwischen Ekliptik und Erdäquator,
- $\Omega'$ , Aufsteigender Knoten des Mondäquators auf dem Erdäquator,
- $\vartheta$ , der aufsteigende Knoten des Mondäquators auf der Ekliptik ist gleich dem absteigenden Knoten der Mondbahn, also

$$\vartheta = \Omega \pm 180^\circ.$$

Vom Jahrgang 1926 ab sind die Brown'schen Mondtafeln verwendet.



Die Größen  $i$ ,  $\Delta$  und  $\Omega'$  berechnen sich aus:

$$\sin \frac{1}{2} (\Delta + \Omega') \cos \frac{1}{2} i = \cos \frac{1}{2} (\epsilon - J) \sin \frac{1}{2} \vartheta$$

$$\cos \frac{1}{2} (\Delta + \Omega') \cos \frac{1}{2} i = \cos \frac{1}{2} (\epsilon + J) \cos \frac{1}{2} \vartheta$$

$$\sin \frac{1}{2} (\Delta - \Omega') \sin \frac{1}{2} i = \sin \frac{1}{2} (\epsilon - J) \sin \frac{1}{2} \vartheta$$

$$\cos \frac{1}{2} (\Delta - \Omega') \sin \frac{1}{2} i = \sin \frac{1}{2} (\epsilon + J) \cos \frac{1}{2} \vartheta;$$

dabei ist  $J$ , die Neigung des Mondäquators gegen die Ekliptik, nach F. Hayn (Astr. Nachr. Bd. 199, S. 263) zu  $J = 1^\circ 32' 20''$  angenommen worden. Die Zahlen geben die Lage des mittleren Mondäquators (ohne physische Libration).

Die auf S. 306\* gemachten Angaben über die Elemente der Mondbahn und des Mondäquators werden, teilweise in Verbindung mit den Größen  $L_\odot$  und  $M_\odot$  auf S. 29, zu verschiedenen Zwecken verwendet:

1) Als Argumente für die Berechnung der Reduktionsgrößen  $A, B, C, D, E, A', B'$ .

2) Bei Bestimmung der selenographischen Koordinaten von Punkten der Mondoberfläche (siehe darüber den folgenden Abschnitt).

3) Bei Berechnung der *optischen* und *physischen* Libration des Mondes.

a) Für die Berechnung der *optischen* Libration des Mondes sind alle nötigen Angaben in den Erläuterungen zu den Hilfstafeln unter Nr. 9 (S. 415\*) gemacht.

b) Die Beträge der *physischen* Mondlibration in selenographischer Länge, der Neigung des Mondäquators und seinem aufsteigenden Knoten auf der Ekliptik  $\tau, \rho, \sigma$  haben die Werte:

$$\tau = -13'' \sin M_\odot + 65'' \sin M_\odot + 26'' \sin 2(L_\odot - M_\odot - \Omega)$$

$$\rho = -106'' \cos M_\odot + 34'' \cos(2L_\odot - M_\odot - 2\Omega) - 11'' \cos 2(L_\odot - \Omega)$$

$$\sigma \sin J = -108'' \sin M_\odot + 34'' \sin(2L_\odot - M_\odot - 2\Omega) - 11'' \sin 2(L_\odot - \Omega)$$

Diese Zahlenangaben beruhen auf der Annahme  $f = 0.73$ , worüber F. Hayn (Astr. Nachr. Bd. 199, S. 264) einzusehen ist.

### Ephemeride für den Mondkrater Mösting A.

(S. 307\*—311\*).

Die Ephemeride des Mondkraters Mösting A. dient zwei verschiedenen Zwecken: erstens zur genauen Bestimmung von Mondörtern am Himmel durch Beobachtung des Kraters, zweitens zur Bestimmung der selenographischen Koordinaten weiterer Punkte der Mondoberfläche durch deren mikrometrischen Anschluß an Mösting A.

Sie gilt für 0<sup>h</sup> Welt-Zeit und enthält für die Tage, an welchen Mösting A. innerhalb der Beleuchtungsgrenze liegt, die Unterschiede  $\alpha_c - \alpha_k$  in Rektaszension und  $\delta_c - \delta_k$  in Deklination zwischen der Mondmitte und dem Krater, vom Erdmittelpunkt aus gesehen, sowie den Logarithmus des Sinus der Äquatorial-Horizontalparallaxe  $p_k$  des



Kraters, welche von der des Mondes  $p_c$  zu unterscheiden ist, mit den zugehörigen Differenzen.

Zur Anwendung der Ephemeride auf Beobachtungen des Kraters interpoliere man  $\alpha_c - \alpha_k$ ,  $\delta_c - \delta_k$  und  $\log \sin p_k$  mit der Beobachtungszeit. Fügt man alsdann  $\alpha_c - \alpha_k$  und  $\delta_c - \delta_k$  zum geozentrischen Ort des Kraters hinzu (die Parallaxe wird mit  $p_k$  und  $\delta_k$ , der Deklination des Kraters, berechnet), so hat man die geozentrische Rektaszension und Deklination des Mondes für die Beobachtungszeit.

Hat man einen Punkt der Mondoberfläche mikrometrisch an Mösting A. angeschlossen, so bestimme man zunächst die topozentrischen, d. h. mit Parallaxe behafteten Koordinatendifferenzen  $\alpha'_c - \alpha'_k$  und  $\delta'_c - \delta'_k$  zwischen Mondmittelpunkt und Mösting A. aus folgenden Identitäten:

$$\begin{aligned}\alpha'_c - \alpha'_k &= \alpha_c - \alpha_k + (\alpha'_c - \alpha_c) - (\alpha'_k - \alpha_k) \\ \delta'_c - \delta'_k &= \delta_c - \delta_k + (\delta'_c - \delta_c) - (\delta'_k - \delta_k).\end{aligned}$$

Verbindet man die so erhaltenen topozentrischen Abstände zwischen der Mondmitte und Mösting A. mit den mikrometrischen Messungen zwischen Mösting A. und einem zweiten Krater, so erhält man die topozentrische Lage des letzteren gegen die Mondmitte und kann hieraus mit Hilfe von  $\alpha'_c$  und  $\delta'_c$  und den Angaben auf S. 306\* die selenographische Länge und Breite des zweiten Kraters berechnen. Hierzu dienen die im folgenden angeführten Formeln.

Bezeichnet man mit  $\alpha'$  und  $\delta'$  die topozentrische AR. und Dekl. des an Mösting A. angeschlossen Kraters, so hat man:

$$\begin{aligned}s \sin \pi_m &= (\alpha' - \alpha'_c) \cos \frac{1}{2} (\delta' + \delta'_c) \\ s \cos \pi_m &= \delta' - \delta'_c \\ \pi &= \pi_m - \frac{1}{2} (\alpha' - \alpha'_c) \sin \frac{1}{2} (\delta' + \delta'_c) \\ \sin (K + s) &= \sin s \operatorname{cosec} h' .\end{aligned}$$

$h'$  ist der Abstand des Kraters vom Mondschwerpunkt, gesehen vom Beobachtungsort aus, der aus  $h$ , dem vom Erdmittelpunkt aus gesehenen Abstand, durch Anbringen der Parallaxe gewonnen wird. Ist die Entfernung des Kraters vom Mondschwerpunkt gänzlich unbekannt, so möge für  $h$  der aus Sternbedeckungen folgende Wert des Mondhalbmessers  $15' 32'' 59$  (nach J. Peters, Astr. Nachr. Bd. 138, S. 147) eingesetzt werden.

$$\begin{aligned}\sin d &= -\sin \delta'_c \cos K + \cos \delta'_c \sin K \cos \pi \\ \cos d \cos (a - \alpha'_c) &= -\cos \delta'_c \cos K - \sin \delta'_c \sin K \cos \pi \\ \cos d \sin (a - \alpha'_c) &= \sin K \sin \pi \\ \sin \beta &= \sin d \cos i - \cos d \sin i \sin (a - \alpha') \\ \cos \beta \sin \lambda' &= \sin d \sin i + \cos d \cos i \sin (a - \alpha') \\ \cos \beta \cos \lambda' &= \cos d \cos (a - \alpha') \\ \lambda &= \lambda' - 180^\circ - L_c - (\Delta - \vartheta).\end{aligned}$$



Die so erhaltenen Werte von  $\lambda$  und  $\beta$  beziehen sich auf den mittleren (vom Einfluß der physischen Libration freien) Mondäquator; die Transformation auf den wahren erfolgt durch die Korrekturen:

$$\begin{aligned} d\lambda &= + 13'' \sin M_{\odot} - 65'' \sin M_{\oplus} - 26'' \sin 2(L_{\odot} - M_{\odot} - \Omega) \\ &\quad + \operatorname{tg} \beta [-106'' \cos(L_{\odot} - M_{\odot} - \Omega + \lambda) \\ &\quad + 34'' \cos(L_{\odot} - M_{\odot} - \Omega - \lambda) - 11'' \cos(L_{\odot} - \Omega - \lambda)] \\ d\beta &= + 108'' \sin(L_{\odot} - M_{\odot} - \Omega + \lambda) + 34'' \sin(L_{\odot} - M_{\odot} - \Omega - \lambda) \\ &\quad - 11'' \sin(L_{\odot} - \Omega - \lambda). \end{aligned}$$

Bringt man diese Korrekturen  $d\lambda$  und  $d\beta$  an  $\lambda$  und  $\beta$  an, so erhält man die selenographischen Koordinaten des Kraters:

$$\lambda_0 = \lambda + d\lambda, \quad \beta_0 = \beta + d\beta$$

Der Berechnung der Ephemeride des Kraters Mösting A. liegen folgende von F. Hayn ermittelte Konstanten (Astr. Nachr. Bd. 199, S. 263) zugrunde:

$$\begin{aligned} \lambda_0 &= -5^{\circ} 10' 7'', \quad \beta_0 = -3^{\circ} 11' 2'' \\ h &= 15' 33''.4 \end{aligned}$$

Für die Reduktion auf den mittleren Mondäquator wurden die Werte angenommen:

$$\begin{aligned} d\lambda &= - 13'' \sin M_{\odot} + 65'' \sin M_{\oplus} + 26'' \sin 2(L_{\odot} - M_{\odot} - \Omega) \\ d\beta &= - 107'' \sin(L_{\odot} - M_{\odot} - \Omega + \lambda_0) - 34'' \sin(L_{\odot} - M_{\odot} - \Omega - \lambda_0) \\ &\quad + 11'' \sin(L_{\odot} - \Omega - \lambda_0), \end{aligned}$$

so daß die auf den mittleren Mondäquator bezogenen selenographischen Koordinaten des Kraters Mösting A. sind:

$$\lambda = \lambda_0 + d\lambda, \quad \beta = \beta_0 + d\beta.$$

Die Formeln zur Berechnung der Ephemeride siehe in den Erläuterungen zum Jahrbuch 1916.

### Jupitertrabanten (S. 312\*—313\*).

Die Seiten 312\* und 313\* enthalten die Zeitangaben (in Welt-Zeit) für die Verfinsterungen der vier hellen Jupitertrabanten in dem Schattenkegel des Jupiter; Ein- und Austritte sind durch beigefügtes E. und A. unterschieden.

### Saturnsring (S. 314\*—315\*, 318\*).

Die Angaben für die scheinbare Größe des Saturn und für die Lage und Größe des Saturnsrings haben die folgende Bedeutung:

- $\alpha$  Große Achse des Saturn.
- $\beta$  Kleine Achse des Saturn.
- $p_{\alpha}$  Phase; positiv, wenn der Ostrand, negativ, wenn der Westrand verdunkelt ist.
- $a$  Große Achse der Ringellipse.
- $b$  Kleine Achse der Ringellipse; positiv, wenn die nördliche, negativ, wenn die südliche Fläche des Ringes sichtbar ist.



- U'* Heliozentrische Länge des Saturn, gezählt auf der Ringebene vom aufsteigenden Knoten des Ringes in der Ekliptik an.
- B'* Erhöhungswinkel der Sonne über der Ringebene vom Saturn aus gesehen; nördlich positiv, südlich negativ.
- P'* Winkel der kleinen Achse der Ringellipse mit dem durch den Saturnsmittelpunkt gehenden Längenkreise; östlich positiv, westlich negativ.
- U* Geozentrische Länge des Saturn, gezählt auf der Ringebene vom aufsteigenden Knoten des Ringes im Erdäquator an.
- B* Erhöhungswinkel der Erde über der Ringebene vom Saturn aus gesehen; nördlich positiv, südlich negativ.
- P* Winkel der kleinen Achse der Ringellipse mit dem durch den Saturnsmittelpunkt gehenden Stundenkreise; östlich positiv, westlich negativ.
- N* Aufsteigender Knoten der Ringebene im Erdäquator, gezählt vom Äquinoktium an.
- J* Neigung der Ringebene gegen den Erdäquator.
- $\omega$  Entfernung der Ekliptik vom Erdäquator, gemessen auf der Ringebene.

Es liegen folgende Bestimmungen nach H. Struve zugrunde:

Durchmesser des Saturn in der Entfernung 9.53887

Äquatorial 17"47                      Polar 15"65

Durchmesser des Ringes in der Entfernung 9.53887

$2 R = 39"35$

Lage des Saturnsringses gegen die Ekliptik und das Äquinoktium von 1889.25 nach G. Struve

$\Omega_1 = 167^\circ 58'.08$     und     $i_1 = 28^\circ 4'55$

### Saturnstrabanten (S. 316\*—325\*).

Die Berechnungen der Saturnstrabanten Mimas bis Rhea sind mit den von G. Struve in den Veröffentlichungen der Universitätssternwarte Berlin-Babelsberg, Bd. VI, Heft 4 abgeleiteten Elementen durchgeführt worden. Für Titan und Japetus sind die von ihm in Bd. VI, Heft 5 angegebenen Elemente benutzt worden, und für Hyperion haben die von J. Woltjer in den Annalen der Sternwarte Leiden, Bd. 16, Teil 3 bestimmten Elemente als Grundlage gedient.



Die den Ephemeriden zugrunde liegenden Elemente sind:

MIMAS (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April 0.0 Mittl. Zt. Grw.

$$\begin{aligned} E_0 &= 127^\circ 5'5 \\ n &= 381^\circ 994442 \\ \delta l &= -44^\circ 390 \sin [5^\circ 0864 (\tau - 1866.27)] \\ &\quad - 0^\circ 764 \sin 3 [5^\circ 0864 (\tau - 1866.27)] \\ l_1 &= E_0 + n t_d + \delta l \\ \odot &= 56^\circ 1 - 365^\circ 23 t \\ \gamma &= 1^\circ 31'0 \\ \Pi_1 &= 105^\circ 0 + 365^\circ 60 t \\ e &= 0.0201 \\ a &= 26'826 \end{aligned}$$

ENCELADUS (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April 0.0 Mittl. Zt. Grw.

$$\begin{aligned} E_0 &= 199^\circ 25'8 \\ n &= 262^\circ 7319405 \\ \delta l &= +14'39 \sin (63^\circ 75 + 32^\circ 51 t) \\ &\quad + 14'06 \sin (117^\circ 28 + 93^\circ 14 t) \\ l_1 &= E_0 + n t_d + \delta l \\ \odot &= 51^\circ 81 - 152^\circ 7 t \\ \gamma &= 1'4 \\ \Pi_1 &= 308^\circ 38 + 123^\circ 43 t \\ e &= 0.00444 \\ a &= 34'416 \end{aligned}$$

TETHYS (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April 0.0 Mittl. Zt. Grw.

$$\begin{aligned} E_0 &= 284^\circ 28'3 \\ n &= 190^\circ 697950 \\ \delta l &= +2^\circ 065 \sin [5^\circ 0864 (\tau - 1866.27)] \\ &\quad + 0^\circ 036 \sin 3 [5^\circ 0864 (\tau - 1866.27)] \\ l_1 &= E_0 + n t_d + \delta l \\ \odot &= 110^\circ 39 - 72^\circ 25 t \\ \gamma &= 1^\circ 5'56 \\ e &= 0.0000 \\ a &= 42'605 \end{aligned}$$

DIONE (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April 0.0 Mittl. Zt. Grw.

$$\begin{aligned} E_0 &= 253^\circ 52'0 \\ n &= 131^\circ 5349729 \\ \delta l &= -0'93 \sin (63^\circ 75 + 32^\circ 51 t) \\ &\quad - 0'91 \sin (117^\circ 28 + 93^\circ 14 t) \\ l_1 &= E_0 + n t_d + \delta l \end{aligned}$$



$$\begin{aligned}\Theta &= 201^{\circ}0 - 31^{\circ}0 t \\ \gamma &= 1^{\circ}4 \\ \Pi_1 &= 173^{\circ}4 + 30^{\circ}75 t \\ e &= 0.00221 \\ a &= 54^{\circ}567\end{aligned}$$

RHEA (Berlin-Bbg. VI, Heft 4)

Epoche: 1889 April 0.0 Mittl. Zt. Grw.

$$\begin{aligned}E_0 &= 358^{\circ} 23^{\circ}7 \\ n &= 79^{\circ}6900881 \\ l &= E_0 + nt_a \\ (\Omega - \Omega_1) \sin i_1 &= 20^{\circ}49 \sin (344^{\circ}09 - 10^{\circ}20 t) - 0^{\circ}38 + 1^{\circ}00 \sin (48^{\circ}5 - 0^{\circ}50 t) \\ i - i_1 &= 20^{\circ}49 \cos (344^{\circ}09 - 10^{\circ}20 t) - 2^{\circ}79 + 1^{\circ}00 \cos (48^{\circ}5 - 0^{\circ}50 t) \\ \Pi &= 275^{\circ}85 + 0^{\circ}53 t + 17^{\circ}64 \sin [9^{\circ}5 (\tau - 1879.59)] \\ e &= 0.00098 + 0.00030 \cos [9^{\circ}5 (\tau - 1879.59)] \\ a &= 76^{\circ}203 \\ \Omega_1 \text{ und } i_1 &\text{ bezeichnen die Lage des Saturnsrings.}\end{aligned}$$

TITAN (Berlin-Bbg. VI, Heft 5)

Epoche: 1890 Jan. 0.0 Mittl. Zt. Grw.

$$\begin{aligned}E_0 &= 260^{\circ} 24^{\circ}26 \\ n &= 22^{\circ}577015 \\ l &= E_0 + nt_a + (E - E_0) \\ E - E_0 &= + 4^{\circ}39 \sin (40^{\circ}69 - 0^{\circ}506 t) \\ \Omega &= 167^{\circ} 51^{\circ}90 + 39^{\circ}00 \sin (40^{\circ}69 - 0^{\circ}506 t) \\ i &= 27^{\circ} 26^{\circ}33 + 18^{\circ}35 \cos (40^{\circ}69 - 0^{\circ}506 t) \\ \Pi &= 276^{\circ} 7^{\circ}7 + 31^{\circ}41 t + 22^{\circ}0 (\sin 2g - \sin 2g_0) \\ e &= 0.02910 + 0.000186 (\cos 2g_0 - \cos 2g) \\ g &= \Pi - \Omega - 4^{\circ}5 \\ g_0 &= g \text{ für } t = 0 \\ a &= 176^{\circ}578\end{aligned}$$

HYPERION (J. Woltjer, Ann. Sternwarte Leiden Bd. XVI, 3, S. 64)

Anfangsepoche für  $t_a$ : 1900 Januar 0.0 Mittl. Zt. Grw.,, ,,  $t$ : 1900.0Argumente:  $\sigma = 93^{\circ}13 + 0^{\circ}562039 t_a$   $\tilde{\omega} = 148^{\circ}72 - 19^{\circ}184 t$ 

$$\begin{aligned}n &= 16^{\circ}9199896 \\ l &= 176^{\circ}293 + 16^{\circ}9199896 t_a + 9^{\circ}092 \sin \sigma + 0^{\circ}211 \sin (\tilde{\omega} + \sigma) \\ &\quad + 0^{\circ}192 \sin (\tilde{\omega} - \sigma) - 0^{\circ}077 \sin \tilde{\omega} \\ \Pi &= 70^{\circ}05 - 18^{\circ}6562 t - 13^{\circ}67 \sin \tilde{\omega} + 0^{\circ}93 \sin 2\tilde{\omega} - 0^{\circ}47 \sin \sigma \\ e &= 0.10419 + 0.02414 \cos \tilde{\omega} - 0.00401 \cos \sigma - 0.00183 \cos 2\tilde{\omega} \\ &\quad + 0.00009 \cos (\tilde{\omega} - \sigma) - 0.00009 \cos (\tilde{\omega} + \sigma) \\ a &= 214^{\circ}32 - 0^{\circ}74 \cos \sigma\end{aligned}$$



$$\begin{aligned} \gamma \sin h &= -0^{\circ}061 + 0^{\circ}574 \sin [-2^{\circ}392 t + 95^{\circ}9] \\ &\quad + 0^{\circ}315 \sin [-0^{\circ}500 t + 42^{\circ}78] \\ \gamma \cos h &= -0^{\circ}747 + 0^{\circ}574 \cos [-2^{\circ}392 t + 95^{\circ}9] \\ &\quad + 0^{\circ}315 \cos [-0^{\circ}500 t + 42^{\circ}78]. \end{aligned}$$

$\gamma$  = Neigung der Bahnebene gegen den Saturnsäquator,

$h$  = Länge des aufsteigenden Knotens auf dem Saturnsäquator, gezählt vom aufsteigenden Knoten des Saturnsäquators auf der Ekliptik.

J APETUS (Berlin-Bbg. VI, Heft 5)

Epoche: 1885 Sept. 1.0 Mittl. Zt. Grw.

$$\begin{aligned} E_0 &= 75^{\circ} 25'61 & i &= 18^{\circ} 26'39 - 0'54 t \\ n &= 4^{\circ}537995 & \Pi &= 354^{\circ} 27'4 + 8'1 t \\ l &= E_0 + nt_a & e &= 0.02828 \\ \Omega &= 142^{\circ} 11'3 - 1'375 t & a &= 514''59 \end{aligned}$$

Hierin bedeuten:

$l_1, l$  = Mittlere Länge in der Bahn

$n$  = Tropische mittlere tägliche Bewegung

$\delta l$  = Libration

$\tau$  = Epoche

$t_a$  = Anzahl der Tage seit der Anfangsepoche

$t$  = Anzahl der Jahre seit der Anfangsepoche

$\odot$  = Knoten auf dem Saturnsäquator

$\Omega$  = Knoten auf der Ekliptik

$\gamma$  = Neigung der Trabantenbahn gegen den Saturnsäquator

$i$  = Neigung der Trabantenbahn gegen die Ekliptik

$\Pi_1, \Pi$  = Perisaturnium

$e$  = Exzentrizität

$a$  = Halbachse der Trabantenbahn in der mittleren Entfernung ( $\Delta$ ) = 9.53887.

$l_1, \Pi_1$  und  $\odot$  werden gezählt vom Äquinoktium aus in der Ekliptik weiter im Saturnsäquator und dann erst in der Trabantenbahn,  $l$  und  $\Pi$  vom Äquinoktium aus in der Ekliptik und weiter in der Trabantenbahn.

Auf den Seiten 316\*—318\* sind die Hilfsmittel gegeben, um in bequemer Weise die Positionen der Trabanten ableiten zu können. Sieht man hierbei von den Neigungen  $\gamma$  ab, so erhält man die rechtwinkligen Koordinaten  $x$  und  $y$  des Trabanten in bezug auf ein Achsenkreuz, dessen Anfangspunkt im Mittelpunkt des Saturn gelegen ist, dessen X-Achse parallel der großen Achse des Ringes verläuft, positiv, wenn östlich, negativ, wenn westlich vom Saturn, und dessen positive Y-Achse mit dem durch den Saturnmittelpunkt gehenden Stundenkreise den Winkel  $P$  einschließt, aus den Gleichungen:

$$x = \frac{a(\Delta)}{\Delta} \frac{1}{1+\xi} \frac{r}{a} \sin(u-U)$$

$$y = \frac{a(\Delta)}{\Delta} \frac{1}{1+\xi} \frac{r}{a} \sin B \cos(u-U).$$



$(\Delta) = 9.53887$  bezeichnet den mittleren Wert der Entfernung Sonne—Saturn,  $\Delta$  ist die Entfernung Erde—Saturn,  $u = L + (v - M)$  ist die wahre Länge des Trabanten vom Erdäquator an gezählt.

Die Größen  $v - M$  und  $\log \frac{r}{a}$  sind auf S. 312\*—313\* des Jahrbuchs 1933 gegeben,  $\log \frac{1}{1+\zeta}$  ist auf Seite 318\* enthalten.

Ist genaueste Ortsbestimmung erforderlich, so darf man bei Mimas, Tethys und Rhea die Neigungen gegen den Saturnsäquator, da sie schon merklichere Werte annehmen, nicht mehr vernachlässigen;  $x$  und  $y$  ergeben sich dann aus:

$$x = \frac{a(\Delta)}{\Delta} \frac{1}{1+\zeta} \frac{r}{a} \sin(u - U)$$

$$y = \frac{a(\Delta)}{\Delta} \frac{1}{1+\zeta} \frac{r}{a} \sin B [\cos(u - U) + \sin \gamma \cotg B \sin(u - \vartheta)].$$

Die Werte von  $\vartheta$ , der Länge des aufsteigenden Knotens der Trabantenbahn auf dem Saturnsäquator, gezählt vom Schnittpunkte des Saturnsäquators mit dem Erdäquator, finden sich für die fünf inneren Trabanten auf Seite 318\*; auch ist hier für Rhea  $\gamma$ , weil stärker mit der Zeit veränderlich, in Intervallen von 16 Tagen gegeben.

Will man aus  $x$  und  $y$  die Rektaszensions- und Deklinationsdifferenzen bestimmen, so dienen dazu die Gleichungen:

$$s \sin(p - P) = x$$

$$s \cos(p - P) = y$$

$$\Delta\alpha = \alpha_{tr} - \alpha_{pl} = \frac{1}{15} s \sin p \sec \delta_{tr}$$

$$\Delta\delta = \delta_{tr} - \delta_{pl} = s \cos p.$$

Auf den Seiten 319\*—321\* finden sich, außer den Hilfsgrößen  $U$ ,  $B$  und  $P$  für die Trabanten Titan, Hyperion und Japetus die genäherten Rektaszensions- und Deklinationsunterschiede gegen den Saturn in dem Sinne Trabant minus Planet für die beiden letzteren Trabanten.

Die aus den Angaben des Berliner Jahrbuchs ermittelten Trabantenerter sind auf das mittlere Äquinoktium der Epoche bezogen.

Zum Schluß enthalten die Seiten 322\*—325\* die Zeitangaben (in Welt-Zeit) für die östlichen Elongationen von Mimas, Enceladus, Tethys, Dione, Rhea, ferner für die östlichen und westlichen Elongationen ( $u - U = \pm 90^\circ$ ) und für die oberen und unteren Konjunktionen ( $u - U = 0^\circ, 180^\circ$ ) von Titan, Hyperion und Japetus mit Saturn; diese Zeitangaben für die Elongationen und Konjunktionen sind bereits für Lichtzeit korrigiert, also ohne weiteres mit den Beobachtungen vergleichbar.

### Konstellationen (S. 326\*—327\*).

In der Übersicht der Konstellationen des Jahres 1945 sind die hauptsächlichsten Planeten-Konstellationen gegeneinander und gegen Sonne und Mond, sowie die Angaben der Epochen, zu welchen sich



die Planeten in gewissen Hauptpunkten ihrer Bahn und ihres synodischen Laufes befinden, zusammengestellt. Die Bedeutung der hier verwendeten Zeichen siehe Seite VIII des Vorworts. — Die Konjunktionen der Planeten mit dem Mond und ihre gegenseitigen sind als Konjunktionen in AR. zu verstehen, ebenso entsprechen die Angaben über Konjunktion und Opposition der Planeten mit der Sonne den Zeiten, zu denen der Rektaszensionsunterschied zwischen Planet und Sonne  $0^\circ$  oder  $180^\circ$  ist.

### Auf- und Untergangszeiten der Sonne und des Mondes

(S. 328\*—363\*).

Die für Orte auf dem Meridian von Greenwich und ausgewählte geographische Breiten zwischen  $-40^\circ$  und  $+70^\circ$  gegebenen mittleren Ortszeiten der Auf- und Untergänge von Sonne und Mond beziehen sich auf das Erscheinen bzw. Verschwinden des oberen Randes der Sonne oder des Mondes und sind mit der Horizontalrefraktion  $34'0$  berechnet.

### Hilfstafeln (S. 364\*—387\*).

Es folgt eine Reihe von häufig gebrauchten Hilfstafeln.

1) Tafeln für Präzessionswerte (S. 364\*—366\*).

a) Präzession in Länge und Breite (Seite 364\*—365\*).

$$p_\lambda = \psi + \pi \operatorname{tg} \beta \cos (\Pi - \lambda)$$

$$p_\beta = \pi \sin (\Pi - \lambda)$$

b) Präzession in Rektaszension und Deklination (Seite 366\*).

$$p_\alpha = m + \frac{1}{15} n \sin \alpha \operatorname{tg} \delta$$

$$p_\delta = n \cos \alpha$$

c) Präzessionswerte  $m$ ,  $n$ ,  $\psi$ ,  $\pi$ ,  $\Pi$  und  $\varepsilon$ , die mittlere Schiefe der Ekliptik (Seite 366\*).

Mit diesen Werten berechnet sich die Präzession für die Elemente einer Bahnebene im System der Ekliptik nach:

$$p_\Omega = \psi - \pi \operatorname{cotg} i \sin (\Pi - \Omega)$$

$$p_i = -\pi \cos (\Pi - \Omega)$$

$$p_\omega = \pi \operatorname{cosec} i \sin (\Pi - \Omega)$$

und im System des Äquators nach:

$$p_{\Omega'} = m - n \operatorname{cotg} i' \cos \Omega'$$

$$p_{i'} = -n \sin \Omega'$$

$$p_{\omega'} = n \cos \Omega' \operatorname{cosec} i'$$

Den Tafeln a) und b) liegen die Präzessionswerte für 1950.0 zugrunde. Über die Bedeutung der Bezeichnungen und die Zahlenwerte vergleiche die Erläuterungen zum Jahrbuch für 1916.

2) Eine Tafel zur Verwandlung von Minuten und Sekunden in Dezimalteile des Grades und umgekehrt (S. 367\*).

3) Hilfstafeln zur Verwandlung von mittlerer Zeit in Sternzeit (S. 368\*, 370\*) und von Sternzeit in mittlere Zeit (S. 369\*, 371\*).

4) Eine Tafel zur Verwandlung von Stunden, Minuten und Sekunden in Dezimalteile des Tages und umgekehrt (S. 372\*—373\*).



5) Eine Tafel für die Ermittlung eines Datums in der Julianischen Periode (Seite 374\*–378\*). Die Tafel besteht aus zwei Teilen. Der erste Teil (S. 374\*–375\*) gibt in vierjährigen Schaltperioden für die Jahre 0 bis 2000 die Anzahl der am 0. Januar, 12<sup>h</sup> Welt-Zeit, seit Anfang der Julianischen Periode verfloßenen Tage. Als Ergänzung gibt die Hilfstafel am Fuß der Seite die Anzahl der am 0. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Schaltperiode verfloßenen Tage. Man gehe bis zum 4. Oktober des Jahres 1582 mit dem Datum des Julianischen, für spätere Jahre mit dem Datum des Gregorianischen Kalenders in die Tafel ein. Der zweite Teil (S. 376\*–378\*) gibt für die Jahre 1860–1979 unmittelbar die Anzahl der im Gregorianischen Kalender am 0. eines jeden Monats, 12<sup>h</sup> Welt-Zeit, seit Beginn der Julianischen Periode verfloßenen Tage.

6) Eine Tafel der Hilfsgrößen  $s$  und  $c$  (S. 379\*) zur Berechnung der geozentrischen Breite  $\varphi'$  und der geozentrischen Entfernung  $\rho$  eines Erdortes, ausgedrückt in Einheiten der großen Halbachse des Erdellipsoids, aus der geographischen Breite  $\varphi$  nach den Formeln:

$$\begin{aligned}\rho \sin \varphi' &= s \sin \varphi \\ \rho \cos \varphi' &= c \cos \varphi\end{aligned}$$

Darin haben  $s$  und  $c$  die Bedeutung:

$$s = \frac{1 - e^2}{\sqrt{1 - e^2 \sin^2 \varphi}}, \quad c = \frac{1}{\sqrt{1 - e^2 \sin^2 \varphi}}, \quad e = \sqrt{2a - a^2}.$$

Gemäß den Beschlüssen der Pariser Ephemeridenkonferenz von 1911 ist dabei die Abplattung  $a = \frac{1}{297}$  angenommen.

7) Tafel des halben Tagbogens (S. 380\*–381\*), berechnet mit der Horizontalrefraktion 34'9" für geographische Breiten von +30° bis +60° und Deklinationen von -30° bis +30°.

8) Reduktionstabellen für die Auf- und Untergangszeiten der Sonne und des Mondes (S. 382\*–385\*). Sie geben die Reduktion der für +50° Breite gültigen Zeiten, wie sie in den Ephemeriden auf S. 3–19 bzw. S. 31–47 enthalten sind, auf geographische Breiten zwischen +30° und +60° und sind für das Erscheinen oder Verschwinden des oberen Gestirnsrandes gerechnet.

9) Die Tafel zur Berechnung der optischen Mondlibration (S. 386\*–387\*) gibt mit dem Argument  $\lambda - \Omega$  die Werte  $\Delta\lambda$ ,  $a$  und  $B$  entsprechend den Gleichungen:

$$\begin{aligned}\Delta\lambda &= \frac{1}{\arccos 1'} \operatorname{tang}^2 \frac{1}{2} J \sin 2(\lambda - \Omega) \\ a &= -\cos(\lambda - \Omega) \sin J \\ \operatorname{tang} B &= -\sin(\lambda - \Omega) \operatorname{tang} J\end{aligned}$$

$J$  = Neigung des Mondäquators gegen die Ekliptik.

$\Omega$  = Länge des aufsteigenden Knotens der Mondbahn auf der Ekliptik (s. S. 306\*).

$\lambda, \beta$  = Länge und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.



Bezeichnen noch  $L_c$  die mittlere Länge des Mondes,  $l'$  und  $b'$  die optische Libration der Mondmitte in selenographischer Länge und Breite, so ist:

$$l' = \lambda - L_c + \Delta\lambda - \alpha(B - \beta)$$

$$b' = B - \beta$$

Der Winkel  $C$ , welchen der Mondmeridian des Mittelpunktes der scheinbaren Mondscheibe mit dem Stundenkreise bildet, ergibt sich aus der Gleichung:

$$\sin C = -\sin i \frac{\cos(L_c + l' + \Delta - \vartheta)}{\cos \delta_c} = -\sin i \frac{\cos(\alpha_c - \Omega')}{\cos b'}$$

worin  $\alpha_c$ ,  $\delta_c$  Rektaszension und Deklination des Mondmittelpunktes gesehen vom Beobachtungsort aus, bezeichnen; die anderen vorkommenden Größen  $i$ ,  $\Delta$ ,  $\vartheta$  und  $\Omega'$  haben schon auf S. 405\* ihre Erklärung gefunden.

### Koordinaten der Sternwarten (S. 388\*—394\*).

Die Seiten 388\*—394\* enthalten die geographischen und geozentrischen Koordinaten der Sternwarten.

Die Seehöhen sind in allen Fällen angegeben, wo sie sich einigermaßen sicher ermitteln ließen.

Die geographischen Längen sind auf den Meridian von Greenwich bezogen und dem entsprechend ist die »Korrektion der Sternzeit« die Differenz: Orts-Sternzeit in mittlerer Mitternacht minus Greenwicher Sternzeit in mittlerer Mitternacht.

Die geozentrischen Koordinaten sind den Beschlüssen der Pariser Ephemeridenkonferenz vom Oktober 1911 gemäß unter Annahme der Abplattung 1 : 297 berechnet.

Bei Berechnung von  $\log \rho$  ist die Seehöhe berücksichtigt.

### Normalzeiten der wichtigeren Länder (S. 395\*).

Auf S. 395\* sind die in den wichtigeren Ländern eingeführten Normalzeiten zusammengestellt.

### Berichtigungen

Jahrbuch 1943,	S. 11,	Juli 7	Sternzeit lies	21 <sup>s</sup> 233	anstatt	21 <sup>s</sup> 133.	
	S. 13,	Aug. 3	„	48.244	„	48.144.	
		Aug. 12	„	17.236	„	17.136.	
Jahrbuch 1944,	S. 13,	Aug. 25	„	31.492	„	31.592.	
	S. 348*,	März 27	$\varphi + 30^\circ$	lies	8 <sup>h</sup> 13 <sup>m</sup>	anstatt	8 <sup>h</sup> 3 <sup>m</sup> .
		April 20	$\varphi + 65^\circ$	„	4 <sup>h</sup> 45 <sup>m</sup>	„	4 <sup>h</sup> 35 <sup>m</sup> .
	S. 354*,	Juli 24	$\varphi + 50^\circ$	„	8 <sup>h</sup> 28 <sup>m</sup>	„	8 <sup>h</sup> 29 <sup>m</sup> .
	S. 358*,	Okt. 25	$\varphi + 70^\circ$	„	17 <sup>h</sup> 28 <sup>m</sup>	„	17 <sup>h</sup> 33 <sup>m</sup> .
	S. 360*,	Dez. 4	$\varphi + 60^\circ$	„	19 <sup>h</sup> 36 <sup>m</sup>	„	20 <sup>h</sup> 36 <sup>m</sup> .
Jahrbuch 1945,	S. 113*.	Fußnote.	Anstatt	0°107	lies	0°108.	



## Alphabetisches Sachregister

	Seite
Aberration, Konstante der . . . . .	IV
der Sonne . . . . .	29
siehe auch Reduktionsgrößen	
Berichtigungen zum Jahrbuch . . . . .	416*
Besselsche Größen, siehe Reduktionsgrößen	
Datum, Julianisches, siehe Julianisches Datum	
Doppelsterne, Koordinaten der Komponenten . . . . .	12*, 13*, 24*
Ekliptik, Schiefe der, siehe Schiefe	
Erde, Abplattung . . . . .	IV, VI
Dimensionen . . . . .	VI
Masse . . . . .	VI
Masse des Systems Erde + Mond . . . . .	110
Heliozentrische Koordinaten des Systems Erde + Mond . . . . .	110
Koordinatenverzeichnis von Sternwarten . . . . .	388*
Hilfstafel zur Berechnung der geozentrischen Koordinaten von Punkten der Erdoberfläche . . . . .	379*
Erläuterungen zum Jahrbuch . . . . .	396*
Finsternisse der Sonne . . . . .	292*, 295*
Größenklasse, siehe Polsterne, Sterne	
Inhaltsverzeichnis . . . . .	V
Jahreszeiten, Beginn der . . . . .	28
Julianisches Datum für jeden Tag von 1945 . . . . .	3
für die Jahre 0 bis 2000 . . . . .	374*
für die Jahre 1860 bis 1979 . . . . .	376*
Jupiter, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	76
Heliozentrische Koordinaten . . . . .	111
Bahnlage und Masse . . . . .	111
Jupitertrabanten . . . . .	312*
Kalender, Gregorianischer . . . . .	VI
Konstanten, Astronomische . . . . .	IV, VII
Konstellationen . . . . .	326*
Libration des Mondes, Tafeln zur Berechnung der optischen . . . . .	386*
Physische . . . . .	406*
Mars, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	67
Heliozentrische Koordinaten . . . . .	111
Bahnlage und Masse . . . . .	111
Merkur, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	49
Heliozentrische Koordinaten . . . . .	109
Bahnlage und Masse . . . . .	109
Mittlere Örter, siehe Sterne, Polsterne, Präzession, Tafeln	
Mittlere Zeit, Verwandlung in Sternzeit . . . . .	368*, 370*
in Bruchteilen des tropischen Jahres . . . . .	252*
Mond, Alter . . . . .	30
Äquatorelemente . . . . .	III, 306*
Aufgangszeiten für +5° Breite . . . . .	31
Reduktionstafel dazu für Breiten zwischen +30° und +60° . . . . .	384*
Aufgangszeiten für Breiten zwischen -40° und +70° . . . . .	346*
Bahnelemente . . . . .	306*
Erdferne . . . . .	48
Erdnähe . . . . .	48
Finsternisse . . . . .	294*, 299*
Halbmesser, mittlerer Wert . . . . .	III, 407*



	Seite
Mond, Halbmesser, Ephemeride . . . . .	30
Koordinaten, äquatoriale . . . . .	30, 31
» » ekliptikale . . . . .	30
Krater Mösting A, Lage . . . . .	408*
» » » Ephemeride . . . . .	307*
Kulmination, Mittlere Zeit der oberen . . . . .	31
Libration, Hilfstafeln zur Berechnung der optischen . . . . .	386*
» Physische . . . . .	406*
Parallaxe, Ephemeride . . . . .	30, 31
Phasen . . . . .	48
Untergangszeiten für + 50° Breite . . . . .	31
Reduktionstafel dazu für Breiten zwischen +30° und +60° . . . . .	384*
Untergangszeiten für Breiten zwischen -40° und +70° . . . . .	347*
Neptun, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	96
Heliozentrische Koordinaten . . . . .	112
Bahnlage und Masse . . . . .	112
Normalzeiten der wichtigeren Länder . . . . .	395*
Nutation, Konstante der . . . . .	IV
in Länge, $\Delta\psi$ , $\Delta\psi'$ . . . . .	253*
in Schiefe der Ekliptik, $\Delta\varepsilon$ , $\Delta\varepsilon'$ . . . . .	253*
in Rektaszension . . . . .	3
siehe auch Reduktionsgrößen	
Periode, Julianische, siehe Julianisches Datum	
Planeten, Große, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	49
Heliozentrische Koordinaten . . . . .	109
Elemente der Bahnen . . . . .	VII
Halbmesser in der Entfernung 1 . . . . .	398*
Bahnlage und Masse . . . . .	109—112
Pluto, Geozentrische Koordinaten . . . . .	98
Heliozentrische Koordinaten, Bahnlage und Masse . . . . .	112
Polnahe Sterne, Mittlere Örter . . . . .	401*
Koord. d. scheinb. Örter für 12 <sup>h</sup> Sternzeit Greenwich . . . . .	241*
Polsterne, Mittlere Örter, Spektren und Größen von 20 Polsternen . . . . .	39*
Scheinbare Örter von 20 Polsternen . . . . .	181*
Hilfsgrößen zur Übertragung mittlerer Polsternörter auf 1945.0 . . . . .	281*
siehe auch Präzession, Tafeln	
Präzession, Allgemeine seit 1945.0 . . . . .	253*
Hilfstafeln für äquatoriale Koordinaten . . . . .	366*
» » ekliptikale » . . . . .	364*
Größen $m$ , $n$ , $\psi$ , $\pi$ , $\Pi$ , $\varepsilon$ . . . . .	VII, 366*
Hilfsgrößen zur Übertragung von verschiedenen mittleren Äquinoktien auf 1945.0 . . . . .	280*
Hilfsgrößen zur Übertragung mittlerer Polsternörter auf 1945.0 . . . . .	281*
Variatio saecularis . . . . .	287*
Übertragung von Sternörtern vom mittleren Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0 . . . . .	288*, 290*
Reduktion auf den scheinbaren Ort, Formeln . . . . .	251*
Reduktion von Koordinatendifferenzen vom mittleren Äquinoktium 1945.0 auf das Normaläquinoktium 1950.0 . . . . .	285*, 402*
Reduktion von Koordinatendifferenzen scheinbarer Örter auf Differenzen mittlerer Örter für den Jahresanfang . . . . .	282*, 402*
Reduktionsgrößen $\log A$ , $\log B$ , $\log C$ , $\log D$ , $E$ . . . . .	279*



	Seite
Reduktionsgrößen $A, B, C, D, A', B'$ . . . . .	270*
$f, g, G, h, H, i$ . . . . .	252*
$f', g', G'$ . . . . .	253*
$j, k$ . . . . .	253*
Zur Reduktion von 1950.0 auf das jedesmalige wahre Äquinoktium . . . . .	286*
Saturn, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	85
Heliozentrische Koordinaten . . . . .	112
Durchmesser, Phase, Lage zum Saturnsring . . . . .	314*
Bahnlage und Masse . . . . .	112
Saturnsring, Durchmesser, Lage gegen die Ekliptik . . . . .	409*
Ephemeride . . . . .	314*, 318*
Saturnstrabanten . . . . .	316*
Elongationen und Konjunktionen . . . . .	322*
Scheinbarer Ort, Formeln zur Reduktion auf den scheinbaren Ort . . . . .	251*
siehe auch Reduktionsgrößen	
Scheinbare Örter, siehe Sterne, Polsterne, Polnahe Sterne	
Schiefe der Ekliptik, Mittlere . . . . .	253*, 366*
Langperiodische Nutationsglieder $\Delta \varepsilon$ . . . . .	253*
Kurzperiodische Nutationsglieder $\Delta \varepsilon'$ . . . . .	253*
Sonne, Aberration der . . . . .	29
Anomalie, mittlere . . . . .	29
Aufgangszeiten für $+50^\circ$ Breite . . . . .	3
Reduktionstafel dazu für Breiten zwischen $+30^\circ$ und $+60^\circ$ . . . . .	382*
Aufgangszeiten für Breiten zwischen $-40^\circ$ und $+70^\circ$ . . . . .	328*
Durchgangsdauer, halbe, in Sternzeit . . . . .	2
Erdferne . . . . .	28
Erdsnähe . . . . .	28
Finsternisse . . . . .	292*, 295*
Halbmesser, mittlerer Wert . . . . .	III, VI
»  Ephemeride . . . . .	2
Koordinaten, Geozentrische, äquatoriale . . . . .	2
»  ekliptikale . . . . .	3
»  rechtwinklige, Äquinoktium 1945.0 . . . . .	20
»  »  »  »  1950.0 . . . . .	100
Länge, mittlere . . . . .	29
Parallaxe, Konstante der . . . . .	IV
Ephemeride . . . . .	29
Untergangszeiten für $+50^\circ$ Breite . . . . .	3
Reduktionstafel dazu für Breiten zwischen $+30^\circ$ und $+60^\circ$ . . . . .	382*
Untergangszeiten für Breiten zwischen $-40^\circ$ und $+70^\circ$ . . . . .	329*
Spektrum, siehe Polsterne, Sterne	
Sternbedeckungen, Mittlere Örter der Sterne, die in Mitteleuropa vom Monde bedeckt werden . . . . .	300*
Elemente der in Mitteleuropa sichtbaren Sternbedeckungen . . . . .	301*
Ein- und Austritte für Berlin-Babelsberg, Königsberg, Straßburg und Wien . . . . .	303*
Sterne, Mittlere Örter, Spektren und Größen von 1535 Sternen . . . . .	2*
Scheinbare Örter von 584 Sternen . . . . .	41*
Parallaxen von 35 Sternen . . . . .	399*
Sternwarten, Koordinatenverzeichnis . . . . .	388*



	Seite
Sternzeit im Nullmeridian für $0^h$ Welt-Zeit . . . . .	3
Sternzeit für andere Sternwarten . . . . .	388*
Verwandlung in mittlere Zeit . . . . .	369*, 371*
in Bruchteilen des tropischen Jahres . . . . .	270*, 279*
<b>Tafeln zur Berechnung</b>	
des Julianischen Datums . . . . .	374*, 376*
geozentrischer Koordinaten von Orten der Erdoberfläche . . . . .	379*
der Verwandlung von mittlerer Zeit in Sternzeit und umgekehrt	368*
der Reduktion auf den scheinbaren Ort . . . . .	252*
der Reduktion von Koordinatendifferenzen scheinbarer Örter auf	
Differenzen mittlerer Örter für den Jahresanfang . . . . .	282*
der numerischen Werte der Funktionen Sinus und Cosinus für	
in Zeit ausgedrückte Winkel . . . . .	284*
der Übertragung von Koordinatendifferenzen vom mittleren Äqui-	
noktium 1945.0 auf das Normaläquinoktium 1950.0 . . . . .	285*
der Übertragung mittlerer Sternörter von verschiedenen Äqui-	
noktien auf 1945.0 . . . . .	280*
der Übertragung von mittleren Polsternörtern auf 1945.0 . . . . .	281*
der Übertragung von Sternörtern vom mittleren Äquinoktium	
1945.0 auf das Normaläquinoktium 1950.0 . . . . .	288*, 290*
der Präzession in ekliptikalen und äquatorialen Koordinaten	364*, 366*
des halben Tagbogens . . . . .	380*
der Verwandlung von Stunden, Minuten und Sekunden in Dezi-	
malteile des Tages und umgekehrt . . . . .	372*
der Verwandlung von Minuten und Sekunden in Dezimalteile	
des Grades und umgekehrt . . . . .	367*
der Aufgangs- und Untergangszeiten von Sonne und Mond in	
Breiten zwischen $+30^\circ$ und $+60^\circ$ . . . . .	382*, 384*
der optischen Mondlibration . . . . .	386*
Tagbogen, Tafel für den halben . . . . .	380*
Trabanten des Jupiter . . . . .	312*
des Saturn . . . . .	316*
Uranus, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	94
Heliozentrische Koordinaten . . . . .	112
Bahnlage und Masse . . . . .	112
Variatio saecularis . . . . .	287*
Venus, Geozentrische Koordinaten nebst Kulminationszeiten . . . . .	58
Heliozentrische Koordinaten . . . . .	110
Bahnlage und Masse . . . . .	110
Wochentage . . . . .	2
Zeichen, Astronomische . . . . .	VIII
des Tierkreises und der Himmelskörper . . . . .	VIII
Zeit, Zeit- und Festrechnung . . . . .	VI
Verwandlung von mittlerer Zeit in Sternzeit . . . . .	368*, 370*
Verwandlung von Stunden, Minuten, Sekunden in Dezimalteile des	
Tages und umgekehrt . . . . .	372*
Verwandlung von mittlerer Zeit in Bruchteile des tropischen Jahres	252*
Verwandlung von Sternzeit in Bruchteile des tropischen Jahres	270*, 279*
Verwandlung von Sternzeit in mittlere Zeit . . . . .	369*, 371*
Zeitgleichung . . . . .	2