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für

## 1912.

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domestic and international

240)

International Organization

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**Astronomisches Jahrbuch**

für

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mit Angaben für die Oppositionen  
der Planeten (1)—(674)

für

1910.

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Erläuterungen . . . . .	[I]

## Berichtigungen.

### Jahrbuch 1912.

In dem Jahrbuch für 1912 sind folgende Anmerkungen nachzutragen:

#### Seite 156

1) Ort des Schwerpunkts. Die Reduktion auf den Hauptstern ist (Peters, Neuer Fundamental-Katalog, Seite 98):

$$\begin{array}{lll} 1912.0 & \Delta\alpha = -0^{\circ}.218 & \Delta\delta = -0''.38 \\ 1913.0 & -0.223 & -0.52 \end{array}$$

#### Seite 157

1) AR. der Mitte, Dekl. des folgenden, helleren Sterns.

2) Ort des Schwerpunkts. Die Reduktion auf den Ort des hellen Sterns beträgt (Peters, Neuer Fundamental-Katalog, Seite 98):

$$\begin{array}{lll} 1912.0 & \Delta\alpha = -0^{\circ}.042 & \Delta\delta = -0''.66 \\ 1913.0 & -0.048 & -0.57 \end{array}$$

## Vorwort.

Nach den Beschlüssen der Pariser Konferenz vom Mai 1896 (*Conférence internationale des étoiles fondamentales. Procès-Verbaux. Paris 1896*) sind im Jahrbuch vom Jahrgang 1901 an durchweg eingeführt:

- die Präzessions-Größen nach S. Newcomb (*Astr. Papers Vol. VIII. Part I*),
- die Nutations-Konstante  $9''.21$ ,
- die Aberrations-Konstante  $20''.47$ ,
- die Sonnen-Parallaxe  $8''.80$ ;

ferner sind in allen Ephemeriden der Sonne, der Planeten und der Fixsterne die kurzperiodischen, von der Mondlänge abhängigen Nutationsglieder weggelassen; ausgenommen von dieser allgemeinen Regel sind nur die Ephemeriden der Polsterne, die von Tag zu Tag fortschreiten; in diesen ist wohl das allen Sternen gemeinsame Nutationsglied  $f' = -0''.1865 \sin 2\zeta + 0''.0618 \sin(\zeta - \Gamma')$  weggelassen, die übrigen mit der Tangente der Dekl. multiplizierten Glieder sind jedoch beibehalten. Das Jahrbuch gibt übrigens die Mittel an die Hand, die weggelassenen Glieder nachträglich anzubringen, worüber die »Erläuterungen« einzusehen sind.

Die mittleren Örter der 925 Sterne des neuen Auwersschen Fundamentkalataloges sind nach der Bearbeitung desselben von Dr. J. Peters (Veröffentlichungen des K. Astronomischen Recheninstituts Nr. 33) berechnet worden.

Ausführliche Ephemeriden der scheinbaren Örter werden für 573 Sterne geboten, darunter 18 von Tag zu Tag fortschreitende der eigentlichen Polsterne.

Den angegebenen Eigenbewegungen liegt die Newcombsche Präzessions-Konstante zu Grunde.

Für die Planeten sind folgende Tafeln benutzt worden:

Sonne: Tafeln von Newcomb,

Merkur: Tafeln von Newcomb,

Venus: Tafeln von Newcomb,

Mars: Tafeln von Newcomb,

Jupiter: Tafeln von Hill,

Saturn: Tafeln von Hill,

Uranus: Tafeln von Newcomb,

Neptun: Tafeln von Newcomb.

Die Schiefe der Ekliptik ist nach Newcomb angenommen.

Für den Halbmesser der Sonne ist die bisherige Konstante nach Auwers ( $15' 59''.63$ ) beibehalten, für den Halbmesser des Mondes ist sowohl in der Ephemeride (S. 42—81) als bei der Berechnung der Finsternisse und Sternbedeckungen der von J. Peters ermittelte Wert  $15' 32''.59$ , entsprechend der Parallaxe  $57' 2''.27$ , benutzt (A. N. Nr. 3297).

Die Neigung des Mondäquators gegen die Ekliptik ist nach F. Hayn (Selenographische Koordinaten) angenommen.

Als Vergrößerungsfaktor für den Erdschatten bei Mondfinsternissen ist nach J. Hartmann  $\frac{1}{50}$  angenommen worden.

# Zeit- und Festrechnung 1912.

Das Jahr 1912 entspricht dem  
Jahr 6625 der Julianischen Periode und dem  
Jahr 7420 — 7421 der Byzantinischen Äre.

Gregorianischer oder Neuer Kalender.	Julianischer oder Alter Kalender.
Goldene Zahl . . . . .	13
Epakten . . . . .	XI
Sonnenzirkel . . . . .	17
Römer Zinszahl . . . . .	10
Sonntagsbuchstabe . . . . .	GF
Septuagesima . . . . Febr. 4	Jan. 22
Aschermittwoch . . . . Febr. 21	Febr. 8
I. Quatember . . . . Febr. 28	Febr. 15
Ostersonntag . . . . April 7	März 25
Himmelfahrt . . . . Mai 16	Mai 3
Pfingstsonntag . . . . Mai 26	Mai 13
II. Quatember . . . . Mai 29	Mai 16
III. Quatember . . . . Sept. 18	Sept. 19
I. Advent . . . . Dez. 1	Dez. 2
IV. Quatember . . . . Dez. 18	Dez. 19

## Kalender der Mohammedaner.

1330 (Schaltjahr)		1912	Jan. 21
Safar I	.	»	Febr. 19
Rebî-el-awwel I	.	»	März 20
Rebî-el-accher I	.	»	April 18
Dschemâdi-el-awwel I	.	»	Mai 18
Dschemâdi-el-accher I	.	»	Juni 16
Redscheb I	.	»	Juli 16
Schabân I	.	»	Aug. 14
Ramadân I	.	»	Sept. 13
Schewwâl I	.	»	Okt. 12
Dsû'l-kade I	.	»	Nov. 11
Dsû'l-hedsche I	.	»	

1331 (Gemeinjahr)		1913	Jan. 10
Moharrem I	.	»	Dez. 11
Safar I	.	»	

## Kalender der Juden.

5672	Schebat	I	.	.	.	.	.	.	.	.	.	.	.	1912	Jan.	20
	Adar	I	.	.	.	.	.	.	.	.	.	.	.	»	Febr.	19
		II	Fasten - Esther	.	.	.	.	.	.	.	.	.	.	»		29
		14	Purim	.	.	.	.	.	.	.	.	.	.	»	März	3
		15	Schuschan - Purim	.	.	.	.	.	.	.	.	.	.	»		4
	Nisan	I	.	.	.	.	.	.	.	.	.	.	.	»		19
		15	Passah - Anfang*	.	.	.	.	.	.	.	.	.	.	»	April	2
		16	Zweites Fest*	.	.	.	.	.	.	.	.	.	.	»		3
		21	Siebentes Fest*	.	.	.	.	.	.	.	.	.	.	»		8
		22	Achtes Fest*	.	.	.	.	.	.	.	.	.	.	»		9
	Ijar	I	.	.	.	.	.	.	.	.	.	.	.	»		18
		18	Lag - B'omer	.	.	.	.	.	.	.	.	.	.	»	Mai	5
5673	Sivan	I	.	.	.	.	.	.	.	.	.	.	.	»		17
		6	Wochenfest*	.	.	.	.	.	.	.	.	.	.	»		22
		7	Zweites Fest*	.	.	.	.	.	.	.	.	.	.	»		23
	Thamuz	I	.	.	.	.	.	.	.	.	.	.	.	»	Juni	16
5673		17	Fasten. Tempeleroberung	.	.	.	.	.	.	.	.	.	.	»	Juli	2
	Ab	I	.	.	.	.	.	.	.	.	.	.	.	»		15
		9	Fasten. Tempelverbrennung	.	.	.	.	.	.	.	.	.	.	»		23
	Elul	I	.	.	.	.	.	.	.	.	.	.	.	»	Aug.	14
{ Überzähliges Schaltjahr																
5673	Tischri	I	Neujahrsfest*	.	.	.	.	.	.	.	.	.	.	»	Sept.	12
		2	Zweites Fst*	.	.	.	.	.	.	.	.	.	.	»		13
		4	Fasten - Gedaljah	.	.	.	.	.	.	.	.	.	.	»		15
		10	Versöhnungsfest*	.	.	.	.	.	.	.	.	.	.	»		21
		15	Laubhüttenfest*	.	.	.	.	.	.	.	.	.	.	»		26
		16	Zweites Fest*	.	.	.	.	.	.	.	.	.	.	»		27
		21	Palmenfest	.	.	.	.	.	.	.	.	.	.	»	Okt.	2
		22	Versammlung oder Laubhüttenende*	.	.	.	.	.	.	.	.	.	.	»		3
		23	Gesetzesfreude*	.	.	.	.	.	.	.	.	.	.	»		4
	Marcheschwan	I	.	.	.	.	.	.	.	.	.	.	.	»		12
	Kislev	I	.	.	.	.	.	.	.	.	.	.	.	»	Nov.	11
		25	Tempelweihe	.	.	.	.	.	.	.	.	.	.	»	Dez.	5
5673	Tebet	I	.	.	.	.	.	.	.	.	.	.	.	»		11
		10	Fasten. Belagerung Jerusalems	.	.	.	.	.	.	.	.	.	.	»		20
5673	Schebat	I	.	.	.	.	.	.	.	.	.	.	.	1913	Jan.	9

Die mit \* bezeichneten Festtage werden streng gefeiert.

## REDUKTIONSELEMENTE.

1

1912	Schiefe der Ekliptik mittlere wahre		Präzession in Länge	Nutation in Länge	Aberration der Sonne	Parallaxe der Sonne
$23^{\circ}$						
Jan. 1	27	2.64	27 10.26	- 0.04	- 7.25	20.82
11		2.62	10.38	+ 1.34	6.69	20.82
21		2.61	10.55	2.72	6.24	20.80
31		2.60	10.76	4.09	5.92	20.78
Febr. 10		2.59	10.98	5.47	5.76	20.74
20	27	2.57	27 11.18	+ 6.84	- 5.76	20.70
März 1		2.56	11.35	8.22	5.90	20.65
11		2.55	11.46	9.60	6.14	20.60
21		2.53	11.51	10.97	6.42	20.54
31		2.52	11.50	12.35	6.70	20.48
April 10	27	2.51	27 11.42	+ 13.72	- 6.93	20.42
20		2.50	11.30	15.10	7.07	20.37
30		2.48	11.14	16.48	7.09	20.31
Mai 10		2.47	10.97	17.85	6.96	20.26
20		2.46	10.81	19.23	6.70	20.22
Juni 30	27	2.45	27 10.68	+ 20.61	- 6.31	20.19
9		2.43	10.59	21.98	5.83	20.16
19		2.42	10.56	23.36	5.30	20.14
29		2.41	10.59	24.73	4.75	20.13
Juli 9		2.39	10.68	26.11	4.24	20.13
19	27	2.38	27 10.81	+ 27.48	- 3.81	20.14
29		2.37	10.98	28.86	3.49	20.16
Aug. 8		2.36	11.17	30.24	3.30	20.19
18		2.34	11.36	31.61	3.24	20.23
28		2.33	11.53	32.99	3.32	20.27
Sept. 7	27	2.32	27 11.66	+ 34.36	- 3.51	20.32
17		2.30	11.73	35.74	3.76	20.37
27		2.29	11.74	37.12	4.05	20.43
Okt. 7		2.28	11.68	38.49	4.31	20.49
17		2.27	11.57	39.87	4.50	20.55
27	27	2.25	27 11.41	+ 41.24	- 4.58	20.61
Nov. 6		2.24	11.23	42.62	4.51	20.66
16		2.23	11.04	44.00	4.28	20.71
26		2.22	10.86	45.37	3.90	20.75
Dez. 6		2.20	10.73	46.75	3.39	20.78
16	27	2.19	27 10.66	+ 48.12	- 2.79	20.80
26		2.18	10.66	49.50	2.16	20.82
36		2.16	10.72	50.88	1.56	20.82
						8.95

Mittlere Schiefe der Ekliptik für 1910.0 =  $23^{\circ} 27' 3'' .58$ .

## Mittlerer Berliner Mittag.

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg.-Dauer St. - Zt.	Halbm.
Jan.	1 Mo + 3 12.19	18 <sup>h</sup> 42 <sup>m</sup> 10.93	4 25.03	-23 <sup>o</sup> 5 <sup>'</sup> 54.2	4 41.1	141.91	16° 16.01
	2 Di 3 40.66	18 46 35.96	4 24.70	23 1 13.1	5 8.6	141.83	16 16.02
	3 Mi 4 8.80	18 51 0.66	4 24.35	22 56 4.5	5 36.0	141.74	16 16.02
	4 Do 4 36.60	18 55 25.01	4 23.97	22 50 28.5	6 3.2	141.64	16 16.02
	5 Fr 5 4.01	18 59 48.98	4 23.56	22 44 25.3	6 30.2	141.53	16 16.01
	6 Sa + 5 31.01	19 4 12.54	4 23.13	-22 37 55.1	6 57.1	141.41	16 15.99
	7 So 5 57.58	19 8 35.67	4 22.68	22 30 58.0	7 23.7	141.29	16 15.97
	8 Mo 6 23.70	19 12 58.35	4 22.20	22 23 34.3	7 50.1	141.16	16 15.94
	9 Di 6 49.34	19 17 20.55	4 21.71	22 15 44.2	8 16.4	141.03	16 15.90
	10 Mi 7 14.49	19 21 42.26	4 21.18	22 7 27.8	8 42.4	140.88	16 15.86
	11 Do + 7 39.12	19 26 3.44	4 20.64	-21 58 45.4	9 8.2	140.73	16 15.81
	12 Fr 8 3.20	19 30 24.08	4 20.06	21 49 37.2	9 33.6	140.57	16 15.76
	13 Sa 8 26.70	19 34 44.14	4 19.47	21 40 3.6	9 58.8	140.41	16 15.71
	14 So 8 49.61	19 39 3.61	4 18.84	21 30 4.8	10 23.9	140.24	16 15.65
	15 Mo 9 11.90	19 43 22.45	4 18.20	21 19 40.9	10 48.5	140.06	16 15.58
	16 Di + 9 33.54	19 47 40.65	4 17.54	-21 8 52.4	11 12.9	139.88	16 15.51
	17 Mi 9 54.52	19 51 58.19	4 16.85	20 57 39.5	11 36.9	139.69	16 15.44
	18 Do 10 14.81	19 56 15.04	4 16.14	20 46 2.6	12 0.7	139.50	16 15.36
	19 Fr 10 34.39	20 0 31.18	4 15.42	20 34 1.9	12 24.0	139.30	16 15.28
	20 Sa 10 53.25	20 4 46.60	4 14.67	20 21 37.9	12 47.1	139.10	16 15.20
	21 So + 11 11.37	20 9 1.27	4 13.92	-20 8 50.8	13 9.7	138.89	16 15.11
	22 Mo 11 28.73	20 13 15.19	4 13.14	19 55 41.1	13 32.0	138.68	16 15.02
	23 Di 11 45.31	20 17 28.33	4 12.36	19 42 9.1	13 53.9	138.47	16 14.93
	24 Mi 12 1.11	20 21 40.69	4 11.55	19 28 15.2	14 15.5	138.26	16 14.83
	25 Do 12 16.11	20 25 52.24	4 10.74	19 13 59.7	14 36.6	138.04	16 14.72
	26 Fr + 12 30.29	20 30 2.98	4 9.92	-18 59 23.1	14 57.4	137.82	16 14.62
	27 Sa 12 43.65	20 34 12.90	4 9.10	18 44 25.7	15 17.8	137.60	16 14.51
	28 So 12 56.19	20 38 22.00	4 8.26	18 29 7.9	15 37.7	137.38	16 14.39
	29 Mo 13 7.90	20 42 30.26	4 7.43	18 13 30.2	15 57.2	137.15	16 14.27
	30 Di 13 18.77	20 46 37.69	4 6.59	17 57 33.0	16 16.4	136.93	16 14.15
	31 Mi + 13 28.80	20 50 44.28	4 5.76	-17 41 16.6	16 35.2	136.70	16 14.02
Febr.	1 Do 13 38.00	20 54 50.04	4 4.94	17 24 41.4	16 53.6	136.47	16 13.88
	2 Fr 13 46.38	20 58 54.98	4 4.11	17 7 47.8	17 11.5	136.24	16 13.74
	3 Sa 13 53.94	21 2 59.09	4 3.29	16 50 36.3	17 29.2	136.01	16 13.59
	4 So 14 0.68	21 7 2.38	4 2.48	16 33 7.1	17 46.4	135.78	16 13.43
	5 Mo + 14 6.60	21 11 4.86	4 1.58	-16 15 20.7	18 3.3	135.55	16 13.27
	6 Di 14 11.72	21 15 6.54	4 0.89	15 57 17.4	18 19.8	135.32	16 13.11
	7 Mi 14 16.05	21 19 7.43	4 0.10	15 38 57.6	18 35.9	135.09	16 12.94
	8 Do 14 19.59	21 23 7.53	3 59.31	15 20 21.7	18 51.6	134.86	16 12.76
	9 Fr 14 22.35	21 27 6.84	3 59.31	15 1 30.1	18 46.3	134.63	16 12.58

## Mittlerer Berliner Mittag.

Monats- und Jahrestag	Sternzeit	Mittleres Äqu. 1912.0	Länge	Diff.	Breite	Lg. Rad. v.	Diff.	Nut. C in °.01 dλ	dε
Jan.	1 1	18 38 <sup>h</sup> 58 <sup>m</sup> .74	279 41 57.81	61 8.47	+0.60	9.9926510	42	-21	-5
	2 2	18 42 55.30	280 43 6.28	61 8.33	+0.69	9.9926468	14	-13	-8
	3 3	18 46 51.86	281 44 14.61	61 8.23	+0.76	9.9926454	15	-3	-9
	4 4	18 50 48.41	282 45 22.84	61 8.16	+0.81	9.9926469	45	+8	-8
	5 5	18 54 44.97	283 46 31.00	61 8.15	+0.83	9.9926514	74	+16	-6
	6 6	18 58 41.53	284 47 39.15	61 8.16	+0.83	9.9926588	104	+23	-2
	7 7	19 2 38.09	285 48 47.31	61 8.21	+0.79	9.9926692	131	+24	+2
	8 8	19 6 34.65	286 49 55.52	61 8.26	+0.72	9.9926823	157	+21	+6
	9 9	19 10 31.21	287 51 3.78	61 8.31	+0.62	9.9926980	183	+15	+8
	10 10	19 14 27.77	288 52 12.09	61 8.31	+0.49	9.9927163	206	+9	+9
	11 11	19 18 24.32	289 53 20.43	61 8.34	+0.35	9.9927369	229	-2	+8
	12 12	19 22 20.88	290 54 28.73	61 8.30	+0.22	9.9927598	249	-10	+5
	13 13	19 26 17.44	291 55 36.94	61 8.07	+0.09	9.9927847	269	-14	+1
	14 14	19 30 14.00	292 56 45.01	61 7.86	-0.03	9.9928116	288	-15	-3
	15 15	19 34 10.56	293 57 52.87	61 7.57	-0.13	9.9928404	306	-11	-6
	16 16	19 38 7.12	294 59 0.44	61 7.20	-0.21	9.9928710	324	-4	-8
	17 17	19 42 3.67	295 0 7.64	61 6.75	-0.28	9.9929034	341	+3	-9
	18 18	19 46 0.23	297 1 14.39	61 6.22	-0.32	9.9929375	357	+11	-7
	19 19	19 49 56.79	298 2 20.61	61 5.60	-0.34	9.9929732	373	+15	-5
	20 20	19 53 53.35	299 3 26.21	61 4.90	-0.33	9.9930105	389	+17	-1
	21 21	19 57 49.91	300 4 31.11	61 4.12	-0.28	9.9930494	406	+15	+3
	22 22	20 1 46.46	301 5 35.23	61 3.26	-0.21	9.9930900	422	+9	+7
	23 23	20 5 43.02	302 6 38.49	61 2.30	-0.12	9.9931322	439	0	+9
	24 24	20 9 39.58	303 7 40.79	61 1.26	-0.02	9.9931761	456	-11	+9
	25 25	20 13 36.14	304 8 42.05	61 0.17	+0.09	9.9932217	475	-19	+7
	26 26	20 17 32.69	305 9 42.22	60 59.01	+0.21	9.9932692	494	-25	+4
	27 27	20 21 29.25	306 10 41.23	60 57.80	+0.34	9.9933186	515	-26	0
	28 28	20 25 25.81	307 11 39.03	60 56.56	+0.47	9.9933701	537	-23	-4
	29 29	20 29 22.37	308 12 35.59	60 55.31	+0.57	9.9934238	560	-16	-7
	30 30	20 33 18.92	309 13 30.90	60 54.06	+0.65	9.9934798	584	-7	-9
Febr.	31 31	20 37 15.48	310 14 24.96	60 52.84	+0.70	9.9935382	610	+4	-9
	32 32	20 41 12.04	311 15 17.80	60 51.65	+0.71	9.9935992	635	+14	-7
	33 33	20 45 8.59	312 16 9.45	60 50.51	+0.70	9.9936627	662	+21	-3
	34 34	20 49 5.15	313 16 59.96	60 49.41	+0.66	9.9937289	687	+23	+1
	35 35	20 53 1.71	314 17 49.37	60 48.35	+0.58	9.9937976	713	+23	+5
	36 36	20 56 58.26	315 18 37.72	60 47.34	+0.48	9.9938689	736	+17	+7
	37 37	21 0 54.82	316 19 25.06	60 46.36	+0.36	9.9939425	759	+8	+9
	38 38	21 4 51.37	317 20 11.42	60 45.37	+0.23	9.9940184	780	0	+8
	39 39	21 8 47.93	318 20 56.79	60 44.38	+0.09	9.9940964	800	-8	+6
	40 40	21 12 44.49	319 21 41.17	60 44.38	-0.04	9.9941764	823	-13	+3

## Mittlerer Berliner Mittag.

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg.-Dauer St. - Zt.	Halbm.
Febr. 8	Do +14 19.59	21 23 7.53	m 31	-15 20 21.7	18 51.6	134.86	16 12.76
9	Fr 14 22.35	21 27 6.84	3 58.54	15 1 30.1	19 6.8	134.63	16 12.58
10	Sa 14 24.34	21 31 5.38	3 57.77	14 42 23.3	19 21.7	134.41	16 12.40
11	So 14 25.56	21 35 3.15	3 57.00	14 23 1.6	19 36.1	134.19	16 12.21
12	Mo 14 26.01	21 39 0.15	3 56.24	14 3 25.5	19 50.2	133.97	16 12.02
13	Di +14 25.69	21 42 56.39	3 55.50	-13 43 35.3	20 3.8	133.75	16 11.83
14	Mi 14 24.63	21 46 51.89	3 54.76	13 23 31.5	20 17.0	133.53	16 11.63
15	Do 14 22.83	21 50 46.65	3 54.03	13 3 14.5	20 29.8	133.32	16 11.43
16	Fr 14 20.30	21 54 40.68	3 53.31	12 42 44.7	20 42.0	133.11	16 11.23
17	Sa 14 17.05	21 58 33.99	3 52.59	12 22 2.7	20 54.0	132.90	16 11.03
18	So +14 13.09	22 2 26.58	3 51.88	-12 1 8.7	21 5.4	132.70	16 10.82
19	Mo 14 8.42	22 6 18.46	3 51.19	11 40 3.3	21 16.5	132.50	16 10.62
20	Di 14 3.05	22 10 9.65	3 50.51	11 18 46.8	21 27.1	132.30	16 10.41
21	Mi 13 57.00	22 14 0.16	3 49.84	10 57 19.7	21 37.2	132.11	16 10.19
22	Do 13 50.29	22 17 50.00	3 49.18	10 35 42.5	21 46.9	131.92	16 9.98
23	Fr +13 42.92	22 21 39.18	3 48.53	-10 13 55.6	21 56.2	131.74	16 9.76
24	Sa 13 34.90	22 25 27.71	3 47.89	9 51 59.4	22 5.0	131.56	16 9.54
25	So 13 26.24	22 29 15.60	3 47.28	9 29 54.4	22 13.5	131.38	16 9.32
26	Mo 13 16.96	22 33 2.88	3 46.68	9 7 40.9	22 21.5	131.21	16 9.10
27	Di 13 7.08	22 36 49.56	3 46.10	8 45 19.4	22 29.2	131.05	16 8.87
28	Mi +12 56.62	22 40 35.66	3 45.53	8 22 50.2	22 36.3	130.89	16 8.64
29	Do 12 45.60	22 44 21.19	3 44.99	8 0 13.9	22 43.2	130.73	16 8.41
März 1	Fr 12 34.04	22 48 6.18	3 44.47	7 37 30.7	22 49.7	130.58	16 8.17
2	Sa 12 21.96	22 51 50.65	3 43.98	7 14 41.0	22 55.8	130.44	16 7.93
3	So 12 9.38	22 55 34.63	3 43.51	6 51 45.2	23 1.6	130.30	16 7.69
4	Mo +11 56.33	22 59 18.14	3 43.05	-6 28 43.6	23 7.0	130.16	16 7.44
5	Di 11 42.83	23 3 1.19	3 42.62	6 5 36.6	23 12.0	130.03	16 7.19
6	Mi 11 28.90	23 6 43.81	3 42.22	5 42 24.6	23 16.7	129.90	16 6.94
7	Do 11 14.56	23 10 26.03	3 41.84	5 19 7.9	23 21.0	129.78	16 6.68
8	Fr 10 59.84	23 14 7.87	3 41.47	4 55 46.9	23 25.0	129.67	16 6.42
9	Sa +10 44.76	23 17 49.34	3 41.13	-4 32 21.9	23 28.5	129.56	16 6.15
10	So 10 29.34	23 21 30.47	3 40.81	4 8 53.4	23 31.8	129.46	16 5.89
11	Mo 10 13.60	23 25 11.28	3 40.51	3 45 21.6	23 34.6	129.36	16 5.62
12	Di 9 57.56	23 28 51.79	3 40.22	3 21 47.0	23 37.1	129.27	16 5.35
13	Mi 9 41.23	23 32 32.01	3 39.96	2 58 9.9	23 39.1	129.18	16 5.08
14	Do + 9 24.63	23 36 11.97	3 39.71	-2 34 30.8	23 40.8	129.10	16 4.81
15	Fr 9 7.78	23 39 51.68	3 39.49	2 10 50.0	23 42.1	129.03	16 4.54
16	Sa 8 50.72	23 43 31.17	3 39.28	1 47 7.9	23 43.0	128.96	16 4.27
17	So 8 33.45	23 47 10.45	3 39.09	1 23 24.9	23 43.6	128.90	16 4.00
18	Mo 8 15.98	23 50 49.54	3 39.09	0 59 41.3	23 43.6	128.84	16 3.73

## Mittlerer Berliner Mittag.

Monats- und Jahrstag	Sternzeit	Mittleres Äqu. 1912.0			Lg. Rad. v.	Diff.	Nut. (in °.01 dλ   dz)
		Länge	Dif.	Breite			
Febr. 8	39 21 8 47.93	318° 20' 56.79	60° 44.38	+0.09	9.9940964	800	- 8 +6
	9 40 21 12 44.49	319 21 41.17	60 43.35	-0.04	9.9941764	818	- 13 +3
	10 41 21 16 41.04	320 22 24.52	60 42.26	-0.16	9.9942582	835	- 14 -1
	11 42 21 20 37.60	321 23 6.78	60 41.14	-0.27	9.9943417	851	- 12 -5
	12 43 21 24 34.15	322 23 47.92	60 39.99	-0.36	9.9944268	864	- 6 -8
	13 44 21 28 30.71	323 24 27.91	60 38.78	-0.43	9.9945132	877	+ 1 -9
	14 45 21 32 27.26	324 25 6.69	60 37.50	-0.47	9.9946009	890	+ 9 -8
	15 46 21 36 23.82	325 25 44.19	60 36.15	-0.49	9.9946899	901	+ 15 -6
	16 47 21 40 20.38	326 26 20.34	60 34.73	-0.47	9.9947800	912	+ 18 -2
	17 48 21 44 16.93	327 26 55.07	60 33.26	-0.43	9.9948712	921	+ 16 +2
	18 49 21 48 13.49	328 27 28.33	60 31.71	-0.37	9.9949633	930	+ 11 +6
	19 50 21 52 10.04	329 28 0.04	60 30.07	-0.29	9.9950563	939	+ 3 +8
	20 51 21 56 6.60	330 28 30.11	60 28.34	-0.19	9.9951502	949	- 7 +9
	21 52 22 0 3.15	331 28 58.45	60 26.54	-0.07	9.9952451	958	- 17 +8
	22 53 22 3 59.71	332 29 24.99	60 24.68	+0.05	9.9953409	968	- 24 +5
	23 54 22 7 56.26	333 29 49.67	60 22.75	+0.17	9.9954377	979	- 26 +1
	24 55 22 11 52.81	334 30 12.42	60 20.77	+0.29	9.9955356	989	- 25 -3
	25 56 22 15 49.37	335 30 33.19	60 18.76	+0.40	9.9956345	1002	- 20 -6
	26 57 22 19 45.92	336 30 51.95	60 16.71	+0.48	9.9957347	1016	- 10 -8
	27 58 22 23 42.48	337 31 8.66	60 14.66	+0.53	9.9958363	1030	0 -9
März 1	28 59 22 27 39.03	338 31 23.32	60 12.63	+0.56	9.9959393	1045	+ 11 -7
	29 60 22 31 35.59	339 31 35.95	60 10.63	+0.56	9.9960438	1062	+ 19 -5
	1 61 22 35 32.14	340 31 46.58	60 8.67	+0.53	9.9961500	1079	+ 23 -1
	2 62 22 39 28.70	341 31 55.25	60 6.78	+0.46	9.9962579	1097	+ 23 +3
	3 63 22 43 25.25	342 32 2.03	60 4.95	+0.35	9.9963676	1113	+ 19 +7
	4 64 22 47 21.80	343 32 6.98	60 3.18	+0.22	9.9964789	1130	+ 11 +9
	5 65 22 51 18.36	344 32 10.16	60 1.44	+0.09	9.9965919	1145	+ 2 +9
	6 66 22 55 14.91	345 32 11.60	59 59.76	-0.04	9.9967064	1159	- 5 +7
	7 67 22 59 11.47	346 32 11.36	59 58.09	-0.18	9.9968223	1173	- 11 +4
	8 68 23 3 8.02	347 32 9.45	59 56.43	-0.31	9.9969396	1183	- 14 0
	9 69 23 7 4.57	348 32 5.88	59 54.77	-0.43	9.9970579	1192	- 13 -4
	10 70 23 11 1.13	349 32 0.65	59 53.11	-0.52	9.9971771	1201	- 8 -7
	11 71 23 14 57.68	350 31 53.76	59 51.42	-0.60	9.9972972	1207	- 1 -9
	12 72 23 18 54.23	351 31 45.18	59 49.71	-0.65	9.9974179	1213	+ 6 -9
	13 73 23 22 50.79	352 31 34.89	59 47.97	-0.67	9.9975392	1218	+ 13 -7
	14 74 23 26 47.34	353 31 22.86	59 46.19	-0.66	9.9976610	1220	+ 17 -3
	15 75 23 30 43.90	354 31 9.05	59 44.37	-0.63	9.9977830	1222	+ 17 +1
	16 76 23 34 40.45	355 30 53.42	59 42.50	-0.57	9.9979052	1223	+ 14 +5
	17 77 23 38 37.00	356 30 35.92	59 40.59	-0.49	9.9980275	1222	+ 6 +7
	18 78 23 42 33.56	357 30 16.51	59 39.49	-0.39	9.9981497	1222	- 4 +9

## Mittlerer Berliner Mittag.

Monats- und Woctentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg. Dauer St. - Zt.	Halbm.
März 17	So +8 33.45	23 47 10.45	m 3	— 1 23 24.9	' "	128.90	16 " 4.00
18	Mo 8 15.98	23 50 49.54	3 39.09	0 59 41.3	23 43.7	128.84	16 3.73
19	Di 7 58.34	23 54 28.45	3 38.91	0 35 57.6	23 43.4	128.79	16 3.46
20	Mi 7 40.54	23 58 7.20	3 38.75	— 0 12 14.2	23 42.8	128.75	16 3.19
21	Do 7 22.60	0 1 45.81	3 38.61	+ 0 11 28.6	23 41.7	128.72	16 2.92
22	Fr +7 4.53	0 5 24.30	3 38.49	+ 0 35 10.3	23 40.3	128.69	16 2.65
23	Sa 6 46.35	0 9 2.68	3 38.38	0 58 50.6	23 38.5	128.67	16 2.38
24	So 6 28.09	0 12 40.98	3 38.30	1 22 29.1	23 36.3	128.65	16 2.11
25	Mo 6 9.77	0 16 19.21	3 38.23	1 46 5.4	23 33.7	128.63	16 1.84
26	Di 5 51.40	0 19 57.39	3 38.18	2 9 39.1	23 30.8	128.62	16 1.57
27	Mi +5 33.00	0 23 35.54	3 38.13	+ 2 33 9.9	23 27.5	128.62	16 1.30
28	Do 5 14.58	0 27 13.67	3 38.14	2 56 37.4	23 23.9	128.63	16 1.03
29	Fr 4 56.17	0 30 51.81	3 38.18	3 20 1.3	23 20.0	128.64	16 0.76
30	Sa 4 37.80	0 34 29.99	3 38.24	3 43 21.3	23 15.7	128.66	16 0.48
31	So 4 19.48	0 38 8.23	3 38.32	4 6 37.0	23 11.2	128.68	16 0.21
April 1	Mo +4 1.24	0 41 46.55	3 38.42	+ 4 29 48.2	23 6.3	128.71	15 59.93
2	Di 3 43.11	0 45 24.97	3 38.54	4 52 54.5	23 1.0	128.75	15 59.66
3	Mi 3 25.10	0 49 3.51	3 38.70	5 15 55.5	22 55.5	128.79	15 59.38
4	Do 3 7.24	0 52 42.21	3 38.87	5 38 51.0	22 49.7	128.83	15 59.10
5	Fr 2 49.55	0 56 21.08	3 39.06	6 1 40.7	22 43.6	128.88	15 58.82
6	Sa +2 32.06	1 0 0.14	3 39.27	+ 6 24 24.3	22 37.1	128.94	15 58.54
7	So 2 14.78	1 3 39.41	3 39.50	6 47 1.4	22 30.3	129.00	15 58.26
8	Mo 1 57.73	1 7 18.91	3 39.76	7 9 31.7	22 23.1	129.06	15 57.98
9	Di 1 40.93	1 10 58.67	3 40.02	7 31 54.8	22 15.6	129.13	15 57.70
10	Mi 1 24.40	1 14 38.69	3 40.31	7 54 10.4	22 7.8	129.21	15 57.43
11	Do +1 8.15	1 18 19.00	3 40.61	+ 8 16 18.2	21 59.6	129.29	15 57.15
12	Fr 0 52.20	1 21 59.61	3 40.92	8 38 17.8	21 51.0	129.38	15 56.87
13	Sa 0 36.57	1 25 40.53	3 41.26	9 0 8.8	21 42.2	129.47	15 56.60
14	So 0 21.27	1 29 21.79	3 41.60	9 21 51.0	21 33.0	129.56	15 56.33
15	Mo +0 6.32	1 33 3.39	3 41.96	9 43 24.0	21 23.4	129.66	15 56.06
16	Di —0 8.27	1 36 45.35	3 42.34	+ 10 4 47.4	21 13.4	129.76	15 55.79
17	Mi 0 22.48	1 40 27.69	3 42.72	10 26 0.8	21 3.1	129.87	15 55.52
18	Do 0 36.32	1 44 10.41	3 43.10	10 47 3.9	20 52.4	129.99	15 55.26
19	Fr 0 49.77	1 47 53.51	3 43.50	11 7 56.3	20 41.3	130.11	15 55.00
20	Sa 1 2.82	1 51 37.01	3 43.92	11 28 37.6	20 29.9	130.23	15 54.74
21	So —1 15.46	1 55 20.93	3 44.34	+ 11 49 7.5	20 18.2	130.36	15 54.49
22	Mo 1 27.68	1 59 5.27	3 44.76	12 9 25.7	20 6.1	130.49	15 54.24
23	Di 1 39.47	2 2 50.03	3 45.21	12 29 31.8	19 53.6	130.62	15 53.99
24	Mi 1 50.82	2 6 35.24	3 45.66	12 49 25.4	19 40.9	130.76	15 53.74
25	Do 2 1.71	2 10 20.90		13 9 6.3	130.90	15 53.50	

## Mittlerer Berliner Mittag.

Monats- und Jahrestag	Sternzeit	Mittleres Äqu. 1912.0			Lg. Rad. v.	Diff.	Nut. (in °.01)
		Länge	Diff.	Breite			d <sub>h</sub>
März	17 77	23 38 37.00	356° 30' 35.92	59° 40'.59	-0.49	9.9980275	+ 6 +7
	18 78	23 42 33.56	357° 30' 16.51	59° 38.61	-0.39	9.9981497	- 4 +9
	19 79	23 46 30.11	358° 29' 55.12	59° 36.56	-0.27	9.9982719	-14 +8
	20 80	23 50 26.66	359° 29' 31.68	59° 34.44	-0.14	9.9983939	-22 +6
	21 81	23 54 23.22	0° 29' 6.12	59° 32.26	-0.01	9.9985158	-26 +3
	22 82	23 58 19.77	1° 28' 38.38	59° 30.01	+0.11	9.9986375	-26 -1
	23 83	0° 2 16.33	2° 28' 8.39	59° 27.72	+0.22	9.9987591	-22 -5
	24 84	0° 6 12.88	3° 27' 36.11	59° 25.39	+0.32	9.9988806	-14 -8
	25 85	0° 10 9.43	4° 27' 1.50	59° 23.04	+0.39	9.9990022	- 4 -9
	26 86	0° 14 5.99	5° 26' 24.54	59° 20.68	+0.42	9.9991239	+ 7 -8
	27 87	0° 18 2.54	6° 25' 45.22	59° 18.34	+0.42	9.9992458	+16 -6
	28 88	0° 21 59.09	7° 25' 3.56	59° 16.02	+0.39	9.9993681	+22 -2
	29 89	0° 25 55.65	8° 24' 19.58	59° 13.74	+0.33	9.9994908	+23 +2
	30 90	0° 29 52.20	9° 23' 33.32	59° 11.53	+0.24	9.9996141	+21 +6
	31 91	0° 33 48.75	10° 22' 44.85	59° 9.38	+0.12	9.9997379	+14 +8
April	1 92	0° 37 45.31	11° 21' 54.23	59° 7.29	-0.01	9.9998624	+ 5 +9
	2 93	0° 41 41.86	12° 21' 1.52	59° 5.28	-0.15	9.9999875	- 3 +8
	3 94	0° 45 38.41	13° 20' 6.80	59° 3.35	-0.29	0.0001132	-10 +5
	4 95	0° 49 34.97	14° 19' 10.15	59° 1.47	-0.43	0.0002393	-14 +1
	5 96	0° 53 31.52	15° 18' 11.62	58° 59.62	-0.56	0.0003657	-13 -3
	6 97	0° 57 28.08	16° 17' 11.24	58° 57.81	-0.67	0.0004924	-10 -6
	7 98	1° 1 24.63	17° 16' 9.05	58° 56.04	-0.75	0.0006192	- 3 -8
	8 99	1° 5 21.19	18° 15' 5.09	58° 54.28	-0.81	0.0007459	+ 4 -9
	9 100	1° 9 17.74	19° 13' 59.37	58° 52.53	-0.84	0.0008725	+12 -7
	10 101	1° 13 14.29	20° 12' 51.90	58° 50.78	-0.84	0.0009988	+17 -5
	11 102	1° 17 10.85	21° 11' 42.68	58° 49.02	-0.81	0.0011246	+18 -1
	12 103	1° 21 7.40	22° 10' 31.70	58° 47.26	-0.76	0.0012498	+15 +3
	13 104	1° 25 3.96	23° 9' 18.96	58° 45.49	-0.68	0.0013743	+ 8 +7
	14 105	1° 29 0.51	24° 8' 4.45	58° 43.69	-0.58	0.0014980	- 1 +9
	15 106	1° 32 57.07	25° 6' 48.14	58° 41.85	-0.47	0.0016207	-10 +9
	16 107	1° 36 53.62	26° 5' 29.99	58° 39.96	-0.35	0.0017424	-19 +7
	17 108	1° 40 50.17	27° 4' 9.95	58° 38.02	-0.22	0.0018629	-25 +4
	18 109	1° 44 46.73	28° 2' 47.97	58° 36.00	-0.09	0.0019822	-26 0
	19 110	1° 48 43.28	29° 1' 23.97	58° 33.94	+0.03	0.0021002	-24 -4
	20 111	1° 52 39.84	29° 59' 57.91	58° 31.84	+0.13	0.0022169	-17 -7
	21 112	1° 56 36.39	30° 58' 29.75	58° 29.71	+0.21	0.0023324	- 7 -9
	22 113	2° 0 32.95	31° 56' 59.46	58° 27.55	+0.26	0.0024468	+ 3 -9
	23 114	2° 4 29.50	32° 55' 27.01	58° 25.37	+0.27	0.0025602	+14 -7
	24 115	2° 8 26.06	33° 53' 52.38	58° 23.19	+0.25	0.0026726	+20 -3
	25 116	2° 12 22.61	34° 52' 15.57	58° 21.92	+0.20	0.0027842	+23 +1

## Mittlerer Berliner Mittag.

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg.-Dauer St. - Zt.	Halbm.
April 24	Mi —1 50.82	2 6 35.24	m s	+12 49 25.4	19 40.9	130.76	15 53.74
	25 Do 2 1.71	2 10 20.90	3 45.66	13 9 6.3	19 27.8	130.90	15 53.50
	26 Fr 2 12.14	2 14 7.03	3 46.13	13 28 34.1	19 14.4	131.04	15 53.25
	27 Sa 2 22.09	2 17 53.63	3 47.09	13 47 48.5	19 0.7	131.18	15 53.01
	28 So 2 31.56	2 21 40.72	3 47.59	14 6 49.2	18 46.7	131.33	15 52.77
	29 Mo —2 40.53	2 25 28.31	3 48.10	+14 25 35.9	18 32.5	131.48	15 52.53
	30 Di 2 48.98	2 29 16.41	3 48.63	14 44 8.4	18 17.9	131.64	15 52.29
Mai 1	Mi 2 56.91	2 33 5.04	3 49.16	15 2 26.3	18 3.1	131.79	15 52.06
	2 Do 3 4.30	2 36 54.20	3 49.71	15 20 29.4	17 47.9	131.95	15 51.82
	3 Fr 3 11.15	2 40 43.91	3 50.26	15 38 17.3	17 32.4	132.11	15 51.58
	4 Sa —3 17.44	2 44 34.17	3 50.83	+15 55 49.7	17 16.7	132.27	15 51.35
	5 So 3 23.17	2 48 25.00	3 51.41	16 13 6.4	17 0.7	132.43	15 51.12
	6 Mo 3 28.32	2 52 16.41	3 51.98	16 30 7.1	16 44.4	132.59	15 50.89
	7 Di 3 32.89	2 56 8.39	3 52.57	16 46 51.5	16 27.7	132.75	15 50.66
	8 Mi 3 36.88	3 0 0.96	3 53.15	17 3 19.2	16 10.8	132.91	15 50.43
	9 Do —3 40.28	3 3 54.11	3 53.75	+17 19 30.0	15 53.5	133.07	15 50.21
	10 Fr 3 43.09	3 7 47.86	3 54.33	17 35 23.5	15 36.0	133.24	15 49.99
Juni 11	Sa 3 45.31	3 11 42.19	3 54.93	17 50 59.5	15 18.1	133.40	15 49.77
	12 So 3 46.95	3 15 37.12	3 55.51	18 6 17.6	15 0.0	133.57	15 49.55
	13 Mo 3 47.99	3 19 32.63	3 56.11	18 21 17.6	14 41.6	133.73	15 49.34
	14 Di —3 48.44	3 23 28.74	3 56.69	+18 35 59.2	14 22.8	133.90	15 49.14
	15 Mi 3 48.30	3 27 25.43	3 57.27	18 50 22.0	14 3.7	134.06	15 48.93
	16 Do 3 47.59	3 31 22.70	3 57.83	19 4 25.7	13 44.3	134.22	15 48.74
	17 Fr 3 46.32	3 35 20.53	3 58.39	19 18 10.0	13 24.7	134.38	15 48.54
	18 Sa 3 44.49	3 39 18.92	3 58.95	19 31 34.7	13 4.7	134.54	15 48.35
	19 So —3 42.10	3 43 17.87	3 59.49	+19 44 39.4	12 44.5	134.70	15 48.17
	20 Mo 3 39.16	3 47 17.36	4 0.01	19 57 23.9	12 24.1	134.85	15 47.99
Juni 21	Di 3 35.70	3 51 17.37	4 0.53	20 9 48.0	12 3.3	135.00	15 47.82
	22 Mi 3 31.73	3 55 17.90	4 1.04	20 21 51.3	11 42.4	135.15	15 47.65
	23 Do 3 27.25	3 59 18.94	4 1.54	20 33 33.7	11 21.1	135.30	15 47.48
	24 Fr —3 22.27	4 3 20.48	4 2.02	+20 44 54.8	10 59.6	135.45	15 47.32
	25 Sa 3 16.80	4 7 22.50	4 2.51	20 55 54.4	10 38.0	135.59	15 47.16
	26 So 3 10.85	4 11 25.01	4 2.98	21 6 32.4	10 16.2	135.73	15 47.00
	27 Mo 3 4.43	4 15 27.99	4 3.44	21 16 48.6	9 54.1	135.87	15 46.84
	28 Di 2 57.55	4 19 31.43	4 3.89	21 26 42.7	9 31.8	136.00	15 46.69
	29 Mi —2 50.22	4 23 35.32	4 4.33	+21 36 14.5	9 9.4	136.13	15 46.54
	30 Do 2 42.45	4 27 39.65	4 4.76	21 45 23.9	8 46.8	136.25	15 46.40
Juni 31	Fr 2 34.24	4 31 44.41	4 5.19	21 54 10.7	8 24.0	136.37	15 46.25
	1 Sa 2 25.61	4 35 49.60	4 5.60	22 2 34.7	8 1.1	136.48	15 46.11
2 So	2 16.57	4 39 55.20		22 10 35.8		136.59	15 45.98

## Mittlerer Berliner Mittag.

Monats- und dienstag	Sternzeit	Mittleres Äqu. 1912.0	Länge	Diff.	Breite	Lg. Rad. v.	Diff.	Nut. (in °.0.1)
April 24	115 2 8 <sup>m</sup> 26.06	33° 53' 52.38	58° 23.19	+0.25	0.0026726	1116	+20	-3
25	116 2 12 22.61	34° 52' 15.57	58° 21.05	+0.20	0.0027842	1109	+23	+1
26	117 2 16 19.17	35° 50' 36.62	58° 18.96	+0.12	0.0028951	1102	+21	+5
27	118 2 20 15.72	36° 48' 55.58	58° 16.92	+0.01	0.0030053	1098	+16	+7
28	119 2 24 12.28	37° 47' 12.50	58° 14.95	-0.12	0.0031151	1093	+8	+9
29	120 2 28 8.84	38° 45' 27.45	58° 13.66	-0.26	0.0032244	1088	0	+8
Mai 30	121 2 32 5.39	39° 43' 40.51	58° 11.24	-0.41	0.0033332	1084	-8	+6
1	122 2 36 1.95	40° 41' 51.75	58° 9.49	-0.56	0.0034416	1080	-13	+3
2	123 2 39 58.50	41° 40' 1.24	58° 7.82	-0.69	0.0035496	1075	-14	-1
3	124 2 43 55.06	42° 38' 9.06	58° 6.24	-0.79	0.0036571	1068	-12	-5
4	125 2 47 51.61	43° 36' 15.30	58° 4.72	-0.87	0.0037639	1062	-5	-8
5	126 2 51 48.17	44° 34' 20.02	58° 3.25	-0.93	0.0038701	1054	+2	-9
6	127 2 55 44.73	45° 32' 23.27	58° 1.83	-0.96	0.0039755	1044	+11	-8
7	128 2 59 41.28	46° 30' 25.10	58° 0.44	-0.97	0.0040799	1034	+16	-6
8	129 3 3 37.84	47° 28' 25.54	57° 59.08	-0.95	0.0041833	1022	+19	-2
9	130 3 7 34.40	48° 26' 24.62	57° 57.75	-0.90	0.0042855	1010	+16	+2
10	131 3 11 30.95	49° 24' 22.37	57° 56.45	-0.83	0.0043865	996	+12	+6
11	132 3 15 27.51	50° 22' 18.82	57° 55.16	-0.74	0.0044861	980	+3	+8
12	133 3 19 24.07	51° 20' 13.98	57° 53.88	-0.63	0.0045841	964	-7	+9
13	134 3 23 20.62	52° 18' 7.86	57° 52.59	-0.51	0.0046805	945	-17	+8
14	135 3 27 17.18	53° 16' 0.45	57° 51.28	-0.38	0.0047750	926	-24	+5
15	136 3 31 13.74	54° 13' 51.73	57° 49.93	-0.25	0.0048676	905	-27	+1
16	137 3 35 10.29	55° 11' 41.66	57° 48.53	-0.13	0.0049581	885	-25	-3
17	138 3 39 6.85	56° 9' 30.19	57° 47.09	-0.02	0.0050466	864	-19	-6
18	139 3 43 3.41	57° 7' 17.28	57° 45.59	+0.07	0.0051330	842	-11	-8
19	140 3 46 59.96	58° 5' 2.87	57° 44.05	+0.12	0.0052172	821	0	-9
20	141 3 50 56.52	59° 2' 46.92	57° 42.48	+0.14	0.0052993	802	+10	-7
21	142 3 54 53.08	60° 0' 29.40	57° 40.90	+0.14	0.0053795	783	+18	-4
22	143 3 58 49.64	60° 58' 10.30	57° 39.32	+0.11	0.0054578	765	+22	0
23	144 4 2 46.19	61° 55' 49.62	57° 37.76	+0.04	0.0055343	749	+22	+3
24	145 4 6 42.75	62° 53' 27.38	57° 36.24	-0.06	0.0056092	734	+17	+7
25	146 4 10 39.31	63° 51' 3.62	57° 34.77	-0.18	0.0056826	720	+10	+9
26	147 4 14 35.87	64° 48' 38.39	57° 33.34	-0.31	0.0057546	707	+2	+9
27	148 4 18 32.43	65° 46' 11.73	57° 32.01	-0.45	0.0058253	694	-6	+7
28	149 4 22 28.98	66° 43' 43.74	57° 30.76	-0.59	0.0058947	682	-11	+4
29	150 4 26 25.54	67° 41' 14.50	57° 29.59	-0.71	0.0059629	671	-13	0
30	151 4 30 22.10	68° 38' 44.09	57° 28.50	-0.81	0.0060300	659	-12	-4
31	152 4 34 18.66	69° 36' 12.59	57° 27.49	-0.90	0.0060959	647	-7	-7
Juni 1	153 4 38 15.21	70° 33' 40.08	57° 26.57	-0.97	0.0061606	634	+1	-9
2	154 4 42 11.77	71° 31' 6.65	57° 26.57	-1.01	0.0062240	624	+8	-9

## Mittlerer Berliner Mittag.

Monats- und Woctentag		Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg.-Dauer St.-Zt.	Halbm.
Juni	1 Sa	—2 25.61	4 35 49.60	m s	+22 2 34.7	8 1.1	136.48	15 46.11
	2 So	2 16.57	4 39 55.20	4 5.60	22 10 35.8	7 38.0	136.59	15 45.98
	3 Mo	2 7.14	4 44 1.19	4 5.99	22 18 13.8	7 14.7	136.69	15 45.84
	4 Di	1 57.33	4 48 7.56	4 6.37	22 25 28.5	6 51.2	136.79	15 45.71
	5 Mi	1 47.15	4 52 14.30	4 6.74	22 32 19.7	6 27.6	136.89	15 45.58
	6 Do	—1 36.62	4 56 21.38	4 7.08	+22 38 47.3	6 3.8	136.98	15 45.45
	7 Fr	1 25.76	5 0 28.80	4 7.42	22 44 51.1	5 40.0	137.07	15 45.33
	8 Sa	1 14.59	5 4 36.53	4 7.73	22 50 31.1	5 16.0	137.15	15 45.21
	9 So	1 3.13	5 8 44.55	4 8.02	22 55 47.1	4 51.9	137.22	15 45.10
	10 Mo	0 51.39	5 12 52.85	4 8.30	23 0 39.0	4 27.6	137.29	15 44.99
	11 Di	—0 39.40	5 17 1.40	4 8.55	+23 5 6.6	4 3.2	137.35	15 44.89
	12 Mi	0 27.18	5 21 10.17	4 8.98	23 9 9.8	3 38.7	137.40	15 44.79
	13 Do	0 14.76	5 25 19.15	4 9.16	23 12 48.5	3 14.2	137.45	15 44.69
	14 Fr	—0 2.16	5 29 28.31	4 9.31	23 16 2.7	2 49.5	137.49	15 44.60
	15 Sa	+0 10.59	5 33 37.62	4 9.42	23 18 52.2	2 24.8	137.53	15 44.52
	16 So	+0 23.45	5 37 47.04	4 9.51	+23 21 17.0	2 0.1	137.56	15 44.44
	17 Mo	0 36.40	5 41 56.55	4 9.58	23 23 17.1	1 35.3	137.58	15 44.37
	18 Di	0 49.42	5 46 6.13	4 9.61	23 24 52.4	1 10.4	137.60	15 44.31
	19 Mi	1 2.47	5 50 15.74	4 9.62	23 26 2.8	0 45.6	137.61	15 44.25
	20 Do	1 15.53	5 54 25.36	4 9.61	23 26 48.4	0 20.8	137.62	15 44.19
	21 Fr	+1 28.58	5 58 34.97	4 9.56	+23 27 9.2	0 4.1	137.62	15 44.14
	22 Sa	1 41.59	6 2 44.53	4 9.49	23 27 5.1	0 28.9	137.61	15 44.09
	23 So	1 54.52	6 6 54.02	4 9.40	23 26 36.2	0 53.6	137.60	15 44.05
	24 Mo	2 7.36	6 11 3.42	4 9.40	23 25 42.6	1 18.3	137.58	15 44.01
	25 Di	2 20.10	6 15 12.72	4 9.30	23 24 24.3	1 43.1	137.55	15 43.98
	26 Mi	+2 32.71	6 19 21.89	4 9.02	+23 22 41.2	2 7.7	137.51	15 43.95
	27 Do	2 45.17	6 23 30.91	4 8.85	23 20 33.5	2 32.2	137.47	15 43.92
	28 Fr	2 57.47	6 27 39.76	4 8.67	23 18 1.3	2 56.7	137.42	15 43.90
	29 Sa	3 9.58	6 31 48.43	4 8.46	23 15 4.6	3 21.1	137.37	15 43.88
	30 So	3 21.48	6 35 56.89	4 8.23	23 11 43.5	3 45.4	137.31	15 43.86
Juli	1 Mo	+3 33.15	6 40 5.12	4 7.99	+23 7 58.1	4 9.7	137.24	15 43.84
	2 Di	3 44.58	6 44 13.11	4 7.73	23 3 48.4	4 33.8	137.17	15 43.83
	3 Mi	3 55.75	6 48 20.84	4 7.45	22 59 14.6	4 57.8	137.09	15 43.83
	4 Do	4 6.64	6 52 28.29	4 7.15	22 54 16.8	5 21.8	137.01	15 43.82
	5 Fr	4 17.24	6 56 35.44	4 6.84	22 48 55.0	5 45.6	136.92	15 43.82
	6 Sa	+4 27.52	7 0 42.28	4 6.51	+22 43 9.4	6 9.2	136.82	15 43.83
	7 So	4 37.47	7 4 48.79	4 6.15	22 37 0.2	6 32.8	136.72	15 43.83
	8 Mo	4 47.06	7 8 54.94	4 5.79	22 30 27.4	6 56.2	136.61	15 43.84
	9 Di	4 56.29	7 13 0.73	4 5.40	22 23 31.2	7 19.4	136.50	15 43.86
	10 Mi	5 5.13	7 17 6.13		22 16 11.8		136.38	15 43.88

## Mittlerer Berliner Mittag.

Monats- und Jahrstag	Sternzeit	Mittleres Äqu. 1912.0			Lg. Rad. v.	Diff.	Nut. C in o°.oi d. i. d.e
		Länge	Diff.	Breite			
Juni	1 153	4 38 <sup>m</sup> 15.21	70 33 40.08	57 26.57	-0.97	0.0061606	634 + 1 -9
	2 154	4 42 11.77	71 31 6.65	57 25.72	-1.01	0.0062240	621 + 8 -9
	3 155	4 46 8.33	72 28 32.37	57 24.93	-1.02	0.0062861	607 + 15 -6
	4 156	4 50 4.89	73 25 57.30	57 24.20	-1.01	0.0063468	592 + 18 -3
	5 157	4 54 1.45	74 23 21.50	57 23.53	-0.97	0.0064060	577 + 18 +1
	6 158	4 57 58.01	75 20 45.03	57 22.92	-0.90	0.0064637	559 + 14 +5
	7 159	5 1 54.56	76 18 7.95	57 22.36	-0.81	0.0065196	541 + 6 +7
	8 160	5 5 51.12	77 15 30.31	57 21.83	-0.70	0.0065737	523 - 4 +9
	9 161	5 9 47.68	78 12 52.14	57 21.33	-0.59	0.0066260	502 - 13 +8
	10 162	5 13 44.24	79 10 13.47	57 20.85	-0.47	0.0066762	481 - 22 +6
	11 163	5 17 40.80	80 7 34.32	57 20.38	-0.35	0.0067243	457 - 27 +2
	12 164	5 21 37.36	81 4 54.70	57 19.89	-0.22	0.0067700	433 - 26 -1
	13 165	5 25 33.92	82 2 14.59	57 19.37	-0.10	0.0068133	408 - 22 -5
	14 166	5 29 30.47	82 59 33.96	57 18.81	-0.01	0.0068541	382 - 14 -8
	15 167	5 33 27.03	83 56 52.77	57 18.20	+0.04	0.0068923	- 4 -9
	16 168	5 37 23.59	84 54 10.97	57 17.54	+0.06	0.0069278	355 + 7 -8
	17 169	5 41 20.15	85 51 28.51	57 16.85	+0.05	0.0069606	328 + 15 -6
	18 170	5 45 16.71	86 48 45.36	57 16.13	+0.02	0.0069910	304 + 21 -2
	19 171	5 49 13.27	87 46 1.49	57 15.39	-0.04	0.0070189	279 + 22 +2
	20 172	5 53 9.83	88 43 16.88	57 14.67	-0.12	0.0070444	255 + 19 +6
	21 173	5 57 6.39	89 40 31.55	57 13.97	-0.23	0.0070677	233 + 13 +8
	22 174	6 1 2.94	90 37 45.52	57 13.30	-0.35	0.0070890	213 + 5 +9
	23 175	6 4 59.50	91 34 58.82	57 12.68	-0.47	0.0071083	193 - 4 +8
	24 176	6 8 56.06	92 32 11.50	57 12.15	-0.60	0.0071259	176 - 10 +5
	25 177	6 12 52.62	93 29 23.65	57 11.69	-0.72	0.0071417	158 - 13 +1
	26 178	6 16 49.18	94 26 35.34	57 11.30	-0.83	0.0071559	142 - 13 -3
	27 179	6 20 45.74	95 23 46.64	57 10.98	-0.92	0.0071685	126 - 8 -6
	28 180	6 24 42.30	96 20 57.62	57 10.75	-0.98	0.0071796	111 - 1 -8
	29 181	6 28 38.85	97 18 8.37	57 10.61	-1.01	0.0071892	96 + 6 -9
	30 182	6 32 35.41	98 15 18.98	57 10.54	-1.02	0.0071972	80 + 13 -7
Juli	1 183	6 36 31.97	99 12 29.52	57 10.56	-1.01	0.0072037	65 + 18 -4
	2 184	6 40 28.53	100 9 40.08	57 10.65	-0.98	0.0072087	50 + 19 0
	3 185	6 44 25.09	101 6 50.73	57 10.80	-0.92	0.0072121	34 + 16 +4
	4 186	6 48 21.65	102 4 1.53	57 11.03	-0.83	0.0072138	17 + 9 +7
	5 187	6 52 18.21	103 1 12.56	57 11.33	-0.73	0.0072138	0 + 9 +9
	6 188	6 56 14.76	103 58 23.89	57 11.69	-0.62	0.0072120	37 - 10 +9
	7 189	7 0 11.32	104 55 35.58	57 12.08	-0.49	0.0072083	37 - 20 +7
	8 190	7 4 7.88	105 52 47.66	57 12.50	-0.36	0.0072026	57 - 26 +4
	9 191	7 8 4.44	106 50 0.16	57 12.96	-0.24	0.0071948	78 - 27 0
	10 192	7 12 1.00	107 47 13.12	57 12.96	-0.13	0.0071847	101 - 24 -4

## Mittlerer Berliner Mittag.

Monats- und Wochnetag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg.-Dauer St. - Zi.	Halbm.
Juli 9 Di	+4 56.29	7 13 0.73	m s	+22° 23' 31.2	7 19.4	136.50	15 43.86
10 Mi	5 5.13	7 17 6.13	4 5.40	22 16 11.8	7 42.5	136.38	15 43.88
11 Do	5 13.56	7 21 11.12	4 4.99	22 8 29.3	8 5.4	136.26	15 43.91
12 Fr	5 21.57	7 25 15.69	4 4.57	22 0 23.9	8 28.1	136.13	15 43.94
13 Sa	5 29.14	7 29 19.81	4 4.12	21 51 55.8	8 50.6	136.00	15 43.98
14 So	+5 36.24	7 33 23.47	4 3.17	+21 43 5.2	9 12.9	135.87	15 44.03
15 Mo	5 42.85	7 37 26.64	4 2.67	21 33 52.3	9 35.0	135.73	15 44.08
16 Di	5 48.96	7 41 29.31	4 2.15	21 24 17.3	9 56.9	135.59	15 44.13
17 Mi	5 54.55	7 45 31.46	4 1.61	21 14 20.4	10 18.5	135.44	15 44.19
18 Do	5 59.60	7 49 33.07	4 1.05	21 4 1.9	10 39.8	135.29	15 44.26
19 Fr	+6 4.10	7 53 34.12	4 0.49	+20 53 22.1	11 0.9	135.14	15 44.33
20 Sa	6 8.03	7 57 34.61	3 59.92	20 42 21.2	11 21.8	134.99	15 44.41
21 So	6 11.39	8 1 34.53	3 59.33	20 30 59.4	11 42.5	134.83	15 44.49
22 Mo	6 14.17	8 5 33.86	3 58.74	20 19 16.9	12 2.8	134.67	15 44.58
23 Di	6 16.35	8 9 32.60	3 58.15	20 7 14.1	12 22.8	134.51	15 44.67
24 Mi	+6 17.94	8 13 30.75	3 57.56	+19 54 51.3	12 42.7	134.35	15 44.76
25 Do	6 18.94	8 17 28.31	3 56.95	19 42 8.6	13 2.3	134.18	15 44.86
26 Fr	6 19.34	8 21 25.26	3 56.35	19 29 6.3	13 21.6	134.01	15 44.96
27 Sa	6 19.13	8 25 21.61	3 55.75	19 15 44.7	13 40.7	133.84	15 45.06
28 So	6 18.32	8 29 17.36	3 55.14	19 2 4.0	13 59.5	133.67	15 45.17
29 Mo	+6 16.91	8 33 12.50	3 54.54	+18 48 4.5	14 18.0	133.50	15 45.28
30 Di	6 14.89	8 37 7.04	3 53.94	18 33 46.5	14 36.2	133.33	15 45.39
31 Mi	6 12.27	8 41 0.98	3 53.35	18 19 10.3	14 54.3	133.16	15 45.50
Aug. 1 Do	6 9.07	8 44 54.33	3 52.76	18 4 16.0	15 12.0	132.98	15 45.62
2 Fr	6 5.27	8 48 47.09	3 52.16	17 49 4.0	15 29.5	132.81	15 45.75
3 Sa	+6 0.87	8 52 39.25	3 51.57	+17 33 34.5	15 46.6	132.63	15 45.87
4 So	5 55.89	8 56 30.82	3 50.99	17 17 47.9	16 3.5	132.46	15 46.00
5 Mo	5 50.32	9 0 21.81	3 50.41	17 1 44.4	16 20.2	132.28	15 46.13
6 Di	5 44.17	9 4 12.22	3 49.83	16 45 24.2	16 36.6	132.11	15 46.26
7 Mi	5 37.45	9 8 2.05	3 49.26	16 28 47.6	16 52.6	131.94	15 46.40
8 Do	+5 30.16	9 11 51.31	3 48.70	+16 11 55.0	17 8.3	131.77	15 46.55
9 Fr	5 22.30	9 15 40.01	3 48.13	15 54 46.7	17 23.8	131.60	15 46.70
10 Sa	5 13.87	9 19 28.14	3 47.57	15 37 22.9	17 39.0	131.43	15 46.85
11 So	5 4.88	9 23 15.71	3 47.01	15 19 43.9	17 53.7	131.26	15 47.01
12 Mo	4 55.34	9 27 2.72	3 46.45	15 1 50.2	18 8.2	131.10	15 47.17
13 Di	+4 45.24	9 30 49.17	3 45.90	+14 43 42.0	18 22.3	130.94	15 47.34
14 Mi	4 34.58	9 34 35.07	3 45.35	14 25 19.7	18 36.0	130.78	15 47.51
15 Do	4 23.37	9 38 20.42	3 44.80	14 6 43.7	18 49.5	130.62	15 47.69
16 Fr	4 11.62	9 42 5.22	3 44.26	13 47 54.2	19 2.6	130.47	15 47.87
17 Sa	3 59.32	9 45 49.48		13 28 51.6		130.32	15 48.05

## Mittlerer Berliner Mittag.

Monats- und Jahrestag	Sternzeit	Mittleres Äqu. 1912.0			Lg. Rad. v.	Diff.	Nut. (in °'') dλ dε
		Länge	Diff.	Breite			
Juli	9 191	7 8 <sup>m</sup> 4.44	106° 50' 0.16	57 12.96	-0.24	0.0071948	101 -27 0
	10 192	7 12 1.00	107 47 13.12	57 13.43	-0.13	0.0071847	125 -24 -4
	11 193	7 15 57.56	108 44 26.55	57 13.89	-0.04	0.0071722	150 -17 -7
	12 194	7 19 54.11	109 41 40.44	57 14.34	+0.03	0.0071572	177 -7 -9
	13 195	7 23 50.67	110 38 54.78	57 14.74	+0.08	0.0071395	203 +3 -8
	14 196	7 27 47.23	111 36 9.52	57 15.09	+0.10	0.0071192	230 +13 -6
	15 197	7 31 43.79	112 33 24.61	57 15.37	+0.08	0.0070962	257 +19 -3
	16 198	7 35 40.35	113 30 39.98	57 15.63	+0.03	0.0070705	283 +22 +1
	17 199	7 39 36.91	114 27 55.61	57 15.86	-0.06	0.0070422	308 +20 +5
	18 200	7 43 33.46	115 25 11.47	57 16.07	-0.17	0.0070114	332 +15 +8
	19 201	7 47 30.02	116 22 27.54	57 16.28	-0.29	0.0069782	355 +7 -9
	20 202	7 51 26.58	117 19 43.82	57 16.51	-0.42	0.0069427	375 -1 +8
	21 203	7 55 23.14	118 17 0.33	57 16.79	-0.54	0.0069052	395 -8 +6
	22 204	7 59 19.69	119 14 17.12	57 17.12	-0.66	0.0068657	412 -13 +2
	23 205	8 3 16.25	120 11 34.24	57 17.50	-0.77	0.0068245	429 -13 -2
	24 206	8 7 12.81	121 8 51.74	57 17.94	-0.86	0.0067816	446 -10 -5
	25 207	8 11 9.36	122 6 9.68	57 18.46	-0.92	0.0067370	461 -4 -8
	26 208	8 15 5.92	123 3 28.14	57 19.05	-0.96	0.0066909	475 +4 -9
	27 209	8 19 2.48	124 0 47.19	57 19.72	-0.97	0.0066434	489 +12 -8
	28 210	8 22 59.04	124 58 6.91	57 20.46	-0.96	0.0065945	502 +17 -5
	29 211	8 26 55.59	125 55 27.37	57 21.29	-0.92	0.0065443	516 +20 -2
	30 212	8 30 52.15	126 52 48.66	57 22.19	-0.86	0.0064927	530 +18 +2
Aug.	31 213	8 34 48.71	127 50 10.85	57 23.17	-0.77	0.0064397	544 +12 +6
	1 214	8 38 45.26	128 47 34.02	57 24.21	-0.66	0.0063853	558 +3 +8
	2 215	8 42 41.82	129 44 58.23	57 25.33	-0.54	0.0063295	572 -7 +9
	3 216	8 46 38.38	130 42 23.56	57 26.51	--0.41	0.0062723	587 -16 +8
	4 217	8 50 34.93	131 39 50.07	57 27.76	--0.27	0.0062136	603 -24 +5
	5 218	8 54 31.49	132 37 17.83	57 29.07	--0.14	0.0061533	620 -27 +1
	6 219	8 58 28.05	133 34 46.90	57 30.42	--0.02	0.0060913	638 -25 -3
	7 220	9 2 24.60	134 32 17.32	57 31.78	+0.08	0.0060275	657 -20 -6
	8 221	9 6 21.16	135 29 49.10	57 33.14	+0.16	0.0059618	678 -11 -8
	9 222	9 10 17.71	136 27 22.24	57 34.50	+0.21	0.0058940	699 -1 -9
	10 223	9 14 14.27	137 24 56.74	57 35.84	+0.22	0.0058241	721 +9 -7
	11 224	9 18 10.83	138 22 32.58	57 37.14	+0.20	0.0057520	745 +17 -4
	12 225	9 22 7.38	139 20 9.72	57 38.39	+0.16	0.0056775	768 +21 0
	13 226	9 26 3.94	140 17 48.11	57 39.58	+0.09	0.0056007	791 +21 +4
	14 227	9 30 0.49	141 15 27.69	57 40.70	-0.01	0.0055216	814 +17 +7
	15 228	9 33 57.05	142 13 8.39	57 41.79	-0.13	0.0054402	835 +10 +9
	16 229	9 37 53.60	143 10 50.18	57 42.86	-0.26	0.0053567	855 +2 -9
	17 230	9 41 50.16	144 8 33.04	57 43.93	-0.39	0.0052712	878 -7 +7

## Mittlerer Berliner Mittag.

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durehg.-Dauer St. - Zt.	Halbin.
Aug. 16	Fr +4 11.62	9 42 5.22	m s	+13 47 54.2	19 2.6	130.47	15 47.87
	17 Sa 3 59.32	9 45 49.48	3 44.26	13 28 51.6	19 15.4	130.32	15 48.06
	18 So 3 46.50	9 49 33.21	3 43.73	13 9 36.2	19 27.8	130.17	15 48.25
	19 Mo 3 33.16	9 53 16.43	3 43.22	12 50 8.4	19 39.9	130.03	15 48.44
	20 Di 3 19.31	9 56 59.14	3 42.71	12 30 28.5	19 51.6	129.89	15 48.64
	21 Mi +3 4.97	10 0 41.36	3 41.73	+12 10 36.9	20 3.1	129.75	15 48.84
	22 Do 2 50.15	10 4 23.09	3 41.27	11 50 33.8	20 14.3	129.62	15 49.04
	23 Fr 2 34.87	10 8 43.6	3 40.82	11 30 19.5	20 25.1	129.49	15 49.25
	24 Sa 2 19.13	10 11 45.18	3 40.39	11 9 54.4	20 35.7	129.36	15 49.45
	25 So 2 2.96	10 15 25.57	3 39.97	10 49 18.7	20 45.9	129.24	15 49.66
	26 Mo +1 46.38	10 19 5.54	3 39.58	+10 28 32.8	20 55.8	129.12	15 49.88
	27 Di 1 29.40	10 22 45.12	3 39.19	10 7 37.0	21 5.5	129.01	15 50.09
	28 Mi 1 12.04	10 26 24.31	3 38.83	9 46 31.5	21 14.8	128.90	15 50.31
	29 Do 0 54.32	10 30 3.14	3 38.49	9 25 16.7	21 23.8	128.80	15 50.53
	30 Fr 0 36.26	10 33 41.63	3 38.17	9 3 52.9	21 32.6	128.70	15 50.75
	31 Sa +0 17.87	10 37 19.80	3 37.86	+ 8 42 20.3	21 41.0	128.60	15 50.97
Sept.	1 So -0 0.83	10 40 57.66	3 37.56	8 20 39.3	21 49.2	128.51	15 51.19
	2 Mo 0 19.82	10 44 35.22	3 37.30	7 58 50.1	21 57.0	128.42	15 51.41
	3 Di 0 39.07	10 48 12.52	3 37.06	7 36 53.1	22 4.5	128.34	15 51.64
	4 Mi 0 58.56	10 51 49.58	3 36.83	7 14 48.6	22 11.8	128.26	15 51.87
	5 Do -1 18.28	10 55 26.41	3 36.62	+ 6 52 36.8	22 18.7	128.19	15 52.10
	6 Fr 1 38.22	10 59 3.03	3 36.42	6 30 18.1	22 25.3	128.12	15 52.33
	7 Sa 1 58.36	II 2 39.45	3 36.24	6 7 52.8	22 31.5	128.06	15 52.57
	8 So 2 18.67	II 6 15.69	3 36.08	5 45 21.3	22 37.3	128.00	15 52.81
	9 Mo 2 39.14	II 9 51.77	3 35.93	5 22 44.0	22 42.9	127.95	15 53.05
	10 Di -2 59.76	II 13 27.70	3 35.80	+ 5 0 1.1	22 48.1	127.91	15 53.30
	11 Mi 3 20.52	II 17 3.50	3 35.68	4 37 13.0	22 52.9	127.87	15 53.55
	12 Do 3 41.40	II 20 39.18	3 35.57	4 14 20.1	22 57.3	127.84	15 53.80
	13 Fr 4 2.38	II 24 14.75	3 35.48	3 51 22.8	23 1.4	127.81	15 54.06
	14 Sa 4 23.45	II 27 50.23	3 35.42	3 28 21.4	23 5.1	127.79	15 54.32
	15 So -4 44.59	II 31 25.65	3 35.36	+ 3 5 16.3	23 8.5	127.78	15 54.58
	16 Mo 5 5.78	II 35 1.01	3 35.32	2 42 7.8	23 11.4	127.77	15 54.85
	17 Di 5 27.01	II 38 36.33	3 35.31	2 18 56.4	23 14.1	127.77	15 55.11
	18 Mi 5 48.26	II 42 11.64	3 35.31	1 55 42.3	23 16.5	127.77	15 55.38
	19 Do 6 9.50	II 45 46.95	3 35.34	1 32 25.8	23 18.5	127.78	15 55.65
	20 Fr -6 30.71	II 49 22.29	3 35.39	+ 1 9 7.3	23 20.2	127.80	15 55.92
	21 Sa 6 51.88	II 52 57.68	3 35.45	0 45 47.1	23 21.5	127.82	15 56.20
	22 So 7 12.98	II 56 33.13	3 35.54	+ 0 22 25.6	23 22.5	127.85	15 56.47
	23 Mo 7 33.99	II 60 0.87	3 35.66	- 0 0 56.9	23 23.3	127.88	15 56.74
	24 Di 7 54.88	II 63 44.33		0 24 20.2		127.92	15 57.02

## Mittlerer Berliner Mittag.

Monats- und Jahresstag	Sternzeit	Mittleres Äqu. 1912.0			Lg. Rad. v.	Diff.	Nut. (in °.01 dλ   dε)
		Länge	Diff.	Breite			
Aug.	16 229	9 37 53.60	143 10 50.18	57 42.86	-0.26	0.0053567	855 + 2 +9
	17 230	9 41 50.16	144 8 33.04	57 43.93	-0.39	0.0052712	873 - 7 +7
	18 231	9 45 46.72	145 6 16.97	57 45.01	-0.51	0.0051839	890 - 12 +4
	19 232	9 49 43.27	146 4 1.98	57 46.11	-0.62	0.0050949	905 - 13 0
	20 233	9 53 39.83	147 1 48.09	57 47.25	-0.72	0.0050044	919 - 12 -4
	21 234	9 57 36.38	147 59 35.34	57 48.44	-0.79	0.0049125	932 - 6 -7
	22 235	10 1 32.94	148 57 23.78	57 49.68	-0.83	0.0048193	943 + 2 -9
	23 236	10 5 29.49	149 55 13.46	57 50.97	-0.84	0.0047250	953 + 9 -8
	24 237	10 9 26.05	150 53 4.43	57 52.32	-0.82	0.0046297	963 + 16 -6
	25 238	10 13 22.60	151 50 56.75	57 53.74	-0.77	0.0045334	971 + 19 -3
	26 239	10 17 19.16	152 48 50.49	57 55.22	-0.70	0.0044363	980 + 19 +1
	27 240	10 21 15.71	153 46 45.71	57 56.78	-0.61	0.0043383	988 + 14 +5
	28 241	10 25 12.26	154 44 42.49	57 58.41	-0.50	0.0042395	995 + 7 +8
	29 242	10 29 8.82	155 42 40.90	58 0.10	-0.38	0.0041400	1002 - 3 +9
	30 243	10 33 5.37	156 40 41.00	58 1.86	-0.25	0.0040398	1009 - 14 +8
Sept.	31 244	10 37 1.93	157 38 42.86	58 3.69	-0.11	0.0039389	1017 - 22 +6
	1 245	10 40 58.48	158 36 46.55	58 5.59	+0.03	0.0038372	1026 - 27 +2
	2 246	10 44 55.04	159 34 52.14	58 7.55	+0.16	0.0037346	1034 - 27 -2
	3 247	10 48 51.59	160 32 59.69	58 9.55	+0.27	0.0036312	1044 - 22 -5
	4 248	10 52 48.14	161 31 9.24	58 11.58	+0.36	0.0035268	1054 - 14 -8
	5 249	10 56 44.70	162 29 20.82	58 13.63	+0.41	0.0034214	1066 - 4 -9
	6 250	11 0 41.25	163 27 34.45	58 15.69	+0.44	0.0033148	1079 + 6 -8
	7 251	11 4 37.81	164 25 50.14	58 17.73	+0.43	0.0032069	1093 + 14 -5
	8 252	11 8 34.36	165 24 7.87	58 19.74	+0.39	0.0030976	1108 + 20 -2
	9 253	11 12 30.91	166 22 27.61	58 21.69	+0.32	0.0029868	1123 + 21 +2
	10 254	11 16 27.47	167 20 49.30	58 23.58	+0.22	0.0028745	1139 + 18 +6
	11 255	11 20 24.02	168 19 12.88	58 25.41	+0.10	0.0027606	1154 + 12 +8
	12 256	11 24 20.58	169 17 38.29	58 27.18	-0.02	0.0026452	1169 + 4 +9
	13 257	11 28 17.13	170 16 5.47	58 28.89	-0.15	0.0025283	1183 - 4 +8
	14 258	11 32 13.68	171 14 34.36	58 30.57	-0.27	0.0024100	1195 - 10 +5
	15 259	11 36 10.24	172 13 4.93	58 32.23	-0.38	0.0022905	1206 - 13 +1
	16 260	11 40 6.79	173 11 37.16	58 33.88	-0.47	0.0021699	1215 - 12 -3
	17 261	11 44 3.34	174 10 11.04	58 35.53	-0.55	0.0020484	1222 - 8 -6
	18 262	11 47 59.90	175 8 46.57	58 37.19	-0.60	0.0019262	1228 - 1 -8
	19 263	11 51 56.45	176 7 23.76	58 38.88	-0.62	0.0018034	1233 + 7 -9
	20 264	11 55 53.01	177 6 2.64	58 40.61	-0.61	0.0016801	1237 + 15 -7
	21 265	11 59 49.56	178 4 43.25	58 42.38	-0.57	0.0015564	1239 + 19 -4
	22 266	12 3 46.11	179 3 25.63	58 44.18	-0.51	0.0014325	1239 + 20 0
	23 267	12 7 42.67	180 2 9.81	58 46.02	-0.43	0.0013086	1240 + 17 +4
	24 268	12 11 39.22	181 0 55.83	-0.33	0.0011846	+ 10 +7	

## Mittlerer Berliner Mittag.

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	diff.	Scheinb. Dekl.	diff.	Durchg.-Dauer St. - Zt.	Halbm.
Sept. 23 Mo	— 7 33.99	12 0 8.67	m +	○ ○ 56.9	—	127.88	15 56.74
24 Di	7 54.88	12 3 44.33	3 35.66	○ 24 20.2	23 23.3	127.92	15 57.02
25 Mi	8 15.64	12 7 20.13	3 35.80	○ 47 43.9	23 23.7	127.97	15 57.29
26 Do	8 36.24	12 10 56.09	3 35.96	1 11 7.6	23 23.4	128.02	15 57.56
27 Fr	8 56.65	12 14 32.23	3 36.14	1 34 31.0	23 22.8	128.08	15 57.83
28 Sa	— 9 16.85	12 18 8.58	3 36.35	— 1 57 53.8	23 21.9	128.14	15 58.11
29 So	9 36.82	12 21 45.16	3 36.84	2 21 15.7	23 20.7	128.21	15 58.38
30 Mo	9 56.54	12 25 22.00	3 37.11	2 44 36.4	23 19.2	128.29	15 58.65
Okt. 1 Di	10 15.99	12 28 59.11	3 37.42	3 7 55.6	23 17.3	128.37	15 58.92
2 Mi	10 35.12	12 32 36.53	3 37.74	3 31 12.9	23 15.1	128.46	15 59.19
3 Do	— 10 53.93	12 36 14.27	3 38.08	3 54 28.0	23 12.5	128.55	15 59.46
4 Fr	11 12.41	12 39 52.35	3 38.45	4 17 40.5	23 9.6	128.65	15 59.73
5 Sa	11 30.51	12 43 30.80	3 38.84	4 40 50.1	23 6.3	128.76	16 0.00
6 So	11 48.22	12 47 9.64	3 39.24	5 3 56.4	23 2.6	128.87	16 0.27
7 Mo	12 5.53	12 50 48.88	3 39.66	5 26 59.0	22 58.6	128.98	16 0.55
8 Di	— 12 22.43	12 54 28.54	3 40.09	— 5 49 57.6	22 54.1	129.10	16 0.82
9 Mi	12 38.90	12 58 8.63	3 40.54	6 12 51.7	22 49.2	129.23	16 1.09
10 Do	12 54.91	13 1 49.17	3 41.01	6 35 40.9	22 44.0	129.37	16 1.37
11 Fr	13 10.45	13 5 30.18	3 41.50	6 58 24.9	22 38.3	129.51	16 1.65
12 Sa	13 25.51	13 9 11.68	3 41.99	7 21 3.2	22 32.2	129.65	16 1.93
13 So	— 13 40.07	13 12 53.67	3 42.50	— 7 43 35.4	22 25.7	129.80	16 2.20
14 Mo	13 54.12	13 16 36.17	3 43.03	8 6 1.1	22 18.8	129.96	16 2.48
15 Di	14 7.65	13 20 19.20	3 43.57	8 28 19.9	22 11.5	130.12	16 2.76
16 Mi	14 20.64	13 24 2.77	3 44.12	8 50 31.4	22 3.8	130.29	16 3.04
17 Do	14 33.07	13 27 46.89	3 44.71	9 12 35.2	21 55.8	130.46	16 3.32
18 Fr	— 14 44.92	13 31 31.60	3 45.30	— 9 34 31.0	21 47.3	130.64	16 3.60
19 Sa	14 56.17	13 35 16.90	3 45.91	9 56 18.3	21 38.5	130.82	16 3.88
20 So	15 6.81	13 39 2.81	3 46.54	10 17 56.8	21 29.3	131.01	16 4.15
21 Mo	15 16.82	13 42 49.35	3 47.19	10 39 26.1	21 19.8	131.20	16 4.43
22 Di	15 26.19	13 46 36.54	3 47.85	11 0 45.9	21 9.8	131.39	16 4.70
23 Mi	— 15 34.90	13 50 24.39	3 48.53	— 11 21 55.7	20 59.5	131.59	16 4.97
24 Do	15 42.93	13 54 12.92	3 49.22	11 42 55.2	20 48.7	131.79	16 5.24
25 Fr	15 50.26	13 58 2.14	3 49.93	12 3 43.9	20 37.7	131.99	16 5.50
26 Sa	15 56.88	14 1 52.07	3 50.67	12 24 21.6	20 26.2	132.20	16 5.77
27 So	16 2.77	14 5 42.74	3 51.42	12 44 47.8	20 14.4	132.41	16 6.03
28 Mo	— 16 7.91	14 9 34.16	3 52.18	— 13 5 2.2	20 2.2	132.63	16 6.28
29 Di	16 12.28	14 13 26.34	3 52.96	13 25 4.4	19 49.6	132.85	16 6.54
30 Mi	16 15.87	14 17 19.30	3 53.76	13 44 54.0	19 36.6	133.07	16 6.79
31 Do	16 18.67	14 21 13.06	3 54.56	14 4 30.6	19 23.2	133.29	16 7.03
Nov. 1 Fr	16 20.67	14 25 7.62	14 23 53.8			133.52	16 7.28

## Mittlerer Berliner Mittag.

Monats- und Jahrestag	Sternzeit	Mittleres Länge	Äqu. 1912.0 Diff.	Breite	Lg. Rad. v.	Diff.	Nut. C in °.01 dλ de
Sept. 23 267	12 7 42.67	180° 2' 9.81	58° 46.02	-0.43	0.0013086	1240	+17 +4
24 268	12 II 39.22	181° 0' 55.83	58° 47.92	-0.33	0.0011846	1239	+10 +7
25 269	12 I 5 35.77	181° 59' 43.75	58° 49.87	-0.21	0.0010607	1238	+ 1 +9
26 270	12 19 32.33	182° 58' 33.62	58° 51.87	-0.07	0.0009369	1236	-10 +9
27 271	12 23 28.88	183° 57' 25.49	58° 53.94	+0.07	0.0008133	1233	-19 +7
28 272	12 27 25.43	184° 56' 19.43	58° 56.07	+0.21	0.0006900	1231	-26 +4
29 273	12 31 21.99	185° 55' 15.50	58° 58.26	+0.35	0.0005669	1228	-27 0
Okt. 30 274	12 35 18.54	186° 54' 13.76	59° 0.52	+0.47	0.0004441	1226	-25 -4
1 275	12 39 15.10	187° 53' 14.28	59° 2.83	+0.56	0.0003215	1224	-18 -7
2 276	12 43 11.65	188° 52' 17.11	59° 5.16	+0.62	0.0001991	1224	- 8 -9
3 277	12 47 8.20	189° 51' 22.27	59° 7.51	+0.65	0.0000767	1225	+ 2 -8
4 278	12 51 4.76	190° 50' 29.78	59° 9.87	+0.66	9.9999542	1226	+12 -6
5 279	12 55 1.31	191° 49' 39.65	59° 12.22	+0.64	9.9998316	1228	+18 -3
6 280	12 58 57.86	192° 48' 51.87	59° 14.53	+0.58	9.9997088	1232	+21 +1
7 281	13 2 54.42	193° 48' 6.40	59° 16.80	+0.49	9.9995856	1237	+19 +5
8 282	13 6 50.97	194° 47' 23.20	59° 19.01	+0.38	9.9994619	1241	+13 +8
9 283	13 10 47.53	195° 46' 42.21	59° 21.15	+0.25	9.9993378	1246	+ 6 +9
10 284	13 14 44.08	196° 46' 3.36	59° 23.21	+0.12	9.9992132	1251	- 2 +8
11 285	13 18 40.63	197° 45' 26.57	59° 25.21	-0.01	9.9990881	1256	- 9 +6
12 286	13 22 37.19	198° 44' 51.78	59° 27.14	-0.13	9.9989625	1259	-13 +2
13 287	13 26 33.74	199° 44' 18.92	59° 29.01	-0.23	9.9988366	1261	-13 -2
14 288	13 30 30.30	200° 43' 47.93	59° 30.83	-0.31	9.9987105	1262	-10 -5
15 289	13 34 26.85	201° 43' 18.76	59° 32.62	-0.37	9.9985843	1262	- 3 -8
16 290	13 38 23.41	202° 42' 51.38	59° 34.38	-0.40	9.9984581	1259	+ 5 -9
17 291	13 42 19.96	203° 42' 25.76	59° 36.13	-0.40	9.9983322	1255	+13 -8
18 292	13 46 16.51	204° 42' 1.89	59° 37.89	-0.37	9.9982067	1250	+18 -5
19 293	13 50 13.07	205° 41' 39.78	59° 39.66	-0.32	9.9980817	1243	+21 -2
20 294	13 54 9.62	206° 41' 19.44	59° 41.43	-0.24	9.9979574	1236	+19 +2
21 295	13 58 6.18	207° 41' 0.87	59° 43.22	-0.14	9.9978338	1227	+13 +6
22 296	14 2 2.73	208° 40' 44.09	59° 45.02	-0.02	9.9977111	1217	+ 4 +8
23 297	14 5 59.29	209° 40' 29.11	59° 46.85	+0.11	9.9975894	1205	- 7 +9
24 298	14 9 55.84	210° 40' 15.96	59° 48.72	+0.25	9.9974689	1193	-17 +8
25 299	14 13 52.40	211° 40' 4.68	59° 50.64	+0.39	9.9973496	1180	-23 +5
26 300	14 17 48.95	212° 39' 55.32	59° 52.61	+0.53	9.9972316	1166	-27 +1
27 301	14 21 45.51	213° 39' 47.93	59° 54.64	+0.65	9.9971150	1152	-26 -3
28 302	14 25 42.06	214° 39' 42.57	59° 56.70	+0.75	9.9969998	1138	-20 -6
29 303	14 29 38.62	215° 39' 39.27	59° 58.81	+0.82	9.9968860	1125	-12 -8
30 304	14 33 35.18	216° 39' 38.08	60° 0.97	+0.87	9.9967735	1112	- 2 -9
31 305	14 37 31.73	217° 39' 39.05	60° 3.15	+0.89	9.9966623	1100	+ 9 -7
Nov. 1 306	14 41 28.29	218° 39' 42.20	+0.88	9.9965523	+16 -4		

## Mittlerer Berliner Mittag.

Monats- und Wochentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg.-Dauer St. - Zt.	Halbm.
Okt. 31 Do	-16 <sup>m</sup> 18.67	14 21 <sup>m</sup> 13.06	<sup>m</sup> *	-14 4 30.6	*	133.29	16 7.03
Nov. 1 Fr	16 20.67	14 25 7.62	3 54.56	14 23 53.8	19 23.2	133.52	16 7.28
2 Sa	16 21.85	14 29 3.00	3 55.38	14 43 3.3	19 9.5	133.75	16 7.52
3 So	16 22.20	14 32 59.20	3 56.20	15 1 58.6	18 55.3	133.98	16 7.76
4 Mo	16 21.71	14 36 56.24	3 57.04	15 20 39.3	18 40.7	134.21	16 8.00
5 Di	-16 20.38	14 40 54.12	3 58.73	-15 39 4.9	18 10.2	134.44	16 8.24
6 Mi	16 18.21	14 44 52.85	3 59.57	15 57 15.1	17 54.3	134.68	16 8.47
7 Do	16 15.20	14 48 52.42	4 0.42	16 15 9.4	17 37.9	134.91	16 8.71
8 Fr	16 11.34	14 52 52.84	4 1.27	16 32 47.3	17 21.1	135.15	16 8.94
9 Sa	16 6.63	14 56 54.11	4 2.11	16 50 8.4	17 4.0	135.39	16 9.17
10 So	-16 1.07	15 0 56.22	4 2.96	-17 7 12.4	16 46.4	135.63	16 9.40
11 Mo	15 54.67	15 4 59.18	4 3.80	17 23 58.8	16 28.3	135.87	16 9.63
12 Di	15 47.43	15 9 2.98	4 4.64	17 40 27.1	16 9.9	136.11	16 9.86
13 Mi	15 39.34	15 13 7.62	4 5.48	17 56 37.0	15 51.0	136.35	16 10.08
14 Do	15 30.42	15 17 13.10	4 6.31	18 12 28.0	15 31.8	136.59	16 10.31
15 Fr	-15 20.67	15 21 19.41	4 7.13	-18 27 59.8	15 12.1	136.83	16 10.53
16 Sa	15 10.09	15 25 26.54	4 7.95	18 43 11.9	14 52.1	137.06	16 10.74
17 So	14 58.70	15 29 34.49	4 8.77	18 58 4.0	14 31.7	137.30	16 10.96
18 Mo	14 46.49	15 33 43.26	4 9.59	19 12 35.7	14 11.0	137.53	16 11.17
19 Di	14 33.46	15 37 52.85	4 10.40	19 26 46.7	13 49.9	137.76	16 11.37
20 Mi	-14 19.62	15 42 3.25	4 11.20	-19 40 36.6	13 28.4	137.98	16 11.58
21 Do	14 4.98	15 46 14.45	4 11.98	19 54 5.0	13 6.5	138.20	16 11.78
22 Fr	13 49.55	15 50 26.43	4 12.76	20 7 11.5	12 44.4	138.42	16 11.97
23 Sa	13 33.34	15 54 39.19	4 13.54	20 19 55.9	12 21.9	138.64	16 12.16
24 So	13 16.36	15 58 52.73	4 14.31	20 32 17.8	11 59.1	138.85	16 12.34
25 Mo	-12 58.61	16 3 7.04	4 15.07	-20 44 16.9	11 36.0	139.06	16 12.52
26 Di	12 40.10	16 7 22.11	4 15.82	20 55 52.9	11 12.5	139.26	16 12.69
27 Mi	12 20.84	16 11 37.93	4 16.55	21 7 5.4	10 48.7	139.46	16 12.86
28 Do	12 0.85	16 15 54.48	4 17.28	21 17 54.1	10 24.7	139.66	16 13.02
29 Fr	11 40.13	16 20 11.76	4 17.98	21 28 18.8	10 0.3	139.85	16 13.18
30 Sa	-11 18.70	16 24 29.74	4 18.67	-21 38 19.1	9 35.6	140.03	16 13.34
1 So	10 56.59	16 28 48.41	4 19.34	21 47 54.7	9 10.6	140.21	16 13.49
2 Mo	10 33.81	16 33 7.75	4 19.99	21 57 5.3	8 45.3	140.38	16 13.63
3 Di	10 10.38	16 37 27.74	4 20.61	22 5 50.6	8 19.8	140.55	16 13.77
4 Mi	9 46.33	16 41 48.35	4 21.21	22 14 10.4	7 53.9	140.71	16 13.91
5 Do	-9 21.68	16 46 9.56	4 21.78	-22 22 4.3	7 27.8	140.86	16 14.04
6 Fr	8 56.46	16 50 31.34	4 22.31	22 29 32.1	7 1.5	141.01	16 14.17
7 Sa	8 30.70	16 54 53.65	4 22.82	22 36 33.6	6 34.9	141.15	16 14.30
8 So	8 4.44	16 59 16.47	4 23.29	22 43 8.5	6 8.1	141.28	16 14.42
9 Mo	7 37.71	17 3 39.76	4 23.29	22 49 16.6	141.40	16 14.54	

## Mittlerer Berliner Mittag.

Monats- und Jahrestag	Sternzeit	Mittleres Äqu. 1912.0	Länge	Diff.	Breite	Lg. Rad. v.	Diff.	Nut. (in °.01 dλ   dε)
Okt. 31	305 14 37 31.73	217 39 39.05	60 3.15	+0.89	9.9966623	1100	+ 9 -7	
Nov. 1	306 14 41 28.29	218 39 42.20	60 5.33	+0.88	9.9965523	1089	+16 -4	
2	307 14 45 24.84	219 39 47.53	60 7.48	+0.83	9.9964434	1080	+20 0	
3	308 14 49 21.40	220 39 55.01	60 9.61	+0.75	9.9963354	1071	+20 +4	
4	309 14 53 17.95	221 40 4.62	60 11.70	+0.64	9.9962283	1063	+16 +7	
5	310 14 57 14.51	222 40 16.32	60 13.74	+0.52	9.9961220	1057	+ 8 +9	
6	311 15 1 11.07	223 40 30.06	60 15.70	+0.39	9.9960163	1050	0 +9	
7	312 15 5 7.62	224 40 45.76	60 17.57	+0.26	9.9959113	1044	- 7 +7	
8	313 15 9 4.18	225 41 3.33	60 19.36	+0.14	9.9958069	1038	-12 +4	
9	314 15 13 0.74	226 41 22.69	60 21.07	+0.03	9.9957031	1032	-13 0	
10	315 15 16 57.29	227 41 43.76	60 22.69	-0.06	9.9955999	1025	-11 -4	
11	316 15 20 53.85	228 42 6.45	60 24.22	-0.13	9.9954974	1017	- 6 -7	
12	317 15 24 50.41	229 42 30.67	60 25.69	-0.17	9.9953957	1007	+ 2 -9	
13	318 15 28 46.96	230 42 56.36	60 27.11	-0.18	9.9952950	997	+10 -8	
14	319 15 32 43.52	231 43 23.47	60 28.49	-0.16	9.9951953	985	+17 -6	
15	320 15 36 40.08	232 43 51.96	60 29.82	-0.12	9.9950968	972	+20 -3	
16	321 15 40 36.63	233 44 21.78	60 31.13	-0.04	9.9949996	958	+20 +1	
17	322 15 44 33.19	234 44 52.91	60 32.42	+0.06	9.9949038	942	+15 +5	
18	323 15 48 29.75	235 45 25.33	60 33.69	+0.16	9.9948096	925	+ 7 +8	
19	324 15 52 26.31	236 45 59.02	60 34.94	+0.27	9.9947171	907	- 3 +9	
20	325 15 56 22.86	237 46 33.96	60 36.18	+0.40	9.9946264	887	-13 +8	
21	326 16 0 19.42	238 47 10.14	60 37.43	+0.53	9.9945377	866	-21 +6	
22	327 16 4 15.98	239 47 47.57	60 38.71	+0.66	9.9944511	844	-27 +2	
23	328 16 8 12.54	240 48 26.28	60 40.02	+0.78	9.9943667	822	-27 -2	
24	329 16 12 9.09	241 49 6.30	60 41.37	+0.88	9.9942845	798	-23 -5	
25	330 16 16 5.65	242 49 47.67	60 42.76	+0.96	9.9942047	774	-15 -8	
26	331 16 20 2.21	243 50 30.43	60 44.18	+1.01	9.9941273	750	- 5 -9	
27	332 16 23 58.77	244 51 14.61	60 45.64	+1.02	9.9940523	727	+ 5 -8	
28	333 16 27 55.33	245 52 0.25	60 47.13	+1.01	9.9939796	705	+13 -5	
29	334 16 31 51.89	246 52 47.38	60 48.63	+0.97	9.9939091	684	+19 -2	
Dez. 30	335 16 35 48.44	247 53 36.01	60 50.12	+0.90	9.9938407	663	+20 +2	
1	336 16 39 45.00	248 54 26.13	60 51.59	+0.80	9.9937744	644	+17 +6	
2	337 16 43 41.56	249 55 17.72	60 53.01	+0.68	9.9937100	626	+10 +8	
3	338 16 47 38.12	250 56 10.73	60 54.37	+0.54	9.9936474	610	+ 3 +9	
4	339 16 51 34.68	251 57 5.10	60 55.67	+0.41	9.9935864	594	- 5 +8	
5	340 16 55 31.24	252 58 0.77	60 56.88	+0.29	9.9935270	579	-11 +5	
6	341 16 59 27.80	253 58 57.65	60 57.99	+0.18	9.9934691	565	-13 +1	
7	342 17 3 24.36	254 59 55.64	60 59.02	+0.09	9.9934126	550	-12 -3	
8	343 17 7 20.91	256 0 54.66	60 59.96	+0.02	9.9933576	536	- 8 -6	
9	344 17 11 17.47	257 1 54.62	60 60.03	-0.03	9.9933040	518	0 -8	

## Mittlerer Berliner Mittag.

Monats- und Woctentag	Zeitgleichung M. Zt. — W. Zt.	Scheinb. AR.	Diff.	Scheinb. Dekl.	Diff.	Durchg. Dauer St. - Zt.	Halbm.
Dez. 8 So	-8 <sup>m</sup> 4.44	16 <sup>h</sup> 59 <sup>m</sup> 16. <sup>s</sup> 47	m s 4 23.29	-22 <sup>o</sup> 43 <sup>'</sup> 8. <sup>5</sup>	6 <sup>'</sup> 8. <sup>1</sup>	141.28	16 14.42
9 Mo	7 37.71	17 3 39.76	4 23.73	22 49 16.6	5 41.0	141.40	16 14.54
10 Di	7 10.54	17 8 3.49	4 24.15	22 54 57.6	5 13.8	141.52	16 14.66
11 Mi	6 42.96	17 12 27.64	4 24.52	23 0 11.4	4 46.4	141.63	16 14.77
12 Do	6 15.00	17 16 52.16	4 24.86	23 4 57.8	4 18.8	141.73	16 14.88
13 Fr	-5 46.69	17 21 17.02	4 25.17	-23 9 16.6	3 51.2	141.82	16 14.99
14 Sa	5 18.08	17 25 42.19	4 25.45	23 13 7.8	3 23.4	141.91	16 15.09
15 So	4 49.19	17 30 7.64	4 25.68	23 16 31.2	2 55.5	141.99	16 15.19
16 Mo	4 20.06	17 34 33.32	4 25.89	23 19 26.7	2 27.4	142.05	16 15.28
17 Di	3 50.73	17 38 59.21	4 26.06	23 21 54.1	1 59.4	142.10	16 15.37
18 Mi	-3 21.23	17 43 25.27	4 26.20	-23 23 53.5	1 31.2	142.15	16 15.45
19 Do	2 51.59	17 47 51.47	4 26.31	23 25 24.7	1 3.0	142.19	16 15.53
20 Fr	2 21.84	17 52 17.78	4 26.38	23 26 27.7	0 34.8	142.22	16 15.60
21 Sa	1 52.02	17 56 44.16	4 26.43	23 27 2.5	0 6.6	142.24	16 15.67
22 So	1 22.15	18 1 10.59	4 26.44	23 27 9.1	0 21.7	142.25	16 15.73
23 Mo	-0 52.27	18 5 37.03	4 26.42	-23 26 47.4	0 49.9	142.25	16 15.78
24 Di	-0 22.41	18 10 3.45	4 26.38	23 25 57.5	1 18.1	142.24	16 15.83
25 Mi	+0 7.41	18 14 29.83	4 26.30	23 24 39.4	1 46.3	142.22	16 15.87
26 Do	0 37.15	18 18 56.13	4 26.20	23 22 53.1	2 14.5	142.20	16 15.91
27 Fr	1 6.79	18 23 22.33	4 26.07	23 20 38.6	2 42.6	142.17	16 15.94
28 Sa	+1 36.30	18 27 48.40	4 25.90	-23 17 56.0	3 10.6	142.12	16 15.96
29 So	2 5.65	18 32 14.30	4 25.71	23 14 45.4	3 38.6	142.06	16 15.98
30 Mo	2 34.80	18 36 40.01	4 25.49	23 11 6.8	4 6.4	142.00	16 15.99
31 Di	3 3.73	18 41 5.50	4 25.23	23 7 0.4	4 34.2	141.93	16 15.99
32 Mi	3 32.40	18 45 30.73	4 24.93	23 2 26.2	5 1.9	141.85	16 15.99
33 Do	+4 0.77	18 49 55.66		-22 57 24.3		141.76	16 15.99

Frühlingsäquinoktium  
Sommersolstitium  
Herbstäquinoktium  
Wintersolstitium

März 20 12<sup>h</sup>  
Juni 21 8  
Sept. 22 23  
Dez. 21 18

## Mittlerer Berliner Mittag.

Monats- und Jahrstag	Sternzeit	Mittleres Äqu. 1912.0	Länge	Diff.	Breite	Lg. Rad. v.	Diff.	Nut. ( in o'.01 dλ   dε )
Dez. 8	343	17 <sup>h</sup> 7 <sup>m</sup> 20.91	256° 0' 54.66	60° 59.96	+0.02	9.9933576	536	- 8 -6
9	344	17 II 17.47	257 1 54.62	61 0.80	-0.03	9.9933040	0	-8
10	345	17 15 14.03	258 2 55.42	61 1.55	-0.05	9.9932519	521	+ 8 -9
11	346	17 19 10.59	259 3 56.97	61 2.23	-0.05	9.9932013	506	+16 -7
12	347	17 23 7.15	260 4 59.20	61 2.83	-0.02	9.9931523	490	+20 -4
13	348	17 27 3.71	261 6 2.03	61 3.36	+0.04	9.9931051	472	+21 0
14	349	17 31 0.27	262 7 5.39	61 3.83	+0.12	9.9930597	454	+18 +4
15	350	17 34 56.83	263 8 9.22	61 4.25	+0.22	9.9930161	436	+11 +7
16	351	17 38 53.39	264 9 13.47	61 4.63	+0.34	9.9929746	415	+ 1 +9
17	352	17 42 49.94	265 10 18.10	61 4.96	+0.46	9.9929352	394	-10 +9
18	353	17 46 46.50	266 11 23.06	61 5.25	+0.58	9.9928980	372	-19 +7
19	354	17 50 43.06	267 12 28.31	61 5.52	+0.69	9.9928632	348	-25 +4
20	355	17 54 39.62	268 13 33.83	61 5.79	+0.79	9.9928308	324	-27 0
21	356	17 58 36.18	269 14 39.62	61 6.06	+0.89	9.9928011	297	-25 -4
22	357	18 2 32.74	270 15 45.68	61 6.35	+0.97	9.9927741	270	-17 -7
23	358	18 6 29.30	271 16 52.03	61 6.67	+1.02	9.9927499	242	- 9 -9
24	359	18 10 25.86	272 17 58.70	61 7.03	+1.04	9.9927286	213	+ 1 -8
25	360	18 14 22.42	273 19 5.73	61 7.44	+1.02	9.9927103	183	+11 -6
26	361	18 18 18.98	274 20 13.17	61 7.87	+0.97	9.9926948	155	+17 -3
27	362	18 22 15.54	275 21 21.04	61 8.33	+0.90	9.9926822	126	+20 +1
28	363	18 26 12.10	276 22 29.37	61 8.80	+0.80	9.9926723	99	+18 +5
29	364	18 30 8.66	277 23 38.17	61 9.26	+0.68	9.9926650	73	+13 +8
30	365	18 34 5.21	278 24 47.43	61 9.68	+0.55	9.9926602	48	+ 5 +9
31	366	18 38 1.77	279 25 57.11	61 10.05	+0.42	9.9926578	24	- 3 +8
32	367	18 41 58.33	280 27 7.16	61 10.36	+0.29	9.9926575	3	- 9 +6
33	368	18 45 54.89	281 28 17.52		+0.17	9.9926593	18	-13 +2

Perigäum Jan. 3 °<sup>b</sup>  
Apogäum Juli 4 12  
Perigäum Dez. 31 15

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Jan.						
1.0	0.165 6518	86109	—	0.889 1163	—	0.385 6869
1.5	0.174 2627	85971	-4715	0.887 7248	13915	0.385 0830
2.0	0.182 8598	85827		0.886 2645	14603	0.384 4494
2.5	0.191 4425	85677	4699	0.884 7356	15289	0.383 7860
3.0	0.200 0102	85521		0.883 1383	15973	0.383 0929
3.5	0.208 5623	85359	4681	0.881 4726	16657	0.382 3702
4.0	0.217 0982	85192		0.879 7387	17339	0.381 6179
4.5	0.225 6174	85018	4663	0.877 9368	18698	0.380 8361
5.0	0.234 1192			0.876 0670	19377	0.380 0250
5.5	0.242 6029	84837	4643	0.874 1293	1083	0.379 1845
	+	84650		—	20053	—
6.0	0.251 0679	84458		0.872 1240		0.378 3146
6.5	0.259 5137	84260	-4621	0.870 0512	20728	0.377 4154
7.0	0.267 9397	84055		0.867 9109	21403	0.376 4870
7.5	0.276 3452	83844	4598	0.865 7032	22077	0.375 5295
8.0	0.284 7296	83627		0.863 4284	22748	0.374 5429
8.5	0.293 0923	83403	4574	0.861 0865	23419	0.373 5273
9.0	0.301 4326	83173		0.858 6777	24757	0.372 4827
9.5	0.309 7499	82936	4548	0.856 2020	25423	0.371 4091
10.0	0.318 0435	82692		0.853 6597	26087	0.370 3067
10.5	0.326 3127		4521	0.851 0510	1457	0.369 1754
	+	82443		—	26750	—
11.0	0.334 5570	82186		0.848 3760	27412	0.368 0154
11.5	0.342 7756	81924	-4492	0.845 6348	28072	0.366 8267
12.0	0.350 9680	81654		0.842 8276	28729	0.365 6094
12.5	0.359 1334	81377	4462	0.839 9547	29384	0.364 3635
13.0	0.367 2711	81094		0.837 0163	30037	0.363 0892
13.5	0.375 3805	80804	4431	0.834 0126	30688	0.361 7865
14.0	0.383 4609	80509		0.830 9438	31337	0.360 4555
14.5	0.391 5118	80206	4398	0.827 8101	31984	0.359 0964
15.0	0.399 5324	79896		0.824 6117	32628	0.357 7093
15.5	0.407 5220		4364	0.821 3489	1820	0.356 2941
	+	79581		—	33270	—
16.0	0.415 4801	79258		0.818 0219	33909	0.354 8511
16.5	0.423 4059	78930	-4328	0.814 6310	—	0.353 3804
17.0	0.431 2989	78594		0.811 1766	34544	0.351 8821
17.5	0.439 1583	78252	4291	0.807 6588	35178	0.350 3562
18.0	0.446 9835	77904		0.804 0779	35809	0.348 8030
18.5	0.454 7739	77549	4253	0.800 4342	36437	0.347 2225
19.0	0.462 5288	77188		0.796 7280	37062	0.345 6148
19.5	0.470 2476	76821	4213	0.792 9597	37683	0.343 9801
20.0	0.477 9297			0.789 1296	38301	0.342 3186

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Jan.	+ 0.477 9297	76447	- 0.789 1296	38916	- 0.342 3186	16883
	20.0 0.485 5744	76068	- 0.785 2380	39528	- 0.340 6303	17148
	20.5 0.493 1812	75683	- 0.781 2852	40136	- 0.338 9155	17413
	21.0 0.500 7495	75292	- 0.777 2716	40741	- 0.337 1742	17675
	21.5 0.508 2787	74893	- 0.773 1975	41343	- 0.335 4067	17937
	22.0 0.515 7680	74489	- 0.769 0632	41940	- 0.333 6130	18196
	22.5 0.523 2169	74079	- 0.764 8692	42535	- 0.331 7934	18454
	23.0 0.530 6248	73664	- 0.760 6157	43126	- 0.329 9480	18711
	23.5 0.537 9912	73243	- 0.756 3031	43713	- 0.328 0769	18965
	24.0 0.545 3155		- 0.751 9318		- 0.326 1804	1059
	24.5 + 72816		- 44295		-	19217
	25.0 0.552 5971	72383	- 0.747 5023	44874	- 0.324 2587	19469
	25.5 0.559 8354	71946	- 0.743 0149	45448	- 0.322 3118	19718
	26.0 0.567 0300	71502	- 0.738 4701	46019	- 0.320 3400	19966
	26.5 0.574 1802	71053	- 0.733 8682	46586	- 0.318 3434	20212
	27.0 0.581 2855	70600	- 0.729 2096	47148	- 0.316 3222	20455
	27.5 0.588 3455	70141	- 0.724 4948	47705	- 0.314 2767	20697
	28.0 0.595 3596	69678	- 0.719 7243	48260	- 0.312 2070	20938
	28.5 0.602 3274	69210	- 0.714 8983	48811	- 0.310 1132	21176
	29.0 0.609 2484	68736	- 0.710 0172	49357	- 0.307 9956	21412
	29.5 0.616 1220		- 0.705 0815		- 0.305 8544	1197
	+ 68258		- 49898		-	21647
	30.0 0.622 9478	67774	- 0.700 0917	50436	- 0.303 6897	21880
	30.5 0.629 7252	67287	- 0.695 0481	50970	- 0.301 5017	22111
	31.0 0.636 4539	66795	- 0.689 9511	51499	- 0.299 2906	22341
	31.5 0.643 1334	66299	- 0.684 8012	52025	- 0.297 0565	22569
Febr.	1.0 0.649 7633	65798	- 0.679 5987	52547	- 0.294 7996	22795
	1.5 0.656 3431	65293	- 0.674 3440	53065	- 0.292 5201	23019
	2.0 0.662 8724	64784	- 0.669 0375	53579	- 0.290 2182	23241
	2.5 0.669 3508	64269	- 0.663 6796	54088	- 0.287 8941	23461
	3.0 0.675 7777	63751	- 0.658 2708	54594	- 0.285 5480	23680
	3.5 0.682 1528		- 0.652 8114		- 0.283 1800	1325
	+ 63227		- 55096		-	23898
	4.0 0.688 4755	62699	- 0.647 3018	55595	- 0.280 7902	24114
	4.5 0.694 7454	62167	- 0.641 7423	56089	- 0.278 3788	24327
	5.0 0.700 9621	61631	- 0.636 1334	56579	- 0.275 9461	24540
	5.5 0.707 1252	61089	- 0.630 4755	57065	- 0.273 4921	24751
	6.0 0.713 2341	60544	- 0.624 7090	57547	- 0.271 0170	24961
	6.5 0.719 2885	59994	- 0.619 0143	58025	- 0.268 5209	25167
	7.0 0.725 2879	59439	- 0.613 2118	58499	- 0.266 0042	25373
	7.5 0.731 2318	58879	- 0.607 3619	58969	- 0.263 4669	25577
	8.0 0.737 1197		- 0.601 4650		- 0.260 9092	1421

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Febr. 8.0	0.737 1197 + 58314	— 3164	0.601 4650 0.595 5215 0.589 5320 0.583 4968 0.577 4165 0.571 2915 0.565 1222 0.558 9091 0.552 6528 0.546 3536	— 3319 — 3371 — 3422 — 3471 — 3519	0.260 9092 0.258 3314 0.255 7336 0.253 1159 0.250 4786 0.247 8218 0.245 1459 0.242 4510 0.239 7373 0.237 0050	25778 25978 26177 26373 26568 26759 26949 27137 27323 27507
8.5	0.742 9511 + 57745	— 3164	0.595 5215 0.589 5320 0.60352 0.60803	— 3319	0.258 3314 0.255 7336 0.253 1159 0.250 4786	— 1444
9.0	0.748 7256 + 57172	— 3100	0.589 5320 0.60352 0.61250	— 3371	0.255 7336 0.253 1159 0.250 4786	1466
9.5	0.754 4428 + 56594	— 3100	0.583 4968 0.60803 0.61693	— 3371	0.253 1159 0.250 4786 0.247 8218	1488
10.0	0.760 1022 + 56011	— 3035	0.577 4165 0.571 2915 0.565 1222 0.558 9091	— 3422	0.250 4786 0.247 8218 0.245 1459 0.242 4510	1488
10.5	0.765 7033 + 55423	— 3035	0.571 2915 0.565 1222 0.558 9091	— 3471	0.247 8218 0.245 1459 0.242 4510	1509
11.0	0.771 2456 + 54831	— 2969	0.565 1222 0.558 9091 0.552 6528	— 3471	0.245 1459 0.242 4510 0.239 7373	1509
11.5	0.776 7287 + 54234	— 2969	0.558 9091 0.552 6528 0.546 3536	— 3519	0.242 4510 0.239 7373 0.237 0050	1530
12.0	0.782 1521 + 53634	— 2902	0.552 6528 0.546 3536 + 53028	— 3519	0.239 7373 0.237 0050 — 27507	1530
12.5	0.787 5155 + 53028	— 2902	0.546 3536 — 63415	— 3519	0.237 0050 — 27507	1530
13.0	0.792 8183 + 52419	— 2835	0.540 0121 0.533 6287 0.527 2040	— 3566	0.234 2543 0.231 4854 0.228 6085	1551
13.5	0.798 0602 + 51805	— 2835	0.533 6287 0.527 2040 0.520 7385	— 3566	0.231 4854 0.228 6085 0.225 8939	1571
14.0	0.803 2407 + 51189	— 2767	0.527 2040 0.520 7385 0.514 2327	— 3612	0.228 6085 0.225 8939 0.223 0718	1571
14.5	0.808 3596 + 50567	— 2767	0.520 7385 0.514 2327 0.507 6872	— 3612	0.225 8939 0.223 0718 0.220 2324	1590
15.0	0.813 4163 + 49942	— 2698	0.514 2327 0.507 6872 0.501 1025	— 3657	0.223 0718 0.220 2324 0.217 3759	1590
15.5	0.818 4105 + 49312	— 2698	0.507 6872 0.501 1025 0.494 4791	— 3657	0.220 2324 0.217 3759 0.214 5026	1609
16.0	0.823 3417 + 48678	— 2628	0.501 1025 0.494 4791 0.487 8176	— 3701	0.217 3759 0.214 5026 0.211 6128	1609
16.5	0.828 2095 + 48041	— 2628	0.494 4791 0.487 8176 0.481 1185	— 3743	0.214 5026 0.211 6128 0.208 7066	1628
17.0	0.833 0136 + 47400	— 2557	0.481 1185 — 67362	— 3743	0.208 7066 — 29223	1628
17.5	0.837 7536 + 46754	— 2557	0.481 1185 — 67362	— 3743	0.208 7066 — 29223	1628
18.0	0.842 4290 + 46104	— 2485	0.474 3823 0.467 6095 0.460 8007	— 3784	0.205 7843 0.202 8462 0.199 8924	1646
18.5	0.847 0394 + 45452	— 2485	0.467 6095 0.460 8007 0.453 9566	— 3784	0.202 8462 0.199 8924 0.196 9232	1663
19.0	0.851 5846 + 44797	— 2412	0.460 8007 0.453 9566 0.447 0777	— 3825	0.199 8924 0.196 9232 0.193 9389	1663
19.5	0.856 0643 + 44797	— 2412	0.453 9566 0.447 0777 0.440 1646	— 3825	0.196 9232 0.193 9389 0.190 9398	1680
20.0	0.860 4781 + 44138	— 2339	0.447 0777 0.440 1646 0.433 2178	— 3864	0.193 9389 0.190 9398 0.187 9261	1680
20.5	0.864 8256 + 42811	— 2339	0.440 1646 0.433 2178 0.426 2380	— 3864	0.190 9398 0.187 9261 0.184 8980	1680
21.0	0.869 1067 + 42143	— 2265	0.433 2178 0.426 2380 0.419 2258	— 3902	0.187 9261 0.184 8980 0.181 8559	1697
21.5	0.873 3210 + 41472	— 2265	0.426 2380 0.419 2258 0.412 1817	— 3902	0.184 8980 0.181 8559 0.178 7999	1697
22.0	0.877 4682 + 40798	— 2190	0.419 2258 0.412 1817 — 70754	— 3939	0.181 8559 0.178 7999 — 30696	1713
22.5	0.881 5480 + 40121	— 2190	0.412 1817 — 70754	— 3939	0.178 7999 — 30696	1713
23.0	0.885 5601 + 39442	— 2115	0.405 1063 0.398 0002 0.390 8640	— 3974	0.175 7303 0.172 6474 0.169 5515	1729
23.5	0.889 5043 + 38759	— 2115	0.398 0002 0.390 8640 0.383 6982	— 3974	0.172 6474 0.169 5515 0.166 4428	1744
24.0	0.893 3802 + 38075	— 2039	0.390 8640 0.383 6982 0.376 5035	— 4008	0.169 5515 0.166 4428 0.163 3215	1744
24.5	0.897 1877 + 37388	— 2039	0.383 6982 0.376 5035 0.369 2804	— 4008	0.166 4428 0.163 3215 0.160 1879	1758
25.0	0.900 9265 + 36608	— 1963	0.376 5035 0.369 2804 0.362 0295	— 4042	0.163 3215 0.160 1879 0.157 0423	1758
25.5	0.904 5963 + 36007	— 1963	0.369 2804 0.362 0295 0.354 7514	— 4074	0.160 1879 0.157 0423 0.153 8850	1772
26.0	0.908 1070 + 35314	— 1886	0.362 0295 0.354 7514 0.347 4466	— 4074	0.157 0423 0.153 8850 0.150 7162	1772
26.5	0.911 7284 + 34620	— 1886	0.354 7514 0.347 4466	— 4074	0.153 8850 0.150 7162	1772
27.0	0.915 1904	—	0.347 4466	—	0.150 7162	1772

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Febr. 27.0	+		—		—	
	0.915 1904	33923	0.347 4466	73308	0.150 7162	31801
	27.5	0.918 5827	33224	—1808	0.147 5361	31911
	28.0	0.921 9051	32524	0.332 7595	0.144 3450	32019
	28.5	0.925 1575	31822	1730	0.141 1431	32125
	29.0	0.928 3397	31118	0.317 9727	0.137 9306	32228
	29.5	0.931 4515	30413	1651	0.134 7078	32328
	1.0	0.934 4928	29706	0.310 5433	0.131 4750	1810
	1.5	0.937 4634	28997	—1572	0.128 2324	32426
	2.0	0.940 3631	28287	0.288 1176	0.124 9802	1822
März	2.5	0.943 1918	1492	0.280 5983	0.121 7186	1833
	+	27576	—	75404	—	32707
	3.0	0.945 9494	26863	0.273 0579	0.118 4479	32796
	3.5	0.948 6357	26149	—1412	0.115 1683	32882
	4.0	0.951 2506	25432	0.257 9157	0.111 8801	32967
	4.5	0.953 7938	24713	1331	0.108 5834	1854
	5.0	0.956 2651	23993	0.242 6953	0.105 2784	33050
	5.5	0.958 6644	23272	1250	0.101 9654	33130
	6.0	0.960 9916	22548	0.227 4012	0.098 6447	33207
	6.5	0.963 2464	21823	1168	0.095 3164	33283
Juni	7.0	0.965 4287	21096	0.212 0376	0.091 9808	1873
	7.5	0.967 5383	1086	0.204 3312	0.088 6381	33427
	+	20368	—	77221	—	33495
	8.0	0.969 5751	19637	0.196 6091	0.085 2886	33560
	8.5	0.971 5388	18905	—1004	0.081 9326	33623
	9.0	0.973 4293	18172	0.181 1201	0.078 5703	33684
	9.5	0.975 2465	17438	922	0.075 2019	1896
	10.0	0.976 9903	16702	0.165 5749	0.071 8276	33743
	10.5	0.978 6605	15964	839	0.068 4477	33799
	11.0	0.980 2569	15225	0.149 9786	0.065 0625	33852
Juli	11.5	0.981 7794	14486	756	0.061 6722	33903
	12.0	0.983 2280	13745	0.142 1627	0.058 2770	33952
	12.5	0.984 6025	13002	0.134 3357	0.054 8772	33998
	+	—	—	78472	—	1914
	13.0	0.985 9027	12259	0.118 6512	0.051 4732	34081
	13.5	0.987 1286	11516	—590	0.048 0651	34118
	14.0	0.988 2802	10771	0.102 9296	0.044 6533	34153
	14.5	0.989 3573	10025	506	0.041 2380	34186
	15.0	0.990 3598	9278	0.087 1760	0.037 8194	34216
August	15.5	0.991 2876	8531	422	0.034 3978	34242
	16.0	0.992 1407	7782	0.071 3954	0.030 9736	1927
	16.5	0.992 9189	7034	338	0.063 4964	34267
	17.0	0.993 6223	—	0.055 5925	0.027 5469	34288
				4437	0.024 1181	1930

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
März 17.0	0.993 6223	6285	—	—	—	—
17.5	0.994 2508	5536	— 254	0.047 6844	79081	0.024 1181
18.0	0.994 8044	4787	—	0.039 7726	79118	0.020 6874 34307
18.5	0.995 2831	4038	170	0.031 8577	79149	0.017 2550 34324
19.0	0.995 6869	3288	—	0.023 9405	79172	0.013 8213 34337
19.5	0.996 0157	2539	86	0.016 0215	79201	0.010 3865 34348
20.0	0.996 2696	1790	—	0.008 1014	79206	0.006 9510 34355
20.5	0.996 4486	—	2	0.000 1808	—	0.003 5150 34360
	+	1041	—	—	—	0.000 0788 34362
21.0	0.996 5527	292	—	0.007 7396	79204	+
21.5	0.996 5819	—	82	0.015 6592	—	0.003 3573 34361
	+	455	—	—	—	0.006 7931 34368
22.0	0.996 5364	1203	—	0.023 5775	79163	0.010 2283 34343
22.5	0.996 4161	1949	+ 166	0.031 4938	79136	0.013 6626 34331
23.0	0.996 2212	2695	—	0.039 4074	79103	0.017 0957 34317
23.5	0.995 9517	3439	250	0.047 3177	79064	0.020 5274 34300
24.0	0.995 6078	4183	—	0.055 2241	79019	0.023 9574 34280
24.5	0.995 1895	4925	334	0.063 1260	78969	0.027 3854 34257
25.0	0.994 6970	5667	—	0.071 0229	78912	0.030 8111 34232
25.5	0.994 1303	6408	418	0.078 9141	78849	0.034 2343 34205
26.0	0.993 4895	7146	—	0.086 7990	78781	0.037 6548 34175
26.5	0.992 7749	—	502	0.094 6771	—	0.041 0723 1929
	+	7882	—	—	—	+
27.0	0.991 9867	8618	—	0.102 5479	78628	0.044 4865 34107
27.5	0.991 1249	9353	+ 586	0.110 4107	—	0.047 8972 34070
28.0	0.990 1896	10086	—	0.118 2649	78542	—
28.5	0.989 1810	10817	669	0.126 1099	78450	0.051 3042 34030
29.0	0.988 0993	11548	—	0.133 9453	78354	0.054 7072 33988
29.5	0.986 9445	12276	752	0.141 7706	78253	0.058 1060 33943
30.0	0.985 7169	13004	—	0.149 5852	78146	0.061 5003 33896
30.5	0.984 4165	13729	835	0.157 3885	78033	0.064 8899 33847
31.0	0.983 0436	14452	—	0.165 1801	77916	0.068 2746 33796
31.5	0.981 5984	—	918	0.172 9593	77792	0.071 6542 33742
	+	15175	—	—	—	0.075 0284 1908
April	1.0	0.980 0809	15896	—	—	+
1.5	0.978 4913	16616	+ 1000	0.188 4788	77531	0.078 3970 33628
2.0	0.976 8297	17335	—	0.196 2180	77392	0.081 7598 33568
2.5	0.975 0962	18053	1082	0.203 9428	77248	0.085 1166 33506
3.0	0.973 2909	18769	—	0.211 6527	77099	0.088 4672 33442
3.5	0.971 4140	19483	1164	0.219 3472	76945	0.091 8114 33374
4.0	0.969 4657	20196	—	0.227 0257	76785	0.095 1488 33304
4.5	0.967 4461	20908	1246	0.234 6877	76620	0.098 4792 33233
5.0	0.965 3553	—	—	0.242 3327	76450	0.101 8025 33160
						0.105 1185

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
April 5.0	+ 0.965 3553	21619	+ 0.242 3327	76274	+ 0.105 1185	33084
5.5	0.963 1934	22328	- 0.249 9601	76092	- 0.108 4269	33006
6.0	0.960 9606		+ 0.257 5693		+ 0.111 7275	32925
6.5	0.958 6572	23034	0.265 1599	75906	- 0.115 0200	32842
7.0	0.956 2832	23740	- 0.272 7313	75516	- 0.118 3042	32756
7.5	0.953 8387	24445	+ 0.280 2829	75313	+ 0.121 5798	32669
8.0	0.951 3240	25147	- 0.287 8142	75105	- 0.124 8467	32579
8.5	0.948 7392	25848	+ 0.295 3247	74891	- 0.128 1046	32487
9.0	0.946 0846	26546	- 0.302 8138	74671	+ 0.131 3533	32392
9.5	0.943 3603	27243	+ 0.310 2809		- 0.134 5925	1834
	+ 27938		+ 74446		+ 32294	
10.0	0.940 5665	28631	- 0.317 7255	74215	- 0.137 8219	32194
10.5	0.937 7034	29321	+ 0.325 1470	73979	- 0.141 0413	32092
11.0	0.934 7713	30010	- 0.332 5449	73738	- 0.144 2505	31988
11.5	0.931 7703	30695	+ 0.339 9187	73491	- 0.147 4493	31882
12.0	0.928 7008	31379	- 0.347 2678	73238	- 0.150 6375	31772
12.5	0.925 5629	32061	+ 0.354 5916	72979	- 0.153 8147	1800
13.0	0.922 3568	32740	- 0.361 8805	72716	- 0.156 9806	31659
13.5	0.919 0828	33418	+ 0.369 1611	72447	- 0.160 1351	31545
14.0	0.915 7410	34093	- 0.376 4058	72172	- 0.163 2780	31429
14.5	0.912 3317	2037	+ 0.383 6230		- 0.166 4090	1787
	+ 34765		+ 71892		+ 31189	
15.0	0.908 8552	35433	- 0.390 8122	71606	- 0.169 5279	31066
15.5	0.905 3119	36099	+ 0.397 9728	71314	- 0.172 6345	30940
16.0	0.901 7020	36762	- 0.405 1042	71017	- 0.175 7285	30811
16.5	0.898 0258	2188	+ 0.412 2059	70715	- 0.178 8096	1746
17.0	0.894 2836	37422	- 0.419 2774	70407	- 0.181 8775	30679
17.5	0.890 4757	38079	+ 0.426 3181	70093	- 0.184 9320	1731
18.0	0.886 6025	38732	- 0.433 3274	69774	- 0.187 9729	30409
18.5	0.882 6642	39383	+ 0.440 3048	69450	- 0.190 9999	30270
19.0	0.878 6612	40030	- 0.447 2498	69121	- 0.194 0128	1716
19.5	0.874 5939	40673	+ 0.454 1619		- 0.197 0114	29986
	+ 41313		+ 68786		+ 29841	
20.0	0.870 4626		- 0.461 0405	68446	- 0.199 9955	29694
20.5	0.866 2677	41949	+ 0.467 8851	68102	- 0.202 9649	- 1684
21.0	0.862 0097	42580	- 0.474 6953	67753	- 0.205 9193	29392
21.5	0.857 6888	43209	+ 0.481 4706	67399	- 0.208 8585	29238
22.0	0.853 3055	43833	- 0.488 2105	67040	- 0.211 7823	29082
22.5	0.848 8602	44453	+ 0.494 9145	66677	- 0.214 6905	28924
23.0	0.844 3534	45068	- 0.501 5822	66308	- 0.217 5829	28764
23.5	0.839 7854	45680	+ 0.508 2130	65935	- 0.220 4593	1633
24.0	0.835 1566	46288	- 0.514 8065		- 0.223 3194	

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
April	24.0 0.835 1566	46892	+ 0.514 8065	65558	+ 0.223 3194	28437
	24.5 0.830 4674	47493	+ 0.521 3623	65177	- 0.226 1631	28272
	25.0 0.825 7181	48089	+ 0.527 8800	64791	- 0.228 9903	28104
	25.5 0.820 9092	48681	+ 0.534 3591	64402	- 0.231 8007	27935
	26.0 0.816 0411	49268	+ 0.540 7993	64008	- 0.234 5942	27763
	26.5 0.811 1143	49852	+ 0.547 2001	63610	- 0.237 3705	27590
	27.0 0.806 1291	50432	+ 0.553 5611	63208	- 0.240 1295	27416
	27.5 0.801 0859	51008	+ 0.559 8819	62803	- 0.242 8711	27240
	28.0 0.795 9851	51580	+ 0.566 1622	62393	- 0.245 5951	27062
	28.5 0.790 8271		+ 0.572 4015		- 0.248 3013	1537
		52148	+ 0.572 4015	61979	+ 26882	
	29.0 0.785 6123	52713	+ 0.578 5994	61562	- 0.250 9895	26700
	29.5 0.780 3410	53273	+ 0.584 7556	61140	- 0.253 6595	26518
Mai	30.0 0.775 0137	53830	+ 0.590 8696	60714	- 0.256 3113	26333
	30.5 0.769 6307	54382	+ 0.596 9410	60285	- 0.258 9446	26147
	1.0 0.764 1925	54931	+ 0.602 9695	59852	- 0.261 5593	25960
	1.5 0.758 6994	55476	+ 0.608 9547	59414	- 0.264 1553	25771
	2.0 0.753 1518	56017	+ 0.614 8961	58973	- 0.266 7324	25579
	2.5 0.747 5501	56555	+ 0.620 7934	58529	- 0.269 2903	25387
	3.0 0.741 8946	57089	+ 0.626 6463	58081	- 0.271 8290	25192
	3.5 0.736 1857		+ 0.632 4544		- 0.274 3482	1431
		57619	+ 0.632 4544	57628	+ 24996	
	4.0 0.730 4238	58145	+ 0.638 2172	57170	- 0.276 8478	24798
	4.5 0.724 6093	58666	+ 0.643 9342	56710	- 0.279 3276	24599
	5.0 0.718 7427	59184	+ 0.649 6052	56245	- 0.281 7875	24397
	5.5 0.712 8243	59698	+ 0.655 2297	55776	- 0.284 2272	24195
	6.0 0.706 8545	60207	+ 0.660 8073	55304	- 0.286 6467	23990
	6.5 0.700 8338	60713	+ 0.666 3377	54829	- 0.289 0457	23784
	7.0 0.694 7625	61214	+ 0.671 8206	54348	- 0.291 4241	23577
	7.5 0.688 6411	61711	+ 0.677 2554	53864	- 0.293 7818	23367
	8.0 0.682 4700	62204	+ 0.682 6418	53376	- 0.296 1185	23155
	8.5 0.676 2496		+ 0.687 9794		- 0.298 4340	1315
		62692	+ 0.687 9794	52884	+ 22941	
	9.0 0.669 9804	63176	+ 0.693 2678	52389	- 0.300 7281	22727
	9.5 0.663 6628		+ 0.698 5067	51889	- 0.303 0008	22511
	10.0 0.657 2973	63655	+ 0.703 6956	51385	- 0.305 2519	22293
	10.5 0.650 8843	64130	+ 0.708 8341	50878	- 0.307 4812	22073
	11.0 0.644 4242	64601	+ 0.713 9219	50367	- 0.309 6885	21852
	11.5 0.637 9176	65528	+ 0.718 9586	49852	- 0.311 8737	21629
	12.0 0.631 3648	65984	+ 0.723 9438	49334	- 0.314 0366	21403
	12.5 0.624 7664	66436	+ 0.728 8772	48811	- 0.316 1769	21177
	13.0 0.618 1228		+ 0.733 7583		- 0.318 2946	1215

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Mai	+ 0.618 1228	66883	+ 0.733 7583	48285	+ 0.318 2946	20949
	+ 0.611 4345	67325	+ 0.738 5868	47755	- 0.320 3895	20719
	+ 0.604 7020	67762	+ 0.743 3623	47221	- 0.322 4614	20487
	+ 0.597 9258	68194	+ 0.748 0844	46684	+ 0.324 5101	20255
	+ 0.591 1064	68620	+ 0.752 7528	46144	+ 0.326 5356	20020
	+ 0.584 2444	69041	+ 0.757 3672	45600	+ 0.328 5376	19784
	+ 0.577 3403	69456	+ 0.761 9272	45052	+ 0.330 5160	19546
	+ 0.570 3947	69866	+ 0.766 4324	44501	+ 0.332 4706	19306
	+ 0.563 4081	70271	+ 0.770 8825	43947	+ 0.334 4012	19065
	+ 0.556 3810	70670	+ 0.775 2772	4117	+ 0.336 3077	18822
	+ 0.549 3140	71063	+ 0.779 6161	42829	+ 0.338 1901	18580
	+ 0.542 2077	71450	+ 0.783 8990	42265	+ 0.340 0481	18336
	+ 0.535 0627	71832	+ 0.788 1255	41699	+ 0.341 8817	18090
	+ 0.527 8795	72208	+ 0.792 2954	41129	+ 0.343 6907	17842
	+ 0.520 6587	72577	+ 0.796 4083	40557	+ 0.345 4749	17594
	+ 0.513 4010	72941	+ 0.800 4640	39983	+ 0.347 2343	17344
	+ 0.506 1069	73300	+ 0.804 4623	39406	+ 0.348 9687	17093
	+ 0.498 7769	73653	+ 0.808 4029	38827	+ 0.350 6780	16842
	+ 0.491 4116	74000	+ 0.812 2856	38245	+ 0.352 3622	16589
	+ 0.484 0116	74340	+ 0.816 1101	37662	+ 0.354 0211	941
	+ 0.476 5776	74676	+ 0.819 8763	37077	+ 0.355 6546	16335
	+ 0.469 1100	75006	+ 0.823 5840	36489	+ 0.357 2627	16081
	+ 0.461 6094	75331	+ 0.827 2329	35900	+ 0.358 8453	15826
	+ 0.454 0763	75650	+ 0.830 8229	35309	+ 0.360 4023	15570
	+ 0.446 5113	75963	+ 0.834 3538	34715	+ 0.361 9336	15313
	+ 0.438 9150	76271	+ 0.837 8253	34119	+ 0.363 4392	15056
	+ 0.431 2879	76574	+ 0.841 2372	33522	+ 0.364 9189	14797
	+ 0.423 6305	76870	+ 0.844 5894	32923	+ 0.366 3726	14537
	+ 0.415 9435	77162	+ 0.847 8817	32321	+ 0.367 8003	14277
	+ 0.408 2273	77448	+ 0.851 1138	31718	+ 0.369 2020	824
	+ 0.400 4825	77729	+ 0.854 2856	31114	+ 0.370 5776	794
	+ 0.392 7096	78006	+ 0.857 3970	30507	+ 0.371 9270	13494
	+ 0.384 9090	78277	+ 0.860 4477	29899	+ 0.373 2501	13231
	+ 0.377 0813	78542	+ 0.863 4376	29290	+ 0.374 5468	12967
	+ 0.369 2271	78802	+ 0.866 3666	28678	+ 0.375 8171	12703
	+ 0.361 3469	79057	+ 0.869 2344	28065	+ 0.377 0609	12438
	+ 0.353 4412	79306	+ 0.872 0409	27450	+ 0.378 2781	12172
	+ 0.345 5106	79551	+ 0.874 7859	26832	+ 0.379 4687	11906
	1.0 0.337 5555		+ 0.877 4691		+ 0.380 6325	672
Juni						

## SONNENKOORDINATEN 1912.

Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Juni						
1.0	0.337 5555	79791	0.877 4691	26213	0.380 6325	
1.5	0.329 5764	80025	+4674	0.880 0904	11369	-641
2.0	0.321 5739	80253		0.882 6497	11101	
2.5	0.313 5486	80476	4701	0.885 1468	10832	610
3.0	0.305 5010	80694		0.887 5815	10561	
3.5	0.297 4316	80906	4727	0.889 9537	10019	579
4.0	0.289 3410	81113		0.892 2631	9747	
4.5	0.281 2297	81314	4751	0.894 5096	9473	547
5.0	0.273 0983	81510		0.896 6931	9199	
5.5	0.264 9473		4774	0.898 8134	8924	516
		81700		+20568		
6.0	0.256 7773	81885		0.900 8702	8648	
6.5	0.248 5888	82065	+4796	0.902 8634	8372	-484
7.0	0.240 3823	82239		0.904 7929	8096	
7.5	0.232 1584	82406	4816	0.906 6585	7818	452
8.0	0.223 9178	82568		0.908 4601	7540	
8.5	0.215 6610	82724	4835	0.910 1976	7261	420
9.0	0.207 3886	82875		0.911 8707	6982	
9.5	0.199 1011	83019	4852	0.913 4793	6702	388
10.0	0.190 7992	83158		0.915 0234	6421	
10.5	0.182 4834		4868	0.916 5027	356	
		83291		+14145	6140	
11.0	0.174 1543	83418		0.917 9172	5857	
11.5	0.165 8125	83539	+4883	0.919 2667	5574	-324
12.0	0.157 4586	83653		0.920 5510	5291	
12.5	0.149 0933	83761	4896	0.921 7701	5008	291
13.0	0.140 7172	83863		0.922 9238	4723	
13.5	0.132 3309	83957	4908	0.924 0120	4438	259
14.0	0.123 9352	84046		0.925 0347	4152	
14.5	0.115 5306	84129	4918	0.925 9917	3867	226
15.0	0.107 1177	84205		0.926 8830	3582	
15.5	0.098 6972		4927	0.927 7085	193	
		84273		+7597	3296	
16.0	0.090 2699	84336		0.928 4682	3010	
16.5	0.081 8363	84393	+4935	0.929 1619	2723	-160
17.0	0.073 3970	84442		0.929 7897	2437	
17.5	0.064 9528	84485	4941	0.930 3516	2150	127
18.0	0.056 5043	84522		0.930 8475	1864	
18.5	0.048 0521	84553	4946	0.931 2776	1578	94
19.0	0.039 5968	84577		0.931 6418	1292	
19.5	0.031 1391	84595	4950	0.931 9401	1066	
20.0	0.022 6796			0.932 1725	0.404 3668	

## Mittl. Äquator und Mittl. Äquinoktium 1912.c

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0	
Juni	20.0	+ 0.022 6796	84666	0.932 1725	1667	0.404 3668	
	20.5	0.014 2190	84612	+ 0.932 3392	1009	- 0.404 4389	
	21.0	0.005 7578		0.932 4401		0.404 4824	
		- 84612		+ 351		+ 150	
	21.5	0.002 7034	84666	+ 0.932 4752	306	0.404 4974	
	22.0	0.011 1640	84594	0.932 4446	962	0.404 4838	
	22.5	0.019 6234	84576	4952	0.932 3484	1617	
	23.0	0.028 0810	84552	0.932 1867	2272	0.404 4417	
	23.5	0.036 5362	84523	4950	0.931 9595	162	
	24.0	0.044 9885	84487	0.931 6668	2927	0.404 2722	
	24.5	0.053 4372		0.931 3087	3581	0.404 1449	
		- 84447			238	0.403 9892	
	25.0	0.061 8819	84401	+ 0.930 8853	4887	+ 1839	
	25.5	0.070 3220	84349	+ 0.930 3966	5539	0.403 8053	
	26.0	0.078 7569	84292	0.929 8427	6191	0.403 5930	
	26.5	0.087 1861	84229	4935	0.929 2236	389	
	27.0	0.095 6090	84161	0.928 5393	7493	0.402 7864	
	27.5	0.104 0251	84086	4928	0.927 7900	464	
	28.0	0.112 4337	84006	0.926 9756	8144	0.402 4612	
	28.5	0.120 8343	83921	4919	0.926 0963	539	
	29.0	0.129 2264	83831	0.925 1522	10089	0.401 7263	
	29.5	0.137 6095		0.924 1433	9441	0.401 3167	
		- 83735		+ 10736	614	0.400 8790	
	30.0	0.145 9830	83634	0.923 0697	11383	+ 4658	
Juli	30.5	0.154 3464	83526	+ 0.921 9314	12029	0.400 4132	
	1.0	0.162 6990	83413	0.920 7285	12675	0.399 9194	
	1.5	0.171 0403	83295	4884	0.919 4610	764	
	2.0	0.179 3698	83172	0.918 1291	13319	0.398 8480	
	2.5	0.187 6870	83042	4870	0.916 7329	14605	
	3.0	0.195 9912	82907	0.915 2724	15247	0.398 2704	
	3.5	0.204 2819	82766	4854	0.913 7477	15889	
	4.0	0.212 5585	82620	0.912 1588	16529	0.396 3704	
	4.5	0.220 8205		4837	0.910 5059	986	
		- 82468		+ 17169		0.394 9647	
	5.0	0.229 0673	82311	0.908 7890	17808	+ 7445	
	5.5	0.237 2984	82147	+ 0.907 0082	18447	0.394 2202	
	6.0	0.245 5131	81979	0.905 1635	19084	0.393 4479	
	6.5	0.253 7110	81804	4798	0.903 2551	1133	
	7.0	0.261 8914	81624	0.901 2831	19720	0.391 8205	
	7.5	0.270 0538	81438	4777	0.899 2476	20355	0.390 9654
	8.0	0.278 1976	81246	0.897 1487	21621	0.390 0827	
	8.5	0.286 3222	81047	4754	0.894 9866	1279	
	9.0	0.294 4269		0.892 7613	22253	0.388 2350	

## SONNENKOORDINATEN 1912.

Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red.auf 1910.0	Y	Red.auf 1910.0	Z	Red.auf 1910.0
Juli	—		+		+	
9.0	0.294 4269	80843	0.892 7613	22883	0.387 2700	9924
9.5	0.302 5112	80633	0.890 4730	23513	0.386 2776	10197
10.0	0.310 5745	80416	0.888 1217	24142	0.385 2579	10470
10.5	0.318 6161	80195	0.885 7075	24769	0.384 2109	10742
11.0	0.326 6356	79967	0.883 2306	25395	0.383 1367	11014
11.5	0.334 6323	79733	0.880 6911	26019	0.382 0353	11285
12.0	0.342 6056	79493	0.878 0892	26642	0.380 9068	11556
12.5	0.350 5549	79247	0.875 4250	27263	0.379 7512	11825
13.0	0.358 4796	78994	0.872 6987	27881	0.378 5687	12094
13.5	0.366 3790	—	0.869 9106	—	0.377 3593	712
	—	78734	—	28497	—	12361
14.0	0.374 2524	78469	0.867 0609	29111	0.376 1232	12628
14.5	0.382 0993	78198	+ 4591	0.864 1498	+ 1706	0.374 8604
15.0	0.389 9191	77920	—	0.861 1776	—	0.373 5709
15.5	0.397 7111	77636	4559	0.858 1443	30941	0.372 2549
16.0	0.405 4747	77347	—	0.855 0502	—	0.370 9126
16.5	0.413 2094	77052	4525	0.851 8956	31546	0.369 5440
17.0	0.420 9146	76751	—	0.848 6808	32148	0.368 1492
17.5	0.428 5897	76445	4490	0.845 4061	32747	0.366 7283
18.0	0.436 2342	76133	—	0.842 0717	33344	0.365 2815
18.5	0.443 8475	—	4455	0.838 6778	33939	0.363 8090
	—	75816	—	—	—	14982
19.0	0.451 4291	75493	—	0.835 2247	35119	0.362 3108
19.5	0.458 9784	75166	+ 4418	0.831 7128	35705	+ 2050
20.0	0.466 4950	74833	—	0.828 1423	—	0.359 2379
20.5	0.473 9783	74494	4380	0.824 5135	36288	0.357 6635
21.0	0.481 4277	74151	—	0.820 8267	36868	0.356 0639
21.5	0.488 8428	73802	4341	0.817 0823	37444	0.354 4392
22.0	0.496 2230	73450	—	0.813 2805	38018	0.352 7897
22.5	0.503 5680	73092	4300	0.809 4216	38589	0.351 1154
23.0	0.510 8772	72730	—	0.805 5058	39158	0.349 4165
23.5	0.518 1502	—	4258	0.801 5335	39723	0.347 6930
	—	72362	—	—	—	1007
24.0	0.525 3864	71990	—	0.797 5049	40846	0.345 9452
24.5	0.532 5854	71613	+ 4215	0.793 4203	41403	+ 2379
25.0	0.539 7467	71231	—	0.789 2800	41957	0.342 3770
25.5	0.546 8698	70844	4171	0.785 0843	42508	0.340 5568
26.0	0.553 9542	70453	—	0.780 8335	43057	0.338 7128
26.5	0.560 9995	70057	4125	0.776 5278	43602	0.336 8450
27.0	0.568 0052	69657	—	0.772 1676	44144	0.334 9536
27.5	0.574 9709	69253	4079	0.767 7532	44684	0.333 0387
28.0	0.581 8962	—	—	0.763 2848	—	0.331 1005

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Juli	28.0	0.581 8962 68843		0.763 2848 45220		0.331 1005 19615
	28.5	0.588 7805 68429	+ 4031	0.758 7628 45753	+ 2631	0.329 1390 19846
	29.0	0.595 6234 68011		0.754 1875 46284		0.327 1544 20077
	29.5	0.602 4245 67587	3982	0.749 5591 46811	2692	0.325 1467 20305
	30.0	0.609 1832 67158		0.744 8780 47337		0.323 1162 20532
	30.5	0.615 8990 66726	3932	0.740 1443 47860	2752	0.321 0630 20758
	31.0	0.622 5716 66288		0.735 3583 48379		0.318 9872 20983
	31.5	0.629 2004 65846	3881	0.730 5204 48894	2811	0.316 8889 21206
	1.0	0.635 7850 65399		0.725 6310 49407		0.314 7683 21429
	1.5	0.642 3249 — 64949	3829	0.720 6903 49917	2870	0.312 6254 21650
Aug.	2.0	0.648 8198 64494		0.715 6986 50423		0.310 4604 21870
	2.5	0.655 2692 64033	+ 3776	0.710 6563 50927	+ 2928	0.308 2734 22089
	3.0	0.661 6725 63568		0.705 5636 51427		0.306 0645 22305
	3.5	0.668 0293 63099	3721	0.700 4209 51924	2985	0.303 8340 22521
	4.0	0.674 3392 62624		0.695 2285 52418		0.301 5819 22735
	4.5	0.680 6016 62146	3665	0.689 9867 52908	3041	0.299 3084 22948
	5.0	0.686 8162 61662		0.684 6959 53396		0.297 0136 23159
	5.5	0.692 9824 61173	3609	0.679 3563 53880	3096	0.294 6977 23369
	6.0	0.699 0997 60681		0.673 9683 54361		0.292 3608 23578
	6.5	0.705 1678 — 60183	3552	0.668 5322 54839	3150	0.290 0030 23786
	7.0	0.711 1861 59681		0.663 0483 55313		0.287 6244 23992
	7.5	0.717 1542 59173	+ 3493	0.657 5170 55783	+ 3204	0.285 2252 24197
	8.0	0.723 0715 58661		0.651 9387 56250		0.282 8055 24399
	8.5	0.728 9376 58144	3434	0.646 3137 56713	3257	0.280 3656 24600
	9.0	0.734 7520 57622		0.640 6424 57172		0.277 9056 24800
	9.5	0.740 5142 57096	3374	0.634 9252 57627	3308	0.275 4256 24998
	10.0	0.746 2238 56564		0.629 1625 58078		0.272 9258 25193
	10.5	0.751 8802 56028	3313	0.623 3547 58524	3359	0.270 4065 25388
	11.0	0.757 4830 55487		0.617 5023 58966		0.267 8677 25581
	11.5	0.763 0317 — 54942	3250	0.611 6057 59405	3409	0.265 3096 25771
	12.0	0.768 5259 54392		0.605 6652 59839		0.262 7325 25959
	12.5	0.773 9651 53837	+ 3187	0.599 6813 60269	+ 3458	0.260 1366 26146
	13.0	0.779 3488 53278		0.593 6544 60693		0.257 5220 26331
	13.5	0.784 6766 52715	3123	0.587 5851 61113	3506	0.254 8889 26513
	14.0	0.789 9481 52148		0.581 4738 61528		0.252 2376 26693
	14.5	0.795 1629 51578	3058	0.575 3210 61939	3553	0.249 5683 26871
	15.0	0.800 3207 51004		0.569 1271 62345		0.246 8812 27048
	15.5	0.805 4211 50425	2992	0.562 8926 62745	3599	0.244 1764 27222
	16.0	0.810 4636 —		0.556 6181		0.241 4542

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Aug. 16.0	0.810 4636	49843	+ 0.556 6181	63140	+ 0.241 4542	27393
16.5	0.815 4479	49257	+ 0.550 3041	63531	+ 0.238 7149	27563
17.0	0.820 3736	48668	+ 0.543 9510	63918	+ 0.235 9586	27730
17.5	0.825 2404	48075	+ 0.537 5592	64299	+ 0.233 1856	27896
18.0	0.830 0479	47479	+ 0.531 1293	64677	+ 0.230 3960	28059
18.5	0.834 7958	46881	+ 0.524 6616	65048	+ 0.227 5901	28220
19.0	0.839 4839	46279	+ 0.518 1568	65415	+ 0.224 7681	28379
19.5	0.844 1118	45673	+ 0.511 6153	65778	+ 0.221 9302	28536
20.0	0.848 6791	45065	+ 0.505 0375	66136	+ 0.219 0766	28691
20.5	0.853 1856	44454	+ 0.498 4239	66489	+ 0.216 2075	28844
	—	44454	+ 0.491 7750	66837	+ 0.213 3231	28995
21.0	0.857 6310	43840	+ 0.485 0913	67180	+ 0.210 4236	29143
21.5	0.862 0150	43223	+ 0.478 3733	67519	+ 0.207 5093	29289
22.0	0.866 3373	42604	+ 0.471 6214	67854	+ 0.204 5804	29434
22.5	0.870 5977	41981	+ 0.464 8360	68184	+ 0.201 6370	29577
23.0	0.874 7958	41356	+ 0.458 0176	68508	+ 0.198 6793	29717
23.5	0.878 9314	40727	+ 0.451 1668	68829	+ 0.195 7076	29856
24.0	0.883 0041	40096	+ 0.444 2839	69144	+ 0.192 7220	29993
24.5	0.887 0137	39463	+ 0.437 3695	69455	+ 0.189 7227	30128
25.0	0.890 9600	38826	+ 0.430 4240	69761	+ 0.186 7099	30260
25.5	0.894 8426	38187	+ 0.423 4479	70063	+ 0.183 6839	30391
	—	38187	+ 0.416 4416	70360	+ 0.180 6448	30519
26.0	0.898 6613	37544	+ 0.409 4056	70653	+ 0.177 5929	30646
26.5	0.902 4157	36899	+ 0.402 3403	70941	+ 0.174 5283	30770
27.0	0.906 1056	36252	+ 0.395 2462	71224	+ 0.171 4513	30893
27.5	0.909 7308	35602	+ 0.388 1238	71501	+ 0.168 3620	31013
28.0	0.913 2910	34949	+ 0.380 9737	71775	+ 0.165 2607	31132
28.5	0.916 7859	34294	+ 0.373 7962	72044	+ 0.162 1475	31248
29.0	0.920 2153	33637	+ 0.366 5918	72308	+ 0.159 0227	31362
29.5	0.923 5790	32977	+ 0.359 3610	72567	+ 0.155 8865	31475
30.0	0.926 8767	32314	+ 0.352 1043	72821	+ 0.152 7390	31586
30.5	0.930 1081	31648	+ 0.344 8222	73071	+ 0.149 5804	31694
	—	31648	+ 0.337 5151	73317	+ 0.146 4110	31801
31.0	0.933 2729	30979	+ 0.330 1834	73557	+ 0.143 2309	31905
31.5	0.936 3708	30308	+ 0.322 8277	73792	+ 0.140 0404	32007
Sept. 1.0	0.939 4016	29635	+ 0.315 4485	74023	+ 0.136 8397	32108
1.5	0.942 3651	28960	+ 0.308 0462	74248	+ 0.133 6289	32206
2.0	0.945 2611	28281	+ 0.300 6214	74468	+ 0.130 4083	32301
2.5	0.948 0892	27599	+ 0.293 1746	74782	+ 0.127 1782	32453
3.0	0.950 8491	26915				
3.5	0.953 5406	26229				
4.0	0.956 1635					

## Mittl. Äquator und Mittl. Äquinoktium 1912.○

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Sept.			+		+	
4.0	0.956 1635	25540	0.293 1746		0.127 1782	32395
4.5	0.958 7175	24849	+ 1519	0.285 7062	74684	0.123 9387 32486
5.0	0.961 2024	24155		0.278 2169	74893	0.120 6901 32576
5.5	0.963 6179	23459		0.270 7071	75098	0.117 4325 32663
6.0	0.965 9638	22759		0.263 1773	75492	0.114 1662 32748
6.5	0.968 2397	22058		0.255 6281	75681	0.110 8914 32831
7.0	0.970 4455	21354		0.248 0600	75864	0.107 6083 32910
7.5	0.972 5809	20647		0.240 4736	76041	0.104 3173 32987
8.0	0.974 6456	19939		0.232 8695	76213	0.101 0186 33062
8.5	0.976 6395			0.225 2482		0.097 7124 1898
	—	19229			+	33135
9.0	0.978 5624	18516		0.217 6102		0.094 3989
9.5	0.980 4140	17801	+ 1117	0.209 9562	76540	0.091 0784 33205
10.0	0.982 1941	17084		0.202 2868	76694	0.087 7512 33272
10.5	0.983 9025	16366		0.194 6026	76842	0.084 4176 33336
11.0	0.985 5391	15646		0.186 9042	76984	0.081 0778 33398
11.5	0.987 1037	14926		0.179 1922	77120	0.077 7320 33458
12.0	0.988 5963	14203		0.171 4672	77250	0.074 3806 33514
12.5	0.990 0166	13479		0.163 7297	77375	0.071 0238 33568
13.0	0.991 3645	12754		0.155 9804	77493	0.067 6619 33619
13.5	0.992 6399			0.148 2199	77605	0.064 2952 33667
	—	12027		+	77710	+
14.0	0.993 8426	11300		0.140 4489		0.060 9239 33757
14.5	0.994 9726	10573	+ 706	0.132 6678	77811	0.057 5482 33797
15.0	0.996 0299	9845		0.124 8773	77905	0.054 1685 33835
15.5	0.997 0144	9116		0.117 0780	77993	0.050 7850 33870
16.0	0.997 9260	8387		0.109 2704	78076	0.047 3980 1938
16.5	0.998 7647	7658		0.101 4552	78152	0.044 0077 33903
17.0	0.999 5305	6928		0.093 6329	78223	0.040 6143 33934
17.5	1.000 2233	6108		0.085 8041	78288	0.037 2181 33962
18.0	1.000 8431	5467		0.077 9694	78347	0.033 8194 33987
18.5	1.001 3898			0.070 1294	78400	0.030 4184 34010
	—	4736		+	78447	+
19.0	1.001 8634	4005		0.062 2847		0.027 0154 34048
19.5	1.002 2639		+ 291	0.054 4358	78489	0.023 6106
20.0	1.002 5912	3273		0.046 5833	78525	0.020 2042 34064
20.5	1.002 8452	2540		0.038 7276	78557	0.016 7965 34077
21.0	1.003 0261	1809		0.030 8693	78583	0.013 3878 34087
21.5	1.003 1338	1077		0.023 0090	78603	0.009 9782 34096
22.0	1.003 1682	344		0.015 1473	78626	0.006 5680 34102
22.5	1.003 1294	388		0.007 2847		0.003 1575 34105
	—	1120		—	78629	—
23.0	1.003 0174			0.000 5782		0.000 2531

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Sept. 23.0	1.003 0174	1853	0.000 5782	78627	0.000 2531	34105
23.5	1.002 8321	2584	0.008 4409	78620	+ 4482	0.003 6636 34102
24.0	1.002 5737	3316	0.016 3029	78606		+ 1949
24.5	1.002 2421	4048	0.024 1635	78588	4479	0.010 4834 34096
25.0	1.001 8373	4781	0.032 0223	78564		0.013 8921 34087
25.5	1.001 3592	5512	0.039 8787	78535	4475	0.017 2998 34077
26.0	1.000 8080	6244	0.047 7322	78499		0.020 7062 34064
26.5	1.000 1836	6975	0.055 5821	78459	4470	0.024 1110 34048
27.0	0.999 4861	7707	0.063 4280	78413		0.027 5141 34031
27.5	0.998 7154	8439	0.071 2693	78362	4463	0.030 9152 34011
						33989
28.0	0.997 8715	9170	0.079 1055	78305		0.034 3141 33964
28.5	0.996 9545	9901	0.086 9360	78243	+ 4455	0.037 7105 33938
29.0	0.995 9644	10632	0.094 7603	78176		+ 1938
29.5	0.994 9012	11362	0.102 5779	78104	4446	0.044 4952 33877
30.0	0.993 7650	12093	0.110 3883	78025		1934
30.5	0.992 5557	12822	0.118 1908	77941	4436	0.051 2672 33843
Okt.	1.0	0.991 2735	13553	0.125 9849		0.054 6480 33808
1.5	0.989 9182	14282	0.133 7701	77852	4424	0.058 0250 33770
2.0	0.988 4900	15013	0.141 5457	77756		1924
2.5	0.986 9887	15743	0.149 3113	77656	4411	0.061 3979 33685
						1918
3.0	0.985 4144	16472	0.157 0662	77549		33639
3.5	0.983 7672	17199	0.164 8098	77436		
4.0	0.982 0473	17927	0.172 5416	77318	+ 4397	0.068 1303 33591
4.5	0.980 2546	18655	0.180 2610	77194		+ 1912
5.0	0.978 3891	19382	0.187 9674	77064	4381	0.071 4894 33540
5.5	0.976 4509	20109	0.195 6602	76928		0.074 8434 33486
6.0	0.974 4400	20834	0.203 3388	76786	4364	0.081 5351 33431
6.5	0.972 3566	21559	0.211 0026	76638		1905
7.0	0.970 2007	22283	0.218 6510	76484	4346	0.084 8723 33372
7.5	0.967 9724	23005	0.226 2834	76324		1898
8.0	0.965 6719	23727	0.233 8991	76157	4327	0.091 5281 33247
8.5	0.963 2992	24447	0.241 4975	75984		1890
9.0	0.960 8545	25166	0.249 0780	75805	+ 4306	0.094 8461 33180
9.5	0.958 3379	25882	0.256 6400	75620		1882
10.0	0.955 7497	26597	0.264 1829	75429	4284	0.101 4612 32965
10.5	0.953 0900	27311	0.271 7061	75232		+ 1873
11.0	0.950 3589	28022	0.279 2089	75028	4260	0.104 7577 32887
11.5	0.947 5567	28731	0.286 6907	74818		1863
12.0	0.944 6836		0.294 1509	74602	4235	0.108 0464 32806
						1853
						32724
						1853
						32638
						32550
						32459
						1842
						32365

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Okt.						
12.0	0.944 6836	—	0.294 1509	—	0.127 6006	—
12.5	0.941 7397	29439	—	0.301 5890	0.130 8274	32268
13.0	0.938 7253	30144	—	0.309 0043	0.134 0444	32170
13.5	0.935 6406	30847	—	0.316 3963	0.137 2512	32068
14.0	0.932 4859	31547	—	0.323 7644	0.140 4475	31963
14.5	0.929 2615	32244	—	0.331 1079	0.143 6332	31857
15.0	0.925 9677	32938	—	0.338 4264	0.146 8080	31748
15.5	0.922 6047	33630	—	0.345 7192	0.149 9716	31636
16.0	0.919 1728	34319	—	0.352 9858	0.153 1239	31523
16.5	0.915 6722	35006	—	0.360 2257	0.156 2646	31407
	—	35691	—	72127	—	31288
17.0	0.912 1031	—	0.367 4384	—	0.159 3934	—
17.5	0.908 4658	36373	—	0.374 6232	0.162 5100	31166
18.0	0.904 7607	37051	—	0.381 7796	0.165 6143	31043
18.5	0.900 9880	37727	—	0.388 9071	0.168 7060	30917
19.0	0.897 1481	38399	—	0.396 0053	0.171 7850	30790
19.5	0.893 2411	39070	—	0.403 0735	0.174 8509	1751
20.0	0.889 2674	39737	—	0.410 1113	0.177 9036	1736
20.5	0.885 2273	40401	—	0.417 1182	0.180 9429	1721
21.0	0.881 1210	41063	—	0.424 0936	0.183 9685	1706
21.5	0.876 9489	41721	—	0.431 0370	0.186 9801	1705
	—	42377	—	69109	—	29975
22.0	0.872 7112	—	0.437 9479	—	0.189 9776	—
22.5	0.868 4083	43029	—	0.444 8257	0.192 9608	29832
23.0	0.864 0405	43678	—	0.451 6701	0.195 9295	29687
23.5	0.859 6081	44324	—	0.458 4805	0.198 8834	29539
24.0	0.855 1114	44967	—	0.465 2564	0.201 8223	29389
24.5	0.850 5507	45607	—	0.471 9974	0.204 7461	1671
25.0	0.845 9264	46243	—	0.478 7029	0.207 6546	1653
25.5	0.841 2387	46877	—	0.485 3725	0.210 5474	28928
26.0	0.836 4880	47507	—	0.492 0058	0.213 4245	1635
26.5	0.831 6745	48135	—	0.498 6022	0.216 2857	28612
	—	48759	—	65590	—	1617
27.0	0.826 7986	—	0.505 1612	—	0.219 1307	28450
27.5	0.821 8606	49380	—	0.511 6823	0.221 9593	28286
28.0	0.816 8607	49999	—	0.518 1651	0.224 7712	28119
28.5	0.811 7993	50614	—	0.524 6092	0.227 5663	27951
29.0	0.806 6767	51226	—	0.531 0141	0.230 3445	27782
29.5	0.801 4932	51835	—	0.537 3792	0.233 1054	27609
30.0	0.796 2491	52441	—	0.543 7040	0.235 8489	27435
30.5	0.790 9448	53043	—	0.549 9880	0.238 5748	27259
31.0	0.785 5806	53642	—	0.556 2308	0.241 2829	1538

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Okt. 31.0	0.785 5806		0.556 2308		0.241 2829	
31.5	0.780 1567	54239	0.562 4318	62010	0.243 9728	26899
Nov. 1.0	0.774 6736	54831	-2987	+3487	0.246 6445	26717
1.5	0.769 1316	55420	0.568 5906	61160	0.246 6445	26532
2.0	0.763 5311	56005	0.574 7066	60728	0.249 2977	26345
2.5	0.757 8724	56587	0.580 7794	60291	0.251 9322	26156
3.0	0.752 1559	57165	0.586 8085	59849	0.254 5478	25964
3.5	0.746 3819	57740	0.592 7934	59400	0.257 1442	25770
4.0	0.740 5508	58311	0.598 7334	58947	0.259 7212	25573
4.5	0.734 6631	58877	0.604 6281	58489	0.262 2785	25375
			0.610 4770		0.264 8160	
		59439		3283		
			58027			25175
5.0	0.728 7192	59997	0.616 2797		0.267 3335	
5.5	0.722 7195	60551	-3303	0.622 0356	0.269 8307	24972
6.0	0.716 6644	61100	0.627 7441	57085	+3230	24767
6.5	0.710 5544	61645	0.633 4048	56125	0.272 3074	24559
7.0	0.704 3899	62186	0.639 0173	55637	0.274 7633	24349
7.5	0.698 1713	62720	0.644 5810	55144	0.277 1982	1381
8.0	0.691 8993	63250	0.650 0954	54647	0.279 6120	24138
8.5	0.685 5743	63776	0.655 5601	54145	0.282 0044	23924
9.0	0.679 1967	64297	0.660 9746	53638	0.284 3752	23708
9.5	0.672 7670		0.666 3384		0.286 7242	23490
		64811		3007	0.289 0512	1333
			53128			23048
10.0	0.666 2859	65321	0.671 6512	52612	0.291 3560	
10.5	0.659 7538	65826	-3595	0.676 9124	+2949	22824
11.0	0.653 1712	66325	0.682 1216	52092	0.293 6384	22598
11.5	0.646 5387	66819	0.687 2784	51568	0.295 8982	22371
12.0	0.639 8568	67308	0.692 3823	51039	0.298 1353	1257
12.5	0.633 1260	67791	0.697 4330	50507	0.300 3494	21910
13.0	0.626 3469	68269	0.702 4301	49971	0.302 5404	1231
13.5	0.619 5200	68741	0.707 3732	49431	0.304 7081	21442
14.0	0.612 6459	69208	0.712 2619	48887	0.306 8523	21206
14.5	0.605 7251		0.717 0959	48340	0.308 9729	1205
		69669		2707	0.311 0698	1178
			47788			20729
15.0	0.598 7582	70125	0.721 8747	47233	0.313 1427	20488
15.5	0.591 7457		-3859	0.726 5980	+2645	0.315 1915
16.0	0.584 6881	70576	0.731 2654	46674	0.317 2160	20245
16.5	0.577 5860	71021	0.735 8766	46112	0.319 2161	19756
17.0	0.570 4400	71894	0.740 4313	45547	0.321 1917	19508
17.5	0.563 2506	72323	0.744 9291	44978	0.323 1425	19260
18.0	0.556 0183	72745	0.749 3697	44406	0.325 0685	19010
18.5	0.548 7438	73162	0.753 7527	43830	0.326 9695	18758
19.0	0.541 4276		0.758 0777	43250	0.328 8453	1068

## Mittl. Äquator und Mittl. Äquinoktium 1912.

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Nov.	19.0	0.541 4276	—	0.758 0777	—	0.328 8453
	19.5	0.534 0702	73574	0.762 3445	42668	18506
	20.0	0.526 6722	73980	0.766 5529	42084	+ 1039
	20.5	0.519 2342	74380	0.770 7025	41496	17997
	21.0	0.511 7567	74775	0.774 7930	40905	17741
	21.5	0.504 2402	75165	0.778 8241	39311	17483
	22.0	0.496 6853	75549	0.782 7956	39115	17224
	22.5	0.489 0926	75927	0.786 7071	38512	981
	23.0	0.481 4626	76300	0.790 5583	37906	952
	23.5	0.473 7959	76667	0.794 3489	2118	16440
		—	77029	—	—	922
	24.0	0.466 0930	—	0.798 0787	—	16177
	24.5	0.458 3545	77385	0.801 7474	36687	15912
	25.0	0.450 5808	77737	0.805 3548	36074	+ 892
	25.5	0.442 7726	78082	0.808 9006	35458	15379
	26.0	0.434 9303	78423	0.812 3844	34838	15112
	26.5	0.427 0545	78758	0.815 8060	34216	862
	27.0	0.419 1458	79087	0.819 1651	33591	14842
	27.5	0.411 2047	79411	0.822 4615	32964	14572
	28.0	0.403 2317	79730	0.825 6949	32334	800
	28.5	0.395 2274	80043	0.828 8650	31701	14027
		—	80350	—	—	769
	29.0	0.387 1924	80652	0.831 9714	31064	13477
	29.5	0.379 1272	80947	0.835 0139	30425	13200
Dez.	30.0	0.371 0325	81237	0.837 9922	29783	+ 737
	30.5	0.362 9088	81522	0.840 9060	29138	12922
	1.0	0.354 7566	81800	0.843 7551	28491	12642
	1.5	0.346 5766	82071	0.846 5392	27841	706
	2.0	0.338 3695	82337	0.849 2580	27188	12362
	2.5	0.330 1358	82597	0.851 9113	26533	12080
	3.0	0.321 8761	82850	0.854 4987	25874	674
	3.5	0.313 5911	83096	0.857 0201	25214	11513
	4.0	0.305 2815	83336	—	24550	642
	4.5	0.296 9479	83570	0.859 4751	23884	11227
	5.0	0.288 5909	83797	0.861 8635	23216	545
	5.5	0.280 2112	84016	0.864 1851	22545	9783
	6.0	0.271 8c96	84229	0.866 4396	21872	9490
	6.5	0.263 3867	84436	0.868 6268	21197	9197
	7.0	0.254 9431	84636	0.870 7465	20520	8904
	7.5	0.246 4795	84828	0.872 7985	19841	8609
	8.0	0.237 9967	—	0.874 7826	19161	8313
		—	—	0.876 6987	—	479

## Mittl. Äquator und Mittl. Äquinoktium 1912.

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Dez.	8.0	0.237 9967 85014	—	0.876 6987 18478	—	0.380 3033 8017
	8.5	0.229 4953 85192	-4666	0.878 5465 17794	+1026	0.381 1050 7720
	9.0	0.220 9761 85364	—	0.880 3259 17109	—	0.381 8770 7422
	9.5	0.212 4397 85528	4685	0.882 0368 16422	950	0.382 6192 7124
	10.0	0.203 8869 85685	—	0.883 6790 15733	—	0.383 3316 6825
	10.5	0.195 3184 85836	4702	0.885 2523 15043	874	0.384 0141 6525
	11.0	0.186 7348 85980	—	0.886 7566 14353	—	0.384 6666 6226
	11.5	0.178 1368 86116	4718	0.888 1919 13662	797	0.385 2892 5926
	12.0	0.169 5252 86245	—	0.889 5581 12969	—	0.385 8818 5625
	12.5	0.160 9007 86367	4732	0.890 8550 12276	720	0.386 4443 5323
	13.0	0.152 2640 86483	—	0.892 0826 11581	—	0.386 9766 5021
	13.5	0.143 6157 86592	-4745	0.893 2407 10886	+ 643	0.387 4787 4720
	14.0	0.134 9565 86694	—	0.894 3293 10190	—	0.387 9507 4418
	14.5	0.126 2871 86788	4756	0.895 3483 9493	566	0.388 3925 4116
	15.0	0.117 6083 86876	—	0.896 2976 8796	—	0.388 8041 3813
	15.5	0.108 9207 86957	4766	0.897 1772 8099	488	0.389 1854 3510
	16.0	0.100 2250 87031	—	0.897 9871 7401	—	0.389 5364 3207
	16.5	0.091 5219 87099	4774	0.898 7272 6703	410	0.389 8571 2904
	17.0	0.082 8120 87160	—	0.899 3975 6004	—	0.390 1475 2601
	17.5	0.074 0960 87213	4781	0.899 9979 5305	332	0.390 4076 2299
	18.0	0.065 3747 87260	—	0.900 5284 4606	—	0.390 6375 1996
	18.5	0.056 6487 87300	-4786	0.900 9890 3908	+ 254	0.390 8371 1693
	19.0	0.047 9187 87334	—	0.901 3798 3209	—	0.391 0064 1389
	19.5	0.039 1853 87361	4790	0.901 7007 2510	176	0.391 1453 1085
	20.0	0.030 4492 87381	—	0.901 9517 1811	—	0.391 2538 783
	20.5	0.021 7111 87395	4792	0.902 1328 1113	98	0.391 3321 480
	21.0	0.012 9716 87403	—	0.902 2441 415	—	0.391 3801 177
	21.5	0.004 2313 + 87404	4793	0.902 2856 284	+ 20	0.391 3978 125
	22.0	0.004 5091 87399	—	0.902 2572 982	—	0.391 3853 428
	22.5	0.013 2490 + 87387	4792	0.902 1590 1680	58	0.391 3425 730
	23.0	0.021 9877 87370	—	0.901 9910 2378	—	0.391 2695 1032
	23.5	0.030 7247 87346	-4790	0.901 7532 3075	- 136	0.391 1663 1334
	24.0	0.039 4593 87316	—	0.901 4457 3772	—	0.391 0329 1636
	24.5	0.048 1909 87279	4786	0.901 0685 4469	214	0.390 8693 1938
	25.0	0.056 9188 87236	—	0.900 6216 5166	—	0.390 6755 2240
	25.5	0.065 6424 87187	4781	0.900 1050 5863	292	0.390 4515 2541
	26.0	0.074 3611 87132	—	0.899 5187 6559	—	0.390 1974 2843
	26.5	0.083 0743 87071	4774	0.898 8628 7255	370	0.389 9131 3146
	27.0	0.091 7814	—	0.898 1373	—	0.389 5985 161

## Mittl. Äquator und Mittl. Äquinoktium 1912.0

1912	X	Red. auf 1910.0	Y	Red. auf 1910.0	Z	Red. auf 1910.0
Dez.	+ 27.0 0.091 7814 87003	- 4766	0.898 1373 7951	- 448	0.389 5985 3447	
	27.5 0.100 4817 86929		0.897 3422 8648		0.389 2538 3748	- 195
	28.0 0.109 1746 86848		0.896 4774 9344		0.388 8790 4050	
	28.5 0.117 8594 86760	4757	0.895 5430 10040	526	0.388 4740 4352	229
	29.0 0.126 5354 86666		0.894 5390 10736		0.388 0388 4653	
	29.5 0.135 2020 86565	4746	0.893 4654 11431	603	0.387 5735 4954	262
	30.0 0.143 8585 86458		0.892 3223 12126		0.387 0781 5256	
	30.5 0.152 5043 86343	4733	0.891 1097 12819	681	0.386 5525 5558	296
	31.0 0.161 1386 86222		0.889 8278 13512		0.385 9967 5859	
	31.5 0.169 7608 86094	4719	0.888 4766 14205	758	0.385 4108 6159	329
	+ 32.0 0.178 3702 85959		0.887 0561 14897		0.384 7949 6459	
	32.5 0.186 9661 85816	- 4704	0.885 5664 15589	- 835	0.384 1490 6759	- 363
	33.0 0.195 5477 85667		0.884 0075 16279		0.383 4731 7059	
	33.5 0.204 1144 85511	4687	0.882 3796 16969	912	0.382 7672 7359	396
	34.0 0.212 6655 85347		0.880 6827 17658		0.382 0313 7658	
	34.5 0.221 2002 85177	4669	0.878 9169 18346	988	0.381 2655 7956	+29
	35.0 0.229 7179 85000		0.877 0823 19032		0.380 4699 8254	
	35.5 0.238 2179 84815	4649	0.875 1791 19716	1064	0.379 6445 8551	462
	36.0 0.246 6994 84624		0.873 2075 20400		0.378 7894 8848	
	36.5 0.255 1618	4628	0.871 1675 1139		0.377 9046	495

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Jan. 1.0	3 32 50.65	30 24.56	+21 35 52.9	+2 7 8.8	8.24192	+296	16 21.2
1.5	4 3 15.21	31 45.47	23 43 1.7	1 45 24.1	8.24488	259	16 27.9
2.0	4 35 0.68	32 57.94	25 28 25.8	1 19 48.6	8.24747	214	16 33.8
2.5	5 7 58.62	33 55.12	26 48 14.4	0 50 53.3	8.24961	163	16 38.7
3.0	5 41 53.74	34 30.67	27 39 7.7	+0 19 32.5	8.25124	105	16 42.5
3.5	6 16 24.41	34 40.44	27 58 40.2	-0 12 58.6	8.25229	+ 44	16 44.9
4.0	6 51 4.85	34 23.31	27 45 41.6	0 45 14.9	8.25273	- 19	16 45.9
4.5	7 25 28.16	33 41.73	27 0 26.7	1 15 52.0	8.25254	80	16 45.4
5.0	7 59 9.89	32 40.84	25 44 34.7	1 43 38.9	8.25174	139	16 43.6
5.5	8 31 50.73	31 27.36	24 0 55.8	8.25035			16 40.4
6.0	9 3 18.09	30 8.02	+21 53 9.3	2 27 48.7	8.24841	241	16 35.9
6.5	9 33 26.11	28 48.70	19 25 20.6	2 43 40.6	8.24600	282	16 30.4
7.0	10 2 14.81	27 33.82	16 41 40.0	2 55 32.6	8.24318	315	16 24.0
7.5	10 29 48.63	26 26.37	13 46 7.4	3 3 44.6	8.24003	338	16 16.9
8.0	10 56 15.00	25 28.13	10 42 22.8	3 8 41.7	8.23665	354	16 9.3
8.5	11 21 43.13	24 39.97	7 33 41.1	3 10 48.7	8.23311	361	16 1.5
9.0	11 46 23.10	24 2.11	4 22 52.4	3 10 29.5	8.22950	362	15 53.5
9.5	12 10 25.21	23 34.33	+ 1 12 22.9	3 8 4.2	8.22588	355	15 45.6
10.0	12 33 59.54	23 16.27	- 1 55 41.3	3 3 49.7	8.22233	343	15 37.9
10.5	12 57 15.81	23 7.31	4 59 31.0	8.21890			15 30.5
11.0	13 20 23.12	23 6.78	- 7 57 29.4	2 50 39.3	8.21563	306	15 23.5
11.5	13 43 29.90	23 13.88	10 48 8.7	2 41 58.5	8.21257	283	15 17.0
12.0	14 6 43.78	23 27.76	13 30 7.2	2 31 59.2	8.20974	258	15 11.1
12.5	14 30 11.54	23 47.34	16 2 6.4	2 20 43.4	8.20716	232	15 5.7
13.0	14 53 58.88	24 11.43	18 22 49.8	2 8 11.4	8.20484	205	15 0.9
13.5	15 18 10.31	24 38.58	20 31 1.2	1 54 24.3	8.20279	178	14 56.6
14.0	15 42 48.89	25 7.11	22 25 25.5	1 39 23.1	8.20101	151	14 53.0
14.5	16 7 56.00	25 35.16	24 4 48.6	1 23 11.4	8.19950	126	14 49.9
15.0	16 33 31.16	26 0.76	25 28 0.0	1 5 55.4	8.19824	101	14 47.3
15.5	16 59 31.92	26 22.00	26 33 55.4	8.19723			14 45.2
16.0	17 25 53.92	26 37.12	-27 21 39.9	0 28 50.9	8.19646	54	14 43.7
16.5	17 52 31.04	26 44.74	27 50 30.8	-0 9 30.9	8.19592	34	14 42.6
17.0	18 19 15.78	26 44.09	28 0 1.7	+0 9 57.3	8.19558	- 14	14 41.9
17.5	18 45 59.87	26 35.11	27 50 4.4	0 29 14.5	8.19544	+ 5	14 41.7
18.0	19 12 34.98	26 18.33	27 20 49.9	0 48 2.1	8.19549	22	14 41.7
18.5	19 38 53.31	25 54.93	26 32 47.8	1 6 2.4	8.19571	40	14 42.1
19.0	20 4 48.24	25 26.57	25 26 45.4	1 23 0.9	8.19611	56	14 42.9
19.5	20 30 14.81	24 55.04	24 3 44.5	1 38 46.8	8.19667	72	14 44.1
20.0	20 55 9.85	24 22.26	22 24 57.7	1 53 12.2	8.19739	89	14 45.6
20.5	21 19 32.11	20 31 45.5	20 31 45.5	8.19828			14 47.4

Jan. 4 2 <sup>b</sup> 23.3 Vollmond.Jan. 10 20 <sup>b</sup> 36.5 Letzt. Viert.Jan. 19 0 <sup>b</sup> 3.6 Neumond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.- Sterne			
							AR.	Dekl.	Gr.	
Jan.	I O	9 15.7	3 56 <sup>m</sup> II	-74.90	160.23	+23° 15.8'	+10.6	3 22.0	+18° 27'	6.4
	U	21 46.5	4 29 2	-76.67	167.76	+25 10.7	+ 8.5	3 33.9	+20 38	6.5
2 O	10 18.7	5 3 16	-78.19	174.29	+26 38.7	+ 6.1	4 18.7	+24 6	6.1	
U	22 52.0	5 38 40	-79.27	179.08	+27 35.7	+ 3.3	4 47.3	+27 45	6.0	
3 O	11 26.0	6 14 46	-79.81	181.52	+27 58.5	+ 0.4	5 31.7	+26 52	5.7	
	—	—	—	—	—	—	5 47.8	+27 36	4.6	
4 U	0 0.3	6 51 5	-79.73	181.26	+27 45.7	- 2.6	6 39.2	+29 4	5.5	
O	12 34.2	7 27 5	+79.05	178.21	+26 57.5	- 5.4	6 57.9	+29 29	5.9	
5 U	1 7.3	8 2 16	+77.86	173.03	+25 36.0	- 8.1	7 56.4	+25 20	6.2	
O	13 39.2	8 36 16	+76.31	166.38	+23 44.7	-10.4	8 15.3	+24 18	5.9	
6 U	2 9.8	9 8 50	+74.55	158.96	+21 27.9	-12.3	9 5.3	+22 21	6.1	
O	14 38.8	9 39 54	+72.72	151.42	+18 50.5	-13.8	9 19.8	+20 10	6.6	
7 U	3 6.4	10 9 30	+70.95	144.28	+15 57.2	-15.0	10 2.5	+17 12	3.6	
O	15 32.5	10 37 44	+69.32	137.85	+12 52.6	-15.8	10 17.1	+15 25	6.1	
8 U	3 57.5	II 4 45	+67.89	132.30	+ 9 40.5	-16.2	II 0.5	+ 7 49	4.7	
O	16 21.5	II 30 46	+66.70	127.74	+ 6 24.5	-16.4	II 9.5	+ 8 33	5.8	
9 U	4 44.7	II 55 57	+65.75	124.17	+ 3 7.4	-16.4	II 46.1	+ 2 16	3.8	
O	17 7.2	II 20 32	+65.05	121.57	- 0 8.3	-16.2	II 5.2	+ 2 24	6.2	
10 U	5 29.3	II 44 40	+64.58	119.89	- 3 20.4	-15.8	II 37.2	- 0 58	2.9	
O	17 51.2	III 8 33	+64.36	119.07	- 6 27.2	-15.3	II 48.7	- 3 5	6.1	
II U	6 12.9	13 32 21	+64.34	119.04	- 9 26.9	-14.6	13 28.3	- 9 43	5.4	
O	18 34.8	13 56 13	+64.53	119.73	-12 18.1	-13.9	13 41.2	-11 59	5.6	
12 U	6 56.8	14 20 17	+64.88	121.06	-14 59.4	-13.0	14 14.3	-12 58	4.5	
O	19 19.1	14 44 39	+65.36	122.92	-17 29.4	-12.0	14 32.3	-11 56	6.2	
13 U	7 41.8	15 9 27	+65.94	125.19	-19 46.6	-10.9	15 1.4	-21 41	6.1	
O	20 5.1	15 34 44	+66.60	127.72	-21 49.7	- 9.6	15 11.3	-22 4	5.8	
14 U	8 28.9	16 0 31	+67.27	130.35	-23 37.3	- 8.3	15 58.0	-25 37	4.9	
O	20 53.2	16 26 50	+67.91	132.92	-25 8.0	- 6.8	16 8.4	-24 12	6.3	
15 U	9 17.9	16 53 39	+68.47	135.20	-26 20.6	- 5.3	16 38.8	-27 17	6.4	
O	21 43.1	17 20 52	+68.92	137.01	-27 14.0	- 3.6	17 6.9	-27 39	6.1	
16 U	10 8.6	17 48 23	+69.19	138.18	-27 47.3	- 1.9				
O	22 34.2	18 16 4	+69.26	138.59	-27 59.9	- 0.2				
17 U	10 59.9	18 43 46	+69.15	138.20	-27 51.6	+ 1.6				
O	23 25.4	19 11 19	+68.82	137.02	-27 22.7	+ 3.3				
18 U	11 50.6	19 38 33	+68.32	135.13	-26 33.6	+ 4.9				
	—	—	—	—	—	—				
19 O	0 15.4	20 5 21	-67.69	132.82	-25 25.2	+ 6.5				
U	12 39.6	20 31 38	-66.95	130.03	-23 58.7	+ 7.9				
20 O	1 3.3	20 57 20	-66.16	127.04	-22 15.6	+ 9.2				
U	13 26.3	21 22 25	-65.37	124.03	-20 17.3	+10.4				

Januar 4 3<sup>h</sup> Perigäum.Januar 17 15<sup>h</sup> Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Jan.	20.0 20 55 9.85	m. *	— 22 24 57.7	+ 1 53 12.2	8.19739	+ 89	14 45.6
	20.5 21 19 32.11	24 22.26	20 31 45.5	2 6 12.5	8.19828	105	14 47.4
	21.0 21 43 22.22	23 50.11	18 25 33.0	2 17 45.9	8.19933	121	14 49.5
	21.5 22 6 42.39	23 20.17	16 7 47.1	2 27 52.6	8.20054	139	14 52.0
	22.0 22 29 36.22	22 53.83	13 39 54.5	2 36 33.6	8.20193	156	14 54.9
	22.5 22 52 8.55	22 16.60	11 3 20.9	2 43 50.1	8.20349	175	14 58.1
	23.0 23 14 25.15	22 7.48	8 19 30.8	2 49 43.6	8.20524	193	15 1.7
	23.5 23 36 32.63	22 5.62	5 29 47.2	2 54 14.0	8.20717	211	15 5.7
	24.0 23 58 38.25	22 11.65	— 2 35 33.2	2 57 19.8	8.20928	231	15 10.1
	24.5 0 20 49.90	+ 0 21 46.6			8.21159	15	15.0
		22 26.11		+ 2 58 57.6		+ 250	
	25.0 0 43 16.01	22 49.48	+ 3 20 44.2	2 59 1.2	8.21409	266	15 20.3
	25.5 1 6 5.49	23 22.14	6 19 45.4	2 57 21.6	8.21675	282	15 25.9
	26.0 1 29 27.63	24 4.32	9 17 7.0	2 53 46.8	8.21957	296	15 32.0
	26.5 1 53 31.95	24 56.06	12 10 53.8	2 48 1.6	8.22253	307	15 38.3
	27.0 2 18 28.01	25 56.91	14 58 55.4	2 39 47.6	8.22560	314	15 44.9
	27.5 2 44 24.92	27 5.81	17 38 43.0	2 28 46.1	8.22874	316	15 51.8
	28.0 3 11 30.73	28 20.86	20 7 29.1	2 14 37.7	8.23190	312	15 58.8
	28.5 3 39 51.59	29 38.99	22 22 6.8	1 57 6.0	8.23502	303	16 5.7
	29.0 4 9 30.58	30 55.95	24 19 12.8	1 36 3.8	8.23805	287	16 12.5
	29.5 4 40 26.53	32 6.28	25 55 16.6		8.24092	16	18.9
			+ 1 11 35.6			+ 263	
	30.0 5 12 32.81	33 3.93	+ 27 6 52.2	0 44 3.6	8.24355	231	16 24.9
	30.5 5 45 36.74	33 43.25	27 50 55.8	+ 0 14 10.0	8.24586	193	16 30.1
	31.0 6 19 19.99	34 0.10	28 5 5.8	- 0 17 5.3	8.24779	149	16 34.5
	31.5 6 53 20.09	33 52.75	27 48 0.5	0 48 28.8	8.24928	98	16 37.9
Febr.	1.0 7 27 12.84	33 22.58	26 59 31.7	1 18 43.5	8.25026	+ 43	16 40.2
	1.5 8 0 35.42	32 33.55	25 40 48.2	1 46 40.2	8.25069	- 15	16 41.2
	2.0 8 33 8.97	31 31.26	23 54 8.0	2 11 24.5	8.25054	72	16 40.8
	2.5 9 4 40.23	30 21.73	21 42 43.5	2 32 20.5	8.24982	129	16 39.2
	3.0 9 35 1.96	29 10.49	19 10 23.0	2 49 12.1	8.24853	182	16 36.2
	3.5 10 4 12.45	28 1.98	16 21 10.9	2 46 7.1	8.24671	16	32.0
			- 3 1 58.8			- 230	
	4.0 10 32 14.43	26 59.42	+ 13 19 12.1	3 10 52.2	8.24441	272	16 26.8
	4.5 10 59 13.85	26 4.83	10 8 19.9	3 16 11.1	8.24169	307	16 20.6
	5.0 11 25 18.68	25 19.28	6 52 8.8	3 18 17.6	8.23862	334	16 13.7
	5.5 11 50 37.96	24 43.24	3 33 51.2	3 18 17.6	8.23528	352	16 6.3
	6.0 12 15 21.20	24 16.72	+ 0 16 16.7	3 17 34.5	8.23176	362	15 58.5
	6.5 12 39 37.92	23 59.36	- 2 58 7.3	3 14 24.0	8.22814	364	15 50.5
	7.0 13 3 37.28	23 50.62	6 7 12.5	3 9 5.2	8.22245	360	15 42.6
	7.5 13 27 27.90	23 49.85	9 9 6.8	3 1 54.3	8.22090	349	15 34.8
	8.0 13 51 17.75	23 56.24	12 2 11.2	2 53 4.4	8.21741	332	15 27.3
	8.5 14 15 13.99	14 44 56.2	14 44 56.2	2 42 45.0	8.21409	15	20.3

Januar 26 21 45.0 Erstes Viertel.

Februar 2 12 51.7 Vollmond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl. - Sterne
							AR. Dekl. Gr.
Jan.	20 O 1 3.3	20 57 20	—66.16	127.04	—22 ° 15.6	+ 9.2	
	U 13 26.3	21 22 25	—65.37	124.03	—20 17.3	+10.4	
	21 O 1 48.8	21 46 56	—64.61	121.18	—18 5.4	+11.5	
	U 14 10.7	22 10 54	—63.94	118.64	—15 41.6	+12.4	
	22 O 2 32.2	22 34 24	—63.38	116.52	—13 7.5	+13.2	
	U 14 53.3	22 57 31	—62.98	114.92	—10 24.5	+13.9	
	23 O 3 14.1	23 20 23	—62.74	113.92	— 7 34.3	+14.5	22 48.8 —12 ° 5 5.8
	U 15 34.8	23 43 8	—62.69	113.58	— 4 38.2	+14.9	23 0.6 — 8 10 5.4
	24 O 3 55.6	○ 5 53	—62.83	113.98	— 1 37.8	+15.2	23 27.0 — 4 34 6.5
	U 16 16.5	○ 28 48	—63.20	115.15	+ 1 25.4	+15.3	23 48.4 — 3 39 6.1
	25 O 4 37.7	○ 52 2	—63.80	117.16	+ 4 29.8	+15.4	○ 20.9 + 1 27 6.0
	U 16 59.3	1 15 44	—64.63	120.04	+ 7 33.8	+15.3	○ 46.8 + 2 54 6.5
	26 O 5 21.7	1 40 7	—65.69	123.83	+10 35.3	+15.0	1 9.1 + 7 7 5.4
	U 17 44.9	2 5 22	—66.98	128.53	+13 32.2	+14.5	1 23.8 + 7 30 6.4
Febr.	27 O 6 9.1	2 31 38	—68.48	134.14	+16 22.0	+13.8	1 57.8 +13 3 6.3
	U 18 34.6	2 59 7	—70.15	140.55	+19 1.8	+12.8	2 8.2 +14 52 5.8
	28 O 7 1.4	3 27 57	—71.93	147.58	+21 28.2	+11.5	2 53.0 +20 19 5.8
	U 19 29.6	3 58 13	—73.75	154.94	+23 37.5	+10.0	3 3.4 +18 27 6.5
	29 O 7 59.3	4 29 58	—75.49	162.18	+25 25.7	+ 8.0	3 51.8 +22 55 6.0
	U 20 30.3	5 3 5	—77.01	168.71	+26 48.8	+ 5.8	4 5.5 +26 15 5.5
	30 O 9 2.6	5 37 22	—78.20	173.89	+27 42.8	+ 3.2	4 59.1 +27 34 6.5
	U 21 35.7	6 12 32	—78.91	177.13	+28 4.7	+ 0.4	5 15.5 +27 52 6.4
	31 O 10 9.2	6 48 7	—79.08	178.03	+27 52.7	— 2.4	6 9.8 +29 32 4.4
	U 22 42.6	7 23 35	—78.69	176.53	+27 6.2	— 5.3	6 15.6 +29 35 6.3
	1 O 11 15.5	7 58 33	—77.80	172.85	+25 46.5	— 8.0	7 19.1 +27 49 5.7
	U 23 47.5	8 32 36	—76.52	167.54	+23 56.2	—10.4	7 30.5 +27 6 4.3
	2 O 12 18.3	9 5 27	—74.99	160.97	+21 39.1	—12.4	8 26.3 +24 23 5.7
	—	—	—	—	—	—	9 2.4 +23 20 6.3
	3 U ○ 47.8	9 37 ○	+73.35	154.23	+18 59.6	—14.1	9 39.6 +19 16 6.5
	O 13 15.9	10 7 13	+71.72	147.64	+16 2.5	—15.4	10 0.9 +16 11 6.3
	4 U 1 42.8	10 36 9	+70.19	141.58	+12 52.4	—16.3	10 27.5 +14 35 5.8
	O 14 8.6	11 3 57	+68.84	136.26	+ 9 33.6	—16.8	10 44.7 +11 1 5.3
	5 U 2 33.4	11 30 46	+67.69	131.80	+ 6 10.0	—17.1	11 16.6 + 6 31 4.2
	O 14 57.3	11 56 46	+66.77	128.26	+ 2 45.0	—17.0	11 41.4 + 7 1 4.2
	6 U 3 20.7	12 22 9	+66.09	125.64	— 0 38.3	—16.8	12 14.2 — 0 18 5.9
	O 15 43.6	12 47 6	+65.64	123.90	— 3 57.5	—16.4	12 37.2 — 0 58 2.9
	7 U 4 6.2	13 11 47	+65.42	122.98	— 7 10.3	—15.8	13 4.0 — 8 31 5.6
	O 16 28.8	13 36 21	+65.40	122.84	—10 14.8	—15.0	13 20.0 — 4 42 5.7
	8 U 4 51.4	14 ○ 58	+65.56	123.38	—13 9.4	—14.1	13 59.7 —14 33 6.4
	O 17 14.1	14 25 44	+65.89	124.50	—15 52.4	—13.1	14 14.3 —12 58 4.5

Februar 1 15<sup>h</sup> Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Febr. 8.0	13 5 <sup>h</sup> 17.75	m 24	— 12 2 11.2	— 2 42 45.0	8.21741	-332	15 27.3
8.5	14 15 13.99	24 8.80	14 44 56.2	2 31 4.1	8.21409	311	15 20.3
9.0	14 39 22.79	24 26.45	17 16 0.3	2 18 7.1	8.21098	286	15 13.7
9.5	15 3 49.24	24 47.84	19 34 7.4	2 3 58.0	8.20812	257	15 7.7
10.0	15 28 37.08	25 11.51	21 38 5.4	1 48 40.7	8.20555	228	15 2.3
10.5	15 53 48.59	25 35.77	23 26 46.1	1 32 19.3	8.20327	196	14 57.6
11.0	16 19 24.36	25 58.83	24 59 5.4	1 14 59.6	8.20131	164	14 53.6
11.5	16 45 23.19	26 18.89	26 14 5.0	0 56 49.8	8.19967	133	14 50.2
12.0	17 11 42.08	26 34.23	27 10 54.8	0 37 59.4	8.19834	100	14 47.5
12.5	17 38 16.31	26 43.43	27 48 54.2	— 0 18 41.0	8.19734	— 70	14 45.4
13.0	18 4 59.74	26 45.50	— 28 7 35.2	+ 0 0 49.8	8.19664	41	14 44.0
13.5	18 31 45.24	26 40.04	28 6 45.4	0 20 17.2	8.19623	— 14	14 43.2
14.0	18 58 25.28	26 27.22	27 46 28.2	0 39 24.3	8.19609	+ 13	14 42.9
14.5	19 24 52.50	26 7.83	27 7 3.9	0 57 55.3	8.19622	36	14 43.2
15.0	19 51 0.33	25 43.08	26 9 8.6	1 15 35.2	8.19658	57	14 43.9
15.5	20 16 43.41	25 14.53	24 53 33.4	1 32 11.6	8.19715	77	14 45.1
16.0	20 41 57.94	24 43.91	23 21 21.8	1 47 34.7	8.19792	96	14 46.6
16.5	21 6 41.85	24 12.93	21 33 47.1	2 1 37.7	8.19888	111	14 48.6
17.0	21 30 54.78	23 43.17	19 32 9.4	2 14 15.6	8.19999	123	14 50.9
17.5	21 54 37.95	23 16.06	17 17 53.8	+ 2 25 24.8	8.20122	+ 136	14 53.4
18.0	22 17 54.01	22 52.77	— 14 52 29.0	2 35 4.1	8.20258	147	14 56.2
18.5	22 40 46.78	22 34.37	12 17 24.9	2 43 12.8	8.20405	157	14 59.2
19.0	23 3 21.15	22 21.67	9 34 12.1	2 49 49.5	8.20562	166	15 2.5
19.5	23 25 42.82	22 15.34	6 44 22.6	2 54 53.9	8.20728	174	15 6.0
20.0	23 47 58.16	22 15.97	3 49 28.7	2 58 24.3	8.20902	182	15 9.6
20.5	0 10 14.13	22 24.07	— 0 51 4.4	3 0 17.8	8.21084	189	15 13.4
21.0	0 32 38.20	22 40.06	+ 2 9 13.4	3 0 30.9	8.21273	197	15 17.4
21.5	0 55 18.26	23 4.27	5 9 44.3	2 58 57.8	8.21470	205	15 21.6
22.0	1 18 22.53	23 36.89	8 8 42.1	2 55 30.5	8.21675	212	15 25.9
22.5	1 41 59.42	24 17.97	11 4 12.6	+ 2 50 0.5	8.21887	+ 218	15 30.4
23.0	2 6 17.39	25 7.23	+ 13 54 13.1	2 42 15.9	8.22105	224	15 35.1
23.5	2 31 24.62	26 3.96	16 36 29.0	2 32 4.4	8.22329	228	15 40.0
24.0	2 57 28.58	27 6.86	19 8 33.4	2 19 13.3	8.22557	231	15 44.9
24.5	3 24 35.44	28 13.85	21 27 46.7	2 3 31.5	8.22788	232	15 50.0
25.0	3 52 49.29	29 21.87	23 31 18.2	1 44 52.2	8.23020	231	15 55.0
25.5	4 22 11.16	30 27.10	25 16 10.4	1 23 15.8	8.23251	225	16 0.1
26.0	4 52 38.26	31 24.87	26 39 26.2	0 58 52.9	8.23476	215	16 5.1
26.5	5 24 3.13	32 10.48	27 38 19.1	0 32 7.4	8.23691	201	16 9.9
27.0	5 56 13.61	32 39.73	28 10 26.5	+ 0 3 37.8	8.23892	183	16 14.4
27.5	6 28 53.34	28 14 4.3	28 14 4.3	8.24075			16 18.5

Febr. 9 13<sup>h</sup> 44.4 Letzt. Viert. Febr. 17 18<sup>h</sup> 37.7 Neumond. Febr. 25 8<sup>h</sup> 20.3 Erst. Viert.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in th Länge	Dekl.	Bew. in th Länge	Vergl. - Sterne
		AR.			Dekl.	Gr.	
Febr. 8	U 4 51.4	14 0 58	+65.56	123.38	-13° 9.4	-14.1	13 59.7 -14 33 6.4
O 17	14.1	14 25 44	+65.89	124.50	-15 52.4	-13.1	14 14.3 -12 58 4.5
9 U	5 37.1	14 50 47	+66.33	126.12	-18 22.4	-11.9	14 45.8 -15 38 5.4
O 18	0.5	15 16 11	+66.87	128.10	-20 38.1	-10.7	15 8.3 -19 19 6.0
10 U	6 24.3	15 42 1	+67.45	130.29	-22 38.1	-9.3	15 48.7 -23 43 5.3
O 18	48.5	16 8 17	+68.04	132.52	-24 21.2	-7.9	15 58.6 -24 29 6.4
11 U	7 13.2	16 34 59	+68.57	134.64	-25 46.3	-6.3	16 26.0 -26 21 6.2
O 19	38.2	17 2 6	+69.03	136.45	-26 52.4	-4.7	16 54.6 -24 58 6.3
12 U	8 3.6	17 29 32	+69.35	137.78	-27 38.5	-3.0	17 26.3 -26 12 6.0
O 20	29.2	17 57 10	+69.51	138.50	-28 4.1	-1.3	17 37.7 -27 51 6.3
13 U	8 54.9	18 24 53	+69.47	138.52	-28 8.8	+ 0.5	18 16.4 -28 28 6.1
O 21	20.5	18 52 32	+69.25	137.81	-27 52.6	+ 2.2	18 40.1 -27 5 3.3
14 U	9 45.9	19 19 58	+68.86	136.41	-27 15.8	+ 3.9	
O 22	11.0	19 47 4	+68.30	134.42	-26 19.1	+ 5.5	
15 U	10 35.6	20 13 44	+67.62	131.98	-25 3.3	+ 7.1	
O 22	59.7	20 39 52	+66.87	129.24	-23 29.7	+ 8.5	
16 U	11 23.2	21 5 27	+66.08	126.37	-21 39.6	+ 9.8	
O 23	46.2	21 30 27	+65.30	123.56	-19 34.6	+11.0	
17 U	12 8.6	21 54 55	+64.58	120.94	-17 16.2	+12.0	
—	—	—	—	—	—	—	—
18 O	0 30.6	22 18 53	-63.94	118.74	-14 46.1	+12.9	
U	12 52.1	22 42 25	-63.42	116.84	-12 5.9	+13.7	
19 O	1 13.3	23 5 38	-63.05	115.45	- 9 17.2	+14.4	
U	13 34.2	23 28 38	-62.84	114.62	- 6 21.7	+14.9	
20 O	1 55.1	23 51 31	-62.82	114.43	- 3 21.1	+15.2	
U	14 16.0	0 14 27	-62.99	114.92	- 0 17.1	+15.4	
21 O	2 37.1	0 37 33	-63.37	116.15	+ 2 48.6	+15.5	
U	14 58.5	1 0 59	-63.98	118.14	+ 5 54.3	+15.4	
22 O	3 20.3	1 24 53	-64.79	120.92	+ 8 58.0	+15.2	
U	15 42.9	1 49 26	-65.82	124.52	+11 57.5	+14.7	
23 O	4 6.2	2 14 47	-67.04	128.90	+14 50.7	+14.1	1 46.2 +10 36 6.0
U	16 30.4	2 41 5	-68.43	134.04	+17 34.9	+13.2	1 57.8 +13 3 6.3
24 O	4 55.8	3 8 29	-69.96	139.83	+20 7.4	+12.1	2 26.0 +17 19 6.4
U	17 22.4	3 37 5	-71.58	146.06	+22 25.2	+10.8	2 50.9 +17 59 6.0
25 O	5 50.2	4 6 58	-73.20	152.45	+24 24.8	+ 9.1	3 23.3 +22 30 6.1
U	18 19.3	4 38 6	-74.72	158.62	+26 2.9	+ 7.2	3 51.8 +22 55 6.0
26 O	6 49.5	5 10 24	-76.04	164.07	+27 16.1	+ 5.0	4 18.7 +24 6 6.1
U	19 20.7	5 43 40	-77.03	168.30	+28 1.3	+ 2.5	4 47.3 +27 45 6.0
27 O	7 52.6	6 17 38	-77.61	170.89	+28 16.1	- 0.1	5 33.7 +29 10 5.9
U	20 24.9	6 51 55	-77.72	171.56	+27 59.1	- 2.8	5 51.0 +28 56 6.4

Febr. 14      <sup>h</sup> Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Febr. 27.0	5 56 13.61	m -	+ 28 10 26.5	o -	8.23892	+ 183	16' 14.4
27.5	6 28 53.34	32 39.73	28 14 4.3	- o 25 45.5	8.24075	158	16 18.5
28.0	7 1 43.24	32 40.31	27 48 18.8	o 55 4.2	8.24233	128	16 22.1
28.5	7 34 23.55	32 12.46	26 53 14.6	1 23 18.2	8.24361	95	16 25.1
29.0	8 6 36.01	31 29.78	25 29 56.4	1 49 33.6	8.24456	57	16 27.2
29.5	8 38 5.79	31 29.78	23 40 22.8	2 13 5.9	8.24513	+ 14	16 28.5
März 1.0	9 8 42.59	30 36.80	21 27 16.9	2 33 23.9	8.24527	- 31	16 28.8
1.5	9 38 20.90	29 38.31	18 53 53.0	2 50 9.2	8.24496	76	16 28.1
2.0	10 6 59.62	28 38.72	16 3 43.8	3 3 15.3	8.24420	121	16 26.3
2.5	10 34 41.28	27 41.66	13 0 28.5	8.24299			16 23.6
		26 49.80		- 3 12 45.2		- 165	
3.0	11 1 31.08	26 4.94	+ 9 47 43.3	3 18 48.0	8.24134	206	16 19.9
3.5	11 27 36.02	25 28.10	6 28 55.3	3 21 36.9	8.23928	242	16 15.2
4.0	11 53 4.12	24 59.73	+ 3 7 18.4	3 21 27.1	8.23686	272	16 9.8
4.5	12 18 3.85	24 39.87	- 0 14 8.7	3 18 35.1	8.23414	297	16 3.7
5.0	12 42 43.72	24 28.27	3 32 43.8	3 13 17.1	8.23117	315	15 57.2
5.5	13 7 11.99	24 24.40	6 46 0.9	3 5 47.8	8.22802	325	15 50.3
6.0	13 31 36.39	24 27.60	9 51 48.7	2 56 20.7	8.22477	330	15 43.2
6.5	13 56 3.99	24 36.99	12 48 9.4	2 45 7.3	8.22147	327	15 36.0
7.0	14 20 40.98	24 51.55	15 33 16.7	2 32 18.2	8.21820	317	15 29.0
7.5	14 45 32.53	25 10.00	18 5 34.9	- 2 18 2.4	8.21503	- 303	15 22.3
8.0	15 10 42.53	25 30.91	- 20 23 37.3	2 2 28.5	8.21200	283	15 15.9
8.5	15 36 13.44	25 52.72	22 26 5.8	1 45 44.7	8.20917	259	15 9.9
9.0	16 2 6.16	26 13.69	24 11 50.5	1 28 0.3	8.20658	232	15 4.5
9.5	16 28 19.85	26 32.07	25 39 50.8	1 9 25.0	8.20426	201	14 59.7
10.0	16 54 51.92	26 46.24	26 49 15.8	0 50 10.7	8.20225	169	14 55.5
10.5	17 21 38.16	26 54.77	27 39 26.5	0 30 30.1	8.20056	135	14 52.0
11.0	17 48 32.93	26 56.73	28 9 56.6	- 0 10 37.9	8.19921	101	14 49.3
11.5	18 15 29.66	26 51.61	28 20 34.5	+ 0 9 10.6	8.19820	66	14 47.2
12.0	18 42 21.27	26 39.52	28 11 23.9	0 28 40.7	8.19754	- 32	14 45.9
12.5	19 9 0.79	26 21.11	27 42 43.2	+ 0 47 37.8	8.19722	+ 1	14 45.2
13.0	19 35 21.90	25 57.49	- 26 55 5.4	1 5 49.0	8.19723	32	14 45.2
13.5	20 1 19.39	25 30.09	25 49 16.4	1 23 3.6	8.19755	61	14 45.9
14.0	20 26 49.48	25 0.49	24 26 12.8	1 39 12.7	8.19816	88	14 47.1
14.5	20 51 49.97	24 30.33	22 47 0.1	1 54 9.9	8.19904	113	14 48.9
15.0	21 16 20.30	24 1.13	20 52 50.2	2 7 49.9	8.20017	135	14 51.2
15.5	21 40 21.43	23 34.27	18 45 0.3	2 20 9.0	8.20152	154	14 54.0
16.0	22 3 55.70	23 10.95	16 24 51.3	2 31 4.2	8.20306	169	14 57.2
16.5	22 27 6.65	22 52.16	13 53 47.1	2 40 33.2	8.20475	181	15 0.7
17.0	22 49 58.81	22 38.71	11 13 13.9	2 48 32.6	8.20656	190	15 4.4
17.5	23 12 37.52		8 24 41.3		8.20846		15 8.4

März 2 23 35.5 Vollmond.

März 10 8 49.2 Letztes Viertel.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.-Sterne		
							AR.	Dekl.	Gr.
Febr. 27	O 7 52.6	6 17 <sup>m</sup> 38 <sup>s</sup>	-77.61	170.89	+28° 16.1	- 0.1	5 33.7	+29 10	5.9
	U 20 24.9	6 51 55	-77.72	171.56	+27 59.1	- 2.8	5 51.0	+28 56	6.4
28	O 8 57.0	7 26 7	-77.37	170.26	+27 10.0	- 5.4	6 39.2	+29 4	5.5
	U 21 28.7	7 59 53	-76.61	167.20	+25 49.7	- 7.9	7 5.9	+27 0	5.6
29	O 9 59.6	8 32 53	-75.51	162.82	+24 0.4	-10.2	7 55.6	+25 38	6.1
	U 22 29.6	9 4 55	-74.20	157.57	+21 45.2	-12.2	8 5.2	+25 47	5.9
März 1	O 10 58.5	9 35 51	-72.78	151.97	+19 7.7	-13.9	9 2.4	+23 20	6.3
	U 23 26.3	10 5 40	-71.38	146.45	+16 12.0	-15.3	9 8.6	+21 39	6.1
2	O 11 53.0	10 34 25	-70.06	141.32	+13 2.3	-16.3	10 0.9	+16 11	6.3
	- - -	- - -	- - -	- - -	- - -	- - -	10 17.1	+15 25	6.1
3	U 0 18.7	11 2 12	+68.90	136.63	+ 9 42.6	-17.0	10 44.7	+11 1	5.3
	O 12 43.7	11 29 10	+67.91	132.88	+ 6 16.8	-17.3	11 9.5	+ 8 33	5.8
4	U 1 7.9	11 55 27	+67.14	129.95	+ 2 48.3	-17.4	11 46.1	+ 2 16	3.8
	O 13 31.6	12 21 13	+66.59	127.84	- 0 39.6	-17.2	12 5.2	+ 2 24	6.2
5	U 1 55.0	12 46 39	+66.26	126.52	- 4 4.0	-16.8	12 43.0	- 5 49	6.3
	O 14 18.3	13 11 53	+66.13	125.96	- 7 22.3	-16.2	12 55.1	- 3 20	5.7
6	U 2 41.4	13 37 5	+66.20	126.10	-10 32.2	-15.4	13 28.3	- 9 43	5.4
	O 15 4.6	14 2 22	+66.43	126.84	-13 31.6	-14.4	13 42.6	- 9 16	6.2
7	U 3 28.1	14 27 50	+66.80	128.09	-16 18.7	-13.3	14 14.4	-12 58	4.5
	O 15 51.8	14 53 37	+67.27	129.75	-18 51.7	-12.1	14 44.5	-13 47	5.4
8	U 4 15.9	15 19 44	+67.82	131.66	-21 9.0	-10.8	15 11.3	-22 4	5.8
	O 16 40.4	15 46 16	+68.38	133.68	-23 9.3	-9.3	15 32.6	-22 51	6.0
9	U 5 5.3	16 13 11	+68.91	135.64	-24 51.4	-7.7	16 9.6	-25 15	6.0
	O 17 30.5	16 40 29	+69.38	137.35	-26 14.1	-6.1	16 24.9	-24 55	4.8
10	U 5 56.1	17 8 5	+69.73	138.67	-27 16.5	-4.3	17 6.9	-27 39	6.1
	O 18 21.9	17 35 54	+69.93	139.44	-27 58.1	-2.6	17 17.8	-28 4	5.4
11	U 6 47.8	18 3 49	+69.97	139.58	-28 18.4	-0.8	18 2.5	-28 28	4.7
	O 19 13.6	18 31 41	+69.81	139.03	-28 17.4	+ 1.0	18 16.4	-28 28	6.1
12	U 7 39.2	18 59 23	+69.47	137.81	-27 55.3	+ 2.7	18 49.8	-26 24	2.1
	O 20 4.6	19 26 47	+68.97	136.01	-27 12.7	+ 4.4	19 7.8	-26 3	5.9
13	U 8 29.5	19 53 47	+68.34	133.73	-26 10.3	+ 6.0	19 50.4	-26 32	4.8
	O 20 54.0	20 20 17	+67.61	131.12	-24 49.2	+ 7.5	20 9.8	-27 18	5.8
14	U 9 17.9	20 46 15	+66.84	128.36	-23 10.7	+ 8.9	20 41.1	-21 50	5.8
	O 21 41.3	21 11 39	+66.06	125.59	-21 15.9	+10.2	21 3.5	-21 33	5.3
15	U 10 4.1	21 36 31	+65.30	122.97	-19 6.4	+11.4			
	O 22 26.5	22 0 53	+64.62	120.61	-16 43.7	+12.4			
16	U 10 48.4	22 24 49	+64.05	118.64	-14 9.3	+13.3			
	O 23 9.9	22 48 24	+63.60	117.14	-11 24.7	+14.1			
17	U 11 31.2	23 11 43	+63.30	116.16	- 8 31.6	+14.7			
	O 23 52.4	23 34 54	+63.18	115.77	- 5 31.6	+15.2			

Februar 29 22<sup>b</sup> Perigäum. März 12 18<sup>b</sup> Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
März 17.0	22 49 58.81	m 8	— II 13 13.9	n 8	8.20656	+ 190	15 4.4
	17.5	23 12 37.52	22 31.29	8 24 41.3	8.20846	196	15 8.4
	18.0	23 35 8.81	22 30.44	5 29 42.0	8.21042	200	15 12.5
	18.5	23 57 39.25	22 36.67	— 2 29 52.5	8.21242	201	15 16.7
	19.0	○ 20 15.92	22 50.30	+ ○ 33 5.3	8.21443	199	15 21.0
	19.5	○ 43 6.22	23 11.63	3 37 23.9	8.21642	196	15 25.2
	20.0	I 6 17.85	23 40.82	6 41 8.5	8.21838	191	15 29.4
	20.5	I 29 58.67	24 17.78	9 42 16.0	8.22029	185	15 33.5
	21.0	I 54 16.45	25 2.25	12 38 34.4	8.22214	179	15 37.5
	21.5	2 19 18.70		15 27 42.2	8.22393		15 41.4
			25 53.50			+ 171	
	22.0	2 45 12.20	26 50.28	+ 18 7 7.5	8.22564	164	15 45.1
	22.5	3 12 2.48	27 50.70	20 34 9.7	8.22728	156	15 48.6
	23.0	3 39 53.18	28 52.08	22 46 1.4	8.22884	149	15 52.1
	23.5	4 8 45.26	29 50.99	24 39 52.8	8.23033	140	15 55.3
	24.0	4 38 36.25	30 43.47	26 12 57.4	8.23173	131	15 58.4
	24.5	5 9 19.72	31 25.41	27 22 42.1	8.23304	122	16 1.3
	25.0	5 40 45.13	31 53.18	28 6 56.8	8.23426	111	16 4.0
	25.5	6 12 38.31	32 4.27	28 24 4.6	8.23537	99	16 6.5
	26.0	6 44 42.58	31 57.85	28 13 12.1	8.23636	86	16 8.7
	26.5	7 16 40.43		27 34 14.7	8.23722		16 10.6
			31 34.95			+ 70	
	27.0	7 48 15.38	30 58.26	+ 26 27 57.5	8.23792	51	16 12.2
	27.5	8 19 13.64	30 11.55	24 55 51.4	8.23843	31	16 13.3
	28.0	8 49 25.19	29 18.99	23 0 5.3	8.23874	+ 8	16 14.0
	28.5	9 18 44.18	28 24.60	20 43 15.7	8.23882	- 18	16 14.2
	29.0	9 47 8.78	28 24.60	18 8 17.9	8.23864	45	16 13.8
	29.5	10 14 40.56	27 31.78	15 18 16.7	8.23819	74	16 12.8
	30.0	10 41 23.73	26 43.17	12 16 19.6	8.23745	103	16 11.1
	30.5	II 7 24.43	26 0.70	9 5 31.8	8.23642	133	16 8.8
	31.0	II 32 49.96	25 25.53	5 48 53.5	8.23509	162	16 5.9
	31.5	II 57 48.27	24 39.28	+ 2 29 17.3	8.23347	- 189	16 2.3
				- 3 19 49.7			
April	1.0	I 2 22 27.55	24 28.33	- ○ 50 32.4	8.23158	213	15 58.1
	1.5	I 2 46 55.88	24 25.14	4 8 0.1	8.22945	234	15 53.4
	2.0	I 3 11 21.02	24 29.12	7 20 39.4	8.22711	251	15 48.3
	2.5	I 3 35 50.14	24 39.50	10 26 12.7	8.22460	264	15 42.8
	3.0	I 4 0 29.64	24 55.29	I 3 22 31.5	8.22196	272	15 37.1
	3.5	I 4 25 24.93	25 15.31	16 7 36.2	8.21924	273	15 31.2
	4.0	I 4 50 40.24	25 38.12	18 39 36.1	8.21651	270	15 25.4
	4.5	I 5 16 18.36	26 2.06	20 56 50.3	8.21381	262	15 19.7
	5.0	I 5 42 20.42	26 25.35	22 57 47.9	8.21119	250	15 14.1
	5.5	I 6 8 45.77		24 41 9.8	8.20869		15 8.9

März 18 II 2.3 Neumond.

März 25 I 5 55.5 Erst. Viert.

April 1 I 10 58.2 Vollmond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.-Sterne		
							AR.	Dekl.	Gr.
März 17	U 11 31.2	23 II 43	+63.30	116.16	- 8° 31.6	+14.7			
O 23	52.4	23 34 54	+63.18	115.77	- 5 31.6	+15.2			
18 U	12 13.5	23 58 5	-63.26	116.01	- 2 26.5	+15.6			
-	-	-	-	-	-	-			
19 O	○ 34.8	○ 21 22	-63.51	116.92	+ ○ 42.0	+15.8			
U	12 56.3	○ 44 54	-63.99	118.53	+ 3 51.8	+15.8			
20 O	I 18.2	I 8 51	-64.66	120.90	+ 7 1.0	+15.7			
U	I3 40.6	I 33 20	-65.55	124.01	+10 7.3	+15.3			
21 O	2 3.8	I 58 31	-66.62	127.85	+13 8.2	+14.8			
U	I4 27.8	2 24 33	-67.86	132.38	+16 1.3	+14.0			
22 O	2 52.8	2 51 33	-69.26	137.51	+18 43.7	+13.0			
U	I5 18.8	3 19 38	-70.73	143.07	+21 12.2	+11.7			
23 O	3 45.9	3 48 50	-72.22	148.82	+23 23.8	+10.2			
U	I6 14.2	4 19 11	-73.65	154.44	+25 15.3	+ 8.4			
24 O	4 43.6	4 50 37	-74.92	159.51	+26 43.4	+ 6.3	4 5.5	+26 15	5.5
U	I7 13.9	5 22 57	-75.93	163.60	+27 45.3	+ 4.0	4 31.2	+23 10	6.0
25 O	5 44.9	5 55 59	-76.60	166.33	+28 18.6	+ 1.5	5 15.5	+27 52	6.4
U	I8 16.2	6 29 24	-76.85	167.41	+28 21.9	- 1.0	5 31.7	+26 52	5.7
26 O	6 47.6	7 2 50	-76.68	166.76	+27 54.6	- 3.6	6 15.6	+29 35	6.3
U	I9 18.7	7 35 59	-76.10	164.48	+26 57.1	- 6.0	6 34.0	+28 20	5.8
27 O	7 49.2	8 8 31	-75.20	160.87	+25 30.8	- 8.3	7 30.5	+27 6	4.3
U	20 18.8	8 40 14	-74.06	156.34	+23 38.0	-10.4	7 48.1	+27 0	4.9
28 O	8 47.5	9 10 59	-72.78	151.32	+21 21.7	-12.3	8 27.8	+24 23	6.4
U	21 15.2	9 40 43	-71.46	146.24	+18 45.2	-13.8	9 2.4	+23 20	6.3
29 O	9 41.9	10 9 27	-70.20	141.39	+15 51.9	-15.0	9 39.6	+19 16	6.5
U	22 7.7	10 37 16	-69.04	137.03	+12 45.4	-16.0	10 0.9	+16 11	6.3
30 O	10 32.7	II 4 17	-68.03	133.32	+ 9 29.1	-16.7	10 28.2	+ 9 46	3.8
U	22 57.0	II 30 38	-67.23	130.34	+ 6 6.3	-17.1	10 44.7	+11 1	5.3
31 O	II 20.8	II 56 27	-66.63	128.14	+ 2 40.2	-17.2	11 16.6	+ 6 31	4.2
U	23 44.2	II 21 55	-66.24	126.72	- ○ 46.2	-17.1	11 46.1	+ 2 16	3.8
April 1 O	I2 7.4	I2 47 11	+66.06	126.05	- 4 10.0	-16.8	I2 14.2	- ○ 18	5.9
-	-	-	-	-	-	-	I2 37.2	- ○ 58	2.9
2 U	○ 30.6	I3 12 23	+66.09	126.13	- 7 28.7	-16.3	I3 4.0	- 8 31	5.6
O	I2 53.8	I3 37 40	+66.29	126.86	-10 39.7	-15.5	I3 18.0	- 5 44	6.8
3 U	I 17.2	I4 3 9	+66.65	128.13	-13 40.8	-14.6	I3 59.7	-14 33	6.4
O	I3 41.0	I4 28 56	+67.14	129.85	-16 29.8	-13.5	I4 14.4	-12 58	4.5
4 U	2 5.2	I4 55 6	+67.71	131.90	-19 4.6	-12.3	I4 52.3	-21 1	5.7
O	I4 29.7	I5 21 41	+68.33	134.11	-21 23.4	-10.9	I5 7.2	-19 28	4.7
5 U	2 54.7	I5 48 43	+68.94	136.30	-23 24.5	- 9.3	I5 35.1	-23 32	5.0
O	I5 20.1	I6 16 10	+69.50	138.29	-25 6.6	- 7.7	I5 58.6	-24 29	6.4

März 28 Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
April 5.0	15 42 20.42	m n	-22 57 47.9	o o o	8.21119	-250	15 14.1
5.5	16 8 45.77	26 25.35	24 41 9.8	1 24 40.2	8.20869	232	15 8.9
6.0	16 35 31.84	26 46.07	26 5 50.0	1 5 7.5	8.20637	209	15 4.0
6.5	17 2 34.30	27 2.46	27 10 57.5	o 45 0.1	8.20428	184	14 59.7
7.0	17 29 47.24	27 12.94	27 55 57.6	o 24 35.7	8.20244	155	14 55.9
7.5	17 57 3.60	27 12.12	28 20 33.3	-o 4 11.9	8.20089	125	14 52.7
8.0	18 24 15.72	27 0.27	28 24 45.2	+o 15 53.9	8.19964	92	14 50.1
8.5	18 51 15.99	26 41.42	28 8 51.3	o 35 26.1	8.19872	57	14 48.3
9.0	19 17 57.41	26 16.81	27 33 25.2	o 54 11.0	8.19815	-23	14 47.1
9.5	19 44 14.22	25 47.95	26 39 14.2	8.19792			14 46.6
				+1 11 58.3		+ 13	
10.0	20 10 2.17	25 16.55	-25 27 15.9	1 28 40.4	8.19805	48	14 46.9
10.5	20 35 18.72	24 44.35	23 58 35.5	1 44 12.0	8.19853	80	14 47.9
11.0	21 0 3.07	24 13.05	22 14 23.5	1 58 30.3	8.19933	112	14 49.5
11.5	21 24 16.12	23 44.12	20 15 53.2	2 11 33.6	8.20045	143	14 51.8
12.0	21 48 0.24	23 18.77	18 4 19.6	2 23 20.8	8.20188	169	14 54.8
12.5	22 11 19.01	22 58.09	15 40 58.8	2 33 50.7	8.20357	193	14 58.2
13.0	22 34 17.10	22 42.94	13 7 8.1	2 43 1.7	8.20550	213	15 2.2
13.5	22 57 0.04	22 34.00	10 24 6.4	2 50 50.7	8.20763	229	15 6.7
14.0	23 19 34.04	22 31.84	7 33 15.7	2 57 13.4	8.20992	241	15 11.5
14.5	23 42 5.88	22 36.97	4 36 2.3	8.21233			15 16.5
				+3 2 3.6		+249	
15.0	0 4 42.85	22 49.74	- 1 33 58.7	3 5 13.4	8.21482	251	15 21.7
15.5	0 27 32.59	23 10.46	+ 1 31 14.7	3 6 32.8	8.21733	249	15 27.1
16.0	0 50 43.05	23 39.33	4 37 47.5	3 5 50.1	8.21982	243	15 32.5
16.5	1 14 22.38	24 16.36	7 43 37.6	2 57 26.9	8.22225	233	15 37.7
17.0	1 38 38.74	25 1.26	10 46 30.5	3 2 52.9	8.22458	218	15 42.7
17.5	2 3 40.00	25 53.38	13 43 57.4	2 49 18.5	8.22676	201	15 47.5
18.0	2 29 33.38	26 51.51	16 33 15.9	2 38 15.4	8.22877	182	15 51.9
18.5	2 56 24.89	27 53.79	19 11 31.3	2 24 7.9	8.23059	160	15 55.9
19.0	3 24 18.68	28 57.42	21 35 39.2	2 6 52.0	8.23219	137	15 59.4
19.5	3 53 16.10	29 58.84	23 42 31.2	8.23356			16 2.5
				+1 46 31.1		+114	
20.0	4 23 14.94	30 53.82	+25 29 2.3	1 23 19.4	8.23470	91	16 5.0
20.5	4 54 8.76	31 37.93	26 52 21.7	o 57 42.6	8.23561	68	16 7.0
21.0	5 25 46.69	32 7.15	27 50 4.3	o 30 18.7	8.23629	47	16 8.5
21.5	5 57 53.84	32 18.62	28 20 23.0	+o 1 55.6	8.23676	27	16 9.6
22.0	6 30 12.46	32 11.37	28 22 18.6	-o 26 33.5	8.23703	+ 8	16 10.2
22.5	7 2 23.83	31 46.44	27 55 45.1	o 54 15.5	8.23711	-10	16 10.4
23.0	7 34 10.27	31 6.65	27 1 29.6	1 20 22.9	8.23701	25	16 10.2
23.5	8 5 16.92	30 16.11	25 41 6.7	1 44 18.2	8.23676	41	16 9.6
24.0	8 35 33.03	29 19.30	23 56 48.5	2 5 36.2	8.23635	55	16 8.7
24.5	9 4 52.33		21 51 12.3	8.23580			16 7.4

April 9 <sup>h</sup> 4 <sup>m</sup> 17.4 Letzt. Viert. April 17 <sup>h</sup> 0 <sup>m</sup> 33.8 Neumond. April 23 <sup>h</sup> 21 <sup>m</sup> 40.8 Erst. Viert.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-1. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.- Sterne			
							AR.	Dekl.	Gr.	
April 5	U 2 54.7	15 48 <sup>m</sup> 43 <sup>s</sup>	+68.94	136.30	-23 ° 24.5	-9.3	15 35.1	-23 32	5.0	
O 15	20.1	16 16 10	+69.50	138.29	-25	6.6	15 58.6	-24 29	6.4	
6 U	3 45.9	16 43 59	+69.95	139.91	-26	28.4	16 38.8	-27 17	6.4	
O 16	12.0	17 12 5	+70.26	140.97	-27	29.0	16 54.6	-24 58	6.3	
7 U	4 38.2	17 40 19	+70.40	141.36	-28	7.9	17 37.8	-27 51	6.3	
O 17	4.4	18 8 34	+70.34	141.01	-28	24.7	17 51.2	-28 3	5.7	
8 U	5 30.4	18 36 41	+70.09	139.94	-28	19.8	+ 1.3	18 23.5	-26 38	6.5
O 17	56.2	19 4 31	+69.64	138.18	-27	53.7	+ 3.1	18 47.0	-29 29	6.3
9 U	6 21.6	19 31 56	+69.04	135.87	-27	7.0	+ 4.7	19 24.4	-27 10	5.7
O 18	46.5	19 58 52	+68.32	133.17	-26	0.7	+ 6.3	19 51.6	-27 24	4.6
10 U	7 10.8	20 25 13	+67.53	130.25	-24	36.1	+ 7.8	20 27.6	-25 15	6.2
O 19	34.5	20 51 0	+66.72	127.28	-22	54.5	+ 9.2	20 35.0	-24 6	6.3
11 U	7 57.7	21 16 11	+65.92	124.43	-20	57.3	+10.4	21 10.6	-21 1	5.3
O 20	20.3	21 40 49	+65.17	121.83	-18	45.8	+11.5	21 29.9	-20 39	5.7
12 U	8 42.4	22 4 57	+64.51	119.60	-16	21.4	+12.5	21 57.6	-17 23	6.5
O 21	4.1	22 28 42	+63.98	117.83	-13	45.6	+13.4	22 14.3	-13 45	6.1
13 U	9 25.5	22 52 9	+63.60	116.61	-10	59.8	+14.2			
O 21	46.8	23 15 24	+63.40	115.99	- 8	5.4	+14.8			
14 U	10 7.9	23 38 35	+63.37	116.02	- 5	4.0	+15.4			
O 22	29.2	○ 1 51	+63.54	116.76	- 1	57.2	+15.8			
15 U	10 50.6	○ 25 20	+63.92	118.22	+ 1	13.3	+16.0			
O 23	12.4	○ 49 10	+64.52	120.44	+ 4	25.5	+16.0			
16 U	11 34.7	I 13 32	+65.33	123.45	+ 7	37.1	+15.9			
O 23	57.7	I 38 34	+66.35	127.10	+10	45.9	+15.5			
17 U	12 21.6	2 4 26	-67.56	131.51	+13	49.1	+14.9			
—	—	—	—	—	—	—	—			
18 O	○ 46.4	2 31 15	-68.92	136.65	+16	43.8	+14.1			
U	13 12.2	2 59 10	-70.40	142.31	+19	26.7	+13.0			
19 O	1 39.2	3 28 14	-71.94	148.24	+21	54.3	+11.6			
U	14 7.5	3 58 30	-73.44	154.15	+24	3.0	+ 9.8			
20 O	2 36.8	4 29 54	-74.80	159.58	+25	49.3	+ 7.8			
U	15 7.2	5 2 18	-75.93	164.09	+27	9.9	+ 5.6			
21 O	3 38.3	5 35 29	-76.71	167.23	+28	2.2	+ 3.1			
U	16 9.8	6 9 6	-77.08	168.66	+28	24.3	+ 0.5			
22 O	4 41.5	6 42 49	-76.99	168.23	+28	15.3	- 2.1	6 0.8	+29 31	6.3
U	17 12.9	7 16 16	-76.48	166.03	+27	35.5	- 4.6	6 15.6	+29 35	6.3
23 O	5 43.7	7 49 7	-75.59	162.32	+26	26.3	- 7.0	7 10.5	+28 3	5.9
U	18 13.6	8 21 6	-74.42	157.56	+24	49.8	- 9.1	7 24.3	+28 6	5.0
24 O	6 42.5	8 52 4	-73.09	152.19	+22	49.0	-11.0	8 15.3	+24 18	5.9
U	19 10.3	9 21 56	-71.69	146.68	+20	27.1	-12.6	8 27.8	+24 23	6.4

April 9 14 Apogäum.

April 22 11 Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
April 24.0	8 <sup>h</sup> 35 <sup>m</sup> 33.03		+23° 56' 48.5"	-2° 5' 36.2"	8.23635	- 55	16° 8.7"
	24.5	9 4 52.33	28 20.48	21 51 12.3	2 24 2.5	8.23580	16 7.4
	25.0	9 33 12.81	27 23.39	19 27 9.8	2 39 31.8	8.23512	16 5.9
	25.5	10 0 36.20	26 30.79	16 47 38.0	2 52 5.6	8.23431	16 4.1
	26.0	10 27 6.99	25 44.66	13 55 32.4	3 1 49.1	8.23336	16 2.0
	26.5	10 52 51.65	25 6.24	10 53 43.3	3 8 50.0	8.23228	15 59.6
	27.0	11 17 57.89	24 36.24	7 44 53.3	3 13 15.9	8.23107	15 57.0
	27.5	11 42 34.13	24 14.89	4 31 37.4	3 15 14.0	8.22972	15 54.0
	28.0	12 6 49.02	24 2.15	+ 1 16 23.4	3 14 50.8	8.22824	15 50.7
	28.5	12 30 51.17		- 1 58 27.4	8.22662		15 47.2
			23 57.74	- 3 12 11.6		- 175	
	29.0	12 54 48.91	24 1.13	- 5 10 39.0	8.22487	186	15 43.4
	29.5	13 18 50.04	24 11.69	8 18 0.0	8.22301	197	15 39.4
	30.0	13 43 1.73	24 28.52	11 18 23.1	2 51 21.4	8.22104	206
	30.5	14 7 30.25	24 50.53	14 9 44.5	2 40 20.4	8.21898	213
Mai 1.0	14 32 20.78	25 16.31	16 50 4.9	2 27 25.1	8.21685	216	15 26.1
	1.5	14 57 37.09	25 44.28	19 17 30.0	2 12 42.3	8.21469	217
	2.0	15 23 21.37	26 12.56	21 30 12.3	1 56 20.5	8.21252	215
	2.5	15 49 33.93	26 39.06	23 26 32.8	1 38 31.7	8.21037	209
	3.0	16 16 12.99	27 1.70	25 5 4.5	1 19 30.2	8.20828	199
	3.5	16 43 14.69	27 18.49	26 24 34.7	8.20629		15 3.9
				- 0 59 33.5		- 186	
	4.0	17 10 33.18	27 27.83	- 27 24 8.2	8.20443	169	15 0.0
	4.5	17 38 1.01	27 28.68	28 3 9.8	8.20274	149	14 56.5
	5.0	18 5 29.69	27 20.61	28 21 25.6	8.20125	127	14 53.4
	5.5	18 32 50.30	27 4.11	28 19 2.9	8.19998	100	14 50.8
	6.0	18 59 54.41	26 40.24	27 56 29.6	8.19898	71	14 48.8
	6.5	19 26 34.65	26 10.55	27 14 31.0	8.19827	14 47.3	
	7.0	19 52 45.20	25 36.99	26 14 6.0	8.19787	40	14 46.5
	7.5	20 18 22.19	25 1.59	24 56 23.7	8.19779	+ 26	14 46.4
	8.0	20 43 23.78	24 26.29	23 22 38.9	8.19805	60	14 46.9
	8.5	21 7 50.07	23 52.83	21 34 9.3	8.19865		14 48.1
				+ 2 1 56.3		+ 94	
	9.0	21 31 42.90	23 22.71	- 19 32 13.0	8.19959	128	14 50.0
	9.5	21 55 5.61	22 57.17	17 18 6.8	8.20087	161	14 52.7
	10.0	22 18 2.78	22 37.18	14 53 5.3	8.20248	191	14 56.0
	10.5	22 40 39.96	22 23.58	12 18 21.7	2 34 43.6	8.20439	220
	11.0	23 3 3.54	22 17.01	9 35 8.9	2 43 12.8	8.20659	15 4.5
	11.5	23 25 20.55	22 18.03	6 44 41.3	2 50 27.6	8.20905	246
	12.0	23 47 38.58	22 27.09	3 48 16.1	2 56 25.2	8.21172	267
	12.5	0 10 5.67	22 44.63	- 0 47 16.3	3 0 59.8	8.21456	284
	13.0	0 32 50.30	23 10.94	+ 2 16 46.3	3 4 2.6	8.21752	296
	13.5	0 56 1.24		5 22 8.4	3 5 22.1	8.22055	303

April 30 23<sup>h</sup> 13.0 Vollmond.Mai 8 22<sup>h</sup> 49.7 Letztes Viertel.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Bürging.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl. - Sterne			
							AR.	Dekl.	Gr.	
April	24 O	6 <sup>h</sup> 42.5	8 <sup>h</sup> 52 <sup>m</sup> 4 <sup>s</sup>	-73.09	152.19	+22° 49.0	-11.0	8 <sup>h</sup> 15.3	+24 18	5.9
	U	19 10.3	9 21 56	-71.69	146.68	+20 27.1	-12.6	8 27.8	+24 23	6.4
	25 O	7 37.1	9 50 42	-70.31	141.37	+17 47.5	-14.0	9 8.6	+21 39	6.1
	U	20 2.8	10 18 28	-69.04	136.55	+14 53.4	-15.0	9 39.6	+19 16	6.5
	26 O	8 27.6	10 45 20	-67.92	132.40	+11 48.2	-15.8	10 12.0	+14 10	5.5
	U	20 51.7	11 11 27	-66.99	129.01	+ 8 34.8	-16.4	10 27.5	+14 35	5.8
	27 O	9 15.2	11 36 58	-66.26	126.43	+ 5 16.1	-16.7	11 9.5	+ 8 33	5.8
	U	21 38.3	12 2 4	-65.77	124.68	+ 1 54.9	-16.8	11 16.6	+ 6 31	4.2
	28 O	10 1.1	12 26 54	-65.48	123.75	- 1 26.4	-16.7	11 54.6	+ 1 1	6.5
	U	22 23.7	12 51 37	-65.42	123.59	- 4 45.2	-16.4	12 5.2	+ 2 24	6.2
	29 O	10 46.4	13 16 22	-65.55	124.14	- 7 59.2	-15.9	12 43.0	- 5 49	6.3
	U	23 9.4	13 41 19	-65.87	125.36	-11 6.0	-15.2	13 5.4	- 5 4	4.4
Mai	30 O	11 32.6	14 6 34	-66.34	127.12	-14 3.4	-14.3	13 28.4	- 9 43	5.4
	U	23 56.2	14 32 13	+66.93	129.44	-16 49.3	-13.3	13 42.6	- 9 16	6.2
	1 O	12 20.3	14 58 20	+67.61	131.94	-19 21.5	-12.0	14 29.9	-20 3	6.5
	—	—	—	—	—	—	—	14 46.0	-15 41	2.9
	2 U	0 44.9	15 24 59	+68.31	134.58	-21 37.9	-10.7	15 11.3	-22 4	5.8
	O	13 10.0	15 52 8	+69.00	137.14	-23 36.9	- 9.1	15 34.2	-22 52	6.2
	3 U	1 35.6	16 19 47	+69.61	139.40	-25 16.8	- 7.5	16 15.9	-25 23	3.1
	O	14 1.6	16 47 50	+70.10	141.15	-26 36.1	- 5.7	16 36.3	-24 18	6.1
	4 U	2 27.9	17 16 11	+70.42	142.24	-27 33.8	- 3.9	17 10.0	-26 28	5.4
	O	14 54.4	17 44 41	+70.53	142.52	-28 9.5	- 2.0	17 26.3	-26 12	6.0
	5 U	3 20.8	18 13 8	+70.43	141.95	-28 22.8	- 0.2	18 6.4	-28 55	6.4
	O	15 47.0	18 41 25	+70.10	140.54	-28 14.1	+ 1.6	18 23.5	-26 38	6.5
	6 U	4 12.9	19 9 20	+69.58	138.41	-27 43.9	+ 3.4	19 1.5	-27 48	3.5
	O	16 38.3	19 36 45	+68.91	135.70	-26 53.3	+ 5.0	19 19.0	-28 2	5.9
	7 U	5 3.1	20 3 36	+68.12	132.61	-25 43.4	+ 6.6	19 53.6	-26 26	4.9
	O	17 27.3	20 29 49	+67.26	129.34	-24 15.7	+ 8.0	20 27.7	-25 15	6.2
	8 U	5 50.8	20 55 22	+66.40	126.08	-22 31.6	+ 9.3	20 47.9	-24 7	6.2
	O	18 13.7	21 20 18	+65.56	123.01	-20 32.5	+10.5	21 10.6	-21 1	5.3
	9 U	6 36.0	21 44 38	+64.80	120.27	-18 19.9	+11.6	21 37.8	-19 16	4.8
	O	18 57.8	22 8 27	+64.15	117.97	-15 55.2	+12.5	21 57.4	-18 20	6.4
10 U	7 19.1	22 31 52	+63.64	116.21	-13 19.8	+13.4	22 25.3	-13 22	6.2	
	O	19 40.2	22 55 0	+63.29	115.06	-10 34.9	+14.1	22 43.9	-11 1	6.1
	11 U	8 1.2	23 17 57	+63.12	114.58	- 7 42.0	+14.7	23 12.3	- 8 12	5.3
	O	20 22.1	23 40 53	+63.16	114.82	- 4 42.2	+15.2	23 31.0	- 7 57	6.5
	12 U	8 43.1	0 3 56	+63.40	115.82	- 1 37.1	+15.6	0 0.6	- 0 59	6.3
	O	21 4.4	0 27 15	+63.88	117.64	+ 1 31.7	+15.8	0 13.3	+ 1 12	6.3
	13 U	9 26.1	0 51 1	+64.58	120.28	+ 4 42.5	+15.9			
	O	21 48.5	1 15 24	+65.50	123.79	+ 7 53.3	+15.8			

Mai 7 9<sup>b</sup> Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Mai	13.0	○ 32 50.30	m 8	+ 2 16 46.3	8.21752	+ 303	15 27.6
	13.5	○ 56 1.24	23 10.94	5 22 8.4	8.22055	304	15 34.1
	14.0	1 19 47.50	23 46.26	8 26 52.5	8.22359	298	15 40.6
	14.5	1 44 18.08	24 30.58	11 28 43.8	8.22657	288	15 47.1
	15.0	2 9 41.69	25 23.61	14 25 9.0	8.22945	270	15 53.4
	15.5	2 36 6.19	26 24.50	17 13 15.7	8.23215	247	15 59.3
	16.0	3 3 37.97	27 31.78	19 49 52.7	8.23462	218	16 4.8
	16.5	3 32 20.97	28 43.00	22 11 34.5	8.23680	187	16 9.7
	17.0	4 2 15.62	29 54.65	24 14 48.5	8.23867	151	16 13.8
	17.5	4 33 17.81	31 2.19	25 56 5.8	8.24018	16	17.2
			32 0.35	+ 1 16 10.7		+ 113	
	18.0	5 5 18.16	32 43.77	+ 27 12 16.5	8.24131	75	16 19.8
	18.5	5 38 1.93	33 8.07	28 ○ 45.9	8.24206	+ 36	16 21.5
	19.0	6 11 10.00	33 10.60	28 19 49.8	8.24242	- 1	16 22.3
	19.5	6 44 20.60	32 51.35	28 8 47.5	8.24241	35	16 22.3
	20.0	7 17 11.95	32 12.75	27 28 4.6	8.24206	68	16 21.5
	20.5	7 49 24.70	31 19.20	26 19 8.8	8.24138	96	16 20.0
	21.0	8 20 43.90	31 19.20	24 44 19.0	8.24042	121	16 17.8
	21.5	8 50 59.97	30 16.07	22 46 29.4	8.23921	142	16 15.1
	22.0	9 20 8.71	29 8.74	20 28 53.2	8.23779	158	16 11.9
	22.5	9 48 10.56	28 1.85	17 54 49.2	8.23621	16	8.4
			26 59.05	- 2 47 17.9		- 172	
	23.0	10 15 9.61	26 2.92	+ 15 7 31.3	8.23449	182	16 4.5
	23.5	10 41 12.53	25 15.07	12 10 2.8	8.23267	189	16 0.5
	24.0	11 6 27.60	24 36.34	9 5 13.7	8.23078	194	15 56.3
	24.5	11 31 3.94	24 7.10	5 55 39.8	8.22884	197	15 52.1
	25.0	11 55 11.04	23 47.34	+ 2 43 44.0	8.22687	198	15 47.7
	25.5	12 18 58.38	23 47.34	- ○ 28 21.0	8.22489	198	15 43.4
	26.0	12 42 35.16	23 36.78	3 38 31.1	8.22291	198	15 39.1
	26.5	13 6 10.11	23 34.95	6 44 47.9	8.22093	198	15 34.9
	27.0	13 29 51.34	23 41.23	9 45 17.6	8.21895	196	15 30.6
	27.5	13 53 46.19	23 54.85	12 38 8.4	8.21699	195	15 26.4
			24 14.87	- 2 43 21.8		- 193	
	28.0	14 18 1.06	24 40.05	- 15 21 30.2	8.21506	191	15 22.3
	28.5	14 42 41.11	25 8.88	17 53 34.1	8.21315	188	15 18.3
	29.0	15 7 49.99	25 39.63	20 12 33.8	8.21127	183	15 14.3
	29.5	15 33 29.62	26 10.28	22 16 46.9	8.20944	177	15 10.5
	30.0	15 59 39.90	26 38.57	24 4 37.3	8.20767	171	15 6.7
	30.5	16 26 18.47	27 2.28	25 34 38.6	8.20596	162	15 3.2
	31.0	16 53 20.75	27 19.31	26 45 38.3	8.20434	152	14 59.8
	31.5	17 20 40.06	27 28.01	27 36 41.5	8.20282	139	14 56.7
	Juni 1.0	17 48 8.07	27 27.37	28 7 13.8	8.20143	125	14 53.8
	1.5	18 15 35.44		28 17 3.7	8.20018		14 51.2

Mai 16 II<sup>b</sup> 7.2 Neumond.

Mai 23 III 4.9 Erst. Viert.

Mai 30 II<sup>b</sup> 23.2 Vollmond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in r <sup>h</sup> Länge	Dekl.	Bew. in r <sup>h</sup> Länge	Vergl. - Sterne		
							AR.	Dekl.	Gr.
Mai	13 U	9 26.1	0 51 <sup>m</sup> 1 <sup>s</sup>	+64.58	120.28	+ 4 42.5	+15.9		
	O 21	48.5	1 15 24	+65.50	123.79	+ 7 53.3	+15.8		
	14 U	10 11.6	1 40 33	+66.66	128.16	+11 1.6	+15.5		
	O 22	35.7	2 6 40	+68.02	133.36	+14 4.9	+15.0		
	15 U	11 0.8	2 33 53	+69.55	139.27	+16 59.8	+14.1		
	O 23	27.3	3 2 21	+71.20	145.76	+19 43.0	+13.0		
	16 U	11 55.0	3 32 9	-72.89	152.23	+22 10.7	+11.5		
	—	—	—	—	—	—	—		
	17 O	0 24.1	4 3 17	-74.53	158.85	+24 18.6	+ 9.7		
	U 12	54.4	4 35 41	-75.99	164.85	+26 2.8	+ 7.6		
	18 O	1 25.9	5 9 10	-77.14	169.64	+27 19.6	+ 5.2		
	U 13	58.1	5 43 27	-77.88	172.68	+28 5.9	+ 2.5		
	19 O	2 30.7	6 18 7	-78.12	173.62	+28 20.0	- 0.2		
	U 15	3.3	6 52 45	-77.85	172.35	+28 1.2	- 2.9		
	20 O	3 35.4	7 26 55	-77.09	169.09	+27 10.3	- 5.5		
	U 16	6.7	8 0 15	-75.95	164.22	+25 49.4	- 7.9		
	21 O	4 36.9	8 32 30	-74.55	158.34	+24 1.6	-10.0	7 55.6	+25 38 6.1
	U 17	5.8	9 3 31	-73.00	152.01	+21 50.3	-11.8	8 15.3	+24 18 5.9
	22 O	5 33.5	9 33 16	-71.43	145.74	+19 19.4	-13.3	9 2.4	+23 20 6.3
	U 18	0.0	10 1 47	-69.93	139.86	+16 32.6	-14.5	9 8.6	+21 39 6.1
	23 O	6 25.4	10 29 13	-68.57	134.65	+13 33.6	-15.4	10 0.9	+16 11 6.3
	U 18	49.8	10 55 40	-67.40	130.25	+10 25.6	-16.0	10 12.0	+14 10 5.5
	24 O	7 13.4	11 21 20	-66.45	126.75	+ 7 11.5	-16.4	10 44.7	+11 1 5.3
	U 19	36.5	11 46 24	-65.73	124.14	+ 3 54.1	-16.5	11 9.5	+ 8 33 5.8
	25 O	7 59.1	12 11 2	-65.25	122.45	+ 0 35.8	-16.5	11 29.9	+ 3 33 5.7
	U 20	21.4	12 35 26	-64.99	121.61	- 2 41.1	-16.3	11 55.5	+ 4 9 5.2
	26 O	8 43.7	12 59 44	-64.96	121.59	- 5 54.5	-15.9	12 27.1	- 4 34 6.3
	U 21	6.0	13 24 7	-65.14	122.33	- 9 2.3	-15.4	12 48.7	- 3 5 6.1
	27 O	9 28.6	13 48 43	-65.50	123.73	-12 2.5	-14.7	13 20.6	-10 42 1.2
	U 21	51.5	14 13 40	-66.01	125.73	-14 53.1	-13.8	13 28.4	- 9 43 5.4
	28 O	10 14.9	14 39 3	-66.64	128.17	-17 32.2	-12.7	14 6.1	-15 53 5.1
	U 22	38.8	15 4 58	-67.36	130.92	-19 57.6	-11.5	14 14.4	-12 58 4.5
	29 O	11 3.2	15 31 27	-68.10	133.79	-22 7.6	-10.1	15 1.4	-21 41 6.1
	U 23	28.2	15 58 30	-68.81	136.56	-24 0.2	-8.6	15 11.3	-22 4 5.8
	30 O	11 53.7	16 26 4	-69.45	139.03	-25 33.9	-7.0	15 49.4	-24 59 5.9
	—	—	—	—	—	—	—	16 8.5	-24 12 6.3
	31 U	0 19.7	16 54 6	+69.94	141.02	-26 47.3	- 5.2	16 54.6	-24 58 6.3
	O 12	46.0	17 22 25	+70.26	142.19	-27 39.3	- 3.4	17 10.0	-26 28 5.4
Juni	1 U	1 12.4	17 50 54	+70.35	142.48	-28 9.2	- 1.6	17 42.1	-27 48 var.
	O 13	38.8	18 19 21	+70.22	141.84	-28 16.8	+ 0.3	18 2.6	-28 28 4.7

Mai 19 5<sup>h</sup> Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Juni 1.0	17 <sup>b</sup> 48 <sup>m</sup> 8.07	m *	-28 7 13.8	-o 9 49.9	8.20143	-125	14 53.8
1.5	18 15 35.44	27 27.37	28 17 3.7	+o 10 40.8	8.20018	109	14 51.2
2.0	18 42 52.61	26 57.97	28 6 22.9	o 30 38.0	8.19909	89	14 49.0
2.5	19 9 50.58	26 31.12	27 35 44.9	o 49 42.9	8.19820	67	14 47.2
3.0	19 36 21.70	25 58.42	26 46 2.0	1 7 40.7	8.19753	43	14 45.8
3.5	20 2 20.12	25 22.00	25 38 21.3	1 24 21.1	8.19710	- 17	14 45.0
4.0	20 27 42.12	24 44.07	24 14 0.2	1 39 39.0	8.19693	+ 10	14 44.6
4.5	20 52 26.19	24 6.62	22 34 21.2	1 53 32.0	8.19703	40	14 44.8
5.0	21 16 32.81	23 31.45	20 40 49.2	2 6 1.2	8.19743	71	14 45.6
5.5	21 40 4.26	23 0.07	18 34 48.0		8.19814		14 47.1
6.0	22 3 4.33	22 33.73	-16 17 38.6	+2 17 9.4		+102	
6.5	22 25 38.06	22 13.40	13 50 38.4	2 27 0.2	8.19916	136	14 49.2
7.0	22 47 51.46	21 59.81	11 15 1.0	2 35 37.4	8.20052	167	14 52.0
7.5	23 9 51.27	21 53.65	8 31 58.1	2 43 2.9	8.20219	199	14 55.4
8.0	23 31 44.92	21 55.48	5 42 40.5	2 49 17.6	8.20418	230	14 59.5
8.5	23 53 40.40	21 58.00	- 2 48 19.7	2 54 20.8	8.20648	257	15 4.3
9.0	o 15 46.20	22 5.80	+ o 9 48.2	2 58 7.9	8.20905	283	15 9.6
9.5	o 38 11.23	22 25.03	3 10 20.7	3 0 32.5	8.21188	306	15 15.6
10.0	1 1 4.83	22 53.60	6 11 44.8	3 1 24.1	8.21494	323	15 22.1
10.5	1 24 36.64	23 31.81	9 12 13.2	3 0 28.4	8.21817	336	15 29.0
		24 19.80		+2 57 28.4	8.22153		15 36.2
11.0	1 48 56.44	25 17.34	+12 9 41.6	2 52 3.6	8.22496	343	15 43.6
11.5	2 14 13.78	26 23.75	15 1 45.2	2 43 51.7	8.22839	337	15 51.1
12.0	2 40 37.53	27 37.54	17 45 36.9	2 32 29.3	8.23176	322	15 58.5
12.5	3 8 15.07	28 56.21	20 18 6.2	2 17 36.3	8.23498	301	16 5.6
13.0	3 37 11.28	30 15.93	22 35 42.5	1 58 59.6	8.23799	272	16 12.3
13.5	4 7 27.21	31 31.72	24 34 42.1	1 36 37.6	8.24071	236	16 18.4
14.0	4 38 58.93	32 37.51	26 11 19.7	1 10 45.5	8.24307	195	16 23.8
14.5	5 11 36.44	33 27.05	27 22 5.2	0 41 58.7	8.24502	149	16 28.2
15.0	5 45 3.49	33 55.13	28 4 3.9	+o 11 13.2	8.24651	100	16 31.6
15.5	6 18 58.62	33 58.67	28 15 17.1		8.24751		16 33.9
			-o 20 19.5			+ 48	
16.0	6 52 57.29	33 37.54	+27 54 57.6	o 51 21.2	8.24799	- 2	16 35.0
16.5	7 26 34.83	32 54.78	27 3 36.4	1 20 38.6	8.24797	52	16 34.9
17.0	7 59 29.61	31 55.53	25 42 57.8	1 47 11.6	8.24745	99	16 33.7
17.5	8 31 25.14	30 46.03	23 55 46.2	2 10 19.4	8.24646	141	16 31.5
18.0	9 2 11.17	29 32.50	21 45 26.8	2 29 41.9	8.24505	178	16 28.3
18.5	9 31 43.67	28 19.99	19 15 44.9	2 45 15.6	8.24327	209	16 24.2
19.0	10 0 3.66	27 12.52	16 30 29.3	2 57 9.2	8.24118	234	16 19.5
19.5	10 27 16.18	26 12.67	13 33 20.1	3 5 39.5	8.23884	254	16 14.2
20.0	10 53 28.85	25 22.01	10 27 40.6	3 11 5.9	8.23630	266	16 8.5
20.5	11 18 50.86		7 16 34.7		8.23364		16 2.6

Juni 7 15<sup>b</sup> 29.2 Letztes Viertel.Juni 14 19<sup>b</sup> 17.2 Neumond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl. - Sterne		
							AR.	Dekl.	Gr.
Junii 1 U	1 12.4	17 50 <sup>m</sup> 54 <sup>s</sup>	+70.35	142.48	-28° 9.2	-1.6	17 42.1	-27 48	var.
0	13 38.8	18 19 21	+70.22	141.84	-28 16.8	+ 0.3	18 2.6	-28 28	4.7
2 U	2 5.0	18 47 35	+69.85	140.31	-28 2.5	+ 2.1	18 40.2	-27 5	3.3
0	14 30.8	19 15 26	+69.30	137.99	-27 26.9	+ 3.8	19 1.5	-27 48	3.5
3 U	2 56.1	19 42 46	+68.57	135.08	-26 31.1	+ 5.5	19 24.5	-27 10	5.7
0	15 20.8	20 9 28	+67.73	131.76	-25 16.4	+ 7.0	19 50.5	-26 32	4.8
4 U	3 44.8	20 35 30	+66.84	128.26	-23 44.5	+ 8.4	20 27.7	-25 15	6.2
0	16 8.1	21 0 49	+65.92	124.79	-21 56.7	+ 9.6	20 47.9	-24 7	6.2
5 U	4 30.7	21 25 27	+65.06	121.53	-19 54.8	+10.7	21 19.2	-21 14	5.3
0	16 52.7	21 49 28	+64.27	118.62	-17 40.3	+11.7	21 37.8	-19 16	4.8
6 U	5 14.1	22 12 58	+63.61	116.19	-15 14.6	+12.6	22 7.7	-14 38	6.2
0	17 35.2	22 36 1	+63.09	114.32	-12 39.2	+13.3	22 25.6	-15 2	6.1
7 U	5 55.9	22 58 45	+62.75	113.08	- 9 55.3	+14.0	23 0.6	- 8 10	5.4
0	18 16.4	23 21 18	+62.58	112.55	- 7 4.2	+14.5	23 11.3	- 9 34	4.5
8 U	6 36.9	23 43 49	+62.64	112.76	- 4 7.1	+15.0	23 43.4	- 3 15	5.6
0	18 57.5	○ 6 27	+62.91	113.76	- 1 5.4	+15.3	23 54.2	- 4 3	5.0
9 U	7 18.4	○ 29 22	+63.41	115.62	+ 1 59.5	+15.5	○ 20.9	+ 1 27	6.0
0	19 39.7	○ 52 44	+64.16	118.36	+ 5 6.2	+15.6	○ 43.8	+ 4 50	5.9
10 U	8 1.7	1 16 45	+65.14	122.01	+ 8 12.7	+15.5	1 9.1	+ 7 7	5.4
0	20 24.5	1 41 34	+66.35	126.60	+11 17.0	+15.2	1 23.8	+ 7 30	6.4
11 U	8 48.3	2 7 24	+67.80	132.11	+14 16.6	+14.7	1 57.8	+13 3	6.3
0	21 13.3	2 34 24	+69.44	138.46	+17 8.6	+13.9	2 8.3	+14 52	5.8
12 U	9 39.6	3 2 46	+71.21	145.52	+19 49.4	+12.8			
0	22 7.3	3 32 35	+73.06	152.98	+22 15.3	+11.4			
13 U	10 36.6	4 3 53	+74.88	160.43	+24 22.0	+ 9.6			
0	23 7.3	4 36 38	+76.51	167.29	+26 5.1	+ 7.5			
14 U	11 39.2	5 10 39	+77.85	172.92	+27 20.4	+ 5.0			
—	—	—	—	—	—	—			
15 O	○ 12.2	5 45 38	-78.74	176.55	+28 4.5	+ 2.3			
U	12 45.6	6 21 9	-79.08	178.02	+28 14.9	- 0.6			
16 O	1 19.1	6 56 40	-78.84	176.99	+27 50.8	- 3.4			
U	13 52.1	7 31 46	-78.06	173.63	+26 52.9	- 6.2			
17 O	2 24.2	8 5 59	-76.86	168.43	+25 23.5	- 8.7			
U	14 55.2	8 39 1	-75.35	162.05	+23 26.0	-10.9			
18 O	3 24.9	9 10 43	-73.68	155.15	+21 4.7	-12.7			
U	15 53.2	9 41 2	-72.00	148.29	+18 23.8	-14.1			
19 O	4 20.1	10 10 1	-70.40	141.87	+15 27.7	-15.2	9 39.6	+19 16	6.5
U	16 45.8	10 37 47	-68.96	136.20	+12 20.5	-16.0	10 0.9	+16 11	6.3
20 O	5 10.5	11 4 31	-67.71	131.42	+ 9 5.8	-16.5	10 23.0	+10 13	5.8
U	17 34.3	11 30 23	-66.70	127.61	+ 5 46.8	-16.7	10 44.6	+11 1	5.3

Juni 4 2<sup>h</sup> Apogäum.Juni 16 5<sup>h</sup> Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Dif.	Wahre Dekl.	Dif.	Log. sin. A. H. Par.	Dif.	Halbm.
Juni 20.0	10 53 28.85	m 8	+ 10 27 40.6	- 3 11 5.9	8.23630	- 266	16 8.5
	20.5	11 18 50.86	25 22.01	7 16 34.7	8.23364	16 2.6	
	21.0	11 43 32.17	24 41.31	4 2 46.7	8.23090	274	15 56.6
	21.5	12 7 42.92	24 10.75	+ 0 48 42.2	8.22813	277	15 50.5
	22.0	12 31 33.09	23 50.17	- 2 23 28.2	8.22538	275	15 44.5
	22.5	12 55 12.26	23 39.17	5 31 45.8	8.22269	269	15 38.7
	23.0	13 18 49.41	23 37.15	8 34 20.8	8.22007	262	15 33.0
	23.5	13 42 32.84	23 43.43	11 29 30.2	8.21754	253	15 27.6
	24.0	14 6 29.91	23 57.07	14 15 34.5	8.21513	241	15 22.5
	24.5	14 30 46.94	24 17.03	16 50 56.4	8.21286	227	15 17.7
			24 41.99	- 2 23 3.6		- 215	
	25.0	14 55 28.93	25 10.40	- 19 14 0.0	8.21071	201	15 13.1
	25.5	15 20 39.33	25 40.40	21 23 11.9	8.20870	188	15 8.9
	26.0	15 46 19.73	26 9.94	23 17 1.4	8.20682	173	15 5.0
	26.5	16 12 29.67	26 36.71	24 54 3.6	8.20509	159	15 1.4
	27.0	16 39 6.38	26 58.51	26 13 2.7	8.20350	145	14 58.1
	27.5	17 6 4.89	27 13.37	27 12 54.7	8.20205	131	14 55.1
	28.0	17 33 18.26	27 19.68	27 52 52.6	8.20074	117	14 52.4
	28.5	18 0 37.94	27 16.61	28 12 29.6	8.19957	101	14 50.0
	29.0	18 27 54.55	27 4.10	28 11 40.4	8.19856	85	14 47.9
	29.5	18 54 58.65	26 42.86	27 50 42.3	8.19771		14 46.2
				+ 0 40 28.0		- 70	
	30.0	19 21 41.51	26 14.29	- 27 10 14.3	8.19701	52	14 44.8
	30.5	19 47 55.80	25 40.29	26 11 13.6	8.19649	33	14 43.7
Juli 1.0	20 13 36.09	25 2.96	24 54 51.6	8.19616	- 13	14 43.0	
	1.5	20 38 39.05	24 24.43	23 22 30.1	8.19603	+ 8	14 42.8
	2.0	21 3 3.48	23 46.67	21 35 36.5	8.19611		14 42.9
	2.5	21 26 50.15	23 11.41	19 35 40.2	8.19643	32	14 43.6
	3.0	21 50 1.56	22 40.05	17 24 9.4	8.19699	56	14 44.7
	3.5	22 12 41.61	22 13.78	15 2 29.7	8.19780	108	14 46.4
	4.0	22 34 55.39	21 53.52	12 32 2.7	8.19888	136	14 48.6
	4.5	22 56 48.91	21 40.00	9 54 6.0	8.20024		14 51.4
				+ 2 44 11.9		+ 165	
	5.0	23 18 28.91	21 33.83	- 7 9 54.1	8.20189	193	14 54.8
	5.5	23 40 2.74	21 35.55	4 20 39.5	8.20382	221	14 58.8
	6.0	0 1 38.29	21 45.69	- 1 27 34.5	8.20603	248	15 3.3
	6.5	0 23 23.98	22 4.65	+ 1 28 6.3	8.20851	248	15 8.5
	7.0	0 45 28.63	22 32.88	4 25 3.6	8.21126	275	15 14.3
	7.5	1 8 1.51	23 10.74	7 21 50.1	8.21426	300	15 20.6
	8.0	1 31 12.25	23 58.43	10 16 46.7	8.21746	320	15 27.4
	8.5	1 55 10.68	24 55.85	13 7 59.4	8.22082	336	15 34.6
	9.0	2 20 6.53	26 2.43	15 53 15.8	8.22431	349	15 42.2
	9.5	2 46 8.96		18 30 2.4	8.22787	356	15 49.9

Juni 21 <sup>b</sup> 9 32.5 Erst. Viert.    Juni 29 <sup>b</sup> 27.4 Vollmond.    Juli 7 <sup>b</sup> 5 40.5 Letzt. Viert.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in Th Länge	Dekl.	Bew. in Th Länge	Vergl.- Sterne		
							AR.	Dekl.	Gr.
Juni 20 O	5 10.5	11 4 31	-67.71	131.42	+ 9 5.8	-16.5	10 23.0	+10 13	5.8
U	17 34.3	11 30 23	-66.70	127.61	+ 5 46.8	-16.7	10 44.6	+11 1	5.3
21 O	5 57.5	11 55 36	-65.94	124.76	+ 2 26.3	-16.7	11 16.6	+ 6 31	4.2
U	18 20.2	12 20 20	-65.43	122.87	- 0 53.1	-16.5	11 41.4	+ 7 1	4.2
22 O	6 42.6	12 44 47	-65.15	121.88	- 4 9.4	-16.1	12 14.2	- 0 18	5.9
U	19 4.9	13 9 8	-65.10	121.75	- 7 20.3	-15.6	12 37.2	- 0 58	2.9
23 O	7 27.3	13 33 33	-65.26	122.39	-10 24.1	-15.0	13 4.0	- 8 31	5.6
U	19 49.9	13 58 9	-65.60	123.72	-13 19.0	-14.2	13 28.4	- 9 43	5.4
24 O	8 12.8	14 23 5	-66.10	125.62	-16 3.2	-13.2	13 59.7	-14 33	6.4
U	20 36.1	14 48 26	-66.71	128.00	-18 34.8	-12.1	14 6.1	-15 53	5.1
25 O	8 59.9	15 14 18	-67.40	130.66	-20 52.3	-10.8	14 41.2	-20 48	6.4
U	21 24.3	15 40 44	-68.10	133.45	-22 53.8	-9.4	15 8.3	-19 19	6.0
26 O	9 49.3	16 7 43	-68.78	136.15	-24 37.7	-7.9	15 32.7	-22 51	6.0
U	22 14.7	16 35 12	-69.35	138.51	-26 2.7	-6.2	15 48.7	-23 43	5.3
27 O	10 40.6	17 3 6	-69.81	140.34	-27 7.3	-4.5	16 26.0	-26 21	6.2
U	23 6.7	17 31 18	-70.06	141.43	-27 50.6	-2.7	16 38.9	-27 17	6.4
28 O	11 33.0	17 59 37	-70.10	141.65	-28 12.1	-0.9	17 26.3	-26 12	6.0
U	23 59.2	18 27 53	-69.91	140.95	-28 11.7	+ 0.9	17 42.1	-27 48	var.
29 O	12 25.2	18 55 55	+69.50	139.28	-27 49.6	+ 2.7	18 16.5	-28 28	6.1
							18 40.2	-27 5	3.3
30 U	0 50.8	19 23 34	+68.89	136.90	-27 6.7	+ 4.4	19 19.1	-28 2	5.9
O	13 15.9	19 50 40	+68.13	133.91	-26 4.0	+ 6.0	19 34.9	-23 38	6.1
Juli 1 U	1 40.3	20 17 8	+67.26	130.54	-24 42.9	+ 7.5	20 12.9	-22 5	6.0
O	14 4.1	20 42 54	+66.34	126.99	-23 5.1	+ 8.8	20 27.7	-25 15	6.2
2 U	2 27.1	21 7 58	+65.41	123.48	-21 12.1	+10.0	21 3.6	-21 33	5.3
O	14 49.4	21 32 21	+64.52	120.17	-19 5.7	+11.1	21 19.2	-21 14	5.3
3 U	3 11.2	21 56 6	+63.74	117.21	-16 47.5	+12.0	21 45.4	-17 15	6.5
O	15 32.3	22 19 17	+63.07	114.73	-14 19.0	+12.8	22 7.7	-14 38	6.2
4 U	3 53.0	22 42 2	+62.55	112.78	-11 41.7	+13.4	22 43.9	-11 1	6.1
O	16 13.4	23 4 28	+62.20	111.47	- 8 57.0	+14.0	22 48.9	-12 5	5.8
5 U	4 33.6	23 26 41	+62.04	110.83	- 6 6.1	+14.4	23 25.0	- 5 1	6.4
O	16 53.8	23 48 51	+62.08	110.92	- 3 10.4	+14.8	23 31.0	- 7 57	6.5
6 U	5 14.0	20 11 6	+62.34	111.80	- 0 11.2	+15.0	20 3.7	- 2 56	6.3
O	17 34.5	20 33 36	+62.83	113.50	+ 2 50.2	+15.2	20 20.9	+ 1 27	6.0
7 U	5 55.4	20 56 32	+63.57	116.08	+ 5 52.4	+15.2	20 55.3	+ 6 1	6.3
O	18 16.9	21 20 4	+64.54	119.56	+ 8 53.8	+15.0	21 9.2	+ 7 7	5.4
8 U	6 39.2	21 44 23	+65.74	123.99	+11 52.3	+14.7	21 32.4	+11 42	5.6
O	19 2.4	2 9 41	+67.18	129.36	+14 45.8	+14.2	21 54.7	+11 52	6.0
9 U	7 26.8	2 36 8	+68.82	135.61	+17 31.7	+13.4	2 39.4	+17 24	6.5
O	19 52.6	3 3 55	+70.62	142.63	+20 6.9	+12.4	2 50.9	+17 59	6.0

Juli 1 13 Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Juli 9.0	2 20 <sup>m</sup> 6.53	26 <sup>m</sup> 2.43	+15° 53' 15".8	+2 36 46.6	8.22431	+356	15 42.2
9.5	2 46 8.96	27 16.91	18 30 2.4	2 25 20.6	8.22787	357	15 49.9
10.0	3 13 25.87	28 37.02	20 55 23.0	2 10 37.1	8.23144	349	15 57.7
10.5	3 42 2.89	29 59.24	23 6 0.1	1 52 19.3	8.23493	335	16 5.5
11.0	4 12 2.13	31 18.67	24 58 19.4	1 30 20.7	8.23828	312	16 13.0
11.5	4 43 20.80	32 29.38	26 28 40.1	1 4 49.9	8.24140	282	16 20.0
12.0	5 15 50.18	33 25.02	27 33 30.0	0 36 15.8	8.24422	243	16 26.4
12.5	5 49 15.20	33 59.90	28 9 45.8	+0 5 28.1	8.24665	198	16 31.9
13.0	6 23 15.10	34 10.37	28 15 13.9	-0 26 24.5	8.24863	146	16 36.4
13.5	6 57 25.47	33 55.67	27 48 49.4	-0 58 2.7	8.25009	16 39.8	
14.0	7 31 21.14	33 18.25	+26 50 46.7	1 28 7.6	8.25100	+34	16 41.9
14.5	8 4 39.39	32 23.04	25 22 39.1	1 55 31.8	8.25134	-25	16 42.7
15.0	8 37 2.43	31 16.27	23 27 7.3	2 19 25.7	8.25109	83	16 42.1
15.5	9 8 18.70	30 4.27	21 7 41.6	2 39 20.6	8.25026	137	16 40.2
16.0	9 38 22.97	28 52.50	18 28 21.0	2 55 7.2	8.24889	185	16 37.1
16.5	10 7 15.47	27 45.13	15 33 13.8	3 6 51.0	8.24704	229	16 32.8
17.0	10 35 0.60	26 45.06	12 26 22.8	3 14 47.1	8.24475	265	16 27.6
17.5	11 1 45.66	25 54.03	9 11 35.7	3 19 16.6	8.24210	293	16 21.6
18.0	11 27 39.69	25 12.86	5 52 19.1	3 20 42.3	8.23917	314	16 15.0
18.5	11 52 52.55	24 41.81	+ 2 31 36.8	-3 19 26.0	8.23603	-328	16 8.0
19.0	12 17 34.36	24 20.74	- 0 47 49.2	3 15 47.1	8.23275	334	16 0.7
19.5	12 41 55.10	24 9.17	4 3 36.3	3 10 2.3	8.22941	334	15 53.3
20.0	13 6 4.27	24 6.46	7 13 38.6	3 2 24.5	8.22607	329	15 46.0
20.5	13 30 10.73	24 11.78	10 16 3.1	2 53 3.8	8.22278	318	15 38.9
21.0	13 54 22.51	24 24.16	13 9 6.9	2 42 7.6	8.21960	304	15 32.0
21.5	14 18 46.67	24 42.42	15 51 14.5	2 29 41.0	8.21656	287	15 25.5
22.0	14 43 29.09	25 5.12	18 20 55.5	2 15 48.2	8.21369	267	15 19.4
22.5	15 8 34.21	25 30.64	20 36 43.7	2 0 33.3	8.21102	246	15 13.8
23.0	15 34 4.85	25 57.07	22 37 17.0	1 44 1.3	8.20856	224	15 8.6
23.5	16 0 1.92	26 22.32	24 21 18.3	-1 26 18.8	8.20632	15 3.9	
24.0	16 26 24.24	26 44.30	-25 47 37.1	1 7 35.5	8.20430	179	14 59.7
24.5	16 53 8.54	27 0.94	26 55 12.6	0 48 4.4	8.20251	157	14 56.0
25.0	17 20 9.48	27 10.49	27 43 17.0	0 28 1.1	8.20094	134	14 52.8
25.5	17 47 19.97	27 11.77	28 11 18.1	-0 7 44.2	8.19960	114	14 50.1
26.0	18 14 31.74	27 4.20	28 19 2.3	+0 12 26.2	8.19846	94	14 47.7
26.5	18 41 35.94	26 48.03	28 6 36.1	0 32 9.8	8.19752	73	14 45.8
27.0	19 8 23.97	26 24.13	27 34 26.3	0 51 7.9	8.19679	54	14 44.3
27.5	19 34 48.10	25 53.98	26 43 18.4	1 9 4.4	8.19625	36	14 43.2
28.0	20 0 42.08	25 19.41	25 34 14.0	1 25 46.2	8.19589	18	14 42.5
28.5	20 26 1.49	-	24 8 27.8	8.19571	-	14 42.1	

Juli 14 2<sup>h</sup> 6.8 Neumond.Juli 20 18<sup>h</sup> 12.0 Erstes Viertel.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.-Sterne		
							AR.	Dekl.	Gr.
Juli 9 U	7 26.8	2 36 <sup>m</sup> 8 <sup>s</sup>	+68.82	135.61	+17° 31.7'	+13.4	2 39.4	+17 24'	6.5
O	19 52.6	3 3 55	+70.62	142.63	+20 6.9	+12.4	2 50.9	+17 59	6.0
10 U	8 19.8	3 33 9	+72.50	150.20	+22 27.8	+11.0	3 23.3	+22 30	6.1
O	20 48.5	4 3 56	+74.39	157.93	+24 30.4	+ 9.3	3 43.1	+23 9	5.5
11 U	9 18.7	4 36 14	+76.16	165.29	+26 10.5	+ 7.3			
O	21 50.4	5 9 55	+77.64	171.63	+27 23.9	+ 4.9			
12 U	10 23.1	5 44 43	+78.72	176.29	+28 6.6	+ 2.2			
O	22 56.6	6 20 15	+79.27	178.70	+28 16.0	- 0.7			
13 U	11 30.3	6 56 1	+79.24	178.57	+27 50.5	- 3.6			
—	—	—	—	—	—	—	—	—	—
14 O	0 3.7	7 31 32	+78.65	176.15	+26 50.4	- 6.4			
U	12 36.5	8 6 19	-77.58	171.62	+25 17.4	- 9.0			
15 O	1 8.1	8 40 3	-76.17	165.68	+23 14.9	-11.3			
U	13 38.5	9 12 30	-74.56	158.98	+20 47.0	-13.3			
16 O	2 7.6	9 43 35	-72.90	152.15	+17 58.4	-14.8			
U	14 35.3	10 13 20	-71.30	145.67	+14 53.8	-15.9			
17 O	3 1.7	10 41 51	-69.84	139.85	+11 37.8	-16.7			
U	15 27.1	11 9 18	-68.58	134.90	+ 8 14.6	-17.1			
18 O	3 51.6	11 35 50	-67.55	130.90	+ 4 47.8	-17.3			
U	16 15.4	12 1 41	-66.77	127.87	+ 1 20.6	-17.2			
—	—	—	—	—	—	—	—	—	—
19 O	4 38.7	12 27 2	-66.24	125.79	- 2 4.2	-16.9	11 54.6	+ 1 1	6.5
U	17 1.7	12 52 3	-65.94	124.64	- 5 24.1	-16.4	12 14.2	- 0 18	5.9
20 O	5 24.6	13 16 56	-65.88	124.34	- 8 36.9	-15.7	12 43.0	- 5 49	6.3
U	17 47.5	13 41 50	-66.00	124.78	-11 40.8	-14.9	13 5.4	- 5 4	4.4
21 O	6 10.5	14 6 54	-66.31	125.91	-14 34.0	-13.9	13 28.4	- 9 43	5.4
U	18 33.8	14 32 15	-66.76	127.60	-17 14.8	-12.8	13 41.3	-11 59	5.6
22 O	6 57.5	14 57 59	-67.32	129.71	-19 41.5	-11.6	14 13.8	-18 19	5.7
U	19 21.7	15 24 10	-67.94	132.09	-21 52.6	-10.2	14 41.1	-15 5	6.6
23 O	7 46.3	15 50 50	-68.55	134.54	-23 46.6	- 8.7	15 11.3	-22 4	5.8
U	20 11.4	16 17 59	-69.12	136.85	-25 22.2	- 7.2	15 32.7	-22 51	6.0
—	—	—	—	—	—	—	—	—	—
24 O	8 36.9	16 45 34	-69.60	138.82	-26 38.1	- 5.5	16 9.6	-25 15	6.0
U	21 2.8	17 13 29	-69.93	140.24	-27 33.3	- 3.7	16 24.9	-24 55	4.8
25 O	9 28.9	17 41 38	-70.07	140.94	-28 7.1	- 1.9	17 7.0	-27 39	6.1
U	21 55.1	18 9 50	-70.00	140.83	-28 19.2	- 0.1	17 21.5	-25 52	6.3
26 O	10 21.1	18 37 54	-69.72	139.86	-28 9.5	+ 1.7	18 2.6	-28 28	4.7
U	22 46.9	19 5 42	-69.22	138.08	-27 38.6	+ 3.5	18 16.5	-28 28	6.1
27 O	11 12.2	19 33 4	-68.56	135.61	-26 47.3	+ 5.1	19 1.5	-27 48	3.5
U	23 37.0	19 59 53	-67.75	132.62	-25 36.7	+ 6.6	19 19.1	-28 2	5.9
28 O	12 1.1	20 26 4	-66.87	129.30	-24 8.3	+ 8.1	19 53.7	-26 26	4.9
—	—	—	—	—	—	—	20 12.9	-22 5	6.0

Juli 14 13<sup>h</sup> Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Juli 28.0	20° 0' 42.08	m. *	-25° 34' 14.0	+1 25 46.2	8.19589	- 18	14 42.5
	28.5	20 26 1.49	24 42.39	1 41 5.0	8.19571	+ 1	14 42.1
	29.0	20 50 43.88	24 4.86	1 54 55.0	8.19572	19	14 42.1
	29.5	21 14 48.74	23 28.57	2 7 14.8	8.19591	37	14 42.5
	30.0	21 38 17.31	22 55.07	2 18 4.5	8.19628	55	14 43.3
	30.5	22 1 12.38	22 25.58	2 27 25.8	8.19683	74	14 44.4
	31.0	22 23 37.96	13 39 42.7	8.19757	74	14 45.9	
	31.5	22 45 39.11	11 4 21.0	8.19852	95	14 47.9	
	Aug. 1.0	23 7 21.68	8 22 25.5	8.19967	115	14 50.2	
	1.5	23 28 52.17	5 35 15.8	8.20103	136	14 53.0	
Aug. 2.0		21 25.47		+2 51 5.6		+158	
	23 50 17.64	21 28.00	- 2 44 10.2	8.20261	180	14 56.3	
	2.5	0 11 45.64	+ 0 9 33.7	8.20441	203	15 0.0	
	3.0	0 33 24.12	21 57.35	8.20644	225	15 4.2	
	3.5	0 55 21.47	22 24.96	8.20869	248	15 8.9	
	4.0	1 17 46.43	8 52 59.6	8.21117	268	15 14.1	
	4.5	1 40 48.00	23 1.57	8.21385	288	15 19.8	
	5.0	2 4 35.32	23 47.32	8.21673	305	15 25.9	
	5.5	2 29 17.39	24 42.07	8.21978	319	15 32.4	
	6.0	2 55 2.61	25 45.22	8.22297	329	15 39.3	
	6.5	3 21 58.13	26 55.52	8.22626		15 46.4	
		28 10.90		+2 1 8.7	+334		
	7.0	3 50 9.03	+23 52 20.2	8.22960	334	15 53.7	
	7.5	4 19 37.22	25 35 7.3	8.23294	328	16 1.1	
	8.0	4 50 20.27	26 56 15.5	8.23622	314	16 8.4	
Aug. 8.5	5 22 10.50	31 50.23	27 52 34.1	8.23936	314	16 15.4	
	9.0	5 54 54.71	28 21 15.7	8.24229	293	16 22.0	
	9.5	6 28 14.60	28 20 14.7	8.24492	263	16 28.0	
	10.0	7 1 48.59	27 48 22.5	8.24719	227	16 33.1	
	10.5	7 35 14.06	26 45 40.0	8.24902	183	16 37.3	
	11.0	8 8 10.26	25 13 18.8	8.25036	134	16 40.4	
	11.5	8 40 20.46	23 13 36.0	8.25115	79	16 42.2	
		31 12.80		-2 23 55.6	+ 22		
	12.0	9 11 33.26	+20 49 40.4	8.25137	- 37	16 42.7	
	12.5	9 41 42.95	18 5 15.3	8.25100	95	16 41.9	
	13.0	10 10 48.84	15 4 22.7	8.25005	151	16 39.7	
	13.5	10 38 54.27	11 51 7.9	8.24854	202	16 36.2	
	14.0	11 6 5.47	8 29 28.8	8.24652	246	16 31.6	
	14.5	11 32 30.51	5 3 8.8	8.24406	285	16 26.0	
	15.0	11 58 18.46	+ 1 35 32.2	8.24121	315	16 19.6	
	15.5	12 23 38.70	- 1 50 17.0	8.23806	337	16 12.5	
	16.0	12 48 40.54	5 11 35.1	8.23469	351	16 5.0	
	16.5	13 13 32.87	8 25 57.1	8.23118	15 57.2		

Juli 28 17<sup>h</sup>21<sup>m</sup>.8 Vollmond.Aug. 5 17<sup>h</sup>11<sup>m</sup>.2 Letzt. Viert.Aug. 12 8<sup>h</sup>51<sup>m</sup>.2 Neumond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl. - Sterne
							AR. Dekl. Gr.
Juli 28 O	12 <sup>h</sup> 1.1	20 <sup>h</sup> 26 <sup>m</sup> 4 <sup>s</sup>	-66.87	129.30	-24° 8.3	+ 8.1	19 <sup>h</sup> 53.7 -26 <sup>°</sup> 26' 4.9
-	-	-	-	-	-	-	20 12.9 -22 5 6.0
29 U	0 24.6	20 51 34	+65.94	125.68	-22 23.7	+ 9.4	20 47.9 -24 7 6.2
O	12 47.3	21 16 22	+65.01	122.28	-20 24.5	+10.5	21 3.6 -21 33 5.3
30 U	1 9.5	21 40 31	+64.15	119.09	-18 12.4	+11.5	21 37.8 -19 16 4.8
O	13 31.0	22 4 4	+63.37	116.26	-15 49.0	+12.4	21 57.4 -18 20 6.4
31 U	1 52.0	22 27 5	+62.72	113.86	-13 16.0	+13.1	22 19.8 -13 59 5.9
O	14 12.5	22 49 40	+62.22	112.00	-10 35.0	+13.7	22 43.9 -11 1 6.1
Aug. 1 U	2 32.8	23 11 56	+61.88	110.73	- 7 47.4	+14.2	23 0.6 - 8 10 5.4
O	14 52.8	23 34 1	+61.73	110.12	- 4 54.5	+14.6	23 16.2 - 6 23 6.3
2 U	3 12.8	23 56 2	+61.79	110.18	- 1 57.8	+14.8	23 48.4 - 3 39 6.1
O	15 32.9	0 18 8	+62.04	111.00	+ 1 1.3	+15.0	0 3.7 - 2 56 6.3
3 U	3 53.2	0 40 28	+62.55	112.58	+ 4 1.4	+15.0	0 43.8 + 4 50 5.9
O	16 13.9	1 3 12	+63.23	114.98	+ 7 1.0	+14.9	0 55.3 + 6 1 6.3
4 U	4 35.2	1 26 30	+64.16	118.23	+ 9 58.5	+14.6	1 23.8 + 7 30 6.4
O	16 57.2	1 50 31	+65.32	122.36	+12 52.1	+14.2	1 32.5 + 11 42 5.6
5 U	5 20.1	2 15 27	+66.68	127.35	+15 39.6	+13.6	2 8.3 + 14 52 5.8
O	17 44.0	2 41 27	+68.25	133.16	+18 18.7	+12.8	2 28.1 + 14 39 6.1
6 U	6 9.2	3 8 42	+69.96	139.70	+20 46.5	+11.8	3 3.4 + 18 27 6.5
O	18 35.8	3 37 18	+71.76	146.74	+22 59.9	+10.4	3 19.4 + 20 30 6.0
7 U	7 3.8	4 7 20	+73.56	154.00	+24 55.3	+ 8.8	4 5.5 + 26 15 5.5
O	19 33.2	4 38 49	+75.27	161.01	+26 28.9	+ 6.8	4 17.2 + 25 25 5.3
8 U	8 4.0	5 11 38	+76.75	167.20	+27 37.0	+ 4.5	5 4.2 + 27 55 6.0
O	20 35.8	5 45 33	+77.87	172.01	+28 16.1	+ 1.9	5 20.7 + 28 32 1.8
9 U	9 8.5	6 20 16	+78.52	174.90	+28 23.3	- 0.8	6 15.6 + 29 35 6.3
O	21 41.5	6 55 21	+78.66	175.58	+27 56.9	- 3.6	6 32.8 + 29 4 5.6
10 U	10 14.4	7 30 21	+78.28	174.02	+26 56.8	- 6.4	
O	22 46.9	8 4 51	+77.43	170.52	+25 24.0	- 9.0	
11 U	11 18.5	8 38 31	+76.24	165.58	+23 21.2	-11.4	
O	23 49.0	9 11 5	+74.84	159.80	+20 52.0	-13.4	
12 U	12 18.3	9 42 28	-73.36	154.00	+18 0.8	-15.1	
-	-	-	-	-	-	-	
13 O	0 46.4	10 12 39	-71.89	148.14	+14 52.2	-16.3	
U	13 13.5	10 41 43	-70.55	142.78	+11 30.9	-17.2	
14 O	1 39.5	11 9 47	-69.39	138.18	+ 8 1.2	-17.7	
U	14 4.7	11 37 1	-68.43	134.43	+ 4 27.2	-17.9	
15 O	2 29.2	12 3 36	-67.71	131.58	+ 0 52.6	-17.8	
U	14 53.3	12 29 41	-67.23	129.63	- 2 39.3	-17.5	
16 O	3 17.1	12 55 30	-66.97	128.55	- 6 5.6	-16.9	
U	15 40.7	13 21 10	-66.93	128.27	- 9 23.8	-16.1	

Juli 28 18<sup>h</sup> Apogäum.August 11 22<sup>h</sup> Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Dif.	Wahre Dekl.	Dif.	Log. sin. A. H. Par.	Dif.	Halbm.
Aug. 16.0	12 <sup>h</sup> 48 <sup>m</sup> 40.54	— m —	— 5 <sup>h</sup> 11 <sup>m</sup> 35.1	— 0 <sup>h</sup> 7 <sup>m</sup> "	8.23469	— 351	16 <sup>h</sup> 5.0
	16.5	13 13 32.87	8 25 57.1	3 14 22.0	8.23118	357	15 57.2
	17.0	13 38 23.91	11 31 14.3	3 5 17.2	8.22761	356	15 49.4
	17.5	14 3 20.99	14 25 31.8	2 54 17.5	8.22405	349	15 41.6
	18.0	14 28 30.35	17 7 6.5	2 27 18.6	8.22056	337	15 34.1
	18.5	14 53 56.91	19 34 25.1	2 11 37.9	8.21719	319	15 26.9
	19.0	15 19 44.04	21 46 3.0	1 54 40.8	8.21400	297	15 20.1
	19.5	15 45 53.36	23 40 43.8	1 36 36.4	8.21103	273	15 13.8
	20.0	16 12 24.55	25 17 20.2	1 17 35.3	8.20830	246	15 8.1
	20.5	16 39 15.24	26 34 55.5	8.20584	—	15 2.9	
		27 5.92	— 0 57 49.5	—	— 219		
	21.0	17 6 21.16	— 27 32 45.0	8.20365	191	14 58.4	
	21.5	17 33 36.30	28 10 19.0	8.20174	162	14 54.5	
	22.0	18 0 53.36	28 27 24.1	8.20012	134	14 51.1	
	22.5	18 28 4.31	28 24 4.7	8.19878	105	14 48.4	
	23.0	18 55 1.11	28 0 43.2	8.19773	78	14 46.2	
	23.5	19 21 36.37	27 17 59.4	8.19695	54	14 44.7	
	24.0	19 47 43.82	26 16 47.9	8.19641	54	14 43.6	
	24.5	20 13 18.77	24 58 15.9	8.19612	29	14 43.0	
	25.0	20 38 18.34	23 23 40.1	8.19606	— 6	14 42.8	
	25.5	21 2 41.43	21 34 23.7	8.19621	+ 15	14 43.1	
		23 47.21	+ 2 2 30.1	+ 35			
	26.0	21 26 28.64	— 19 31 53.6	8.19656	53	14 43.8	
	26.5	21 49 42.06	17 17 38.5	8.19709	70	14 44.9	
	27.0	22 12 25.05	14 53 6.7	8.19779	86	14 46.4	
	27.5	22 34 42.01	12 19 45.9	8.19865	102	14 48.1	
	28.0	22 56 38.12	9 39 2.3	8.19967	116	14 50.2	
	28.5	23 18 19.24	6 52 21.2	8.20083	130	14 52.6	
	29.0	23 39 51.76	4 1 7.1	8.20213	144	14 55.3	
	29.5	0 1 22.52	2 54 22.6	8.20357	159	14 58.2	
	30.0	0 22 58.74	2 56 5.3	8.20516	172	15 1.5	
	30.5	0 44 47.95	2 56 19.5	8.20688	15 5.1		
		22 10.01	+ 2 55 0.8	+ 185			
Sept. 1.0	1 6 57.96	+ 7 40 41.1	8.20873	200	15 9.0		
	1 29 36.84	10 32 44.4	8.21073	213	15 13.2		
	1 52 52.74	13 20 3.7	8.21286	226	15 17.7		
	1.5	2 16 53.69	16 0 42.1	8.21512	239	15 22.4	
	2.0	2 41 47.32	18 32 31.6	8.21751	251	15 27.5	
	2.5	3 7 40.41	20 53 11.6	8.22002	261	15 32.9	
	3.0	3 34 38.30	23 0 9.1	8.22263	269	15 38.5	
	3.5	4 2 44.01	24 50 40.6	8.22532	275	15 44.4	
	4.0	4 31 57.49	26 21 56.9	8.22807	276	15 50.4	
	4.5	5 2 14.77	27 31 10.4	8.23083	15 56.4		

August 19 5<sup>h</sup> 50.2 Erstes Viertel.August 27 8<sup>h</sup> 52.5 Vollmond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.-Sterne		
							AR.	Dekl.	Gr.
Aug. 16	O 3 17.1	12 55 30	-66.97	128.55	- 6 5.6	-16.9			
	U 15 40.7	13 21 10	-66.93	128.27	- 9 23.8	-16.1			
17	O 4 4.3	13 46 51	-67.07	128.70	-12 31.7	-15.2	13 20.6	-10 42	1.2
	U 16 28.1	14 12 41	-67.38	129.75	-15 27.3	-14.1	13 28.3	-9 43	5.4
18	O 4 52.2	14 38 48	-67.82	131.30	-18 8.7	-12.8	14 6.1	-15 53	5.1
	U 17 16.6	15 5 15	-68.33	133.18	-20 34.3	-11.4	14 14.4	-12 58	4.5
19	O 5 41.4	15 32 6	-68.88	135.23	-22 42.6	-9.9	15 1.4	-21 41	6.1
	U 18 6.6	15 59 21	-69.41	137.27	-24 32.2	-8.3	15 11.3	-22 4	5.8
20	O 6 32.3	16 27 0	-69.87	139.09	-26 2.0	-6.6	15 53.3	-24 35	5.4
	U 18 58.2	16 54 58	-70.21	140.48	-27 11.0	-4.8	16 8.5	-24 12	6.3
21	O 7 24.3	17 23 10	-70.39	141.30	-27 58.4	-3.0	16 38.9	-27 17	6.4
	U 19 50.6	17 51 27	-70.39	141.39	-28 23.8	-1.2	17 7.0	-27 39	6.1
22	O 8 16.8	18 19 40	-70.17	140.71	-28 27.3	+ 0.6	17 42.1	-27 48	var.
	U 20 42.7	18 47 40	-69.76	139.25	-28 9.1	+ 2.4	17 59.4	-29 35	var.
23	O 9 8.3	19 15 18	-69.16	137.11	-27 29.9	+ 4.1	18 40.2	-27 5	3.3
	U 21 33.4	19 42 27	-68.41	134.40	-26 30.7	+ 5.7	19 1.5	-27 48	3.5
24	O 9 57.9	20 9 1	-67.54	131.30	-25 12.8	+ 7.2	19 24.5	-27 10	5.7
	U 22 21.8	20 34 56	-66.63	127.98	-23 37.5	+ 8.6	19 50.5	-26 32	4.8
25	O 10 45.0	21 0 11	-65.70	124.63	-21 46.4	+ 9.9	20 27.7	-25 15	6.2
	U 23 7.6	21 24 46	-64.79	121.39	-19 41.2	+11.0	20 47.9	-24 7	6.2
26	O 11 29.5	21 48 44	-63.96	118.42	-17 23.5	+12.0	21 19.2	-21 14	5.3
	U 23 50.9	22 12 8	-63.22	115.81	-14 55.0	+12.8	21 32.2	-19 52	4.7
27	O 12 11.8	22 35 4	+62.62	113.57	-12 17.2	+13.5	22 7.7	-14 38	6.2
	—	—	—	—	—	—	22 19.8	-13 59	5.9
28	U 0 32.3	22 57 37	+62.16	111.95	- 9 31.7	+14.1	22 43.9	-11 1	6.1
	O 12 52.6	23 19 54	+61.87	110.93	- 6 40.0	+14.5	23 13.4	- 9 40	4.6
29	U 1 12.7	23 42 2	+61.77	110.52	- 3 43.6	+14.8	23 43.5	- 3 15	5.6
	O 13 32.8	0 4 9	+61.87	110.78	- 0 44.1	+15.0	23 54.2	- 4 3	5.0
30	U 1 53.0	0 26 23	+62.16	111.73	+ 2 17.0	+15.1	0 20.9	+ 1 27	6.0
	O 14 13.4	0 48 53	+62.67	113.40	+ 5 18.3	+15.1	0 43.8	+ 4 50	5.9
31	U 2 34.3	1 11 47	+63.38	115.82	+ 8 17.9	+14.9	1 9.2	+ 7 7	5.4
Sept. 1	O 14 55.8	1 35 14	+64.31	119.03	+11 14.1	+14.5	1 23.8	+ 7 30	6.4
	U 3 17.9	1 59 24	+65.43	122.99	+14 5.0	+14.0	1 54.8	+11 52	6.0
	O 15 40.9	2 24 26	+66.74	127.71	+16 48.3	+13.2	2 8.3	+14 52	5.8
2	U 4 4.9	2 50 29	+68.21	133.11	+19 21.7	+12.3	2 43.6	+17 55	6.0
	O 16 30.1	3 17 40	+69.80	139.07	+21 42.6	+11.1	3 6.6	+19 24	4.6
3	U 4 56.4	3 46 4	+71.44	145.38	+23 47.8	+9.7	3 39.7	+23 50	3.8
	O 17 24.0	4 15 45	+73.07	151.74	+25 34.3	+8.0	3 59.1	+23 52	5.6
4	U 5 52.9	4 46 41	+74.57	157.76	+26 58.8	+6.0	4 47.3	+27 45	6.0
	O 18 22.9	5 18 45	+75.84	162.97	+27 58.1	+3.8	4 59.2	+27 34	6.5

Aug. 24 21<sup>h</sup> Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Sept. 4.0	4 31 57.49	m 17.28	+26° 21' 56.9	+ 1° 9 13.5	8.22807	+276	15 50.4
4.5	5 2 14.77	31 12.73	27 31 10.4	0 44 35.1	8.23083	273	15 56.4
5.0	5 33 27.50	31 55.44	28 15 45.5	+0 17 45.8	8.23356	267	16 2.5
5.5	6 5 22.94	32 21.78	28 33 31.3	-0 10 37.0	8.23623	254	16 8.5
6.0	6 37 44.72	32 29.71	28 22 54.3	0 39 43.8	8.23877	235	16 14.1
6.5	7 10 14.43	32 19.10	27 43 10.5	1 8 39.3	8.24112	210	16 19.4
7.0	7 42 33.53	31 51.88	26 34 31.2	1 36 27.7	8.24322	179	16 24.2
7.5	8 14 25.41	31 11.65	24 58 3.5	2 2 16.8	8.24501	142	16 28.2
8.0	8 45 37.06	30 22.76	22 55 46.7	2 25 24.3	8.24643	100	16 31.4
8.5	9 15 59.82	29 29.80	20 30 22.4	8.24743		16 33.7	
9.0	9 45 29.62	28 36.89	+17 45 2.8	-2 45 19.6		+ 53	
9.5	10 14 6.51	27 47.30	14 43 19.9	3 1 42.9	8.24796	+ 3	16 34.9
10.0	10 41 53.81	27 3.46	11 28 54.9	3 14 25.0	8.24799	- 48	16 35.0
10.5	11 8 57.27	26 26.96	8 5 30.1	3 23 24.8	8.24751	100	16 33.9
11.0	11 35 24.23	25 58.70	4 36 42.2	3 28 47.9	8.24651	149	16 31.6
11.5	12 1 22.93	25 39.00	+ 1 5 58.1	3 30 44.1	8.24502	195	16 28.2
12.0	12 27 1.93	25 27.79	- 2 23 28.2	3 29 26.3	8.24069	238	16 23.8
12.5	12 52 29.72	25 24.64	5 48 37.0	3 25 8.8	8.23795	274	16 12.2
13.0	13 17 54.36	25 28.80	9 6 43.4	3 18 6.4	8.23492	303	16 5.5
13.5	13 43 23.16	25 39.32	12 15 17.9	3 8 34.5	8.23169	323	15 58.3
14.0	14 9 2.48	25 54.97	-15 12 5.3	-2 56 47.4		-338	
14.5	14 34 57.45	26 14.21	17 55 4.1	2 42 58.8	8.22831	345	15 50.9
15.0	15 1 11.66	26 35.33	20 22 26.7	2 27 22.6	8.22486	344	15 43.4
15.5	15 27 46.99	26 56.34	22 32 38.9	2 10 12.2	8.22142	337	15 35.9
16.0	15 54 43.33	27 15.23	24 24 20.0	1 51 41.1	8.21805	324	15 28.7
16.5	16 21 58.56	27 30.00	25 56 24.3	1 32 4.3	8.21481	306	15 21.8
17.0	16 49 28.56	27 38.89	27 8 2.0	1 11 37.7	8.20891	284	15 9.4
17.5	17 17 7.45	27 40.53	27 58 40.9	0 50 38.9	8.20634	257	15 4.0
18.0	17 44 47.98	27 34.16	28 28 7.3	0 29 26.4	8.20406	228	14 59.2
18.5	18 12 22.14	27 19.69	28 36 26.7	-0 8 19.4	8.20208	198	14 55.1
19.0	18 39 41.83	26 57.73	-28 24 2.6	+0 12 24.1		-166	
19.5	19 6 39.56	26 29.42	27 51 35.7	0 32 26.9	8.20042	133	14 51.7
20.0	19 33 8.98	25 56.31	27 0 1.3	0 51 34.4	8.19909	101	14 49.0
20.5	19 59 5.29	25 20.20	25 50 26.0	1 9 35.3	8.19808	68	14 47.0
21.0	20 24 25.49	24 42.90	24 24 4.8	1 26 21.2	8.19740	37	14 45.6
21.5	20 49 8.39	24 6.12	22 42 18.1	1 41 46.7	8.19703	- 8	14 44.8
22.0	21 13 14.51	23 31.37	20 46 29.3	1 55 48.8	8.19695	+ 20	14 44.7
22.5	21 36 45.88	22 59.87	18 38 2.7	2 8 26.6	8.19715	46	14 45.1
23.0	21 59 45.75	22 32.67	16 18 22.6	2 19 40.1	8.19761	70	14 46.0
23.5	22 22 18.42	21 48 52.9	13 48 52.9	2 29 29.7	8.19831	91	14 47.4
					8.19922		14 49.3

Sept. 4 2<sup>b</sup> 16<sup>m</sup>.7 Letzt. Viert. Sept. 10 16<sup>b</sup> 42.1 Neumond. Sept. 17 20<sup>b</sup> 48.3 Erst. Viert.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-I. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.- Sterne
							AR. Dekl. Gr.
Sept. 4 U	5 52.9	4 46 41	+74.57	157.76	+26° 58.8	+ 6.0	4 47.3 +27 45 6.0
O	18 22.9	5 18 45	+75.84	162.97	+27 58.1	+ 3.8	4 59.2 +27 34 6.5
5 U	6 53.9	5 51 44	+76.79	166.91	+28 29.4	+ 1.4	5 45.5 +27 57 5.6
O	19 25.4	6 25 22	+77.33	169.22	+28 30.4	- 1.2	6 0.8 +29 31 6.3
6 U	7 57.3	6 59 18	+77.42	169.67	+27 59.8	- 3.9	6 57.9 +29 29 5.9
O	20 29.1	7 33 8	+77.07	168.30	+26 57.6	- 6.5	7 10.5 +28 3 5.9
7 U	9 0.4	8 6 32	+76.33	165.36	+25 24.6	- 9.0	8 5.2 +25 47 5.9
O	21 31.1	8 39 14	+75.31	161.24	+23 23.1	-11.2	8 23.4 +24 26 6.1
8 U	10 0.9	9 11 2	+74.11	156.44	+20 55.9	-13.2	
O	22 29.6	9 41 50	+72.83	151.41	+18 6.8	-14.9	
9 U	10 57.3	10 11 39	+71.59	146.55	+14 59.7	-16.2	
O	23 24.2	10 40 32	+70.45	142.14	+11 38.8	-17.2	
10 U	11 50.2	11 8 35	+69.46	138.37	+ 8 8.3	-17.8	
—	—	—	—	—	—	—	
11 O	○ 15.5	11 35 58	-68.68	135.50	+ 4 32.2	-18.1	
U	12 40.4	12 2 50	-68.11	133.29	+ 0 54.2	-18.1	
12 O	1 4.9	12 29 20	-67.77	131.92	- 2 42.2	-17.9	
U	13 29.1	12 55 38	-67.63	131.32	- 6 13.6	-17.3	
13 O	1 53.3	13 21 54	-67.70	131.46	- 9 37.1	-16.5	
U	14 17.6	13 48 17	-67.95	132.25	-12 50.1	-15.6	
14 O	2 42.2	14 14 51	-68.33	133.57	-15 50.1	-14.4	
U	15 7.0	14 41 44	-68.81	135.28	-18 34.9	-13.0	
15 O	3 32.2	15 9 0	-69.36	137.22	-21 2.7	-11.5	
U	15 57.8	15 36 39	-69.90	139.19	-23 11.7	-9.9	
16 O	4 23.8	16 4 41	-70.40	141.00	-25 0.4	-8.2	15 32.6 -22 51 6.0
U	16 50.2	16 33 2	-70.79	142.45	-26 27.8	-6.4	15 48.4 -25 4 4.6
17 O	5 16.7	17 1 37	-71.03	143.33	-27 32.9	-4.5	16 26.0 -26 21 6.2
U	17 43.4	17 30 20	-71.08	143.54	-28 15.4	-2.6	16 38.9 -27 17 6.4
18 O	6 10.0	17 58 59	-70.93	142.96	-28 35.0	-0.7	17 21.5 -25 52 6.3
U	18 36.4	18 27 27	-70.56	141.61	-28 32.1	+ 1.2	17 42.1 -27 48 var.
19 O	7 2.5	18 55 34	-70.00	139.52	-28 7.4	+ 3.0	18 16.5 -28 28 6.1
U	19 28.1	19 23 12	-69.28	136.85	-27 21.7	+ 4.7	18 40.2 -27 5 3.3
20 O	7 53.1	19 50 16	-68.42	133.74	-26 16.3	+ 6.2	19 19.1 -28 2 5.9
U	20 17.5	20 16 40	-67.50	130.38	-24 52.5	+ 7.7	19 24.5 -27 10 5.7
21 O	8 41.1	20 42 23	-66.53	126.93	-23 11.9	+ 9.0	20 12.9 -22 5 6.0
U	21 4.1	21 7 25	-65.59	123.58	-21 16.0	+10.2	20 27.7 -25 15 6.2
22 O	9 26.5	21 31 48	-64.69	120.46	-19 6.4	+11.3	21 3.6 -21 33 5.3
U	21 48.2	21 55 35	-63.88	117.68	-16 44.7	+12.3	21 19.2 -21 14 5.3
23 O	10 9.5	22 18 52	-63.19	115.33	-14 12.4	+13.1	21 46.9 -19 2 6.1
U	22 30.3	22 41 44	-62.65	113.49	-11 31.0	+13.8	22 7.7 -14 38 6.2

Sept. 9 <sup>h</sup> Perigäum.Sept. 21 <sup>h</sup> Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Sept. 23.0	21 59 45.75	m n	-16° 18' 22.6	o ' "	8.19831	+ 91	14 47.4
23.5	22 22 18.42	22 32.67	13 48 52.9	2 37 56.0	8.19922	110	14 49.3
24.0	22 44 29.01	21 54.23	11 10 56.9	2 44 59.1	8.20032	127	14 51.5
24.5	23 6 23.24	21 44.11	8 25 57.8	2 50 38.6	8.20159	140	14 54.1
25.0	23 28 7.35	21 40.63	5 35 19.2	2 54 52.4	8.20299	152	14 57.0
25.5	23 49 47.98	21 44.10	- 2 40 26.8	2 57 37.7	8.20451	162	15 0.1
26.0	o 11 32.08	+ o 17	10.9	2 58 50.7	8.20613	170	15 3.5
26.5	o 33 26.88	21 54.80	3 16 1.6	2 58 25.7	8.20783	176	15 7.1
27.0	o 55 39.84	22 12.96	6 14 27.3	2 56 16.1	8.20959	181	15 10.8
27.5	1 18 18.52	22 38.68	9 10 43.4	8.21140		15 14.6	
		23 12.00		+ 2 52 13.7		+ 185	
28.0	1 41 30.52	23 52.77	+ 12 2 57.1	2 46 9.9	8.21325	187	15 18.5
28.5	2 5 23.29	24 40.52	14 49 7.0	2 37 54.7	8.21512	189	15 22.4
29.0	2 30 3.81	25 34.39	17 27 1.7	2 27 18.1	8.21701	191	15 26.5
29.5	2 55 38.20	26 33.01	19 54 19.8	2 14 11.5	8.21892	193	15 30.6
30.0	3 22 11.21	27 34.41	22 8 31.3	1 58 28.2	8.22085	194	15 34.7
30.5	3 49 45.62	28 35.77	24 6 59.5	1 40 6.0	8.22279	194	15 38.9
Okt.	1.0	4 18 21.39	25 47 5.5	1 19 8.9	8.22473	193	15 43.1
1.5	4 47 55.16	29 33.77	27 6 14.4	o 55 49.8	8.22666	193	15 47.3
2.0	5 18 19.75	30 24.59	28 2 4.2	o 30 31.1	8.22859	190	15 51.5
2.5	5 49 24.20	31 4.45	28 32 35.3	8.23049		15 55.7	
		31 30.19		+ 0 3 45.0		+ 185	
3.0	6 20 54.39	31 39.81	+ 28 36 20.3	- 0 23 47.6	8.23234	179	15 59.8
3.5	6 52 34.20	31 33.02	28 12 32.7	o 51 20.7	8.23413	171	16 3.7
4.0	7 24 7.22	31 11.16	27 21 12.0	1 18 8.1	8.23584	158	16 7.5
4.5	7 55 18.38	31 3.39	26 3 3.9	1 43 27.8	8.23742	141	16 11.0
5.0	8 25 55.40	30 37.02	24 19 36.1	2 6 43.5	8.23883	122	16 14.2
5.5	8 55 49.76	29 54.36	22 12 52.6	2 27 27.9	8.24005	99	16 17.0
6.0	9 24 56.90	29 7.14	19 45 24.7	2 45 21.9	8.24104	71	16 19.2
6.5	9 53 16.00	28 19.10	17 0 2.8	3 0 13.4	8.24175	39	16 20.8
7.0	10 20 49.42	26 52.53	13 59 49.4	3 11 56.6	8.24214	+ 5	16 21.7
7.5	10 47 41.95	26 18.19	10 47 52.8	8.24219		16 21.8	
			- 3 20 29.5		- 32		
8.0	11 14 0.14	25 51.50	+ 7 27 23.3	3 25 53.4	8.24187	70	16 21.0
8.5	11 39 51.64	25 33.00	4 1 29.9	3 28 11.2	8.24117	108	16 19.4
9.0	12 5 24.64	25 22.88	+ o 33 18.7	3 27 27.9	8.24009	146	16 17.0
9.5	12 30 47.52	25 20.93	- 2 54 9.2	3 23 49.9	8.23863	146	16 13.8
10.0	12 56 8.45	25 26.60	6 17 59.1	3 17 24.1	8.23680	183	16 9.7
10.5	13 21 35.05	25 39.11	9 35 23.2	3 8 19.2	8.23464	216	16 4.8
11.0	13 47 14.16	25 57.34	12 43 42.4	2 56 44.6	8.23220	267	15 59.4
11.5	14 13 11.50	26 19.86	15 40 27.0	2 42 51.5	8.22953	286	15 53.6
12.0	14 39 31.36	26 44.86	18 23 18.5	2 26 52.4	8.22667	298	15 47.3
12.5	15 6 16.22	26 50 10.9	20 50 10.9	8.22369		15 40.8	

Sept. 26 o 27.8 Vollmond.

Okt. 3 9 41.7 Letzt. Viert.

Okt. 10 2 34.2 Neumond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl. - Sterne		
							AR.	Dekl.	Gr.
Sept. 23	O 10 <sup>h</sup> 9.5	22 18 <sup>m</sup> 52 <sup>s</sup>	-63.19	115.33	-14° 12.4	+13.1	21 46.9	19 2	6.1
	U 22 30.3	22 41 44	-62.65	113.49	-11 31.0	+13.8	22 7.7	14 38	6.2
24	O 10 50.9	23 4 18	-62.27	112.21	- 8 42.1	+14.4	22 25.4	-13 22	6.2
	U 23 11.2	23 26 39	-62.06	111.52	- 5 47.0	+14.8	22 48.9	12 5	5.8
25	O 11 31.4	23 48 56	-62.04	111.47	- 2 47.4	+15.1	23 16.2	- 6 23	6.3
	U 23 51.8	○ 11 17	-62.22	112.12	+ ○ 15.1	+15.3	23 43.5	- 3 15	5.6
26	O 12 12.3	○ 33 49	+62.59	113.45	+ 3 19.1	+15.3	○ 3.8	- 2 56	6.3
	-	-	-	-	-	-	○ 20.9	+ 1 27	6.0
27	U ○ 33.1	○ 56 42	+63.17	115.48	+ 6 22.6	+15.2	○ 55.3	+ 6 1	6.3
	O 12 54.4	I 20 2	+63.96	118.24	+ 9 23.9	+15.0	I 9.2	+ 7 7	5.4
28	U I 16.4	I 44 ○	+64.94	121.71	+12 20.9	+14.5	I 32.5	+11 42	5.6
	O 13 39.1	2 8 44	+66.10	125.87	+15 11.4	+13.9	I 54.8	+11 52	6.0
29	U 2 2.7	2 34 21	+67.42	130.67	+17 52.9	+13.0	2 26.1	+17 19	6.4
	O 14 27.2	3 ○ 59	+68.86	135.98	+20 22.9	+11.9	2 50.9	+17 59	6.0
30	U 2 52.9	3 28 43	+70.36	141.65	+22 38.5	+10.6	3 23.3	+22 30	6.1
Okt.	O 15 19.8	3 57 36	+71.87	147.42	+24 36.7	+ 9.0	3 39.6	+24 1	5.4
1	U 3 47.8	4 27 37	+73.29	152.94	+26 14.5	+ 7.2	4 18.7	+24 6	6.1
	O 16 16.8	4 58 41	+74.55	157.85	+27 28.9	+ 5.2	4 47.3	+27 45	6.0
2	U 4 46.7	5 30 38	+75.53	161.74	+28 17.4	+ 2.9	5 20.8	+28 32	1.8
	O 17 17.2	6 3 15	+76.17	164.25	+28 37.6	+ 0.5	5 45.5	+27 57	5.6
3	U 5 48.1	6 36 13	+76.41	165.19	+28 28.3	- 2.0	6 29.7	+28 6	5.1
	O 18 19.1	7 9 13	+76.25	164.49	+27 48.9	- 4.5	6 58.0	+29 29	5.9
4	U 6 49.7	7 41 56	+75.72	162.31	+26 40.0	- 7.0	7 38.8	+26 0	5.5
	O 19 19.8	8 14 5	+74.89	158.97	+25 2.8	- 9.2	7 55.6	+25 38	6.1
5	U 7 49.2	8 45 30	+73.85	154.84	+22 59.5	-11.3	8 38.2	+21 47	4.8
	O 20 17.7	9 16 3	+72.70	150.35	+20 33.0	-13.1	9 2.4	+23 20	6.3
6	U 8 45.3	9 45 41	+71.53	145.88	+17 46.4	-14.6	9 39.6	+19 16	6.5
	O 21 12.0	10 14 28	+70.43	141.72	+14 43.0	-15.9	10 2.6	+17 12	3.6
7	U 9 37.9	10 42 27	+69.45	138.08	+11 26.5	-16.8			
	O 22 3.2	II 9 46	+68.65	135.13	+ 8 0.4	-17.5			
8	U 10 8.0	II 36 35	+68.04	132.94	+ 4 28.0	-17.9			
	O 22 52.4	12 3 1	+67.66	131.56	+ 0 52.9	-18.0			
9	U 11 16.6	12 29 16	+67.48	130.97	- 2 41.7	-17.8			
	O 23 40.8	12 55 28	+67.51	131.14	- 6 12.6	-17.3			
10	U 12 5.0	13 21 46	-67.74	131.96	- 9 36.7	-16.6			
	-	-	-	-	-	-			
11	O ○ 29.5	I 3 48 18	-68.14	133.40	-12 51.2	-15.7			
	U 12 54.4	I 4 15 10	-68.67	135.32	-15 53.3	-14.6			
12	O I 19.6	I 4 42 28	-69.27	137.56	-18 40.4	-13.2			
	U 13 45.3	I 5 10 13	-69.92	139.95	-21 10.2	-11.7			

Okt. 7    8<sup>h</sup> Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Okt. 12.0	14 39 31.36	26 44.86	-18 23 18.5	-2 26 52.4	8.22667	-298	15 47.3
12.5	15 6 16.22	27 10.34	20 50 10.9	2 9 2.2	8.22369	304	15 40.8
13.0	15 33 26.56	27 34.04	22 59 13.1	1 49 37.7	8.22065	304	15 34.2
13.5	16 1 0.60	27 53.67	24 48 50.8	1 28 58.9	8.21761	297	15 27.7
14.0	16 28 54.27	28 7.11	26 17 49.7	1 7 27.6	8.21464	285	15 21.4
14.5	16 57 1.38	28 12.62	27 25 17.3	0 45 27.1	8.21179	269	15 15.4
15.0	17 25 14.00	28 9.11	28 10 44.4	0 23 21.7	8.20910	247	15 9.8
15.5	17 53 23.11	27 56.25	28 34 6.1	-0 1 35.1	8.20663	222	15 4.6
16.0	18 21 19.36	27 34.56	28 35 41.2	-0 19 31.6	8.20441	192	15 0.0
16.5	18 48 53.92	27 5.25	28 16 9.6	-0 39 40.6	8.20249	-162	14 56.0
17.0	19 15 59.17	26 30.05	-27 36 29.0	0 58 38.4	8.20087	129	14 52.7
17.5	19 42 29.22	25 51.02	26 37 50.6	1 16 15.4	8.19958	95	14 50.0
18.0	20 8 20.24	25 10.25	25 21 35.2	1 32 27.1	8.19863	60	14 48.1
18.5	20 33 30.49	24 29.74	23 49 8.1	1 47 11.9	8.19803	-25	14 46.9
19.0	20 58 0.23	24 29.74	22 1 56.2	2 0 30.5	8.19778	+ 8	14 46.3
19.5	21 21 51.36	23 51.13	20 1 25.7	2 12 25.3	8.19786	+ 8	14 46.5
20.0	21 45 7.30	23 15.94	17 49 0.4	2 22 58.9	8.19828	42	14 47.4
20.5	22 7 52.59	22 45.29	15 26 1.5	2 32 14.0	8.19900	102	14 48.8
21.0	22 30 12.61	22 0.83	12 53 47.5	2 40 12.7	8.20002	129	14 50.9
21.5	22 52 13.44	21 48.22	10 13 34.8	+2 46 54.9	8.20131	+152	14 53.6
22.0	23 14 1.66	21 42.58	-7 26 39.9	2 52 19.1	8.20283	172	14 56.7
22.5	23 35 44.24	21 44.22	4 34 20.8	2 56 22.6	8.20455	189	15 0.3
23.0	23 57 28.46	21 53.40	-1 37 58.2	2 59 0.3	8.20644	202	15 4.2
23.5	0 19 21.86	22 10.35	+ 1 21 2.1	3 0 5.2	8.20846	211	15 8.4
24.0	0 41 32.21	22 35.21	4 21 7.3	2 59 28.3	8.21057	217	15 12.8
24.5	1 4 7.42	23 7.98	7 20 35.6	2 56 58.9	8.21274	219	15 17.4
25.0	1 27 15.40	23 48.53	10 17 34.5	2 52 25.5	8.21493	217	15 22.1
25.5	1 51 3.93	24 36.42	13 10 0.0	2 45 34.9	8.21710	212	15 26.7
26.0	2 15 40.35	25 30.85	15 55 34.9	2 36 14.3	8.21922	205	15 31.2
26.5	2 41 11.20	26 30.42	18 31 49.2	+2 24 12.6	8.22127	+195	15 35.6
27.0	3 7 41.62	27 33.06	+20 56 1.8	2 9 21.7	8.22322	184	15 39.8
27.5	3 35 14.68	28 35.96	23 5 23.5	1 51 38.1	8.22506	171	15 43.8
28.0	4 3 50.64	29 35.58	24 57 1.6	1 31 6.1	8.22677	158	15 47.5
28.5	4 33 26.22	30 27.90	26 28 7.7	1 8 0.6	8.22835	158	15 51.0
29.0	5 3 54.12	31 8.81	27 36 8.3	0 42 46.3	8.22978	143	15 54.1
29.5	5 35 2.93	31 34.94	28 18 54.6	+0 15 59.5	8.23106	128	15 56.9
30.0	6 6 37.87	31 44.06	28 34 54.1	-0 11 35.4	8.23221	102	15 59.5
30.5	6 38 21.93	31 35.75	28 23 18.7	0 39 9.7	8.23323	88	16 1.7
31.0	7 9 57.68	31 11.44	27 44 9.0	1 5 55.0	8.23411	115	16 3.7
31.5	7 41 9.12	26 38 14.0	26 38 14.0	8.23486	75	16 5.3	

Oktober 17 14 59.8 Erstes Viertel.

Oktober 25 15 24.1 Vollmond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternezeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.- Sterne
		AR.			AR.	Dekl.	Gr.
Okt. 12 O	1 19.6	14 42 <sup>m</sup> 28 <sup>s</sup>	-69.27	137.56	-18° 40.4	13.2	
U	13 45.3	15 10 13	-69.92	139.95	-21 10.2	11.7	
13 O	2 11.5	15 38 27	-70.55	142.25	-23 20.7	10.0	
U	14 38.2	16 7 7	-71.09	144.22	-25 10.2	8.2	
14 O	3 5.1	16 36 7	-71.49	145.67	-26 37.3	6.3	
U	15 32.3	17 5 20	-71.70	146.37	-27 41.0	4.3	
15 O	3 59.5	17 34 37	-71.69	146.23	-28 21.0	2.3	17 1.5 -26 24 6.2
U	16 26.6	18 3 46	-71.45	145.17	-28 37.2	0.4	17 17.8 -28 4 5.4
16 O	4 53.4	18 32 37	-70.97	143.25	-28 30.2	+ 1.5	17 53.1 -28 45 5.8
U	17 19.8	19 1 0	-70.30	140.58	-28 1.0	+ 3.3	18 11.9 -28 41 6.0
17 O	5 45.5	19 28 47	-69.46	137.33	-27 10.6	+ 5.0	18 49.8 -26 24 2.1
U	18 10.5	19 55 52	-68.50	133.71	-26 0.7	+ 6.6	19 7.9 -26 3 5.9
18 O	6 34.8	20 22 14	-67.48	129.94	-24 32.8	+ 8.0	19 50.5 -26 32 4.8
U	18 58.4	20 47 50	-66.46	126.21	-22 48.5	+ 9.3	20 12.9 -22 5 6.0
19 O	7 21.3	21 12 42	-65.48	122.69	-20 49.6	+10.5	20 35.0 -24 6 6.3
U	19 43.4	21 36 54	-64.57	119.50	-18 37.5	+11.5	21 3.6 -21 33 5.3
20 O	8 5.0	22 0 30	-63.78	116.77	-16 13.8	+12.4	21 30.0 -20 29 5.7
U	20 26.1	22 23 37	-63.12	114.55	-13 39.9	+13.2	21 46.9 -19 2 6.1
21 O	8 46.8	22 46 20	-62.63	112.91	-10 57.3	+13.9	22 14.3 -13 45 6.1
U	21 7.2	23 8 48	-62.32	111.91	- 8 7.3	+14.4	22 25.6 -15 2 6.1
22 O	9 27.5	23 31 8	-62.18	111.56	- 5 11.2	+14.9	23 0.6 - 8 10 5.4
U	21 47.9	23 53 29	-62.25	111.90	- 2 10.6	+15.2	23 16.2 - 6 23 6.3
23 O	10 8.3	0 15 58	-62.53	112.94	+ 0 53.2	+15.4	23 43.5 - 3 15 5.6
U	22 29.0	0 38 44	-63.02	114.73	+ 3 58.4	+15.4	0 3.3 - 3 2 6.3
24 O	10 50.2	1 1 56	-63.71	117.26	+ 7 3.3	+15.3	0 25.7 + 4 22 6.6
U	23 12.0	1 25 42	-64.62	120.53	+10 5.9	+15.1	0 46.8 + 2 54 6.5
25 O	11 34.5	1 50 12	-65.71	124.55	+13 4.0	+14.6	1 11.2 + 9 19 7.1
U	23 57.8	2 15 36	+66.98	129.47	+15 55.1	+13.9	1 32.5 +11 42 5.6
26 O	12 22.1	2 41 59	+68.40	134.78	+18 36.4	+13.0	2 8.3 +14 52 5.8
—	—	—	—	—	—	—	2 26.1 +17 19 6.4
27 U	0 47.6	3 9 29	+69.91	140.51	+21 5.1	+11.8	3 6.7 +19 24 4.6
O	13 14.2	3 38 9	+71.44	146.41	+23 17.8	+10.3	3 19.4 +20 30 6.0
28 U	1 42.0	4 7 59	+72.92	152.16	+25 11.2	+ 8.6	4 5.5 +26 15 5.5
O	14 10.9	4 38 55	+74.24	157.35	+26 42.3	+ 6.6	4 18.8 +24 6 6.1
29 U	2 40.7	5 10 48	+75.31	161.54	+27 48.0	+ 4.3	5 4.3 +27 55 6.0
O	15 11.3	5 43 24	+76.04	164.37	+28 25.8	+ 1.9	5 20.8 +28 32 1.8
30 U	3 42.2	6 16 25	+76.37	165.56	+28 34.3	- 0.5	6 9.8 +29 32 4.4
O	16 13.2	6 49 31	+76.27	165.01	+28 12.6	- 3.1	6 29.7 +28 6 5.1
31 U	4 44.0	7 22 20	+75.78	162.83	+27 21.3	- 5.5	7 19.1 +27 49 5.7
O	17 14.2	7 54 35	+74.96	159.35	+26 1.5	- 7.8	7 38.8 +26 0 5.5

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Okt. 31.0	7 9 <sup>m</sup> 57.68	<sup>m</sup> .	+ 27 44 9.0	- 1 5 55.0	8.23411	+ 75	16 3.7
	31.5	7 41 9.12	31 11.44	26 38 14.0	8.23486	62	16 5.3
Nov. 1.0	8 11 43.19	29 47.58	25 7 5.0	1 31 9.0	8.23548	49	16 6.7
	1.5	8 41 30.77	28 56.27	1 54 18.0	8.23597	36	16 7.8
2.0	9 10 27.04	28 4.04	20 57 48.5	2 32 56.3	8.23633	23	16 8.6
	2.5	9 38 31.08	27 14.23	2 48 5.0	8.23656	+ 8	16 9.1
3.0	10 5 45.31	26 29.45	15 36 47.2	3 0 23.5	8.23664	- 9	16 9.3
	3.5	10 32 14.76	25 51.52	12 36 23.7	8.23655	27	16 9.1
4.0	10 58 6.28	25 21.57	9 26 29.6	3 9 54.1	8.23628	45	16 8.5
	4.5	11 23 27.85	25 0.25	6 9 49.6	8.23583	- 65	16 7.5
5.0	11 48 28.10	24 47.83	+ 2 49 4.8	- 3 20 44.8	8.23518	87	16 6.1
	5.5	12 13 15.93	24 44.23	3 22 11.9	8.23431	109	16 4.1
6.0	12 38 0.16	24 49.05	3 54 11.1	3 21 4.0	8.23322	131	16 1.7
	6.5	13 2 49.21	25 1.71	7 11 34.2	8.23191	154	15 58.8
7.0	13 27 50.92	25 21.29	10 22 45.2	3 11 11.0	8.23037	175	15 55.4
	7.5	13 53 12.21	25 46.55	13 25 15.3	8.22862	195	15 51.6
8.0	14 18 58.76	26 15.93	16 16 38.7	2 51 23.4	8.22667	212	15 47.3
	8.5	14 45 14.69	26 47.46	18 54 35.1	8.22455	227	15 42.7
9.0	15 12 2.15	27 18.78	21 16 52.0	2 22 16.9	8.22228	239	15 37.8
	9.5	15 39 20.93	27 47.36	23 21 28.0	8.21989	- 245	15 32.6
10.0	16 7 8.29	28 10.60	- 25 6 37.9	- 1 45 9.9	8.21744	248	15 27.4
	10.5	16 35 18.89	28 26.08	26 30 56.3	8.21496	247	15 22.1
11.0	17 3 44.97	28 31.90	27 33 22.0	1 2 25.7	8.21249	240	15 16.9
	11.5	17 32 16.87	28 27.01	28 13 21.4	0 39 59.4	249	15 11.8
12.0	18 0 43.88	28 11.30	28 30 49.6	- 0 17 28.2	8.20780	229	15 7.0
	12.5	18 28 55.18	28 45.58	28 26 9.9	+ 0 4 39.7	214	15 2.6
13.0	18 56 40.76	27 11.56	28 0 10.7	0 25 59.2	8.20566	194	14 58.5
	13.5	19 23 52.32	26 31.44	27 14 1.0	0 46 9.7	172	14 55.0
14.0	19 50 23.76	25 47.67	26 9 4.5	1 4 56.5	8.20200	145	14 52.0
	14.5	20 16 11.43	25 2.67	24 46 54.0	1 22 10.5	116	14 49.6
15.0	20 41 14.10	24 18.63	- 23 9 5.9	+ 1 37 48.1	8.19939	- 84	
	15.5	21 5 32.73	23 37.40	21 17 15.9	1 51 50.0	51	14 47.9
16.0	21 29 10.13	23 0.45	19 12 56.3	2 4 19.6	8.19804	- 16	14 46.9
	16.5	21 52 10.58	22 28.90	16 57 34.2	8.19788	+ 20	14 46.6
17.0	22 14 39.48	22 3.57	14 32 31.3	2 25 2.9	8.19808	55	14 47.0
	17.5	22 36 43.05	21 45.15	11 59 3.7	2 33 27.6	90	14 48.1
18.0	22 58 28.20	21 34.05	9 18 24.1	2 40 39.6	8.19953	123	14 49.9
	18.5	23 20 2.25	21 30.64	6 31 42.8	2 46 41.3	155	14 52.4
19.0	23 41 32.89	21 35.27	3 40 9.9	2 51 32.9	8.20231	184	14 55.6
	19.5	0 3 8.16	21 44 58.3	2 55 11.6	8.20415	211	14 59.4
					8.20626		15 3.8

Nov. 1 16<sup>b</sup> 31<sup>m</sup> 2 Letzt. Viert. Nov. 8 14<sup>b</sup> 58<sup>m</sup> 4 Neumond. Nov. 16 11<sup>b</sup> 36<sup>m</sup> 9 Erst. Viert.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.-Sterne		
							AR.	Dekl.	Gr.
Okt. 31	U 4 44.0	7 22 20	+75.78	162.83	+27 21.3	- 5.5	7 19.1	+27 49	5.7
Nov. 1	O 17 14.2	7 54 35	+74.96	159.35	+26 1.5	- 7.8	7 38.8	+26 0	5.5
	U 5 43.6	8 26 3	+73.89	154.96	+24 15.3	- 9.9	8 23.4	+24 26	6.1
2	O 18 12.1	8 56 35	+72.69	150.12	+22 5.5	-11.7	8 38.2	+21 47	4.8
	U 6 39.6	9 26 8	+71.45	145.23	+19 35.0	-13.3	9 14.1	+18 5	6.6
3	O 19 6.2	9 54 44	+70.24	140.62	+16 47.0	-14.6	9 39.6	+19 16	6.5
	U 7 31.9	10 22 28	+69.15	136.54	+13 44.8	-15.7	10 17.1	+15 25	6.1
4	O 19 56.8	10 49 26	+68.23	133.13	+10 31.5	-16.5	10 27.5	+14 35	5.8
	U 8 21.1	11 15 48	+67.50	130.53	+ 7 10.2	-17.0	11 9.5	+ 8 33	5.8
5	O 20 45.0	11 41 43	+66.99	128.76	+ 3 43.7	-17.3	11 16.6	+ 6 31	4.2
	U 9 8.6	12 7 23	+66.70	127.84	+ 0 15.0	-17.4			
6	O 21 32.1	12 32 55	+66.65	127.74	- 3 13.1	-17.2			
	U 9 55.7	12 58 31	+66.79	128.44	- 6 37.9	-16.8			
7	O 22 19.5	13 24 20	+67.15	129.86	- 9 56.5	-16.2			
	U 10 43.6	13 50 30	+67.67	131.90	-13 6.4	-15.4			
8	O 23 8.2	14 17 7	+68.32	134.44	-16 4.7	-14.3			
	U 11 33.3	14 44 16	+69.06	137.29	-18 49.0	-13.0			
9	O 23 59.0	15 12 0	-69.83	140.11	-21 16.7	-11.5			
	U 12 25.3	15 40 19	-70.56	142.93	-23 25.5	- 9.9			
—	—	—	—	—	—	—	—		
10	O 0 52.1	16 9 10	-71.19	145.37	-25 13.4	- 8.1			
	U 13 19.3	16 38 26	-71.67	147.16	-26 38.9	- 6.2			
11	O 1 46.8	17 7 58	-71.92	148.08	-27 40.7	- 4.2			
	U 14 14.4	17 37 36	-71.93	147.98	-28 18.3	- 2.1			
12	O 2 41.8	18 7 6	-71.67	146.81	-28 31.7	- 0.1			
	U 15 8.9	18 36 15	-71.16	144.65	-28 21.4	+ 1.8			
13	O 3 35.5	19 4 53	-70.41	141.64	-27 48.4	+ 3.6			
	U 16 1.4	19 32 51	-69.51	138.00	-26 54.2	+ 5.3			
14	O 4 26.6	20 0 2	-68.48	133.98	-25 40.6	+ 6.9	19 24.5	-27 10	5.7
	U 16 50.9	20 26 24	-67.39	129.83	-24 9.2	+ 8.3	19 50.5	-26 32	4.8
15	O 5 14.4	20 51 56	-66.31	125.75	-22 21.9	+ 9.6	20 27.7	-25 15	6.2
	U 17 37.2	21 16 41	-65.28	121.95	-20 20.5	+10.7	20 35.0	-24 6	6.3
16	O 5 59.2	21 40 43	-64.34	118.54	-18 6.7	+11.6	21 10.7	-21 1	5.3
	U 18 20.5	22 4 7	-63.53	115.66	-15 42.0	+12.5	21 25.1	-19 32	6.5
17	O 6 41.3	22 27 0	-62.88	113.37	-13 7.8	+13.2	21 57.7	-17 23	6.5
	U 19 1.8	22 49 30	-62.40	111.72	-10 25.7	+13.8	22 14.3	-13 45	6.1
18	O 7 22.0	23 11 43	-62.10	110.77	- 7 36.7	+14.3	22 43.9	-11 1	6.1
	U 19 42.1	23 33 50	-62.02	110.54	- 4 42.1	+14.7	23 0.6	- 8 10	5.4
19	O 8 2.2	23 55 59	-62.14	111.05	- 1 43.2	+15.0	23 27.0	- 4 34	6.5
	U 20 22.5	○ 18 19	-62.49	112.35	+ 1 18.8	+15.2	23 43.5	- 3 15	5.6

Nov. 3 ○ Perigäum.

Nov. 15 23 Apogäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Nov. 19.0	23 41 <sup>m</sup> 32.89	21 35.27	— 3 40 <sup>m</sup> 9.9	+2 55 11.6	8.20415	+211	14 59.4
	19.5 0 3 8.16	21 48.22	— 0 44 58.3	2 57 32.8	8.20626	233	15 3.8
	20.0 0 24 56.38	22 9.68	+ 2 12 34.5	2 58 28.1	8.20859	252	15 8.7
	20.5 0 47 6.06	22 39.86	5 11 2.6	2 57 46.9	8.21111	266	15 14.0
	21.0 1 9 45.92	23 18.82	8 8 49.5	2 55 16.0	8.21377	275	15 19.6
	21.5 1 33 4.74	24 6.37	11 4 5.5	2 50 39.7	8.21652	279	15 25.4
	22.0 1 57 11.11	25 2.01	13 54 45.2	2 43 40.5	8.21931	276	15 31.4
	22.5 2 22 13.12	26 4.74	16 38 25.7	2 34 0.6	8.22207	269	15 37.3
	23.0 2 48 17.86	27 12.84	19 12 26.3	2 21 23.5	8.22476	257	15 43.1
	23.5 3 15 30.70	28 23.60	21 33 49.8	8.22733			15 48.7
	24.0 3 43 54.30	29 33.49	+23 39 26.8	1 46 36.3	8.22973	247	15 54.0
	24.5 4 13 27.79	30 38.00	25 26 3.1	1 24 27.1	8.23190	192	15 58.8
	25.0 4 44 5.79	31 32.16	26 50 30.2	0 59 28.7	8.23382	164	16 3.0
	25.5 5 15 37.95	32 11.21	27 49 58.9	0 32 16.4	8.23546	134	16 6.7
	26.0 5 47 49.16	32 31.44	28 22 15.3	+0 3 38.7	8.23680	103	16 9.7
	26.5 6 20 20.60	32 31.07	28 25 54.0	-0 25 26.2	8.23783	72	16 12.0
	27.0 6 52 51.67	32 10.65	28 0 27.8	0 53 57.5	8.23855	42	16 13.6
	27.5 7 25 2.32	31 32.98	27 6 30.3	1 20 59.0	8.23897	+13	16 14.5
	28.0 7 56 35.30	30 42.39	25 45 31.3	1 45 45.3	8.23910	-14	16 14.8
	28.5 8 27 17.69	29 44.00	23 59 46.0	8.23896			16 14.5
	29.0 8 57 1.69	28 42.73	+21 52 0.8	-2 7 45.2	-38		
	29.5 9 25 44.42	27 42.77	19 25 19.9	2 26 40.9	16 13.6	59	16 12.3
	30.0 9 53 27.19	26 47.50	16 42 52.9	2 42 27.0	8.23799	77	16 10.6
	30.5 10 20 14.69	25 59.21	13 47 46.2	2 55 6.7	8.23722	93	16 8.5
Dez. 1.0	10 46 13.90	25 19.37	10 42 58.1	3 4 48.1	8.23629	107	16 6.1
	1.5 11 11 33.27	24 48.77	7 31 16.4	3 11 41.7	8.23522	118	16 3.5
	2.0 11 36 22.04	24 27.83	4 15 18.4	3 15 58.0	8.23404	127	16 0.7
	2.5 12 0 49.87	24 16.52	+ 0 57 31.5	3 17 46.9	8.23277	136	15 57.7
	3.0 12 25 6.39	24 14.51	- 2 19 44.6	3 17 16.1	8.23141	144	15 54.5
	3.5 12 49 20.90	24 21.39	5 34 15.0	3 14 30.4	8.22997	150	15 51.2
	4.0 13 13 42.29	24 36.40	- 8 43 48.4	-3 9 33.4	8.22847	-156	15 47.8
	4.5 13 38 18.69	24 58.52	11 46 15.6	3 2 27.2	163	15 44.3	
	5.0 14 3 17.21	25 26.57	14 39 27.9	2 53 12.3	8.22528	170	15 40.6
	5.5 14 28 43.78	25 58.78	17 21 17.2	2 41 49.3	8.22358	176	15 36.8
8.0	14 54 42.56	26 33.14	19 49 37.3	2 28 20.1	8.22182	181	15 32.9
	6.5 15 21 15.70	27 7.29	22 2 25.7	2 12 48.4	8.22001	186	15 28.9
	7.0 15 48 22.99	27 38.48	23 57 47.8	1 55 22.1	8.21815	190	15 24.8
	7.5 16 16 1.47	28 3.93	25 34 0.9	1 36 13.1	8.21625	194	15 20.7
	8.0 16 44 5.40	28 21.12	26 49 39.7	1 15 38.8	8.21431	196	15 16.6
	8.5 17 12 26.52	28 23.60	27 43 41.5	0 54 1.8	8.21235	194	15 12.5
	Nov. 24 5 5.8	Vollmond.	Nov. 30 23 58.4	Letztes Viertel.	8.21041		

## Im Meridian von Berlin.

Bild. Jag.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.-Sterne		
							AR.	Dekl.	Gr.
Nov. 19	O 8 22.2	23 55 59 <sup>a</sup>	-62.14	111.05	- 1 43.2	+15.0	23 27.0	- 4 34	6.5
	U 20 22.5	○ 18 19	-62.49	112.35	+ 1 18.8	+15.2	23 43.5	- 3 15	5.6
	O 20 8 43.2	○ 41 ○	-63.06	114.45	+ 4 22.3	+15.3	○ 13.3	+ 1 12	6.3
	U 21 4.4	I 4 11	-63.85	117.38	+ 7 25.6	+15.2	○ 20.9	+ 1 27	6.0
	O 21 9 26.2	I 28 2	-64.87	121.15	+10 27.0	+15.0	○ 58.4	+ 7 25	4.5
	U 21 48.8	I 52 44	-66.09	125.73	+13 24.1	+14.5	I 9.2	+ 7 7	5.4
	22 O 10 12.5	2 18 25	-67.51	131.08	+16 14.5	+13.8	I 46.3	+10 36	6.0
	U 22 37.3	2 45 15	-69.07	137.08	+18 55.3	+12.9	I 57.9	+13 3	6.3
	23 O 11 3.3	3 13 20	-70.73	143.56	+21 23.2	+11.7	2 39.5	+17 24	6.5
	U 23 30.6	3 42 44	-72.41	150.19	+23 34.7	+10.2	2 53.1	+20 19	5.8
24	O 11 59.3	4 13 26	+73.98	156.85	+25 26.0	+ 8.3	3 34.0	+20 38	6.5
	—	—	—	—	—	—	3 51.9	+22 55	6.0
	25 U 0 29.2	4 45 21	+75.37	162.49	+26 53.4	+ 6.2	4 47.4	+27 45	6.0
	O 13 0.1	5 18 18	+76.45	166.85	+27 53.8	+ 3.8	4 59.2	+27 34	6.5
	26 U 1 31.7	5 51 57	+77.11	169.47	+28 24.3	+ 1.2	5 47.9	+27 36	4.6
	O 14 3.6	6 25 56	+77.30	170.08	+28 23.6	- 1.4	6 0.8	+29 31	6.3
	27 U 2 35.4	6 59 51	+77.00	168.65	+27 51.2	- 4.0	6 58.0	+29 29	5.9
	O 15 6.8	7 33 18	+76.27	165.42	+26 48.0	- 6.5	7 10.5	+28 3	5.9
	28 U 3 37.4	8 5 58	+75.20	160.82	+25 16.1	- 8.8	7 56.5	+25 20	6.2
	O 16 7.0	8 37 37	+73.89	155.36	+23 18.3	-10.8	8 15.4	+24 18	5.9
Dez.	29 U 4 35.5	9 8 8	+72.48	149.61	+20 58.0	-12.5	9 4.4	+22 24	5.2
	O 17 2.9	9 37 31	+71.08	143.98	+18 18.7	-14.0	9 34.0	+20 42	6.7
	30 U 5 29.1	10 5 48	+69.75	138.80	+15 24.2	-15.1	10 1.0	+16 11	6.3
	O 17 54.4	10 33 8	+68.58	134.32	+12 17.8	-15.9	10 17.2	+15 25	6.1
	1 U 6 18.9	10 59 38	+67.60	130.66	+ 9 2.8	-16.5	11 0.5	+ 7 49	4.7
	O 18 42.7	11 25 29	+66.84	127.90	+ 5 42.0	-16.9	11 9.5	+ 8 33	5.8
	2 U 7 6.0	11 50 53	+66.33	126.06	+ 2 18.4	-17.0	11 46.2	+ 2 16	3.8
	O 19 29.1	12 15 59	+66.05	125.14	- 1 5.7	-16.9	12 5.2	+ 2 24	6.2
	3 U 7 52.1	12 41 0	+66.01	125.10	- 4 27.7	-16.7	12 37.2	- 0 58	2.9
	O 20 15.1	13 6 5	+66.19	125.88	- 7 45.3	-16.2	12 49.1	- 3 45	6.5
4	U 8 38.4	13 31 23	+66.57	127.43	-10 56.0	-15.5	13 28.4	- 9 43	5.4
	O 21 2.0	13 57 4	+67.12	129.62	-13 57.6	-14.7	13 41.3	- 11 59	5.6
	5 U 9 26.2	14 23 15	+67.81	132.35	-16 47.8	-13.6			
	O 21 50.9	14 50 1	+68.58	135.42	-19 24.1	-12.4			
	6 U 10 16.2	15 17 24	+69.39	138.64	-21 44.3	-10.9			
	O 22 42.2	15 45 26	+70.18	141.74	-23 46.2	- 9.3			
	7 U 11 8.8	16 14 3	+70.86	144.46	-25 27.9	- 7.6			
	O 23 35.9	16 43 9	+71.37	146.51	-26 47.5	- 5.7			
8 U 12 3.2	17 12 34	-71.67	147.62	-27 43.9	- 3.7				
	—	—	—	—	—	—	—		

Nov. 28 ○ Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Dez. 8.0	16 44 5.40	m s	— 26 49 39.7	— o 54 1.8	8.21235	- 194	15 16.6
8.5	17 12 26.52	28 21.12	27 43 41.5	o 31 49.0	8.21041	192	15 12.5
9.0	17 40 54.60	28 28.08	28 15 30.5	— o 9 29.7	8.20849	186	15 8.5
9.5	18 9 18.28	28 23.68	28 25 0.2	+ o 12 26.6	8.20663	178	15 4.6
10.0	18 37 26.01	28 7.73	28 12 33.6	o 33 32.8	8.20485	167	15 0.9
10.5	19 5 7.21	27 41.20	27 39 0.8	o 53 26.6	8.20318	153	14 57.4
11.0	19 32 13.13	27 5.92	26 45 34.2	1 11 51.2	8.20165	135	14 54.3
11.5	19 58 37.35	26 24.22	25 33 43.0	1 28 36.7	8.20030	115	14 51.5
12.0	20 24 16.04	25 38.69	24 5 6.3	1 43 39.0	8.19915	91	14 49.1
12.5	20 49 7.98	24 51.94	22 21 27.3	1 49 58.2	8.19824	71	14 47.3
		24 6.26		+ 1 56 58.2		- 65	
13.0	21 13 14.24	23 23.50	— 20 24 29.1	2 8 38.8	8.19759	36	14 46.0
13.5	21 36 37.74	22 45.21	18 15 50.3	2 18 47.0	8.19723	6	14 45.2
14.0	21 59 22.95	22 12.55	15 57 3.3	2 27 29.4	8.19717	+ 27	14 45.1
14.5	22 21 35.50	21 46.38	13 29 33.9	2 34 52.7	8.19744	61	14 45.7
15.0	22 43 21.88	21 27.33	10 54 41.2	2 41 2.9	8.19805	95	14 46.9
15.5	23 4 49.21	21 15.86	8 13 38.3	2 46 4.0	8.19900	95	14 48.8
16.0	23 26 5.07	21 12.35	5 27 34.3	2 49 58.2	8.20029	129	14 51.5
16.5	23 47 17.42	21 17.18	— 2 37 36.1	2 52 44.7	8.20192	163	14 54.8
17.0	o 8 34.60	21 30.66	+ o 15 8.6	2 54 20.4	8.20389	197	14 58.9
17.5	o 30 5.26	21 53.11	3 9 29.0	2 54 39.3	8.20616	227	15 3.6
				+ 2 54 39.3		+ 256	
18.0	o 51 58.37	22 24.80	+ 6 4 8.3	2 53 31.2	8.20872	281	15 9.0
18.5	1 14 23.17	23 5.86	8 57 39.5	2 50 43.6	8.21153	303	15 14.9
19.0	1 37 29.03	23 56.28	11 48 23.1	2 46 0.5	8.21456	319	15 21.3
19.5	2 1 25.31	24 55.70	14 34 23.6	2 39 2.6	8.21775	329	15 28.0
20.0	2 26 21.01	26 3.23	17 13 26.2	2 29 29.2	8.22104	334	15 35.1
20.5	2 52 24.24	27 17.23	19 42 55.4	2 17 0.0	8.22438	334	15 42.3
21.0	3 19 41.47	28 34.95	21 59 55.4	2 1 16.8	8.22770	322	15 49.5
21.5	3 48 16.42	29 52.58	24 1 12.2	1 42 8.8	8.23092	307	15 56.6
22.0	4 18 9.00	31 5.23	25 43 21.0	1 19 35.8	8.23399	283	16 3.4
22.5	4 49 14.23	32 7.18	27 2 56.8	+ o 53 54.6	8.23682	16 9.7	
				+ 2 53 54.6		+ 253	
23.0	5 21 21.41	32 52.83	+ 27 56 51.4	+ o 25 39.2	8.23935	216	16 15.4
23.5	5 54 14.24	33 17.68	28 22 30.6	- o 4 18.1	8.24151	176	16 20.2
24.0	6 27 31.92	33 19.42	28 18 12.5	o 34 50.3	8.24327	132	16 24.2
24.5	7 o 51.34	32 58.52	27 43 22.2	1 4 46.1	8.24459	85	16 27.2
25.0	7 33 49.86	32 18.09	26 38 36.1	1 32 58.1	8.24544	+ 38	16 29.2
25.5	8 6 7.95	31 23.13	25 5 38.0	1 58 30.9	8.24582	- 9	16 30.0
26.0	8 37 31.08	30 19.48	23 7 7.1	2 20 46.6	8.24573	53	16 29.8
26.5	9 7 50.56	29 12.75	20 46 20.5	2 39 24.6	8.24520	93	16 28.6
27.0	9 37 3.31	28 7.67	18 6 55.9	2 54 20.1	8.24427	130	16 26.5
27.5	10 5 10.98		15 12 35.8	8.24297		16 23.5	

Dez. 8 6<sup>h</sup> 0<sup>m</sup>.3 Neumond.Dez. 16 9<sup>h</sup> 0<sup>m</sup>.1 Erst. Viert.Dez. 23 17<sup>h</sup> 23<sup>m</sup>.7 Vollmond.

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternzeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl.- Sterne		
							AR.	Dekl.	Gr.
Dez. 8	U 12 <sup>h</sup> 3.2	17 <sup>h</sup> 12 <sup>m</sup> 34 <sup>s</sup>	-71.67	147.62	-27° 43.9'	-3.7			
-	-	-	-	-	-	-			
9 O	○ 30.7	17 42 8	-71.70	147.75	-28 16.4	-1.7			
U	12 58.1	18 11 35	-71.46	146.74	-28 24.8	+0.3			
10 O	1 25.3	18 40 44	-70.95	144.66	-28 9.7	+2.2			
U	13 51.9	19 9 22	-70.20	141.64	-27 32.0	+4.0			
11 O	2 17.8	19 37 20	-69.27	137.94	-26 33.2	+5.7			
U	14 42.9	20 4 30	-68.22	133.80	-25 15.1	+7.3			
12 O	3 7.2	20 30 48	-67.11	129.49	-23 39.5	+8.6			
U	15 30.6	20 56 16	-66.00	125.24	-21 48.5	+9.8			
13 O	3 53.2	21 20 53	-64.94	121.24	-19 44.0	+10.9	20 41.1	-21 50	5.8
U	16 15.0	21 44 45	-63.98	117.67	-17 27.8	+11.8	21 4.6	-20 55	6.1
14 O	4 36.2	22 7 58	-63.15	114.60	-15 1.4	+12.6	21 37.8	-19 16	4.8
U	16 56.8	22 30 37	-62.48	112.14	-12 26.5	+13.2	21 57.4	-18 20	6.4
15 O	5 17.0	22 52 51	-61.99	110.34	-9 44.5	+13.8	22 25.4	-13 22	6.2
U	17 36.9	23 14 47	-61.68	109.25	-6 56.6	+14.2	22 43.9	-11 1	6.1
16 O	5 56.7	23 36 35	-61.60	108.90	-4 3.8	+14.6	23 9.8	-6 31	4.6
U	18 16.5	23 58 24	-61.72	109.34	-1 7.6	+14.8	23 25.0	-5 1	6.4
17 O	6 36.5	○ 20 23	-62.08	110.57	+ 1 51.0	+14.9	23 48.5	-3 39	6.1
U	18 56.8	○ 42 42	-62.66	112.64	+ 4 50.6	+15.0	○ 3.7	-2 56	6.3
18 O	7 17.5	1 5 31	-63.48	115.59	+ 7 49.8	+14.9	○ 43.8	+ 4 50	5.9
U	19 39.0	1 29 1	-64.54	119.43	+10 46.9	+14.6	○ 55.3	+ 6 1	6.3
19 O	8 1.4	1 53 24	-65.82	124.15	+13 40.0	+14.2	1 23.8	+ 7 30	6.4
U	20 24.7	2 18 47	-67.31	129.75	+16 26.8	+13.6	1 46.3	+10 36	6.0
20 O	8 49.3	2 45 23	-68.97	136.15	+19 4.4	+12.7	2 8.3	+14 52	5.8
U	21 15.2	3 13 19	-70.74	143.18	+21 29.8	+11.5	2 26.1	+17 19	6.4
21 O	9 42.5	3 42 43	-72.55	150.50	+23 39.4	+10.0	3 6.7	+19 24	4.6
U	22 11.3	4 13 34	-74.32	157.69	+25 29.3	+8.2	3 23.4	+22 30	6.1
22 O	10 41.5	4 45 48	-75.90	164.29	+26 55.5	+6.1	4 5.5	+26 15	5.5
U	23 12.9	5 19 14	-77.15	169.63	+27 54.2	+3.7	4 18.8	+24 6	6.1
23 O	11 45.1	5 53 33	-77.97	173.17	+28 22.3	+1.0	5 15.5	+27 52	6.4
-	-	-	-	-	-	-	5 30.5	+27 36	6.5
24 U	○ 17.8	6 28 22	+78.27	174.48	+28 17.7	-1.8	6 29.7	+28 6	5.1
O	12 50.6	7 3 11	+78.03	173.39	+27 39.8	-4.5	6 39.3	+29 4	5.5
25 U	1 23.0	7 37 35	+77.30	170.18	+26 29.3	-7.2	7 30.6	+27 6	4.3
O	13 54.5	8 11 11	+76.18	165.35	+24 48.4	-9.6	7 48.2	+27 0	4.9
26 U	2 25.0	8 43 43	+74.79	159.49	+22 40.4	-11.7	8 38.3	+21 47	4.8
O	14 54.2	9 15 1	+73.28	153.22	+20 9.3	-13.4	9 2.5	+23 20	6.3
27 U	3 22.3	9 45 4	+71.77	147.03	+17 19.3	-14.8	9 39.7	+19 16	6.5
O	15 49.1	10 13 55	+70.34	141.34	+14 14.6	-15.9	10 1.0	+16 11	6.3

Dez. 13 20<sup>h</sup> Apogäum.Dez. 25 16<sup>h</sup> Perigäum.

## Mittlerer Mittag und Mitternacht.

Datum	Wahre AR.	Diff.	Wahre Dekl.	Diff.	Log. sin. A. H. Par.	Diff.	Halbm.
Dez. 27.○	9 37 3.31	28 7.67	+18° 6' 55.9	- 2 54 20.1	8.24427	-130	16 26.5
27.5	10 5 10.98	27 7.85	15 12 35.8	3 5 38.9	8.24297	162	16 23.5
28.0	10 32 18.83	26 15.69	12 6 56.9	3 13 34.2	8.24135	187	16 19.9
28.5	10 58 34.52	25 32.67	8 53 22.7	3 18 22.6	8.23948	208	16 15.7
29.○	11 24 7.19	24 59.54	5 35 0.1	3 20 21.6	8.23740	222	16 11.○
29.5	11 49 6.73	24 36.53	+ 2 14 38.5	3 19 46.9	8.23518	233	16 6.1
30.○	12 13 43.26	- 1 5	8.4	3 16 51.8	8.23285	239	16 0.9
30.5	12 38 6.74	24 23.48	4 22 0.2	3 11 47.2	8.23046	241	15 55.6
31.○	13 2 26.71	24 25.41	7 33 47.4	3 4 41.0	8.22805	239	15 50.3
31.5	13 26 52.12	- 10 38 28.4	- 2 55 38.3	8.22566	-235	15 45.1	
32.○	13 51 31.05	24 38.93	- 13 34 6.7	8.22331	15 40.0		

Dez. 30 9 5.5 Letztes Viertel.

## Phasen des Mondes.

Jan.	4	2 23.3	Vollmond	Juli	7	5 40.5	Letztes Viertel
	10	20 36.5	Letztes Viertel		14	2 6.8	Neumond
	19	0 3.6	Neumond		20	18 12.0	Erstes Viertel
	26	21 45.0	Erstes Viertel		28	17 21.8	Vollmond
Febr.	2	12 51.7	Vollmond	Aug.	5	17 11.2	Letztes Viertel
	9	13 44.4	Letztes Viertel		12	8 51.2	Neumond
	17	18 37.7	Neumond		19	5 50.2	Erstes Viertel
	25	8 20.3	Erstes Viertel		27	8 52.5	Vollmond
März	2	23 35.5	Vollmond	Sept.	4	2 16.7	Letztes Viertel
	10	8 49.2	Letztes Viertel		10	16 42.1	Neumond
	18	11 2.3	Neumond		17	20 48.3	Erstes Viertel
	25	15 55.5	Erstes Viertel		26	0 27.8	Vollmond
April	1	10 58.2	Vollmond	Okt.	3	9 41.7	Letztes Viertel
	9	4 17.4	Letztes Viertel		10	2 34.2	Neumond
	17	0 33.8	Neumond		17	14 59.8	Erstes Viertel
	23	21 40.8	Erstes Viertel		25	15 24.1	Vollmond
	30	23 13.0	Vollmond	Nov.	1	16 31.2	Letztes Viertel
Mai	8	22 49.7	Letztes Viertel		8	14 58.4	Neumond
	16	11 7.2	Neumond		16	11 36.9	Erstes Viertel
	23	3 4.9	Erstes Viertel		24	5 5.8	Vollmond
	30	12 23.2	Vollmond		30	23 58.4	Letztes Viertel
Juni	7	15 29.2	Letztes Viertel	Dez.	8	6 0.3	Neumond
	14	19 17.2	Neumond		16	9 0.1	Erstes Viertel
	21	9 32.5	Erstes Viertel		23	17 23.7	Vollmond
	29	2 27.4	Vollmond		30	9 5.5	Letztes Viertel

## Im Meridian von Berlin.

Datum und Kulmination	Mittlere Zeit	AR.	Halbe Durchg.-D. Sternezeit	Bew. in 1 <sup>h</sup> Länge	Dekl.	Bew. in 1 <sup>h</sup> Länge	Vergl. - Sterne		
							AR.	Dekl.	Gr.
Dez. 27 U	3 22.3	9 45 4	+71.77	147.03	+17° 19.3	-14.8	9 39.7	+19 16	6.5
O	15 49.1	10 13 55	+70.34	141.34	+14 14.6	-15.9	10 1.0	+16 11	6.3
28 U	4 14.8	10 41 42	+69.08	136.38	+10 59.2	-16.6	10 44.7	+11 1	5.3
O	16 39.6	11 8 34	+68.03	132.30	+ 7 36.7	-17.1	10 55.0	+10 24	7.0
29 U	5 3.7	11 34 43	+67.20	129.18	+ 4 10.6	-17.3	11 29.9	+ 3 33	5.7
O	17 27.3	12 0 20	+66.63	127.04	+ 0 43.6	-17.2	11 46.2	+ 2 16	3.8
30 U	5 50.6	12 25 37	+66.30	125.83	- 2 41.5	-17.0	12 15.5	- 0 11	4.0
O	18 13.7	12 50 44	+66.22	125.54	- 6 2.3	-16.5	12 37.2	- 0 58	2.9
31 U	6 36.8	13 15 53	+66.35	126.09	- 9 16.6	-15.8	13 4.0	- 8 31	5.6
O	19 0.1	13 41 13	+66.68	127.39	-12 22.2	-15.0	13 28.4	- 9 43	5.4

Mond  
im Perigäum

Jan.	4	3
Febr.	1	15
Febr.	29	22
März	28	10
April	22	11
Mai	19	5
Juni	16	5
Juli	14	13
Aug.	11	22
Sept.	9	7
Okt.	7	8
Nov.	3	0
Nov.	28	0
Dez.	25	16

Mond  
im Apogäum

Jan.	17	15
Febr.	14	0
März	12	18
April	9	14
Mai	7	9
Juni	4	2
Juli	1	13
Juli	28	18
Aug.	24	21
Sept.	21	9
Okt.	19	3
Nov.	15	23
Dez.	13	20

## Mittlere Mitternacht Berlin.

Datum	$\alpha_{\text{g}} - \alpha_k$	$\delta_{\text{g}} - \delta_k$	$\log \sin p_k$
Jan. 0	+ 1.45 -1.13 -0.94	+ 20.6 " -0.3	8.24072 +624 -86
1	+ 0.32 -2.24 -1.11	- 9.9 -24.6 + 5.9	8.24696 +476 -148
2	- 1.92 -3.11 -0.87	- 34.5 -11.6 +13.0	8.25172 +269 -207
3	- 5.03 -3.35 -0.24	- 46.1 + 5.4 +17.0	8.25441 + 24 -245
4	- 8.38 2.68 +0.67	- 40.7 +20.4 +15.0	8.25465 -221 -245
5	-11.06 1.66 +1.02	- 20.3 +28.7 + 8.3	8.25244 -438 -217
6	-12.72 -0.71 +0.95	+ 8.4 +30.3 + 1.6	8.24806 -601 -163
7	-13.43 -0.01 +0.70	+ 38.7 +27.3 - 3.0	8.24205 -696 -95
8	-13.44 +0.40 +0.41	+ 66.0 +22.3 - 5.0	8.23509 -727 -31
9	-13.04 +0.40 +0.23	+ 88.3 +16.9 - 5.4	8.22782 -701 +26
10	-12.41 +0.63 +0.12	+105.2 +12.3 - 4.6	8.22081 -635 +66
11	-11.66 +0.75 +0.02	+117.5 + 8.6 - 3.7	8.21446 -543 +92
12	-10.89 +0.77	+126.1	8.20903
Jan. 27	+ 1.99 -0.15 -0.67	+ 27.2 -27.6 - 2.2	8.23075 +631 + 7
28	+ 1.84 -1.09 -0.94	- 0.4 -25.9 + 1.7	8.23706 +593 -38
29	+ 0.75 2.15 -1.06	- 26.3 -18.5 + 7.4	8.24299 +496 -97
30	- 1.40 -2.89 -0.74	- 44.8 - 5.2 +13.3	8.24795 +343 -153
31	- 4.29 -2.97 -0.08	- 50.0 +10.7 +15.9	8.25138 +141 -202
Febr. 1	- 7.26 -2.38 +0.59	- 39.3 +24.1 +13.4	8.25279 -88 -229
2	- 9.64 -1.55 +0.83	- 15.2 +31.4 + 7.3	8.25191 -313 -225
3	-11.19 -0.78 +0.77	+ 16.2 +32.6 + 1.2	8.24878 -505 -192
4	-11.97 -0.23 +0.55	+ 48.8 +29.2 - 3.4	8.24373 -645 -140
5	-12.20 +0.12 +0.35	+ 78.0 +23.6 - 5.6	8.23728 -718 -73
6	-12.08 +0.21 +0.21	+101.6 +17.5 6.1	8.23010 -728 -10
7	-11.75 +0.33 +0.10	+119.1 +11.8 - 5.7	8.22282 -683 +45
8	-11.32 +0.43 +0.06	+130.9 + 7.1 - 4.7	8.21599 -599 +84
9	-10.83 +0.49 +0.02	+138.0 + 3.6 - 3.5	8.21000 -487 +112
10	-10.32 0.00	+141.6 - 2.6	8.20513 +125
Febr. 25	+ 0.71 -1.24 -0.83	- 24.4 -18.9 + 4.8	8.23454 +442 -23
26	- 0.53 -1.98 -0.74	- 43.3 - 9.6 + 9.3	8.23896 +385 -57
27	- 2.51 -2.33 -0.35	- 52.9 + 3.1 +12.7	8.24281 +287 -98
28	- 4.84 -2.17 +0.16	- 49.8 +16.1 +13.0	8.24568 +152 -135
29	- 7.01 -1.66 +0.51	- 33.7 +26.1 +10.0	8.24720 -17 -169
März 1	- 8.67 -1.07 +0.59	- 7.6 +31.5 + 5.4	8.24703 -198 -181
2	- 9.74 -0.58 +0.49	+ 23.9 +32.1 + 0.6	8.24505 -374 -176
3	-10.32 -0.25 +0.33	+ 56.0 +29.1 - 3.0	8.24131 -517 -143
4	-10.57 -0.04 +0.21	+ 85.1 +23.9 - 5.2	8.23614 -615 -98
5	-10.61 +0.07 +0.11	+109.0 +17.8 - 6.1	8.22999 -659 -44
6	-10.54 +0.14 +0.07	+126.8 +11.7 - 6.1	8.222340 -647 +12
7	-10.40 +0.18 +0.04	+138.5 + 6.5 - 5.2	8.21693 -588 +59
8	-10.22 +0.25 +0.07	+145.0 + 2.3 - 4.2	8.21105 -493 +95
9	- 9.97 +0.32 +0.07	+147.3 - 0.7 - 3.0	8.20612 -372 +121
10	- 9.65 +0.13	+146.6 - 1.9	8.20240 +135

## Mittlere Mitternacht Berlin.

Datum	$\alpha_{\text{E}} - \alpha_k$	$\delta_{\text{E}} - \delta_k$	$\log \sin p_k$
März	- 3.19	- 1.79	8.23741 + 185
	- 4.98	- 1.66	8.23926 + 122 - 63
	- 6.64	+ 0.41	8.24048 + 39 - 83
	- 1.25	+ 0.46	8.24087 - 64 - 103
	- 7.89	- 0.79	8.24023 - 178 - 114
	- 8.68	- 0.42	8.23845 - 297 - 119
	- 9.10	- 0.18	8.23548 - 404 - 107
	- 9.28	+ 0.14	8.23144 - 488 - 84
	- 9.32	0.00	8.22656 - 539 - 51
	- 9.32	- 0.01	8.22117 - 7
April	- 9.33	- 0.02	8.21571 - 546 + 32
	- 9.36	- 0.03	8.21057 - 514 + 71
	- 9.38	+ 0.06	8.20614 - 443 + 103
	- 9.32	+ 0.22	8.20274 - 340 + 122
	- 9.10	+ 0.44	8.20056 - 218 + 138
	- 8.66	+ 0.67	8.19976 - 80 + 138
	- 7.99	+ 0.22	8.20037 + 61 + 141
	- 7.10		
		+ 133.0	
April	- 7.81	- 1.05	8.23880 - 96
	- 8.86	- 0.50	8.23784 - 151 - 55
	- 9.36	- 0.11	8.23633 - 204 - 53
	- 9.47	+ 0.13	8.23429 - 258 - 54
	- 9.34	+ 0.23	8.23171 - 311 - 53
	- 9.11	+ 0.22	8.22860 - 364 - 53
	- 8.89	+ 0.14	8.22496 - 405 - 41
	- 8.75	+ 0.04	8.22091 - 431 - 26
	- 8.71	- 0.09	8.21660 - 434 - 3
	- 8.76	- 0.05	8.21226 - 410 + 24
Mai	- 8.82	- 0.06	8.20816 - 357 + 53
	- 8.79	+ 0.03	8.20459 - 276 + 81
	- 8.54	+ 0.25	8.20183 - 172 + 104
	- 8.01	+ 0.53	8.20011 - 48 + 124
	- 8.01	- 0.82	8.19963 + 87 + 135
	- 7.19	+ 1.04	8.20050 + 224 + 137
	- 6.15	+ 1.19	8.20274
	- 4.96		
		+ 121.4	
Mai	- 10.76	+ 0.25	8.23467 - 385
	- 10.51	+ 0.17	8.23082 - 397 - 12
	- 10.09	+ 0.42	8.22685 - 398 - 1
	- 10.09	+ 0.02	8.22287 - 396 + 2
	- 9.65	+ 0.44	8.21891 - 386 + 10
	- 9.65	- 0.07	8.21505 - 373 + 13
	- 9.28	+ 0.37	8.21132 - 349 + 24
	- 9.03	+ 0.25	8.20783 - 315 + 34
	- 8.92	+ 0.11	8.20468 - 50
	- 8.90	+ 0.02	
	- 8.87	+ 0.03	
	- 8.87	+ 0.12	

## Mittlere Mitternacht Berlin.

Datum	$\alpha_{\text{a}} - \alpha_k$	$\delta_{\text{a}} - \delta_k$	$\log \sin p_k$
Mai 31	- 8.87 + 0.15	+ 147.7 - 3.0	8.20468 - 265 + 50
Juni 1	- 8.72 + 0.42	+ 144.7 - 5.1	8.20203 - 198 + 67
2	- 8.30 + 0.73	+ 139.6 - 6.1	8.20005 - 111 + 87
3	- 7.57 + 1.03	+ 133.5 - 6.5	8.19894 7 + 104
4	- 6.54 + 1.23	+ 127.0 - 6.8	8.19887 + 112 + 119
5	- 5.31 + 1.36	+ 120.2 - 7.6	8.19999 + 240 + 128
6	- 3.95 + 1.39	+ 112.6 - 9.3	8.20239 + 368 + 128
7	- 2.56 + 1.35	+ 103.3 - 12.2	8.20607 + 121 + 121
8	- 1.21	+ 91.1	8.21096 + 489
Juni 21	- 11.36 + 0.41	+ 92.4 + 20.5	8.23010 - 547
22	- 10.95 + 0.42	+ 112.9 + 15.8	8.22463 - 517 + 30
23	- 10.53 + 0.35	+ 128.7 + 11.2	8.21946 - 470 + 47
24	- 10.18 + 0.23	+ 139.9 + 6.9	8.21476 - 418 + 52
25	- 9.95 + 0.13	+ 146.8 + 2.8	8.21058 - 363 + 55
26	- 9.82 + 0.11	+ 149.6 - 0.8	8.20695 - 305 + 58
27	- 9.71 + 0.19	+ 148.8 - 4.0	8.20390 - 249 + 56
28	- 9.52 + 0.40	+ 144.8 - 6.0	8.20141 - 187 + 62
29	- 9.12 + 0.70	+ 138.8 - 1.3	8.19954 - 122 + 65
30	- 8.42 + 0.29	+ 131.5 - 7.3	8.19832 - 45 + 77
Juli 1	- 7.43 + 1.25	+ 123.8 - 7.7	8.19787 + 41
2	- 6.18 + 1.41	+ 116.1 - 8.0	8.19828 + 138 + 97
3	- 4.77 + 1.51	+ 108.1 - 8.8	8.19966 + 245 + 107
4	- 3.26 + 1.52	+ 99.3 - 10.5	8.20211 + 360 + 115
5	- 1.74 + 1.47	+ 88.8 - 13.2	8.20571 + 471 + 111
6	- 0.27 + 1.31	+ 75.6 - 16.6	8.21042 + 578 + 107
7	+ 1.04	+ 59.0	8.21620
Juli 21	- 11.38 + 0.15	+ 147.7 + 6.4	8.21846 - 556
22	- 11.23 + 0.11	+ 154.1 + 1.6	8.21290 - 472 + 84
23	- 11.12	+ 155.7 - 2.5	8.20818 - 383 + 89
24	- 11.01 + 0.22	+ 153.2 - 5.6	8.20435 - 292 + 91
25	- 10.79 + 0.42	+ 147.6 - 7.8	8.20143 - 208 + 84
26	- 10.37 + 0.71	+ 139.8 - 9.0	8.19935 - 127 + 81
27	- 9.66 + 0.98	+ 130.8 - 9.3	8.19808 - 53 + 74
28	- 8.68 + 1.24	+ 121.5 - 9.3	8.19755 + 20 + 73
29	- 7.44 + 1.42	+ 112.2 - 9.4	8.19775 + 93 + 73
30	- 6.02 + 1.53	+ 102.8 - 9.7	8.19868 + 170 + 77
31	- 4.49 + 1.58	+ 93.1 - 10.7	8.20038 + 82
Aug. 1	- 2.91 + 1.56	+ 82.4 - 12.4	8.20290 + 252 + 89
2	- 1.35 + 1.50	+ 70.0 - 14.8	8.20631 + 430 + 89
3	+ 0.15 + 1.32	+ 55.2 - 17.8	8.21061 + 518 + 88
4	+ 1.47 + 1.01	+ 37.4 - 20.9	8.21579 + 595 + 77
5	+ 2.48 + 0.46	+ 16.5 - 23.2	8.22174 + 652 + 57
6	+ 2.94	- 6.7	8.22826

## Mittlere Mitternacht Berlin.

Datum	$\alpha_{\text{ir}} - \alpha_k$	$\delta_{\text{ir}} - \delta_k$	$\log \sin p_k$
Aug. 19	-12.00	+162.8	8.21290
20	-12.08	-0.08	8.20769
21	-11.99	+0.09	8.20357
22	-11.63	+0.36	8.20060
23	-10.96	+0.67	8.19877
24	-9.98	+1.24	8.19795
25	-8.74	+1.41	8.19805
26	-7.33	+1.51	8.19894
27	-5.82	+1.55	8.20051
28	-4.27	+1.53	8.20271
29	-2.74	+1.48	8.20546
30	-1.26	+1.36	8.20879
Sept. 1	+ 0.10	+1.14	8.21265
2	+ 1.24	+0.75	8.21706
3	+ 1.99	+0.16	8.22199
4	+ 2.15	-0.63	8.22731
	+ 1.52	-0.79	8.23285
Sept. 18	-12.36	+149.2	8.20392
19	-11.85	+0.51	8.20092
20	-10.94	+0.91	8.19923
21	-9.72	+1.22	8.19879
22	-8.32	+1.40	8.19946
23	-6.82	+1.50	8.20108
24	-5.30	+0.02	8.20347
25	-3.83	+1.52	8.20641
26	-2.44	+1.47	8.20974
27	-1.19	+1.39	8.21333
28	-0.17	+1.25	8.21707
29	+ 0.17	-0.23	8.22088
	+ 0.51	-0.02	8.22477
Okt. 1	+ 0.72	-0.21	8.22866
2	+ 0.31	-0.41	8.23251
3	- 0.73	-0.62	8.23617
4	- 2.23	-0.41	8.23947
	- 3.86	-0.63	
Okt. 17	-11.31	+1.10	8.20141
18	-10.21	+0.29	8.19986
19	- 8.82	+1.39	8.19970
20	- 7.30	+1.52	8.20086
21	- 5.75	+0.03	8.20319
22	- 4.25	+1.55	8.20644
23	- 2.88	-0.05	8.21037
24	- 1.69	+1.37	8.21467
25	- 0.76	-0.13	8.21905
	- 0.76	-0.39	

## Mittlere Mitternacht Berlin.

Datum	$\alpha_{\text{c}} - \alpha_k$	$\delta_{\text{c}} - \delta_k$	$\log \sin p_k$
Okt. 25	-0.76	8. -0.39	+ 8.21905 - 19
	-0.22	+0.54 -0.52	+ 8.22324 + 419 - 38
	-0.20	+0.02 -0.62	+ 8.22705 + 381 - 50
	-0.80	-1.17 -0.57	+ 8.23036 + 331 - 59
	-1.97	-1.53 -0.36	+ 8.23308 + 272 - 54
	-3.50	-1.51 +0.02	+ 8.23526 + 164 - 54
Nov. 1	-5.01	-1.18 +0.33	+ 8.23690 + 111 - 53
	-6.19	-0.76 +0.42	+ 8.23801 + 59 - 52
2	-6.95	-	+ 8.23860
Nov. 16	-7.48	+1.63	+ 8.19993 + 147
	-5.85	+1.62 -0.01	+ 8.20140 + 279 + 132
	-4.23	+1.52 -0.10	+ 8.20419 + 397 + 118
	-2.71	+1.34 -0.18	+ 8.20816 + 487 + 90
	-1.37	+1.07 -0.27	+ 8.21303 + 544 + 57
	-0.30	+0.64 -0.43	+ 8.21847 + 558 + 14
	+0.34	+0.66 -0.58	+ 8.22405 + 528 - 30
	+0.40	-0.69 -0.75	+ 8.22933 + 459 - 69
	-0.29	-1.46 -0.77	+ 8.23392 + 358 - 101
	-1.75	-1.97 -0.51	+ 8.23750 - 120
	-3.72	-1.99 -0.02	+ 8.23988 + 238 - 123
	-5.71	-1.55 +0.44	+ 8.24103 - 2 - 117
	-7.26	-0.94 +0.61	+ 8.24101 - 98 - 96
	-8.20	-0.39 +0.55	+ 8.24003 - 171 - 73
Dez. 1	-8.59	-0.05 +0.34	+ 8.23832 - 226 - 55
	-8.64	+0.16	+ 8.23606 - 265 - 39
2	-8.53	-	+ 8.23341
Dez. 15	-4.34	+1.71	+ 8.20087 + 294
	-2.63	+1.61 -0.10	+ 8.20381 + 131
	-1.02	-0.21	+ 8.20806 + 425
	+0.38	+1.40 -0.35	+ 8.21346 + 115
	+1.43	+1.05 -0.50	+ 8.21971 + 85
	+1.98	-0.23 -0.78	+ 8.22637 + 625
	+1.75	-1.21 -0.98	+ 8.23294 + 471
	+0.54	-2.10 -0.89	+ 8.23887 - 63 - 122
	-1.56	-2.56 -0.46	+ 8.24358 + 309
	-4.12	-2.36 +0.20	+ 8.24667 - 186
	-6.48	-1.72 +0.64	+ 8.24790 + 123
	-8.20	-0.98 +0.74	+ 8.24727 - 63 - 186
	-9.18	-0.43 +0.55	+ 8.24503 - 224 - 127
	-9.61	-0.10 +0.33	+ 8.24152 - 433 - 82
30	-9.71	+0.03 +0.13	+ 8.23719 - 475 - 42
	-9.68	0.00 -0.03	+ 8.23244 - 483 - 8
	-9.68	-	+ 8.22761

12 <sup>h</sup> Mittl. Zeit	Lage gegen den Erdäquator.				
	i	Δ	δ'	Δ - δ'	
Jan. - 8	22 6.15 0.41	209 16.33 33.58	358° 6.84 1.98	I 44.34 1.82	
2	22 5.74 0.40	208 42.75 33.60	358 8.82 1.99	I 42.52 1.83	
12	22 5.34 0.40	208 9.15 33.61	358 10.81 2.00	I 40.69 1.84	
22	22 4.94 0.39	207 35.54 33.62	358 12.81 2.01	I 38.85 1.85	
Febr. 1	22 4.55 0.38	207 1.92 33.63	358 14.82 2.02	I 37.00 1.87	
11	22 4.17 0.37	206 28.29 33.64	358 16.84 2.03	I 35.13 1.88	
21	22 3.80 0.37	205 54.65 33.66	358 18.87 2.05	I 33.25 1.88	
März 2	22 3.43 0.36	205 20.99 33.67	358 20.92 2.06	I 31.37 1.89	
12	22 3.07 0.35	204 47.32 33.68	358 22.98 2.06	I 29.48 1.90	
22	22 2.72 0.34	204 13.64 33.69	358 25.04 2.07	I 27.58 1.91	
April 1	22 2.38 0.34	203 39.95 33.69	358 27.11 2.08	I 25.67 1.92	
11	22 2.04 0.33	203 6.26 33.70	358 29.19 2.09	I 23.75 1.93	
21	22 1.71 0.33	202 32.56 33.71	358 31.28 2.10	I 21.82 1.93	
Mai 1	22 1.38 0.32	201 58.85 33.71	358 33.38 2.11	I 19.89 1.94	
11	22 1.06 0.31	201 25.14 33.72	358 35.49 2.12	I 17.95 1.95	
21	22 0.75 0.30	200 51.42 33.73	358 37.61 2.13	I 16.00 1.96	
31	22 0.45 0.29	200 17.69 33.73	358 39.74 2.13	I 14.04 1.97	
Juni 10	22 0.16 0.28	199 43.96 33.74	358 41.87 2.14	I 12.07 1.98	
20	21 59.88 0.28	199 10.22 33.74	358 44.01 2.15	I 10.09 1.98	
30	21 59.60 0.27	198 36.48 33.76	358 46.16 2.16	I 8.11 1.99	
Juli 10	21 59.33 0.25	198 2.72 33.76	358 48.32 2.16	I 6.12 2.00	
20	21 59.08 0.25	197 28.96 33.77	358 50.48 2.17	I 4.12 2.00	
30	21 58.83 0.24	196 55.19 33.78	358 52.65 2.18	I 2.12 2.01	
Aug. 9	21 58.59 0.23	196 21.41 33.79	358 54.83 2.19	I 0.11 2.01	
19	21 58.36 0.23	195 47.62 33.79	358 57.02 2.20	O 58.10 2.02	
29	21 58.13 0.22	195 13.83 33.80	358 59.22 2.20	O 56.08 2.03	
Sept. 8	21 57.91 0.21	194 40.03 33.81	359 1.42 2.20	O 54.05 2.03	
18	21 57.70 0.20	194 6.22 33.81	359 3.62 2.21	O 52.02 2.04	
28	21 57.50 0.20	193 32.41 33.82	359 5.83 2.21	O 49.98 2.04	
Okt. 8	21 57.30 0.19	192 58.59 33.82	359 8.04 2.22	O 47.94 2.05	
18	21 57.11 0.18	192 24.77 33.83	359 10.26 2.23	O 45.89 2.05	
28	21 56.93 0.17	191 50.94 33.83	359 12.49 2.23	O 43.84 2.06	
Nov. 7	21 56.76 0.16	191 17.11 33.83	359 14.72 2.24	O 41.78 2.06	
17	21 56.60 0.16	190 43.28 33.83	359 16.96 2.24	O 39.72 2.07	
27	21 56.44 0.15	190 9.45 33.84	359 19.20 2.24	O 37.65 2.07	
Dez. 7	21 56.29 0.14	189 35.61 33.84	359 21.44 2.25	O 35.58 2.07	
17	21 56.15 0.13	189 1.77 33.84	359 23.69 2.25	O 33.51 2.08	
27	21 56.02 0.12	188 27.93 33.84	359 25.94 2.25	O 31.43 2.08	
37	21 55.90	187 54.09	359 28.19	O 29.35	

## MONDBEWEGLUNG 1912.

12 <sup>b</sup> Mittl. Zeit	Aufst. Knoten der Mondbahn	Mittlere Länge des Mondes	Bewegung der mittleren Länge des Mondes nach mittlerer Sonnenzeit					
			d	13 ° 10' 55.0	m	0 ° 32.9	31	17' 1.2
Jan. - 8	27° 32' 7.2	310° 6' 15.5	1	13 ° 10' 55.0	1	0 ° 32.9	31	17' 1.2
2	27 0 20.8	81 52 5.8	2	26 21 10.1	2	1 5.9	32	17 34.1
12	26 28 34.5	213 37 56.1	3	39 31 45.1	3	1 38.8	33	18 7.1
22	25 56 48.1	345 23 46.4	4	52 42 20.1	4	2 11.8	34	18 40.0
Febr. 1	25 25 1.8	117 9 36.7	5	65 52 55.1	5	2 44.7	35	19 12.9
II	24 53 15.4	248 55 27.0	6	79 3 30.2	6	3 17.6	36	19 45.9
21	24 21 29.1	20 41 17.3	7	92 14 5.2	7	3 50.6	37	20 18.8
März 2	23 49 42.8	152 27 7.6	8	105 24 40.2	8	4 23.5	38	20 51.8
12	23 17 56.4	284 12 57.9	9	118 35 15.2	9	4 56.5	39	21 24.7
22	22 46 10.1	55 58 48.2	10	131 45 50.3	10	5 29.4	40	21 57.7
April 1	22 14 23.7	187 44 38.5			11	6 2.4	41	22 30.6
II	21 42 37.4	319 30 28.8			12	6 35.3	42	23 3.5
21	21 10 51.1	91 16 19.1			13	7 8.2	43	23 36.5
Mai 1	20 39 4.7	223 2 9.4			14	7 41.2	44	24 9.4
II	20 7 18.4	354 47 59.7	1	0 ° 32' 56.5	15	8 14.1	45	24 42.3
21	19 35 32.0	126 33 50.0	2	1 5 52.9	16	8 47.1	46	25 15.3
31	19 3 45.7	258 19 40.2	3	1 38 49.4	17	9 20.0	47	25 48.2
Juni 10	18 31 59.4	3° 5 30.5	4	2 11 45.8	18	9 52.9	48	26 21.2
20	18 0 13.0	161 51 20.8	5	2 44 42.3	19	10 25.9	49	26 54.1
30	17 28 26.7	293 37 11.1	6	3 17 38.8	20	10 58.8	50	27 27.1
Juli 10	16 56 40.3	65 23 1.4	7	3 50 35.2	21	11 31.8	51	28 0.0
20	16 24 54.0	197 8 51.7	8	4 23 31.7	22	12 4.7	52	28 32.9
30	15 53 7.6	328 54 42.0	9	4 56 28.1	23	12 37.6	53	29 5.9
Aug. 9	15 21 21.3	100 40 32.3	10	5 29 24.6	24	13 10.6	54	29 38.8
19	14 49 34.9	232 26 22.6	11	6 2 21.1	25	13 43.5	55	30 11.7
29	14 17 48.6	4 12 12.9	12	6 35 17.5	26	14 16.5	56	30 44.7
Sept. 8	13 46 2.2	135 58 3.1	13	7 8 14.0	27	14 49.4	57	31 17.6
18	13 14 15.9	267 43 53.4	14	7 41 10.4	28	15 22.3	58	31 50.6
28	12 42 29.5	39 29 43.7	15	8 14 6.9	29	15 55.3	59	32 23.5
Okt. 8	12 10 43.2	171 15 34.0	16	8 47 3.4	30	16 28.2	60	32 56.5
18	11 38 56.8	303 1 24.3	17	9 19 59.8				
28	11 7 10.5	74 47 14.6	18	9 52 56.3				
Nov. 7	10 35 24.2	206 33 4.9	19	10 25 52.7				
17	10 3 37.8	338 18 55.2	20	10 58 49.2				
27	9 31 51.5	110 4 45.5	21	11 31 45.6				
Dez. 7	9 0 5.1	241 50 35.8	22	12 4 42.1				
17	8 28 18.8	13 36 26.1	23	12 37 38.5				
27	7 56 32.5	145 22 16.4	24	13 10 35.0				
37	7 24 46.1	277 8 6.7						

## Meridian und Polhöhe von Berlin.

Datum	SONNE		MOND		Datum	SONNE		MOND	
	Unterg.	Aufg.	Aufg.	Unterg.		Unterg.	Aufg.	Aufg.	Unterg.
Jan. 1	3 53	20 14	○ 54	18 1	Febr. 8	4 55	19 33	12 29	21 46
2	3 54	20 13	1 25	19 29	9	4 57	19 31	13 48	22 2
3	3 55	20 13	2 12	20 42	10	4 59	19 29	15 6	22 24
4	3 56	20 13	3 21	21 33	11	5 1	19 27	16 19	22 53
5	3 58	20 13	4 49	22 5	12	5 3	19 25	17 23	23 34
6	3 59	20 12	6 25	22 27	13	5 5	19 23	18 14	—
7	4 0	20 12	7 59	22 42					
8	4 1	20 11	9 29	22 55					Unterg. Aufg.
9	4 3	20 11	10 51	23 6	14	5 6	19 21	○ 29	18 51
10	4 4	20 10	12 10	23 17	15	5 8	19 19	1 36	19 18
11	4 5	20 10	13 28	23 28	16	5 10	19 17	2 50	19 38
12	4 7	20 9	14 45	23 41	17	5 12	19 15	4 6	19 52
13	4 8	20 8	16 2	23 59	18	5 14	19 13	5 22	20 4
14	4 10	20 7	17 17	—	19	5 16	19 11	6 37	20 14
			Unterg.	Aufg.	20	5 18	19 9	7 53	20 23
15	4 12	20 6	○ 23	18 27	21	5 20	19 7	9 9	20 33
16	4 13	20 5	○ 55	19 27	22	5 21	19 5	10 28	20 45
17	4 15	20 4	1 41	20 15	23	5 23	19 3	11 50	21 0
18	4 16	20 3	2 40	20 49	24	5 25	19 1	13 15	21 20
19	4 18	20 2	3 49	21 13	25	5 27	18 58	14 42	21 50
20	4 20	20 1	5 3	21 30	26	5 29	18 56	16 3	22 36
21	4 21	20 0	6 19	21 44	27	5 31	18 54	17 9	23 44
22	4 23	19 59	7 34	21 55	28	5 33	18 52	17 56	—
23	4 25	19 58	8 48	22 5					Aufg. Unterg.
24	4 27	19 56	10 3	22 15					
25	4 29	19 55	11 19	22 25	März 1	5 35	18 50	1 9	18 27
26	4 30	19 54	12 39	22 38	2	5 36	18 47	2 43	18 48
27	4 32	19 52	14 4	22 55	3	5 38	18 45	4 18	19 4
28	4 34	19 51	15 32	23 19	4	5 40	18 43	5 49	19 17
29	4 36	19 49	17 0	23 56	5	5 42	18 41	7 16	19 28
30	4 38	19 48	18 19	—	6	5 44	18 38	8 41	19 39
			Aufg.	Unterg.	7	5 46	18 36	10 4	19 51
Febr. 1	4 40	19 46	○ 52	19 19	8	5 48	18 34	11 26	20 5
2	4 42	19 45	2 11	20 0	9	5 49	18 31	12 47	20 24
3	4 43	19 43	3 44	20 27	10	5 53	18 27	15 14	21 28
4	4 45	19 41	5 21	20 46	11	5 55	18 24	16 11	22 18
5	4 47	19 40	6 55	21 0	12	5 57	18 22	16 53	23 21
6	4 49	19 38	8 24	21 12	13	5 58	18 20	17 23	—
7	4 51	19 36	9 48	21 22					Unterg. Aufg.
	4 53	19 34	11 9	21 34	14	6 0	18 18	○ 33	17 44

## Meridian und Polhöhe von Berlin.

Datum	SONNE		MOND		Datum	SONNE		MOND	
	Unterg.	Aufg.	Unterg.	Aufg.		Unterg.	Aufg.	Unterg.	Aufg.
März 15	6 2	18 15	1 49	18 0	April 22	7 8	16 48	13 54	20 36
16	6 4	18 13	3 5	18 12	23	7 10	16 46	14 34	22 2
17	6 5	18 11	4 22	18 22	24	7 12	16 44	14 59	23 32
18	6 7	18 8	5 38	18 32	25	7 13	16 42	15 17	—
19	6 9	18 6	6 55	18 42					
20	6 11	18 3	8 14	18 53				Aufg.	Unterg.
21	6 12	18 1	9 37	19 6	26	7 15	16 40	1 1	15 31
22	6 14	17 59	11 3	19 24	27	7 17	16 38	2 28	15 42
23	6 16	17 56	12 30	19 51	28	7 19	16 35	3 51	15 53
24	6 18	17 54	13 53	20 31	29	7 20	16 33	5 13	16 4
25	6 19	17 51	15 3	21 30	30	7 22	16 31	6 35	16 16
26	6 21	17 49	15 55	22 48	Mai 1	7 24	16 29	7 58	16 31
27	6 23	17 47	16 30	—	2	7 25	16 28	9 20	16 51
			Aufg.	Unterg.	3	7 27	16 26	10 39	17 19
28	6 25	17 44	0 17	16 53	4	7 29	16 24	11 48	17 59
29	6 26	17 42	1 49	17 10	5	7 31	16 22	12 43	18 52
30	6 28	17 40	3 20	17 23	6	7 32	16 20	13 24	19 58
31	6 30	17 37	4 47	17 34	7	7 34	16 18	13 52	21 11
April 1	6 32	17 35	6 12	17 45	8	7 35	16 16	14 11	22 26
2	6 34	17 33	7 36	17 56	9	7 37	16 15	14 26	23 42
3	6 35	17 30	8 59	18 9	10	7 39	16 13	14 38	—
4	6 37	17 28	10 22	18 26				Unterg.	Aufg.
5	6 39	17 26	11 43	18 49	11	7 40	16 11	0 57	14 48
6	6 40	17 23	12 58	19 22	12	7 42	16 10	2 13	14 57
7	6 42	17 21	14 1	20 7	13	7 43	16 8	3 30	15 7
8	6 44	17 19	14 50	21 5	14	7 45	16 7	4 50	15 19
9	6 46	17 17	15 25	22 14	15	7 47	16 5	6 16	15 34
10	6 47	17 14	15 49	23 29	16	7 48	16 4	7 46	15 54
11	6 49	17 12	16 6	—	17	7 50	16 2	9 17	16 25
			Unterg.	Aufg.	18	7 51	16 1	10 41	17 13
12	6 51	17 10	0 45	16 19	19	7 53	15 59	11 48	18 21
13	6 53	17 7	2 2	16 30	20	7 54	15 58	12 34	19 46
14	6 54	17 5	3 18	16 40	21	7 56	15 57	13 4	21 18
15	6 56	17 3	4 35	16 50	22	7 57	15 55	13 25	22 48
16	6 58	17 1	5 54	17 0	23	7 58	15 54	13 39	—
17	7 0	16 59	7 17	17 13				Aufg.	Unterg.
18	7 1	16 56	8 44	17 30	24	8 0	15 53	0 15	13 51
19	7 3	16 54	10 13	17 53	25	8 1	15 52	1 38	14 2
20	7 5	16 52	11 40	18 29	26	8 3	15 51	2 59	14 12
21	7 7	16 50	12 56	19 23	27	8 4	15 49	4 19	14 23

## Meridian und Polhöhe von Berlin.

Datum	SONNE		MOND		Datum	SONNE		MOND		
	Unterg.	Aufg.	Aufg.	Unterg.		Unterg.	Aufg.	Aufg.	Unterg.	
Mai	28	8 <sup>h</sup> 5 <sup>m</sup>	15 48 <sup>m</sup>	5 40	14 37	Juli	5	8 <sup>h</sup> 22 <sup>m</sup>	15 47	11 <sup>h</sup> 11 <sup>m</sup>
	29	8 7	15 47	7 2	14 55		6	8 21	15 48	11 20
	30	8 8	15 46	8 21	15 20					
Juni	31	8 9	15 46	9 34	15 54	Aug.	Unterg.	Aufg.		
	1	8 10	15 45	10 35	16 43		7	8 21	15 49	0 6
	2	8 11	15 44	11 21	17 44		8	8 20	15 50	1 24
	3	8 12	15 43	11 53	18 55		9	8 19	15 51	2 46
	4	8 13	15 43	12 16	20 10		10	8 19	15 52	4 13
	5	8 14	15 42	12 32	21 25		11	8 18	15 53	5 42
	6	8 15	15 42	12 44	22 39		12	8 17	15 54	7 6
	7	8 16	15 41	12 55	23 53		13	8 16	15 55	8 13
	8	8 17	15 41	13 4	—		14	8 15	15 57	8 59
				Unterg.	Aufg.		15	8 14	15 58	9 30
	9	8 18	15 40	1 8	13 13		16	8 13	15 59	9 50
	10	8 19	15 40	2 25	13 24		17	8 12	16 0	10 4
	11	8 19	15 39	3 46	13 37		18	8 11	16 2	10 16
	12	8 20	15 39	5 13	13 55		19	8 10	16 3	10 27
	13	8 21	15 39	6 44	14 20		20	8 8	16 4	10 38
	14	8 21	15 39	8 14	15 0					Aufg. Unterg.
	15	8 22	15 39	9 31	16 1		21	8 7	16 6	1 17
	16	8 22	15 39	10 27	17 22		22	8 6	16 7	2 38
	17	8 23	15 39	11 4	18 55		23	8 4	16 9	3 58
	18	8 23	15 39	11 29	20 30		24	8 3	16 10	5 14
Juli	19	8 24	15 39	11 46	22 0		25	8 1	16 11	6 22
	20	8 24	15 39	11 59	23 26		26	8 0	16 13	7 17
	21	8 24	15 39	12 10	—		27	7 59	16 15	7 57
				Aufg.	Unterg.		28	7 57	16 16	8 24
	22	8 24	15 39	0 48	12 20		29	7 55	16 17	8 44
	23	8 24	15 40	2 9	12 31		30	7 54	16 19	8 59
	24	8 24	15 40	3 29	12 44		31	7 52	16 21	9 10
	25	8 24	15 40	4 49	13 0		Aug.	1	7 50	16 22
	26	8 24	15 41	6 8	13 23		2	7 49	16 24	9 29
	27	8 24	15 41	7 23	13 54		3	7 47	16 25	9 38
	28	8 24	15 42	8 28	14 37		4	7 45	16 27	9 48
	29	8 24	15 42	9 18	15 35					Unterg. Aufg.
	30	8 24	15 43	9 54	16 43		5	7 43	16 28	0 27
	1	8 24	15 44	10 20	17 57		6	7 42	16 30	1 50
	2	8 23	15 44	10 38	19 12		7	7 40	16 32	3 17
	3	8 23	15 45	10 51	20 26		8	7 38	16 33	4 43
	4	8 22	15 46	11 2	21 39		9	7 36	16 35	5 55

## Meridian und Polhöhe von Berlin.

Datum	SONNE		MOND		Datum	SONNE		MOND	
	Unterg.	Aufg.	Unterg.	Aufg.		Unterg.	Aufg.	Aufg.	Unterg.
Aug. 10	7 34	16 37	6 50	13 44	Sept. 16	6 12	17 38	0 45	7 54
	7 32	16 38	7 27	15 20		17	6 10	17 40	2 3
	7 30	16 40	7 51	16 59		18	6 7	17 42	3 9
	7 28	16 42	8 8	18 34		19	6 5	17 43	3 58
	7 26	16 43	8 22	20 5		20	6 2	17 45	4 33
	7 24	16 45	8 34	21 32		21	6 0	17 47	4 58
	7 22	16 47	8 44	22 57		22	5 58	17 48	5 15
	7 20	16 48	8 56	—		23	5 55	17 50	5 28
						24	5 53	17 52	5 38
						25	5 51	17 54	5 47
	18	7 18	16 50	0 21	Unterg.	26	5 48	17 55	5 56
	19	7 16	16 52	1 44	Aufg.	27	5 46	17 57	6 5
	20	7 14	16 53	3 4	Unterg.	28	5 44	17 59	6 16
	21	7 12	16 55	4 16	Aufg.	29	5 41	18 0	6 30
	22	7 10	16 57	5 15	Unterg.	30	5 39	18 2	6 49
	23	7 7	16 58	5 59	Aufg.				
	24	7 5	17 0	6 30	Unterg.				
	25	7 3	17 2	6 51	Aufg.				
	26	7 1	17 3	7 7	Unterg.				
	27	6 58	17 5	7 19	Aufg.				
	28	6 56	17 7	7 29	Unterg.				
	29	6 54	17 8	7 37	Aufg.				
	30	6 52	17 10	7 46	Unterg.				
	31	6 49	17 12	7 56	Aufg.				
Sept. 1	6 47	17 13	8 8	23 36	Unterg.				
	2	6 45	17 15	8 23	Aufg.				
	3	6 43	17 17	1 0	Unterg.				
	4	6 40	17 18	2 24	Aufg.				
	5	6 38	17 20	3 41	Unterg.				
	6	6 36	17 22	4 42	Aufg.				
	7	6 33	17 23	5 25	Unterg.				
	8	6 31	17 25	5 53	Aufg.				
	9	6 29	17 27	6 12	Unterg.				
	10	6 26	17 28	6 27	Aufg.				
	11	6 24	17 30	6 39	Unterg.				
	12	6 22	17 32	6 50	Aufg.				
	13	6 19	17 33	7 2	Unterg.				
	14	6 17	17 35	7 15	Aufg.				
	15	6 14	17 37	7 31	Unterg.				

## Meridian und Polhöhe von Berlin.

Datum	SONNE		MOND		Datum	SONNE		MOND			
	Unterg.	Aufg.	Aufg.	Unterg.		Unterg.	Aufg.	Unterg.	Aufg.		
Okt.	23	4 47	18 43	4 5	16 29	Nov.	28	3 50	19 47	○ ○	7 22
	24	4 45	18 44	4 14	17 46		29	3 49	19 49	○ 28	8 54
	25	4 43	18 46	4 24	19 7		30	3 49	19 50	○ 47	10 25
	26	4 41	18 48	4 37	20 31		1	3 48	19 51	1 1	11 52
	27	4 39	18 50	4 54	21 57		2	3 47	19 53	1 12	13 17
	28	4 37	18 52	5 19	23 20		3	3 47	19 54	1 23	14 40
	29	4 35	18 54	5 57	—		4	3 46	19 56	1 34	16 4
Nov.				Unterg.	Aufg.	Dez.	5	3 45	19 57	1 46	17 29
	30	4 33	18 56	○ 31	6 54		6	3 45	19 58	2 1	18 53
	31	4 31	18 58	1 24	8 9		7	3 45	19 59	2 22	20 14
	1	4 29	19 0	1 59	9 37		8	3 44	20 1	2 52	21 25
	2	4 27	19 1	2 23	11 8		9	3 44	20 2	3 34	22 21
	3	4 25	19 3	2 40	12 38		10	3 44	20 3	4 32	23 1
	4	4 23	19 5	2 53	14 5		11	3 44	20 4	5 41	23 27
	5	4 22	19 7	3 4	15 31		12	3 44	20 5	6 56	23 45
	6	4 20	19 9	3 15	16 57		13	3 44	20 6	8 11	23 59
	7	4 18	19 11	3 26	18 23		14	3 44	20 7	9 25	—
	8	4 16	19 12	3 39	19 50					Aufg.	Unterg.
	9	4 15	19 14	3 57	21 16		15	3 44	20 8	○ 10	10 38
	10	4 13	19 16	4 21	22 35		16	3 44	20 8	○ 19	11 50
	11	4 12	19 18	4 55	23 40		17	3 44	20 9	○ 28	13 2
	12	4 10	19 20	5 44	—		18	3 44	20 10	○ 37	14 17
				Aufg.	Unterg.		19	3 44	20 10	○ 48	15 37
	13	4 8	19 22	○ 29	6 46		20	3 45	20 11	1 1	17 1
	14	4 7	19 23	1 2	7 58		21	3 45	20 11	1 19	18 29
	15	4 5	19 25	1 25	9 13		22	3 46	20 12	1 47	19 53
	16	4 4	19 27	1 41	10 28		23	3 46	20 12	2 29	21 4
	17	4 3	19 29	1 54	11 42		24	3 47	20 13	3 33	21 55
	18	4 1	19 31	2 3	12 55		25	3 48	20 13	4 57	22 29
	19	4 0	19 32	2 12	14 9		26	3 48	20 13	6 31	22 51
	20	3 59	19 34	2 21	15 24		27	3 49	20 13	8 6	23 7
	21	3 57	19 36	2 31	16 42		28	3 50	20 14	9 38	23 20
	22	3 56	19 37	2 43	18 5		29	3 51	20 14	11 5	23 31
	23	3 55	19 39	2 58	19 33		30	3 52	20 14	12 29	23 42
	24	3 54	19 41	3 20	20 59		31	3 53	20 14	13 52	23 53
	25	3 53	19 42	3 53	22 18						
	26	3 52	19 44	4 44	23 19						
	27	3 51	19 46	5 56	—						

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Jan. 1	17 39 55.42	-2 13.42	-20 II 27.7	+ 0 15.8	9.863773	23 1	4 10
2	17 37 42.00	1 29.92	20 II 11.9	- 1 44.2	9.873410	22 55	4 10
3	17 36 12.08	0 47.89	20 12 56.1	3 33.8	9.883551	22 49	4 10
4	17 35 24.19	-0 8.04	20 16 29.9	5 10.7	9.894009	22 45	4 9
5	17 35 16.15	+0 29.21	20 21 40.6	- 6 34.1	9.904624	22 41	4 9
6	17 35 45.36	1 3.65	-20 28 14.7	7 43.4	9.915265	22 37	4 8
7	17 36 49.01	1 35.25	20 35 58.1	8 38.7	9.925829	22 34	4 7
8	17 38 24.26	2 4.05	20 44 36.8	9 20.7	9.936235	22 32	4 6
9	17 40 28.31	2 30.22	20 53 57.5	9 49.9	9.946421	22 30	4 5
10	17 42 58.53	+2 53.90	21 3 47.4	- 10 7.5	9.956343	22 28	4 4
11	17 45 52.43	3 15.30	-21 13 54.9	10 14.4	9.965970	22 27	4 3
12	17 49 7.73	3 34.62	21 24 9.3	10 11.5	9.975280	22 27	4 2
13	17 52 42.35	3 52.06	21 34 20.8	9 59.8	9.984262	22 26	4 0
14	17 56 34.41	3 7.81	21 44 20.6	9 40.4	9.992909	22 26	3 59
15	18 0 42.22	+4 22.03	21 54 1.0	- 9 14.0	0.001221	22 27	3 58
16	18 5 4.25	4 34.89	-22 3 15.0	8 41.4	0.009200	22 27	3 57
17	18 9 39.14	4 46.54	22 II 56.4	8 3.3	0.016852	22 28	3 56
18	18 14 25.68	4 57.09	22 I 59.7	7 20.2	0.024183	22 28	3 55
19	18 19 22.77	5 6.66	22 27 19.9	6 32.7	0.031203	22 29	3 54
20	18 24 29.43	+5 15.36	22 33 52.6	5 41.3	0.037921	22 31	3 54
21	18 29 44.79	5 23.28	-22 39 33.9	4 46.5	0.044348	22 32	3 53
22	18 35 8.07	5 30.49	22 44 20.4	3 48.7	0.050493	22 33	3 52
23	18 40 38.56	5 37.07	22 48 9.1	2 48.1	0.056367	22 35	3 52
24	18 46 15.63	5 43.08	22 50 57.2	1 45.0	0.061980	22 37	3 52
25	18 51 58.71	+5 48.57	22 52 42.2	- 0 39.8	0.067342	22 38	3 51
26	18 57 47.28	5 53.59	-22 53 22.0	+ 0 27.4	0.072463	22 40	3 51
27	19 3 40.87	5 58.20	22 52 54.6	1 36.5	0.077352	22 42	3 51
28	19 9 39.07	6 2.43	22 51 18.1	2 47.0	0.082017	22 44	3 51
29	19 15 41.50	6 6.30	22 48 31.1	3 58.9	0.086467	22 46	3 52
30	19 21 47.80	+6 9.87	22 44 32.2	+ 5 12.2	0.090710	22 48	3 52
31	19 27 57.67	6 13.14	-22 39 20.0	6 26.6	0.094753	22 51	3 53
Febr. 1	19 34 10.81	6 16.16	22 32 53.4	7 42.1	0.098602	22 53	3 54
2	19 40 26.97	6 18.93	22 25 11.3	8 58.6	0.102264	22 55	3 55
3	19 46 45.90	6 21.49	22 16 12.7	10 16.0	0.105744	22 58	3 56
4	19 53 7.39	+6 23.85	22 5 56.7	+11 34.2	0.109048	23 0	3 57
5	19 59 31.24	6 26.03	-21 54 22.5	12 53.0	0.112181	23 3	3 58
6	20 5 57.27	6 28.05	21 41 29.5	14 12.5	0.115146	23 5	4 0
7	20 12 25.32	6 29.91	21 27 17.0	15 32.7	0.117947	23 8	4 1
8	20 18 55.23	6 31.64	21 11 44.3	16 53.3	0.120587	23 10	4 3
9	20 25 26.87		20 54 51.0		0.123070	23 13	4 5

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Febr. 8	20 <sup>h</sup> 18 <sup>m</sup> 55.23	-16 <sup>m</sup> 31.64	-21 <sup>h</sup> 11 <sup>m</sup> 44.3	+16 <sup>m</sup> 53.3	0.120587	23 <sup>h</sup> 10 <sup>m</sup>	4 <sup>h</sup> 3 <sup>m</sup>
9	20 25 26.87	6 33.24	20 54 51.0	18 14.5	0.123070	23 13	4 5
10	20 32 0.11	6 34.74	20 36 36.5	19 36.1	0.125397	23 15	4 7
11	20 38 34.85	6 36.14	20 17 0.4	20 58.1	0.127569	23 18	4 9
12	20 45 10.99	16 37.46	19 56 2.3	+22 20.4	0.129588	23 21	4 12
13	20 51 48.45	6 38.70	-19 33 41.9	23 43.1	0.131455	23 23	4 14
14	20 58 27.15	6 39.87	19 9 58.8	25 6.0	0.133169	23 26	4 17
15	21 5 7.02	6 41.00	18 44 52.8	26 29.1	0.134731	23 29	4 19
16	21 11 48.02	6 42.10	18 18 23.7	27 52.4	0.136140	23 31	4 22
17	21 18 30.12	+6 43.15	17 50 31.3	+29 15.8	0.137393	23 34	4 25
18	21 25 13.27	6 44.18	-17 21 15.5	30 39.4	0.138488	23 37	4 28
19	21 31 57.45	6 45.20	16 50 36.1	32 2.9	0.139423	23 40	4 31
20	21 38 42.65	6 46.22	16 18 33.2	33 26.4	0.140194	23 43	4 34
21	21 45 28.87	6 47.22	15 45 6.8	34 49.8	0.140796	23 45	4 38
22	21 52 16.09	+6 48.24	15 10 17.0	+36 13.0	0.141224	23 48	4 41
23	21 59 4.33	6 49.25	-14 34 4.0	37 36.0	0.141473	23 51	4 45
24	22 5 53.58	6 50.28	13 56 28.0	38 58.5	0.141534	23 54	4 48
25	22 12 43.86	6 51.32	13 17 29.5	40 20.4	0.141400	23 57	4 52
26	22 19 35.18	6 52.37	12 37 9.1	41 41.7	0.141062	○ ○	4 56
27	22 26 27.55	+6 53.40	11 55 27.4	+43 2.1	0.140509	○ 3	5 ○
28	22 33 20.95	6 54.43	-11 12 25.3	44 21.2	0.139730	○ 6	5 4
29	22 40 15.38	6 55.44	10 28 4.1	45 39.0	0.138713	○ 9	5 8
März 1	22 47 10.82	6 56.40	9 42 25.1	46 55.0	0.137443	○ 12	5 12
2	22 54 7.22	6 57.30	8 55 30.1	48 8.8	0.135904	○ 15	5 16
3	23 1 4.52	+6 58.09	8 7 21.3	+49 19.9	0.134079	○ 18	5 21
4	23 8 2.61	6 58.75	-7 18 1.4	50 27.9	0.131950	○ 21	5 25
5	23 15 1.36	6 59.21	6 27 33.5	51 31.9	0.129498	○ 24	5 30
6	23 22 0.57	6 59.43	5 36 1.6	52 31.4	0.126700	○ 27	5 34
7	23 29 0.00	6 59.32	4 43 30.2	53 25.5	0.123534	○ 30	5 39
8	23 35 59.32	+6 58.83	3 50 4.7	+54 13.2	0.119977	○ 33	5 44
9	23 42 58.15	6 57.84	-2 55 51.5	54 53.4	0.116004	○ 36	5 48
10	23 49 55.99	6 56.26	2 0 58.1	55 25.3	0.111591	○ 39	5 53
11	23 56 52.25	6 53.99	1 5 32.8	55 47.5	0.106714	○ 42	5 58
12	○ 3 46.24	6 50.90	-○ 9 45.3	55 58.8	0.101350	○ 45	6 3
13	○ 10 37.14	+6 46.86	+○ 46 13.5	+55 58.2	0.095476	○ 48	6 8
14	○ 17 24.00	6 41.76	+ 1 42 11.7	55 44.5	0.089073	○ 51	6 13
15	○ 24 5.76	6 35.47	2 37 56.2	55 16.6	0.082125	○ 53	6 17
16	○ 30 41.23	6 27.90	3 33 12.8	54 33.8	0.074620	○ 56	6 22
17	○ 37 9.13	6 18.94	4 27 46.6	53 35.6	0.066551	○ 59	6 27
18	○ 43 28.07	5 21 22.2	5 21 22.2	0.057917	○ 1 1	6 32	

## Wahrer geozentrischer Ort.

O <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 17	○ 37 <sup>h</sup> 9.13	+6 18.94	+ 4 27 46.6	+53 35.6	0.066551	○ 59 <sup>h</sup>	6 27 <sup>h</sup>
18	○ 43 28.07	6 8.51	5 21 22.2	52 21.4	0.057917	I I	6 32
19	○ 49 36.58	5 56.57	6 13 43.6	50 51.3	0.048725	I 3	6 36
20	○ 55 33.15	5 43.08	7 4 34.9	49 5.5	0.038987	I 5	6 41
21	I 1 16.23	+5 28.06	7 53 40.4	+47 4.6	0.028723	I 7	6 45
22	I 6 44.29	5 11.54	+ 8 40 45.0	44 49.2	0.017959	I 8	6 50
23	I 11 55.83	4 53.56	9 25 34.2	42 20.3	0.006730	I 10	6 54
24	I 16 49.39	4 34.21	10 7 54.5	39 38.9	0.995076	I 11	6 58
25	I 21 23.60	4 13.58	10 47 33.4	36 46.3	0.983043	I 11	7 2
26	I 25 37.18	+3 51.78	11 24 19.7	+33 43.4	0.970683	I 12	7 5
27	I 29 28.96	3 28.96	+11 58 3.1	30 31.5	0.958052	I 11	7 8
28	I 32 57.92	3 5.23	12 28 34.6	27 11.5	0.945210	I 11	7 11
29	I 36 3.15	2 40.76	12 55 46.1	23 44.3	0.932223	I 10	7 13
30	I 38 43.91	2 15.74	13 19 30.4	20 11.0	0.919157	I 9	7 16
31	I 40 59.65	+1 50.33	13 39 41.4	+16 32.6	0.906084	I 7	7 18
April 1	I 42 49.98	I 24.73	-13 56 14.0	12 49.9	0.893078	I 5	7 19
2	I 44 14.71	○ 59.20	14 9 3.9	9 4.0	0.880216	I 3	7 21
3	I 45 13.91	○ 33.97	14 18 7.9	5 16.2	0.867578	I 0	7 22
4	I 45 47.88	+0 9.30	14 23 24.1	+ 1 28.0	0.855247	○ 56	7 22
5	I 45 57.18	-○ 14.50	14 24 52.1	- 2 19.0	0.843305	○ 52	7 22
6	I 45 42.68	○ 37.15	+14 22 33.1	6 2.7	0.831837	○ 48	7 22
7	I 45 5.53	○ 58.32	14 16 30.4	9 40.8	0.820929	○ 44	7 21
8	I 44 7.21	I 17.71	14 6 49.6	13 10.9	0.810663	○ 39	7 20
9	I 42 49.50	I 35.01	13 53 38.7	16 29.7	0.801120	○ 34	7 19
10	I 41 14.49	I 49.94	13 37 9.0	-19 34.4	0.792376	○ 28	7 18
11	I 39 24.55	2 2.28	-13 17 34.6	22 21.9	0.784499	○ 22	7 16
12	I 37 22.27	2 11.84	12 55 12.7	24 49.1	0.777551	○ 16	7 13
13	I 35 10.43	2 18.50	12 30 23.6	26 53.5	0.771581	○ 10	7 11
14	I 32 51.93	2 22.20	12 3 30.1	28 32.9	0.766626	○ 4	7 8
15	I 30 29.73	-2 22.96	11 34 57.2	-29 45.4	0.762710	23 58	7 6
16	I 28 6.77	2 20.90	+11 5 11.8	30 30.6	0.759844	23 51	7 3
17	I 25 45.87	2 16.15	10 34 41.2	30 48.2	0.758023	23 45	7 0
18	I 23 29.72	2 8.92	10 3 53.0	30 38.6	0.757229	23 39	6 57
19	I 21 20.80	I 59.47	9 33 14.4	30 3.2	0.757431	23 33	6 54
20	I 19 21.33	I 48.09	9 3 11.2	-29 4.1	0.758586	23 27	6 52
21	I 17 33.24	I 35.08	+ 8 34 7.1	27 43.6	0.760644	23 21	6 49
22	I 15 58.16	I 20.73	8 6 23.5	26 4.3	0.763546	23 15	6 46
23	I 14 37.43	I 5.33	7 40 19.2	24 9.1	0.767229	23 10	6 44
24	I 13 32.10	○ 49.18	7 16 10.1	22 0.9	0.771624	23 5	6 42
25	I 12 42.92		6 54 9.2	9.776664	23 0	6 40	

## Wahrer geozentrischer Ort.

Mittl. Zeit <sup>h</sup>	AR.	Dif.	Dekl.	Dif.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
April 24	1 13 32.10	- 0 49.18	+ 7 16 10.1	- 22 0.9	9.771624	23 5	6 42
25	1 12 42.92	0 32.51	6 54 9.2	19 42.5	9.776664	23 0	6 40
26	1 12 10.41	- 0 15.54	6 34 26.7	17 16.5	9.782281	22 56	6 38
27	1 11 54.87	+ 0 1.53	6 17 10.2	14 45.2	9.788409	22 52	6 37
28	1 11 56.40	+ 0 18.55	6 2 25.0	- 12 10.9	9.794986	22 48	6 35
29	1 12 14.95	0 35.37	+ 5 50 14.1	9 35.5	9.801952	22 44	6 34
Mai 30	1 12 50.32	0 51.89	5 40 38.6	7 0.2	9.809252	22 41	6 33
1	1 13 42.21	1 8.04	5 33 38.4	4 26.4	9.816835	22 38	6 33
2	1 14 50.25	1 23.77	5 29 12.0	- 1 55.4	9.824655	22 35	6 32
3	1 16 14.02	+ 1 39.02	5 27 16.6	+ 0 32.1	9.832670	22 32	6 32
4	1 17 53.04	1 53.78	+ 5 27 48.7	2 55.6	9.840843	22 30	6 32
5	1 19 46.82	2 8.04	5 30 44.3	5 14.6	9.849141	22 28	6 33
6	1 21 54.86	2 21.82	5 35 58.9	7 28.7	9.857534	22 26	6 33
7	1 24 16.68	2 35.11	5 43 27.6	9 37.7	9.865996	22 25	6 34
8	1 26 51.79	+ 2 47.96	5 53 5.3	+ 11 41.6	9.874506	22 23	6 35
9	1 29 39.75	3 0.37	+ 6 4 46.9	13 40.2	9.883043	22 22	6 36
10	1 32 40.12	3 12.38	6 18 27.1	15 33.5	9.891590	22 21	6 37
11	1 35 52.50	3 24.02	6 34 0.6	17 21.7	9.900132	22 20	6 38
12	1 39 16.52	3 35.34	6 51 22.3	19 4.7	9.908657	22 20	6 40
13	1 42 51.86	+ 3 46.37	7 10 27.0	+ 20 42.6	9.917152	22 20	6 41
14	1 46 38.23	3 57.15	+ 7 31 9.6	22 15.6	9.925606	22 19	6 43
15	1 50 35.38	4 7.72	7 53 25.2	23 43.7	9.934012	22 19	6 45
16	1 54 43.10	4 18.12	8 17 8.9	25 7.0	9.942362	22 20	6 47
17	1 59 1.22	4 28.38	8 42 15.9	26 25.5	9.950648	22 20	6 50
18	2 3 29.60	+ 4 38.56	9 8 41.4	+ 27 39.4	9.958863	22 20	6 52
19	2 8 8.16	4 48.69	+ 9 36 20.8	28 48.6	9.967001	22 21	6 55
20	2 12 56.85	4 58.80	10 5 9.4	29 53.2	9.975056	22 22	6 57
21	2 17 55.65	5 8.93	10 35 2.6	30 53.1	9.983022	22 23	7 0
22	2 23 4.58	5 19.14	11 5 55.7	31 48.4	9.990892	22 24	7 3
23	2 28 23.72	+ 5 29.44	11 37 44.1	+ 32 38.9	9.998659	22 26	7 6
24	2 33 53.16	5 39.86	+ 12 10 23.0	33 24.5	0.006316	22 27	7 9
25	2 39 33.02	5 50.45	12 43 47.5	34 5.1	0.013856	22 29	7 12
26	2 45 23.47	6 1.21	13 17 52.6	34 40.3	0.021270	22 31	7 16
27	2 51 24.68	6 12.18	13 52 32.9	35 10.0	0.028549	22 33	7 19
28	2 57 36.86	+ 6 23.38	14 27 42.9	+ 35 33.8	0.035683	22 35	7 23
29	3 4 0.24	6 34.80	+ 15 3 16.7	35 51.3	0.042659	22 38	7 26
30	3 10 35.04	6 46.46	15 39 8.0	36 2.2	0.049465	22 40	7 30
31	3 17 21.50	6 58.33	16 15 10.2	36 5.8	0.056087	22 43	7 33
Juni 1	3 24 19.83	7 10.42	16 51 16.0	36 1.7	0.062510	22 46	7 37
2	3 31 30.25		17 27 17.7		0.068717	22 49	7 41

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	halber Tag- bogen
Juni	1 3 24 <sup>m</sup> 19.83	+7 10.42	+16° 51' 16.0	+36° 1.7	0.062510	22° 46'	7 37
	2 3 31 30.25	7 22.69	17 27 17.7	35 49.3	0.068717	22 49	7 41
	3 3 38 52.94	7 35.09	18 3 7.0	35 27.8	0.074690	22 53	7 45
	4 3 46 28.03	7 47.55	18 38 34.8	34 56.7	0.080408	22 56	7 49
	5 3 54 15.58	+8 0.00	19 13 31.5	+34 15.4	0.085851	23 0	7 53
	6 4 2 15.58	8 12.33	+19 47 46.9	33 23.1	0.090997	23 4	7 56
	7 4 10 27.91	8 24.43	20 21 10.0	32 19.4	0.095822	23 9	8 0
	8 4 18 52.34	8 36.15	20 53 29.4	31 3.8	0.100303	23 13	8 4
	9 4 27 28.49	8 47.34	21 24 33.2	29 35.9	0.104417	23 18	8 8
	10 4 36 15.83	+8 57.82	21 54 9.1	+27 55.8	0.108141	23 23	8 11
	11 4 45 13.65	9 7.42	+22 22 4.9	26 3.6	0.111453	23 28	8 15
	12 4 54 21.07	9 15.97	22 48 8.5	23 59.7	0.114334	23 33	8 18
	13 5 3 37.04	9 23.29	23 12 8.2	21 44.8	0.116766	23 38	8 21
	14 5 13 0.33	9 29.23	23 33 53.0	19 20.2	0.118736	23 43	8 24
	15 5 22 29.56	+9 33.69	23 53 13.2	+16 47.0	0.120235	23 49	8 26
	16 5 32 3.25	9 36.57	+24 10 0.2	14 6.8	0.121257	23 55	8 28
	17 5 41 39.82	9 37.82	24 24 7.0	11 21.5	0.121801	0 0	8 30
	18 5 51 17.64	9 37.45	24 35 28.5	8 32.9	0.121872	0 6	8 32
	19 6 0 55.09	9 35.48	24 44 1.4	5 42.9	0.121479	0 12	8 33
	20 6 10 30.57	+9 32.00	24 49 44.3	+2 53.2	0.120634	0 17	8 33
	21 6 20 2.57	9 27.10	+24 52 37.5	+0 5.5	0.119353	0 23	8 34
	22 6 29 29.67	9 20.92	24 52 43.0	-2 38.7	0.117656	0 28	8 34
	23 6 38 50.59	9 13.58	24 50 4.3	5 17.9	0.115563	0 34	8 34
	24 6 48 4.17	9 5.25	24 44 46.4	7 51.2	0.113096	0 39	8 33
	25 6 57 9.42	+8 56.06	24 36 55.2	-10 17.9	0.110279	0 44	8 32
	26 7 6 5.48	8 46.17	+24 26 37.3	12 37.1	0.107134	0 49	8 30
	27 7 14 51.65	8 35.71	24 14 0.2	14 48.7	0.103685	0 54	8 29
	28 7 23 27.36	8 24.79	23 59 11.5	16 52.2	0.099953	0 59	8 27
	29 7 31 52.15	8 13.54	23 42 19.3	18 47.6	0.095960	1 3	8 25
	30 7 40 5.69	+8 2.05	23 23 31.7	-20 34.8	0.091725	1 8	8 22
Juli	1 7 48 7.74	7 50.40	+23 2 56.9	22 14.1	0.087266	1 12	8 20
	2 7 55 58.14	7 38.65	22 40 42.8	23 45.6	0.082599	1 15	8 17
	3 8 3 36.79	7 26.87	22 16 57.2	25 9.3	0.077740	1 19	8 14
	4 8 11 3.66	7 15.11	21 51 47.9	26 25.8	0.072703	1 23	8 11
	5 8 18 18.77	+7 3.38	21 25 22.1	-27 35.1	0.067499	1 26	8 8
	6 8 25 22.15	6 51.73	+20 57 47.0	28 37.5	0.062140	1 29	8 4
	7 8 32 13.88	6 40.16	20 29 9.5	29 33.3	0.056635	1 32	8 1
	8 8 38 54.04	6 28.68	19 59 36.2	30 22.9	0.050992	1 35	7 58
	9 8 45 22.72	6 17.30	19 29 13.3	31 6.3	0.045220	1 37	7 54
	10 8 51 40.02		18 58 7.0		0.039324	1 40	7 51

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Dift.	Dekl.	Dift.	Log. Δ	Östl. Stunden-Winkel	Halber Tagbogen
Juli	9 8 <sup>h</sup> 45 <sup>m</sup> 22.72	+ 6 <sup>m</sup> 17.30	+ 19 <sup>o</sup> 29 <sup>r</sup> 13.3	- 31 <sup>r</sup> 6.3	0.045220	I 37 <sup>h</sup> 37 <sup>m</sup>	7 54
	10 8 51 40.02	6 6.03	18 58 7.0	31 43.8	0.039324	I 40 40	7 51
	11 8 57 46.05	5 54.85	18 26 23.2	32 15.6	0.033309	I 42 42	7 47
	12 9 3 40.90	5 43.75	17 54 7.6	32 42.0	0.027181	I 44 44	7 43
	13 9 9 24.65	+ 5 32.71	17 21 25.6		0.020943	I 46 46	7 40
	14 9 14 57.36	5 21.71	+ 16 48 22.6	33 18.6	0.014598	I 47 47	7 37
	15 9 20 19.07	5 10.73	16 15 4.0	33 29.2	0.008150	I 49 49	7 33
	16 9 25 29.80	4 59.76	15 41 34.8	33 34.8	0.001600	I 50 50	7 30
	17 9 30 29.56	4 48.76	15 8 0.0		9.994952	I 51 51	7 27
	18 9 35 18.32	+ 4 37.71	14 34 24.7	33 35.3	9.988207	I 52 52	7 23
	19 9 39 56.03	4 26.59	+ 14 0 53.9	33 21.3	9.981367	I 52 52	7 20
	20 9 44 22.62	4 15.36	13 27 32.6	33 6.7	9.974435	I 53 53	7 17
	21 9 48 37.98	4 3.97	12 54 25.9	32 47.1	9.967412	I 53 53	7 13
	22 9 52 41.95	3 52.41	12 21 38.8	32 22.3	9.960301	I 53 53	7 10
	23 9 56 34.36	+ 3 40.65	11 49 16.5		9.953104	I 53 53	7 7
	24 10 0 15.01	3 28.64	+ 11 17 24.3	31 16.7	9.945825	I 53 53	7 4
	25 10 3 43.65	3 16.33	10 46 7.6	30 35.5	9.938468	I 53 53	7 1
	26 10 6 59.98	3 3.70	10 15 32.1	29 48.4	9.931037	I 52 52	6 58
	27 10 10 3.68	2 50.71	9 45 43.7	28 55.3	9.923539	I 51 51	6 55
	28 10 12 54.39	+ 2 37.31	9 16 48.4		9.915981	I 50 50	6 53
	29 10 15 31.70	2 23.48	+ 8 48 52.6	26 49.7	9.908371	I 49 49	6 50
	30 10 17 55.18	2 9.17	8 22 2.9	25 36.7	9.900720	I 47 47	6 48
	31 Aug. I 10 20 4.35	1 54.35	7 56 26.2	24 16.2	9.893040	I 45 45	6 46
	1 10 21 58.70	1 39.01	7 32 10.0	22 48.1	9.885348	I 43 43	6 43
	2 10 23 37.71	+ 1 23.11	7 9 21.9		9.877661	I 41 41	6 41
	3 10 25 0.82	1 6.64	+ 6 48 9.8	19 27.6	9.870001	I 38 38	6 39
	4 10 26 7.46	0 49.62	6 28 42.2	17 34.4	9.862393	I 35 35	6 38
	5 10 26 57.08	0 32.07	6 11 7.8	15 32.4	9.854867	I 32 32	6 36
	6 10 27 29.15	+ 0 14.01	5 55 35.4	13 21.4	9.847458	I 29 29	6 35
	7 10 27 43.16	- 0 4.48	5 42 14.0		9.840204	I 25 25	6 34
	8 10 27 38.68	0 23.32	+ 5 31 12.7	8 32.3	9.833151	I 21 21	6 33
	9 10 27 15.36	0 42.39	5 22 40.4	5 54.6	9.826351	I 17 17	6 32
	10 10 26 32.97	1 1.52	5 16 45.8	3 9.0	9.819861	I 12 12	6 31
	11 10 25 31.45	1 20.48	5 13 36.8	- 0 16.4	9.813745	I 7 7	6 31
	12 10 24 10.97	- 1 39.04	5 13 20.4		9.808073	I 2 2	6 31
	13 10 22 31.93	1 56.92	+ 5 16 2.1	5 43.6	9.802921	0 57 57	6 31
	14 10 20 35.01	2 13.73	5 21 45.7	8 47.1	9.798370	0 51 51	6 32
	15 10 18 21.28	2 29.12	5 30 32.8	11 49.3	9.794503	0 44 44	6 33
	16 10 15 52.16	2 42.67	5 42 22.1	14 47.1	9.791407	0 38 38	6 34
	17 10 13 9.49		5 57 9.2		9.789166	0 31 31	6 35

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 16	10 15 52.16	-2 42.67	+ 5 42 22.1	+ 14 47.1	9.791407	○ 38 <sup>h</sup> m <sup>m</sup>	6 34 <sup>h</sup> m <sup>m</sup>
	17 13 9.49	2 53.94	5 57 9.2	17 37.0	9.789166	○ 31 <sup>h</sup> m <sup>m</sup>	6 35 <sup>h</sup> m <sup>m</sup>
	18 10 15.55	3 2.50	6 14 46.2	20 15.1	9.787861	○ 24 <sup>h</sup> m <sup>m</sup>	6 36 <sup>h</sup> m <sup>m</sup>
	19 7 13.05	3 7.97	6 35 1.3	22 37.5	9.787567	○ 17 <sup>h</sup> m <sup>m</sup>	6 38 <sup>h</sup> m <sup>m</sup>
	20 4 5.08	-3 10.00	6 57 38.8	+ 24 40.6	9.788348	○ 10 <sup>h</sup> m <sup>m</sup>	6 40 <sup>h</sup> m <sup>m</sup>
	21 0 55.08	3 8.30	+ 7 22 19.4	26 20.9	9.790254	○ 3 <sup>h</sup> m <sup>m</sup>	6 42 <sup>h</sup> m <sup>m</sup>
	22 9 57 46.78	3 2.68	7 48 40.3	27 35.6	9.793320	23 56 <sup>h</sup> m <sup>m</sup>	6 45 <sup>h</sup> m <sup>m</sup>
	23 9 54 44.10	2 53.09	8 16 15.9	28 22.6	9.797562	23 49 <sup>h</sup> m <sup>m</sup>	6 47 <sup>h</sup> m <sup>m</sup>
	24 9 51 51.01	2 39.56	8 44 38.5	28 40.7	9.802974	23 43 <sup>h</sup> m <sup>m</sup>	6 50 <sup>h</sup> m <sup>m</sup>
	25 9 49 11.45	-2 22.24	9 13 19.2	+ 28 29.2	9.809532	23 36 <sup>h</sup> m <sup>m</sup>	6 53 <sup>h</sup> m <sup>m</sup>
	26 9 46 49.21	2 1.40	+ 9 41 48.4	27 48.7	9.817191	23 30 <sup>h</sup> m <sup>m</sup>	6 55 <sup>h</sup> m <sup>m</sup>
	27 9 44 47.81	1 37.39	10 9 37.1	26 40.5	9.825886	23 24 <sup>h</sup> m <sup>m</sup>	6 58 <sup>h</sup> m <sup>m</sup>
	28 9 43 10.42	1 10.63	10 36 17.6	25 6.0	9.835538	23 18 <sup>h</sup> m <sup>m</sup>	7 0 <sup>h</sup> m <sup>m</sup>
	29 9 41 59.79	0 41.61	11 1 23.6	23 7.6	9.846052	23 13 <sup>h</sup> m <sup>m</sup>	7 3 <sup>h</sup> m <sup>m</sup>
	30 9 41 18.18	-0 10.82	11 24 31.2	+ 20 47.5	9.857324	23 8 <sup>h</sup> m <sup>m</sup>	7 5 <sup>h</sup> m <sup>m</sup>
	31 9 41 7.36	+ 0 21.22	+ 11 45 18.7	18 8.5	9.869242	23 4 <sup>h</sup> m <sup>m</sup>	7 7 <sup>h</sup> m <sup>m</sup>
Sept. 1	9 41 28.58	0 53.99	12 3 27.2	15 13.0	9.881690	23 0 <sup>h</sup> m <sup>m</sup>	7 8 <sup>h</sup> m <sup>m</sup>
	2 9 42 22.57	1 27.00	12 18 40.2	12 3.8	9.894551	22 57 <sup>h</sup> m <sup>m</sup>	7 10 <sup>h</sup> m <sup>m</sup>
	3 9 43 49.57	1 59.80	12 30 44.0	8 43.3	9.907708	22 55 <sup>h</sup> m <sup>m</sup>	7 11 <sup>h</sup> m <sup>m</sup>
	4 9 45 49.37	+ 2 31.94	12 39 27.3	+ 5 14.0	9.921046	22 53 <sup>h</sup> m <sup>m</sup>	7 12 <sup>h</sup> m <sup>m</sup>
	5 9 48 21.31	3 3.02	+ 12 44 41.3	+ 1 38.3	9.934456	22 52 <sup>h</sup> m <sup>m</sup>	7 12 <sup>h</sup> m <sup>m</sup>
	6 9 51 24.33	3 32.70	12 46 19.6	- 2 1.4	9.947835	22 51 <sup>h</sup> m <sup>m</sup>	7 13 <sup>h</sup> m <sup>m</sup>
	7 9 54 57.03	4 0.68	12 44 18.2	5 42.6	9.961087	22 50 <sup>h</sup> m <sup>m</sup>	7 12 <sup>h</sup> m <sup>m</sup>
	8 9 58 57.71	4 26.68	12 38 35.6	9 23.0	9.974123	22 50 <sup>h</sup> m <sup>m</sup>	7 12 <sup>h</sup> m <sup>m</sup>
	9 10 3 24.39	+ 4 50.52	12 29 12.6	- 13 0.3	9.986862	22 51 <sup>h</sup> m <sup>m</sup>	7 11 <sup>h</sup> m <sup>m</sup>
	10 10 8 14.91	5 12.03	+ 12 16 12.3	16 32.3	9.999234	22 52 <sup>h</sup> m <sup>m</sup>	7 10 <sup>h</sup> m <sup>m</sup>
	11 10 13 26.94	5 31.15	11 59 40.0	19 56.7	0.011180	22 53 <sup>h</sup> m <sup>m</sup>	7 8 <sup>h</sup> m <sup>m</sup>
	12 10 18 58.09	5 47.82	11 39 43.3	23 11.8	0.022650	22 55 <sup>h</sup> m <sup>m</sup>	7 6 <sup>h</sup> m <sup>m</sup>
	13 10 24 45.91	6 2.09	11 16 31.5	26 15.8	0.033604	22 57 <sup>h</sup> m <sup>m</sup>	7 4 <sup>h</sup> m <sup>m</sup>
	14 10 30 48.00	+ 6 14.05	10 50 15.7	0.044014	0.044014	22 59 <sup>h</sup> m <sup>m</sup>	7 1 <sup>h</sup> m <sup>m</sup>
	15 10 37 2.05	6 23.80	+ 10 21 8.2	- 29 7.5	0.053859	23 1 <sup>h</sup> m <sup>m</sup>	6 59 <sup>h</sup> m <sup>m</sup>
	16 10 43 25.85	6 31.51	9 49 22.5	31 45.7	0.063130	23 3 <sup>h</sup> m <sup>m</sup>	6 56 <sup>h</sup> m <sup>m</sup>
	17 10 49 57.36	6 37.36	9 15 12.6	34 9.9	0.071824	23 6 <sup>h</sup> m <sup>m</sup>	6 53 <sup>h</sup> m <sup>m</sup>
	18 10 56 34.72	6 41.56	8 38 52.7	36 19.9	0.079946	23 9 <sup>h</sup> m <sup>m</sup>	6 49 <sup>h</sup> m <sup>m</sup>
	19 11 3 16.28	+ 6 44.32	8 0 37.1	38 15.6	0.087507	23 11 <sup>h</sup> m <sup>m</sup>	6 46 <sup>h</sup> m <sup>m</sup>
	20 11 10 0.60	6 45.82	+ 7 20 39.8	- 39 57.3	0.094522	23 14 <sup>h</sup> m <sup>m</sup>	6 42 <sup>h</sup> m <sup>m</sup>
	21 11 16 46.42	6 46.29	6 39 14.3	41 25.5	0.101011	23 17 <sup>h</sup> m <sup>m</sup>	6 39 <sup>h</sup> m <sup>m</sup>
	22 11 23 32.71	6 45.89	5 56 33.3	42 41.0	0.106995	23 20 <sup>h</sup> m <sup>m</sup>	6 35 <sup>h</sup> m <sup>m</sup>
	23 11 30 18.60	6 44.78	5 12 48.7	43 44.6	0.112496	23 23 <sup>h</sup> m <sup>m</sup>	6 31 <sup>h</sup> m <sup>m</sup>
	24 11 37 3.38		4 28 11.6	44 37.1	0.117540	23 25 <sup>h</sup> m <sup>m</sup>	6 27 <sup>h</sup> m <sup>m</sup>

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Sept. 23	II 30 <sup>m</sup> 18 <sup>s</sup> .60	+ 6 44.78	+ 5 12 <sup>o</sup> 48 <sup>s</sup> .7	- 44 37.1	O.112496	23 23 <sup>h</sup> 23 <sup>m</sup>	6 31 <sup>h</sup> 31 <sup>m</sup>
24	II 37 3.38	6 43.12	4 28 11.6	45 19.4	O.117540	23 25	6 27
25	II 43 46.50	6 41.04	3 42 52.2	45 52.6	O.122151	23 28	6 23
26	II 50 27.54	6 38.65	2 56 59.6	46 17.3	O.126352	23 31	6 19
27	II 57 6.19	+ 6 36.05	2 10 42.3	- 46 34.5	O.130166	23 34	6 15
28	II 3 42.24	6 33.31	+ 1 24 7.8	46 45.0	O.133617	23 36	6 11
29	II 10 15.55	6 30.50	+ 0 37 22.8	46 49.4	O.136725	23 39	6 7
30	II 16 46.05	6 27.68	- 0 9 26.6	46 48.3	O.139510	23 41	6 3
Okt. 1	II 23 13.73	6 24.90	0 56 14.9	46 42.5	O.141990	23 44	5 59
2	II 29 38.63	+ 6 22.18	I 42 57.4	- 46 32.4	O.144182	23 46	5 55
3	II 36 0.81	6 19.54	- 2 29 29.8	46 18.5	O.146102	23 49	5 51
4	II 42 20.35	6 17.03	3 15 48.3	46 1.0	O.147764	23 51	5 47
5	II 48 37.38	6 14.65	4 I 49.3	45 40.5	O.149182	23 54	5 43
6	II 54 52.03	6 12.41	4 47 29.8	45 17.1	O.150366	23 56	5 39
7	II 1 4.44	+ 6 10.32	5 32 46.9	- 44 51.3	O.151328	23 58	5 35
8	II 7 14.76	6 8.39	- 6 17 38.2	44 23.2	O.152077	○ ○	5 31
9	II 13 23.15	6 6.61	7 2 1.4	43 53.0	O.152621	○ 3	5 27
10	II 19 29.76	6 4.98	7 45 54.4	43 20.9	O.152968	○ 5	5 23
11	II 25 34.74	6 3.52	8 29 15.3	42 47.0	O.153125	○ 7	5 19
12	II 31 38.26	+ 6 2.21	9 12 2.3	- 42 11.4	O.153097	○ 9	5 15
13	II 37 40.47	6 1.05	- 9 54 13.7	41 34.4	O.152889	○ 11	5 11
14	II 43 41.52	6 0.02	10 35 48.1	40 55.8	O.152506	○ 13	5 7
15	II 49 41.54	5 59.14	II 16 43.9	40 15.9	O.151951	○ 15	5 4
16	II 55 40.68	5 58.40	II 56 59.8	39 34.6	O.151226	○ 17	5 ○
17	II 1 39.08	+ 5 57.78	II 36 34.4	- 38 52.2	O.150334	○ 19	4 56
18	II 7 36.86	5 57.27	- 13 15 26.6	38 8.4	O.149277	○ 21	4 52
19	II 13 34.13	5 56.87	13 53 35.0	37 23.4	O.148056	○ 23	4 49
20	II 19 31.00	5 56.58	14 30 58.4	36 37.2	O.146670	○ 25	4 45
21	II 25 27.58	5 56.36	15 7 35.6	35 49.8	O.145121	○ 27	4 42
22	II 31 23.94	+ 5 56.22	15 43 25.4	- 35 1.2	O.143407	○ 29	4 38
23	II 37 20.16	5 56.15	- 16 18 26.6	34 11.4	O.141526	○ 31	4 34
24	II 43 16.31	5 56.13	16 52 38.0	33 20.4	O.139478	○ 33	4 31
25	II 49 12.44	5 56.15	17 25 58.4	32 28.1	O.137261	○ 35	4 28
26	II 55 8.59	5 56.17	17 58 26.5	31 34.5	O.134871	○ 37	4 24
27	II 1 4.76	+ 5 56.19	18 30 1.0	- 30 39.6	O.132305	○ 39	4 21
28	II 7 0.95	5 56.22	- 19 0 40.6	29 43.4	O.129559	○ 41	4 18
29	II 12 57.17	5 56.19	19 30 24.0	28 45.9	O.126630	○ 43	4 14
30	II 18 53.36	5 56.10	19 59 9.9	27 46.9	O.123512	○ 45	4 11
31	II 24 49.46	5 55.91	20 26 56.8	26 46.5	O.120199	○ 47	4 8
Nov. 1	II 30 45.37	20 53 43.3			O.116685	○ 49	4 5

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tagbogen
Okt. 31	15 24 49.46		-20 26 56.8	-26 46.5	0.120199	○ 47	4 8
Nov. 1	15 30 45.37	+5 55.91	20 53 43.3	25 44.6	0.116685	○ 49	4 5
2	15 36 40.98	5 55.61	21 19 27.9	24 41.1	0.112965	○ 51	4 2
3	15 42 36.13	5 55.15	21 44 9.0	23 36.1	0.109030	○ 53	3 59
4	15 48 30.64	5 54.51	22 7 45.1	0.104873	○ 55	3 57	
		+5 53.63		-22 29.5			
5	15 54 24.27	5 52.47	-22 30 14.6	21 21.2	0.100485	○ 57	3 54
6	16 0 16.74	5 50.98	22 51 35.8	20 11.2	0.095857	○ 59	3 51
7	16 6 7.72	5 49.12	23 II 47.0	18 59.4	0.090979	I I	3 49
8	16 11 56.84	5 46.80	23 30 46.4	17 46.0	0.085841	I 3	3 47
9	16 17 43.64	5 43.95	23 48 32.4	0.080432	I 5	3 44	
10	16 23 27.59	+5 43.95	-24 5 3.2	15 13.7	0.074741	I 7	3 42
11	16 29 8.10	5 40.51	24 20 16.9	13 54.9	0.068755	I 8	3 40
12	16 34 44.49	5 36.39	24 34 11.8	12 34.3	0.062461	I 10	3 39
13	16 40 15.95	5 31.46	24 46 46.1	11 11.9	0.055847	I 12	3 37
14	16 45 41.57	5 25.62	24 57 58.0	0.048901	I 13	3 36	
		+5 18.76		-9 47.7			
15	16 51 0.33	5 10.72	-25 7 45.7	8 21.8	0.041609	I 14	3 34
16	16 56 11.05	5 1.35	25 16 7.5	6 54.1	0.033958	I 16	3 33
17	17 1 12.40	4 50.45	25 23 1.6	5 24.7	0.025936	I 17	3 32
18	17 6 2.85	4 37.85	25 28 26.3	3 53.6	0.017534	I 18	3 32
19	17 10 40.70	+4 23.32	25 32 19.9	0.008743	I 18	3 31	
20	17 15 4.02	4 6.63	-25 34 40.9	-2 21.0			
21	17 19 10.65	3 47.53	25 35 27.7	-○ 46.8	9.999557	I 19	3 31
22	17 22 58.18	3 25.76	25 34 38.5	9.989975	I 19	3 31	
23	17 26 23.94	3 1.08	25 32 11.8	+○ 49.2	9.980001	I 19	3 31
24	17 29 25.02	+2 33.25	25 28 5.9	2 26.7	9.969647	I 18	3 31
				4 5.9	9.958935	I 17	3 32
25	17 31 58.27	2 2.06	-25 22 19.0	+5 46.9	9.947899	I 16	3 32
26	17 34 0.33	1 27.38	25 14 49.0	7 30.0	9.936589	I 14	3 33
27	17 35 27.71	○ 49.21	25 5 33.8	9 15.2	9.925076	I 11	3 35
28	17 36 16.92	1○ 7.71	24 54 31.0	11 2.8	9.913452	I 8	3 36
29	17 36 24.63	-○ 36.75	24 41 37.9	12 53.1	9.901838	I 5	3 38
				+14 45.9			
30	17 35 47.88	1 23.46	-24 26 52.0	16 40.8	9.890386	I ○	3 40
Dez. 1	17 34 24.42	2 11.37	24 10 11.2	18 36.7	9.879281	○ 55	3 42
2	17 32 13.05	2 59.05	23 51 34.5	20 31.3	9.868739	○ 49	3 44
3	17 29 14.00	3 44.63	23 31 3.2	22 21.0	9.859006	○ 42	3 47
4	17 25 29.37	-4 25.95	23 8 42.2	+24 0.5	9.850346	○ 34	3 49
5	17 21 3.42	5 0.75	-22 44 41.7	25 23.0	9.843028	○ 26	3 52
6	17 16 2.67	5 26.82	22 19 18.7	26 20.4	9.837307	○ 17	3 55
7	17 10 35.85	5 42.44	21 52 58.3	26 44.7	9.833401	○ 7	3 58
8	17 4 53.41	5 46.52	21 26 13.6	26 29.4	9.831467	23 58	4 1
9	16 59 6.89	20 59 44.2	20 59 44.2	9.831586	23 48	4 4	

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Dez. 8	17 <sup>h</sup> 4 <sup>m</sup> 53.41	-5 <sup>m</sup> 46.52	-21 <sup>o</sup> 26' 13".6	+26' "	9.831467	23 <sup>h</sup> 58 <sup>m</sup>	4 <sup>h</sup> 1 <sup>m</sup>
9	16 59 6.89	5 38.87	20 59 44.2	25 30.3	9.831586	23 48	4 4
10	16 53 28.02	5 20.23	20 34 13.9	23 47.2	9.833748	23 38	4 7
11	16 48 7.79	4 52.05	20 10 26.7	21 24.1	9.837858	23 29	4 10
12	16 43 15.74	-4 16.34	19 49 2.6		9.843747	23 20	4 12
13	16 38 59.40	3 35.34	-19 30 34.5	15 8.6	9.851188	23 12	4 14
14	16 35 24.06	2 51.22	19 15 25.9	11 36.2	9.859922	23 4	4 16
15	16 32 32.84	2 5.90	19 3 49.7	8 0.3	9.869680	22 58	4 17
16	16 30 26.94	1 20.95	18 55 49.4	4 29.5	9.880199	22 52	4 18
17	16 29 5.99	-0 37.54	18 51 19.9		9.891240	22 46	4 19
18	16 28 28.45	+0 3.55	-18 50 9.7	-1 52.8	9.902592	22 42	4 19
19	16 28 32.00	0 41.82	18 52 2.5	4 36.8	9.914077	22 38	4 18
20	16 29 13.82	1 17.06	18 56 39.3	7 0.6	9.925549	22 35	4 18
21	16 30 30.88	1 49.22	19 3 39.9	9 3.7	9.936892	22 32	4 17
22	16 32 20.10	+2 18.37	19 12 43.6	-10 46.7	9.948019	22 30	4 16
23	16 34 38.47	2 44.68	-19 23 30.3	12 10.7	9.958864	22 28	4 15
24	16 37 23.15	3 8.35	19 35 41.0	13 17.1	9.969379	22 27	4 14
25	16 40 31.50	3 29.61	19 48 58.1	14 7.3	9.979533	22 26	4 13
26	16 44 1.11	3 48.70	20 3 5.4	14 42.9	9.989307	22 26	4 11
27	16 47 49.81	+4 5.83	20 17 48.3	-15 5.4	9.998690	22 26	4 9
28	16 51 55.64	4 21.22	-20 32 53.7	15 16.2	0.007680	22 26	4 7
29	16 56 16.86	4 35.06	20 48 9.9	15 16.7	0.016278	22 26	4 6
30	17 0 51.92	4 47.52	21 3 26.6	15 7.9	0.024490	22 27	4 4
31	17 5 39.44	4 58.77	21 18 34.5	14 50.8	0.032326	22 28	4 2
32	17 10 38.21	+5 8.95	21 33 25.3	-14 26.6	0.039796	22 29	4 1
33	17 15 47.16		-21 47 51.9		0.046913	22 30	3 59

## Wahrer geozentrischer Ort.

<sup>ob</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Jan.	1 15 <sup>h</sup> 37 <sup>m</sup> 46 <sup>s</sup> .13	+4 43.48	-16° 48' 6".1	-17 5.3	9.978161	20 <sup>h</sup> 59 <sup>m</sup>	4 31
	2 15 42 29.61	4 44.83	17 5 11.4	16 44.6	9.981411	21 0	4 30
	3 15 47 14.44	4 46.20	17 21 56.0	16 23.0	9.984629	21 0	4 28
	4 15 52 0.64	4 47.55	17 38 19.0	16 0.6	9.987815	21 1	4 26
	5 15 56 48.19	+4 48.88	17 54 19.6		9.990970	21 2	4 25
	6 16 1 37.07	4 50.21	-18 9 57.2	15 13.7	9.994093	21 3	4 23
	7 16 6 27.28	4 51.53	18 25 10.9	14 48.9	9.997186	21 4	4 21
	8 16 11 18.81	4 52.81	18 39 59.8	14 23.5	0.000247	21 5	4 20
	9 16 16 11.62	4 54.08	18 54 23.3	13 57.2	0.003278	21 6	4 18
	10 16 21 5.70	+4 55.33	19 8 20.5		0.006279	21 7	4 17
	11 16 26 1.03	4 56.54	-19 21 50.7	13 2.5	0.009250	21 8	4 15
	12 16 30 57.57	4 57.73	19 34 53.2	12 34.0	0.012191	21 9	4 14
	13 16 35 55.30	4 58.89	19 47 27.2	12 4.9	0.015102	21 10	4 12
	14 16 40 54.19	5 0.01	19 59 32.1	11 35.1	0.017984	21 11	4 11
	15 16 45 54.20	+5 1.11	20 11 7.2		0.020838	21 12	4 10
	16 16 50 55.31	5 2.17	-20 22 11.8	10 33.5	0.023663	21 13	4 9
	17 16 55 57.48	5 3.18	20 32 45.3	10 1.8	0.026460	21 14	4 7
	18 17 1 0.66	5 4.16	20 42 47.1	9 29.4	0.029229	21 15	4 6
	19 17 6 4.82	5 5.10	20 52 16.5	8 56.6	0.031970	21 16	4 5
	20 17 11 9.92	+5 6.00	21 1 13.1		0.034685	21 17	4 4
	21 17 16 15.92	5 6.85	-21 9 36.3	7 49.2	0.037373	21 18	4 3
	22 17 21 22.77	5 7.66	21 17 25.5	7 14.8	0.040035	21 20	4 2
	23 17 26 30.43	5 8.43	21 24 40.3	6 40.0	0.042671	21 21	4 2
	24 17 31 38.86	5 9.14	21 31 20.3	6 47	0.045282	21 22	4 1
	25 17 36 48.00	+5 9.81	21 37 25.0		0.047868	21 23	4 0
	26 17 41 57.81	5 10.44	-21 42 54.0	4 53.0	0.050429	21 24	4 0
	27 17 47 8.25	5 11.01	21 47 47.0	4 16.5	0.052965	21 26	3 59
	28 17 52 19.26	5 11.54	21 52 3.5	3 39.8	0.055478	21 27	3 58
	29 17 57 30.80	5 12.02	21 55 43.3	3 2.8	0.058967	21 28	3 58
	30 18 2 42.82	+5 12.46	21 58 46.1		0.060433	21 29	3 58
	31 18 7 55.28	5 12.84	-22 1 11.6	1 47.9	0.062876	21 31	3 57
Febr.	1 18 13 8.12	5 13.17	22 2 59.5	1 10.2	0.065297	21 32	3 57
	2 18 18 21.29	5 13.46	22 4 9.7	- 0 32.2	0.067695	21 33	3 57
	3 18 23 34.75	5 13.69	22 4 41.9	+ 0 5.9	0.070070	21 34	3 57
	4 18 28 48.44	+5 13.87	22 4 36.0	+ 0 44.1	0.072424	21 36	3 57
	5 18 34 2.31	5 13.99	-22 3 51.9	1 22.5	0.074756	21 37	3 57
	6 18 39 16.30	5 14.06	22 2 29.4	2 0.9	0.077066	21 38	3 57
	7 18 44 30.36	5 14.08	22 0 28.5	2 39.3	0.079354	21 40	3 57
	8 18 49 44.44	5 14.05	21 57 49.2	3 17.9	0.081620	21 41	3 58
	9 18 54 58.49		21 54 31.3		0.083865	21 42	3 58

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Febr. 8	18 <sup>b</sup> 49 <sup>m</sup> 44.44	+ 5 14.05	- 21 57 49.2	+ 3 17.9	0.081620	21 <sup>b</sup> 41 <sup>m</sup>	3 <sup>b</sup> 58 <sup>m</sup>
9	18 54 58.49	5 13.95	21 54 31.3	3 56.3	0.083865	21 42	3 58
10	19 ○ 12.44	5 13.80	21 50 35.0	4 34.7	0.086089	21 44	3 59
11	19 5 26.24	5 13.59	21 46 0.3	5 13.1	0.088292	21 45	3 59
12	19 10 39.83	+ 5 13.33	21 40 47.2	+ 5 51.3	0.090473	21 46	4 ○
13	19 15 53.16	5 13.02	- 21 34 55.9	6 29.2	0.092634	21 47	4 ○
14	19 21 6.18	5 12.66	21 28 26.7	7 7.1	0.094774	21 49	4 I
15	19 26 18.84	5 12.25	21 21 19.6	7 44.8	0.096894	21 50	4 2
16	19 31 31.09	5 11.78	21 13 34.8	8 22.2	0.098993	21 51	4 3
17	19 36 42.87	21 5 12.6	+ 8 59.3	0.101073	21 52	4 4	
18	19 41 54.13	5 10.71	- 20 56 13.3	9 36.2	0.103133	21 54	4 5
19	19 47 4.84	5 10.12	20 46 37.1	10 12.7	0.105173	21 55	4 6
20	19 52 14.96	5 9.48	20 36 24.4	10 48.8	0.107193	21 56	4 7
21	19 57 24.44	5 8.80	20 25 35.6	11 24.6	0.109195	21 57	4 8
22	20 2 33.24	+ 5 8.08	20 14 11.0	+ 12 0.0	0.111178	21 59	4 10
23	20 7 41.32	5 7.33	- 20 2 11.0	12 35.0	0.113142	22 ○	4 II
24	20 12 48.65	5 6.54	19 49 36.0	13 9.5	0.115088	22 I	4 12
25	20 17 55.19	5 5.73	19 36 26.5	13 43.6	0.117016	22 2	4 14
26	20 23 0.92	5 4.90	19 22 42.9	14 17.2	0.118926	22 3	4 15
27	20 28 5.82	+ 5 4.05	19 8 25.7	+ 14 50.3	0.120819	22 4	4 17
28	20 33 9.87	5 3.18	- 18 53 35.4	15 23.0	0.122694	22 6	4 18
29	20 38 13.05	5 2.28	18 38 12.4	15 55.1	0.124552	22 7	4 20
März 1	20 43 15.33	5 1.36	18 22 17.3	16 26.7	0.126393	22 8	4 22
2	20 48 16.69	5 0.44	18 5 50.6	16 57.8	0.128217	22 9	4 23
3	20 53 17.13	+ 4 59.51	17 48 52.8	+ 17 28.3	0.130025	22 10	4 25
4	20 58 16.64	4 58.57	- 17 31 24.5	17 58.3	0.131816	22 11	4 27
5	21 3 15.21	4 57.61	17 13 26.2	18 27.7	0.133590	22 12	4 29
6	21 8 12.82	4 56.65	16 54 58.5	18 56.5	0.135348	22 13	4 31
7	21 13 9.47	4 55.68	16 36 2.0	19 24.6	0.137089	22 14	4 33
8	21 18 5.15	+ 4 54.72	16 16 37.4	+ 19 52.2	0.138814	22 15	4 35
9	21 22 59.87	4 53.74	- 15 56 45.2	20 19.2	0.140522	22 16	4 37
10	21 27 53.61	4 52.77	15 36 26.0	20 45.6	0.142214	22 17	4 39
11	21 32 46.38	4 51.80	15 15 40.4	21 11.2	0.143890	22 18	4 41
12	21 37 38.18	4 50.83	14 54 29.2	21 36.2	0.145549	22 19	4 43
13	21 42 29.01	+ 4 49.86	14 32 53.0	+ 22 0.6	0.147192	22 20	4 45
14	21 47 18.87	4 48.91	- 14 10 52.4	22 24.2	0.148819	22 21	4 47
15	21 52 7.78	4 47.96	13 48 28.2	22 47.1	0.150430	22 21	4 49
16	21 56 55.74	4 47.02	13 25 41.1	23 9.4	0.152024	22 22	4 51
17	22 1 42.76	4 46.09	13 2 31.7	23 31.1	0.153602	22 23	4 54
18	22 6 28.85	12 39 0.6			0.155165	22 24	4 56

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 17	22 <sup>h</sup> 1 <sup>m</sup> 42.76	+4 46.09	-13° 2' 31.7"	+23 31.1	0.153602	22 23 <sup>m</sup>	4 54
18	22 6 28.85	4 45.17	12 39 0.6	23 51.9	0.155165	22 24	4 56
19	22 II 14.02	4 44.26	12 15 8.7	24 12.1	0.156712	22 25	4 58
20	22 15 58.28	4 43.38	11 50 56.6	24 31.6	0.158243	22 26	5 0
21	22 20 41.66	+4 42.52	11 26 25.0	+24 50.4	0.159759	22 26	5 3
22	22 25 24.18	4 41.67	-II 1 34.6	25 8.4	0.161259	22 27	5 5
23	22 30 5.85	4 40.85	10 36 26.2	25 25.8	0.162745	22 28	5 7
24	22 34 46.70	4 40.05	10 II 0.4	25 42.5	0.164215	22 29	5 10
25	22 39 26.75	4 39.27	9 45 17.9	25 58.5	0.165670	22 29	5 12
26	22 44 6.02	+4 38.52	9 19 19.4	+26 13.7	0.167111	22 30	5 14
27	22 48 44.54	4 37.80	- 8 53 5.7	26 28.3	0.168537	22 31	5 17
28	22 53 22.34	4 37.12	8 26 37.4	26 42.3	0.169948	22 31	5 19
29	22 57 59.46	4 36.46	7 59 55.1	26 55.5	0.171345	22 32	5 21
30	23 2 35.92	4 35.84	7 32 59.6	27 8.0	0.172728	22 33	5 24
31	23 7 11.76	+4 35.24	7 5 51.6	+27 19.9	0.174097	22 33	5 26
April 1	23 II 47.00	4 34.69	- 6 38 31.7	27 31.2	0.175452	22 34	5 29
2	23 16 21.69	4 34.17	6 11 0.5	27 41.8	0.176793	22 35	5 31
3	23 20 55.86	4 33.68	5 43 18.7	27 51.6	0.178119	22 35	5 34
4	23 25 29.54	4 33.24	5 15 27.1	28 0.8	0.179431	22 36	5 36
5	23 30 2.78	+4 32.82	4 47 26.3	+28 9.3	0.180729	22 37	5 39
6	23 34 35.60	4 32.44	- 4 19 17.0	28 17.1	0.182013	22 37	5 41
7	23 39 8.04	4 32.10	3 50 59.9	28 24.3	0.183283	22 38	5 44
8	23 43 40.14	4 31.78	3 22 35.6	28 30.7	0.184539	22 38	5 46
9	23 48 11.92	4 31.51	2 54 4.9	28 36.4	0.185780	22 39	5 49
10	23 52 43.43	+4 31.27	2 25 28.5	+28 41.5	0.187007	22 39	5 51
11	23 57 14.70	4 31.08	- I 56 47.0	28 45.9	0.188219	22 40	5 54
12	o 1 45.78	4 30.93	I 28 1.1	28 49.5	0.189417	22 41	5 56
13	o 6 16.71	4 30.80	o 59 11.6	28 52.5	0.190601	22 41	5 59
14	o 10 47.51	4 30.70	o 30 19.1	28 54.7	0.191771	22 42	6 1
15	o 15 18.21	+4 30.64	- o 1 24.4	+28 56.2	0.192926	22 42	6 4
16	o 19 48.85	4 30.63	+ o 27 31.8	28 57.0	0.194066	22 43	6 6
17	o 24 19.48	4 30.65	o 56 28.8	28 57.2	0.195192	22 43	6 9
18	o 28 50.13	4 30.71	I 25 26.0	28 56.6	0.196304	22 44	6 11
19	o 33 20.84	4 30.80	I 54 22.6	28 55.3	0.197402	22 45	6 14
20	o 37 51.64	+4 30.93	2 23 17.9	+28 53.3	0.198485	22 45	6 16
21	o 42 22.57	4 31.10	+ 2 52 11.2	28 50.6	0.199554	22 46	6 19
22	o 46 53.67	4 31.31	3 21 1.8	28 47.2	0.200610	22 46	6 21
23	o 51 24.98	4 31.56	3 49 49.0	28 43.1	0.201651	22 47	6 24
24	o 55 56.54	4 31.84	4 18 32.1	28 38.3	0.202678	22 48	6 26
25	I o 28.38		4 47 10.4	0.203691	22 48	6 29	

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
April 24	o 55 56.54	+ 4 31.84	+ 4 18 32.1	+ 28 38.3	0.202678	22 48	6 26
25	I 0 28.38	4 32.17	4 47 10.4	28 32.9	0.203691	22 48	6 29
26	I 5 0.55	4 32.53	5 15 43.3	28 26.7	0.204691	22 49	6 31
27	I 9 33.08	4 32.93	5 44 10.0	28 19.9	0.205677	22 49	6 34
28	I 14 6.01	+ 4 33.38	6 12 29.9	+ 28 12.5	0.206649	22 50	6 36
29	I 18 39.39	4 33.86	+ 6 40 42.4	28 4.3	0.207608	22 51	6 39
Mai 1	I 23 13.25	4 34.38	7 8 46.7	27 55.4	0.208554	22 51	6 41
2	I 27 47.63	4 34.94	7 36 42.1	27 45.8	0.209485	22 52	6 44
3	I 32 22.57	4 35.54	8 4 27.9	27 35.5	0.210403	22 52	6 46
4	I 36 58.11	+ 4 36.17	8 32 3.4	+ 27 24.6	0.211308	22 53	6 49
5	I 41 34.28	4 36.84	+ 8 59 28.0	27 12.9	0.212198	22 54	6 51
6	I 46 11.12	4 37.54	9 26 40.9	27 0.6	0.213075	22 54	6 54
7	I 50 48.66	4 38.27	9 53 41.5	26 47.5	0.213938	22 55	6 56
8	I 55 26.93	4 39.05	10 20 29.0	26 33.7	0.214787	22 56	6 59
9	I 59 0.98	+ 4 39.85	10 47 2.7	+ 26 19.2	0.215622	22 56	7 1
10	I 2 4 45.83	4 40.67	+ 11 13 21.9	26 4.0	0.216444	22 57	7 4
11	I 2 9 26.50	4 41.52	11 39 25.9	25 48.0	0.217250	22 58	7 6
12	I 2 14 8.02	4 42.41	12 5 13.9	25 31.3	0.218043	22 59	7 9
13	I 2 18 50.43	4 43.32	12 30 45.2	25 13.8	0.218822	22 59	7 11
14	I 2 23 33.75	+ 4 44.26	12 55 59.0	+ 24 55.7	0.219586	23 0	7 13
15	I 2 28 18.01	4 45.22	+ 13 20 54.7	24 36.8	0.220336	23 1	7 16
16	I 2 33 3.23	4 46.20	13 45 31.5	24 17.2	0.221071	23 2	7 18
17	I 2 37 49.43	4 47.19	14 9 48.7	23 56.8	0.221792	23 3	7 21
18	I 2 42 36.62	4 48.20	14 33 45.5	23 35.5	0.222498	23 3	7 23
19	I 2 47 24.82	+ 4 49.23	14 57 21.0	+ 23 13.6	0.223190	23 4	7 26
20	I 2 52 14.05	4 50.28	+ 15 20 34.6	22 51.1	0.223867	23 5	7 28
21	I 2 57 4.33	4 51.34	15 43 25.7	22 27.8	0.224530	23 6	7 30
22	I 3 1 55.67	4 52.41	16 5 53.5	22 3.7	0.225179	23 7	7 33
23	I 3 6 48.08	4 53.49	16 27 57.2	21 38.9	0.225813	23 8	7 35
24	I 3 11 41.57	+ 4 54.58	16 49 36.1	+ 21 13.4	0.226433	23 9	7 37
25	I 3 16 36.15	4 55.69	+ 17 10 49.5	20 47.3	0.227038	23 10	7 39
26	I 3 21 31.84	4 56.79	17 31 36.8	20 20.4	0.227630	23 11	7 41
27	I 3 26 28.63	4 57.91	17 51 57.2	19 52.9	0.228207	23 12	7 43
28	I 3 31 26.54	4 59.03	18 11 50.1	19 24.7	0.228771	23 13	7 46
29	I 3 36 25.57	+ 5 0.14	18 31 14.8	+ 18 55.7	0.229320	23 14	7 48
30	I 3 41 25.71	5 1.26	+ 18 50 10.5	18 26.1	0.229856	23 15	7 50
31	I 3 46 26.97	5 2.37	19 8 36.6	17 55.8	0.230377	23 16	7 52
Juni 1	I 3 51 29.34	5 3.48	19 26 32.4	17 25.1	0.230884	23 17	7 54
2	I 3 56 32.82	5 4.59	19 43 57.5	16 53.5	0.231377	23 18	7 56
	I 4 1 37.41	20 0 51.0	20 0 51.0		0.231856	23 19	7 58

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Juni	1 3 56 <sup>m</sup> 32.82	+5 4.59	+19 43 57.5	+16 53.5	0.231377	23 18 <sup>m</sup>	7 56 <sup>m</sup>
	2 4 1 37.41	5 5.68	20 0 51.0	16 21.2	0.231856	23 19	7 58
	3 4 6 43.09	5 6.75	20 17 12.2	15 48.4	0.232321	23 21	8 0
	4 4 II 49.84	5 7.81	20 33 0.6	15 14.9	0.232771	23 22	8 2
	5 4 16 57.65	+5 8.86	20 48 15.5	+14 40.9	0.233207	23 23	8 3
	6 4 22 6.51	5 9.89	+21 2 56.4	14 6.2	0.233629	23 24	8 5
	7 4 27 16.40	5 10.89	21 17 2.6	13 31.0	0.234037	23 25	8 7
	8 4 32 27.29	5 11.86	21 30 33.6	12 55.2	0.234429	23 27	8 8
	9 4 37 39.15	5 12.80	21 43 28.8	12 18.9	0.234807	23 28	8 10
	10 4 42 51.95	+5 13.71	21 55 47.7	+11 41.9	0.235171	23 29	8 11
	II 4 48 5.66	5 14.59	+22 7 29.6	11 4.5	0.235519	23 30	8 13
	12 4 53 20.25	5 15.42	22 18 34.1	10 26.5	0.235853	23 32	8 14
	13 4 58 35.67	5 16.22	22 29 0.6	9 48.2	0.236172	23 33	8 15
	14 5 3 51.89	5 16.98	22 38 48.8	9 9.4	0.236476	23 34	8 17
	15 5 9 8.87	+5 17.69	22 47 58.2	+8 30.1	0.236765	23 36	8 18
	16 5 14 26.56	5 18.35	+22 56 28.3	7 50.4	0.237038	23 37	8 19
	17 5 19 44.91	5 18.96	23 4 18.7	7 10.4	0.237297	23 38	8 20
	18 5 25 3.87	5 19.52	23 11 29.1	6 30.0	0.237541	23 40	8 21
	19 5 30 23.39	5 20.04	23 17 59.1	5 49.3	0.237770	23 41	8 21
	20 5 35 43.43	+5 20.50	23 23 48.4	+5 8.3	0.237984	23 43	8 22
	21 5 41 3.93	5 20.90	+23 28 56.7	4 27.1	0.238183	23 44	8 23
	22 5 46 24.83	5 21.25	23 33 23.8	3 45.7	0.238367	23 45	8 23
	23 5 51 46.08	5 21.54	23 37 9.5	3 4.0	0.238537	23 47	8 24
	24 5 57 7.62	5 21.79	23 40 13.5	2 22.1	0.238692	23 48	8 24
	25 6 2 29.41	+5 21.99	23 42 35.6	+1 40.2	0.238832	23 50	8 25
	26 6 7 51.40	5 22.12	+23 44 15.8	0 58.2	0.238958	23 51	8 25
	27 6 13 13.52	5 22.19	23 45 14.0	- 0 15.9	0.239070	23 52	8 25
	28 6 18 35.71	5 22.21	23 45 29.9	- 0 26.3	0.239167	23 54	8 25
	29 6 23 57.92	5 22.18	23 45 3.6	1 8.5	0.239250	23 55	8 25
	30 6 29 20.10	+5 22.09	23 43 55.1	- 1 50.8	0.239318	23 57	8 25
Juli	1 6 34 42.19	5 21.95	+23 42 4.3	2 33.0	0.239371	23 58	8 25
	2 6 40 4.14	5 21.74	23 39 31.3	3 15.1	0.239410	0 0	8 24
	3 6 45 25.88	5 21.48	23 36 16.2	3 57.2	0.239435	0 1	8 24
	4 6 50 47.36	5 21.17	23 32 19.0	4 39.1	0.239445	0 2	8 23
	5 6 56 8.53	+5 20.80	23 27 39.9	- 5 20.8	0.239441	0 4	8 23
	6 7 1 29.33	5 20.38	+23 22 19.1	6 2.4	0.239422	0 5	8 22
	7 7 6 49.71	5 19.91	23 16 16.7	6 43.9	0.239388	0 7	8 21
	8 7 12 9.62	5 19.39	23 9 32.8	7 25.0	0.239339	0 8	8 20
	9 7 17 29.01	5 18.81	23 2 7.8	8 5.8	0.239275	0 9	8 19
	10 7 22 47.82		22 54 2.0		0.239197	0 11	8 18

## Wahrer geozentrischer Ort.

<sup>o</sup> Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- hogen
Juli	9 7 17 29.01	+5 18.81	+23 2 7.8	- 8 5.8	0.239275	○ 9	8 19
	10 7 22 47.82	5 18.18	22 54 2.0	8 46.4	0.239197	○ 11	8 18
	11 7 28 6.00	5 17.51	22 45 15.6	9 26.7	0.239104	○ 12	8 17
	12 7 33 23.51	5 16.79	22 35 48.9	10 6.6	0.238995	○ 13	8 16
	13 7 38 40.30	+5 16.02	22 25 42.3	- 10 46.1	0.238871	○ 15	8 15
	14 7 43 56.32	5 15.20	+22 14 56.2	11 25.2	0.238733	○ 16	8 14
	15 7 49 11.52	5 14.35	22 3 31.0	12 3.8	0.238580	○ 17	8 12
	16 7 54 25.87	5 13.46	21 51 27.2	12 42.0	0.238412	○ 19	8 11
	17 7 59 39.33	5 12.53	21 38 45.2	13 19.8	0.238228	○ 20	8 9
	18 8 4 51.86	5 11.56	21 25 25.4	- 13 57.0	0.238030	○ 21	8 8
	19 8 10 3.42	5 10.56	- 21 11 28.4	14 33.6	0.237816	○ 23	8 6
	20 8 15 13.98	5 9.54	20 56 54.8	15 9.8	0.237588	○ 24	8 4
	21 8 20 23.52	5 8.49	20 41 45.0	15 45.3	0.237345	○ 25	8 3
	22 8 25 32.01	5 7.42	20 25 59.7	16 20.4	0.237087	○ 26	8 1
	23 8 30 39.43	+5 6.32	20 9 39.3	- 16 54.8	0.236815	○ 27	7 59
	24 8 35 45.75	5 5.22	+19 52 44.5	17 28.6	0.236528	○ 29	7 57
	25 8 40 50.97	5 4.10	19 35 15.9	18 1.9	0.236227	○ 30	7 55
	26 8 45 55.07	5 2.97	19 17 14.0	18 34.5	0.235912	○ 31	7 53
	27 8 50 58.04	5 1.83	18 58 39.5	19 6.4	0.235582	○ 32	7 51
	28 8 55 59.87	+5 0.68	18 39 33.1	- 19 37.7	0.235238	○ 33	7 49
	29 9 1 0.55	4 59.53	+18 19 55.4	20 8.4	0.234880	○ 34	7 47
	30 9 6 0.08	4 58.37	17 59 47.0	20 38.4	0.234507	○ 35	7 44
	31 9 10 58.45	4 57.23	17 39 8.6	21 7.8	0.234120	○ 36	7 42
Aug.	1 9 15 55.68	4 56.08	17 18 0.8	21 36.5	0.233306	○ 38	7 38
	2 9 20 51.76	+4 54.93	16 56 24.3	- 22 4.4			
	3 9 25 46.69	4 53.79	- 16 34 19.9	22 31.7	0.232877	○ 39	7 35
	4 9 30 40.48	4 52.67	16 11 48.2	22 58.4	0.232434	○ 40	7 33
	5 9 35 33.15	4 51.55	15 48 49.8	23 24.3	0.231977	○ 41	7 31
	6 9 40 24.70	4 50.45	15 25 25.5	23 49.5	0.231505	○ 42	7 28
	7 9 45 15.15	+4 49.35	15 1 36.0	- 24 14.0	0.231019	○ 43	7 26
	8 9 50 4.50	4 48.28	- 14 37 22.0	24 37.9	0.230519	○ 44	7 24
	9 9 54 52.78	4 47.22	14 12 44.1	25 0.9	0.230005	○ 45	7 21
	10 9 59 40.00	4 46.19	13 47 43.2	25 23.2	0.229477	○ 45	7 19
	11 10 4 26.19	4 45.16	13 22 20.0	25 44.8	0.228934	○ 46	7 16
	12 10 9 11.35	+4 44.15	12 56 35.2	- 26 5.6	0.228376	○ 47	7 14
	13 10 13 55.50	4 43.17	- 12 30 29.6	26 25.8	0.227804	○ 48	7 11
	14 10 18 38.67	4 42.21	12 4 3.8	26 45.1	0.227217	○ 49	7 8
	15 10 23 20.88	4 41.27	11 37 18.7	27 3.7	0.226616	○ 50	7 6
	16 10 28 2.15	4 40.36	11 10 15.0	27 21.5	0.226000	○ 50	7 3
	17 10 32 42.51		10 42 53.5		0.225370	○ 51	7 1

## Wahrer geozentrischer Ort.

<sup>o</sup> <sup>h</sup> Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 16	10 28 <sup>m</sup> 2.15	+ 4 40.36	+ 11 10 15.0	- 27 21.5	0.226000	○ 50 <sup>h</sup> 7 <sup>m</sup>	7 3
	17 32 42.51	4 39.48	10 42 53.5	27 38.7	0.225370	○ 51	7 1
	18 37 21.99	4 38.62	10 15 14.8	27 55.0	0.224726	○ 52	6 58
	19 42 0.61	4 37.80	9 47 19.8	28 10.6	0.224068	○ 52	6 56
	20 46 38.41	+ 4 37.01	9 19 9.2	- 28 25.5	0.223396	○ 53	6 53
	21 51 15.42	4 36.26	+ 8 50 43.7	28 39.7	0.222710	○ 54	6 50
	22 55 51.68	4 35.53	8 22 4.0	28 53.1	0.222010	○ 54	6 48
	23 II 0 27.21	4 34.85	7 53 10.9	29 5.8	0.221296	○ 55	6 45
	24 II 5 2.06	4 34.20	7 24 5.1	29 17.8	0.220568	○ 56	6 43
	25 II 9 36.26	+ 4 33.59	6 54 47.3	- 29 29.1	0.219827	○ 56	6 40
	26 II 14 9.85	4 33.02	+ 6 25 18.2	29 39.6	0.219072	○ 57	6 37
	27 II 18 42.87	4 32.49	5 55 38.6	29 49.4	0.218304	○ 57	6 35
	28 II 23 15.36	4 32.00	5 25 49.2	29 58.6	0.217523	○ 58	6 32
	29 II 27 47.36	4 31.55	4 55 50.6	30 7.1	0.216728	○ 59	6 29
	30 II 32 18.91	+ 4 31.13	4 25 43.5	- 30 14.8	0.215919	○ 59	6 27
	31 II 36 50.04	4 30.77	+ 3 55 28.7	30 21.7	0.215097	I 0	6 24
Sept. 1	II 41 20.81	4 30.45	3 25 7.0	30 28.0	0.214262	I 0	6 21
	2 II 45 51.26	4 30.17	2 54 39.0	30 33.7	0.213414	I 1	6 19
	3 II 50 21.43	4 29.93	2 24 5.3	30 38.5	0.212552	I 1	6 16
	4 II 54 51.36	+ 4 29.74	I 53 26.8	- 30 42.7	0.211676	I 2	6 13
	5 II 59 21.10	4 29.58	+ I 22 44.1	30 46.2	0.210787	I 3	6 11
	6 II 3 50.68	4 29.47	○ 51 57.9	30 48.9	0.209885	I 3	6 8
	7 II 8 20.15	4 29.41	+ ○ 21 9.0	30 50.9	0.208969	I 4	6 5
	8 II 12 49.56	4 29.39	- ○ 9 41.9	30 52.2	0.208039	I 4	6 3
	9 II 17 18.95	+ 4 29.40	○ 40 34.1	- 30 52.8	0.207096	I 5	6 0
	10 II 21 48.35	4 29.46	- I 11 26.9	30 52.6	0.206139	I 5	5 57
	11 II 26 17.81	4 29.55	I 42 19.5	30 51.6	0.205169	I 6	5 55
	12 II 30 47.36	4 29.69	2 13 11.1	30 49.9	0.204184	I 6	5 52
	13 II 35 17.05	4 29.87	2 44 1.0	30 47.5	0.203185	I 7	5 49
	14 II 39 46.92	+ 4 30.09	3 14 48.5	- 30 44.3	0.202172	I 8	5 47
	15 II 44 17.01	4 30.36	- 3 45 32.8	30 40.4	0.201146	I 8	5 44
	16 II 48 47.37	4 30.66	4 16 13.2	30 35.7	0.200106	I 9	5 41
	17 II 53 18.03	4 30.99	4 46 48.9	30 30.3	0.199052	I 9	5 39
	18 II 57 49.02	4 31.37	5 17 19.2	30 24.1	0.197985	I 10	5 36
	19 II 2 20.39	+ 4 31.79	5 47 43.3	- 30 17.1	0.196904	I 10	5 33
	20 II 6 52.18	4 32.26	- 6 18 0.4	30 9.5	0.195810	I 11	5 31
	21 II 11 24.44	4 32.77	6 48 9.9	30 1.1	0.194702	I 12	5 28
	22 II 15 57.21	4 33.32	7 18 11.0	29 52.1	0.193581	I 12	5 25
	23 II 20 30.53	4 33.90	7 48 3.1	29 42.3	0.192446	I 13	5 23
	24 II 25 4.43		8 17 45.4		0.191298	I 13	5 20

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Sept. 23	13 20 30.53	+4 33.90	- 7 48' 3.1	-29 42.3	0.192446	I 13 <sup>h</sup> m <sup>m</sup>	5 23
24	13 25 4.43	4 34.53	8 17 45.4	29 31.6	0.191298	I 13	5 20
25	13 29 38.96	4 35.20	8 47 17.0	29 20.3	0.190137	I 14	5 17
26	13 34 14.16	4 35.90	9 16 37.3	29 8.2	0.188963	I 15	5 15
27	13 38 50.06	+4 36.65	9 45 45.5	-28 55.3	0.187776	I 15	5 12
28	13 43 26.71	4 37.43	-10 14 40.8	28 41.8	0.186575	I 16	5 9
29	13 48 4.14	4 38.25	10 43 22.6	28 27.4	0.185362	I 17	5 7
30	13 52 42.39	4 39.11	11 11 50.0	28 12.3	0.184135	I 17	5 4
Okt. 1	13 57 21.50	4 40.01	11 40 2.3	27 56.5	0.182895	I 18	5 1
2	14 2 1.51	+4 40.93	12 7 58.8	-27 39.9	0.181642	I 19	4 59
3	14 6 42.44	4 41.89	-12 35 38.7	27 22.5	0.180375	I 20	4 56
4	14 11 24.33	4 42.88	13 3 1.2	27 4.4	0.179095	I 20	4 54
5	14 16 7.21	4 43.90	13 30 5.6	26 45.5	0.177801	I 21	4 51
6	14 20 51.11	4 44.95	13 56 51.1	26 25.8	0.176494	I 22	4 48
7	14 25 36.06	+4 46.03	14 23 16.9	-26 5.3	0.175173	I 23	4 46
8	14 30 22.09	4 47.12	-14 49 22.2	25 44.0	0.173839	I 24	4 43
9	14 35 9.21	4 48.23	15 15 6.2	25 21.8	0.172490	I 24	4 41
10	14 39 57.44	4 49.38	15 40 28.0	24 58.9	0.171127	I 25	4 38
11	14 44 46.82	4 50.53	16 5 26.9	24 35.2	0.169750	I 26	4 36
12	14 49 37.35	+4 51.69	16 30 2.1	-24 10.8	0.168359	I 27	4 33
13	14 54 29.04	4 52.87	-16 54 12.9	23 45.5	0.166953	I 28	4 31
14	14 59 21.91	4 54.05	17 17 58.4	23 19.4	0.165533	I 29	4 28
15	15 4 15.96	4 55.25	17 41 17.8	22 52.5	0.164998	I 30	4 26
16	15 9 11.21	4 56.45	18 4 10.3	22 24.8	0.162649	I 31	4 24
17	15 14 7.66	+4 57.65	18 26 35.1	-21 56.3	0.161186	I 32	4 21
18	15 19 5.31	4 58.87	-18 48 31.4	21 27.1	0.159708	I 33	4 19
19	15 24 4.18	5 0.08	19 9 58.5	20 57.2	0.158216	I 34	4 17
20	15 29 4.26	5 1.29	19 30 55.7	20 26.5	0.156709	I 35	4 14
21	15 34 5.55	5 2.49	19 51 22.2	19 55.0	0.155188	I 36	4 12
22	15 39 8.04	+5 3.69	20 11 17.2	-19 22.8	0.153653	I 37	4 10
23	15 44 11.73	5 4.88	-20 30 40.0	18 50.0	0.152103	I 38	4 8
24	15 49 16.61	5 6.06	20 49 30.0	18 16.3	0.150539	I 39	4 6
25	15 54 22.67	5 7.22	21 7 46.3	17 42.0	0.148960	I 41	4 4
26	15 59 29.89	5 8.36	21 25 28.3	17 7.0	0.147367	I 42	4 2
27	16 4 38.25	+5 9.49	21 42 35.3	-16 31.3	0.145760	I 43	4 0
28	16 9 47.74	5 10.60	-21 59 6.6	15 55.0	0.144138	I 44	3 58
29	16 14 58.34	5 11.69	22 15 1.6	15 18.1	0.142501	I 45	3 56
30	16 20 10.03	5 12.75	22 30 19.7	14 40.5	0.140850	I 47	3 54
31	16 25 22.78	5 13.78	22 45 0.2	14 2.3	0.139184	I 48	3 52
Nov. 1	16 30 36.56		22 59 2.5		0.137503	I 49	3 51

## Wahrer geozentrischer Ort.

<sup>o</sup> <sup>h</sup> Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Okt. 31	16 <sup>h</sup> 25 <sup>m</sup> 22.78	+5 13.78	-22 <sup>h</sup> 45 <sup>m</sup> 0.2	-14 <sup>h</sup> 2.3	0.139184	1 <sup>h</sup> 48 <sup>m</sup>	3 <sup>h</sup> 52 <sup>m</sup>
Nov. 1	16 30 36.56	5 14.77	22 59 2.5	13 23.5	0.137503	1 49	3 51
2	16 35 51.33	5 15.74	23 12 26.0	12 44.1	0.135807	1 50	3 49
3	16 41 7.07	5 16.66	23 25 10.1	12 4.2	0.134095	1 52	3 47
4	16 46 23.73	+5 17.54	23 37 14.3	-11 23.8	0.132368	1 53	3 46
5	16 51 41.27	5 18.37	23 48 38.1	10 42.9	0.130626	1 54	3 44
6	16 56 59.64	5 19.15	23 59 21.0	10 1.4	0.128868	1 56	3 43
7	17 2 18.79	5 19.87	24 9 22.4	9 19.4	0.127093	1 57	3 42
8	17 7 38.66	5 20.54	24 18 41.8	8 37.1	0.125302	1 59	3 41
9	17 12 59.20	+5 21.16	24 27 18.9	-7 54.3	0.123495	2 0	3 40
10	17 18 20.36	5 21.72	24 35 13.2	7 11.2	0.121671	2 1	3 39
11	17 23 42.08	5 22.20	24 42 24.4	6 27.7	0.119831	2 3	3 38
12	17 29 4.28	5 22.63	24 48 52.1	5 43.9	0.117973	2 4	3 37
13	17 34 26.91	5 22.98	24 54 36.0	4 59.9	0.116098	2 6	3 36
14	17 39 49.89	+5 23.26	24 59 35.9	4 15.6	0.114206	2 7	3 35
15	17 45 13.15	5 23.47	25 3 51.5	3 31.0	0.112297	2 9	3 35
16	17 50 36.62	5 23.62	25 7 22.5	2 46.3	0.110370	2 10	3 34
17	17 56 0.24	5 23.70	25 10 8.8	2 1.6	0.108425	2 11	3 34
18	18 1 23.94	5 23.70	25 12 10.4	1 16.7	0.106463	2 12	3 34
19	18 6 47.64	+5 23.63	25 13 27.1	0 31.8	0.104484	2 14	3 34
20	18 12 11.27	5 23.49	25 13 58.9	+0 13.2	0.102487	2 16	3 33
21	18 17 34.76	5 23.28	25 13 45.7	0 58.1	0.100472	2 17	3 33
22	18 22 58.04	5 23.00	25 12 47.6	1 43.0	0.098438	2 19	3 34
23	18 28 21.04	5 22.64	25 11 4.6	2 27.9	0.096386	2 20	3 34
24	18 33 43.68	+5 22.22	25 8 36.7	+3 12.6	0.094316	2 22	3 34
25	18 39 5.90	5 21.74	25 5 24.1	3 57.1	0.092228	2 23	3 35
26	18 44 27.64	5 21.19	25 1 27.0	4 41.4	0.090122	2 24	3 35
27	18 49 48.83	5 20.57	24 56 45.6	5 25.6	0.087997	2 26	3 36
28	18 55 9.40	5 19.88	24 51 20.0	6 9.5	0.085853	2 27	3 36
29	19 0 29.28	+5 19.14	24 45 10.5	+6 53.1	0.083691	2 29	3 37
30	19 5 48.42	5 18.34	24 38 17.4	7 36.4	0.081510	2 30	3 38
Dez. 1	19 11 6.76	5 17.48	24 30 41.0	8 19.4	0.079309	2 31	3 39
2	19 16 24.24	5 16.56	24 22 21.6	9 2.0	0.077088	2 33	3 40
3	19 21 40.80	5 15.58	24 13 19.6	9 44.2	0.074848	2 34	3 41
4	19 26 56.38	+5 14.55	24 3 35.4	+10 26.0	0.072587	2 35	3 43
5	19 32 10.93	5 13.46	-23 53 9.4	11 7.3	0.070306	2 37	3 44
6	19 37 24.39	5 12.31	23 42 2.1	11 48.2	0.068004	2 38	3 45
7	19 42 36.70	5 11.12	23 30 13.9	12 28.5	0.065680	2 39	3 47
8	19 47 47.82	5 9.88	23 17 45.4	13 8.3	0.063334	2 40	3 48
9	19 52 57.70		23 4 37.1		0.060967	2 42	3 50

## Wahrer geozentrischer Ort.

$\text{O}^{\text{h}}$ Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. $\Delta$	Ostl. Stunden- Winkel	Halber Tag- bogen
Dez. 8	19 47 47.82	+5 9.88	-23 17 45.4	+13 8.3	0.063334	2 40	3 48
9	19 52 57.70	5 8.59	23 4 37.1	13 47.5	0.060967	2 42	3 50
10	19 58 6.29	5 7.25	22 50 49.6	14 26.1	0.058577	2 43	3 52
11	20 3 13.54	5 5.87	22 36 23.5	15 4.1	0.056165	2 44	3 53
12	20 8 19.41	+5 4.46	22 21 19.4	+15 41.5	0.053730	2 45	3 55
13	20 13 23.87	5 3.00	-22 5 37.9	16 18.2	0.051272	2 46	3 57
14	20 18 26.87	5 1.51	21 49 19.7	16 54.2	0.048790	2 47	3 59
15	20 23 28.38	4 59.99	21 32 25.5	17 29.5	0.046285	2 49	4 1
16	20 28 28.37	4 58.44	21 14 56.0	18 4.1	0.043756	2 50	4 3
17	20 33 26.81	+4 56.87	20 56 51.9	+18 38.0	0.041202	2 51	4 5
18	20 38 23.68	4 55.27	-20 38 13.9	19 11.1	0.038624	2 52	4 7
19	20 43 18.95	4 53.65	20 19 2.8	19 43.5	0.036022	2 53	4 9
20	20 48 12.60	4 52.01	19 59 19.3	20 15.2	0.033395	2 54	4 11
21	20 53 4.61	4 50.37	19 39 4.1	20 46.0	0.030743	2 54	4 13
22	20 57 54.98	+4 48.71	19 18 18.1	+21 16.2	0.028066	2 55	4 16
23	21 2 43.69	4 47.04	-18 57 1.9	21 45.5	0.025363	2 56	4 18
24	21 7 30.73	4 45.37	18 35 16.4	22 14.1	0.022634	2 57	4 20
25	21 12 16.10	4 43.70	18 13 2.3	22 41.8	0.019880	2 58	4 23
26	21 16 59.80	4 42.02	17 50 20.5	23 8.8	0.017100	2 59	4 25
27	21 21 41.82	+4 40.36	17 27 11.7	+23 35.1	0.014293	2 59	4 27
28	21 26 22.18	4 38.70	-17 3 36.6	24 0.6	0.011459	3 0	4 30
29	21 31 0.88	4 37.05	16 39 36.0	24 25.3	0.008598	3 1	4 32
30	21 35 37.93	4 35.41	16 15 10.7	24 49.2	0.005709	3 2	4 35
31	21 40 13.34	4 33.76	15 50 21.5	25 12.4	0.002792	3 2	4 37
32	21 44 47.10	+4 32.13	15 25 9.1	+25 34.7	9.999847	3 3	4 40
33	21 49 19.23		-14 59 34.4		9.996874	3 3	4 42

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tagbogen
Jan.	1 3 25 36.92	+ 0 9.98	+ 21 0 35.7	+ 1 7.5	9.841730	8 47	8 5
	2 3 25 46.90	0 13.11	21 1 43.2	1 16.2	9.846384	8 43	8 5
	3 3 26 0.01	0 16.18	21 2 59.4	1 24.7	9.851050	8 39	8 5
	4 3 26 16.19	0 19.21	21 4 24.1	1 33.1	9.855726	8 35	8 5
	5 3 26 35.40	+ 0 22.17	21 5 57.2	+ 1 41.2	9.860409	8 32	8 5
	6 3 26 57.57	0 25.10	+ 21 7 38.4	1 49.2	9.865098	8 28	8 6
	7 3 27 22.67	0 27.98	21 9 27.6	1 57.1	9.869790	8 25	8 6
	8 3 27 50.65	0 30.80	21 11 24.7	2 4.7	9.874484	8 21	8 6
	9 3 28 21.45	0 33.57	21 13 29.4	2 12.2	9.879177	8 18	8 6
	10 3 28 55.02	+ 0 36.30	21 15 41.6	+ 2 19.4	9.883868	8 14	8 7
	11 3 29 31.32	0 38.98	+ 21 18 1.0	2 26.5	9.888555	8 11	8 7
	12 3 30 10.30	0 41.62	21 20 27.5	2 33.4	9.893236	8 8	8 7
	13 3 30 51.92	0 44.22	21 23 0.9	2 40.1	9.897910	8 5	8 7
	14 3 31 36.14	0 46.76	21 25 41.0	2 46.7	9.902576	8 1	8 8
	15 3 32 22.90	+ 0 49.26	21 28 27.7	+ 2 52.9	9.907231	7 58	8 8
	16 3 33 12.16	0 51.71	+ 21 31 20.6	2 58.9	9.911875	7 55	8 8
	17 3 34 3.87	0 54.13	21 34 19.5	3 4.8	9.916506	7 52	8 9
	18 3 34 58.00	0 56.50	21 37 24.3	3 10.3	9.921122	7 49	8 9
	19 3 35 54.50	0 58.81	21 40 34.6	3 15.7	9.925722	7 46	8 9
	20 3 36 53.31	+ 1 1.08	21 43 50.3	+ 3 20.7	9.930305	7 43	8 10
	21 3 37 54.39	1 3.30	+ 21 47 11.0	3 25.6	9.934871	7 40	8 10
	22 3 38 57.69	1 5.49	21 50 36.6	3 30.1	9.939417	7 37	8 11
	23 3 40 3.18	1 7.63	21 54 6.7	3 34.3	9.943943	7 34	8 11
	24 3 41 10.81	1 9.71	21 57 41.0	3 38.4	9.948448	7 32	8 12
	25 3 42 20.52	+ 1 11.74	22 1 19.4	+ 3 42.1	9.952931	7 29	8 12
	26 3 43 32.26	1 13.73	+ 22 5 1.5	3 45.5	9.957392	7 26	8 12
	27 3 44 45.99	1 15.68	22 8 47.0	3 48.7	9.961829	7 23	8 13
	28 3 46 1.67	1 17.57	22 12 35.7	3 51.6	9.966242	7 21	8 13
	29 3 47 19.24	1 19.43	22 16 27.3	3 54.2	9.970630	7 18	8 14
	30 3 48 38.67	+ 1 21.23	22 20 21.5	+ 3 56.5	9.974993	7 15	8 14
Febr.	31 3 49 59.90	1 22.99	+ 22 24 18.0	3 58.6	9.979330	7 13	8 15
	1 3 51 22.89	1 24.70	22 28 16.6	4 0.4	9.983641	7 10	8 15
	2 3 52 47.59	1 26.38	22 32 17.0	4 1.9	9.987926	7 8	8 16
	3 3 54 13.97	1 28.03	22 36 18.9	4 3.1	9.992184	7 5	8 16
	4 3 55 42.00	+ 1 29.64	22 40 22.0	+ 4 4.2	9.996415	7 3	8 17
	5 3 57 11.64	1 31.20	+ 22 44 26.2	4 5.0	0.000620	7 0	8 17
	6 3 58 42.84	1 32.74	22 48 31.2	4 5.6	0.004799	6 58	8 18
	7 4 0 15.58	1 34.26	22 52 36.8	4 5.9	0.008950	6 55	8 18
	8 4 1 49.84	1 35.75	22 56 42.7	4 6.1	0.013075	6 53	8 19
	9 4 3 25.59	23 0 48.8			0.017172	6 51	8 19

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Febr. 8	4 1 49.84	+1 35.75	+22 56' 42.7	+4 6.1	0.013075	6 53	8 19
	9 4 3 25.59	1 37.21	23 0 48.8	4 6.0	0.017172	6 51	8 19
	10 4 5 2.80	1 38.63	23 4 54.8	4 5.8	0.021243	6 48	8 20
	11 4 6 41.43	1 40.03	23 9 0.6	4 5.3	0.025286	6 46	8 20
	12 4 8 21.46	+1 41.41	23 13 5.9	+4 4.6	0.029301	6 44	8 21
	13 4 10 2.87	1 42.77	+23 17 10.5	4 3.7	0.033289	6 42	8 21
	14 4 11 45.64	1 44.10	23 21 14.2	4 2.6	0.037249	6 39	8 22
	15 4 13 29.74	1 45.40	23 25 16.8	4 1.3	0.041182	6 37	8 22
	16 4 15 15.14	1 46.67	23 29 18.1	3 59.7	0.045087	6 35	8 23
	17 4 17 1.81	+1 47.91	23 33 17.8	+3 58.0	0.048963	6 33	8 23
	18 4 18 49.72	1 49.15	+23 37 15.8	3 56.1	0.052811	6 31	8 24
	19 4 20 38.87	1 50.35	23 41 11.9	3 54.0	0.056631	6 28	8 24
	20 4 22 29.22	1 51.52	23 45 5.9	3 51.7	0.060423	6 26	8 25
	21 4 24 20.74	1 52.66	23 48 57.6	3 49.0	0.064186	6 24	8 25
	22 4 26 13.40	+1 53.78	23 52 46.6	+3 46.3	0.067920	6 22	8 26
	23 4 28 7.18	1 54.88	+23 56 32.9	3 43.4	0.071626	6 20	8 26
	24 4 30 2.06	1 55.95	24 0 16.3	3 40.3	0.075303	6 18	8 27
	25 4 31 58.01	1 56.99	24 3 56.6	3 36.9	0.078951	6 16	8 27
	26 4 33 55.00	1 58.00	24 7 33.5	3 33.4	0.082571	6 14	8 28
	27 4 35 53.00	+1 58.98	24 11 6.9	+3 29.7	0.086162	6 12	8 28
	28 4 37 51.98	1 59.94	+24 14 36.6	3 25.8	0.089725	6 10	8 29
	29 4 39 51.92	2 0.88	24 18 2.4	3 21.7	0.093260	6 8	8 29
März 1	4 41 52.80	2 1.79	24 21 24.1	3 17.5	0.096766	6 6	8 30
	2 4 43 54.59	2 2.69	24 24 41.6	3 13.0	0.100245	6 4	8 30
	3 4 45 57.28	+2 3.55	24 27 54.6	+3 8.5	0.103696	6 3	8 31
	4 4 48 0.83	2 4.40	+24 31 3.1	3 3.8	0.107120	6 1	8 31
	5 4 50 5.23	2 5.24	24 34 6.9	2 58.9	0.110517	5 59	8 31
	6 4 52 10.47	2 6.06	24 37 5.8	2 53.9	0.113887	5 57	8 32
	7 4 54 16.53	2 6.86	24 39 59.7	2 48.8	0.117230	5 55	8 32
	8 4 56 23.39	+2 7.65	24 42 48.5	+2 43.6	0.120546	5 53	8 33
	9 4 58 31.04	2 8.43	+24 45 32.1	2 38.2	0.123836	5 51	8 33
	10 5 0 39.47	2 9.19	24 48 10.3	2 32.6	0.127101	5 50	8 33
	11 5 2 48.66	2 9.93	24 50 42.9	2 27.0	0.130340	5 48	8 34
	12 5 4 58.59	2 10.66	24 53 9.9	2 21.3	0.133553	5 46	8 34
	13 5 7 9.25	+2 11.37	24 55 31.2	+2 15.3	0.136740	5 44	8 34
	14 5 9 20.62	2 12.07	+24 57 46.5	2 9.3	0.139901	5 43	8 35
	15 5 11 32.69	2 12.76	24 59 55.8	2 3.1	0.143036	5 41	8 35
	16 5 13 45.45	2 13.43	25 1 58.9	1 56.8	0.146146	5 39	8 35
	17 5 15 58.88	2 14.08	25 3 55.7	1 50.5	0.149230	5 37	8 35
	18 5 18 12.96		25 5 46.2		0.152289	5 36	8 36

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 17	5 15 <sup>m</sup> 58.88	+2 14.08	+25 ° 3' 55.7	+1 50.5	0.149230	5 37 <sup>h</sup> 8 35 <sup>m</sup>	
18	5 18 12.96	2 14.72	25 5 46.2	1 44.0	0.152289	5 36 <sup>h</sup> 8 36 <sup>m</sup>	
19	5 20 27.68	2 15.35	25 7 30.2	1 37.4	0.155323	5 34 <sup>h</sup> 8 36 <sup>m</sup>	
20	5 22 43.03	2 15.95	25 9 7.6	1 30.7	0.158332	5 32 <sup>h</sup> 8 36 <sup>m</sup>	
21	5 24 58.98	+2 16.53	25 10 38.3	+1 23.8	0.161315	5 31 <sup>h</sup> 8 36 <sup>m</sup>	
22	5 27 15.51	2 17.11	+25 12 2.1	1 16.8	0.164274	5 29 <sup>h</sup> 8 37 <sup>m</sup>	
23	5 29 32.62	2 17.66	25 13 18.9	1 9.8	0.167207	5 27 <sup>h</sup> 8 37 <sup>m</sup>	
24	5 31 50.28	2 18.19	25 14 28.7	1 2.6	0.170115	5 26 <sup>h</sup> 8 37 <sup>m</sup>	
25	5 34 8.47	2 18.70	25 15 31.3	0 55.4	0.172998	5 24 <sup>h</sup> 8 37 <sup>m</sup>	
26	5 36 27.17	+2 19.20	25 16 26.7	+0 48.0	0.175857	5 22 <sup>h</sup> 8 37 <sup>m</sup>	
27	5 38 46.37	2 19.69	+25 17 14.7	0 40.5	0.178691	5 21 <sup>h</sup> 8 37 <sup>m</sup>	
28	5 41 6.06	2 20.14	25 17 55.2	0 33.0	0.181501	5 19 <sup>h</sup> 8 37 <sup>m</sup>	
29	5 43 26.20	2 20.58	25 18 28.2	0 25.4	0.184287	5 18 <sup>h</sup> 8 37 <sup>m</sup>	
30	5 45 46.78	2 21.02	25 18 53.6	0 17.7	0.187049	5 16 <sup>h</sup> 8 37 <sup>m</sup>	
31	5 48 7.80	+2 21.43	25 19 11.3	+0 10.0	0.189787	5 14 <sup>h</sup> 8 37 <sup>m</sup>	
April 1	5 50 29.23	2 21.83	+25 19 21.3	+0 2.1	0.192502	5 13 <sup>h</sup> 8 38 <sup>m</sup>	
2	5 52 51.06	2 22.22	25 19 23.4	-0 5.8	0.195194	5 11 <sup>h</sup> 8 38 <sup>m</sup>	
3	5 55 13.28	2 22.60	25 19 17.6	0 13.7	0.197863	5 10 <sup>h</sup> 8 38 <sup>m</sup>	
4	5 57 35.88	2 22.96	25 19 3.9	0 21.6	0.200510	5 8 <sup>h</sup> 8 37 <sup>m</sup>	
5	5 59 58.84	+2 23.32	25 18 42.3	-0 29.7	0.203134	5 6 <sup>h</sup> 8 37 <sup>m</sup>	
6	6 2 22.16	2 23.67	+25 18 12.6	0 37.9	0.205736	5 5 <sup>h</sup> 8 37 <sup>m</sup>	
7	6 4 45.83	2 24.00	25 17 34.7	0 46.1	0.208316	5 3 <sup>h</sup> 8 37 <sup>m</sup>	
8	6 7 9.83	2 24.33	25 16 48.6	0 54.4	0.210874	5 2 <sup>h</sup> 8 37 <sup>m</sup>	
9	6 9 34.16	2 24.65	25 15 54.2	1 2.6	0.213411	5 0 <sup>h</sup> 8 37 <sup>m</sup>	
10	6 11 58.81	+2 24.95	25 14 51.6	-1 10.9	0.215926	4 59 <sup>h</sup> 8 37 <sup>m</sup>	
11	6 14 23.76	2 25.24	+25 13 40.7	1 19.4	0.218419	4 57 <sup>h</sup> 8 37 <sup>m</sup>	
12	6 16 49.00	2 25.53	25 12 21.3	1 27.8	0.220891	4 56 <sup>h</sup> 8 37 <sup>m</sup>	
13	6 19 14.53	2 25.81	25 10 53.5	1 36.3	0.223342	4 54 <sup>h</sup> 8 36 <sup>m</sup>	
14	6 21 40.34	2 26.07	25 9 17.2	1 44.8	0.225772	4 53 <sup>h</sup> 8 36 <sup>m</sup>	
15	6 24 6.41	+2 26.32	25 7 32.4	-1 53.3	0.228180	4 51 <sup>h</sup> 8 36 <sup>m</sup>	
16	6 26 32.73	2 26.56	+25 5 39.1	2 1.9	0.230568	4 50 <sup>h</sup> 8 36 <sup>m</sup>	
17	6 28 59.29	2 26.79	25 3 37.2	2 10.6	0.232934	4 48 <sup>h</sup> 8 35 <sup>m</sup>	
18	6 31 26.08	2 27.01	25 1 26.6	2 19.3	0.235279	4 47 <sup>h</sup> 8 35 <sup>m</sup>	
19	6 33 53.09	2 27.22	24 59 7.3	2 28.0	0.237603	4 45 <sup>h</sup> 8 35 <sup>m</sup>	
20	6 36 20.31	+2 27.40	24 56 39.3	-2 36.7	0.239907	4 44 <sup>h</sup> 8 34 <sup>m</sup>	
21	6 38 47.71	2 27.57	+24 54 2.6	2 45.4	0.242190	4 42 <sup>h</sup> 8 34 <sup>m</sup>	
22	6 41 15.28	2 27.74	24 51 17.2	2 54.1	0.244452	4 41 <sup>h</sup> 8 34 <sup>m</sup>	
23	6 43 43.02	2 27.90	24 48 23.1	3 3.0	0.246694	4 39 <sup>h</sup> 8 33 <sup>m</sup>	
24	6 46 10.92	2 28.03	24 45 20.1	3 11.8	0.248915	4 38 <sup>h</sup> 8 33 <sup>m</sup>	
25	6 48 38.95		24 42 8.3	0.251116	4 36 <sup>h</sup> 8 32 <sup>m</sup>		

## Wahrer geozentrischer Ort.

$\text{O}^{\text{h}}$ Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. $\Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
April 24	6 <sup>h</sup> 46 <sup>m</sup> 10 <sup>s</sup> .92	+2 28.03	+24° 45' 20.1"	-3 11.8	0.248915	4 38 <sup>m</sup>	8 <sup>h</sup> 33 <sup>m</sup>
25	6 48 38.95	2 28.15	24 42 8.3	3 20.6	0.251116	4 36	8 32
26	6 51 7.10	2 28.26	24 38 47.7	3 29.4	0.253298	4 35	8 32
27	6 53 35.36	2 28.35	24 35 18.3	3 38.2	0.255459	4 33	8 32
28	6 56 3.71	+2 28.44	24 31 40.1	-3 47.0	0.257600	4 32	8 31
29	6 58 32.15	2 28.53	+24 27 53.1	3 55.8	0.259723	4 30	8 31
Mai 1	7 1 0.68	2 28.60	24 23 57.3	4 4.6	0.261826	4 29	8 30
2	7 3 29.28	2 28.66	24 19 52.7	4 13.4	0.263910	4 27	8 29
3	7 5 57.94	2 28.71	24 15 39.3	4 22.2	0.265975	4 26	8 29
4	7 7 8 26.65	+2 28.76	24 11 17.1	-4 31.0	0.268022	4 25	8 28
5	7 10 55.41	2 28.81	+24 6 46.1	4 39.8	0.270050	4 23	8 28
6	7 13 24.22	2 28.85	24 2 6.3	4 48.5	0.272060	4 22	8 27
7	7 15 53.07	2 28.87	23 57 17.8	4 57.3	0.274052	4 20	8 27
8	7 18 21.94	2 28.89	23 52 20.5	5 6.1	0.276025	4 18	8 26
9	7 20 50.83	+2 28.92	23 47 14.4	-5 14.8	0.277981	4 17	8 25
10	7 23 19.75	2 28.94	+23 41 59.6	5 23.6	0.279919	4 16	8 25
11	7 25 48.69	2 28.94	23 36 36.0	5 32.3	0.281839	4 14	8 24
12	7 28 17.63	2 28.94	23 31 3.7	5 41.0	0.283742	4 13	8 23
13	7 30 46.57	2 28.93	23 25 22.7	5 49.7	0.285627	4 11	8 23
14	7 33 15.50	+2 28.93	23 19 33.0	-5 58.4	0.287494	4 10	8 22
15	7 35 44.43	2 28.91	+23 13 34.6	6 7.1	0.289344	4 8	8 21
16	7 38 13.34	2 28.89	23 7 27.5	6 15.7	0.291176	4 7	8 20
17	7 40 42.23	2 28.85	23 1 11.8	6 24.3	0.292991	4 6	8 19
18	7 43 11.08	2 28.81	22 54 47.5	6 32.9	0.294789	4 4	8 19
19	7 45 39.89	+2 28.76	22 48 14.6	-6 41.5	0.296569	4 3	8 18
20	7 48 8.65	2 28.71	+22 41 33.1	6 49.9	0.298332	4 1	8 17
21	7 50 37.36	2 28.64	22 34 43.2	6 58.4	0.300077	4 0	8 16
22	7 53 6.00	2 28.56	22 27 44.8	7 6.9	0.301805	3 58	8 15
23	7 55 34.56	2 28.49	22 20 37.9	7 15.3	0.303517	3 57	8 14
24	7 58 3.05	+2 28.40	22 13 22.6	-7 23.6	0.305211	3 55	8 13
25	8 0 31.45	2 28.30	+22 5 59.0	7 31.9	0.306889	3 54	8 13
26	8 2 59.75	2 28.20	21 58 27.1	7 40.1	0.308550	3 52	8 12
27	8 5 27.95	2 28.09	21 50 47.0	7 48.3	0.310194	3 51	8 11
28	8 7 56.04	2 27.98	21 42 58.7	7 56.4	0.311822	3 49	8 10
Juni 1	8 10 24.02	+2 27.87	21 35 2.3	-8 4.5	0.313434	3 48	8 9
2	8 12 51.89	2 27.75	+21 26 57.8	8 12.5	0.315030	3 46	8 8
3	8 15 19.64	2 27.63	21 18 45.3	8 20.6	0.316610	3 45	8 7
4	8 17 47.27	2 27.50	21 10 24.7	8 28.5	0.318174	3 43	8 6
5	8 20 14.77	2 27.38	21 1 56.2	8 36.4	0.319723	3 42	8 5
6	8 22 42.15	2 27.26	20 53 19.8	0.321256	3 41	8 4	

## Wahrer geozentrischer Ort.

<sup>o</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Juni	1 8 20 <sup>b</sup> 14.77	+2 27.38	+21 ° 1 56.2	- 8 36.4	0.319723	3 42 <sup>b</sup>	8 5
	2 8 22 42.15	2 27.25	20 53 19.8	8 44.2	0.321256	3 41	8 4
	3 8 25 9.40	2 27.12	20 44 35.6	8 52.1	0.322774	3 39	8 3
	4 8 27 36.52	2 27.00	20 35 43.5	8 59.9	0.324277	3 38	8 2
	5 8 30 3.52	+2 26.87	20 26 43.6	- 9 7.5	0.325764	3 36	8 1
	6 8 32 30.39	2 26.73	+20 17 36.1	9 15.2	0.327237	3 35	8 0
	7 8 34 57.12	2 26.60	20 8 20.9	9 22.9	0.328694	3 33	7 59
	8 8 37 23.72	2 26.47	19 58 58.0	9 30.4	0.330137	3 32	7 58
	9 8 39 50.19	2 26.34	19 49 27.6	9 38.0	0.331565	3 30	7 57
	10 8 42 16.53	+2 26.20	19 39 49.6	- 9 45.4	0.332978	3 29	7 55
	11 8 44 42.73	2 26.06	+19 30 4.2	9 52.8	0.334376	3 27	7 54
	12 8 47 8.79	2 25.93	19 20 11.4	10 0.2	0.335759	3 26	7 53
	13 8 49 34.72	2 25.79	19 10 11.2	10 7.6	0.337127	3 24	7 52
	14 8 52 0.51	2 25.65	19 0 3.6	10 14.7	0.338481	3 23	7 51
	15 8 54 26.16	+2 25.50	18 49 48.9	-10 21.9	0.339820	3 21	7 50
	16 8 56 51.66	2 25.36	+18 39 27.0	10 29.0	0.341144	3 19	7 49
	17 8 59 17.02	2 25.21	18 28 58.0	10 36.1	0.342454	3 18	7 48
	18 9 1 42.23	2 25.06	18 18 21.9	10 43.0	0.343749	3 16	7 46
	19 9 4 7.29	2 24.90	18 7 38.9	10 49.9	0.345029	3 15	7 45
	20 9 6 32.19	+2 24.74	17 56 49.0	-10 56.7	0.346294	3 13	7 44
	21 9 8 56.93	2 24.58	+17 45 52.3	11 3.4	0.347545	3 12	7 43
	22 9 11 21.51	2 24.42	17 34 48.9	11 10.0	0.348782	3 10	7 42
	23 9 13 45.93	2 24.26	17 23 38.9	11 16.7	0.350005	3 9	7 41
	24 9 16 10.19	2 24.10	17 12 22.2	11 23.2	0.351213	3 7	7 39
	25 9 18 34.29	+2 23.94	17 0 59.0	-11 29.6	0.352408	3 6	7 38
	26 9 20 58.23	2 23.78	+16 49 29.4	11 35.9	0.353589	3 4	7 37
	27 9 23 22.01	2 23.61	16 37 53.5	11 42.2	0.354756	3 3	7 36
	28 9 25 45.62	2 23.46	16 26 11.3	11 48.5	0.355910	3 1	7 35
	29 9 28 9.08	2 23.31	16 14 22.8	11 54.7	0.357050	3 0	7 33
	30 9 30 32.39	+2 23.16	16 2 28.1	-12 0.7	0.358177	2 58	7 32
Juli	1 9 32 55.55	2 23.01	+15 50 27.4	12 6.8	0.359291	2 56	7 31
	2 9 35 18.56	2 22.87	15 38 20.6	12 12.7	0.360391	2 55	7 30
	3 9 37 41.43	2 22.72	15 26 7.9	12 18.6	0.361478	2 53	7 28
	4 9 40 4.15	2 22.59	15 13 49.3	12 24.5	0.362552	2 52	7 27
	5 9 42 26.74	+2 22.45	15 1 24.8	-12 30.3	0.363613	2 50	7 26
	6 9 44 49.19	2 22.32	+14 48 54.5	12 36.0	0.364662	2 49	7 25
	7 9 47 11.51	2 22.19	14 36 18.5	12 41.7	0.365698	2 47	7 23
	8 9 49 33.70	2 22.06	14 23 36.8	12 47.2	0.366720	2 45	7 22
	9 9 51 55.76	2 21.94	14 10 49.6	12 52.8	0.367730	2 44	7 21
	10 9 54 17.70		13 57 56.8	0.368727		2 42	7 20

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Julij 9	9 <sup>h</sup> 51 <sup>m</sup> 55.76		+ 14 <sup>h</sup> 10 <sup>m</sup> 49.6	- 12 <sup>h</sup> 52.8	0.367730	2 <sup>h</sup> 44 <sup>m</sup>	7 <sup>h</sup> 21 <sup>m</sup>
10	9 54 17.70	+ 2 21.82	13 57 56.8	12 58.3	0.368727	2 42	7 20
11	9 56 39.52	+ 2 21.70	13 44 58.5	13 3.7	0.369711	2 41	7 18
12	9 59 1.22	+ 2 21.59	13 31 54.8	13 8.9	0.370682	2 39	7 17
13	10 1 22.81	+ 2 21.49	13 18 45.9	- 13 14.1	0.371640	2 38	7 16
14	10 3 44.30	+ 2 21.37	+ 13 5 31.8	13 19.3	0.372586	2 36	7 14
15	10 6 5.67	+ 2 21.26	12 52 12.5	13 24.4	0.373519	2 34	7 13
16	10 8 26.93	+ 2 21.15	12 38 48.1	13 29.4	0.374438	2 33	7 12
17	10 10 48.08	+ 2 21.04	12 25 18.7	13 34.2	0.375341	2 31	7 11
18	10 13 9.12	+ 2 20.93	12 11 44.5	- 13 39.0	0.376239	2 30	7 9
19	10 15 30.05	+ 2 20.83	+ 11 58 5.5	13 43.7	0.377121	2 28	7 8
20	10 17 50.88	+ 2 20.73	11 44 21.8	13 48.4	0.377989	2 26	7 7
21	10 20 11.61	+ 2 20.62	11 30 33.4	13 52.9	0.378845	2 25	7 5
22	10 22 32.23	+ 2 20.53	11 16 40.5	13 57.3	0.379689	2 23	7 4
23	10 24 52.76	+ 2 20.43	11 2 43.2	- 14 1.6	0.380521	2 22	7 3
24	10 27 13.19	+ 2 20.34	+ 10 48 41.6	14 6.0	0.381340	2 20	7 1
25	10 29 33.53	+ 2 20.27	10 34 35.6	14 10.2	0.382147	2 18	7 0
26	10 31 53.80	+ 2 20.19	10 20 25.4	14 14.3	0.382942	2 17	6 59
27	10 34 13.99	+ 2 20.11	10 6 11.1	14 18.3	0.383725	2 15	6 57
28	10 36 34.10	+ 2 20.04	9 51 52.8	- 14 22.4	0.384496	2 14	6 56
29	10 38 54.14	+ 2 19.97	+ 9 37 30.4	14 26.3	0.385256	2 12	6 55
30	10 41 14.11	+ 2 19.92	9 23 4.1	14 30.1	0.386004	2 10	6 53
31	10 43 34.03	+ 2 19.87	9 8 34.0	14 34.0	0.386740	2 9	6 52
Aug. 1	10 45 53.90	+ 2 19.82	8 54 0.0	14 37.6	0.387465	2 7	6 51
2	10 48 13.72	+ 2 19.79	8 39 22.4	- 14 41.3	0.388178	2 6	6 49
3	10 50 33.51	+ 2 19.75	+ 8 24 41.1	14 44.8	0.388879	2 4	6 48
4	10 52 53.26	+ 2 19.72	8 9 56.3	14 48.3	0.389569	2 2	6 47
5	10 55 12.98	+ 2 19.70	7 55 8.0	14 51.8	0.390248	2 1	6 45
6	10 57 32.68	+ 2 19.69	7 40 16.2	14 55.1	0.390916	1 59	6 44
7	10 59 52.37	+ 2 19.68	7 25 21.1	- 14 58.4	0.391572	1 57	6 43
8	11 2 12.05	+ 2 19.68	+ 7 10 22.7	15 1.6	0.392216	1 56	6 41
9	11 4 31.73	+ 2 19.68	6 55 21.1	15 4.7	0.392849	1 54	6 40
10	11 6 51.41	+ 2 19.68	6 40 16.4	15 7.8	0.393470	1 53	6 39
11	11 9 11.09	+ 2 19.69	6 25 8.6	15 10.7	0.394080	1 51	6 37
12	11 11 30.78	+ 2 19.71	6 9 57.9	- 15 13.5	0.394679	1 49	6 36
13	11 13 50.49	+ 2 19.72	+ 5 54 44.4	15 16.3	0.395266	1 48	6 35
14	11 16 10.21	+ 2 19.74	5 39 28.1	15 19.0	0.395841	1 46	6 33
15	11 18 29.95	+ 2 19.77	5 24 9.1	15 21.4	0.396405	1 45	6 32
16	11 20 49.72	+ 2 19.79	5 8 47.7	15 23.9	0.396957	1 43	6 31
17	11 23 9.51		4 53 23.8	0.397498	1 41	6 29	

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 16	II <sup>h</sup> 20 <sup>m</sup> 49.72	+2 19.79	+5 <sup>°</sup> 8 <sup>'</sup> 47.7	-15 23.9	0.396957	I 43 <sup>h</sup> 6 <sup>m</sup> 31	
17	II 23 9.51	2 19.83	4 53 23.8	15 26.3	0.397498	I 41 6 29	
18	II 25 29.34	2 19.87	4 37 57.5	15 28.6	0.398028	I 40 6 28	
19	II 27 49.21	2 19.91	4 22 28.9	15 30.7	0.398546	I 38 6 27	
20	II 30 9.12	+2 19.96	4 6 58.2	+15 32.9	0.399053	I 36 6 25	
21	II 32 29.08	2 20.01	+3 51 25.3	15 34.9	0.399549	I 35 6 24	
22	II 34 49.09	2 20.07	3 35 50.4	15 36.8	0.400034	I 33 6 22	
23	II 37 9.16	2 20.14	3 20 13.6	15 38.6	0.400508	I 32 6 21	
24	II 39 29.30	2 20.21	3 4 35.0	15 40.3	0.400971	I 30 6 20	
25	II 41 49.51	+2 20.29	2 48 54.7	+15 41.9	0.401424	I 28 6 18	
26	II 44 9.80	2 20.38	+2 33 12.8	15 43.5	0.401866	I 27 6 17	
27	II 46 30.18	2 20.48	2 17 29.3	15 45.0	0.402297	I 25 6 16	
28	II 48 50.66	2 20.58	2 I 44.3	15 46.5	0.402718	I 24 6 14	
29	II 51 II.24	2 20.69	I 45 57.8	15 47.8	0.403128	I 22 6 13	
30	II 53 31.93	+2 20.80	I 30 10.0	+15 49.0	0.403528	I 20 6 11	
Sept. 1	II 55 52.73	2 20.93	+1 14 21.0	15 50.2	0.403917	I 19 6 10	
2	II 58 13.66	2 21.06	0 58 30.8	15 51.3	0.404296	I 17 6 9	
3	I 2 34.72	2 21.21	0 42 39.5	15 52.3	0.404665	I 16 6 7	
4	I 2 55.93	2 21.35	0 26 47.2	15 53.3	0.405023	I 14 6 6	
5	I 2 5 17.28	+2 21.51	+0 10 53.9	+15 54.1	0.405371	I 12 6 5	
6	I 2 7 38.79	2 21.67	-0 5 0.2	15 54.9	0.405708	I 11 6 3	
7	I 2 10 0.46	2 21.84	0 20 55.1	15 55.5	0.406035	I 9 6 2	
8	I 2 12 22.30	2 22.02	0 36 50.6	15 56.1	0.406352	I 8 6 0	
9	I 2 14 44.32	2 22.20	0 52 46.7	15 56.6	0.406658	I 6 5 59	
10	I 2 17 6.52	+2 22.38	I 8 43.3	+15 56.9	0.406953	I 5 5 58	
11	I 2 19 28.90	2 22.57	-1 24 40.2	15 57.1	0.407238	I 3 5 56	
12	I 2 21 51.47	2 22.77	I 40 37.3	15 57.2	0.407512	I 1 5 55	
13	I 2 24 14.24	2 22.98	I 56 34.5	15 57.3	0.407776	I 0 5 54	
14	I 2 26 37.22	2 23.19	2 I 2 31.8	15 57.2	0.408029	○ 58 5 52	
15	I 2 29 0.41	+2 23.40	2 28 29.0	+15 57.0	0.408272	○ 57 5 51	
16	I 2 31 23.81	2 23.61	-2 44 26.0	15 56.6	0.408504	○ 55 5 49	
17	I 2 33 47.42	2 23.84	3 0 22.6	15 56.2	0.408726	○ 54 5 48	
18	I 2 36 11.26	2 24.07	3 16 18.8	15 55.7	0.408938	○ 52 5 47	
19	I 2 38 35.33	2 24.30	3 32 14.5	15 55.0	0.409140	○ 51 5 45	
20	I 2 40 59.63	+2 24.54	3 48 9.5	+15 54.2	0.409331	○ 49 5 44	
21	I 2 43 24.17	2 24.80	-4 4 3.7	15 53.4	0.409512	○ 48 5 42	
22	I 2 45 48.97	2 25.06	4 19 57.1	15 52.5	0.409683	○ 46 5 41	
23	I 2 48 14.03	2 25.32	4 35 49.6	15 51.5	0.409845	○ 44 5 40	
24	I 2 50 39.35	2 25.59	4 51 41.1	15 50.3	0.409997	○ 43 5 38	
	I 2 53 4.94		5 7 31.4	○ 410139		○ 41 5 37	

## Wahrer geozentrischer Ort.

$\text{O}^{\text{h}}$ Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. $\Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Sept. 23	12 50° 39.35	+2 25.59	— 4 51° 41.1	-15 50.3	0.409997	○ 43	5 38
24	12 53 4.94	2 25.87	5 7 31.4	15 49.0	0.410139	○ 41	5 37
25	12 55 30.81	2 26.16	5 23 20.4	15 47.7	0.410271	○ 40	5 35
26	12 57 56.97	2 26.46	5 39 8.1	15 46.2	0.410394	○ 38	5 34
27	13 0 23.43	+2 26.76	5 54 54.3	-15 44.6	0.410507	○ 37	5 33
28	13 2 50.19	2 27.07	— 6 10 38.9	15 43.0	0.410610	○ 35	5 31
29	13 5 17.26	2 27.40	6 26 21.9	15 41.2	0.410704	○ 34	5 30
30	13 7 44.66	2 27.73	6 42 3.1	15 39.4	0.410788	○ 32	5 28
Okt. I	13 10 12.39	2 28.06	6 57 42.5	15 37.4	0.410863	○ 31	5 27
2	13 12 40.45	+2 28.41	7 13 19.9	-15 35.3	0.410928	○ 29	5 26
3	13 15 8.86	2 28.76	— 7 28 55.2	15 33.2	0.410984	○ 28	5 24
4	13 17 37.62	2 29.12	7 44 28.4	15 30.9	0.411030	○ 27	5 23
5	13 20 6.74	2 29.48	7 59 59.3	15 28.4	0.411067	○ 25	5 21
6	13 22 36.22	2 29.86	8 15 27.7	15 25.9	0.411094	○ 24	5 20
7	13 25 6.08	+2 30.24	8 30 53.6	-15 23.2	0.411111	○ 22	5 19
8	13 27 36.32	2 30.63	— 8 46 16.8	15 20.3	0.411119	○ 21	5 17
9	13 30 6.95	2 31.01	9 1 37.1	15 17.4	0.411117	○ 19	5 16
10	13 32 37.96	2 31.41	9 16 54.5	15 14.5	0.411105	○ 18	5 15
11	13 35 9.37	2 31.80	9 32 9.0	15 11.3	0.411084	○ 16	5 13
12	13 37 41.17	+2 32.21	9 47 20.3	-15 7.9	0.411053	○ 15	5 12
13	13 40 13.38	2 32.62	— 10 2 28.2	15 4.3	0.411012	○ 13	5 10
14	13 42 46.00	2 33.03	10 17 32.5	15 0.7	0.410962	○ 12	5 9
15	13 45 19.03	2 33.45	10 32 33.2	14 57.0	0.410903	○ 11	5 8
16	13 47 52.48	2 33.88	10 47 30.2	14 53.1	0.410834	○ 9	5 6
17	13 50 26.36	+2 34.30	11 2 23.3	-14 49.0	0.410756	○ 8	5 5
18	13 53 0.66	2 34.74	— 11 17 12.3	14 44.9	0.410669	○ 7	5 4
19	13 55 35.40	2 35.18	11 31 57.2	14 40.6	0.410572	○ 5	5 2
20	13 58 10.58	2 35.63	11 46 37.8	14 36.2	0.410466	○ 4	5 1
21	14 0 46.21	2 36.10	12 1 14.0	14 31.6	0.410351	○ 3	4 59
22	14 3 22.31	+2 36.55	12 15 45.6	-14 27.0	0.410227	○ 1	4 58
23	14 5 58.86	2 37.02	— 12 30 12.6	14 22.2	0.410094	○ ○	4 57
24	14 8 35.88	2 37.49	12 44 34.8	14 17.3	0.409953	23 59	4 55
25	14 11 13.37	2 37.97	12 58 52.1	14 12.2	0.409803	23 57	4 54
26	14 13 51.34	2 38.46	13 13 4.3	14 7.0	0.409644	23 56	4 53
27	14 16 29.80	+2 38.96	13 27 11.3	-14 1.7	0.409476	23 55	4 51
28	14 19 8.76	2 39.45	— 13 41 13.0	13 56.2	0.409300	23 53	4 50
29	14 21 48.21	2 39.96	13 55 9.2	13 50.7	0.409115	23 52	4 48
30	14 24 28.17	2 40.48	14 8 59.9	13 45.0	0.408922	23 51	4 47
31	14 27 8.65	2 41.00	14 22 44.9	13 39.1	0.408720	23 50	4 46
Nov. I	14 29 49.65		14 36 24.0	13 39.1	0.408509	23 48	4 45

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Okt. 31	14 27 <sup>m</sup> 8.65	<sup>m - n</sup> +2 41.00	-14 22 44.9	-13 39.1	0.408720	23 50 <sup>m</sup>	4 46 <sup>m</sup>
Nov. 1	14 29 49.65	2 41.53	14 36 24.0	13 33.1	0.408509	23 48	4 45
2	14 32 31.18	2 42.06	14 49 57.1	13 27.0	0.408290	23 47	4 43
3	14 35 13.24	2 42.59	15 3 24.1	13 20.7	0.408062	23 46	4 42
4	14 37 55.83	+2 43.13	15 16 44.8	-13 14.2	0.407825	23 45	4 41
5	14 40 38.96	2 43.67	-15 29 59.0	13 7.6	0.407580	23 43	4 39
6	14 43 22.63	2 44.22	15 43 6.6	13 0.9	0.407326	23 42	4 38
7	14 46 6.85	2 44.76	15 56 7.5	12 53.9	0.407063	23 41	4 37
8	14 48 51.61	2 45.30	16 9 1.4	12 46.9	0.406792	23 40	4 35
9	14 51 36.91	+2 45.85	16 21 48.3	-12 39.6	0.406512	23 39	4 34
10	14 54 22.76	2 46.40	-16 34 27.9	12 32.2	0.406223	23 37	4 33
11	14 57 9.16	2 46.95	16 47 0.1	12 24.6	0.405925	23 36	4 32
12	14 59 56.11	2 47.51	16 59 24.7	12 16.9	0.405619	23 35	4 30
13	15 2 43.62	2 48.07	17 11 41.6	12 9.1	0.405304	23 34	4 29
14	15 5 31.69	+2 48.62	17 23 50.7	-12 1.1	0.404981	23 33	4 28
15	15 8 20.31	2 49.18	-17 35 51.8	11 52.8	0.404650	23 32	4 26
16	15 11 9.49	2 49.73	17 47 44.6	11 44.5	0.404311	23 31	4 25
17	15 13 59.22	2 50.29	17 59 29.1	11 36.0	0.403964	23 29	4 24
18	15 16 49.51	2 50.85	18 11 5.1	11 27.3	0.403608	23 28	4 23
19	15 19 40.36	+2 51.41	18 22 32.4	-11 18.6	0.403244	23 27	4 22
20	15 22 31.77	2 51.98	-18 33 51.0	11 9.6	0.402872	23 26	4 20
21	15 25 23.75	2 52.55	18 45 0.6	11 0.5	0.402493	23 25	4 19
22	15 28 16.30	2 53.12	18 56 1.1	10 51.3	0.402106	23 24	4 18
23	15 31 9.42	2 53.69	19 6 52.4	10 41.9	0.401712	23 23	4 17
24	15 34 3.11	+2 54.26	19 17 34.3	-10 32.4	0.401310	23 22	4 16
25	15 36 57.37	2 54.82	-19 28 6.7	10 22.7	0.400900	23 21	4 15
26	15 39 52.19	2 55.39	19 38 29.4	10 13.0	0.400482	23 20	4 13
27	15 42 47.58	2 55.97	19 48 42.4	10 3.0	0.400057	23 19	4 12
28	15 45 43.55	2 56.55	19 58 45.4	9 52.8	0.399625	23 18	4 11
29	15 48 40.10	+2 57.12	20 8 38.2	-9 42.6	0.399186	23 17	4 10
30	15 51 37.22	2 57.70	-20 18 20.8	9 32.1	0.398739	23 16	4 9
Dez. 1	15 54 34.92	2 58.26	20 27 52.9	9 21.5	0.398284	23 15	4 8
2	15 57 33.18	2 58.83	20 37 14.4	9 10.8	0.397822	23 14	4 7
3	16 0 32.01	2 59.39	20 46 25.2	8 59.9	0.397352	23 13	4 6
4	16 3 31.40	+2 59.95	20 55 25.1	-8 48.8	0.396875	23 12	4 5
5	16 6 31.35	3 0.50	-21 4 13.9	8 37.7	0.396390	23 11	4 4
6	16 9 31.85	3 1.05	21 12 51.6	8 26.3	0.395898	23 10	4 3
7	16 12 32.90	3 1.59	21 21 17.9	8 14.8	0.395398	23 9	4 2
8	16 15 34.49	3 2.13	21 29 32.7	8 3.1	0.394891	23 8	4 1
9	16 18 36.62		21 37 35.8		0.394376	23 7	4 0

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Dez. 8	16 15 34.49		-21 29 32.7	-8 3.1	0.394891	23 8	4 I
9	16 18 36.62	+3 2.13	21 37 35.8	7 51.3	0.394376	23 7	4 O
10	16 21 39.27	3 2.65	21 45 27.1	7 39.3	0.393854	23 6	3 59
11	16 24 42.44	3 3.17	21 53 6.4	7 27.2	0.393325	23 6	3 58
12	16 27 46.13	3 3.69	22 0 33.6		0.392789	23 5	3 57
13	16 30 50.32	+3 4.19	-22 7 48.6	7 2.6	0.392246	23 4	3 57
14	16 33 55.01	3 4.69	22 14 51.2	6 50.1	0.391696	23 3	3 56
15	16 37 0.20	3 5.19	22 21 41.3	6 37.4	0.391139	23 2	3 55
16	16 40 5.88	3 5.68	22 28 18.7	6 24.6	0.390575	23 1	3 54
17	16 43 12.03	3 6.15	22 34 43.3		0.390004	23 0	3 53
18	16 46 18.66	+3 6.63	-22 40 55.0	5 58.8	0.389427	23 0	3 53
19	16 49 25.75	3 7.09	22 46 53.8	5 45.6	0.388843	22 59	3 52
20	16 52 33.30	3 7.55	22 52 39.4	5 32.3	0.388253	22 58	3 51
21	16 55 41.29	3 7.99	22 58 11.7	5 18.9	0.387657	22 57	3 51
22	16 58 49.72	3 8.43	23 3 30.6		0.387054	22 56	3 50
23	17 1 58.58	+3 8.86	-5 5.4				
24	17 5 7.87	3 9.29	-23 8 36.0	4 51.9	0.386445	22 55	3 49
25	17 8 17.58	3 9.71	23 13 27.9	4 38.2	0.385830	22 55	3 49
26	17 11 27.70	3 10.12	23 18 6.1	4 24.4	0.385209	22 54	3 48
27	17 14 38.23	3 10.53	23 22 30.5	4 10.4	0.384582	22 53	3 48
28	17 17 49.15	+3 10.92	23 26 40.9	-3 56.4	0.383950	22 52	3 47
29	17 21 0.46	3 11.31	-23 30 37.3	3 42.3	0.383312	22 51	3 47
30	17 24 12.14	3 11.68	23 34 19.6	3 28.1	0.382668	22 51	3 46
31	17 27 24.18	3 12.04	23 37 47.7	3 13.7	0.382017	22 50	3 46
32	17 30 36.57	3 12.39	23 41 1.4	2 59.3	0.381360	22 49	3 45
33	17 33 49.29	+3 12.72	23 44 0.7	-2 44.8	0.380698	22 49	3 45
			-23 46 45.5		0.380030	22 48	3 45

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Jan. 0	16 <sup>h</sup> 10 <sup>m</sup> 24.93	+ 1 41.35	-20 <sup>h</sup> 18 <sup>m</sup> 10.7	-4 <sup>h</sup> 24.0	0.789275	21 <sup>h</sup> 35 <sup>m</sup>	4 9
2	16 12 6.28	1 40.42	20 22 34.7	4 17.3	0.787926	21 29	4 9
4	16 13 46.70	1 39.43	20 26 52.0	4 10.5	0.786521	21 23	4 8
6	16 15 26.13	1 38.39	20 31 2.5	4 3.8	0.785061	21 17	4 8
8	16 17 4.52	+ 1 37.29	20 35 6.3	- 3 57.1	0.783545	21 10	4 7
10	16 18 41.81	1 36.14	-20 39 3.4	3 50.3	0.781975	21 4	4 7
12	16 20 17.95	1 34.92	20 42 53.7	3 43.5	0.780351	20 58	4 6
14	16 21 52.87	1 33.65	20 46 37.2	3 36.6	0.778672	20 52	4 6
16	16 23 26.52	1 32.30	20 50 13.8	3 29.8	0.776940	20 45	4 5
18	16 24 58.82	+ 1 30.89	20 53 43.6	- 3 23.0	0.775156	20 39	4 5
20	16 26 29.71	1 29.41	-20 57 6.6	3 16.2	0.773319	20 33	4 5
22	16 27 59.12	1 27.87	21 0 22.8	3 9.4	0.771432	20 26	4 4
24	16 29 26.99	1 26.27	21 3 32.2	3 2.7	0.769494	20 20	4 4
26	16 30 53.26	1 24.61	21 6 34.9	2 56.0	0.767508	20 13	4 4
28	16 32 17.87	+ 1 22.90	21 9 30.9	- 2 49.3	0.765473	20 7	4 3
30	16 33 40.77	1 21.13	-21 12 20.2	2 42.8	0.763392	20 0	4 3
Febr. 1	16 35 1.90	1 19.30	21 15 3.0	2 36.3	0.761265	19 54	4 3
3	16 36 21.20	1 17.42	21 17 39.3	2 29.9	0.759093	19 47	4 2
5	16 37 38.62	1 15.48	21 20 9.2	2 23.5	0.756878	19 41	4 2
7	16 38 54.10	+ 1 13.47	21 22 32.7	- 2 17.2	0.754620	19 34	4 2
9	16 40 7.57	1 11.39	-21 24 49.9	2 11.0	0.752320	19 27	4 2
11	16 41 18.96	1 9.24	21 27 0.9	2 4.7	0.749980	19 21	4 1
13	16 42 28.20	1 7.03	21 29 5.6	1 58.6	0.747601	19 14	4 1
15	16 43 35.23	1 4.75	21 31 4.2	1 52.4	0.745184	19 7	4 1
17	16 44 39.98	+ 1 2.40	21 32 56.6	- 1 46.4	0.742732	19 0	4 1
19	16 45 42.38	0 59.99	-21 34 43.0	1 40.4	0.740245	18 54	4 0
21	16 46 42.37	0 57.53	21 36 23.4	1 34.6	0.737726	18 47	4 0
23	16 47 39.90	0 55.00	21 37 58.0	1 28.8	0.735177	18 40	4 0
25	16 48 34.90	0 52.42	21 39 26.8	1 23.1	0.732600	18 33	4 0
27	16 49 27.32	+ 0 49.80	21 40 49.9	- 1 17.6	0.729998	18 26	4 0
29	16 50 17.12	0 47.13	-21 42 7.5	1 12.1	0.727372	18 19	4 0
März 2	16 51 4.25	0 44.40	21 43 19.6	1 6.7	0.724725	18 12	3 59
4	16 51 48.65	0 41.63	21 44 26.3	1 1.3	0.722058	18 4	3 59
6	16 52 30.28	0 38.80	21 45 27.6	0 56.1	0.719373	17 57	3 59
8	16 53 9.08	+ 0 35.92	21 46 23.7	- 0 50.8	0.716673	17 50	3 59
10	16 53 45.00	0 32.98	-21 47 14.5	0 45.7	0.713961	17 43	3 59
12	16 54 17.98	0 30.00	21 48 0.2	0 40.5	0.711239	17 35	3 59
14	16 54 47.98	0 26.96	21 48 40.7	0 35.5	0.708510	17 28	3 59
16	16 55 14.94	0 23.88	21 49 16.2	0 30.5	0.705776	17 21	3 59
18	16 55 38.82		21 49 46.7	0 703042		17 13	3 59

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 16	16 55 <sup>m</sup> <sub>s</sub> 14.94	+o 23.88	-21 49 16.2	-o 30.5	0.705776	17 <sup>h</sup> <sub>m</sub> 21	3 59
	18 16 55 38.82	o 20.77	21 49 46.7	o 25.5	0.703042	17 13	3 59
	20 16 55 59.59	o 17.63	21 50 12.2	o 20.7	0.700310	17 6	3 59
	22 16 56 17.22	o 14.46	21 50 32.9	o 15.8	0.697584	16 58	3 59
	24 16 56 31.68	+o 11.28	21 50 48.7	-o 11.0	0.694868	16 50	3 59
	26 16 56 42.96	o 8.08	-21 50 59.7	o 6.3	0.692164	16 43	3 59
	28 16 56 51.04	o 4.89	21 51 6.0	-o 1.6	0.689477	16 35	3 59
	30 16 56 55.93	+o 1.69	21 51 7.6	+o 3.0	0.686810	16 27	3 59
April 1	16 56 57.62	-o 1.52	21 51 4.6	o 7.5	0.684166	16 19	3 59
	3 16 56 56.10	-o 4.72	21 50 57.1	+o 12.1	0.681549	16 11	3 59
	5 16 56 51.38	o 7.93	-21 50 45.0	o 16.7	0.678962	16 3	3 59
	7 16 56 43.45	o 11.13	21 50 28.3	o 21.3	0.676410	15 55	3 59
	9 16 56 32.32	o 14.31	21 50 7.0	o 26.0	0.673896	15 47	3 59
	11 16 56 18.01	o 17.49	21 49 41.0	o 30.5	0.671424	15 39	3 59
	13 16 56 0.52	-o 20.64	21 49 10.5	+o 35.1	0.668999	15 31	3 59
	15 16 55 39.88	o 23.74	-21 48 35.4	o 39.6	0.666624	15 23	3 59
	17 16 55 16.14	o 26.77	21 47 55.8	o 44.1	0.664305	15 14	3 59
	19 16 54 49.37	o 29.74	21 47 11.7	o 48.5	0.662046	15 6	3 59
Mai 1	16 54 19.63	o 32.63	21 46 23.2	o 53.0	0.659851	14 58	3 59
	3 16 53 47.00	-o 35.44	21 45 30.2	+o 57.3	0.657724	14 49	3 59
	5 16 53 11.56	o 38.17	-21 44 32.9	1 1.6	0.655669	14 41	3 59
	7 16 52 33.39	o 40.80	21 43 31.3	1 5.8	0.653690	14 32	3 59
	29 16 51 52.59	o 43.34	21 42 25.5	1 10.0	0.651791	14 24	4 ○
	1 16 51 9.25	o 45.78	21 41 15.5	1 14.2	0.649975	14 15	4 ○
	3 16 50 23.47	-o 48.11	21 40 1.3	+1 18.2	0.648246	14 6	4 ○
	5 16 49 35.36	o 50.32	-21 38 43.1	1 22.3	0.646607	13 58	4 ○
	7 16 48 45.04	o 52.42	21 37 20.8	1 26.2	0.645063	13 49	4 ○
	9 16 47 52.62	o 54.38	21 35 54.6	1 30.0	0.643616	13 40	4 ○
Juni 1	16 46 58.24	o 56.20	21 34 24.6	1 33.6	0.642270	13 32	4 ○
	13 16 46 2.04	-o 57.88	21 32 51.0	+1 37.1	0.641027	13 23	4 I
	15 16 45 4.16	o 59.38	-21 31 13.9	1 40.3	0.639892	13 14	4 I
	17 16 44 4.78	1 0.71	21 29 33.6	1 43.3	0.638866	13 5	4 I
	19 16 43 4.07	1 1.87	21 27 50.3	1 46.1	0.637953	12 56	4 I
	21 16 42 2.20	1 2.84	21 26 4.2	1 48.6	0.637154	12 47	4 I
	23 16 40 59.36	-1 3.64	21 24 15.6	+1 50.8	0.636472	12 38	4 2
	25 16 39 55.72	1 4.25	-21 22 24.8	1 52.8	0.635906	12 29	4 2
	27 16 38 51.47	1 4.70	21 20 32.0	1 54.4	0.635459	12 20	4 2
	29 16 37 46.77	1 4.97	21 18 37.6	1 55.8	0.635130	12 11	4 2
Juni 31	16 36 41.80	1 5.06	21 16 41.8	1 56.9	0.634921	12 2	4 3
	16 35 36.74	21 14 44.9			0.634831	11 53	4 3

## Wahrer geozentrischer Ort.

<sup>o</sup> <sup>b</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Mai 31	16 <sup>h</sup> 36 <sup>m</sup> 41.80	- <sup>m</sup> <sup>s</sup> 5.06	-21° 16' 41.8	+ <sup>h</sup> <sup>m</sup> 56.9	0.634921	12 <sup>h</sup> 2 <sup>m</sup>	4 3
Juni 2	16 35 36.74	1 4.98	21 14 44.9	1 57.6	0.634831	11 53	4 3
4	16 34 31.76	1 4.73	21 12 47.3	1 58.0	0.634861	11 44	4 3
6	16 33 27.03	1 4.30	21 10 49.3	1 58.0	0.635010	11 35	4 3
8	16 32 22.73	-1 3.69	21 8 51.3	+1 57.6	0.635279	11 26	4 3
10	16 31 19.04	1 2.90	-21 6 53.7	1 56.7	0.635666	II 18	4 4
12	16 30 16.14	1 1.93	21 4 57.0	1 55.4	0.636171	II 9	4 4
14	16 29 14.21	1 0.79	21 3 1.6	1 53.7	0.636791	II 0	4 4
16	16 28 13.42	0 59.47	21 1 7.9	1 51.5	0.637526	IO 51	4 4
18	16 27 13.95	-0 57.99	20 59 16.4	+1 48.9	0.638374	IO 42	4 4
20	16 26 15.96	0 56.36	-20 57 27.5	1 46.0	0.639331	IO 33	4 5
22	16 25 19.60	0 54.59	20 55 41.5	1 42.5	0.640396	IO 24	4 5
24	16 24 25.01	0 52.67	20 53 59.0	1 38.8	0.641565	IO 15	4 5
26	16 23 32.34	0 50.64	20 52 20.2	1 34.6	0.642834	IO 7	4 5
28	16 22 41.70	-0 48.51	20 50 45.6	+1 30.2	0.644201	9 58	4 5
30	16 21 53.19	0 46.25	-20 49 15.4	1 25.3	0.645663	9 49	4 6
Juli 2	16 21 6.94	0 43.90	20 47 50.1	1 20.2	0.647216	9 41	4 6
4	16 20 23.04	0 41.44	20 46 29.9	1 14.7	0.648857	9 32	4 6
6	16 19 41.60	0 38.90	20 45 15.2	1 8.9	0.650582	9 23	4 6
8	16 19 2.70	-0 36.26	20 44 6.3	+1 2.7	0.652387	9 15	4 6
10	16 18 26.44	0 33.54	-20 43 3.6	0 56.4	0.654269	9 6	4 6
12	16 17 52.90	0 30.73	20 42 7.2	0 49.7	0.656225	8 58	4 6
14	16 17 22.17	0 27.86	20 41 17.5	0 42.7	0.658250	8 50	4 6
16	16 16 54.31	0 24.92	20 40 34.8	0 35.5	0.660340	8 41	4 7
18	16 16 29.39	-0 21.95	20 39 59.3	+0 28.3	0.662491	8 33	4 7
20	16 16 7.44	0 18.94	-20 39 31.0	0 20.8	0.664698	8 25	4 7
22	16 15 48.50	0 15.90	20 39 10.2	0 13.4	0.666957	8 16	4 7
24	16 15 32.60	0 12.84	20 38 56.8	+0 5.8	0.669265	8 8	4 7
26	16 15 19.76	0 9.77	20 38 51.0	-0 1.8	0.671616	8 0	4 7
28	16 15 9.99	-0 6.69	20 38 52.8	-0 9.5	0.674008	7 52	4 7
30	16 15 3.30	0 3.60	-20 39 2.3	0 17.2	0.676436	7 44	4 7
Aug. 1	16 14 59.70	-0 0.51	20 39 19.5	0 24.9	0.678896	7 36	4 7
3	16 14 59.19	+0 2.58	20 39 44.4	0 32.5	0.681386	7 28	4 7
5	16 15 1.77	0 5.67	20 40 16.9	0 40.2	0.683902	7 21	4 7
7	16 15 7.44	+0 8.77	20 40 57.1	-0 47.9	0.686440	7 13	4 7
9	16 15 16.21	0 11.86	-20 41 45.0	0 55.4	0.688997	7 5	4 6
11	16 15 28.07	0 14.93	20 42 40.4	1 2.9	0.691570	6 57	4 6
13	16 15 43.00	0 17.98	20 43 43.3	1 10.2	0.694155	6 50	4 6
15	16 16 0.98	0 21.01	20 44 53.5	1 17.4	0.696748	6 42	4 6
17	16 16 21.99		20 46 10.9	0.699347		6 35	4 6

## Wahrer geozentrischer Ort.

<sup>ob</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 15	16 <sup>h</sup> 16 <sup>m</sup> 0.98	+ 0 21.01	- 20° 44' 53.5"	- 1° 17.4"	0.696748	6 <sup>h</sup> 42 <sup>m</sup>	4 <sup>h</sup> 6 <sup>m</sup>
17	16 16 21.99	0 24.01	20 46 10.9	1 24.4	0.699347	6 35	4 6
19	16 16 46.00	0 26.98	20 47 35.3	1 31.2	0.701947	6 27	4 6
21	16 17 12.98	0 29.90	20 49 6.5	1 37.8	0.704546	6 20	4 6
23	16 17 42.88	+ 0 32.78	20 50 44.3	- 1 44.3	0.707141	6 12	4 5
25	16 18 15.66	0 35.62	- 20 52 28.6	1 50.4	0.709730	6 5	4 5
27	16 18 51.28	0 38.42	20 54 19.0	1 56.3	0.712310	5 58	4 5
29	16 19 29.70	0 41.17	20 56 15.3	2 2.0	0.714878	5 50	4 5
31	16 20 10.87	0 43.89	20 58 17.3	2 7.6	0.717433	5 43	4 5
Sept. 2	16 20 54.76	+ 0 46.57	21 0 24.9	- 2 12.8	0.719973	5 36	4 4
4	16 21 41.33	0 49.22	- 21 2 37.7	2 17.9	0.722495	5 29	4 4
6	16 22 30.55	0 51.83	21 4 55.6	2 22.7	0.724996	5 22	4 4
8	16 23 22.38	0 54.40	21 7 18.3	2 27.3	0.727475	5 15	4 4
10	16 24 16.78	0 56.93	21 9 45.6	2 31.6	0.729930	5 8	4 3
12	16 25 13.71	+ 0 59.40	21 12 17.2	- 2 35.5	0.732359	5 1	4 3
14	16 26 13.11	1 1.82	- 21 14 52.7	2 39.1	0.734759	4 54	4 3
16	16 27 14.93	1 4.18	21 17 31.8	2 42.5	0.737129	4 47	4 2
18	16 28 19.11	1 6.49	21 20 14.3	2 45.6	0.739467	4 40	4 2
20	16 29 25.60	1 8.74	21 22 59.9	2 48.3	0.741772	4 33	4 2
22	16 30 34.34	+ 1 10.94	21 25 48.2	- 2 50.8	0.744041	4 27	4 1
24	16 31 45.28	1 13.10	- 21 28 39.0	2 53.0	0.746274	4 20	4 1
26	16 32 58.38	1 15.20	21 31 32.0	2 54.8	0.748469	4 13	4 1
28	16 34 13.58	1 17.25	21 34 26.8	2 56.5	0.750626	4 7	4 0
30	16 35 30.83	1 19.27	21 37 23.3	2 57.9	0.752743	4 0	4 0
Okt. 2	16 36 50.10	+ 1 21.23	21 40 21.2	- 2 58.9	0.754819	3 54	4 0
4	16 38 11.33	1 23.16	- 21 43 20.1	2 59.8	0.756854	3 47	3 59
6	16 39 34.49	1 25.04	21 46 19.9	3 0.3	0.758845	3 41	3 59
8	16 40 59.53	1 26.87	21 49 20.2	3 0.6	0.760792	3 34	3 59
10	16 42 26.40	1 28.64	21 52 20.8	3 0.5	0.762693	3 28	3 58
12	16 43 55.04	+ 1 30.37	21 55 21.3	- 3 0.2	0.764548	3 21	3 58
14	16 45 25.41	1 32.04	- 21 58 21.5	2 59.5	0.766355	3 15	3 58
16	16 46 57.45	1 33.65	22 1 21.0	2 58.7	0.768114	3 8	3 57
18	16 48 31.10	1 35.21	22 4 19.7	2 57.6	0.769823	3 2	3 57
20	16 50 6.31	1 36.71	22 7 17.3	2 56.1	0.771482	2 56	3 57
22	16 51 43.02	+ 1 38.16	22 10 13.4	- 2 54.4	0.773090	2 50	3 56
24	16 53 21.18	1 39.56	- 22 13 7.8	2 52.5	0.774647	2 43	3 56
26	16 55 0.74	1 40.93	22 16 0.3	2 50.4	0.776152	2 37	3 56
28	16 56 41.67	1 42.25	22 18 50.7	2 48.1	0.777605	2 31	3 55
30	16 58 23.92	1 43.52	22 21 38.8	2 45.5	0.779006	2 25	3 55
Nov. 1	17 0 7.44		22 24 24.3		0.780353	2 19	3 55

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Okt. 30	16 <sup>h</sup> 58 <sup>m</sup> 23.92	+ 1 43.52	-22 21 38.8	- 2 45.5	0.779006	2 25	3 55
Nov. 1	17 0 7.44	1 44.76	22 24 24.3	2 42.8	0.780353	2 19	3 55
3	17 1 52.20	1 45.94	22 27 7.1	2 39.9	0.781647	2 13	3 54
5	17 3 38.14	1 47.08	22 29 47.0	2 36.6	0.782886	2 6	3 54
7	17 5 25.22	+ 1 48.16	22 32 23.6	- 2 33.2	0.784070	2 0	3 54
9	17 7 13.38	1 49.20	-22 34 56.8	2 29.6	0.785198	1 54	3 53
11	17 9 2.58	1 50.18	22 37 26.4	2 25.8	0.786269	1 48	3 53
13	17 10 52.76	1 51.10	22 39 52.2	2 21.7	0.787283	1 42	3 53
15	17 12 43.86	1 51.98	22 42 13.9	2 17.6	0.788240	1 36	3 53
17	17 14 35.84	+ 1 52.79	22 44 31.5	- 2 13.2	0.789140	1 30	3 52
19	17 16 28.63	1 53.56	-22 46 44.7	2 8.7	0.789982	1 24	3 52
21	17 18 22.19	1 54.28	22 48 53.4	2 4.1	0.790767	1 18	3 52
23	17 20 16.47	1 54.96	22 50 57.5	1 59.3	0.791494	1 12	3 51
25	17 22 11.43	1 55.59	22 52 56.8	1 54.4	0.792162	1 6	3 51
27	17 24 7.02	+ 1 56.18	22 54 51.2	- 1 49.5	0.792772	1 0	3 51
Dec. 29	17 26 3.20	1 56.73	-22 56 40.7	1 44.4	0.793324	0 54	3 51
1	17 27 59.93	1 57.23	22 58 25.1	1 39.2	0.793817	0 48	3 51
3	17 29 57.16	1 57.69	23 0 4.3	1 33.8	0.794250	0 42	3 50
5	17 31 54.85	1 58.10	23 1 38.1	1 28.4	0.794624	0 36	3 50
7	17 33 52.95	+ 1 58.44	23 3 6.5	- 1 22.9	0.794938	0 30	3 50
9	17 35 51.39	1 58.74	-23 4 29.4	1 17.3	0.795191	0 25	3 50
11	17 37 50.13	1 58.97	23 5 46.7	1 11.6	0.795385	0 19	3 50
13	17 39 49.10	1 59.15	23 6 58.3	1 5.9	0.795518	0 13	3 50
15	17 41 48.25	1 59.27	23 8 4.2	1 0.1	0.795591	0 7	3 49
17	17 43 47.52	+ 1 59.35	23 9 4.3	- 0 54.4	0.795603	0 1	3 49
19	17 45 46.87	1 59.39	-23 9 58.7	0 48.6	0.795555	23 55	3 49
21	17 47 46.26	1 59.38	23 10 47.3	0 42.9	0.795447	23 49	3 49
23	17 49 45.64	1 59.33	23 11 30.2	0 37.1	0.795278	23 43	3 49
25	17 51 44.97	1 59.23	23 12 7.3	0 31.3	0.795050	23 37	3 49
27	17 53 44.20	+ 1 59.08	23 12 38.6	- 0 25.6	0.794762	23 31	3 49
29	17 55 43.28	1 58.88	-23 13 4.2	0 19.8	0.794414	23 26	3 49
31	17 57 42.16	1 58.64	23 13 24.0	0 14.0	0.794006	23 20	3 49
33	17 59 40.80		23 13 38.0		0.793537	23 14	3 49

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Jan.	○ 2 47 13.74	- 13.17	+ 13 36 49.4	- ○ 24.6	0.931623	8 12	7 18
	2 47 0.57	11.48	13 36 24.8	○ 16.5	0.933024	8 4	7 17
	4 2 46 49.09	9.79	13 36 8.3	○ 8.4	0.934453	7 56	7 17
	6 2 46 39.30	8.07	13 35 59.9	- ○ 0.3	0.935908	7 48	7 17
	8 2 46 31.23	- 6.33	13 35 59.6	+ ○ 7.9	0.937387	7 40	7 17
	10 2 46 24.90	4.58	+ 13 36 7.5	○ 16.1	0.938887	7 32	7 17
	12 2 46 20.32	2.81	13 36 23.6	○ 24.4	0.940407	7 24	7 17
	14 2 46 17.51	- 1.03	13 36 48.0	○ 32.6	0.941945	7 16	7 17
	16 2 46 16.48	+ 0.75	13 37 20.6	○ 40.8	0.943498	7 8	7 18
	18 2 46 17.23	+ 2.53	13 38 1.4	+ ○ 49.1	0.945065	7 0	7 18
	20 2 46 19.76	4.32	+ 13 38 50.5	○ 57.2	0.946642	6 52	7 18
	22 2 46 24.08	6.10	13 39 47.7	1 5.3	0.948227	6 45	7 18
	24 2 46 30.18	7.86	13 40 53.0	1 13.3	0.949818	6 37	7 18
	26 2 46 38.04	9.63	13 42 6.3	1 21.2	0.951413	6 29	7 18
	28 2 46 47.67	+ 11.37	13 43 27.5	+ 1 28.9	0.953010	6 21	7 18
	30 2 46 59.04	13.11	+ 13 44 56.4	1 36.4	0.954607	6 14	7 18
Febr.	1 2 47 12.15	14.81	13 46 32.8	1 43.9	0.956202	6 6	7 18
	3 2 47 26.96	16.50	13 48 16.7	1 51.2	0.957794	5 58	7 19
	5 2 47 43.46	18.18	13 50 7.9	1 58.3	0.959380	5 51	7 19
	7 2 48 1.64	+ 19.84	13 52 6.2	+ 2 5.4	0.960959	5 43	7 19
	9 2 48 21.48	21.48	+ 13 54 11.6	2 12.3	0.962529	5 36	7 19
	11 2 48 42.96	23.11	13 56 23.9	2 19.1	0.964088	5 28	7 19
	13 2 49 6.07	24.71	13 58 43.0	2 25.7	0.965635	5 21	7 20
	15 2 49 30.78	26.29	14 1 8.7	2 32.1	0.967169	5 13	7 20
	17 2 49 57.07	+ 27.83	14 3 40.8	+ 2 38.3	0.968687	5 6	7 20
	19 2 50 24.90	29.35	+ 14 6 19.1	2 44.3	0.970189	4 58	7 20
März	21 2 50 54.25	30.84	14 9 3.4	2 50.2	0.971672	4 51	7 21
	23 2 51 25.09	32.30	14 11 53.6	2 55.7	0.973135	4 44	7 21
	25 2 51 57.39	33.73	14 14 49.3	3 1.1	0.974576	4 36	7 21
	27 2 52 31.12	+ 35.12	14 17 50.4	+ 3 6.2	0.975995	4 29	7 22
	29 2 53 6.24	36.48	+ 14 20 56.6	3 11.2	0.977390	4 22	7 22
	2 2 53 42.72	37.80	14 24 7.8	3 15.9	0.978760	4 14	7 22
	4 2 54 20.52	39.09	14 27 23.7	3 20.4	0.980105	4 7	7 23
	6 2 54 59.61	40.36	14 30 44.1	3 24.8	0.981423	4 0	7 23
	8 2 55 39.97	+ 41.59	14 34 8.9	+ 3 28.9	0.982713	3 53	7 23
	10 2 56 21.56	42.80	+ 14 37 37.8	3 32.9	0.983975	3 45	7 24
	12 2 57 4.36	43.97	14 41 10.7	3 36.7	0.985207	3 38	7 24
	14 2 57 48.33	45.10	14 44 47.4	3 40.2	0.986409	3 31	7 24
	16 2 58 33.43	46.21	14 48 27.6	3 43.5	0.987579	3 24	7 25
	18 2 59 19.64		14 52 11.1		0.988716	3 17	7 25

## Wahrer geozentrischer Ort.

○ Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 16	2 58 <sup>h</sup> 33.43	+46.21	+14° 48' 27.6	+3 43.5	0.987579	3 24 <sup>m</sup>	7 25 <sup>n</sup>
18	2 59 19.64	47.28	14 52 11.1	3 46.6	0.988716	3 17	7 25
20	3 0 6.92	48.30	14 55 57.7	3 49.4	0.989820	3 10	7 25
22	3 0 55.22	49.30	14 59 47.1	3 52.1	0.990890	3 3	7 26
24	3 1 44.52	+50.25	15 3 39.2	+3 54.6	0.991926	2 56	7 26
26	3 2 34.77	51.17	+15 7 33.8	3 56.8	0.992927	2 48	7 27
28	3 3 25.94	52.04	15 11 30.6	3 58.9	0.993892	2 41	7 27
30	3 4 17.98	52.89	15 15 29.5	4 0.6	0.994820	2 34	7 27
April 1	3 5 10.87	53.69	15 19 30.1	4 2.1	0.995711	2 27	7 28
3	3 6 4.56	+54.47	15 23 32.2	+4 3.6	0.996566	2 20	7 28
5	3 6 59.03	55.22	+15 27 35.8	4 4.8	0.997383	2 13	7 29
7	3 7 54.25	55.93	15 31 40.6	4 6.0	0.998162	2 6	7 29
9	3 8 50.18	56.60	15 35 46.6	4 6.8	0.998902	2 0	7 29
11	3 9 46.78	57.25	15 39 53.4	4 7.5	0.999604	1 53	7 30
13	3 10 44.03	+57.85	15 44 0.9	+4 8.1	1.000267	1 46	7 30
15	3 11 41.88	58.43	+15 48 9.0	4 8.4	1.000890	1 39	7 31
17	3 12 40.31	58.96	15 52 17.4	4 8.6	1.001473	1 32	7 31
19	3 13 39.27	59.46	15 56 26.0	4 8.5	1.002016	1 25	7 32
21	3 14 38.73	59.92	16 0 34.5	4 8.2	1.002518	1 18	7 32
23	3 15 38.65	+60.34	16 4 42.7	+4 7.8	1.002979	1 11	7 32
25	3 16 38.99	60.72	+16 8 50.5	4 7.2	1.003399	1 4	7 33
27	3 17 39.71	61.07	16 12 57.7	4 6.5	1.003778	0 57	7 33
29	3 18 40.78	61.38	16 17 4.2	4 5.7	1.004116	0 51	7 34
Mai 1	3 19 42.16	61.67	16 21 9.9	4 4.6	1.004414	0 44	7 34
3	3 20 43.83	+61.93	16 25 14.5	+4 3.4	1.004671	0 37	7 35
5	3 21 45.76	62.15	+16 29 17.9	4 2.2	1.004886	0 30	7 35
7	3 22 47.91	62.33	16 33 20.1	4 0.7	1.005060	0 23	7 35
9	3 23 50.24	62.48	16 37 20.8	3 59.2	1.005192	0 16	7 36
11	3 24 52.72	62.61	16 41 20.0	3 57.5	1.005283	0 9	7 36
13	3 25 55.33	+62.70	16 45 17.5	+3 55.7	1.005333	0 3	7 37
15	3 26 58.03	62.74	+16 49 13.2	3 53.6	1.005341	23 56	7 37
17	3 28 0.77	62.75	16 53 6.8	3 51.4	1.005308	23 49	7 37
19	3 29 3.52	62.72	16 56 58.2	3 49.2	1.005233	23 42	7 38
21	3 30 6.24	62.65	17 0 47.4	3 46.8	1.005116	23 35	7 38
23	3 31 8.89	+62.54	17 4 34.2	+3 44.2	1.004958	23 28	7 39
25	3 32 11.43	62.40	+17 8 18.4	3 41.6	1.004759	23 21	7 39
27	3 33 13.83	62.25	17 12 0.0	3 38.9	1.004519	23 15	7 39
29	3 34 16.08	62.05	17 15 38.9	3 36.1	1.004239	23 8	7 40
31	3 35 18.13	61.81	17 19 15.0	3 33.2	1.003918	23 1	7 40
Juni 2	3 36 19.94		17 22 48.2		1.003557	22 54	7 41

## Wahrer geozentrischer Ort.

<sup>o</sup> <sup>b</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Mai 31	3 35 <sup>m</sup> 18. <sup>s</sup> 13	+61.81	+17 ° 19' 15.0	+3 33.2	1.003918	23 <sup>h</sup> 1 <sup>m</sup>	7 40
Juni 2	3 36 19.94	61.55	17 22 48.2	3 30.1	1.003557	22 54	7 41
4	3 37 21.49	61.25	17 26 18.3	3 27.1	1.003156	22 47	7 41
6	3 38 22.74	60.92	17 29 45.4	3 23.9	1.002715	22 40	7 41
8	3 39 23.66	+60.56	17 33 9.3	+3 20.7	1.002234	22 34	7 42
10	3 40 24.22	60.15	+17 36 30.0	3 17.3	1.001714	22 27	7 42
12	3 41 24.37	59.71	17 39 47.3	3 13.8	1.001154	22 20	7 42
14	3 42 24.08	59.23	17 43 1.1	3 10.2	1.000555	22 13	7 43
16	3 43 23.31	58.71	17 46 11.3	3 6.5	0.999917	22 6	7 43
18	3 44 22.02	+58.15	17 49 17.8	+3 2.8	0.999241	21 59	7 43
20	3 45 20.17	57.56	+17 52 20.6	2 59.0	0.998527	21 52	7 44
22	3 46 17.73	56.93	17 55 19.6	2 55.1	0.997775	21 45	7 44
24	3 47 14.66	56.27	17 58 14.7	2 51.1	0.996986	21 38	7 44
26	3 48 10.93	55.58	18 1 5.8	2 47.2	0.996161	21 31	7 45
28	3 49 6.51	+54.86	18 3 53.0	+2 43.1	0.995300	21 24	7 45
Julii 30	3 50 1.37	54.10	+18 6 36.1	2 39.1	0.994404	21 17	7 45
2	3 50 55.47	53.30	18 9 15.2	2 34.9	0.993472	21 10	7 46
4	3 51 48.77	52.47	18 11 50.1	2 30.8	0.992506	21 3	7 46
6	3 52 41.24	51.61	18 14 20.9	2 26.5	0.991505	20 56	7 46
8	3 53 32.85	+50.71	18 16 47.4	+2 22.2	0.990471	20 49	7 46
10	3 54 23.56	49.78	+18 19 9.6	2 17.9	0.989403	20 42	7 47
12	3 55 13.34	48.80	18 21 27.5	2 13.4	0.988303	20 35	7 47
14	3 56 2.14	47.77	18 23 40.9	2 8.9	0.987171	20 28	7 47
16	3 56 49.91	46.71	18 25 49.8	2 4.4	0.986008	20 21	7 47
18	3 57 36.62	+45.62	18 27 54.2	+1 59.8	0.984814	20 14	7 48
20	3 58 22.24	44.49	+18 29 54.0	1 55.2	0.983591	20 7	7 48
22	3 59 6.73	43.33	18 31 49.2	1 50.6	0.982339	20 0	7 48
24	3 59 50.06	42.14	18 33 39.8	1 46.0	0.981060	19 53	7 48
26	4 0 32.20	40.92	18 35 25.8	1 41.5	0.979754	19 45	7 48
28	4 1 13.12	+39.67	18 37 7.3	+1 36.8	0.978422	19 38	7 49
Aug. 30	4 1 52.79	38.38	+18 38 44.1	1 32.2	0.977066	19 31	7 49
1	4 2 31.17	37.06	18 40 16.3	1 27.5	0.975685	19 24	7 49
3	4 3 8.23	35.71	18 41 43.8	1 22.7	0.974281	19 16	7 49
5	4 3 43.94	34.32	18 43 6.5	1 18.0	0.972855	19 9	7 49
7	4 4 18.26	+32.90	18 44 24.5	+1 13.1	0.971408	19 2	7 49
9	4 4 51.16	31.44	+18 45 37.6	1 8.3	0.969940	18 55	7 49
11	4 5 22.60	29.94	18 46 45.9	1 3.5	0.968453	18 47	7 50
13	4 5 52.54	28.41	18 47 49.4	0 58.7	0.966949	18 40	7 50
15	4 6 20.95	26.86	18 48 48.1	0 53.8	0.965429	18 32	7 50
17	4 6 47.81		18 49 41.9		0.963894	18 25	7 50

## Wahrer geozentrischer Ort.

$\text{G}^{\text{h}}$ Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. $\Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 15	4 6 <sup>h</sup> 20.95	+26.86	+18° 48' 48.1	+ 53.8	0.965429	18 <sup>h</sup> 32 <sup>m</sup>	7 50 <sup>s</sup>
17	4 6 47.81	25.27	18 49 41.9	○ 49.0	0.963894	18 25	7 50
19	4 7 13.08	23.67	18 50 30.9	○ 44.1	0.962346	18 17	7 50
21	4 7 36.75	22.04	18 51 15.0	○ 39.3	0.960786	18 10	7 50
23	4 7 58.79	+20.40	18 51 54.3	+ 34.5	0.959216	18 2	7 50
25	4 8 19.19	18.73	+18 52 28.8	○ 29.7	0.957638	17 55	7 50
27	4 8 37.92	17.04	18 52 58.5	○ 24.9	0.956052	17 47	7 50
29	4 8 54.96	15.33	18 53 23.4	○ 20.1	0.954460	17 40	7 50
31	4 9 10.29	13.60	18 53 43.5	○ 15.3	0.952864	17 32	7 50
Sept. 2	4 9 23.89	+11.84	18 53 58.8	+ 10.5	0.951265	17 24	7 50
4	4 9 35.73	10.08	+18 54 9.3	○ 5.7	0.949666	17 17	7 50
6	4 9 45.81	8.29	18 54 15.0	+ 0.9	0.948067	17 9	7 50
8	4 9 54.10	6.48	18 54 15.9	- 0.38	0.946471	17 1	7 50
10	4 10 0.58	4.66	18 54 12.1	○ 8.6	0.944880	16 54	7 50
12	4 10 5.24	+ 2.85	18 54 3.5	- 0 13.3	0.943296	16 46	7 50
14	4 10 8.09	+ 1.02	+18 53 50.2	○ 18.0	0.941720	16 38	7 50
16	4 10 9.11	- 0.79	18 53 32.2	○ 22.6	0.940155	16 30	7 50
18	4 10 8.32	2.60	18 53 9.6	○ 27.2	0.938604	16 22	7 50
20	4 10 5.72	4.41	18 52 42.4	○ 31.7	0.937067	16 14	7 50
22	4 10 1.31	- 6.21	18 52 10.7	- 0 36.2	0.935548	16 6	7 50
24	4 9 55.10	7.99	+18 51 34.5	○ 40.6	0.934048	15 58	7 50
26	4 9 47.11	9.77	18 50 53.9	○ 44.9	0.932569	15 50	7 50
28	4 9 37.34	11.53	18 50 9.0	○ 49.2	0.931114	15 42	7 50
30	4 9 25.81	13.27	18 49 19.8	○ 53.4	0.929684	15 34	7 50
Okt. 2	4 9 12.54	-15.00	18 48 26.4	- 0 57.7	0.928281	15 26	7 50
4	4 8 57.54	16.71	+18 47 28.7	1 1.8	0.926908	15 18	7 50
6	4 8 40.83	18.39	18 46 26.9	1 5.9	0.925567	15 10	7 50
8	4 8 22.44	20.03	18 45 21.0	1 9.8	0.924260	15 1	7 49
10	4 8 2.41	21.64	18 44 11.2	1 13.5	0.922990	14 53	7 49
12	4 7 40.77	-23.21	18 42 57.7	- 1 17.2	0.921759	14 45	7 49
14	4 7 17.56	24.71	+18 41 40.5	1 20.8	0.920569	14 37	7 49
16	4 6 52.85	26.17	18 40 19.7	1 24.2	0.919423	14 28	7 49
18	4 6 26.68	27.58	18 38 55.5	1 27.5	0.918322	14 20	7 49
20	4 5 59.10	28.93	18 37 28.0	1 30.5	0.917268	14 12	7 49
22	4 5 30.17	-30.21	18 35 57.5	- 1 33.5	0.916263	14 3	7 48
24	4 4 59.96	31.44	+18 34 24.0	1 36.3	0.915309	13 55	7 48
26	4 4 28.52	32.60	18 32 47.7	1 38.9	0.914407	13 47	7 48
28	4 3 55.92	33.71	18 31 8.8	1 41.4	0.913560	13 38	7 48
30	4 3 22.21	34.75	18 29 27.4	1 43.7	0.912768	13 30	7 48
Nov. 1	4 2 47.46		18 27 43.7		0.912034	13 21	7 48

## Wahrer geozentrischer Ort.

<sup>o</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Okt. 30	4 3 22.21	- 34.75	+ 18° 29' 27.4	- 1' "	0.912768	13 30	7 48
Nov. 1	4 2 47.46	35.72	18 27 43.7	1 45.8	0.912034	13 21	7 48
3	4 2 11.74	36.61	18 25 57.9	1 47.7	0.911359	13 13	7 47
5	4 1 35.13	37.41	18 24 10.2	1 49.3	0.910745	13 4	7 47
7	4 0 57.72	- 38.13	18 22 20.9	- 1 50.8	0.910193	12 56	7 47
9	4 0 19.59	38.76	+ 18 20 30.1	1 52.0	0.909705	12 47	7 47
11	3 59 40.83	39.30	18 18 38.1	1 52.8	0.909281	12 39	7 47
13	3 59 1.53	39.75	18 16 45.3	1 53.5	0.908923	12 30	7 46
15	3 58 21.78	40.10	18 14 51.8	1 53.8	0.908631	12 22	7 46
17	3 57 41.68	- 40.36	18 12 58.0	- 1 53.9	0.908405	12 13	7 46
19	3 57 1.32	40.53	+ 18 11 41.1	1 53.8	0.908246	12 5	7 46
21	3 56 20.79	40.61	18 9 10.3	1 53.4	0.908155	11 56	7 46
23	3 55 40.18	40.59	18 7 16.9	1 52.8	0.908132	11 47	7 45
25	3 54 59.59	40.50	18 5 24.1	1 51.8	0.908176	11 39	7 45
27	3 54 19.09	- 40.31	18 3 32.3	- 1 50.6	0.908288	11 30	7 45
Dez. 29	3 53 38.78	40.03	+ 18 1 41.7	1 49.1	0.908468	11 22	7 45
1	3 52 58.75	39.67	17 59 52.6	1 47.4	0.908715	11 13	7 45
3	3 52 19.08	39.20	17 58 5.2	1 45.4	0.909028	11 5	7 44
5	3 51 39.88	38.65	17 56 19.8	1 43.0	0.909408	10 56	7 44
7	3 51 1.23	- 38.01	17 54 36.8	- 1 40.4	0.909853	10 48	7 44
9	3 50 23.22	37.27	+ 17 52 56.4	1 37.4	0.910364	10 39	7 44
11	3 49 45.95	36.44	17 51 19.0	1 34.2	0.910938	10 31	7 44
13	3 49 9.51	35.54	17 49 44.8	1 30.7	0.911575	10 22	7 43
15	3 48 33.97	34.54	17 48 14.1	1 27.0	0.912274	10 14	7 43
17	3 47 59.43	- 33.48	17 46 47.1	- 1 23.1	0.913032	10 5	7 43
19	3 47 25.95	32.35	+ 17 45 24.0	1 18.9	0.913849	9 57	7 43
21	3 46 53.60	31.15	17 44 5.1	1 14.6	0.914722	9 48	7 43
23	3 46 22.45	29.90	17 42 50.5	1 10.0	0.915649	9 40	7 43
25	3 45 52.55	28.58	17 41 40.5	1 5.1	0.916630	9 32	7 43
27	3 45 23.97	- 27.21	17 40 35.4	- 1 0.1	0.917662	9 23	7 42
29	3 44 56.76	25.77	+ 17 39 35.3	0 55.0	0.918743	9 15	7 42
31	3 44 30.99	24.28	17 38 40.3	0 49.6	0.919872	9 6	7 42
33	3 44 6.71		17 37 50.7		0.921046	8 58	7 42

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Jan.	○ 20 I 48.24	+28.50	- 21 ° 2 36.9	+82.6	I.315354	I 27	4 4
	2 20 2 16.74	28.71	21 I 14.3	83.5	I.315591	I 19	4 4
	4 20 2 45.45	28.90	20 59 50.8	84.2	I.315806	I 12	4 4
	6 20 3 14.35	29.07	20 58 26.6	84.8	I.315997	I 5	4 5
	8 20 3 43.42	+29.23	20 57 1.8	+85.5	I.316165	○ 57	4 5
	10 20 4 12.65	29.35	- 20 55 36.3	86.1	I.316309	○ 50	4 5
	12 20 4 42.00	29.46	20 54 10.2	86.8	I.316430	○ 42	4 5
	14 20 5 11.46	29.53	20 52 43.4	87.2	I.316528	○ 35	4 5
	16 20 5 40.99	29.57	20 51 16.2	87.5	I.316602	○ 28	4 5
	18 20 6 10.56	+29.59	20 49 48.7	+87.8	I.316652	○ 20	4 5
	20 20 6 40.15	29.59	- 20 48 20.9	88.1	I.316678	○ 13	4 6
	22 20 7 9.74	29.56	20 46 52.8	88.2	I.316680	○ 5	4 6
	24 20 7 39.30	29.49	20 45 24.6	88.2	I.316657	23 58	4 6
	26 20 8 8.79	29.41	20 43 56.4	88.2	I.316611	23 51	4 6
	28 20 8 38.20	+29.31	20 42 28.2	+88.1	I.316542	23 43	4 6
	30 20 9 7.51	29.18	- 20 41 0.1	87.9	I.316450	23 36	4 7
Febr.	1 20 9 36.69	29.02	20 39 32.2	87.6	I.316334	23 28	4 7
	3 20 10 5.71	28.84	20 38 4.6	87.3	I.316194	23 21	4 7
	5 20 10 34.55	28.64	20 36 37.3	86.9	I.316031	23 14	4 7
	7 20 11 3.19	+28.41	20 35 10.4	+86.4	I.315845	23 6	4 7
	9 20 11 31.60	28.17	- 20 33 44.0	85.9	I.315636	22 59	4 7
	11 20 11 59.77	27.89	20 32 18.1	85.2	I.315405	22 51	4 8
	13 20 12 27.66	27.59	20 30 52.9	84.5	I.315152	22 44	4 8
	15 20 12 55.25	27.27	20 29 28.4	83.7	I.314876	22 37	4 8
	17 20 13 22.52	+26.93	20 28 4.7	+82.7	I.314578	22 29	4 8
	19 20 13 49.45	26.56	- 20 26 42.0	81.7	I.314258	22 22	4 8
	21 20 14 16.01	26.18	20 25 20.3	80.7	I.313917	22 14	4 8
	23 20 14 42.19	25.77	20 23 59.6	79.6	I.313555	22 7	4 8
	25 20 15 7.96	25.33	20 22 40.0	78.3	I.313172	21 59	4 9
	27 20 15 33.29	+24.88	20 21 21.7	+77.0	I.312770	21 52	4 9
	29 20 15 58.17	24.41	- 20 20 4.7	75.7	I.312348	21 44	4 9
März	2 20 16 22.58	23.92	20 18 49.0	74.3	I.311907	21 37	4 9
	4 20 16 46.50	23.41	20 17 34.7	72.7	I.311447	21 29	4 9
	6 20 17 9.91	22.88	20 16 22.0	71.1	I.310969	21 22	4 9
	8 20 17 32.79	+22.34	20 15 10.9	+69.4	I.310472	21 14	4 9
	10 20 17 55.13	21.77	- 20 14 1.5	67.7	I.309958	21 7	4 10
	12 20 18 16.90	21.17	20 12 53.8	65.8	I.309426	20 59	4 10
	14 20 18 38.07	20.56	20 11 48.0	64.0	I.308879	20 52	4 10
	16 20 18 58.63	19.95	20 10 44.0	62.1	I.308316	20 44	4 10
	18 20 19 18.58		20 9 41.9		I.307737	20 37	4 10

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 16	20 18 <sup>m</sup> 58 <sup>s</sup> .63	+ 19.95	— 20 ° 10' 44.0	+ 62.1	I.308316	20 44 <sup>m</sup>	4 10 <sup>m</sup>
	18 20 19 18.58	19.30	20 9 41.9	60.0	I.307737	20 37	4 10
	20 20 19 37.88	18.65	20 8 41.9	57.9	I.307143	20 29	4 10
	22 20 19 56.53	17.98	20 7 44.0	55.7	I.306536	20 21	4 10
	24 20 20 14.51	+ 17.29	20 6 48.3	+ 53.6	I.305916	20 14	4 10
	26 20 20 31.80	16.59	— 20 5 54.7	51.3	I.305282	20 6	4 10
	28 20 20 48.39	15.89	20 5 3.4	48.9	I.304636	19 59	4 11
	30 20 21 4.28	15.16	20 4 14.5	46.6	I.303979	19 51	4 11
	April 1 20 21 19.44	14.43	20 3 27.9	44.2	I.303312	19 43	4 11
	3 20 21 33.87	+ 13.68	20 2 43.7	+ 41.7	I.302634	19 36	4 11
April	5 20 21 47.55	12.93	— 20 2 2.0	39.2	I.301947	19 28	4 11
	7 20 22 0.48	12.16	20 1 22.8	36.6	I.301252	19 21	4 11
	9 20 22 12.64	11.39	20 0 46.2	34.1	I.300549	19 13	4 11
	11 20 22 24.03	10.60	20 0 12.1	31.4	I.299839	19 5	4 11
	13 20 22 34.63	+ 9.80	19 59 40.7	+ 28.7	I.299122	18 58	4 11
	15 20 22 44.43	9.00	— 19 59 12.0	26.1	I.298400	18 50	4 11
	17 20 22 53.43	8.20	19 58 45.9	23.4	I.297674	18 42	4 11
	19 20 23 1.63	7.38	19 58 22.5	20.6	I.296943	18 34	4 11
	21 20 23 9.01	6.55	19 58 1.9	17.8	I.296208	18 26	4 11
	23 20 23 15.56	+ 5.73	19 57 44.1	+ 15.0	I.295472	18 19	4 11
Mai	25 20 23 21.29	4.90	— 19 57 29.1	12.3	I.294734	18 11	4 11
	27 20 23 26.19	4.07	19 57 16.8	9.5	I.293995	18 3	4 11
	29 20 23 30.26	3.25	19 57 7.3	6.7	I.293256	17 55	4 11
	I 20 23 33.51	2.42	19 57 0.6	3.9	I.292519	17 48	4 11
	3 20 23 35.93	+ 1.60	19 56 56.7	+ 1.2	I.291784	17 40	4 11
	5 20 23 37.53	+ 0.78	— 19 56 55.5	— 1.7	I.291052	17 32	4 11
	7 20 23 38.31	— 0.05	19 56 57.2	4.4	I.290323	17 24	4 11
	9 20 23 38.26	0.87	19 57 1.6	7.2	I.289600	17 16	4 11
	II 20 23 37.39	1.68	19 57 8.8	9.9	I.288882	17 8	4 11
	I3 20 23 35.71	— 2.50	19 57 18.7	— 12.7	I.288169	17 0	4 11
Juni	15 20 23 33.21	3.30	— 19 57 31.4	15.4	I.287464	16 52	4 11
	17 20 23 29.91	4.10	19 57 46.8	18.1	I.286768	16 44	4 11
	19 20 23 25.81	4.89	19 58 4.9	20.7	I.286080	16 36	4 11
	21 20 23 20.92	5.67	19 58 25.6	23.3	I.285401	16 28	4 11
	23 20 23 15.25	— 6.43	19 58 48.9	— 25.8	I.284733	16 20	4 11
	25 20 23 8.82	7.19	— 19 59 14.7	28.3	I.284077	16 12	4 11
	27 20 23 1.63	7.93	19 59 43.0	30.7	I.283433	16 4	4 11
	29 20 22 53.70	8.66	20 0 13.7	33.1	I.282801	15 56	4 11
	31 20 22 45.04	9.37	20 0 46.8	35.3	I.282184	15 48	4 11
	2 20 22 35.67		20 1 22.1		I.281582	15 40	4 11

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Mai 31	20 22 45.04	- 9.37	- 20 ° 0' 46.8	- 35.3	1.282184	15 48 <sup>m</sup>	4 11 <sup>m</sup>
Juni 2	20 22 35.67	10.07	20 1 22.1	37.5	1.281582	15 40	4 11
4	20 22 25.60	10.75	20 1 59.6	39.7	1.280996	15 32	4 11
6	20 22 14.85	11.42	20 2 39.3	41.9	1.280425	15 24	4 11
8	20 22 3.43	-12.08	20 3 21.2	-43.9	1.279871	15 16	4 11
10	20 21 51.35	12.70	- 20 4 5.1	45.8	1.279336	15 8	4 11
12	20 21 38.65	13.32	20 4 50.9	47.8	1.278819	15 0	4 11
14	20 21 25.33	13.91	20 5 38.7	49.6	1.278320	14 52	4 10
16	20 21 11.42	14.47	20 6 28.3	51.2	1.277842	14 44	4 10
18	20 20 56.95	-15.01	20 7 19.5	-52.8	1.277385	14 36	4 10
20	20 20 41.94	15.53	- 20 8 12.3	54.4	1.276949	14 28	4 10
22	20 20 26.41	16.02	20 9 6.7	55.9	1.276534	14 19	4 10
24	20 20 10.39	16.49	20 10 2.6	57.1	1.276142	14 11	4 10
26	20 19 53.90	16.92	20 10 59.7	58.3	1.275773	14 3	4 10
28	20 19 36.98	-17.33	20 11 58.0	-59.5	1.275428	13 55	4 10
Juli 30	20 19 19.65	17.72	- 20 12 57.5	60.5	1.275106	13 47	4 10
1	20 19 1.93	18.07	20 13 58.0	61.4	1.274809	13 39	4 10
4	20 18 43.86	18.40	20 14 59.4	62.2	1.274537	13 30	4 9
6	20 18 25.46	18.70	20 16 1.6	63.0	1.274290	13 22	4 9
8	20 18 6.76	-18.97	20 17 4.6	63.6	1.274068	13 14	4 9
10	20 17 47.79	19.22	- 20 18 8.2	64.0	1.273872	13 6	4 9
12	20 17 28.57	19.42	20 19 12.2	64.4	1.273703	12 58	4 9
14	20 17 9.15	19.60	20 20 16.6	64.8	1.273560	12 49	4 9
16	20 16 49.55	19.74	20 21 21.4	65.1	1.273444	12 41	4 9
18	20 16 29.81	-19.85	20 22 26.5	-65.0	1.273355	12 33	4 9
20	20 16 9.96	19.92	- 20 23 31.5	64.9	1.273294	12 25	4 8
22	20 15 50.04	19.97	20 24 36.4	64.9	1.273260	12 17	4 8
24	20 15 30.07	19.98	20 25 41.3	64.6	1.273253	12 8	4 8
26	20 15 10.09	19.95	20 26 45.9	64.1	1.273273	12 0	4 8
28	20 14 50.14	-19.89	20 27 50.0	-63.6	1.273320	11 52	4 8
30	20 14 30.25	19.81	- 20 28 53.6	63.1	1.273395	11 44	4 8
Aug. 1	20 14 10.44	19.69	20 29 56.7	62.5	1.273497	11 35	4 8
3	20 13 50.75	19.53	20 30 59.2	61.7	1.273626	11 27	4 8
5	20 13 31.22	19.35	20 32 0.9	60.8	1.273782	11 19	4 8
7	20 13 11.87	-19.14	20 33 1.7	-59.9	1.273964	11 11	4 7
9	20 12 52.73	18.89	- 20 34 1.6	58.9	1.274173	11 3	4 7
11	20 12 33.84	18.62	20 35 0.5	57.7	1.274409	10 54	4 7
13	20 12 15.22	18.30	20 35 58.2	56.5	1.274670	10 46	4 7
15	20 11 56.92	17.96	20 36 54.7	55.2	1.274957	10 38	4 7
17	20 11 38.96		20 37 49.9		1.275269	10 30	4 7

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Aug. 15	20 II <sup>h</sup> 56.92	-17.96	-20 <sup>h</sup> 36' 54.7	-55.2	I.274957	10 <sup>h</sup> 38 <sup>m</sup>	4 7
17	20 II 38.96	17.58	20 37 49.9	53.7	I.275269	10 30	4 7
19	20 II 21.38	17.17	20 38 43.6	52.1	I.275606	10 22	4 7
21	20 II 4.21	16.74	20 39 35.7	50.7	I.275967	10 13	4 7
23	20 IO 47.47	-16.29	20 40 26.4	-49.0	I.276352	10 5	4 7
25	20 IO 31.18	15.80	-20 41 15.4	47.3	I.276760	9 57	4 7
27	20 IO 15.38	15.28	20 42 2.7	45.5	I.277191	9 49	4 6
29	20 IO 0.10	14.75	20 42 48.2	43.6	I.277644	9 41	4 6
31	20 9 45.35	14.18	20 43 31.8	41.8	I.278118	9 33	4 6
Sept. 2	20 9 31.17	-13.60	20 44 13.6	-39.8	I.278613	9 25	4 6
4	20 9 17.57	12.99	-20 44 53.4	37.7	I.279129	9 16	4 6
6	20 9 4.58	12.36	20 45 31.1	35.6	I.279664	9 8	4 6
8	20 8 52.22	11.69	20 46 6.7	33.6	I.280218	9 0	4 6
10	20 8 40.53	11.02	20 46 40.3	31.4	I.280790	8 52	4 6
12	20 8 29.51	-10.33	20 47 11.7	-29.1	I.281381	8 44	4 6
14	20 8 19.18	9.62	-20 47 40.8	26.7	I.281987	8 36	4 6
16	20 8 9.56	8.88	20 48 7.5	24.5	I.282609	8 28	4 6
18	20 8 0.68	8.13	20 48 32.0	22.1	I.283247	8 20	4 6
20	20 7 52.55	7.36	20 48 54.1	19.7	I.283899	8 12	4 6
22	20 7 45.19	-6.59	20 49 13.8	-17.2	I.284563	8 4	4 6
24	20 7 38.60	5.80	-20 49 31.0	14.8	I.285239	7 56	4 6
26	20 7 32.80	5.00	20 49 45.8	12.4	I.285928	7 48	4 6
28	20 7 27.80	4.20	20 49 58.2	I.286628	7 40	4 6	
30	20 7 23.60	3.38	20 50 8.0	9.8	I.287337	7 32	4 6
Okt. 2	20 7 20.22	-2.55	20 50 15.3	-4.8	I.288054	7 24	4 5
4	20 7 17.67	1.71	-20 50 20.1	-2.2	I.288780	7 16	4 5
6	20 7 15.96	0.87	20 50 22.3	I.289514	7 8	4 5	
8	20 7 15.09	-0.02	20 50 22.0	+ 0.3	I.290254	7 0	4 5
10	20 7 15.07	+ 0.83	20 50 19.1	2.9	I.290999	6 53	4 5
12	20 7 15.90	+ 1.69	20 50 13.6	5.5	I.291749	6 45	4 6
14	20 7 17.59	2.54	-20 50 5.5	10.7	I.292503	6 37	4 6
16	20 7 20.13	3.40	20 49 54.8	13.3	I.293259	6 29	4 6
18	20 7 23.53	4.26	20 49 41.5	15.8	I.294016	6 21	4 6
20	20 7 27.79	5.11	20 49 25.7	18.5	I.294775	6 13	4 6
22	20 7 32.90	+ 5.97	20 49 7.2	+ 21.0	I.295534	6 6	4 6
24	20 7 38.87	6.81	-20 48 46.2	23.5	I.296291	5 58	4 6
26	20 7 45.68	7.65	20 48 22.7	26.1	I.297046	5 50	4 6
28	20 7 53.33	8.49	20 47 56.6	28.6	I.297799	5 42	4 6
30	20 8 1.82	9.31	20 47 28.0	31.1	I.298549	5 34	4 6
Nov. 1	20 8 11.13		20 46 56.9		I.299294	5 27	4 6

## Wahrer geozentrischer Ort.

<sup>o</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
Okt. 30	20 <sup>h</sup> 8 <sup>m</sup> 1 <sup>s</sup> .82	+ 9.31	-20 <sup>h</sup> 47 <sup>m</sup> 28.0	+ 31.1	1.298549	5 <sup>h</sup> 34 <sup>m</sup>	4 <sup>h</sup> 6 <sup>m</sup>
Nov. 1	20 8 11.13	10.14	20 46 56.9	33.6	1.299294	5 27	4 6
3	20 8 21.27	10.95	20 46 23.3	36.2	1.300034	5 19	4 6
5	20 8 32.22	11.76	20 45 47.1	38.7	1.300768	5 11	4 6
7	20 8 43.98	+ 12.56	20 45 8.4	+ 41.1	1.301495	5 4	4 6
9	20 8 56.54	13.34	-20 44 27.3	43.5	1.302215	4 56	4 6
11	20 9 9.88	14.12	20 43 43.8	45.8	1.302927	4 48	4 6
13	20 9 24.00	14.88	20 42 58.0	48.3	1.303629	4 41	4 6
15	20 9 38.88	15.63	20 42 9.7	50.6	1.304321	4 33	4 6
17	20 9 54.51	+ 16.35	20 41 19.1	+ 52.8	1.305002	4 25	4 6
19	20 10 10.86	17.07	-20 40 26.3	55.1	1.305671	4 18	4 7
21	20 10 27.93	17.77	20 39 31.2	57.3	1.306329	4 10	4 7
23	20 10 45.70	18.46	20 38 33.9	59.4	1.306974	4 3	4 7
25	20 11 4.16	19.13	20 37 34.5	61.5	1.307605	3 55	4 7
27	20 11 23.29	+ 19.77	20 36 33.0	+ 63.7	1.308222	3 47	4 7
29	20 11 43.06	20.41	-20 35 29.3	65.7	1.308824	3 40	4 7
Dez. 1	20 12 3.47	21.02	20 34 23.6	67.7	1.309411	3 32	4 7
3	20 12 24.49	21.62	20 33 15.9	69.6	1.309982	3 25	4 7
5	20 12 46.11	22.19	20 32 6.3	71.6	1.310536	3 17	4 8
7	20 13 8.30	+ 22.75	20 30 54.7	+ 73.5	1.311074	3 10	4 8
9	20 13 31.05	23.29	-20 29 41.2	75.2	1.311594	3 2	4 8
11	20 13 54.34	23.80	20 28 26.0	76.9	1.312095	2 55	4 8
13	20 14 18.14	24.29	20 27 9.1	78.7	1.312578	2 47	4 8
15	20 14 42.43	24.75	20 25 50.4	80.3	1.313042	2 40	4 8
17	20 15 7.18	+ 25.21	20 24 30.1	+ 81.8	1.313486	2 32	4 8
19	20 15 32.39	25.64	-20 23 8.3	83.4	1.313910	2 25	4 9
21	20 15 58.03	26.03	20 21 44.9	84.8	1.314314	2 17	4 9
23	20 16 24.06	26.40	20 20 20.1	86.2	1.314697	2 10	4 9
25	20 16 50.46	26.75	20 18 53.9	87.4	1.315059	2 2	4 9
27	20 17 17.21	+ 27.07	20 17 26.5	+ 88.7	1.315399	1 55	4 9
29	20 17 44.28	27.39	-20 15 57.8	89.9	1.315718	1 48	4 9
31	20 18 11.67	27.68	20 14 27.9	91.0	1.316015	1 40	4 9
33	20 18 39.35		20 12 56.9		1.316289	1 33	4 10

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Jan. 1	7 37 57.11	-13.87	+20 57 13.0	+33.2	1.462653	13 3	8 4
2	7 37 43.24	14.01	20 57 46.2	33.6	1.462537	12 55	8 4
4	7 37 29.23	14.12	20 58 19.8	33.8	1.462439	12 47	8 4
6	7 37 15.11	14.21	20 58 53.6	34.1	1.462359	12 39	8 5
8	7 37 0.90	-14.28	20 59 27.7	+34.2	1.462298	12 30	8 5
10	7 36 46.62	14.32	+21 0 1.9	34.4	1.462255	12 22	8 5
12	7 36 32.30	14.34	21 0 36.3	34.5	1.462231	12 14	8 5
14	7 36 17.96	14.33	21 1 10.8	34.6	1.462225	12 6	8 5
16	7 36 3.63	14.31	21 1 45.4	34.4	1.462238	11 58	8 5
18	7 35 49.32	-14.25	21 2 19.8	+34.2	1.462270	11 50	8 5
20	7 35 35.07	14.18	+21 2 54.0	34.0	1.462321	11 42	8 5
22	7 35 20.89	14.08	21 3 28.0	33.9	1.462390	11 34	8 5
24	7 35 6.81	13.96	21 4 1.9	33.6	1.462478	11 25	8 5
26	7 34 52.85	13.81	21 4 35.5	33.3	1.462584	11 17	8 5
28	7 34 39.04	-13.65	21 5 8.8	+33.0	1.462708	11 9	8 5
30	7 34 25.39	13.46	+21 5 41.8	32.6	1.462851	11 1	8 5
Febr. 1	7 34 11.93	13.24	21 6 14.4	32.1	1.463011	10 53	8 5
3	7 33 58.69	13.01	21 6 46.5	31.5	1.463189	10 45	8 5
5	7 33 45.68	12.76	21 7 18.0	31.0	1.463383	10 37	8 6
7	7 33 32.92	-12.48	21 7 49.0	+30.4	1.463594	10 29	8 6
9	7 33 20.44	12.19	+21 8 19.4	29.7	1.463822	10 21	8 6
11	7 33 8.25	11.88	21 8 49.1	29.0	1.464066	10 13	8 6
13	7 32 56.37	11.54	21 9 18.1	28.4	1.464326	10 4	8 6
15	7 32 44.83	11.19	21 9 46.5	27.6	1.464602	9 56	8 6
17	7 32 33.64	-10.82	21 10 14.1	+26.7	1.464893	9 48	8 6
19	7 32 22.82	10.43	+21 10 40.8	25.9	1.465198	9 40	8 6
21	7 32 12.39	10.02	21 11 6.7	25.1	1.465517	9 32	8 6
23	7 32 2.37	9.60	21 11 31.8	24.1	1.465851	9 24	8 6
25	7 31 52.77	9.17	21 11 55.9	23.2	1.466198	9 16	8 6
27	7 31 43.60	-8.72	21 12 19.1	+22.2	1.466557	9 8	8 6
29	7 31 34.88	8.26	+21 12 41.3	21.2	1.466928	9 0	8 6
März 2	7 31 26.62	7.78	21 13 2.5	20.3	1.467311	8 52	8 6
4	7 31 18.84	7.30	21 13 22.8	19.2	1.467705	8 44	8 6
6	7 31 11.54	6.80	21 13 42.0	18.1	1.468109	8 36	8 6
8	7 31 4.74	-6.30	21 14 0.1	+17.1	1.468524	8 28	8 6
10	7 30 58.44	5.79	+21 14 17.2	15.9	1.468949	8 20	8 6
12	7 30 52.65	5.26	21 14 33.1	14.8	1.469383	8 12	8 6
14	7 30 47.39	4.73	21 14 47.9	13.6	1.469824	8 4	8 6
16	7 30 42.66	4.19	21 15 1.5	12.6	1.470273	7 56	8 6
18	7 30 38.47		21 15 14.1	1.470730		7 48	8 6

## Wahrer geozentrischer Ort.

<sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden- Winkel	Halber Tag- bogen
März 16	7 30° 42.66	- 4.19	+ 21° 15' 1.5	+ 12.6	I.470273	7 56 <sup>m</sup>	8 6 <sup>b</sup>
	18	7 30° 38.47	3.63	21 15 14.1	11.4	I.470730	7 48
	20	7 30° 34.84	3.07	21 15 25.5	10.2	I.471194	7 40
	22	7 30° 31.77	2.51	21 15 35.7	9.0	I.471663	7 32
	24	7 30° 29.26	- 1.95	21 15 44.7	+ 7.8	I.472137	7 24
	26	7 30° 27.31	1.38	+ 21 15 52.5	6.6	I.472616	7 16
	28	7 30° 25.93	0.82	21 15 59.1	5.3	I.473099	7 9
	30	7 30° 25.11	- 0.24	21 16 4.4	4.1	I.473585	7 1
	April 1	7 30° 24.87	+ 0.32	21 16 8.5	2.8	I.474074	6 53
	3	7 30° 25.19	+ 0.89	21 16 11.3	+ 1.6	I.474566	6 45
April	5	7 30° 26.08	1.46	+ 21 16 12.9	+ 0.4	I.475060	6 37
	7	7 30° 27.54	2.03	21 16 13.3	- 0.9	I.475554	6 29
	9	7 30° 29.57	2.60	21 16 12.4	2.2	I.476049	6 21
	11	7 30° 32.17	3.17	21 16 10.2	3.5	I.476544	6 13
	13	7 30° 35.34	+ 3.74	21 16 6.7	- 4.6	I.477039	6 6
	15	7 30° 39.08	4.30	+ 21 16 2.1	5.8	I.477532	5 58
	17	7 30° 43.38	4.85	21 15 56.3	7.0	I.478023	5 50
	19	7 30° 48.23	5.41	21 15 49.3	8.2	I.478513	5 42
	21	7 30° 53.64	5.95	21 15 41.1	9.5	I.479000	5 34
	23	7 30° 59.59	+ 6.49	21 15 31.6	- 10.8	I.479483	5 27
Mai	25	7 31° 6.08	7.02	+ 21 15 20.8	11.9	I.479962	5 19
	27	7 31° 13.10	7.55	21 15 8.9	13.1	I.480437	5 11
	29	7 31° 20.65	8.07	21 14 55.8	14.3	I.480907	5 3
	1	7 31° 28.72	8.58	21 14 41.5	15.5	I.481371	4 55
	3	7 31° 37.30	+ 9.08	21 14 26.0	- 16.6	I.481830	4 48
	5	7 31° 46.38	9.57	+ 21 14 9.4	17.8	I.482282	4 40
	7	7 31° 55.95	10.06	21 13 51.6	18.9	I.482727	4 32
	9	7 32° 6.01	10.52	21 13 32.7	20.1	I.483164	4 24
	11	7 32° 16.53	10.99	21 13 12.6	21.2	I.483594	4 17
	13	7 32° 27.52	+ 11.44	21 12 51.4	- 22.3	I.484016	4 9
Juni	15	7 32° 38.96	11.89	+ 21 12 29.1	23.3	I.484429	4 1
	17	7 32° 50.85	12.32	21 12 5.8	24.4	I.484833	3 54
	19	7 33° 3.17	12.74	21 11 41.4	25.5	I.485228	3 46
	21	7 33° 15.91	13.15	21 11 15.9	26.5	I.485613	3 38
	23	7 33° 29.06	+ 13.54	21 10 49.4	- 27.5	I.485988	3 31
	25	7 33° 42.60	13.92	+ 21 10 21.9	28.4	I.486352	3 23
	27	7 33° 56.52	14.29	21 9 53.5	29.4	I.486705	3 15
	29	7 34° 10.81	14.64	21 9 24.1	30.3	I.487047	3 8
	31	7 34° 25.45	14.99	21 8 53.8	31.2	I.487378	3 0
	2	7 34° 40.44		21 8 22.6		I.487696	2 52

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Östl. Stunden-Winkel	Halber Tagbogen
Mai 31	7 34 25.45	+14.99	+21° 8' 53.8"	-31.2	1.487378	3 °	8 <sup>b</sup> 6 <sup>m</sup>
Juni 2	7 34 40.44	15.31	21 8 22.6	32.1	1.487696	2 52	8 6
4	7 34 55.75	15.63	21 7 50.5	33.0	1.488002	2 45	8 6
6	7 35 11.38	15.93	21 7 17.5	33.9	1.488297	2 37	8 6
8	7 35 27.31	+16.23	21 6 43.6	-34.6	1.488579	2 30	8 5
10	7 35 43.54	16.50	+21 6 9.0	35.4	1.488848	2 22	8 5
12	7 36 0.04	16.76	21 5 33.6	36.2	1.489103	2 14	8 5
14	7 36 16.80	17.00	21 4 57.4	37.0	1.489345	2 7	8 5
16	7 36 33.80	17.24	21 4 20.4	37.7	1.489574	1 59	8 5
18	7 36 51.04	+17.45	21 3 42.7	-38.3	1.489788	1 52	8 5
20	7 37 8.49	17.65	+21 3 44	39.0	1.489988	1 44	8 5
22	7 37 26.14	17.83	21 2 25.4	39.6	1.490174	1 36	8 5
24	7 37 43.97	18.00	21 1 45.8	40.1	1.490346	1 29	8 5
26	7 38 1.97	18.15	21 1 5.7	40.7	1.490503	1 21	8 5
28	7 38 20.12	+18.28	21 0 25.0	-41.3	1.490645	1 14	8 5
Julij 30	7 38 38.40	18.41	+20 59 43.7	41.8	1.490773	1 6	8 5
2	7 38 56.81	18.51	20 59 1.9	42.2	1.490886	0 58	8 5
4	7 39 15.32	18.60	20 58 19.7	42.6	1.490984	0 51	8 4
6	7 39 33.92	18.68	20 57 37.1	42.9	1.491067	0 43	8 4
8	7 39 52.60	+18.74	20 56 54.2	-43.3	1.491135	0 36	8 4
10	7 40 11.34	18.78	+20 56 10.9	43.6	1.491188	0 28	8 4
12	7 40 30.12	18.81	20 55 27.3	43.9	1.491225	0 21	8 4
14	7 40 48.93	18.82	20 54 43.4	44.2	1.491247	0 13	8 4
16	7 41 7.75	18.82	20 53 59.2	44.3	1.491254	0 5	8 4
18	7 41 26.57	+18.80	20 53 14.9	-44.4	1.491245	23 58	8 4
20	7 41 45.37	18.76	+20 52 30.5	44.5	1.491221	23 50	8 4
22	7 42 4.13	18.71	20 51 46.0	44.7	1.491181	23 43	8 4
24	7 42 22.84	18.64	20 51 1.3	44.7	1.491126	23 35	8 4
26	7 42 41.48	18.55	20 50 16.6	44.6	1.491056	23 28	8 4
28	7 43 0.03	+18.46	20 49 32.0	-44.6	1.490971	23 20	8 3
Aug. 30	7 43 18.49	18.34	+20 48 47.4	44.6	1.490871	23 12	8 3
1	7 43 36.83	18.21	20 48 2.8	44.5	1.490755	23 5	8 3
3	7 43 55.04	18.07	20 47 18.3	44.2	1.490625	22 57	8 3
5	7 44 13.11	17.91	20 46 34.1	44.0	1.490480	22 50	8 3
7	7 44 31.02	+17.73	20 45 50.1	-43.8	1.490320	22 42	8 3
9	7 44 48.75	17.54	+20 45 6.3	43.5	1.490146	22 35	8 3
11	7 45 6.29	17.34	20 44 22.8	43.1	1.489957	22 27	8 3
13	7 45 23.63	17.11	20 43 39.7	42.8	1.489754	22 19	8 3
15	7 45 40.74	16.88	20 42 56.9	42.4	1.489537	22 12	8 3
17	7 45 57.62		20 42 14.5		1.489305	22 4	8 3

## Wahrer geozentrischer Ort.

Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Östl. Stunden-Winkel	Halber Tag-bogen
Aug. 15	7 45 40.74	+16.88	+20° 42' 56.9"	-42.4	I.489537	22 12	8 3
17	7 45 57.62	16.62	20 42 14.5	41.9	I.489305	22 4	8 3
19	7 46 14.24	16.35	20 41 32.6	41.4	I.489060	21 57	8 3
21	7 46 30.59	16.07	20 40 51.2	40.8	I.488802	21 49	8 3
23	7 46 46.66	+15.77	20 40 10.4	-40.2	I.488530	21 41	8 2
25	7 47 2.43	15.47	+20 39 30.2	39.6	I.488245	21 34	8 2
27	7 47 17.90	15.14	20 38 50.6	38.9	I.487947	21 26	8 2
29	7 47 33.04	14.80	20 38 11.7	38.2	I.487637	21 18	8 2
31	7 47 47.84	14.45	20 37 33.5	37.4	I.487315	21 11	8 2
Sept. 2	7 48 2.29	+14.09	20 36 56.1	-36.6	I.486981	21 3	8 2
4	7 48 16.38	13.72	+20 36 19.5	35.7	I.486635	20 55	8 2
6	7 48 30.10	13.33	20 35 43.8	34.8	I.486278	20 48	8 2
8	7 48 43.43	12.93	20 35 9.0	33.9	I.485910	20 40	8 2
10	7 48 56.36	12.51	20 34 35.1	32.9	I.485531	20 32	8 2
12	7 49 8.87	+12.08	20 34 2.2	-31.9	I.485142	20 25	8 2
14	7 49 20.95	11.64	+20 33 30.3	30.9	I.484743	20 17	8 2
16	7 49 32.59	11.20	20 32 59.4	29.8	I.484335	20 9	8 2
18	7 49 43.79	10.74	20 32 29.6	28.7	I.483918	20 2	8 1
20	7 49 54.53	10.26	20 32 0.9	27.5	I.483492	19 54	8 1
22	7 50 4.79	+ 9.79	20 31 33.4	-26.3	I.483058	19 46	8 1
24	7 50 14.58	9.29	+20 31 7.1	25.2	I.482616	19 39	8 1
26	7 50 23.87	8.80	20 30 41.9	23.9	I.482167	19 31	8 1
28	7 50 32.67	8.28	20 30 18.0	22.6	I.481711	19 23	8 1
30	7 50 40.95	7.76	20 29 55.4	21.3	I.481249	19 15	8 1
Okt. 2	7 50 48.71	+ 7.25	20 29 34.1	-20.0	I.480781	19 8	8 1
4	7 50 55.96	6.72	+20 29 14.1	18.6	I.480307	19 0	8 1
6	7 51 2.68	6.19	20 28 55.5	17.2	I.479828	18 52	8 1
8	7 51 8.87	5.64	20 28 38.3	15.8	I.479345	18 44	8 1
10	7 51 14.51	5.09	20 28 22.5	14.3	I.478859	18 36	8 1
12	7 51 19.60	+ 4.53	20 28 8.2	-12.9	I.478369	18 29	8 1
14	7 51 24.13	3.97	+20 27 55.3	11.4	I.477876	18 21	8 1
16	7 51 28.10	3.40	20 27 43.9	9.9	I.477382	18 13	8 1
18	7 51 31.50	2.84	20 27 34.0	8.4	I.476886	18 5	8 1
20	7 51 34.34	2.26	20 27 25.6	6.9	I.476389	17 57	8 1
22	7 51 36.60	+ 1.70	20 27 18.7	-5.4	I.475891	17 50	8 1
24	7 51 38.30	1.12	+20 27 13.3	3.9	I.475394	17 42	8 1
26	7 51 39.42	+ 0.56	20 27 9.4	2.3	I.474898	17 34	8 1
28	7 51 39.98	- 0.01	20 27 7.1	- 0.8	I.474404	17 26	8 1
30	7 51 39.97	0.58	20 27 6.3	+ 0.7	I.473911	17 18	8 1
Nov. 1	7 51 39.39		20 27 7.0		I.473421	17 10	8 1

## Wahrer geozentrischer Ort.

$\circ^h$ Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. $\Delta$	Östl. Stunden- Winkel	Halber Tag- bogen
Okt. 30	7 51 39.97	- 0.58	+ 20° 27' 6.3"	+ 0.7	I.473911	17 18 <sup>m</sup>	8 1 <sup>m</sup>
Nov. 1	7 51 39.39	1.15	20 27 7.0	2.2	I.473421	17 10	8 1
3	7 51 38.24	1.71	20 27 9.2	3.8	I.472934	17 2	8 1
5	7 51 36.53	2.28	20 27 13.0	5.4	I.472451	16 54	8 1
7	7 51 34.25	- 2.85	20 27 18.4	+ 6.8	I.471972	16 46	8 1
9	7 51 31.40	3.41	+ 20 27 25.2	8.3	I.471499	16 39	8 1
11	7 51 27.99	3.96	20 27 33.5	9.8	I.471031	16 31	8 1
13	7 51 24.03	4.51	20 27 43.3	11.3	I.470569	16 23	8 1
15	7 51 19.52	5.05	20 27 54.6	12.7	I.470115	16 15	8 1
17	7 51 14.47	- 5.57	20 28 7.3	+ 14.2	I.469669	16 7	8 1
19	7 51 8.90	6.09	+ 20 28 21.5	15.5	I.469231	15 59	8 1
21	7 51 2.81	6.60	20 28 37.0	17.0	I.468801	15 51	8 1
23	7 50 56.21	7.10	20 28 54.0	18.3	I.468380	15 43	8 1
25	7 50 49.11	7.59	20 29 12.3	19.6	I.467970	15 35	8 1
27	7 50 41.52	- 8.07	20 29 31.9	+ 20.9	I.467571	15 27	8 1
29	7 50 33.45	8.52	+ 20 29 52.8	22.2	I.467182	15 19	8 1
Dez. 1	7 50 24.93	8.98	20 30 15.0	23.4	I.466805	15 11	8 1
3	7 50 15.95	9.42	20 30 38.4	24.6	I.466440	15 3	8 1
5	7 50 6.53	9.84	20 31 3.0	25.7	I.466088	14 55	8 1
7	7 49 56.69	- 10.26	20 31 28.7	+ 26.8	I.465749	14 47	8 1
9	7 49 46.43	10.65	+ 20 31 55.5	27.8	I.465424	14 38	8 1
11	7 49 35.78	11.03	20 32 23.3	28.9	I.465113	14 30	8 1
13	7 49 24.75	11.38	20 32 52.2	29.8	I.464817	14 22	8 2
15	7 49 13.37	11.72	20 33 22.0	30.8	I.464535	14 14	8 2
17	7 49 1.65	- 12.03	20 33 52.8	+ 31.6	I.464269	14 6	8 2
19	7 48 49.62	12.33	+ 20 34 24.4	32.3	I.464019	13 58	8 2
21	7 48 37.29	12.61	20 34 56.7	33.1	I.463786	13 50	8 2
23	7 48 24.68	12.87	20 35 29.8	33.9	I.463569	13 42	8 2
25	7 48 11.81	13.11	20 36 3.7	34.4	I.463369	13 34	8 2
27	7 47 58.70	- 13.32	20 36 38.1	+ 34.9	I.463186	13 26	8 2
29	7 47 45.38	13.52	+ 20 37 13.0	35.4	I.463020	13 18	8 2
31	7 47 31.86	13.70	20 37 48.4	35.9	I.462872	13 10	8 2
33	7 47 18.16		20 38 24.3		I.462742	13 1	8 2

## MERKUR 1912.

## Mittlere Ekliptik und Äquinoktium 1910.0.

$\text{ob}$ Mittl. Zeit	Log. Rad. v.	Länge in d. Bahn	Red. a. d. Ekl.	Breite	$\text{ob}$ Mittl. Zeit	Log. Rad. v.	Länge in d. Bahn	Red. a. d. Ekl.	Breite
Jan. 2	9.5294	138° 19'	○	+7° 0'	Juli 5	9.5906	179° 40'	+13'	+5° 10'
7	9.5637	162° 35'	+10	+6° 20'	10	9.6193	198° 7'	+11	+3° 24'
12	9.5964	183° 19'	+13	+4° 51'	15	9.6417	214° 33'	+6	+1° 32'
17	9.6240	201° 21'	+10	+3° 3'	20	9.6574	229° 35'	-1	-0° 17'
22	9.6452	217° 28'	+4	+1° 11'	25	9.6665	243° 48'	-7	-1° 59'
27	9.6596	232° 18'	-2	-0° 37'	30	9.6690	257° 37'	-11	-3° 32'
Febr. 1	9.6674	246° 24'	-8	-2° 17'	Aug. 4	9.6650	271° 29'	-13	-4° 53'
6	9.6687	260° 12'	-12	-3° 48'	9	9.6544	285° 50'	-11	-5° 58'
11	9.6635	274° 8'	-13	-5° 6'	14	9.6372	301° 8'	-7	-6° 44'
16	9.6517	288° 37'	-11	-6° 9'	19	9.6133	317° 57'	0	-7° 0'
21	9.6332	304° 9'	-6	-6° 49'	24	9.5833	337° 0'	+8	-6° 35'
26	9.6081	321° 20'	+2	-6° 59'	29	9.5493	359° 7'	+13	-5° 13'
März 2	9.5772	340° 53'	+9	-6° 25'	Sept. 3	9.5163	24° 59'	+9	-2° 39'
7	9.5429	3 40'	+13	-4° 49'	8	9.4930	54° 32'	-3	+0° 53'
12	9.5109	30° 16'	+7	-2° 3'	13	9.4890	86° 4'	-13	+4° 23'
17	9.4906	60° 23'	-6	+1° 35'	18	9.5060	116° 39'	-9	+6° 33'
22	9.4907	91° 58'	-13	+4° 55'	23	9.5367	143° 57'	+3	+6° 57'
27	9.5111	122° 4'	-7	+6° 45'	28	9.5711	167° 23'	+11	+6° 3
April 1	9.5431	148° 38'	+5	+6° 52'	Okt. 3	9.6029	187° 28'	+13	+4° 29'
6	9.5774	171° 23'	+12	+5° 48'	8	9.6292	205° 1'	+9	+2° 39'
11	9.6083	190° 56'	+12	+4° 9'	13	9.6489	220° 48'	+3	+0° 47'
16	9.6334	208° 5'	+8	+2° 18'	18	9.6619	235° 26'	-4	-1° 0'
21	9.6518	223° 37'	+2	+0° 27'	23	9.6683	249° 26'	-9	-2° 38'
26	9.6636	238° 6'	-5	-1° 19'	28	9.6682	263° 13'	-12	-4° 6'
Mai 1	9.6688	252° 1'	-10	-2° 56'	Nov. 2	9.6615	277° 14'	-13	-5° 21'
6	9.6674	265° 49'	-13	-4° 22'	7	9.6483	291° 54'	-10	-6° 20'
11	9.6595	279° 55'	-12	-5° 34'	12	9.6283	307° 44'	-4	-6° 54'
16	9.6450	294° 46'	-9	-6° 28'	17	9.6018	325° 22'	+4	-6° 56'
21	9.6238	310° 53'	-3	-6° 58'	22	9.5698	345° 34'	+11	-6° 10'
26	9.5962	328° 56'	+5	-6° 51'	27	9.5354	9° 8'	+12	-4° 19'
31	9.5634	349° 42'	+12	-5° 54'	Dez. 2	9.5051	36° 35'	+5	-1° 18'
Juni 5	9.5291	13° 59'	+12	-3° 50'	7	9.4887	67° 15'	-8	+2° 23'
10	9.5006	42° 9'	+2	-0° 37'	12	9.4936	98° 46'	-13	+5° 29'
15	9.4879	73° 12'	-10	+3° 3'	17	9.5174	128° 12'	-4	+6° 55'
20	9.4969	104° 32'	-12	+5° 53'	22	9.5507	153° 55'	+7	+6° 42'
25	9.5233	133° 20'	-2	+6° 59'	27	9.5846	175° 54'	+13	+5° 28'
30	9.5572	158° 19'	+9	+6° 32'	32	9.6144	194° 51'	+12	+3° 45'
Juli 5	9.5906	179° 40'	+13	+5° 10'	37	9.6380	211° 36'	+7	+1° 53'

$$\Omega = 47^\circ 15'.7; \quad i = 7^\circ 0'.18; \quad m = \frac{1}{6000000}$$

## VENUS 1912.

## Mittl. Ekliptik und Äquin. 1910.0.

<sup>o</sup> h Mittl. Zeit	Log. Radius v.	Länge in der Bahn	Red. auf d. Eklipt.	Breite
Jan.	9.85695	167° 2.9	+0.1	+3° 23.6
	9.85754	183 13.5	+1.7	+3 14.3
	9.85826	199 21.2	+2.8	+2 49.8
Febr.	9.85906	215 25.5	+3.0	+2 12.0
	9.85988	231 26.2	+2.3	+1 24.2
	9.86066	247 23.3	+0.9	+0 30.0
März	9.86134	263 17.2	-0.8	-0 26.3
	9.86185	279 8.5	-2.2	-1 20.5
	9.86217	294 57.9	-3.0	-2 8.4
April	9.86228	310 46.4	-2.8	-2 46.6
	9.86216	326 34.9	-1.9	-3 12.2
	9.86183	342 24.4	-0.4	-3 23.3
Mai	9.86130	358 15.8	+1.3	-3 18.9
	9.86062	14 9.8	+2.5	-2 59.3
	9.85984	30 7.1	+3.0	-2 25.8
Juni	9.85902	46 7.9	+2.6	-1 40.9
	9.85822	62 12.4	+1.4	-0 48.0
	9.85751	78 20.2	-0.3	+0 8.8
Juli	9.85694	94 31.0	-1.8	+1 5.2
	9.85655	110 43.9	-2.8	+1 56.4
	9.85638	126 58.0	-2.9	+2 38.4
Aug.	9.85645	143 12.4	-2.1	+3 7.9
	9.85675	159 25.9	-0.7	+3 22.3
	9.85725	175 37.7	+1.0	+3 20.7
Sept.	9.85791	191 46.8	+2.3	+3 3.1
	9.85868	207 52.7	+3.0	+2 31.2
	9.85950	223 55.1	+2.7	+1 47.7
Okt.	9.86030	239 53.8	+1.6	+0 55.9
	9.86103	255 49.1	0.0	+0 0.1
	9.86162	271 41.5	-1.6	-0 55.5
Nov.	9.86204	287 31.7	-2.7	-1 46.8
	9.86225	303 20.6	-3.0	-2 30.0
	9.86224	319 9.0	-2.4	-3 1.9
Dez.	9.86201	334 57.9	-1.1	-3 20.0
	9.86157	350 48.3	+0.5	-3 22.9
	9.86095	6 41.0	+2.0	-3 10.3
	9.86021	22 36.7	+2.9	-2 43.1
	9.85940	38 35.9	+2.9	-2 3.2

$$\Omega = 75^\circ 51'.8; \quad i = 3^\circ 23'.6; \quad m = \frac{1}{408000}$$

## ERDE 1912.

## Mittl. Äqu. 1910.0.

	Log. Radius vect.	Länge
	9.99265	100° 41.4
	9.99276	110 52.8
	9.99309	121 3.9
	9.99360	131 13.6
	9.99434	141 21.4
	9.99525	151 27.3
	9.99626	161 30.2
	9.99742	171 30.1
	9.99864	181 27.0
	9.99986	191 20.2
	0.00112	201 10.0
	0.00233	210 56.8
	0.00344	220 40.2
	0.00449	230 20.6
	0.00538	239 58.8
	0.00610	249 34.5
	0.00668	259 8.5
	0.00704	268 41.6
	0.00720	278 13.6
	0.00718	287 45.5
	0.00694	297 18.1
	0.00649	306 51.1
	0.00589	316 25.7
	0.00509	326 2.4
	0.00414	335 41.0
	0.00310	345 22.5
	0.00193	355 7.1
	0.00069	4 54.6
	9.99946	14 45.7
	9.99821	24 40.4
	9.99700	34 38.0
	9.99591	44 39.1
	9.99490	54 43.2
	9.99405	64 49.6
	9.99341	74 58.3
	9.99294	85 8.6
	9.99268	95 19.7
	9.99268	105 31.3

$$m = \frac{1}{329390}$$

## MARS 1912.

## Mittlere Ekliptik und Äquinoktium 1910.0.

<sup>0h</sup> Mittl. Zeit	Log. Radius vect.	Länge in der Bahn	Red. auf die Ekliptik	Breite
Jan. 2	0.19122	81° 38.1	-0.8	+1° 0.1
	0.19464	86 37.0	-0.9	+1 8.0
	0.19792	91 31.3	-0.9	+1 15.2
Febr. 1	0.20104	96 21.3	-0.9	+1 21.8
	0.20398	101 7.3	-0.9	+1 27.8
	0.20673	105 49.6	-0.8	+1 33.1
März 2	0.20927	110 28.4	-0.7	+1 37.7
	0.21159	115 4.1	-0.7	+1 41.6
	0.21369	119 37.1	-0.6	+1 44.8
April 1	0.21555	124 7.6	-0.4	+1 47.4
	0.21717	128 35.9	-0.3	+1 49.2
	0.21855	133 2.3	-0.2	+1 50.4
Mai 1	0.21968	137 27.3	0.0	+1 51.0
	0.22055	141 51.0	+0.1	+1 50.9
	0.22117	146 13.8	+0.2	+1 50.1
Juni 10	0.22153	150 36.0	+0.4	+1 48.7
	0.22163	154 57.9	+0.5	+1 46.7
	0.22147	159 19.9	+0.6	+1 44.0
Juli 10	0.22105	163 42.2	+0.7	+1 40.8
	0.22037	168 5.2	+0.8	+1 36.9
	0.21944	172 29.2	+0.8	+1 32.4
Aug. 9	0.21825	176 54.4	+0.9	+1 27.4
	0.21682	181 21.2	+0.9	+1 21.8
	0.21514	185 50.0	+0.9	+1 15.7
Sept. 8	0.21322	190 21.0	+0.9	+1 9.1
	0.21107	194 54.6	+0.8	+1 2.0
	0.20869	199 31.1	+0.8	+0 54.4
Okt. 8	0.20610	204 10.7	+0.7	+0 46.3
	0.20330	208 53.8	+0.6	+0 37.9
	0.20032	213 40.7	+0.5	+0 29.1
Nov. 7	0.19716	218 31.7	+0.3	+0 19.9
	0.19384	223 27.1	+0.2	+0 10.5
	0.19039	228 27.1	0.0	+0 0.8
Dez. 7	0.18682	233 32.0	-0.1	-0 9.1
	0.18315	238 42.1	-0.3	-0 19.0
	0.17942	243 57.5	-0.5	-0 28.9
17	0.17565	249 18.3	-0.6	-0 38.8
	0.17188	254 44.7	-0.7	-0 48.5

$$\Omega = 48^\circ 51'.4; \quad i = 1^\circ 51'.0; \quad m = \frac{1}{3093500}$$

## JUPITER 1912.

Mittlere Ekliptik und Äquinoktium 1910.0.

ob. Mittl. Zeit	Log. Radius vect.	Länge in der Bahn	Red. auf die Ekliptik	Breite	$B_s$
Jan. - 8	0.730267	237° 51' 45.1	+26.7	+0° 52' 12.2	+0.5
2	0.730058	238 38 27.4	+26.6	+0 51 24.0	+0.4
12	0.729846	239 25 12.4	+26.5	+0 50 35.2	+0.3
22	0.729631	240 12 0.3	+26.3	+0 49 45.9	+0.2
Febr. 1	0.729413	240 58 51.0	+26.2	+0 48 55.9	+0.2
11	0.729192	241 45 44.4	+26.0	+0 48 5.4	+0.1
21	0.728969	242 32 40.7	+25.8	+0 47 14.3	0.0
März 2	0.728743	243 19 39.9	+25.6	+0 46 22.6	0.0
12	0.728514	244 6 42.1	+25.4	+0 45 30.3	0.0
22	0.728283	244 53 47.3	+25.2	+0 44 37.4	-0.1
April 1	0.728049	245 40 55.5	+24.9	+0 43 44.0	-0.1
11	0.727812	246 28 6.8	+24.6	+0 42 50.0	-0.2
21	0.727572	247 15 21.2	+24.3	+0 41 55.6	-0.2
Mai 1	0.727331	248 2 38.8	+23.9	+0 41 0.5	-0.3
11	0.727087	248 49 59.5	+23.6	+0 40 4.9	-0.3
21	0.726840	249 37 23.4	+23.2	+0 39 8.8	-0.4
Juni 31	0.726591	250 24 50.6	+22.9	+0 38 12.2	-0.4
10	0.726340	251 12 21.0	+22.5	+0 37 15.0	-0.5
20	0.726086	251 59 54.8	+22.1	+0 36 17.4	-0.5
30	0.725830	252 47 31.9	+21.6	+0 35 19.3	-0.6
Juli 10	0.725571	253 35 12.4	+21.1	+0 34 20.7	-0.6
20	0.725312	254 22 56.2	+20.7	+0 33 21.7	-0.7
30	0.725050	255 10 43.5	+20.2	+0 32 22.2	-0.7
Aug. 9	0.724786	255 58 34.4	+19.7	+0 31 22.3	-0.7
19	0.724519	256 46 28.8	+19.2	+0 30 21.9	-0.8
29	0.724251	257 34 26.7	+18.6	+0 29 21.1	-0.8
Sept. 8	0.723981	258 22 28.2	+18.1	+0 28 19.8	-0.9
18	0.723709	259 10 33.2	+17.5	+0 27 18.2	-1.0
28	0.723435	259 58 41.9	+17.0	+0 26 16.2	-1.0
Okt. 8	0.723159	260 46 54.2	+16.4	+0 25 13.7	-1.1
18	0.722881	261 35 10.2	+15.8	+0 24 10.9	-1.1
28	0.722602	262 23 29.9	+15.2	+0 23 7.8	-1.1
Nov. 7	0.722321	263 11 53.4	+14.6	+0 22 4.3	-1.2
17	0.722038	264 0 20.7	+13.9	+0 21 0.4	-1.2
27	0.721754	264 48 51.7	+13.3	+0 19 56.2	-1.3
Dez. 7	0.721468	265 37 26.5	+12.6	+0 18 51.7	-1.3
17	0.721181	266 26 5.2	+11.9	+0 17 46.9	-1.4
27	0.720893	267 14 47.7	+11.2	+0 16 41.7	-1.4
37	0.720604	268 3 34.1	+10.5	+0 15 36.3	-1.5

$$\Omega = 99^\circ 32' 41''.4; \quad i = 1^\circ 18' 29''.7; \quad m = \frac{1}{1047.355}$$

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## Mittlere Ekliptik und Äquinoktium 1910.0.

$\text{o}^{\text{h}}$ Mittl. Zeit	Log. Radius vect.	Länge in der Bahn	Red. auf die Ekliptik	Breite	$B_{\circ}$
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## SATURN 1912.

1911 Dez. 13	0.9611139	47° 53' 30.0	+74.8	-2° 15' 30.4	-1.2
1912 Jan. 22	0.960742	49 20 44.3	+77.9	-2 13 51.6	-1.4
März 2	0.960355	50 48 8.0	+80.8	-2 12 7.4	-1.5
April 11	0.959980	52 15 41.0	+83.5	-2 10 17.9	-1.6
Mai 21	0.959616	53 43 23.0	+86.0	-2 8 23.2	-1.8
Juni 30	0.959263	55 11 13.8	+88.2	-2 6 23.2	-1.9
Aug. 9	0.958923	56 39 13.2	+90.2	-2 4 18.0	-1.9
Sept. 18	0.958594	58 7 20.8	+92.0	-2 2 7.7	-2.0
Okt. 28	0.958278	59 35 36.4	+93.6	-1 59 52.4	-2.1
Dez. 7	0.957975	61 3 59.8	+94.9	-1 57 32.2	-2.2
47	0.957685	62 32 30.5	+95.9	-1 55 7.1	-2.3

$$\Omega = 112^\circ 52' 26''.8; \quad i = 2^\circ 29' 31''.3; \quad m = \frac{1}{3501.6}$$

## URANUS 1912.

1911 Dez. 13	1.295440	298° 57' 46.0	-9.4	-0° 32' 58.8	+3.0
1912 Jan. 22	1.295569	299 24 21.2	-9.4	-0 33 13.8	+3.0
März 2	1.295697	299 50 55.7	-9.4	-0 33 28.8	+3.0
April 11	1.295824	300 17 29.4	-9.4	-0 33 43.6	+3.0
Mai 21	1.295951	300 44 2.2	-9.4	-0 33 58.3	+3.0
Juni 30	1.296076	301 10 34.2	-9.3	-0 34 12.8	+2.9
Aug. 9	1.296200	301 37 5.5	-9.3	-0 34 27.2	+2.9
Sept. 18	1.296323	302 3 36.0	-9.3	-0 34 41.5	+2.9
Okt. 28	1.296445	302 30 5.6	-9.3	-0 34 55.7	+2.9
Dez. 7	1.296566	302 56 34.5	-9.3	-0 35 9.7	+2.9
47	1.296686	303 23 2.5	-9.2	-0 35 23.6	+2.9

$$\Omega = 73^\circ 32'; \quad i = 0^\circ 46' 22''; \quad m = \frac{1}{22869}$$

## NEPTUN 1912.

1911 Dez. 13	1.476705	112° 10' 28.7	+30.0	-0° 34' 3.9	-1.3
1912 Jan. 22	1.476717	112 24 54.6	+29.7	-0 33 38.4	-1.3
März 2	1.476729	112 39 20.3	+29.4	-0 33 12.9	-1.3
April 11	1.476742	112 53 45.9	+29.0	-0 32 47.4	-1.3
Mai 21	1.476754	113 8 11.4	+28.7	-0 32 21.8	-1.3
Juni 30	1.476767	113 22 36.8	+28.4	-0 31 56.2	-1.3
Aug. 9	1.476780	113 37 2.1	+28.0	-0 31 30.5	-1.3
Sept. 18	1.476793	113 51 27.3	+27.7	-0 31 4.9	-1.3
Okt. 28	1.476807	114 5 52.3	+27.3	-0 30 39.2	-1.3
Dez. 7	1.476821	114 20 17.2	+27.0	-0 30 13.5	-1.3
47	1.476835	114 34 42.1	+26.6	-0 29 47.7	-1.3

$$\Omega = 130^\circ 47'; \quad i = 1^\circ 46' 42''; \quad m = \frac{1}{19314}$$

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
1	$\alpha$ Androm.	2.1	○ 3 50.149	+3.0954	+ 107	+28° 36' 16".56	+19.882	- 161
2	$\beta$ Cassiopeiae	2.2	○ 4 28.448	+3.1829	+ 675	+58 39 51.80	+19.862	- 180
3	$\varepsilon$ Phoenicis	3.8	○ 4 56.819	+3.0524	+ 99	-46 13 59.04	+19.849	- 192
4	[22 Androm.]	5.2	○ 5 44.496	+3.1075	+ 8	+45 34 57.09	+20.037	- 3
5	[ $\chi^2$ Sculptoris]	5.5	○ 7 6.410	+3.0506	+ 4	-28 17 24.15	+20.042	+ 6
6	[ $\vartheta$ Sculptoris]	5.3	○ 7 15.638	+3.0526	+ 104	-35 37 32.83	+20.160	+ 124
7	$\gamma$ Pegasi	2.7	○ 8 42.145	+3.0859	+ 1	+14 41 39.46	+20.018	- 14
8	[Br. 6]	6.5	○ 11 13.311	+3.3508	+ 67	+76 27 42.48	+20.023	+ 2
9	$\iota$ Ceti	3.5	○ 14 56.661	+3.0568	- 15	-9 18 42.34	+19.971	- 32
10	$\zeta$ Tucanae	4.2	○ 15 29.513	+3.1461	+2706	-65 23 31.29	+21.154	+1154
11	$\beta$ Hydri	2.8	○ 21 8.633	+3.2051	+6998	-77 44 59.37	+20.279	+ 318
12	$\alpha$ Phoenicis	2.3	○ 21 56.156	+2.9712	+ 168	-42 47 2.32	+19.545	- 409
13	$\iota^2$ Ceti	6.1	○ 25 32.872	+3.0618	+ 8	-4 26 36.61	+19.913	- 8
14	[Ceti 49 G.]	5.3	○ 25 58.735	+3.0018	- 25	-24 16 28.25	+19.926	+ 9
15	[ $\lambda^1$ Phoenicis]	4.7	○ 27 10.388	+2.9011	+ 123	-49 17 24.76	+19.917	+ 12
16	[ $\kappa$ Cassiop.]	4.2	○ 27 59.294	+3.3857	+ 11	+62 26 46.42	+19.900	+ 3
17	$\zeta$ Cassiopeiae	3.8	○ 32 3.670	+3.3259	+ 23	+53 24 45.75	+19.843	- 7
18	$\pi$ Androm.	4.2	○ 32 10.617	+3.1968	+ 17	+33 14 6.07	+19.849	○
19	[ $\varepsilon$ Androm.]	4.3	○ 33 54.113	+3.1637	- 173	+28 50 2.60	+19.576	- 251
20	$\delta$ Androm.	3.2	○ 34 37.109	+3.2010	+ 106	+30 22 46.55	+19.734	- 84
21	$\alpha$ Cassiopeiae	(2.2)	○ 35 30.307	+3.3849	+ 60	+56 3 17.50	+19.777	- 29
22	$\beta$ Ceti	2.2	○ 39 10.368	+3.0127	+ 160	-18 28 10.28	+19.792	+ 39
23	[ $\eta$ Phoenicis]	4.3	○ 39 24.218	+2.7079	+ 5	-57 56 44.71	+19.742	- 8
25	$\circ$ Cassiopeiae	4.7	○ 39 48.912	+3.3295	+ 22	+47 48 10.29	+19.736	- 8
24	21 Cassiopeiae	5.8	○ 39 48.945	+3.9001	- 57	+74 30 25.82	+19.721	- 23
26	[ $\chi^2$ Sculptoris]	5.9	○ 39 56.840	+2.9033	+ 178	-38 54 23.41	+19.857	+ 115
27	$\zeta$ Androm.	4.1	○ 42 40.257	+3.1741	- 75	+23 47 18.90	+19.621	- 79
28	[ $\delta$ Piscium]	4.4	○ 44 6.906	+3.1096	+ 52	+ 7 6 22.60	+19.630	- 46
29	[Br. 82]	5.7	○ 45 22.578	+3.6119	+ 59	+63 46 7.07	+19.650	- 5
31	[ $\lambda$ Hydri]	5.3	○ 45 32.589	+2.0996	+ 400	-75 24 8.67	+19.625	- 26
30	[19 Ceti]	5.4	○ 45 43.140	+3.0046	- 159	-11 7 5.21	+19.426	- 223
32	$\gamma$ Cassiopeiae	2.0	○ 51 23.226	+3.5959	+ 37	+60 14 25.44	+19.540	- 4
34	[ $\chi^2$ Tucanae]	5.3	○ 51 43.095	+2.2476	- 33	-70 ○ 10.41	+19.493	- 45
33	$\mu$ Androm.	3.9	○ 51 51.834	+3.3199	+ 129	+38 1 20.06	+19.571	+ 36
35	$\alpha$ Sculptoris	4.1	○ 54 21.956	+2.8920	- 5	-29 49 58.77	+19.479	- 5

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von 0".0001	Dekl. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von 0".001
36	ε Piscium	4.2	○ 58° 22.462	+3.1109	—	55	+ 7° 24' 59.70	+19.430 + 30
37	[26 Ceti]	6.2	○ 59° 17.233	+3.0860	+	81	+ ○ 53° 43.09	+19.340 — 39
38	β Phoenicis	3.2	I 2° 9.438	+2.6805	—	56	-47° 11' 23.86	+19.298 — 15
39	[t Tucanae]	5.5	I 3° 49.663	+2.3845	+	101	-62° 14' 42.52	+19.269 — 4
40	[η Ceti]	3.3	I 4° 9.741	+3.0169	+	138	-10° 38' 54.80	+19.134 — 132
41	[44 H. Ceph.]	5.7	I 4° 37.679	+5.0558	+	331	+79° 12' 21.24	+19.263 + 9
42	β Androm.	2.1	I 4° 48.018	+3.3502	+	151	+35° 9' 15.36	+19.137 — 112
43	[τ Piscium]	4.3	I 6° 48.592	+3.2965	+	56	+29° 37' 21.36	+19.159 — 41
44	[Sculpt. 102 G.]	6.0	I 8° 42.147	+2.7645	+	39	-38° 19' 21.61	+19.125 — 27
45	υ Piscium	4.6	I 14° 37.548	+3.2900	+	15	+26° 48' 6.34	+18.982 — 11
47	θ Ceti	3.4	I 19° 37.462	+2.9979	—	55	- 8° 38' 13.94	+18.634 — 214
46	[ψ Cassiop.]	5.0	I 19° 41.999	+4.1948	+	134	+67° 40' 15.91	+18.879 + 33
48	δ Cassiopeiae	2.7	I 20° 2.891	+3.8974	+	397	+59° 46' 41.77	+18.793 — 43
49	[γ Phoenicis]	3.2	I 24° 32.639	+2.6072	—	38	-43° 46' 8.14	+18.480 — 218
50	η Piscium	3.6	I 26° 46.305	+3.2055	+	15	+14° 53' 32.69	+18.619 — 7
51	40 Cassiopeiae	5.5	I 31° 27.569	+4.7267	—	19	+72° 35' 31.09	+18.465 — 6
52	υ Persei	3.6	I 32° 35.005	+3.6661	+	64	+48° 10' 57.73	+18.319 — 113
53	[Hydri 14 G.]	6.3	I 33° 3.421	+0.3625	—	69	-78° 57' 5.37	+18.288 — 128
54	α Eridani	1	I 34° 26.332	+2.2386	+	122	-57° 41' 1.07	+18.330 — 38
55	43 Cassiopeiae	5.9	I 35° 48.363	+4.3974	+	88	+67° 35' 54.22	+18.318 — 2
56	[ν Piscium]	4.5	I 36° 51.007	+3.1193	—	16	+ 5° 2' 33.25	+18.284 + 2
57	φ Persei	4.1	I 38° 8.214	+3.7423	+	26	+50° 14' 44.86	+18.222 — 15
58	[Sculpt. 129 G.]	5.8	I 38° 10.205	+2.6443	—	58	-37° 16' 33.60	+18.212 — 23
59	τ Ceti	3.4	I 39° 58.788	+2.7868	-1196	-16	24° 2.48	+19.020 + 851
60	ο Piscium	4.3	I 40° 44.678	+3.1644	+	47	+ 8° 42' 54.61	+18.190 + 50
61	Lac. ε Sculpt.	5.3	I 41° 31.431	+2.8094	+	99	-25° 29' 32.41	+18.036 — 75
62	ζ Ceti	3.5	I 47° 6.963	+2.9602	+	22	-10° 46' 10.20	+17.862 — 34
63	ε Cassiopeiae	3.3	I 48° 3.031	+4.2810	+	50	+63° 14' 13.91	+17.844 — 15
64	α Triang.	3.5	I 48° 3.660	+3.4123	+	11	+29° 9' 1.81	+17.626 — 233
65	ξ Piscium	4.6	I 48° 59.894	+3.1033	+	13	+ 2° 45' 12.26	+17.840 + 19
66	β Arietis	2.7	I 49° 46.520	+3.3079	+	65	+20° 22' 41.69	+17.681 — 109
67	ψ Phoenicis	4.5	I 50° 7.122	+2.4069	—	95	-46° 44' 0.75	+17.675 — 101
68	χ Eridani	3.6	I 52° 31.976	+2.3359	+	713	-52° 2' 48.65	+17.948 + 271
69	[η' Hydri]	4.7	I 52° 42.190	+1.5164	+	119	-68° 4' 47.97	+17.750 + 80
70	50 Cassiopeiae	4.0	I 55° 53.721	+5.0553	—	91	+71° 59' 45.82	+17.562 + 25

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von 0".0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von 0".001
71	υ Ceti	3.9	1 55 51.520	+2.8267	+ 91	-21 30 13.99	+17.525	- 14
72	α Hydri	2.9	1 55 59.788	+1.8904	+362	-61 59 52.32	+17.554	+ 21
73	γ Androm.	2.1	1 58 29.491	+3.6697	+ 43	+41 54 28.26	+17.372	- 54
74	α Arietis	2.0	2 2 12.534	+3.3753	+137	+23 2 48.42	+17.120	-143
75	β Triang.	3.0	2 4 18.130	+3.5601	+122	+34 34 17.41	+17.129	- 40
76	55 Cassiopeiae	6.3	2 7 33.620	+4.6656	- 10	+66 6 45.26	+17.023	+ 3
77	[6 Persei]	5.7	2 7 44.671	+3.9716	+367	+50 39 26.97	+16.843	-169
78	Lac. μ Forn.	5.2	2 9 1.991	+2.6430	+ 13	-31 8 10.76	+16.954	+ 2
79	[γ Triang.]	4.2	2 12 4.677	+3.5572	+ 37	+33 26 26.62	+16.764	- 44
80	67 Ceti	5.8	2 12 35.584	+2.9905	+ 55	- 6 49 38.28	+16.674	-110
81	[θ Arietis]	5.7	2 13 13.652	+3.3314	- 10	+19 29 40.22	+16.752	- 2
82	[φ Eridani]	3.5	2 13 21.898	+2.1433	+ 81	-51 55 9.54	+16.711	- 36
83	[z Fornacis]	5.4	2 18 30.950	+2.7452	+142	-24 12 57.09	+16.432	- 63
84	[λ Horologii]	5.5	2 22 26.241	+1.6762	- 95	-60 42 20.33	+16.160	-137
85	ε² Ceti	4.2	2 23 28.688	+3.1861	+ 26	+ 8 3 57.90	+16.240	- 4
86	[x Eridani]	4.1	2 23 45.511	+2.1982	- 2	-48 5 54.99	+16.207	- 23
88	[λ¹ Fornacis]	6.0	2 29 26.786	+2.4997	- 43	-35 2 12.48	+15.901	- 32
87	36 II. Cassiop.	5.4	2 29 38.398	+5.6311	- 60	+72 26 3.18	+15.944	+ 21
90	μ Hydri	5.5	2 33 30.667	-1.3535	+474	-79 29 36.32	+15.682	- 32
89	ν Arietis	5.6	2 33 48.956	+3.4004	- 9	+21 34 53.05	+15.682	- 16
91	δ Ceti	3.9	2 34 58.220	+3.0725	+ 7	- 0 3 2.32	+15.633	- 2
92	[Br. 366]	6.3	2 37 14.224	+5.1141	+ 25	+67 27 5.47	+15.482	- 29
93	θ Persei	4.1	2 38 10.907	+4.0810	+346	+48 51 24.68	+15.370	- 88
95	[ε Hydri]	4.0	2 38 13.894	+0.9128	+169	-68 38 38.03	+15.460	+ 5
94	[35 Arietis]	4.7	2 38 17.025	+3.5130	+ 4	+27 19 59.71	+15.445	- 7
96	[γ Ceti]	3.4	2 38 44.341	+3.1055	- 98	+ 2 51 55.52	+15.278	-148
97	π Ceti	4.0	2 39 56.030	+2.8540	- 8	-14 13 51.33	+15.351	- 9
98	μ Ceti	4.2	2 40 10.961	+3.2390	+189	+ 9 44 35.12	+15.315	- 31
99	[η Persei]	3.8	2 44 16.082	+4.3542	+ 28	+55 31 51.48	+15.103	- 11
100	41 Arietis	3.6	2 44 48.006	+3.5242	+ 51	+26 53 54.11	+14.970	-113
101	β Fornacis	4.4	2 45 24.430	+2.5103	+ 62	-32 46 30.31	+15.207	+159
102	τ² Eridani	4.8	2 47 2.795	+2.7204	- 39	-21 21 59.14	+14.923	- 29
103	τ Persei	4.0	2 48 0.600	+4.2342	+ 3	+52 24 10.86	+14.895	- 2
104	η Eridani	3.7	2 52 7.648	+2.9293	+ 52	- 9 14 52.51	+14.435	-218
105	47 II. Cephei	5.8	2 54 20.306	+7.8330	-113	+79 4 20.35	+14.542	+ 21

Nr.	Name	Gr.	A.R. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von 0".0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von 0".001
106	θ Eridani	2.9	2 54 55.389	+2.2724	— 68	-40 39 24.64	+14.513	+ 28
107	α Ceti	2.5	2 57 40.646	+3.1329	— 9	+ 3 44 42.08	+14.241	- 76
108	γ Persei	3.0	2 58 24.857	+4.3254	+ 2	+53 9 45.11	+14.268	- 4
109	ρ Persei	(3.8)	2 59 31.928	+3.8341	+ 114	+38 29 59.86	+14.100	-103
110	μ Horologii	5.1	3 1 32.220	+1.4079	— 117	-60 4 43.93	+14.011	- 68
113	[θ Hydri]	5.7	3 2 3.914	+0.0998	+ 51	-72 14 45.79	+14.069	+ 22
111	β Persei	(2.2)	3 2 26.258	+3.8923	+ 7	+40 37 2.32	+14.022	- 1
112	[ι Persei]	4.1	3 2 42.525	+4.3127	+1295	+49 16 40.18	+13.925	- 81
114	δ Arietis	4.3	3 6 35.638	+3.4252	+ 106	+19 23 40.22	+13.757	- 4
116	[94 Ceti]	5.2	3 8 16.917	+3.0602	+ 136	— 1 31 29.02	+13.592	- 61
117	12 Eridani	3.6	3 8 19.914	+2.5467	+ 241	-29 20 0.80	+14.294	+644
115	48 H. Cephei	5.9	3 9 6.727	+7.4876	+ 183	+77 24 46.21	+13.557	- 44
118	[Horol. 38 G.]	6.1	3 10 19.220	+1.5145	— 5	-57 39 3.16	+13.516	- 6
119	[e Eridani]	4.2	3 16 24.835	+2.3958	+2788	-43 24 21.91	+13.859	+736
120	α Persei	1.9	3 18 1.982	+4.2675	+ 29	+49 32 55.46	+12.991	- 26
121	ο Tauri	3.6	3 20 4.536	+3.2252	— 44	+ 8 43 11.10	+12.804	- 76
122	2 II. Camelop.	4.4	3 21 55.944	+4.8321	— 1	+59 38 4.58	+12.762	+ 6
123	[ξ Tauri]	3.6	3 22 23.866	+3.2479	+ 39	+ 9 25 35.02	+12.679	- 45
124	[σ Persei]	4.8	3 24 21.836	+4.2160	+ 9	+47 41 32.01	+12.614	+ 23
125	[/ Tauri]	4.1	3 26 0.735	+3.3083	+ 13	+12 38 8.41	+12.473	- 5
126	[κ Reticuli]	4.8	3 27 50.139	+1.0361	+ 514	-63 14 51.29	+12.715	+362
127	ε Eridani	3.5	3 28 47.026	+2.8253	— 658	— 9 45 20.37	+12.299	+ 12
128	[Horol. 45 G.]	5.8	3 29 57.116	+1.7833	+ 48	-50 40 36.76	+12.287	+ 81
130	[y Eridani]	4.5	3 33 56.157	+2.1515	— 16	-40 33 46.36	+11.904	- 24
129	[Gr. 716]	5.4	3 34 30.420	+5.1761	— 21	+62 55 56.90	+11.911	+ 22
131	δ Persei	3.0	3 36 39.197	+4.2585	+ 33	+47 30 25.11	+11.701	- 35
133	[δ Fornacis]	4.9	3 38 44.861	+2.3849	— 5	-32 13 8.71	+11.595	+ 7
132	[ο Persei]	3.9	3 38 47.793	+3.7552	+ 8	+32 0 36.51	+11.567	-- 17
135	[δ Eridani]	3.4	3 39 1.899	+2.8724	— 65	-10 3 38.54	+12.314	+747
134	ν Persei	3.9	3 39 12.627	+4.0657	— 6	+42 18 4.84	+11.550	- 5
136	[17 Tauri]	4.0	3 39 38.813	+3.5574	+ 17	+23 50 14.51	+11.480	- 44
137	[24 Eridani]	5.4	3 40 2.241	+3.0451	+ 1	— 1 26 24.42	+11.487	- 8
138	5 II. Camelop.	4.5	3 41 2.954	+6.2775	+ 42	+71 3 44.38	+11.383	- 40
139	η Tauri	3.0	3 42 15.035	+3.5612	+ 18	+23 50 1.34	+11.289	- 48
140	τ <sup>6</sup> Eridani	4.1	3 43 3.663	+2.5797	— 123	-23 30 32.77	+10.758	-519

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °.0001	Dekl. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °.001
141	β Reticuli	3.8	3 43 5.523	+0.7417	+478	-65 5 1.57	+11.337	+ 62
142	[27 Tauri]	3.8	3 43 55.594	+3.5622	+ 14	+23 47 6.11	+11.170	- 45
143	γ Eridani	4.1	3 46 9.649	+2.2446	- 40	-36 27 58.74	+11.001	- 52
146	γ Hydri	3.1	3 48 35.411	-0.9657	+123	-74 30 32.30	+10.984	+109
144	ζ Persei	2.9	3 48 35.816	+3.7649	+ 11	+31 37 22.97	+10.863	- 11
145	9 II. Camelop.	5.5	3 49 37.421	+5.0912	- 3	+60 51 7.30	+10.782	- 16
147	ε Persei	3.0	3 51 56.649	+4.0175	+ 23	+39 45 23.09	+10.598	- 29
148	ξ Persei	4.0	3 53 15.087	+3.8859	+ 10	+35 32 19.47	+10.521	- 8
149	γ Eridani	3.0	3 53 55.370	+2.7979	+ 43	-13 45 30.00	+10.368	-112
150	λ Tauri	(3.5)	3 55 48.160	+3.3205	- 5	+12 14 32.44	+10.326	- 13
151	ν Tauri	3.9	3 58 28.413	+3.1890	+ 4	+ 5 44 44.68	+10.128	- 10
153	[Erid. 174 G.]	5.7	4 1 59.773	+2.4717	+148	-27 53 31.54	+ 9.979	+108
152	ε Persei	4.0	4 2 16.069	+4.3451	+ 33	+47 28 42.28	+ 9.818	- 32
154	ο¹ Eridani	4.1	4 7 34.141	+2.9272	+ 8	- 7 3 59.25	+ 9.526	+ 82
155	α Horologii	3.7	4 11 5.037	+1.9853	+ 21	-42 30 39.56	+ 8.953	-219
156	α Reticuli	3.2	4 13 17.271	+0.7646	+ 50	-62 41 38.04	+ 9.047	+ 47
157	[γ Doradus]	4.2	4 13 43.112	+1.5675	+ 88	-51 42 29.99	+ 9.138	+172
160	υ⁴ Eridani	3.3	4 14 33.774	+2.2682	+ 37	-34 0 45.90	+ 8.888	- 12
158	[54 Persei]	5.3	4 14 41.585	+3.8894	- 20	+34 21 18.28	+ 8.884	- 6
159	[γ Tauri]	3.7	4 14 47.005	+3.4111	+ 82	+15 24 56.86	+ 8.854	- 29
161	[Erid. 212 G.]	5.4	4 16 48.701	+2.6179	+ 36	-20 50 55.82	+ 8.739	+ 15
162	δ Tauri	3.8	4 17 51.470	+3.4568	+ 78	+17 20 12.59	+ 8.610	- 31
163	[η Reticuli]	5.3	4 20 56.071	+0.6412	+126	-63 35 42.59	+ 8.558	+160
164	ε Tauri	3.5	4 23 28.574	+3.5002	+ 80	+18 59 9.63	+ 8.160	- 35
166	[δ Mensae]	5.8	4 23 53.938	-4.1504	+ 97	-80 25 14.96	+ 8.234	- 72
165	[ι Camel. seq.]	6.3	4 25 3.279	+4.7399	+ 7	+53 43 13.93	+ 8.069	0
167	[δ Cacli]	5.2	4 28 8.314	+1.8354	- 6	-45 8 32.43	+ 7.805	- 17
168	α Tauri	1	4 30 52.160	+3.4398	+ 49	+16 19 59.18	+ 7.412	-189
169	ν Eridani	3.8	4 31 55.263	+2.9964	+ 2	- 3 31 54.34	+ 7.511	- 4
171	α Doradus	3.2	4 32 5.694	+1.2948	+ 71	-55 13 35.18	+ 7.505	+ 3
170	[υ² Eridani]	3.5	4 32 7.704	+2.3309	- 46	-30 44 30.94	+ 7.493	- 6
172	53 Eridani	3.9	4 34 8.960	+2.7461	- 54	-14 28 31.87	+ 7.170	-165
174	τ Tauri	4.2	4 36 57.691	+3.5981	+ 5	+22 47 19.94	+ 7.086	- 19
173	Gr. 848	6.2	4 36 58.256	+8.0155	+107	+75 46 57.82	+ 6.972	-133
175	4 Camelop.	5.5	4 40 40.038	+4.9853	+ 61	+56 36 7.00	+ 6.655	-146

## MITTLERE STERNÖRTER 1912.

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °.0001	Dekl. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °.001	
176	[ $\mu$ Eridani]	3.8	4 <sup>h</sup> 41 <sup>m</sup> 6. <sup>s</sup> 092	+2.9988	+	13	- 3 <sup>o</sup> 24' 55.18	+6.754	- 12
177	[ $\mu$ Mensae]	5.5	4 43 56.313	-0.6144	+	17	- 71 5 32.90	+6.560	+ 28
178	9 Camelop.	4.3	4 45 17.568	+5.9428	+	5	+66 11 40.32	+6.429	+ 10
179	[ $\pi^4$ Orionis]	3.7	4 46 31.079	+3.1937	o	+ 5 27 18.94	+6.310	- 7	
180	$\pi^5$ Orionis	3.7	4 49 39.982	+3.1235	-	2	+ 2 17 49.98	+6.053	- 3
181	$\iota$ Aurigae	2.7	4 51 15.645	+3.9036	+	10	+33 1 39.41	+5.902	- 20
182	10 Camelop.	4.1	4 55 35.073	+5.3249	-	1	+60 18 53.27	+5.549	- 12
183	$\varepsilon$ Aurigae	(3.2)	4 55 39.077	+4.3000	+	6	+43 41 38.38	+5.541	- 14
184	$\iota$ Tauri	4.8	4 57 50.063	+3.5842	+	53	+21 27 54.24	+5.328	- 43
185	$\eta$ Aurigae	3.3	5 0 20.477	+4.2030	+	33	+41 6 58.93	+5.088	- 71
186	$\varepsilon$ Leporis	3.2	5 1 44.131	+2.5391	+	20	-22 29 19.20	+4.974	- 68
187	[ $\eta^2$ Pictoris]	5.1	5 2 41.067	+1.5495	+	35	-49 41 47.67	+4.967	+ 6
188	$\beta$ Eridani	2.7	5 3 31.377	+2.9487	-	59	- 5 11 58.40	+4.811	- 79
189	[ $\zeta$ Doradus]	4.7	5 3 59.953	+1.0228	-	71	-57 35 33.69	+4.953	+103
190	[ $\lambda$ Eridani]	4.2	5 4 56.074	+2.8704	+	3	- 8 51 58.65	+4.766	- 4
192	$\mu$ Aurigae	5.1	5 7 24.263	+4.1020	-	13	+38 22 52.08	+4.482	- 79
191	19 H. Camelop.	5.1	5 8 1.859	+9.8237	-	316	+79 7 56.22	+4.667	+160
193	$\alpha$ Aurigae	1	5 10 11.152	+4.4281	+	85	+45 54 34.15	+3.895	- 428
194	$\beta$ Orionis	1	5 10 18.479	+2.8823	+	2	- 8 18 9.57	+4.312	0
195	[ $\tau$ Orionis]	3.7	5 13 19.966	+2.9121	-	12	- 6 56 19.87	+4.047	- 7
196	$\delta$ Doradus	4.8	5 13 49.314	-0.0537	+	14	-67 17 3.52	+4.050	+ 39
197	[ $\sigma$ Columbae]	4.9	5 14 18.591	+2.1623	+	63	-34 58 50.42	+3.642	-328
198	[Columb. 12 G.]	6.0	5 15 53.228	+2.3917	+	8	-27 27 31.72	+3.823	- 11
199	[ $\zeta$ Pictoris]	5.6	5 17 12.517	+1.4690	+	8	-50 42 0.73	+3.948	+227
200	[ $\eta$ Orion. m.]	3.3	5 20 3.127	+3.0161	+	5	- 2 28 38.71	+3.478	+ 1
201	$\gamma$ Orionis	1.7	5 20 24.628	+3.2170	-	3	+ 6 16 14.23	+3.425	- 20
202	$\beta$ Tauri	1.8	5 20 43.677	+3.7911	+	25	+28 32 2.34	+3.241	-177
203	17 Camelop.	5.9	5 21 51.275	+5.6582	-	3	+62 59 41.84	+3.320	- 1
204	[ $\beta$ Leporis]	2.9	5 24 28.488	+2.5707	+	4	-20 49 44.69	+3.002	- 93
206	$\delta$ Orionis	2.2	5 27 30.602	+3.0642	o	- 0 21 48.97	+2.831	- 2	
205	Gr. 966	6.6	5 27 56.992	+8.0062	-	9	+74 59 14.45	+2.814	+ 20
207	$\alpha$ Leporis	2.6	5 28 50.909	+2.6455	+	2	-17 53 4.94	+2.719	+ 2
208	[ $\varphi^1$ Orionis]	4.6	5 29 59.326	+3.2925	-	1	+ 9 25 50.38	+2.607	- 10
209	$\iota$ Orionis	2.8	5 31 7.683	+2.9344	+	4	- 5 58 1.38	+2.514	- 4
210	$\varepsilon$ Orionis	1.6	5 31 44.851	+3.0435	+	1	- 1 15 26.87	+2.462	- 3

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von o".0001	Dekl. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von o".001
211	ζ Tauri	3.0	5 32 <sup>h</sup> 23. <sup>m</sup> 086	+3.5848	+	6	+21° 5' 22." <sup>s</sup> 76	+2.384 — 26
212	β Doradus	3.7	5 32 51.589	+0.5169	—	13	-62 32 50.01	+2.366 — 2
213	[σ Orionis]	3.8	5 34 19.667	+3.0111	0	— 2 39 073	+2.240 — 1	
214	[γ Mensae]	5.3	5 35 21.706	-2.3936	+276	-76 24 15.02	+2.450 +299	
215	α Columbae	2.4	5 36 27.690	+2.1717	—	1	-34 7 14.11	+2.018 — 37
216	ο Aurigae	5.7	5 39 4.919	+4.6462	—	6	+49 47 19.69	+1.819 — 9
217	[γ Leporis]	3.8	5 40 47.695	+2.5015	—	201	-22 28 35.63	+1.302 — 376
218	[ι30 Tauri]	5.8	5 42 18.320	+3.4981	+	4	+17 41 49.00	+1.540 — 6
219	ζ Leporis	3.5	5 42 58.058	+2.7179	—	12	-14 51 14.85	+1.487 — 2
220	ζ Orionis	2.1	5 43 34.953	+2.8451	+	4	— 9 42 0.89	+1.432 — 3
221	[γ Aurigae]	3.9	5 45 23.398	+4.1569	—	4	+39. 7 25.19	+1.288 +11
222	[δ Leporis]	3.8	5 47 32.197	+2.5799	+166	—	-20 53 9.63	+0.437 — 652
223	[β Columbae]	2.9	5 47 51.382	+2.1134	+	33	-35 48 3.12	+1.465 +404
224	α Orionis	1	5 50 24.432	+3.2478	+	20	+ 7 23 29.18	+0.852 +13
225	δ Aurigae	3.8	5 52 16.865	+4.9399	+100	—	+54 16 44.65	+0.553 — 122
226	[η Leporis]	3.6	5 52 23.796	+2.7323	—	27	-14 10 59.30	+0.804 +140
227	β Aurigae	1.9	5 53 4.425	+4.4013	—	42	+44 56 22.07	+0.598 — 8
228	θ Aurigae	2.7	5 53 43.226	+4.0917	+	49	+37 12 26.41	+0.462 — 87
229	η Columbae	3.9	5 56 27.179	+1.8366	+	22	-42 49 11.07	+0.277 — 34
230	[66 Orionis]	5.9	6 0 19.361	+3.1693	—	6	+ 4 9 51.40	-0.043 — 15
231	[Puppis ι G.]	5.8	6 1 56.437	+1.7262	—	83	-45 2 9.05	+0.062 +232
232	ν Orionis	4.4	6 2 32.857	+3.4262	+	11	+14 46 46.79	-0.254 — 31
233	[36 Camelop.]	5.6	6 3 59.860	+6.0366	—	5	+65 44 14.05	-0.379 — 29
235	[β Pictoris]	5.0	6 8 35.019	+1.1667	—	22	-54 56 55.55	-0.758 — 7
234	22 H. Camelop.	4.6	6 9 9.096	+6.6179	+	17	+69 21 8.49	-0.902 — 102
236	η Geminor.	3.3	6 9 33.954	+3.6224	—	42	+22 31 59.40	-0.849 — 13
237	[2 Lyneis]	4.4	6 11 51.596	+5.2969	—	7	+59 2 38.42	-1.007 +29
239	[α Mensae]	5.1	6 12 51.543	-1.7888	+238	—	-74 43 23.83	-1.350 — 226
238	[ζ Columbae]	4.4	6 13 25.262	+2.1340	—	6	-35 6 38.78	-1.099 +74
240	ζ Canis maj.	2.9	6 16 56.062	+2.3025	+	2	-30 1 25.31	-1.476 + 4
241	μ Geminor.	2.9	6 17 38.231	+3.6309	+	48	+22 33 34.62	-1.652 -111
242	ψ <sup>1</sup> Aurigae	5.1	6 18 7.328	+4.6242	+	9	+49 20 1.97	-1.587 — 3
243	β Canis maj.	2.0	6 18 49.445	+2.6417	—	4	-17 54 41.78	-1.643 + 2
244	8 Monocer.	4.5	6 19 6.311	+3.1799	—	7	+ 4 38 17.70	-1.665 + 4
245	α Argus	1	6 21 59.837	+1.3313	+	16	-52 38 50.15	-1.910 + 11

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.001
246	10 Monocer.	5.0	6 23 <sup>m</sup> 36.846	+ 2.9629	- 2	- 4 ° 42' 25.59	- 2.057	+ 5
247	8 Lyncis	6.3	6 29 39.055	+ 5.4911	- 283	+ 61 33 34.92	- 2.864	- 277
248	23 H. Camelop.	5.6	6 31 14.017	+ 10.3036	- 272	+ 79 39 42.92	- 3.346	- 623
249	5 <sup>2</sup> Canis maj.	4.6	6 31 22.072	+ 2.5140	+ 5	- 22 53 40.22	- 2.722	+ 13
250	51 Aurigae	6.1	6 32 33.735	+ 4.1601	- 18	+ 39 28 9.53	- 2.953	- 114
251	γ Geminor.	2.0	6 32 37.725	+ 3.4672	+ 34	+ 16 28 30.59	- 2.890	- 45
252	ν Argus	3.1	6 35 4.096	+ 1.8354	- 4	- 43 7 6.39	- 3.075	- 20
253	S Monocer.	(4.4)	6 36 7.937	+ 3.3054	+ 6	+ 9 58 40.34	- 3.153	- 5
254	ε Geminor.	3.1	6 38 31.144	+ 3.6934	+ 3	+ 25 13 8.74	- 3.368	- 15
256	ξ Geminor.	3.4	6 40 21.056	+ 3.3687	- 75	+ 12 59 28.34	- 3.710	- 199
255	[ψ <sup>5</sup> Aurigae]	5.5	6 40 23.903	+ 4.3290	+ 6	+ 43 39 57.25	- 3.361	+ 154
257	α Canis maj. <sup>1)</sup>	1	6 41 16.317	+ 2.6438	- 369	- 16 35 41.32	- 4.803	- 1213
258	18 Monocer.	4.7	6 43 16.380	+ 3.1299	- 2	+ 2 30 32.79	- 3.782	- 20
259	[43 Camelop.]	5.1	6 44 13.340	+ 6.4897	+ 16	+ 68 59 31.09	- 3.841	+ 3
261	θ Geminor.	3.4	6 46 59.432	+ 3.9581	+ 7	+ 34 4 5.49	- 4.136	- 55
260	[24 H. Camel.]	4.6	6 47 14.863	+ 8.8018	+ 217	+ 77 5 28.94	- 4.116	- 13
262	α Pictoris	3.2	6 47 17.348	+ 0.6182	- 101	- 61 50 47.94	- 3.851	+ 256
264	[ζ Mensae]	5.7	6 47 23.271	- 4.9373	- 38	- 80 43 17.87	- 4.031	+ 85
263	[τ Argus]	2.9	6 47 45.135	+ 1.4888	+ 29	- 50 30 34.36	- 4.242	- 96
265	15 Lyncis	4.6	6 49 39.622	+ 5.2057	0	+ 58 32 21.32	- 4.440	- 130
266	θ Canis maj.	4.1	6 50 6.087	+ 2.7876	- 94	- 11 55 40.03	- 4.361	- 14
267	[t Volantis]	5.4	6 52 27.606	- 0.6768	- 5	- 70 51 14.00	- 4.537	+ 12
268	ε Canis maj.	1.5	6 55 10.003	+ 2.3575	0	- 28 51 6.40	- 4.778	+ 1
269	ζ Geminor.	(3.8)	6 58 53.445	+ 3.5609	0	+ 20 42 0.73	- 5.097	- 3
270	[η <sup>2</sup> Canis maj.]	3.1	6 59 20.988	+ 2.5052	- 2	- 23 42 14.99	- 5.133	0
271	γ Canis maj.	4.0	6 59 46.653	+ 2.7152	+ 8	- 15 30 9.63	- 5.182	- 12
272	[Carinae 27 G.]	5.5	7 2 39.844	+ 1.1175	- 24	- 56 36 56.93	- 5.420	- 7
273	δ Canis maj.	1.9	7 4 48.761	+ 2.4389	- 8	- 26 15 10.60	- 5.590	+ 3
274	63 Aurigae	5.0	7 5 36.289	+ 4.1325	+ 45	+ 39 27 54.06	- 5.660	+ 1
275	[J Puppis]	4.5	7 10 3.036	+ 1.7095	- 148	- 46 36 43.02	- 5.942	+ 90
276	[64 Aurigae]	6.0	7 11 55.251	+ 4.1788	- 3	+ 41 2 25.61	- 6.185	+ 3
277	λ Geminor.	3.6	7 13 2.205	+ 3.4502	- 31	+ 16 41 59.47	- 6.324	- 44
278	π Argus	2.5	7 14 2.048	+ 2.1184	- 14	- 36 56 20.38	- 6.361	+ 3
279	δ Geminor.	3.3	7 14 52.138	+ 3.5866	- 11	+ 22 8 42.75	- 6.443	- 10
280	19 Lync.seq.	5.5	7 15 41.510	+ 4.9083	- 1	+ 25 26 53.67	- 6.535	- 34

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
281	δ Volantis	4.0	7 16 <sup>m</sup> 52.729	-0.0186	+ 4	-67° 47' 46.25	- 6.611	- 12
282	ι Geminor.	3.8	7 20 15.790	+3.7309	- 83	+27 58 25.71	- 6.963	- 85
283	[η Can. maj.]	2.4	7 20 36.845	+2.3729	- 5	-29 7 50.94	- 6.893	+ 13
284	Gr. 1308	5.8	7 21 44.003	+6.2751	- 7	+68 38 48.20	- 7.042	- 44
285	β Canis min.	2.9	7 22 22.764	+3.2557	- 31	+ 8 28 2.51	- 7.092	- 41
286	ρ Geminor.	4.4	7 23 27.201	+3.8638	+122	+31 57 37.42	- 6.956	+ 183
287	α Gemin.¹)	1.8, 2.8	7 28 59.109	+3.8351	-129	+32 4 57.47	- 7.671	- 81
288	[Pupp. 108 G.]	4.7	7 30 17.146	+2.5674	- 39	-22 6 20.29	- 7.676	+ 18
289	25 Monocer.	5.3	7 32 54.202	+2.9838	- 47	- 3 54 49.90	- 7.885	+ 20
290	[γ Puppis]	4.7	7 34 6.701	+2.2192	- 27	-34 46 12.26	- 7.986	+ 16
291	α Can. min.²)	0.5	7 34 41.769	+3.1425	-469	+ 5 27 4.55	- 9.077	-1029
292	24 Lyncis	5.0	7 35 34.076	+5.0948	- 47	+58 55 2.29	- 8.172	- 53
293	[26 Monocer.]	4.0	7 37 2.562	+2.8664	- 57	- 9 20 42.89	- 8.258	- 22
294	χ Geminor.	3.4	7 39 8.225	+3.6268	- 15	+24 36 35.30	- 8.457	- 54
295	β Geminor.	1.1	7 39 55.991	+3.6764	-468	+28 14 22.31	- 8.520	- 53
296	π Geminor.	5.5	7 41 50.128	+3.8752	- 1	+33 37 56.90	- 8.648	- 31
297	ζ Volantis	3.9	7 42 54.438	-0.7207	+ 8	-72 23 41.48	- 8.694	+ 8
298	[Pupp. 205 G.]	5.7	7 47 41.827	+2.7788	- 41	-13 39 50.27	- 9.420	- 343
299	[26 Lyncis]	5.7	7 48 18.539	+4.3805	- 40	+47 47 37.00	- 9.131	- 7
301	[α Puppis]	3.7	7 49 11.487	+2.0619	- 18	-40 20 54.05	- 9.192	+ 1
300	Gr. 1374	5.5	7 49 40.976	+7.2490	- 30	+74 9 16.02	- 9.264	- 32
302	[53 Camelop.]	6.3	7 54 12.030	+5.1499	- 30	+60 33 57.67	- 9.601	- 21
303	χ Argus	3.5	7 54 32.520	+1.5271	- 32	-52 44 45.01	- 9.583	+ 24
304	[27 Monocer.]	5.2	7 55 20.446	+2.9995	- 27	- 3 26 20.34	- 9.659	+ 9
305	χ Geminor.	5.1	7 58 6.963	+3.6905	- 15	+28 2 30.53	- 9.926	- 46
306	ζ Argus	2.2	8 0 29.427	+2.1076	- 34	-39 45 17.24	- 10.050	+ 10
307	27 Lyneis	4.6	8 1 50.629	+4.5284	- 59	+51 45 40.44	- 10.167	- 5
308	ι Navis	2.8	8 3 47.759	+2.5547	- 64	-24 3 0.38	- 10.263	+ 46
309	γ Argus	2.1	8 6 49.201	+1.8488	- 12	-47 4 36.67	- 10.539	- 4
310	Br. 1147	5.8	8 8 30.871	+7.6267	+ 58	+76 1 37.23	- 10.644	+ 17
311	20 Navis	5.3	8 9 17.300	+2.7581	- 8	-15 31 21.19	- 10.724	- 6
312	β Caneri	3.5	8 11 44.654	+3.2564	- 30	+ 9 27 26.59	- 10.951	- 52
313	[η Puppis]	4.4	8 15 15.602	+2.2440	-104	-36 23 10.07	- 11.067	+ 89
314	31 Lyncis	4.4	8 16 48.948	+4.1196	- 8	+43 28 16.16	- 11.376	- 108
315	ε Argus	1.7	8 20 42.575	+1.2351	- 32	-59 13 33.42	- 11.534	+ 15

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.001
316	Br. 1197	3.6	8 <sup>b</sup> 21 <sup>m</sup> 15.850	+2.9995	- 41	- 3 ° 37 " 7.49	-11.609	- 21
317	ο Ursae maj.	3.3	8 22 57.789	+5.0131	-174	+61 ° 0 47.85	-11.820	- 111
318	θ Chamael.	4.2	8 23 17.818	-1.7428	-456	-77 12 3.20	-11.703	+ 29
319	[β Volantis]	3.7	8 24 46.976	+0.6627	- 53	-65 50 35.04	-12.015	-177
320	Gr. 1450	6.3	8 27 11.986	+3.9099	- 83	+38 19 8.17	-12.178	-170
321	η Cancri	5.6	8 27 37.335	+3.4747	- 26	+20 44 26.74	-12.087	- 50
322	[Gr. 1446]	6.4	8 29 56.918	+6.7522	- 35	+73 56 18.64	-12.304	-104
323	[Gr. 1460]	6.3	8 32 46.795	+4.4636	- 38	+53 1 14.64	-12.430	- 35
324	[ε Velorum]	4.2	8 34 32.922	+2.1078	- 22	-42 40 51.10	-12.523	- 7
325	[6 Hydrae]	5.4	8 35 51.307	+2.8422	- 64	-12 9 49.54	-12.608	- 3
326	δ Cancri	3.9	8 39 41.180	+3.4142	- 9	+18 28 42.03	-13.100	-236
327	α Pyxidis	3.7	8 40 3.337	+2.4097	- 15	-32 52 7.24	-12.877	+ 12
328	ι Cancri	4.1	8 41 22.515	+3.6379	- 12	+29 4 56.78	-13.024	- 47
329	[ε Hydræ]	3.3	8 42 7.034	+3.1801	-126	+ 6 44 32.14	-13.077	- 50
330	δ Argus	2.0	8 42 16.428	+1.6575	+ 22	-54 23 9.05	-13.130	- 93
331	[η Chamael.]	5.9	8 44 20.222	-1.9580	-151	-78 38 39.01	-13.140	+ 33
332	[γ Pyxidis]	4.2	8 46 47.814	+2.5458	-100	-27 22 58.63	-13.242	+ 93
333	[σ <sup>2</sup> Cancri med.]	5.6	8 48 52.732	+3.6683	+ 31	+30 54 47.79	-13.496	- 26
334	ζ Hydrae	3.1	8 50 44.601	+3.1742	- 64	+ 6 16 51.68	-13.579	+ 12
336	c Carinae	4.0	8 53 3.259	+1.3632	- 26	-60 18 28.75	-13.687	+ 52
335	ι Ursae maj.	2.9	8 53 11.336	+4.1239	-437	+48 23 16.16	-13.995	-248
337	α Cancri	4.1	8 53 40.569	+3.2850	+ 26	+12 11 56.22	-13.813	- 35
338	[ρ Ursae maj.]	4.9	8 54 37.580	+5.4589	- 34	+67 58 24.41	-13.824	+ 15
339	ι <sup>0</sup> Ursae maj.	3.9	8 54 55.970	+3.9078	-383	+42 7 54.51	-14.122	-265
340	[Gr. 1501]	5.9	8 57 34.016	+4.4170	- 8	+54 37 53.21	-14.021	+ 3
341	χ Ursae maj.	3.3	8 57 37.421	+4.1119	- 27	+47 30 18.76	-14.092	- 65
343	α Volantis	4.1	9 1 3.608	+0.9548	-- 7	-66 2 40.91	-14.353	-114
342	[c Velorum]	3.9	9 1 7.060	+2.0661	- 70	-46 44 49.52	-14.271	- 28
344	σ <sup>2</sup> Ursae maj.	4.9	9 2 39.953	+5.3248	- 16	+67 29 33.68	-14.406	- 67
345	λ Argus	2.1	9 4 45.457	+2.2042	- 33	-43 4 36.66	-14.457	+ 9
346	[36 Lyncis]	5.3	9 8 3.223	+3.9379	- 18	+43 34 52.02	-14.706	- 42
347	θ Hydrae	3.9	9 9 47.225	+3.1238	+ 89	+ 2 41 9.73	-15.080	-313
348	β Argus	1.7	9 12 14.330	+0.6716	-303	-69 21 16.53	-14.814	+ 97
349	[38 Lyncis]	3.9	9 13 22.370	+3.7443	- 18	+37 10 32.04	-15.106	-129
350	83 Cancri	6.7	9 14 4.334	+3.3535	- 80	+18 4 44.21	-15.153	-135

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351	[t Argus]	2.2	9 14 44.039	+1.6061	— 35	-58° 54' 20".56	-15.054	+ 2
352	40 Lyncis	3.2	9 15 41.883	+3.6642	— 178	+34 45 54.79	-15.100	+ 12
353	z Argus	2.5	9 19 23.243	+1.8563	— 22	-54 38 4.23	-15.320	+ 2
354	α Hydreae	2.0	9 23 15.813	+2.9490	— 7	8 16 36.11	-15.506	+ 32
355	h Ursae maj.	3.5	9 24 36.273	+4.7668	+ 168	+63 26 50.42	-15.584	+ 28
356	[ε Antliae]	4.7	9 25 36.725	+2.4740	— 25	-35 33 57.98	-15.681	- 14
357	d Ursae maj.	4.5	9 26 43.302	+5.3644	— 121	+70 13 4.55	-15.653	+ 75
358	g Ursae maj.	3.1	9 26 58.751	+4.0319	-1028	+52 4 44.32	-16.288	-547
359	ψ Argus	3.6	9 27 13.962	+2.3601	— 172	-40 4 51.67	-15.681	+ 74
361	[N Velorum]	3.0	9 28 32.882	+1.8228	— 36	-56 38 44.76	-15.825	+ 1
360	10 Leon. min.	4.6	9 28 50.219	+3.6862	+ 13	+36 47 19.76	-15.867	- 26
362	[H Carinae]	5.8	9 30 57.144	+0.4702	— 61	-72 41 25.86	-15.971	- 17
363	[Gr. 1564]	5.9	9 34 44.010	+5.1920	— 131	+69 38 19.40	-16.226	- 74
364	[z Hydreae]	5.1	9 36 5.253	+2.8760	— 18	-13 55 57.19	-16.233	- 11
365	[o Leonis]	3.8	9 36 27.345	+3.2054	— 94	+10 17 35.30	-16.278	- 37
366	g Antliae	5.0	9 40 16.690	+2.6725	— 40	-27 21 58.30	-16.399	+ 35
367	ε Leonis	3.0	9 40 51.545	+3.4118	— 31	+24 10 47.65	-16.481	- 17
368	v Ursae maj.	3.8	9 44 44.572	+4.2948	-379	+59 27 11.66	-16.809	-154
369	v Argus	3.0	9 44 54.166	+1.5014	— 21	-64 39 48.70	-16.664	— 1
370	6 Sextantis	6.2	9 46 48.002	+3.0242	+ 8	— 3 49 50.00	-16.785	- 30
371	[μ Leonis]	4.0	9 47 45.709	+3.4186	— 162	+26 25 18.79	-16.857	- 57
372	Gr. 1586	6.3	9 50 32.448	+5.4388	— 180	+73 17 54.93	-16.978	- 45
373	[Hydreae 183 G.]	5.5	9 50 43.176	+2.8298	— 24	-18 35 32.12	-17.006	- 66
374	[19 Leon. min.]	5.2	9 52 18.004	+3.6872	— 100	+41 28 30.51	-17.041	- 27
375	[φ Argus]	3.7	9 53 46.291	+2.1026	— 21	-54 8 54.98	-17.084	- 2
377	[η Antliae]	5.3	9 55 5.636	+2.5706	— 83	-35 28 9.95	-17.166	- 24
376	[12 Sextantis]	6.7	9 55 9.261	+3.1139	— 47	+ 3 48 21.23	-17.117	+ 27
378	π Leonis	4.9	9 55 33.876	+3.1732	— 21	+ 8 28 0.58	-17.188	- 25
379	η Leonis	3.4	10 2 32.222	+3.2751	— 2	+17 11 31.78	-17.476	- 6
380	α Leonis	1.3	10 3 41.231	+3.1987	— 167	+12 23 51.51	-17.520	— 1
381	λ Hydreae	3.7	10 6 17.886	+2.9249	— 134	— 11 55 7.51	-17.716	- 87
382	q Velorum	3.9	10 11 2.345	+2.5124	— 154	-41 41 8.15	-17.778	+ 45
385	[ω Argus]	3.4	10 11 38.934	+1.4334	— 28	-69 36 2.60	-17.847	0
383	λ Ursae maj.	3.4	10 11 47.702	+3.6316	— 148	+43 21 15.01	-17.902	- 49
384	ζ Leonis	3.4	10 11 47.925	+3.3429	+ 15	+23 51 22.47	-17.860	- 7

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386	$\mu$ Ursae maj.	3.0	10 17 5.507	+3.5869	- 70	+41 56 32.68	-18.035	+ 24
387	30 II. Urs.maj.	5.0	10 17 47.980	+4.3653	- 25	+66 0 42.77	-18.104	- 18
388	[25 Sextantis]	6.2	10 18 59.621	+3.0324	- 40	- 3 37 44.53	-18.133	- 2
389	$\mu$ Hydræ	3.9	10 21 50.045	+2.9008	- 85	-16 23 12.42	-18.317	- 82
391	$J$ Carinae	4.1	10 22 39.014	+1.1966	- 67	-73 35 0.52	-18.281	- 17
390	31 Leon. min.	4.2	10 22 47.958	+3.4798	- 96	+37 9 30.60	-18.376	-106
392	Lac. $\alpha$ Antliae	4.2	10 23 7.410	+2.7419	- 62	-30 37 10.00	-18.272	+ 10
393	$s$ Carinae	4.1	10 24 38.740	+2.1952	- 32	-58 17 23.43	-18.350	- 14
394	36 Ursae maj.	4.8	10 25 0.222	+3.8620	-217	+56 25 55.87	-18.382	- 33
395	9 II. Dracon.	4.9	10 27 38.725	+5.1912	- 96	+76 10 0.45	-18.445	- 4
396	[ $p$ Leonis]	3.8	10 28 10.734	+3.1617	- 6	+ 9 45 35.07	-18.463	- 5
397	[ $p$ Carinae]	3.5	10 28 53.609	+2.1284	- 18	-61 13 56.60	-18.478	+ 5
398	[37 Ursae maj.]	5.2	10 29 30.142	+3.8889	+ 83	+57 32 10.42	-18.468	+ 36
399	[44 Hydræ]	5.6	10 29 49.700	+2.8518	- 2	-23 17 29.16	-18.493	+ 21
400	[ $p$ Velorum]	4.0	10 33 35.948	+2.5123	-183	-47 46 6.12	-18.672	- 34
401	[ $\gamma$ Chamael.]	4.2	10 34 26.260	+0.7378	-116	-78 9 4.25	-18.635	+ 30
402	[ $\pi$ Velorum]	4.4	10 35 47.921	+2.3758	- 75	-55 8 41.42	-18.729	- 21
403	[35 II. Urs.maj.]	5.1	10 36 46.965	+4.3427	- 19	+69 32 12.50	-18.757	- 18
404	33 Sextantis	6.6	10 36 55.613	+3.0526	- 94	- 1 16 43.48	-18.869	-125
405	[41 Leon. min.]	5.2	10 38 38.045	+3.2679	- 81	+23 38 57.97	-18.783	+ 13
406	$\vartheta$ Argus	2.8	10 39 48.892	+2.1335	- 26	-63 55 59.37	-18.827	+ 4
407	42 Leon. min.	5.3	10 40 58.523	+3.3441	- 15	+31 8 45.96	-18.903	- 37
408	$\mu$ Argus	2.7	10 42 58.839	+2.5713	+ 49	-48 57 18.24	-18.989	- 65
409	$\iota$ Leonis	5.4	10 44 37.985	+3.1563	- 3	+11 0 39.86	-19.002	- 30
411	[ $\delta^2$ Chamael.]	4.7	10 44 58.299	+0.6045	-119	-80 4 33.33	-18.972	+ 9
410	[ $\nu$ Hydræ]	3.2	10 45 16.929	+2.9586	+ 66	-15 43 58.62	-18.795	+195
412	[46 Leon. min.]	3.9	10 48 23.663	+3.3645	+ 76	+34 41 22.36	-19.357	-282
414	[ $\iota$ Antliae]	4.9	10 52 36.867	+2.7904	+ 62	-36 39 52.26	-19.322	-137
413	[Br. 1508]	6.4	10 52 56.782	+4.8983	-260	+78 14 30.96	-19.221	- 26
415	$i$ Velorum	4.5	10 56 6.850	+2.7463	+ 20	-41 45 13.42	-19.276	- 4
416	$\beta$ Ursae maj.	2.3	10 56 32.362	+3.6421	+101	+56 51 15.55	-19.256	+ 26
417	$\alpha$ Ursae maj.	1.8	10 58 18.425	+3.7299	-175	+62 13 34.58	-19.396	- 72
418	$\chi$ Leonis	4.8	II 0 28.727	+3.0966	-231	+ 7 48 43.06	-19.420	- 46
419	[ $\chi$ Hydræ]	4.8	II 1 5.381	+2.8854	-154	-26 49 6.50	-19.394	- 7
420	$\psi$ Ursae maj.	3.0	II 4 43.277	+3.3858	- 57	+44 58 34.07	-19.501	- 36

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.001
421	$\beta$ Crateris	4.3	II 7 <sup>m</sup> 19.696	+2.9474	○	-22° 20' 42.68	-19.616	- 98
422	$\delta$ Leonis	2.4	II 9 25.826	+3.1955	+106	+21 ○ 21.61	-19.696	-136
423	$\theta$ Leonis	3.3	II 9 37.428	+3.1513	-43	+15 54 38.62	-19.645	- 81
424	[Gr. 1757]	6.1	II 11 44.624	+3.3952	-97	+49 57 23.89	-19.626	- 22
425	$\nu$ Ursae maj.	3.4	II 13 43.751	+3.2488	-16	+33 34 28.54	-19.617	+ 22
426	$\delta$ Crateris	3.6	II 14 56.390	+2.9972	-88	-14 18 7.89	-19.459	+200
427	$\sigma$ Leonis	4.1	II 16 35.973	+3.0950	-62	+ 6 30 42.34	-19.700	- 12
428	$\pi$ Centauri	4.1	II 16 59.370	+2.7252	-41	-54 ○ 31.11	-19.707	- 13
429	Gr. 1771	6.2	II 17 38.185	+3.5938	-10	+64 48 44.14	-19.670	+ 34
430	[t Leonis]	4.0	II 19 20.266	+3.1291	+106	+11 ○ 50.57	-19.815	- 84
431	[ $\gamma$ Crateris]	4.0	II 20 29.047	+2.9944	-72	-17 12 1.80	-19.742	+ 7
432	[58 Ursae maj.]	6.1	II 25 45.690	+3.2580	-44	+43 39 22.95	-19.751	+ 72
433	$\lambda$ Draconis	3.6	II 26 11.592	+3.5989	-80	+69 49 0.70	-19.850	- 21
434	$\xi$ Hydræ	3.6	II 28 40.248	+2.9448	-167	-31 22 14.22	-19.901	- 43
435	[C Centauri]	5.5	II 31 39.365	+2.8961	+13	-47 9 12.72	-19.940	- 47
436	$\lambda$ Centauri	3.3	II 31 42.980	+2.7503	-58	-62 31 58.19	-19.910	- 17
437	$\nu$ Leonis	4.4	II 32 26.582	+3.0717	+ 1	- ○ 20 16.27	-19.865	+ 36
438	[ $\pi$ Chamael.]	6.1	II 33 37.564	+2.4552	-277	-75 24 33.40	-19.918	- 5
439	[ $\rho$ Hydræ]	4.8	II 35 50.377	+2.9738	-30	-34 15 24.74	-19.934	+ 1
440	$\beta$ Draconis	5.4	II 37 34.479	+3.3758	-78	+67 13 55.44	-19.910	+ 40
441	$\gamma$ Ursae maj.	3.8	II 41 24.511	+3.1806	-134	+48 16 2.51	-19.960	+ 20
442	[ $\lambda$ , Muscae]	3.7	II 41 26.815	+2.8118	-152	-66 14 27.12	-19.960	+ 20
443	[Centauri 65 G.]	4.2	II 42 15.080	+2.8859	-25	-60 41 20.93	-20.021	- 35
444	$\beta$ Leonis	2.1	II 44 34.332	+3.0626	-341	+15 3 50.50	-20.118	-118
445	$\beta$ Virginis	3.5	II 46 6.684	+3.1252	+494	+ 2 15 38.31	-20.285	-276
446	[B Centauri]	4.8	II 46 44.387	+2.9850	-111	-44 41 2.20	-20.058	- 46
447	$\gamma$ Ursae maj.	2.3	II 49 12.455	+3.1705	+108	+54 11 2.44	-20.021	+ 2
448	[ $\varepsilon$ Chamael.]	5.0	II 55 14.408	+2.9288	-160	-77 43 54.39	-20.050	- 9
449	[Centauri 88 G.]	5.5	II 59 5.787	+3.0945	+267	-41 56 28.71	-20.168	-122
450	$\circ$ Virginis	4.1	I 12 ○ 43.621	+3.0571	-147	+ 9 13 18.02	-20.008	+ 38
451	[Gr. 1852]	6.0	I 12 ○ 47.572	+3.0958	+440	+77 23 52.21	-20.142	- 96
452	$\delta$ Centauri	2.7	I 12 3 47.538	+3.0948	-44	-50 13 56.26	-20.061	- 18
453	$\epsilon$ Corvi	3.0	I 12 5 35.789	+3.0807	-51	-22 7 49.27	-20.029	+ 11
454	$\tau$ H. Draconis	5.0	I 12 8 5.368	+2.8509	+23	+78 6 18.77	-20.010	+ 23
455	[ $\delta$ Crucis]	3.0	I 12 10 27.930	+3.1661	-50	-58 15 34.22	-20.052	- 27

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung von 0".0001	Jährl. Eigen- bew.in Einh.	Dekl. 1912.0	Jährl. Verände- itung von 0".001
456	δ Ursae maj.	3.4	12 11 <sup>m</sup> 4.593	+2.9847	+136	+57 31 17.32	-20.020 + 3
457	[γ Corvi]	2.4	12 11 16.708	+3.0815	-112	-17 3 12.15	-20.005 + 17
458	[2 Can. ven.]	5.9	12 11 43.194	+3.0154	+ 26	+41 8 59.72	-20.065 - 45
459	β Chamael.	4.4	12 13 9.753	+3.4465	-142	-78 49 25.11	-20.001 + 12
460	η Virginis	3.7	12 15 24.194	+3.0686	- 42	- 0 10 40.19	-20.024 - 23
461	[6 Can. ven.]	5.3	12 21 30.992	+2.9626	- 67	+39 30 24.35	-19.994 - 36
462	α Crucis md.	1.0	12 21 41.992	+3.3120	- 44	-62 36 42.59	-19.987 - 31
463	[Hydr. 323 G.]	5.7	12 22 13.200	+3.1531	- 14	-32 20 32.68	-20.001 - 49
464	[5 Centauri]	4.1	12 23 16.518	+3.2290	- 36	-49 44 36.10	-19.975 - 33
466	20 Comae	6.0	12 25 18.087	+3.0175	+ 26	+21 22 59.82	-19.963 - 39
465	δ Corvi	2.8	12 25 18.541	+3.1004	-145	-16 1 32.18	-20.066 - 142
467	[74 Ursae maj.]	5.6	12 25 50.984	+2.8137	- 96	+58 53 23.33	-19.831 + 88
468	[γ Crucis]	1.6	12 26 16.623	+3.3072	+ 26	-56 37 14.12	-20.192 - 278
469	[γ Muscae]	3.9	12 27 11.909	+3.5414	- 81	-71 38 49.35	-19.926 - 22
470	8 Can. ven.	4.3	12 29 34.005	+2.8561	-625	+41 50 7.77	-19.599 + 280
472	ζ Draconis	3.6	12 29 43.989	+2.5787	-117	+70 16 23.47	-19.870 + 7
471	β Corvi	2.6	12 29 45.688	+3.1452	- 4	-22 54 36.80	-19.936 - 59
473	24 Comae seq.	5.1	12 30 43.009	+3.0117	+ 2	+18 51 40.99	-19.848 + 18
474	α Muscae	2.8	12 31 55.505	+3.5417	- 55	-68 39 3.07	-19.883 - 32
475	[χ Virginis]	4.9	12 34 42.190	+3.0942	- 49	- 7 30 41.24	-19.854 - 37
476	γ Centauri	2.3	12 36 39.420	+3.2925	-205	-48 28 35.86	-19.809 - 19
477	[γ Virgin. m.]	3.5-3.5	12 37 12.024	+3.0387	-375	- 0 58 1.01	-19.777 + 5
478	76 Ursae maj.	6.2	12 37 43.529	+2.6346	- 45	+63 11 45.87	-19.792 - 17
479	[Hydr. 330 G.]	5.9	12 39 18.904	+3.1905	- 26	-27 50 28.35	-19.802 - 50
480	[β Muscae]	3.2	12 40 52.343	+3.6432	- 53	-67 37 35.54	-19.759 - 31
481	β Crucis	1.4	12 42 34.242	+3.4808	- 59	-59 12 28.20	-19.728 - 27
482	n Centauri	4.4	12 48 33.440	+3.3104	+ 45	-39 42 1.97	-19.635 - 37
483	ε Ursae maj.	1.7	12 50 9.690	+2.6489	+137	+56 26 14.30	-19.579 - 11
484	δ Virginis	3.4	12 51 10.209	+3.0210	-315	+ 3 52 31.52	-19.611 - 63
485	12 Can. ven. sq.	2.8	12 51 54.814	+2.8114	-199	+38 47 36.33	-19.483 + 50
486	8 Draconis	5.2	12 51 58.564	+2.3988	- 15	+65 54 56.56	-19.566 - 34
487	[δ Muscae]	3.6	12 56 11.997	+4.0714	+527	-71 4 28.05	-19.482 - 36
488	ε Virginis	2.8	12 57 47.782	+2.9866	-185	+11 25 54.92	-19.394 + 18
489	[ε Centauri]	4.3	13 1 45.981	+3.4848	- 35	-49 26 6.74	-19.352 - 30
490	φ Virginis	4.3	13 5 23.529	+3.1035	- 24	- 5 4 10.04	-19.275 - 39

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °.0001	Dekl. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °.001
491	[17 Can. ven.]	6.1	13 <sup>b</sup> 6 <sup>m</sup> 0.886	+2.7596	- 59	+38° 57' 58.72	-19.188	+ 32
492	43 Comae	4.2	13 7 46.084	+2.8024	-602	+28 19 26.33	-18.297	+879
493	[η Muscae]	5.0	13 9 16.380	+4.0263	- 33	-67 25 42.73	-19.166	- 30
494	[20 Can. ven.]	4.6	13 13 35.924	+2.6947	-108	+41 2 8.04	-19.013	+ 8
495	γ Hydrae	3.1	13 14 8.081	+3.2554	+ 51	-22 42 27.33	-19.060	- 53
496	ι Centauri	2.9	13 15 38.695	+3.3608	-293	-36 14 54.29	-19.056	- 92
497	ζ Urs. maj.pr.	2.2	13 20 23.086	+2.4217	+144	+55 23 4.88	-18.851	- 25
498	α Virginis	1.1	13 20 33.298	+3.1567	- 28	-10 42 8.26	-18.854	- 33
499	Gr. 2001	6.2	13 23 53.337	+1.5262	+ 35	+72 50 53.77	-18.733	- 15
500	69 H. Urs. maj.	5.5	13 25 13.427	+2.2068	-110	+60 24 0.29	-18.639	+ 37
501	ζ Virginis	3.3	13 30 12.478	+3.0548	-190	- 0 8 46.82	-18.478	+ 35
502	17 II. Can. ven.	4.9	13 30 52.126	+2.6811	+ 64	+37 37 58.58	-18.504	- 14
503	[Chamael. 49 G.]	6.4	13 31 38.585	+5.0416	- 49	-75 14 7.21	-18.478	- 14
504	ε Centauri	2.4	13 34 18.225	+3.7786	- 37	-53 1 9.73	-18.406	- 34
505	[Gr. 2029]	5.9	13 35 4.059	+1.4364	- 86	+71 41 23.66	-18.346	0
506	[i Centauri]	4.3	13 40 40.948	+3.3990	-371	-32 35 56.63	-18.298	-156
507	τ Bootis	4.5	13 43 4.820	+2.8509	-340	+17 53 41.87	-18.024	+ 29
509	η Ursae maj.	1.8	13 44 4.493	+2.3681	-119	+49 45 7.76	-18.034	- 20
508	[μ Centauri]	3.3	13 44 18.565	+3.5993	- 28	-42 2 8.02	-18.024	- 19
510	89 Virginis	5.2	13 45 5.249	+3.2544	- 69	-17 41 46.12	-18.013	- 38
511	[i Draconis]	4.8	13 48 51.725	+1.7524	0	+65 9 28.05	-17.829	- 2
512	ζ Centauri	2.6	13 50 2.567	+3.7242	- 70	-46 51 20.11	-17.840	- 60
513	η Bootis	2.8	13 50 29.680	+2.8570	- 42	+18 50 18.47	-18.125	-364
514	[Cent. 294 G.]	4.9	13 51 16.141	+4.3055	- 46	-63 15 20.38	-17.764	- 35
515	[47 Hydrac]	5.5	13 53 34.681	+3.3593	- 34	-24 32 35.21	-17.675	- 40
516	τ Virginis	4.2	13 57 10.015	+3.0513	+ 13	+ 1 58 11.78	-17.513	- 30
517	11 Bootis	6.3	13 57 11.108	+2.7219	- 57	+27 48 40.46	-17.474	+ 8
518	β Centauri	1	13 57 36.192	+4.2037	- 28	-59 56 56.39	-17.504	- 40
519	[π Hydrac]	3.4	14 1 21.375	+3.4085	+ 29	-26 15 32.04	-17.453	-153
520	θ Centauri	2.1	14 1 29.900	+3.5185	-439	-35 56 14.98	-17.824	-530
521	α Draconis	3.4	14 2 0.359	+1.6230	- 83	+64 47 46.43	-17.255	+ 17
522	d Bootis	4.9	14 6 23.169	+2.7373	- 12	+25 30 29.26	-17.144	- 69
523	z Virginis	4.2	14 8 11.959	+3.1963	+ 4	- 9 51 52.37	-16.856	+134
524	4 Ursae min.	5.0	14 9 10.406	-0.2865	-113	+77 57 39.74	-16.913	+ 32
525	ι Virginis	4.0	14 11 23.869	+3.1420	- 14	- 5 34 51.87	-17.271	-431

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von 0°.0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von 0°.001
526	$\alpha$ Bootis	I	14 <sup>h</sup> 11 <sup>m</sup> 38.828	+2.7357	— 778	+19° 38' 24".55	— 18.828	— 1999
527	$\lambda$ Bootis	4.0	14 13 2.359	+2.2827	— 177	+46 29 31.23	— 16.610	+ 152
528	[ $\iota$ Bootis]	4.6	14 13 3.000	+2.1261	— 159	+51 46 22.10	— 16.676	+ 86
529	[ $\nu$ Centauri]	4.4	14 14 10.100	+4.1619	— 47	-55 58 54.23	— 16.747	— 39
530	[Circini 10 G.]	5.9	14 17 47.449	+4.9205	— 41	-67 47 44.93	— 16.567	— 36
531	$\vartheta$ Bootis	3.9	14 22 12.089	+2.0431	— 257	+52 15 25.72	— 16.714	— 404
532	[52 Hydrae]	5.1	14 23 0.904	+3.5043	— 28	-29 5 48.02	— 16.298	— 30
533	[ $\varphi$ Virginis]	5.0	14 23 40.008	+3.0886	— 90	-1 50 2.30	— 16.242	— 7
534	$\rho$ Bootis	3.7	14 28 2.265	+2.5863	— 75	+30 45 26.10	— 15.894	+ 113
535	$\gamma$ Bootis	2.9	14 28 32.101	+2.4171	— 93	+38 41 33.91	— 15.837	+ 145
536	[Gr. 2125]	6.4	14 29 19.448	+1.6277	— 59	+60 36 47.24	— 15.921	+ 19
537	$\eta$ Centauri	2.5	14 29 54.810	+3.7953	— 36	-41 46 18.57	— 15.944	— 36
538	$\alpha$ Centauri <sup>1)</sup>	I	14 33 36.776	+4.0513	-4869	-60 28 21.96	— 14.993	+ 716
539	[ $\alpha$ Circini]	3.3	14 35 22.821	+4.8053	— 320	-64 35 33.15	— 15.851	— 238
540	[33 Bootis]	5.5	14 35 33.744	+2.2331	— 68	+44 47 2.32	— 15.628	— 26
541	[ $\alpha$ Lupi]	2.4	14 36 4.229	+3.9731	— 20	-47 ° 39.97	— 15.611	— 36
542	$\alpha$ Apodis	3.8	14 36 52.605	+7.2849	— 57	-78 40 20.28	— 15.565	— 35
543	$\zeta$ Bootis m.	3.6	14 36 56.758	+2.8639	+ 37	+14 6 18.92	— 15.553	— 27
544	[ $\epsilon^1$ Centauri]	4.1	14 38 16.204	+3.6580	— 61	-34 47 43.29	— 15.651	— 198
545	$\mu$ Virginis	3.9	14 38 25.239	+3.1581	+ 69	-5 16 34.27	— 15.771	— 327
546	[ $b$ Lupi]	5.9	14 40 51.518	+4.1750	— 25	-52 ° 42.08	— 15.400	— 92
547	[109 Virginis	3.7	14 41 47.921	+3.0308	— 75	+ 2 15 47.23	— 15.294	— 39
548	$\alpha$ Librae	2.7	14 46 0.441	+3.3134	— 77	-15 40 36.02	— 15.087	— 73
549	Gr. 2164	5.8	14 49 12.277	+1.5194	— 170	+59 39 4.47	— 14.697	+ 130
550	$\beta$ Ursae min.	2.0	14 50 56.997	-0.2089	— 79	+74 30 54.57	— 14.716	+ 7
551	P. XIV, 221	6.0	14 52 3.976	+2.8306	— 10	+14 48 4.80	— 14.675	— 18
552	$\beta$ Lupi	2.7	14 52 45.690	+3.9139	— 51	-42 46 48.53	— 14.675	— 60
553	[ $\varepsilon$ Centauri]	3.2	14 53 25.854	+3.8894	— 21	-41 45 6.07	— 14.608	— 33
554	[2 H. Urs. min.]	4.8	14 56 10.767	+0.9430	-148	+66 16 58.17	— 14.375	+ 34
555	$\beta$ Bootis	3.3	14 58 37.873	+2.2600	— 36	+40 44 13.70	— 14.302	— 43
556	$\gamma$ Scorpii	3.4	14 58 54.956	+3.5042	— 57	-24 56 12.43	— 14.297	— 55
557	$\psi$ Bootis	4.5	15 ° 40.482	+2.5705	-131	+27 17 24.83	— 14.148	— 15
558	$\zeta$ Lupi	3.4	15 5 57.294	+4.2894	-133	-51 45 53.93	— 13.874	— 72
559	[ $\iota$ Librae]	4.6	15 7 12.124	+3.4136	— 32	-19 27 33.65	— 13.770	— 47
561	[ $\beta$ Circini]	4.2	15 10 36.896	+4.6697	-130	-58 28 23.87	— 13.652	— 149

<sup>1)</sup> Schwerpunkt des Systems. Abstände vom Schwerpunkt (Peters. Neuer Fundamental-Katalog. Seite 99):

heller Stern 1912.0:  $\Delta\alpha = +0^{\circ}.693$     $\Delta\delta = +7''.22$   
                   1913.0:           +0.686           +7 .00  
 Begleiter 1912.0:  $\Delta\alpha = -0^{\circ}.816$     $\Delta\delta = -8''.49$   
                   1913.0:           -0.808           -8 .22

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".0001
560	$\gamma$ Triang. austr.	2.9	15 10 40.712	+5.5521	-101	-68° 21' 19.27	-13.536	- 37
562	[3 Serpentis]	5.5	15 10 48.830	+2.9802	- 12	+ 5 15 55.51	-13.497	- 7
563	$\delta$ Bootis	3.2	15 11 57.298	+2.4190	+ 73	+33 38 33.33	-13.538	-122
564	$\beta$ Librae	2.5	15 12 16.171	+3.2246	- 64	- 9 3 31.88	-13.423	- 27
565	$\iota$ H. Urs. min.	5.3	15 13 37.434	+0.6765	+386	+67 40 50.61	-13.703	-396
566	$\psi^1$ Lupi	3.5	15 16 13.044	+3.7962	- 82	-35 56 34.14	-13.231	- 94
569	$\gamma$ Ursae min.	3.0	15 20 51.551	-0.1191	- 32	+72 8 49.65	-12.811	+ 16
568	$\mu$ Bootis	4.1	15 21 9.942	+2.2661	-123	+37 41 7.02	-12.726	+ 81
570	[ $\tau^1$ Serpentis]	5.5	15 21 42.465	+2.7812	- 11	+15 44 12.57	-12.794	- 24
567	[ $\epsilon^1$ Apodis]	5.9	15 21 54.000	+6.4628	+ 5	-73 5 7.28	-12.795	- 37
571	$\iota$ Draconis	3.2	15 22 58.220	+1.3311	- 5	+59 16 26.54	-12.671	+ 14
572	$\beta$ Coron. bor.	3.7	15 24 12.040	+2.4736	-131	+29 24 30.59	-12.526	+ 76
573	$\nu^1$ Bootis	4.8	15 27 46.086	+2.1546	+ 10	+41 7 57.18	-12.370	- 13
574	[ $\epsilon$ Triang. austr.]	4.3	15 28 39.155	+5.4484	+ 29	-66 1 19.38	-12.378	- 82
575	$\gamma$ Lupi	2.9	15 29 16.254	+3.9852	- 26	-40 52 18.04	-12.293	- 39
576	[ $\theta$ Coron. bor.]	4.1	15 29 22.842	+2.4185	- 17	+31 39 19.91	-12.272	- 26
577	$\gamma$ Librae	4.1	15 30 36.073	+3.3516	+ 43	-14 29 47.99	-12.158	+ 3
578	$\alpha$ Coron. bor.	2.2	15 30 57.698	+2.5396	+ 93	+27 0 36.96	-12.235	- 98
579	[ $\zeta$ H. Scorpii]	3.9	15 31 40.694	+3.6346	- 11	-27 50 39.59	-12.097	- 11
580	[ $\varphi$ Bootis]	5.3	15 34 39.971	+2.1544	+ 58	+40 38 21.96	-11.825	+ 52
581	[ $\gamma$ Coron. bor.]	3.8	15 39 2.824	+2.5192	- 74	+26 34 25.64	-11.532	+ 34
582	$\alpha$ Serpentis	2.5	15 39 55.941	+2.9531	+ 91	+ 6 42 6.64	-11.461	+ 42
583	$\beta$ Serpentis	3.4	15 42 7.538	+2.7680	+ 51	+15 41 47.64	-11.400	- 55
584	$\gamma$ Serpentis	4.0	15 44 46.687	+2.6998	- 31	+18 24 45.65	-11.251	- 98
585	$\nu$ Serpentis	3.3	15 45 1.563	+3.1280	- 59	- 3 9 41.79	-11.166	- 31
586	[ $\chi$ Lupi]	4.1	15 45 21.754	+3.8034	- 15	-33 21 35.11	-11.141	- 30
587	[ $\iota$ H. Dracon.]	5.3	15 45 19.310	+0.9073	+ 55	+62 52 16.63	-11.175	- 62
588	$\epsilon$ Serpentis	3.5	15 46 25.690	+2.9884	+ 84	+ 4 44 30.96	-10.973	+ 59
590	$\zeta$ Ursae min.	4.3	15 47 10.602	-2.2118	+ 60	+78 3 56.43	-10.979	- 1
589	$\beta$ Triang. austr.	2.9	15 47 22.723	+5.2556	-280	-63 9 35.95	-11.370	-407
591	[ $\gamma$ Serpentis]	3.7	15 52 23.249	+2.7695	+212	+15 56 53.27	-11.889	-1295
592	[ $\pi$ Scorpii]	4.1	15 53 31.487	+3.6229	- 15	-25 51 41.76	-10.546	- 37
593	$\epsilon$ Coron. bor.	4.0	15 53 56.612	+2.4826	- 61	+27 7 55.51	-10.546	- 68
594	$\delta$ Scorpii	2.3	15 55 7.636	+3.5422	- 8	-22 22 19.45	-10.426	- 36
595	[Gr. 2296]	5.1	15 55 42.033	+1.4193	-187	+54 59 52.98	-10.236	+ 111

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".0001
596	[δ Normae]	4.8	16 <sup>b</sup> 0 <sup>m</sup> 15.989	+4.2275	— 5	—44° 56' " 7.41	— 9.997	+ 6
598	θ Draconis	3.8	16 0 14.313	+1.1202	-402	+58 48 0.06	— 9.665	+340
597	β Scorpii	2.6	16 0 19.046	+3.4835	— 7	-19 33 55.31	— 10.026	— 27
599	[θ Lupi]	4.4	16 0 48.546	+3.9298	— 29	-36 33 48.58	— 10.002	— 41
601	[φ Herculis]	4.0	16 5 59.786	+1.8891	— 23	+45 9 54.43	— 9.534	+ 31
600	[z Normae]	5.3	16 6 31.791	+4.7111	— 42	-54 24 14.17	— 9.589	— 65
602	[δ Triang.austr.]	4.0	16 7 25.126	+5.4328	+ 7	-63 27 42.53	— 9.482	— 26
603	ο Ophiuchi	2.8	16 9 43.951	+3.1413	— 30	— 3 28 6.57	— 9.426	— 150
604	γ <sup>2</sup> Normae	4.2	16 13 14.943	+4.4736	-190	-49 56 25.77	— 9.064	— 61
606	ι Ursae min.	5.8	16 13 19.068	-1.7532	— 4	+76 5 58.28	— 8.985	+ 12
605	ε Ophiuchi	3.2	16 13 39.808	+3.1715	+ 53	— 4 28 43.56	— 8.940	+ 31
607	[σ Scorpii]	3.1	16 15 50.203	+3.6412	— 11	-25 22 56.90	— 8.834	— 33
608	τ Herculis	3.6	16 17 5.694	+1.8020	— 9	+46 31 20.86	— 8.669	+ 32
609	γ Herculis	3.5	16 18 2.234	+2.6451	— 36	+19 21 32.91	— 8.587	+ 40
610	[ζ Triang.austr.]	5.2	16 18 59.231	+6.4098	+366	-69 53 14.13	— 8.469	+ 83
611	γ Apodis	3.9	16 19 55.161	+9.0952	-385	-78 42 4.32	— 8.549	— 70
612	[η Ursae min.]	5.1	16 20 3.720	-1.7924	-215	+75 57 30.74	— 8.211	+256
613	[ω Herculis]	4.7	16 21 21.229	+2.7673	+ 28	+14 14 6.41	— 8.433	— 68
614	[Gr. 2343]	5.8	16 22 29.788	+1.3097	+ 20	+55 24 17.52	— 8.255	+ 18
615	η Draconis	2.7	16 22 47.782	+0.8065	— 28	+61 42 47.55	— 8.189	+ 61
616	α Scorpii	1.2	16 24 0.545	+3.6736	— 7	-26 14 15.15	— 8.181	— 28
618	β Herculis	2.6	16 26 26.179	+2.5780	— 69	+21 40 50.52	— 7.979	— 21
617	[λ Ophiuchi]	3.7	16 26 28.430	+3.0237	— 23	+ 2 10 32.52	— 8.045	— 90
619	A Draconis	5.0	16 28 8.957	-0.1312	-51	+68 57 30.83	— 7.785	+ 35
620	[τ Scorpii]	2.9	16 30 24.084	+3.7294	— 11	-28 2 3.44	— 7.672	— 33
621	σ Herculis	4.1	16 31 15.940	+1.9333	— 6	+42 37 4.89	— 7.530	+ 38
622	ζ Ophiuchi	2.6	16 32 18.696	+3.3008	+ 9	-10 23 22.66	— 7.462	+ 22
623	[Gr. 2373]	6.5	16 34 24.676	-2.6288	-315	+77 37 20.02	— 7.038	+275
624	[24 Scorpii]	5.2	16 36 28.886	+3.4661	— 18	-17 34 21.39	— 7.147	— 2
625	α Triang. austr.	1.9	16 39 20.135	+6.3213	+ 32	-68 52 2.79	— 6.960	— 49
626	η Herculis	3.3	16 39 52.723	+2.0560	+ 34	+39 5 20.85	— 6.950	— 84
627	Gr. 2377	4.9	16 43 37.583	+1.1353	+ 29	+56 56 19.55	— 6.499	+ 58
628	ε Scorpii	2.3	16 44 27.618	+3.8797	-501	-34 8 3.35	— 6.742	-254
629	49 Herculis	6.5	16 48 4.428	+2.7303	+ 12	+15 7 16.19	— 6.195	— 6
630	ζ <sup>2</sup> Scorpii	3.8	16 48 23.199	+4.2127	-134	-42 12 41.21	— 6.400	-238

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von o".001
631	ζ Arae	3.0	16 <sup>b</sup> 51 <sup>m</sup> 19.978	+4.9521	-30	-55° 51' 7.77	-5.964	-48
632	[ε <sup>1</sup> Arae]	4.0	16 52 33.876	+4.7695	-19	-53 1 34.39	-5.822	-8
633	ζ Ophiuchi	3.2	16 53 30.128	+2.8382	-198	+9 30 39.99	-5.748	-12
634	ε Herculis	3.6	16 56 55.336	+2.2947	-35	+31 3 19.40	-5.424	+24
635	[60 Herculis]	4.9	17 1 17.805	+2.7808	+34	+12 51 39.40	-5.094	-15
636	[Gr. 2415]	6.4	17 4 54.470	+1.9559	-29	+40 37 50.07	-4.800	-28
637	η Ophiuchi	2.4	17 5 19.786	+3.4378	+23	-15 37 0.34	-4.646	+90
638	[η Scorpii]	3.4	17 5 50.861	+4.2911	+17	-43 7 26.68	-4.991	-298
639	ζ Draconis	3.0	17 8 31.766	+0.1677	-28	+65 49 22.63	-4.442	+22
640	α Herculis	(3.0)	17 10 38.053	+2.7344	-8	+14 29 23.68	-4.256	+29
641	δ Herculis	3.0	17 11 24.993	+2.4635	-15	+24 56 32.44	-4.376	-159
643	π Herculis	3.1	17 11 58.897	+2.0888	-21	+36 54 27.99	-4.168	+1
642	[t Apodis]	5.7	17 12 16.479	+6.6698	-14	-70 1 55.10	-4.171	-27
644	θ Ophiuchi	3.2	17 16 36.204	+3.6815	-7	-24 54 45.06	-3.798	-25
645	β Arae	2.7	17 17 58.889	+4.9794	-14	-55 26 51.93	-3.696	-42
646	[d Ophiuchi]	4.5	17 21 43.987	+3.8275	+6	-29 47 17.54	-3.476	-145
647	[27 II. Ophiuchi]	4.5	17 21 57.687	+3.1822	-58	-5 0 34.56	-3.362	-51
648	δ Arae	3.6	17 23 9.112	+5.4077	-70	-60 36 41.17	-3.310	-101
650	[x Herculis]	6.0	17 24 24.261	+1.5892	+2	+48 20 0.07	-3.119	-19
649	[υ Scorpii]	2.8	17 24 46.649	+4.0736	-24	-37 13 35.37	-3.108	-39
651	α Arae	2.8	17 25 2.196	+4.6322	-39	-49 48 26.69	-3.140	-94
652	λ Scorpii	1.7	17 27 37.846	+4.0697	-14	-37 2 25.67	-2.854	-32
653	β Draconis	2.7	17 28 26.627	+1.3543	-15	+52 21 58.10	-2.742	+10
655	[ν <sup>1</sup> Draconis]	4.7	17 30 26.566	+1.1802	+176	+55 14 38.48	-2.527	+51
657	[ν <sup>2</sup> Draconis]	4.8	17 30 31.971	+1.1815	+182	+55 13 57.15	-2.519	+52
656	α Ophiuchi	2.1	17 30 50.933	+2.7836	+79	+12 37 24.01	-2.776	-233
654	δ Scorpii	1.9	17 30 59.591	+4.3063	0	-42 56 34.08	-2.548	-18
659	[f Draconis]	5.2	17 32 18.833	-0.2460	-32	+68 11 28.12	-2.282	+134
658	ξ Serpentis	3.5	17 32 32.798	+3.4332	-34	-15 20 38.32	-2.460	-64
660	[z Scorpii]	2.5	17 36 23.889	+4.1470	-15	-38 59 7.64	-2.087	-26
663	ι Herculis	3.6	17 36 58.811	+1.6926	-5	+46 3 9.38	-2.014	-4
661	η Pavonis	3.5	17 37 5.548	+5.8813	-22	-64 40 57.98	-2.056	-56
662	[μ Arae]	5.6	17 37 9.323	+4.7588	-29	-51 47 17.37	-2.203	-208
664	ω Draconis	4.9	17 37 27.873	-0.3547	+14	+68 47 55.40	-1.645	+323
665	β Ophiuchi	2.8	17 39 7.485	+2.9627	-27	+4 36 11.73	-1.670	+153

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.0001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.001
666	[ι <sup>1</sup> Scorpii]	3.0	17 <sup>h</sup> 41 <sup>m</sup> 25. <sup>s</sup> 677	+4.1929	—	10 <sup>°</sup> 5' 37.35	—1.625	— 3
667	μ Herculis	3.3	17 43 0.812	+2.3466	— 242	+27 46 17.49	—2.235	—750
668	[γ Ophiuchi]	3.7	17 43 28.783	+3.0072	— 16	+ 2 44 22.59	—1.521	— 77
670	ψ Drac. austr.	4.7	17 43 30.035	-1.0743	+	28 +72 II 32.26	—1.709	—267
669	[G Scorpii]	3.1	17 43 52.025	+4.0819	+	42 —37 0 57.97	—1.384	+ 26
671	ξ Draconis	3.6	17 52 0.416	+1.0369	+	120 +56 53 10.18	—0.623	+ 76
672	θ Herculis	3.8	17 53 14.084	+2.0568	+	4 +37 15 41.81	—0.587	+ 5
675	35 Draconis	5.1	17 53 23.200	-2.6904	+	118 +76 58 30.37	—0.337	+241
673	ν Ophiuchi	3.4	17 54 10.883	+3.3017	—	7 — 9 45 48.79	—0.627	—118
674	[ξ Herculis]	3.7	17 54 20.697	+2.3308	+	66 +29 15 24.00	—0.520	— 26
676	γ Draconis	2.3	17 54 33.741	+1.3922	—	9 +51 29 55.78	—0.498	— 22
677	67 Ophiuchi	4.0	17 56 14.241	+3.0040	0	+ 2 56 6.17	—0.342	— 13
678	[Apodis 66 G.]	6.0	17 58 56.850	+8.3861	—	50 —75 53 42.06	—0.362	—270
679	γ Sagittarii	3.0	18 0 9.240	+3.8527	—	48 —30 25 33.72	—0.181	—194
680	72 Ophiuchi	3.6	18 3 10.639	+2.8436	—	42 + 9 33 2.16	+0.356	+ 79
681	ο Herculis	3.8	18 4 6.570	+2.3397	+	2 +28 44 58.96	+0.359	0
682	μ Sagittarii	3.9	18 8 30.018	+3.5872	—	3 —21 4 57.82	+0.740	— 3
683	[η Sagittarii]	3.1	18 11 40.316	+4.0589	—	118 —36 47 20.15	+0.858	—163
684	[Gr. 2533]	5.6	18 12 54.516	+1.8652	—	6 +42 7 43.54	+1.122	— 7
685	[36 Draconis]	5.0	18 13 23.406	+0.3454	+	533 +64 22 2.38	+1.200	+ 29
686	[ξ Pavonis]	4.2	18 15 6.989	+5.5295	—	26 —61 32 5.09	+1.338	+ 17
687	[δ Sagittarii]	2.7	18 15 21.614	+3.8410	+	27 —29 51 58.77	+1.311	— 32
688	η Serpentis	3.2	18 16 45.365	+3.1033	—	373 — 2 55 20.84	+0.766	—698
689	ε Sagittarii	1.9	18 18 19.853	+3.9826	—	30 —34 25 37.23	+1.475	—127
690	109 Herculis	3.9	18 19 56.865	+2.5559	+	140 +21 43 44.27	+1.485	—257
691	α Telescopii	3.7	18 20 26.908	+4.4496	—	21 —46 1 3.81	+1.739	— 47
693	[φ Draconis]	4.3	18 22 1.235	-0.8571	—	17 +71 17 28.14	+1.956	+ 33
692	[λ Sagittarii]	2.8	18 22 32.378	+3.7024	—	37 —25 28 16.15	+1.781	—188
694	b Draconis	5.1	18 22 37.539	+0.8766	—	45 +58 44 57.99	+2.034	+ 59
695	χ Draconis	3.6	18 22 38.668	-1.0794	+	1165 +72 41 41.66	+1.612	-366
696	[2 H. Seuti]	4.8	18 24 10.907	+3.4190	—	3 —14 37 21.50	+2.113	+ 2
697	[θ Coron. austr.]	4.7	18 27 13.123	+4.2847	+	14 —42 22 36.35	+2.351	— 24
698	ζ Pavonis	4.0	18 32 45.474	+7.0245	—	26 —71 30 18.08	+2.678	—178
699	α Lyrae	1	18 33 57.526	+2.0312	+	176 +38 42 4.27	+3.240	+281
700	[Gr. 2655]	6.1	18 34 0.375	-2.8800	—	10 +77 28 44.55	+2.961	— 3

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701	[Gr. 2640]	6.2	18 <sup>b</sup> 35 <sup>m</sup> 56 <sup>s</sup> .730	+0.1900	+ 19	+65° 24' 35.45	+3.215	+ 84
702	[5 II. Scuti]	5.1	18 38 43.709	+3.2675	+ 13	- 8 21 46.39	+3.381	+ 9
703	110 Herculis	4.1	18 41 52.454	+2.5810	- 12	+20 27 41.06	+3.302	-340
704	λ Pavonis	4.3	18 44 3.950	+5.5675	- 26	-62 17 22.21	+3.803	- 27
705	β Lyrae	(3.3)	18 46 49.850	+2.2146	+ 3	+33 15 35.86	+4.066	- 2
706	σ Sagittarii	2.1	18 49 48.550	+3.7210	+ 4	-26 24 24.82	+4.260	- 63
707	ο Draconis	4.6	18 49 54.225	+0.8872	+105	+59 16 49.85	+4.355	+ 24
708	λ Telescopii	5.1	18 51 25.479	+4.8053	+ 3	-53 3 16.49	+4.475	+ 14
709	θ Serpent. pr.	4.5	18 51 50.690	+2.9824	+ 29	+ 4 5 17.87	+4.524	+ 28
710	[ξ Sagittarii]	3.6	18 52 28.836	+3.5798	+ 18	-21 13 23.31	+4.534	- 16
711	R Lyrae	(4.5)	18 52 39.455	+1.8262	+ 28	+43 49 46.67	+4.641	+ 76
714	[v Draconis]	5.0	18 55 28.782	-0.7238	+104	+71 10 47.02	+4.846	+ 40
712	[ε Aquilae]	4.0	18 55 37.687	+2.7220	- 42	+14 56 53.03	+4.738	- 80
713	γ Lyrae	3.2	18 55 39.084	+2.2436	- 4	+32 34 5.69	+4.818	- 2
715	[ζ Sagittarii]	2.7	18 57 0.803	+3.8185	- 21	-30 0 24.01	+4.938	+ 2
716	ζ Aquilae	3.0	19 1 21.916	+2.7569	- 7	+13 43 54.90	+5.203	-101
717	λ Aquilae	3.2	19 1 34.747	+3.1840	- 16	- 5 ○ 54.90	+5.235	- 87
718	α Coron. austr.	4.1	19 3 29.174	+4.0843	+ 59	-38 2 32.71	+5.373	-110
719	[ι Lyrae]	5.2	19 4 9.684	+2.1405	- 3	+35 57 41.83	+5.536	- 3
720	π Sagittarii	2.9	19 4 31.866	+3.5690	- 5	-21 9 51.54	+5.535	- 35
721	[Pavonis 60 G.]	5.7	19 8 21.527	+6.0542	- 7	-66 48 50.45	+5.870	- 21
722	[d Sagittarii]	5.2	19 12 29.224	+3.5114	- 12	-19 6 36.88	+6.226	- 9
723	δ Draconis	3.0	19 12 32.271	+0.0222	+167	+67 30 24.15	+6.327	+ 87
724	θ Lyrae	4.3	19 13 18.795	+2.0816	- 7	+37 58 35.13	+6.302	- 1
725	ω Aquilae	5.4	19 13 41.152	+2.8158	- 3	+11 26 9.64	+6.348	+ 13
726	ζ Cygni	3.8	19 15 4.180	+1.3877	+ 69	+53 12 20.46	+6.569	+119
727	[v Sagittarii]	4.5	19 16 41.304	+3.4374	○ -16	7 15.21	+6.581	- 2
729	τ Draconis	4.5	19 17 15.113	-1.1350	- 324	+73 11 32.70	+6.740	+110
728	α Sagittarii	4.0	19 17 47.449	+4.1614	+ 18	-40 46 56.22	+6.556	-118
730	δ Aquilae	3.3	19 21 3.696	+3.0250	+168	+ 2 56 18.91	+7.024	+ 81
731	[Sagittar. 186 G.]	5.8	19 21 22.879	+3.7943	+ 7	-29 55 4.84	+6.923	- 47
734	[Gr. 2900]	6.4	19 27 2.352	-3.5675	+ 95	+79 25 38.02	+7.396	- 35
732	β Cygni	3.0	19 27 10.330	+2.4189	- 2	+27 46 27.22	+7.435	- 8
733	ι Cygni	3.9	19 27 29.262	+1.5134	+ 23	+51 32 30.60	+7.592	+125
735	[t Telescopii]	5.1	19 28 41.384	+4.4569	- 42	-48 17 22.84	+7.525	- 40

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °".0001	Dekl. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von °".001
736	$\eta$ Sagittarii	4.6	19 <sup>h</sup> 31 <sup>m</sup> 21.206	+3.6535 +	46	-25° 4' 42.96 +	7.758	22
737	[ $\alpha$ Aquilae]	5.0	19 32 9.486	+3.2287 +	3	- 7 13 25.75 +	7.846	0
738	$\delta$ Cygni	4.5	19 34 4.892	+1.6085 -	28	+50 1 0.51 +	8.247	+ 247
739	[ $\nu$ Telescopii]	5.5	19 40 50.285	+4.9131 +	86	-56 34 29.64 +	8.401	- 137
740	[ $\iota_5$ Cygni]	5.2	19 41 6.160	+2.1631 +	59	+37 8 28.49 +	8.594	+ 35
741	$\gamma$ Aquilae	2.7	19 42 4.561	+2.8521 +	9	+10 23 53.38 +	8.636	0
742	$\delta$ Cygni	2.8	19 42 13.487	+1.8756 +	51	+44 54 55.62 +	8.687	+ 39
743	$\delta$ Sagittae	3.8	19 43 27.830	+2.6749 +	4	+18 18 59.50 +	8.758	+ 13
744	[ $\varsigma$ Aquilae]	5.8	19 45 56.353	+3.3027 -	21	-10 59 14.71 +	8.981	+ 41
745	$\alpha$ Aquilae	1	19 46 29.382	+2.9271 +	360	+ 8 38 6.89 +	9.365	+ 382
746	[ $\eta$ Aquilae]	(4.0)	19 47 59.440	+3.0570 +	6	+ 0 46 44.66 +	9.091	9
747	$\epsilon$ Draconis	3.8	19 48 28.607	-0.1876 +	156	+70 2 37.63 +	9.167	+ 29
748	$\alpha$ Pavonis	3.8	19 50 25.858	+6.9957 +	146	-73 8 38.04 +	9.158	- 132
749	$\beta$ Aquilae	3.7	19 50 59.441	+2.9468 +	24	+ 6 11 10.67 +	8.853	- 480
750	$\psi$ Cygni	5.0	19 53 21.304	+1.5516 -	43	+52 12 17.68 +	9.485	- 31
751	$\vartheta^1$ Sagittarii	4.3	19 54 0.624	+3.9096 -	12	-35 30 54.02 +	9.530	- 36
752	$\gamma$ Sagittae	3.6	19 54 50.600	+2.6675 +	43	+19 15 9.00 +	9.654	+ 24
753	[ $\epsilon$ Sagittarii]	4.6	19 57 14.937	+3.6931 +	21	-27 57 18.77 +	9.831	+ 18
754	$\delta$ Pavonis	3.5	20 0 6.180	+5.9178 +	1959	-66 24 26.82 +	8.866	- 1165
755	[ $\xi$ Telescopii]	5.2	20 0 38.825	+4.6090 -	44	-53 8 0.76 +	10.070	- 2
756	$\theta^1$ Aquilae	3.1	20 6 45.896	+3.0962 +	22	- 1 4 59.41 +	10.536	+ 5
757	$\alpha^1$ Cygni sq.	4.3	20 10 51.634	+1.8891 +	4	+46 28 26.18 +	10.835	+ 1
758	[ $\beta$ Cygni]	4.3	20 11 21.174	+1.3964 +	74	+56 17 53.50 +	10.955	+ 85
759	$\alpha$ Cephei	4.3	20 11 52.287	-1.9615 +	12	+77 26 48.61 +	10.935	+ 27
760	$\omega$ Vulpecul.	5.7	20 13 1.148	+2.5669 +	12	+24 23 57.90 +	10.973	- 19
761	$\alpha^2$ Capricorni	3.6	20 13 10.401	+3.3308 +	40	-12 49 5.61 +	11.015	+ 11
762	[ $\beta$ Capricorni]	3.1	20 16 4.100	+3.3729 +	23	-15 3 35.78 +	11.220	+ 6
763	[ $\alpha^1$ Sagittarii]	5.8	20 16 29.249	+4.0840 +	37	-42 19 39.57 +	11.149	- 96
764	$\alpha$ Pavonis	1.9	20 18 41.574	+4.7672 +	11	-57 1 3.92 +	11.319	- 85
765	$\gamma$ Cygni	2.3	20 19 4.177	+2.1526 +	4	+39 58 28.23 +	11.431	0
766	[ $\rho$ Capricorni]	5.0	20 23 50.567	+3.4249 -	14	-18 6 18.75 +	11.756	- 16
767	$\delta$ Cephei	4.1	20 28 6.430	+1.0119 +	62	+62 41 53.03 +	12.057	- 14
768	$\epsilon$ Delphini	3.9	20 29 0.533	+2.8663 +	5	+11 0 12.74 +	12.109	- 25
769	$\alpha$ Jndi	3.0	20 31 22.883	+4.2316 +	33	-47 35 56.58 +	12.359	+ 60
770	73 Draconis	5.3	20 32 40.884	-0.7541 +	15	+74 39 11.46 +	12.377	- 12

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von o".001	Dekl. 1912.0	Jährl. Verände- itung	Jährl. Eigen- bew. in Einh. von o".001
771	$\beta$ Delphini	3.5	20° 33' 25.347	+2.8131	+	74 +14° 17' 18.25	+12.403	- 36
772	[ $\alpha$ Delphini]	5.1	20° 34' 51.322	+2.9141	+	212 + 9 46 32.32	+12.555	+ 18
773	$\nu$ Capricorni	5.5	20° 35' 2.526	+3.4185	-	17 -18 26 56.91	+12.534	- 16
774	$\alpha$ Delphini	3.7	20° 35' 33.042	+2.7866	+	45 +15 36 3.56	+12.579	- 6
775	$\beta$ Pavonis	3.3	20° 37' 2.492	+5.4475	-	71 -66 31 12.95	+12.688	+ 2
776	[ $\eta$ Jndi]	4.8	20° 37' 34.938	+4.4214	+	157 -52 14 9.90	+12.649	- 73
777	$\alpha$ Cygni	1.3	20° 38' 25.893	+2.0446	+	4 +44 57 55.43	+12.779	- 1
778	[ $\delta$ Delphini]	4.2	20° 39' 21.036	+2.8008	-	14 +14 45 29.75	+12.794	- 48
779	[ $\psi$ Capricorni]	4.2	20° 40' 53.255	+3.5568	-	44 -25 35 16.16	+12.788	- 157
780	$\epsilon$ Cygni	2.4	20° 42' 39.010	+2.4270	+	290 +33 38 24.44	+13.389	+ 327
781	$\varepsilon$ Aquarii	3.6	20° 42' 54.805	+3.2496	+	17 - 9 49 6.53	+13.051	- 28
782	[6 H. Cephei]	4.5	20° 43' 10.097	+1.4901	-	87 +57 15 48.90	+12.862	- 234
783	$\eta$ Cephei	3.5	20° 43' 30.104	+1.2251	+	134 +61 29 48.07	+13.937	+ 818
784	$\lambda$ Cygni	4.6	20° 43' 58.812	+2.3358	+	5 +36 10 0.73	+13.150	0
785	$\beta$ Jndi	3.6	20° 47' 56.359	+4.7119	-	0 -58 47 12.51	+13.382	- 27
786	32 Vulpeculae	5.3	20° 50' 48.544	+2.5561	-	4 +27 43 20.70	+13.596	+ 1
788	$\nu$ Cygni	3.9	20° 53' 53.508	+2.2355	+	9 +40 49 40.20	+13.774	- 17
787	[ $\alpha$ Octantis]	5.5	20° 54' 5.438	+7.3916	-	20 -77 21 37.00	+13.450	- 355
789	[11 Aquarii]	6.4	20° 55' 55.854	+3.1602	+	23 - 5 4 14.79	+13.788	- 133
790	$\zeta$ Microscopii	5.4	20° 57' 20.758	+3.8423	-	36 -38 58 32.66	+13.888	- 122
792	[ $\xi$ Cygni]	3.9	21° 1' 43.773	+2.1814	+	12 +43 34 34.57	+14.278	- 3
791	[4 Capricorni]	4.6	21° 1' 58.960	+3.5136	-	30 -25 21 29.65	+14.250	- 47
793	61 Cygni pr.	5.4	21° 2' 57.086	+2.6860	+3504	+38 18 58.20	+17.607	+3251
794	$\nu$ Aquarii	4.4	21° 4' 48.135	+3.2708	+	62 -11 43 42.76	+14.459	- 9
795	Br. 2777	6.0	21° 7' 16.737	-1.1388	+	74 +77 46 10.97	+14.653	+ 36
797	$\zeta$ Cygni	3.1	21° 9' 11.414	+2.5520	-	1 +29 51 55.68	+14.673	- 58
796	[Jndi 23 G.]	5.9	21° 9' 28.992	+4.2995	-	19 -53 37 41.15	+14.702	- 46
798	[Gr. 3415]	5.8	21° 9' 33.851	+1.5284	-	6 +59 37 27.69	+14.752	- 2
799	[ $\tau$ Cygni]	3.8	21° 11' 16.650	+2.3935	+	137 +37 40 9.55	+15.290	+ 435
800	$\alpha$ Equulei	3.9	21° 11' 25.522	+2.9997	+	38 + 4 53 0.46	+14.776	- 87
801	[4 Pisc. austr.]	4.8	21° 12' 36.292	+3.6449	+	35 -32 32 26.94	+14.906	- 26
802	[ $\eta$ Microscop.]	4.9	21° 15' 8.200	+3.8500	+	70 -41 10 54.99	+15.093	+ 14
803	$\alpha$ Cephei	2.5	21° 16' 28.797	+1.4340	+	212 +62 12 44.79	+15.205	+ 49
804	$\iota$ Pegasi	4.2	21° 18' 0.982	+2.7738	+	74 +19 25 38.85	+15.305	+ 61
805	$\gamma$ Pavonis	4.2	21° 19' 10.803	+5.0022	+	133 -65 45 54.35	+16.098	+ 788

Nr.	Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.001	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bew. in Einh. von °.001
806	ζ Capricorni	3.8	21 <sup>b</sup> 21 <sup>m</sup> 38.724	+3.4303	—	1 — 22° 47' 35.01	+15.471	+ 23
807	[γ Cygni]	5.4	21 26 12.065	+2.2123	+	48 +46 9 7.63	+15.802	+ 103
808	β Aquarii	2.9	21 26 55.639	+3.1601	+	11 — 5 57 31.68	+15.734	- 5
809	β Cephei	3.1	21 27 31.773	+0.7864	+	20 +70 10 27.35	+15.778	+ 7
810	ν Octantis	3.7	21 31 43.666	+6.8054	+	130 -77 46 53.69	+15.739	- 256
811	74 Cygni	5.1	21 33 25.231	+2.4025	—	3 +40 1 4.00	+16.095	+ 12
812	[γ Capricorni]	3.6	21 35 13.044	+3.3278	+	131 -17 3 36.87	+16.161	- 16
813	[ι3 II. Cephei]	6.1	21 36 13.796	+1.8612	+	7 +57 5 26.80	+16.231	+ 2
814	[ι Pisc.austr.]	4.4	21 39 42.478	+3.5812	+	18 -33 25 39.87	+16.317	- 89
815	ε Pegasi	2.3	21 39 51.831	+2.9464	+	18 + 9 28 15.78	+16.413	0
816	[ζ Pegasi]	4.1	21 40 39.558	+2.7151	+	25 +25 14 24.36	+16.463	+ 10
817	[II Cephei]	4.8	21 40 38.196	+0.8903	+	233 +70 54 21.86	+16.550	+ 97
818	[λ Capricorni]	5.5	21 41 47.988	+3.2325	+	20 -11 46 19.96	+16.507	- 4
819	δ Capricorni	2.8	21 42 11.130	+3.3147	+	178 -16 31 37.52	+16.236	- 294
820	[ο Jndi]	5.6	21 43 21.476	+5.1300	—	87 -70 2 22.37	+16.567	- 21
821	π² Cygni	4.3	21 43 32.456	+2.2142	+	8 +48 54 7.03	+16.593	- 4
822	γ Gruis	3.0	21 48 36.215	+3.6421	+	77 -37 46 45.19	+16.822	- 18
823	16 Pegasi	5.2	21 49 3.431	+2.7281	+	4 +25 30 38.46	+16.863	+ 1
824	[δ Jndi]	4.6	21 51 56.137	+4.1044	+	43 -55 24 41.73	+16.968	- 29
825	[ε Jndi]	4.9	21 56 38.209	+4.6147	+4812	-57 8 53.16	+14.626	- 2585
826	[20 Pegasi]	5.8	21 56 48.096	+2.9219	+	36 +12 41 52.55	+17.164	- 54
827	α Aquarii	2.9	22 1 15.880	+3.0821	+	10 — 0 44 51.98	+17.408	- 7
828	ι Aquarii	4.2	22 1 41.170	+3.2430	+	24 -14 17 49.16	+17.383	- 51
830	20 Cephei	5.7	22 2 19.976	+1.8215	+	22 +62 21 21.76	+17.522	+ 60
829	α Gruis	1.8	22 2 41.528	+3.7960	+	119 -47 23 15.79	+17.305	- 171
831	[ι Pegasi]	3.9	22 2 54.794	+2.7909	+	219 +24 54 53.57	+17.508	+ 22
832	[μ Pisc.austr.]	4.6	22 3 15.085	+3.5067	+	41 -33 25 6.05	+17.460	- 41
833	[27 Pegasi]	5.8	22 5 19.608	+2.6561	—	42 +32 44 31.43	+17.524	- 65
834	θ Pegasi	3.6	22 5 45.656	+3.0265	+	184 + 5 45 52.23	+17.637	+ 31
835	π Pegasi	4.3	22 6 4.657	+2.6618	—	9 +32 44 45.73	+17.602	- 19
836	ζ Cephei	3.4	22 7 47.951	+2.0773	+	14 +57 46 1.77	+17.697	+ 6
837	24 Cephei	4.8	22 8 7.105	+1.1594	+	54 +71 54 27.21	+17.712	+ 8
838	[λ Pisc.austr.]	5.4	22 9 19.665	+3.4070	+	16 -28 12 12.57	+17.753	- 1
839	[ε Octantis]	5.3	22 10 12.774	+6.9226	+	138 -80 52 42.13	+17.749	- 40
840	ϑ Aquarii	4.2	22 12 11.475	+3.1677	+	76 - 8 13 18.62	+17.850	- 19

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841	$\alpha$ Tucanae	2.8	22 12 28.934	+4.1393	— 98	-60 41 55.22	+17.831	— 49
842	$\gamma$ Aquarii	3.7	22 17 6.693	+3.0994	+ 83	- 1 49 52.23	+18.066	+ 7
843	[ $\beta$ Pegasi]	4.9	22 17 11.148	+2.9518	— 1	+11 45 41.22	+18.071	+ 9
844	$\beta$ Lacertae	4.5	22 20 5.821	+2.3543	— 15	+51 47 16.13	+17.981	— 191
845	[ $\nu$ Gruis]	5.6	22 23 29.936	+3.5265	+ 24	-39 34 38.57	+18.133	— 162
846	[ $\delta^1$ Gruis]	4.0	22 24 0.840	+3.5981	+ 17	-43 56 43.89	+18.305	— 8
847	[ $\delta$ Cephei]	(4.1	22 25 54.056	+2.2218	+ 17	+57 57 52.14	+18.382	+ 2
848	$\gamma$ Lacertae	3.8	22 27 39.810	+2.4666	+ 147	+49 49 47.14	+18.457	+ 16
849	[ $\nu$ Aquarii]	5.5	22 29 52.949	+3.2863	+ 155	-21 9 33.55	+18.372	— 144
850	$\eta$ Aquarii	3.9	22 30 50.093	+3.0835	+ 59	— 0 34 17.12	+18.492	— 55
851	[ $\beta$ Cephei]	5.2	22 33 35.690	+1.4826	+ 381	+73 11 10.24	+18.661	+ 23
852	$\alpha$ Lacertae	4.9	22 35 18.628	+2.6878	+ 4	+38 35 31.04	+18.687	— 6
853	[ $\alpha$ Cephei]	5.3	22 35 31.600	+2.1225	+ 1	+63 7 36.43	+18.678	— 22
854	[ $\epsilon$ Pisc. austr.]	4.0	22 35 47.436	+3.3237	+ 12	-27 30 10.21	+18.710	+ 2
855	$\zeta$ Pegasi	3.3	22 37 4.359	+2.9913	+ 53	+10 22 17.97	+18.735	— 13
856	$\beta$ Gruis	2.0	22 37 24.989	+3.5957	+ 117	-47 20 42.77	+18.733	— 25
857	$\eta$ Pegasi	2.9	22 38 52.515	+2.8089	+ 12	+29 45 38.33	+18.770	— 33
858	[ $\iota_3$ Lacertae]	5.4	22 40 9.848	+2.6704	— 6	+41 21 25.70	+18.847	+ 5
859	$\lambda$ Pegasi	3.9	22 42 17.455	+2.8870	+ 41	+23 6 8.13	+18.895	— 10
860	$\epsilon$ Gruis	3.5	22 43 14.631	+3.6400	+ 97	-51 46 47.73	+18.859	— 73
861	[ $\tau$ Aquarii]	4.0	22 44 56.042	+3.1790	— 12	-14 3 26.37	+18.947	— 33
862	[ $\mu$ Pegasi]	3.6	22 45 45.264	+2.8929	+ 109	+24 8 11.93	+18.963	— 41
863	$\iota$ Cephei	3.5	22 46 32.639	+2.1270	— 114	+65 44 14.53	+18.902	— 123
864	$\lambda$ Aquarii	3.8	22 48 1.465	+3.1314	+ 5	— 8 2 53.27	+19.104	+ 38
865	$\rho$ Jndi	6.3	22 48 33.033	+4.2228	— 102	-70 32 38.56	+19.142	+ 62
866	$\delta$ Aquarii	3.2	22 49 58.883	+3.1867	— 33	-16 17 20.58	+19.098	— 19
867	$\alpha$ Pisc. austr.	1.2	22 52 47.411	+3.3211	+ 247	-30 5 19.76	+19.031	— 159
868	[ $\zeta$ Gruis]	4.0	22 55 41.397	+3.5597	— 80	-53 13 34.63	+19.246	— 16
869	$\sigma$ Androm.	3.5	22 57 52.162	+2.7545	+ 25	+41 51 9.91	+19.301	— 13
870	$\beta$ Pegasi	2.4	22 59 30.375	+2.9048	+ 145	+27 36 18.76	+19.489	+137
871	$\alpha$ Pegasi	2.4	23 0 22.572	+2.9863	+ 41	+14 43 53.53	+19.330	— 41
872	$\delta$ Gruis	4.2	23 1 55.512	+3.3909	— 52	-43 59 45.46	+19.368	— 38
873	$\epsilon^2$ Aquarii	3.7	23 4 45.372	+3.2024	+ 32	-21 39 0.95	+19.502	+ 36
874	$\pi$ Cephei	4.5	23 5 5.723	+1.8993	+ 28	+74 54 41.92	+19.448	— 25
875	Br. 3077	5.8	23 9 2.430	+2.8768	+2525	+56 40 56.26	+19.848	+295

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876	[Tucanae 25 G.]	5.9	23 <sup>h</sup> 11 <sup>m</sup> 40. <sup>s</sup> 632	+3.6325	+232	-62° 28' 52.29	+19.549	- 53
877	γ Tucanae	3.9	23 12 17.949	+3.5211	- 59	-58 43 5.99	+19.695	+ 82
878	[γ Piscium]	3.7	23 12 36.185	+3.1094	+503	+ 2 48 4.44	+19.636	+ 18
879	γ Sculptoris	4.4	23 14 4.482	+3.2464	+ 10	-33 0 41.77	+19.577	- 68
880	τ Pegasi	4.5	23 16 16.769	+2.9658	+ 21	+23 15 30.39	+19.669	- 13
882	4 Cassiopeiae	5.5	23 20 55.388	+2.6514	+ 17	+61 47 58.27	+19.745	- 10
881	[υ Pegasi]	4.4	23 20 59.120	+2.9906	+138	+22 55 10.07	+19.791	+ 35
883	[ο Gruis]	5.7	23 21 41.278	+3.3696	- 4	-53 12 32.00	+19.885	+119
884	ζ Piscium	5.1	23 22 25.275	+3.0752	+ 56	+ 0 46 25.31	+19.684	- 93
885	7ο Pegasi	4.7	23 24 42.178	+3.0318	+ 38	+12 16 29.56	+19.836	+ 28
886	[β Sculptoris]	4.4	23 28 15.302	+3.2248	+ 65	-38 18 18.35	+19.868	+ 14
887	[72 Pegasi]	5.2	23 29 35.081	+2.9710	+ 40	+30 50 22.22	+19.857	- 12
888	[Aquarii 248 G.]	6.7	23 30 59.733	+3.0956	-- 5	- 7 57 5.63	+19.909	+ 23
889	[Phoenicis 11G.]	4.6	23 33 6.932	+3.2391	+ 47	-45 58 46.56	+19.871	- 37
890	[λ Androm.]	3.8	23 33 15.158	+2.9271	+156	+45 58 52.45	+19.486	-423
891	ι Androm.	4.1	23 33 48.985	+2.9342	+ 27	+42 46 50.65	+19.910	- 5
892	ι Piscium	4.1	23 35 25.398	+3.0844	+247	+ 5 8 56.99	+19.491	-440
893	γ Cephei	3.3	23 35 43.598	+2.4355	-182	+77 8 28.24	+20.091	+157
894	ω Aquarii	4.5	23 38 9.592	+3.1132	+ 65	-15 1 53.62	+19.892	- 63
895	41 H. Cephei	5.2	23 43 41.689	+2.8475	+ 23	+67 19 4.16	+19.996	+ 1
896	Lac. δ Sculpt.	4.4	23 44 20.634	+3.1294	+ 71	-28 37 1.25	+19.894	-105
897	[Aquarii 268 G.]	6.3	23 45 42.282	+3.0965	+ 86	-10 27 55.41	+20.093	+ 86
898	φ Pegasi	5.4	23 48 0.545	+3.0482	- 8	+18 37 53.35	+19.979	- 39
899	[ρ Cassiopeiae]	4.8	23 49 58.835	+2.9819	- 7	+57 0 35.19	+20.031	+ 4
900	[27 Piscium]	5.1	23 54 10.067	+3.0713	- 37	- 4 2 39.22	+19.971	- 68
901	[π Phoenicis]	5.2	23 54 22.322	+3.1194	+ 30	-53 14 15.22	+20.085	+ 46
902	ω Piscium	3.9	23 54 47.486	+3.0791	+100	+ 6 22 33.94	+19.931	-109
903	ε Tucanae	4.5	23 55 20.984	+3.1401	+ 64	-66 4 0.24	+20.009	- 33
904	[θ Octantis]	5.0	23 57 5.089	+3.1275	-221	-77 33 5.58	+19.874	-171
905	[2 Ceti]	4.5	23 59 13.954	+3.0751	+ 12	-17 49 33.09	+20.042	- 4

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

Name	Gr.	AR. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bewe- gung o".	Dekl. 1912.0	Jährl. Verände- rung	Jährl. Eigen- bewe- gung o".
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## Nördliche Polsterne.

N <sub>a</sub>	43 H. Cephei	4.3	○ 56 <sup>h</sup> 31 <sup>m</sup> 28 <sup>s</sup>	+ 7.5738	+0739	+85° 47' 8.00	+19.438	-001
N <sub>b</sub>	α Ursae min.	2.0	I 27 51.080	+27.8185	+1405	+88 50 10.67	+18.593	+002
N <sub>c</sub>	Gr. 750	6.8	4 8 34.746	+17.5309	+0158	+85 19 23.03	+ 9.399	+033
N <sub>d</sub>	51 H. Cephei	5.2	6 59 38.173	+29.3248	-0502	+87 11 20.94	- 5.194	-036
N <sub>e</sub>	I H. Dracon.	4.3	9 24 37.668	+ 8.8235	-0062	+81 42 59.80	-15.634	-020
N <sub>f</sub>	[30 II. Camel.]	5.2	10 20 26.777	+ 7.6110	-0469	+83 ○ 25.56	-18.154	+031
N <sub>g</sub>	ε Ursae min.	4.2	I 6 54 56.821	- 6.2656	+0075	+82 11 1.14	- 5.608	+006
N <sub>h</sub>	δ Ursae min.	4.3	I 8 ○ 38.811	-19.4988	+0173	+86 36 51.19	+ 0.113	+057
N <sub>i</sub>	λ Ursae min.	6.8	I 9 8 37.324	-70.8719	-0931	+89 ○ 33.93	+ 5.922	+009
N <sub>k</sub>	76 Draconis	6.0	20 49 1.338	- 4.1378	+0164	+82 12 22.48	+13.506	+027

## Südliche Polsterne.

S <sub>a</sub>	Octantis 4 G.	6	I 42 <sup>h</sup> 21 <sup>m</sup> 56 <sup>s</sup>	- 3.804	+019	-85° 12' 51.86	+18.114	+035
S <sub>b</sub>	ξ Mensae]	6.0	5 8 51.10	- 6.952	-004	-82 35 22.02	+ 4.451	+014
S <sub>c</sub>	ζ Octantis	6-5	9 9 39.35	- 8.049	-093	-85 18 43.82	-14.712	+047
S <sub>d</sub>	ι Octantis	6-5	I 2 45 37.57	+ 5.934	+041	-84 38 44.34	-19.625	+025
S <sub>e</sub>	Octantis 20 G.	7	I 4 44 1.01	+25.643	-181	-87 47 34.58	-15.194	-066
S <sub>f</sub>	Octantis 26 G.	6-7	I 6 27 52.29	+21.620	+005	-86 12 19.21	- 7.845	-002
S <sub>g</sub>	γ Octantis	6	I 8 3 I 3.49	+35.745	-095	-87 39 53.27	+ 0.155	-127
S <sub>h</sub>	σ Octantis	6	I 9 I 9 42.70	+97.224	+115	-89 14 4.37	+ 6.831	-002
S <sub>i</sub>	β Octantis	4.1	22 37 7.58	+ 6.345	-026	-81 50 36.18	+18.752	+003
S <sub>k</sub>	τ Octantis	6	23 15 17.66	+10.387	+022	-87 57 56.80	+19.680	+015

## Obere Kulmination.

1912	43 Hev. Cephei. 4 <sup>m</sup> .3.		α Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	○ <sup>h</sup> 56 <sup>m</sup>	+85° 47'	1 <sup>h</sup> 26 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'	
Jan.							
1	25.15 <sup>25</sup>	27.17 <sup>11</sup>	98.77 <sup>89</sup>	30.67 <sup>16</sup>	42.62 <sup>7</sup>	40.51 <sup>29</sup>	
2	24.90 <sup>27</sup>	27.28 <sup>12</sup>	97.88 <sup>95</sup>	30.83 <sup>17</sup>	42.55 <sup>8</sup>	40.80 <sup>31</sup>	
3	24.63 <sup>28</sup>	27.40 <sup>11</sup>	96.93 <sup>101</sup>	31.00 <sup>16</sup>	42.47 <sup>10</sup>	41.11 <sup>32</sup>	
4	24.35 <sup>31</sup>	27.51 <sup>11</sup>	95.92 <sup>106</sup>	31.16 <sup>15</sup>	42.37 <sup>11</sup>	41.43 <sup>32</sup>	
5	24.04 <sup>31</sup>	27.62 <sup>9</sup>	94.86 <sup>112</sup>	31.31 <sup>14</sup>	42.26 <sup>13</sup>	41.75 <sup>32</sup>	
6	23.73 <sup>32</sup>	27.71 <sup>6</sup>	93.74 <sup>116</sup>	31.45 <sup>12</sup>	42.13 <sup>15</sup>	42.07 <sup>30</sup>	
7	23.41 <sup>33</sup>	27.77 <sup>3</sup>	92.58 <sup>118</sup>	31.57 <sup>10</sup>	41.98 <sup>16</sup>	42.37 <sup>29</sup>	
8	23.08 <sup>31</sup>	27.80 <sup>2</sup>	91.40 <sup>115</sup>	31.67 <sup>7</sup>	41.82 <sup>17</sup>	42.66 <sup>27</sup>	
9	22.77 <sup>30</sup>	27.82 <sup>0</sup>	90.25 <sup>110</sup>	31.74 <sup>5</sup>	41.65 <sup>17</sup>	42.93 <sup>25</sup>	
10	22.47 <sup>29</sup>	27.82 <sup>1</sup>	89.15 <sup>105</sup>	31.79 <sup>4</sup>	41.48 <sup>16</sup>	43.18 <sup>23</sup>	
11	22.18 <sup>27</sup>	27.81 <sup>1</sup>	88.10 <sup>100</sup>	31.83 <sup>4</sup>	41.32 <sup>16</sup>	43.41 <sup>21</sup>	
12	21.91 <sup>26</sup>	27.80 <sup>1</sup>	87.10 <sup>96</sup>	31.87 <sup>3</sup>	41.16 <sup>15</sup>	43.62 <sup>21</sup>	
13	21.65 <sup>25</sup>	27.79 <sup>1</sup>	86.14 <sup>94</sup>	31.90 <sup>5</sup>	41.01 <sup>14</sup>	43.83 <sup>22</sup>	
14	21.40 <sup>26</sup>	27.78 <sup>1</sup>	85.20 <sup>95</sup>	31.95 <sup>5</sup>	40.87 <sup>15</sup>	44.05 <sup>22</sup>	
15	21.14 <sup>27</sup>	27.79 <sup>1</sup>	84.25 <sup>97</sup>	32.00 <sup>6</sup>	40.72 <sup>14</sup>	44.27 <sup>23</sup>	
16	20.87 <sup>27</sup>	27.80 <sup>2</sup>	83.28 <sup>103</sup>	32.06 <sup>7</sup>	40.58 <sup>15</sup>	44.50 <sup>25</sup>	
17	20.60 <sup>30</sup>	27.82 <sup>1</sup>	82.25 <sup>109</sup>	32.13 <sup>6</sup>	40.43 <sup>17</sup>	44.75 <sup>25</sup>	
18	20.30 <sup>31</sup>	27.83 <sup>1</sup>	81.16 <sup>115</sup>	32.19 <sup>5</sup>	40.26 <sup>18</sup>	45.00 <sup>25</sup>	
19	19.99 <sup>33</sup>	27.82 <sup>2</sup>	80.01 <sup>119</sup>	32.24 <sup>3</sup>	40.08 <sup>19</sup>	45.25 <sup>25</sup>	
20	19.66 <sup>33</sup>	27.80 <sup>32</sup>	78.82 <sup>120</sup>	32.27 <sup>1</sup>	39.89 <sup>22</sup>	45.50 <sup>24</sup>	
21	19.34 <sup>32</sup>	27.76 <sup>7</sup>	77.62 <sup>119</sup>	32.28 <sup>1</sup>	39.67 <sup>22</sup>	45.74 <sup>22</sup>	
22	19.02 <sup>30</sup>	27.69 <sup>8</sup>	76.43 <sup>116</sup>	32.27 <sup>3</sup>	39.45 <sup>22</sup>	45.96 <sup>20</sup>	
23	18.72 <sup>28</sup>	27.61 <sup>10</sup>	75.27 <sup>111</sup>	32.24 <sup>4</sup>	39.23 <sup>23</sup>	46.16 <sup>18</sup>	
24	18.44 <sup>27</sup>	27.51 <sup>10</sup>	74.16 <sup>105</sup>	32.20 <sup>5</sup>	39.00 <sup>21</sup>	46.34 <sup>15</sup>	
25	18.17 <sup>26</sup>	27.41 <sup>10</sup>	73.11 <sup>99</sup>	32.15 <sup>5</sup>	38.79 <sup>20</sup>	46.49 <sup>15</sup>	
26	17.91 <sup>25</sup>	27.31 <sup>9</sup>	72.12 <sup>94</sup>	32.10 <sup>5</sup>	38.59 <sup>20</sup>	46.64 <sup>14</sup>	
27	17.66 <sup>24</sup>	27.22 <sup>8</sup>	71.18 <sup>92</sup>	32.05 <sup>4</sup>	38.39 <sup>18</sup>	46.78 <sup>15</sup>	
28	17.42 <sup>24</sup>	27.14 <sup>7</sup>	70.26 <sup>93</sup>	32.01 <sup>2</sup>	38.21 <sup>18</sup>	46.93 <sup>16</sup>	
29	17.18 <sup>25</sup>	27.07 <sup>6</sup>	69.33 <sup>96</sup>	31.99 <sup>2</sup>	38.03 <sup>19</sup>	47.09 <sup>17</sup>	
30	16.93 <sup>26</sup>	27.01 <sup>6</sup>	68.37 <sup>101</sup>	31.97 <sup>1</sup>	37.84 <sup>19</sup>	47.26 <sup>18</sup>	
31	16.67 <sup>28</sup>	26.95 <sup>7</sup>	67.36 <sup>106</sup>	31.96 <sup>2</sup>	37.65 <sup>20</sup>	47.44 <sup>19</sup>	
Febr.	1	16.39 <sup>30</sup>	26.88 <sup>8</sup>	66.30 <sup>111</sup>	31.94 <sup>3</sup>	37.45 <sup>22</sup>	47.63 <sup>19</sup>
2	16.09 <sup>30</sup>	26.80 <sup>11</sup>	65.19 <sup>114</sup>	31.91 <sup>6</sup>	37.23 <sup>24</sup>	47.82 <sup>18</sup>	
3	15.79 <sup>29</sup>	26.69 <sup>12</sup>	64.05 <sup>114</sup>	31.85 <sup>7</sup>	36.99 <sup>25</sup>	48.00 <sup>16</sup>	
4	15.50 <sup>29</sup>	26.57 <sup>15</sup>	62.91 <sup>113</sup>	31.78 <sup>10</sup>	36.74 <sup>26</sup>	48.16 <sup>14</sup>	
5	15.21 <sup>28</sup>	26.42 <sup>17</sup>	61.78 <sup>108</sup>	31.68 <sup>12</sup>	36.48 <sup>26</sup>	48.30 <sup>11</sup>	
6	14.93 <sup>26</sup>	26.25 <sup>18</sup>	60.70 <sup>102</sup>	31.56 <sup>14</sup>	36.22 <sup>25</sup>	48.41 <sup>9</sup>	
7	14.67	26.07	59.68	31.42	35.97	48.50	
O. K.	+ 0°.29 cos φ		+ 1°.05 cos φ		+ 0°.26 cos φ		
U. K.	- 0°.29 cos φ		- 1°.05 cos φ		- 0°.26 cos φ		

## Obere Kulmination. Bibl. Jag.

1912	43 H̄ev. Cephei. 4 <sup>m</sup> .3.		$\alpha$ Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	0 <sup>h</sup> 56 <sup>m</sup>	+85° 47'	1 <sup>h</sup> 26 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'	
Febr.	7	14.67 <sup>24</sup>	26.07 <sup>18</sup>	59.68 <sup>97</sup>	31.42 <sup>13</sup>	35.97 <sup>24</sup>	48.50 <sup>8</sup>
	8	14.43 <sup>22</sup>	25.89 <sup>18</sup>	58.71 <sup>90</sup>	31.29 <sup>14</sup>	35.73 <sup>23</sup>	48.58 <sup>7</sup>
	9	14.21 <sup>21</sup>	25.71 <sup>17</sup>	57.81 <sup>86</sup>	31.15 <sup>14</sup>	35.50 <sup>23</sup>	48.65 <sup>6</sup>
	10	14.00 <sup>20</sup>	25.54 <sup>17</sup>	56.95 <sup>85</sup>	31.01 <sup>12</sup>	35.27 <sup>22</sup>	48.71 <sup>6</sup>
	11	13.80 <sup>22</sup>	25.37 <sup>15</sup>	56.10 <sup>85</sup>	30.89 <sup>12</sup>	35.05 <sup>22</sup>	48.77 <sup>8</sup>
	12	13.58 <sup>22</sup>	25.22 <sup>15</sup>	55.25 <sup>89</sup>	30.77 <sup>11</sup>	34.83 <sup>22</sup>	48.85 <sup>9</sup>
	13	13.36 <sup>23</sup>	25.07 <sup>15</sup>	54.36 <sup>94</sup>	30.66 <sup>11</sup>	34.61 <sup>23</sup>	48.94 <sup>9</sup>
	14	13.13 <sup>25</sup>	24.92 <sup>15</sup>	53.42 <sup>98</sup>	30.55 <sup>11</sup>	34.38 <sup>24</sup>	49.03 <sup>10</sup>
	15	12.88 <sup>26</sup>	24.77 <sup>18</sup>	52.44 <sup>102</sup>	30.44 <sup>14</sup>	34.14 <sup>26</sup>	49.13 <sup>10</sup>
	16	12.62 <sup>26</sup>	24.59 <sup>19</sup>	51.42 <sup>103</sup>	30.30 <sup>15</sup>	33.88 <sup>27</sup>	49.23 <sup>8</sup>
	17	12.36 <sup>25</sup>	24.40 <sup>22</sup>	50.39 <sup>103</sup>	30.15 <sup>17</sup>	33.61 <sup>28</sup>	49.31 <sup>7</sup>
	18	12.11 <sup>25</sup>	24.18 <sup>24</sup>	49.36 <sup>100</sup>	29.98 <sup>19</sup>	33.33 <sup>28</sup>	49.38 <sup>4</sup>
	19	11.86 <sup>22</sup>	23.94 <sup>24</sup>	48.36 <sup>94</sup>	29.79 <sup>21</sup>	33.05 <sup>28</sup>	49.42 <sup>2</sup>
	20	11.64 <sup>21</sup>	23.70 <sup>26</sup>	47.42 <sup>86</sup>	29.58 <sup>22</sup>	32.77 <sup>27</sup>	49.44 <sup>0</sup>
	21	11.43 <sup>18</sup>	23.44 <sup>25</sup>	46.56 <sup>80</sup>	29.36 <sup>22</sup>	32.50 <sup>26</sup>	49.44 <sup>2</sup>
	22	11.25 <sup>17</sup>	23.19 <sup>24</sup>	45.76 <sup>73</sup>	29.14 <sup>21</sup>	32.24 <sup>24</sup>	49.42 <sup>2</sup>
	23	11.08 <sup>15</sup>	22.95 <sup>23</sup>	45.03 <sup>69</sup>	28.93 <sup>20</sup>	32.00 <sup>23</sup>	49.40 <sup>2</sup>
	24	10.93 <sup>16</sup>	22.72 <sup>22</sup>	44.34 <sup>68</sup>	28.73 <sup>19</sup>	31.77 <sup>22</sup>	49.38 <sup>1</sup>
	25	10.77 <sup>16</sup>	22.50 <sup>21</sup>	43.66 <sup>69</sup>	28.54 <sup>17</sup>	31.55 <sup>22</sup>	49.37 <sup>0</sup>
	26	10.61 <sup>17</sup>	22.29 <sup>19</sup>	42.97 <sup>72</sup>	28.37 <sup>18</sup>	31.33 <sup>22</sup>	49.37 <sup>1</sup>
	27	10.44 <sup>19</sup>	22.10 <sup>21</sup>	42.25 <sup>76</sup>	28.19 <sup>17</sup>	31.11 <sup>23</sup>	49.38 <sup>2</sup>
	28	10.25 <sup>19</sup>	21.89 <sup>22</sup>	41.49 <sup>80</sup>	28.02 <sup>19</sup>	30.88 <sup>24</sup>	49.40 <sup>2</sup>
	29	10.06 <sup>20</sup>	21.67 <sup>22</sup>	40.69 <sup>83</sup>	27.83 <sup>19</sup>	30.64 <sup>26</sup>	49.42 <sup>2</sup>
März	1	9.86 <sup>19</sup>	21.45 <sup>24</sup>	39.86 <sup>84</sup>	27.64 <sup>20</sup>	30.38 <sup>26</sup>	49.44 <sup>0</sup>
	2	9.67 <sup>19</sup>	21.21 <sup>27</sup>	39.02 <sup>82</sup>	27.44 <sup>24</sup>	30.12 <sup>28</sup>	49.44 <sup>3</sup>
	3	9.48 <sup>18</sup>	20.94 <sup>29</sup>	38.20 <sup>78</sup>	27.20 <sup>26</sup>	29.84 <sup>28</sup>	49.41 <sup>5</sup>
	4	9.30 <sup>16</sup>	20.65 <sup>30</sup>	37.42 <sup>71</sup>	26.94 <sup>27</sup>	29.56 <sup>27</sup>	49.36 <sup>7</sup>
	5	9.14 <sup>14</sup>	20.35 <sup>31</sup>	36.71 <sup>64</sup>	26.67 <sup>28</sup>	29.29 <sup>26</sup>	49.29 <sup>9</sup>
	6	9.00 <sup>12</sup>	20.04 <sup>31</sup>	36.07 <sup>57</sup>	26.39 <sup>28</sup>	29.03 <sup>25</sup>	49.20 <sup>10</sup>
	7	8.88 <sup>10</sup>	19.73 <sup>29</sup>	35.50 <sup>51</sup>	26.11 <sup>27</sup>	28.78 <sup>24</sup>	49.10 <sup>10</sup>
	8	8.78 <sup>9</sup>	19.44 <sup>28</sup>	34.99 <sup>47</sup>	25.84 <sup>26</sup>	28.54 <sup>22</sup>	49.00 <sup>10</sup>
	9	8.69 <sup>9</sup>	19.16 <sup>27</sup>	34.52 <sup>48</sup>	25.58 <sup>25</sup>	28.32 <sup>21</sup>	48.90 <sup>10</sup>
	10	8.60 <sup>10</sup>	18.89 <sup>25</sup>	34.04 <sup>49</sup>	25.33 <sup>24</sup>	28.11 <sup>21</sup>	48.80 <sup>9</sup>
	11	8.50 <sup>11</sup>	18.64 <sup>25</sup>	33.55 <sup>52</sup>	25.09 <sup>23</sup>	27.90 <sup>22</sup>	48.71 <sup>7</sup>
	12	8.39 <sup>12</sup>	18.39 <sup>26</sup>	33.03 <sup>56</sup>	24.86 <sup>24</sup>	27.68 <sup>23</sup>	48.64 <sup>7</sup>
	13	8.27 <sup>13</sup>	18.13 <sup>27</sup>	32.47 <sup>59</sup>	24.62 <sup>25</sup>	27.45 <sup>24</sup>	48.57 <sup>6</sup>
	14	8.14 <sup>13</sup>	17.86 <sup>28</sup>	31.88 <sup>61</sup>	24.37 <sup>25</sup>	27.21 <sup>25</sup>	48.51 <sup>8</sup>
	15	8.01 <sup>13</sup>	17.58	31.27	24.12	26.96	48.43
O. K.	+ 0°.29 cos φ		+ 1°.05 cos φ		+ 0°.26 cos φ		
U. K.	— 0°.29 cos φ		— 1°.05 cos φ		— 0°.26 cos φ		

## Obere Kulmination.

1912	43 Rev. Cephei. 4 <sup>m</sup> .3.		$\alpha$ Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	0 <sup>h</sup> 56 <sup>m</sup>	+85° 47'	1 <sup>h</sup> 26 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'
März 15	8.01	17.58	31.27	24.12	26.96	48.43
16	7.88	17.28	30.66	23.84	26.70	48.34
17	7.76	16.96	30.08	23.54	26.44	48.23
18	7.66	16.63	29.55	23.23	26.18	48.09
19	7.58	16.30	29.10	22.91	25.94	47.93
20	7.52	15.97	28.73	22.59	25.70	47.76
21	7.48	15.65	28.44	22.27	25.48	47.58
22	7.46	15.34	28.20	21.97	25.28	47.39
23	7.45	15.04	27.99	21.67	25.10	47.22
24	7.43	14.77	27.79	21.40	24.93	47.06
25	7.40	14.50	27.57	21.15	24.75	46.91
26	7.37	14.24	27.32	20.89	24.56	46.77
27	7.32	13.97	27.03	20.63	24.38	46.64
28	7.27	13.70	26.70	20.36	24.18	46.50
29	7.22	13.40	26.36	20.08	23.97	46.35
30	7.18	13.09	26.04	19.79	23.76	46.20
April 1	7.15	12.77	25.76	19.47	23.54	46.02
2	7.13	12.43	25.54	19.13	23.33	45.81
3	7.13	12.09	25.39	18.80	23.13	45.58
4	7.16	11.75	25.32	18.46	22.94	45.34
5	7.20	11.43	25.31	18.13	22.78	45.09
6	7.25	11.12	25.31	17.81	22.63	44.85
7	7.31	10.83	25.35	17.50	22.48	44.61
8	7.37	10.55	25.42	17.22	22.35	44.38
9	7.42	10.28	25.48	16.94	22.21	44.17
10	7.46	10.01	25.52	16.67	22.06	43.96
11	7.48	9.73	25.52	16.38	21.91	43.77
12	7.52	9.16	25.41	16.10	21.75	43.57
13	7.55	8.85	25.34	15.81	21.59	43.36
14	7.60	8.53	25.29	15.49	21.42	43.13
15	7.66	8.20	25.30	15.16	21.25	42.88
16	7.75	7.87	25.37	14.82	21.09	42.61
17	7.86	7.55	25.52	14.49	20.94	42.33
18	7.99	7.26	26.04	13.83	20.82	42.04
19	8.12	6.98	26.37	13.53	20.71	41.75
O. K.		+ 0°.29 cos φ	+ 1°.05 cos φ	+ 0°.26 cos φ	+ 0°.29 cos φ	+ 0°.26 cos φ
U. K.		- 0.29 cos φ	- 1.05 cos φ	- 0.26 cos φ	- 0.29 cos φ	- 0.26 cos φ

## Obere Kulmination.

1912	43 Hvv. Cephei. 4 <sup>m</sup> .3.		α Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	○ <sup>h</sup> 56 <sup>m</sup>	+85° 46'	1 <sup>h</sup> 26 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'
April 19	8.26	66.72 25	26.73 34	13.25 26	20.62 8	41.46 27
20	8.39 13	66.47 23	27.07 31	12.99 25	20.54 7	41.19 26
21	8.51 12	66.24 23	27.38 27	12.74 25	20.47 7	40.93 25
22	8.62 10	66.01 23	27.65 24	12.49 25	20.40 7	40.68 23
23	8.72 10	65.78 25	27.89 21	12.24 26	20.33 8	40.45 23
24	8.82 9	65.53 26	28.10 22	11.98 27	20.25 10	40.22 23
25	8.91 11	65.27 27	28.32 25	11.71 29	20.15 10	39.99 25
26	9.02 12	65.00 29	28.57 30	11.42 31	20.05 11	39.74 26
27	9.14 14	64.71 28	28.87 36	11.11 31	19.94 9	39.48 28
28	9.28 16	64.43 28	29.23 43	10.80 31	19.85 8	39.20 30
29	9.44 18	64.15 28	29.66 51	10.49 31	19.77 8	38.90 31
Mai 1	9.62 20	63.87 26	30.17 56	10.18 29	19.69 5	38.59 32
2	10.02 20	63.37 22	30.73 59	9.89 26	19.64 4	38.27 33
3	10.22 20	63.15 20	31.32 59	9.63 25	19.60 3	37.94 31
4	10.42 18	62.95 20	32.49 53	9.15 23	19.56 2	37.33 28
5	10.60 16	62.75 21	33.02 49	8.92 23	19.54 1	37.05 27
6	10.76 16	62.54 20	33.51 46	8.69 23	19.53 2	36.78 26
7	10.92 16	62.34 21	33.97 44	8.46 24	19.51 3	36.52 25
8	11.08 16	62.13 22	34.41 45	8.22 25	19.48 4	36.27 26
9	11.24 17	61.91 24	34.86 48	7.97 26	19.44 4	36.01 27
10	11.41 19	61.67 23	35.34 54	7.71 27	19.40 4	35.74 28
11	11.60 21	61.44 24	35.88 62	7.44 27	19.36 3	35.46 31
12	11.81 22	61.20 23	36.50 69	7.17 26	19.33 2	35.15 31
13	12.03 25	60.97 21	37.19 75	6.91 26	19.31 0	34.84 33
14	12.28 26	60.76 19	37.94 80	6.65 23	19.31 2	34.51 33
15	12.54 25	60.57 17	38.74 82	6.42 21	19.33 4	34.18 33
16	12.79 26	60.40 16	39.56 82	6.21 19	19.37 5	33.85 31
17	13.05 24	60.24 13	40.38 79	6.02 18	19.42 6	33.54 30
18	13.29 23	60.11 12	41.17 75	5.84 15	19.48 6	33.24 28
19	13.52 23	59.99 13	41.92 71	5.69 16	19.54 7	32.96 26
20	13.75 21	59.86 13	42.63 67	5.53 17	19.61 5	32.70 25
21	13.96 20	59.73 14	43.30 65	5.36 18	19.66 4	32.45 24
22	14.16 22	59.59 15	43.95 67	5.18 19	19.70 4	32.21 26
23	14.38 23	59.44 16	44.62 70	4.99 21	19.74 3	31.95 26
24	14.61	59.28	45.32	4.78	19.77 4	31.69 29
25	14.85 24	59.10 18	46.08 76	4.57 21	{ 19.81 4	{ 31.40 29
					{ 19.85 4	{ 31.11 29
O. K.	+ 0°.29 cos φ		+ 1°.05 cos φ		+ 0°.26 cos φ	
U. K.	— 0°.29 cos φ		— 1°.05 cos φ		— 0°.26 cos φ	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	43 Hvv. Cephei. 4 <sup>m</sup> .3.		$\alpha$ Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	0 <sup>h</sup> 56 <sup>m</sup>	+85° 46'	1 <sup>h</sup> 26 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'
Mai						
25	14.85 <sup>26</sup>	59.10 <sup>16</sup>	46.08 <sup>84</sup>	4.57 <sup>20</sup>	19.85 <sup>6</sup>	31.11 <sup>32</sup>
26	15.11 <sup>28</sup>	58.94 <sup>16</sup>	46.92 <sup>90</sup>	4.37 <sup>20</sup>	19.91 <sup>7</sup>	30.79 <sup>32</sup>
27	15.39 <sup>29</sup>	58.78 <sup>14</sup>	47.82 <sup>95</sup>	4.17 <sup>20</sup>	19.98 <sup>9</sup>	30.47 <sup>32</sup>
28	15.68 <sup>29</sup>	58.64 <sup>13</sup>	48.77 <sup>97</sup>	3.97 <sup>17</sup>	20.07 <sup>10</sup>	30.15 <sup>31</sup>
29	15.97 <sup>30</sup>	58.51 <sup>10</sup>	49.74 <sup>99</sup>	3.80 <sup>14</sup>	20.17 <sup>12</sup>	29.84 <sup>29</sup>
30	16.27 <sup>29</sup>	58.41 <sup>8</sup>	50.73 <sup>97</sup>	3.66 <sup>13</sup>	20.29 <sup>12</sup>	29.55 <sup>29</sup>
31	16.56 <sup>28</sup>	58.33 <sup>7</sup>	51.70 <sup>94</sup>	3.53 <sup>12</sup>	20.41 <sup>13</sup>	29.26 <sup>26</sup>
Juni						
1	16.84 <sup>26</sup>	58.26 <sup>7</sup>	52.64 <sup>89</sup>	3.41 <sup>11</sup>	20.54 <sup>12</sup>	29.00 <sup>24</sup>
2	17.10 <sup>25</sup>	58.19 <sup>7</sup>	53.53 <sup>83</sup>	3.30 <sup>11</sup>	20.66 <sup>10</sup>	28.76 <sup>24</sup>
3	17.35 <sup>24</sup>	58.12 <sup>8</sup>	54.36 <sup>80</sup>	3.19 <sup>11</sup>	20.76 <sup>10</sup>	28.52 <sup>23</sup>
4	17.59 <sup>25</sup>	58.04 <sup>8</sup>	55.16 <sup>80</sup>	3.08 <sup>13</sup>	20.86 <sup>9</sup>	28.29 <sup>24</sup>
5	17.84 <sup>24</sup>	57.96 <sup>10</sup>	55.96 <sup>81</sup>	2.95 <sup>14</sup>	20.95 <sup>9</sup>	28.05 <sup>25</sup>
6	18.08 <sup>26</sup>	57.86 <sup>11</sup>	56.77 <sup>86</sup>	2.81 <sup>15</sup>	21.04 <sup>10</sup>	27.80 <sup>28</sup>
7	18.34 <sup>29</sup>	57.75 <sup>10</sup>	57.63 <sup>92</sup>	2.66 <sup>14</sup>	21.14 <sup>10</sup>	27.52 <sup>28</sup>
8	18.63 <sup>30</sup>	57.65 <sup>9</sup>	58.55 <sup>98</sup>	2.52 <sup>14</sup>	21.24 <sup>13</sup>	27.24 <sup>29</sup>
9	18.93 <sup>31</sup>	57.56 <sup>8</sup>	59.53 <sup>105</sup>	2.38 <sup>13</sup>	21.37 <sup>14</sup>	26.95 <sup>29</sup>
10	19.24 <sup>32</sup>	57.48 <sup>6</sup>	60.58 <sup>110</sup>	2.25 <sup>12</sup>	21.51 <sup>16</sup>	26.66 <sup>30</sup>
11	19.56 <sup>33</sup>	57.42 <sup>4</sup>	61.68 <sup>113</sup>	2.13 <sup>9</sup>	21.67 <sup>18</sup>	26.36 <sup>28</sup>
12	19.89 <sup>32</sup>	57.38 <sup>2</sup>	62.81 <sup>112</sup>	2.04 <sup>6</sup>	21.85 <sup>18</sup>	26.08 <sup>26</sup>
13	20.21 <sup>32</sup>	57.36 <sup>1</sup>	63.93 <sup>109</sup>	1.98 <sup>5</sup>	22.03 <sup>19</sup>	25.82 <sup>24</sup>
14	20.53 <sup>30</sup>	57.37 <sup>2</sup>	65.02 <sup>104</sup>	1.93 <sup>3</sup>	22.22 <sup>19</sup>	25.58 <sup>21</sup>
15	20.83 <sup>29</sup>	57.39 <sup>2</sup>	66.06 <sup>100</sup>	1.90 <sup>3</sup>	22.41 <sup>17</sup>	25.37 <sup>20</sup>
16	21.12 <sup>27</sup>	57.41 <sup>2</sup>	67.06 <sup>96</sup>	1.87 <sup>3</sup>	22.58 <sup>17</sup>	25.17 <sup>20</sup>
17	21.39 <sup>26</sup>	57.43 <sup>1</sup>	68.02 <sup>92</sup>	1.84 <sup>3</sup>	22.75 <sup>16</sup>	24.97 <sup>19</sup>
18	21.65 <sup>26</sup>	57.44 <sup>0</sup>	68.94 <sup>90</sup>	1.81 <sup>5</sup>	22.91 <sup>16</sup>	24.78 <sup>21</sup>
19	21.91 <sup>28</sup>	57.44 <sup>1</sup>	69.84 <sup>93</sup>	1.76 <sup>6</sup>	23.07 <sup>16</sup>	24.57 <sup>22</sup>
20	22.19 <sup>28</sup>	57.43 <sup>2</sup>	70.77 <sup>98</sup>	1.70 <sup>6</sup>	23.23 <sup>16</sup>	24.35 <sup>23</sup>
21	22.47 <sup>30</sup>	57.41 <sup>2</sup>	71.75 <sup>104</sup>	1.64 <sup>8</sup>	23.39 <sup>17</sup>	24.12 <sup>25</sup>
22	22.77 <sup>32</sup>	57.39 <sup>1</sup>	72.79 <sup>109</sup>	1.56 <sup>6</sup>	23.56 <sup>18</sup>	23.87 <sup>25</sup>
23	23.09 <sup>33</sup>	57.38 <sup>0</sup>	73.88 <sup>114</sup>	1.50 <sup>5</sup>	23.74 <sup>21</sup>	23.62 <sup>25</sup>
24	23.42 <sup>34</sup>	57.38 <sup>2</sup>	75.02 <sup>118</sup>	1.45 <sup>4</sup>	23.95 <sup>21</sup>	23.37 <sup>25</sup>
25	23.76 <sup>33</sup>	57.40 <sup>4</sup>	76.20 <sup>120</sup>	1.41 <sup>2</sup>	24.16 <sup>23</sup>	23.12 <sup>23</sup>
26	24.09 <sup>33</sup>	57.44 <sup>6</sup>	77.40 <sup>118</sup>	1.39 <sup>1</sup>	24.39 <sup>23</sup>	22.89 <sup>22</sup>
27	24.42 <sup>32</sup>	57.50 <sup>8</sup>	78.58 <sup>114</sup>	1.40 <sup>2</sup>	24.62 <sup>24</sup>	22.67 <sup>19</sup>
28	24.74 <sup>31</sup>	57.58 <sup>8</sup>	79.72 <sup>108</sup>	1.42 <sup>3</sup>	24.86 <sup>23</sup>	22.48 <sup>17</sup>
29	25.05 <sup>28</sup>	57.66 <sup>8</sup>	80.80 <sup>103</sup>	1.45 <sup>4</sup>	25.09 <sup>22</sup>	22.31 <sup>16</sup>
30	25.33 <sup>28</sup>	57.74 <sup>9</sup>	81.83 <sup>98</sup>	1.49 <sup>4</sup>	25.31 <sup>21</sup>	22.15 <sup>15</sup>
Juli	1	25.61	57.83	82.81	1.53	25.52
O. K.		+ 0°.29 cos φ		+ 1°.05 cos ϕ		+ 0°.26 cos ϕ
U. K.		- 0.29 cos φ		- 1.05 cos ϕ		- 0.26 cos ϕ

## Obere Kulmination.

1912	43 Hev. Cephei. 4 <sup>m</sup> .3.		$\alpha$ Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
Juli	1	0 <sup>h</sup> 56 <sup>m</sup>	+85° 46'	1 <sup>h</sup> 27 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'
	2	25.61 26	57.83 7	22.81 95	1.53 2	25.52 21	22.00 16
	3	25.87 27	57.90 6	23.76 94	1.55 2	25.73 19	21.84 16
	4	26.14 28	57.96 5	24.70 98	1.57 1	25.92 20	21.68 18
	5	26.42 29	58.01 5	25.68 103	1.58 0	26.12 20	21.50 20
	6	26.71 30	58.06 5	26.71 108	1.58 0	26.32 22	21.30 20
	7	27.01 32	58.11 7	27.79 114	1.58 1	26.54 23	21.10 21
	8	27.33 33	58.18 8	28.93 119	1.59 3	26.77 26	20.89 20
	9	27.66 34	58.26 11	30.12 122	1.62 5	27.03 26	20.69 19
	10	28.00 33	58.37 12	31.34 122	1.67 7	27.29 28	20.50 16
	11	28.33 32	58.49 15	32.56 120	1.74 10	27.57 29	20.34 15
	12	28.65 32	58.64 17	33.76 115	1.84 11	27.86 29	20.19 13
	13	28.97 29	58.81 17	34.91 109	1.95 12	28.15 27	20.06 11
	14	29.26 27	58.98 17	36.00 103	2.07 12	28.42 26	19.95 10
	15	29.53 27	59.15 16	37.03 99	2.19 12	28.68 26	19.85 9
	16	29.80 26	59.31 15	38.02 96	2.31 10	28.94 25	19.76 10
	17	30.06 26	59.46 14	38.98 96	2.41 10	29.19 24	19.66 11
	18	30.32 27	59.60 14	39.94 100	2.51 9	29.43 24	19.55 12
	19	30.59 29	59.74 13	40.94 104	2.60 8	29.67 25	19.43 14
	20	30.88 30	59.87 13	41.98 109	2.68 8	29.92 26	19.29 14
	21	31.18 31	60.00 13	43.07 115	2.76 9	30.18 27	19.15 15
	22	31.49 31	60.14 16	44.22 118	2.85 11	30.45 30	19.00 13
	23	31.80 33	60.30 18	45.40 119	2.96 12	30.75 30	18.87 13
	24	32.13 31	60.48 19	46.59 118	3.08 15	31.05 30	18.74 11
	25	32.44 30	60.67 21	47.77 114	3.23 16	31.35 31	18.63 9
	26	32.74 28	60.88 22	48.91 109	3.39 17	31.66 31	18.54 6
	27	33.02 27	61.10 23	50.00 102	3.56 18	31.97 30	18.48 5
	28	33.29 25	61.33 24	51.02 96	3.74 19	32.27 28	18.43 5
	29	33.54 24	61.57 22	51.98 93	3.93 17	32.55 28	18.38 3
	30	33.78 23	61.79 20	52.91 90	4.10 17	32.83 26	18.35 5
	31	34.01 24	61.99 19	53.81 91	4.27 15	33.09 25	18.30 5
Aug.	1	34.25 25	62.18 19	54.72 95	4.42 15	33.34 27	18.25 7
	2	34.50 26	62.37 19	55.67 99	4.57 14	33.61 28	18.18 8
	3	34.76 27	62.56 19	56.66 105	4.71 14	33.89 28	18.10 8
	4	35.03 29	62.75 20	57.71 109	4.85 16	34.17 31	18.02 8
	5	35.32 29	62.95 23	58.80 113	5.01 19	34.48 31	17.94 8
	6	35.61 30	63.18 25	59.93 113	5.20 20	34.79 33	17.86 5
	7	35.91 28	63.43 28	61.06 111	5.40 22	35.12 34	17.81 4
		36.19	63.71	62.17	5.62	35.46	17.77
O. K.		+ 0 <sup>h</sup> .29 cos $\varphi$		+ 1 <sup>h</sup> .05 cos $\varphi$		+ 0 <sup>h</sup> .26 cos $\varphi$	
U. K.		- 0.29 cos $\varphi$		- 1.05 cos $\varphi$		- 0.26 cos $\varphi$	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	43 Hev. Cephei. 4 <sup>m</sup> .3.		$\alpha$ Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	0 <sup>h</sup> 56 <sup>m</sup>	+85° 47'	1 <sup>h</sup> 28 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'
Aug. 7	36.19	27	37.1	28	35.46	17.77
8	36.46	25	3.99	30	35.80	17.76
9	36.71	24	4.29	30	36.13	17.76
10	36.95	21	4.59	30	36.44	17.78
11	37.16	21	4.89	29	36.75	17.82
12	37.37	21	5.18	27	37.05	17.85
13	37.58	20	5.45	26	37.34	17.88
14	37.78	22	5.71	25	37.62	17.89
15	38.00	23	5.96	24	37.91	17.88
16	38.23	24	6.20	26	38.20	17.87
17	38.47	26	6.46	27	38.50	17.85
18	38.73	26	6.73	29	38.82	17.83
19	38.99	25	7.02	31	39.16	17.83
20	39.24	23	7.33	32	39.49	17.84
21	39.47	22	7.65	33	39.83	17.87
22	39.69	21	7.98	34	40.16	17.93
23	39.90	19	8.32	34	40.49	18.00
24	40.09	17	8.66	34	40.81	18.08
25	40.26	16	9.00	31	41.11	18.18
26	40.42	15	9.31	30	41.39	18.27
27	40.57	17	9.61	30	41.68	18.35
28	40.74	18	9.91	29	41.96	18.42
29	40.92	19	10.20	29	42.25	18.47
30	41.11	20	10.49	30	42.54	18.51
31	41.31	22	10.79	33	42.86	18.55
Sept. 1	41.53	21	11.12	34	43.18	18.60
2	41.74	20	11.46	35	43.51	18.67
3	41.94	19	11.81	38	43.85	18.75
4	42.13	17	12.19	39	44.19	18.86
5	42.30	15	12.58	39	44.53	18.99
6	42.45	13	12.97	38	44.86	19.14
7	42.58	12	13.35	37	45.17	19.29
8	42.70	12	13.72	36	45.48	19.45
9	42.82	11	14.08	36	45.77	19.61
10	42.93	12	14.42	34	46.04	19.75
11	43.05	14	14.76	33	46.32	19.88
12	43.19	15	15.09	33	46.60	20.00
13	43.34	15	15.42	33	46.90	20.11
O. K.	+ 0°.29 cos φ		+ 1°.05 cos φ		+ 0°.26 cos φ	
U. K.	— 0°.29 cos φ		— 1°.05 cos φ		— 0°.26 cos φ	

## Obere Kulmination.

1912	43 Rev. Cephei. 4 <sup>m</sup> .3.		$\alpha$ Ursae minoris. 2 <sup>m</sup> .0.		Gr. 75°. 6 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	0 <sup>h</sup> 56 <sup>m</sup>	185° 47'	1 <sup>h</sup> 28 <sup>m</sup>	188° 50'	4 <sup>h</sup> 8 <sup>m</sup>	185° 19'
Sept. 13	43.34	16	15.42	32.24	16.09	46.90
	43.50	15	15.76	32.93	16.40	47.21
	43.65	15	16.12	33.65	16.74	47.52
	43.80	15	16.49	34.36	17.08	47.84
	43.95	13	16.88	35.04	17.45	48.17
			40	63	37	33
	44.08	11	17.28	35.67	17.82	48.50
	44.19	10	17.68	36.24	18.21	48.81
	44.29	7	18.09	36.73	18.60	49.11
	44.36	5	18.48	37.15	18.99	49.39
	44.41	6	18.87	37.53	19.36	49.66
			37	35	35	26
	44.47	6	19.24	37.88	19.71	49.92
	44.53	6	19.59	38.23	20.06	50.18
	44.59	8	19.93	38.61	20.39	50.44
	44.67	9	20.28	39.04	20.72	50.69
	44.76	9	20.63	39.51	21.06	50.96
		10	36	50	34	29
	44.86	11	20.99	40.01	21.40	51.25
	44.97	9	21.36	40.54	21.75	51.55
Okt. 1	45.06	9	21.76	41.05	22.14	51.85
	45.15	6	22.18	41.52	22.54	52.16
	45.21		22.61	41.94	22.96	52.46
	5		42	35	42	29
	45.26	3	23.03	42.29	23.38	52.75
	45.29	1	23.46	42.57	23.80	53.03
	45.30	1	23.87	42.79	24.21	53.29
	45.31	0	24.27	42.96	24.61	53.53
	45.31	1	24.65	43.12	24.99	53.77
			37	17	37	23
8	45.32	1	25.02	43.29	25.36	54.00
9	45.33	2	25.37	43.48	25.72	54.24
10	45.35	3	25.74	43.71	26.08	54.47
11	45.38	3	26.10	43.98	26.43	54.72
12	45.43	5	26.47	44.28	26.79	54.98
13	45.46	3	26.86	44.59	27.17	55.24
14	45.49	2	27.26	44.87	27.57	55.51
15	45.51	0	27.67	45.11	27.98	55.78
16	45.51	2	28.08	45.28	28.40	56.03
17	45.49	4	28.50	45.37	28.81	56.27
18	45.45	5	28.91	45.39	29.23	56.50
19	45.40	7	29.31	45.35	29.64	56.71
20	45.33		37	45.28	30.03	56.91
O. K.	+ 0°.29 cos φ		+ 1°.05 cos φ		+ 0°.26 cos φ	
U. K.	— 0.29 cos φ		— 1.05 cos φ		— 0.26 cos φ	

## Obere Kulmination.

1912	43 Hev. Cephei. 4 <sup>m</sup> .3.		$\alpha$ Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	0 <sup>h</sup> 56 <sup>m</sup>	+85° 47'	1 <sup>h</sup> 28 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 8 <sup>m</sup>	+85° 19'
Okt. 20	45.33	7	29.68	36	45.28	8
21	45.26	5	30.04	35	45.20	7
22	45.21	4	30.39	34	45.13	3
23	45.17	3	30.73	34	45.10	2
24	45.14	3	31.07	35	45.12	5
25	45.11	3	31.42	36	45.17	7
26	45.08	2	31.78	38	45.24	7
27	45.06	3	32.16	39	45.31	5
28	45.03	5	32.55	40	45.36	1
29	44.98	6	32.95	41	45.35	7
30	44.92	9	33.36	41	45.28	16
Nov. 1	44.83	11	33.77	39	45.12	22
2	44.72	13	34.16	38	44.90	27
3	44.59	12	34.54	36	44.63	30
4	44.47	12	34.90	35	44.33	30
5	44.35	11	35.25	32	44.03	28
6	44.24	10	35.57	32	43.75	25
7	44.14	10	35.89	32	43.50	20
8	44.04	8	36.21	32	43.30	17
9	43.96	8	36.53	34	43.13	16
10	43.88	9	36.87	35	42.97	17
11	43.79	9	37.22	36	42.80	22
12	43.70	12	37.58	37	42.58	27
13	43.58	13	37.95	36	42.31	34
14	43.45	16	38.31	36	41.97	42
15	43.29	17	38.67	34	41.55	49
16	43.12	19	39.01	32	41.06	53
17	42.93	19	39.33	30	40.53	55
18	42.74	18	39.63	29	39.98	55
19	42.56	17	39.92	27	39.43	52
20	42.39	16	40.19	27	38.91	47
21	42.23	15	40.46	27	38.44	43
22	42.08	14	40.73	28	38.01	40
23	41.94	13	41.01	29	37.61	39
24	41.81	15	41.30	31	37.22	41
25	41.66	16	41.61	32	36.81	45
26	41.50	18	41.93	32	36.36	51
O. K.	+ 0°.29 cos φ		+ 1°.06 cos φ		+ 0°.26 cos φ	
U. K.	— 0°.29 cos φ		— 1°.06 cos φ		— 0°.26 cos φ	

## Obere Kulmination.

1912	43 Hov. Cephei. 4 <sup>m</sup> .3.		α Ursae minoris. 2 <sup>m</sup> .0.		Gr. 750. 6 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	0 <sup>h</sup> 56 <sup>m</sup>	+85° 47'	1 <sup>h</sup> 28 <sup>m</sup>	+88° 50'	4 <sup>h</sup> 9 <sup>m</sup>	+85° 19'
Nov. 26	41.32 <sup>19</sup>	42.25 <sup>32</sup>	35.85 <sup>58</sup>	43.37 <sup>35</sup>	2.45 <sup>9</sup>	40.07 <sup>38</sup>
27	41.13 <sup>21</sup>	42.57 <sup>31</sup>	35.27 <sup>66</sup>	43.72 <sup>34</sup>	2.54 <sup>7</sup>	40.45 <sup>39</sup>
28	40.92 <sup>23</sup>	42.88 <sup>30</sup>	34.61 <sup>71</sup>	44.06 <sup>34</sup>	2.61 <sup>5</sup>	40.84 <sup>38</sup>
29	40.69 <sup>24</sup>	43.18 <sup>27</sup>	33.90 <sup>75</sup>	44.40 <sup>32</sup>	2.66 <sup>4</sup>	41.22 <sup>38</sup>
30	40.45 <sup>23</sup>	43.45 <sup>25</sup>	33.15 <sup>76</sup>	44.72 <sup>30</sup>	2.70 <sup>2</sup>	41.60 <sup>36</sup>
Dez. 1	40.22 <sup>23</sup>	43.70 <sup>24</sup>	32.39 <sup>74</sup>	45.02 <sup>27</sup>	2.72 <sup>2</sup>	41.96 <sup>35</sup>
2	39.99 <sup>21</sup>	43.94 <sup>22</sup>	31.65 <sup>71</sup>	45.29 <sup>26</sup>	2.74 <sup>1</sup>	42.31 <sup>33</sup>
3	39.78 <sup>21</sup>	44.16 <sup>22</sup>	30.94 <sup>66</sup>	45.55 <sup>26</sup>	2.75 <sup>1</sup>	42.64 <sup>31</sup>
4	39.57 <sup>20</sup>	44.38 <sup>21</sup>	30.28 <sup>63</sup>	45.81 <sup>25</sup>	2.76 <sup>3</sup>	42.95 <sup>31</sup>
5	39.37 <sup>19</sup>	44.59 <sup>23</sup>	29.65 <sup>60</sup>	46.06 <sup>26</sup>	2.79 <sup>4</sup>	43.26 <sup>31</sup>
6	39.18 <sup>18</sup>	44.82 <sup>23</sup>	29.05 <sup>60</sup>	46.32 <sup>26</sup>	2.83 <sup>4</sup>	43.57 <sup>32</sup>
7	39.00 <sup>20</sup>	45.05 <sup>24</sup>	28.45 <sup>62</sup>	46.58 <sup>28</sup>	2.87 <sup>4</sup>	43.89 <sup>33</sup>
8	38.80 <sup>21</sup>	45.29 <sup>25</sup>	27.83 <sup>68</sup>	46.86 <sup>30</sup>	2.91 <sup>4</sup>	44.22 <sup>34</sup>
9	38.59 <sup>24</sup>	45.54 <sup>24</sup>	27.15 <sup>74</sup>	47.16 <sup>29</sup>	2.95 <sup>2</sup>	44.56 <sup>36</sup>
10	38.35 <sup>25</sup>	45.78 <sup>24</sup>	26.41 <sup>82</sup>	47.45 <sup>28</sup>	2.97 <sup>1</sup>	44.92 <sup>37</sup>
11	38.10 <sup>27</sup>	46.02 <sup>23</sup>	25.59 <sup>89</sup>	47.73 <sup>28</sup>	2.98 <sup>2</sup>	45.29 <sup>38</sup>
12	37.83 <sup>27</sup>	46.25 <sup>21</sup>	24.70 <sup>93</sup>	48.01 <sup>26</sup>	2.96 <sup>3</sup>	45.67 <sup>36</sup>
13	37.56 <sup>28</sup>	46.46 <sup>19</sup>	23.77 <sup>96</sup>	48.27 <sup>24</sup>	2.93 <sup>5</sup>	46.03 <sup>36</sup>
14	37.28 <sup>28</sup>	46.65 <sup>17</sup>	22.81 <sup>96</sup>	48.51 <sup>21</sup>	2.88 <sup>5</sup>	46.39 <sup>34</sup>
15	37.00 <sup>27</sup>	46.82 <sup>14</sup>	21.85 <sup>94</sup>	48.72 <sup>19</sup>	2.83 <sup>6</sup>	46.73 <sup>33</sup>
16	36.73 <sup>25</sup>	46.96 <sup>14</sup>	20.91 <sup>89</sup>	48.91 <sup>18</sup>	2.77 <sup>7</sup>	47.06 <sup>30</sup>
17	36.48 <sup>25</sup>	47.10 <sup>13</sup>	20.02 <sup>84</sup>	49.09 <sup>18</sup>	2.70 <sup>5</sup>	47.36 <sup>30</sup>
18	36.23 <sup>23</sup>	47.23 <sup>15</sup>	19.18 <sup>80</sup>	49.27 <sup>19</sup>	2.65 <sup>4</sup>	47.66 <sup>28</sup>
19	36.00 <sup>23</sup>	47.38 <sup>15</sup>	18.38 <sup>77</sup>	49.46 <sup>20</sup>	2.61 <sup>4</sup>	47.94 <sup>29</sup>
20	35.77 <sup>22</sup>	47.53 <sup>15</sup>	17.61 <sup>78</sup>	49.66 <sup>20</sup>	2.57 <sup>2</sup>	48.23 <sup>30</sup>
21	35.55 <sup>23</sup>	47.68 <sup>17</sup>	16.83 <sup>80</sup>	49.86 <sup>21</sup>	2.55 <sup>3</sup>	48.53 <sup>31</sup>
22	35.32 <sup>26</sup>	47.85 <sup>18</sup>	16.03 <sup>85</sup>	50.07 <sup>22</sup>	2.52 <sup>3</sup>	48.84 <sup>32</sup>
23	35.06 <sup>27</sup>	48.03 <sup>18</sup>	15.18 <sup>91</sup>	50.29 <sup>23</sup>	2.49 <sup>4</sup>	49.16 <sup>35</sup>
24	34.79 <sup>28</sup>	48.21 <sup>17</sup>	14.27 <sup>98</sup>	50.52 <sup>22</sup>	2.45 <sup>7</sup>	49.51 <sup>35</sup>
25	34.51 <sup>30</sup>	48.38 <sup>15</sup>	13.29 <sup>104</sup>	50.74 <sup>20</sup>	2.38 <sup>8</sup>	49.86 <sup>35</sup>
26	34.21 <sup>31</sup>	48.53 <sup>13</sup>	12.25 <sup>107</sup>	50.94 <sup>19</sup>	2.30 <sup>10</sup>	50.21 <sup>34</sup>
27	33.90 <sup>31</sup>	48.66 <sup>11</sup>	11.18 <sup>109</sup>	51.13 <sup>16</sup>	2.20 <sup>11</sup>	50.55 <sup>32</sup>
28	33.59 <sup>30</sup>	48.77 <sup>8</sup>	10.09 <sup>108</sup>	51.29 <sup>14</sup>	2.09 <sup>12</sup>	50.87 <sup>31</sup>
29	33.29 <sup>29</sup>	48.85 <sup>7</sup>	9.01 <sup>105</sup>	51.43 <sup>12</sup>	1.97 <sup>12</sup>	51.18 <sup>29</sup>
30	33.00 <sup>28</sup>	48.92 <sup>6</sup>	7.96 <sup>100</sup>	51.55 <sup>11</sup>	1.85 <sup>11</sup>	51.47 <sup>27</sup>
31	32.72 <sup>26</sup>	48.98 <sup>6</sup>	6.96 <sup>94</sup>	51.66 <sup>11</sup>	1.74 <sup>12</sup>	51.74 <sup>26</sup>
32	32.46 <sup>26</sup>	49.04	6.02 <sup>94</sup>	51.77	1.62	52.00
O. K.	+ 0.29 cos φ		+ 1.06 cos φ		+ 0.26 cos φ	
U. K.	- 0.29 cos φ		- 1.06 cos φ		- 0.26 cos φ	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	51 Hev. Cephei. 5 <sup>m</sup> .2.		ι Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	7 <sup>h</sup> 0 <sup>m</sup>	-187° 11'	9 <sup>h</sup> 24 <sup>m</sup>	-181° 42'	16 <sup>h</sup> 54 <sup>m</sup>	-182° 10'
Jan. 1	4.15 18	26.98 28	46.14 14	53.18 14	49.78 3	45.59 33
2	4.33 19	27.26 30	46.28 14	53.32 15	49.81 4	45.26 35
3	4.52 19	27.56 31	46.42 15	53.47 16	49.85 4	44.91 37
4	4.71 18	27.87 33	46.57 15	53.63 19	49.89 5	44.54 38
5	4.89 15	28.20 35	46.72 15	53.82 21	49.94 8	44.16 37
6	5.04 12	28.55 36	46.87 14	54.03 23	50.02 8	43.79 36
7	5.16 9	28.91 35	47.01 13	54.26 24	50.10 8	43.43 35
8	5.25 6	29.26 35	47.14 11	54.50 26	50.18 9	43.08 33
9	5.31 3	29.61 35	47.25 11	54.76 24	50.27 9	42.75 30
10	5.34 2	29.96 32	47.36 10	55.00 23	50.36 9	42.45 29
11	5.36 1	30.28 31	47.46 10	55.23 23	50.45 10	42.16 27
12	5.37 0	30.59 30	47.56 9	55.46 21	50.55 8	41.89 28
13	5.37 1	30.89 29	47.65 10	55.67 21	50.63 8	41.61 27
14	5.38 3	31.18 28	47.75 11	55.88 20	50.71 8	41.34 29
15	5.41 5	31.46 30	47.86 10	56.08 21	50.79 7	41.05 30
16	5.46 5	31.76 31	47.96 11	56.29 23	50.86 9	40.75 31
17	5.51 4	32.07 33	48.07 12	56.52 25	50.95 10	40.44 32
18	5.55 3	32.40 34	48.19 10	56.77 26	51.05 10	40.12 33
19	5.58 0	32.74 36	48.29 10	57.03 28	51.15 11	39.79 31
20	5.58 1	33.10 36	48.39 10	57.31 30	51.26 12	39.48 31
21	5.57 5	33.46 36	48.49 9	57.61 30	51.38 13	39.17 28
22	5.52 8	33.82 35	48.58 7	57.91 30	51.51 13	38.89 26
23	5.44 11	34.17 33	48.65 7	58.21 30	51.64 12	38.63 24
24	5.33 11	34.50 30	48.72 6	58.51 27	51.76 13	38.39 23
25	5.22 12	34.80 29	48.78 6	58.78 26	51.89 12	38.16 21
26	5.10 10	35.09 27	48.84 5	59.04 25	52.01 11	37.95 21
27	5.00 9	35.36 28	48.89 7	59.29 24	52.12 10	37.74 22
28	4.91 8	35.64 27	48.96 7	59.53 23	52.22 10	37.52 23
29	4.83 7	35.91 28	49.03 7	59.76 25	52.32 11	37.29 25
30	4.76 5	36.19 29	49.10 7	60.01 25	52.43 12	37.04 25
31	4.71 7	36.48 31	49.17 8	60.26 27	52.55 12	36.79 26
Febr. 1	4.64 8	36.79 32	49.25 7	60.53 30	52.67 13	36.53 26
2	4.56 11	37.11 33	49.32 7	60.83 32	52.80 14	36.27 25
3	4.45 15	37.44 34	49.39 5	61.15 33	52.94 15	36.02 24
4	4.30 17	37.78 32	49.44 5	61.48 32	53.09 15	35.78 21
5	4.13 20	38.10 32	49.49 3	61.80 33	53.24 16	35.57 18
6	3.93 21	38.42 29	49.52 3	62.13 32	53.40 15	35.39 17
7	3.72	38.71 29	49.55	62.45	53.55	35.22
O. K.	-1° 0'.44 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ	
U. K.	- 0°.44 cos φ		- 0°.15 cos φ		- 0°.16 cos φ	

## Obere Kulmination.

1912	51 Hev. Cephei. 5 <sup>m</sup> .2.		1 Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	6 <sup>h</sup> 59 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 43'	16 <sup>h</sup> 54 <sup>m</sup>	+82° 10'
Febr. 7	63.72 <sup>23</sup>	38.71 <sup>27</sup>	49.55 <sup>1</sup>	2.45 <sup>30</sup>	53.55 <sup>15</sup>	35.22 <sup>15</sup>
8	63.49 <sup>23</sup>	38.98 <sup>26</sup>	49.56 <sup>2</sup>	2.75 <sup>29</sup>	53.70 <sup>14</sup>	35.07 <sup>14</sup>
9	63.26 <sup>23</sup>	39.24 <sup>24</sup>	49.58 <sup>2</sup>	3.04 <sup>27</sup>	53.84 <sup>14</sup>	34.93 <sup>13</sup>
10	63.03 <sup>22</sup>	39.48 <sup>25</sup>	49.60 <sup>2</sup>	3.31 <sup>27</sup>	53.98 <sup>13</sup>	34.80 <sup>15</sup>
11	62.81 <sup>20</sup>	39.73 <sup>24</sup>	49.62 <sup>2</sup>	3.58 <sup>27</sup>	54.11 <sup>13</sup>	34.65 <sup>16</sup>
12	62.61 <sup>19</sup>	39.97 <sup>25</sup>	49.64 <sup>3</sup>	3.85 <sup>28</sup>	54.24 <sup>14</sup>	34.49 <sup>16</sup>
13	62.42 <sup>18</sup>	40.22 <sup>26</sup>	49.67 <sup>3</sup>	4.13 <sup>30</sup>	54.38 <sup>14</sup>	34.33 <sup>18</sup>
14	62.24 <sup>19</sup>	40.48 <sup>27</sup>	49.70 <sup>2</sup>	4.43 <sup>30</sup>	54.52 <sup>14</sup>	34.15 <sup>17</sup>
15	62.05 <sup>21</sup>	40.75 <sup>28</sup>	49.72 <sup>3</sup>	4.73 <sup>33</sup>	54.66 <sup>16</sup>	33.98 <sup>18</sup>
16	61.84 <sup>24</sup>	41.03 <sup>29</sup>	49.75 <sup>2</sup>	5.06 <sup>35</sup>	54.82 <sup>16</sup>	33.80 <sup>16</sup>
17	61.60 <sup>27</sup>	41.32 <sup>29</sup>	49.77 <sup>0</sup>	5.41 <sup>35</sup>	54.98 <sup>17</sup>	33.64 <sup>14</sup>
18	61.33 <sup>29</sup>	41.61 <sup>29</sup>	49.77 <sup>0</sup>	5.76 <sup>34</sup>	55.15 <sup>18</sup>	33.50 <sup>12</sup>
19	61.04 <sup>31</sup>	41.90 <sup>26</sup>	49.77 <sup>1</sup>	6.10 <sup>33</sup>	55.33 <sup>18</sup>	33.38 <sup>9</sup>
20	60.73 <sup>33</sup>	42.16 <sup>24</sup>	49.76 <sup>2</sup>	6.43 <sup>31</sup>	55.51 <sup>17</sup>	33.29 <sup>7</sup>
21	60.40 <sup>33</sup>	42.40 <sup>21</sup>	49.74 <sup>3</sup>	6.74 <sup>30</sup>	55.68 <sup>16</sup>	33.22 <sup>5</sup>
22	60.07 <sup>32</sup>	42.61 <sup>20</sup>	49.71 <sup>2</sup>	7.04 <sup>28</sup>	55.84 <sup>15</sup>	33.17 <sup>6</sup>
23	59.75 <sup>31</sup>	42.81 <sup>18</sup>	49.69 <sup>2</sup>	7.32 <sup>27</sup>	55.99 <sup>14</sup>	33.11 <sup>5</sup>
24	59.44 <sup>28</sup>	42.99 <sup>18</sup>	49.67 <sup>2</sup>	7.59 <sup>26</sup>	56.13 <sup>14</sup>	33.06 <sup>5</sup>
25	59.16 <sup>28</sup>	43.17 <sup>18</sup>	49.65 <sup>2</sup>	7.85 <sup>26</sup>	56.27 <sup>14</sup>	33.01 <sup>7</sup>
26	58.88 <sup>26</sup>	43.35 <sup>19</sup>	49.63 <sup>0</sup>	8.11 <sup>27</sup>	56.41 <sup>15</sup>	32.94 <sup>8</sup>
27	58.62 <sup>26</sup>	43.54 <sup>20</sup>	49.63 <sup>1</sup>	8.38 <sup>29</sup>	56.56 <sup>15</sup>	32.86 <sup>10</sup>
28	58.36 <sup>28</sup>	43.74 <sup>21</sup>	49.62 <sup>2</sup>	8.67 <sup>30</sup>	56.71 <sup>16</sup>	32.76 <sup>9</sup>
29	58.08 <sup>29</sup>	43.95 <sup>22</sup>	49.60 <sup>1</sup>	8.97 <sup>30</sup>	56.87 <sup>16</sup>	32.67 <sup>8</sup>
März 1	57.79 <sup>32</sup>	44.17 <sup>23</sup>	49.59 <sup>3</sup>	9.27 <sup>32</sup>	57.03 <sup>17</sup>	32.59 <sup>6</sup>
2	57.47 <sup>34</sup>	44.40 <sup>21</sup>	49.56 <sup>4</sup>	9.59 <sup>33</sup>	57.20 <sup>18</sup>	32.53 <sup>4</sup>
3	57.13 <sup>37</sup>	44.61 <sup>21</sup>	49.52 <sup>4</sup>	9.92 <sup>32</sup>	57.38 <sup>17</sup>	32.49 <sup>2</sup>
4	56.76 <sup>40</sup>	44.82 <sup>18</sup>	49.48 <sup>5</sup>	10.24 <sup>31</sup>	57.55 <sup>18</sup>	32.47 <sup>0</sup>
5	56.36 <sup>40</sup>	45.00 <sup>17</sup>	49.43 <sup>7</sup>	10.55 <sup>29</sup>	57.73 <sup>18</sup>	32.47 <sup>2</sup>
6	55.96 <sup>40</sup>	45.17 <sup>14</sup>	49.36 <sup>7</sup>	10.84 <sup>27</sup>	57.91 <sup>16</sup>	32.49 <sup>4</sup>
7	55.56 <sup>39</sup>	45.31 <sup>13</sup>	49.29 <sup>6</sup>	11.11 <sup>26</sup>	58.07 <sup>15</sup>	32.53 <sup>5</sup>
8	55.17 <sup>39</sup>	45.44 <sup>11</sup>	49.23 <sup>6</sup>	11.37 <sup>25</sup>	58.22 <sup>15</sup>	32.58 <sup>4</sup>
9	54.78 <sup>36</sup>	45.55 <sup>11</sup>	49.17 <sup>6</sup>	11.62 <sup>24</sup>	58.37 <sup>14</sup>	32.62 <sup>2</sup>
10	54.42 <sup>34</sup>	45.66 <sup>12</sup>	49.11 <sup>6</sup>	11.86 <sup>24</sup>	58.51 <sup>15</sup>	32.64 <sup>2</sup>
11	54.08 <sup>34</sup>	45.78 <sup>12</sup>	49.05 <sup>5</sup>	12.10 <sup>25</sup>	58.66 <sup>15</sup>	32.66 <sup>0</sup>
12	53.74 <sup>34</sup>	45.90 <sup>14</sup>	49.00 <sup>5</sup>	12.35 <sup>27</sup>	58.81 <sup>16</sup>	32.66 <sup>0</sup>
13	53.40 <sup>34</sup>	46.04 <sup>15</sup>	48.95 <sup>5</sup>	12.62 <sup>27</sup>	58.97 <sup>16</sup>	32.66 <sup>1</sup>
14	53.06 <sup>37</sup>	46.19 <sup>15</sup>	48.90 <sup>5</sup>	12.89 <sup>29</sup>	59.13 <sup>16</sup>	32.67 <sup>1</sup>
15	52.69 <sup>37</sup>	46.34 <sup>15</sup>	48.85 <sup>5</sup>	13.18 <sup>29</sup>	59.29 <sup>16</sup>	32.68 <sup>1</sup>
O. K.	+ 0°.44 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ	
U. K.	— 0.44 cos φ		— 0.15 cos φ		— 0.16 cos φ	

## Obere Kulmination.

1912	5 <sup>h</sup> Hev. Cephei. 5 <sup>m</sup> .2.		1 Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	6 <sup>h</sup> 59 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 43'	16 <sup>h</sup> 54 <sup>m</sup>	+82° 10'
März 15	52.69	46.34	48.85	13.18	59.29	32.68
16	52.30	46.49	48.78	13.47	59.45	32.71
17	51.89	46.64	48.71	13.77	59.63	32.76
18	51.45	46.77	48.62	14.05	59.80	32.84
19	51.00	46.87	48.53	14.32	59.98	32.94
	45	8	10	25	16	12
20	50.55	46.95	48.43	14.57	60.14	33.06
21	50.11	47.01	48.33	14.80	60.29	33.18
22	49.69	47.04	48.24	15.00	60.43	33.30
23	49.28	47.07	48.14	15.19	60.56	33.42
24	48.90	47.09	48.05	15.38	60.69	33.53
	36	4	8	18	13	10
25	48.54	47.13	47.97	15.56	60.82	33.63
26	48.19	47.17	47.89	15.76	60.95	33.71
27	47.83	47.22	47.81	15.97	61.09	33.79
28	47.47	47.29	47.73	16.20	61.24	33.88
29	47.09	47.36	47.65	16.43	61.39	33.98
	41	6	9	24	15	12
30	46.68	47.42	47.56	16.67	61.54	34.10
31	46.25	47.47	47.45	16.90	61.70	34.25
April 1	45.80	47.50	47.34	17.12	61.85	34.41
2	45.33	47.51	47.23	17.32	62.00	34.60
3	44.87	47.50	47.10	17.50	62.14	34.81
	45	3	13	16	13	21
4	44.42	47.47	46.97	17.66	62.27	35.02
5	43.99	47.42	46.85	17.81	62.39	35.22
6	43.58	47.38	46.73	17.95	62.51	35.42
7	43.19	47.33	46.62	18.09	62.62	35.61
8	42.81	47.29	46.52	18.23	62.74	35.79
	36	3	11	15	11	17
9	42.45	47.26	46.41	18.38	62.85	35.96
10	42.09	47.23	46.31	18.54	62.97	36.12
11	41.71	47.22	46.20	18.70	63.10	36.29
12	41.32	47.21	46.09	18.88	63.24	36.48
13	40.91	47.19	45.97	19.05	63.37	36.67
	44	3	12	17	13	22
14	40.47	47.16	45.85	19.22	63.50	36.89
15	40.03	47.11	45.72	19.36	63.63	37.13
16	39.59	47.04	45.58	19.49	63.75	37.39
17	39.15	46.94	45.43	19.59	63.86	37.66
18	38.73	46.81	45.29	19.67	63.96	37.93
	40	13	13	7	9	27
19	38.33	46.68	45.16	19.74	64.05	38.20
20	37.97	46.54	45.03	19.80	64.13	38.45
	34	14	13	5	8	24
21	37.63	46.40	44.90	19.85	64.21	38.69
O. K.	+ 0°.44 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ	
U. K.	— 0°.44 cos φ		— 0°.15 cos φ		— 0°.16 cos φ	

## Obere Kulmination.

1912	51 Hev. Cephei. 5 <sup>m</sup> .2.		1 Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	6 <sup>h</sup> 59 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 43'	16 <sup>h</sup> 55 <sup>m</sup>	+82° 10'
April 21	37.63	46.40	44.90	19.85	4.21	38.69
22	37.31	46.28	44.79	19.91	4.29	38.92
23	37.00	46.16	44.68	19.98	4.38	39.14
24	36.68	46.06	44.58	20.05	4.47	39.35
25	36.35	45.96	44.46	20.14	4.56	39.58
	35	9	12	9	10	23
26	36.00	45.87	44.34	20.23	4.66	39.81
27	35.63	45.78	44.21	20.33	4.77	40.07
28	35.25	45.66	44.08	20.41	4.87	40.34
29	34.85	45.52	43.93	20.48	4.96	40.64
30	34.46	45.36	43.79	20.52	5.04	40.95
Mai 1	34.08	45.18	43.64	20.54	5.11	41.27
2	33.72	44.99	43.50	20.55	5.17	41.59
3	33.38	44.79	43.36	20.54	5.23	41.90
4	33.07	44.59	43.22	20.52	5.28	42.20
5	32.78	44.40	43.10	20.50	5.33	42.48
6	32.50	44.21	42.98	20.49	5.38	42.75
7	32.23	44.03	42.86	20.49	5.44	43.02
8	31.96	43.87	42.75	20.50	5.50	43.28
9	31.67	43.71	42.63	20.52	5.56	43.55
10	31.37	43.55	42.50	20.54	5.63	43.83
11	31.05	43.39	42.37	20.56	5.70	44.13
12	30.73	43.20	42.23	20.56	5.76	44.45
13	30.40	43.00	42.09	20.55	5.81	44.79
14	30.08	42.77	41.95	20.51	5.85	45.14
15	29.78	42.52	41.80	20.44	5.89	45.49
16	29.50	42.26	41.66	20.36	5.92	45.83
17	29.26	41.99	41.53	20.26	5.93	46.17
18	29.04	41.73	41.41	20.15	5.94	46.48
19	28.85	41.47	41.30	20.05	5.95	46.77
20	28.67	41.23	41.20	19.96	5.96	47.05
21	28.50	41.00	41.09	19.88	5.97	47.32
22	28.32	40.79	40.99	19.80	5.99	47.60
23	28.14	40.57	40.88	19.74	6.01	47.88
24	27.93	40.36	40.77	19.69	6.03	48.18
25	27.70	40.14	40.64	19.62	6.06	48.50
26	27.46	39.89	40.51	19.53	6.08	48.83
27	27.23	39.63	40.37	19.43	6.09	49.19
28	27.01	39.34	40.24	19.31	6.10	49.55
O. K.	+ 0°.44 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ	
U. K.	— 0°.44 cos φ		— 0°.15 cos φ		— 0°.16 cos φ	

## Obere Kulmination.

1912	51 Rev. Cephei. 5 <sup>m</sup> .2.		1 Rev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.							
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.						
	6 <sup>h</sup> 59 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 43'	16 <sup>h</sup> 55 <sup>m</sup>	+82° 10'						
Mai												
28	27.01	21	39.34	30	40.24	13	19.31	14	6.10	2	49.55	35
29	26.80	19	39.04	30	40.11	12	19.17	16	6.08	1	49.90	34
30	26.61	15	38.74	31	39.99	12	19.01	18	6.07	2	50.24	34
31	26.46	12	38.43	31	39.87	11	18.83	17	6.05	3	50.58	32
Juni												
1	26.34	11	38.12	29	39.76	10	18.66	16	6.02	1	50.90	30
2	26.23	10	37.83	27	39.66	9	18.50	16	6.00	3	51.20	28
3	26.13	10	37.56	26	39.57	9	18.34	14	5.97	2	51.48	28
4	26.03	9	37.30	25	39.48	9	18.20	13	5.95	1	51.76	29
5	25.94	10	37.05	25	39.39	10	18.07	12	5.94	0	52.05	29
6	25.84	13	36.80	25	39.29	10	17.95	12	5.94	1	52.34	30
7	25.71	14	36.55	27	39.19	11	17.83	14	5.93	1	52.64	32
8	25.57	15	36.28	28	39.08	11	17.69	15	5.92	2	52.96	33
9	25.42	14	36.00	30	38.97	12	17.54	18	5.90	3	53.29	34
10	25.28	12	35.70	32	38.85	11	17.36	20	5.87	4	53.63	35
11	25.16	12	35.38	32	38.74	11	17.16	21	5.83	5	53.98	34
12	25.07	7	35.05	34	38.63	9	16.95	24	5.78	5	54.32	33
13	25.00	4	34.71	34	38.54	9	16.71	24	5.73	7	54.65	32
14	24.96	1	34.37	34	38.45	8	16.47	25	5.66	7	54.97	29
15	24.95	2	34.03	32	38.37	8	16.22	23	5.59	7	55.26	28
16	24.97	3	33.71	30	38.29	7	15.99	22	5.52	7	55.54	26
17	25.00	3	33.41	28	38.22	6	15.77	20	5.45	6	55.80	26
18	25.03	1	33.13	28	38.16	7	15.57	20	5.39	5	56.06	26
19	25.04	0	32.85	28	38.09	7	15.37	19	5.34	5	56.32	27
20	25.04	2	32.57	27	38.02	8	15.18	19	5.29	6	56.59	29
21	25.02	3	32.30	29	37.94	9	14.99	21	5.23	5	56.88	30
22	24.99	4	32.01	31	37.85	9	14.78	22	5.18	6	57.18	31
23	24.95	3	31.70	32	37.76	9	14.56	24	5.12	6	57.49	32
24	24.92	1	31.38	34	37.67	9	14.32	26	5.06	8	57.81	32
25	24.91	2	31.04	35	37.58	8	14.06	28	4.98	9	58.13	31
26	24.93	4	30.69	36	37.50	7	13.78	29	4.89	9	58.44	31
27	24.97	7	30.33	34	37.43	7	13.49	29	4.80	9	58.75	28
28	25.04	9	29.99	34	37.36	5	13.20	29	4.71	11	59.03	26
29	25.13	11	29.65	31	37.31	5	12.91	27	4.60	10	59.29	24
30	25.24	12	29.34	30	37.26	5	12.64	26	4.50	9	59.53	24
Juli												
1	25.36	12	29.04	28	37.22	4	12.38	25	4.41	8	59.77	22
2	25.48	10	28.76	28	37.17	5	12.13	23	4.33	8	59.99	23
3	25.58	9	28.48	27	37.12	5	11.90	23	4.25	8	60.22	24
4	25.67		28.21		37.07	5	11.67		4.17		60.46	24
O. K.			+ 0°.44 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ					
U. K.			- 0°.44 cos φ		- 0°.15 cos φ		- 0°.16 cos φ					

## Obere Kulmination.

1912	51 Hev. Cephei. 5 <sup>m</sup> .2.		1 Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	6 <sup>h</sup> 59 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 43'	16 <sup>h</sup> 54 <sup>m</sup>	+82° 11'	
Juli	4	25.67 8	28.21 28	37.07 5	11.67 24	64.17 8	0.46 25
	5	25.75 6	27.93 29	37.02 6	11.43 25	64.09 8	0.71 27
	6	25.81 7	27.64 32	36.96 7	11.18 28	64.01 10	0.98 28
	7	25.95 7	26.99 33	36.89 6	10.90 29	63.91 10	1.26 29
	8	26.04 13	26.64 36	36.83 5	10.61 31	63.81 11	1.55 28
	9	26.17 16	26.28 35	36.78 5	10.30 32	63.70 13	1.83 27
	10	26.33 19	25.93 34	36.73 5	9.98 34	63.57 13	2.10 25
	11	26.52 21	25.59 33	36.68 3	9.64 34	63.44 13	2.35 23
	12	26.73 23	25.26 31	36.65 2	9.30 33	63.31 13	2.58 21
	13	26.96 24	24.95 29	36.63 0	8.97 32	63.18 13	2.79 19
	14	27.20 23	24.66 29	36.63 1	8.65 31	63.05 13	2.98 17
	15	27.43 21	24.37 27	36.62 2	8.34 29	62.92 12	3.15 18
	16	27.64 19	24.10 27	36.60 2	8.05 28	62.80 12	3.33 18
	17	27.83 17	23.83 28	36.58 2	7.77 28	62.68 11	3.51 20
	18	28.00 17	23.55 29	36.56 2	7.49 28	62.57 12	3.71 20
	19	28.17 17	23.26 30	36.54 3	7.21 30	62.45 11	3.91 22
	20	28.34 19	22.96 32	36.51 4	6.91 32	62.34 12	4.13 23
	21	28.53 20	22.64 34	36.47 3	6.59 33	62.22 13	4.36 23
	22	28.73 23	22.30 35	36.44 2	6.26 34	62.09 15	4.59 23
	23	28.96 26	21.95 33	36.42 2	5.92 35	61.94 15	4.82 22
	24	29.22 28	21.62 31	36.40 1	5.57 37	61.79 16	5.04 19
	25	29.50 30	21.31 30	36.39 1	5.20 36	61.63 15	5.23 17
	26	29.80 31	21.01 28	36.38 1	4.84 35	61.48 15	5.40 15
	27	30.11 31	20.73 27	36.39 2	4.49 33	61.33 15	5.55 14
	28	30.42 30	20.46 25	36.41 2	4.16 31	61.18 15	5.69 13
	29	30.72 28	20.21 24	36.43 1	3.85 30	61.03 14	5.82 12
	30	31.00 26	19.97 24	36.44 1	3.55 29	60.89 13	5.94 13
	31	31.26 26	19.73 25	36.45 1	3.26 30	60.76 13	6.07 14
Aug.	1	31.52 26	19.48 27	36.46 0	2.96 30	60.63 13	6.21 16
	2	31.78 26	19.21 29	36.46 0	2.66 32	60.50 15	6.37 17
	3	32.04 27	18.92 31	36.46 0	2.34 34	60.35 15	6.54 18
	4	32.31 30	18.61 30	36.46 0	2.00 36	60.20 15	6.72 17
	5	32.61 33	18.31 31	36.46 1	1.64 37	60.05 17	6.89 16
	6	32.94 36	18.00 30	36.47 1	1.27 38	59.88 18	7.05 15
	7	33.30 38	17.70 28	36.48 3	0.89 38	59.70 18	7.20 12
	8	33.68 40	17.42 27	36.51 4	0.51 37	59.52 18	7.32 10
	9	34.08 40	17.15 27	36.55	0.14 37	59.34	7.42
O. K.		+ 0°.43 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ	
U. K.		- 0°.43 cos φ		- 0°.15 cos φ		- 0°.16 cos φ	

## Obere Kulmination.

1912	51 Rev. Cephei. 5 <sup>m</sup> .2.		1 Rev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	6 <sup>h</sup> 59 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 42'	16 <sup>h</sup> 54 <sup>m</sup>	+82° 11'
Aug. 9	34.08 41	17.15 25	36.55 4	60.14 37	59.34 17	7.42 8
10	34.49 40	16.90 24	36.59 5	59.77 35	59.17 17	7.50 7
11	34.89 39	16.66 22	36.64 5	59.42 34	59.00 17	7.57 6
12	35.28 37	16.44 22	36.69 4	59.08 32	58.83 16	7.63 6
13	35.65 36	16.22 22	36.78 4	58.44 32	58.67 15	7.69 6
14	36.01 34	16.00 22	36.82 3	58.12 32	58.52 15	7.75 8
15	36.35 33	15.78 24	36.85 3	57.80 33	58.37 16	7.83 9
16	36.68 35	15.54 25	36.88 3	57.47 35	58.21 16	7.92 11
17	37.03 36	15.29 27	36.91 3	57.12 37	58.05 16	8.03 11
18	37.39 38	15.02 27	36.94 4	56.75 37	57.89 18	8.14 11
19	37.77 41	14.75 26	36.98 5	56.38 39	57.71 18	8.25 9
20	38.18 43	14.49 26	37.03 6	55.99 38	57.53 18	8.34 7
21	38.61 45	14.23 24	37.09 7	55.61 36	57.35 20	8.41 5
22	39.06 46	13.99 22	37.16 8	55.25 36	57.15 19	8.46 3
23	39.52 47	13.77 20	37.24 7	54.89 34	56.96 19	8.49 1
24	39.99 45	13.57 17	37.31 7	54.55 32	56.77 17	8.50 0
25	40.44 44	13.40 17	37.38 8	54.23 31	56.60 17	8.50 1
26	40.88 42	13.23 17	37.46 8	53.92 30	56.43 17	8.49 0
27	41.30 41	13.06 17	37.54 6	53.62 30	56.26 16	8.49 1
28	41.71 40	12.89 18	37.60 5	53.32 31	56.10 16	8.50 2
29	42.11 40	12.71 20	37.65 6	53.01 33	55.94 16	8.52 3
30	42.51 40	12.51 21	37.71 6	52.68 34	55.78 17	8.55 3
31	42.91 43	12.30 23	37.77 6	52.34 37	55.61 18	8.58 5
Sept. 1	43.34 45	12.07 22	37.83 7	51.97 37	55.43 19	8.63 3
2	43.79 47	11.85 21	37.90 8	51.60 38	55.24 19	8.66 2
3	44.26 50	11.64 21	37.98 9	51.22 38	55.05 20	8.68 1
4	44.76 53	11.43 19	38.07 11	50.84 37	54.85 20	8.67 2
5	45.29 54	11.24 17	38.18 11	50.47 34	54.65 20	8.65 5
6	45.83 53	11.07 15	38.29 10	50.13 32	54.45 19	8.60 6
7	46.36 52	10.92 13	38.39 11	49.81 31	54.26 18	8.54 7
8	46.88 50	10.79 12	38.50 11	49.50 30	54.08 17	8.47 8
9	47.38 47	10.67 12	38.61 10	49.20 30	53.91 17	8.39 7
10	47.85 47	10.55 12	38.71 10	48.90 29	53.74 17	8.32 6
11	48.32 45	10.43 14	38.81 8	48.61 30	53.57 17	8.26 5
12	48.77 45	10.29 15	38.89 9	48.31 32	53.40 17	8.21 3
13	49.22 46	10.14 16	38.98 9	47.99 33	53.23 17	8.18 3
14	49.68	9.98	39.07	47.66 33	53.06 17	8.15 3
O. K.	+ 0°.43 cos ϕ		+ 0°.15 cos ϕ		+ 0°.16 cos ϕ	
U. K.	— 0°.43 cos ϕ		— 0°.15 cos ϕ		— 0°.16 cos ϕ	

## Obere Kulmination.

1912	5 <sup>h</sup> Hev. Cephei. 5 <sup>m</sup> .2.		1 <sup>h</sup> Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Sept. 14	6 <sup>h</sup> 59 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 42'	16 <sup>h</sup> 54 <sup>m</sup>	+82° 11'
15	49.68 48	9.98 17	39.07 10	47.66 35	53.06 18	8.15 3
16	50.16 50	9.81 17	39.17 10	47.31 35	52.88 19	8.12 3
17	50.66 52	9.64 16	39.27 11	46.96 35	52.69 20	8.09 6
18	51.18 53	9.48 15	39.38 12	46.61 33	52.49 19	8.03 7
19	51.71 56	9.33 12	39.50 12	46.28 33	52.30 20	7.96 10
20	52.27 57	9.21 10	39.62 12	45.95 31	52.10 19	7.86 12
21	52.84 56	9.11 8	39.74 14	45.64 29	51.91 18	7.74 14
22	53.40 53	9.03 6	39.88 13	45.35 27	51.73 18	7.60 15
23	53.93 52	8.97 6	40.01 13	45.08 26	51.55 17	7.45 14
24	54.45 50	8.91 5	40.14 11	44.82 26	51.38 16	7.31 14
25	54.95 47	8.86 7	40.25 12	44.56 27	51.22 15	7.17 12
26	55.42 48	8.79 7	40.37 11	44.29 27	51.07 15	7.05 11
27	55.90 48	8.72 9	40.48 12	44.02 29	50.92 16	6.94 10
28	56.38 49	8.63 11	40.60 11	43.73 31	50.76 17	6.84 9
29	56.87 51	8.52 11	40.71 12	43.42 31	50.59 18	6.75 10
30	57.38 54	8.41 11	40.83 13	43.11 32	50.41 18	6.65 12
Okt. 1	57.92 56	8.30 9	40.96 14	42.79 31	50.23 19	6.53 13
2	58.48 59	8.21 8	41.10 15	42.48 31	50.04 19	6.40 15
3	59.07 59	8.13 6	41.25 16	42.17 29	49.85 19	6.25 18
4	59.66 59	8.07 4	41.41 16	41.88 27	49.66 18	6.07 20
5	60.25 59	8.03 1	41.57 16	41.61 25	49.48 18	5.87 21
6	60.84 56	8.02 0	41.73 16	41.36 23	49.30 16	5.66 21
7	61.40 53	8.02 0	41.89 15	41.13 23	49.14 16	5.45 21
8	61.93 52	8.02 0	42.04 14	40.90 22	48.98 15	5.24 20
9	62.45 50	8.02 1	42.18 13	40.68 23	48.83 15	5.04 19
10	62.95 49	8.01 2	42.31 13	40.45 24	48.68 15	4.85 17
11	63.44 50	7.99 4	42.44 14	40.21 24	48.53 15	4.68 16
12	63.94 50	7.95 4	42.58 13	39.97 26	48.38 15	4.52 16
13	64.44 53	7.91 4	42.71 14	39.71 28	48.23 17	4.36 17
14	64.97 55	7.87 3	42.85 16	39.43 27	48.06 17	4.19 17
15	65.52 56	7.84 2	43.01 16	39.16 26	47.89 18	4.02 20
16	66.08 58	7.82 0	43.17 18	38.90 25	47.71 16	3.82 22
17	66.66 59	7.82 2	43.35 17	38.65 22	47.55 16	3.60 24
18	67.25 57	7.84 5	43.52 17	38.43 21	47.39 16	3.36 25
19	67.82 57	7.89 6	43.69 17	38.22 19	47.23 15	3.11 27
20	68.38 53	7.95 7	43.86 17	38.03 17	47.08 14	2.84 28
21	68.91 51	8.02 7	44.03 16	37.86 16	46.94 13	2.56 26
O. K.	+ 0°.43 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ	
U. K.	— 0.43 cos φ		— 0.15 cos φ		— 0.16 cos φ	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	51 Hev. Cephei. 5 <sup>m</sup> .2.		1 Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	7 <sup>h</sup> 0 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 42'	16 <sup>h</sup> 54 <sup>m</sup>	+82° 10'
Okt.						
21	9.42 <sup>50</sup>	8.09 <sup>7</sup>	44.19 <sup>16</sup>	37.70 <sup>16</sup>	46.81 <sup>12</sup>	62.30 <sup>25</sup>
22	9.92 <sup>48</sup>	8.16 <sup>6</sup>	44.35 <sup>14</sup>	37.54 <sup>18</sup>	46.69 <sup>12</sup>	62.05 <sup>24</sup>
23	10.40 <sup>48</sup>	8.22 <sup>4</sup>	44.49 <sup>15</sup>	37.36 <sup>18</sup>	46.57 <sup>13</sup>	61.81 <sup>23</sup>
24	10.88 <sup>48</sup>	8.26 <sup>4</sup>	44.64 <sup>16</sup>	37.18 <sup>20</sup>	46.44 <sup>13</sup>	61.58 <sup>22</sup>
25	11.36 <sup>48</sup>	8.30 <sup>4</sup>	44.80 <sup>16</sup>	36.98 <sup>21</sup>	46.31 <sup>14</sup>	61.36 <sup>22</sup>
26	11.86 <sup>53</sup>	8.33 <sup>3</sup>	44.96 <sup>16</sup>	36.77 <sup>22</sup>	46.17 <sup>14</sup>	61.14 <sup>22</sup>
27	12.39 <sup>54</sup>	8.36 <sup>3</sup>	45.12 <sup>17</sup>	36.55 <sup>21</sup>	46.03 <sup>14</sup>	60.92 <sup>24</sup>
28	12.93 <sup>56</sup>	8.39 <sup>4</sup>	45.29 <sup>17</sup>	36.34 <sup>20</sup>	45.89 <sup>15</sup>	60.68 <sup>26</sup>
29	13.49 <sup>57</sup>	8.43 <sup>7</sup>	45.46 <sup>19</sup>	36.14 <sup>19</sup>	45.74 <sup>15</sup>	60.42 <sup>28</sup>
30	14.06 <sup>58</sup>	8.50 <sup>10</sup>	45.65 <sup>20</sup>	35.95 <sup>17</sup>	45.59 <sup>15</sup>	60.14 <sup>30</sup>
Nov.						
31	14.64 <sup>56</sup>	8.60 <sup>11</sup>	45.85 <sup>19</sup>	35.78 <sup>14</sup>	45.44 <sup>13</sup>	59.84 <sup>32</sup>
1	15.20 <sup>54</sup>	8.71 <sup>12</sup>	46.04 <sup>19</sup>	35.64 <sup>13</sup>	45.31 <sup>12</sup>	59.52 <sup>32</sup>
2	15.74 <sup>52</sup>	8.83 <sup>14</sup>	46.23 <sup>18</sup>	35.51 <sup>11</sup>	45.19 <sup>11</sup>	59.20 <sup>33</sup>
3	16.26 <sup>50</sup>	8.97 <sup>13</sup>	46.41 <sup>18</sup>	35.40 <sup>11</sup>	45.08 <sup>11</sup>	58.87 <sup>32</sup>
4	16.76 <sup>47</sup>	9.10 <sup>13</sup>	46.59 <sup>16</sup>	35.29 <sup>10</sup>	44.97 <sup>10</sup>	58.55 <sup>31</sup>
5	17.23 <sup>45</sup>	9.23 <sup>11</sup>	46.75 <sup>16</sup>	35.19 <sup>12</sup>	44.87 <sup>10</sup>	58.24 <sup>29</sup>
6	17.68 <sup>45</sup>	9.34 <sup>11</sup>	46.91 <sup>16</sup>	35.07 <sup>12</sup>	44.77 <sup>10</sup>	57.95 <sup>28</sup>
7	18.13 <sup>46</sup>	9.45 <sup>10</sup>	47.07 <sup>17</sup>	34.95 <sup>13</sup>	44.67 <sup>10</sup>	57.67 <sup>27</sup>
8	18.59 <sup>47</sup>	9.55 <sup>10</sup>	47.24 <sup>17</sup>	34.82 <sup>14</sup>	44.57 <sup>11</sup>	57.40 <sup>27</sup>
9	19.06 <sup>49</sup>	9.65 <sup>9</sup>	47.41 <sup>17</sup>	34.68 <sup>15</sup>	44.46 <sup>11</sup>	57.13 <sup>28</sup>
10	19.55 <sup>50</sup>	9.74 <sup>11</sup>	47.58 <sup>18</sup>	34.53 <sup>15</sup>	44.35 <sup>11</sup>	56.85 <sup>29</sup>
11	20.05 <sup>52</sup>	9.85 <sup>12</sup>	47.76 <sup>19</sup>	34.38 <sup>12</sup>	44.24 <sup>11</sup>	56.56 <sup>31</sup>
12	20.57 <sup>52</sup>	9.97 <sup>15</sup>	47.95 <sup>19</sup>	34.26 <sup>11</sup>	44.13 <sup>11</sup>	56.25 <sup>33</sup>
13	21.09 <sup>51</sup>	10.12 <sup>17</sup>	48.14 <sup>20</sup>	34.15 <sup>9</sup>	44.02 <sup>10</sup>	55.92 <sup>36</sup>
14	21.60 <sup>50</sup>	10.29 <sup>19</sup>	48.34 <sup>19</sup>	34.06 <sup>6</sup>	43.92 <sup>9</sup>	55.56 <sup>37</sup>
15	22.10 <sup>48</sup>	10.48 <sup>20</sup>	48.53 <sup>19</sup>	34.00 <sup>5</sup>	43.83 <sup>8</sup>	55.19 <sup>36</sup>
16	22.58 <sup>45</sup>	10.68 <sup>21</sup>	48.72 <sup>19</sup>	33.95 <sup>3</sup>	43.75 <sup>8</sup>	54.83 <sup>36</sup>
17	23.03 <sup>42</sup>	10.89 <sup>20</sup>	48.91 <sup>17</sup>	33.92 <sup>3</sup>	43.67 <sup>6</sup>	54.47 <sup>36</sup>
18	23.45 <sup>40</sup>	11.09 <sup>20</sup>	49.08 <sup>17</sup>	33.89 <sup>3</sup>	43.61 <sup>6</sup>	54.11 <sup>34</sup>
19	23.85 <sup>40</sup>	11.29 <sup>19</sup>	49.25 <sup>17</sup>	33.86 <sup>3</sup>	43.55 <sup>6</sup>	53.77 <sup>32</sup>
20	24.25 <sup>39</sup>	11.48 <sup>16</sup>	49.42 <sup>16</sup>	33.83 <sup>4</sup>	43.49 <sup>6</sup>	53.45 <sup>31</sup>
21	24.64 <sup>40</sup>	11.64 <sup>16</sup>	49.58 <sup>17</sup>	33.79 <sup>6</sup>	43.43 <sup>7</sup>	53.14 <sup>30</sup>
22	25.04 <sup>41</sup>	11.80 <sup>15</sup>	49.75 <sup>17</sup>	33.73 <sup>7</sup>	43.36 <sup>7</sup>	52.84 <sup>31</sup>
23	25.45 <sup>43</sup>	11.95 <sup>16</sup>	49.92 <sup>17</sup>	33.66 <sup>8</sup>	43.29 <sup>8</sup>	52.53 <sup>32</sup>
24	25.88 <sup>45</sup>	12.11 <sup>17</sup>	50.09 <sup>19</sup>	33.58 <sup>7</sup>	43.21 <sup>8</sup>	52.21 <sup>34</sup>
25	26.33 <sup>46</sup>	12.28 <sup>19</sup>	50.28 <sup>19</sup>	33.51 <sup>5</sup>	43.13 <sup>8</sup>	51.87 <sup>35</sup>
26	26.79 <sup>47</sup>	12.47 <sup>21</sup>	50.47 <sup>20</sup>	33.46 <sup>2</sup>	43.05 <sup>8</sup>	51.52 <sup>37</sup>
27	27.26 <sup>47</sup>	12.68 <sup>21</sup>	50.67 <sup>20</sup>	33.44 <sup>7</sup>	42.97 <sup>7</sup>	51.15 <sup>37</sup>
O. K.	+ 0°.43 cos φ		+ 0°.15 cos φ		+ 0°.16 cos φ	
U. K.	— 0°.43 cos φ		— 0°.15 cos φ		— 0°.16 cos φ	

## Obere Kulmination.

1912	51 Hev. Cephei. 5 <sup>m</sup> .2.		1 Hev. Draconis. 4 <sup>m</sup> .3.		ε Ursae minoris. 4 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	7 <sup>h</sup> 0 <sup>m</sup>	+87° 11'	9 <sup>h</sup> 24 <sup>m</sup>	+81° 42'	16 <sup>h</sup> 54 <sup>m</sup>	+82° 10'
Nov. 27	27.26	12.68	50.67	33.44	42.97	51.15
28	27.71 45	12.92 24	50.87 20	33.43 1	42.91 6	50.77 40
29	28.14 43	13.17 25	51.07 19	33.44 3	42.85 4	50.37 40
30	28.55 41	13.42 25	51.26 18	33.47 4	42.81 4	49.97 39
Dez. 1	28.94 39	13.69 27	51.44 18	33.51 5	42.77 3	49.58 38
2	29.30 33	13.94 25	51.62 16	33.56 4	42.74 2	49.20 36
3	29.63 32	14.19 23	51.78 16	33.60 2	42.72 3	48.84 34
4	29.95 32	14.42 22	51.94 15	33.62 2	42.69 2	48.50 33
5	30.27 32	14.64 21	52.09 16	33.64 2	42.67 3	48.17 31
6	30.59 34	14.85 22	52.25 17	33.66 1	42.64 4	47.86 33
7	30.93 35	15.07 22	52.42 17	33.67 0	42.60 4	47.53 33
8	31.28 36	15.29 23	52.59 18	33.67 2	42.53 4	46.84 38
9	31.64 36	15.52 25	52.77 18	33.69 4	42.49 2	46.46 38
10	32.00 37	15.77 27	52.95 18	33.73 6	42.47 1	46.08 40
11	32.37 35	16.04 29	53.13 19	33.79 8	42.46 1	45.68 41
12	32.72 32	16.33 31	53.32 18	33.87 11	42.45 1	45.27 40
13	33.04 29	16.64 31	53.50 17	33.98 13	42.46 2	44.87 39
14	33.33 27	16.95 32	53.67 16	34.11 12	42.48 2	44.48 36
15	33.60 24	17.27 31	53.83 15	34.23 13	42.50 3	44.12 35
16	33.84 21	17.58 29	53.98 15	34.36 13	42.53 2	43.77 34
17	34.05 21	17.87 28	54.13 14	34.49 11	42.55 2	43.43 32
18	34.26 21	18.15 26	54.27 14	34.60 10	42.57 1	43.11 32
19	34.47 23	18.41 26	54.41 15	34.70 8	42.58 0	42.79 33
20	34.70 24	18.67 25	54.56 15	34.78 8	42.58 0	42.46 33
21	34.94 25	18.92 25	54.71 17	34.86 9	42.58 0	42.13 36
22	35.19 27	19.17 28	54.88 16	34.95 10	42.58 1	41.77 37
23	35.46 28	19.45 29	55.04 16	35.05 12	42.59 2	41.40 39
24	35.74 26	19.74 31	55.20 17	35.17 14	42.61 3	41.01 39
25	36.00 24	20.05 33	55.37 17	35.31 16	42.64 4	40.62 39
26	36.24 22	20.38 34	55.54 16	35.47 17	42.68 4	40.23 39
27	36.46 19	20.72 34	55.70 15	35.64 19	42.72 6	39.84 38
28	36.65 16	21.06 34	55.85 14	35.83 20	42.78 5	39.46 35
29	36.81 13	21.40 32	55.99 13	36.03 19	42.83 6	39.11 33
30	36.94 11	21.72 32	56.12 13	36.22 19	42.89 6	38.78 31
31	37.05 10	22.04 30	56.25 12	36.41 17	42.95 6	38.47 30
32	37.15	22.34	56.37	36.58	43.01	38.17
O. K.	+ 0°.43	cos φ	+ 0°.15	cos φ	+ 0°.16	cos φ
U. K.	- 0°.43	cos φ	- 0°.15	cos φ	- 0°.16	cos φ

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		76 Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18 <sup>h</sup> 0 <sup>m</sup>	+ 86° 36'	19 <sup>h</sup> 7 <sup>m</sup>	+ 89° 0'	20 <sup>h</sup> 48 <sup>m</sup>	+ 82° 12'
Jan. 1	18.91	40.13	21.44	28.69	51.09	25.77
2	18.87	39.79	20.94	28.40	50.98	25.57
3	18.83	39.44	20.40	28.10	50.87	25.35
4	18.81	39.07	19.86	27.79	50.75	25.10
5	18.80	38.69	19.36	27.45	50.63	24.84
	2	39	44	35	11	29
6	18.82	38.30	18.92	27.10	50.52	24.55
	6	37	36	37	10	30
7	18.88	37.93	18.56	26.73	50.42	24.25
8	18.95	37.56	18.29	26.36	50.32	23.93
9	19.04	37.21	18.12	26.00	50.23	23.62
10	19.14	36.88	18.01	25.65	50.16	23.30
11	19.24	36.57	17.93	25.01	50.10	23.00
12	19.34	36.27	17.90	24.71	50.04	22.71
13	19.42	35.98	17.84	24.42	49.99	22.42
14	19.50	35.69	17.74	24.12	49.93	22.15
15	19.58	35.38	17.60	23.81	49.86	21.89
16	19.65	35.06	17.45	23.49	49.79	21.62
17	19.73	34.73	17.31	23.15	49.72	21.33
18	19.82	34.38	17.22	22.80	49.65	21.03
19	19.93	34.02	17.20	22.44	49.57	20.71
20	20.07	33.66	17.26	22.07	49.50	20.37
21	20.24	33.32	17.40	21.70	49.44	20.02
22	20.43	32.99	17.62	21.34	49.39	19.66
23	20.62	32.67	17.90	21.00	49.35	19.31
24	20.82	32.38	18.20	20.68	49.32	18.96
	19	27	31	31	2	33
25	21.01	32.11	18.51	20.37	49.30	18.63
26	21.19	31.84	18.80	20.09	49.28	18.32
27	21.36	31.59	19.05	19.81	49.27	18.01
28	21.52	31.33	19.25	19.52	49.25	17.72
29	21.67	31.06	19.41	19.23	49.22	17.43
	15	28	15	30	4	29
30	21.82	30.78	19.56	18.93	49.18	17.14
	15	30	17	32	4	31
31	21.97	30.48	19.73	18.61	49.14	16.83
Febr. 1	22.15	30.17	19.95	18.28	49.10	16.52
2	22.35	29.86	20.24	17.94	49.07	16.18
3	22.57	29.55	20.62	17.59	49.02	15.47
4	22.81	29.26	21.09	17.24	49.02	15.10
5	23.07	28.98	21.64	16.91	49.03	14.74
0. K.	+ 0°.36 cos φ		+ 1°.23 cos φ		+ 0°.16 cos φ	
U. K.	- 0°.36 cos φ		- 1°.23 cos φ		- 0°.16 cos φ	

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		76 Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 7 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 48 <sup>m</sup>	+82° 12'
Febr. 5	23.07 28	28.98 25	21.64 61	16.91 30	49.03 1	14.74 35
6	23.35 28	28.73 24	22.25 64	16.61 28	49.04 3	14.39 34
7	23.63 27	28.49 21	22.89 64	16.33 27	49.07 3	14.05 32
8	23.90 26	28.28 20	23.53 62	16.06 26	49.10 2	13.73 31
9	24.16 26	28.08 21	24.15 58	15.80 25	49.12 1	13.42 30
10	24.42 24	27.87 20	24.73 54	15.55 25	49.13 2	13.12 29
11	24.66 24	27.67 21	25.27 51	15.30 26	49.15 2	12.83 30
12	24.90 24	27.46 22	25.78 51	15.04 27	49.17 1	12.53 31
13	25.14 25	27.24 24	26.29 54	14.77 29	49.18 1	12.22 33
14	25.39 27	27.00 24	26.83 58	14.48 30	49.19 1	11.89 35
15	25.66 29	26.76 25	27.41 66	14.18 31	49.20 2	11.54 35
16	25.95 31	26.51 24	28.07 74	13.87 30	49.22 3	11.19 36
17	26.26 32	26.27 23	28.81 82	13.57 29	49.25 4	10.83 36
18	26.58 34	26.04 20	29.63 88	13.28 27	49.29 5	10.47 35
19	26.92 35	25.84 18	30.51 91	13.01 25	49.34 6	10.12 34
20	27.27 34	25.66 16	31.42 92	12.76 24	49.40 7	9.78 31
21	27.61 33	25.50 13	32.34 90	12.52 21	49.47 6	9.47 29
22	27.94 30	25.37 13	33.24 86	12.31 20	49.53 6	9.18 27
23	28.24 30	25.24 13	34.10 80	12.11 19	49.59 6	8.91 27
24	28.54 28	25.11 13	34.90 76	11.92 20	49.65 6	8.64 26
25	28.82 28	24.98 14	35.66 73	11.72 20	49.71 5	8.38 27
26	29.10 28	24.84 16	36.39 72	11.52 22	49.76 4	8.11 28
27	29.38 29	24.68 16	37.11 75	11.30 22	49.80 5	7.83 30
28	29.67 31	24.52 17	37.86 81	11.08 24	49.85 5	7.53 31
29	29.98 33	24.35 16	38.67 89	10.84 24	49.90 6	7.22 32
März 1	30.31 35	24.19 16	39.56 96	10.60 23	49.96 7	6.90 33
2	30.66 37	24.03 13	40.52 104	10.37 22	50.03 9	6.57 32
3	31.03 38	23.90 11	41.56 110	10.15 21	50.12 9	6.25 31
4	31.41 38	23.79 9	42.66 113	9.94 18	50.21 9	5.94 28
5	31.79 37	23.70 7	43.79 114	9.76 15	50.30 11	5.66 26
6	32.16 36	23.63 5	44.93 111	9.61 13	50.41 11	5.40 25
7	32.52 35	23.58 4	46.04 106	9.48 13	50.52 10	5.15 24
8	32.87 35	23.54 5	47.10 101	9.35 13	50.62 10	4.91 22
9	33.20 33	23.49 5	48.11 97	9.22 12	50.72 9	4.69 23
10	33.52 32	23.44 6	49.08 95	9.10 14	50.81 9	4.46 23
11	33.84 32	23.38 7	50.03 96	8.96 15	50.90 9	4.23 24
12	34.16 34	23.31 8	50.99 99	8.81 16	50.99 9	3.99 26
13	34.50 34	23.23	51.98	8.65	51.08	3.73
O. K.	+ 0°.36 cos φ		+ 1°.23 cos φ		+ 0°.16 cos φ	
U. K.	— 0°.36 cos φ		— 1°.23 cos φ		— 0°.16 cos φ	

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		76 Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 7 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 48 <sup>m</sup>	+82° 11'
März 13	34.50	23.23 8	51.98	8.65 17	51.08	63.73 27
14	34.85	23.15 8	53.02	8.48 17	51.17	63.46 26
15	35.22	23.07 6	54.12	8.31 16	51.27	63.20 27
16	35.60	23.01 5	55.29	8.15 13	51.38	62.93 26
17	36.00	22.96 2	56.53	8.02 12	51.50	62.67 24
18	36.40	22.94 1	57.81	7.90 10	51.62	62.43 22
19	36.80	22.95 2	59.08	7.80 7	51.76	62.21 20
20	37.18	22.97 4	60.33	7.73 5	51.90	62.01 17
21	37.54	23.01 5	61.53	7.68 5	52.03	61.84 17
22	37.88	23.06 5	62.68	7.63 4	52.16	61.67 15
23	38.20	23.10 4	63.76	7.59 4	52.28	61.52 15
24	38.52	23.14 2	64.79	7.55 5	52.39	61.37 16
25	38.82	23.16 1	65.79	7.50 7	52.51	61.21 18
26	39.14	23.17 1	66.80	7.43 8	52.62	61.03 18
27	39.46	23.18 1	67.84	7.35 8	52.73	60.85 18
28	39.80	23.19 1	68.94	7.27 8	52.84	60.67 19
29	40.15	23.20 3	70.11	7.19 7	52.97	60.48 19
30	40.52	23.23 5	71.34	7.12 4	53.10	60.29 18
31	40.90	23.28 8	72.62	7.08 3	53.25	60.11 15
April 1	41.29	23.36 10	73.93	7.05 0	53.41	59.96 14
2	41.66	23.46 11	75.25	7.05 2	53.57	59.82 12
3	42.03	23.57 13	76.54	7.07 3	53.73	59.70 10
4	42.37	23.70 13	77.78	7.10 5	53.89	59.60 9
5	42.70	23.83 13	78.95	7.15 7	54.04	59.51 7
6	43.01	23.96 13	80.07	7.19 3	54.18	59.44 8
7	43.30	24.08 10	81.15	7.22 2	54.31	59.36 10
8	43.60	24.18 10	82.20	7.24 1	54.45	59.26 11
9	43.90	24.28 9	83.26	7.25 1	54.58	59.15 11
10	44.21	24.37 8	84.35	7.26 0	54.72	59.04 12
11	44.54	24.45 9	85.50	7.26 1	54.86	58.92 12
12	44.88	24.54 12	86.71	7.27 2	55.01	58.80 12
13	45.24	24.66 14	87.97	7.29 4	55.16	58.68 10
14	45.59	24.80 16	89.25	7.33 6	55.32	58.58 7
15	45.94	24.96 18	90.54	7.39 9	55.49	58.51 6
16	46.26	25.14 20	91.81	7.48 11	55.66	58.45 3
17	46.58	25.34 21	93.04	7.59 12	55.83	58.42 0
18	46.88	25.55 20	94.19	7.71 13	56.00	58.42 1
19	47.15	25.75	95.26	7.84	56.16	58.43
O. K.	+ 0°.36 cos φ		+ 1°.22 cos φ		+ 0°.16 cos φ	
U. K.	— 0°.36 cos φ		— 1°.22 cos φ		— 0°.16 cos φ	

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		76 Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 8 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 48 <sup>m</sup>	+82° 11'
April 19	47.15 <sup>25</sup>	25.75 <sup>19</sup>	35.26 <sup>100</sup>	7.84 <sup>12</sup>	56.16 <sup>15</sup>	58.43 <sup>1</sup>
20	47.40 <sup>23</sup>	25.94 <sup>19</sup>	36.26 <sup>95</sup>	7.96 <sup>11</sup>	56.31 <sup>14</sup>	58.44 <sup>1</sup>
21	47.63 <sup>24</sup>	26.13 <sup>17</sup>	37.21 <sup>94</sup>	8.07 <sup>11</sup>	56.45 <sup>14</sup>	58.45 <sup>1</sup>
22	47.87 <sup>24</sup>	26.30 <sup>17</sup>	38.15 <sup>94</sup>	8.18 <sup>9</sup>	56.59 <sup>14</sup>	58.44 <sup>1</sup>
23	48.11 <sup>25</sup>	26.47 <sup>16</sup>	39.09 <sup>98</sup>	8.27 <sup>9</sup>	56.73 <sup>14</sup>	58.43 <sup>2</sup>
24	48.36 <sup>27</sup>	26.63 <sup>16</sup>	40.07 <sup>103</sup>	8.36 <sup>8</sup>	56.87 <sup>15</sup>	58.41 <sup>2</sup>
25	48.63 <sup>28</sup>	26.79 <sup>18</sup>	41.10 <sup>108</sup>	8.44 <sup>10</sup>	57.02 <sup>15</sup>	58.39 <sup>2</sup>
26	48.91 <sup>29</sup>	26.97 <sup>19</sup>	42.18 <sup>114</sup>	8.54 <sup>10</sup>	57.17 <sup>16</sup>	58.37 <sup>2</sup>
27	49.20 <sup>29</sup>	27.16 <sup>21</sup>	43.32 <sup>116</sup>	8.64 <sup>13</sup>	57.33 <sup>16</sup>	58.35 <sup>0</sup>
28	49.49 <sup>28</sup>	27.37 <sup>23</sup>	44.48 <sup>116</sup>	8.77 <sup>15</sup>	57.49 <sup>18</sup>	58.35 <sup>2</sup>
29	49.77 <sup>28</sup>	27.60 <sup>25</sup>	45.64 <sup>114</sup>	8.92 <sup>17</sup>	57.67 <sup>18</sup>	58.37 <sup>5</sup>
Mai 1	50.05 <sup>25</sup>	27.85 <sup>27</sup>	46.78 <sup>109</sup>	9.09 <sup>19</sup>	57.85 <sup>17</sup>	58.42 <sup>8</sup>
2	50.30 <sup>23</sup>	28.12 <sup>27</sup>	47.87 <sup>102</sup>	9.28 <sup>20</sup>	58.02 <sup>16</sup>	58.50 <sup>8</sup>
3	50.74 <sup>19</sup>	28.66 <sup>25</sup>	49.83 <sup>94</sup>	9.68 <sup>19</sup>	58.33 <sup>16</sup>	58.66 <sup>10</sup>
4	50.93 <sup>18</sup>	28.91 <sup>24</sup>	50.71 <sup>83</sup>	9.87 <sup>18</sup>	58.49 <sup>15</sup>	58.76 <sup>9</sup>
5	51.11 <sup>19</sup>	29.15 <sup>24</sup>	51.54 <sup>82</sup>	10.05 <sup>17</sup>	58.64 <sup>13</sup>	58.85 <sup>7</sup>
6	51.30 <sup>19</sup>	29.39 <sup>21</sup>	52.36 <sup>84</sup>	10.22 <sup>16</sup>	58.77 <sup>14</sup>	58.92 <sup>6</sup>
7	51.49 <sup>20</sup>	29.60 <sup>21</sup>	53.20 <sup>88</sup>	10.38 <sup>15</sup>	58.91 <sup>15</sup>	58.98 <sup>5</sup>
8	51.69 <sup>22</sup>	29.81 <sup>23</sup>	54.08 <sup>92</sup>	10.53 <sup>15</sup>	59.06 <sup>15</sup>	59.03 <sup>5</sup>
9	51.91 <sup>22</sup>	30.04 <sup>23</sup>	55.00 <sup>97</sup>	10.68 <sup>17</sup>	59.21 <sup>15</sup>	59.08 <sup>5</sup>
10	52.13 <sup>23</sup>	30.27 <sup>25</sup>	55.97 <sup>99</sup>	10.85 <sup>18</sup>	59.36 <sup>16</sup>	59.13 <sup>7</sup>
11	52.36 <sup>23</sup>	30.52 <sup>27</sup>	56.96 <sup>101</sup>	11.03 <sup>20</sup>	59.52 <sup>16</sup>	59.20 <sup>8</sup>
12	52.59 <sup>21</sup>	30.79 <sup>29</sup>	57.97 <sup>99</sup>	11.23 <sup>22</sup>	59.68 <sup>17</sup>	59.28 <sup>11</sup>
13	52.80 <sup>19</sup>	31.08 <sup>30</sup>	58.96 <sup>93</sup>	11.45 <sup>24</sup>	59.85 <sup>17</sup>	59.39 <sup>13</sup>
14	52.99 <sup>16</sup>	31.38 <sup>32</sup>	59.89 <sup>85</sup>	11.69 <sup>26</sup>	60.02 <sup>16</sup>	59.52 <sup>15</sup>
15	53.15 <sup>14</sup>	31.70 <sup>32</sup>	60.74 <sup>77</sup>	11.95 <sup>27</sup>	60.18 <sup>16</sup>	59.67 <sup>17</sup>
16	53.29 <sup>12</sup>	32.02 <sup>31</sup>	61.51 <sup>69</sup>	12.22 <sup>26</sup>	60.34 <sup>15</sup>	59.84 <sup>17</sup>
17	53.41 <sup>10</sup>	32.33 <sup>30</sup>	62.20 <sup>63</sup>	12.48 <sup>25</sup>	60.49 <sup>13</sup>	60.01 <sup>18</sup>
18	53.51 <sup>9</sup>	32.63 <sup>27</sup>	62.83 <sup>59</sup>	12.73 <sup>24</sup>	60.62 <sup>12</sup>	60.19 <sup>17</sup>
19	53.60 <sup>9</sup>	32.90 <sup>27</sup>	63.42 <sup>57</sup>	12.97 <sup>23</sup>	60.74 <sup>12</sup>	60.36 <sup>15</sup>
20	53.69 <sup>11</sup>	33.17 <sup>25</sup>	63.99 <sup>58</sup>	13.20 <sup>22</sup>	60.86 <sup>13</sup>	60.51 <sup>15</sup>
21	53.80 <sup>11</sup>	33.42 <sup>26</sup>	64.57 <sup>62</sup>	13.42 <sup>22</sup>	60.99 <sup>12</sup>	60.66 <sup>14</sup>
22	53.91 <sup>12</sup>	33.68 <sup>26</sup>	65.19 <sup>67</sup>	13.64 <sup>21</sup>	61.11 <sup>13</sup>	60.80 <sup>14</sup>
23	54.03 <sup>14</sup>	33.94 <sup>27</sup>	65.86 <sup>72</sup>	13.85 <sup>22</sup>	61.24 <sup>15</sup>	60.94 <sup>14</sup>
24	54.17 <sup>13</sup>	34.21 <sup>29</sup>	66.58 <sup>75</sup>	14.07 <sup>24</sup>	61.39 <sup>15</sup>	61.08 <sup>15</sup>
25	54.30 <sup>14</sup>	34.50 <sup>31</sup>	67.33 <sup>76</sup>	14.31 <sup>26</sup>	61.54 <sup>15</sup>	61.23 <sup>17</sup>
26	54.44	34.81	68.09	14.57	61.69	61.40
O. K.	+ 0 <sup>s</sup> .36 cos φ		+ 1 <sup>s</sup> .23 cos φ		+ 0 <sup>s</sup> .16 cos φ	
U. K.	- 0 <sup>s</sup> .36 cos φ		- 1 <sup>s</sup> .23 cos φ		- 0 <sup>s</sup> .16 cos φ	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		76 Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 9 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 49 <sup>m</sup>	+82° 12'
Mai 26	54.44 12	34.81 33	8.09	14.57 29	1.69 15	1.40 19
27	54.56 10	35.14 34	8.82 73	14.86 30	1.84 14	1.59 21
28	54.66 8	35.48 35	9.49 60	15.16 31	1.98 15	1.80 23
29	54.74 5	35.83 35	10.09 53	15.47 31	2.13 13	2.03 25
30	54.79 4	36.18 33	10.62 46	15.78 30	2.26 13	2.28 25
Juni 31	54.83 3	36.51 32	11.08	16.08	2.39 12	2.53 24
1	54.86 2	36.83 29	11.48 40	16.38 30	2.51 10	2.77 23
2	54.88 1	37.12 29	11.84 36	16.67 26	2.61 10	3.00 21
3	54.89 4	37.41 28	12.19 38	16.93 25	2.71 11	3.21 21
4	54.93 4	37.69 28	12.57 42	17.18 25	2.82	3.42
5	54.97 6	37.97 28	12.99 47	17.43 26	2.94 12	3.61 19
6	55.03 6	38.25 30	13.46 50	17.69 26	3.06 12	3.80 21
7	55.09 5	38.55 31	13.96 50	17.95 29	3.18 13	4.01 22
8	55.14 5	38.86 33	14.46 49	18.24 31	3.31 12	4.23 24
9	55.19 3	39.19 35	14.95 45	18.55 32	3.43 13	4.47 27
10	55.22 0	39.54 35	15.40 38	18.87 35	3.56 13	4.74 28
11	55.22 2	39.89 36	15.78 29	19.22 34	3.69 12	5.02 29
12	55.20 5	40.25 36	16.07 20	19.56 35	3.81 10	5.31 31
13	55.15 5	40.61 34	16.27 13	19.91 33	3.91 9	5.62 30
14	55.08 7	40.95 32	16.40 6	20.24 32	4.00 8	5.92 30
15	55.00 8	41.27 30	16.46 3	20.56 31	4.08 8	6.22 29
16	54.92 7	41.57 29	16.49 4	20.87 29	4.16 8	6.51 28
17	54.85 7	41.86 28	16.53 6	21.16 28	4.24 8	6.79 27
18	54.78 6	42.14 28	16.59 11	21.44 28	4.32 8	7.06 26
19	54.72 4	42.42 29	16.70 15	21.72 29	4.40 8	7.32 26
20	54.68 3	42.71 29	16.85 19	22.01 30	4.48 10	7.58 27
21	54.65 4	43.00 32	17.04 19	22.31 31	4.58 10	7.85 28
22	54.61 5	43.32 34	17.23 19	22.62 33	4.68 9	8.13 29
23	54.56 7	43.66 34	17.42 14	22.95 35	4.77 10	8.42 32
24	54.49 9	44.00 36	17.56 6	23.30 36	4.87 9	8.74 34
25	54.40 12	44.36 35	17.62 1	23.66 37	4.96 9	9.08 34
26	54.28 13	44.71 34	17.61 9	24.03 36	5.05 7	9.42 34
27	54.15 15	45.05 33	17.52 15	24.39 34	5.12 6	9.76 35
28	54.00 15	45.38 30	17.37 20	24.73 33	5.18 6	10.11 34
29	53.85 16	45.68 29	17.17 23	25.06 31	5.24 5	10.45 32
30	53.69 14	45.97 28	16.94 21	25.37 30	5.29 5	10.77 30
Juli 1	53.55 14	46.25 27	16.73 17	25.67 29	5.34 5	11.07 30
2	53.41	46.52	16.56	25.96	5.39	11.37
O. K.	+ 0°.36 cos φ		+ 1°.23 cos φ		+ 0°.16 cos φ	
U. K.	— 0.36 cos φ		— 1.23 cos φ		— 0.16 cos φ	

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		γ Draconis. 6 <sup>m</sup> .0.		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 8 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 49 <sup>m</sup>	+82° 12'	
Juli	2	53.41 <sub>12</sub>	46.52 <sub>26</sub>	76.56 <sub>13</sub>	25.96 <sub>28</sub>	5.39 <sub>6</sub>	11.37 <sub>23</sub>
	3	53.29 <sub>11</sub>	46.78 <sub>27</sub>	76.43 <sub>10</sub>	26.24 <sub>29</sub>	5.45 <sub>5</sub>	11.65 <sub>29</sub>
	4	53.18 <sub>11</sub>	47.05 <sub>29</sub>	76.33 <sub>7</sub>	26.53 <sub>31</sub>	5.50 <sub>6</sub>	11.94 <sub>31</sub>
	5	53.07 <sub>12</sub>	47.34 <sub>31</sub>	76.26 <sub>8</sub>	26.84 <sub>33</sub>	5.56 <sub>7</sub>	12.25 <sub>32</sub>
	6	52.95 <sub>14</sub>	47.65 <sub>32</sub>	76.18 <sub>11</sub>	27.17 <sub>34</sub>	5.63 <sub>7</sub>	12.57 <sub>34</sub>
	7	52.81 <sub>16</sub>	47.97 <sub>34</sub>	76.07 <sub>17</sub>	27.51 <sub>35</sub>	5.70 <sub>6</sub>	12.91 <sub>36</sub>
	8	52.65 <sub>18</sub>	48.31 <sub>33</sub>	75.90 <sub>25</sub>	27.86 <sub>37</sub>	5.76 <sub>6</sub>	13.27 <sub>37</sub>
	9	52.47 <sub>21</sub>	48.64 <sub>32</sub>	75.65 <sub>35</sub>	28.23 <sub>36</sub>	5.82 <sub>4</sub>	13.64 <sub>38</sub>
	10	52.26 <sub>23</sub>	48.96 <sub>32</sub>	75.30 <sub>44</sub>	28.59 <sub>36</sub>	5.86 <sub>3</sub>	14.02 <sub>39</sub>
	11	52.03 <sub>25</sub>	49.28 <sub>30</sub>	74.86 <sub>50</sub>	28.95 <sub>34</sub>	5.89 <sub>3</sub>	14.41 <sub>38</sub>
	12	51.78 <sub>24</sub>	49.58 <sub>28</sub>	74.36 <sub>54</sub>	29.29 <sub>33</sub>	5.92 <sub>1</sub>	14.79 <sub>37</sub>
	13	51.54 <sub>25</sub>	49.86 <sub>25</sub>	73.82 <sub>55</sub>	29.62 <sub>31</sub>	5.93 <sub>1</sub>	15.16 <sub>35</sub>
	14	51.29 <sub>24</sub>	50.11 <sub>25</sub>	73.27 <sub>53</sub>	29.93 <sub>28</sub>	5.94 <sub>1</sub>	15.51 <sub>34</sub>
	15	51.05 <sub>23</sub>	50.36 <sub>24</sub>	72.74 <sub>50</sub>	30.21 <sub>29</sub>	5.95 <sub>1</sub>	15.85 <sub>33</sub>
	16	50.82 <sub>21</sub>	50.60 <sub>23</sub>	72.24 <sub>45</sub>	30.50 <sub>28</sub>	5.96 <sub>2</sub>	16.18 <sub>31</sub>
	17	50.61 <sub>21</sub>	50.83 <sub>25</sub>	71.79 <sub>40</sub>	30.78 <sub>30</sub>	5.98 <sub>3</sub>	16.49 <sub>32</sub>
	18	50.40 <sub>19</sub>	51.08 <sub>26</sub>	71.39 <sub>39</sub>	31.08 <sub>30</sub>	6.01 <sub>3</sub>	16.81 <sub>33</sub>
	19	50.21 <sub>20</sub>	51.34 <sub>29</sub>	71.00 <sub>39</sub>	31.38 <sub>32</sub>	6.04 <sub>2</sub>	17.14 <sub>34</sub>
	20	50.01 <sub>22</sub>	51.63 <sub>29</sub>	70.61 <sub>42</sub>	31.70 <sub>34</sub>	6.06 <sub>3</sub>	17.48 <sub>36</sub>
	21	49.79 <sub>24</sub>	51.92 <sub>30</sub>	70.19 <sub>48</sub>	32.04 <sub>35</sub>	6.09 <sub>3</sub>	17.84 <sub>39</sub>
	22	49.55 <sub>26</sub>	52.22 <sub>30</sub>	69.71 <sub>55</sub>	32.39 <sub>35</sub>	6.12 <sub>2</sub>	18.23 <sub>39</sub>
	23	49.29 <sub>28</sub>	52.52 <sub>29</sub>	69.16 <sub>63</sub>	32.74 <sub>34</sub>	6.14 <sub>0</sub>	18.62 <sub>40</sub>
	24	49.01 <sub>30</sub>	52.81 <sub>27</sub>	68.53 <sub>70</sub>	33.08 <sub>34</sub>	6.14 <sub>0</sub>	19.02 <sub>39</sub>
	25	48.71 <sub>31</sub>	53.08 <sub>26</sub>	67.83 <sub>76</sub>	33.42 <sub>32</sub>	6.14 <sub>1</sub>	19.41 <sub>38</sub>
	26	48.40 <sub>31</sub>	53.34 <sub>23</sub>	67.07 <sub>78</sub>	33.74 <sub>30</sub>	6.13 <sub>3</sub>	19.79 <sub>38</sub>
	27	48.09 <sub>31</sub>	53.57 <sub>21</sub>	66.29 <sub>78</sub>	34.04 <sub>28</sub>	6.10 <sub>2</sub>	20.17 <sub>35</sub>
	28	47.78 <sub>30</sub>	53.78 <sub>20</sub>	65.51 <sub>75</sub>	34.32 <sub>28</sub>	6.08 <sub>2</sub>	20.52 <sub>33</sub>
	29	47.48 <sub>27</sub>	53.98 <sub>20</sub>	64.76 <sub>70</sub>	34.60 <sub>25</sub>	6.06 <sub>1</sub>	20.85 <sub>33</sub>
	30	47.21 <sub>27</sub>	54.18 <sub>20</sub>	64.06 <sub>66</sub>	34.85 <sub>26</sub>	6.05 <sub>1</sub>	21.18 <sub>32</sub>
	31	46.94 <sub>26</sub>	54.38 <sub>21</sub>	63.40 <sub>64</sub>	35.11 <sub>28</sub>	6.04 <sub>1</sub>	21.50 <sub>32</sub>
Aug.	1	46.68 <sub>26</sub>	54.59 <sub>23</sub>	62.76 <sub>63</sub>	35.39 <sub>28</sub>	6.03 <sub>1</sub>	21.82 <sub>34</sub>
	2	46.42 <sub>27</sub>	54.82 <sub>25</sub>	62.13 <sub>64</sub>	35.67 <sub>30</sub>	6.02 <sub>0</sub>	22.16 <sub>35</sub>
	3	46.15 <sub>29</sub>	55.07 <sub>25</sub>	61.49 <sub>69</sub>	35.97 <sub>32</sub>	6.02 <sub>0</sub>	22.51 <sub>37</sub>
	4	45.86 <sub>31</sub>	55.32 <sub>26</sub>	60.80 <sub>77</sub>	36.29 <sub>33</sub>	6.02 <sub>2</sub>	22.88 <sub>39</sub>
	5	45.55 <sub>33</sub>	55.58 <sub>25</sub>	60.03 <sub>85</sub>	36.62 <sub>32</sub>	6.00 <sub>2</sub>	23.27 <sub>40</sub>
	6	45.22 <sub>36</sub>	55.83 <sub>24</sub>	59.18 <sub>93</sub>	36.94 <sub>32</sub>	5.98 <sub>3</sub>	23.67 <sub>40</sub>
	7	44.86 <sub>38</sub>	56.07 <sub>22</sub>	58.25 <sub>100</sub>	37.26 <sub>30</sub>	5.95 <sub>5</sub>	24.07 <sub>40</sub>
	8	44.48	56.29	57.25	37.56 <sub>30</sub>	5.90	24.47
O. K.	+ 0°.36 cos φ		+ 1°.23 cos φ		+ 0°.16 cos φ		
U. K.	— 0°.36 cos φ		— 1°.23 cos φ		— 0°.16 cos φ		

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		76 Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 8 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 49 <sup>m</sup>	+82° 12'
Aug. 8	44.48 <sup>38</sup>	56.29 <sup>19</sup>	57.25 <sup>106</sup>	37.56 <sup>29</sup>	5.90 <sup>6</sup>	24.47 <sup>38</sup>
9	44.10 <sup>38</sup>	56.48 <sup>18</sup>	56.19 <sup>108</sup>	37.85 <sup>27</sup>	5.84 <sup>6</sup>	24.85 <sup>37</sup>
10	43.72 <sup>37</sup>	56.66 <sup>17</sup>	55.11 <sup>106</sup>	38.12 <sup>26</sup>	5.78 <sup>6</sup>	25.22 <sup>35</sup>
11	43.35 <sup>36</sup>	56.83 <sup>15</sup>	54.05 <sup>103</sup>	38.38 <sup>24</sup>	5.72 <sup>6</sup>	25.57 <sup>34</sup>
12	42.99 <sup>35</sup>	56.98 <sup>15</sup>	53.02 <sup>97</sup>	38.62 <sup>23</sup>	5.66 <sup>5</sup>	25.91 <sup>32</sup>
13	42.64 <sup>34</sup>	57.13 <sup>15</sup>	52.05 <sup>93</sup>	38.85 <sup>22</sup>	5.61 <sup>5</sup>	26.23 <sup>33</sup>
14	42.30 <sup>32</sup>	57.28 <sup>17</sup>	51.12 <sup>90</sup>	39.07 <sup>24</sup>	5.56 <sup>5</sup>	26.56 <sup>33</sup>
15	41.98 <sup>33</sup>	57.45 <sup>18</sup>	50.22 <sup>88</sup>	39.31 <sup>26</sup>	5.51 <sup>4</sup>	26.89 <sup>34</sup>
16	41.65 <sup>33</sup>	57.63 <sup>19</sup>	49.34 <sup>91</sup>	39.57 <sup>28</sup>	5.47 <sup>4</sup>	27.23 <sup>36</sup>
17	41.32 <sup>35</sup>	57.82 <sup>21</sup>	48.43 <sup>95</sup>	39.85 <sup>28</sup>	5.43 <sup>5</sup>	27.59 <sup>36</sup>
18	40.97 <sup>37</sup>	58.03 <sup>20</sup>	47.48 <sup>101</sup>	40.13 <sup>29</sup>	5.38 <sup>5</sup>	27.95 <sup>38</sup>
19	40.60 <sup>38</sup>	58.23 <sup>19</sup>	46.47 <sup>107</sup>	40.42 <sup>29</sup>	5.33 <sup>5</sup>	28.33 <sup>39</sup>
20	40.22 <sup>41</sup>	58.42 <sup>18</sup>	45.40 <sup>116</sup>	40.71 <sup>27</sup>	5.28 <sup>7</sup>	28.72 <sup>38</sup>
21	39.81 <sup>42</sup>	58.60 <sup>16</sup>	44.24 <sup>122</sup>	40.98 <sup>26</sup>	5.21 <sup>8</sup>	29.10 <sup>37</sup>
22	39.39 <sup>42</sup>	58.76 <sup>14</sup>	43.02 <sup>124</sup>	41.24 <sup>24</sup>	5.13 <sup>8</sup>	29.47 <sup>35</sup>
23	38.97 <sup>42</sup>	58.90 <sup>11</sup>	41.78 <sup>124</sup>	41.48 <sup>22</sup>	5.05 <sup>10</sup>	29.82 <sup>33</sup>
24	38.55 <sup>40</sup>	59.01 <sup>11</sup>	40.54 <sup>122</sup>	41.70 <sup>20</sup>	4.95 <sup>9</sup>	30.15 <sup>32</sup>
25	38.15 <sup>39</sup>	59.12 <sup>9</sup>	39.32 <sup>118</sup>	41.90 <sup>19</sup>	4.86 <sup>9</sup>	30.47 <sup>31</sup>
26	37.76 <sup>38</sup>	59.21 <sup>9</sup>	38.14 <sup>112</sup>	42.09 <sup>18</sup>	4.77 <sup>9</sup>	30.78 <sup>30</sup>
27	37.38 <sup>36</sup>	59.30 <sup>10</sup>	37.02 <sup>109</sup>	42.27 <sup>19</sup>	4.68 <sup>9</sup>	31.08 <sup>29</sup>
28	37.02 <sup>35</sup>	59.40 <sup>11</sup>	35.93 <sup>106</sup>	42.46 <sup>20</sup>	4.61 <sup>8</sup>	31.37 <sup>30</sup>
29	36.67 <sup>36</sup>	59.51 <sup>12</sup>	34.87 <sup>106</sup>	42.66 <sup>21</sup>	4.53 <sup>7</sup>	31.67 <sup>32</sup>
30	36.31 <sup>37</sup>	59.63 <sup>14</sup>	33.81 <sup>109</sup>	42.87 <sup>23</sup>	4.46 <sup>7</sup>	31.99 <sup>33</sup>
31	35.94 <sup>39</sup>	59.77 <sup>15</sup>	32.72 <sup>115</sup>	43.10 <sup>24</sup>	4.39 <sup>7</sup>	32.32 <sup>35</sup>
Sept. 1	35.55 <sup>41</sup>	59.92 <sup>14</sup>	31.57 <sup>123</sup>	43.34 <sup>24</sup>	4.32 <sup>9</sup>	32.67 <sup>36</sup>
2	35.14 <sup>44</sup>	60.06 <sup>13</sup>	30.34 <sup>131</sup>	43.58 <sup>24</sup>	4.23 <sup>10</sup>	33.03 <sup>37</sup>
3	34.70 <sup>45</sup>	60.19 <sup>11</sup>	29.03 <sup>138</sup>	43.82 <sup>22</sup>	4.13 <sup>11</sup>	33.40 <sup>35</sup>
4	34.25 <sup>46</sup>	60.30 <sup>9</sup>	27.65 <sup>143</sup>	44.04 <sup>20</sup>	4.02 <sup>11</sup>	33.75 <sup>35</sup>
5	33.79 <sup>47</sup>	60.39 <sup>7</sup>	26.22 <sup>146</sup>	44.24 <sup>19</sup>	3.91 <sup>12</sup>	34.10 <sup>33</sup>
6	33.32 <sup>45</sup>	60.46 <sup>5</sup>	24.76 <sup>146</sup>	44.43 <sup>16</sup>	3.79 <sup>13</sup>	34.43 <sup>31</sup>
7	32.87 <sup>44</sup>	60.51 <sup>4</sup>	23.30 <sup>142</sup>	44.59 <sup>15</sup>	3.66 <sup>13</sup>	34.74 <sup>29</sup>
8	32.43 <sup>42</sup>	60.55 <sup>3</sup>	21.88 <sup>137</sup>	44.74 <sup>14</sup>	3.53 <sup>12</sup>	35.03 <sup>29</sup>
9	32.01 <sup>41</sup>	60.58 <sup>2</sup>	20.51 <sup>131</sup>	44.88 <sup>13</sup>	3.41 <sup>12</sup>	35.32 <sup>27</sup>
10	31.60 <sup>40</sup>	60.60 <sup>2</sup>	19.20 <sup>127</sup>	45.01 <sup>15</sup>	3.29 <sup>10</sup>	35.59 <sup>27</sup>
11	31.20 <sup>39</sup>	60.64 <sup>4</sup>	17.93 <sup>124</sup>	45.16 <sup>15</sup>	3.19 <sup>11</sup>	35.86 <sup>28</sup>
12	30.81 <sup>39</sup>	60.70 <sup>7</sup>	16.69 <sup>124</sup>	45.31 <sup>17</sup>	3.08 <sup>10</sup>	36.14 <sup>28</sup>
13	30.42 <sup>41</sup>	60.77 <sup>8</sup>	15.45 <sup>127</sup>	45.48 <sup>17</sup>	2.98 <sup>10</sup>	36.42 <sup>30</sup>
14	30.01 <sup>41</sup>	60.85 <sup></sup>	14.18 <sup></sup>	45.65 <sup></sup>	2.88 <sup></sup>	36.72 <sup></sup>
O. K.	+ 0°.36 cos φ		+ 1°.24 cos φ		+ 0°.16 cos φ	
U. K.	— 0°.36 cos φ		— 1°.24 cos φ		— 0°.16 cos φ	

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		γ Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 7 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 48 <sup>m</sup>	+82° 12'
Sept. 14	30.01 <sup>42</sup>	60.85 <sup>8</sup>	74.18 <sup>132</sup>	45.65 <sup>19</sup>	62.88 <sup>11</sup>	36.72 <sup>32</sup>
15	29.59 <sup>44</sup>	60.93 <sup>7</sup>	72.86 <sup>138</sup>	45.84 <sup>19</sup>	62.77 <sup>11</sup>	37.04 <sup>31</sup>
16	29.15 <sup>46</sup>	61.00 <sup>6</sup>	71.48 <sup>144</sup>	46.03 <sup>17</sup>	62.66 <sup>13</sup>	37.35 <sup>32</sup>
17	28.69 <sup>46</sup>	61.06 <sup>4</sup>	70.04 <sup>150</sup>	46.20 <sup>15</sup>	62.53 <sup>14</sup>	37.67 <sup>31</sup>
18	28.23 <sup>48</sup>	61.10 <sup>1</sup>	68.54 <sup>154</sup>	46.35 <sup>14</sup>	62.39 <sup>14</sup>	37.98 <sup>29</sup>
19	27.75 <sup>46</sup>	61.11 <sup>0</sup>	67.00 <sup>155</sup>	46.49 <sup>12</sup>	62.25 <sup>14</sup>	38.27 <sup>27</sup>
20	27.29 <sup>46</sup>	61.11 <sup>2</sup>	65.45 <sup>153</sup>	46.61 <sup>9</sup>	62.11 <sup>15</sup>	38.54 <sup>25</sup>
21	26.83 <sup>43</sup>	61.09 <sup>4</sup>	63.92 <sup>148</sup>	46.70 <sup>8</sup>	61.96 <sup>15</sup>	38.79 <sup>23</sup>
22	26.40 <sup>42</sup>	61.05 <sup>3</sup>	62.44 <sup>142</sup>	46.78 <sup>8</sup>	61.81 <sup>14</sup>	39.02 <sup>22</sup>
23	25.98 <sup>40</sup>	61.02 <sup>4</sup>	61.02 <sup>137</sup>	46.86 <sup>7</sup>	61.67 <sup>13</sup>	39.24 <sup>22</sup>
24	25.58 <sup>39</sup>	60.98 <sup>2</sup>	59.65 <sup>133</sup>	46.93 <sup>8</sup>	61.54 <sup>13</sup>	39.46 <sup>22</sup>
25	25.19 <sup>39</sup>	60.96 <sup>1</sup>	58.32 <sup>131</sup>	47.01 <sup>10</sup>	61.41 <sup>13</sup>	39.68 <sup>23</sup>
26	24.80 <sup>40</sup>	60.95 <sup>0</sup>	57.01 <sup>132</sup>	47.11 <sup>11</sup>	61.28 <sup>12</sup>	39.91 <sup>24</sup>
27	24.40 <sup>41</sup>	60.95 <sup>1</sup>	55.69 <sup>137</sup>	47.22 <sup>11</sup>	61.16 <sup>12</sup>	40.15 <sup>25</sup>
28	23.99 <sup>44</sup>	60.96 <sup>1</sup>	54.32 <sup>142</sup>	47.33 <sup>12</sup>	61.04 <sup>14</sup>	40.40 <sup>27</sup>
29	23.55 <sup>46</sup>	60.97 <sup>0</sup>	52.90 <sup>150</sup>	47.45 <sup>12</sup>	60.90 <sup>14</sup>	40.67 <sup>27</sup>
30	23.09 <sup>46</sup>	60.97 <sup>1</sup>	51.40 <sup>157</sup>	47.57 <sup>12</sup>	60.76 <sup>15</sup>	40.94 <sup>27</sup>
Okt. 1	22.63 <sup>48</sup>	60.96 <sup>3</sup>	49.83 <sup>162</sup>	47.69 <sup>9</sup>	60.61 <sup>16</sup>	41.21 <sup>26</sup>
2	22.15 <sup>48</sup>	60.93 <sup>6</sup>	48.21 <sup>165</sup>	47.78 <sup>7</sup>	60.45 <sup>17</sup>	41.47 <sup>24</sup>
3	21.67 <sup>48</sup>	60.87 <sup>7</sup>	46.56 <sup>166</sup>	47.85 <sup>5</sup>	60.28 <sup>17</sup>	41.71 <sup>22</sup>
4	21.19 <sup>46</sup>	60.80 <sup>10</sup>	44.90 <sup>162</sup>	47.90 <sup>3</sup>	60.11 <sup>18</sup>	41.93 <sup>20</sup>
5	20.73 <sup>43</sup>	60.70 <sup>11</sup>	43.28 <sup>157</sup>	47.93 <sup>1</sup>	59.93 <sup>17</sup>	42.13 <sup>19</sup>
6	20.30 <sup>42</sup>	60.59 <sup>10</sup>	41.71 <sup>151</sup>	47.94 <sup>1</sup>	59.76 <sup>16</sup>	42.32 <sup>17</sup>
7	19.88 <sup>42</sup>	60.49 <sup>10</sup>	40.20 <sup>145</sup>	47.95 <sup>1</sup>	59.60 <sup>16</sup>	42.49 <sup>16</sup>
8	19.47 <sup>41</sup>	60.39 <sup>9</sup>	38.75 <sup>140</sup>	47.96 <sup>2</sup>	59.44 <sup>15</sup>	42.65 <sup>16</sup>
9	19.08 <sup>40</sup>	60.30 <sup>8</sup>	37.35 <sup>138</sup>	47.98 <sup>3</sup>	59.29 <sup>15</sup>	42.81 <sup>18</sup>
10	18.68 <sup>39</sup>	60.22 <sup>6</sup>	35.97 <sup>138</sup>	48.01 <sup>5</sup>	59.14 <sup>14</sup>	42.99 <sup>19</sup>
11	18.29 <sup>41</sup>	60.16 <sup>7</sup>	34.59 <sup>142</sup>	48.06 <sup>5</sup>	59.00 <sup>14</sup>	43.18 <sup>20</sup>
12	17.88 <sup>41</sup>	60.09 <sup>6</sup>	33.17 <sup>148</sup>	48.11 <sup>6</sup>	58.86 <sup>16</sup>	43.38 <sup>20</sup>
13	17.46 <sup>44</sup>	60.03 <sup>6</sup>	31.69 <sup>153</sup>	48.17 <sup>5</sup>	58.70 <sup>16</sup>	43.58 <sup>21</sup>
14	17.02 <sup>45</sup>	59.97 <sup>9</sup>	30.16 <sup>159</sup>	48.22 <sup>3</sup>	58.54 <sup>17</sup>	43.79 <sup>20</sup>
15	16.57 <sup>46</sup>	59.88 <sup>10</sup>	28.57 <sup>162</sup>	48.25 <sup>1</sup>	58.37 <sup>17</sup>	43.99 <sup>18</sup>
16	16.11 <sup>46</sup>	59.78 <sup>13</sup>	26.95 <sup>163</sup>	48.26 <sup>1</sup>	58.20 <sup>18</sup>	44.17 <sup>16</sup>
17	15.67 <sup>44</sup>	59.65 <sup>15</sup>	25.32 <sup>161</sup>	48.25 <sup>3</sup>	58.02 <sup>18</sup>	44.33 <sup>14</sup>
18	15.24 <sup>42</sup>	59.50 <sup>17</sup>	23.71 <sup>157</sup>	48.22 <sup>5</sup>	57.84 <sup>19</sup>	44.47 <sup>13</sup>
19	14.82 <sup>40</sup>	59.33 <sup>17</sup>	22.14 <sup>151</sup>	48.17 <sup>6</sup>	57.65 <sup>18</sup>	44.60 <sup>10</sup>
20	14.42 <sup>38</sup>	59.16 <sup>17</sup>	20.63 <sup>144</sup>	48.11 <sup>6</sup>	57.47 <sup>17</sup>	44.70 <sup>9</sup>
21	14.04	58.99	19.19	48.05	57.30	44.79
O. K.	+ 0.36 cos φ		+ 1.24 cos φ		+ 0.16 cos φ	
U. K.	— 0.36 cos φ		— 1.24 cos φ		— 0.16 cos φ	

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		76 Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
*	18 <sup>h</sup> 0 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 6 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 48 <sup>m</sup>	+82° 12'
Okt. 21	14.04 36	58.99 17	79.19 138	48.05 6	57.30 16	44.79 9
22	13.68 36	58.82 16	77.81 134	47.99 5	57.14 16	44.88 10
23	13.32 35	58.66 13	76.47 133	47.94 4	56.98 15	44.98 11
24	12.97 36	58.53 13	75.14 136	47.90 2	56.83 15	45.09 12
25	12.61 38	58.40 12	73.78 140	47.88 1	56.68 16	45.21 14
26	12.23 40	58.28 13	72.38 146	47.87 2	56.52 16	45.35 14
27	11.83 41	58.15 14	70.92 153	47.85 4	56.36 17	45.49 14
28	11.42 42	58.01 16	69.39 158	47.81 4	56.19 19	45.63 13
29	11.00 43	57.85 19	67.81 161	47.77 6	56.00 19	45.76 12
30	10.57 41	57.66 19	66.20 161	47.71 8	55.81 19	45.88 9
Nov. 1	10.16 41	57.47 22	64.59 159	47.63 10	55.62 19	45.97 7
2	9.75 38	57.25 24	63.00 153	47.53 12	55.43 19	46.04 5
3	9.37 36	57.01 24	61.47 146	47.41 13	55.24 19	46.09 3
4	9.01 34	56.77 23	60.01 138	47.28 13	55.05 18	46.12 2
5	8.67 33	56.54 23	58.63 133	47.15 12	54.87 18	46.14 2
6	8.34 31	56.31 20	57.30 129	47.03 12	54.69 16	46.16 3
7	8.03 32	56.11 19	56.01 127	46.91 10	54.53 16	46.19 4
8	7.71 33	55.92 19	54.74 129	46.81 9	54.37 16	46.23 5
9	7.38 33	55.73 18	53.45 133	46.72 10	54.21 16	46.28 6
10	7.05 35	55.55 19	52.12 137	46.62 9	54.05 17	46.34 7
11	6.70 36	55.36 21	50.75 142	46.53 9	53.88 17	46.41 6
12	6.34 35	55.15 23	49.33 145	46.44 12	53.71 19	46.47 4
13	5.99 36	54.92 25	47.88 147	46.32 14	53.52 19	46.51 2
14	5.63 34	54.67 27	46.41 145	46.18 16	53.33 19	46.53 0
15	5.29 32	54.40 28	44.96 140	46.02 18	53.14 18	46.53 2
16	4.97 31	54.12 29	43.56 134	45.84 20	52.96 18	46.51 4
17	4.66 28	53.83 30	42.22 125	45.64 20	52.78 18	46.47 6
18	4.38 26	53.53 29	40.97 118	45.44 21	52.60 17	46.41 7
19	4.12 24	53.24 27	39.79 113	45.23 19	52.43 17	46.34 7
20	3.88 25	52.97 26	38.66 109	45.04 18	52.26 15	46.27 5
21	3.63 24	52.71 25	37.57 109	44.86 17	52.11 15	46.22 4
22	3.39 26	52.46 24	36.48 113	44.69 16	51.96 16	46.18 3
23	3.13 27	52.22 24	35.35 117	44.53 15	51.80 16	46.15 2
24	2.86 28	51.98 24	34.18 122	44.38 16	51.64 16	46.13 2
25	2.58 30	51.74 27	32.96 128	44.22 17	51.48 17	46.11 2
26	2.28 29	51.47 28	31.68 131	44.05 19	51.31 18	46.09 4
27	1.99 29	51.19 30	30.37 131	43.86 21	51.13 19	46.05 6
O. K.	+ 0°.36 cos φ		+ 1°.24 cos φ		+ 0°.16 cos φ	
U. K.	— 0°.36 cos φ		— 1°.24 cos φ		— 0°.16 cos φ	

## Obere Kulmination.

1912	δ Ursae minoris. 4 <sup>m</sup> .3.		λ Ursae minoris. 6 <sup>m</sup> .8.		γ Draconis. 6 <sup>m</sup> .0.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	17 <sup>h</sup> 59 <sup>m</sup>	+86° 36'	19 <sup>h</sup> 6 <sup>m</sup>	+89° 0'	20 <sup>h</sup> 48 <sup>m</sup>	+82° 12'
Nov. 27	61.70 28	50.89 32	29.06 128	43.65 23	50.94 19	45.99 8
28	61.42 25	50.57 33	27.78 123	43.42 25	50.75 18	45.91 9
29	61.17 24	50.24 34	26.55 115	43.17 25	50.57 17	45.82 12
30	60.93 21	49.90 33	25.40 107	42.92 27	50.40 16	45.70 13
Dez. 1	60.72 19	49.57 33	24.33 100	42.65 26	50.24 15	45.57 14
2	60.53 17	49.24 32	23.33 94	42.39 24	50.08 15	45.43 13
3	60.36 17	48.92 30	22.39 90	42.15 24	49.93 14	45.30 12
4	60.19 17	48.62 28	21.49 89	41.91 22	49.79 14	45.18 11
5	60.02 18	48.34 28	20.60 92	41.69 21	49.65 14	45.07 10
6	59.84 19	48.06 28	19.68 95	41.48 21	49.51 15	44.97 10
7	59.65 20	47.78 29	18.73 99	41.27 22	49.36 15	44.87 10
8	59.45 21	47.49 30	17.74 102	41.05 24	49.21 15	44.77 10
9	59.24 20	47.19 32	16.72 103	40.81 25	49.06 16	44.67 13
10	59.04 19	46.87 35	15.69 102	40.56 27	48.90 17	44.54 15
11	58.85 17	46.52 36	14.67 98	40.29 30	48.73 17	44.39 17
12	58.68 14	46.16 37	13.69 91	39.99 31	48.56 15	44.22 20
13	58.54 12	45.79 37	12.78 82	39.68 31	48.41 15	44.02 21
14	58.42 10	45.42 36	11.96 73	39.37 32	48.26 14	43.81 22
15	58.32 7	45.06 36	11.23 66	39.05 30	48.12 13	43.59 22
16	58.25 8	44.70 34	10.57 62	38.75 30	47.99 12	43.37 21
17	58.17 7	44.36 32	9.95 60	38.45 29	47.87 11	43.16 20
18	58.10 7	44.04 31	9.35 60	38.16 26	47.76 11	42.96 19
19	58.03 8	43.73 30	8.75 62	37.90 26	47.65 12	42.77 17
20	57.95 10	43.43 30	8.13 64	37.64 26	47.53 12	42.60 18
21	{ 57.85 11	43.13 31	67	26		
	{ 57.74 11	42.82 32	7.46	37.38	47.41 13	42.42 17
	{ 57.63 12	42.50 35	72	26		
22	57.51 10	42.15 36	6.74 76	37.12 28	47.28 14	42.25 19
23	57.41 8	41.79 38	5.98 77	36.84 29	47.14 14	42.06 19
24	57.33 5	41.41 38	5.21 74	36.55 32	47.00 14	41.87 22
25	57.28 2	41.03 39	4.47 69	36.23 34	46.86 14	41.65 24
26	57.26 0	40.64 37	3.78 61	35.89 35	46.72 13	41.41 25
27	57.26 1	40.27 36	3.17 53	35.54 35	46.59 12	41.16 27
28	57.27 2	39.91 34	2.64 44	35.19 34	46.47 11	40.89 28
29	57.29 2	39.57 32	2.20 37	34.85 34	46.36 10	40.61 27
30	57.31 2	39.25 30	1.83 32	34.51 32	46.26 9	40.34 26
31	57.33 1	38.95	1.51 28	34.19 30	46.17 9	40.08 25
32			1.23	33.89	46.08 9	39.83
O. K.		+ 0°.36 cos φ		+ 1°.24 cos φ		+ 0°.16 cos φ
U. K.		- 0°.36 cos φ		- 1°.24 cos φ		- 0°.16 cos φ

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	1 <sup>h</sup> 42 <sup>m</sup>	—85° 13'	9 <sup>h</sup> 9 <sup>m</sup>	—85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	—84° 38'	
Jan.	I	32.19 <sup>s</sup> 31.89 <sup>30</sup> 31.60 <sup>29</sup> 31.33 <sup>26</sup> 31.07 <sup>25</sup>	10.91 <sup>1</sup> 10.90 <sup>3</sup> 10.87 <sup>4</sup> 10.83 <sup>4</sup> 10.79 <sup>4</sup>	49.12 <sup>s</sup> 49.23 <sup>9</sup> 49.32 <sup>8</sup> 49.40 <sup>8</sup> 49.48 <sup>7</sup>	24.16 <sup>38</sup> 24.54 <sup>37</sup> 24.91 <sup>36</sup> 25.27 <sup>34</sup> 25.61 <sup>32</sup>	31.01 <sup>27</sup> 31.28 <sup>26</sup> 31.54 <sup>24</sup> 31.78 <sup>23</sup> 32.01 <sup>23</sup>	22.81 <sup>13</sup> 22.94 <sup>15</sup> 23.09 <sup>15</sup> 23.24 <sup>15</sup> 23.39 <sup>14</sup>
	2	30.82 <sup>24</sup> 30.58 <sup>24</sup> 30.34 <sup>25</sup> 30.09 <sup>25</sup> 29.84 <sup>27</sup>	10.75 <sup>3</sup> 10.72 <sup>2</sup> 10.70 <sup>1</sup> 10.69 <sup>0</sup> 10.69 <sup>0</sup>	49.55 <sup>8</sup> 49.63 <sup>8</sup> 49.71 <sup>10</sup> 49.81 <sup>10</sup> 49.91 <sup>11</sup>	25.93 <sup>32</sup> 26.25 <sup>31</sup> 26.56 <sup>32</sup> 26.88 <sup>33</sup> 27.21 <sup>35</sup>	32.24 <sup>22</sup> 32.46 <sup>23</sup> 32.69 <sup>24</sup> 32.93 <sup>24</sup> 33.17 <sup>26</sup>	23.53 <sup>12</sup> 23.65 <sup>11</sup> 23.76 <sup>11</sup> 23.87 <sup>11</sup> 23.98 <sup>12</sup>
	3	29.57 <sup>28</sup> 29.29 <sup>30</sup> 28.99 <sup>29</sup> 28.70 <sup>30</sup> 28.40 <sup>30</sup>	10.69 <sup>1</sup> 10.68 <sup>2</sup> 10.66 <sup>5</sup> 10.61 <sup>6</sup> 10.55 <sup>9</sup>	50.02 <sup>11</sup> 50.13 <sup>10</sup> 50.23 <sup>7</sup> 50.30 <sup>7</sup> 50.37 <sup>5</sup>	27.56 <sup>36</sup> 27.92 <sup>38</sup> 28.30 <sup>40</sup> 28.70 <sup>40</sup> 29.10 <sup>40</sup>	33.43 <sup>27</sup> 33.70 <sup>27</sup> 33.97 <sup>27</sup> 34.24 <sup>26</sup> 34.50 <sup>25</sup>	24.10 <sup>12</sup> 24.22 <sup>15</sup> 24.37 <sup>17</sup> 24.54 <sup>19</sup> 24.73 <sup>21</sup>
	4	28.10 <sup>28</sup> 27.82 <sup>26</sup> 27.56 <sup>26</sup> 27.30 <sup>24</sup> 27.06 <sup>24</sup>	10.46 <sup>10</sup> 10.36 <sup>11</sup> 10.25 <sup>12</sup> 10.13 <sup>11</sup> 10.02 <sup>10</sup>	50.42 <sup>3</sup> 50.45 <sup>1</sup> 50.46 <sup>2</sup> 50.48 <sup>2</sup> 50.50 <sup>2</sup>	29.50 <sup>39</sup> 29.89 <sup>37</sup> 30.26 <sup>36</sup> 30.62 <sup>34</sup> 30.96 <sup>34</sup>	34.75 <sup>24</sup> 34.99 <sup>23</sup> 35.22 <sup>21</sup> 35.43 <sup>21</sup> 35.64 <sup>20</sup>	24.94 <sup>21</sup> 25.15 <sup>21</sup> 25.36 <sup>21</sup> 25.57 <sup>20</sup> 25.77 <sup>20</sup>
	5	26.82 <sup>24</sup> 26.58 <sup>24</sup> 26.34 <sup>26</sup> 26.08 <sup>27</sup> 25.81 <sup>28</sup>	9.92 <sup>9</sup> 9.83 <sup>9</sup> 9.74 <sup>8</sup> 9.66 <sup>9</sup> 9.57 <sup>10</sup>	50.52 <sup>3</sup> 50.55 <sup>4</sup> 50.59 <sup>5</sup> 50.64 <sup>4</sup> 50.68 <sup>3</sup>	31.30 <sup>33</sup> 31.63 <sup>34</sup> 31.97 <sup>36</sup> 32.33 <sup>38</sup> 32.71 <sup>39</sup>	35.84 <sup>21</sup> 36.05 <sup>22</sup> 36.27 <sup>23</sup> 36.50 <sup>24</sup> 36.74 <sup>25</sup>	25.97 <sup>19</sup> 26.16 <sup>18</sup> 26.34 <sup>18</sup> 26.52 <sup>20</sup> 26.72 <sup>21</sup>
	6	25.53 <sup>29</sup> 25.24 <sup>29</sup> 24.95 <sup>29</sup> 24.66 <sup>29</sup> 24.37 <sup>27</sup>	9.47 <sup>12</sup> 9.35 <sup>14</sup> 9.21 <sup>16</sup> 9.05 <sup>18</sup> 8.87 <sup>20</sup>	50.71 <sup>3</sup> 50.74 <sup>1</sup> 50.75 <sup>2</sup> 50.73 <sup>3</sup> 50.70 <sup>4</sup>	33.10 <sup>41</sup> 33.51 <sup>43</sup> 33.94 <sup>43</sup> 34.37 <sup>42</sup> 34.79 <sup>40</sup>	36.99 <sup>25</sup> 37.24 <sup>25</sup> 37.49 <sup>24</sup> 37.73 <sup>22</sup> 37.95 <sup>21</sup>	26.93 <sup>24</sup> 27.17 <sup>25</sup> 27.42 <sup>28</sup> 27.70 <sup>29</sup> 27.99 <sup>30</sup>
	7	24.10 <sup>25</sup> 23.85 <sup>25</sup> 23.60 <sup>23</sup> 23.37 <sup>22</sup> 23.15 <sup>23</sup>	8.67 <sup>20</sup> 8.47 <sup>21</sup> 8.26 <sup>19</sup> 8.07 <sup>19</sup> 7.88 <sup>18</sup>	50.66 <sup>6</sup> 50.60 <sup>5</sup> 50.55 <sup>6</sup> 50.49 <sup>5</sup> 50.44 <sup>4</sup>	35.19 <sup>39</sup> 35.58 <sup>37</sup> 35.95 <sup>36</sup> 36.31 <sup>35</sup> 36.66 <sup>34</sup>	38.16 <sup>19</sup> 38.35 <sup>19</sup> 38.54 <sup>18</sup> 38.72 <sup>18</sup> 38.90 <sup>18</sup>	28.29 <sup>30</sup> 28.59 <sup>29</sup> 28.88 <sup>28</sup> 29.16 <sup>27</sup> 29.43 <sup>25</sup>
	8	22.92 <sup>23</sup> 22.69 <sup>24</sup> 22.45 <sup>16</sup>	7.70 <sup>16</sup> 7.54 <sup>16</sup> 7.38 <sup>16</sup>	50.40 <sup>3</sup> 50.37 <sup>2</sup> 50.35 <sup>37</sup>	37.00 <sup>36</sup> 37.36 <sup>37</sup> 37.73 <sup>37</sup>	39.08 <sup>19</sup> 39.27 <sup>20</sup> 39.47 <sup>20</sup>	29.68 <sup>25</sup> 29.93 <sup>25</sup> 30.18 <sup>25</sup>
O. K.		+ 0°.26 cos φ		+ 0°.26 cos φ		+ 0°.23 cos φ	
U. K.		— 0.26 cos φ		— 0.26 cos φ		— 0.23 cos φ	

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> –5 <sup>m</sup> .		$\iota$ Octantis. 6 <sup>m</sup> –5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	–85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	–85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	–84° 38'
Febr. 7	22.45 26	67.38 16	50.35 1	37.73 38	39.47 21	30.18 26
8	22.19 27	67.22 18	50.34 3	38.11 39	39.68 21	30.44 29
9	21.92 27	67.04 20	50.31 4	38.50 41	39.89 22	30.73 29
10	21.65 26	66.84 22	50.27 6	38.91 42	40.11 20	31.02 31
11	21.39 27	66.62 23	50.21 7	39.33 41	40.31 20	31.33 34
12	21.12 26	66.39 25	50.14 10	39.74 40	40.51 18	31.67 34
13	20.86 23	66.14 26	50.04 10	40.14 38	40.69 17	32.01 34
14	20.63 22	65.88 27	49.94 12	40.52 37	40.86 15	32.35 34
15	20.41 21	65.61 27	49.82 12	40.89 35	41.01 15	32.69 33
16	20.20 19	65.34 25	49.70 10	41.24 34	41.16 14	33.02 31
17	20.01 20	65.09 24	49.60 11	41.58 33	41.30 14	33.33 31
18	19.81 19	64.85 24	49.49 10	41.91 34	41.44 15	33.64 29
19	19.62 20	64.61 23	49.39 9	42.25 34	41.59 16	33.93 31
20	19.42 22	64.38 22	49.30 8	42.59 36	41.75 17	34.24 31
21	19.20 23	64.16 23	49.22 8	42.95 37	41.92 17	34.55 31
22	18.97 24	63.93 25	49.14 10	43.32 39	42.09 17	34.86 33
23	18.73 24	63.68 26	49.04 10	43.71 39	42.26 18	35.19 36
24	18.49 24	63.42 29	48.94 13	44.10 40	42.44 16	35.55 37
25	18.25 23	63.13 30	48.81 15	44.50 40	42.60 16	35.92 38
26	18.02 22	62.83 33	48.66 16	44.90 39	42.76 14	36.30 40
27	17.80 21	62.50 33	48.50 18	45.29 36	42.90 12	36.70 40
28	17.59 19	62.17 34	48.32 17	45.65 35	43.02 11	37.10 39
29	17.40 16	61.83 33	48.15 18	46.00 33	43.13 10	37.49 37
März 1	17.24 16	61.50 33	47.97 17	46.33 32	43.23 9	37.86 36
2	17.08 16	61.17 31	47.80 16	46.65 31	43.32 10	38.22 34
3	16.92 17	60.86 29	47.64 15	46.96 30	43.42 11	38.56 34
4	16.75 17	60.57 27	47.49 14	47.26 32	43.53 11	38.90 34
5	16.58 18	60.30 28	47.35 13	47.58 33	43.64 13	39.24 34
6	16.40 20	60.02 29	47.22 14	47.91 34	43.77 13	39.58 34
7	16.20 19	59.73 30	47.08 15	48.25 35	43.90 13	39.92 36
8	16.01 19	59.43 32	46.93 16	48.60 36	44.03 12	40.28 39
9	15.82 20	59.11 33	46.77 18	48.96 36	44.15 11	40.67 40
10	15.62 18	58.78 33	46.59 19	49.32 35	44.26 10	41.07 41
11	15.44 17	58.43 35	46.40 21	49.67 33	44.36 9	41.48 41
12	15.27 15	58.07 36	46.19 22	50.00 32	44.45 7	41.89 41
13	15.12 14	57.70 37	45.97 23	50.32 29	44.52 6	42.30 40
14	14.98 12	57.33 36	45.74 22	50.61 28	44.58 5	42.70 39
15	14.86 15	56.97 37	45.52 23	50.89	44.63 4	43.09
O. K.	+ 0°.26 cos φ		+ 0°.26 cos φ		+ 0°.23 cos φ	
U. K.	– 0°.26 cos φ		– 0°.26 cos φ		+ 0°.23 cos φ	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> – 5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> – 5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	–85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	–85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	–84° 38'
März 15	14.86	56.97	45.52	50.89	44.63	43.09
16	14.75	56.62	45.31	51.16	44.68	43.45
17	14.64	56.29	45.11	51.42	44.73	43.81
18	14.52	55.97	44.92	51.69	44.79	44.15
19	14.40	55.65	44.74	51.96	44.87	44.50
20	14.26	55.33	44.56	52.25	44.95	44.85
21	14.11	55.00	44.38	52.55	45.03	45.23
22	13.96	54.66	44.18	52.87	45.11	45.62
23	13.81	54.30	43.97	53.19	45.18	46.03
24	13.66	53.91	43.74	53.51	45.25	46.45
25	13.53	53.51	43.49	53.81	45.31	46.88
26	13.41	53.10	43.23	54.10	45.34	47.31
27	13.32	52.68	42.97	54.36	45.37	47.74
28	13.24	52.28	42.71	54.61	45.38	48.15
29	13.16	51.89	42.44	54.84	45.39	48.54
30	13.10	51.51	42.19	55.06	45.39	48.92
31	13.04	51.15	41.96	55.27	45.40	49.29
April 1	12.96	50.79	41.74	55.49	45.41	49.64
2	12.89	50.45	41.52	55.72	45.44	49.99
3	12.80	50.10	41.29	55.95	45.47	50.35
4	12.71	49.75	41.07	56.20	45.51	50.73
5	12.61	49.39	40.84	56.46	45.54	51.11
6	12.51	49.01	40.60	56.73	45.57	51.51
7	12.42	48.62	40.33	56.98	45.58	51.92
8	12.35	48.21	40.05	57.21	45.58	52.34
9	12.29	47.79	39.77	57.42	45.56	52.75
10	12.26	47.37	39.48	57.61	45.53	53.15
11	12.24	46.97	39.20	57.79	45.48	53.54
12	12.23	46.57	38.92	57.94	45.43	53.91
13	12.22	46.20	38.65	58.09	45.39	54.26
14	12.21	45.84	38.40	58.24	45.36	54.60
15	12.20	45.49	38.15	58.40	45.33	54.94
16	12.17	45.14	37.91	58.56	45.31	55.28
17	12.13	44.79	37.67	58.74	45.30	55.62
		37	25	19	1	37
18	12.04	44.04	37.42	58.93	45.29	55.99
19	12.00	43.64	37.17	59.13	45.28	56.37
20	11.97	43.22	36.90	59.32	45.26	56.76
O. K.	$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.23 \cos \varphi$	
U. K.	$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.23 \cos \varphi$	

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	—85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	—85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	—84° 38'
April 20	11.97	43.22	36.90	59.32	45.26	56.76
21	11.95	42.80	36.60	59.51	45.22	57.16
22	11.95	42.37	36.29	59.68	45.17	57.56
23	11.98	41.95	35.98	59.83	45.10	57.96
24	12.01	41.54	35.67	59.95	45.01	58.35
	4	40	31	11	8	36
25	12.05	41.14	35.36	60.06	44.93	58.71
26	12.10	40.77	35.06	60.16	44.84	59.06
27	12.15	40.41	34.78	60.25	44.75	59.39
28	12.19	40.06	34.52	60.33	44.67	59.70
29	12.21	39.72	34.26	60.42	44.61	60.02
	2	34	25	11	6	32
Mai 30	12.23	39.38	34.01	60.53	44.55	60.34
1	12.24	39.02	33.76	60.64	44.49	60.66
2	12.25	38.65	33.50	60.76	44.43	60.99
3	12.27	38.27	33.24	60.89	44.37	61.34
4	12.30	37.88	32.95	61.01	44.30	61.69
	5	40	30	10	9	37
5	12.35	37.48	32.65	61.11	44.21	62.06
6	12.42	37.08	32.35	61.20	44.12	62.42
7	12.50	36.68	32.03	61.26	44.00	62.76
8	12.60	36.30	31.72	61.30	43.87	63.09
9	12.70	35.95	31.41	61.33	43.74	63.41
10	12.80	35.60	31.12	61.34	43.61	63.70
11	12.90	35.27	30.85	61.35	43.48	63.97
12	12.99	34.95	30.59	61.36	43.36	64.24
13	13.07	34.63	30.33	61.38	43.25	64.51
14	13.14	34.31	30.08	61.41	43.15	64.78
	6	34	25	4	9	29
15	13.20	33.97	29.83	61.45	43.06	65.07
16	13.26	33.62	29.56	61.50	42.96	65.37
17	13.34	33.25	29.29	61.55	42.86	65.68
18	13.43	32.87	29.00	61.60	42.75	66.01
19	13.53	32.49	28.70	61.63	42.62	66.33
	12	38	32	2	14	32
20	13.65	32.11	28.38	61.65	42.48	66.65
21	13.79	31.75	28.07	61.64	42.32	66.95
22	13.94	31.40	27.76	61.61	42.16	67.24
23	14.09	31.07	27.46	61.56	41.99	67.51
24	14.24	30.75	27.18	61.51	41.83	67.76
	15	29	27	6	17	23
25	14.39	30.46	26.91	61.45	41.66	67.99
26	14.52	30.18	26.66	61.39	41.51	68.20
27	14.63	29.89	26.42	61.34	41.38	68.42
O. K.	$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.23 \cos \varphi$	
U. K.	$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.23 \cos \varphi$	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		ζ Octantis. 6 <sup>m</sup> – 5 <sup>m</sup> .		ι Octantis. 6 <sup>m</sup> – 5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	–85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	–85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	–84° 38'
Mai	27	14.63 12	29.89 29	26.42 24	61.34 4	41.38 13
	28	14.75 12	29.60 30	26.18 25	61.30 2	41.25 14
	29	14.87 12	29.30 31	25.93 25	61.28 3	41.11 13
	30	14.99 13	28.99 32	25.68 25	61.25 3	40.98 14
	31	15.12 14	28.67 33	25.43 27	61.22 3	40.84 15
Juni	1	15.26 16	28.34 33	25.16 28	61.19 5	40.69 16
	2	15.42 18	28.01 33	24.88 29	61.14 7	40.53 18
	3	15.60 19	27.69 30	24.59 29	61.07 10	40.35 20
	4	15.79 20	27.39 29	24.30 28	60.97 11	40.15 19
	5	15.99 20	27.10 27	24.02 27	60.86 13	39.96 20
	6	16.19 20	26.83 25	23.75 25	60.73 14	39.76 20
	7	16.39 19	26.58 24	23.50 24	60.59 13	39.56 19
	8	16.58 17	26.34 23	23.26 22	60.46 13	39.37 18
	9	16.75 17	26.11 23	23.04 22	60.33 12	39.19 17
	10	16.92 15	25.88 23	22.82 22	60.21 11	39.02 15
	11	17.07 16	25.64 26	22.60 22	60.10 9	38.87 17
	12	17.23 16	25.38 26	22.38 23	60.01 9	38.70 17
	13	17.39 17	25.12 28	22.15 24	59.92 9	38.53 16
	14	17.56 19	24.84 28	21.91 26	59.83 11	38.37 18
	15	17.75 21	24.56 28	21.65 26	59.72 11	38.19 19
	16	17.96 21	24.28 27	21.39 27	59.61 14	38.00 21
	17	18.17 23	24.01 25	21.12 26	59.47 16	37.79 21
	18	18.40 24	23.76 24	20.86 25	59.31 19	37.58 22
	19	18.64 24	23.52 21	20.61 24	59.12 19	37.36 22
	20	18.88 22	23.31 20	20.37 22	58.93 19	37.14 22
	21	19.10 22	23.11 18	20.15 20	58.74 20	36.92 20
	22	19.32 21	22.93 17	19.95 19	58.54 18	36.72 19
	23	19.53 20	22.76 17	19.76 18	58.36 18	36.53 18
	24	19.73 19	22.59 17	19.58 18	58.18 16	36.35 18
	25	19.92 19	22.42 19	19.40 19	58.02 16	36.17 17
	26	20.11 20	22.23 20	19.21 19	57.86 16	36.00 18
	27	20.31 21	22.03 21	19.02 21	57.70 16	35.82 19
	28	20.52 23	21.82 20	18.81 21	57.54 17	35.63 20
	29	20.75 24	21.62 20	18.60 22	57.37 19	35.43 21
	30	20.99 25	21.42 19	18.38 22	57.18 21	35.22 23
Juli	1	21.24 27	21.23 17	18.16 21	56.97 23	34.99 23
	2	21.51 27	21.06 17	17.95 21	56.74 26	34.76 24
	3	21.78	20.92 14	17.74	56.48	34.52 23
O. K.		+ 0°.26 cos φ		+ 0°.26 cos φ		+ 0°.23 cos φ
U. K.		— 0°.26 cos φ		— 0°.26 cos φ		— 0°.23 cos φ

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Juli	1 <sup>h</sup> 42 <sup>m</sup>	—85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	—85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	—84° 38'
3	21.78 <sup>27</sup>	20.92 <sup>13</sup>	17.74 <sup>18</sup>	56.48 <sup>26</sup>	34.52 <sup>24</sup>	74.30 <sup>3</sup>
4	22.05 <sup>25</sup>	20.79 <sup>12</sup>	17.56 <sup>17</sup>	56.22 <sup>26</sup>	34.28 <sup>22</sup>	74.33 <sup>2</sup>
5	22.30 <sup>25</sup>	20.67 <sup>10</sup>	17.39 <sup>15</sup>	55.96 <sup>26</sup>	34.06 <sup>21</sup>	74.35 <sup>0</sup>
6	22.55 <sup>23</sup>	20.57 <sup>9</sup>	17.24 <sup>14</sup>	55.70 <sup>24</sup>	33.85 <sup>21</sup>	74.35 <sup>0</sup>
7	22.78 <sup>21</sup>	20.48 <sup>10</sup>	17.10 <sup>12</sup>	55.46 <sup>24</sup>	33.64 <sup>19</sup>	74.35 <sup>1</sup>
8	22.99 <sup>22</sup>	20.38 <sup>11</sup>	16.98 <sup>14</sup>	55.22 <sup>21</sup>	33.45 <sup>18</sup>	74.36 <sup>1</sup>
9	23.21 <sup>22</sup>	20.27 <sup>12</sup>	16.84 <sup>15</sup>	55.01 <sup>21</sup>	33.27 <sup>18</sup>	74.37 <sup>3</sup>
10	23.43 <sup>22</sup>	20.15 <sup>14</sup>	16.69 <sup>15</sup>	54.80 <sup>20</sup>	33.09 <sup>19</sup>	74.40 <sup>5</sup>
11	23.65 <sup>23</sup>	20.01 <sup>14</sup>	16.54 <sup>16</sup>	54.60 <sup>21</sup>	32.90 <sup>19</sup>	74.45 <sup>4</sup>
12	23.88 <sup>25</sup>	19.87 <sup>14</sup>	16.38 <sup>18</sup>	54.39 <sup>23</sup>	32.71 <sup>21</sup>	74.49 <sup>4</sup>
13	24.13 <sup>26</sup>	19.73 <sup>14</sup>	16.20 <sup>17</sup>	54.16 <sup>23</sup>	32.50 <sup>22</sup>	74.53 <sup>4</sup>
14	24.39 <sup>27</sup>	19.59 <sup>12</sup>	16.03 <sup>18</sup>	53.93 <sup>26</sup>	32.28 <sup>23</sup>	74.57 <sup>3</sup>
15	24.66 <sup>28</sup>	19.47 <sup>9</sup>	15.85 <sup>17</sup>	53.67 <sup>28</sup>	32.05 <sup>24</sup>	74.60 <sup>1</sup>
16	24.94 <sup>28</sup>	19.38 <sup>7</sup>	15.68 <sup>14</sup>	53.39 <sup>30</sup>	31.81 <sup>24</sup>	74.61 <sup>2</sup>
17	25.22 <sup>27</sup>	19.31 <sup>5</sup>	15.54 <sup>14</sup>	53.09 <sup>29</sup>	31.57 <sup>23</sup>	74.59 <sup>4</sup>
18	25.49 <sup>26</sup>	19.26 <sup>3</sup>	15.40 <sup>12</sup>	52.80 <sup>30</sup>	31.34 <sup>22</sup>	74.55 <sup>6</sup>
19	25.75 <sup>25</sup>	19.23 <sup>2</sup>	15.28 <sup>9</sup>	52.50 <sup>29</sup>	31.12 <sup>21</sup>	74.49 <sup>8</sup>
20	26.00 <sup>23</sup>	19.21 <sup>2</sup>	15.19 <sup>9</sup>	52.21 <sup>27</sup>	30.91 <sup>19</sup>	74.41 <sup>6</sup>
21	26.23 <sup>23</sup>	19.19 <sup>3</sup>	15.10 <sup>8</sup>	51.94 <sup>27</sup>	30.72 <sup>19</sup>	74.35 <sup>8</sup>
22	26.46 <sup>22</sup>	19.16 <sup>3</sup>	15.02 <sup>9</sup>	51.67 <sup>26</sup>	30.53 <sup>17</sup>	74.27 <sup>6</sup>
23	26.68 <sup>23</sup>	19.13 <sup>4</sup>	14.93 <sup>9</sup>	51.41 <sup>24</sup>	30.36 <sup>18</sup>	74.21 <sup>5</sup>
24	26.91 <sup>23</sup>	19.09 <sup>5</sup>	14.84 <sup>9</sup>	51.17 <sup>25</sup>	30.18 <sup>18</sup>	74.16 <sup>5</sup>
25	27.14 <sup>25</sup>	19.04 <sup>5</sup>	14.75 <sup>11</sup>	50.92 <sup>25</sup>	30.00 <sup>20</sup>	74.11 <sup>4</sup>
26	27.39 <sup>26</sup>	18.99 <sup>5</sup>	14.64 <sup>11</sup>	50.67 <sup>27</sup>	29.80 <sup>21</sup>	74.07 <sup>3</sup>
27	27.65 <sup>27</sup>	18.94 <sup>4</sup>	14.53 <sup>12</sup>	50.40 <sup>29</sup>	29.59 <sup>22</sup>	74.04 <sup>6</sup>
28	27.92 <sup>28</sup>	18.90 <sup>1</sup>	14.41 <sup>10</sup>	50.11 <sup>31</sup>	29.37 <sup>22</sup>	73.98 <sup>8</sup>
29	28.20 <sup>29</sup>	18.89 <sup>0</sup>	14.31 <sup>10</sup>	49.80 <sup>32</sup>	29.15 <sup>23</sup>	73.90 <sup>9</sup>
30	28.49 <sup>28</sup>	18.89 <sup>2</sup>	14.21 <sup>8</sup>	49.48 <sup>34</sup>	28.92 <sup>23</sup>	73.81 <sup>12</sup>
31	28.77 <sup>27</sup>	18.91 <sup>4</sup>	14.13 <sup>7</sup>	49.14 <sup>34</sup>	28.69 <sup>22</sup>	73.69 <sup>13</sup>
Aug. I	29.04 <sup>27</sup>	18.95 <sup>5</sup>	14.06 <sup>4</sup>	48.80 <sup>33</sup>	28.47 <sup>19</sup>	73.56 <sup>15</sup>
2	29.31 <sup>24</sup>	19.00 <sup>7</sup>	14.02 <sup>3</sup>	48.47 <sup>32</sup>	28.28 <sup>19</sup>	73.41 <sup>14</sup>
3	29.55 <sup>23</sup>	19.07 <sup>6</sup>	13.99 <sup>2</sup>	48.15 <sup>30</sup>	28.09 <sup>17</sup>	73.27 <sup>15</sup>
4	29.78 <sup>22</sup>	19.13 <sup>6</sup>	13.97 <sup>2</sup>	47.85 <sup>28</sup>	27.92 <sup>17</sup>	73.12 <sup>14</sup>
5	30.00 <sup>22</sup>	19.19 <sup>4</sup>	13.95 <sup>2</sup>	47.57 <sup>27</sup>	27.75 <sup>16</sup>	72.98 <sup>14</sup>
6	30.22 <sup>21</sup>	19.23 <sup>3</sup>	13.93 <sup>3</sup>	47.30 <sup>27</sup>	27.59 <sup>16</sup>	72.84 <sup>11</sup>
7	30.43 <sup>23</sup>	19.26 <sup>3</sup>	{ 13.90 <sup>5</sup>	47.03 <sup>26</sup>	27.43 <sup>17</sup>	72.73 <sup>10</sup>
8	30.66 <sup>23</sup>	19.29 <sup>3</sup>	{ 13.85 <sup>5</sup>	46.77 <sup>27</sup>	27.26 <sup>17</sup>	72.63 <sup>9</sup>
O. K.	+ 0°.26 cos φ		+ 0°.26 cos φ		+ 0°.23 cos φ	
U. K.	— 0°.26 cos φ		— 0°.26 cos φ		— 0°.23 cos φ	

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	—85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	—85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	—84° 38'
Aug. 8	30.66 <sup>24</sup>	19.29 <sup>3</sup>	13.80 <sup>5</sup>	46.50 <sup>29</sup>	27.26 <sup>18</sup>	72.63 <sup>10</sup>
9	30.90 <sup>24</sup>	19.32 <sup>2</sup>	13.75 <sup>5</sup>	46.21 <sup>31</sup>	27.08 <sup>19</sup>	72.53 <sup>11</sup>
10	31.14 <sup>26</sup>	19.34 <sup>4</sup>	13.70 <sup>5</sup>	45.90 <sup>33</sup>	26.89 <sup>19</sup>	72.42 <sup>13</sup>
11	31.40 <sup>27</sup>	19.38 <sup>6</sup>	13.65 <sup>4</sup>	45.57 <sup>33</sup>	26.70 <sup>21</sup>	72.29 <sup>14</sup>
12	31.67 <sup>27</sup>	19.44 <sup>8</sup>	13.61 <sup>2</sup>	45.24 <sup>34</sup>	26.49 <sup>21</sup>	72.15 <sup>15</sup>
13	31.94 <sup>26</sup>	19.52 <sup>10</sup>	13.59 <sup>1</sup>	44.90 <sup>34</sup>	26.28 <sup>19</sup>	72.00 <sup>18</sup>
14	32.20 <sup>25</sup>	19.62 <sup>12</sup>	13.60 <sup>2</sup>	44.56 <sup>33</sup>	26.09 <sup>19</sup>	71.82 <sup>20</sup>
15	32.45 <sup>23</sup>	19.74 <sup>13</sup>	13.62 <sup>3</sup>	44.23 <sup>32</sup>	25.90 <sup>17</sup>	71.62 <sup>21</sup>
16	32.68 <sup>22</sup>	19.87 <sup>15</sup>	13.65 <sup>4</sup>	43.91 <sup>30</sup>	25.73 <sup>16</sup>	71.41 <sup>23</sup>
17	32.90 <sup>21</sup>	20.02 <sup>13</sup>	13.69 <sup>4</sup>	43.61 <sup>29</sup>	25.57 <sup>14</sup>	71.18 <sup>21</sup>
18	33.11 <sup>20</sup>	20.15 <sup>13</sup>	13.73 <sup>4</sup>	43.32 <sup>28</sup>	25.43 <sup>13</sup>	70.97 <sup>20</sup>
19	33.31 <sup>20</sup>	20.28 <sup>12</sup>	13.77 <sup>4</sup>	43.04 <sup>27</sup>	25.30 <sup>13</sup>	70.77 <sup>20</sup>
20	33.51 <sup>20</sup>	20.40 <sup>11</sup>	13.81 <sup>2</sup>	42.77 <sup>28</sup>	25.17 <sup>13</sup>	70.57 <sup>19</sup>
21	33.71 <sup>21</sup>	20.51 <sup>11</sup>	13.83 <sup>1</sup>	42.49 <sup>28</sup>	25.04 <sup>14</sup>	70.38 <sup>19</sup>
22	33.92 <sup>21</sup>	20.62 <sup>11</sup>	13.84 <sup>1</sup>	42.21 <sup>29</sup>	24.90 <sup>15</sup>	70.19 <sup>21</sup>
23	34.13 <sup>23</sup>	20.73 <sup>11</sup>	13.85 <sup>2</sup>	41.92 <sup>32</sup>	24.75 <sup>16</sup>	69.98 <sup>22</sup>
24	34.36 <sup>24</sup>	20.84 <sup>13</sup>	13.87 <sup>3</sup>	41.60 <sup>33</sup>	24.59 <sup>17</sup>	69.86 <sup>22</sup>
25	34.60 <sup>24</sup>	20.97 <sup>15</sup>	13.90 <sup>4</sup>	41.27 <sup>34</sup>	24.42 <sup>17</sup>	69.64 <sup>22</sup>
26	34.84 <sup>24</sup>	21.12 <sup>18</sup>	13.94 <sup>6</sup>	40.93 <sup>34</sup>	24.25 <sup>17</sup>	69.42 <sup>24</sup>
27	35.08 <sup>24</sup>	21.30 <sup>19</sup>	14.00 <sup>7</sup>	40.59 <sup>34</sup>	24.08 <sup>16</sup>	69.18 <sup>25</sup>
28	35.32 <sup>22</sup>	21.49 <sup>21</sup>	14.07 <sup>10</sup>	40.25 <sup>32</sup>	23.92 <sup>15</sup>	68.93 <sup>28</sup>
29	35.54 <sup>20</sup>	21.70 <sup>21</sup>	14.17 <sup>10</sup>	39.93 <sup>30</sup>	23.77 <sup>13</sup>	68.65 <sup>28</sup>
30	35.74 <sup>18</sup>	21.91 <sup>22</sup>	14.27 <sup>11</sup>	39.63 <sup>28</sup>	23.64 <sup>12</sup>	68.37 <sup>27</sup>
31	35.92 <sup>17</sup>	22.13 <sup>21</sup>	14.38 <sup>11</sup>	39.35 <sup>27</sup>	23.52 <sup>10</sup>	68.10 <sup>27</sup>
Sept. 1	36.09 <sup>15</sup>	22.34 <sup>19</sup>	14.49 <sup>10</sup>	39.08 <sup>25</sup>	23.42 <sup>9</sup>	67.83 <sup>26</sup>
2	36.24 <sup>16</sup>	22.53 <sup>19</sup>	14.59 <sup>9</sup>	38.83 <sup>25</sup>	23.33 <sup>9</sup>	67.57 <sup>24</sup>
3	36.40 <sup>17</sup>	22.72 <sup>18</sup>	14.68 <sup>8</sup>	38.58 <sup>26</sup>	23.24 <sup>8</sup>	67.33 <sup>22</sup>
4	36.57 <sup>17</sup>	22.90 <sup>17</sup>	14.76 <sup>8</sup>	38.32 <sup>25</sup>	23.16 <sup>10</sup>	67.11 <sup>22</sup>
5	36.74 <sup>18</sup>	23.07 <sup>17</sup>	14.84 <sup>7</sup>	38.07 <sup>27</sup>	23.06 <sup>10</sup>	66.89 <sup>22</sup>
6	36.92 <sup>19</sup>	23.24 <sup>17</sup>	14.91 <sup>8</sup>	37.80 <sup>29</sup>	22.96 <sup>12</sup>	66.67 <sup>22</sup>
7	37.11 <sup>20</sup>	23.41 <sup>19</sup>	14.99 <sup>8</sup>	37.51 <sup>30</sup>	22.84 <sup>12</sup>	66.45 <sup>24</sup>
8	37.31 <sup>19</sup>	23.60 <sup>21</sup>	15.07 <sup>11</sup>	37.21 <sup>30</sup>	22.72 <sup>12</sup>	66.21 <sup>26</sup>
9	37.50 <sup>19</sup>	23.81 <sup>24</sup>	15.18 <sup>12</sup>	36.91 <sup>31</sup>	22.60 <sup>12</sup>	65.95 <sup>28</sup>
10	37.69 <sup>18</sup>	24.05 <sup>25</sup>	15.30 <sup>14</sup>	36.60 <sup>30</sup>	22.48 <sup>11</sup>	65.67 <sup>29</sup>
11	37.87 <sup>17</sup>	24.30 <sup>26</sup>	15.44 <sup>15</sup>	36.30 <sup>27</sup>	22.37 <sup>10</sup>	65.38 <sup>31</sup>
12	38.04 <sup>14</sup>	24.56 <sup>27</sup>	15.59 <sup>17</sup>	36.03 <sup>26</sup>	22.27 <sup>8</sup>	65.07 <sup>31</sup>
13	38.18 <sup>14</sup>	24.83 <sup>27</sup>	15.76 <sup>15</sup>	35.77 <sup>27</sup>	22.19 <sup>9</sup>	64.76 <sup>26</sup>
O. K.	+ 0°.26 cos φ		+ 0°.26 cos φ		+ 0°.23 cos φ	
U. K.	— 0°.26 cos φ		— 0°.26 cos φ		— 0°.23 cos φ	

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	—85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	—85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	—84° 38'
Sept. 13	38. <sup>5</sup> 18	24.83 <sup>27</sup>	15.76 <sup>17</sup>	35.77 <sup>25</sup>	22.19 <sup>6</sup>	64.76 <sup>31</sup>
14	38.32 <sup>14</sup>	25.10 <sup>26</sup>	15.93 <sup>16</sup>	35.52 <sup>23</sup>	22.13 <sup>4</sup>	64.45 <sup>30</sup>
15	38.44 <sup>11</sup>	25.36 <sup>26</sup>	16.09 <sup>16</sup>	35.29 <sup>21</sup>	22.09 <sup>4</sup>	64.15 <sup>29</sup>
16	38.55 <sup>11</sup>	25.62 <sup>25</sup>	16.25 <sup>15</sup>	35.08 <sup>22</sup>	22.05 <sup>4</sup>	63.86 <sup>28</sup>
17	38.66 <sup>11</sup>	25.87 <sup>25</sup>	16.40 <sup>15</sup>	34.86 <sup>22</sup>	22.01 <sup>4</sup>	63.58 <sup>27</sup>
18	38.77 <sup>13</sup>	26.11 <sup>23</sup>	16.55 <sup>14</sup>	34.64 <sup>22</sup>	21.97 <sup>6</sup>	63.31 <sup>26</sup>
19	38.90 <sup>14</sup>	26.34 <sup>23</sup>	16.69 <sup>14</sup>	34.42 <sup>23</sup>	21.91 <sup>5</sup>	63.05 <sup>26</sup>
20	39.04 <sup>14</sup>	26.57 <sup>24</sup>	16.83 <sup>14</sup>	34.19 <sup>26</sup>	21.86 <sup>7</sup>	62.79 <sup>27</sup>
21	39.18 <sup>14</sup>	26.81 <sup>25</sup>	16.97 <sup>15</sup>	33.93 <sup>26</sup>	21.79 <sup>7</sup>	62.52 <sup>28</sup>
22	39.32 <sup>15</sup>	27.06 <sup>28</sup>	17.12 <sup>18</sup>	33.67 <sup>26</sup>	21.72 <sup>7</sup>	62.24 <sup>31</sup>
23	39.47 <sup>14</sup>	27.34 <sup>30</sup>	17.30 <sup>19</sup>	33.41 <sup>26</sup>	21.65 <sup>5</sup>	61.93 <sup>32</sup>
24	39.61 <sup>12</sup>	27.64 <sup>32</sup>	17.49 <sup>20</sup>	33.15 <sup>24</sup>	21.60 <sup>5</sup>	61.61 <sup>33</sup>
25	39.73 <sup>11</sup>	27.96 <sup>32</sup>	17.69 <sup>22</sup>	32.91 <sup>23</sup>	21.55 <sup>4</sup>	61.28 <sup>34</sup>
26	39.84 <sup>9</sup>	28.28 <sup>32</sup>	17.91 <sup>22</sup>	32.68 <sup>21</sup>	21.51 <sup>1</sup>	60.94 <sup>34</sup>
27	39.93 <sup>8</sup>	28.60 <sup>32</sup>	18.13 <sup>22</sup>	32.47 <sup>18</sup>	21.50 <sup>0</sup>	60.60 <sup>33</sup>
28	40.01 <sup>6</sup>	28.92 <sup>30</sup>	18.35 <sup>22</sup>	32.29 <sup>17</sup>	21.50 <sup>2</sup>	60.27 <sup>32</sup>
29	40.07 <sup>5</sup>	29.22 <sup>29</sup>	18.57 <sup>20</sup>	32.12 <sup>15</sup>	21.52 <sup>1</sup>	59.95 <sup>30</sup>
Okt. 30	40.12 <sup>5</sup>	29.51 <sup>27</sup>	18.77 <sup>19</sup>	31.97 <sup>15</sup>	21.53 <sup>2</sup>	59.65 <sup>29</sup>
1	40.17 <sup>5</sup>	29.78 <sup>27</sup>	18.96 <sup>19</sup>	31.82 <sup>15</sup>	21.55 <sup>2</sup>	59.36 <sup>27</sup>
2	40.22 <sup>5</sup>	30.05 <sup>26</sup>	19.15 <sup>18</sup>	31.67 <sup>16</sup>	21.57 <sup>1</sup>	59.09 <sup>27</sup>
3	40.29 <sup>7</sup>	30.31 <sup>26</sup>	19.33 <sup>17</sup>	31.51 <sup>17</sup>	21.58 <sup>0</sup>	58.82 <sup>26</sup>
4	40.36 <sup>8</sup>	30.57 <sup>27</sup>	19.50 <sup>19</sup>	31.34 <sup>18</sup>	21.58 <sup>1</sup>	58.56 <sup>28</sup>
5	40.44 <sup>7</sup>	30.84 <sup>29</sup>	19.69 <sup>20</sup>	31.16 <sup>19</sup>	21.57 <sup>0</sup>	58.28 <sup>28</sup>
6	40.51 <sup>8</sup>	31.13 <sup>30</sup>	19.89 <sup>21</sup>	30.97 <sup>18</sup>	21.56 <sup>1</sup>	58.00 <sup>30</sup>
7	40.59 <sup>7</sup>	31.43 <sup>32</sup>	20.10 <sup>24</sup>	30.79 <sup>19</sup>	21.57 <sup>1</sup>	57.39 <sup>33</sup>
8	40.66 <sup>5</sup>	31.75 <sup>34</sup>	20.34 <sup>25</sup>	30.60 <sup>17</sup>	21.58 <sup>4</sup>	57.06 <sup>33</sup>
9	40.71 <sup>4</sup>	32.09 <sup>34</sup>	20.59 <sup>26</sup>	30.43 <sup>15</sup>	21.62 <sup>5</sup>	56.73 <sup>33</sup>
10	40.75 <sup>1</sup>	32.43 <sup>34</sup>	20.85 <sup>26</sup>	30.28 <sup>12</sup>	21.67 <sup>7</sup>	56.40 <sup>32</sup>
11	40.76 <sup>0</sup>	32.77 <sup>34</sup>	21.11 <sup>26</sup>	30.16 <sup>10</sup>	21.74 <sup>7</sup>	56.08 <sup>31</sup>
12	40.76 <sup>1</sup>	33.11 <sup>32</sup>	21.37 <sup>25</sup>	30.06 <sup>9</sup>	21.81 <sup>8</sup>	55.77 <sup>30</sup>
13	40.75 <sup>2</sup>	33.43 <sup>30</sup>	21.62 <sup>24</sup>	29.97 <sup>8</sup>	21.89 <sup>8</sup>	55.47 <sup>27</sup>
14	40.73 <sup>1</sup>	33.73 <sup>29</sup>	21.86 <sup>23</sup>	29.89 <sup>8</sup>	21.97 <sup>7</sup>	55.20 <sup>26</sup>
15	40.72 <sup>0</sup>	34.02 <sup>28</sup>	22.09 <sup>22</sup>	29.81 <sup>8</sup>	22.04 <sup>7</sup>	54.94 <sup>26</sup>
16	40.72 <sup>0</sup>	34.30 <sup>28</sup>	22.31 <sup>22</sup>	29.73 <sup>10</sup>	22.11 <sup>6</sup>	54.68 <sup>26</sup>
17	40.72 <sup>1</sup>	34.58 <sup>29</sup>	22.53 <sup>22</sup>	29.63 <sup>10</sup>	22.17 <sup>6</sup>	54.42 <sup>27</sup>
18	40.73 <sup>1</sup>	34.87 <sup>30</sup>	22.75 <sup>23</sup>	29.53 <sup>12</sup>	22.23 <sup>5</sup>	54.15 <sup>29</sup>
19	40.74 <sup>1</sup>	35.17 <sup>30</sup>	22.98 <sup>23</sup>	29.41 <sup>12</sup>	22.28 <sup>5</sup>	53.86 <sup>29</sup>
O. K.	$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.23 \cos \varphi$	
U. K.	$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.23 \cos \varphi$	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> —5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	—85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	—85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	—84° 38'
Okt. 19	40.74 <sup>s</sup> 2	35.17 <sup>s</sup> 31	22.98 <sup>s</sup> 24	29.41 <sup>s</sup> 12	22.28 <sup>s</sup> 5	53.86 <sup>s</sup> 30
20	40.76 <sup>1</sup>	35.48 <sup>33</sup>	23.22 <sup>25</sup>	29.29 <sup>12</sup>	22.33 <sup>7</sup>	53.56 <sup>31</sup>
21	40.77 <sup>0</sup>	35.81 <sup>34</sup>	23.47 <sup>27</sup>	29.17 <sup>10</sup>	22.40 <sup>8</sup>	53.25 <sup>32</sup>
22	40.77 <sup>2</sup>	36.15 <sup>34</sup>	23.74 <sup>28</sup>	29.07 <sup>8</sup>	22.48 <sup>10</sup>	52.93 <sup>32</sup>
23	40.75 <sup>4</sup>	36.49 <sup>35</sup>	24.02 <sup>30</sup>	28.99 <sup>6</sup>	22.58 <sup>11</sup>	52.61 <sup>30</sup>
24	40.71 <sup>5</sup>	36.84 <sup>35</sup>	24.32 <sup>29</sup>	28.93 <sup>4</sup>	22.69 <sup>13</sup>	52.31 <sup>29</sup>
25	40.66 <sup>7</sup>	37.19 <sup>33</sup>	24.61 <sup>28</sup>	28.89 <sup>1</sup>	22.82 <sup>14</sup>	52.02 <sup>28</sup>
26	40.59 <sup>8</sup>	37.52 <sup>31</sup>	24.89 <sup>27</sup>	28.88 <sup>1</sup>	22.96 <sup>15</sup>	51.74 <sup>25</sup>
27	40.51 <sup>9</sup>	37.83 <sup>30</sup>	25.16 <sup>26</sup>	28.89 <sup>0</sup>	23.11 <sup>14</sup>	51.49 <sup>23</sup>
28	40.42 <sup>8</sup>	38.13 <sup>28</sup>	25.42 <sup>24</sup>	28.89 <sup>1</sup>	23.25 <sup>13</sup>	51.26 <sup>23</sup>
29	40.34 <sup>7</sup>	38.41 <sup>26</sup>	25.66 <sup>23</sup>	28.90 <sup>0</sup>	23.38 <sup>11</sup>	51.03 <sup>22</sup>
30	40.27 <sup>7</sup>	38.67 <sup>26</sup>	25.89 <sup>23</sup>	28.90 <sup>0</sup>	23.49 <sup>12</sup>	50.81 <sup>21</sup>
31	40.20 <sup>6</sup>	38.93 <sup>26</sup>	26.12 <sup>23</sup>	28.90 <sup>2</sup>	23.61 <sup>10</sup>	50.60 <sup>22</sup>
Nov. 1	40.14 <sup>5</sup>	39.19 <sup>28</sup>	26.35 <sup>24</sup>	28.88 <sup>3</sup>	23.71 <sup>12</sup>	50.38 <sup>24</sup>
2	40.09 <sup>5</sup>	39.47 <sup>29</sup>	26.59 <sup>26</sup>	28.85 <sup>2</sup>	23.83 <sup>11</sup>	50.14 <sup>25</sup>
3	40.04 <sup>6</sup>	39.76 <sup>31</sup>	26.85 <sup>27</sup>	28.83 <sup>2</sup>	23.94 <sup>13</sup>	49.89 <sup>27</sup>
4	39.98 <sup>7</sup>	40.07 <sup>31</sup>	27.12 <sup>27</sup>	28.81 <sup>1</sup>	24.07 <sup>15</sup>	49.62 <sup>26</sup>
5	39.91 <sup>10</sup>	40.38 <sup>33</sup>	27.39 <sup>29</sup>	28.82 <sup>2</sup>	24.22 <sup>16</sup>	49.36 <sup>26</sup>
6	39.81 <sup>11</sup>	40.71 <sup>32</sup>	27.68 <sup>30</sup>	28.84 <sup>3</sup>	24.38 <sup>18</sup>	49.10 <sup>26</sup>
7	39.70 <sup>13</sup>	41.03 <sup>32</sup>	27.98 <sup>30</sup>	28.87 <sup>6</sup>	24.56 <sup>18</sup>	48.84 <sup>23</sup>
8	39.57 <sup>14</sup>	41.35 <sup>29</sup>	28.28 <sup>28</sup>	28.93 <sup>8</sup>	24.74 <sup>20</sup>	48.61 <sup>22</sup>
9	39.43 <sup>13</sup>	41.64 <sup>29</sup>	28.56 <sup>27</sup>	29.01 <sup>9</sup>	24.94 <sup>19</sup>	48.39 <sup>20</sup>
10	39.30 <sup>15</sup>	41.93 <sup>26</sup>	28.83 <sup>26</sup>	29.10 <sup>10</sup>	25.13 <sup>19</sup>	48.19 <sup>18</sup>
11	39.15 <sup>15</sup>	42.19 <sup>25</sup>	29.09 <sup>25</sup>	29.20 <sup>10</sup>	25.32 <sup>18</sup>	48.01 <sup>17</sup>
12	39.00 <sup>13</sup>	42.44 <sup>24</sup>	29.34 <sup>24</sup>	29.30 <sup>8</sup>	25.50 <sup>17</sup>	47.84 <sup>17</sup>
13	38.87 <sup>13</sup>	42.68 <sup>23</sup>	29.58 <sup>23</sup>	29.38 <sup>7</sup>	25.67 <sup>16</sup>	47.67 <sup>17</sup>
14	38.74 <sup>12</sup>	42.91 <sup>25</sup>	29.81 <sup>24</sup>	29.45 <sup>7</sup>	25.83 <sup>16</sup>	47.50 <sup>18</sup>
15	38.62 <sup>11</sup>	43.16 <sup>25</sup>	30.05 <sup>24</sup>	29.52 <sup>6</sup>	25.99 <sup>16</sup>	47.32 <sup>19</sup>
16	38.51 <sup>11</sup>	43.41 <sup>27</sup>	30.29 <sup>26</sup>	29.58 <sup>6</sup>	26.15 <sup>17</sup>	47.13 <sup>20</sup>
17	38.40 <sup>12</sup>	43.68 <sup>28</sup>	30.55 <sup>27</sup>	29.64 <sup>7</sup>	26.32 <sup>18</sup>	46.93 <sup>22</sup>
18	38.28 <sup>14</sup>	43.96 <sup>29</sup>	30.82 <sup>27</sup>	29.71 <sup>8</sup>	26.50 <sup>20</sup>	46.71 <sup>21</sup>
19	38.14 <sup>16</sup>	44.25 <sup>29</sup>	31.09 <sup>29</sup>	29.79 <sup>11</sup>	26.70 <sup>21</sup>	46.50 <sup>20</sup>
20	37.98 <sup>17</sup>	44.54 <sup>27</sup>	31.38 <sup>29</sup>	29.90 <sup>13</sup>	26.91 <sup>23</sup>	46.30 <sup>18</sup>
21	37.81 <sup>19</sup>	44.81 <sup>27</sup>	31.67 <sup>27</sup>	30.03 <sup>16</sup>	27.14 <sup>23</sup>	46.12 <sup>18</sup>
22	37.62 <sup>20</sup>	45.08 <sup>26</sup>	31.94 <sup>27</sup>	30.19 <sup>17</sup>	27.37 <sup>24</sup>	45.94 <sup>14</sup>
23	37.42 <sup>21</sup>	45.34 <sup>23</sup>	32.21 <sup>25</sup>	30.36 <sup>19</sup>	27.61 <sup>24</sup>	45.80 <sup>12</sup>
24	37.21 <sup>20</sup>	45.57 <sup>20</sup>	32.46 <sup>23</sup>	30.55 <sup>19</sup>	27.85 <sup>23</sup>	45.68 <sup>10</sup>
25	37.01	45.77	32.69	30.74	28.08	45.58
O. K.	$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.23 \cos \varphi$	
U. K.	$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.23 \cos \varphi$	

## Obere Kulmination.

1912	Octantis 4 G. 6 <sup>m</sup> .		$\zeta$ Octantis. 6 <sup>m</sup> – 5 <sup>m</sup> .		t Octantis. 6 <sup>m</sup> – 5 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	1 <sup>h</sup> 42 <sup>m</sup>	–85° 12'	9 <sup>h</sup> 9 <sup>m</sup>	–85° 18'	12 <sup>h</sup> 45 <sup>m</sup>	–84° 38'
Nov. 25	37.01 <sup>20</sup>	45.77 <sup>19</sup>	32.69 <sup>22</sup>	30.74 <sup>18</sup>	28.08 <sup>22</sup>	45.58 <sup>9</sup>
26	36.81 <sup>18</sup>	45.96 <sup>18</sup>	32.91 <sup>21</sup>	30.92 <sup>17</sup>	28.30 <sup>21</sup>	45.49 <sup>9</sup>
27	36.63 <sup>18</sup>	46.14 <sup>17</sup>	33.12 <sup>21</sup>	31.09 <sup>17</sup>	28.51 <sup>20</sup>	45.40 <sup>10</sup>
28	36.45 <sup>18</sup>	46.31 <sup>18</sup>	33.33 <sup>21</sup>	31.26 <sup>16</sup>	28.71 <sup>19</sup>	45.30 <sup>9</sup>
29	36.27 <sup>17</sup>	46.49 <sup>19</sup>	33.54 <sup>22</sup>	31.42 <sup>15</sup>	28.90 <sup>20</sup>	45.21 <sup>10</sup>
30	36.10 <sup>17</sup>	46.68 <sup>20</sup>	33.76 <sup>23</sup>	31.57 <sup>16</sup>	29.10 <sup>21</sup>	45.11 <sup>12</sup>
Dez. 1	35.93 <sup>18</sup>	46.88 <sup>21</sup>	33.99 <sup>24</sup>	31.73 <sup>17</sup>	29.31 <sup>22</sup>	44.99 <sup>13</sup>
2	35.75 <sup>20</sup>	47.09 <sup>21</sup>	34.23 <sup>25</sup>	31.90 <sup>18</sup>	29.53 <sup>23</sup>	44.86 <sup>12</sup>
3	35.55 <sup>21</sup>	47.30 <sup>22</sup>	34.48 <sup>26</sup>	32.08 <sup>20</sup>	29.76 <sup>24</sup>	44.74 <sup>11</sup>
4	35.34 <sup>23</sup>	47.52 <sup>21</sup>	34.74 <sup>26</sup>	32.28 <sup>22</sup>	30.02 <sup>26</sup>	44.63 <sup>10</sup>
5	35.11 <sup>25</sup>	47.73 <sup>19</sup>	35.00 <sup>24</sup>	32.50 <sup>25</sup>	30.28 <sup>27</sup>	44.53 <sup>7</sup>
6	34.86 <sup>25</sup>	47.92 <sup>18</sup>	35.24 <sup>23</sup>	32.75 <sup>25</sup>	30.55 <sup>26</sup>	44.46 <sup>6</sup>
7	34.61 <sup>24</sup>	48.10 <sup>15</sup>	35.47 <sup>22</sup>	33.00 <sup>27</sup>	30.81 <sup>26</sup>	44.40 <sup>4</sup>
8	34.37 <sup>25</sup>	48.25 <sup>14</sup>	35.69 <sup>20</sup>	33.27 <sup>26</sup>	31.07 <sup>25</sup>	44.36 <sup>2</sup>
9	34.12 <sup>23</sup>	48.39 <sup>12</sup>	35.89 <sup>19</sup>	33.53 <sup>25</sup>	31.32 <sup>24</sup>	44.34 <sup>2</sup>
10	33.89 <sup>23</sup>	48.51 <sup>10</sup>	36.08 <sup>18</sup>	33.78 <sup>24</sup>	31.56 <sup>22</sup>	44.32 <sup>1</sup>
11	33.66 <sup>21</sup>	48.61 <sup>12</sup>	36.26 <sup>17</sup>	34.02 <sup>23</sup>	31.78 <sup>23</sup>	44.31 <sup>2</sup>
12	33.45 <sup>20</sup>	48.73 <sup>12</sup>	36.43 <sup>18</sup>	34.25 <sup>22</sup>	32.01 <sup>22</sup>	44.29 <sup>3</sup>
13	33.25 <sup>21</sup>	48.85 <sup>13</sup>	36.61 <sup>19</sup>	34.47 <sup>22</sup>	32.23 <sup>22</sup>	44.26 <sup>5</sup>
14	33.04 <sup>21</sup>	48.98 <sup>14</sup>	36.80 <sup>19</sup>	34.69 <sup>23</sup>	32.45 <sup>23</sup>	44.21 <sup>4</sup>
15	32.83 <sup>22</sup>	49.12 <sup>15</sup>	36.99 <sup>21</sup>	34.92 <sup>23</sup>	32.68 <sup>25</sup>	44.17 <sup>5</sup>
16	32.61 <sup>24</sup>	49.27 <sup>16</sup>	37.20 <sup>21</sup>	35.15 <sup>25</sup>	32.93 <sup>26</sup>	44.12 <sup>4</sup>
17	32.37 <sup>25</sup>	49.43 <sup>15</sup>	37.41 <sup>21</sup>	35.40 <sup>28</sup>	33.19 <sup>27</sup>	44.08 <sup>2</sup>
18	32.12 <sup>27</sup>	49.58 <sup>13</sup>	37.62 <sup>20</sup>	35.68 <sup>30</sup>	33.46 <sup>27</sup>	44.06 <sup>1</sup>
19	31.85 <sup>28</sup>	49.71 <sup>11</sup>	37.82 <sup>19</sup>	35.98 <sup>32</sup>	33.73 <sup>29</sup>	44.05 <sup>1</sup>
20	31.57 <sup>28</sup>	49.82 <sup>9</sup>	38.01 <sup>18</sup>	36.30 <sup>32</sup>	34.02 <sup>28</sup>	44.06 <sup>3</sup>
21	31.29 <sup>28</sup>	49.91 <sup>7</sup>	38.19 <sup>16</sup>	36.62 <sup>34</sup>	34.30 <sup>27</sup>	44.09 <sup>6</sup>
22	31.01 <sup>27</sup>	49.98 <sup>5</sup>	38.35 <sup>14</sup>	36.96 <sup>33</sup>	34.57 <sup>27</sup>	44.15 <sup>8</sup>
23	30.74 <sup>26</sup>	50.03 <sup>3</sup>	38.49 <sup>13</sup>	37.29 <sup>32</sup>	34.84 <sup>25</sup>	44.23 <sup>8</sup>
24	30.48 <sup>26</sup>	50.06 <sup>3</sup>	38.62 <sup>12</sup>	37.61 <sup>31</sup>	35.09 <sup>25</sup>	44.31 <sup>8</sup>
25	30.22 <sup>24</sup>	50.09 <sup>2</sup>	38.74 <sup>12</sup>	37.92 <sup>30</sup>	35.34 <sup>23</sup>	44.39 <sup>8</sup>
26	29.98 <sup>23</sup>	50.11 <sup>3</sup>	38.86 <sup>12</sup>	38.22 <sup>29</sup>	35.57 <sup>23</sup>	44.47 <sup>7</sup>
27	29.75 <sup>24</sup>	50.14 <sup>5</sup>	38.98 <sup>13</sup>	38.51 <sup>29</sup>	35.80 <sup>23</sup>	44.54 <sup>6</sup>
28	29.51 <sup>24</sup>	50.19 <sup>5</sup>	39.11 <sup>14</sup>	38.80 <sup>29</sup>	36.03 <sup>24</sup>	44.60 <sup>5</sup>
29	29.27 <sup>25</sup>	50.24 <sup>5</sup>	39.25 <sup>15</sup>	39.09 <sup>30</sup>	36.27 <sup>26</sup>	44.65 <sup>5</sup>
30	29.02 <sup>27</sup>	50.29 <sup>6</sup>	39.40 <sup>16</sup>	39.39 <sup>32</sup>	36.53 <sup>26</sup>	44.70 <sup>6</sup>
31	28.75 <sup>28</sup>	50.35 <sup>6</sup>	39.56 <sup>15</sup>	39.71 <sup>34</sup>	36.79 <sup>28</sup>	44.76 <sup>7</sup>
32	28.47 <sup>28</sup>	50.41 <sup>6</sup>	39.71 <sup>15</sup>	40.05 <sup>34</sup>	37.07 <sup>27</sup>	44.83 <sup>7</sup>
O. K.	$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.26 \cos \varphi$		$+ 0^{\circ}.23 \cos \varphi$	
U. K.	$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.26 \cos \varphi$		$- 0^{\circ}.23 \cos \varphi$	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Jan. 1	14 <sup>h</sup> 43 <sup>m</sup>	-87° 47'	16 <sup>h</sup> 27 <sup>m</sup>	-86° 12'	18 <sup>h</sup> 2 <sup>m</sup>	-87° 39'
2	29.10 64	19.98 7	28.94 32	14.09 22	35.51 32	57.72 33
3	29.74 64	19.91 6	29.26 32	13.87 19	35.83 33	57.39 31
4	30.38 63	19.85 3	29.58 30	13.68 18	36.16 33	57.08 29
5	31.01 59	19.82 3	29.88 30	13.50 17	36.49 33	56.79 27
6	31.60 57	19.79 3	30.18 28	13.33 17	36.82 33	56.52 26
7	32.17 56	19.76 4	30.46 28	13.16 17	37.12 28	56.26 26
8	32.73 55	19.72 6	30.74 27	12.99 18	37.40 26	56.00 27
9	33.28 57	19.66 7	31.01 26	12.81 20	37.66 26	55.73 29
10	33.85 59	19.59 7	31.27 28	12.61 21	37.92 27	55.44 30
11	34.44 62	19.52 8	31.55 30	12.40 22	38.19 29	55.14 32
12	35.06 64	19.44 6	31.85 31	12.18 22	38.48 31	54.82 32
13	35.70 68	19.38 6	32.16 34	11.96 22	38.79 35	54.50 33
14	36.38 69	19.32 4	32.50 35	11.74 20	39.14 38	54.17 32
15	37.07 69	19.28 1	32.85 36	11.54 17	39.52 41	53.85 30
16	37.76 68	19.27 1	33.21 36	11.37 16	39.93 43	53.55 29
17	38.44 66	19.28 3	33.57 37	11.21 14	40.36 44	53.26 27
18	39.10 64	19.31 4	33.94 35	11.07 12	40.80 43	52.99 24
19	39.74 60	19.35 4	34.29 33	10.95 11	41.23 42	52.75 23
20	40.34 59	19.39 4	34.62 33	10.84 10	41.65 40	52.52 23
21	40.93 58	19.43 3	34.95 31	10.74 12	42.05 38	52.29 23
22	41.51 57	19.46 2	35.26 32	10.62 12	42.43 37	52.06 24
23	42.08 60	19.48 1	35.58 32	10.50 14	42.80 38	51.82 25
24	42.68 63	19.49 1	35.90 33	10.36 15	43.18 38	51.57 27
25	43.31 65	19.50 0	36.23 35	10.21 15	43.56 41	51.30 28
26	43.96 68	19.50 2	36.58 37	10.06 15	43.97 45	51.02 28
27	44.64 71	19.52 4	36.95 39	9.91 13	44.42 48	50.74 28
28	45.35 72	19.56 6	37.34 41	9.78 12	44.90 51	50.46 28
29	46.07 72	19.62 8	37.75 41	9.66 10	45.41 54	50.18 25
30	46.79 69	19.70 10	38.16 42	9.56 8	45.95 55	49.93 24
31	47.48 67	19.80 12	38.58 41	9.48 5	46.50 56	49.69 21
Febr. 1	48.15 65	19.92 12	38.99 40	9.43 4	47.06 55	49.48 19
2	48.80 62	20.04 13	39.39 38	9.39 3	47.61 53	49.29 18
3	49.42 60	20.17 12	39.77 36	9.36 4	48.14 51	49.11 17
4	50.02 58	20.29 11	40.13 35	9.32 4	48.65 49	48.94 18
5	50.60 58	20.40 10	40.48 35	9.28 5	49.14 48	48.76 19
6	51.18 60	20.50 8	40.83 36	9.23 8	49.62 48	48.57 21
7	51.78 63	20.58 9	41.19 37	9.15 8	50.10 49	48.36 22
O. K.	+ 0°.55 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	- 0°.55 cos φ		- 0°.32 cos φ		- 0°.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		χ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 <sup>h</sup> 43 <sup>m</sup>	—87° 47'	16 <sup>h</sup> 27 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 2 <sup>m</sup>	—87° 39'
Febr. 7	52.41 65	20.67 9	41.56 38	9.07 9	50.59 51	48.14 23
8	53.06 68	20.76 10	41.94 40	8.98 8	51.10 54	47.91 23
9	53.74 69	20.86 10	42.34 42	8.90 6	51.64 56	47.68 22
10	54.43 69	20.96 14	42.76 42	8.84 5	52.20 59	47.46 21
11	55.12 68	21.10 16	43.18 42	8.79 2	52.79 62	47.25 19
12	55.80 66	21.26 17	43.61 43	8.77 0	53.41 62	47.06 17
13	56.46 62	21.43 19	44.04 41	8.77 1	54.03 61	46.89 15
14	57.08 59	21.62 19	44.45 39	8.78 3	54.64 60	46.74 13
15	57.67 57	21.81 20	44.84 38	8.81 3	55.24 58	46.61 12
16	58.24 55	22.01 18	45.22 37	8.84 3	55.82 56	46.49 12
17	58.79 54	22.19 17	45.59 36	8.87 2	56.38 54	46.37 12
18	59.33 55	22.36 16	45.95 37	8.89 1	56.92 53	46.25 13
19	59.88 56	22.52 16	46.32 37	8.90 0	57.45 54	46.12 15
20	60.44 60	22.68 15	46.69 38	8.90 1	57.99 56	45.97 16
21	61.04 62	22.83 15	47.07 40	8.89 1	58.55 58	45.81 18
22	61.66 64	22.98 18	47.47 42	8.88 1	59.13 62	45.63 17
23	62.30 66	23.16 20	47.89 44	8.87 2	59.75 66	45.46 15
24	62.96 66	23.36 22	48.33 44	8.89 3	60.41 67	45.31 15
25	63.62 65	23.58 23	48.77 43	8.92 6	61.08 69	45.16 12
26	64.27 62	23.81 26	49.20 44	8.98 7	61.77 70	45.04 10
27	64.89 57	24.07 26	49.64 42	9.05 10	62.47 68	44.94 7
28	65.46 55	24.33 27	50.06 41	9.15 10	63.15 66	44.87 7
29	66.01 53	24.60 26	50.47 39	9.25 11	63.81 64	44.80 6
März 1	66.54 50	24.86 26	50.86 37	9.36 10	64.45 61	44.74 5
2	67.04 49	25.12 24	51.23 37	9.46 9	65.06 59	44.69 6
3	67.53 50	25.36 22	51.60 37	9.55 7	65.65 59	44.63 7
4	68.03 52	25.58 20	51.97 36	9.62 6	66.24 59	44.56 10
5	68.55 54	25.78 21	52.33 38	9.68 6	66.83 60	44.46 10
6	69.09 56	25.99 23	52.71 40	9.74 6	67.43 61	44.36 10
7	69.65 58	26.22 23	53.11 41	9.80 6	68.04 65	44.26 10
8	70.23 58	26.45 25	53.52 42	9.86 9	68.69 68	44.16 9
9	70.81 58	26.70 28	53.94 42	9.95 10	69.37 69	44.07 7
10	71.39 56	26.98 29	54.36 42	10.05 13	70.06 70	44.00 5
11	71.95 52	27.27 30	54.78 41	10.18 14	70.76 70	43.95 3
12	72.47 48	27.57 31	55.19 40	10.32 17	71.46 69	43.92 1
13	72.95 45	27.88 31	55.59 38	10.49 17	72.15 65	43.91 1
14	73.40 43	28.19 30	55.97 35	10.66 17	72.80 63	43.92 1
15	73.83 43	28.49 30	56.32 35	10.83 17	73.43 63	43.93
O. K.	+ 0°.55 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	— 0°.55 cos φ		— 0°.32 cos φ		— 0°.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		γ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 <sup>h</sup> 44 <sup>m</sup>	—87° 47'	16 <sup>h</sup> 27 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 39'
März 15	13.83 41	28.49 29	56.32 34	10.83 15	13.43 61	43.93 1
16	14.24 41	28.78 28	56.66 34	10.98 15	14.05 59	43.94 1
17	14.65 42	29.06 26	57.00 35	11.13 13	14.64 60	43.93 1
18	15.07 44	29.32 26	57.35 34	11.26 12	15.24 60	43.92 2
19	15.51 47	29.58 26	57.69 36	11.38 12	15.84 62	43.90 3
20	15.98 49	29.84 27	58.05 38	11.50 12	16.46 64	43.87 4
21	16.47 50	30.11 29	58.43 40	11.62 13	17.10 68	43.83 3
22	16.97 51	30.40 31	58.83 41	11.75 15	17.78 70	43.80 2
23	17.48 50	30.71 33	59.24 40	11.90 17	18.48 71	43.78 0
24	17.98 46	31.04 34	59.64 40	12.07 20	19.19 72	43.78 3
25	18.44 43	31.38 36	60.04 39	12.27 21	19.91 71	43.81 5
26	18.87 40	31.74 37	60.43 37	12.48 23	20.62 69	43.86 6
27	19.27 37	32.11 35	60.80 35	12.71 23	21.31 67	43.92 7
28	19.64 34	32.46 35	61.15 33	12.94 22	21.98 64	43.99 8
29	19.98 32	32.81 35	61.48 32	13.16 22	22.62 61	44.07 6
30	20.30 32	33.15 31	61.80 32	13.38 20	23.23 60	44.13 7
31	20.62 34	33.46 31	62.12 31	13.58 19	23.83 59	44.20 5
April 1	20.96 36	33.77 29	62.43 32	13.77 17	24.42 59	44.25 4
2	21.32 37	34.06 29	62.75 33	13.94 18	25.01 61	44.29 1
3	21.69 37	34.35 31	63.08 34	14.12 18	25.62 63	44.30 3
4	22.08 40	34.66 32	63.42 36	14.30 19	26.25 64	44.33 4
5	22.48 39	34.98 34	63.78 36	14.49 21	26.89 68	44.37 5
6	22.87 37	35.32 36	64.14 35	14.70 23	27.57 67	44.42 7
7	23.24 34	35.68 36	64.49 35	14.93 25	28.24 68	44.49 10
8	23.58 30	36.04 37	64.84 33	15.18 26	28.92 66	44.59 12
9	23.88 27	36.41 39	65.17 31	15.44 28	29.58 64	44.71 12
10	24.15 23	36.80 38	65.48 29	15.72 27	30.22 61	44.83 14
11	24.38 21	37.18 36	65.77 28	15.99 27	30.83 58	44.97 15
12	24.59 21	37.54 34	66.05 26	16.26 26	31.41 56	45.12 13
13	24.80 22	37.88 33	66.31 26	16.52 24	31.97 54	45.25 12
14	25.02 23	38.21 32	66.57 26	16.76 23	32.51 55	45.37 11
15	25.25 25	38.53 31	66.83 27	16.99 22	33.06 56	45.48 9
16	25.50 28	38.84 32	67.10 30	17.21 22	33.62 58	45.57 9
17	25.78 28	39.16 32	67.40 31	17.43 23	34.20 61	45.66 9
18	26.06 30	39.50 35	67.71 31	17.66 24	34.81 63	45.75 11
19	26.36 29	39.85 37	68.02 32	17.90 26	35.44 64	45.86 12
20	26.65 27	40.22 39	68.34 31	18.16 28	36.08 65	45.98 13
21	26.92	40.61 39	68.65	18.44	36.73	46.11
O. K.	+ 0°.55 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	— 0.55 cos φ		— 0.32 cos φ		— 0.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		γ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 <sup>h</sup> 44 <sup>m</sup>	—87° 47'	16 <sup>h</sup> 28 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 39'
April 21	26.92 23	40.61 40	8.65 30	18.44 30	36.73 64	46.11 16
22	27.15 19	41.01 40	8.95 28	18.74 31	37.37 62	46.27 18
23	27.34 15	41.41 40	9.23 27	19.05 32	37.99 59	46.45 19
24	27.49 13	41.81 39	9.50 24	19.37 31	38.58 57	46.64 20
25	27.62 11	42.20 38	9.74 22	19.68 31	39.15 54	46.84 19
26	27.73 10	42.58 36	9.96 22	19.99 30	39.69 51	47.03 19
27	27.83 10	42.94 34	10.18 21	20.29 27	40.20 49	47.22 18
28	27.93 12	43.28 33	10.39 21	20.56 27	40.69 49	47.40 16
29	28.05 14	43.61 33	10.60 23	20.83 25	41.18 51	47.56 15
30	28.19 16	43.94 33	10.83 24	21.08 25	41.69 51	47.71 14
Mai I	28.35 17	44.27 34	11.07 24	21.33 27	42.20 54	47.85 15
2	28.52 17	44.61 35	11.31 25	21.60 28	42.74 56	48.00 16
3	28.69 15	44.96 37	11.56 25	21.88 29	43.30 56	48.16 17
4	28.84 12	45.33 38	11.81 24	22.17 31	43.86 57	48.33 20
5	28.96 9	45.71 39	12.05 22	22.48 33	44.43 55	48.53 22
6	29.05 5	46.10 40	12.27 20	22.81 34	44.98 53	48.75 24
7	29.10 1	46.50 39	12.47 18	23.15 35	45.51 50	48.99 25
8	29.11 2	46.89 37	12.65 16	23.50 34	46.01 46	49.24 25
9	29.09 2	47.26 36	12.81 16	23.84 32	46.47 43	49.49 25
10	29.07 2	47.62 34	12.97 14	24.16 32	46.90 41	49.74 24
11	29.05 1	47.96 32	13.11 14	24.48 29	47.31 40	49.98 21
12	29.04 1	48.28 32	13.25 15	24.77 27	47.71 41	50.19 21
13	29.03 2	48.60 32	13.40 15	25.04 28	48.12 43	50.40 20
14	29.05 5	48.92 33	13.55 17	25.32 29	48.55 45	50.60 19
15	29.10 5	49.25 34	13.72 19	25.61 29	49.00 46	50.79 19
16	29.15 5	49.59 35	13.91 19	25.90 31	49.46 49	50.98 21
17	29.20 4	49.94 37	14.10 19	26.21 32	49.95 50	51.19 23
18	29.24 0	50.31 39	14.29 18	26.53 34	50.45 49	51.42 25
19	29.24 4	50.70 39	14.47 16	26.87 37	50.94 48	51.67 27
20	29.20 7	51.09 39	14.63 14	27.24 36	51.42 45	51.94 29
21	29.13 10	51.48 37	14.77 12	27.60 37	51.87 41	52.23 29
22	29.03 12	51.85 36	14.89 10	27.97 35	52.28 37	52.52 29
23	28.91 14	52.21 35	14.99 8	28.32 34	52.65 35	52.81 29
24	28.77 14	52.56 35	15.07 8	28.66 32	53.00 33	53.10 27
25	28.63 13	52.88 32	15.15 7	28.98 31	53.33 31	53.37 25
26	28.50 10	53.19 30	15.22 8	29.29 29	53.64 32	53.62 24
27	28.40 9	53.49 30	15.30 9	29.58 29	53.96 33	53.86 24
28	28.31	53.79	15.39	29.87	54.29	54.10
O. K.	+ 0°.55 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	— 0°.55 cos φ		— 0°.32 cos φ		— 0°.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		χ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 <sup>h</sup> 44 <sup>m</sup>	—87° 47'	16 <sup>h</sup> 28 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 39'
Mai 28	28.31 9	53.79 30	15.39 11	29.87 28	54.29 35	54.10 23
29	28.22 7	54.09 31	15.50 11	30.15 30	54.64 37	54.33 23
30	28.15 8	54.40 33	15.61 11	30.45 32	55.01 37	54.56 26
31	28.07 11	54.73 34	15.72 11	30.77 34	55.38 37	54.82 27
Juni 1	27.96 14	55.07 35	15.83 9	31.11 35	55.75 36	55.09 30
2	27.82 18	55.42 35	15.92 7	31.46 36	56.11 34	55.39 30
3	27.64 21	55.77 35	15.99 4	31.82 37	56.45 31	55.69 32
4	27.43 24	56.12 34	16.03 3	32.19 35	56.76 27	56.01 33
5	27.19 26	56.46 31	16.06 0	32.54 35	57.03 25	56.34 32
6	26.93 27	56.77 30	16.06 0	32.89 33	57.28 21	56.66 31
7	26.66 26	57.07 29	16.06 1	33.22 32	57.49 20	56.97 30
8	26.40 24	57.36 26	16.07 0	33.54 29	57.69 20	57.27 28
9	26.16 22	57.62 26	16.07 1	33.83 29	57.89 21	57.55 26
10	25.94 20	57.88 26	16.08 2	34.12 28	58.10 23	57.81 26
11	25.74 19	58.14 27	16.10 3	34.40 29	58.33 24	58.07 26
12	25.55 18	58.41 28	16.13 4	34.69 30	58.57 26	58.33 27
13	25.37 19	58.69 29	16.17 4	34.99 32	58.83 27	58.60 28
14	25.18 22	58.98 31	16.21 3	35.31 33	59.10 27	58.88 30
15	24.96 25	59.29 32	16.24 2	35.64 35	59.37 25	59.18 32
16	24.71 28	59.61 32	16.26 0	35.99 35	59.62 24	59.50 33
17	24.43 32	59.93 31	16.26 2	36.34 36	59.86 20	59.83 34
18	24.11 34	60.24 30	16.24 5	36.70 35	60.06 16	60.17 34
19	23.77 36	60.54 28	16.19 7	37.05 33	60.22 13	60.51 34
20	23.41 37	60.82 24	16.12 7	37.38 31	60.35 10	60.85 33
21	23.04 35	61.06 23	16.05 8	37.69 30	60.45 9	61.18 30
22	22.69 34	61.29 22	15.97 7	37.99 28	60.54 8	61.48 29
23	22.35 31	61.51 21	15.90 6	38.27 26	60.62 8	61.77 28
24	22.04 30	61.72 22	15.84 5	38.53 26	60.70 10	62.05 27
25	21.74 28	61.94 22	15.79 4	38.79 27	60.80 12	62.32 28
26	21.46 29	62.16 23	15.75 4	39.06 28	60.92 12	62.60 28
27	21.17 30	62.39 24	15.71 4	39.34 30	61.04 14	62.88 30
28	20.87 34	62.63 26	15.67 5	39.64 31	61.18 12	63.18 32
29	20.53 37	62.89 25	15.62 8	39.95 32	61.30 10	63.50 33
30	20.16 41	63.14 26	15.54 9	40.27 32	61.40 8	63.83 34
Juli 1	19.75 43	63.40 24	15.45 12	40.59 33	61.48 5	64.17 35
2	19.32 46	63.64 22	15.33 13	40.92 32	61.53 1	64.52 35
3	18.86 47	63.86 21	15.20 15	41.24 29	61.54 3	64.87 34
4	18.39 47	64.07	15.05	41.53	61.51	65.21
O. K.	+ 0°.56 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	— 0°.56 cos φ		— 0°.32 cos φ		— 0°.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		χ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Juli 4	14 <sup>h</sup> 44 <sup>m</sup>	—87° 48'	16 <sup>h</sup> 28 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 40'
5	18.39 46	4.07 18	15.05 15	41.53 27	61.51 5	5.21 32
6	17.93 45	4.25 16	14.90 15	41.80 26	61.46 6	5.53 30
7	17.48 42	4.41 15	14.75 14	42.06 24	61.40 4	5.83 28
8	17.06 39	4.56 15	14.61 14	42.30 23	61.36 4	6.11 27
9	16.67 37	4.71 15	14.47 12	42.53 23	61.32 2	6.38 26
10	16.30 36	4.86 17	14.35 11	42.76 25	61.30 0	6.64 27
11	15.94 37	5.03 17	14.24 10	43.01 25	61.30 1	6.91 28
12	15.57 38	5.20 19	14.14 11	43.26 26	61.31 2	7.19 30
13	15.19 40	5.39 20	14.03 11	43.52 29	61.33 1	7.49 31
14	14.79 44	5.59 21	13.92 14	43.81 29	61.34 1	7.80 33
15	14.35 47	5.80 19	13.78 16	44.10 29	61.33 4	8.13 34
16	13.88 51	5.99 18	13.62 18	44.39 28	61.29 9	8.47 34
17	13.37 52	6.17 15	13.44 19	44.67 26	61.20 12	8.81 33
18	12.85 52	6.32 13	13.25 21	44.93 25	61.08 14	9.14 31
19	12.33 51	6.45 11	13.04 22	45.18 23	60.94 17	9.45 30
20	11.82 50	6.56 10	12.82 21	45.41 20	60.77 17	9.75 27
21	11.32 47	6.66 8	12.61 20	45.61 19	60.60 17	10.02 27
22	10.85 45	6.74 8	12.41 19	45.80 18	60.43 16	10.29 25
23	10.40 43	6.82 7	12.22 18	45.98 18	60.27 14	10.54 24
24	9.97 42	6.89 9	12.04 17	46.16 19	60.13 13	10.78 25
25	9.55 43	6.98 11	11.87 18	46.35 20	60.00 13	11.03 26
26	9.12 46	7.09 11	11.69 18	46.55 22	59.87 12	11.29 27
27	8.66 48	7.20 12	11.51 19	46.77 22	59.75 14	11.56 30
28	8.18 52	7.32 11	11.32 21	46.99 24	59.61 17	11.86 30
29	7.66 54	7.43 11	11.11 24	47.23 23	59.44 20	12.16 31
30	7.12 57	7.54 9	10.87 24	47.46 22	59.24 23	12.47 31
31	6.55 58	7.63 6	10.63 27	47.68 20	59.01 26	12.78 30
Aug. 1	5.97 57	7.69 4	10.36 28	47.88 18	58.75 29	13.08 27
2	5.40 56	7.73 2	10.08 28	48.06 15	58.46 31	13.35 25
3	4.84 53	7.75 1	9.80 27	48.21 14	58.15 31	13.60 25
4	4.31 50	7.76 0	9.53 25	48.35 13	57.84 28	13.85 23
5	3.81 47	7.76 0	9.28 24	48.48 12	57.56 27	14.08 21
6	3.34 45	7.76 1	9.04 22	48.60 12	57.29 26	14.29 21
7	2.89 45	7.77 3	8.82 22	48.72 13	57.03 23	14.50 21
8	2.44 45	7.80 4	8.60 21	48.85 14	56.80 22	14.71 22
9	1.99 47	7.84 4	8.39 22	48.99 16	56.58 22	14.93 24
10	1.52 50	7.88 4	8.17 23	49.15 16	56.36 24	15.17 25
O. K.	+ 0°.56 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	— 0°.56 cos φ		— 0°.32 cos φ		— 0°.52 cos φ	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 <sup>h</sup> 43 <sup>m</sup>	—87° 48'	16 <sup>h</sup> 27 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 40'
Aug. 10	61.02	7.92	67.94	49.31	56.12	15.42
11	60.49	53	67.69	49.48	55.85	15.68
12	59.93	56	67.42	49.64	55.55	15.95
13	59.36	57	67.13	49.79	55.22	16.21
14	58.78	58	66.83	49.92	54.85	16.45
	57	3	31	11	39	23
15	58.21	54	66.52	50.03	54.46	16.68
16	57.67	52	66.21	50.11	54.06	16.88
17	57.15	49	65.91	50.18	53.66	17.06
18	56.66	47	65.63	50.23	53.28	17.23
19	56.19	44	65.36	50.29	52.91	17.39
	44	6	27	5	35	15
20	55.75	45	65.09	50.34	52.56	17.54
21	55.30	46	64.84	50.39	52.22	17.70
22	54.84	48	64.58	50.46	51.89	17.87
23	54.36	50	64.31	50.54	51.55	18.06
24	53.86	53	64.03	50.63	51.19	18.27
	53	6	29	9	38	20
25	53.33	56	63.74	50.72	50.81	18.47
26	52.77	56	63.43	50.81	50.39	18.67
27	52.21	56	63.10	50.87	49.94	18.87
28	51.65	55	62.76	50.91	49.46	19.05
29	51.10	51	62.43	50.92	48.98	19.21
	51	14	33	0	49	13
30	50.59	48	62.10	50.92	48.49	19.34
31	50.11	45	61.79	50.90	48.01	19.45
Sept. 1	49.66	42	61.49	50.87	47.55	19.54
2	49.24	40	61.21	50.84	47.11	19.63
3	48.84	40	60.94	50.81	46.70	19.72
	40	13	26	2	40	9
4	48.44	41	60.68	50.79	46.30	19.81
5	48.03	43	60.43	50.80	45.92	19.92
6	47.60	45	60.16	50.82	45.53	20.05
7	47.15	47	59.89	50.84	45.12	20.18
8	46.68	48	59.59	50.85	44.67	20.31
	48	13	32	1	47	13
9	46.20	49	59.27	50.84	44.20	20.44
10	45.71	49	58.95	50.82	43.71	20.56
11	45.22	46	58.62	50.78	43.19	20.65
12	44.76	44	58.29	50.72	42.66	20.73
13	44.32	40	57.97	50.64	42.13	20.78
	40	22	30	11	52	3
14	43.92	36	57.67	50.53	41.61	20.81
15	43.56	34	57.39	50.42	41.12	20.83
16	43.22	40	57.12	50.31	40.64	20.84
O. K.	+ 0°.56 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	— 0°.56 cos φ		— 0°.32 cos φ		— 0°.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		χ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 <sup>h</sup> 43 <sup>m</sup>	—87° 47'	16 <sup>h</sup> 27 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 40'
Sept. 16	43.22	64.07 21	57.12 26	50.31 10	40.64 45	20.84 1
17	42.89 33	63.86 19	56.86 26	50.21 10	40.19 44	20.85 2
18	42.57 33	63.67 19	56.60 26	50.11 8	39.75 44	20.87 3
19	42.24 36	63.48 18	56.34 26	50.03 7	39.31 45	20.90 4
20	41.88 38	63.30 19	56.08 27	49.96 6	38.86 45	20.94 6
21	41.50 40	63.11 19	55.81 30	49.90 8	38.39 49	21.00 5
22	41.10 41	62.92 22	55.51 31	49.82 8	37.90 53	21.05 4
23	40.69 41	62.70 23	55.20 32	49.74 10	37.37 54	21.09 3
24	40.28 40	62.47 26	54.88 31	49.64 13	36.83 56	21.12 2
25	39.88 36	62.21 27	54.57 30	49.51 15	36.27 57	21.14 2
26	39.52 32	61.94 29	54.27 30	49.36 17	35.70 55	21.12 4
27	39.20 29	61.65 29	53.97 28	49.19 19	35.15 53	21.08 5
28	38.91 25	61.36 28	53.69 25	49.00 18	34.62 50	21.03 6
29	38.66 23	61.08 27	53.44 23	48.82 18	34.12 47	20.97 7
30	38.43 21	60.81 26	53.21 22	48.64 17	33.65 44	20.90 7
Okt.	38.22 21	60.55 24	52.99 22	48.47 16	33.21 43	20.83 6
2	38.01 23	60.31 22	52.77 21	48.31 15	32.78 42	20.77 5
3	37.78 24	60.09 23	52.56 22	48.16 15	32.36 43	20.72 4
4	37.54 26	59.86 23	52.34 23	48.01 14	31.93 46	20.68 2
5	37.28 28	59.63 24	52.11 25	47.87 14	31.47 48	20.66 2
6	37.00 29	59.39 26	51.86 26	47.73 16	30.99 49	20.64 5
7	36.71 28	59.13 28	51.60 26	47.57 18	30.50 52	20.59 6
8	36.43 25	58.85 30	51.34 27	47.39 20	29.98 53	20.53 8
9	36.18 22	58.55 31	51.07 25	47.19 22	29.45 52	20.45 11
10	35.96 18	58.24 31	50.82 24	46.97 24	28.93 51	20.34 13
11	35.78 14	57.93 32	50.58 22	46.73 25	28.42 49	20.21 13
12	35.64 11	57.61 32	50.36 19	46.48 26	27.93 45	20.08 15
13	35.53 10	57.29 30	50.17 18	46.22 25	27.48 43	19.93 16
14	35.43 8	56.99 30	49.99 16	45.97 23	27.05 42	19.77 14
15	35.35 8	56.69 27	49.83 17	45.74 22	26.63 40	19.63 14
16	35.27 10	56.42 27	49.66 17	45.52 21	26.23 40	19.49 12
17	35.17 13	56.15 27	49.49 18	45.31 21	25.83 42	19.37 11
18	35.04 14	55.88 27	49.31 19	45.10 20	25.41 43	19.26 11
19	34.90 15	55.61 28	49.12 20	44.90 22	24.98 44	19.15 11
20	34.75 15	55.33 30	48.92 21	44.68 22	24.54 48	19.04 13
21	34.60 14	55.03 32	48.71 21	44.46 25	24.06 49	18.91 14
22	34.46 11	54.71 33	48.50 20	44.21 27	23.57 48	18.77 16
23	34.35	54.38 33	48.30	43.94	23.09	18.61
O. K.	+ 0.56 cos φ		+ 0.32 cos φ		+ 0.52 cos φ	
U. K.	— 0.56 cos φ		— 0.32 cos φ		— 0.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	14 <sup>h</sup> 43 <sup>m</sup>	—87° 47'	16 <sup>h</sup> 27 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 40'
Okt. 23	34.35 <sup>7</sup>	54.38 <sup>34</sup>	48.30 <sup>18</sup>	43.94 <sup>29</sup>	23.09 <sup>47</sup>	18.61 <sup>19</sup>
24	34.28 <sup>3</sup>	54.04 <sup>35</sup>	48.12 <sup>17</sup>	43.65 <sup>30</sup>	22.62 <sup>45</sup>	18.42 <sup>21</sup>
25	34.25 <sup>1</sup>	53.69 <sup>35</sup>	47.95 <sup>15</sup>	43.35 <sup>31</sup>	22.17 <sup>42</sup>	18.21 <sup>22</sup>
26	34.26 <sup>4</sup>	53.34 <sup>33</sup>	47.80 <sup>11</sup>	43.04 <sup>30</sup>	21.75 <sup>39</sup>	17.99 <sup>22</sup>
27	34.30 <sup>6</sup>	53.01 <sup>30</sup>	47.69 <sup>10</sup>	42.74 <sup>29</sup>	21.36 <sup>35</sup>	17.77 <sup>23</sup>
28	34.36 <sup>8</sup>	52.71 <sup>30</sup>	47.59 <sup>9</sup>	42.45 <sup>27</sup>	21.01 <sup>33</sup>	17.54 <sup>21</sup>
29	34.44 <sup>7</sup>	52.41 <sup>28</sup>	47.50 <sup>9</sup>	42.18 <sup>27</sup>	20.68 <sup>31</sup>	17.33 <sup>21</sup>
30	34.51 <sup>5</sup>	52.13 <sup>27</sup>	47.41 <sup>9</sup>	41.91 <sup>25</sup>	20.37 <sup>30</sup>	17.12 <sup>19</sup>
Nov. 1	34.56 <sup>4</sup>	51.86 <sup>27</sup>	47.32 <sup>10</sup>	41.66 <sup>24</sup>	20.07 <sup>31</sup>	16.93 <sup>18</sup>
	34.60 <sup>3</sup>	51.59 <sup>27</sup>	47.22 <sup>11</sup>	41.42 <sup>25</sup>	19.76 <sup>34</sup>	16.75 <sup>18</sup>
2	34.63 <sup>1</sup>	51.32 <sup>29</sup>	47.11 <sup>11</sup>	41.17 <sup>25</sup>	19.42 <sup>35</sup>	16.57 <sup>18</sup>
3	34.64 <sup>1</sup>	51.03 <sup>30</sup>	47.00 <sup>12</sup>	40.92 <sup>27</sup>	19.07 <sup>37</sup>	16.39 <sup>20</sup>
4	34.65 <sup>4</sup>	50.73 <sup>32</sup>	46.88 <sup>12</sup>	40.65 <sup>29</sup>	18.70 <sup>38</sup>	16.19 <sup>21</sup>
5	34.69 <sup>6</sup>	50.41 <sup>33</sup>	46.76 <sup>12</sup>	40.36 <sup>29</sup>	18.32 <sup>37</sup>	15.98 <sup>24</sup>
	34.75 <sup>10</sup>	50.08 <sup>33</sup>	46.76 <sup>11</sup>	40.36 <sup>30</sup>	18.32 <sup>37</sup>	15.98 <sup>24</sup>
6	34.85 <sup>14</sup>	49.74 <sup>33</sup>	46.65 <sup>9</sup>	40.06 <sup>33</sup>	17.95 <sup>37</sup>	15.74 <sup>26</sup>
7	34.99 <sup>17</sup>	49.41 <sup>33</sup>	46.56 <sup>8</sup>	39.73 <sup>34</sup>	17.58 <sup>34</sup>	15.48 <sup>28</sup>
8	35.16 <sup>21</sup>	49.08 <sup>32</sup>	46.48 <sup>5</sup>	39.39 <sup>34</sup>	17.24 <sup>31</sup>	15.20 <sup>29</sup>
9	35.37 <sup>22</sup>	48.76 <sup>30</sup>	46.43 <sup>3</sup>	39.05 <sup>33</sup>	16.93 <sup>27</sup>	14.91 <sup>29</sup>
10	35.59 <sup>22</sup>	48.46 <sup>29</sup>	46.40 <sup>2</sup>	38.72 <sup>31</sup>	16.66 <sup>24</sup>	14.62 <sup>28</sup>
11	35.81 <sup>21</sup>	48.17 <sup>27</sup>	46.38 <sup>1</sup>	38.41 <sup>31</sup>	16.42 <sup>23</sup>	14.34 <sup>27</sup>
12	36.02 <sup>19</sup>	47.90 <sup>27</sup>	46.37 <sup>0</sup>	38.10 <sup>29</sup>	16.19 <sup>21</sup>	14.07 <sup>25</sup>
13	36.21 <sup>17</sup>	47.63 <sup>26</sup>	46.37 <sup>1</sup>	37.81 <sup>28</sup>	15.98 <sup>22</sup>	13.82 <sup>25</sup>
14	36.38 <sup>16</sup>	47.37 <sup>26</sup>	46.36 <sup>2</sup>	37.53 <sup>27</sup>	15.76 <sup>23</sup>	13.57 <sup>24</sup>
15	36.54 <sup>15</sup>	47.11 <sup>28</sup>	46.34 <sup>4</sup>	37.26 <sup>28</sup>	15.53 <sup>24</sup>	13.33 <sup>24</sup>
16	36.69 <sup>16</sup>	46.83 <sup>30</sup>	46.30 <sup>4</sup>	36.98 <sup>28</sup>	15.29 <sup>26</sup>	13.09 <sup>24</sup>
17	36.85 <sup>18</sup>	46.53 <sup>31</sup>	46.26 <sup>5</sup>	36.70 <sup>30</sup>	15.03 <sup>28</sup>	12.85 <sup>25</sup>
18	37.03 <sup>21</sup>	46.22 <sup>31</sup>	46.21 <sup>4</sup>	36.40 <sup>32</sup>	14.75 <sup>28</sup>	12.60 <sup>27</sup>
19	37.24 <sup>26</sup>	45.91 <sup>32</sup>	46.17 <sup>2</sup>	36.08 <sup>33</sup>	14.47 <sup>26</sup>	12.33 <sup>30</sup>
20	37.50 <sup>29</sup>	45.59 <sup>32</sup>	46.15 <sup>0</sup>	35.75 <sup>34</sup>	14.21 <sup>24</sup>	12.03 <sup>32</sup>
21	37.79 <sup>33</sup>	45.27 <sup>30</sup>	46.15 <sup>2</sup>	35.41 <sup>35</sup>	13.97 <sup>21</sup>	11.71 <sup>32</sup>
22	38.12 <sup>36</sup>	44.97 <sup>28</sup>	46.17 <sup>4</sup>	35.06 <sup>35</sup>	13.76 <sup>17</sup>	11.39 <sup>33</sup>
23	38.48 <sup>37</sup>	44.69 <sup>27</sup>	46.21 <sup>7</sup>	34.71 <sup>34</sup>	13.59 <sup>14</sup>	11.06 <sup>34</sup>
24	38.85 <sup>37</sup>	44.42 <sup>24</sup>	46.28 <sup>8</sup>	34.37 <sup>32</sup>	13.45 <sup>10</sup>	10.72 <sup>32</sup>
25	39.22 <sup>36</sup>	44.18 <sup>23</sup>	46.36 <sup>7</sup>	34.05 <sup>31</sup>	13.35 <sup>8</sup>	10.40 <sup>31</sup>
26	39.58 <sup>34</sup>	43.95 <sup>22</sup>	46.45 <sup>9</sup>	33.74 <sup>28</sup>	13.27 <sup>6</sup>	10.09 <sup>30</sup>
27	39.92 <sup>33</sup>	43.73 <sup>21</sup>	46.54 <sup>8</sup>	33.46 <sup>28</sup>	13.21 <sup>8</sup>	9.79 <sup>28</sup>
28	40.25	43.52	46.62	33.18	13.13	9.51
O. K.	+ 0°.55 cos φ		+ 0°.32 cos φ		+ 0°.52 cos φ	
U. K.	— 0.55 cos φ		— 0.32 cos φ		— 0.52 cos φ	

## Obere Kulmination.

1912	Octantis 20 G. 7 <sup>m</sup> .		Octantis 26 G. 6 <sup>m</sup> —7 <sup>m</sup> .		Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Nov. 28	14 <sup>h</sup> 43 <sup>m</sup>	—87° 47'	16 <sup>h</sup> 27 <sup>m</sup>	—86° 12'	18 <sup>h</sup> 3 <sup>m</sup>	—87° 39'
29	40.25 <sup>31</sup>	43.52 <sup>22</sup>	46.62 <sup>8</sup>	33.18 <sup>26</sup>	13.13 <sup>8</sup>	69.51 <sup>27</sup>
30	40.56 <sup>30</sup>	43.30 <sup>23</sup>	46.70 <sup>6</sup>	32.92 <sup>27</sup>	13.05 <sup>9</sup>	69.24 <sup>27</sup>
Dec. 1	40.86 <sup>31</sup>	43.07 <sup>25</sup>	46.76 <sup>6</sup>	32.65 <sup>29</sup>	12.96 <sup>11</sup>	68.97 <sup>28</sup>
2	41.17 <sup>34</sup>	42.82 <sup>26</sup>	46.82 <sup>6</sup>	32.36 <sup>29</sup>	12.85 <sup>12</sup>	68.69 <sup>30</sup>
3	41.51 <sup>37</sup>	42.56 <sup>27</sup>	46.88 <sup>7</sup>	32.07 <sup>32</sup>	12.73 <sup>12</sup>	68.39 <sup>31</sup>
4	41.88 <sup>40</sup>	42.29 <sup>27</sup>	47.02 <sup>10</sup>	31.43 <sup>33</sup>	12.61 <sup>10</sup>	68.08 <sup>33</sup>
5	42.28 <sup>44</sup>	42.02 <sup>26</sup>	47.12 <sup>13</sup>	31.10 <sup>34</sup>	12.51 <sup>9</sup>	67.75 <sup>35</sup>
6	42.72 <sup>48</sup>	41.76 <sup>25</sup>	47.25 <sup>14</sup>	30.76 <sup>34</sup>	12.42 <sup>6</sup>	67.40 <sup>35</sup>
7	43.20 <sup>49</sup>	41.51 <sup>23</sup>	47.39 <sup>16</sup>	30.42 <sup>32</sup>	12.36 <sup>1</sup>	67.05 <sup>36</sup>
8	43.69 <sup>50</sup>	41.28 <sup>21</sup>	47.55 <sup>17</sup>	30.10 <sup>31</sup>	12.35 <sup>1</sup>	66.69 <sup>36</sup>
9	44.19 <sup>49</sup>	41.07 <sup>19</sup>	47.72 <sup>18</sup>	29.79 <sup>28</sup>	12.36 <sup>4</sup>	66.33 <sup>34</sup>
10	44.68 <sup>47</sup>	40.88 <sup>17</sup>	47.90 <sup>17</sup>	29.51 <sup>26</sup>	12.40 <sup>5</sup>	65.99 <sup>33</sup>
11	45.15 <sup>45</sup>	40.71 <sup>17</sup>	48.07 <sup>15</sup>	29.25 <sup>26</sup>	12.45 <sup>6</sup>	65.66 <sup>31</sup>
12	45.60 <sup>45</sup>	40.54 <sup>17</sup>	48.22 <sup>15</sup>	28.99 <sup>25</sup>	12.51 <sup>6</sup>	65.35 <sup>30</sup>
13	46.02 <sup>42</sup>	40.37 <sup>17</sup>	48.37 <sup>14</sup>	28.74 <sup>26</sup>	12.57 <sup>5</sup>	65.05 <sup>29</sup>
14	46.44 <sup>41</sup>	40.20 <sup>19</sup>	48.51 <sup>13</sup>	28.48 <sup>26</sup>	12.62 <sup>2</sup>	64.76 <sup>29</sup>
15	46.85 <sup>42</sup>	40.01 <sup>20</sup>	48.64 <sup>14</sup>	28.22 <sup>28</sup>	12.64 <sup>1</sup>	64.47 <sup>30</sup>
16	47.27 <sup>45</sup>	39.81 <sup>20</sup>	48.78 <sup>15</sup>	27.94 <sup>30</sup>	12.65 <sup>0</sup>	64.17 <sup>32</sup>
17	47.72 <sup>49</sup>	39.61 <sup>22</sup>	48.93 <sup>17</sup>	27.64 <sup>31</sup>	12.65 <sup>2</sup>	63.85 <sup>33</sup>
18	48.21 <sup>52</sup>	39.39 <sup>21</sup>	49.10 <sup>19</sup>	27.33 <sup>31</sup>	12.67 <sup>3</sup>	63.52 <sup>34</sup>
19	48.73 <sup>56</sup>	39.18 <sup>19</sup>	49.29 <sup>21</sup>	27.02 <sup>31</sup>	12.70 <sup>6</sup>	63.18 <sup>35</sup>
20	49.29 <sup>58</sup>	38.99 <sup>18</sup>	49.50 <sup>23</sup>	26.71 <sup>30</sup>	12.76 <sup>11</sup>	62.83 <sup>36</sup>
21	49.87 <sup>60</sup>	38.81 <sup>16</sup>	49.73 <sup>24</sup>	26.41 <sup>28</sup>	12.87 <sup>13</sup>	62.47 <sup>37</sup>
22	50.47 <sup>61</sup>	38.65 <sup>14</sup>	49.97 <sup>26</sup>	26.13 <sup>26</sup>	13.00 <sup>17</sup>	62.10 <sup>35</sup>
23	51.08 <sup>59</sup>	38.51 <sup>11</sup>	50.23 <sup>27</sup>	25.87 <sup>24</sup>	13.17 <sup>21</sup>	61.75 <sup>34</sup>
24	51.67 <sup>57</sup>	38.40 <sup>10</sup>	50.50 <sup>26</sup>	25.63 <sup>23</sup>	13.38 <sup>22</sup>	61.41 <sup>32</sup>
25	52.24 <sup>55</sup>	38.30 <sup>9</sup>	50.76 <sup>25</sup>	25.40 <sup>21</sup>	13.60 <sup>22</sup>	61.09 <sup>31</sup>
26	52.79 <sup>53</sup>	38.21 <sup>8</sup>	51.01 <sup>24</sup>	25.19 <sup>21</sup>	13.82 <sup>21</sup>	60.78 <sup>29</sup>
27	53.32 <sup>52</sup>	38.13 <sup>10</sup>	51.25 <sup>23</sup>	24.98 <sup>21</sup>	14.03 <sup>21</sup>	60.49 <sup>29</sup>
28	53.84 <sup>52</sup>	38.03 <sup>11</sup>	51.48 <sup>22</sup>	24.77 <sup>22</sup>	14.24 <sup>19</sup>	60.20 <sup>28</sup>
29	54.36 <sup>52</sup>	37.92 <sup>12</sup>	51.70 <sup>23</sup>	24.55 <sup>24</sup>	14.43 <sup>17</sup>	59.92 <sup>29</sup>
30	54.88 <sup>52</sup>	37.80 <sup>13</sup>	51.93 <sup>24</sup>	24.31 <sup>25</sup>	14.60 <sup>16</sup>	59.63 <sup>31</sup>
31	55.43 <sup>59</sup>	37.67 <sup>13</sup>	52.17 <sup>25</sup>	24.06 <sup>26</sup>	14.76 <sup>17</sup>	59.32 <sup>33</sup>
32	56.02 <sup>62</sup>	37.54 <sup>13</sup>	52.42 <sup>27</sup>	23.80 <sup>27</sup>	14.93 <sup>19</sup>	58.99 <sup>34</sup>
33	56.64 <sup>65</sup>	37.41 <sup>12</sup>	52.69 <sup>30</sup>	23.53 <sup>25</sup>	15.12 <sup>23</sup>	58.65 <sup>35</sup>
O. K.	+ 0°.55	cos φ	+ 0°.32	cos φ	+ 0°.52	cos φ
U. K.	- 0°.55	cos φ	- 0°.32	cos φ	- 0°.52	cos φ

## Obere Kulmination.

1912	α Octantis. 6 <sup>m</sup> .		β Octantis. 4 <sup>m</sup> – 5 <sup>n</sup> .		τ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 <sup>h</sup> 18 <sup>m</sup>	–89° 14'	22 <sup>h</sup> 37 <sup>m</sup>	–81° 50'	23 <sup>h</sup> 15 <sup>m</sup>	–87° 58'
Jan. 1	0.61	16° 40'	5.17	59° 40'	16.78	20.41
2	0.88	27	16.02	38	16.23	20.17
3	1.27	39	15.65	37	15.72	19.92
4	1.72	45	15.28	37	15.25	19.67
5	2.17	45	14.94	34	14.81	19.42
6	2.61	40	14.62	32	14.39	19.19
7	3.01	34	14.31	31	13.97	18.97
8	3.35	29	14.00	30	13.54	18.76
9	{ 3.64	26	{ 13.70	33	13.09	18.55
	{ 3.90	{ 25	{ 13.37	34	47	20
10	4.15	29	13.03	37	12.62	18.35
11	4.44	37	12.66	37	12.11	18.13
12	4.81	46	12.29	38	11.58	17.90
13	5.27	57	11.91	36	11.05	17.65
14	5.84	67	11.55	38	10.54	17.38
15	6.51	75	11.17	36	10.05	17.09
16	7.26	81	10.81	36	9.59	16.79
17	8.07	81	10.48	33	9.17	16.49
18	8.88	80	10.16	32	8.80	16.18
19	9.68		9.85		8.45	15.89
		75	29	5	33	28
20	10.43	70	9.56	30	8.12	15.61
21	11.13	66	9.26	30	7.79	15.34
22	11.79	64	8.96	31	7.46	15.06
23	12.43	66	8.65	31	7.10	14.80
24	13.09	72	8.31	34	6.71	14.54
		72	35	7	41	28
25	13.81	81	7.96	35	6.30	14.26
26	14.62	92	7.61	37	5.88	13.96
27	15.54	104	7.24	36	5.46	13.64
28	16.58	114	6.88	36	5.06	13.30
29	17.72	123	6.53	35	4.68	12.93
		123	33	5	33	37
30	18.95	125	6.20	31	4.35	12.56
31	20.20	124	5.89	29	4.06	12.19
Febr. 1	21.44	120	5.60	28	3.81	11.82
2	22.64	115	5.32	26	3.59	11.46
3	23.79	109	5.06	27	3.38	11.12
4	24.88	103	4.79	28	3.18	10.79
5	25.91	101	4.51	29	2.96	10.47
6	26.92		4.22		2.72	10.16
O. K.	+ 1°.60 cos φ		+ 0°.15 cos φ		+ 0°.60 cos φ	
U. K.	– 1°.60 cos φ		– 0°.15 cos φ		– 0°.60 cos φ	

## Obere Kulmination.

1912	$\alpha$ Octantis. 6 <sup>m</sup> .		$\beta$ Octantis. 4 <sup>m</sup> —5 <sup>m</sup> .		$\tau$ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 <sup>h</sup> 18 <sup>m</sup>	-89° 13'	22 <sup>h</sup> 37 <sup>m</sup>	-81° 50'	23 <sup>h</sup> 14 <sup>m</sup>	-87° 57'
Febr. 6	26.92 104	64.22	2.80	48.60	62.72 27	70.16 32
7	27.96 109	63.92 30	2.76 4	48.27 33	62.45 29	69.84 34
8	29.05 115	63.60 32	2.73 3	47.93 34	62.16 31	69.50 34
9	30.20 125	63.27 33	2.69 4	47.58 35	61.85 29	69.16 36
10	31.45 137	62.94 33	2.65 3	47.20 38	61.56 27	68.80 38
11	32.82 145	62.63 31	2.62 2	46.82 40	61.29 24	68.42 40
12	34.27 149	62.33 30	2.60 1	46.42 41	61.05 20	68.02 40
13	35.76 151	62.04 26	2.59 0	46.01 39	60.85 15	67.62 40
14	37.27 150	61.78 24	2.59 1	45.62 38	60.70 12	67.22 39
15	38.77 146	61.54 24	2.60 0	45.24 37	60.58 9	66.83 38
16	40.23 140	61.30 23	2.60 2	44.87 35	60.49 8	66.45 36
17	41.63 134	61.07 22	2.62 1	44.52 35	60.41 9	66.09 35
18	42.97 129	60.85 24	2.63 1	44.17 33	60.32 10	65.74 34
19	44.26 129	60.61 24	2.64 1	43.84 34	60.22 12	65.40 34
20	45.55 133	60.37 27	2.63 0	43.50 35	60.10 14	65.06 35
21	46.88 140	60.10 28	2.63 0	43.15 37	59.96 17	64.71 37
22	48.28 150	59.82 28	2.63 1	42.78 38	59.79 18	64.34 38
23	49.78 161	59.54 28	2.62 1	42.40 40	59.61 17	63.96 40
24	51.39 171	59.26 26	2.61 1	42.00 41	59.44 13	63.56 42
25	53.10 179	59.00	2.62 2	41.59 42	59.31 9	63.14 43
26	54.88 178	58.75 25	2.64 2	41.17 43	59.22 5	62.71 43
27	56.71 183	58.52 23	2.66 4	40.74 41	59.17 1	62.28 43
28	58.54 183	58.31 21	2.70 4	40.33 40	59.16 2	61.85 41
29	60.33 172	58.12 19	2.74 5	39.93 39	59.18 5	61.44 41
März 1	62.05 165	57.95 18	2.84 4	39.17 36	59.23 6	61.03 38
2	63.70 159	57.77 18	2.88 4	38.81 34	59.29 4	60.65 37
3	65.29 154	57.59 18	2.92 4	38.47 35	59.33 2	60.28 37
4	66.83 153	57.41 21	2.96 3	38.12 36	59.35 0	59.91 35
5	68.36 155	57.20 22	2.99 2	37.76 36	59.35 2	59.56 37
6	69.91 162	56.98 22	3.01 2	37.40 39	59.33 4	59.19 38
7	71.53 170	56.76 22	3.03 3	37.01 40	59.29 4	58.81 40
8	73.23 179	56.54 22	3.06 4	36.61 41	59.25 1	58.41 40
9	75.02 188	56.32 21	3.10 5	36.20 41	59.24 0	58.01 42
10	76.90 194	56.11 19	3.15 6	35.79 40	59.28 9	57.17 43
11	78.84 194	55.92 16	3.21 7	35.39 39	59.37 13	56.74 41
12	80.78 194	55.76	3.28	35.00	59.50	56.33
0. K.	$+\ 1^{\circ}.59 \cos \varphi$		$+\ 0^{\circ}.15 \cos \varphi$		$+\ 0^{\circ}.60 \cos \varphi$	
11. K.	$-\ 1.59 \cos \varphi$		$-\ 0.15 \cos \varphi$		$-\ 0.60 \cos \varphi$	

## Obere Kulmination.

1912	σ Octantis. 6 <sup>m</sup> .		β Octantis. 4 <sup>m</sup> —5 <sup>m</sup> .		τ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 <sup>h</sup> 19 <sup>m</sup>	—89° 13'	22 <sup>h</sup> 37 <sup>m</sup>	—81° 50'	23 <sup>h</sup> 14 <sup>m</sup>	—87° 57'
März 12	20.78	55.76	3.28	8	35.00	56.33
13	22.71	193	55.62	14	34.62	55.93
14	24.61	190	55.50	12	34.26	55.54
15	26.44	183	55.38	11	33.91	55.16
16	28.19	175	55.27	12	33.57	54.80
17	29.89	167	55.15	13	33.25	54.45
18	31.56	167	55.02	15	32.92	54.10
19	33.23	171	54.87	16	32.57	53.73
20	34.94	179	54.71	16	32.21	53.35
21	36.73	189	54.55	16	31.83	52.96
22	38.62	199	54.39	16	31.44	52.56
23	40.61	206	54.23	13	31.04	52.14
24	42.67	210	54.10	12	30.64	51.71
25	44.77	211	53.98	10	30.24	51.29
26	46.88	208	53.88	7	29.86	50.88
27	48.96	202	53.81	7	29.49	50.48
28	50.98	194	53.74	6	29.15	52.26
29	52.92	185	53.68	5	28.82	50.11
30	54.77	179	53.63	6	28.50	49.75
31	56.56	175	53.57	7	28.20	49.41
April 1	58.31	175	53.50	8	27.89	49.07
2	60.06	179	53.42	9	27.56	48.74
3	61.85	185	53.33	10	27.22	48.39
4	63.70	194	53.23	10	26.87	48.04
5	65.64	200	53.13	8	26.52	47.66
6	67.64	206	53.05	7	26.16	47.33
7	69.70	210	52.98	4	25.80	46.89
8	71.80	208	52.94	2	25.45	46.50
9	73.88	203	52.92	0	25.12	46.12
10	75.91	195	52.92	1	24.81	45.76
11	77.86	188	52.93	2	24.52	45.41
12	79.74	181	52.95	2	24.25	45.08
13	81.55	174	52.97	0	23.98	44.77
14	83.29	174	52.97	1	23.71	44.47
15	85.01	175	52.96	3	23.44	44.16
16	86.76	181	52.93	3	23.15	43.86
17	88.57	188	52.90	3	22.85	43.55
18	90.45	188	52.87	3	22.54	43.22
O. K.	+ 1.59 cos φ		+ 0.15 cos φ		+ 0.60 cos φ	
U. K.	— 1.59 cos φ		— 0.15 cos φ		— 0.60 cos φ	

## Obere Kulmination.

1912	σ Octantis. 6 <sup>m</sup> .		β Octantis. 4 <sup>m</sup> —5 <sup>m</sup> .		τ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 <sup>h</sup> 20 <sup>m</sup>	—89° 13'	22 <sup>h</sup> 37 <sup>m</sup>	—81° 50'	23 <sup>h</sup> 15 <sup>m</sup>	—87° 57'
April 18	30.45 197	52.87	6.80	22.54	8.76	42.88
19	32.42 204	52.84	6.92	22.21	9.11	42.53
20	34.46 210	52.83	7.05	21.88	9.49	42.17
21	36.56 211	52.84	7.18	21.56	9.92	41.82
22	38.67 207	52.87	7.33	21.26	10.39	41.47
		5	15	28	50	33
23	40.74 200	52.92	7.48	20.98	10.89	41.14
24	42.74 193	52.99	7.64	20.71	11.41	40.82
25	44.67 184	53.07	7.79	20.45	11.92	40.53
26	46.51 175	53.15	7.94	20.22	12.41	40.26
27	48.26 169	53.23	8.08	20.00	12.88	40.00
		6	15	22	45	26
28	49.95 166	53.29	8.23	19.78	13.33	39.74
29	51.61 167	53.34	8.36	19.55	13.75	39.48
30	53.28 173	53.38	8.48	19.32	14.15	39.21
Mai 1	55.01 180	53.42	8.62	19.07	14.55	38.93
2	56.81 186	53.45	8.75	18.81	14.96	38.65
		4	14	26	44	30
3	58.67 191	53.49	8.89	18.55	15.40	38.35
4	60.58 193	53.55	9.04	18.29	15.89	38.06
5	62.51 193	53.63	9.20	18.04	16.42	37.77
6	64.44 189	53.73	9.36	17.80	16.98	37.49
7	66.33 182	53.86	9.53	17.58	17.56	37.24
		14	17	19	59	24
8	68.15 172	54.00	9.70	17.39	18.15	37.00
9	69.87 163	54.15	9.86	17.22	18.73	36.78
10	71.50 156	54.29	10.03	17.06	19.30	36.58
11	73.06 151	54.44	10.19	16.90	19.85	36.38
12	74.57 151	54.57	10.33	16.74	20.36	36.18
		11	14	17	48	20
13	76.08 153	54.68	10.47	16.57	20.84	35.98
14	77.61 159	54.78	10.61	16.39	21.31	35.77
15	79.20 167	54.87	10.75	16.20	21.78	35.55
16	80.87 174	54.97	10.90	16.00	22.27	35.31
17	82.61 180	55.07	11.06	15.79	22.79	35.06
		12	16	20	57	24
18	84.41 182	55.19	11.22	15.59	23.36	34.82
19	86.23 180	55.34	11.39	15.39	23.97	34.58
20	88.03 173	55.50	11.57	15.22	24.60	34.36
21	89.76 164	55.69	11.75	15.07	25.25	34.16
22	91.40 154	55.88	11.94	14.94	25.90	33.99
		21	18	11	64	16
23	92.94 144	56.09	12.12	14.83	26.54	33.83
24	94.38 137	56.29	12.29	14.73	27.16	33.69
25	95.75	56.49	12.45	14.63	27.74	33.55
O. K.	+ 1.59 cos φ		+ 0.15 cos φ		+ 0.60 cos φ	
U. K.	— 1.59 cos φ		— 0.15 cos φ		— 0.60 cos φ	

## Obere Kulmination.

1912	σ Octantis. 6 <sup>m</sup> .		β Octantis. 4 <sup>m</sup> – 5 <sup>m</sup> .		τ Octantis. 6 <sup>m</sup> .		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	19 <sup>h</sup> 21 <sup>m</sup>	–89° 13'	22 <sup>h</sup> 37 <sup>m</sup>	–81° 50'	23 <sup>h</sup> 15 <sup>m</sup>	–87° 57'	
Mai	25	35.75 132	56.49 18	12.45 16	14.63 9	27.74 55	33.55 13
	26	37.07 130	56.67 16	12.61 15	14.54 10	28.29 53	33.42 14
	27	38.37 133	56.83 16	12.76 14	14.44 12	28.82 51	33.28 15
	28	39.70 138	56.99 15	12.90 16	14.32 12	29.33 53	33.13 16
	29	41.08 143	57.14 15	13.06 16	14.20 13	29.86 55	32.97 16
	30	42.51 149	57.29 17	13.22 16	14.07 13	30.41 58	32.81 17
Juni	1	44.00 151	57.46 19	13.38 17	13.94 12	30.99 62	32.64 16
	2	45.51 152	57.65 21	13.55 18	13.82 10	31.61 65	32.48 15
	3	47.03 148	57.86 24	13.73 18	13.72 9	32.26 67	32.33 13
	4	48.51 139	58.10 24	13.91 19	13.63 7	32.93 68	32.20 11
	5	49.90 130	58.34 26	14.10 18	13.56 4	33.61 68	32.09 9
	6	51.20 121	58.60 26	14.28 18	13.52 3	34.29 67	32.00 7
	7	52.41 111	58.86 25	14.46 17	13.49 0	34.96 63	31.93 6
	8	53.52 105	59.11 24	14.63 16	13.49 1	35.59 60	31.87 5
	9	54.57 102	59.35 23	14.79 15	13.48 2	36.19 56	31.82 6
	10	55.59 102	59.58 21	14.94 15	13.46 3	36.75 55	31.76 7
	11	56.61 106	59.79 21	15.09 15	13.43 5	37.30 54	31.69 7
	12	57.67 113	60.00 20	15.24 16	13.38 6	37.84 55	31.62 10
	13	58.80 120	60.20 20	15.40 15	13.32 6	38.39 57	31.52 10
	14	60.00 125	60.40 22	15.55 16	13.26 6	38.96 61	31.42 10
	15	61.25 127	60.62 24	15.71 18	13.20 5	39.57 64	31.32 9
	16	62.52 126	60.86 25	15.89 19	13.15 4	40.21 67	31.23 8
	17	63.78 121	61.11 27	16.08 19	13.11 1	40.88 69	31.15 5
	18	64.99 112	61.38 29	16.27 18	13.10 0	41.57 70	31.10 5
	19	66.11 101	61.67 30	16.45 17	13.10 3	42.27 69	31.05 2
	20	67.12 91	61.97 30	16.62 17	13.13 4	42.96 66	31.03 0
	21	68.03 81	62.27 28	16.79 17	13.17 5	43.62 63	31.03 1
	22	68.84 73	62.55 28	16.96 15	13.22 5	44.25 59	31.04 2
	23	69.57 69	62.83 26	17.11 15	13.27 5	44.84 56	31.06 2
	24	70.26 70	63.09 24	17.26 14	13.32 4	45.40 54	31.08 1
	25	70.96 74	63.33 24	17.40 14	13.36 2	45.94 54	31.09 1
	26	71.70 79	63.57 24	17.54 15	13.38 2	46.48 55	31.08 1
	27	72.49 84	63.81 24	17.69 15	13.40 2	47.03 57	31.07 2
	28	73.33 88	64.05 26	17.84 15	13.42 2	47.60 60	31.05 1
	29	74.21 87	64.31 28	17.99 17	13.44 4	48.20 63	31.04 1
	30	75.08 84	64.59 30	18.16 17	13.48 6	48.83 66	31.03 1
Juli	1	75.92 79	64.89 32	18.33 17	13.54 7	49.49 67	31.04 4
O. K.		+ 1.59 cos φ		+ 0.15 cos φ		+ 0.60 cos φ	
U. K.		– 1.59 cos φ		– 0.15 cos φ		– 0.60 cos φ	

## Obere Kulmination.

1912	$\sigma$ Octantis. $6^m$ .		$\beta$ Octantis. $4^m - 5^m$ .		$\tau$ Octantis. $6^m$ .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 <sup>h</sup> 22 <sup>m</sup>	-89° 14'	22 <sup>h</sup> 37 <sup>m</sup>	-81° 50'	23 <sup>h</sup> 15 <sup>m</sup>	-87° 57'
Juli	1	16.71 69	5.21 33	18.50 17	13.61 10	50.16 67
	2	17.40 55	5.54 33	18.67 16	13.71 12	50.83 65
	3	17.95 46	5.87 33	18.83 16	13.83 13	51.48 62
	4	18.41 38	6.20 31	18.99 14	13.96 13	52.10 58
	5	18.79 33	6.51 30	19.13 14	14.09 13	52.68 55
	6	19.12 31	6.81 28	19.27 14	14.22 12	53.23 52
	7	19.43 34	7.09 27	19.41 12	14.34 11	53.75 50
	8	19.77 39	7.36 26	19.53 12	14.45 9	54.25 50
	9	20.16 45	7.62 26	19.65 13	14.54 9	54.75 51
	10	20.61 50	7.88 27	19.78 14	14.63 8	55.26 54
	11	21.11 55	8.15 28	19.92 14	14.71 9	55.80 57
	12	21.66 54	8.43 30	20.06 15	14.80 10	56.37 60
	13	22.20 50	8.73 32	20.21 15	14.90 12	56.97 61
	14	22.70 42	9.05 33	20.36 16	15.02 14	57.58 62
	15	23.12 31	9.38 34	20.52 15	15.16 16	58.20 61
	16	23.43 20	9.72 34	20.67 14	15.32 18	58.81 59
	17	23.63 9	10.06 34	20.81 13	15.50 19	59.40 56
	18	23.72 0	10.39 32	20.94 13	15.69 19	59.96 51
	19	23.72 5	10.71 31	21.07 12	15.88 19	60.47 48
	20	23.67 7	11.02 28	21.19 10	16.07 18	60.95 45
	21	23.60 5	11.30 27	21.29 10	16.25 16	61.40 44
	22	23.55 0	11.57 27	21.39 11	16.41 16	61.84 43
	23	23.55 5	11.84 26	21.50 11	16.57 16	62.27 45
	24	23.60 8	12.10 28	21.61 10	16.73 16	62.72 47
	25	23.68 10	12.38 29	21.71 12	16.89 16	63.19 51
	26	23.78 8	12.67 30	21.83 12	17.05 18	63.70 52
	27	23.86 2	12.97 33	21.95 13	17.23 20	64.22 53
	28	23.88 7	13.30 35	22.08 13	17.43 21	64.75 53
	29	23.81 17	13.65 34	22.21 11	17.64 24	65.28 52
	30	23.64 29	13.99 34	22.32 11	17.88 25	65.80 49
	31	23.35 38	14.33 32	22.43 10	18.13 26	66.29 46
Aug.	1	22.97 45	14.65 31	22.53 9	18.39 26	66.75 41
	2	22.52 49	14.96 29	22.62 7	18.65 24	67.16 37
	3	22.03 48	15.25 27	22.69 8	18.89 24	67.53 35
	4	21.55 43	15.52 26	22.77 7	19.13 22	67.88 34
	5	21.12 37	15.78 25	22.84 7	19.35 20	68.22 34
	6	20.75 31	16.03 25	22.91 9	19.55 19	68.56 35
	7	20.44	16.28	23.00	19.74	68.91 36
O. K.		+ 1°.60 cos φ		+ 0°.15 cos φ		+ 0°.60 cos φ
U. K.		- 1°.60 cos φ		- 0°.15 cos φ		- 0°.60 cos φ

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	σ Octantis. 6 <sup>m</sup> .		β Octantis. 4 <sup>m</sup> —5 <sup>m</sup> .		τ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Aug. 7	19 <sup>h</sup> 21 <sup>m</sup>	-89° 14'	22 <sup>h</sup> 37 <sup>m</sup>	-81° 50'	23 <sup>h</sup> 16 <sup>m</sup>	-87° 57'
8	80.44 26	16.28	23.00 8	19.74 20	8.91	36.20 18
9	80.18 26	16.55 28	23.08 9	19.94 21	9.28	36.38 19
10	79.92 28	16.83 30	23.17 9	20.15 23	9.69	36.57 21
11	79.64 33	17.13 30	23.26 10	20.38 24	10.11	36.78 21
12	79.31 44	17.43 32	23.36 9	20.62 26	10.54	36.99 24
13	78.87 55	17.75 32	23.45 9	20.88 28	10.96	37.23 26
14	78.32 66	18.07 31	23.54 7	21.16 29	11.37	37.49 28
15	77.66 76	18.38 29	23.61 7	21.45 29	11.74	37.77 28
16	76.90 81	18.67 27	23.68 5	21.74 29	12.07	38.05 28
17	76.09 85	18.94 25	23.73 5	22.03 29	12.35	38.33 28
18	75.24 84	19.19 24	23.78 4	22.32 26	12.59	38.61 27
19	74.40 80	19.43 22	23.82 4	22.58 26	12.81	38.88 24
20	73.60 75	19.65 22	23.86 4	22.84 24	13.02	39.12 24
21	72.85 70	19.87 23	23.90 5	23.08 24	13.25	39.36 24
22	72.15 67	20.10 23	23.95 5	23.32 25	13.48	39.60 24
23	71.48 68	20.33 25	24.00 5	23.57 25	13.73	39.84 25
24	70.80 72	20.58 27	24.05 5	23.82 28	14.00	40.09 25
25	70.08 79	20.85 27	24.10 6	24.10 29	14.29	40.34 28
26	69.29 88	21.12 28	24.16 5	24.39 31	14.59	40.62 30
27	68.41 100	21.40 28	24.21 5	24.70 32	14.87	40.92 31
28	67.41 110	21.68 27	24.26 3	25.02 32	15.12	41.23 32
29	66.31 116	21.95 24	24.29 2	25.34 33	15.34	41.55 33
30	65.15 119	22.19 23	24.31 1	25.67 32	15.52	41.88 32
31	63.96 120	22.42 21	24.32 0	25.99 31	15.65	42.20 31
Sept. 1	62.76 117	22.63 18	24.32 0	26.30 28	15.74	42.51 29
2	61.59 110	22.81 17	24.32 1	26.58 27	15.82	42.80 29
3	60.49 104	22.98 17	24.33 0	26.85 26	15.89	43.09 26
4	59.45 98	23.15 17	24.33 1	27.11 26	15.97	43.35 26
5	58.47 95	23.32 19	24.34 1	27.37 25	16.06	43.61 25
6	57.52 94	23.51 19	24.35 2	27.62 27	16.18	43.86 27
7	56.58 98	23.70 21	24.37 1	27.89 27	16.32	44.13 27
8	55.60 106	23.91 22	24.38 2	28.16 30	16.47	44.40 30
9	54.54 116	24.13 22	24.40 2	28.46 31	16.62	44.70 31
10	53.38 126	24.35 21	24.42 0	28.77 33	16.75	45.01 32
11	52.12 136	24.56 20	24.42 1	29.10 33	16.84	45.33 34
12	50.76 143	24.76 18	24.41 2	29.43 32	16.90	45.67 33
13	49.33 146	24.94 15	24.39 3	29.75 31	16.91	46.00 32
O. K.	+ 1.61 cos φ		+ 0.15 cos φ		+ 0.60 cos φ	
U. K.	- 1.61 cos φ		- 0.15 cos φ		- 0.60 cos φ	

## Obere Kulmination.

1912	$\sigma$ Octantis. 6 <sup>m</sup> .		$\beta$ Octantis. 4 <sup>m</sup> —5 <sup>m</sup> .		$\tau$ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
Sept. 13	19 <sup>h</sup> 20 <sup>m</sup>	—89° 14'	22 <sup>h</sup> 37 <sup>m</sup>	—81° 50'	23 <sup>h</sup> 16 <sup>m</sup>	—87° 57'
14	107.87 145	25.09 14	24.36 4	30.06 30	16.87 6	46.32 31
15	106.42 141	25.23 12	24.32 3	30.36 28	16.81 8	46.63 30
16	105.01 135	25.35 11	24.29 4	30.64 26	16.73 9	46.93 29
17	103.66 129	25.46 10	24.25 4	30.90 26	16.64 8	47.22 27
18	102.37 124	25.56 12	24.21 3	31.16 26	16.56 5	47.49 27
19	101.13 123	25.68 12	24.18 2	31.42 26	16.51 3	47.76 27
20	99.90 123	25.80 14	24.16 2	31.68 28	16.48 1	48.03 29
21	98.67 128	25.94 14	24.14 2	31.96 29	16.47 1	48.32 30
22	97.39 136	26.08 16	24.12 2	32.25 30	16.46 1	48.62 31
23	96.03 147	26.24 15	24.10 3	32.55 32	16.45 4	48.93 33
24	94.56 155	26.39 14	24.07 4	32.87 32	16.41 8	49.26 34
25	93.01 162	26.53 13	24.03 5	33.19 32	16.33 12	49.60 35
26	91.39 166	26.66 10	23.98 6	33.51 31	16.21 16	49.95 33
27	89.73 167	26.76 7	23.92 7	33.82 30	16.05 20	50.28 33
28	88.06 163	26.83 5	23.85 8	34.12 28	15.85 23	50.61 30
29	86.43 156	26.88 3	23.77 8	34.40 25	15.62 25	50.91 28
30	84.87 147	26.91 3	23.69 7	34.65 24	15.37 23	51.19 27
Okt. 1	83.40 140	26.94 3	23.62 6	34.89 23	15.14 22	51.46 25
2	82.00 135	26.97 3	23.56 7	35.12 22	14.92 20	51.71 25
3	80.65 131	27.00 5	23.49 6	35.34 23	14.72 17	51.96 24
4	79.34 132	27.05 5	23.43 5	35.57 24	14.55 16	52.20 26
5	78.02 137	27.10 7	23.38 6	35.81 25	14.39 16	52.46 26
6	76.65 145	27.17 6	23.32 7	36.06 26	14.23 17	52.72 29
7	75.20 153	27.23 7	23.25 6	36.32 28	14.06 20	53.01 30
8	73.67 162	27.30 5	23.19 8	36.60 27	13.86 23	53.31 30
9	72.05 168	27.35 3	23.11 8	36.87 27	13.63 27	53.61 30
10	70.37 172	27.38 1	23.03 10	37.14 27	13.36 32	53.91 29
11	68.65 171	27.39 2	22.93 11	37.41 25	13.04 36	54.20 29
12	66.94 166	27.37 4	22.82 11	37.66 22	12.68 38	54.49 26
13	65.28 159	27.33 5	22.71 10	37.88 21	12.30 38	54.75 25
14	63.69 151	27.28 6	22.61 10	38.09 20	11.92 37	55.00 23
15	62.18 145	27.22 6	22.51 10	38.29 19	11.55 36	55.23 22
16	60.73 140	27.16 4	22.41 10	38.48 19	11.19 34	55.45 22
17	59.33 137	27.12 4	22.31 9	38.67 19	10.85 31	55.67 20
18	57.96 140	27.08 2	22.22 8	38.86 20	10.54 30	55.87 23
19	56.56 145	27.06 1	22.14 9	39.06 21	10.24 30	56.10 25
20	55.11 151	27.05 2	22.05 9	39.27 23	9.94 31	56.35 25
O. K.	+ 1°.61 cos φ		+ 0°.15 cos φ		+ 0°.60 cos φ	
U. K.	— 1°.61 cos φ		— 0°.15 cos φ		— 0°.60 cos φ	

## SCHEINBARE STERNÖRTER.

## Obere Kulmination.

1912	σ Octantis. 6 <sup>m</sup> .		β Octantis. 4 <sup>m</sup> —5 <sup>m</sup> .		τ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 <sup>h</sup> 20 <sup>m</sup>	—89° 14'	22 <sup>h</sup> 37 <sup>m</sup>	—81° 50'	23 <sup>h</sup> 15 <sup>m</sup>	—87° 57'
Okt.	20	53.60 160	27.03 2	21.96 10	39.50 24	69.63 34
	21	52.00 166	27.01 4	21.86 11	39.74 23	69.29 39
	22	50.34 170	26.97 6	21.75 12	39.97 22	68.90 43
	23	48.64 170	26.91 8	21.63 12	40.19 21	68.47 46
	24	46.94 166	26.83 11	21.51 14	40.40 19	68.01 49
	25	45.28 160	26.72 12	21.37 14	40.59 16	67.52 51
	26	43.68 150	26.60 14	21.23 13	40.75 13	67.01 51
	27	42.18 140	26.46 14	21.10 13	40.88 13	66.50 49
	28	40.78 131	26.32 14	20.97 12	41.01 12	66.01 47
	29	39.47 125	26.18 13	20.85 11	41.13 11	65.54 44
	30	38.22 122	26.05 12	20.74 11	41.24 12	65.10 42
Nov.	31	37.00 124	25.93 10	20.63 10	41.36 13	64.68 41
	1	35.76 129	25.83 11	20.53 11	41.49 14	64.27 41
	2	34.47 136	25.72 10	20.42 12	41.63 15	63.86 42
	3	33.11 143	25.62 12	20.30 12	41.78 15	63.44 45
	4	31.68 148	25.50 13	20.18 13	41.93 15	62.99 50
	5	30.20 151	25.37 15	20.05 14	42.08 14	62.49 54
	6	28.69 151	25.22 17	19.91 15	42.22 12	61.95 57
	7	27.18 146	25.05 20	19.76 15	42.34 11	61.38 59
	8	25.72 137	24.85 21	19.61 15	42.45 8	60.79 60
	9	24.35 128	24.64 21	19.46 15	42.53 6	60.19 60
	10	23.07 119	24.43 23	19.31 15	42.59 6	59.59 58
	11	21.88 112	24.20 21	19.16 14	42.65 4	59.01 56
	12	20.76 107	23.99 20	19.02 12	42.69 4	58.45 52
	13	19.69 106	23.79 19	18.90 11	42.73 5	57.93 49
	14	18.63 109	23.60 18	18.79 12	42.78 7	57.44 48
	15	17.54 113	23.42 17	18.67 13	42.85 7	56.96 49
	16	16.41 119	23.25 18	18.54 13	42.92 8	56.47 51
	17	15.22 125	23.07 18	18.41 13	43.00 8	55.96 55
	18	13.97 129	22.89 21	18.28 15	43.08 7	55.41 58
	19	12.68 129	22.68 23	18.13 15	43.15 6	54.83 62
	20	11.39 125	22.45 25	17.98 15	43.21 4	54.21 64
	21	10.14 118	22.20 27	17.83 16	43.25 2	53.57 66
	22	8.96 107	21.93 29	17.67 16	43.27 1	52.91 66
	23	7.89 107	21.64 29	17.51 15	43.26 3	52.25 65
	24	6.94 84	21.35 28	17.36 14	43.23 3	51.60 61
	25	6.10 76	21.07 28	17.22 14	43.20 5	50.99 58
	26	5.34	20.79	17.08	43.15	50.41 61
O. K.		+ 1°.61 cos φ		+ 0°.15 cos φ		+ 0°.60 cos φ
U. K.		— 1.61 cos φ		— 0.15 cos φ		— 0.60 cos φ

## Obere Kulmination.

1912	$\sigma$ Octantis. 6 <sup>m</sup> .		$\beta$ Octantis. 4 <sup>m</sup> —5 <sup>m</sup> .		$\tau$ Octantis. 6 <sup>m</sup> .	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	19 <sup>h</sup> 19 <sup>m</sup>	—89° 14'	22 <sup>h</sup> 37 <sup>m</sup>	—81° 50'	23 <sup>h</sup> 15 <sup>m</sup>	—87° 57'
Nov. 26	65.34 71	20.79 27	17.08 13	43.15 5	50.41 56	61.72 0
27	64.63 69	20.52 25	16.95 12	43.10 4	49.85 53	61.72 1
28	63.94 72	20.27 24	16.83 12	43.06 3	49.32 52	61.71 0
29	63.22 77	20.03 24	16.71 12	43.03 2	48.80 53	61.71 1
30	62.45 82	19.79 24	16.59 13	43.01 1	48.27 54	61.72 2
Dez. 1	61.63 87	19.55 25	16.46 14	43.00 1	47.73 58	61.74 2
2	60.76 90	19.30 28	16.32 14	42.99 2	47.15 61	61.76 2
3	59.86 89	19.02 29	16.18 16	42.97 3	46.54 64	61.78 1
4	58.97 85	18.73 32	16.02 14	42.94 6	45.90 67	61.79 2
5	58.12 77	18.41 32	15.88 16	42.88 9	45.23 67	61.77 4
6	57.35 67	18.08 33	15.72 14	42.79 10	44.56 67	61.73 5
7	56.68 56	17.74 34	15.58 14	42.69 12	43.89 65	61.68 8
8	56.12 47	17.40 33	15.44 14	42.57 14	43.24 62	61.60 9
9	55.65 40	17.07 32	15.30 14	42.43 13	42.62 58	61.51 9
10	55.25 36	16.75 31	15.16 12	42.30 12	42.04 55	61.42 9
11	54.89 36	16.44 29	15.04 11	42.18 11	41.49 54	61.33 8
12	54.53 39	16.15 29	14.93 11	42.07 10	40.95 52	61.25 7
13	54.14 44	15.86 27	14.82 12	41.97 9	40.43 52	61.18 7
14	53.70 50	15.59 29	14.70 12	41.88 9	39.91 55	61.11 5
15	53.20 53	15.30 29	14.58 13	41.79 10	39.36 58	61.06 6
16	52.67 54	15.01 32	14.45 13	41.69 11	38.78 61	61.00 6
17	52.13 51	14.69 33	14.32 14	41.58 12	38.17 64	60.94 8
18	51.62 45	14.36 36	14.18 14	41.46 14	37.53 65	60.86 11
19	51.17 45	14.00 36	14.04 14	41.32 17	36.88 65	60.75 13
20	50.83 34	13.64 38	13.90 14	41.15 19	36.23 64	60.62 15
21	50.61 10	13.26 38	13.76 12	40.96 21	35.59 61	60.47 17
22	50.51 0	12.88 36	13.64 12	40.75 22	34.98 57	60.30 18
23	50.51 8	12.52 35	13.52 11	40.53 21	34.41 53	60.12 19
24	50.59 11	12.17 33	13.41 11	40.32 21	33.88 50	59.93 18
25	50.70 11	11.84 32	13.30 10	40.11 20	33.38 49	59.75 17
26	50.81 9	11.52 30	13.20 9	39.91 19	32.89 48	59.58 17
27	50.90 3	11.22 31	13.11 10	39.72 18	32.41 49	59.41 16
28	50.93 2	10.91 31	13.01 10	39.54 18	31.92 50	59.25 15
29	50.91 6	10.60 31	12.91 11	39.36 18	31.42 53	59.10 15
30	50.85 7	10.27 35	12.80 12	39.18 20	30.89 56	58.95 16
31	50.78 3	9.92 36	12.68 12	38.98 21	30.33 59	58.79 18
32	50.75 5	9.56 38	12.56 12	38.77 23	29.74 59	58.61 19
33	50.80 0	9.18 38	12.44 12	38.54	29.15	58.42
O. K.	+ 18.60 cos φ		+ 0.15 cos φ		+ 0.60 cos φ	
U. K.	— 1.60 cos φ		— 0.15 cos φ		— 0.60 cos φ	

## SCHEINBARE STERNÖRTER.

1912	$\alpha$ Andromed.		$\beta$ Cassiopej.		$\varepsilon$ Phoenicis.		$\gamma$ Pegasi.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +
	o <sup>h</sup> 3 <sup>m</sup>	28° 36'	o <sup>h</sup> 4 <sup>m</sup>	58° 39'	o <sup>h</sup> 4 <sup>m</sup>	46° 13'	o <sup>h</sup> 8 <sup>m</sup>	14° 41'
Jan.								
I	49.21	22.2	26.80	65.6	56.64	77.3	41.39	40.6
II	49.08	13 21.3 9	26.49	64.9	56.46	76.9	41.29	39.8
21	48.95	11 20.2	26.20	63.7	56.29	76.0	41.19	39.0
31	48.84	9 18.9	25.93	62.0	56.14	74.7	41.09	38.0
Febr.	10	48.75	7 17.4	25.70	60.0	56.02	73.0	41.02
	20	48.68	4 15.8	25.51	57.6	55.93	70.9	40.96
März	I	48.64	0 14.2	25.39	55.0	55.88	68.4	40.93
II	48.64	4 12.8	25.33	52.4	55.87	65.8	40.94	
21	48.68	11.4	25.35	49.7	55.91	62.9	40.97	
31	2 <sup>a</sup> 48.78	10.2	25.47	47.0	56.01	59.5	41.06	
April	10	48.91	9.4	25.66	44.8	56.15	56.4	41.19
	20	49.10	8.9	25.92	42.9	56.35	53.2	41.35
Mai	30	49.32	8.8	26.25	41.4	56.60	50.0	41.56
I	49.59	30	9.1	26.65	40.4	56.89	47.0	41.80
20	49.89	32	9.7	27.09	39.9	57.22	44.1	42.08
Juni	30	50.21	10.8	27.58	39.9	57.59	41.4	42.38
9	50.56	35	12.2	28.09	40.5	57.99	39.1	42.70
19	50.91	35	13.9	28.60	41.6	58.40	37.1	43.03
29	51.26	35	15.9	29.11	43.2	58.82	35.5	43.36
Juli	9	51.60	18.2	29.61	45.2	59.24	34.3	43.69
	19	51.93	20.6	30.08	47.6	59.64	33.6	44.00
Aug.	29	52.23	23.1	30.51	50.3	60.01	33.4	44.28
8	52.50	27	25.7	30.89	53.3	60.35	33.7	44.54
18	52.73	20	28.2	31.22	56.6	60.65	34.4	44.77
28	52.93	30.7	31.48	59.9	60.89	35.6	44.96	
Sept.	7	53.08	11 33.2	31.69	63.4	61.08	37.1	45.11
	17	53.19	8 35.4	31.84	66.9	61.22	38.9	45.23
Okt.	27	53.27	3 37.5	31.91	70.3	61.31	41.0	45.31
7	53.30	0 39.4	31.93	73.6	61.32	43.2	45.35	
17	53.30	3 41.1	31.89	76.7	61.29	45.5	45.36	
	27	53.27	5 42.5	31.80	79.5	61.21	47.7	45.34
Nov.	6	53.22	8 43.6	31.65	82.0	61.09	49.8	45.30
	16	53.14	10 44.5	31.46	84.1	60.94	51.6	45.23
26	53.04	12 45.0	31.23	85.8	60.77	53.2	45.15	
Dez.	6	52.92	12 45.2	30.97	87.0	60.58	54.4	45.06
	16	52.80	13 45.1	30.68	87.7	60.38	55.1	44.96
26	52.67	13 44.7	30.38	87.8	60.18	55.4	44.85	
36	52.54	13 43.9	30.08	87.4	59.99	55.2	44.75	
Mittl. Ort	50.15	16.6	28.45	51.8	56.82	59.0	42.14	39.5
	1)		2)		3)		7)	

1912	ι Ceti. 3 <sup>m</sup> -5.		ζ Tucanae. 4 <sup>m</sup> .2.		β Hydri. 2 <sup>m</sup> .8.		α Phoenicis. 2 <sup>m</sup> .3.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	0 <sup>h</sup> 14 <sup>m</sup>	9° 18'	0 <sup>h</sup> 15 <sup>m</sup>	65° 23'	0 <sup>h</sup> 21 <sup>m</sup>	77° 44'	0 <sup>h</sup> 21 <sup>m</sup>	42° 46'
Jan.								
1	56.17	10	49.4	5	29.91	39	52.6	8
11	56.07	10	49.9	3	29.52	36	51.8	14
21	55.97	8	50.2	1	29.16	32	50.4	20
31	55.89	7	50.3	0	28.84	27	48.4	24
Febr.	10		55.82	5	28.57	21	46.0	28
20	55.77	3	50.1	4	28.36	15	43.2	32
März	1		55.74	0	28.21	7	40.0	34
11	55.74	3	49.7	9	28.14	0	36.6	34
21	55.77	8	48.1	12	28.14	9	33.0	20
31	55.85	12	46.9	21	28.23	9	28.9	41
April	10		55.97	15	28.40	25	25.2	37
20	56.12	20	43.9	18	28.65	21.5	37	6.59
Mai	30		56.32	23	28.98	33	17.9	54
10	56.55	23	42.1	20	29.39	41	14.6	33
20	56.81	29	38.0	22	29.86	47	11.5	31
Juni	30		57.10	31	30.39	57	8.7	9.54
9	57.41	32	33.6	21	30.96	60	6.4	10.55
19	57.73	33	31.5	21	31.56	63	4.5	11.61
29	58.06	33	29.4	20	32.19	62	3.2	12.72
Juli	9		58.38	32	32.81	62	2.3	13.84
19	58.69	29	27.4	18	31.61	61	1.3	10.9
29	58.98	27	25.6	15	33.42	57	2.0	14.93
Aug.	8		59.25	27	33.99	52	2.3	15.97
18	59.48	23	22.8	10	34.51	52	3.1	16.93
28	59.68	20	21.8	10	34.98	47	4.4	17.78
Sept.	7		59.84	16	35.36	38	6.2	18.49
17	59.96	12	20.6	1	35.66	30	22	55
Okt.	27		60.04	8	35.88	22	8.4	19.04
7	60.09	5	20.6	1	35.88	11	24	37
17	60.11	2	21.5	5	35.99	2	10.8	19.41
Nov.	27		60.09	2	36.01	8	13.5	19.60
6	60.05	4	22.2	8	35.77	23	24	19.04
16	59.99	6	23.0	8	35.54	30	24.2	18.51
26	59.91	8	23.8	9	35.24	35	26.2	17.85
Dez.	6		59.82	9	34.89	38	27.9	17.07
16	59.73	11	24.7	8	34.51	40	29.0	16.22
26	59.62	10	25.5	7	33.70	40	29.6	15.93
36	59.52	27.4	27.4	9	33.30	40	29.0	15.22
Mittl. Ort	56.66	42.3	29.51	31.3	8.63	59.4	56.16	62.3
	9)		10)		11)		12)	

## SCHEINBARE STERNÖRTER.

1912	12 Ceti. 6 <sup>m</sup> .I.		ζ Cassiopej. 3 <sup>m</sup> .8.		π Andromed. 4 <sup>m</sup> .2.		δ Andromed. 3 <sup>m</sup> .2.			
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +		
	0 <sup>h</sup> 25 <sup>m</sup>	4° 26'	0 <sup>h</sup> 32 <sup>m</sup>	53° 24'	0 <sup>h</sup> 32 <sup>m</sup>	33° 13'	0 <sup>h</sup> 34 <sup>m</sup>	30° 22'		
Jan.										
I	32.40	10	41.6	6	2.47	26	59.5	4		
II	32.30	10	42.2	4	2.21	25	59.1	10		
21	32.20	9	42.6	4	1.96	24	58.1	14		
31	32.11	8	43.0	2	1.72	22	56.7	17		
Febr.	10		43.2	0	1.50	18	55.0	20		
	20		43.2	2	1.32	13	53.0	23		
März	I	31.93	1	43.0	3	1.19	8	50.7	24	
II	31.92	3	42.7	6	1.11	2	48.3	24		
21	31.95	7	42.1	10	1.09	6	45.9	25		
31	32.02	10	41.1	11	1.15	13	43.4	21		
April	10	32.12	15	40.0	13	1.28	20	41.3	18	
	20	32.27	18	38.7	16	1.48	27	39.5	15	
	30	32.45	23	37.1	17	1.75	32	38.0	10	
Mai	10	32.68	23	35.4	20	2.07	38	37.0	5	
	20	32.93	28	33.4	20	2.45	42	36.5	1	
	30	33.21	31	31.4	21	2.87	44	36.4	4	
Juni	9	33.52	32	29.3	22	3.31	47	36.8	10	
	19	33.84	32	27.1	21	3.78	47	37.8	10	
	29	34.16	32	25.0	20	4.25	46	39.2	14	
Juli	9	34.48	32	23.0	19	4.71	41.0	41.0	11	
	19	34.79	30	21.1	18	5.15	42	43.1	25	
	29	35.09	27	19.3	14	5.57	38	45.6	28	
Aug.	8	35.36	23	17.9	13	5.95	48.4	29	12.23	33
	18	35.59	21	16.6	10	6.28	33	51.3	32	
	28	35.80	17	15.6	7	6.57	24	54.5	32	
Sept.	7	35.97	13	14.9	4	6.81	18	57.7	32	
	17	36.10	9	14.5	2	6.99	60.9	60.9	11	
	27	36.19	6	14.3	1	7.12	7	64.2	31	
Okt.	7	36.25	3	14.4	2	7.19	2	67.3	29	
	17	36.28	1	14.6	5	7.21	2	70.2	27	
	27	36.27	3	15.1	5	7.19	8	72.9	25	
Nov.	6	36.24	5	15.6	7	7.11	11	75.4	21	
	16	36.19	7	16.3	7	7.00	16	77.5	17	
	26	36.12	8	17.0	7	6.84	19	79.2	13	
Dez.	6	36.04	9	17.7	7	6.65	21	80.5	8	
	16	35.95	10	18.4	7	6.44	24	81.3	3	
	26	35.85	10	19.1	6	6.20	25	81.6	2	
	36	35.75	10	19.7	—	5.95	81.4	81.4	5	
Mitt. Okt.		32.87	36.6	3.67	45.7	10.62	66.1	37.11	46.6	
		(13)		(17)		(18)		(20)		

1912	$\alpha$ Cassiopej. ( $2^m.2.$ )		$\beta$ Ceti. $2^m.2.$		21 Cassiopej. $5^m.8$		$\delta$ Cassiopej. $4^m.7$	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. -
	$0^h 35^m$	$56^\circ 3'$	$0^h 39^m$	$18^\circ 27'$	$0^h 39^m$	$74^\circ 30'$	$0^h 39^m$	$47^\circ 48'$
Jan.								
I	29.06	28	32.0		10.12	12	46.65	1
II	28.78	27	31.6	4	10.00	11	45.93	6
21	28.51	27	30.7	9	9.89	11	45.23	11
31	28.24	24	29.4	17	9.78	1	44.55	17
Febr.	28.00	21	27.7	21	9.69	9	43.93	17
20	27.79	15	25.6	23	9.61	5	43.41	25
März	27.64	9	23.3	24	9.56	3	42.99	28
II	27.55	3	20.9	25	9.53	1	42.70	29
21	27.52	5	18.4	27	9.54	14	42.55	29
31	27.57	13	15.7	22	9.58	17	42.56	27
April	27.70	20	13.5	19	9.68	13	42.76	20
20	27.90	27	11.6	16	9.81	18	43.09	21
30	28.17		10.0		9.99	21	43.56	19
Mai	28.51	34	8.9	11	10.20	21	44.16	17.3
20	28.91	40	8.2	7	10.45	25	44.87	14
30	29.35	47	8.0	—	10.73	31	45.67	15.1
Juni	29.82	48	8.3	3	11.04	32	46.53	89
19	30.30	50	9.1	8	11.36	34	47.42	91
29	30.80	48	10.4	17	11.70	33	48.33	93
Juli	31.28	48	12.1		12.03	33	51.4	13
19	31.76	44	14.2		12.35	31	50.10	82
29	32.20	40	16.6	24	12.66	29	50.92	74
Aug.	32.60	40	19.4		12.95	26	51.66	74
18	32.96	36	22.4	30	13.21	22	52.32	66
28	33.27	31	25.6	32	13.43	19	52.89	57
Sept.	33.52	19	28.8		13.62	15	53.35	35
17	33.71	14	32.1	33	13.77	10	53.70	24
27	33.85	9	35.4	33	13.87	7	53.94	12
Okt.	33.94	2	38.7	30	13.94	4	54.06	11
17	33.96	3	41.7	28	13.98	0	54.06	12
27	33.93	8	44.5	26	13.98	2	53.94	23
Nov.	33.85	12	47.1	23	13.96	5	53.71	35
16	33.73	17	49.4	18	13.91	8	53.36	44
26	33.56	20	51.2	14	13.83	9	52.92	12
Dez.	33.36	24	52.6	10	13.74	10	52.39	61
16	33.12	25	53.6		13.64	11	51.78	66
26	32.87	27	54.0	1	13.53	11	51.12	69
36	32.60		53.9		13.42	6	50.43	65.7
Mitt. Oct	30.31	17.5	10.37	70.3	48.94	25.8	48.91	10.3
	21)		22)		24)		25)	

## SCHEINBARE STERNÖRTER.

1912	$\zeta$ Andromed. 4 <sup>m</sup> .I		$\gamma$ Cassiopej. 2 <sup>m</sup> .O.		$\mu$ Andromed. 3 <sup>m</sup> .9.		$\alpha$ Sculptoris. 4 <sup>m</sup> .I.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	○ <sup>h</sup> 42 <sup>m</sup>	23° 47'	○ <sup>h</sup> 51 <sup>m</sup>	60° 14'	○ <sup>h</sup> 51 <sup>m</sup>	38° 1'	○ <sup>h</sup> 54 <sup>m</sup>	29° 49'
Jan.								
I	39.62	13	24.4	6	22.02	33	41.3	1
II	39.49	12	23.8	8	21.69	33	41.2	6
21	39.37	13	23.0	11	21.36	32	40.6	12
31	39.24	11	21.9	11	21.04	30	39.4	15
Febr.	10	39.13	20.8	9	20.74	26	37.9	20
	20	39.04	19.6	12	20.48	20	35.9	22
März	I	38.98	18.4	12	20.28	14	33.7	25
II	38.94	0	17.2	10	20.14	7	31.2	26
21	38.94	1	16.2	8	20.07	1	28.6	26
31	38.98	10	15.4	7	20.08	12	26.0	26
April	10	39.08	14.7	4	20.20	19	23.4	21
	20	39.22	14.3	0	20.39	27	21.3	18
	30	39.41	14.3	4	20.66	27	19.5	14
Mai	10	39.64	14.7	6	21.01	35	18.1	10
	20	39.90	15.3	10	21.43	42	17.1	14
	30	40.20	16.3	14	21.89	51	16.6	0
Juni	9	40.52	32	17.7	16	22.40	51	16.6
	19	40.86	34	19.3	18	22.93	53	17.0
	29	41.21	35	21.1	20	23.47	54	18.0
Juli	9	41.55	34	23.1	20	24.01	54	19.5
	19	41.88	33	25.3	22	24.54	50	21.4
	29	42.19	29	27.5	23	25.04	46	23.6
Aug.	8	42.48	26	29.8	23	25.50	46	26.2
	18	42.74	23	32.1	22	25.92	36	29.1
	28	42.97	19	34.3	21	26.28	31	32.2
Sept.	7	43.16	16	36.4	20	26.59	25	35.5
	17	43.32	11	38.4	18	26.84	18	38.8
	27	43.43	8	40.2	17	27.02	12	42.2
Okt.	7	43.51	5	41.9	14	27.14	5	45.6
	17	43.56	2	43.3	12	27.19	0	48.8
	27	43.58	1	44.5	10	27.19	6	51.9
Nov.	6	43.57	4	45.5	7	27.13	12	54.7
	16	43.53	7	46.2	5	27.01	18	57.2
	26	43.46	8	46.7	2	26.83	22	59.3
Dez.	6	43.38	10	46.9	1	26.61	12	61.1
	16	43.28	11	46.8	2	26.35	29	62.3
	26	43.17	12	46.6	6	26.06	31	63.0
	36	43.05	46.0		25.75	31	63.2	54.64
Mitt. Okt.	40.26	18.9	23.23	25.4	51.83	20.1	21.96	58.8
	27)		32)		33)		35)	

1912	ε Piscium. 4 <sup>m</sup> .2.		β Phoenicis. 3 <sup>m</sup> .2.		β Andromed. 2 <sup>m</sup> .1.		υ Piscium. 4 <sup>m</sup> .6.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	ο <sup>h</sup> 58 <sup>m</sup>	7° 24'	ι <sup>h</sup> 2 <sup>m</sup>	47° 10'	ι <sup>h</sup> 4 <sup>m</sup>	35° 9'	ι <sup>h</sup> 14 <sup>m</sup>	26° 48'
Jan.								
I	22.08	60.0	6	9.80	21	100.4	37.08	13.9
II	21.97	59.4	6	9.59	22	100.7	36.96	13.4
21	21.86	58.8	6	9.37	20	100.2	36.82	12.8
31	21.75	58.2	6	9.17	19	99.4	36.68	11.9
Febr.	21.65	57.6		8.98		98.0	36.55	11.0
	9	5		17		13	12	12
20	21.56	57.1	5	8.81	13	96.3	36.43	9.8
März	21.49	56.6	3	8.68	10	94.1	36.33	8.6
II	21.45	56.3	0	8.58	6	91.6	36.26	7.4
21	21.44	56.3	1	8.52	0	88.8	36.23	6.3
31	21.47	56.4		8.52	31	46.46	36.24	5.3
April	21.55	56.8	6	8.57	11	82.2	36.30	4.4
20	21.67	57.4	8	8.68	17	78.9	36.41	3.8
30	21.83	58.2	12	8.85	22	75.5	36.57	3.5
Mai	22.03	59.4	14	9.07	27	72.1	36.78	3.6
20	22.26	60.8		9.34	32	47.35	37.02	3.9
	27		16	31	31	10.9	29	7
30	22.53	62.4	18	9.65	35	65.8	37.31	4.6
Juni	22.83	64.2	19	10.00	39	63.0	37.62	5.7
19	23.14	66.1	20	10.39	41	60.5	37.96	7.0
29	23.46	68.1	20	10.80	41	58.3	38.31	8.6
Juli	23.79	70.1	21	11.21	41	56.6	38.66	10.4
19	24.11	72.2	20	11.62	40	55.4	39.01	12.3
29	24.41	74.2	18	12.02	38	54.6	39.34	14.5
Aug.	24.70	76.0	17	12.40	34	54.4	39.65	16.6
18	24.96	77.7	16	12.74	31	54.8	39.94	18.8
28	25.19	79.3	20	13.05	26	55.6	40.20	21.0
Sept.	25.39	80.6	11	13.31	21	56.8	23.2	20
17	25.55	81.7	9	13.52	15	58.5	25.2	19
27	25.68	82.6	6	13.67	10	60.6	27.1	18
Okt.	25.77	83.2	4	13.77	4	62.8	28.9	15
17	25.83	83.6	2	13.81	1	65.3	30.4	14
27	25.86	83.8	1	13.80	5	67.8	31.8	12
Nov.	25.86	83.9	1	13.75	10	70.2	32.8	10
16	25.84	83.8	3	13.65	14	72.6	42.9	1
26	25.80	83.5	4	13.51	17	74.6	44.3	3
Dez.	25.74	83.1	4	13.34	19	76.3	45.4	2
16	25.66	82.7	6	13.15	21	77.7	46.6	0
26	25.57	82.1	6	12.94	21	78.6	47.6	3
36	25.47	81.5		12.73	4	50.99	46.6	3
Mittl. Ort	22.46	59.7		9.44	83.9	48.02	15.4	6.3
	36)			38)		42)		45)

## SCHEINBARE STERNÖRTER.

1912	θ Ceti. 3 <sup>m</sup> .4.		δ Cassiopej. 2 <sup>m</sup> .7.		η Piscium. 3 <sup>m</sup> .6.		40 Cassiopej. 5 <sup>m</sup> .5.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	1 <sup>h</sup> 19 <sup>m</sup>	8° 37'	1 <sup>h</sup> 19 <sup>m</sup>	59° 46'	1 <sup>h</sup> 26 <sup>m</sup>	14° 53'	1 <sup>h</sup> 31 <sup>m</sup>	72° 35'
Jan.								
I	37.36	II	78.5	6	62.02	58.3	46.02	36.6
II	37.25	12	79.1	5	61.71	58.5	45.91	36.1
21	37.13	12	79.6	3	61.39	58.2	45.79	35.5
31	37.01	II	79.9	1	61.07	57.4	45.67	34.8
Febr.	10		36.90	80.0	10	56.2	45.55	34.1
					29	17	7	7
20	36.80	8	79.9	3	60.47	54.5	45.44	33.4
März	I	36.72	7	79.6	6	60.23	52.5	45.35
II	36.65	3	79.0	8	60.05	50.3	45.28	32.7
21	36.62	1	78.2	10	59.94	47.8	45.24	31.6
31	36.63	4	77.2	13	59.90	45.4	45.24	31.2
April	10	36.67	10	75.9	17	59.95	43.0	45.28
	20	36.77	13	74.2	18	60.10	40.5	45.38
	30	36.90	18	72.4	19	60.32	38.6	45.52
Mai	10	37.08	22	70.5	21	60.63	36.9	45.70
	20	37.30	24	68.4	22	61.01	35.7	45.92
					43	7	26	12
Juni	30	37.54	28	66.2	22	61.44	35.0	46.18
9	37.82	30	64.0	22	61.92	34.7	46.47	31
19	38.12	32	61.8	22	62.44	34.8	46.78	32
29	38.44	32	59.6	21	62.98	35.4	47.10	33
Juli	9	38.76	32	57.5	19	63.53	36.5	47.43
	19	39.08	32	55.6	17	64.07	38.1	47.76
	29	39.40	29	53.9	15	64.59	40.1	48.08
Aug.	8	39.69	27	52.4	12	65.08	42.4	48.39
	18	39.96	25	51.2	8	65.53	45.0	48.67
	28	40.21	21	50.4	6	65.94	47.8	48.92
Sept.	7	40.42	18	49.8	2	66.30	50.9	49.15
	17	40.60	15	49.6	1	66.60	54.1	49.34
	27	40.75	11	49.7	4	66.84	57.3	49.50
Okt.	7	40.86	8	50.1	5	67.03	60.5	49.63
	17	40.94	5	50.6	8	67.15	63.7	49.72
					6	31	7	7
	27	40.99	1	51.4	9	67.21	66.8	49.79
Nov.	6	41.00	1	52.3	9	67.21	69.7	49.82
	16	40.99	3	53.2	11	67.15	72.3	49.83
	26	40.96	6	54.3	10	67.03	74.6	49.81
Dez.	6	40.90	7	55.3	9	66.86	76.5	49.76
	16	40.83	9	56.2	9	66.64	78.0	49.69
	26	40.74	10	57.1	9	66.38	79.1	49.61
	36	40.64	7	57.8	7	66.09	79.6	49.51
Mittl. Ort		37.46	73.9		62.89	41.8	46.30	32.7
					47)	48)	50)	51)

1912	υ Persei. 3 <sup>m</sup> .6.		α Eridani. 1 <sup>m</sup> .		43 Cassiopej. 5 <sup>m</sup> .9.		φ Persei. 4 <sup>m</sup> .1.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	1 <sup>h</sup> 32 <sup>m</sup>	48° 10'	1 <sup>h</sup> 34 <sup>m</sup>	57° 40'	1 <sup>h</sup> 35 <sup>m</sup>	67° 35'	1 <sup>h</sup> 38 <sup>m</sup>	50° 14'
Jan.								
I	34.45	20	71.9	1	27.38	78.1	7.68	59.6
II	34.25	22	72.0	3	27.07	78.5	7.47	59.8
21	34.03	22	71.7	7	26.74	78.2	7.24	59.6
31	33.81	22	71.0	11	26.43	77.5	7.00	59.0
Febr.	10	33.59	22	69.9	26.13	76.2	6.77	57.9
	20	33.39	18	68.4	25.85	74.3	6.55	56.5
März	I	33.21	14	66.7	25.60	72.0	6.36	54.8
II	33.07	8	64.8	25.40	69.4	44.63	6.21	52.9
21	32.99	9	62.8	25.25	66.4	44.42	6.11	50.9
31	32.96	3	60.8	25.16	63.1	44.32	6.07	48.8
April	10	32.99	11	58.9	25.13	59.6	6.09	46.8
	14	33.10	18	57.0	25.18	55.6	6.20	44.8
	20	33.28	23	55.5	25.30	52.0	6.37	43.2
Mai	10	33.51	29	54.3	25.49	48.3	6.60	41.9
	20	33.80	34	53.5	25.74	44.8	6.90	40.9
	30	34.14	38	53.1	26.06	41.4	7.24	40.4
Juni	9	34.52	41	53.1	26.43	38.4	7.63	40.3
	19	34.93	43	53.6	26.85	35.6	8.05	40.6
	29	35.36	43	54.4	27.31	33.3	8.49	41.3
Juli	9	35.80	44	55.6	27.78	31.4	8.94	42.4
	19	36.23	42	57.2	28.27	30.0	9.39	43.9
	29	36.65	41	59.1	28.76	29.2	9.83	45.8
Aug.	8	37.06	37	61.3	29.23	29.0	10.25	47.9
	18	37.43	34	63.7	29.67	29.3	10.65	50.2
	28	37.77	31	66.3	30.07	30.2	11.00	52.8
Sept.	7	38.08	26	69.0	30.42	31.6	11.32	55.5
	17	38.34	21	71.8	30.71	33.5	11.60	58.3
	27	38.55	17	74.6	30.94	35.8	11.83	61.2
Okt.	7	38.72	17	77.3	31.10	38.4	12.02	64.0
	17	38.85	13	80.0	31.18	41.2	12.16	66.7
	27	38.93	4	82.5	31.20	44.0	12.25	69.4
Nov.	6	38.97	0	84.9	31.15	46.9	12.29	71.8
	16	38.97	5	87.0	31.04	49.6	12.29	74.1
	26	38.92	9	88.9	30.87	52.1	12.25	76.1
Dez.	6	38.83	13	90.4	30.65	54.2	12.16	77.7
	16	38.70	16	91.6	30.40	55.9	12.03	79.0
	26	38.54	19	92.3	30.11	57.1	11.86	79.9
	36	38.35	4	92.7	29.80	57.7	11.67	80.3
Mittl. Ort	35.01	57.7	26.33	61.1	48.36	54.2	8.21	44.9
			52)	54)	55)		57)	

1912	$\tau$ Ceti.	$3^m\cdot4.$	$\alpha$ Pisces.	$4^m\cdot3.$	Lac. & Sculpt.	$5^m\cdot3.$	$\zeta$ Ceti.	$3^m\cdot5.$
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. —
		$1^h\ 39^m\ 16^\circ\ 23'$		$1^h\ 40^m\ 8^\circ\ 42'$		$1^h\ 41^m\ 25^\circ\ 29'$		$1^h\ 47^m\ 10^\circ\ 45'$
Jan.	I	58.89 <sup>8</sup> 12	68.7 <sup>8</sup>	44.53 <sup>10</sup>	56.8 <sup>5</sup>	31.66 <sup>13</sup>	41.4 <sup>8</sup>	7.04 <sup>11</sup>
	II	58.77 <sup>13</sup>	69.5 <sup>5</sup>	44.43 <sup>12</sup>	56.3 <sup>6</sup>	31.53 <sup>14</sup>	42.2 <sup>4</sup>	6.93 <sup>12</sup>
	21	58.64 <sup>13</sup>	70.0 <sup>1</sup>	44.31 <sup>12</sup>	55.7 <sup>6</sup>	31.39 <sup>15</sup>	42.6 <sup>0</sup>	6.81 <sup>13</sup>
	31	58.51 <sup>14</sup>	70.1 <sup>1</sup>	44.19 <sup>12</sup>	55.1 <sup>5</sup>	31.24 <sup>14</sup>	42.6 <sup>3</sup>	6.68 <sup>12</sup>
Febr.	10	58.37 <sup>12</sup>	70.0 <sup>4</sup>	44.07 <sup>11</sup>	54.6 <sup>5</sup>	31.10 <sup>14</sup>	42.3 <sup>7</sup>	6.56 <sup>12</sup>
	20	58.25 <sup>11</sup>	69.6 <sup>6</sup>	43.96 <sup>10</sup>	54.1 <sup>4</sup>	30.96 <sup>12</sup>	41.6 <sup>9</sup>	6.44 <sup>11</sup>
März	I	58.14 <sup>8</sup>	69.0 <sup>9</sup>	43.86 <sup>8</sup>	53.7 <sup>3</sup>	30.84 <sup>9</sup>	40.7 <sup>14</sup>	6.33 <sup>9</sup>
	II	58.06 <sup>6</sup>	68.1 <sup>5</sup>	43.78 <sup>5</sup>	53.4 <sup>2</sup>	30.75 <sup>6</sup>	39.3 <sup>16</sup>	6.24 <sup>5</sup>
	21	58.00 <sup>2</sup>	66.9 <sup>15</sup>	43.73 <sup>1</sup>	53.2 <sup>1</sup>	30.69 <sup>3</sup>	37.7 <sup>19</sup>	6.19 <sup>3</sup>
	31	57.98 <sup>1</sup>	65.4 <sup>17</sup>	43.72 <sup>3</sup>	53.3 <sup>2</sup>	30.66 <sup>1</sup>	35.8 <sup>22</sup>	6.16 <sup>2</sup>
April	10	57.99 <sup>7</sup>	63.7 <sup>22</sup>	43.75 <sup>8</sup>	53.5 <sup>5</sup>	30.67 <sup>6</sup>	33.6 <sup>27</sup>	6.18 <sup>6</sup>
	20	58.06 <sup>10</sup>	61.5 <sup>22</sup>	43.83 <sup>12</sup>	54.0 <sup>7</sup>	30.73 <sup>11</sup>	30.9 <sup>26</sup>	6.24 <sup>11</sup>
	30	58.16 <sup>16</sup>	59.3 <sup>23</sup>	43.95 <sup>16</sup>	54.7 <sup>10</sup>	30.84 <sup>15</sup>	28.3 <sup>27</sup>	6.35 <sup>15</sup>
Mai	10	58.32 <sup>19</sup>	57.0 <sup>25</sup>	44.11 <sup>20</sup>	55.7 <sup>12</sup>	30.99 <sup>20</sup>	25.6 <sup>28</sup>	6.50 <sup>19</sup>
	20	58.51 <sup>23</sup>	54.5 <sup>25</sup>	44.31 <sup>25</sup>	56.9 <sup>14</sup>	31.19 <sup>24</sup>	22.8 <sup>28</sup>	6.69 <sup>23</sup>
	30	58.74 <sup>27</sup>	52.0 <sup>25</sup>	44.56 <sup>27</sup>	58.3 <sup>16</sup>	31.43 <sup>27</sup>	20.0 <sup>27</sup>	6.92 <sup>26</sup>
Juni	9	59.01 <sup>29</sup>	49.5 <sup>25</sup>	44.83 <sup>30</sup>	59.9 <sup>18</sup>	31.70 <sup>30</sup>	17.3 <sup>26</sup>	7.18 <sup>29</sup>
	19	59.30 <sup>31</sup>	47.0 <sup>23</sup>	45.13 <sup>32</sup>	61.7 <sup>19</sup>	32.00 <sup>32</sup>	14.7 <sup>24</sup>	7.47 <sup>31</sup>
	29	59.61 <sup>32</sup>	44.7 <sup>22</sup>	45.45 <sup>32</sup>	63.6 <sup>19</sup>	32.32 <sup>34</sup>	12.3 <sup>22</sup>	7.78 <sup>32</sup>
Juli	9	59.93 <sup>32</sup>	42.5 <sup>19</sup>	45.77 <sup>33</sup>	65.5 <sup>19</sup>	32.66 <sup>34</sup>	10.1 <sup>19</sup>	8.10 <sup>32</sup>
	19	60.25 <sup>32</sup>	40.6 <sup>17</sup>	46.10 <sup>31</sup>	67.4 <sup>19</sup>	33.00 <sup>33</sup>	8.2 <sup>15</sup>	8.42 <sup>32</sup>
	29	60.57 <sup>30</sup>	38.9 <sup>13</sup>	46.41 <sup>31</sup>	69.3 <sup>18</sup>	33.33 <sup>32</sup>	6.7 <sup>11</sup>	8.74 <sup>30</sup>
Aug.	8	60.87 <sup>29</sup>	37.6 <sup>10</sup>	46.72 <sup>28</sup>	71.1 <sup>17</sup>	33.65 <sup>30</sup>	5.6 <sup>7</sup>	9.04 <sup>29</sup>
	18	61.16 <sup>26</sup>	36.6 <sup>7</sup>	47.00 <sup>26</sup>	72.8 <sup>16</sup>	33.95 <sup>27</sup>	4.9 <sup>2</sup>	9.33 <sup>26</sup>
	28	61.42 <sup>22</sup>	35.9 <sup>2</sup>	47.26 <sup>23</sup>	74.4 <sup>13</sup>	34.22 <sup>24</sup>	4.7 <sup>1</sup>	9.59 <sup>24</sup>
Sept.	7	61.64 <sup>20</sup>	35.7 <sup>1</sup>	47.49 <sup>20</sup>	75.7 <sup>11</sup>	34.46 <sup>21</sup>	4.8 <sup>6</sup>	9.83 <sup>20</sup>
	17	61.84 <sup>17</sup>	35.8 <sup>4</sup>	47.69 <sup>17</sup>	76.8 <sup>9</sup>	34.67 <sup>18</sup>	5.4 <sup>9</sup>	10.03 <sup>17</sup>
	27	62.01 <sup>13</sup>	36.2 <sup>8</sup>	47.86 <sup>14</sup>	77.7 <sup>6</sup>	34.85 <sup>13</sup>	6.3 <sup>13</sup>	10.20 <sup>14</sup>
Okt.	7	62.14 <sup>9</sup>	37.0 <sup>10</sup>	48.00 <sup>11</sup>	78.3 <sup>5</sup>	34.98 <sup>10</sup>	7.6 <sup>15</sup>	10.34 <sup>11</sup>
	17	62.23 <sup>6</sup>	38.0 <sup>12</sup>	48.11 <sup>7</sup>	78.8 <sup>3</sup>	35.08 <sup>6</sup>	9.1 <sup>17</sup>	10.45 <sup>8</sup>
	27	62.29 <sup>3</sup>	39.2 <sup>14</sup>	48.18 <sup>5</sup>	79.1 <sup>0</sup>	35.14 <sup>3</sup>	10.8 <sup>18</sup>	10.53 <sup>4</sup>
Nov.	6	62.32 <sup>0</sup>	40.6 <sup>14</sup>	48.23 <sup>2</sup>	79.1 <sup>0</sup>	35.17 <sup>1</sup>	12.6 <sup>19</sup>	10.57 <sup>1</sup>
	16	62.32 <sup>3</sup>	42.0 <sup>14</sup>	48.25 <sup>1</sup>	79.1 <sup>2</sup>	35.16 <sup>3</sup>	14.5 <sup>17</sup>	10.58 <sup>1</sup>
	26	62.29 <sup>5</sup>	43.4 <sup>13</sup>	48.24 <sup>4</sup>	78.9 <sup>4</sup>	35.13 <sup>6</sup>	16.2 <sup>17</sup>	10.57 <sup>4</sup>
Dez.	6	62.24 <sup>8</sup>	44.7 <sup>12</sup>	48.20 <sup>5</sup>	78.5 <sup>4</sup>	35.07 <sup>9</sup>	17.9 <sup>14</sup>	10.53 <sup>6</sup>
	16	62.16 <sup>10</sup>	45.9 <sup>10</sup>	48.15 <sup>8</sup>	78.1 <sup>5</sup>	34.98 <sup>11</sup>	19.3 <sup>12</sup>	10.47 <sup>9</sup>
	26	62.06 <sup>11</sup>	46.9 <sup>8</sup>	48.07 <sup>9</sup>	77.6 <sup>5</sup>	34.87 <sup>13</sup>	20.5 <sup>9</sup>	10.38 <sup>10</sup>
	36	61.95 <sup>47.7</sup>	47.7	47.98 <sup>77.1</sup>	5	34.74 <sup>21.4</sup>	21.4	10.28 <sup>54.5</sup>
Mittl. Ort		58.79	62.5	44.68	54.6	31.43	32.4	6.96
		59)		60)		61)		62)

## SCHEINBARE STERNÖRTER.

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1912	ε Cassiopej. 3 <sup>m</sup> .3.		α Trianguli. 3 <sup>m</sup> .5.		ξ Piscium. 4 <sup>m</sup> .6.		β Arietis. 2 <sup>m</sup> .7.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	1 <sup>h</sup> 47 <sup>m</sup>	63° 14'	1 <sup>h</sup> 48 <sup>m</sup>	29° 9'	1 <sup>h</sup> 48 <sup>m</sup>	2° 45'	1 <sup>h</sup> 49 <sup>m</sup>	20° 22'
Jan.								
1	62.44	31.5	3.39	10.9	59.85	12.7	46.33	48.1
II	62.10	34	3.27	10.8	59.75	12.1	46.22	47.7
21	61.73	37	3.13	10.3	59.63	11.5	46.10	47.2
31	61.35	38	2.98	9.7	59.51	11.0	45.96	46.6
Febr.	10	60.98	37	2.83	8.8	59.39	10.6	45.83
		35	14	10	12	3	13	45.9
	20	60.63	32	29.6	2.69	59.27	10.3	45.70
März	1	60.31	27.8	2.56	6.7	59.17	10.1	45.59
	11	60.06	25	2.46	5.6	59.09	10.1	45.49
	21	59.88	18	2.39	4.4	59.03	10.2	45.43
	31	59.78	10	2.36	3.3	59.01	10.6	45.41
April	10	59.77	10	18.4	2.38	59.03	11.2	45.43
	20	59.87	19	15.8	2.46	59.10	12.1	45.50
	30	60.06	28	13.6	2.59	59.21	13.2	45.62
Mai	10	60.34	36	11.6	2.77	59.36	14.5	45.79
	20	60.70	44	10.1	2.99	59.55	16.0	46.00
	30	61.14	8.9	8.9	3.26	59.79	17.6	46.25
Juni	9	61.64	50	8.2	3.56	60.05	19.5	46.53
	19	62.19	55	7.9	3.89	60.34	21.4	46.84
	29	62.77	58	8.2	4.23	60.65	23.4	47.17
Juli	9	63.37	60	8.8	4.59	60.97	25.4	47.50
	19	63.97	59	9.9	5.17	61.29	27.3	47.84
	29	64.56	57	11.5	5.29	61.61	29.2	48.17
Aug.	8	65.13	53	13.4	5.63	61.91	30.9	48.49
	18	65.66	49	15.7	5.95	62.19	32.4	48.79
	28	66.15	44	18.3	6.24	62.45	33.7	49.07
Sept.	7	66.59	39	21.2	6.50	62.69	34.7	49.32
	17	66.98	33	24.2	6.73	62.89	35.5	49.54
	27	67.31	26	27.4	6.92	63.07	36.1	49.72
Okt.	7	67.57	20	30.6	7.08	63.21	36.4	49.88
	17	67.77	13	33.8	7.21	63.32	36.5	50.00
	27	67.90	6	37.0	7.30	63.41	36.4	50.09
Nov.	6	67.96	1	40.1	7.36	63.46	36.1	50.15
	16	67.95	8	43.0	7.39	63.48	35.7	50.18
	26	67.87	15	45.6	7.39	63.48	35.1	50.18
Dez.	6	67.72	21	47.9	7.35	63.45	34.5	50.15
	16	67.51	27	49.7	7.29	63.40	33.9	50.10
	26	67.24	51	51.1	7.20	63.33	33.2	50.02
	36	66.92	32	52.1	7.08	63.23	32.6	49.93
Mittl. Ort	63.03	13.9	3.66	1.8	59.89	12.3	46.52	41.7
	63)		64)		65)		66)	

## SCHEINBARE STERNÖRTER.

1912	ψ Phoenicis. 4 <sup>m</sup> .5.		χ Eridani. 3 <sup>m</sup> .6.		υ Ceti. 3 <sup>m</sup> .9.		50 Cassiopej. 4 <sup>m</sup> .0.		
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	
	1 <sup>h</sup> 50 <sup>m</sup>	46° 43'	1 <sup>h</sup> 52 <sup>m</sup>	52° 2'	1 <sup>h</sup> 55 <sup>m</sup>	21° 29'	1 <sup>h</sup> 55 <sup>m</sup>	71° 59'	
Jan.									
I	7.88 <sup>22</sup>	74.8 <sup>7</sup>	32.94 <sup>25</sup>	63.7 <sup>6</sup>	51.78 <sup>12</sup>	81.2 <sup>8</sup>	53.11 <sup>53</sup>	64.7 <sup>11</sup>	
II	7.66 <sup>23</sup>	75.5 <sup>2</sup>	32.69 <sup>27</sup>	64.3 <sup>1</sup>	51.66 <sup>14</sup>	82.0 <sup>5</sup>	52.58 <sup>58</sup>	65.8 <sup>4</sup>	
21	7.43 <sup>23</sup>	75.7 <sup>3</sup>	32.42 <sup>27</sup>	64.4 <sup>4</sup>	51.52 <sup>14</sup>	82.5 <sup>2</sup>	52.00 <sup>60</sup>	66.2 <sup>2</sup>	
31	7.20 <sup>23</sup>	75.4 <sup>8</sup>	32.15 <sup>27</sup>	64.0 <sup>9</sup>	51.38 <sup>14</sup>	82.7 <sup>1</sup>	51.40 <sup>60</sup>	66.0 <sup>7</sup>	
Febr.	10	6.97 <sup>22</sup>	74.6 <sup>13</sup>	31.88 <sup>25</sup>	63.1 <sup>16</sup>	51.24 <sup>14</sup>	82.6 <sup>4</sup>	50.80 <sup>56</sup>	65.3 <sup>13</sup>
	20	6.75 <sup>19</sup>	73.3 <sup>18</sup>	31.63 <sup>22</sup>	61.5 <sup>19</sup>	51.10 <sup>12</sup>	82.2 <sup>8</sup>	50.24 <sup>50</sup>	64.0 <sup>17</sup>
März	I	6.56 <sup>16</sup>	71.5 <sup>22</sup>	31.41 <sup>19</sup>	59.6 <sup>23</sup>	50.98 <sup>11</sup>	81.4 <sup>11</sup>	49.74 <sup>42</sup>	62.3 <sup>22</sup>
II	6.40 <sup>13</sup>	69.3 <sup>25</sup>	31.22 <sup>15</sup>	57.3 <sup>27</sup>	50.87 <sup>7</sup>	80.3 <sup>14</sup>	49.32 <sup>32</sup>	60.1 <sup>24</sup>	
21	6.27 <sup>8</sup>	66.8 <sup>29</sup>	31.07 <sup>10</sup>	54.6 <sup>30</sup>	50.80 <sup>4</sup>	78.9 <sup>17</sup>	49.00 <sup>19</sup>	57.7 <sup>26</sup>	
31	6.19 <sup>2</sup>	63.9 <sup>31</sup>	30.97 <sup>4</sup>	51.6 <sup>33</sup>	50.76 <sup>0</sup>	77.2 <sup>17</sup>	48.81 <sup>7</sup>	55.1 <sup>27</sup>	
April	10	6.17 <sup>—</sup> <sup>19</sup>	60.8 <sup>35</sup>	30.93 <sup>2</sup>	48.3 <sup>34</sup>	50.76 <sup>4</sup>	75.3 <sup>22</sup>	48.74 <sup>8</sup>	52.4 <sup>27</sup>
	20	6.20 <sup>9</sup>	57.3 <sup>34</sup>	30.95 <sup>9</sup>	44.9 <sup>39</sup>	50.80 <sup>10</sup>	73.1 <sup>26</sup>	48.82 <sup>23</sup>	49.7 <sup>28</sup>
Mai	10	6.29 <sup>15</sup>	53.9 <sup>35</sup>	31.04 <sup>15</sup>	41.0 <sup>36</sup>	50.90 <sup>14</sup>	70.5 <sup>25</sup>	49.05 <sup>35</sup>	46.9 <sup>23</sup>
	20	6.44 <sup>20</sup>	50.4 <sup>34</sup>	31.19 <sup>20</sup>	37.4 <sup>35</sup>	51.04 <sup>18</sup>	68.0 <sup>27</sup>	49.40 <sup>47</sup>	44.6 <sup>19</sup>
Juni	30	6.64 <sup>26</sup>	47.0 <sup>33</sup>	31.39 <sup>28</sup>	33.9 <sup>34</sup>	51.22 <sup>23</sup>	65.3 <sup>27</sup>	49.87 <sup>59</sup>	42.7 <sup>16</sup>
	9	6.90 <sup>30</sup>	43.7 <sup>31</sup>	31.67 <sup>32</sup>	30.5 <sup>32</sup>	51.45 <sup>26</sup>	62.6 <sup>26</sup>	50.46 <sup>67</sup>	41.1 <sup>11</sup>
19	7.20 <sup>34</sup>	40.6 <sup>29</sup>	31.99 <sup>36</sup>	27.3 <sup>30</sup>	51.71 <sup>28</sup>	60.0 <sup>26</sup>	51.13 <sup>74</sup>	40.0 <sup>7</sup>	
29	7.54 <sup>38</sup>	37.7 <sup>26</sup>	32.35 <sup>40</sup>	24.3 <sup>25</sup>	51.99 <sup>31</sup>	57.4 <sup>24</sup>	51.87 <sup>78</sup>	39.3 <sup>2</sup>	
Juli	9	7.92 <sup>39</sup>	35.1 <sup>21</sup>	32.75 <sup>42</sup>	21.8 <sup>21</sup>	52.30 <sup>32</sup>	55.0 <sup>23</sup>	52.65 <sup>83</sup>	39.1 <sup>4</sup>
	19	8.31 <sup>40</sup>	33.0 <sup>17</sup>	33.17 <sup>44</sup>	19.7 <sup>17</sup>	52.62 <sup>34</sup>	52.7 <sup>19</sup>	53.48 <sup>83</sup>	39.5 <sup>8</sup>
Aug.	8	8.71 <sup>40</sup>	31.3 <sup>12</sup>	33.61 <sup>44</sup>	18.0 <sup>11</sup>	52.96 <sup>32</sup>	50.8 <sup>17</sup>	54.31 <sup>82</sup>	40.3 <sup>13</sup>
	18	9.11 <sup>39</sup>	30.1 <sup>7</sup>	34.05 <sup>42</sup>	16.9 <sup>6</sup>	53.28 <sup>32</sup>	49.1 <sup>12</sup>	55.13 <sup>80</sup>	41.6 <sup>18</sup>
	28	9.50 <sup>37</sup>	29.4 <sup>1</sup>	34.47 <sup>41</sup>	16.3 <sup>0</sup>	53.60 <sup>30</sup>	47.9 <sup>9</sup>	55.93 <sup>76</sup>	43.4 <sup>21</sup>
	10.21	9.87 <sup>34</sup>	29.3 <sup>4</sup>	34.88 <sup>37</sup>	16.3 <sup>5</sup>	53.90 <sup>28</sup>	47.0 <sup>5</sup>	56.69 <sup>70</sup>	45.5 <sup>25</sup>
Sept.	7	10.52 <sup>26</sup>	30.7 <sup>14</sup>	35.59 <sup>28</sup>	17.9 <sup>16</sup>	54.43 <sup>22</sup>	46.4 <sup>4</sup>	58.02 <sup>56</sup>	50.9 <sup>30</sup>
	17	10.78 <sup>21</sup>	32.1 <sup>18</sup>	35.87 <sup>23</sup>	19.5 <sup>20</sup>	54.65 <sup>18</sup>	46.8 <sup>7</sup>	58.58 <sup>47</sup>	53.9 <sup>33</sup>
Okt.	27	10.99 <sup>15</sup>	33.9 <sup>22</sup>	36.10 <sup>18</sup>	21.5 <sup>24</sup>	54.83 <sup>15</sup>	47.5 <sup>12</sup>	59.05 <sup>38</sup>	57.2 <sup>34</sup>
	7	11.14 <sup>12</sup>	36.1 <sup>25</sup>	36.28 <sup>12</sup>	23.9 <sup>26</sup>	54.98 <sup>11</sup>	48.6 <sup>13</sup>	59.43 <sup>29</sup>	60.6 <sup>35</sup>
	17	11.26 <sup>5</sup>	38.6 <sup>26</sup>	36.40 <sup>5</sup>	26.5 <sup>28</sup>	55.09 <sup>8</sup>	49.9 <sup>15</sup>	59.72 <sup>18</sup>	64.1 <sup>35</sup>
	27	11.31 <sup>1</sup>	41.2 <sup>26</sup>	36.45 <sup>0</sup>	29.3 <sup>28</sup>	55.17 <sup>4</sup>	51.4 <sup>17</sup>	59.90 <sup>8</sup>	67.6 <sup>34</sup>
Nov.	6	11.32 <sup>4</sup>	43.8 <sup>27</sup>	36.45 <sup>5</sup>	32.1 <sup>27</sup>	55.21 <sup>2</sup>	53.1 <sup>17</sup>	59.98 <sup>3</sup>	71.0 <sup>32</sup>
	16	11.28 <sup>9</sup>	46.5 <sup>24</sup>	36.40 <sup>11</sup>	34.8 <sup>25</sup>	55.23 <sup>2</sup>	54.8 <sup>17</sup>	59.95 <sup>14</sup>	74.2 <sup>31</sup>
	26	11.19 <sup>13</sup>	48.9 <sup>22</sup>	36.29 <sup>15</sup>	37.3 <sup>23</sup>	55.21 <sup>5</sup>	56.5 <sup>16</sup>	59.81 <sup>24</sup>	77.3 <sup>26</sup>
Dez.	6	11.06 <sup>16</sup>	51.1 <sup>18</sup>	36.14 <sup>20</sup>	39.6 <sup>19</sup>	55.16 <sup>7</sup>	58.1 <sup>14</sup>	59.57 <sup>34</sup>	79.9 <sup>23</sup>
	16	10.90 <sup>19</sup>	52.9 <sup>14</sup>	35.94 <sup>22</sup>	41.5 <sup>14</sup>	55.09 <sup>10</sup>	59.5 <sup>13</sup>	59.23 <sup>43</sup>	82.2 <sup>18</sup>
	26	10.71 <sup>21</sup>	54.3 <sup>10</sup>	35.72 <sup>25</sup>	42.9 <sup>9</sup>	54.99 <sup>11</sup>	60.8 <sup>9</sup>	58.80 <sup>49</sup>	84.0 <sup>12</sup>
	36	10.50 <sup>55.3</sup>	55.3	35.47	43.8	54.88	61.7	58.31 <sup>85.2</sup>	
Mittl. Ort	7.12	60.8	31.98	48.6	51.52	74.0	53.72	45.8	
	67)		68)		71)		70)		

1912	$\alpha$ Hydry. 2 <sup>m</sup> .9.		$\gamma$ Andromed. 2 <sup>m</sup> .1.		$\alpha$ Arietis. 2 <sup>m</sup> .0.		$\beta$ Trianguli. 3 <sup>m</sup> .0.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	1 <sup>h</sup> 55 <sup>m</sup>	61° 59'	1 <sup>h</sup> 58 <sup>m</sup>	41° 54'	2 <sup>h</sup> 2 <sup>m</sup>	23° 2'	2 <sup>h</sup> 4 <sup>m</sup>	34° 34'
Jan.	I	61.34 38	68.8 6	29.20 16	41.2 2	12.40 11	56.0 3	17.93 13
	II	60.96 39	69.4 1	29.04 18	41.4 1	12.29 12	55.7 4	17.80 15
	21	60.57 39	69.3 6	28.86 19	41.3 5	12.17 14	55.3 6	17.65 16
	31	60.18 38	68.7 11	28.67 19	40.8 8	12.03 14	54.7 6	17.49 17
Febr.	10	59.80 36	67.6 18	28.48 18	40.0 12	11.89 14	54.1 8	17.32 17
	20	59.44 33	65.8 21	28.30 17	38.8 13	11.75 13	53.3 9	17.15 15
März	I	59.11 28	63.7 26	28.13 14	37.5 16	11.62 10	52.4 9	17.00 12
	II	58.83 23	61.1 30	27.99 10	35.9 16	11.52 8	51.5 8	16.88 9
	21	58.60 16	58.1 33	27.89 5	34.3 17	11.44 3	50.7 8	16.79 5
	31	58.44 9	54.8 35	27.84 0	32.6 16	11.41 1	49.9 6	16.74 0
April	10	58.35 1	51.3 37	27.84 6	31.0 15	11.42 5	49.3 4	16.74 6
	20	58.34 7	47.6 41	27.90 14	29.5 13	11.47 12	48.9 2	16.80 12
	30	58.41 15	43.5 21	28.04 18	28.2 10	11.59 15	48.7 1	16.92 17
Mai	10	58.56 23	39.8 37	28.22 25	27.2 6	11.74 21	48.8 3	17.09 22
	20	58.79 31	36.1 35	28.47 29	26.6 4	11.95 24	49.1 6	17.31 26
	30	59.10 37	32.6 32	28.76 33	26.2 1	12.19 28	49.7 9	17.57 31
Juni	9	59.47 43	29.4 29	29.09 37	26.3 4	12.47 31	50.6 12	17.88 33
	19	59.90 48	26.5 25	29.46 38	26.7 8	12.78 33	51.8 14	18.21 36
	29	60.38 51	24.0 20	29.84 40	27.5 11	13.11 34	53.2 15	18.57 37
Juli	9	60.89 53	22.0 16	30.24 41	28.6 14	13.45 34	54.7 17	18.94 38
	19	61.42 53	20.4 9	30.65 40	30.0 17	13.79 34	56.4 18	19.32 36
	29	61.95 53	19.5 4	31.05 38	31.7 20	14.13 33	58.2 19	19.68 36
Aug.	8	62.48 51	19.1 2	31.43 36	33.7 21	14.46 31	60.1 18	20.04 34
	18	62.99 46	19.3 8	31.79 34	35.8 22	14.77 29	61.9 19	20.38 32
	28	63.45 42	20.1 13	32.13 31	38.0 24	15.06 26	63.8 18	20.70 29
Sept.	7	63.87 35	21.4 19	32.44 27	40.4 24	15.32 23	65.6 17	20.99 25
	17	64.22 29	23.3 23	32.71 24	42.8 24	15.55 20	67.3 15	21.24 23
	27	64.51 21	25.6 26	32.95 19	45.2 24	15.75 17	68.8 14	21.47 19
Okt.	7	64.72 13	28.2 29	33.14 16	47.6 23	15.92 14	70.2 13	21.66 15
	17	64.85 5	31.1 30	33.30 11	49.9 22	16.06 11	71.5 11	21.81 12
	27	64.90 3	34.1 30	33.41 8	52.1 20	16.17 7	72.6 9	21.93 8
Nov.	6	64.87 11	37.1 29	33.49 4	54.1 18	16.24 5	73.5 7	22.01 5
	16	64.76 18	40.0 27	33.53 1	55.9 17	16.29 1	74.2 6	22.06 1
	26	64.58 24	42.7 23	33.52 4	57.6 13	16.30 2	74.8 4	22.07 2
Dez.	6	64.34 29	45.0 20	33.48 8	58.9 11	16.28 4	75.2 2	22.05 6
	16	64.05 33	47.0 14	33.40 11	60.0 7	16.24 7	75.4 0	21.99 9
	26	63.72 37	48.4 9	33.29 14	60.7 4	16.17 10	75.4 1	21.90 12
	36	63.35 37	49.3 9	33.15 6	61.1 1	16.07 7	75.3 1	21.78 12
Mittl. Ort		59.79	52.3	29.49	28.3	12.53	48.4	18.13
		72)		73)		74)		75)

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1912	55 Cassiopej. 6 <sup>m</sup> .3.		Lac. μ Foru. 5 <sup>m</sup> .2.		67 Ceti. 5 <sup>m</sup> .8.		ξ Ceti. 4 <sup>m</sup> .2.	
	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl. -	AR.	Dekl. +
	2 <sup>h</sup> 7 <sup>m</sup>	66° 6'	2 <sup>h</sup> 9 <sup>m</sup>	31° 7'	2 <sup>h</sup> 12 <sup>m</sup>	6° 49'	2 <sup>h</sup> 23 <sup>m</sup>	8° 3'
Jan.								
I	33.27	63.5 <sup>10</sup>	2.49	80.0 <sup>10</sup>	35.76 <sup>10</sup>	40.1 8	28.79 <sup>9</sup>	61.2 <sup>5</sup>
II	32.90	64.5 <sup>4</sup>	2.34	81.0 <sup>6</sup>	35.66 <sup>12</sup>	40.9 7	28.70 <sup>11</sup>	60.7 <sup>6</sup>
II	32.49	64.9 <sup>2</sup>	2.18	81.6 <sup>1</sup>	35.54 <sup>12</sup>	41.6 4	28.59 <sup>13</sup>	60.1 <sup>5</sup>
III	32.06	64.7 <sup>6</sup>	2.02	81.7 <sup>3</sup>	35.42 <sup>13</sup>	42.0 3	28.46 <sup>14</sup>	59.6 <sup>4</sup>
Febr.	31.63	64.1 <sup>11</sup>	1.84	81.4 <sup>6</sup>	35.29 <sup>13</sup>	42.3 0	28.32 <sup>13</sup>	59.2 <sup>4</sup>
	31.21 <sup>42</sup>	63.0 <sup>16</sup>	1.68 <sup>16</sup>	80.8 <sup>11</sup>	35.16 <sup>13</sup>	42.3 1	28.19 <sup>12</sup>	58.8 <sup>4</sup>
März	30.83 <sup>37</sup>	61.4 <sup>20</sup>	1.52 <sup>13</sup>	79.7 <sup>14</sup>	35.03 <sup>10</sup>	42.2 4	28.07 <sup>11</sup>	58.4 <sup>2</sup>
II	30.50 <sup>25</sup>	59.4 <sup>23</sup>	1.39 <sup>10</sup>	78.3 <sup>18</sup>	34.93 <sup>8</sup>	41.8 7	27.96 <sup>8</sup>	58.2 <sup>1</sup>
II	30.25 <sup>16</sup>	57.1 <sup>24</sup>	1.29 <sup>7</sup>	76.5 <sup>21</sup>	34.85 <sup>4</sup>	41.1 8	27.88 <sup>5</sup>	58.1 <sup>1</sup>
III	30.09 <sup>6</sup>	54.7 <sup>25</sup>	1.22 <sup>2</sup>	74.4 <sup>24</sup>	34.81 <sup>1</sup>	40.3 <sup>11</sup>	27.83 <sup>2</sup>	58.2 <sup>2</sup>
April	29.93 <sup>5</sup>	52.2 <sup>25</sup>	1.20 <sup>2</sup>	72.0 <sup>26</sup>	34.80 <sup>3</sup>	39.2 <sup>14</sup>	27.81 <sup>—</sup>	58.4 <sup>4</sup>
II	29.08 <sup>17</sup>	49.7 <sup>26</sup>	1.22 <sup>7</sup>	69.4 <sup>31</sup>	34.83 <sup>9</sup>	37.8 <sup>17</sup>	27.84 <sup>8</sup>	58.8 <sup>8</sup>
III	29.25 <sup>26</sup>	47.1 <sup>22</sup>	1.29 <sup>12</sup>	66.3 <sup>30</sup>	34.92 <sup>12</sup>	36.1 <sup>17</sup>	27.92 <sup>13</sup>	59.6 <sup>9</sup>
Mai	29.51 <sup>36</sup>	44.9 <sup>18</sup>	1.41 <sup>17</sup>	63.3 <sup>30</sup>	35.04 <sup>18</sup>	34.4 <sup>20</sup>	28.05 <sup>13</sup>	60.5 <sup>11</sup>
II	29.87 <sup>45</sup>	43.1 <sup>14</sup>	1.58 <sup>22</sup>	60.3 <sup>30</sup>	35.22 <sup>21</sup>	32.4 <sup>21</sup>	28.22 <sup>21</sup>	61.6 <sup>13</sup>
III	31.32 <sup>53</sup>	41.7 <sup>11</sup>	1.80 <sup>25</sup>	57.3 <sup>29</sup>	35.43 <sup>24</sup>	30.3 <sup>21</sup>	28.43 <sup>24</sup>	62.9 <sup>15</sup>
Juni	31.85 <sup>58</sup>	40.6 <sup>6</sup>	2.05 <sup>29</sup>	54.4 <sup>28</sup>	35.67 <sup>27</sup>	28.2 <sup>22</sup>	28.67 <sup>28</sup>	64.4 <sup>17</sup>
II	32.43 <sup>62</sup>	40.0 <sup>1</sup>	2.34 <sup>32</sup>	51.6 <sup>25</sup>	35.94 <sup>30</sup>	26.0 <sup>22</sup>	28.95 <sup>30</sup>	66.1 <sup>17</sup>
III	33.05 <sup>65</sup>	39.9 <sup>3</sup>	2.66 <sup>33</sup>	49.1 <sup>23</sup>	36.24 <sup>31</sup>	23.8 <sup>21</sup>	29.25 <sup>31</sup>	67.8 <sup>19</sup>
Juli	33.70 <sup>66</sup>	40.2 <sup>9</sup>	2.99 <sup>34</sup>	46.8 <sup>21</sup>	36.55 <sup>32</sup>	21.7 <sup>20</sup>	29.56 <sup>32</sup>	69.7 <sup>18</sup>
II	34.36 <sup>66</sup>	41.1 <sup>12</sup>	3.33 <sup>35</sup>	44.7 <sup>16</sup>	36.87 <sup>31</sup>	19.7 <sup>18</sup>	29.88 <sup>32</sup>	71.5 <sup>17</sup>
III	35.02 <sup>64</sup>	42.3 <sup>17</sup>	3.68 <sup>34</sup>	43.1 <sup>11</sup>	37.18 <sup>31</sup>	17.9 <sup>16</sup>	30.20 <sup>31</sup>	73.2 <sup>17</sup>
Aug.	35.66 <sup>61</sup>	44.0 <sup>20</sup>	4.02 <sup>32</sup>	42.0 <sup>7</sup>	37.49 <sup>30</sup>	16.3 <sup>12</sup>	30.51 <sup>30</sup>	74.9 <sup>16</sup>
II	36.27 <sup>58</sup>	46.0 <sup>24</sup>	4.34 <sup>30</sup>	41.3 <sup>3</sup>	37.79 <sup>27</sup>	15.1 <sup>10</sup>	30.81 <sup>29</sup>	76.5 <sup>14</sup>
III	36.85 <sup>52</sup>	48.4 <sup>26</sup>	4.64 <sup>27</sup>	41.0 <sup>3</sup>	38.06 <sup>25</sup>	14.1 <sup>7</sup>	31.10 <sup>26</sup>	77.9 <sup>12</sup>
Sept.	37.37 <sup>46</sup>	51.0 <sup>29</sup>	4.91 <sup>24</sup>	41.3 <sup>7</sup>	38.31 <sup>22</sup>	13.4 <sup>3</sup>	31.36 <sup>23</sup>	79.1 <sup>10</sup>
II	37.83 <sup>41</sup>	53.9 <sup>31</sup>	5.15 <sup>20</sup>	42.0 <sup>11</sup>	38.53 <sup>20</sup>	13.1 <sup>1</sup>	31.59 <sup>21</sup>	80.1 <sup>7</sup>
III	38.24 <sup>34</sup>	57.0 <sup>32</sup>	5.35 <sup>17</sup>	43.1 <sup>15</sup>	38.73 <sup>16</sup>	13.0 <sup>3</sup>	31.80 <sup>18</sup>	80.8 <sup>6</sup>
Okt.	38.58 <sup>26</sup>	60.2 <sup>32</sup>	5.52 <sup>13</sup>	44.6 <sup>18</sup>	38.89 <sup>13</sup>	13.3 <sup>5</sup>	31.98 <sup>15</sup>	81.4 <sup>3</sup>
II	38.84 <sup>19</sup>	63.4 <sup>33</sup>	5.65 <sup>8</sup>	46.4 <sup>21</sup>	39.02 <sup>11</sup>	13.8 <sup>7</sup>	32.13 <sup>12</sup>	81.7 <sup>1</sup>
III	39.03 <sup>11</sup>	66.7 <sup>32</sup>	5.73 <sup>4</sup>	48.5 <sup>21</sup>	39.13 <sup>7</sup>	14.5 <sup>9</sup>	32.25 <sup>9</sup>	81.8 <sup>0</sup>
Nov.	39.14 <sup>3</sup>	69.9 <sup>30</sup>	5.77 <sup>2</sup>	50.6 <sup>22</sup>	39.20 <sup>4</sup>	15.4 <sup>11</sup>	32.34 <sup>6</sup>	81.8 <sup>1</sup>
II	39.17 <sup>5</sup>	72.9 <sup>28</sup>	5.79 <sup>2</sup>	52.8 <sup>21</sup>	39.24 <sup>1</sup>	16.5 <sup>11</sup>	32.40 <sup>3</sup>	81.7 <sup>3</sup>
III	39.12 <sup>14</sup>	75.7 <sup>25</sup>	5.77 <sup>5</sup>	54.9 <sup>19</sup>	39.25 <sup>2</sup>	17.6 <sup>11</sup>	32.43 <sup>0</sup>	81.4 <sup>4</sup>
Dez.	38.98 <sup>21</sup>	78.2 <sup>22</sup>	5.72 <sup>9</sup>	56.8 <sup>18</sup>	39.23 <sup>4</sup>	18.7 <sup>10</sup>	32.43 <sup>3</sup>	81.0 <sup>5</sup>
II	38.77 <sup>28</sup>	80.4 <sup>17</sup>	5.63 <sup>11</sup>	58.6 <sup>15</sup>	39.19 <sup>7</sup>	19.7 <sup>10</sup>	32.40 <sup>5</sup>	80.5 <sup>5</sup>
III	38.49 <sup>33</sup>	82.1 <sup>13</sup>	5.52 <sup>13</sup>	60.1 <sup>12</sup>	39.12 <sup>8</sup>	20.7 <sup>9</sup>	32.35 <sup>8</sup>	80.0 <sup>5</sup>
III	38.16 <sup>33</sup>	83.4 <sup>13</sup>	5.39 <sup>13</sup>	61.3 <sup>21.6</sup>	39.04 <sup>21.6</sup>	21.6 <sup>9</sup>	32.27 <sup>79.5</sup>	79.5
Mittl. Ort	33.62	45.3	1.99	70.8	35.58	38.3	28.69	57.9
	76)		78)		80)		85)	

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1912	36 H. Cassiop. 5 <sup>m</sup> .4.		μ Hydry. 5 <sup>m</sup> .5.		ν Arietis. 5 <sup>m</sup> .6.		δ Geti. 3 <sup>m</sup> .9.	
	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl. -
	2 <sup>h</sup> 29 <sup>m</sup>	72° 25'	2 <sup>h</sup> 33 <sup>m</sup>	79° 29'	2 <sup>h</sup> 33 <sup>m</sup>	21° 34'	2 <sup>h</sup> 34 <sup>m</sup>	0° 2'
Jan.								
I	38.44	82.3	36.65	51.6	49.02	60.8	58.45	61.2
II	37.94	83.7	35.50	52.4	48.93	60.6	58.36	62.0
21	37.38	84.5	34.29	52.6	48.81	60.3	58.25	62.6
31	36.78	84.8	33.06	52.2	48.68	59.9	58.12	63.1
Febr.	36.16	84.5	31.83	51.2	48.53	59.4	57.99	63.5
10	61	9	118	15	15	6	14	2
20	35.55	83.6	30.65	49.7	48.38	58.8	57.85	63.7
März	34.99	82.3	29.54	47.6	48.24	58.1	57.72	63.8
I	34.49	80.5	28.53	45.1	48.12	57.4	57.61	63.7
II	34.08	78.3	27.65	42.2	48.02	56.7	57.51	63.4
21	33.79	75.8	26.91	38.9	47.95	56.1	57.45	63.0
31	16	26	57	35	2	5	2	7
April	33.63	73.2	26.34	35.4	47.93	55.6	57.43	62.3
10	33.60	70.6	25.95	31.7	47.95	55.2	57.44	61.4
20	33.71	68.0	25.75	27.9	48.02	55.1	57.50	60.3
Mai	34.00	65.2	25.75	23.7	48.15	55.1	57.62	58.8
10	40	22	25.96	20.0	48.32	55.4	57.77	57.2
20	34.40	63.0	40	35	22	6	20	17
30	34.92	61.2	26.36	16.5	48.54	56.0	57.97	55.5
Juni	35.54	59.7	26.95	13.2	48.80	56.8	58.20	53.7
9	36.26	58.6	27.70	10.1	49.08	57.8	58.46	51.8
19	37.03	58.0	28.59	7.5	49.39	59.0	58.74	49.8
Juli	37.86	83	29.63	5.4	49.72	60.4	59.05	47.8
9	85	4	110	17	34	16	31	19
19	38.71	58.3	30.73	3.7	50.06	62.0	59.36	45.9
29	39.58	59.1	31.90	2.6	50.40	63.6	59.67	44.1
Aug.	40.44	60.3	33.10	2.1	50.73	65.3	59.99	42.5
8	82	16	118	5	32	17	30	15
18	41.26	61.9	34.28	2.2	51.05	67.0	60.29	41.0
28	42.04	64.1	35.42	3.0	51.36	68.6	60.57	39.8
Sept.	74	25	106	13	28	16	26	9
7	42.78	66.6	36.48	4.3	51.64	70.2	60.83	38.9
17	43.45	69.3	37.40	6.2	51.89	71.7	61.07	38.3
27	44.04	72.3	38.18	8.5	52.12	73.0	61.28	37.9
Okt.	7	50	31	59	27	12	19	0
7	44.54	75.4	38.77	11.2	52.32	74.2	61.47	37.9
17	44.95	78.8	39.15	14.2	52.49	75.3	61.62	38.0
	31	34	18	31	14	9	13	4
27	45.26	82.2	39.33	17.3	52.63	76.2	61.75	38.4
Nov.	6	20	6	32	11	8	10	6
16	45.46	85.5	39.27	20.5	52.74	77.0	61.85	39.0
26	45.54	88.8	39.00	23.7	52.82	77.6	61.92	39.7
Dez.	7	3	49	29	4	5	3	7
6	45.51	92.0	38.51	26.6	52.86	78.1	61.95	40.4
16	45.37	94.9	37.83	29.2	52.88	78.5	61.96	41.3
16	25	25	86	22	2	2	2	8
26	45.12	97.4	36.97	31.4	52.86	78.7	61.94	42.1
36	44.76	99.5	35.97	33.1	5	0	5	8
36	44.30	101.2	34.86	34.2	52.73	78.6	61.81	43.7
Mittl. Ort	38.40	63.2	30.67	36.3	48.96	53.0	58.22	62.3

## SCHEINBARE STERNÖRTER.

1912	θ Persei. 4 <sup>m</sup> .1.		π Ceti. 4 <sup>m</sup> .0.		μ Ceti. 4 <sup>m</sup> .2.		41 Arietis. 3 <sup>m</sup> .6.		
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +	
	2 <sup>h</sup> 38 <sup>m</sup>	48° 51'	2 <sup>h</sup> 39 <sup>m</sup>	14° 13'	2 <sup>h</sup> 40 <sup>m</sup>	9° 44'	2 <sup>h</sup> 44 <sup>m</sup>	26° 53'	
Jan.									
I	10.92	16	39.7	7	56.44	18	54.3	10	
II	10.76	20	40.4	4	56.33	12	55.3	8	
21	10.56	23	40.8	1	56.21	13	56.1	5	
31	10.33	23	40.7	4	56.08	15	56.6	3	
Febr.	10		40.3	8	55.93	15	56.9	1	
20	9.86	22	39.5	11	55.78	14	56.8	3	
März	I	9.64	20	38.4	14	55.64	13	56.5	6
II	9.44	17	37.0	17	55.51	10	55.9	9	
21	9.27	11	35.3	17	55.41	8	55.0	12	
31	9.16	11	33.6	17	55.33	4	53.8	14	
April	10	5	31.7	18	55.29	0	52.4	17	
20	9.12	8	29.9	27	55.29	5	50.7	19	
30	9.20	16	28.2	16	55.34	10	48.8	23	
Mai	10	9.36	26.6	16	55.44	14	46.5	23	
20	9.58	22	25.4	12	55.58	14	44.2	24	
30	9.86	32	24.5	6	55.76	23	41.8	25	
Juni	9	10.18	38	23.9	2	55.99	25	39.3	24
19	10.56	23	23.7	1	56.24	28	36.9	23	
29	10.96	40	23.8	5	56.52	30	34.6	23	
Juli	9	11.39	43	24.3	5	56.82	32	32.3	21
19	11.84	45	25.1	12	57.14	31	30.2	18	
29	12.29	45	26.3	14	57.45	32	28.4	15	
Aug.	8	12.73	44	27.7	17	57.77	30	26.9	15
18	13.16	43	29.4	20	58.07	29	25.6	8	
28	13.56	40	31.4	21	58.36	27	24.8	4	
Sept.	7	13.94	35	33.5	23	58.63	24	24.4	1
17	14.29	35	35.8	24	58.87	22	24.3	3	
27	14.61	32	38.2	24	59.09	19	24.6	6	
Okt.	7	14.88	27	40.6	24	59.28	15	25.2	10
17	15.11	23	43.0	24	59.43	13	26.2	12	
27	15.30	15	45.4	24	59.56	9	27.4	14	
Nov.	6	15.45	10	47.8	22	59.65	6	28.8	15
16	15.55	5	50.0	20	59.71	3	30.3	15	
26	15.60	0	52.0	19	59.74	0	31.8	16	
Dez.	6	15.60	5	53.9	16	59.74	3	33.4	14
16	15.55	10	55.5	12	59.71	6	34.8	13	
26	15.45	14	56.7	9	59.65	9	36.1	11	
36	15.31	57.6	59.56		37.2		36.7		
Mittl. Ort	10.91	24.7	56.03	51.3	10.96	35.1	48.01	54.1	

1912	3 Fornacis. 4 <sup>m</sup> .4.		τ <sup>2</sup> Eridani. 4 <sup>m</sup> .8.		τ Persei. 4 <sup>m</sup> .0.		η Eridani. 3 <sup>m</sup> .7.		
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	
	2 <sup>h</sup> 45 <sup>m</sup>	32° 45'	2 <sup>h</sup> 47 <sup>m</sup>	21° 21'	2 <sup>h</sup> 47 <sup>m</sup>	52° 24'	2 <sup>h</sup> 52 <sup>m</sup>	9° 14'	
Jan.									
I	25.18	14	98.0	13	3.34	12	63.8	12	
II	25.04	17	99.3	8	3.22	13	65.0	8	
21	24.87	18	100.1	5	3.09	15	65.8	5	
31	24.69	19	100.6	0	2.94	16	66.3	2	
Febr.	10				2.78		66.5		
	20				16	1	59.80	26	
	24.31	18	100.2	9	2.62	15	66.4	5	
März	I	24.13	17	99.3	12	2.47	15	65.9	8
II	23.96	14	98.1	16	2.32	12	65.1	12	
21	23.82	11	96.5	20	2.20	9	63.9	15	
31	23.71	7	94.5	23	2.11	9	62.4	15	
April	10	23.64	3	92.2	26	2.06	1	58.65	17
	20	23.61	2	89.6	28	2.05	3	58.7	23
	30	23.63	9	86.8	32	2.08	3	56.4	27
Mai	10	23.72	12	83.6	31	2.17	9	53.7	26
	20	23.84	18	80.5	31	2.30	13	51.1	27
	30	24.02	22	77.4	30	2.47	22	48.4	27
Juni	9	24.24	26	74.4	30	2.69	25	45.7	27
	19	24.50	29	71.4	28	2.94	28	43.0	25
	29	24.79	32	68.6	25	3.22	30	40.5	24
Juli	9	25.11	34	66.1	25	3.52	32	38.1	22
	19	25.45	34	63.9	18	3.84	32	35.9	18
	29	25.79	34	62.1	14	4.16	32	34.1	15
Aug.	8	26.13	34	60.7	14	4.48	31	32.6	11
	18	26.46	33	59.8	9	4.79	30	31.5	7
	28	26.78	32	59.4	4	5.09	28	30.8	2
Sept.	7	27.08	27	59.5	6	5.37	25	30.6	1
	17	27.35	24	60.1	11	5.62	23	30.7	6
	27	27.59	20	61.2	15	5.85	19	31.3	10
Okt.	7	27.79	17	62.7	18	6.04	17	32.3	13
	17	27.96	12	64.5	21	6.21	13	33.6	16
	27	28.08	9	66.6	21	6.34	9	35.2	18
Nov.	6	28.17	9	68.9	23	6.43	6	37.0	18
	16	28.22	5	71.2	23	6.49	3	38.8	19
	26	28.24	2	73.6	23	6.52	0	40.7	19
Dez.	6	28.21	3	75.9	23	6.52	4	42.6	18
	16	28.14	9	78.0	17	6.48	7	44.4	15
	26	28.05	13	79.7	15	6.41	9	45.9	13
	36	27.92	8	81.2	15	6.32	47.2	47.2	44.2
Mittl. Ort		24.43	90.3	2.80	59.1	60.60	10.9	7.65	52.5
		(101)		(102)		(103)		(104)	



1912	ρ Persei.	(3 <sup>m</sup> .8).	μ Horologii.	5 <sup>m</sup> .1.	β Persei.	(2 <sup>m</sup> .2).	δ Arietis.	4 <sup>m</sup> .3.
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	2 <sup>h</sup> 59 <sup>m</sup>	38° 29'	3 <sup>h</sup> 1 <sup>m</sup>	60° 4'	3 <sup>h</sup> 2 <sup>m</sup>	40° 37'	3 <sup>h</sup> 6 <sup>m</sup>	19° 23'
Jan.	I	32.10 11	72.4 6	34.25 33	55.5 15	26.45 11	15.4 6	35.90 8
	II	31.99 14	73.0 2	33.92 36	57.0 9	26.34 15	16.0 3	35.82 10
	21	31.85 17	73.2 0	33.56 39	57.9 4	26.19 18	16.3 1	35.72 13
	31	31.68 19	73.2 3	33.17 40	58.3 3	26.01 19	16.4 3	35.59 14
Febr.	10	31.49 19	72.9 6	32.77 40	58.0 8	25.82 20	16.1 6	35.45 15
	20	31.30 19	72.3 9	32.37 39	57.2 13	25.62 20	15.5 8	35.30 15
März	I	31.11 17	71.4 10	31.98 36	55.9 18	25.42 18	14.7 10	35.15 14
	II	30.94 15	70.4 12	31.62 33	54.1 23	25.24 16	13.7 13	35.01 12
	21	30.79 11	69.2 13	31.29 27	51.8 27	25.08 11	12.4 13	34.89 10
	31	30.68 6	67.9 13	31.02 22	49.1 31	24.97 7	11.1 14	34.79 5
April	10	30.62 1	66.6 12	30.80 14	46.0 33	24.90 1	9.7 13	34.74 1
	20	30.61 —	65.4 12	30.66 8	42.7 35	24.89 4	8.4 13	34.73 4
Mai	10	30.66 7	64.2 11	30.58 8	39.2 1	24.93 40	7.1 12	34.77 10
	20	30.78 17	63.1 7	30.59 9	35.2 37	25.05 17	5.9 9	34.87 13
	30	30.95 23	62.4 5	30.68 17	31.5 36	25.22 22	5.0 6	35.00 19
Juni	30	31.18 27	61.9 2	30.85 24	27.9 36	25.44 28	4.4 4	35.19 22
	9	31.45 31	61.7 0	31.09 31	24.3 33	25.72 31	4.0 0	35.41 26
	19	31.76 34	61.7 4	31.40 37	21.0 30	26.03 35	4.0 2	35.67 30
Juli	29	32.10 37	62.1 6	31.77 42	18.0 27	26.38 38	4.2 5	35.97 31
	9	32.47 38	62.7 9	32.19 45	15.3 22	26.76 39	4.7 9	36.28 32
	19	32.85 39	63.6 12	32.64 48	13.1 17	27.15 39	5.6 10	36.60 34
Aug.	8	33.24 39	64.8 13	33.12 50	11.4 12	27.54 40	6.6 13	36.94 33
	18	33.63 36	66.1 15	33.62 49	10.2 6	27.94 39	7.9 15	37.27 32
	28	34.01 34	67.6 17	34.11 48	9.6 1	28.33 38	9.4 16	37.59 32
Sept.	7	34.71 32	71.0 19	35.05 41	10.3 13	29.06 33	12.8 18	38.20 28
	17	35.03 29	72.9 18	35.46 37	11.6 18	29.39 31	14.6 19	38.48 25
Okt.	27	35.32 27	74.7 19	35.83 30	13.4 23	29.70 27	16.5 20	38.73 23
	7	35.59 23	76.6 18	36.13 25	15.7 26	29.97 24	18.5 19	38.96 20
	17	35.82 19	78.4 18	36.38 16	18.3 30	30.21 20	20.4 19	39.16 18
Nov.	27	36.01 16	80.2 17	36.54 10	21.3 31	30.41 16	22.3 18	39.34 14
	6	36.17 12	81.9 16	36.64 2	24.4 32	30.57 13	24.1 17	39.48 11
	16	36.29 8	83.5 15	36.66 5	27.6 31	30.70 8	25.8 16	39.59 8
	26	36.37 4	85.0 13	36.61 13	30.7 29	30.78 4	27.4 15	39.67 5
Dez.	6	36.41 1	86.3 11	36.48 19	33.6 26	30.82 0	28.9 12	39.72 1
	16	36.40 4	87.4 9	36.29 26	36.2 22	30.82 5	30.1 10	39.73 3
	26	36.36 9	88.3 7	36.03 30	38.4 18	30.77 9	31.1 7	39.70 6
	36	36.27 9	89.0 7	35.73 40.2		30.68 31.8		39.64 63.7
Mittl. Ort		31.93	59.9	32.22	43.9	26.26	2.3	35.64
		109)		110)		111)		114)

## SCHEINBARE STERNÖRTER.

1912	12 Eridani. 3 <sup>m</sup> .6.		48 H. Cephei. 5 <sup>m</sup> .9.		α Persci. 1 <sup>m</sup> .9.		ο Tauri. 3 <sup>m</sup> .6.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	3 <sup>h</sup> 8 <sup>m</sup>	29° 19'	3 <sup>h</sup> 9 <sup>m</sup>	77° 24'	3 <sup>h</sup> 18 <sup>m</sup>	49° 32'	3 <sup>h</sup> 20 <sup>m</sup>	8° 43'
Jan.								
I	20.70	12	66.3	14	7.96	62	65.2	20
II	20.58	15	67.7	11	7.34	74	67.2	15
21	20.43	16	68.8	6	6.60	83	68.7	9
31	20.27	18	69.4	3	5.77	88	69.6	4
Febr.	20.09	19	69.7	2	4.89	89	70.0	3
20	19.90	19	69.5	6	4.00	86	69.7	9
März	19.71	17	68.9	10	3.14	80	68.8	14
II	19.54	15	67.9	13	2.34	70	67.4	18
21	19.39	13	66.6	17	1.64	56	65.6	23
31	19.26	9	64.9	20	1.08	56	63.3	11
April	19.17	4	62.9	24	0.68	21	60.9	26
20	19.13	0	60.5	26	0.47	3	58.3	28
Mai	19.13	5	57.9	27	0.44	16	55.5	28
10	19.18	11	55.2	32	0.60	40	52.7	27
20	19.29	15	52.0	30	1.00	50.0	59.1	12
30	19.44	20	49.0	30	1.54	71	47.6	21
Juni	19.64	24	46.0	29	2.25	85	45.5	16
19	19.88	27	43.1	28	3.10	96	43.9	13
29	20.15	30	40.3	26	4.06	106	42.6	8
Juli	20.45	31	37.7	23	5.12	112	41.8	22
19	20.76	33	35.4	20	6.24	117	41.5	1
29	21.09	33	33.4	16	7.41	119	41.6	6
Aug.	21.42	33	31.8	11	8.60	118	42.2	11
18	21.75	33	30.7	6	9.78	114	43.3	14
28	22.07	32	30.1	1	10.92	110	44.7	19
Sept.	22.37	28	30.0	3	12.02	103	46.6	23
17	22.65	25	30.3	8	13.05	95	48.9	26
Okt.	22.90	22	31.1	13	14.00	84	51.5	29
7	23.12	19	32.4	16	14.84	73	54.4	31
17	23.31	15	34.0	19	15.57	59	57.5	33
27	23.46	12	35.9	22	16.16	60	60.8	21
Nov.	23.58	7	38.1	23	16.60	44	64.2	34
16	23.65	4	40.4	23	16.88	28	67.6	34
26	23.69	1	42.7	23	17.00	6	70.9	33
Dez.	23.70	4	45.0	21	16.94	22	74.1	30
16	23.66	7	47.1	19	16.72	39	77.1	26
26	23.59	10	49.0	15	16.33	54	79.7	23
36	23.49	5	50.5	—	15.79	82.0	85.9	18
Mittl. Ort	19.91	60.8	6.73	46.2	1.98	55.5	4.54	11.1
	(117)		(115)		(120)		(121)	

## SCHEINBARE STERNÖRTER.

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1912	2 H. Camelop. 4 <sup>m</sup> .4.		f Tauri. 4 <sup>m</sup> .I.		ε Eridani. 3 <sup>m</sup> .5.		δ Persci. 3 <sup>m</sup> .o.		
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	
	3 <sup>h</sup> 21 <sup>m</sup>	59° 38'	3 <sup>h</sup> 25 <sup>m</sup>	12° 38'	3 <sup>h</sup> 28 <sup>m</sup>	9° 44'	3 <sup>h</sup> 36 <sup>m</sup>	47° 30'	
Jan.	I	56.47 19	21.1 16	61.13 6	14.5 3	47.60 7	80.1 11	39.68 10	39.3 12
	II	56.28 25	22.7 11	61.07 10	14.2 4	47.53 10	81.2 9	39.58 16	40.5 8
	21	56.03 30	23.8 6	60.97 12	13.8 4	47.43 13	82.1 7	39.42 19	41.3 5
	31	55.73 32	24.4 2	60.85 13	13.4 4	47.30 15	82.8 5	39.23 22	41.8 1
Febr.	10	55.41 32	24.6 —	60.72 13	13.0 4	47.15 15	83.3 2	39.01 23	41.9 3
	20	55.07 34	24.3 7	60.57 15	12.6 3	47.00 16	83.5 0	38.78 24	41.6 5
März	I	54.73 32	23.6 12	60.42 15	12.3 3	46.84 16	83.5 3	38.54 24	41.1 9
	II	54.41 28	22.4 15	60.27 13	12.0 2	46.68 13	83.2 5	38.30 20	40.2 11
	21	54.13 22	20.9 18	60.14 10	11.8 1	46.55 12	82.7 8	38.10 17	39.1 14
	31	53.91 16	19.1 20	60.04 7	11.7 0	46.43 8	81.9 11	37.93 12	37.7 15
April	10	53.75 8	17.1 21	59.97 3	11.7 1	46.35 4	80.8 13	37.81 6	36.2 16
	20	53.67 1	15.0 21	59.94 2	11.8 3	46.31 0	79.5 16	37.75 1	34.6 16
	30	53.68 9	12.9 21	59.96 6	12.1 5	46.31 4	77.9 17	37.74 7	33.0 15
Mai	10	53.77 20	10.8 21	60.02 12	12.6 7	46.35 10	76.2 21	37.81 15	31.5 15
	20	53.97 27	8.7 17	60.14 11	13.3 9	46.45 14	74.1 21	37.96 20	30.0 12
	30	54.24 34	7.0 15	60.31 20	14.2 10	46.59 18	72.0 22	38.16 26	28.8 9
Juni	9	54.58 41	5.5 11	60.51 24	15.2 12	46.77 22	69.8 22	38.42 31	27.9 7
	19	54.99 46	4.4 7	60.75 26	16.4 13	46.99 25	67.6 22	38.73 27	27.2 3
	29	55.45 50	3.7 4	61.01 30	17.7 15	47.24 27	65.4 22	39.08 40	26.9 1
Juli	9	55.95 50	3.3 4	61.31 30	19.2 15	47.51 29	63.2 20	39.48 41	26.8 2
	19	56.49 55	3.4 3	61.61 32	20.6 15	47.80 30	61.2 19	39.89 44	27.0 6
	29	57.04 56	3.7 3	61.93 32	22.1 14	48.10 31	59.3 16	40.33 43	27.6 8
Aug.	8	57.60 56	4.4 7	62.25 32	23.5 14	48.41 30	57.7 14	40.76 44	28.4 10
	18	58.16 56	5.6 14	62.57 31	24.9 13	48.71 30	56.3 10	41.20 43	29.4 12
	28	58.70 54	7.0 17	62.88 26	26.2 13	49.01 29	55.3 6	41.63 42	30.6 15
Sept.	7	59.23 49	8.7 19	63.17 28	27.3 9	49.30 26	54.7 3	42.05 39	32.1 16
	17	59.72 10.6	63.45 26	28.2 8	49.56 25	54.4 0	42.44 37	33.7 18	
	27	60.18 46	12.9 23	63.71 24	29.0 6	49.81 23	54.4 5	42.81 35	35.5 19
Okt.	7	60.60 42	15.3 24	63.95 21	29.6 4	50.04 20	54.9 7	43.16 31	37.4 19
	17	60.97 37	17.8 26	64.16 18	30.0 2	50.24 17	55.6 10	43.47 27	39.3 20
	27	61.29 25	20.4 26	64.34 16	30.2 1	50.41 14	56.6 13	43.74 23	41.3 21
Nov.	6	61.54 20	23.0 27	64.50 13	30.3 1	50.55 11	57.9 13	43.97 18	43.4 20
	16	61.74 13	25.7 26	64.63 9	30.2 1	50.66 8	59.2 15	44.15 14	45.4 19
	26	61.87 6	28.3 25	64.72 6	30.1 2	50.74 4	60.7 15	44.29 9	47.3 18
Dez.	6	61.93 2	30.8 22	64.78 3	29.9 3	50.78 1	62.2 15	44.38 3	49.1 17
	16	61.91 8	33.0 21	64.81 1	29.6 4	50.79 2	63.7 14	44.41 2	50.8 15
	26	61.83 15	35.1 16	64.80 4	29.2 3	50.77 6	65.1 12	44.39 7	52.3 12
	36	61.68 15	36.7	64.76 2	28.9 3	50.71	66.3	44.32	53.5
Mittl. Ort		55.94	4.6	60.74	8.4	47.03	80.4	39.20	25.1
		(122)		(125)		(127)		(131)	

## SCHEINBARE STERNÖRTER.

1912	v Persei.	3 <sup>m</sup> .9.	5 H. Camelop.	4 <sup>m</sup> .5.	η Tauri.	3 <sup>m</sup> .0.	τ <sup>6</sup> Eridani.	4 <sup>m</sup> .1.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	
	3 <sup>h</sup> 39 <sup>m</sup>	42° 18'	3 <sup>h</sup> 40 <sup>m</sup>	71° 3'	3 <sup>h</sup> 42 <sup>m</sup>	23° 50'	3 <sup>h</sup> 43 <sup>m</sup>	23° 30'	
Jan.									
I	13.09	9	18.0	9	64.22	31	61.9	21	
II	13.00	13	18.9	7	63.91	41	64.0	17	
21	12.87	16	19.6	3	63.50	48	65.7	11	
31	12.71	20	19.9	1	63.02	54	66.8	6	
Febr.	10	12.51	20.0	—	62.48	57	67.4	—	
	21	—	2	—	—	—	17	3	
20	12.30	21	19.8	6	61.91	57	67.5	5	
März	1	12.09	21	19.2	8	61.34	55	67.0	10
II	11.88	19	18.4	10	60.79	50	66.0	15	
21	11.69	15	17.4	11	60.29	41	64.5	18	
31	11.54	11	16.3	13	59.88	32	62.7	22	
April	10	11.43	6	15.0	14	59.56	20	60.5	23
	20	11.37	0	13.6	13	59.36	8	58.2	25
30	11.37	6	12.3	13	59.28	—	55.7	25	
Mai	10	11.43	14	11.0	13	59.33	5	53.2	27
	17	11.57	14	9.8	12	59.53	5	50.5	18
20	11.57	19	9.8	9	59.53	32	50.5	23	
30	11.76	24	8.9	6	59.85	44	48.2	20	
Juni	9	12.00	29	8.3	4	60.29	54	46.2	18
19	12.29	—	7.9	2	60.83	63	44.4	14	
29	12.62	33	7.7	1	61.46	70	43.0	9	
Juli	9	12.98	36	7.8	62.16	42.1	42.1	—	
	19	13.36	40	8.2	7	62.93	80	41.5	2
29	13.76	41	8.9	8	63.73	83	41.3	2	
Aug.	8	14.17	41	9.7	11	64.56	83	41.5	7
18	14.57	40	10.8	12	65.39	83	42.2	11	
28	14.97	38	12.0	14	66.22	80	43.3	14	
Sept.	7	15.35	37	13.4	15	67.02	77	44.7	19
	17	15.72	35	14.9	16	67.79	72	46.6	21
27	16.07	32	16.5	17	68.51	67	48.7	24	
Okt.	7	16.39	28	18.2	18	69.18	59	51.1	26
	17	16.67	26	20.0	17	69.77	51	53.7	29
27	16.93	22	21.7	17	70.28	—	56.6	—	
Nov.	6	17.15	18	23.4	17	70.71	43	59.6	30
16	17.33	13	25.1	17	71.03	32	62.6	30	
26	17.46	9	26.8	15	71.25	10	65.7	30	
Dez.	6	17.55	5	28.3	14	71.35	2	68.7	28
	16	17.60	1	29.7	12	71.33	15	71.5	26
26	17.59	7	30.9	11	71.18	25	74.1	22	
36	17.52	—	32.0	—	70.93	—	76.3	—	
Mitt. Ort	12.63	4.8	62.95	44.4	15.03	1.3	3.66	32.8	
	134)		138)		139)		140)		

## SCHEINBARE STERNÖRTER.

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1912	$\beta$ Reticuli.		$3^m.8.$		$g$ Eridani.		$4^m.x.$		$\zeta$ Persei.		$2^m.9.$		$\gamma$ Hydry.		$3^m.x.$		
	AR.	Dekl.	—	—	AR.	Dekl.	—	—	AR.	Dekl.	+	—	AR.	Dekl.	—	—	
	3 <sup>h</sup> 43 <sup>m</sup>	65° 4'			3 <sup>h</sup> 46 <sup>m</sup>	36° 27'			3 <sup>h</sup> 48 <sup>m</sup>	31° 37'			3 <sup>h</sup> 48 <sup>m</sup>	74° 29'			
Jan.	I	8.38	37	70.2	20	10.78	13	63.3	19	36.29	6	33.8	5	40.32	65	101.1	19
	II	8.01	43	72.2	14	10.65	15	65.2	15	36.23	10	34.3	3	39.67	74	103.0	14
	21	7.58	47	73.6	9	10.50	19	66.7	10	36.13	13	34.6	1	38.93	81	104.4	8
	31	7.11	50	74.5	3	10.31	21	67.7	6	36.00	16	34.7	0	38.12	85	105.2	3
Febr.	10	6.61	52	74.8	2	10.10	22	68.3	1	35.84	17	34.7	3	37.27	87	105.5	3
	20	6.09	51	74.6	9	9.88	23	68.4	3	35.67	18	34.4	4	36.40	87	105.2	9
März	I	5.58	50	73.7	13	9.65	22	68.1	8	35.49	18	34.0	5	35.53	84	104.3	14
	II	5.08	46	72.4	19	9.43	21	67.3	13	35.31	16	33.5	7	34.69	78	102.9	19
	21	4.62	42	70.5	23	9.22	18	66.0	16	35.15	14	32.8	8	33.91	72	101.0	24
	31	4.20	35	68.2	28	9.04	14	64.4	20	35.01	10	32.0	8	33.19	62	98.6	28
April	10	3.85	28	65.4	30	8.90	11	62.4	24	34.91	5	31.2	9	32.57	52	95.8	30
	20	3.57	20	62.4	33	8.79	5	60.0	26	34.86	1	30.3	7	32.05	39	92.8	33
	30	3.37	12	59.1	36	8.74	1	57.4	29	34.85	1	29.6	7	31.66	26	89.5	36
Mai	10	3.25	18	55.5	40	8.73	6	54.5	34	34.90	10	28.9	5	31.40	13	85.9	36
	20	3.23	8	51.5	37	8.79	10	51.1	31	35.00	20	28.4	4	31.27	3	82.3	41
	30	3.31	17	47.8	36	8.89	16	48.0	32	35.17	21	28.0	1	31.30	17	78.2	36
Juni	9	3.48	25	44.2	35	9.05	20	44.8	32	35.38	25	27.9	1	31.47	30	74.6	34
	19	3.73	34	40.7	33	9.25	24	41.6	30	35.63	29	28.0	3	31.77	71.2	71.2	32
	29	4.07	41	37.4	29	9.49	28	38.6	30	35.92	28.3	28.3	5	32.20	68.0	68.0	28
Juli	9	4.48	46	34.5	26	9.77	31	35.8	28	36.24	32	28.8	6	32.75	65	65.2	26
	19	4.94	51	31.9	21	10.08	32	33.3	22	36.58	35	29.4	9	33.40	72	62.6	21
	29	5.45	51	29.8	10	10.40	34	31.1	17	36.93	36	30.3	10	34.12	80	60.5	15
Aug.	8	5.99	54	28.3	15	10.74	34	29.4	17	37.29	36	31.3	10	34.92	82	59.0	9
	18	6.55	56	27.3	3	11.08	34	28.1	13	37.65	36	32.3	12	35.74	83	58.1	3
	28	7.12	57	27.0	2	11.42	34	27.3	2	38.00	35	33.5	12	36.57	82	57.8	3
Sept.	7	7.67	55	27.2	9	11.75	31	27.1	4	38.35	33	34.7	13	37.39	78	58.1	10
	17	8.18	51	28.1	9	12.06	29	27.5	8	38.68	33	36.0	12	38.17	71	59.1	15
	27	8.66	48	29.6	15	12.35	27	28.3	14	38.99	29	37.2	12	38.88	71	60.6	21
Okt.	7	9.08	42	31.7	21	12.62	23	29.7	18	39.28	26	38.4	12	39.51	63	62.7	26
	17	9.43	35	34.2	25	12.85	31.5	31.5	24	39.54	24	39.6	12	40.03	65.3	65.3	29
	27	9.70	18	37.1	32	13.04	16	33.7	25	39.78	20	40.8	11	40.42	24	68.2	32
Nov.	6	9.88	10	40.3	32	13.20	12	36.2	27	39.98	18	41.9	10	40.66	10	71.4	33
	16	9.98	10	43.6	33	13.32	7	38.9	27	40.16	13	42.9	10	42.76	5	74.7	34
	26	9.98	10	46.9	33	13.39	2	41.6	27	40.29	10	43.9	9	40.71	20	78.1	32
Dez.	6	9.88	18	50.1	30	13.41	1	44.3	26	40.39	5	44.8	8	40.51	35	81.3	30
	16	9.70	26	53.1	26	13.40	6	46.9	24	40.44	1	45.6	6	40.16	49	84.3	26
	26	9.44	34	55.7	23	13.34	11	49.3	21	40.45	3	46.2	6	39.67	60	86.9	23
	36	9.10	58.0	51.4	23	13.23	—	—	—	40.42	—	46.8	—	39.07	89.2	—	—
Mittl. Ort		5.52	61.6			9.65	58.7			35.82	23.0			35.41	62.3		
		(141)				(143)				(144)				(145)			

## SCHEINBARE STERNÖRTER.

1912	9 H. Camelop. 5 <sup>m</sup> .5.		ε Persei. 3 <sup>m</sup> .0.		ξ Persei. 4 <sup>m</sup> .0.		γ Eridani. 3 <sup>m</sup> .0.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	3 <sup>h</sup> 49 <sup>m</sup>	60° 51'	3 <sup>h</sup> 51 <sup>m</sup>	39° 45'	3 <sup>h</sup> 53 <sup>m</sup>	35° 32'	3 <sup>h</sup> 53 <sup>m</sup>	13° 45'
Jan.								
I	38.28	16	23.4	18	57.18	7	35.5	9
II	38.12	23	25.2	14	57.11	11	36.4	7
21	37.89	29	26.6	9	57.00	16	37.1	4
31	37.60	32	27.5	5	56.84	18	37.5	1
Febr.	37.28	36	28.0	1	56.66	20	37.6	2
20	36.92	36	28.1	4	56.46	20	37.4	4
März	36.56	34	27.7	9	56.26	21	37.0	7
II	36.22	32	26.8	12	56.05	18	36.3	8
21	35.90	27	25.6	16	55.87	16	35.5	10
31	35.63	21	24.0	18	55.71	11	34.5	12
April	35.42	13	22.2	21	55.60	7	33.3	12
20	35.29	4	20.1	21	55.53	1	32.1	11
30	35.25	4	18.0	21	55.52	5	31.0	11
Mai	35.29	4	15.9	21	55.57	10	29.9	10
20	35.42	13	13.8	21	55.67	18	28.9	10
30	35.66	31	11.7	16	55.85	22	28.0	6
Juni	35.97	38	10.1	14	56.07	27	27.4	4
19	36.35	44	8.7	11	56.34	27	27.0	1
29	36.79	50	7.6	8	56.65	31	26.9	1
Juli	37.29	53	6.8	3	56.99	34	27.0	1
19	37.82	56	6.5	0	57.36	38	27.3	6
29	38.38	58	6.5	3	57.74	39	27.9	8
Aug.	38.96	58	6.8	7	58.13	40	28.7	9
18	39.54	58	7.5	10	58.53	38	29.6	11
28	40.12	56	8.5	14	58.91	38	30.7	12
Sept.	40.68	54	9.9	16	59.29	36	31.9	14
17	41.22	51	11.5	18	59.65	35	33.3	14
27	41.73	48	13.3	21	60.00	35	34.7	15
Okt.	42.21	43	15.4	23	60.32	29	36.2	15
17	42.64	38	17.7	25	60.61	26	37.7	16
27	43.02	20	20.2	25	60.87	23	39.3	15
Nov.	43.34	32	22.7	26	61.10	19	40.8	15
16	43.61	19	25.3	26	61.29	15	42.3	14
26	43.80	11	27.9	26	61.44	11	43.7	14
Dez.	43.91	4	30.5	23	61.55	6	45.1	13
16	43.95	4	32.8	22	61.61	1	46.4	11
26	43.91	12	35.0	19	61.62	5	47.5	10
36	43.79		36.9		61.57		48.5	
Mittl. Ort	37.42		7.3		56.65	23.1	15.09	19.5
					145)	147)	148)	149)

## SCHEINBARE STERNÖRTER.

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1912	$\lambda$ Tauri. (3°.5).		$\nu$ Tauri. 3°.9.		c Persoi. 4°.0.		e¹ Eridani. 4°.1.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	3° 55'	12° 14'	3° 58'	5° 44'	4° 2'	47° 28'	4° 7'	7° 3'
Jan.								
I	48.69	38.9	28.98	49.7	16.74	56.0	34.84	56.8
II	48.65	38.5	28.94	49.0	16.67	57.2	34.79	58.0
21	48.57	38.1	28.86	48.4	16.54	58.2	34.71	59.0
31	48.46	37.8	28.75	47.9	16.36	59.0	34.60	59.8
Febr.	10	48.33	37.5	28.62	47.5	16.15	59.3	34.47
	20	48.18	37.2	28.48	47.2	15.92	59.3	34.31
März	1	48.02	36.9	28.32	46.9	15.68	59.0	34.15
II	47.87	36.7	28.17	46.8	15.44	58.4	33.99	60.9
21	47.72	36.5	28.02	46.8	15.21	57.4	33.84	60.5
31	47.60	36.4	27.90	47.0	15.02	56.3	33.70	60.0
April	10	47.51	36.4	27.81	47.3	14.87	54.9	33.59
	20	47.46	36.6	27.75	47.8	14.78	53.4	33.52
Mai	30	47.45	36.9	27.74	48.4	14.75	51.9	33.49
10	47.48	37.3	27.77	49.2	14.78	50.4	33.50	55.3
20	47.56	37.9	27.84	50.2	14.88	49.0	33.56	53.7
	30	47.70	38.8	27.97	51.5	15.06	47.6	33.67
Juni	9	47.88	39.8	28.14	52.8	15.29	46.5	33.82
19	48.09	40.8	28.35	54.2	15.57	45.7	34.01	47.6
29	48.34	42.0	28.58	55.7	15.90	45.1	34.23	45.6
Juli	9	48.61	43.3	28.85	57.2	16.27	44.8	34.48
	19	48.91	44.7	29.13	58.8	16.67	44.7	34.75
Aug.	29	49.22	46.0	29.43	60.3	17.10	44.9	35.04
8	49.53	47.3	29.74	61.7	17.53	45.4	35.34	38.2
18	49.85	48.6	30.05	63.0	17.97	46.1	35.64	36.8
28	50.16	49.7	30.35	64.1	18.40	47.1	35.95	35.8
Sept.								
7	50.46	50.6	30.65	65.0	18.83	48.2	36.24	35.0
17	50.75	51.5	30.94	65.6	19.24	49.5	36.53	34.6
Okt.	27	51.03	52.1	31.21	66.0	19.64	51.0	36.80
7	51.29	52.5	31.46	66.2	20.01	52.7	37.05	34.9
17	51.52	52.8	31.70	66.2	20.35	54.4	37.28	35.6
	27	51.73	52.9	31.91	65.9	20.65	56.2	37.49
Nov.	6	51.92	52.8	32.09	65.5	20.92	58.0	37.67
16	52.08	52.7	32.24	64.9	21.15	59.9	37.82	39.0
26	52.20	52.4	32.36	64.3	21.32	61.8	37.95	40.4
Dez.	6	52.29	52.1	32.45	63.5	21.45	63.6	38.03
	16	52.35	51.7	32.50	62.8	21.52	65.3	38.08
26	52.36	51.3	32.52	62.1	21.54	66.9	38.09	44.8
36	52.34	50.9	32.49	61.4	21.49	68.2	38.07	46.1
Mittl. Ort	48.16	32.4	28.41	44.7	16.07	42.3	34.14	59.3
	150)		151)		152)		154)	

## SCHEINBARE STERNÖRTER.

1912	$\alpha$ Horologii. 3 <sup>m</sup> .7.		$\alpha$ Reticuli. 3 <sup>m</sup> .2.		$\nu^4$ Eridani. 3 <sup>m</sup> .3.		$\delta$ Tauri. 3 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	4 <sup>h</sup> 11 <sup>m</sup>	42° 30'	4 <sup>h</sup> 13 <sup>m</sup>	62° 41'	4 <sup>h</sup> 14 <sup>m</sup>	34° 0'	4 <sup>h</sup> 17 <sup>m</sup>	17° 20'
Jan.								
I	6.45	13	43.4	21	20.00	29	43.8	20
II	6.32	17	45.5	18	19.71	36	46.2	18
21	6.15	21	47.3	14	19.35	41	48.0	14
31	5.94	24	48.7	8	18.94	45	49.4	8
Febr.	10		49.5		18.49	50.2	34.35	54.2
	20		49.9	4	18.02	47	34.13	54.6
März	1	5.45	27	49.9	1	18.02	49	34.13
	5.18	26	49.8	7	17.53	47	50.1	9
II	4.92	25	49.1	11	17.06	46	49.2	14
21	4.67	22	48.0	16	16.60	41	47.8	20
31	4.45	20	46.4	20	16.19	41	45.8	33
April	10	4.25	15	44.4	23	15.82	31	43.5
	20	4.10	10	42.1	27	15.51	24	40.8
	30	4.00	5	39.4	29	15.27	16	37.7
Mai	10	3.95	0	36.5	31	15.11	7	34.4
	20	3.95	8	33.4	36	15.04	1	30.9
	30	4.03	12	29.8	36	15.05	10	26.9
Juni	9	4.15	17	26.5	33	15.15	18	23.3
	19	4.32	22	23.2	32	15.33	27	19.8
29	4.54	26	20.0	30	15.60	16	16.4	
Juli	9	4.80	28	17.0	27	15.93	33	13.2
	19	5.08	35	14.3	24	16.32	44	10.4
Aug.	8	5.43	35	11.9	19	16.76	48	8.0
	18	5.78	35	10.0	19	17.24	51	6.2
	28	6.13	36	8.6	9	17.75	52	4.8
		6.49		7.7		18.27		7
Sept.	7	6.85	36	7.4	3	18.78	51	4.0
	17	7.19	34	7.7	3	19.28	50	5
	27	7.52	33	8.5	14	19.76	48	4.5
Okt.	7	7.82	30	9.9	14	20.19	43	5.7
	17	8.08	26	11.8	19	20.56	37	7.4
		23		24		31	27	23
	27	8.31	19	14.2	26	20.87	24	12.4
Nov.	6	8.50	15	16.8	26	21.11	15	15.5
	16	8.65	9	19.7	29	21.26	18	18.8
	26	8.74	4	22.7	30	21.33	1	22.1
Dez.	6	8.78	0	25.7	29	21.32	10	25.5
	16	8.78	6	28.6	27	21.22	19	28.7
	26	8.72	10	31.3	24	21.03	26	31.6
	36	8.62		33.7		20.77		34.2
Mittl. Ort		5.04	39.6		17.27	38.0	33.77	45.9
					155)	156)	160)	162)

1912	$\epsilon$ Tauri. 3 <sup>m</sup> .5.		$\alpha$ Tauri. 1 <sup>m</sup> .		$\nu$ Eridani. 3 <sup>m</sup> .8.		$\alpha$ Doradus. 3 <sup>m</sup> .2.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -
	4 <sup>h</sup> 23 <sup>m</sup>	18° 59'	4 <sup>h</sup> 30 <sup>m</sup>	16° 19'	4 <sup>h</sup> 31 <sup>m</sup>	3° 31'	4 <sup>h</sup> 32 <sup>m</sup>	55° 13'
Jan.								
1	29.20	2	17.7	0	52.82	1	66.8	12
11	29.18	6	17.7	1	52.81	6	66.6	10
21	29.12	10	17.6	1	52.75	9	66.4	2
31	29.02	13	17.5	2	52.66	13	66.2	2
Febr.	10				52.53		66.0	
20	28.89	15	17.3	2	52.38	15	65.8	2
März	1				52.22	16	65.6	2
11	28.58	17	16.9	2	52.06	16	65.4	2
21	28.41	16	16.7	3	51.90	14	65.2	2
31	28.25	14	16.4	3	51.76	14	65.0	2
April	10				51.57	12	54.92	12
20	28.00	8	15.9	2	51.64	8	64.9	1
30	27.92	3	15.7	0	51.56	4	64.8	1
Mai	10				51.52	0	64.9	2
20	27.89	1	15.7	0	51.52	5	65.1	3
30	27.90	6	15.7	2	51.57	10	65.4	4
Juni	10				51.67	16	65.8	6
20	27.96	12	15.9	3	51.83	19	66.4	7
30	28.08	16	16.2	4	52.02	23	67.1	9
9	28.24	20	16.6	6	52.39	31	71.9	10
19	28.44	23	17.2	8	53.71	32	72.9	10
29	28.67	27	18.0	9	54.03	25	73.9	8
Juli	9				52.25	25	68.0	9
19	28.94	29	18.9	9	52.50	29	68.9	10
29	29.23	31	19.8	9	52.79	29	69.9	10
Aug.	8				53.08	31	70.9	10
18	29.85	31	21.7	10	53.39	32	71.9	10
28	30.18	33	22.7	10	53.71	32	72.9	10
Sept.	7				54.03	32	73.9	10
17	30.83	31	24.5	8	54.35	31	74.7	7
27	31.14	30	25.3	7	54.66	29	75.4	5
Okt.	7				54.95	29	75.9	4
17	31.44	28	26.0	5	55.24	27	76.3	3
27	31.72	27	26.5	4	55.51	25	76.6	2
17	31.99	25	26.9	3	55.51	25	76.6	2
Nov.	6				55.76	22	76.8	0
16	32.46	22	27.5	3	55.98	19	76.8	1
26	32.65	19	27.6	1	56.17	17	76.7	1
Dez.	6				56.34	13	76.6	2
16	32.81	12	27.7	0	56.47	9	76.4	2
26	32.93	9	27.7	1	56.47	9	76.4	2
36	33.02	4	27.6	0	56.56	5	76.2	2
36	33.06	0	27.6	1	56.61	1	76.0	2
36	33.06	0	27.5		56.62		75.8	
Mittl. Ort	28.57	9.6	52.16	59.2	55.26	54.3	5.69	35.2

## SCHEINBARE STERNÖRTER.

1912	53 Eridani. 3 <sup>m</sup> .9.		τ Tauri. 4 <sup>m</sup> .2.		Gr. 848. 6 <sup>m</sup> .2.		♀ Camelop. 5 <sup>m</sup> .5.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	4 <sup>h</sup> 34 <sup>m</sup>	14° 28'	4 <sup>h</sup> 36 <sup>m</sup>	22° 47'	4 <sup>h</sup> 36 <sup>m</sup>	75° 46'	4 <sup>h</sup> 40 <sup>m</sup>	56° 36'
Jan. 1	9.82	29.8	58.37	28.7	61.20	73.5 26	41.22	20.7
11	9.78	31.4	58.37	28.8	60.94	76.1 23	41.17	22.6
21	9.71	32.8	58.32	29.0	60.53	78.4 19	41.04	24.2
31	9.59	33.9	58.22	29.0	59.98	80.3 13	40.85	25.5
Febr. 10	9.45	34.8	58.09	29.0	59.33	81.6 13	40.61	26.5
20	9.29	35.3	57.94	28.9	74	82.5 9	40.32	27.0
März 1	9.12	35.5	57.77	28.8	57.81	82.8 3	40.01	27.1
11	8.95	35.5	57.60	28.5	57.03	82.5 8	39.69	26.9
21	8.78	35.1	57.43	28.2	56.29	81.7 13	39.39	26.2
31	8.62	34.4	57.28	27.9	55.60	80.4 13	39.11	25.2
April 10	8.49	33.5	57.16	27.6	55.01	78.7 21	38.87	23.9
20	8.39	32.2	57.07	27.3	54.55	76.6 24	38.70	22.3
30	8.32	30.7	57.02	27.0	54.24	74.2 26	38.60	20.5
Mai 10	8.30	28.9	57.02	26.8	54.09	71.6 26	38.56	18.7
20	8.33	27.0	57.07	26.7	54.10	69.0 26	38.60	16.8
30	8.40	24.9	57.17	26.8	54.28	66.4 28	38.72	15.0
Juni 9	8.53	22.5	57.33	27.0	54.66	63.6 24	38.94	13.1
19	8.69	20.1	57.52	27.3	55.17	61.2 20	39.22	11.5
29	8.88	17.8	57.75	27.7	55.82	59.2 18	39.56	10.2
Juli 9	9.11	15.5	58.01	28.3	56.59	57.4 15	39.95	9.1
19	9.36	13.4	58.30	29.0	57.47	55.9 11	40.39	8.3
29	9.64	11.4	58.61	29.8	58.44	54.8 7	40.86	7.7
Aug. 8	9.93	9.6	58.93	30.6	59.47	54.1 2	41.37	7.5
18	10.23	8.2	59.26	31.4	60.54	53.9 1	41.89	7.6
28	10.53	7.1	59.59	32.2	61.63	54.0 6	42.41	7.9
Sept. 7	10.83	6.5	59.92	33.0	62.73	54.6 10	42.93	8.5
17	11.12	6.2	60.25	33.7	63.82	55.6 13	43.45	9.4
27	11.40	6.3	60.56	34.4	64.87	56.9 17	43.96	10.5
Okt. 7	11.67	6.8	60.86	34.9	65.88	58.6 21	44.44	11.9
17	11.92	7.8	61.14	35.4	66.83	60.7 23	44.90	13.5
27	12.15	9.1	61.40	35.8	67.68	63.0 27	45.32	15.3
Nov. 6	12.35	10.6	61.64	36.2	68.43	65.7 28	45.70	17.2
16	12.53	12.4	61.86	36.5	69.06	68.5 30	46.03	19.2
26	12.67	14.3	62.03	36.7	69.55	71.5 31	46.30	21.4
Dez. 6	12.77	16.3	62.17	36.9	69.89	74.6 42	46.51	23.6
16	12.84	18.2	62.28	37.1	70.06	77.6 30	46.65	25.8
26	12.87	20.1	62.34	37.3	70.06	80.5 28	46.71	27.9
36	12.85	21.8	62.35	37.4	69.89	83.3 29.8	46.70	29.8
Mittl. Ort	8.96	31.9	57.69	19.9	58.26	57.8	40.04	7.0
	172)		174)		173)		175)	

## SCHEINBARE STERNÖRTER.

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1912	9 Camelop. 4 <sup>m</sup> .3.		$\pi^{\circ}$ Orionis. 3 <sup>m</sup> .7.		t Aurigae. 2 <sup>m</sup> .7.		10 Camelop. 4 <sup>m</sup> .1.	
	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-
	+ <sup>h</sup> 45 <sup>m</sup>	66° 11'	4 <sup>h</sup> 49 <sup>m</sup>	2° 17'	4 <sup>h</sup> 51 <sup>m</sup>	33° 1'	4 <sup>h</sup> 55 <sup>m</sup>	60° 18'
Jan.								
1	19.32	10	54.8	-23	16.44	0	49.6	36.55
11	19.22	19	57.1	20	16.44	5	50.3	36.50
21	19.03	28	59.1	17	16.39	10	51.0	36.37
31	18.75	36	60.8	13	16.29	13	51.4	36.17
Febr.	10	18.39	62.1	8	16.16	17	51.8	35.90
	20	17.98	62.9	3	15.99	18	52.0	35.59
März	1	17.54	63.2	2	15.81	19	51.9	35.25
11	17.08	46	63.0	1	15.62	19	51.8	34.88
21	16.64	44	62.3	7	15.43	18	51.4	34.53
31	16.24	40	61.1	12	15.25	15	50.9	34.21
April	10	15.90	59.7	18	15.10	10	50.3	33.93
	20	15.63	57.9	21	15.00	7	49.6	33.71
Mai	30	15.45	55.8	22	14.93	1	48.9	33.56
10	15.37	53.6	22	2	14.92	3	48.2	33.49
20	15.39	51.4	23	39.44	7	47.5	33.50	
30	15.52	49.1	24	39.51	13	47.0	33.61	
Juni	9	15.78	46.7	20	39.64	16	46.4	33.81
	19	16.11	44.7	19	39.80	20	46.1	34.08
29	16.53	42	42.8	19	40.00	6	45.9	34.43
Juli	9	17.02	41.3	15	40.22	22	45.9	34.83
	19	17.58	61	9	40.47	27	46.0	35.29
Aug.	8	18.19	65	5	40.74	29	46.2	35.80
	18	18.84	68	5	41.03	30	46.6	36.34
	28	19.52	70	1	41.33	30	47.1	36.89
Sept.	7	20.22	69	38.6	41.63	30	47.7	37.47
	17	20.91	69	5	41.93	30	48.3	38.05
	27	21.60	67	12	42.23	29	49.0	38.63
Okt.	7	22.27	65	41.1	42.52	27	49.7	39.19
	17	22.92	61	42.6	42.79	27	50.4	39.74
	27	23.53	56	44.3	43.06	24	51.1	40.26
Nov.	6	24.09	51	46.4	43.30	23	51.9	40.74
	16	24.60	43	48.6	43.53	20	52.7	41.17
	26	25.03	35	51.1	43.73	17	53.4	41.56
Dez.	6	25.38	27	53.6	43.90	13	54.2	41.89
	16	25.65	16	56.3	44.03	10	55.0	42.14
	26	25.81	6	58.9	44.13	6	55.9	42.31
	36	25.87	4	61.5	44.19	1	56.6	42.40
Mittl. Ort		25.83	16	63.9	44.20	4	57.3	42.40
		17.57	40.3	39.98	50.0	15.65	39.4	35.07
			178)	180)		181)		182)

1912	ε Aurigae. (3 <sup>m</sup> .2).		ι Tauri. 4 <sup>m</sup> .8.		η Aurigae. 3 <sup>m</sup> .3.		ε Leporis. 3 <sup>m</sup> .2.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	4 <sup>h</sup> 55 <sup>m</sup>	43° 41'	4 <sup>h</sup> 57 <sup>m</sup>	21° 27'	5 <sup>h</sup> 0 <sup>m</sup>	41° 6'	5 <sup>h</sup> 1 <sup>m</sup>	22° 28'
Jan.								
I	40.02	0	49.9	13	50.82	1	62.6	1
II	40.02	6	51.2	11	50.83	4	62.7	1
21	39.96	12	52.3	10	50.79	8	62.8	0
31	39.84	16	53.3	7	50.71	11	62.8	0
Febr. 10	39.68		54.0		50.60	14	62.8	
		19		4		18		
20	39.49	23	54.4	2	50.46	17	62.8	1
März	39.26	23	54.6	2	50.29	17	62.7	2
II	39.03	23	54.4	4	50.12	17	62.5	1
21	38.80	20	54.0	7	49.95	16	62.4	0
31	38.60	18	53.3	8	49.79	13	62.1	3
April	38.42	13	52.5	11	49.66	11	61.9	2
20	38.29	9	51.4	12	49.55	6	61.7	2
30	38.20	3	50.2	12	49.49	2	61.5	1
Mai	38.17	3	49.0	12	49.47	3	61.4	0
20	38.20		47.8		49.50	8	61.4	1
		9		12				
30	38.29	17	46.6	12	49.58	13	61.5	2
Juni	38.46	21	45.4	10	49.71	18	61.7	3
19	38.67	26	44.4	8	49.89	21	62.0	0
29	38.93	30	43.6	6	50.10	24	62.4	5
Juli	39.23	34	43.0		50.34	27	62.9	7
19	39.57	37	42.6	2	50.61	29	63.6	6
29	39.94	39	42.4	0	50.90	31	64.2	7
Aug.	40.33	40	42.4	2	51.21	31	64.9	7
18	40.73	41	42.6	3	51.53	32	65.6	7
28	41.14	42.9			51.86	33	66.3	6
Sept.	41.56	41	43.4	7	52.19	32	66.9	6
17	41.97	40	44.1	8	52.51	32	67.5	5
Okt.	42.37	39	44.9	9	52.83	31	68.0	0
7	42.76	39	45.8	9	53.14	30	68.3	3
17	43.13	37	46.9	11	53.44	27	68.6	3
		35		11				
27	43.48	48.0	48.0	13	53.71	26	68.9	1
Nov.	43.80	32	49.3	13	53.97	23	69.0	1
16	44.08	28	50.6	13	54.20	19	69.1	1
26	44.32	20	52.0	14	54.39	17	69.2	0
Dez.	44.52	14	53.4	14	54.56	12	69.2	1
16	44.66	9	54.8	14	54.68	8	69.3	0
26	44.75	3	56.2	13	54.76	3	69.3	1
36	44.78		57.5		54.79	3	69.4	
Mitt. Ort	39.08	38.4	50.06	54.2	20.48	58.9	44.13	79.2
	183)		184)		185)		186)	

# SCHEINBARE STERNÖRTER.

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1912	$\beta$ Eridani. 2 <sup>m</sup> .7.		$\mu$ Aurigae. 5 <sup>m</sup> .1.		19 II.Camelop. 5 <sup>m</sup> .1.		$\alpha$ Aurigae. 1 <sup>m</sup> .	
	AR.	Dekl. —	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-
	5 <sup>h</sup> 3 <sup>m</sup>	5° 11'	5 <sup>h</sup> 7 <sup>m</sup>	38° 22'	5 <sup>h</sup> 7 <sup>m</sup>	79° 7'	5 <sup>h</sup> 10 <sup>m</sup>	45° 54'
Jan.								
I	32.22	0	53.8	14	25.19	1	62.6	10
II	32.22	5	55.2	12	25.20	4	63.6	9
21	32.17	8	56.4	10	25.16	9	64.5	8
31	32.09	11	57.4	7	25.07	14	65.3	6
Febr.	31.98	15	58.1	6	24.93	17	65.9	4
20	31.83	16	58.7	3	24.76	20	66.3	2
März	31.67	17	59.0	1	24.56	21	66.5	1
II	31.50	17	59.1	1	24.35	21	66.4	3
21	31.33	15	59.0	19	24.14	19	66.1	4
31	31.18	15	58.7	3	23.95	19	65.7	4
April	31.04	11	58.1	8	23.78	13	65.0	8
20	30.93	7	57.3	10	23.65	9	64.2	9
30	30.86	4	56.3	12	23.56	3	63.3	10
Mai	30.82	1	55.1	14	23.53	2	62.3	9
20	30.83	5	53.7	15	23.55	7	61.4	9
Juni	30.88	10	52.2	19	23.62	15	60.5	9
9	30.98	14	50.3	18	23.77	18	59.6	7
19	31.12	18	48.5	18	23.95	24	58.9	6
29	31.30	21	46.7	18	24.19	27	58.3	4
Juli	31.51	23	44.9	18	24.46	31	57.9	3
19	31.74	26	43.1	17	24.77	33	57.6	1
Aug.	32.00	28	41.4	15	25.10	36	57.5	0
8	32.28	29	39.9	13	25.46	37	57.5	2
18	32.57	29	38.6	10	25.83	38	57.7	3
28	32.86	30	37.6	8	26.21	38	58.0	4
Sept.	33.16	30	36.8	4	26.59	38	58.4	5
17	33.46	28	36.4	0	26.97	38	58.9	6
27	33.74	29	36.4	3	27.35	37	59.5	7
Okt.	34.03	26	36.7	6	27.72	35	60.2	8
17	34.29	25	37.3	9	28.07	33	61.0	8
27	34.54	24	38.2	12	28.40	31	61.8	9
Nov.	34.78	20	39.4	13	28.71	28	62.7	10
6	34.98	18	40.7	15	28.99	25	63.7	10
16	35.16	14	42.2	16	29.24	20	64.7	10
Dez.	35.30	10	43.8	16	29.44	15	65.7	11
16	35.40	7	45.4	15	29.59	10	66.8	11
26	35.47	2	46.9	14	29.69	4	67.9	10
36	35.49		48.3		29.73		68.9	
Mittl. Ort	31.38		58.4		24.26	52.1	61.86	56.2
	188)				192)		191)	193)

1912	$\beta$ Orionis. I <sup>m</sup> .		$\theta$ Doradus. 4 <sup>m</sup> .8.		$\gamma$ Orionis. I <sup>m</sup> .7.		$\beta$ Tauri. I <sup>m</sup> .8.	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +
	5 <sup>h</sup> 10 <sup>m</sup>	8° 17'	5 <sup>h</sup> 13 <sup>m</sup>	67° 16'	5 <sup>h</sup> 20 <sup>m</sup>	6° 16'	5 <sup>h</sup> 20 <sup>m</sup>	28° 32'
Jan. 1	19.36	65.2	52.86	63.9	25.45	20.6	44.55	11.3
11	19.36	66.7	52.59	66.9	25.48	19.8	44.58	11.8
21	19.32	68.1	52.22	69.5	25.45	19.1	44.56	12.2
31	19.24	69.2	51.78	71.6	25.39	18.5	44.50	12.6
Febr. 10	19.12	70.1	51.27	73.3	25.29	18.0	44.39	12.9
20	18.98	70.7	50.71	74.4	25.16	17.7	44.24	13.2
März 1	18.82	71.1	50.12	75.0	25.00	17.5	44.07	13.3
11	18.64	71.2	49.51	75.0	24.84	17.3	43.89	13.3
21	18.47	71.1	48.90	74.4	24.67	17.3	43.70	13.1
31	18.31	70.7	48.32	73.3	24.52	17.4	43.53	12.9
April 10	18.16	70.1	47.78	71.8	24.38	17.6	43.38	12.5
20	18.04	69.2	47.29	69.7	24.26	18.0	43.25	12.1
Mai 10	17.96	68.1	46.86	67.3	24.18	18.5	43.17	11.7
20	17.92	66.8	46.52	64.5	24.14	19.1	43.13	11.2
Juni 30	17.92	65.3	46.26	61.4	24.15	19.9	43.14	10.8
9	17.96	63.6	46.10	58.1	24.19	20.8	43.19	10.4
19	18.05	61.8	46.03	54.6	24.28	21.8	43.30	10.1
29	18.19	59.7	46.08	50.8	24.43	23.0	43.47	9.9
Juli 9	18.36	57.7	46.22	47.3	24.60	24.2	43.67	9.8
19	18.56	55.7	46.45	43.9	24.80	25.4	43.90	9.9
29	18.79	53.8	46.77	40.8	25.04	26.6	44.17	9.9
Aug. 8	19.04	52.0	47.17	38.0	25.29	27.8	44.47	10.1
18	19.31	50.4	47.64	35.5	25.57	28.9	44.78	10.4
28	19.60	49.1	48.16	33.6	25.86	29.9	45.11	10.7
Nov. 6	19.90	48.0	48.73	32.2	26.16	30.7	45.45	11.1
17	20.19	47.3	49.32	31.5	26.46	31.3	45.80	11.5
27	20.49	46.9	49.92	31.3	26.76	31.7	46.14	11.9
Okt. 7	20.78	46.9	50.50	31.8	27.06	31.9	46.49	12.3
17	21.06	47.2	51.07	33.0	27.35	31.8	46.82	12.6
27	21.33	48.0	51.59	34.8	27.64	31.5	47.15	12.9
Nov. 6	21.59	49.0	52.05	37.1	27.91	31.0	47.46	13.3
16	21.82	50.3	52.44	39.9	28.16	30.3	47.75	13.6
26	22.03	51.8	52.74	43.0	28.39	29.5	48.01	13.9
Dez. 6	22.21	53.5	52.95	46.4	28.59	28.6	48.25	14.3
16	22.36	55.3	53.05	49.9	28.76	27.6	48.44	14.7
26	22.47	57.0	53.04	53.4	28.89	26.6	48.60	15.1
36	22.54	58.7	52.93	56.9	28.98	25.7	48.71	15.5
Mittl. Ort	18.48	69.6	49.31	63.5	24.63	14.2	43.68	2.3

1912	17 Camelop. 5 <sup>m</sup> .9.		δ Orionis. 2 <sup>m</sup> .2.		Gr. 966. 6 <sup>m</sup> .6.		α Leporis. 2 <sup>m</sup> .6.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. -
	5 <sup>h</sup> 21 <sup>m</sup>	62° 59'	5 <sup>h</sup> 27 <sup>m</sup>	0° 21'	5 <sup>h</sup> 27 <sup>m</sup>	74° 59'	5 <sup>h</sup> 28 <sup>m</sup>	17° 52'
Jan.								
I	53.14	1	54.1	23	31.46	2	43.3	12
II	53.13	10	56.4	22	31.48	2	44.5	10
21	53.03	18	58.6	18	31.46	6	45.5	9
31	52.85	26	60.4	15	31.40	10	46.4	7
Febr. 10	52.59	33	61.9	11	31.30	13	47.1	5
20	52.26	37	63.0	7	31.17	15	47.6	3
März	51.89	39	63.7	2	31.02	17	47.9	1
II	51.50	40	63.9	2	30.85	16	48.1	0
21	51.10	37	63.7	6	30.69	16	48.1	2
31	50.73	34	63.1	11	30.53	15	47.9	4
April	50.39	28	62.0	14	30.38	12	47.5	6
20	50.11	21	60.6	17	30.26	8	46.9	7
30	49.90	13	58.9	19	30.18	5	46.2	9
Mai	49.77	4	57.0	21	30.13	1	45.3	11
20	49.73	5	54.9	21	30.12	-	44.2	12
30	49.78	14	52.8	22	30.15	8	43.0	14
Juni	49.92	26	50.6	22	30.23	13	41.6	16
19	50.18	32	48.4	20	30.36	16	40.0	15
29	50.50	39	46.4	17	30.52	19	38.5	15
Juli	50.89	46	44.7	15	30.71	23	37.0	15
19	51.35	51	43.2	12	30.94	24	35.5	15
29	51.86	56	42.0	10	31.18	27	34.0	13
Aug.	52.42	56	41.0	9	31.45	28	32.7	12
18	53.00	58	40.3	7	31.73	30	31.5	9
28	53.61	61	40.0	3	32.03	30.6	30.6	6
Sept.	54.24	63	39.9	3	32.32	29	30.0	4
17	54.87	63	40.2	6	32.61	29	29.6	1
Okt.	55.50	61	40.8	9	32.91	29	29.5	2
7	56.11	60	41.7	13	33.20	28	29.7	6
17	56.71	63	43.0	1	33.48	30.3	27	7
27	57.26	55	44.5	15	33.75	25	31.0	10
Nov.	57.78	52	46.2	17	34.00	23	32.0	12
16	58.24	46	48.1	19	34.23	20	33.2	13
26	58.64	40	50.3	23	34.43	17	34.5	14
Dez.	58.96	32	52.6	24	34.60	13	35.9	14
6	59.20	24	54.6	24	34.73	9	37.3	13
26	59.35	15	55.0	24	34.82	5	38.6	13
36	59.40	5	57.4	23	34.87	5	39.9	13
Mittl. Ort	51.27	41.8			30.60	49.0	56.99	14.4
					203)	206)	205)	207)

## SCHEINBARE STERNÖRTER.

1912	ι Orionis. 2 <sup>m</sup> .8.		ε Orionis. 1 <sup>m</sup> .6.		ζ Tauri. 3 <sup>m</sup> .0.		β Doradus. 3 <sup>m</sup> .7.	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. + —	AR.	Dekl. —
	5 <sup>h</sup> 31 <sup>m</sup>	5° 57'	5 <sup>h</sup> 31 <sup>m</sup>	1° 15'	5 <sup>h</sup> 32 <sup>m</sup>	21° 5'	5 <sup>h</sup> 32 <sup>m</sup>	62° 32'
Jan.								
1	8.58	56.2	45.72	21.2	23.95	30.7	54.47	48.5
11	8.60	57.7	45.75	22.4	23.99	30.8	54.30	51.6
21	8.58	59.0	45.73	23.5	23.98	30.8	54.04	54.4
31	8.52	60.1	45.67	24.4	23.93	30.9	53.72	56.8
Febr.	10	8.41	61.0	45.57	25.2	23.84	31.0	53.32
	20	8.28	61.7	45.44	25.8	23.71	31.0	52.88
März	1	8.12	62.1	45.29	26.1	23.55	31.1	52.41
	11	7.96	62.3	45.13	26.3	23.38	31.0	51.91
	21	7.78	62.3	44.96	26.3	23.20	31.0	51.42
	31	7.62	62.0	44.79	26.1	23.04	30.9	50.93
April	10	7.47	61.5	44.65	25.7	22.89	30.8	50.47
	20	7.34	60.8	44.53	25.1	22.76	30.6	50.05
	30	7.25	59.9	44.44	24.3	22.68	30.5	49.69
Mai	10	7.19	58.7	44.38	23.4	22.63	30.4	49.39
	20	7.17	57.4	44.37	22.3	22.63	30.4	49.16
	30	7.20	55.9	44.40	21.0	22.67	30.5	49.00
Juni	9	7.27	54.3	44.47	19.7	22.76	30.6	48.93
	19	7.39	52.4	44.60	18.0	22.91	30.8	48.96
	29	7.54	50.6	44.75	16.5	23.08	31.1	49.06
Juli	9	7.73	48.7	44.94	14.9	23.30	31.5	49.24
	19	7.94	47.0	45.16	13.3	23.54	31.9	49.50
	29	8.18	45.3	45.40	11.9	23.81	32.4	49.82
Aug.	8	8.44	43.8	45.67	10.6	24.10	32.9	50.20
	18	8.72	42.5	45.95	9.4	24.41	33.3	50.64
	28	9.00	41.5	46.24	8.5	24.72	33.8	51.11
Sept.	7	9.30	40.8	46.53	7.8	25.05	34.2	51.60
	17	9.60	40.4	46.83	7.4	25.37	34.5	52.10
	27	9.89	40.4	47.12	7.3	25.69	34.7	52.62
Okt.	7	10.18	40.7	47.41	7.6	26.01	34.8	53.13
	17	10.46	41.4	47.70	8.2	26.33	34.9	53.60
	27	10.73	42.3	47.97	9.0	26.63	34.8	54.03
Nov.	6	10.98	43.6	48.22	10.0	26.91	34.7	54.40
	16	11.21	45.0	48.45	11.3	27.17	34.6	54.71
	26	11.41	46.6	48.66	12.6	27.40	34.5	54.94
Dez.	6	11.58	48.3	48.83	14.1	27.60	34.4	55.08
	16	11.71	50.0	48.97	14	27.76	34.3	55.14
	26	11.80	51.7	49.06	16.9	27.87	34.2	55.11
	36	11.84	53.3	49.11	18.2	27.94	34.2	54.98
Mittl. Ort	7.68	61.4	44.85	26.9	23.09	22.8	51.59	50.0

# SCHEINBARE STERNÖRTER.

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1912	$\alpha$ Columbae. $2^m.4$		$\alpha$ Aurigae. $5^m.7$		$\zeta$ Leporis. $3^m.5$		$\alpha$ Orionis. $2^m.1$	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. —
	5 <sup>h</sup> 36 <sup>m</sup>	34° 6'	5 <sup>h</sup> 39 <sup>m</sup>	49° 47'	5 <sup>h</sup> 42 <sup>m</sup>	14° 50'	5 <sup>h</sup> 43 <sup>m</sup>	9° 41'
Jan.								
I	29.00	2	71.0	27	6.24	5	30.0	17
II	28.98	7	73.7	24	6.29	3	31.7	16
21	28.91	12	76.1	21	6.26	9	33.3	14
31	28.79	15	78.2	16	6.17	14	34.7	12
Febr. 10	28.64	20	79.8	13	6.03	20	35.9	10
20	28.44	22	81.1	8	5.83	23	36.9	6
März	28.22	23	81.9	3	5.60	26	37.5	3
II	27.99	24	82.2	0	5.34	26	37.8	0
21	27.75	23	82.2	5	5.08	26	37.8	4
31	27.52	21	81.7	10	4.82	23	37.4	6
April 10	27.31	19	80.7	13	4.59	20	36.8	10
20	27.12	15	79.4	18	4.39	15	35.8	11
30	26.97	12	77.6	21	4.24	9	34.7	14
Mai 10	26.85	7	75.5	24	4.15	3	33.3	14
20	26.78	2	73.1	26	4.12	—	31.9	15
30	26.76	3	70.5	28	4.16	10	30.4	16
Juni 9	26.79	8	67.7	32	4.26	18	28.8	16
19	26.87	12	64.5	30	4.44	23	27.2	14
29	26.99	12	61.5	29	4.67	28	25.8	12
Juli 9	27.16	17	58.6	28	4.95	32	24.6	10
19	27.37	24	55.8	25	5.27	37	23.6	9
29	27.61	27	53.3	23	5.64	39	22.7	7
Aug. 8	27.88	27	51.0	19	6.03	42	22.0	6
18	28.17	29	49.1	15	6.45	44	21.4	3
28	28.48	31	47.6	15	6.89	44	21.1	1
Sept. 7	28.80	32	46.6	10	7.35	46	21.0	2
17	29.13	33	46.2	4	7.81	45	21.2	2
27	29.45	32	46.3	7	8.26	45	21.4	5
Okt. 7	29.77	32	47.0	12	8.72	46	21.9	7
17	30.08	29	48.2	18	9.16	44	22.6	9
27	30.37	27	50.0	22	9.58	40	23.5	11
Nov. 6	30.64	23	52.2	25	9.98	37	24.6	12
16	30.87	20	54.7	28	10.35	32	25.8	14
26	31.07	16	57.5	29	10.67	28	27.2	15
Dez. 6	31.23	11	60.4	30	10.95	22	28.7	17
16	31.34	6	63.4	30	11.17	15	30.4	16
26	31.40	1	66.4	28	11.32	9	32.0	17
36	31.41	1	69.2	—	11.41	—	33.7	—
Mittl. Ort	27.69	74.1	4.92	19.7	58.06	74.8	34.95	60.9
	215)		216)		219)		220)	

## SCHEINBARE STERNÖRTER.

1912	$\alpha$ Orionis. 1 <sup>m</sup> .		$\delta$ Aurigae. 3 <sup>m</sup> .8.		$\beta$ Aurigae. 1 <sup>m</sup> .9.		$\theta$ Aurigae. 2 <sup>m</sup> .7.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	5 <sup>h</sup> 50 <sup>m</sup>	7° 23'	5 <sup>h</sup> 52 <sup>m</sup>	54° 16'	5 <sup>h</sup> 53 <sup>m</sup>	44° 5'	5 <sup>h</sup> 53 <sup>m</sup>	37° 12'
Jan.								
I	25.31	5	35.8	8	18.42	54.6	31.3	35.1
II	25.36	5	35.0	7	18.49	56.5	32.8	36.1
21	25.36	4	34.3	6	18.48	58.4	34.2	37.1
31	25.32	8	33.7	5	18.39	60.0	35.4	38.0
Febr. 10	25.24	11	33.2	3	18.24	61.5	36.5	38.8
20	25.13	15	32.9	2	18.03	62.7	37.4	39.4
März 1	24.98	16	32.7	1	17.77	63.5	38.1	39.9
II	24.82	17	32.6	0	17.48	64.0	38.5	40.2
21	24.65	16	32.6	1	17.19	64.1	38.6	40.2
31	24.49	15	32.7	2	16.90	63.8	38.4	40.1
April 10	24.34	13	32.9	3	16.63	63.2	37.9	39.8
20	24.21	10	33.2	4	16.39	62.3	37.2	39.3
30	24.11	5	33.6	5	16.21	61.0	36.3	38.6
Mai 10	24.06	5	34.1	6	16.09	59.6	35.2	37.9
20	24.03	3	34.7	8	16.03	58.0	34.0	37.0
30	24.05	7	35.5	8	16.04	56.3	32.8	36.2
Juni 9	24.12	10	36.3	10	16.13	54.5	31.5	35.3
19	24.22	16	37.3	11	16.28	52.8	30.3	34.5
29	24.38	18	38.4	19	16.52	51.0	29.0	33.7
Juli 9	24.56	21	39.4	11	16.80	49.5	27.9	33.1
19	24.77	24	40.5	10	17.14	48.1	27.0	32.5
29	25.01	26	41.5	10	17.52	46.8	26.2	32.1
Aug. 8	25.27	27	42.5	8	17.94	45.8	25.5	31.7
18	25.54	29	43.3	7	18.39	45.0	25.0	31.5
28	25.83	30	44.0	5	18.86	44.4	24.7	31.3
Sept. 7	26.13	30	44.5	3	19.35	44.1	24.4	31.2
17	26.43	44.8	0		19.85	43.9	24.4	31.3
27	26.74	31	44.8	1	20.36	44.0	24.5	31.4
Okt. 7	27.04	29	44.7	4	20.86	44.4	24.7	31.5
17	27.33	29	44.3	6	21.35	45.0	25.1	31.8
27	27.62	28	43.7	8	21.82	45.8	25.7	32.1
Nov. 6	27.90	25	42.9	9	22.28	46.9	26.5	32.5
16	28.15	23	42.0	10	22.69	48.2	27.4	33.0
26	28.38	20	41.0	10	23.06	49.7	28.4	33.7
Dez. 6	28.58	16	40.0	10	23.38	51.4	29.5	34.4
16	28.74	12	39.0	9	23.64	53.2	30.8	35.2
26	28.86	7	38.1	9	23.82	55.1	32.2	36.1
36	28.93	37.2			23.93	57.1	33.5	37.0
Mittl. Ort	24.43	29.2			16.86	44.6	4.43	22.1
	224)				225)		227)	228)

1912	$\eta$ Columbae. 3 <sup>m</sup> .9.		v Orions. 4 <sup>m</sup> .4.		22 II. Camelop. 4 <sup>m</sup> .6.		$\eta$ Geminor. 3 <sup>m</sup> .3.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +
	5 <sup>h</sup> 56 <sup>m</sup>	42° 48'	6 <sup>h</sup> 2 <sup>m</sup>	14° 46'	6 <sup>h</sup> 9 <sup>m</sup>	69° 21'	6 <sup>h</sup> 9 <sup>m</sup>	22° 31'
Jan.	28.75	67.0	33.75	7	53.9	4	12.04	18.1
I	28.73	70.1	33.82	2	53.5	4	12.14	20.7
II	28.65	72.8	33.84	3	53.1	2	12.10	23.3
III	28.52	75.3	33.81	8	52.9	2	11.95	25.7
Febr.	28.33	77.3	33.73	11	52.7	0	11.68	27.8
IO	28.22	16			36		17	11
20	28.11	78.9	33.62	14	52.7	1	11.32	29.5
März	27.86	80.0	33.48	16	52.6	0	10.88	30.8
I	27.59	80.7	33.32	17	52.6	1	10.38	31.7
II	27.30	80.8	33.15	16	52.7	0	9.86	32.0
III	27.02	80.4	32.99	16	52.7	1	9.34	31.9
April	26.76	79.6	32.83	13	52.8	1	8.85	31.3
IO	26.52	78.3	32.70	10	52.9	2	8.40	30.2
20	26.32	76.6	32.60	7	53.1	2	8.02	28.7
Mai	26.15	74.5	32.53	3	53.3	2	7.74	26.9
IO	26.04	72.1	32.50	2	53.5	4	7.56	24.8
20	7	27			7		23	1
Juni	25.97	69.4	32.52	6	53.9	4	7.49	22.5
9	25.95	66.4	32.58	10	54.3	5	7.52	20.1
19	25.99	63.3	32.68	16	54.8	6	7.67	17.6
29	26.08	59.9	32.84	18	55.4	6	7.96	15.0
Juli	26.22	56.8	33.02	21	56.0	6	8.33	12.6
9			31		46		21	21
19	26.42	53.7	33.23	24	56.6	6	8.79	10.5
29	26.64	50.9	33.47	26	57.2	6	9.34	8.5
Aug.	26.91	48.4	33.73	28	57.8	5	9.95	6.8
8			31		5		15	17
18	27.21	46.3	34.01	30	58.3	4	10.63	5.3
28	27.53	44.6	34.31	30	58.7	3	11.35	4.1
Sept.	27.87	43.4	34.61	31	59.0	1	12.11	3.3
17	28.22	42.8	34.92	31	59.1	0	12.90	2.8
27	28.58	42.8	35.23	32	59.1	1	13.70	2.7
Okt.	28.93	43.4	35.55	31	59.0	3	14.51	2.9
7			31		3		79	6
17	29.28	44.6	35.86	32	58.7	5	15.30	3.5
27	29.60	46.4	36.16	29	58.2	5	77	9
Nov.	29.90	48.6	36.45	27	57.7	5	16.07	4.4
6			27		5		72	13
16	30.17	51.3	36.72	24	57.2	7	16.79	5.7
26	30.40	54.3	36.96	22	56.5	6	67	17
Dez.	30.58	57.5	37.18	18	55.9	6	17.46	7.4
6	12	33			6		59	20
16	30.70	60.8	37.36	14	55.3	6	18.05	9.4
26	30.77	64.1	37.50	9	54.7	4	18.57	11.6
36	30.78	67.3	37.59	14	54.3	4	19.43	19.2
Mittl. Ort	27.18	71.1	32.86	46.8	9.10	8.5	33.95	59.4
	229)		232)		234)		236)	

## SCHEINBARE STERNÖRTER.

1912	$\xi$ Canis maj. 2 <sup>m</sup> .9.		$\mu$ Geminorum. 2 <sup>m</sup> .9.		$\psi$ Aurigae. 5 <sup>m</sup> .I.		$\beta$ Canis maj. 2 <sup>m</sup> .0.			
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. —		
	6 <sup>h</sup> 16 <sup>m</sup>	30° 1'	6 <sup>h</sup> 17 <sup>m</sup>	22° 33'	6 <sup>h</sup> 18 <sup>m</sup>	49° 20'	6 <sup>h</sup> 18 <sup>m</sup>	17° 54'		
Jan.										
I	57.28	3	19.7	27	39.20	8	41.8	1		
II	57.31	2	22.4	26	39.28	4	41.9	1		
II	57.29	7	25.0	22	39.32	2	42.0	1		
III	57.22	12	27.2	20	39.30	6	42.1	2		
Febr.	10		29.2		39.24		42.3			
	15	15	15	15	10	3	16	12		
	20	56.95	30.7	12	39.14	14	42.6	2		
März	I	56.76	21	31.9	7	39.00	16	42.8	2	
II	56.55	22	32.6	3	38.84	17	43.0	1		
II	56.33	22	32.9	1	38.67	18	43.1	0		
III	56.11	21	32.8		38.49		43.1	0		
April	10	55.90	19	32.3	9	38.33	15	43.1	0	
	20	55.71	17	31.4	14	38.18	12	43.1	1	
	30	55.54	13	30.0	16	38.06	7	43.0	0	
Mai	10	55.41	9	28.4	20	37.99	7	43.0	0	
	20	55.32	5	26.4	22	37.95	4	42.9	1	
	30	55.27	1	24.2		37.95	5	42.8	1	
Juni	9	55.26	4	21.7	25	38.00	9	42.7	0	
	19	55.30	9	19.1	30	38.09	14	42.7	1	
	29	55.39	9	16.1	25	38.23	18	42.8	0	
Juli	9	55.52	13	13.4	27	38.41	20	42.8	1	
	19	55.68	20	10.7	25	38.61	24	42.9	2	
	29	55.88	8	8.2		38.85	26	43.1	1	
Aug.	8	56.12	24	5.9	23	39.11	29	43.2	1	
	18	56.37	25	4.0	16	39.40	30	43.3	1	
	28	56.65	2	2.4		39.70		43.4	0	
Sept.	7	56.95	1	1.2	6	40.01	32	43.4	1	
	17	57.26	0	0.6	2	40.33	33	43.3	1	
	27	57.58	32	0.4	4	40.66	33	43.2	2	
Okt.	7	57.90	32	0.8	10	40.99	34	43.0	2	
	17	58.21	31	1.8	15	41.33	32	42.8	3	
	27	58.52	29	3.3	17	41.65	31	42.5	4	
Nov.	6	58.81	5	5.0		41.96	30	42.1	4	
	16	59.08	27	7.5	25	42.26	28	41.8	3	
	26	59.31	21	10.1	29	42.54	24	41.5	3	
Dez.	6	59.52	16	13.0	29	42.78	21	41.2	2	
	16	59.68	11	15.9	29	42.99	16	41.0	1	
	26	59.79	5	18.8		43.15	12	40.9	1	
	36	59.84	20	20.7		43.27		40.8		
Mittl. Ort	56.06	25.3		38.23	34.6		7.33	2.0	49.44	41.8
				240)	241)		242)		243)	

## SCHEINBARE STERNÖRTER.

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1912	8 Monocerot. 4 <sup>m</sup> .5		$\alpha$ Argus. 1 <sup>m</sup> .		10 Monocerot. 5 <sup>m</sup> .0		8 Lyncis. 6 <sup>m</sup> .3	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. +
	6 <sup>h</sup> 19 <sup>m</sup>	4° 38'	6 <sup>h</sup> 21 <sup>m</sup>	52° 38'	6 <sup>h</sup> 23 <sup>m</sup>	4° 42'	6 <sup>h</sup> 29 <sup>m</sup>	61° 33'
Jan.								
I	7.22	8 24.2	61.82	2 44.3	37.78	7 19.3	41.24	14 42.8
II	7.30	2 23.2	61.80	9 47.6	37.85	2 20.9	41.38	4 45.1
21	7.32	2 22.3	61.71	16 50.8	37.87	2 22.3	41.42	6 47.3
31	7.30	6 21.5	61.55	22 53.7	37.85	6 23.5	41.36	14 49.5
Febr. 10	7.24	20.9	61.33	56.1	37.79	11 24.6	41.22	51.4
20	7.14	13 20.4	61.06	31 58.1	37.68	13 25.4	41.00	30 53.1
März 1	7.01	15 20.1	60.75	34 59.7	37.55	16 26.0	40.70	34 54.5
II	6.86	17 19.9	60.41	36 60.7	37.39	17 26.3	40.36	36 55.5
21	6.69	17 19.9	60.05	61.2	37.22	17 26.5	40.00	37 56.0
31	6.52	15 20.0	59.69	61.2	37.05	17 26.4	39.63	37 56.1
April 10	6.37	14 20.2	59.35	60.6	36.89	15 26.1	39.27	33 55.8
20	6.23	12 20.6	59.02	29 59.6	36.74	12 25.6	38.94	28 55.1
30	6.11	8 21.0	58.73	25 58.1	36.62	9 24.9	38.66	22 54.0
Mai 10	6.03	4 21.6	58.48	20 56.1	36.53	5 24.0	38.44	15 52.5
20	5.99	0 22.3	58.28	23 53.8	36.48	2 22.9	38.29	15 50.8
30	5.99	23.1	58.13	9 51.1	36.46	— 21.6	38.22	7 48.9
Juni 9	6.02	3 24.1	58.04	2 48.2	36.49	6 20.2	38.24	9 46.9
19	6.10	13 25.1	58.02	4 45.1	36.55	11 18.8	38.33	20 44.7
29	6.23	13 26.2	58.06	10 41.5	36.66	17.0 17.0	38.53	26 42.4
Juli 9	6.38	15 27.4	58.16	16 38.2	36.80	14 15.4	38.79	40.3
19	6.56	21 28.5	58.32	20 35.0	36.98	20 13.9	39.11	39 38.3
29	6.77	24 29.5	58.52	27 31.9	37.18	22 12.4	39.50	45 36.4
Aug. 8	7.01	24 30.5	58.79	31 29.1	37.40	11.0 11.0	39.95	49 34.7
18	7.26	25 31.3	59.10	34 26.7	37.65	26 9.8	40.44	53 33.2
28	7.54	28 32.0	59.44	37 24.7	37.91	28 8.9	40.97	32.0
Sept. 7	7.82	30 32.4	59.81	40 23.3	38.19	29 8.3	41.53	59 31.0
17	8.12	30 32.6	60.21	41 22.4	38.48	7.9 4	42.12	60 30.2
27	8.42	30 32.6	60.62	41 22.1	38.78	30 7.9	42.72	61 29.8
Okt. 7	8.72	31 32.3	61.03	41 22.5	39.08	30 8.2	43.33	61 29.7
17	9.03	31.8	61.44	22.6	39.37	29 8.9	43.94	60 29.8
27	9.32	29 31.0	61.83	25.2	39.67	28 9.9	44.54	57 30.3
Nov. 6	9.61	30.0	62.20	27.4	39.95	27 11.2	45.11	57 31.1
16	9.88	28.9	62.52	28 30.1	40.22	24 12.7	45.66	55 32.2
26	10.13	22 27.7	62.80	22 33.2	40.46	22 14.4	46.15	49 33.6
Dez. 6	10.35	19 26.4	63.02	16 36.5	40.68	18 16.2	46.59	36 35.3
16	10.54	14 25.1	63.18	9 40.1	40.86	18.0 17	46.95	28 37.2
26	10.68	10 23.9	63.27	1 43.6	41.00	9 19.7	47.23	19 39.3
36	10.78	22.8	63.28	30 46.6	41.09	17 21.4	47.42	41.6
Mitt. Ort	6.31	17.7	59.84	50.2	36.85	25.6	39.06	34.9
	244)		245)		246)		247)	

## SCHEINBARE STERNÖRTER.

1912	23 II. Camelop. 5 <sup>m</sup> .6.		5 <sup>o</sup> Canis maj. 4 <sup>m</sup> .6.		5 <sup>o</sup> Aurigae. 6 <sup>m</sup> .1.		Geminorum. 2 <sup>m</sup> .0.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	6 <sup>h</sup> 31 <sup>m</sup>	79° 39'	6 <sup>h</sup> 31 <sup>m</sup>	22° 53'	6 <sup>h</sup> 32 <sup>m</sup>	39° 28'	6 <sup>h</sup> 32 <sup>m</sup>	16° 28'
Jan.								
I	20.52	21	51.2	30	23.16	33.8	16.6	38.67
II	20.73	4	54.2	30	23.21	36.4	17.7	38.77
21	20.69	29	57.2	28	23.22	38.7	18.8	38.82
31	20.40	60.0			23.18	40.8	19.9	38.81
Febr.	10	19.89	51	62.5	23.10	42.6	21.0	38.76
		71	22	13	15	12	9	36.4
20	19.18	87	64.7	17	22.97	44.1	21.9	38.68
März	1	18.31	99	66.4	12	22.81	45.2	22.7
II	17.32	107	67.6	7	22.63	45.9	23.3	38.40
21	16.25	108	68.3	1	22.43	46.3	23.7	38.23
31	15.17	105	68.4	—	22.23	46.3	23.8	38.06
April	10	14.12	98	67.9	10	22.04	45.9	23.7
	20	13.14	87	66.9	15	21.86	45.2	23.4
30	12.27	71	65.4	19	21.71	44.1	22.9	37.64
Mai	10	11.56	71	63.5	23	21.59	42.8	22.2
20	11.02	54	61.2	—	21.50	41.1	21.4	37.50
30	10.68	13	58.7	27	21.46	39.2	20.5	37.49
Juni	9	10.55	8	56.0	28	21.45	37.1	19.5
19	10.63	34	53.2	33	21.49	34.8	18.5	37.60
29	10.97	49.9	28	—	21.57	32.2	17.5	37.71
Juli	9	11.49	52	47.1	28	21.69	29.7	16.5
		71	28	15	23	33.89	22	37.87
19	12.20	88	44.3	25	21.84	27.4	15.6	38.06
29	13.08	104	41.8	23	22.03	25.1	14.7	38.27
Aug.	8	14.12	118	39.5	20	22.24	23.0	13.9
18	15.30	129	37.5	17	22.49	21.2	13.2	38.78
28	16.59	139	35.8	13	22.75	19.7	12.6	39.05
Sept.	7	17.98	147	34.5	9	23.03	18.7	12.1
17	19.45	151	33.6	6	23.32	18.0	11.6	39.65
27	20.96	153	33.0	1	23.63	17.9	11.2	39.97
Okt.	7	22.49	152	32.9	3	23.94	18.3	11.0
17	24.01	148	33.2	8	24.24	19.1	10.8	40.29
27	25.49	141	34.0	13	24.54	20.4	10.8	40.61
Nov.	6	26.90	130	35.3	16	24.84	22.1	10.9
16	28.20	118	36.9	21	25.11	24.2	11.2	41.53
26	29.38	101	39.0	24	25.36	26.5	11.6	41.81
Dez.	6	30.39	80	41.4	26	25.57	29.2	12.2
					18	27	7	42.06
16	31.19	58	44.0	29	25.75	31.9	12.9	42.27
26	31.77	35	46.9	29	25.89	34.6	13.7	42.44
36	32.12	49.8			25.97	37.2	14.7	42.57
Mittl. Ort	14.02	42.9			22.07	40.2	33.73	9.5
					248)	249)	250)	251)

## SCHEINBARE STERNÖRTER.

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1912	ν Argus. 3 <sup>m</sup> .1.		S Monocerot. (4 <sup>m</sup> .4)		α Geminorum. 3 <sup>m</sup> .1.		ζ Geminorum. 3 <sup>m</sup> .4	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	6 <sup>h</sup> 35 <sup>m</sup>	43° 6'	6 <sup>h</sup> 36 <sup>m</sup>	9° 58'	6 <sup>h</sup> 38 <sup>m</sup>	25° 13'	6 <sup>h</sup> 40 <sup>m</sup>	12° 59'
Jan.								
I	5.62	59.6	8.86	10	46.9	7	32.16	11
II	5.65	3 62.9	8.96	5	46.2	7	32.27	6
21	5.62	3 65.9	9.01	1	45.5	5	32.33	0
31	5.52	14 68.7	9.00	5	45.0	4	32.33	4
Febr.	10	5.38	71.2	25	8.95	44.6	32.29	4
	20	5.18	73.2	16	8.86	12	32.20	13
März	1	4.95	74.8	10	8.74	14	32.07	16
11	4.69	28 75.8	8.60	16	44.1	0	31.91	17
21	4.41	28 76.4	8.44	17	44.1	1	31.74	18
31	4.13	76.6	8.27	16	44.2	2	31.56	18.0
April	10	3.86	76.2	8	8.11	14	31.39	16
20	3.60	23 75.4	7.97	12	44.6	4	31.23	13
Mai	30	3.37	74.1	17	7.85	9	31.10	9
10	3.18	16 72.4	7.76	5	45.3	3	31.01	6
20	3.02	70.3	7.71	5	45.8	5	30.95	1
Juni	30	2.91	67.9	27	7.69	3	30.94	3
9	2.85	1 65.2	7.72	6	46.9	7	30.97	7
19	2.84	62.3	7.78	11	47.6	7	31.04	11
29	2.88	4 59.3	7.89	15	48.3	8	31.15	17
Juli	9	2.98	55.9	34	8.04	17	31.32	16.7
	19	3.12	52.9	29	8.21	21	16.7	1
Aug.	8	3.54	47.3	27	8.65	23	31.52	22
18	3.80	26 45.0	8.90	25	51.2	6	16.5	1
28	4.09	43.0	9.17	28	51.8	4	31.74	25
Sept.	7	4.41	41.6	9	9.45	30	16.4	1
17	4.75	34 40.7	9.75	30	52.4	1	21.35	20
Okt.	27	5.11	40.3	3	10.05	31	16.3	2
7	5.47	36 40.6	10.36	31	52.3	3	21.55	23
17	5.83	41.5	10.67	31	52.0	6	16.1	2
Nov.	27	6.18	43.0	20	10.98	50.7	22.26	28
6	6.51	33 45.0	11.28	30	49.9	8	14.0	4
16	6.81	20 47.5	11.57	29	48.9	10	24.14	30
26	7.08	23 50.4	11.84	24	47.8	11	34.54	34
Dez.	6	7.31	53.6	32	12.08	46.8	13.6	4
	16	7.49	56.9	35	12.29	16	34.88	31
26	7.61	60.4	12.45	13	45.7	9	13.3	3
36	7.67	63.7	12.58	11	44.8	9	24.74	27
Mittl. Ort	4.10	66.4	7.94	40.3	31.14	8.7	24.44	30

1912	$\alpha$ Canis maj. <sup>7)</sup> $\tau^m$ .		18 Monocerot. $4^m$ . $7$		9 Geminorum. $3^m$ . $4$		$\alpha$ Pictoris. $3^m$ . $2$ .		
	AR.	Dekl.	AR.	Dekl.	+	AR.	Dekl.	+	
	6 <sup>h</sup> 41 <sup>m</sup>	16° 35'	6 <sup>h</sup> 43 <sup>m</sup>	2° 30'		6 <sup>h</sup> 46 <sup>m</sup>	34° 4'	6 <sup>h</sup> 47 <sup>m</sup>	61° 50'
Jan.	17.10	8	35.2	23		17.30	9	39.4	13
11	17.18	2	37.5	22		17.39	5	38.1	11
21	17.20	3	39.7	19		17.44	0	37.0	9
31	17.17	7	41.6	16		17.44	5	36.1	8
Febr.	17.10	7	43.2	13		17.39	8	35.3	6
20	16.99	15	44.5	10		17.31	12	34.7	4
März	16.84	17	45.5	7		17.19	14	34.3	3
11	16.67	18	46.2	4		17.05	16	34.0	0
21	16.49	18	46.6	0		16.89	17	34.0	0
31	16.31	19	46.6	3		16.72	16	34.0	2
April	16.12	16	46.3	6		16.56	15	34.2	4
20	15.96	15	45.7	9		16.41	12	34.6	5
30	15.81	11	44.8	11		16.29	9	35.1	6
Mai	15.70	8	43.7	14		16.20	6	35.7	7
20	15.62	4	42.3	16		16.14	3	36.4	9
30	15.58	0	40.7	19		16.11	2	37.3	10
Juni	15.58	4	38.8	19		16.13	5	38.3	10
19	15.62	8	36.9	20		16.18	9	39.3	11
29	15.70	12	34.9	1		16.27	14	40.4	7
Juli	15.82	12	32.6	23		16.41	13	41.7	13
9	15.82	15	32.6	20		16.41	16	41.7	11
19	15.97	19	30.6	20		16.57	19	42.8	11
29	16.16	21	28.6	18		16.76	22	43.9	9
Aug.	16.37	23	26.8	15		16.98	23	44.8	9
18	16.60	26	25.3	12		17.21	26	45.7	6
28	16.86	27	24.1	1		17.47	27	46.3	5
Sept.	17.13	29	23.2	5		17.74	29	46.8	1
17	17.42	29	22.7	0		18.03	30	46.9	1
27	17.71	29	22.7	0		18.33	30	46.8	3
Okt.	18.01	30	23.1	8		18.63	30	46.5	7
7	18.32	31	23.9	13		18.93	31	45.8	8
17	18.32	30	23.9	13		18.93	31	45.8	8
27	18.62	28	25.2	16		19.24	29	45.0	12
Nov.	18.90	28	26.8	20		19.53	29	43.8	12
16	19.18	28	28.8	20		19.82	26	42.6	14
26	19.43	22	31.0	24		20.08	24	41.2	15
Dez.	19.65	18	33.4	25		20.32	21	39.7	15
16	19.83	15	35.9	25		20.53	16	38.2	14
26	19.98	10	38.4	24		20.69	12	36.8	13
36	20.08	10	40.8	24		20.81	11	35.5	13
Mittl. Ort	16.32	41.3	16.38	32.8		59.43	5.5	17.35	47.9

## SCHEINBARE STERNÖRTER.

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1912	15 Lyneis.		4 <sup>m</sup> .6.		δ Canis maj.		4 <sup>m</sup> .1.		ε Canis maj.		1 <sup>m</sup> .5.		ζ Geminor.		(3 <sup>m</sup> .8.)	
	AR.	Dekl. +/-	AR.	Dekl. --	AR.	Dekl. --	AR.	Dekl. --	AR.	Dekl. --	AR.	Dekl. --	AR.	Dekl. -/-	AR.	Dekl. -/-
	6 <sup>h</sup> 49 <sup>m</sup>	58° 32'	6 <sup>h</sup> 50 <sup>m</sup>	11° 55'	6 <sup>h</sup> 55 <sup>m</sup>	28° 50'	6 <sup>h</sup> 58 <sup>m</sup>	20° 42'								
Jan.																
I	41.66	17	27.7	21	7.05	9	33.1	21	11.14	8	58.8	29	54.43	13	6.8	2
II	41.83	8	29.8	21	7.14	4	35.2	20	11.22	2	61.7	27	54.56	8	6.6	0
21	41.91	1	31.9	21	7.18	1	37.2	17	11.24	3	64.4	25	54.64	2	6.6	1
31	41.90	9	34.0	20	7.17	5	38.9	14	11.21	8	66.9	22	54.66	3	6.7	1
Febr.	10		41.81	17	36.0		7.12	5	40.3	12	11.13	12	69.1	18	54.63	6.8
	20		41.64	24	37.7	15	7.03	13	41.5	9	11.01	16	70.9	15	54.56	7.0
März	I		41.40	29	39.2	11	6.90	16	42.4	7	10.85	18	72.4	10	54.45	7.3
II			41.11	32	40.3	8	6.74	17	43.1	3	10.67	21	73.4	7	54.31	7.5
21			40.79	33	41.1	3	6.57	18	43.4	1	10.46	21	74.1	2	54.15	7.8
31			40.46	33	41.4	0	6.39		43.5	3	10.25	21	74.3	2	53.98	8.0
April	10		40.13	30	41.4	5	6.22	16	43.2	4	10.04	20	74.1	5	53.81	8.2
	20		39.83	27	40.9	9	6.06	14	42.8	8	9.84	18	73.6	10	53.66	8.3
Mai	30		39.56	22	40.0	11	5.92	11	42.0	10	9.66	15	72.6	13	53.52	8.4
I	10		39.34	15	38.9	15	5.81	8	41.0		9.51	11	71.3	17	53.42	8.4
20			39.19	15	37.4		5.73		39.8		9.40	8	69.6		53.35	8.5
Juni	30		39.10	1	35.7	19	5.69	1	38.4	16	9.32	4	67.7	22	53.32	8.5
9			39.09	6	33.8	20	5.68	3	36.8	18	9.28	0	65.5	23	53.33	8.5
19			39.15	13	31.8	20	5.71	7	35.0	18	9.28	5	63.2	26	53.38	8.5
29			39.28	13	29.8		5.78	12	33.2	21	9.33	9	60.6	28	53.47	8.6
Juli	9		39.51	23	27.6	22	5.90	15	31.1	1	9.42	5	57.8	14	53.61	8.6
	19		39.78	27	25.6	20	6.05	17	29.3	18	9.55	16	55.3	25	53.78	8.7
Aug.	29		40.11	33	23.7	18	6.22	20	27.5	16	9.71	20	52.8	23	53.98	8.7
8			40.50	39	21.9	16	6.42	23	25.9	15	9.91	22	50.5	20	54.20	8.7
18			40.93	43	20.3	16	6.65	24	24.4	11	10.13	25	48.5	17	54.45	8.6
28			41.40	47	18.9	14	6.89	23.3	8		10.38	28	46.8	17	54.72	8.5
Sept.	7		41.90	50	17.7	10	7.16	28	22.5	5	10.66	29	45.5	8	55.01	8.2
	17		42.43	53	16.7	7	7.44	29	22.0	1	10.95	31	44.7	4	55.31	7.9
Okt.	27		42.98	55	16.0		7.73	30	21.9	3	11.26	32	44.3	2	55.63	7.5
7			43.54	56	15.5	1	8.03	30	22.2	7	11.58	32	44.5	8	55.96	7.0
17			44.10	56	15.4	1	8.33	30	22.9	12	11.90	32	45.3	12	56.29	6.5
				57								32		33		
Nov.	27		44.67	54	15.5		8.63	24	1.1	14	12.22	31	46.5	18	56.62	5.8
6			45.21	54	16.0	5	8.93	28	25.5	18	12.53	29	48.3	22	56.95	3.3
16			45.73	52	16.7	7	9.21	26	27.3	20	12.82	28	50.5	25	57.27	3.2
26			46.22	49	17.8	11	9.47	24	29.3	22	13.10	23	53.0	28	57.57	3.7
Dez.	6		46.65	43	19.2	14	9.71	20	31.5	22	13.33	20	55.8	29	57.85	3.1
	16		47.02	37	20.8	16	9.91	16	33.7	23	13.53	16	58.7	29	58.09	2.6
26			47.32	30	22.7	20	10.07	11	36.0	21	13.69	10	61.7	30	58.29	2.2
36			47.54	22	24.7		10.18	38.1			13.79	64.7			58.45	1.9
Mittl. Ort			39.62	21.3			6.09	40.0			10.00	66.4			53.44	0.7

## SCHEINBARE STERNÖRTER.

1912	$\gamma$ Canis maj. 4 <sup>m</sup> .o.		$\delta$ Canis maj. 1 <sup>m</sup> .9.		63 Aurigae. 5 <sup>m</sup> .o.		$\lambda$ Geminorum. 3 <sup>m</sup> .6.		
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	
	6 <sup>h</sup> 59 <sup>m</sup> <sup>w</sup>	15° 29'	7 <sup>h</sup> 4 <sup>m</sup>	26° 14'	7 <sup>h</sup> 5 <sup>m</sup>	39° 27'	7 <sup>h</sup> 13 <sup>w</sup>	16° 41'	
Jan.									
I	47.63	9	62.4	23	49.84	9	62.7	28	
II	47.72	5	64.7	21	49.93	4	65.5	27	
21	47.77	0	66.8	20	49.97	1	68.2	24	
31	47.77	5	68.8	16	49.96	7	70.6	22	
Febr.	10								
	47.72	9	70.4	14	49.89	11	72.8	18	
20	47.63	13	71.8	11	49.78	14	74.6	14	
März	I	47.50	16	72.9	8	49.64	18	76.0	11
II	47.34	17	73.7	4	49.46	19	77.1	7	
21	47.17	18	74.1	2	49.27	20	77.8	21	
31	46.99	18	74.3	2	49.07	20	78.1	3	
April	10								
	46.81	17	74.1	5	48.87	20	78.0	5	
20	46.64	14	73.6	7	48.67	17	77.5	8	
Mai	30								
I	46.50	12	72.9	11	48.50	15	76.7	13	
10	46.38	9	71.8	12	48.35	11	75.4	15	
20	46.29	6	70.6	16	48.24	8	73.9	18	
Juni	30								
9	46.23	2	69.0	17	48.16	4	72.1	20	
19	46.21	2	67.3	18	48.12	0	70.1	22	
29	46.23	6	65.5	20	48.12	4	67.9	24	
Juli	29								
9	46.29	11	63.5	22	48.16	8	65.5	27	
19	46.40	13	61.3	19	48.24	12	62.8	24	
Aug.	8								
	46.53	17	59.4	20	48.36	16	60.4	24	
18	46.70	19	57.4	17	48.52	18	58.0	22	
28	47.10	24	54.1	13	48.70	22	55.8	20	
Sept.	27								
7	47.61	28	51.9	6	49.43	29	50.9	8	
17	47.89	29	51.3	1	49.72	30	50.1	3	
27	48.18	30	51.2	3	50.02	31	49.8	2	
Okt.	7								
	48.48	30	51.5	7	50.33	31	50.0	7	
17	48.78	30	52.2	11	50.64	32	50.7	12	
Nov.	27								
6	49.08	30	53.3	15	50.96	31	51.9	16	
16	49.38	29	54.8	19	51.27	30	53.5	21	
26	49.67	27	56.7	21	51.57	28	55.6	25	
Dez.	6								
	49.94	24	58.8	23	51.85	24	58.1	27	
16	50.18	21	61.1	25	52.09	22	60.8	28	
26	50.39	17	63.6	24	52.31	16	63.6	23	
36	50.56	12	66.0	23	52.47	12	66.6	28	
Mittl. Ort	46.65	69.6	48.76	70.6	36.29	54.1	2.20	59.5	

1912	π Argus. 2°.5.		δ Geminorum. 3°.3.		19 Lyncis seq. 5°.5.		δ Volantis. 4°.0.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. —
	7 <sup>h</sup> 14 <sup>m</sup>	36° 55'	7 <sup>h</sup> 14 <sup>m</sup>	22° 8'	7 <sup>h</sup> 15 <sup>m</sup>	55° 26'	7 <sup>h</sup> 16 <sup>m</sup>	67° 47'
Jan.								
I.	3.30 <sup>10</sup>	71.5 <sup>32</sup>	53.14 <sup>15</sup>	48.3 <sup>1</sup>	43.42 <sup>20</sup>	58.2 <sup>19</sup>	55.87 <sup>2</sup>	35.4 <sup>38</sup>
II.	3.40 <sup>2</sup>	74.7 <sup>31</sup>	53.29 <sup>9</sup>	48.2 <sup>0</sup>	43.62 <sup>13</sup>	60.1 <sup>19</sup>	55.89 <sup>10</sup>	39.2 <sup>36</sup>
21	3.42 <sup>2</sup>	77.8 <sup>29</sup>	53.38 <sup>4</sup>	48.2 <sup>1</sup>	43.75 <sup>4</sup>	62.0 <sup>20</sup>	55.79 <sup>20</sup>	42.8 <sup>35</sup>
31	3.40 <sup>9</sup>	80.7 <sup>26</sup>	53.42 <sup>1</sup>	48.3 <sup>2</sup>	43.79 <sup>5</sup>	64.0 <sup>19</sup>	55.59 <sup>31</sup>	46.3 <sup>32</sup>
Febr.	10	3.31 <sup>9</sup>	83.3 <sup>22</sup>	53.41 <sup>6</sup>	48.5 <sup>3</sup>	43.74 <sup>12</sup>	65.9 <sup>19</sup>	55.28 <sup>41</sup>
	20	3.18 <sup>17</sup>	85.5 <sup>18</sup>	53.35 <sup>10</sup>	48.8 <sup>4</sup>	43.62 <sup>18</sup>	67.8 <sup>15</sup>	54.87 <sup>47</sup>
März	1	3.01 <sup>21</sup>	87.3 <sup>14</sup>	53.25 <sup>14</sup>	49.2 <sup>3</sup>	43.44 <sup>24</sup>	69.3 <sup>13</sup>	54.40 <sup>54</sup>
II.	2.80 <sup>23</sup>	88.7 <sup>10</sup>	53.11 <sup>15</sup>	49.5 <sup>4</sup>	43.20 <sup>27</sup>	70.6 <sup>10</sup>	53.86 <sup>57</sup>	56.6 <sup>14</sup>
21	2.57 <sup>24</sup>	89.7 <sup>5</sup>	52.96 <sup>17</sup>	49.9 <sup>3</sup>	42.93 <sup>30</sup>	71.6 <sup>6</sup>	53.29 <sup>61</sup>	58.0 <sup>8</sup>
31	2.33 <sup>24</sup>	90.2 <sup>1</sup>	52.79 <sup>17</sup>	50.2 <sup>2</sup>	42.63 <sup>30</sup>	72.2 <sup>3</sup>	52.68 <sup>60</sup>	58.8 <sup>4</sup>
April	10	2.09 <sup>23</sup>	90.3 <sup>4</sup>	52.62 <sup>16</sup>	50.4 <sup>2</sup>	42.33 <sup>28</sup>	72.5 <sup>2</sup>	52.08 <sup>60</sup>
	20	1.86 <sup>21</sup>	89.9 <sup>8</sup>	52.46 <sup>14</sup>	50.6 <sup>1</sup>	42.05 <sup>26</sup>	72.3 <sup>5</sup>	51.48 <sup>57</sup>
Mai	30	1.65 <sup>19</sup>	89.1 <sup>13</sup>	52.32 <sup>11</sup>	50.7 <sup>1</sup>	41.79 <sup>22</sup>	71.8 <sup>9</sup>	50.91 <sup>53</sup>
10	1.46 <sup>19</sup>	87.8 <sup>13</sup>	52.21 <sup>8</sup>	50.8 <sup>1</sup>	41.57 <sup>16</sup>	70.9 <sup>12</sup>	50.38 <sup>48</sup>	
20	1.31 <sup>15</sup>	86.2 <sup>16</sup>	52.13 <sup>4</sup>	50.7 <sup>0</sup>	41.41 <sup>11</sup>	69.7 <sup>14</sup>	49.90 <sup>40</sup>	
Juni	30	1.19 <sup>8</sup>	84.3 <sup>23</sup>	52.09 <sup>1</sup>	50.7 <sup>1</sup>	41.30 <sup>4</sup>	68.3 <sup>17</sup>	49.50 <sup>33</sup>
9	1.11 <sup>3</sup>	82.0 <sup>25</sup>	52.08 <sup>—</sup>	50.6 <sup>0</sup>	41.26 <sup>2</sup>	66.6 <sup>18</sup>	49.17 <sup>25</sup>	
19	1.08 <sup>1</sup>	79.5 <sup>27</sup>	52.12 <sup>8</sup>	50.6 <sup>1</sup>	41.28 <sup>9</sup>	64.8 <sup>19</sup>	48.92 <sup>16</sup>	
29	1.09 <sup>5</sup>	76.8 <sup>28</sup>	52.20 <sup>11</sup>	50.5 <sup>1</sup>	41.37 <sup>15</sup>	62.9 <sup>19</sup>	48.76 <sup>6</sup>	
Juli	9	1.14 <sup>5</sup>	74.0 <sup>31</sup>	52.31 <sup>17</sup>	50.4 <sup>1</sup>	41.52 <sup>23</sup>	61.0 <sup>22</sup>	48.70 <sup>4</sup>
	19	1.25 <sup>14</sup>	70.9 <sup>27</sup>	52.48 <sup>18</sup>	50.3 <sup>2</sup>	41.75 <sup>27</sup>	58.8 <sup>19</sup>	48.74 <sup>13</sup>
Aug.	8	1.39 <sup>18</sup>	68.2 <sup>25</sup>	52.66 <sup>21</sup>	50.1 <sup>1</sup>	42.02 <sup>32</sup>	56.9 <sup>19</sup>	48.87 <sup>23</sup>
	18	1.79 <sup>22</sup>	65.7 <sup>24</sup>	52.87 <sup>24</sup>	50.0 <sup>3</sup>	42.34 <sup>37</sup>	55.0 <sup>17</sup>	49.10 <sup>31</sup>
	28	2.03 <sup>28</sup>	63.3 <sup>19</sup>	53.11 <sup>26</sup>	49.7 <sup>3</sup>	42.71 <sup>40</sup>	53.3 <sup>16</sup>	49.42 <sup>40</sup>
Sept.	7	2.31 <sup>30</sup>	59.8 <sup>11</sup>	53.66 <sup>30</sup>	49.1 <sup>5</sup>	43.55 <sup>47</sup>	50.2 <sup>13</sup>	50.29 <sup>15</sup>
	17	2.61 <sup>32</sup>	58.7 <sup>5</sup>	53.96 <sup>31</sup>	48.6 <sup>5</sup>	44.02 <sup>50</sup>	48.9 <sup>10</sup>	50.82 <sup>58</sup>
Okt.	27	2.93 <sup>34</sup>	58.2 <sup>0</sup>	54.27 <sup>33</sup>	48.1 <sup>6</sup>	44.52 <sup>51</sup>	47.9 <sup>8</sup>	51.40 <sup>61</sup>
7	3.27 <sup>34</sup>	58.2 <sup>6</sup>	54.60 <sup>33</sup>	47.5 <sup>7</sup>	45.03 <sup>53</sup>	47.1 <sup>6</sup>	52.01 <sup>63</sup>	
	17	3.61 <sup>35</sup>	58.8 <sup>11</sup>	54.93 <sup>34</sup>	46.8 <sup>8</sup>	45.56 <sup>52</sup>	46.5 <sup>3</sup>	52.64 <sup>61</sup>
	27	3.96 <sup>33</sup>	59.9 <sup>18</sup>	55.27 <sup>34</sup>	46.0 <sup>8</sup>	46.08 <sup>52</sup>	46.2 <sup>0</sup>	53.25 <sup>59</sup>
Nov.	6	4.29 <sup>32</sup>	61.7 <sup>22</sup>	55.61 <sup>33</sup>	45.2 <sup>7</sup>	46.60 <sup>51</sup>	46.2 <sup>4</sup>	53.84 <sup>54</sup>
	16	4.61 <sup>30</sup>	63.9 <sup>26</sup>	55.94 <sup>31</sup>	44.5 <sup>7</sup>	47.11 <sup>48</sup>	46.6 <sup>6</sup>	54.38 <sup>48</sup>
	26	4.91 <sup>26</sup>	66.5 <sup>30</sup>	56.25 <sup>29</sup>	43.8 <sup>7</sup>	47.59 <sup>44</sup>	47.2 <sup>10</sup>	54.86 <sup>39</sup>
Dez.	6	5.17 <sup>22</sup>	69.5 <sup>31</sup>	56.54 <sup>26</sup>	43.1 <sup>5</sup>	48.03 <sup>39</sup>	48.2 <sup>12</sup>	55.25 <sup>30</sup>
	16	5.39 <sup>18</sup>	72.6 <sup>33</sup>	56.80 <sup>22</sup>	42.6 <sup>4</sup>	48.42 <sup>32</sup>	49.4 <sup>16</sup>	55.55 <sup>20</sup>
	26	5.57 <sup>12</sup>	75.9 <sup>33</sup>	57.02 <sup>18</sup>	42.2 <sup>3</sup>	48.74 <sup>25</sup>	51.0 <sup>17</sup>	55.75 <sup>8</sup>
	36	5.69	79.2	57.20	41.9	48.99	52.7	55.83
Mitt. Ort	2.05	80.4	52.14	42.7	41.51	53.7	52.73	46.2

## SCHEINBARE STERNÖRTER.

1912	Geminorum. 3 <sup>m</sup> .8.		Gr. 1308. 5 <sup>m</sup> .8.		β Canis min. 2 <sup>m</sup> .9.		Geminorum. 4 <sup>m</sup> .4.	
	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-
	7 <sup>h</sup> 20 <sup>m</sup>	27° 58'	7 <sup>h</sup> 21 <sup>m</sup>	68° 38'	7 <sup>h</sup> 22 <sup>m</sup>	8° 28'	7 <sup>h</sup> 23 <sup>m</sup>	31° 57'
Jan.								
I	16.86	30.8	47.23	52.2	23.67	8.6	28.33	42.2
II	17.02	31.0	47.52	54.7	23.81	7.6	28.50	42.7
21	17.13	31.4	47.68	57.3	23.90	6.8	28.61	43.3
31	17.17	31.9	47.71	59.8	23.94	6.1	28.67	44.0
Febr.	17.17	32.4	47.62	62.3	23.93	5.5	28.66	44.8
20	17.11	33.0	47.42	64.6	23.88	5.1	28.61	45.5
März	17.01	33.6	47.10	66.6	23.79	4.9	28.50	46.3
II	16.87	34.1	46.71	68.2	23.66	4.8	28.36	47.1
21	16.70	34.6	46.26	69.5	23.52	4.8	28.19	47.6
31	16.53	35.0	45.78	70.2	23.36	4.9	28.01	48.1
April	16.35	35.3	45.28	70.5	23.20	5.1	27.83	48.4
20	16.18	35.4	44.80	70.2	23.05	5.4	27.65	48.6
30	16.03	35.4	44.36	69.5	22.92	5.8	27.50	48.5
Mai	15.91	35.4	43.98	68.4	22.81	6.2	27.37	48.4
20	15.83	35.2	43.67	66.8	22.72	6.7	27.27	48.0
30	15.78	34.9	43.44	64.9	22.68	7.2	27.22	47.6
Juni	15.77	34.5	43.31	62.8	22.66	7.8	27.20	47.1
19	15.80	34.1	43.28	60.4	22.69	8.4	27.23	46.5
29	15.87	33.7	43.35	57.9	22.75	9.1	27.30	45.8
Juli	15.99	33.3	43.52	55.4	22.85	9.8	27.42	45.1
10	16.16	32.8	43.81	52.6	22.99	10.5	27.59	44.4
29	16.34	32.3	44.17	50.0	23.16	11.1	27.78	43.6
Aug.	16.56	31.8	44.62	47.6	23.35	11.7	28.00	42.8
18	16.80	31.2	45.14	45.3	23.55	12.1	28.25	42.1
28	17.07	30.6	45.72	43.2	23.79	12.3	28.53	41.3
Sept.	17.36	30.0	46.37	41.4	24.04	12.4	28.83	40.5
17	17.67	29.3	47.06	39.8	24.32	12.3	29.15	39.8
27	18.00	28.6	47.80	38.5	24.61	12.0	29.49	39.0
Okt.	18.34	27.9	48.56	37.5	24.91	11.5	29.84	38.2
17	18.69	27.2	49.34	36.9	25.22	10.8	30.21	37.5
27	19.05	26.5	50.13	36.8	25.54	9.8	30.58	36.8
Nov.	19.40	25.8	50.91	37.0	25.85	8.7	30.95	36.2
16	19.75	25.2	51.66	37.6	26.16	7.5	31.31	35.6
26	20.08	24.6	52.37	38.7	26.46	6.1	31.65	35.2
Dez.	20.39	24.2	53.01	40.1	26.73	4.8	31.98	35.0
16	20.67	24.0	53.57	41.9	26.98	3.5	32.27	35.0
26	20.90	23.9	54.03	44.0	27.19	2.3	32.51	35.2
36	21.09	24.0	54.38	46.4	27.36	1.1	32.71	35.5
Mittl. Ort	15.79	25.7	44.00	48.2	22.76	2.5	27.20	37.4
	(282)		(284)		(285)		(286)	

1912	$\alpha$ Gemin. 1 <sup>m</sup> .8, 2 <sup>m</sup> .8.		25 Monocerot. 5 <sup>m</sup> .3.		$\alpha$ Canis min.*). ○ 5 <sup>m</sup> .5.		24 Lyncis. 5 <sup>m</sup> .0.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	7 <sup>h</sup> 28 <sup>m</sup>	32° 4'	7 <sup>h</sup> 32 <sup>m</sup>	3° 54'	7 <sup>h</sup> 34 <sup>m</sup>	5° 27'	7 <sup>h</sup> 35 <sup>m</sup>	58° 54'
Jan.								
1	60.24	62.0	55.10	42.9	42.61	10.1	36.24	65.3
11	60.41	62.4 4	55.23	44.7	42.76	8.8	36.50	67.3 21
21	60.53	63.0 7	55.32	46.3	42.86	7.7	36.66	69.4 21
31	60.59	63.7 8	55.36	47.8	42.91	6.8	36.74	71.5 22
Febr.	10	60.60	64.5	49.0	42.91	6.0	36.72	73.7 20
	20	60.55	65.3 8	55.30	50.0	42.86	5.4	36.61
März	1	60.45	66.1	55.21	50.8	42.78	5.1	36.43
	11	60.31	66.8 7	55.08	51.3	42.66	4.8	36.18
	21	60.15	67.4 6	54.93	51.7	42.52	4.7	35.89
	31	59.96	68.0	54.77	51.8	42.36	4.8	35.57
April	10	59.78	68.3 1	54.61	51.7	42.20	4.9	35.24
	20	59.60	68.4 0	54.45	51.4	42.05	5.2	34.92
Mai	30	59.44	68.4 1	54.31	50.9	41.91	5.5	34.62
	10	59.31	68.3	54.19	50.3	41.80	6.0	34.36
	20	59.21	68.0 3	54.09	49.4	41.71	6.5	34.15
Juni	30	59.15	67.6 6	54.03	48.5	41.65	7.1	34.00
	9	59.13	67.0 6	54.00	47.4	41.63	7.8	33.92
	19	59.15	66.4 6	54.01	46.2	41.64	8.5	33.90
Juli	29	59.21	65.8 8	54.05	44.9	41.68	9.3	33.95
	9	59.32	65.0	54.13	43.5	41.76	10.1	34.07
	19	59.48	64.2	54.25	42.1	41.89	10.9	34.28
Aug.	29	59.66	63.5 8	54.39	40.8	42.03	11.7	34.53
	8	59.87	62.7	54.56	39.7	42.20	12.3	34.84
	18	60.12	61.8 9	54.76	38.7	42.40	12.8	35.20
	28	60.39	61.0	54.98	37.9	42.63	13.1	35.62
Sept.	7	60.69	60.2	55.22	37.3	42.87	13.3	36.07
	17	61.00	59.3 9	55.48	37.1	43.14	13.2	36.56
Okt.	27	61.34	58.5 8	55.77	37.1	43.42	12.9	37.08
	7	61.69	57.7	56.06	37.5	43.71	12.3	37.63
	17	62.05	56.8 9	56.37	38.2	44.02	11.5	38.20
	27	62.42	56.1	56.68	39.3	44.33	10.5	38.77
Nov.	6	62.79	55.4	56.99	40.6	44.65	9.3	39.34
	16	63.16	54.9 5	57.30	42.2	44.96	7.9	39.90
	26	63.51	54.4 3	57.59	44.0	45.26	6.4	40.44
Dez.	6	63.84	54.1	57.86	45.9	45.54	4.8	40.94
	16	64.13	54.1 1	58.11	47.8	45.79	3.3	41.38
	26	64.39	54.2 3	58.31	49.8	46.00	1.8	41.76
	36	64.59	54.5	58.47	51.7	46.17	0.4	42.06
Mitul. Ort	59.11	57.5	54.20	49.9	41.77	4.6	34.08	62.3
	287)		289)		291)		292)	

\*) Die Angaben für  $\alpha$  Canis min. beziehen sich hier auf den Ort des sichtbaren Sterns.

## SCHEINBARE STERNÖRTER.

1912	z Geminorum. 3 <sup>m</sup> .4.		3 Geminorum. 1 <sup>m</sup> .1.		Geminorum. 5 <sup>m</sup> .5.		5 Volantis. 3 <sup>m</sup> .9.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	7 <sup>h</sup> 39 <sup>m</sup>	24° 36'	7 <sup>h</sup> 39 <sup>m</sup>	28° 14'	7 <sup>h</sup> 41 <sup>m</sup>	33° 37'	7 <sup>h</sup> 42 <sup>m</sup>	72° 23'
Jan.								
I	9.25	17	39.9	1	51.29	19	60.7	5
II	9.42	12	39.8	1	51.48	13	61.2	6
21	9.54	7	39.9	2	51.61	8	61.8	8
31	9.61	1	40.1	4	51.69	1	62.6	9
Febr.	10		9.62	40.5	51.70	—	63.5	9
	20		9.58	40.9	51.66	9	64.4	9
März	I		9.50	13	57.40	8	57.18	46.0
II	9.37	15	41.4	5	57.32	13	56.63	55
21	9.22	15	41.9	5	57.19	15	55.99	70
31	9.07	17	42.4	4	57.04	17	55.29	74
April	10		8.90	17	56.69	17	54.55	76
	20		8.73	15	56.52	16	53.79	76
	30		8.58	12	56.36	13	53.03	75
Mai	10		8.46	9	56.23	10	52.28	75
	20		8.37	6	56.13	6	51.58	66
	30		8.31	3	56.07	3	50.92	58
Juni	9		8.28	2	56.04	1	50.34	50
	19		8.30	5	56.05	4	49.84	40
	29		8.35	9	56.10	5	49.44	30
Juli	9		8.44	9	56.20	10	49.14	18
	19		8.58	16	56.34	16	48.96	40.5
	29		8.74	19	56.50	20	48.37	35
Aug.	8		8.93	22	56.70	22	48.89	7
	18		9.15	25	56.92	26	48.96	18
	28		9.40	27	57.18	28	48.06	33
Sept.	7		9.67	29	57.46	30	47.37	60
	17		9.96	31	57.76	31	47.08	18
	27		10.27	33	58.07	34	46.80	13
Okt.	7		10.60	34	58.41	34	46.52	7
	17		10.94	35	58.76	35	46.23	0
	27		11.29	35.6	59.11	36	45.94	19.5
Nov.	6		11.64	35	59.47	36	45.63	20.8
	16		11.99	35	59.83	37	45.31	20
	26		12.32	33	60.17	37	45.33	22.8
Dez.	6		12.63	32.3	60.49	32	45.95	24
	16		12.92	31.8	60.78	26	45.47	30
	26		13.16	31.4	61.04	21	45.18	35.2
	36		13.36	31.2	61.25	18.0	45.84	38
Mittl. Ort			8.23	35.3	55.99	22.3	54.44	41.5
			294)		295)		296)	

1912	Gr. 1374.		5 <sup>m</sup> .5.		$\gamma$ Argus.		3 <sup>m</sup> .5.		$\gamma$ Geminorum.		5 <sup>m</sup> .1.		$\zeta$ Argus.		2 <sup>m</sup> .2.	
	AR.	Dekl.	+/-	AR.	Dekl.	-/+	AR.	Dekl.	+/-	AR.	Dekl.	-/+	AR.	Dekl.	-/+	
	7 <sup>h</sup> 49 <sup>m</sup>	74° 9'		7 <sup>h</sup> 54 <sup>m</sup>	52° 44'		7 <sup>h</sup> 58 <sup>m</sup>	28° 2'		8 <sup>h</sup> 0 <sup>m</sup>	39° 44'					
Jan.	45.51	45	17.7	34.10	13	32.5	8.02	20	34.0	1	30.57	14	65.7	"		
	45.96	28	20.2	34.23	6	36.2	8.22	14	34.1	2	30.71	9	69.1	34		
	46.24	11	22.9	34.29	2	39.8	8.36	9	34.3	4	30.80	2	72.5	32		
	46.35	6	25.7	34.27	9	43.4	8.45	3	34.7	6	30.82	3	75.7	30		
Febr. 10	46.29	22	28.5	34.18	16	46.6	8.48	2	35.3	6	30.79	10	78.7	27		
	46.07	36	31.1	34.02	22	49.6	8.46	7	35.9	7	30.69	14	81.4	23		
März 1	45.71	48	33.4	33.80	26	52.2	8.39	11	36.6	7	30.55	18	83.7	19		
	45.23	58	35.4	33.54	30	54.4	8.28	14	37.3	7	30.37	21	85.6	15		
	44.65	63	37.0	33.24	32	56.2	8.14	16	38.0	6	30.16	23	87.1	11		
	44.02	67	38.1	32.92	57.4		7.98		38.6		29.93		88.2			
April 10	43.35	67	38.7	32.59	34	58.1	7.81	17	39.0	4	29.69	24	88.8	2		
	42.68	64	38.8	32.25	32	58.4	7.64	16	39.4	2	29.45	23	89.0			
Mai 10	42.04	58	38.3	31.93	30	58.0	7.48		39.6		29.22	22	88.6	4		
	41.46	50	37.4	31.63	27	57.3	7.34	14	39.7	1	29.00	18	87.9	7		
	40.96	40	35.9	31.36	24	56.0	7.23		39.6		28.82		86.7	16		
Juni 30	40.56	28	34.1	31.12	19	54.3	7.16	4	39.5	3	28.66	12	85.1	19		
	40.28	16	31.9	30.93	14	52.2	7.12	0	39.2	4	28.54	8	83.2	22		
	40.12	29.5		30.79	9	49.8	7.12	3	38.8	5	28.46	5	81.0	25		
Juli 29	40.08	4	26.8	30.70	5	47.1	7.15	8	38.3	5	28.41	1	78.5	26		
	40.18	10	24.0	30.65	2	44.2	7.23	10	37.8	6	28.40	-	75.9	27		
Aug. 19	40.42	36	20.8	30.67	8	41.1	7.33	16	37.2	7	28.44	10	73.2	31		
	40.78	36	18.0	30.75	14	37.7	7.49	18	36.5	7	28.54	12	70.1	26		
Sept. 8	41.25	47	15.1	30.89	19	34.7	7.67	21	35.8	8	28.66	17	67.5	25		
	41.83	58	12.4	31.08	24	31.9	7.88	24	35.0	8	28.83	21	65.0	22		
	42.52	69	9.9	31.32	29.4		8.12		34.2		29.04		62.8			
Okt. 7	43.29	77	7.6	31.61	29	27.2	8.38	29	33.3	10	29.28	28	60.9	14		
	44.13	84	5.5	31.94	33	25.6	8.67	31	32.3	10	29.56	31	59.5	9		
	45.05	92	3.8	32.30	40	24.4	8.98	32	31.3	10	29.87	33	58.6	4		
Okt. 17	46.01	100	2.4	32.70	42	23.8	9.30	35	30.3	11	30.20	35	58.2	2		
	47.01	102	1.5	33.12	43	24.0	9.65	36	29.2	11	30.55	36	58.4	8		
Nov. 6	48.03	102	0.9	33.55	43	24.7	10.01	36	28.1	10	30.91	36	59.2	14		
	49.05	100	0.8	33.98	41	26.1	10.37	36	27.1	9	31.27	36	60.6	20		
	50.05	95	1.1	34.39	39	28.0	10.73	35	26.2	8	31.63	34	62.6	24		
Dez. 6	51.00	89	2.0	34.78	35	30.5	11.08	34	25.4	7	31.97	31	65.0	28		
	51.89	79	3.2	35.13	29	33.5	11.42	36	24.7	5	32.28	27	67.8	32		
	52.68	66	4.9	35.42	24	36.8	11.72	27	24.2	3	32.55	23	71.0	33		
26	53.34	52	7.0	35.66	17	40.4	11.99	23	23.9	1	32.78	18	74.3	34		
	53.86	9.5		35.83	44.1		12.22		23.8		32.96		77.7			
Mittel. Ort	40.98	16.0		32.52	45.0		6.96		30.5		29.43		77.2			

## SCHEINBARE STERNÖRTER.

1912	27 Lyncis. 4 <sup>m</sup> .6.		ι Navis. 2 <sup>m</sup> .8.		γ Argus. 2 <sup>m</sup> .I.		Br. 1147. 5 <sup>m</sup> .8.	
	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl. -	AR.	Dekl. +
	8 <sup>h</sup> 1 <sup>m</sup>	51° 45'	8 <sup>h</sup> 3 <sup>m</sup>	24° 2'	8 <sup>h</sup> 6 <sup>m</sup>	47° 4'	8 <sup>h</sup> 8 <sup>m</sup>	76° 1'
Jan.	I	52.36 26	41.8 14	48.65 15	50.7 28	50.50 15	24.0 36	36.08 56
	II	52.62 19	43.2 17	48.80 11	53.5 28	50.65 8	27.6 36	36.64 38
	21	52.81 11	44.9 18	48.91 6	56.3 26	50.73 2	31.2 34	37.02 18
	31	52.92 4	46.7 18	48.97 1	58.9 24	50.75 5	34.6 33	37.20 0
Febr.	10	52.96 4	48.5 19	48.98 5	61.3 21	50.70 11	37.9 29	37.20 19
	20	52.92 11	50.4 17	48.93 9	63.4 18	50.59 16	40.8 26	37.01 36
März	I	52.81 17	52.1 16	48.84 13	65.2 14	50.43 21	43.4 22	36.65 50
	II	52.64 22	53.7 13	48.71 16	66.6 11	50.22 25	45.6 18	36.15 61
	21	52.42 24	55.0 11	48.55 17	67.7 7	49.97 27	47.4 12	35.54 70
	31	52.18 26	56.1 7	48.38 19	68.4 3	49.70 28	48.6 8	34.84 76
April	10	51.92 26	56.8 3	48.19 18	68.7 0	49.42 28	49.4 3	34.08 76
	20	51.66 25	57.1 0	48.01 18	68.7 3	49.14 28	49.7 1	33.32 75
	30	51.41 23	57.1 4	47.83 17	68.4 7	48.86 25	49.6 7	32.57 69
Mai	10	51.18 18	56.7 7	47.66 14	67.7 7	48.61 23	48.9 11	31.88 61
	20	51.00 13	56.0 10	47.52 11	66.6 13	48.38 20	47.8 16	31.27 52
	30	50.87 9	55.0 13	47.41 8	65.3 16	48.18 17	46.2 19	30.75 40
Juni	9	50.78 3	53.7 15	47.33 4	63.7 18	48.01 12	44.3 23	30.35 26
	19	50.75 2	52.2 17	47.29 1	61.9 20	47.89 8	42.0 25	30.09 13
	29	50.77 5	50.5 18	47.28 2	59.9 21	47.81 3	39.5 27	29.96 2
Juli	9	50.84 13	48.7 19	47.30 6	57.8 22	47.78 2	36.8 29	29.98 17
	19	50.97 20	46.8 22	47.36 11	55.6 24	47.80 7	33.9 33	30.15 34
	29	51.17 23	44.6 20	47.47 14	53.2 21	47.87 12	30.6 28	30.49 45
Aug.	8	51.40 23	42.6 19	47.61 17	51.1 19	47.99 15	27.8 27	30.94 57
	18	51.67 32	40.7 20	47.78 19	49.2 16	48.14 23	25.1 25	31.51 70
	28	51.99 36	38.7 18	47.97 23	47.6 14	48.37 25	22.6 21	32.21 81
Sept.	7	52.35 38	36.9 18	48.20 25	46.2 9	48.62 29	20.5 16	33.02 90
	17	52.73 43	35.1 15	48.45 27	45.3 6	48.91 33	18.9 11	33.92 98
	27	53.16 45	33.6 14	48.72 29	44.7 0	49.24 17.8	17.8 6	34.90 105
Okt.	7	53.61 47	32.2 12	49.01 31	44.7 4	49.60 36	17.2 0	35.95 111
	17	54.08 48	31.0 10	49.32 31	45.1 10	49.98 39	17.2 7	37.06 113
	27	54.56 50	30.0 7	49.63 33	46.1 14	50.37 40	17.9 13	38.19 115
Nov.	6	55.06 48	29.3 4	49.96 31	47.5 19	50.77 39	19.2 19	39.34 113
	16	55.54 48	28.9 1	50.27 31	49.4 22	51.16 37	21.1 24	40.47 109
	26	56.02 45	28.8 3	50.58 29	51.6 25	51.53 34	23.5 29	41.56 102
Dez.	6	56.47 41	29.1 7	50.87 26	54.1 28	51.87 30	26.4 32	42.58 93
	16	56.88 37	29.8 9	51.13 23	56.9 28	52.17 24	29.6 34	43.51 79
	26	57.25 30	30.7 13	51.36 18	59.7 30	52.41 18	33.0 36	44.30 65
	36	57.55 32	32.0	51.54	62.7	52.59	36.6	44.95 27.4
Mittl. Ort		50.63	40.4	47.76	60.4	49.20	36.7	30.87 37.2
		307)		308)		309)		310)

1912	20 Navis.		5 <sup>m</sup> .3.		β Cameri.		3 <sup>m</sup> .5.		31 Lyncis.		4 <sup>m</sup> .4.		ε Argus.		1 <sup>m</sup> .7.		
	AR.	Dekl.	-	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	-		
	8 <sup>h</sup> 9 <sup>m</sup>	15° 31'		8 <sup>h</sup> 11 <sup>m</sup>	9° 27'		8 <sup>h</sup> 16 <sup>m</sup>	13° 28'		8 <sup>h</sup> 20 <sup>m</sup>	59° 13'						
Jan.	1	18.13	16	12.5	25		45.50	19	31.8	12	50.34	25	17.2	8	44.30	18	18.7
	11	18.29	12	15.0	24		45.69	14	30.6	9	50.59	19	18.0	11	44.48	9	22.4
	21	18.41	7	17.4	22		45.83	9	29.7	8	50.78	12	19.1	13	44.57	0	26.2
	31	18.48	1	19.6	23		45.92	3	28.9	6	50.90	6	20.4	15	44.57	7	30.0
Febr.	10	18.49	—	21.6	—		45.95	1	28.3	—	50.96	—	21.9	15	44.50	7	33.6
	20	18.46	7	23.3	14		45.94	5	27.9	2	50.95	7	23.4	14	44.34	23	36.9
März	1	18.39	11	24.7	12		45.89	9	27.7	1	50.88	13	24.8	14	44.11	29	39.9
	11	18.28	14	25.9	8		45.80	12	27.6	1	50.75	16	26.2	12	43.82	34	42.5
	21	18.14	16	26.7	5		45.68	14	27.7	2	50.59	20	27.4	10	43.48	37	44.6
	31	17.98	16	27.2	5		45.54	15	27.9	2	50.39	20	28.4	8	43.11	39	46.3
April	10	17.82	17	27.5	1		45.39	15	28.1	3	50.19	21	29.2	5	42.72	40	47.5
	20	17.65	16	27.4	4		45.24	14	28.4	4	49.98	21	29.7	2	42.32	39	48.2
	30	17.49	14	27.0	6		45.10	12	28.8	4	49.77	18	29.9	1	41.93	38	48.3
Mai	10	17.35	12	26.4	9		44.98	10	29.2	4	49.59	15	29.8	3	41.55	36	48.0
	20	17.23	9	25.5	11		44.88	8	29.6	4	49.44	12	29.5	7	41.19	32	47.1
	30	17.14	7	24.4	14		44.80	5	30.1	5	49.32	8	28.8	9	40.87	28	45.7
Juni	9	17.07	3	23.0	15		44.75	1	30.6	5	49.24	4	27.9	10	40.59	22	43.9
	19	17.04	0	21.5	16		44.74	2	31.1	5	49.20	1	26.9	13	40.37	17	41.7
	29	17.04	3	19.9	17		44.76	5	31.6	5	49.21	6	25.6	14	40.20	12	39.1
Juli	9	17.07	6	18.2	18		44.81	5	32.1	5	49.27	10	24.2	15	40.08	32	36.3
	19	17.13	11	16.4	19		44.89	13	32.6	4	49.37	15	22.7	17	40.03	2	33.3
	29	17.24	13	14.5	17		45.02	13	33.0	3	49.52	19	21.0	17	40.05	9	29.9
Aug.	8	17.37	13	12.8	17		45.16	14	33.3	2	49.71	22	19.3	17	40.14	16	26.7
	18	17.53	19	11.3	13		45.33	20	33.5	1	49.93	26	17.6	17	40.30	23	23.8
	28	17.72	21	10.0	10		45.53	22	33.6	2	50.19	15	15.9	16	40.53	21.1	27
Sept.	7	17.93	24	9.0	7		45.75	25	33.4	3	50.49	32	14.3	17	40.81	35	18.7
	17	18.17	26	8.3	7		46.00	27	33.1	5	50.81	35	12.6	16	41.16	40	16.7
	27	18.43	28	8.0	3		46.27	27	32.6	8	51.16	38	11.0	14	41.56	43	15.2
Okt.	7	18.71	31	8.1	6		46.56	29	31.8	9	51.54	41	9.6	14	41.99	48	14.2
	17	19.02	31	8.7	10		46.86	30	30.9	12	51.95	42	8.2	12	42.47	14.0	—
	27	19.33	32	9.7	14		47.18	32	29.7	13	52.37	43	7.0	10	42.96	49	14.3
Nov.	6	19.65	32	11.1	18		47.50	28	28.4	14	52.80	43	6.0	8	43.45	49	15.4
	16	19.97	32	12.9	20		47.83	32	27.0	16	53.23	42	5.2	5	43.94	46	17.0
	26	20.28	29	14.9	24		48.15	31	25.4	15	53.65	41	4.7	2	44.40	42	19.3
Dez.	6	20.57	27	17.3	25		48.46	28	23.9	14	54.06	45	4.5	1	44.82	22.1	28
	16	20.84	23	19.8	25		48.74	25	22.5	14	54.43	34	4.6	4	45.19	30	25.2
	26	21.07	19	22.3	25		48.99	22	21.1	13	54.77	29	5.0	7	45.49	22	28.7
	36	21.26	24	24.8	25		49.21	19	19.8	—	55.06	—	5.7	—	45.71	32.5	38.8
Mittl. Ort		17.30	21.2				44.65	26.6			48.95	16.2			42.58	33.4	
		311)					312)				314)				315)		

## SCHEINBARE STERNÖRTER.

1912	Br. 1197. 3 <sup>m</sup> .6.		o Ursae maj. 3 <sup>m</sup> .3.		g Chamael. 4 <sup>m</sup> .2.		Gr. 1450. 6 <sup>m</sup> .3.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +
	8 <sup>h</sup> 21 <sup>m</sup>	3° 36'	8 <sup>h</sup> 22 <sup>m</sup>	61° 0'	8 <sup>h</sup> 23 <sup>m</sup>	77° 11'	8 <sup>h</sup> 27 <sup>m</sup>	38° 18'
Jan.								
1	16.63	18	60.5	19	22.26	24	46.8	25
11	16.81	14	62.4	18	22.50	5	50.6	19
21	16.95	9	64.2	15	22.55	14	54.4	38
31	17.04	4	65.7	14	22.41	31	58.2	13
Febr.	10	17.08	1	67.1	12	22.10	61.8	70.3
	20	17.07	5	68.3	9	21.61	65.3	71.3
März	1	17.02	9	69.2	7	20.98	68.5	72.4
	11	16.93	12	69.9	4	20.21	71.4	74.9
	21	16.81	14	70.3	2	19.34	73.8	76.1
	31	16.67	14	70.5	1	18.40	75.8	77.3
April	10	16.52	15	70.6	2	17.39	103	79.0
	20	16.37	14	70.4	4	16.36	103	79.6
	30	16.23	15	70.0	5	15.33	102	79.9
Mai	10	16.10	11	69.5	6	14.31	96	80.0
	20	15.99	8	68.9	8	13.35	77.9	80.2
	30	15.91	6	68.1	10	12.44	81	79.4
Juni	9	15.85	3	67.1	10	11.63	71	78.8
	19	15.82	—	66.1	11	10.92	73.1	78.0
	29	15.83	1	65.0	11	10.34	70.7	77.0
Juli	9	15.86	3	63.9	12	9.89	68.0	75.9
	19	15.92	10	62.7	12	9.60	65.0	74.7
	29	16.02	13	61.5	10	9.47	61.5	73.2
Aug.	8	16.15	13	60.5	9	9.52	58.3	71.8
	18	16.30	15	59.6	7	9.74	55.2	70.3
	28	16.48	21	58.9	5	10.13	52.3	68.8
Sept.	7	16.69	23	58.4	2	10.67	68	67.2
	17	16.92	26	58.2	1	11.35	81	65.7
	27	17.18	27	58.3	5	12.16	91	64.1
Okt.	7	17.45	30	58.8	5	13.07	98	62.6
	17	17.75	31	59.5	7	14.05	100	61.2
	27	18.06	60.6	62.15	61	15.05	100	59.9
Nov.	6	18.37	31	62.0	14	16.05	101	58.7
	16	18.69	32	63.6	16	17.06	91	57.7
	26	19.01	30	65.5	19	17.97	81	56.9
Dez.	6	19.31	27	67.5	20	18.78	68	56.3
	16	19.58	25	69.5	21	19.46	52	56.1
	26	19.83	21	71.6	20	19.98	57.2	56.2
	36	20.04	27	73.6	20	20.32	60.8	56.5
Mittl. Ort	15.85	67.5	57.79	47.9	17.82	63.2	11.99	68.2
	316)		317)		318)		320)	

1912	$\eta$ Cancri.	5 <sup>m</sup> .6.	$\delta$ Cancri.	3 <sup>m</sup> .9.	$\alpha$ Pyxidis.	3 <sup>m</sup> .7.	$\iota$ Cancri.	4 <sup>m</sup> .1.
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +
	8 <sup>h</sup> 27 <sup>m</sup>	20° 44'	8 <sup>h</sup> 39 <sup>m</sup>	18° 28'	8 <sup>h</sup> 40 <sup>m</sup>	32° 51'	8 <sup>h</sup> 41 <sup>m</sup>	29° 4'
Jan.								
1	38.24	22	29.9	6	42.04	22	45.0	7
11	38.46	17	29.3	3	42.26	18	44.3	5
21	38.63	11	29.0	1	42.44	12	43.8	3
31	38.74	6	28.9	1	42.56	7	43.5	1
Febr.	10	38.80	29.0		42.63	2	43.4	
20	38.81	4	29.2	4	42.65	2	43.5	3
März	1	38.77	8	29.6	5	42.63	8	43.8
11	38.69	12	30.1	5	42.55	10	44.2	4
21	38.57	14	30.6	5	42.45	13	44.6	5
31	38.43	15	31.1	5	42.32	11	45.1	
April	10	38.28	15	31.6	4	42.18	15	45.6
20	38.13	15	32.0	4	42.03	14	46.0	4
Mai	10	37.98	13	32.4	3	41.89	14	46.4
20	37.85	11	32.7	3	41.75	11	46.8	3
30	37.74	9	33.0		41.64	9	47.1	
Juni	10	37.65	5	33.1	1	41.55	6	47.3
19	37.60	2	33.2	0	41.49	3	47.5	1
29	37.58	0	33.2	1	41.46	1	47.6	0
Juli	10	37.58	5	33.1	2	41.45	3	47.6
19	37.63	7	32.9	2	41.48	6	47.6	2
29	37.70	12	32.7	3	41.54	10	47.4	2
Aug.	8	37.82	14	32.4	4	41.64	13	47.2
18	37.96	17	32.0	5	41.77	16	46.9	4
28	38.13	19	31.5	6	41.93	18	46.5	6
30	38.32	22	30.9		42.11	21	45.9	
Sept.	7	38.54	25	30.2	9	42.32	23	45.2
17	38.79	28	29.3	9	42.55	26	44.4	10
Okt.	7	39.07	30	28.4	11	42.81	29	43.4
17	39.37	31	27.3	12	43.10	31	42.3	13
27	39.68	33	26.1		43.41	41	41.0	
27	40.01	24.8			43.73	34	39.7	14
Nov.	6	40.36	35	23.5	13	44.07	38	3.3
16	40.71	35	22.2	13	44.42	35	36.8	15
26	41.05	34	20.9	12	44.76	34	35.4	14
Dez.	6	41.38	33	19.7	11	45.10	34	34.1
16	41.69	29	18.6	9	45.41	32	32.8	11
26	41.98	24	17.7	7	45.70	31	31.7	8
36	42.22	17	17.0		45.94	30	30.9	
Mitt. Ort		37.33	26.7		41.18	42.0	3.34	67.2

## SCHEINBARE STERNÖRTER.

1912	δ Argus.		γ Hydræ.		ζ Carinae.		η Ursæ maj.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	8 <sup>h</sup> 42 <sup>m</sup>	54° 22'	8 <sup>h</sup> 50 <sup>m</sup>	6° 16'	8 <sup>h</sup> 53 <sup>m</sup>	60° 18'	8 <sup>h</sup> 53 <sup>m</sup>	48° 22'
Jan.								
I	17.73	21	53.7	37	45.33	22	56.5	14
II	17.94	14	57.4	37	45.55	18	55.1	13
21	18.08	6	61.1	37	45.73	12	53.8	11
31	18.14	2	64.8	36	45.85	7	52.7	8
Febr.	18.12	9	68.4	34	45.92	3	51.9	7
20	18.03	15	71.8	31	45.95	2	51.2	4
März	17.88	22	74.9	27	45.93	6	50.8	2
II	17.66	25	77.6	23	45.87	10	50.6	1
21	17.41	29	79.9	19	45.77	11	50.5	1
31	17.12	32	81.8	14	45.66	14	50.6	2
April	16.80	33	83.2	9	45.52	14	50.8	3
20	16.47	33	84.1	3	45.38	14	51.1	4
30	16.14	32	84.4	1	45.24	12	51.5	4
Mai	15.82	30	84.3	7	45.12	11	51.9	4
20	15.52	27	83.6	11	45.01	10	52.3	5
30	15.25	25	82.5	15	44.91	6	52.8	6
Juni	15.00	20	81.0	20	44.85	4	53.4	6
19	14.80	15	79.0	23	44.81	1	54.0	6
29	14.65	11	76.7	26	44.80	1	54.6	6
Juli	14.54	6	74.1	28	44.81	4	55.2	6
19	14.48	0	71.3	30	44.85	8	55.8	5
29	14.48	6	68.3	33	44.93	11	56.3	4
Aug.	14.54	12	65.0	29	45.04	13	56.7	2
18	14.66	18	62.1	27	45.17	16	56.9	1
28	14.84	24	59.4	24	45.33	19	57.0	0
Sept.	15.08	29	57.0	21	45.52	22	57.0	3
17	15.37	33	54.9	15	45.74	24	56.7	6
27	15.70	38	53.4	11	45.98	26	56.1	8
Okt.	16.08	42	52.3	4	46.24	29	55.3	10
17	16.50	44	51.9	2	46.53	31	54.3	13
27	16.94	52.1	52.1	9	46.84	32	53.0	14
Nov.	17.39	45	53.0	15	47.16	33	51.6	17
16	17.84	45	54.5	21	47.49	33	49.9	17
26	18.28	44	56.6	26	47.82	33	48.2	17
Dez.	18.69	41	59.2	37	48.14	32	46.5	18
16	19.06	31	62.2	30	48.44	28	44.7	17
26	19.37	25	65.6	34	48.72	24	43.0	16
36	19.62	37	69.3	37	48.96	41.4	41.4	37
Mittl. Ort	16.43	69.0	44.60	51.7	3.26	28.8	11.34	76.2
			330)	334)	336)		335)	

# SCHEINBARE STERNÖRTER.

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1912	$\alpha$ Cancer. 4 <sup>m</sup> .1.		10 Ursae maj. 3 <sup>m</sup> .9.		$\gamma$ Ursae maj. 3 <sup>m</sup> .3.		$\alpha$ Volantis. 4 <sup>m</sup> .1.		
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	
	8 <sup>h</sup> 53 <sup>m</sup>	12° 11'	8 <sup>h</sup> 54 <sup>m</sup>	42° 7'	8 <sup>h</sup> 57 <sup>m</sup>	47° 30'	9 <sup>h</sup> 0 <sup>m</sup>	66° 2'	
Jan.									
1	41.33	23	59.9	12	57.24	30	53.2	6	
11	41.56	19	58.7	9	57.54	23	53.8	8	
21	41.75	13	57.8	7	57.77	17	54.6	11	
31	41.88	8	57.1	5	57.94	10	55.7	13	
Febr.	10		56.6		58.04		57.0		
	20	3	3	4	4	15	4	17	
März	1	41.99	2	56.3	1	58.08	3	58.5	15
	11	41.97	6	56.2	1	58.05	8	60.0	15
	21	41.91	9	56.3	2	57.97	13	61.5	14
	31	41.82	11	56.5	2	57.84	16	62.9	12
April	10	41.71	14	56.7		57.68		64.1	
	20	41.57	14	57.1	4	57.50	20	65.2	8
	30	41.43	14	57.5	4	57.30	20	66.0	5
Mai	10	41.29	13	57.9	5	57.10	19	66.5	2
	20	41.16	11	58.4	4	56.91	17	66.7	0
	30	41.05	9	58.8		56.74		66.7	
Juni	9	40.96	7	59.2	4	56.60	10	66.3	6
	19	40.89	4	59.6	3	56.50	7	65.7	8
	29	40.85	1	59.9	4	56.43	3	64.9	11
Juli	9	40.84	1	60.3	2	56.40	0	63.8	13
	19	40.85	5	60.5		56.40		62.5	
	29	40.90	7	60.7	2	56.45	9	61.1	16
Aug.	8	40.97	12	60.9	0	56.54	14	59.5	19
	18	41.09	13	60.9	1	56.68	17	57.6	18
	28	41.22	16	60.8	3	56.85	20	55.8	19
	30	41.38	16	60.5		57.05		53.9	
Sept.	7	41.57	22	60.1	6	57.30	27	52.0	19
	17	41.79	25	59.5	7	57.57	32	50.1	19
Okt.	7	42.04	27	58.8	10	57.89	34	48.2	19
	17	42.31	27	57.8	12	58.23	34	46.3	18
	27	42.60	31	56.6		58.60		44.5	16
Nov.	6	42.91	33	55.2	14	59.00	41	42.9	15
	16	43.24	33	53.8	16	59.41	43	41.4	12
	26	43.58	34	52.2	16	59.84	42	40.2	10
Dez.	6	43.91	33	50.6	17	60.26	42	39.2	7
	16	44.24	33	48.9	15	60.68	40	38.5	4
	26	44.55	29	47.4	15	61.08	36	38.1	0
	36	44.84	25	45.9	12	61.44	32	38.1	4
Mitt. Ort		45.09		44.7		61.76		38.5	

337)

339)

341)

343)

## SCHEINBARE STERNÖRTER.

1912	σ² Ursae maj. 4 <sup>m</sup> .9.		λ Argus. 2 <sup>m</sup> .1.		δ Hydræ. 3 <sup>m</sup> .9.		β Argus. 1 <sup>m</sup> .7.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. -
	9 <sup>h</sup> 2 <sup>m</sup>	67° 29'	9 <sup>h</sup> 4 <sup>m</sup>	43° 4'	9 <sup>h</sup> 9 <sup>m</sup>	2° 40'	9 <sup>h</sup> 12 <sup>m</sup>	69° 20'
Jan.								
I	42.94	51	29.4	17	46.30	22	47.87	74.9
II	43.45	39	31.1	21	46.52	17	48.10	73.2
II	43.84	28	33.2	23	46.69	11	48.30	71.6
III	44.12	16	35.5	26	46.80	4	48.44	70.3
Febr.	44.28	4	38.1	26	46.84	1	48.53	69.1
	44.32	8	40.7	25	46.83	7	48.57	68.3
März	44.24	19	43.2	24	46.76	13	48.56	67.6
II	44.05	28	45.6	22	46.63	16	48.52	67.1
II	43.77	35	47.8	19	46.47	19	48.44	66.9
III	43.42	40	49.7	14	46.28	22	48.33	66.8
April	43.02	51.1	51.1	10	46.06	23	48.21	66.9
II	42.58	44	52.1	5	45.83	23	48.08	67.1
III	42.14	44	52.6	0	45.60	51.2	47.94	67.4
Mai	41.71	43	52.6	0	45.37	22	47.82	67.8
II	41.30	41	52.1	5	45.15	20	47.71	68.3
III	40.94	30	51.2	14	44.95	17	47.61	68.9
Juni	40.64	24	49.8	18	44.78	14	47.53	69.5
II	40.40	16	48.0	21	44.64	12	47.48	70.2
II	40.24	8	45.9	24	44.52	8	47.45	70.9
Juli	40.16	0	43.5	26	44.44	3	47.45	71.6
II	40.16	8	40.9	28	44.41	0	47.48	72.3
Aug.	40.24	18	38.1	32	44.41	5	47.53	72.9
II	40.42	26	34.9	6	44.46	5	47.62	73.5
II	40.68	33	31.9	30	44.55	9	47.73	73.9
II	41.01	40	28.9	28	44.69	14	47.87	74.1
Sept.	41.41	48	26.1	28	44.87	22	48.04	74.2
II	41.89	23.3	25.4	26	45.09	27	48.24	74.0
II	42.43	60	20.7	24	45.36	24.0	48.47	73.6
Okt.	43.03	65	18.3	21	45.67	31	48.72	72.9
II	43.68	70	16.2	21	46.00	22.7	49.00	71.9
II	44.38	14.5	14.5	14	46.37	37	49.29	70.7
Nov.	45.10	72	13.1	9	46.75	38	49.61	69.2
II	45.85	75	12.2	4	47.14	39	49.94	67.5
II	46.60	72	11.8	0	47.53	37	50.27	65.6
Dez.	47.32	69	11.8	5	47.90	29.6	50.60	63.7
	48.01	63	12.3	10	48.24	34	50.91	61.7
	48.64	55	13.3	15	48.55	26	51.20	59.8
	49.19	14.8	14.8	15	48.81	39.1	51.45	58.0
Mittl. Ort	39.95	33.7	45.46	36.7	47.22	69.7	14.33	76.5
	344)		345)		347)		348)	

1912	83 Canceris.		6 <sup>m</sup> .7.		40 Lynonis.		3 <sup>m</sup> .2.		z Argus.		2 <sup>m</sup> .5.		α Hydræ.		2 <sup>m</sup> .0.			
			AR.		Dekl. +		AR.		Dekl. +		AR.		Dekl. -		AR.		Dekl. -	
	9 <sup>h</sup> 14 <sup>m</sup>	18° 4'	9 <sup>h</sup> 15 <sup>m</sup>	34° 45'	9 <sup>h</sup> 19 <sup>m</sup>	54° 37'	9 <sup>h</sup> 23 <sup>m</sup>	8° 16'										
Jan.	1	5.09 25	46.0 9	42.90 29	53.4 1	24.22 27	47.2 36	16.37 23	28.6 23									
	11	5.34 21	45.1 7	43.19 24	53.3 3	24.49 21	50.8 37	16.60 20	30.9 22									
	21	5.55 16	44.4 4	43.43 19	53.6 7	24.70 12	54.5 38	16.80 15	33.1 20									
Febr.	10	5.71 11	44.0 2	43.62 12	54.3 8	24.82 5	58.3 37	16.95 9	35.1 18									
	20	5.82 5	43.8 1	43.74 6	55.1 10	24.87 2	62.0 36	17.04 5	36.9 15									
März	1	5.87 1	43.9 2	43.80 0	56.1 12	24.85 9	65.6 33	17.09 1	38.4 13									
	11	5.88 4	44.1 4	43.80 5	57.3 12	24.76 16	68.9 31	17.10 4	39.7 11									
	21	5.84 8	44.5 4	43.75 9	58.5 13	24.60 20	72.0 26	17.06 8	40.8 8									
	31	5.76 11	44.9 6	43.66 13	59.8 11	24.40 25	74.6 23	16.98 10	41.6 6									
April	10	5.52 13	46.1 5	43.38 17	62.0 9	23.87 30	78.7 14	16.76 13	42.5 1									
	20	5.39 14	46.6 5	43.21 16	62.9 6	23.57 31	80.1 8	16.63 14	42.6 1									
Mai	30	5.25 13	47.1 5	43.05 16	63.5 5	23.26 31	80.9 4	16.49 13	42.5 3									
	10	5.12 12	47.6 5	42.89 15	64.0 2	22.95 31	81.3 2	16.36 12	42.2 5									
	20	5.00 11	48.0 3	42.74 13	64.2 0	22.64 28	81.1 7	16.24 11	41.7 7									
Juni	30	4.89 8	48.3 3	42.61 10	64.2 3	22.36 26	80.4 11	16.13 8	41.0 8									
	9	4.81 5	48.6 1	42.51 8	63.9 4	22.10 23	79.3 15	16.05 7	40.2 10									
	19	4.76 5	48.7 1	42.43 4	63.5 7	21.87 20	77.8 20	15.98 5	39.2 11									
Juli	29	4.73 3	48.8 0	42.39 0	62.8 9	21.67 15	75.8 23	15.93 1	38.1 11									
	9	4.73 3	48.8 2	42.39 2	61.9 10	21.52 11	73.5 26	15.92 0	37.0 12									
	19	4.76 6	48.6 2	42.41 6	60.9 12	21.41 5	70.9 27	15.92 4	35.8 12									
Aug.	8	4.82 9	48.4 4	42.47 10	59.7 13	21.36 0	68.2 29	15.96 6	34.6 11									
	18	4.91 12	48.0 5	42.57 14	58.4 16	21.36 6	65.3 32	16.02 10	33.5 11									
	28	5.03 15	47.5 7	42.71 17	56.8 16	21.42 12	62.1 28	16.12 12	32.4 9									
Sept.	7	5.36 20	46.0 9	43.08 23	53.5 17	21.73 24	56.8 23	16.39 18	30.9 4									
	17	5.56 24	45.1 12	43.31 27	51.8 19	21.97 30	54.5 19	16.57 21	30.5 0									
Okt.	27	5.80 26	43.9 13	43.58 29	49.9 18	22.27 35	52.6 13	16.78 25	30.5 2									
	7	6.06 29	42.6 14	43.87 33	48.1 18	22.62 39	51.3 9	17.03 27	30.7 7									
	17	6.35 31	41.2 15	44.20 33	46.3 18	23.01 43	50.4 1	17.30 29	31.4 10									
	27	6.66 33	39.7 17	44.55 38	44.5 17	23.44 45	50.3 5	17.59 31	32.4 13									
Nov.	6	6.99 33	38.0 16	44.93 39	42.8 15	23.89 47	50.8 10	17.90 33	33.7 17									
	16	7.34 35	36.4 16	45.32 39	41.3 14	24.36 46	51.8 17	18.23 33	35.4 19									
Dez.	26	7.69 35	34.8 16	45.71 39	39.9 11	24.82 45	53.5 23	18.56 33	37.3 21									
	6	8.03 34	33.2 15	46.10 37	38.8 9	25.27 41	55.8 28	18.88 32	39.4 23									
	16	8.36 33	31.7 13	46.47 35	37.9 5	25.68 36	58.6 32	19.20 29	41.7 23									
	26	8.67 28	30.4 10	46.82 31	37.4 2	26.04 32	61.8 35	19.49 26	44.0 23									
	36	8.95 33	29.4 15	47.13 37	37.2 9	26.36 32	65.3 28	19.75 46.3										
Mittl. Ort		4.33	44.2	41.88	54.8	23.24	64.2	15.81	36.1									
		350)		352)		353)		354)										

## SCHEINBARE STERNÖRTER.

1912	<i>h Ursae maj. 3<sup>m</sup>.5.</i>		<i>d Ursae maj. 4<sup>m</sup>.5.</i>		<i>g Ursae maj. 3<sup>m</sup>.1.</i>		<i>ψ Argus. 3<sup>m</sup>.6.</i>	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl.
	9 <sup>h</sup> 24 <sup>m</sup>	63° 26'	9 <sup>h</sup> 26 <sup>m</sup>	70° 12'	9 <sup>h</sup> 26 <sup>m</sup>	52° 4'	9 <sup>h</sup> 27 <sup>m</sup>	40° 4'
Jan.								
I	38.66	44.7	46.62	58.1	60.31	39.6	14.60	37.0
II	39.14	48	46.0	59.7	60.69	40.3	14.86	40.3
II	39.54	40	47.7	61.7	61.00	41.5	15.05	43.8
III	39.83	29	47.7	61.7	61.24	43.0	15.19	47.2
Febr.	40.03	20	49.8	64.1	61.40	44.8	15.27	50.5
	9	25	48.33	66.6	8	19	2	31
20	40.12	2	54.6	69.3	61.48	46.7	15.29	53.6
März	40.10	11	57.1	72.1	61.48	48.7	15.26	56.5
II	39.99	20	59.5	74.7	61.42	50.7	15.17	59.2
II	39.79	26	61.7	77.1	61.29	52.6	15.05	61.4
III	39.53	31	63.7	79.2	61.12	54.4	14.89	63.3
April	39.22	35	65.3	80.9	60.90	55.9	14.70	64.8
II	38.87	36	66.5	82.2	60.67	57.0	14.50	65.8
III	38.51	36	67.3	83.0	60.42	57.8	14.30	66.4
Mai	38.15	36	67.7	83.2	60.18	58.3	14.09	66.6
II	37.81	34	67.5	83.0	59.95	58.3	13.89	66.3
III	37.49	27	66.9	82.2	59.74	58.0	13.71	65.6
Juni	37.22	22	65.9	81.0	59.56	57.3	13.54	64.6
II	37.00	16	64.4	79.3	59.42	56.2	13.39	63.1
II	36.84	10	62.6	77.3	59.33	54.9	13.28	61.3
Juli	36.74	3	60.4	75.0	59.28	53.2	13.19	59.3
II	36.71	4	58.0	72.3	59.27	51.3	13.14	57.0
II	36.75	10	55.4	69.4	59.31	49.2	13.12	54.6
Aug.	36.85	11	52.7	66.4	59.39	46.9	13.14	52.1
II	37.04	19	49.5	62.9	59.54	44.2	13.22	49.5
II	37.28	24	46.5	59.7	59.73	41.7	13.32	47.2
Sept.	37.58	30	43.6	56.6	59.96	39.2	13.48	45.0
II	37.95	37	44.52	53.6	60.24	36.6	13.67	43.1
II	38.39	44	40.7	53.6	60.56	34.2	13.91	41.7
Okt.	38.87	48	38.0	50.6	60.92	31.7	14.19	40.7
II	39.41	54	35.4	48.0	61.33	29.5	14.50	40.2
II	39.59	59	33.0	45.6	44	21	34	1
Nov.	40.00	62	31.0	47.58	61.77	27.4	14.84	40.3
II	40.62	29.3	48.37	43.5	62.24	25.6	15.21	41.0
II	41.26	64	28.0	41.8	62.73	24.1	15.59	42.3
II	41.91	65	27.1	50.01	63.22	22.9	15.98	44.1
Dez.	42.56	62	26.7	50.83	63.71	22.2	16.35	46.4
II	43.18	57	26.8	51.61	64.19	21.8	16.70	49.0
II	43.75	52	27.4	52.34	64.64	21.9	17.02	52.1
II	44.27	28.5	28.5	53.00	65.05	22.4	17.30	55.4
Mittl. Ort	36.27	50.4	43.30	64.6	58.75	44.3	13.96	51.7
	355)		357)		358)		359)	

1912	το Leon. min. 4 <sup>m</sup> .6.		θ Antliae. 5 <sup>m</sup> .0.		ε Leonis. 3 <sup>m</sup> .0.		υ Ursae maj. 3 <sup>m</sup> .8.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	9 <sup>h</sup> 28 <sup>m</sup>	36° 47'	9 <sup>h</sup> 40 <sup>m</sup>	27° 21'	9 <sup>h</sup> 40 <sup>m</sup>	24° 10'	9 <sup>h</sup> 44 <sup>m</sup>	59° 26'
Jan.								
1	51.24	17.2	17.17	25	46.2	28	47.0	7
11	51.55	17.2	17.42	21	49.2	30	52.57	4
21	51.81	17.6	17.63	16	52.2	30	52.82	2
31	52.01	18.2	17.79	10	55.2	28	53.01	14
Febr.	10	52.15	19.2	17.89	5	58.0	15	45.8
20	52.23	20.3	17.94	1	60.6	24	53.23	3
März	1	52.24	21.6	17.95	5	63.0	21	53.26
11	52.21	23.0	17.90	8	65.1	19	53.25	6
21	52.13	24.4	17.82	12	67.0	14	53.19	9
31	52.01	25.6	17.71	11	68.4	10	53.10	49.2
April	10	51.86	26.8	17.58	16	69.5	8	50.1
20	51.70	27.8	17.42	15	70.3	4	52.85	14
Mai	30	51.53	28.6	17.27	16	70.7	1	52.71
10	51.36	29.1	17.11	11	70.8	3	52.58	5
20	51.20	29.4	16.96	15	70.5	13	52.45	52.7
Juni	30	51.06	29.5	16.82	13	69.8	9	52.33
9	50.95	29.2	16.69	11	68.9	12	52.24	8
19	50.87	28.7	16.58	8	67.7	15	52.16	5
Juli	29	50.81	28.0	16.50	6	66.2	17	52.11
9	50.79	27.1	16.44	5	64.5	18	52.09	52.6
19	50.80	26.0	16.41	1	62.7	19	52.10	5
Aug.	29	50.85	24.6	16.40	3	60.8	20	52.13
8	50.93	23.2	16.43	7	58.8	22	52.19	10
18	51.06	21.4	16.50	10	56.6	15	52.29	49.8
28	51.21	19.6	16.60	13	54.8	18	52.42	48.7
Sept.	7	51.40	17.8	16.73	17	53.2	13	52.57
17	51.62	15.8	16.90	21	51.9	10	52.76	22
Okt.	27	51.88	13.9	17.11	24	50.9	5	52.98
7	52.17	11.9	17.35	28	50.4	2	53.23	28
17	52.50	9.9	17.63	30	50.2	4	53.51	41.2
27	52.85	8.0	17.93	33	50.6	9	53.82	39.4
Nov.	6	53.23	6.1	18.26	34	51.5	14	54.16
16	53.62	4.5	18.60	36	52.9	18	54.51	35
26	54.02	3.0	18.96	35	54.7	22	54.87	34.1
Dez.	6	54.43	1.8	19.31	35	56.9	26	55.23
16	54.82	0.9	19.64	31	59.5	28	55.59	31.0
26	55.18	0.4	19.95	28	62.3	30	55.92	29.8
36	55.51	0.2	20.23	23	65.3	26	56.23	28.9
Mitt. Ort	50.22	19.8	16.69	58.3	51.54	47.6	44.57	71.7
	360)		366)		367)		368)	

## SCHEINBARE STERNÖRTER.

1912	υ Argus. 3 <sup>m</sup> .0.		6 Sextantis. 6 <sup>m</sup> .2.		Gr. 1586. 6 <sup>m</sup> .3.		π Leonis. 4 <sup>m</sup> .9.	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +
	9 <sup>h</sup> 44 <sup>m</sup>	64° 39'	9 <sup>h</sup> 46 <sup>m</sup>	3° 49'	9 <sup>h</sup> 50 <sup>m</sup>	73° 17'	9 <sup>h</sup> 55 <sup>m</sup>	8° 27'
Jan.	55.24	29.3	48.47	25	43.9	21	36.26	15
	55.62	38	48.72	22	46.0	20	37.00	19
	55.90	38	48.94	18	48.0	18	37.63	23
	56.09	39	49.12	12	49.8	16	38.12	23
Febr.	56.18	9	49.24	8	51.4	14	38.45	26
	56.18	○	49.32	3	52.8	11	38.63	28
	56.10	19	49.35	2	53.9	9	38.65	28
März	55.91	25	49.33	5	54.8	6	38.53	26
	55.66	31	49.28	8	55.4	4	38.26	21
	55.34	32	49.20	10	55.8	2	37.88	21
	54.98	36	49.10	12	56.0	0	37.41	19
April	54.58	40	48.98	13	56.0	1	36.86	15
	54.16	42	48.85	12	55.9	3	36.27	11
	53.72	44	48.73	11	55.6	5	35.67	6
Mai	53.28	44	48.62	11	55.1	6	35.07	5
	52.85	43	48.51	9	54.5	7	34.50	5
	52.44	41	48.42	7	53.8	8	33.98	10
Juni	52.07	37	48.35	7	53.0	8	33.53	16
	51.73	34	48.30	5	52.2	9	33.15	19
	51.44	29	48.27	3	51.3	9	32.87	23
Juli	51.22	17	48.26	2	50.4	9	32.68	29
	51.05	29	48.28	4	49.5	8	32.59	2
	50.96	9	48.32	8	48.7	8	32.61	32
Aug.	50.95	1	48.40	10	47.9	6	32.75	33
	51.03	8	48.50	13	47.3	3	33.00	18
	51.19	25	48.63	16	47.0	1	33.35	46
Sept.	51.44	34	48.79	19	46.9	1	33.81	56
	51.78	34	48.98	23	47.0	5	34.37	31
	52.19	41	49.21	25	47.5	8	35.00	30
Okt.	52.66	47	49.46	28	48.3	11	35.73	28
	53.19	53	49.4	7	49.4	21	35.44	24
	53.76	57	49.74	31	49.4	14	36.55	87
Nov.	54.36	60	50.05	32	50.8	17	37.42	91
	54.95	59	50.37	34	52.5	19	38.33	95
	55.53	55	50.71	33	54.4	21	39.28	5
Dez.	56.08	42	51.36	31	58.6	22	41.15	87
	56.57	49	51.67	27	60.8	22	42.02	80
	56.99	42	51.94	27	63.0	22	42.82	28.7
Mittl. Ort	54.17	48.7	48.00	50.0	32.45	54.9	33.88	60.6

1912	$\eta$ Leonis. 3 <sup>m</sup> .4.		$\alpha$ Leonis. 1 <sup>m</sup> .3.		$\lambda$ Hydrac. 3 <sup>m</sup> .7.		$\eta$ Velorum. 3 <sup>m</sup> .9.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -
	10 <sup>h</sup> 2 <sup>m</sup>	17° 11'	10 <sup>h</sup> 3 <sup>m</sup>	12° 23'	10 <sup>h</sup> 6 <sup>m</sup>	11° 54'	10 <sup>h</sup> 11 <sup>m</sup>	41° 40'
Jan.								
I	32.79 <sup>8</sup> 33.08 <sup>29</sup>	31.9 <sup>12</sup>	41.74 <sup>28</sup>	52.9 <sup>15</sup>	18.22 <sup>27</sup>	59.5 <sup>25</sup>	2.68 <sup>30</sup>	52.3 <sup>33</sup>
II	33.08 <sup>25</sup>	30.7 <sup>9</sup>	42.02 <sup>25</sup>	51.4 <sup>12</sup>	18.49 <sup>24</sup>	62.0 <sup>24</sup>	2.98 <sup>25</sup>	55.6 <sup>33</sup>
21	33.33 <sup>20</sup>	29.8 <sup>7</sup>	42.27 <sup>20</sup>	50.2 <sup>9</sup>	18.73 <sup>19</sup>	64.4 <sup>22</sup>	3.23 <sup>20</sup>	58.9 <sup>34</sup>
31	33.53 <sup>16</sup>	29.1 <sup>4</sup>	42.47 <sup>15</sup>	49.3 <sup>7</sup>	18.92 <sup>14</sup>	66.6 <sup>21</sup>	3.43 <sup>14</sup>	62.3 <sup>34</sup>
Febr.	33.69 <sup>10</sup>	28.7 <sup>1</sup>	42.62 <sup>10</sup>	48.6 <sup>4</sup>	19.06 <sup>9</sup>	68.7 <sup>19</sup>	3.57 <sup>8</sup>	65.7 <sup>34</sup>
20	33.79 <sup>5</sup>	28.6 <sup>2</sup>	42.72 <sup>5</sup>	48.2 <sup>2</sup>	19.15 <sup>4</sup>	70.6 <sup>16</sup>	3.65 <sup>3</sup>	69.1 <sup>31</sup>
März	33.84 <sup>1</sup>	28.8 <sup>3</sup>	42.77 <sup>1</sup>	48.0 <sup>1</sup>	19.19 <sup>0</sup>	72.2 <sup>14</sup>	3.68 <sup>3</sup>	72.2 <sup>30</sup>
II	33.85 <sup>4</sup>	29.1 <sup>5</sup>	42.78 <sup>4</sup>	48.1 <sup>2</sup>	19.19 <sup>4</sup>	73.6 <sup>11</sup>	3.65 <sup>7</sup>	75.2 <sup>25</sup>
21	33.81 <sup>6</sup>	29.6 <sup>6</sup>	42.74 <sup>7</sup>	48.3 <sup>4</sup>	19.15 <sup>7</sup>	74.7 <sup>9</sup>	3.58 <sup>12</sup>	77.7 <sup>22</sup>
31	33.75 <sup>10</sup>	30.2 <sup>7</sup>	42.67 <sup>9</sup>	48.7 <sup>5</sup>	19.08 <sup>9</sup>	75.6 <sup>6</sup>	3.46 <sup>14</sup>	79.9 <sup>19</sup>
April	33.65 <sup>11</sup>	30.9 <sup>7</sup>	42.58 <sup>10</sup>	49.2 <sup>5</sup>	18.99 <sup>11</sup>	76.2 <sup>3</sup>	3.32 <sup>17</sup>	81.8 <sup>15</sup>
20	33.54 <sup>12</sup>	31.6 <sup>7</sup>	42.48 <sup>12</sup>	49.7 <sup>6</sup>	18.88 <sup>12</sup>	76.5 <sup>1</sup>	3.15 <sup>19</sup>	83.3 <sup>10</sup>
30	33.42 <sup>13</sup>	32.3 <sup>6</sup>	42.36 <sup>12</sup>	50.3 <sup>6</sup>	18.76 <sup>12</sup>	76.6 <sup>1</sup>	2.96 <sup>19</sup>	84.3 <sup>7</sup>
Mai	33.29 <sup>12</sup>	32.9 <sup>5</sup>	42.24 <sup>12</sup>	50.9 <sup>5</sup>	18.64 <sup>12</sup>	76.5 <sup>3</sup>	2.77 <sup>20</sup>	85.0 <sup>2</sup>
20	33.17 <sup>10</sup>	33.4 <sup>5</sup>	42.12 <sup>10</sup>	51.4 <sup>5</sup>	18.52 <sup>11</sup>	76.2 <sup>5</sup>	2.57 <sup>19</sup>	85.2 <sup>2</sup>
30	33.07 <sup>10</sup>	33.9 <sup>4</sup>	42.02 <sup>9</sup>	51.9 <sup>5</sup>	18.41 <sup>11</sup>	75.7 <sup>7</sup>	2.38 <sup>18</sup>	85.0 <sup>6</sup>
Juni	32.97 <sup>8</sup>	34.3 <sup>2</sup>	41.93 <sup>8</sup>	52.4 <sup>4</sup>	18.30 <sup>9</sup>	75.0 <sup>9</sup>	2.20 <sup>16</sup>	84.4 <sup>11</sup>
19	32.89 <sup>6</sup>	34.5 <sup>2</sup>	41.85 <sup>6</sup>	52.8 <sup>3</sup>	18.21 <sup>7</sup>	74.1 <sup>10</sup>	2.04 <sup>15</sup>	83.3 <sup>15</sup>
29	32.83 <sup>3</sup>	34.7 <sup>1</sup>	41.79 <sup>4</sup>	53.1 <sup>2</sup>	18.14 <sup>5</sup>	73.1 <sup>11</sup>	1.89 <sup>12</sup>	81.8 <sup>16</sup>
Juli	32.80 <sup>3</sup>	34.8 <sup>1</sup>	41.75 <sup>1</sup>	53.3 <sup>2</sup>	18.09 <sup>3</sup>	72.0 <sup>12</sup>	1.77 <sup>10</sup>	80.2 <sup>20</sup>
19	32.78 <sup>1</sup>	34.7 <sup>3</sup>	41.74 <sup>1</sup>	53.5 <sup>0</sup>	18.06 <sup>0</sup>	70.8 <sup>12</sup>	1.67 <sup>6</sup>	78.2 <sup>22</sup>
29	32.79 <sup>1</sup>	34.4 <sup>3</sup>	41.75 <sup>3</sup>	53.5 <sup>1</sup>	18.06 <sup>2</sup>	69.6 <sup>12</sup>	1.61 <sup>4</sup>	76.0 <sup>23</sup>
Aug.	32.83 <sup>1</sup>	34.0 <sup>4</sup>	41.78 <sup>3</sup>	53.4 <sup>3</sup>	18.08 <sup>4</sup>	68.4 <sup>11</sup>	1.57 <sup>1</sup>	73.7 <sup>24</sup>
18	32.90 <sup>7</sup>	33.5 <sup>5</sup>	41.85 <sup>7</sup>	53.1 <sup>5</sup>	18.12 <sup>9</sup>	67.3 <sup>11</sup>	1.58 <sup>6</sup>	71.3 <sup>26</sup>
28	33.00 <sup>10</sup>	32.7 <sup>8</sup>	41.95 <sup>10</sup>	52.6 <sup>6</sup>	18.21 <sup>11</sup>	66.2 <sup>8</sup>	1.64 <sup>10</sup>	68.7 <sup>23</sup>
Sept.	33.12 <sup>16</sup>	31.9 <sup>11</sup>	42.06 <sup>16</sup>	52.0 <sup>8</sup>	18.32 <sup>14</sup>	65.4 <sup>5</sup>	1.74 <sup>15</sup>	66.4 <sup>20</sup>
17	33.28 <sup>19</sup>	30.8 <sup>13</sup>	42.22 <sup>18</sup>	51.2 <sup>10</sup>	18.46 <sup>17</sup>	64.9 <sup>3</sup>	1.89 <sup>20</sup>	64.4 <sup>16</sup>
27	33.47 <sup>23</sup>	29.5 <sup>15</sup>	42.40 <sup>22</sup>	50.2 <sup>13</sup>	18.63 <sup>21</sup>	64.6 <sup>1</sup>	2.09 <sup>24</sup>	62.8 <sup>13</sup>
Okt.	33.70 <sup>25</sup>	28.0 <sup>16</sup>	42.62 <sup>25</sup>	48.9 <sup>14</sup>	18.84 <sup>24</sup>	64.7 <sup>4</sup>	2.33 <sup>29</sup>	61.5 <sup>8</sup>
17	33.95 <sup>29</sup>	26.4 <sup>17</sup>	42.87 <sup>28</sup>	47.5 <sup>16</sup>	19.08 <sup>28</sup>	65.1 <sup>9</sup>	2.62 <sup>32</sup>	60.7 <sup>3</sup>
27	34.24 <sup>31</sup>	24.7 <sup>19</sup>	43.15 <sup>30</sup>	45.9 <sup>18</sup>	19.36 <sup>30</sup>	66.0 <sup>12</sup>	2.94 <sup>36</sup>	60.4 <sup>2</sup>
Nov.	34.55 <sup>22.8</sup>	22.8 <sup>19</sup>	43.45 <sup>33</sup>	44.1 <sup>19</sup>	19.66 <sup>32</sup>	67.2 <sup>15</sup>	3.30 <sup>39</sup>	60.6 <sup>9</sup>
16	34.88 <sup>33</sup>	20.9 <sup>20</sup>	43.78 <sup>33</sup>	42.2 <sup>19</sup>	19.98 <sup>34</sup>	68.7 <sup>18</sup>	3.69 <sup>39</sup>	61.5 <sup>14</sup>
26	35.23 <sup>35</sup>	18.9 <sup>18</sup>	44.12 <sup>35</sup>	40.3 <sup>20</sup>	20.32 <sup>34</sup>	70.5 <sup>22</sup>	4.08 <sup>39</sup>	62.9 <sup>19</sup>
Dez.	35.58 <sup>35</sup>	17.1 <sup>18</sup>	44.47 <sup>34</sup>	38.3 <sup>18</sup>	20.66 <sup>33</sup>	72.7 <sup>23</sup>	4.48 <sup>39</sup>	64.8 <sup>24</sup>
16	35.93 <sup>33</sup>	15.3 <sup>16</sup>	44.81 <sup>32</sup>	36.5 <sup>18</sup>	20.99 <sup>31</sup>	75.0 <sup>24</sup>	4.87 <sup>36</sup>	67.2 <sup>28</sup>
26	36.26 <sup>31</sup>	13.7 <sup>13</sup>	45.13 <sup>31</sup>	34.7 <sup>16</sup>	21.30 <sup>29</sup>	77.4 <sup>25</sup>	5.23 <sup>34</sup>	70.0 <sup>31</sup>
36	36.57 <sup>31</sup>	12.4 <sup>12</sup>	45.44 <sup>31</sup>	33.1 <sup>1</sup>	21.59 <sup>29</sup>	79.9 <sup>1</sup>	5.57 <sup>31</sup>	73.1 <sup>1</sup>
Mittl. Ori	32.22	31.8	41.23	51.5	17.89	67.5	2.34	68.2

## SCHEINBARE STERNÖRTER.

1912	$\zeta$ Leonis.		$3^m.4.$		$\lambda$ Ursae maj.		$3^m.4.$		$\mu$ Ursae maj.		$3^m.o.$		Coll. Urs. maj.		$5^m.o.$			
	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	
	10 <sup>h</sup>	11 <sup>m</sup>	23° 51'	10 <sup>h</sup>	11 <sup>m</sup>	43° 20'	10 <sup>h</sup>	17 <sup>m</sup>	41° 56'	10 <sup>h</sup>	17 <sup>m</sup>	66° 0'						
Jan.																		
1	48.54	30	20.5	10	48.73	37	68.7	9	6.46	26.3	1	50.31	60	32.8	8			
11	48.84	27	19.5	6	49.10	32	68.7	3	6.84	26.2	3	50.91	51	33.6	14			
21	49.11	22	18.9	3	49.42	26	69.0	8	7.15	27	6	51.42	45	35.0	18			
31	49.33	17	18.6	0	49.68	20	69.8	12	7.42	27.1	11	51.85	32	36.8	22			
Febr.	10	49.50	18.6		49.88	71.0			7.62	28.2		52.17	20	39.0				
	20	49.62	6	18.9	6	50.02	7	72.4	16	7.76	8	16	52.37	10	41.5	26		
März	1	49.68	2	19.5	7	50.09	1	74.0	18	7.84	2	17	52.47	1	44.1	26		
11	49.70	3	20.2	9	50.10	5	75.8	18	7.86	4	17	52.46	12	46.7	26			
21	49.67	6	21.1	9	50.05	9	77.6	17	7.82	8	17	52.34	20	49.3	25			
31	49.61	10	22.0		49.96	9	79.3	17	7.74	13	16	52.14	27	51.8	21			
April	10	49.51	11	22.9	10	49.83	16	81.0	14	7.61	15	15	51.87	33	53.9	18		
	20	49.40	12	23.9	8	49.67	18	82.4	12	7.46	17	12	51.54	37	55.7	13		
	30	49.28	13	24.7	8	49.49	18	83.6	9	7.29	17	9	51.17	39	57.0	9		
Mai	10	49.15	13	25.5	6	49.31	19	84.5	6	7.12	18	6	50.78	40	57.9	5		
	20	49.02	12	26.1		49.12	85.1			6.94	16	3	50.38	39	58.4	1		
	30	48.90	10	26.6		48.95	15	85.3	1	6.78	16	0	49.99	36	58.3	5		
Juni	9	48.80	9	26.9	3	48.80	14	85.2	5	6.62	13	3	49.63	33	57.8	10		
19	48.71	7	27.0	1	48.66	10	84.7	7	6.49	10	6	49.30	28	56.8	15			
29	48.64	7	26.9	2	48.56	8	84.0	10	6.39	8	10	49.02	22	55.3	19			
Juli	9	48.59	5	26.7		48.48	83.0			6.31	4	13	48.80	16	53.4	23		
	19	48.57	0	26.3	6	48.44	1	81.6	16	6.27	2	15	48.64	10	51.1	25		
	29	48.57	3	25.7	8	48.43	2	80.0	18	6.25	2	17	48.54	2	48.6	29		
Aug.	8	48.60	3	24.9	10	48.45	6	78.2	20	6.27	5	19	48.52	4	45.7	30		
	18	48.66	6	23.9		48.51	11	76.2	24	6.32	10	24	48.56	12	42.7	35		
	28	48.76	10	22.7	12	48.62	73.8	24	25	6.42	13	23	48.68	20	39.2	33		
Sept.	7	48.88	15	21.5	15	48.76	19	71.4	24	6.55	17	24	48.88	27	35.9	33		
	17	49.03	19	20.0	16	48.95	22	69.0	25	6.72	22	25	49.15	34	32.6	32		
	27	49.22	23	18.4	18	49.17	27	66.5	26	6.94	25	25	49.49	41	29.4	32		
Okt.	7	49.45	25	16.6	20	49.44	33	63.9	25	7.19	30	25	49.90	49	26.2	29		
	17	49.70	29	14.6	20	49.75	61.4			7.49	19.4	24	50.39	55	23.3	28		
	27	49.99	32	12.6	20	50.09	38	59.0	23	7.83	37	24	50.94	60	20.5	24		
Nov.	6	50.31	10.6			50.47	41	56.7	21	8.20	14.6	21	51.54	65	18.1	20		
	16	50.65	34	8.6		50.88	43	54.6	18	8.59	12.5	19	52.19	69	16.1	16		
	26	51.01	36	6.6		51.31	43	52.8	15	9.01	10.6	16	52.88	69	14.5	11		
Dez.	6	51.37	37	4.8	16	51.74	44	51.3	11	9.44	9.0	12	53.57	69	13.4	5		
	16	51.74	34	3.2	14	52.18	41	50.2	7	9.86	41	8	54.26	67	12.9	0		
	26	52.08	34	1.8	12	52.59	39	49.5	3	10.27	7.0	4	54.93	62	12.9	5		
	36	52.41	33	0.6		52.98	49.2			10.66	6.6	4	55.55	13.4				
Mittl. Ort	47.92	22.5				47.70	75.0			5.51	32.7		47.98	42.8				
			384)			383)				386)			387)					

1912	<i>p. Hydræ.</i>		<i>3<sup>m</sup>.9.</i>		<i>J Carinae.</i>		<i>4<sup>w</sup>.I.</i>		<i>31 Leon. min.</i>		<i>4<sup>n</sup>.2.</i>		<i>Iac. &amp; Antliae.</i>		<i>4<sup>m</sup>.2.</i>	
	AR.	Dekl.	—	—	AR.	Dekl.	—	—	AR.	Dekl.	—	—	AR.	Dekl.	—	—
	10 <sup>h</sup> 21 <sup>m</sup>	16° 23'			10 <sup>h</sup> 22 <sup>m</sup>	73° 34'			10 <sup>h</sup> 22 <sup>m</sup>	37° 9'			10 <sup>h</sup> 23 <sup>m</sup>	30° 36'		
Jan.																
1	50.29	28	3.3	26	39.95	62	38.9	32	48.76	24.9	4	7.62	29	56.9	30	
11	50.57	25	5.9	26	40.57	49	42.1	35	49.11	24.5	0	7.91	26	59.9	30	
21	50.82	20	8.5	25	41.06	37	45.6	38	49.42	24.5	4	8.17	20	62.9	31	
31	51.02	15	11.0	23	41.43	23	49.4	38	49.68	24.9	7	8.37	16	66.0	30	
Febr.	10	51.17	11	13.3	41.66	10	53.2	40	49.88	25.6	11	8.53	11	69.0	28	
20	51.28	6	15.5	19	41.76	4	57.2	39	50.03	26.7	13	8.64	5	71.8	27	
März	1	51.34	1	17.4	17				50.11	28.0	14	8.69	0	74.5	24	
11	51.35	2	19.1	14	41.56	28	64.9	36	50.14	29.4	16	8.69	4	76.9	22	
21	51.33	6	20.5	11	41.28	39	68.5	33	50.11	31.0	15	8.65	7	79.1	18	
31	51.27		21.6		40.89	71.8	33		50.04	32.5	15	8.58	11	80.9	15	
April	10	51.18	10	22.4	6	40.42	55	74.7	26	49.93	34.0	14	8.47	12	82.4	12
20	51.08	12	23.0	3	39.87	61	77.3	20	49.80	35.4	11	8.35	14	83.6	8	
Mai	30	50.96	12	23.3	0	39.26	64	79.3	16	49.65	36.5	10	8.21	15	84.4	4
10	50.84	12	23.3	1	38.62	68	80.9	11	49.50	37.5	7	8.06	15	84.8	1	
20	50.72		23.2		37.94	82.0			49.34	38.2		7.91		84.9		
Juni	30	50.60	11	22.8		37.26	68	82.5	0	49.19	38.6	1	7.76	13	84.6	6
9	50.49	10	22.1	9	36.58	66	82.5	5	49.05	38.7	2	7.63	13	84.0	9	
19	50.39	8	21.2	10	35.92	62	82.0	11	48.93	38.5	5	7.50	11	83.1	12	
Juli	29	50.31	6	20.2	12	35.30	55	80.9	16	48.84	38.0	7	7.39	10	81.9	14
9	50.25	5	19.0	12	34.75	79.3	20		48.76	37.3	10	7.29	7	80.5	17	
19	50.20	2	17.8	14	34.26	49	77.3	23	48.71	36.3	13	7.22	5	78.8	18	
Aug.	8	50.18	0	16.4	13	33.86	30	75.0	27	48.70	35.0	15	7.17	1	77.0	19
18	50.21	3	15.1	13	33.56	18	72.3	29	48.71	33.5	17	7.16	1	75.1	20	
28	50.27	6	13.8	13	33.38	5	69.4	34	48.76	31.8	20	7.17	5	73.1	21	
Sept.	7	50.36	13	11.4	7	33.42	22	63.0	28	48.97	27.7	22	7.31	13	69.2	15
17	50.49	17	10.7	5	33.64	36	60.2	27	49.13	25.5	23	7.44	17	67.7	12	
Okt.	27	50.66	10	10.2	2	34.00	49	57.5	23	49.32	23.2	24	7.61	21	66.5	9
7	50.86	20	10.0	2	34.49	61	55.2	19	49.56	20.8	24	7.82	25	65.6	4	
17	51.09	27	10.2	6	35.10	70	53.3	13	49.83	18.4	24	8.07	29	65.2	1	
27	51.36	10	10.8	10	35.80	79	52.0	8	50.14	16.0	23	8.36	32	65.3	5	
Nov.	6	51.66	30	11.8		36.59	84	51.2	0	50.49	13.7	22	8.68	35	65.8	11
16	51.98	22	13.2	14	37.43	86	51.2	6	50.87	11.5	20	9.03	35	66.9	15	
26	52.32	34	15.0	21	38.29	86	51.8	12	51.26	9.5	17	9.38	35	68.4	19	
Dez.	6	52.66	34	17.1	23	39.15	82	53.0	19	51.66	7.8	14	9.75	37	70.3	24
16	53.00	33	19.4	25	39.97	76	54.9	24	52.07	6.4	11	10.11	35	72.7	26	
26	53.33	30	21.9	26	40.73	67	57.3	30	52.46	5.3	6	10.46	31	75.3	29	
36	53.63		24.5		41.40	60.3			52.82	4.7		10.77		78.2		
Mittl. Ort		50.05	12.4		39.01	60.5			47.96	30.6		7.41	70.0			

## SCHEINBARE STERNÖRTER.

1912	s Carinae. 4 <sup>m</sup> .I.		36 Ursae maj. 4 <sup>m</sup> .8.		9 H. Draconis. 4 <sup>m</sup> .9.		33 Sextantis. 6 <sup>m</sup> .6.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. —
	10 <sup>h</sup> 24 <sup>m</sup>	58° 17'	10 <sup>h</sup> 25 <sup>m</sup>	56° 25'	10 <sup>h</sup> 27 <sup>m</sup>	76° 9'	10 <sup>h</sup> 36 <sup>m</sup>	1° 16'
Jan.								
I	39.10	39	4.0	33	1.72	46.5	42.95	55.85
II	39.49	33	7.3	35	2.19	47.0	43.90	56.15
21	39.82	26	10.8	37	2.60	47.8	44.73	56.41
31	40.08	18	14.5	38	2.94	49.2	45.42	56.63
Febr.	40.26	9	18.3	37	3.21	50.9	45.94	56.80
10								
20	40.35	22.0	3.39	22	3.39	52.9	46.28	56.93
März	40.38	5	25.7	37	3.49	55.1	46.44	57.01
I								
II	40.33	11	29.2	35	3.51	57.5	46.41	57.04
21	40.22	17	32.5	29	3.46	59.8	46.21	57.04
31	40.05	22	35.4	26	3.34	62.1	45.86	57.00
April	39.83	25	38.0	22	3.16	64.1	45.37	56.94
10	39.58	29	40.2	16	2.94	65.9	44.77	56.85
20								
30	39.29	30	41.8	13	2.69	67.3	44.10	56.76
Mai	38.99	30	43.1	13	2.42	68.3	43.38	56.65
10								
20	38.67	32	43.8	7	2.16	68.9	42.64	56.54
30		31		3				
Juni	38.36	31	44.1	—	1.90	69.1	41.90	56.44
9	38.05	29	43.8	3	1.65	68.9	41.20	56.34
19	37.76	28	43.0	8	1.44	68.2	40.55	56.25
29	37.48	24	41.8	12	1.26	67.1	39.98	56.18
Juli	37.24	21	40.2	16	1.11	65.6	39.50	56.12
9								
19	37.03	16	38.1	23	1.00	63.7	39.12	56.08
29	36.87	11	35.8	26	0.94	61.6	38.85	56.05
Aug.	36.76	6	33.2	28	0.93	59.2	38.69	56.05
8	36.70	2	30.4	31	0.96	56.6	38.67	56.08
28	36.72	8	27.3	27	1.06	53.5	38.77	56.13
Sept.	36.80	15	24.6	26	1.20	50.5	39.03	56.22
17	36.95	22.0	22.0	23	1.40	47.5	39.40	56.34
27	37.18	23	19.7	20	1.66	44.4	39.90	56.48
Okt.	37.47	29	17.7	20	1.96	41.4	40.52	56.67
7								
17	37.83	36	16.2	15	2.32	38.5	41.26	56.89
27	38.24	47	15.3	4	2.74	35.8	42.11	57.14
Nov.	38.71	50	14.9	3	3.20	33.3	43.05	57.43
6								
16	39.21	51	15.2	9	3.69	31.1	44.06	57.74
26	39.72	52	16.1	16	4.22	29.3	45.13	58.06
Dez.	40.24	50	17.7	21	4.75	27.9	46.23	58.40
6								
16	40.74	48	19.8	26	5.29	26.9	47.33	58.74
26	41.22	42	22.4	31	5.81	26.5	48.38	59.07
36	41.64	50	25.5	31	6.31	26.6	49.37	59.38
Mittl. Ort	38.74	23.4	0.22	55.9	38.72	60.4	55.61	43.5

1912	θ Argus. 2 <sup>m</sup> .8.		42 Leon. min. 5 <sup>m</sup> .3.		μ Argus. 2 <sup>m</sup> .7.		λ Leonis. 5 <sup>m</sup> .4.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +
	10 <sup>h</sup> 39 <sup>m</sup>	63° 55'	10 <sup>h</sup> 40 <sup>m</sup>	31° 8'	10 <sup>h</sup> 42 <sup>m</sup>	48° 57'	10 <sup>h</sup> 44 <sup>m</sup>	11° 0'
Jan.								
1	49.14	38.8	59.11	40.8	58.92	0.5	38.29	40.1
11	49.61	41.9	59.46	39.9	59.28	3.6	38.59	38.5
21	50.01	45.3	59.76	39.5	59.60	6.9	38.87	37.1
31	50.33	49.0	60.02	39.4	59.85	10.4	39.10	35.9
Febr.	10	50.56	52.8	60.23	39.7	60.05	14.0	39.29
	20	50.70	56.6	60.39	40.4	60.18	17.6	39.43
März	1	50.74	60.5	60.49	41.3	60.25	21.0	39.53
	11	50.71	64.2	60.54	42.5	60.26	24.3	39.58
	21	50.60	67.6	60.54	43.7	60.21	27.3	39.58
	31	50.42	70.8	60.49	45.1	60.12	30.0	39.55
April	10	50.17	73.7	60.42	46.4	59.99	32.4	39.49
	20	49.88	76.2	60.31	47.7	59.82	34.4	39.41
	30	49.55	78.2	60.19	48.9	59.63	36.0	39.32
Mai	10	49.19	79.8	60.05	49.9	59.42	37.2	39.21
	20	48.81	80.9	59.91	50.7	59.21	37.9	39.11
	30	48.42	81.4	59.78	51.3	58.99	38.2	39.00
Juni	9	48.03	81.4	59.66	51.6	58.77	37.9	38.90
	19	47.65	81.0	59.54	51.7	58.56	37.3	38.81
	29	47.29	80.0	59.45	51.5	58.36	36.2	38.74
Juli	9	46.96	78.5	59.38	51.1	58.18	34.8	38.68
	19	46.67	76.6	59.32	50.5	58.02	33.0	38.64
	29	46.43	74.4	59.29	49.5	57.90	30.9	38.61
Aug.	8	46.25	71.9	59.29	48.4	57.81	28.6	38.61
	18	46.14	69.1	59.32	47.0	57.77	26.1	38.63
	28	46.10	66.2	59.37	45.5	57.77	23.6	38.68
Sept.	7	46.15	63.1	59.47	43.5	57.83	20.8	38.77
	17	46.29	60.3	59.60	41.6	57.95	18.5	38.88
	27	46.51	57.8	59.76	39.5	58.12	16.4	39.02
Okt.	7	46.82	55.6	59.97	37.3	58.34	14.7	39.20
	17	47.21	53.8	60.21	34.9	58.63	13.4	39.42
	27	47.68	52.5	60.49	32.6	58.96	12.6	39.67
Nov.	6	48.19	51.8	60.80	31	59.34	12.4	39.95
	16	48.77	51.8	61.15	27.9	59.76	12.7	40.26
	26	49.36	52.4	61.52	25.8	60.19	13.6	40.59
Dez.	6	49.97	53.6	61.90	23.8	60.63	15.2	40.94
	16	50.56	55.4	62.29	22.1	61.07	17.2	41.29
	26	51.12	57.9	62.66	20.7	61.50	19.7	41.62
	36	51.62	60.7	63.01	19.7	61.88	22.7	41.94
Mittl. Ort	48.89	59.4	58.52	46.0	58.84	18.2	37.98	39.9
	406)		407)		408)		409)	

## SCHEINBARE STERNÖRTER.

1912	$\nu$ Velorum. 4 <sup>m</sup> .5.		$\beta$ Ursae maj. 2 <sup>m</sup> .3.		$\alpha$ Ursae maj. 1 <sup>m</sup> .8.		$\chi$ Leonis. 4 <sup>m</sup> .8.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. —
	10 <sup>h</sup> 56 <sup>m</sup>	41° 44'	10 <sup>h</sup> 56 <sup>m</sup>	56° 50'	10 <sup>h</sup> 58 <sup>m</sup>	62° 13'	11 <sup>h</sup> 0 <sup>m</sup>	7° 48'
Jan.								
1	6.81	57.4	33.66	64.2	20.05	22.3	28.92	43.8
11	7.16	35	60.4	30	20.62	22.6	29.23	42.0
21	7.46	26	63.6	32	21.13	23.3	29.51	40.3
31	7.72	21	66.8	34	21.57	24.6	29.75	39.0
Febr. 10	7.93	15	70.2	33	21.93	26.4	29.95	37.9
20	8.08	8	73.5	32	22.20	28.5	30.11	37.0
März 1	8.16	4	76.7	30	22.37	30.9	30.22	36.5
11	8.20	1	79.7	27	22.45	33.5	30.28	36.3
21	8.19	5	82.4	25	22.44	36.1	30.30	36.2
31	8.14	9	84.9	22	22.34	38.7	30.28	36.4
April 10	8.05	12	87.1	18	22.17	41.1	30.24	36.7
20	7.93	15	88.9	15	21.94	43.2	30.17	37.2
30	7.78	16	90.4	10	21.66	44.9	30.09	37.7
Mai 10	7.62	17	91.4	7	21.35	46.3	29.99	38.3
20	7.45	18	92.1	2	21.03	47.3	29.89	38.9
30	7.27	17	92.3	2	20.70	47.7	29.79	39.5
Juni 9	7.10	18	92.1	5	20.38	47.7	29.69	40.1
19	6.92	16	91.6	10	20.07	47.2	29.60	40.6
29	6.76	14	90.6	13	19.80	46.2	29.52	41.0
Juli 9	6.62	14	89.3	13	19.56	44.8	29.45	41.4
19	6.49	11	87.7	19	19.36	43.0	29.40	41.8
29	6.38	7	85.8	21	19.21	40.8	29.36	42.0
Aug. 8	6.31	7	83.7	21	19.11	38.3	29.34	42.0
18	6.27	4	81.5	23	19.06	35.5	29.34	42.0
28	6.27	0	79.2	13	19.07	32.4	29.38	41.8
Sept. 7	6.32	9	76.8	20	19.16	28.9	29.45	41.3
17	6.41	15	74.8	19	19.30	25.5	29.54	40.7
27	6.56	15	72.9	15	19.52	22.2	29.66	39.8
Okt. 7	6.75	19	71.4	10	19.81	18.8	29.82	38.7
17	7.00	25	70.4	6	20.16	15.5	30.03	37.3
27	7.29	34	69.8	2	20.58	12.4	30.27	35.7
Nov. 6	7.63	34	69.6	5	21.06	9.5	30.54	34.0
16	8.00	37	70.1	10	21.59	6.9	30.84	32.0
26	8.39	39	71.1	15	22.16	4.8	31.16	29.9
Dez. 6	8.80	41	72.6	20	22.76	3.0	31.50	27.8
16	9.21	39	74.6	25	23.37	1.8	31.84	25.6
26	9.60	37	77.1	28	23.98	1.2	32.18	23.6
36	9.97	37	79.9	13	24.57	1.1	32.51	21.6
Mittl. Ort	6.85	73.4	32.36	75.5	18.42	34.6	28.73	43.1
	415)		416)		417)		418)	

## SCHEINBARE STERNÖRTER.

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1912	ψ Ursae maj. 3 <sup>m</sup> .0.		β Crateris. 4 <sup>m</sup> .3.		δ Leonis. 2 <sup>m</sup> .4.		γ Leonis. 3 <sup>m</sup> .3.	
	AR.	Dekl. +/-	AR.	Dekl.	AR.	Dekl. +/-	AR.	Dekl. +/-
	11 <sup>h</sup> 4 <sup>m</sup>	44° 58'	11 <sup>h</sup> 7 <sup>m</sup>	22° 20'	11 <sup>h</sup> 9 <sup>m</sup>	20° 59'	11 <sup>h</sup> 9 <sup>m</sup>	15° 54'
Jan.								
1	44.05	41	24.4	5	19.64	32.4	26.12	77.9
11	44.46	37	23.9	0	19.96	35.0	26.45	76.5
21	44.83	33	23.9	5	20.25	37.7	26.75	75.4
31	45.16	27	24.4	9	20.49	40.4	27.02	74.7
Febr.	10	45.43	25.3	13	20.69	43.0	27.24	74.3
	20	45.64	14	26.6	20.85	45.5	27.41	74.2
März	1	45.78	8	28.2	20.95	47.8	27.54	74.5
11	45.86	2	30.1	19	21.02	49.9	27.62	75.0
21	45.88	4	32.1	20	21.04	51.7	27.65	75.7
31	45.84	8	34.1	19	21.02	53.3	27.64	76.7
April	10	45.76	12	36.0	19	20.97	54.6	27.60
	20	45.64	15	37.9	16	20.90	55.6	27.53
Mai	30	45.49	17	39.5	14	20.81	56.3	27.44
10	45.32	17	40.9	10	20.70	56.7	27.34	80.7
20	45.15	19	41.9	7	20.59	56.9	27.23	81.5
Juni	30	44.96	17	42.6	3	20.48	56.8	27.12
9	44.79	17	42.9	0	20.36	56.4	27.01	82.9
19	44.62	15	42.9	4	20.25	55.8	26.91	83.3
Juli	29	44.47	13	42.5	8	20.14	54.9	26.82
9	44.34	10	41.7	11	20.05	53.9	26.73	83.5
	19	44.24	8	40.6	14	19.97	52.7	26.67
Aug.	29	44.16	5	39.2	18	19.90	51.3	26.63
8	44.11	1	37.4	20	19.86	49.9	26.60	82.3
18	44.10	2	35.4	23	19.85	48.5	26.60	81.5
28	44.12	6	33.1	25	19.86	47.1	26.62	80.5
Sept.	7	44.18	12	30.6	30	19.90	45.8	26.68
	17	44.30	15	27.6	28	19.99	44.6	26.78
Okt.	27	44.45	20	24.8	16	20.11	43.7	26.90
7	44.65	25	21.9	29	20.27	43.2	27.05	74.3
17	44.90	29	19.0	29	20.47	43.0	27.26	72.3
	27	45.19	34	16.1	28	20.72	43.2	27.50
Nov.	6	45.53	38	13.3	25	21.00	43.8	27.78
16	45.91	41	10.8	24	21.31	44.8	28.08	67.9
26	46.32	43	8.4	21	21.65	46.2	28.42	65.6
Dez.	6	46.75	45	6.3	16	22.00	48.0	28.77
	16	47.20	43	4.7	13	22.36	50.2	29.13
26	47.63	43	3.4	7	22.71	52.6	29.49	57.2
36	48.06	43	2.7	23.04	33	55.1	29.84	55.6
Mitt.	1st	43.28	34.1	19.70	42.7	25.83	81.6	37.43
								38.6
		420)		421)		422)		423)

## SCHEINBARE STERNÖRTER.

1912	υ Ursae maj. 3 <sup>m</sup> .4.		δ Crateris. 3 <sup>m</sup> .6.		σ Leonis. 4 <sup>m</sup> .1.		π Centauri. 4 <sup>m</sup> .1.	
	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —
	11 <sup>h</sup> 13 <sup>m</sup>	33° 33'	11 <sup>h</sup> 14 <sup>m</sup>	14° 18'	11 <sup>h</sup> 16 <sup>m</sup>	6° 30'	11 <sup>h</sup> 16 <sup>m</sup>	54° 0'
Jan.								
1	44.21	36	81.1	10	56.33	0.3	42.9	12.3
11	44.57	34	80.1	6	56.65	2.8	36.39	15.0
21	44.91	30	79.5	1	56.93	5.2	36.68	18.2
31	45.21	24	79.4	3	57.18	7.6	36.93	21.6
Febr.	10	45.45	19	79.7	6	57.39	9.9	37.14
	20	45.64	14	80.3	11	57.55	11.9	37.31
März	1	45.78	9	81.4	12	57.67	13.8	37.43
	11	45.87	3	82.6	14	57.74	15.4	37.51
	21	45.90	1	84.0	16	57.77	16.7	37.55
	31	45.89	5	85.6	16	57.77	17.9	37.56
April	10	45.84	8	87.2	15	57.74	18.8	37.53
	20	45.76	11	88.7	14	57.68	19.4	37.47
	30	45.65	12	90.1	13	57.60	19.7	37.40
Mai	10	45.53	14	91.4	10	57.51	19.9	37.31
	20	45.39	13	92.4	8	57.41	19.8	37.22
	30	45.26	14	93.2	6	57.30	19.6	37.12
Juni	9	45.12	12	93.8	2	57.20	19.1	37.02
	19	45.00	12	94.0	0	57.10	18.5	36.93
	29	44.88	12	94.0	0	57.01	17.8	36.85
Julij	9	44.78	10	93.6	4	56.92	16.9	36.78
	19	44.70	7	93.0	9	56.85	15.9	36.71
	29	44.63	3	92.1	12	56.79	14.9	36.66
Aug.	8	44.60	3	90.9	12	56.75	13.8	36.63
	18	44.58	2	89.5	14	56.74	12.7	36.62
	28	44.60	2	87.8	17	56.74	11.7	36.64
Sept.	7	44.65	9	85.9	24	56.78	10.9	36.68
	17	44.74	13	83.5	23	56.86	10.1	36.76
	27	44.87	16	81.2	25	56.97	9.7	36.87
Okt.	7	45.03	22	78.7	25	57.13	9.6	37.02
	17	45.25	25	76.2	26	57.32	9.8	37.21
	27	45.50	30	73.6	26	57.55	10.3	37.43
Nov.	6	45.80	30	71.0	26	57.81	11.2	37.69
	16	46.13	33	68.4	26	58.11	12.5	37.99
	26	46.49	36	66.0	24	58.43	14.1	38.30
Dez.	6	46.87	38	63.8	22	58.78	16.0	38.64
	16	47.26	39	61.8	16	59.12	18.1	38.98
	26	47.65	39	60.2	12	59.46	20.5	39.33
	36	48.02	37	59.0	20	59.79	22.9	39.66
Mittl. Ort	43.75	88.5	56.39	7.9	35.97	42.3	59.37	31.1

1912	Gr. 1771. 6 <sup>m</sup> .2.		$\lambda$ Draconis. 3 <sup>m</sup> .6.		$\xi$ Hydræ. 3 <sup>m</sup> .6.		$\lambda$ Centauri. 3 <sup>m</sup> .3.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -
	II <sup>b</sup> 17 <sup>m</sup>	64° 48'	II <sup>b</sup> 26 <sup>m</sup>	69° 48'	II <sup>b</sup> 28 <sup>m</sup>	31° 22'	II <sup>b</sup> 31 <sup>m</sup>	62° 31'
Jan.								
I	39.83 <sup>9</sup> 62	30.4 <sup>1</sup>	13.66 <sup>75</sup>	45.9 <sup>1</sup>	40.00 <sup>34</sup>	1.5 <sup>27</sup>	42.46 <sup>53</sup>	37.8 <sup>26</sup>
II	40.45 <sup>57</sup>	30.5 <sup>6</sup>	14.41 <sup>69</sup>	46.0 <sup>8</sup>	40.34 <sup>31</sup>	4.2 <sup>28</sup>	42.99 <sup>48</sup>	40.4 <sup>30</sup>
21	41.02 <sup>51</sup>	31.1 <sup>12</sup>	15.10 <sup>61</sup>	46.8 <sup>13</sup>	40.65 <sup>28</sup>	7.0 <sup>29</sup>	43.47 <sup>41</sup>	43.4 <sup>33</sup>
31	41.53 <sup>42</sup>	32.3 <sup>17</sup>	15.71 <sup>52</sup>	48.1 <sup>18</sup>	40.93 <sup>23</sup>	9.9 <sup>29</sup>	43.88 <sup>34</sup>	46.7 <sup>35</sup>
Febr. 10	41.95 <sup>33</sup>	34.0 <sup>22</sup>	16.23 <sup>41</sup>	49.9 <sup>22</sup>	41.16 <sup>18</sup>	12.8 <sup>29</sup>	44.22 <sup>26</sup>	50.2 <sup>37</sup>
20	42.28 <sup>23</sup>	36.2 <sup>24</sup>	16.64 <sup>28</sup>	52.1 <sup>25</sup>	41.34 <sup>14</sup>	15.7 <sup>27</sup>	44.48 <sup>18</sup>	53.9 <sup>38</sup>
März								
I	42.51 <sup>12</sup>	38.6 <sup>26</sup>	16.92 <sup>16</sup>	54.6 <sup>28</sup>	41.48 <sup>8</sup>	18.4 <sup>26</sup>	44.66 <sup>10</sup>	57.7 <sup>37</sup>
II	42.63 <sup>1</sup>	41.2 <sup>28</sup>	17.08 <sup>2</sup>	57.4 <sup>28</sup>	41.56 <sup>4</sup>	21.0 <sup>23</sup>	44.76 <sup>2</sup>	61.4 <sup>36</sup>
21	42.64 <sup>7</sup>	44.0 <sup>26</sup>	17.10 <sup>8</sup>	60.2 <sup>28</sup>	41.60 <sup>0</sup>	23.3 <sup>21</sup>	44.78 <sup>5</sup>	65.0 <sup>34</sup>
31	42.57 <sup>15</sup>	46.6 <sup>26</sup>	17.02 <sup>19</sup>	63.0 <sup>27</sup>	41.60 <sup>3</sup>	25.4 <sup>18</sup>	44.73 <sup>12</sup>	68.4 <sup>32</sup>
April								
10	42.42 <sup>23</sup>	49.2 <sup>23</sup>	16.83 <sup>29</sup>	65.7 <sup>25</sup>	41.57 <sup>7</sup>	27.2 <sup>15</sup>	44.61 <sup>17</sup>	71.6 <sup>28</sup>
20	42.19 <sup>29</sup>	51.5 <sup>20</sup>	16.54 <sup>36</sup>	68.2 <sup>21</sup>	41.50 <sup>8</sup>	28.7 <sup>12</sup>	44.44 <sup>22</sup>	74.4 <sup>25</sup>
Mai								
10	41.90 <sup>33</sup>	53.5 <sup>16</sup>	16.18 <sup>41</sup>	70.3 <sup>17</sup>	41.42 <sup>11</sup>	29.9 <sup>9</sup>	44.22 <sup>26</sup>	76.9 <sup>21</sup>
20	41.57 <sup>35</sup>	55.1 <sup>11</sup>	15.77 <sup>46</sup>	72.0 <sup>12</sup>	41.31 <sup>11</sup>	30.8 <sup>5</sup>	43.96 <sup>29</sup>	79.0 <sup>16</sup>
30	41.22 <sup>37</sup>	56.2 <sup>7</sup>	15.31 <sup>47</sup>	73.2 <sup>7</sup>	41.20 <sup>13</sup>	31.3 <sup>3</sup>	43.67 <sup>32</sup>	80.6 <sup>12</sup>
Juni								
30	40.85 <sup>37</sup>	56.9 <sup>1</sup>	14.84 <sup>48</sup>	73.9 <sup>1</sup>	41.07 <sup>13</sup>	31.6 <sup>1</sup>	43.35 <sup>34</sup>	81.8 <sup>6</sup>
9	40.48 <sup>37</sup>	57.0 <sup>—</sup>	14.36 <sup>47</sup>	74.0 <sup>3</sup>	40.94 <sup>13</sup>	31.5 <sup>4</sup>	43.01 <sup>34</sup>	82.4 <sup>2</sup>
19	40.13 <sup>35</sup>	56.7 <sup>3</sup>	13.89 <sup>45</sup>	73.7 <sup>8</sup>	40.81 <sup>13</sup>	31.1 <sup>7</sup>	42.67 <sup>35</sup>	82.6 <sup>4</sup>
Juli								
29	39.80 <sup>33</sup>	55.9 <sup>8</sup>	13.44 <sup>41</sup>	72.9 <sup>14</sup>	40.68 <sup>12</sup>	30.4 <sup>10</sup>	42.32 <sup>33</sup>	82.2 <sup>8</sup>
9	39.50 <sup>30</sup>	54.6 <sup>13</sup>	13.03 <sup>36</sup>	71.5 <sup>18</sup>	40.56 <sup>11</sup>	29.4 <sup>12</sup>	41.99 <sup>32</sup>	81.4 <sup>13</sup>
19	39.24 <sup>21</sup>	52.8 <sup>21</sup>	12.67 <sup>30</sup>	69.7 <sup>22</sup>	40.45 <sup>9</sup>	28.2 <sup>15</sup>	41.67 <sup>28</sup>	80.1 <sup>18</sup>
29	39.03 <sup>16</sup>	50.7 <sup>25</sup>	12.37 <sup>24</sup>	67.5 <sup>27</sup>	40.36 <sup>8</sup>	26.7 <sup>16</sup>	41.39 <sup>24</sup>	78.3 <sup>21</sup>
Aug.								
8	38.87 <sup>16</sup>	48.2 <sup>28</sup>	12.13 <sup>17</sup>	64.8 <sup>29</sup>	40.28 <sup>5</sup>	25.1 <sup>17</sup>	41.15 <sup>18</sup>	76.2 <sup>24</sup>
18	38.76 <sup>11</sup>	45.4 <sup>31</sup>	11.96 <sup>9</sup>	61.9 <sup>32</sup>	40.23 <sup>2</sup>	23.4 <sup>17</sup>	40.97 <sup>13</sup>	73.8 <sup>26</sup>
28	38.72 <sup>4</sup>	42.3 <sup>31</sup>	11.87 <sup>58.7</sup>	58.7 <sup>1</sup>	40.21 <sup>1</sup>	21.7 <sup>17</sup>	40.84 <sup>12</sup>	71.2 <sup>27</sup>
Sept.								
7	38.75 <sup>11</sup>	39.0 <sup>38</sup>	11.86 <sup>9</sup>	55.3 <sup>39</sup>	40.22 <sup>6</sup>	20.0 <sup>17</sup>	40.79 <sup>3</sup>	68.5 <sup>30</sup>
17	38.86 <sup>18</sup>	35.2 <sup>36</sup>	11.95 <sup>18</sup>	51.4 <sup>37</sup>	40.28 <sup>10</sup>	18.3 <sup>14</sup>	40.82 <sup>12</sup>	65.5 <sup>27</sup>
Okt.								
27	39.04 <sup>26</sup>	31.6 <sup>35</sup>	12.13 <sup>28</sup>	47.7 <sup>37</sup>	40.38 <sup>15</sup>	16.9 <sup>10</sup>	40.94 <sup>21</sup>	62.8 <sup>24</sup>
7	39.30 <sup>33</sup>	28.1 <sup>35</sup>	12.41 <sup>37</sup>	44.0 <sup>36</sup>	40.53 <sup>19</sup>	15.9 <sup>8</sup>	41.15 <sup>29</sup>	60.4 <sup>21</sup>
17	39.63 <sup>41</sup>	24.7 <sup>33</sup>	12.78 <sup>46</sup>	40.4 <sup>34</sup>	40.72 <sup>24</sup>	15.1 <sup>3</sup>	41.44 <sup>38</sup>	58.3 <sup>17</sup>
27	40.04 <sup>48</sup>	21.4 <sup>31</sup>	13.24 <sup>55</sup>	37.0 <sup>32</sup>	40.96 <sup>28</sup>	14.8 <sup>1</sup>	41.82 <sup>45</sup>	56.6 <sup>12</sup>
Nov.								
6	40.52 <sup>55</sup>	18.3 <sup>27</sup>	13.79 <sup>62</sup>	33.8 <sup>29</sup>	41.24 <sup>32</sup>	14.9 <sup>5</sup>	42.27 <sup>51</sup>	55.4 <sup>6</sup>
16	41.07 <sup>59</sup>	15.6 <sup>24</sup>	14.41 <sup>70</sup>	30.9 <sup>24</sup>	41.56 <sup>35</sup>	15.4 <sup>11</sup>	42.78 <sup>55</sup>	54.8 <sup>0</sup>
26	41.66 <sup>63</sup>	13.2 <sup>20</sup>	15.11 <sup>74</sup>	28.5 <sup>19</sup>	41.91 <sup>37</sup>	16.5 <sup>15</sup>	43.33 <sup>59</sup>	54.8 <sup>7</sup>
Dez.								
6	42.29 <sup>66</sup>	11.2 <sup>14</sup>	15.85 <sup>77</sup>	26.6 <sup>14</sup>	42.28 <sup>38</sup>	18.0 <sup>19</sup>	43.92 <sup>60</sup>	55.5 <sup>12</sup>
16	42.95 <sup>65</sup>	9.8 <sup>8</sup>	16.62 <sup>78</sup>	25.2 <sup>9</sup>	42.66 <sup>37</sup>	19.9 <sup>22</sup>	44.52 <sup>58</sup>	56.7 <sup>18</sup>
26	43.60 <sup>63</sup>	9.0 <sup>3</sup>	17.40 <sup>76</sup>	24.3 <sup>2</sup>	43.03 <sup>36</sup>	22.1 <sup>26</sup>	45.10 <sup>55</sup>	58.5 <sup>24</sup>
36	44.23 <sup>8.7</sup>	8.7 <sup>3</sup>	18.16 <sup>74</sup>	24.1 <sup>2</sup>	43.39 <sup>24.7</sup>	24.7 <sup>19</sup>	45.65 <sup>60.9</sup>	
Mittl. Ort	38.18	44.1	11.59	60.7	40.25	14.2	42.98	58.2

## SCHEINBARE STERNÖRTER.

1912	α Leonis. 4 <sup>m</sup> .4.		β Draconis. 5 <sup>m</sup> .4.		γ Ursae maj. 3 <sup>m</sup> .8.		δ Leonis. 2 <sup>m</sup> .1.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	h	m	h	m	h	m	h	m
Jan. 1	11 <sup>h</sup> 32 <sup>m</sup>	0° 20'	11 <sup>h</sup> 37 <sup>m</sup>	67° 13'	11 <sup>h</sup> 41 <sup>m</sup>	48° 15'	11 <sup>h</sup> 44 <sup>m</sup>	15° 3'
1	26.53	32	13.9	21	36.12	69	40.3	1
II	26.85	30	16.0	20	36.81	64	40.2	5
21	27.15	26	18.0	18	37.45	57	40.7	11
31	27.41	23	19.8	16	38.02	49	41.8	16
Febr. 10	27.64	21.4	21.4	18	38.51	43.4	43.4	21
20	27.82	13	22.8	10	38.90	28	45.5	24
März 1	27.95	10	23.8	8	39.18	18	47.9	26
II	28.05	5	24.6	6	39.36	6	50.5	28
21	28.10	1	25.2	3	39.42	—	53.3	28
31	28.11	—	25.5	1	39.38	4	56.1	—
April 10	28.10	4	25.6	1	39.24	23	58.8	25
20	28.06	6	25.5	2	39.01	29	61.3	22
30	28.00	8	25.3	4	38.72	35	63.5	18
Mai 10	27.92	8	24.9	4	38.37	38	65.3	14
20	27.84	9	24.5	5	37.99	41	66.7	8
30	27.75	9	24.0	5	37.58	41	67.5	4
Juni 9	27.66	9	23.5	6	37.17	42	67.9	2
19	27.57	9	22.9	6	36.75	39	67.7	6
29	27.48	8	22.3	6	36.36	37	67.1	12
Juli 9	27.40	7	21.7	6	35.99	33	65.9	16
19	27.33	6	21.1	5	35.66	29	64.3	20
29	27.27	5	20.6	5	35.37	23	62.3	25
Aug. 8	27.22	2	20.1	3	35.14	17	59.8	28
18	27.20	0	19.8	2	34.97	10	57.0	31
28	27.20	0	19.6	—	34.87	—	53.9	—
Sept. 7	27.23	6	19.5	2	34.84	—	50.6	39
17	27.29	9	19.7	4	34.89	5	46.7	36
27	27.38	9	20.1	7	35.02	13	43.1	37
Okt. 7	27.52	14	20.8	7	35.24	22	39.4	37
17	27.69	17	21.7	12	35.55	31	35.8	36
27	27.90	22	22.9	15	35.94	47	32.3	33
Nov. 6	28.15	25	24.4	17	36.41	29	30.0	30
16	28.43	28	26.1	20	36.96	61	26.0	26
26	28.74	31	28.1	21	37.57	67	23.4	21
Dez. 6	29.07	33	30.2	22	38.24	21	3.3	16
	34	34	22	22	69	16	45	20
16	29.41	34	32.4	22	38.93	71	19.7	11
26	29.75	33	34.6	23	39.64	69	18.6	4
36	30.08	33	36.9	23	40.33	18.2	45	45
Mittl. Ort	26.58	16.3	34.48	55.4	24.51	62.5	34.33	50.5

1912	$\beta$ Virginis. $3^m.5.$		$\gamma$ Ursae maj. $2^m.3.$		$\alpha$ Virginis. $4^m.1.$		$\delta$ Centauri. $2^m.7.$		
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	
	$11^h 46^m$	$2^\circ 15'$	$11^h 49^m$	$54^\circ 10'$	$12^h 0^m$	$9^\circ 12'$	$12^h 3^m$	$50^\circ 13'$	
Jan.									
I	6.57	33	39.3	21	13.20	50	48.7	7	
II	6.90	31	37.2	19	13.70	47	48.0	1	
21	7.21	27	35.3	18	14.17	42	47.9	4	
31	7.48	24	33.5	14	14.59	36	48.3	9	
Febr.	7.72	20	32.1	12	14.95	30	49.2	15	
10	7.92	15	30.9	10	15.25	23	50.7	18	
März	8.07	11	29.9	6	15.48	15	52.5	22	
II	8.18	7	29.3	4	15.63	9	54.7	23	
21	8.25	5	28.9	2	15.72	1	57.0	25	
31	8.28	3	28.7	—	15.73	5	59.5	25	
April	8.28	—	28.8	2	15.68	11	62.0	23	
10	8.25	3	29.0	3	15.57	15	64.3	22	
30	8.20	6	29.3	5	15.42	19	66.5	18	
Mai	8.14	8	29.8	5	15.23	21	68.3	16	
10	8.06	9	30.3	5	15.02	23	69.9	11	
20	7.97	8	30.8	6	14.79	24	71.0	7	
Juni	7.89	9	31.4	6	14.55	24	71.7	3	
9	7.80	9	32.0	5	14.31	23	72.0	2	
19	7.71	8	32.5	6	14.08	21	71.8	6	
Juli	7.63	8	33.1	5	13.87	20	71.2	11	
9	7.55	6	33.6	4	13.67	17	70.1	15	
19	7.49	5	34.0	3	13.50	14	68.6	18	
Aug.	7.44	4	34.3	2	13.36	10	66.8	23	
8	7.40	1	34.5	0	13.26	7	64.5	25	
18	7.39	—	34.5	1	13.19	2	62.0	28	
Sept.	7	7.41	4	34.4	3	13.17	3	59.2	31
17	7.45	9	34.1	7	13.20	10	56.1	35	
Okt.	7	7.54	9	33.4	8	13.30	15	52.6	34
17	7.66	12	32.6	11	13.45	20	49.2	34	
27	7.82	31.5	31.5	13	13.65	27	45.8	34	
Nov.	8.02	24	30.2	17	13.92	33	42.4	32	
6	8.26	27	28.5	18	14.25	38	39.2	21	
16	8.53	27	26.7	20	14.63	43	36.1	29	
26	8.84	31	24.7	22	15.06	47	33.2	24	
Dez.	9.17	33	22.5	22	15.53	50	30.8	21	
6	9.17	34	22.5	22	17.04	51	26.2	10	
16	9.51	20.3	20.3	22	16.03	50	28.7	15	
26	9.86	35	18.1	22	16.53	51	27.2	10	
36	10.19	33	15.9	—	17.04	—	47.05	53.0	
Mittl. Ort	6.68	38.3	12.45	62.4	43.62	78.0	47.54	56.3	
	445)		447)		450)		452)		

## SCHEINBARE STERNÖRTER.

1912	ε Corvi. 3 <sup>m</sup> .o.		4 H. Draconis. 5 <sup>m</sup> .o.		δ Ursae maj. 3 <sup>m</sup> .4		β Chamael. 4 <sup>m</sup> .4	
	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl.
	12 <sup>h</sup> 5 <sup>m</sup>	22° 7'	12 <sup>h</sup> 8 <sup>m</sup>	78° 5'	12 <sup>h</sup> 11 <sup>m</sup>	57° 30'	12 <sup>h</sup> 13 <sup>m</sup>	78° 49'
Jan.								
I	35.36 <sup>34</sup>	40.4 <sup>24</sup>	8.25 <sup>119</sup>	61.2 <sup>2</sup>	5.27 <sup>53</sup>	61.9 <sup>8</sup>	7.46 <sup>121</sup>	3.1 <sup>18</sup>
II	35.70 <sup>32</sup>	42.8 <sup>25</sup>	9.44 <sup>115</sup>	61.0 <sup>5</sup>	5.80 <sup>51</sup>	61.1 <sup>2</sup>	8.67 <sup>112</sup>	4.9 <sup>24</sup>
21	36.02 <sup>30</sup>	45.3 <sup>25</sup>	10.59 <sup>106</sup>	61.5 <sup>10</sup>	6.31 <sup>47</sup>	60.9 <sup>4</sup>	9.79 <sup>100</sup>	7.3 <sup>28</sup>
31	36.32 <sup>26</sup>	47.8 <sup>25</sup>	11.65 <sup>93</sup>	62.5 <sup>17</sup>	6.78 <sup>41</sup>	61.3 <sup>9</sup>	10.79 <sup>87</sup>	10.1 <sup>32</sup>
Febr.	10	36.58 <sup>21</sup>	50.3 <sup>24</sup>	12.58 <sup>77</sup>	64.2 <sup>21</sup>	7.19 <sup>35</sup>	62.2 <sup>14</sup>	11.66 <sup>72</sup>
	20	36.79 <sup>17</sup>	52.7 <sup>22</sup>	13.35 <sup>60</sup>	66.3 <sup>25</sup>	7.54 <sup>28</sup>	63.6 <sup>19</sup>	12.38 <sup>54</sup>
März	I	36.96 <sup>13</sup>	54.9 <sup>21</sup>	13.95 <sup>40</sup>	68.8 <sup>28</sup>	7.82 <sup>20</sup>	65.5 <sup>23</sup>	12.92 <sup>38</sup>
II	37.09 <sup>9</sup>	57.0 <sup>18</sup>	14.35 <sup>19</sup>	71.6 <sup>30</sup>	8.02 <sup>12</sup>	67.8 <sup>24</sup>	13.30 <sup>20</sup>	24.4 <sup>39</sup>
21	37.18 <sup>5</sup>	58.8 <sup>16</sup>	14.54 <sup>1</sup>	74.6 <sup>30</sup>	8.14 <sup>4</sup>	70.2 <sup>26</sup>	13.50 <sup>3</sup>	28.3 <sup>39</sup>
31	37.23 <sup>1</sup>	60.4 <sup>14</sup>	14.53 <sup>20</sup>	77.6 <sup>30</sup>	8.18 <sup>3</sup>	72.8 <sup>26</sup>	13.53 <sup>13</sup>	32.2 <sup>37</sup>
April	10	37.24 <sup>1</sup>	61.8 <sup>11</sup>	14.33 <sup>37</sup>	80.6 <sup>28</sup>	8.15 <sup>9</sup>	75.4 <sup>26</sup>	13.40 <sup>29</sup>
	20	37.23 <sup>4</sup>	62.9 <sup>9</sup>	13.96 <sup>53</sup>	83.4 <sup>24</sup>	8.06 <sup>14</sup>	78.0 <sup>23</sup>	13.11 <sup>43</sup>
30	37.19 <sup>6</sup>	63.8 <sup>7</sup>	13.43 <sup>66</sup>	85.8 <sup>21</sup>	7.92 <sup>19</sup>	80.3 <sup>21</sup>	12.68 <sup>43</sup>	42.7 <sup>33</sup>
Mai	10	37.13 <sup>8</sup>	64.5 <sup>4</sup>	12.77 <sup>76</sup>	87.9 <sup>16</sup>	7.73 <sup>22</sup>	82.4 <sup>17</sup>	12.11 <sup>57</sup>
	20	37.05 <sup>9</sup>	64.9 <sup>1</sup>	12.01 <sup>84</sup>	89.5 <sup>11</sup>	7.51 <sup>25</sup>	84.1 <sup>13</sup>	11.43 <sup>77</sup>
Juni	30	36.96 <sup>10</sup>	65.0 <sup>1</sup>	11.17 <sup>87</sup>	90.6 <sup>6</sup>	7.26 <sup>26</sup>	85.4 <sup>9</sup>	10.66 <sup>86</sup>
9	36.86 <sup>10</sup>	64.9 <sup>3</sup>	10.30 <sup>89</sup>	91.2 <sup>0</sup>	7.00 <sup>27</sup>	86.3 <sup>4</sup>	9.80 <sup>92</sup>	51.8 <sup>10</sup>
19	36.76 <sup>11</sup>	64.6 <sup>5</sup>	9.41 <sup>89</sup>	91.2 <sup>6</sup>	6.73 <sup>27</sup>	86.7 <sup>0</sup>	8.88 <sup>96</sup>	52.8 <sup>5</sup>
29	36.65 <sup>11</sup>	64.1 <sup>7</sup>	8.52 <sup>85</sup>	90.6 <sup>10</sup>	6.46 <sup>27</sup>	86.7 <sup>5</sup>	7.92 <sup>96</sup>	53.3 <sup>0</sup>
Juli	9	36.54 <sup>10</sup>	63.4 <sup>9</sup>	7.67 <sup>80</sup>	89.6 <sup>16</sup>	6.19 <sup>24</sup>	86.2 <sup>10</sup>	6.96 <sup>94</sup>
	19	36.44 <sup>10</sup>	62.5 <sup>10</sup>	6.87 <sup>73</sup>	88.0 <sup>21</sup>	5.95 <sup>22</sup>	85.2 <sup>15</sup>	6.02 <sup>90</sup>
Aug.	29	36.34 <sup>8</sup>	61.5 <sup>12</sup>	6.14 <sup>64</sup>	85.9 <sup>25</sup>	5.73 <sup>19</sup>	83.7 <sup>18</sup>	5.12 <sup>82</sup>
8	36.26 <sup>6</sup>	60.3 <sup>12</sup>	5.50 <sup>52</sup>	83.4 <sup>29</sup>	5.54 <sup>16</sup>	81.9 <sup>23</sup>	4.30 <sup>70</sup>	50.0 <sup>21</sup>
	18	36.20 <sup>5</sup>	59.1 <sup>12</sup>	4.98 <sup>41</sup>	80.5 <sup>33</sup>	5.38 <sup>12</sup>	79.6 <sup>26</sup>	3.60 <sup>57</sup>
	28	36.15 <sup>2</sup>	57.9 <sup>11</sup>	4.57 <sup>28</sup>	77.2 <sup>35</sup>	5.26 <sup>6</sup>	77.0 <sup>29</sup>	3.03 <sup>41</sup>
Sept.	7	36.13 <sup>1</sup>	56.8 <sup>11</sup>	4.29 <sup>14</sup>	73.7 <sup>37</sup>	5.20 <sup>2</sup>	74.1 <sup>31</sup>	2.62 <sup>23</sup>
	17	36.15 <sup>7</sup>	55.7 <sup>10</sup>	4.15 <sup>3</sup>	70.0 <sup>42</sup>	5.18 <sup>5</sup>	71.0 <sup>36</sup>	2.39 <sup>1</sup>
	27	36.22 <sup>10</sup>	54.7 <sup>6</sup>	4.18 <sup>18</sup>	65.8 <sup>26</sup>	5.23 <sup>10</sup>	67.4 <sup>36</sup>	2.38 <sup>22</sup>
Okt.	7	36.32 <sup>15</sup>	54.1 <sup>4</sup>	4.36 <sup>35</sup>	61.9 <sup>39</sup>	5.33 <sup>17</sup>	63.8 <sup>36</sup>	2.60 <sup>42</sup>
	17	36.47 <sup>19</sup>	53.7 <sup>0</sup>	4.71 <sup>51</sup>	58.1 <sup>38</sup>	5.50 <sup>25</sup>	60.2 <sup>36</sup>	3.02 <sup>63</sup>
	27	36.66 <sup>24</sup>	53.7 <sup>4</sup>	5.22 <sup>67</sup>	54.3 <sup>35</sup>	5.75 <sup>31</sup>	56.6 <sup>34</sup>	3.65 <sup>82</sup>
Nov.	6	36.90 <sup>28</sup>	54.1 <sup>8</sup>	5.89 <sup>81</sup>	50.8 <sup>32</sup>	6.06 <sup>37</sup>	53.2 <sup>33</sup>	4.47 <sup>99</sup>
	16	37.18 <sup>31</sup>	54.9 <sup>11</sup>	6.70 <sup>95</sup>	47.6 <sup>28</sup>	6.43 <sup>43</sup>	49.9 <sup>30</sup>	5.46 <sup>111</sup>
	26	37.49 <sup>34</sup>	56.0 <sup>15</sup>	7.65 <sup>106</sup>	44.8 <sup>24</sup>	6.86 <sup>48</sup>	46.9 <sup>27</sup>	6.57 <sup>121</sup>
Dez.	6	37.83 <sup>37</sup>	57.5 <sup>18</sup>	8.71 <sup>115</sup>	42.4 <sup>18</sup>	7.34 <sup>51</sup>	44.2 <sup>22</sup>	7.78 <sup>126</sup>
	16	38.20 <sup>36</sup>	59.3 <sup>21</sup>	9.86 <sup>120</sup>	40.6 <sup>12</sup>	7.85 <sup>54</sup>	42.0 <sup>17</sup>	9.04 <sup>128</sup>
	26	38.56 <sup>35</sup>	61.4 <sup>23</sup>	11.06 <sup>121</sup>	39.4 <sup>6</sup>	8.39 <sup>53</sup>	40.3 <sup>11</sup>	10.32 <sup>124</sup>
	36	38.91 <sup>35</sup>	63.7 <sup>7</sup>	12.27 <sup>38.8</sup>		8.92 <sup>39.2</sup>		11.56 <sup>26.1</sup>
Mittl. Ort	35.79	49.3	5.37	78.8	4.59	77.3	9.75	25.1

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1912	$\eta$	Virginis.	3 <sup>m</sup> .7.	$\alpha$	Crucis med.	1 <sup>m</sup> .0.	$\alpha$	Comae.	6 <sup>m</sup> .0.	$\delta$	Corvi.	2 <sup>m</sup> .8.		
	AR.	Dekl.	—	AR.	Dekl.	—	AR.	Dekl.	+	AR.	Dekl.	—		
	12 <sup>h</sup>	15 <sup>m</sup>	0° 10'	12 <sup>h</sup>	21 <sup>m</sup>	62° 36'	12 <sup>h</sup>	25 <sup>m</sup>	21° 22'	12 <sup>h</sup>	25 <sup>m</sup>	16° 1'		
Jan.	I	23.89	34	39.3	21	40.76	58	23.1	20	17.94	36	53.0	19	
	II	24.23	31	41.4	21	41.34	55	25.1	25	18.30	34	51.1	14	
	21	24.54	29	43.5	18	41.89	50	27.6	28	18.64	31	49.7	11	
	31	24.83	26	45.3	17	42.39	44	30.4	32	18.95	28	48.6	8	
Febr.	10	25.09	22	47.0	13	42.83	37	33.6	34	19.23	24	47.8	3	
	20	25.31	18	48.3	11	43.20	29	37.0	36	19.47	20	47.5	1	
	I	25.49	14	49.4	8	43.49	22	40.6	36	19.67	15	47.6	5	
	II	25.63	9	50.2	6	43.71	15	44.2	36	19.82	11	48.1	7	
März	21	25.72	6	50.8	3	43.86	7	47.8	34	19.93	7	48.8	10	
	31	25.78	3	51.1	0	43.93	0	51.2	34	20.00	7	49.8	11	
	April	10	25.81	0	51.1	1	43.93	6	54.6	31	20.04	1	50.9	13
	20	25.81	3	51.0	2	43.87	11	57.7	28	20.03	3	52.2	13	
Mai	30	25.78	5	50.8	4	43.76	17	60.5	25	20.00	5	53.5	13	
	10	25.73	6	50.4	4	43.59	22	63.0	21	19.95	7	54.8	12	
	20	25.67	7	50.0	5	43.37	25	65.1	16	19.88	9	56.0	11	
	30	25.60	8	49.5	6	43.12	29	66.7	13	19.79	9	57.1	10	
Juni	9	25.52	9	48.9	6	42.83	32	68.0	7	19.70	11	58.1	7	
	19	25.43	9	48.3	6	42.51	33	68.7	3	19.59	10	58.8	6	
	29	25.34	9	47.7	6	42.18	33	69.0	3	19.49	11	59.4	3	
	Juli	9	25.25	9	47.1	5	41.85	33	68.7	7	19.38	10	59.7	1
Aug.	19	25.16	8	46.6	5	41.51	32	68.0	12	19.28	10	59.8	1	
	29	25.08	7	46.1	4	41.19	29	66.8	16	19.18	9	59.7	4	
	8	25.01	6	45.7	3	40.90	26	65.2	20	19.09	7	59.3	7	
	18	24.95	4	45.4	1	40.64	20	63.2	22	19.02	5	58.6	9	
Sept.	28	24.91	1	45.3	0	40.44	15	61.0	25	18.97	3	57.7	12	
	7	24.90	1	45.3	2	40.29	7	58.5	27	18.94	0	56.5	14	
	17	24.91	5	45.5	4	40.22	2	55.8	26	18.94	3	55.1	17	
	27	24.96	10	45.9	7	40.24	12	53.2	28	18.97	9	53.4	21	
Okt.	7	25.06	10	46.6	7	40.36	21	50.4	23	19.06	12	51.3	21	
	17	25.19	13	47.5	12	40.57	29	48.1	21	19.18	16	49.2	24	
	27	25.36	21	48.7	15	40.86	38	46.0	16	19.34	21	46.8	25	
	Nov.	6	25.57	26	50.2	17	41.24	45	44.4	11	19.55	25	44.3	25
Dez.	16	25.83	29	51.9	19	41.69	53	43.3	6	19.80	29	41.8	26	
	26	26.12	31	53.8	21	42.22	57	42.7	1	20.09	32	39.2	26	
	6	26.43	31	55.9	22	42.79	60	42.6	6	20.41	35	36.6	24	
	16	26.77	34	58.1	22	43.39	61	43.2	12	20.76	36	34.2	23	
Mitt. Ort	26.71	34	60.3	23	44.00	60	44.4	19	21.12	36	31.9	20		
	36	27.45	34	62.6	23	44.60	46.3	21.48	29.9	21.62	35	49.3	18	

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## SCHEINBARE STERNÖRTER.

1912	8 Canum ven. 4 <sup>m</sup> .3.		$\beta$ Corvi. 2 <sup>m</sup> .6.		$\gamma$ Draconis. 3 <sup>m</sup> .6.		24 Corinae seq. 5 <sup>m</sup> .1.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	12 <sup>h</sup> 29 <sup>m</sup>	41° 49'	12 <sup>h</sup> 29 <sup>m</sup>	22° 54'	12 <sup>h</sup> 29 <sup>m</sup>	70° 15'	12 <sup>h</sup> 30 <sup>m</sup>	18° 51'
Jan.								
I	34.11 <sup>42</sup>	54.9 <sup>14</sup>	45.08 <sup>36</sup>	28.4 <sup>23</sup>	45.18 <sup>78</sup>	65.6 <sup>7</sup>	42.80 <sup>36</sup>	34.8 <sup>19</sup>
II	34.53 <sup>40</sup>	53.5 <sup>9</sup>	45.44 <sup>34</sup>	30.7 <sup>24</sup>	45.96 <sup>76</sup>	64.9 <sup>1</sup>	43.16 <sup>33</sup>	32.9 <sup>16</sup>
21	34.93 <sup>37</sup>	52.6 <sup>4</sup>	45.78 <sup>31</sup>	33.1 <sup>24</sup>	46.72 <sup>71</sup>	64.8 <sup>6</sup>	43.49 <sup>31</sup>	31.3 <sup>13</sup>
31	35.30 <sup>33</sup>	52.2 <sup>1</sup>	46.09 <sup>28</sup>	35.5 <sup>25</sup>	47.43 <sup>63</sup>	65.4 <sup>12</sup>	43.80 <sup>28</sup>	30.0 <sup>8</sup>
Febr.	35.63 <sup>29</sup>	52.3 <sup>7</sup>	46.37 <sup>24</sup>	38.0 <sup>23</sup>	48.06 <sup>55</sup>	66.6 <sup>17</sup>	44.08 <sup>24</sup>	29.2 <sup>4</sup>
10	35.92 <sup>23</sup>	53.0 <sup>11</sup>	46.61 <sup>19</sup>	40.3 <sup>22</sup>	48.61 <sup>43</sup>	68.3 <sup>22</sup>	44.32 <sup>21</sup>	28.8 <sup>1</sup>
März								
I	36.15 <sup>18</sup>	54.1 <sup>15</sup>	46.80 <sup>16</sup>	42.5 <sup>21</sup>	49.04 <sup>32</sup>	70.5 <sup>25</sup>	44.53 <sup>16</sup>	28.7 <sup>3</sup>
II	36.33 <sup>13</sup>	55.6 <sup>18</sup>	46.96 <sup>12</sup>	44.6 <sup>19</sup>	49.36 <sup>21</sup>	73.0 <sup>28</sup>	44.69 <sup>11</sup>	29.0 <sup>6</sup>
21	36.46 <sup>7</sup>	57.4 <sup>20</sup>	47.08 <sup>7</sup>	46.5 <sup>16</sup>	49.57 <sup>8</sup>	75.8 <sup>29</sup>	44.80 <sup>8</sup>	29.6 <sup>8</sup>
31	36.53 <sup>2</sup>	59.4 <sup>22</sup>	47.15 <sup>5</sup>	48.1 <sup>15</sup>	49.65 <sup>4</sup>	78.7 <sup>29</sup>	44.88 <sup>4</sup>	30.4 <sup>10</sup>
April								
10	36.55 <sup>2</sup>	61.6 <sup>22</sup>	47.20 <sup>1</sup>	49.6 <sup>12</sup>	49.61 <sup>15</sup>	81.6 <sup>29</sup>	44.92 <sup>0</sup>	31.4 <sup>12</sup>
20	36.53 <sup>6</sup>	63.8 <sup>21</sup>	47.21 <sup>2</sup>	50.8 <sup>10</sup>	49.46 <sup>25</sup>	84.5 <sup>26</sup>	44.92 <sup>2</sup>	32.6 <sup>12</sup>
30	36.47 <sup>9</sup>	65.9 <sup>19</sup>	47.19 <sup>4</sup>	51.8 <sup>7</sup>	49.21 <sup>21</sup>	87.1 <sup>23</sup>	44.90 <sup>5</sup>	33.8 <sup>12</sup>
Mai								
10	36.38 <sup>12</sup>	67.8 <sup>17</sup>	47.15 <sup>6</sup>	52.5 <sup>5</sup>	48.88 <sup>33</sup>	89.4 <sup>19</sup>	44.85 <sup>7</sup>	35.0 <sup>12</sup>
20	36.26 <sup>14</sup>	69.5 <sup>15</sup>	47.09 <sup>7</sup>	53.0 <sup>3</sup>	48.49 <sup>39</sup>	91.3 <sup>14</sup>	44.78 <sup>7</sup>	36.2 <sup>11</sup>
30	36.12 <sup>16</sup>	71.0 <sup>11</sup>	47.02 <sup>9</sup>	53.3 <sup>0</sup>	48.04 <sup>48</sup>	92.7 <sup>10</sup>	44.71 <sup>9</sup>	37.3 <sup>9</sup>
Juni								
9	35.96 <sup>16</sup>	72.1 <sup>8</sup>	46.93 <sup>10</sup>	53.3 <sup>2</sup>	47.56 <sup>50</sup>	93.7 <sup>4</sup>	44.62 <sup>10</sup>	38.2 <sup>8</sup>
19	35.80 <sup>16</sup>	72.9 <sup>4</sup>	46.83 <sup>11</sup>	53.1 <sup>4</sup>	47.06 <sup>51</sup>	94.1 <sup>1</sup>	44.52 <sup>11</sup>	39.0 <sup>6</sup>
29	35.64 <sup>17</sup>	73.3 <sup>0</sup>	46.72 <sup>11</sup>	52.7 <sup>5</sup>	46.55 <sup>49</sup>	94.0 <sup>6</sup>	44.41 <sup>10</sup>	39.6 <sup>4</sup>
Juli								
9	35.47 <sup>16</sup>	73.3 <sup>3</sup>	46.61 <sup>11</sup>	52.2 <sup>8</sup>	46.06 <sup>48</sup>	93.4 <sup>11</sup>	44.31 <sup>10</sup>	40.0 <sup>1</sup>
19	35.31 <sup>15</sup>	73.0 <sup>8</sup>	46.50 <sup>10</sup>	51.4 <sup>9</sup>	45.58 <sup>45</sup>	92.3 <sup>16</sup>	44.21 <sup>10</sup>	40.1 <sup>0</sup>
29	35.16 <sup>13</sup>	72.2 <sup>11</sup>	46.40 <sup>10</sup>	50.5 <sup>10</sup>	45.13 <sup>40</sup>	90.7 <sup>21</sup>	44.11 <sup>9</sup>	40.1 <sup>3</sup>
Aug.								
8	35.03 <sup>12</sup>	71.1 <sup>15</sup>	46.30 <sup>9</sup>	49.5 <sup>12</sup>	44.73 <sup>35</sup>	88.6 <sup>25</sup>	44.02 <sup>7</sup>	39.8 <sup>5</sup>
18	34.91 <sup>9</sup>	69.6 <sup>19</sup>	46.21 <sup>6</sup>	48.3 <sup>11</sup>	44.38 <sup>28</sup>	86.1 <sup>29</sup>	43.95 <sup>6</sup>	39.3 <sup>8</sup>
28	34.82 <sup>5</sup>	67.7 <sup>22</sup>	46.15 <sup>3</sup>	47.2 <sup>11</sup>	44.10 <sup>21</sup>	83.2 <sup>32</sup>	43.89 <sup>3</sup>	38.5 <sup>10</sup>
Sept.								
7	34.77 <sup>2</sup>	65.5 <sup>24</sup>	46.12 <sup>1</sup>	46.1 <sup>11</sup>	43.89 <sup>13</sup>	80.0 <sup>35</sup>	43.86 <sup>0</sup>	37.5 <sup>13</sup>
17	34.75 <sup>1</sup>	63.1 <sup>27</sup>	46.11 <sup>3</sup>	45.0 <sup>9</sup>	43.76 <sup>4</sup>	76.5 <sup>37</sup>	43.86 <sup>2</sup>	36.2 <sup>15</sup>
27	34.76 <sup>7</sup>	60.4 <sup>32</sup>	46.14 <sup>8</sup>	44.1 <sup>8</sup>	43.72 <sup>7</sup>	72.8 <sup>42</sup>	43.88 <sup>8</sup>	34.7 <sup>20</sup>
Okt.								
7	34.83 <sup>7</sup>	57.2 <sup>31</sup>	46.22 <sup>13</sup>	43.3 <sup>4</sup>	43.79 <sup>17</sup>	68.6 <sup>38</sup>	43.96 <sup>11</sup>	32.7 <sup>20</sup>
17	34.95 <sup>18</sup>	54.1 <sup>32</sup>	46.35 <sup>17</sup>	42.9 <sup>1</sup>	43.96 <sup>27</sup>	64.8 <sup>38</sup>	44.07 <sup>16</sup>	30.7 <sup>22</sup>
27	35.13 <sup>22</sup>	50.9 <sup>32</sup>	46.52 <sup>22</sup>	42.8 <sup>2</sup>	44.23 <sup>38</sup>	61.0 <sup>37</sup>	44.23 <sup>21</sup>	28.5 <sup>24</sup>
Nov.								
6	35.35 <sup>28</sup>	47.7 <sup>32</sup>	46.74 <sup>27</sup>	43.0 <sup>6</sup>	44.61 <sup>49</sup>	57.3 <sup>34</sup>	44.44 <sup>24</sup>	26.1 <sup>25</sup>
16	35.63 <sup>32</sup>	44.5 <sup>30</sup>	47.01 <sup>30</sup>	43.6 <sup>10</sup>	45.10 <sup>57</sup>	53.9 <sup>32</sup>	44.68 <sup>29</sup>	23.6 <sup>25</sup>
26	35.95 <sup>36</sup>	41.5 <sup>28</sup>	47.31 <sup>33</sup>	44.6 <sup>13</sup>	45.67 <sup>65</sup>	50.7 <sup>27</sup>	44.97 <sup>31</sup>	21.1 <sup>26</sup>
Dez.								
6	36.31 <sup>40</sup>	38.7 <sup>25</sup>	47.64 <sup>35</sup>	45.9 <sup>17</sup>	46.32 <sup>72</sup>	48.0 <sup>22</sup>	45.28 <sup>34</sup>	18.5 <sup>24</sup>
16	36.71 <sup>41</sup>	36.2 <sup>22</sup>	47.99 <sup>37</sup>	47.6 <sup>19</sup>	47.04 <sup>76</sup>	45.8 <sup>17</sup>	45.62 <sup>35</sup>	16.1 <sup>23</sup>
26	37.12 <sup>41</sup>	34.0 <sup>17</sup>	48.36 <sup>36</sup>	49.5 <sup>22</sup>	47.80 <sup>77</sup>	44.1 <sup>11</sup>	45.97 <sup>35</sup>	13.8 <sup>21</sup>
36	37.53 <sup>32.3</sup>	48.72 <sup>17</sup>	51.7	48.57 <sup>43.0</sup>	46.32 <sup>43.0</sup>	46.32 <sup>11.7</sup>		
Mittl. Ort	34.01	67.8	45.69	36.8	43.99	83.5	43.01	41.0
	470)		471)		472)		473)	

# SCHEINBARE STERNÖRTER.

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1912	$\alpha$ Muscae. $z^m$ .8.		$\gamma$ Centauri. $z^m$ .3.		76 Ursae maj. $6^m$ .2.		$\beta$ Crucis. $r^m$ .4.	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —
	12 <sup>h</sup> 31 <sup>m</sup>	68° 38'	12 <sup>h</sup> 36 <sup>m</sup>	48° 28'	12 <sup>h</sup> 37 <sup>m</sup>	63° II'	12 <sup>h</sup> 42 <sup>m</sup>	59° 12'
Jan.								
I	53.82	71	42.8	38.40	20.0	21	44.16	28.6
II	54.53	68	44.6	38.85	22.1	23	44.77	27.5
21	55.21	62	46.9	39.27	24.4	27	45.36	27.1
31	55.83	56	49.6	39.67	27.1	29	45.92	27.4
Febr.	10	56.39	52.7	40.02	30.0		46.43	28.3
	20	56.86	56.1	40.33	33.1	32	46.87	29.7
März	I	57.24	38	59.6	40.58	20	47.23	31.6
II	57.53	19	63.3	40.78	39.4	31	47.50	33.9
21	57.72	11	67.1	40.92	42.5	30	47.69	36.5
31	57.83	2	70.7	41.02	45.5	28	47.78	39.2
April	10	57.85	6	74.2	41.06	4	47.78	42.0
	20	57.79	14	77.5	41.07	4	47.71	44.8
Mai	30	57.65	21	80.6	41.03	7	47.56	47.4
I0	57.44	28	83.4	40.96	11	19	47.35	49.8
20	57.16	33	85.7	40.85	13	13	47.10	51.8
Juni	30	56.83	37	87.7	40.72	16	46.80	53.4
9	56.46	37	89.2	40.56	17	5	46.47	54.5
19	56.04	42	90.2	40.39	19	5	46.13	55.2
29	55.60	44	90.8	40.20	20	2	45.77	55.3
Juli	9	55.15	45	90.8	40.00	20	45.43	55.0
	19	54.69	46	90.3	39.80	5	45.43	54.1
Aug.	8	54.25	44	89.2	39.61	19	45.09	54.1
18	53.84	41	87.8	39.42	19	14	44.77	52.8
28	53.48	36	85.9	39.26	16	17	44.48	51.0
Sept.	7	53.18	30	83.6	39.13	13	19	44.22
	17	52.96	22	81.1	39.04	9	16	44.02
Okt.	27	52.83	13	78.4	38.99	5	21	43.86
7	52.80	3	75.6	39.00	1	22	43.76	43.2
17	52.90	10	72.6	39.08	8	22	43.73	43.0
Dez.	6	53.12	22	70.0	39.22	14	19	43.78
	27	53.45	44	67.7	39.43	27	11	44.11
Nov.	6	53.89	44	65.8	39.70	33	7	44.40
16	54.43	54	64.3	40.03	38	2	44.77	47.8
26	55.05	62	63.4	40.41	38.6	3	45.21	44.5
6	55.73	63.1	63.1	40.83	42	3	45.72	44.6
	16	56.46	73	63.4	41.28	45	9	46.28
26	57.20	74	64.2	41.74	46	13	46.87	49.2
36	57.94	74	65.7	42.20	43.0	19	47.48	5.9
Mitt. Ort	55.50	63.1		39.42	35.9		43.53	45.9
				474)	476)		478)	481)

## SCHEINBARE STERNÖRTER.

1912	$\eta$ Centauri. 4 <sup>m</sup> .4.		$\epsilon$ Ursae maj. 1 <sup>m</sup> .7.		$\delta$ Virginis. 3 <sup>m</sup> .4.		12 Can. ven. sq. 2 <sup>m</sup> .8.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	12 <sup>h</sup> 48 <sup>m</sup>	39° 41'	12 <sup>h</sup> 50 <sup>m</sup>	56° 25'	12 <sup>h</sup> 51 <sup>m</sup>	3° 52'	12 <sup>h</sup> 51 <sup>m</sup>	38° 47'
Jan.								
I	32.48	48.9	9.94	57.6	9.73	29.7	54.71	23.5
II	32.89	50.9	10.46	56.3	10.07	27.6	55.11	21.8
II	33.28	53.2	10.97	55.5	10.40	25.6	55.50	20.5
III	33.64	55.8	11.45	55.4	10.71	23.8	55.87	19.8
Febr.	10	33.97	58.5	11.89	55.9	10.99	22.3	56.21
	20	34.26	61.3	12.27	57.0	11.24	21.1	56.51
März	I	34.51	64.2	12.60	58.6	11.45	20.2	56.76
II	34.70	67.0	12.86	60.6	11.62	19.6	56.96	22.2
II	34.86	69.6	13.04	62.9	11.75	19.3	57.11	23.8
III	34.96	72.2	13.15	65.5	11.84	19.3	57.22	25.6
April	10	35.03	74.5	13.19	68.2	11.91	19.5	57.26
	20	35.06	76.7	13.16	70.8	11.94	19.8	57.27
	30	35.05	78.6	13.07	73.4	11.94	20.3	57.24
Mai	10	35.01	80.2	12.94	75.8	11.92	20.9	57.18
	20	34.95	81.6	12.76	77.9	11.88	21.6	57.09
	30	34.86	82.6	12.55	79.6	11.83	22.3	56.97
Juni	9	34.75	83.3	12.31	80.9	11.76	23.0	56.84
	19	34.62	83.7	12.05	81.8	11.67	23.7	56.69
	29	34.48	83.7	11.79	82.2	11.58	24.3	56.54
Juli	9	34.32	83.4	11.52	82.2	11.49	24.9	56.39
	19	34.17	82.8	11.26	81.6	11.39	25.4	56.23
	29	34.01	81.8	11.00	80.6	11.29	25.7	56.08
Aug.	8	33.86	80.6	10.77	79.1	11.20	26.0	55.93
	18	33.73	79.2	10.56	77.2	11.12	26.1	55.81
	28	33.62	77.5	10.38	74.9	11.05	26.1	55.70
Sept.	7	33.53	75.8	10.25	72.3	11.00	25.8	55.62
	17	33.49	74.0	10.16	69.3	10.98	25.4	55.58
	27	33.49	72.3	10.12	66.0	10.99	24.8	55.57
Okt.	7	"33.56	70.4	10.15	62.3	11.04	23.9	55.60
	17	33.67	69.0	10.24	58.7	11.14	22.7	55.70
	27	33.85	67.9	10.40	55.0	11.28	21.3	55.84
Nov.	6	34.08	67.2	10.63	51.4	11.46	19.6	56.03
	16	34.37	66.8	10.94	47.8	11.69	17.7	56.27
	26	34.70	66.9	11.30	44.5	11.95	15.7	56.57
Dez.	6	35.07	67.4	11.72	41.5	12.25	13.5	56.90
	16	35.47	68.4	12.19	38.8	12.57	11.2	57.27
	26	35.88	69.9	12.69	36.7	12.91	9.0	57.66
	36	36.30	71.8	13.21	35.0	13.25	6.8	58.06
Mittl. Ort		33.44	62.0	9.69	74.3	10.21	31.5	54.81
		482)		483)		484)		485)

1912	8 Draconis. 5 <sup>m</sup> .2.		ε Virginis. 2 <sup>m</sup> .8.		θ Virginis. 4 <sup>m</sup> .3.		43 Comae. 4 <sup>m</sup> .2.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +
	12 <sup>h</sup> 51 <sup>m</sup>	65° 54'	12 <sup>h</sup> 57 <sup>m</sup>	11° 25'	13 <sup>h</sup> 5 <sup>m</sup>	5° 4'	13 <sup>h</sup> 7 <sup>m</sup>	28° 18'
Jan.								
I	59.13 66	38.4	47.34 11	50.3 21	22.89 34	9.2 21	45.74 37	75.9 20
II	59.79 65	37.3	47.68 34	48.2 19	23.23 33	11.3 21	46.11 36	73.9 15
21	60.44 62	36.8	48.02 31	46.3 16	23.56 32	13.4 20	46.47 34	72.4 11
31	61.06 57	36.9	48.33 29	44.7 12	23.88 28	15.4 18	46.81 32	71.3 7
Febr.	61.63 49	37.7	48.62	43.5	24.16 26	17.2 16	47.13 28	70.6 1
10	62.12 42	39.1	48.87 22	42.6 5	24.42 22	18.8 13	47.41 24	70.5 3
März	62.54 33	41.0	49.09 18	42.1 2	24.64 18	20.1 11	47.65 20	70.8 7
II	62.87 22	43.3	49.27 14	41.9 2	24.82 15	21.2 8	47.85 16	71.5 11
21	63.09 13	45.9	49.41 10	42.1	24.97 11	22.0 6	48.01 11	72.6 13
31	63.22 3	48.7	49.51	42.5	25.08 8	22.6	48.12 8	73.9 16
April	63.25 6	51.6	49.58 3	43.1	25.16 5	22.9 2	48.20 3	75.5 17
10	63.19 15	54.5	49.61 1	43.9	25.21 2	23.1 0	48.23 0	77.2 18
30	63.04 22	57.2	49.62 2	44.8	25.23 1	23.1 2	48.23 3	79.0 18
Mai	62.82 27	59.7	49.60	45.8	25.22 2	22.9 3	48.20 6	80.8 17
10	62.55 33	61.8	49.56	46.8	25.20 4	22.6	48.14 4	82.5 15
30	62.22 36	63.5	49.51 8	47.8	25.16 6	22.2 4	48.07 10	84.0 13
Juni	61.86 9	64.8	49.43 8	48.7	25.10 8	21.8 5	47.97 11	85.3 11
19	61.47 39	65.6	49.35 9	49.5	25.02 8	21.3 6	47.86 12	86.4 8
29	61.06 41	65.9	49.26 10	50.2	24.94 9	20.7	47.74 12	87.2 6
Juli	60.65 41	65.6	49.16 10	50.8	24.85 10	20.2 5	47.62 13	87.8 2
9	60.25 40	64.9	49.06 11	51.2	24.75 10	19.6 5	47.49 14	88.0 1
29	59.87 35	63.6	48.95 10	51.4	24.65 10	19.1 5	47.35 12	87.9 4
Aug.	59.52 8	61.9	48.85 8	51.4	24.55 9	18.6 4	47.23 12	87.5 8
18	59.20 32	59.7	48.77 8	51.3	24.46 8	18.2 4	47.11 10	86.7 10
28	58.93 21	57.1	48.69	50.9	24.38 6	17.8 2	47.01 8	85.7 14
Sept.	58.72 16	54.2	48.64 3	50.3	24.32 3	17.6 0	46.93 5	84.3 17
17	58.56 8	50.9	48.61 0	49.5	24.29 0	17.6 1	46.88 2	82.6 19
Okt.	58.48 27	47.4	48.61	48.4	24.29 4	17.7 3	46.86 2	80.7 23
7	58.48 10	43.7	48.65 4	47.1	24.33 8	18.0 6	46.88 7	78.4 26
17	58.58 18	39.6	48.74 13	45.3	24.41 13	18.6 9	46.95 12	75.8 27
27	58.76 28	35.7	48.87 18	43.5	24.54 17	19.5 11	47.07 16	73.1 28
Nov.	59.04 6	32.0	49.05 22	41.5	24.71 22	20.6 14	47.23 22	70.3 29
16	59.40 36	28.4	49.27 26	39.3	24.93 26	22.0 17	47.45 26	67.4 29
26	59.85 45	25.0	49.53 29	36.9	25.19 29	23.7 18	47.71 30	64.5 29
Dez.	60.37 6	22.0	49.82	34.5	25.48 32	25.5 20	48.01 33	61.6 27
16	60.96 62	19.4	50.14 34	32.1	25.80 34	27.5 21	48.34 35	58.9 24
26	61.58 65	17.4	50.48 34	29.7	26.14 34	29.6 22	48.69 37	56.5 22
36	62.23	15.9	50.82	27.5	26.48	31.8	49.06	54.3
Mitt. Ort	58.56	56.6	47.78	54.9	23.53	10.0	46.08	86.3
	486)		488)		490)		492)	

## SCHEINBARE STERNÖRTER.

1912	$\gamma$ Hydrae. 3 <sup>m</sup> .I.		ι Centauri. 2 <sup>m</sup> .9.		ζ Urs. maj. pr. 2 <sup>m</sup> .2.		α Virginis. 1 <sup>m</sup> .I.	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl.
	13 <sup>h</sup> 14 <sup>m</sup>	22° 42'	13 <sup>h</sup> 15 <sup>m</sup>	36° 14'	13 <sup>h</sup> 20 <sup>m</sup>	55° 22'	13 <sup>h</sup> 20 <sup>m</sup>	10° 42'
Jan.								
I	7.19 <sup>*</sup> 11	36 <sup>20.7</sup> 22	37.59 <sup>*</sup> 39	43.4 <sup>18</sup> 21	23.00 <sup>*</sup> 50	47.6 <sup>17</sup>	32.51 <sup>*</sup> 34	6.0 <sup>21</sup>
II	7.55 <sup>*</sup> 21	36 <sup>22.7</sup> 23	37.99 <sup>*</sup> 37	45.2 <sup>18</sup> 23	23.50 <sup>*</sup> 50	45.9 <sup>11</sup>	32.85 <sup>*</sup> 34	8.1 <sup>21</sup>
21	7.91 <sup>*</sup> 31	33 <sup>24.8</sup> 22	38.38 <sup>*</sup> 34	47.3 <sup>23</sup> 25	24.00 <sup>*</sup> 48	44.8 <sup>5</sup>	33.19 <sup>*</sup> 33	10.2 <sup>20</sup>
Febr.	8.24 <sup>*</sup> 10	31 <sup>27.1</sup> 22	38.75 <sup>*</sup> 34	49.6 <sup>25</sup> 25	24.48 <sup>*</sup> 45	44.3 <sup>1</sup>	33.52 <sup>*</sup> 30	12.2 <sup>19</sup>
20	8.55 <sup>*</sup> 20	29.3 <sup>22</sup>	39.09 <sup>*</sup> 30	52.1 <sup>25</sup> 25	24.93 <sup>*</sup> 41	44.4 <sup>8</sup>	33.82 <sup>*</sup> 27	14.1 <sup>18</sup>
März	8.83 <sup>*</sup> 1	31.5 <sup>21</sup>	39.39 <sup>*</sup> 27	54.6 <sup>26</sup>	25.34 <sup>*</sup> 35	45.2 <sup>13</sup>	34.09 <sup>*</sup> 23	15.9 <sup>16</sup>
II	9.07 <sup>*</sup> 11	33.6 <sup>19</sup>	39.66 <sup>*</sup> 18	57.2 <sup>25</sup>	25.69 <sup>*</sup> 29	46.5 <sup>17</sup>	34.32 <sup>*</sup> 20	17.5 <sup>15</sup>
21	9.27 <sup>*</sup> 31	35.5 <sup>18</sup>	39.88 <sup>*</sup> 18	59.7 <sup>24</sup>	25.98 <sup>*</sup> 23	48.2 <sup>22</sup>	34.52 <sup>*</sup> 16	18.8 <sup>12</sup>
31	9.44 <sup>*</sup> 10	37.3 <sup>16</sup>	40.06 <sup>*</sup> 14	62.1 <sup>23</sup>	26.21 <sup>*</sup> 16	50.4 <sup>25</sup>	34.68 <sup>*</sup> 13	20.0 <sup>9</sup>
April	9.66 <sup>*</sup> 10	40.3 <sup>12</sup>	40.30 <sup>*</sup> 7	66.6 <sup>20</sup>	26.46 <sup>*</sup> 2	55.6 <sup>27</sup>	34.91 <sup>*</sup> 6	21.5 <sup>5</sup>
20	9.72 <sup>*</sup> 30	41.5 <sup>10</sup>	40.37 <sup>*</sup> 3	68.6 <sup>18</sup>	26.48 <sup>*</sup> 4	58.3 <sup>27</sup>	34.97 <sup>*</sup> 4	22.0 <sup>3</sup>
Mai	9.75 <sup>*</sup> 10	42.5 <sup>8</sup>	40.40 <sup>*</sup> 0	70.4 <sup>15</sup>	26.44 <sup>*</sup> 9	61.0 <sup>25</sup>	35.01 <sup>*</sup> 1	22.3 <sup>1</sup>
20	9.75 <sup>*</sup> 20	43.3 <sup>6</sup>	40.40 <sup>*</sup> 4	71.9 <sup>13</sup>	26.35 <sup>*</sup> 14	63.5 <sup>23</sup>	35.02 <sup>*</sup> 1	22.4 <sup>0</sup>
30	9.73 <sup>*</sup> 4	43.9 <sup>4</sup>	40.36 <sup>*</sup> 5	73.2 <sup>10</sup>	26.21 <sup>*</sup> 17	65.8 <sup>20</sup>	35.01 <sup>*</sup> 3	22.4 <sup>1</sup>
Juni	9.69 <sup>*</sup> 9	44.3 <sup>2</sup>	40.31 <sup>*</sup> 8	74.2 <sup>7</sup>	26.04 <sup>*</sup> 21	67.8 <sup>17</sup>	34.98 <sup>*</sup> 6	22.3 <sup>3</sup>
19	9.63 <sup>*</sup> 19	44.5 <sup>1</sup>	40.23 <sup>*</sup> 10	74.9 <sup>5</sup>	25.83 <sup>*</sup> 24	69.5 <sup>12</sup>	34.92 <sup>*</sup> 6	22.0 <sup>3</sup>
29	9.55 <sup>*</sup> 29	44.4 <sup>2</sup>	40.13 <sup>*</sup> 13	75.4 <sup>1</sup>	25.59 <sup>*</sup> 25	70.7 <sup>8</sup>	34.86 <sup>*</sup> 9	21.7 <sup>4</sup>
Juli	9.45 <sup>*</sup> 9	44.2 <sup>3</sup>	40.00 <sup>*</sup> 13	75.5 <sup>1</sup>	25.34 <sup>*</sup> 27	71.5 <sup>3</sup>	34.77 <sup>*</sup> 9	21.3 <sup>5</sup>
19	9.35 <sup>*</sup> 19	43.9 <sup>6</sup>	39.87 <sup>*</sup> 15	75.4 <sup>5</sup>	25.07 <sup>*</sup> 27	71.8 <sup>2</sup>	34.68 <sup>*</sup> 10	20.8 <sup>6</sup>
29	9.24 <sup>*</sup> 29	43.3 <sup>7</sup>	39.72 <sup>*</sup> 15	74.9 <sup>7</sup>	24.80 <sup>*</sup> 26	71.6 <sup>6</sup>	34.58 <sup>*</sup> 11	20.2 <sup>6</sup>
Aug.	9.12 <sup>*</sup> 8	42.6 <sup>8</sup>	39.57 <sup>*</sup> 15	74.2 <sup>10</sup>	24.54 <sup>*</sup> 26	71.0 <sup>11</sup>	34.47 <sup>*</sup> 10	19.6 <sup>6</sup>
18	9.00 <sup>*</sup> 18	41.8 <sup>9</sup>	39.42 <sup>*</sup> 14	73.2 <sup>11</sup>	24.28 <sup>*</sup> 24	69.9 <sup>16</sup>	34.37 <sup>*</sup> 11	19.0 <sup>5</sup>
28	8.89 <sup>*</sup> 28	40.9 <sup>9</sup>	39.28 <sup>*</sup> 13	72.1 <sup>14</sup>	24.04 <sup>*</sup> 21	68.3 <sup>20</sup>	34.26 <sup>*</sup> 9	18.5 <sup>6</sup>
Sept.	8.79 <sup>*</sup> 7	40.0 <sup>10</sup>	39.15 <sup>*</sup> 9	70.7 <sup>15</sup>	23.83 <sup>*</sup> 18	66.3 <sup>24</sup>	34.17 <sup>*</sup> 7	17.9 <sup>4</sup>
17	8.72 <sup>*</sup> 17	39.0 <sup>10</sup>	39.06 <sup>*</sup> 7	69.2 <sup>15</sup>	23.65 <sup>*</sup> 14	63.9 <sup>28</sup>	34.10 <sup>*</sup> 5	17.5 <sup>4</sup>
27	8.67 <sup>*</sup> 27	38.0 <sup>8</sup>	38.99 <sup>*</sup> 3	67.7 <sup>16</sup>	23.51 <sup>*</sup> 10	61.1 <sup>31</sup>	34.05 <sup>*</sup> 1	17.1 <sup>2</sup>
Okt.	8.66 <sup>*</sup> 7	37.2 <sup>7</sup>	38.96 <sup>*</sup> 2	66.1 <sup>14</sup>	23.41 <sup>*</sup> 3	58.0 <sup>34</sup>	34.04 <sup>*</sup> 2	16.9 <sup>0</sup>
17	8.69 <sup>*</sup> 17	36.5 <sup>6</sup>	38.98 <sup>*</sup> 13	64.7 <sup>14</sup>	23.38 <sup>*</sup> 4	54.6 <sup>39</sup>	34.06 <sup>*</sup> 7	16.9 <sup>3</sup>
27	8.77 <sup>*</sup> 27	35.9 <sup>2</sup>	39.07 <sup>*</sup> 14	63.3 <sup>10</sup>	23.42 <sup>*</sup> 10	50.7 <sup>36</sup>	34.13 <sup>*</sup> 11	17.2 <sup>4</sup>
Nov.	8.90 <sup>*</sup> 6	35.7 <sup>1</sup>	39.21 <sup>*</sup> 19	62.3 <sup>7</sup>	23.52 <sup>*</sup> 17	47.1 <sup>37</sup>	34.24 <sup>*</sup> 17	17.6 <sup>8</sup>
16	9.08 <sup>*</sup> 16	35.8 <sup>4</sup>	39.40 <sup>*</sup> 25	61.6 <sup>4</sup>	23.69 <sup>*</sup> 24	43.4 <sup>37</sup>	34.41 <sup>*</sup> 21	18.4 <sup>10</sup>
26	9.31 <sup>*</sup> 26	36.2 <sup>7</sup>	39.65 <sup>*</sup> 30	61.2 <sup>0</sup>	23.93 <sup>*</sup> 31	39.7 <sup>35</sup>	34.62 <sup>*</sup> 25	19.4 <sup>14</sup>
Dez.	9.58 <sup>*</sup> 6	36.9 <sup>11</sup>	39.95 <sup>*</sup> 35	61.2 <sup>5</sup>	24.24 <sup>*</sup> 37	36.2 <sup>33</sup>	34.87 <sup>*</sup> 29	20.8 <sup>15</sup>
16	9.89 <sup>*</sup> 16	38.0 <sup>14</sup>	40.30 <sup>*</sup> 37	61.7 <sup>9</sup>	24.61 <sup>*</sup> 43	32.9 <sup>29</sup>	35.16 <sup>*</sup> 32	22.3 <sup>18</sup>
26	10.23 <sup>*</sup> 26	39.4 <sup>17</sup>	40.67 <sup>*</sup> 39	62.6 <sup>13</sup>	25.04 <sup>*</sup> 46	30.0 <sup>25</sup>	35.48 <sup>*</sup> 33	24.1 <sup>20</sup>
36	10.58 <sup>*</sup> 36	41.1 <sup>19</sup>	41.06 <sup>*</sup> 40	63.9 <sup>16</sup>	25.50 <sup>*</sup> 49	27.5 <sup>20</sup>	35.81 <sup>*</sup> 35	26.1 <sup>21</sup>
Mittl. Ort	10.95 <sup>*</sup>	43.0	41.46	65.5	25.99	25.5	36.16 <sup>*</sup>	28.2

1912	Gr. 2001. 6 <sup>m</sup> .z.		69 H.Urs. maj. 5 <sup>m</sup> .5.		ζ Virginis.		17 H.can.ven. 4 <sup>m</sup> .9.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +
	13 <sup>h</sup> 23 <sup>m</sup>	72° 50'	13 <sup>h</sup> 25 <sup>m</sup>	60° 23'	13 <sup>h</sup> 30 <sup>m</sup>	0° 8'	13 <sup>h</sup> 30 <sup>m</sup>	37° 37'
Jan.								
I	53.74	85	34.2	15	13.39	42.1	11.74	48.6
II	54.59	85	32.7	7	13.94	40.4	12.08	50.7
21	55.44	84	32.0	1	14.49	39.3	12.41	52.7
31	56.28	79	31.9	6	15.03	39.0	12.73	54.6
Febr.	10	57.07	32.5	12	15.54	39.2	13.03	56.3
März	20	57.78	62	33.7	16.00	40.0	13.30	57.6
I	58.40	50	35.5	22	16.40	41.5	13.54	58.7
II	58.90	38	37.7	26	16.73	43.4	13.75	59.5
21	59.28	40.3	40.3	29	16.99	45.7	13.92	60.1
31	59.52	24	43.2	30	17.17	48.3	14.05	60.3
April	10	59.63	2	46.2	17.27	51.1	14.16	60.3
	20	59.61	15	49.2	17.29	53.9	14.22	60.2
Mai	30	59.46	26	52.2	17.24	56.7	14.27	59.8
I0	59.20	36	54.9	24	17.13	59.4	14.28	59.4
20	58.84	44	57.3	20	16.96	61.8	14.28	58.8
Juni	30	58.40	51	59.3	16	16.74	63.9	14.25
9	57.89	57	60.9	11	16.48	65.6	14.20	57.6
19	57.32	60	62.0	6	16.19	66.8	14.14	56.9
29	56.72	62	62.6	1	15.89	67.6	14.06	56.3
Juli	9	56.09	63	62.7	15.56	67.9	13.97	55.7
	19	55.47	62	62.1	15.23	67.7	13.87	55.2
29	54.85	59	61.1	10	14.90	67.0	13.76	54.7
Aug.	8	54.26	59	59.6	14.59	65.8	13.65	54.3
	18	53.71	55	57.6	14.29	64.1	13.55	54.1
	28	53.21	50	55.1	14.02	62.0	13.45	53.9
Sept.								
7	52.78	43	52.3	33	13.80	59.4	13.38	53.9
17	52.43	35	49.0	35	13.61	56.5	13.32	54.1
27	52.18	25	45.5	37	13.48	53.3	13.30	54.5
Okt.	7	52.03	15	41.8	13.42	49.9	13.31	55.1
	17	51.99	4	37.6	13.43	45.9	13.36	55.9
Nov.	27	52.10	23	33.6	13.52	42.1	13.46	57.1
6	52.33	29.7	38	13.69	38.3	13.61	58.5	
16	52.68	35	25.9	13.95	34.5	13.80	60.1	
26	53.15	47	35	14.28	30.9	14.04	62.0	
Dez.	6	53.73	58	22.4	14.68	27.6	14.31	64.0
	16	54.42	77	16.4	15.14	24.7	14.62	66.1
	26	55.19	82	14.1	15.65	22.2	14.95	68.2
	36	56.01	12.3		16.19	20.2	15.28	70.4
Mittl. Ort		53.34	53.8		13.43	60.3	12.48	46.8
		499)			500)		501)	502)

1912	$\varepsilon$ Centauri. 2 <sup>m</sup> .4.		$\pi$ Bootis. 4 <sup>m</sup> .5.		$\gamma$ Ursae maj. 1 <sup>m</sup> .8.		89 Virginis. 5 <sup>m</sup> .2.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. —
	13 <sup>h</sup> 34 <sup>m</sup>	53° 0'	13 <sup>h</sup> 43 <sup>m</sup>	17° 53'	13 <sup>h</sup> 44 <sup>m</sup>	49° 44'	13 <sup>h</sup> 45 <sup>m</sup>	17° 41'
Jan.								
I	16.53	50	55.6	17	4.16	33.7	4.10	51.1
II	17.03	49	57.3	21	4.51	31.4	4.54	49.0
21	17.52	48	59.4	24	4.85	29.5	4.99	47.5
31	18.00	44	61.8	26	5.18	27.9	5.43	46.6
Febr.	18.44	40	64.4	29	5.50	26.7	5.85	46.4
20	18.84	36	67.3	30	5.79	25	6.23	46.7
März	19.20	31	70.3	30	6.04	25.6	6.57	47.6
II	19.51	25	73.3	30	6.26	25.7	6.87	49.0
21	19.76	21	76.3	30	6.45	26.1	7.10	50.9
31	19.97	15	79.3	28	6.59	26.9	7.28	53.1
April	20.12	10	82.1	26	6.70	8	7.40	55.6
20	20.22	5	84.7	24	6.78	4	7.46	58.2
30	20.27	1	87.1	22	6.82	2	7.48	60.8
Mai	20.28	4	89.3	18	6.84	1	7.44	63.4
20	20.24	7	91.1	15	6.83	15	7.36	65.8
30	20.17	12	92.6	12	6.79	5	7.24	67.9
Juni	20.05	15	93.8	8	6.74	8	7.08	69.8
19	19.90	19	94.6	4	6.66	9	6.90	71.3
29	19.71	20	95.0	1	6.57	10	6.70	72.4
Juli	19.51	23	95.1	4	6.47	12	6.48	73.0
19	19.28	24	94.7	8	6.35	12	6.25	73.2
29	19.04	23	93.9	11	6.23	13	6.02	73.0
Aug.	18.81	23	92.8	11	6.10	13	5.79	72.3
18	18.58	21	91.4	14	5.98	11	5.56	71.1
28	18.37	18	89.7	20	5.87	10	5.36	69.5
Sept.	18.19	13	87.7	21	5.77	7	5.18	67.4
17	18.06	8	85.6	21	5.70	5	5.02	65.0
27	17.98	2	83.5	21	5.65	1	4.92	62.2
Okt.	17.96	6	81.4	20	5.64	3	4.86	59.2
17	18.02	14	79.4	19	5.67	8	4.85	55.9
27	18.16	21	77.5	15	5.75	13	4.91	52.0
Nov.	18.37	29	76.0	10	5.88	18	5.04	48.4
16	18.66	36	75.0	6	6.06	22	5.23	44.8
26	19.02	41	74.4	1	6.28	26	5.48	41.2
Dez.	19.43	46	74.3	5	6.54	20	5.80	37.8
16	19.89	48	74.8	9	6.84	17.1	6.16	34.7
26	20.37	51	75.7	14	7.16	32	6.56	32.0
36	20.88	51	77.1	14	7.50	34	7.00	29.6
Mittl. Ort	18.22	69.7	4.82	41.9	4.49	67.8	5.25	46.1
	504)		507)		509)		510)	

1912	$\zeta$ Centauri. 2 <sup>m</sup> .6.		$\eta$ Bootis. 2 <sup>m</sup> .8.		$\tau$ Virginis. 4 <sup>m</sup> .2.		II Bootis. 6 <sup>m</sup> .3.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
		-		+		+		+
	13 <sup>h</sup> 50 <sup>m</sup>	46° 51'	13 <sup>h</sup> 50 <sup>m</sup>	18° 49'	13 <sup>h</sup> 57 <sup>m</sup>	1° 57'	13 <sup>h</sup> 57 <sup>m</sup>	27° 48'
Jan.								
I	0.95	8.0	28.98	69.8	9.14	68.4	10.44	28.9
II	1.40	45	29.33	35	9.47	66.2	10.79	26.6
21	1.86	46	29.67	34	9.81	64.2	11.15	24.7
31	2.30	44	30.01	32	10.14	62.4	11.50	23.2
Febr.	10	2.72	15.0	30.33	62.8	10.45	60.8	11.84
	37	37	29	8	28	14	31	5
März	20	3.09	17.4	30.62	62.0	10.73	59.4	12.15
I	3.43	34	20.0	30.89	61.7	10.99	58.4	12.43
II	3.73	25	22.7	31.12	61.7	11.22	57.7	12.67
21	3.98	21	25.4	31.31	62.2	11.41	57.3	12.88
31	4.19	17	28.0	31.46	63.0	11.58	57.2	13.04
April	10	4.36	30.6	31.58	64.1	11.71	57.3	13.17
	20	4.48	8	31.66	65.3	11.81	57.7	13.26
30	4.56	3	35.4	31.71	66.7	11.87	58.2	13.31
Mai	10	4.59	0	37.5	68.2	11.91	58.8	13.33
	20	4.59	4	31.73	69.7	11.93	59.5	13.32
Juni	30	4.55	7	40.1	71.1	11.92	60.3	13.29
9	4.48	11	42.4	31.65	72.4	11.89	61.1	13.22
19	4.37	14	43.5	31.58	73.6	11.84	61.8	13.13
29	4.23	16	44.2	31.49	74.6	11.76	62.5	13.03
Juli	9	4.07	18	44.6	31.39	75.4	11.68	63.1
	19	3.89	20	44.6	31.27	75.9	11.58	63.7
Aug.	29	3.69	20	44.2	31.15	76.2	11.47	64.2
8	3.49	20	43.5	31.02	76.2	11.36	64.6	12.48
18	3.29	19	42.5	30.89	76.0	11.24	64.8	12.34
	28	3.10	16	41.2	30.77	75.4	11.13	64.8
Sept.	7	2.94	12	39.6	30.67	74.6	11.04	64.8
	17	2.82	8	37.9	30.59	73.5	10.96	64.5
Okt.	27	2.74	3	36.0	30.53	72.2	10.91	64.0
7	2.71	3	34.2	30.51	70.5	10.89	63.3	11.87
	17	2.74	22	32.3	30.54	68.5	10.92	62.4
Nov.	27	2.85	18	30.5	30.61	66.2	10.99	61.1
6	3.03	24	29.1	30.73	63.8	11.11	59.7	12.05
16	3.27	31	28.0	30.90	61.3	11.28	58.0	12.21
	26	3.58	31	27.2	31.12	58.6	11.49	56.1
Dez.	6	3.94	36	26.9	31.38	55.9	11.75	54.1
	16	4.34	44	27.0	31.67	53.2	12.03	51.9
26	4.78	45	27.6	31.99	50.6	12.35	49.7	13.30
	36	5.23	45	28.6	32.33	48.2	12.68	47.5
Mittl. Ort		2.57	20.1	29.68	78.5	10.02	71.8	11.11
		512)		513)		516)		517)

## SCHEINBARE STERNÖRTER.

1912	$\beta$ Centauri. $r^m$ .		$\theta$ Centauri. $z^m$ . $I$ .		$\alpha$ Draconis. $3^m$ . $4$ .		$d$ Bootis. $4^m$ . $9$ .	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +
	13 <sup>h</sup> 57 <sup>m</sup>	59° 56'	14 <sup>h</sup> 1 <sup>m</sup>	35° 56'	14 <sup>h</sup> 1 <sup>m</sup>	64° 47'	14 <sup>h</sup> 6 <sup>m</sup>	25° 29'
Jan.								
I	33.91	58	41.9	8	28.48	6.4	59.92	27.1
II	34.49	59	42.7	13	28.88	7.8	60.51	25.1
21	35.08	56	44.0	17	29.28	9.5	61.12	23.7
31	35.64	55	45.7	21	29.66	11.4	61.73	22.9
Febr.	10	36.19	55	47.8	30.03	13.5	62.33	22.8
		50		24	34	22	55	6
20	36.69	45	50.2	27	30.37	15.7	62.88	23.4
März	I	37.14	40	52.9	29	30.68	18.0	63.38
II	37.54	34	55.8	30	30.96	20.2	63.81	26.3
21	37.88	28	58.8	30	31.19	22.4	64.16	28.5
31	38.16	22	61.8	31	31.39	24.6	64.43	31.1
April	10	38.38	16	64.9	31	31.55	12	64.61
20	38.54	10	68.0	29	31.67	9	64.70	36.8
30	38.64	1	70.9	27	31.76	6	64.70	39.8
Mai	10	38.68	1	73.6	25	31.82	2	64.62
20	38.67	7	76.1	23	31.84	1	64.47	45.4
Juni	30	38.60	13	78.4	19	31.83	4	64.25
9	38.47	17	80.3	16	31.79	7	63.97	49.9
19	38.30	22	81.9	12	31.72	10	63.64	51.6
29	38.08	25	83.1	8	31.62	11	63.28	52.8
Juli	9	37.83	28	83.9	3	31.51	14	62.89
		37.55	30	84.2	0	31.37	15	53.5
19	37.25	31	84.2	6	31.22	16	62.47	53.7
Aug.	8	36.94	31	83.6	10	31.06	16	62.05
18	36.63	29	82.6	14	30.90	16	51.63	52.5
28	36.34	25	81.2	17	30.74	13	61.22	51.1
Sept.	7	36.09	20	79.5	20	30.61	11	60.83
17	35.89	15	77.5	21	30.50	7	49.3	44.3
27	35.74	7	75.4	24	30.43	14	59.93	41.2
Okt.	7	35.67	1	73.0	23	30.40	3	59.76
17	35.68	12	70.7	25	30.42	12	59.66	34.2
		35.80	20	68.2	21	30.51	14	59.65
Nov.	6	36.00	29	66.1	18	30.65	20	59.74
16	36.29	38	64.3	14	30.85	26	59.92	22.2
26	36.67	45	62.9	10	31.11	31	60.20	18.5
Dez.	6	37.12	50	61.9	5	31.42	24.5	60.57
		37.62	56	61.4	1	31.76	34	61.02
16	38.18	56	61.5	5	32.14	40	25.0	11.7
26	38.76	58	62.0	5	32.54	27.2	61.53	8.8
Mittl. Ort		36.19	56.4		29.90	15.0	60.36	46.4
					518)	520)	521)	522)

## SCHEINBARE STERNÖRTER.

1912	z Virginis. 4 <sup>m</sup> .2.		4 Ursae min. 5 <sup>m</sup> .0.		t Virginis. 4 <sup>m</sup> .0.		α Bootis. 1 <sup>m</sup> .	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +
	14 <sup>h</sup> 8 <sup>m</sup>	9° 51'	14 <sup>h</sup> 9 <sup>m</sup>	77° 56'	14 <sup>h</sup> 11 <sup>m</sup>	5° 34'	14 <sup>h</sup> 11 <sup>m</sup>	19° 37'
Jan.								
I	10.91	35	52.2	20	9.95	105	79.3	18
II	11.26	33	54.2	19	11.00	112	77.5	13
21	11.59	33	56.1	19	12.12	114	76.2	5
31	11.92	32	58.0	18	13.26	112	75.7	1
Febr.	10	12.24	59.8		14.38	105	75.8	
		30	16			7		
März	1	12.54	27	61.4	15	15.43	96	76.5
	12.81	23	62.9	12	16.39	83	77.9	19
II	13.04	21	64.1	10	17.22	67	79.8	24
21	13.25	18	65.1	7	17.89	50	82.2	27
31	13.43	14	65.8	5	18.39	31	84.9	
April	10	13.57	12	66.3	4	18.70	30	87.9
	13.69	8	66.7	2	18.83	13	91.0	31
	13.77	6	66.9	0	18.77	6	91.0	31
Mai	10	13.83	3	66.9	1	18.52	25	94.1
	13.86	0	66.8	2	18.12	40	97.0	28
					55	24		
Juni	30	13.86	2	66.6	3	17.57	67	102.2
9	13.84	1	66.3	4	16.90	79	104.2	16
19	13.80	6	65.9	4	16.11	87	105.8	
29	13.74	9	65.5	4	15.24	93	106.9	6
Juli	9	13.65	10	65.1	5	14.31	96	107.5
					96	0	9	5
	19	13.55	11	64.6	5	13.35	98	107.5
	13.44	11	64.1	5	12.37	98	107.0	10
Aug.	8	13.33	12	63.6	5	11.39	95	106.0
	13.21	12	63.1	4	10.44	89	104.4	20
	13.09	10	62.7	4	9.55	82	102.4	25
Sept.	7	12.99	9	62.3	2	8.73	72	99.9
	12.90	6	62.1	2	8.01	61	97.1	33
					7.40	47	93.8	
Okt.	27	12.84	2	61.9	1	6.93	32	90.3
7	12.82	2	62.0	2	6.61	32	86.6	37
	12.84	6	62.2	4	16	39		
					82.7	43	25	
Nov.	27	12.90	12	62.6	7	6.45	4	24.82
6	13.02	17	63.3	10	6.49	22	78.4	39
	13.19	21	64.3	12	6.71	41	74.5	38
	13.40	25	65.5	15	7.12	59	70.7	35
Dez.	6	13.65	29	67.0	16	7.71	75	67.2
	13.94	32	68.6	18	8.46	89	64.1	28
	14.26	33	70.4	19	9.35	101	61.3	21
	14.59	72.3			10.36		59.2	
Mittl. Ort	11.96	52.4			10.41	99.7	23.87	51.9
					523)	524)	525)	526)

## SCHEINBARE STERNÖRTER.

1912	$\lambda$ Bootis.		4 <sup>m</sup> .O.		$\vartheta$ Bootis.		3 <sup>m</sup> .9.		$\varphi$ Bootis.		3 <sup>m</sup> .7.		$\gamma$ Bootis.		2 <sup>m</sup> .9.	
	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	
	14 <sup>h</sup> 13 <sup>m</sup>	46° 28'		14 <sup>h</sup> 22 <sup>m</sup>	52° 14'		14 <sup>h</sup> 28 <sup>m</sup>	30° 44'		14 <sup>h</sup> 28 <sup>m</sup>	38° 40'					
Jan.	I	1.69	74.8	11.36	68.1	24	1.41	73.2	24	31.28	79.1	25				
	II	2.10	72.5	11.79	65.7	18	1.76	70.8	21	31.65	76.6	21				
	21	2.52	70.7	12.24	63.9	13	2.12	68.7	16	32.03	74.5	15				
	31	2.94	69.4	12.70	62.6	6	2.48	67.1	12	32.41	73.0					
Febr.	10	3.34	68.8	13.15	62.0	0	2.83	65.9	6	32.78	72.1	9				
	20	3.72	68.7	13.57	62.0	6	3.15	65.3	0	33.13	71.7	4				
März	I	4.07	69.3	13.96	62.6	12	3.46	65.3	4	33.46	71.8	8				
	II	4.38	70.4	14.30	63.8	17	3.73	65.7	9	33.75	72.6	12				
	21	4.64	71.9	14.59	65.5	22	3.97	66.6	14	34.00	73.8	16				
	31	4.84	73.9	14.83	67.7	24	4.17	68.0	16	34.21	75.4	20				
April	10	5.00	76.3	15.00	70.1	27	4.33	69.6	19	34.37	77.4	22				
	20	5.10	78.8	15.12	72.8	28	4.45	71.5	21	34.50	79.6	24				
	30	5.15	81.4	15.18	75.6	27	4.53	73.6	21	34.58	82.0					
Mai	10	5.16	84.0	15.19	78.3	27	4.58	75.7	21	34.62	84.4	24				
	20	5.13	86.5	15.14	81.0	27	4.59	77.8	21	34.62	86.8					
	30	5.05	88.9	15.05	83.5	22	4.57	79.9	18	34.58	89.1	21				
Juni	9	4.94	91.0	14.92	85.7	19	4.52	81.7	17	34.51	91.2	18				
	19	4.79	92.7	14.74	87.6	15	4.45	83.4	14	34.42	93.0	15				
	29	4.62	94.1	14.54	89.1	10	4.35	84.8	11	34.29	94.5	12				
Juli	9	4.43	95.1	14.31	90.1	6	4.22	85.9	8	34.14	95.7	8				
	19	4.22	95.7	14.05	90.7	2	4.08	86.7	4	33.97	96.5	3				
	29	3.99	95.8	13.79	90.9	4	3.93	87.1	1	33.79	96.8	0				
Aug.	8	3.77	95.5	13.51	90.5	8	3.77	87.2	3	33.59	96.8	4				
	18	3.54	94.7	13.24	89.7	13	3.60	86.9	7	33.40	96.4	9				
	28	3.33	93.4	12.98	88.4	18	3.43	86.2	10	33.21	95.5	13				
Sept.	7	3.13	91.8	12.73	86.6	22	3.28	85.2	14	33.03	94.2	17				
	17	2.96	89.7	12.52	84.4	25	3.15	83.8	17	32.87	92.5	20				
	27	2.82	87.3	12.34	81.9	30	3.04	82.1	21	32.74	90.5	24				
Okt.	7	2.72	84.5	12.21	78.9	30	2.97	80.0	24	32.65	88.1	27				
	17	2.68	81.4	12.13	75.7	35	2.93	77.6	26	32.60	85.4	30				
	27	2.69	78.1	12.11	72.2	40	2.95	75.0	32	32.61	82.4	36				
Nov.	6	2.77	74.3	12.17	68.2	38	3.02	71.8	30	32.67	78.8	33				
	16	2.93	70.7	12.30	64.4	38	3.14	68.8	32	32.79	75.5	34				
	26	3.12	67.1	12.50	60.7	36	3.32	65.6	31	32.97	72.1	34				
Dez.	6	3.39	63.6	12.76	57.1	36	3.55	62.5	31	33.21	68.7					
	16	3.71	60.3	13.09	53.7	31	3.82	59.4	29	33.49	65.5	31				
	26	4.07	57.3	13.47	50.6	26	4.13	56.5	27	33.81	62.4	27				
	36	4.46	54.8	13.89	48.0	44	4.47	53.8	31	34.17	59.7					
Mittl. Ort		2.36	91.2	12.09	85.7		2.27	86.1		32.10	93.9					
		527		531			534			535						

1912	$\eta$ Centauri. 2 <sup>m</sup> .5		$\alpha$ Centauri. 1 <sup>m</sup> .		$\alpha$ Apodis. 3 <sup>m</sup> .8.		$\zeta$ Bootis m. 3 <sup>m</sup> .6.			
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.		
	14 <sup>h</sup> 29 <sup>m</sup>	41° 46'	14 <sup>h</sup> 33 <sup>m</sup>	60° 28'	14 <sup>h</sup> 36 <sup>m</sup>	78° 40'	14 <sup>h</sup> 36 <sup>m</sup>	14° 5'		
Jan.										
I	53.06	10.1	34.10	9.6	46.19	130	55.76	70.5 23		
II	53.48	42	34.67	57	47.49	134	56.09	68.2 21		
21	53.90	43	35.25	58	48.83	135	56.42	66.1 18		
31	54.33	41	35.84	59	50.18	131	56.75	64.3 15		
Febr.	10	54.74	15.6	36.40	13.5	51.49	8.0	57.08	62.8 10	
	20	55.12	17.7	36.93	15.5	52.76	118	57.38	61.8 7	
März	I	55.48	19.8	37.43	17.7	53.94	12.1	57.67	61.1 2	
II	55.80	32	37.88	20.3	55.02	14.7	57.93	60.9 2		
21	56.09	24.2	38.28	23.0	55.98	17.7	58.16	61.1 5		
31	56.34	26.4	38.63	25.8	56.80	20.9	58.35	61.6 8		
April	10	56.54	28.6	38.91	28.6	57.48	24.2	58.52	62.4 11	
	20	56.72	30.6	39.14	31.5	58.00	27.6	58.65	63.5 12	
Mai	30	56.85	32.6	39.30	34.4	58.35	31.1	58.75	64.7 14	
I	56.94	9	34.5	39.41	37.1	58.54	34.5	58.82	66.1 15	
20	57.00	2	36.2	39.45	39.7	58.58	37.8	58.86	67.6 1	
	30	57.02	37.6	39.43	42.1	58.43	40.9	58.87	69.0 14	
Juni	9	57.00	5	38.9	44.2	58.14	43.7	58.86	70.4 12	
19	56.95	9	40.0	39.22	46.1	57.68	46.3	58.82	71.6 12	
29	56.86	10	40.8	39.03	47.6	57.10	48.4	58.76	72.8 10	
Juli	9	56.74	11	41.3	38.80	48.7	56.39	50.1	58.67	73.8 7
	19	56.60	17	41.6	38.52	49.5	55.58	51.4	58.57	74.5 6
Aug.	29	56.43	18	41.5	38.21	49.7	54.70	52.1	58.45	75.1 3
8	56.25	18	41.1	37.88	49.6	53.77	52.2	58.32	75.4 1	
18	56.07	19	40.5	37.54	49.0	52.83	51.9	58.18	75.5 2	
28	55.88	11	39.5	37.21	48.0	51.92	51.0	58.04	75.3 4	
Sept.	7	55.71	14	38.4	36.91	46.6	51.08	49.6	57.91	74.9 7
	17	55.57	12	37.0	36.64	44.8	50.33	47.7	57.80	74.2 10
Okt.	27	55.45	6	35.6	36.42	42.8	49.73	45.4	57.71	73.2 13
7	55.39	2	34.0	36.28	40.6	49.29	42.8	57.65	71.9 15	
17	55.37	5	32.5	36.21	38.2	49.04	40.0	57.62	70.4 18	
	27	55.42	12	31.1	36.23	35.9	49.01	37.2	57.64	68.6 22
Nov.	6	55.54	18	29.7	36.36	33.4	49.23	34.0	57.72	66.4 23
	16	55.72	25	28.6	36.58	31.4	49.68	31.3	57.84	64.1 24
Dez.	26	55.97	30	27.9	36.89	29.7	50.33	28.8	58.01	61.7 25
6	56.27	27.6	35	37.29	28.3	51.19	26.7	58.23	59.2 26	
	16	56.62	39	27.5	37.75	27.4	52.21	25.1	58.49	56.6 26
26	57.01	41	27.9	38.27	26.9	53.37	24.0	58.78	54.0 24	
36	57.42	28.7	38.83	26.9	54.64	23.4	59.10	51.6		
Mitt. Ort	54.81	18.6	36.78	22.0	52.60	20.3	56.76	78.9		
	537)		538)		542)		543)			

## SCHEINBARE STERNÖRTER.

1912	p. Virginis. 3 <sup>m</sup> .9.		109 Virginis. 3 <sup>m</sup> .7.		α Librae. 2 <sup>m</sup> .7.		Gr. 2164. 5 <sup>m</sup> .8.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +
	14 <sup>h</sup> 38 <sup>m</sup>	5° 16'	14 <sup>h</sup> 41 <sup>m</sup>	2° 15'	14 <sup>h</sup> 45 <sup>m</sup>	15° 40'	14 <sup>h</sup> 49 <sup>m</sup>	59° 38'
Jan.	I	24.08 <sup>s</sup> II 24.40 <sup>32</sup>	36.8 <sup>20</sup> 38.8 <sup>19</sup>	46.81 <sup>32</sup>	42.2 <sup>22</sup>	59.12 <sup>33</sup>	35.7 <sup>16</sup>	11.25 <sup>47</sup>
	II	24.40 <sup>34</sup>	38.8 <sup>19</sup>	47.13 <sup>33</sup>	40.0 <sup>20</sup>	59.45 <sup>35</sup>	37.3 <sup>17</sup>	11.72 <sup>51</sup>
	II	24.74 <sup>33</sup>	40.7 <sup>18</sup>	47.46 <sup>33</sup>	38.0 <sup>18</sup>	59.80 <sup>34</sup>	39.0 <sup>17</sup>	12.23 <sup>51</sup>
	III 25.07 <sup>33</sup>	42.5 <sup>17</sup>	47.79 <sup>32</sup>	36.2 <sup>15</sup>	60.14 <sup>34</sup>	40.7 <sup>17</sup>	12.74 <sup>52</sup>	39.8 <sup>8</sup>
Febr.	10	25.39 <sup>32</sup>	44.2 <sup>14</sup>	48.11 <sup>31</sup>	34.7 <sup>13</sup>	60.48 <sup>32</sup>	42.4 <sup>16</sup>	13.26 <sup>51</sup>
	20	25.70 <sup>28</sup>	45.6 <sup>12</sup>	48.42 <sup>28</sup>	33.4 <sup>10</sup>	60.80 <sup>29</sup>	44.0 <sup>15</sup>	13.77 <sup>47</sup>
März	I	25.98 <sup>26</sup>	46.8 <sup>10</sup>	48.70 <sup>26</sup>	32.4 <sup>7</sup>	61.09 <sup>27</sup>	45.5 <sup>13</sup>	14.24 <sup>42</sup>
	II	26.24 <sup>23</sup>	47.8 <sup>7</sup>	48.96 <sup>23</sup>	31.7 <sup>3</sup>	61.36 <sup>25</sup>	46.8 <sup>11</sup>	14.66 <sup>38</sup>
	II	26.47 <sup>20</sup>	48.5 <sup>5</sup>	49.19 <sup>20</sup>	31.4 <sup>1</sup>	61.61 <sup>21</sup>	47.9 <sup>10</sup>	15.04 <sup>31</sup>
	III 26.67 <sup>17</sup>	49.0 <sup>2</sup>	49.39 <sup>17</sup>	31.3 <sup>2</sup>	61.82 <sup>19</sup>	48.9 <sup>7</sup>	15.35 <sup>24</sup>	44.5 <sup>26</sup>
April	10	26.84 <sup>15</sup>	49.2 <sup>0</sup>	49.56 <sup>14</sup>	31.5 <sup>5</sup>	62.01 <sup>15</sup>	49.6 <sup>6</sup>	15.59 <sup>17</sup>
	20	26.99 <sup>11</sup>	49.2 <sup>1</sup>	49.70 <sup>11</sup>	32.0 <sup>6</sup>	62.16 <sup>13</sup>	50.2 <sup>5</sup>	15.76 <sup>10</sup>
	30	27.10 <sup>8</sup>	49.1 <sup>3</sup>	49.81 <sup>8</sup>	32.6 <sup>8</sup>	62.29 <sup>10</sup>	50.7 <sup>3</sup>	15.86 <sup>3</sup>
Mai	10	27.18 <sup>6</sup>	48.8 <sup>4</sup>	49.89 <sup>5</sup>	33.4 <sup>8</sup>	62.39 <sup>7</sup>	51.0 <sup>2</sup>	15.89 <sup>3</sup>
	20	27.24 <sup>3</sup>	48.4 <sup>5</sup>	49.94 <sup>3</sup>	34.2 <sup>8</sup>	62.46 <sup>4</sup>	51.2 <sup>1</sup>	15.86 <sup>11</sup>
	30	27.27 <sup>0</sup>	47.9 <sup>5</sup>	49.97 <sup>0</sup>	35.0 <sup>9</sup>	62.50 <sup>1</sup>	51.3 <sup>1</sup>	15.75 <sup>15</sup>
Juni	9	27.27 <sup>3</sup>	47.4 <sup>5</sup>	49.97 <sup>3</sup>	35.9 <sup>9</sup>	62.51 <sup>2</sup>	51.2 <sup>0</sup>	15.60 <sup>21</sup>
	19	27.24 <sup>5</sup>	46.9 <sup>6</sup>	49.94 <sup>5</sup>	36.8 <sup>8</sup>	62.49 <sup>4</sup>	51.2 <sup>2</sup>	15.39 <sup>26</sup>
	29	27.19 <sup>5</sup>	46.3 <sup>6</sup>	49.89 <sup>5</sup>	37.6 <sup>7</sup>	62.45 <sup>7</sup>	51.0 <sup>3</sup>	15.13 <sup>30</sup>
Juli	9	27.12 <sup>7</sup>	45.8 <sup>5</sup>	49.82 <sup>7</sup>	38.3 <sup>7</sup>	62.38 <sup>9</sup>	50.7 <sup>3</sup>	14.83 <sup>33</sup>
	19	27.03 <sup>10</sup>	45.3 <sup>5</sup>	49.73 <sup>11</sup>	39.0 <sup>5</sup>	62.29 <sup>11</sup>	50.4 <sup>4</sup>	14.50 <sup>35</sup>
	29	26.93 <sup>12</sup>	44.8 <sup>4</sup>	49.62 <sup>12</sup>	39.5 <sup>4</sup>	62.18 <sup>12</sup>	50.0 <sup>4</sup>	14.15 <sup>36</sup>
Aug.	8	26.81 <sup>12</sup>	44.4 <sup>4</sup>	49.50 <sup>13</sup>	39.9 <sup>3</sup>	62.06 <sup>14</sup>	49.6 <sup>4</sup>	13.79 <sup>37</sup>
	18	26.68 <sup>13</sup>	44.0 <sup>3</sup>	49.37 <sup>13</sup>	40.2 <sup>1</sup>	61.92 <sup>13</sup>	49.2 <sup>5</sup>	13.42 <sup>36</sup>
	28	26.55 <sup>12</sup>	43.7 <sup>1</sup>	49.24 <sup>13</sup>	40.3 <sup>0</sup>	61.79 <sup>13</sup>	48.7 <sup>4</sup>	13.06 <sup>35</sup>
Sept.	7	26.43 <sup>11</sup>	43.6 <sup>1</sup>	49.11 <sup>11</sup>	40.3 <sup>3</sup>	61.66 <sup>11</sup>	48.3 <sup>5</sup>	12.71 <sup>32</sup>
	17	26.32 <sup>8</sup>	43.5 <sup>1</sup>	49.00 <sup>8</sup>	40.0 <sup>4</sup>	61.55 <sup>9</sup>	47.8 <sup>4</sup>	12.39 <sup>28</sup>
	27	26.24 <sup>5</sup>	43.6 <sup>3</sup>	48.92 <sup>6</sup>	39.6 <sup>7</sup>	61.46 <sup>6</sup>	47.4 <sup>2</sup>	12.11 <sup>23</sup>
Okt.	7	26.19 <sup>5</sup>	43.9 <sup>5</sup>	48.86 <sup>2</sup>	38.9 <sup>9</sup>	61.40 <sup>2</sup>	47.2 <sup>2</sup>	11.88 <sup>17</sup>
	17	26.18 <sup>3</sup>	44.4 <sup>7</sup>	48.84 <sup>3</sup>	38.0 <sup>11</sup>	61.38 <sup>2</sup>	47.0 <sup>1</sup>	11.71 <sup>9</sup>
	27	26.21 <sup>9</sup>	45.1 <sup>10</sup>	48.87 <sup>8</sup>	36.9 <sup>15</sup>	61.40 <sup>8</sup>	47.1 <sup>2</sup>	11.62 <sup>2</sup>
Nov.	6	26.30 <sup>13</sup>	46.1 <sup>11</sup>	48.95 <sup>12</sup>	35.4 <sup>16</sup>	61.48 <sup>14</sup>	47.3 <sup>5</sup>	11.60 <sup>8</sup>
	16	26.43 <sup>18</sup>	47.2 <sup>14</sup>	49.07 <sup>17</sup>	33.8 <sup>18</sup>	61.62 <sup>18</sup>	47.8 <sup>8</sup>	11.68 <sup>7</sup>
	26	26.61 <sup>23</sup>	48.6 <sup>16</sup>	49.24 <sup>22</sup>	32.0 <sup>20</sup>	61.80 <sup>23</sup>	48.6 <sup>9</sup>	11.83 <sup>15</sup>
Dez.	6	26.84 <sup>27</sup>	50.2 <sup>18</sup>	49.46 <sup>26</sup>	30.0 <sup>21</sup>	62.03 <sup>27</sup>	49.5 <sup>13</sup>	12.07 <sup>32</sup>
	16	27.11 <sup>29</sup>	52.0 <sup>19</sup>	49.72 <sup>29</sup>	27.9 <sup>21</sup>	62.30 <sup>31</sup>	50.8 <sup>14</sup>	12.39 <sup>39</sup>
	26	27.40 <sup>32</sup>	53.9 <sup>20</sup>	50.01 <sup>31</sup>	25.8 <sup>21</sup>	62.61 <sup>33</sup>	52.2 <sup>15</sup>	12.78 <sup>44</sup>
	36	27.72 <sup>27</sup>	55.9 <sup>18</sup>	50.32 <sup>23</sup>	23.7 <sup>7</sup>	62.94 <sup>53.7</sup>		13.22 <sup>36</sup>
Mittl. Ort	25.24	34.3	47.92	47.2	60.44	36.0	12.28	64.5
	545)		547)		548)		549)	

## SCHEINBARE STERNÖRTER.

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1912	$\beta$ Ursae min. $2^m$ .o.		P. XIV 221. $6^m$ .o.		$\beta$ Lupi. $2^m$ .7.		$\beta$ Bootis. $3^m$ .3.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +
	14 <sup>h</sup> 50 <sup>m</sup>	74° 30'	14 <sup>h</sup> 52 <sup>m</sup>	14° 47'	14 <sup>h</sup> 52 <sup>m</sup>	42° 46'	14 <sup>h</sup> 58 <sup>m</sup>	40° 43'
Jan.								
I	55.58	78	34.6	"	43.77	41.2	36.84	58.3
II	56.36	84	32.2	24	44.19	41.9	37.19	55.6
21	57.20	89	30.3	12	44.62	42.9	37.56	53.3
31	58.09	89	29.1	5	45.05	44.2	37.95	51.6
Febr.	10	58.98	28.6	1	45.47	45.7	38.33	50.4
	20	59.86	28.7	8	45.87	47.5	38.70	49.8
März	1	60.69	74	29.5	46.25	49.4	39.05	49.8
II	61.43	65	31.0	19	46.60	51.4	39.36	50.4
21	62.08	52	32.9	24	46.91	53.5	39.65	51.5
31	62.60	40	35.3	28	47.19	55.6	39.89	53.1
April	10	63.00	38.1	30	47.44	57.7	40.09	55.0
	20	63.25	41.1	31	47.64	59.7	40.25	57.3
	30	63.36	3	44.2	47.81	61.7	40.36	59.8
Mai	10	63.33	17	47.3	6.04	63.5	40.43	62.3
	20	63.16	29	50.3	6.10	65.3	40.46	64.9
	30	62.87	42	53.1	6.13	66.9	40.46	67.4
Juni	9	62.45	55.6	25	6.12	68.3	40.41	69.7
	19	61.94	60	57.7	6.09	69.4	40.32	71.8
	29	61.34	67	59.4	6.04	70.4	40.20	73.6
Juli	9	60.67	60.6	5.96	59.7	71.1	40.06	75.1
	19	59.94	73	61.3	5.86	71.5	39.89	76.1
	29	59.18	76	61.5	5.74	71.7	39.70	76.8
Aug.	8	58.39	79	61.1	5.60	71.5	39.49	77.0
	18	57.61	78	60.2	5.46	71.7	39.27	76.8
	28	56.84	77	58.8	5.32	70.3	39.05	76.1
Sept.	7	56.11	67	56.9	5.18	69.3	38.84	75.0
	17	55.44	60	54.6	5.05	68.1	38.65	73.5
	27	54.84	51	51.8	4.95	66.7	38.48	71.6
Okt.	7	54.33	40	48.7	4.87	65.2	38.35	69.4
	17	53.93	27	45.3	4.84	63.7	38.26	66.8
	27	53.66	41.6	41.6	4.84	62.2	38.22	63.8
Nov.	6	53.52	14	37.7	4.89	60.8	38.23	60.6
	16	53.54	2	33.4	5.00	59.5	38.31	57.0
	26	53.72	34	29.5	5.16	58.6	38.45	53.5
Dez.	6	54.06	47	25.8	5.36	58.0	38.65	50.0
	16	54.53	61	22.3	5.61	57.8	38.90	46.6
	26	55.14	19.1	22.7	5.89	57.9	39.20	43.4
	36	55.86	72	16.4	6.19	58.3	39.54	40.5
Mittl. Ort	57.00	54.6	3.98	64.8	45.69	48.5	37.87	73.7
	550)		551)		552)		555)	

## SCHEINBARE STERNÖRTER.

1912	$\gamma$ Scorp. 3 <sup>m</sup> .4.		$\psi$ Bootis. 4 <sup>m</sup> .5.		$\zeta$ Lupi. 3 <sup>m</sup> .4.		$\gamma$ Triang. austr. 2 <sup>m</sup> .9.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. —
	14 <sup>h</sup> 58 <sup>m</sup>	24° 56'	15 <sup>h</sup> 0 <sup>m</sup>	27° 16'	15 <sup>h</sup> 5 <sup>m</sup>	51° 45'	15 <sup>h</sup> 10 <sup>m</sup>	68° 21'
Jan.								
1	53.43	35	10.1	13	39.41	72.5	45.6	8.6
II	53.78	36	11.4	14	39.74	69.9	45.8	8.1
21	54.14	37	12.8	15	40.08	67.6	46.4	8.2
31	54.51	35	14.3	16	40.42	65.7	47.4	8.7
Febr.	10	54.86	35	15.9	40.77	64.4	48.6	9.7
		34	16		33	9	16	14
	20	55.20	32	17.5	41.10	63.5	57.34	10.2
März	I	55.52	29	19.1	41.41	63.2	57.79	11.1
	II	55.81	27	20.6	41.69	63.3	58.21	12.9
	21	56.08	24	22.0	41.95	64.0	58.59	13.1
	31	56.32	24	23.4	42.17	65.0	58.93	14.2
April	10	56.52	18	24.5	42.36	66.5	59.23	15.7
	20	56.70	15	25.6	42.51	68.2	59.48	16.0
	30	56.85	12	26.6	42.63	70.1	59.69	16.3
Mai	10	56.97	9	27.4	42.72	72.2	59.85	16.9
	20	57.06	9	28.1	42.77	74.3	59.97	17.9
	30	57.11	2	28.7	42.78	76.3	60.03	18.7
Juni	9	57.13	1	29.2	42.77	78.3	60.04	19.3
	19	57.12	3	29.5	42.72	80.1	60.01	19.7
	29	57.09	3	29.7	42.65	81.7	59.92	19.9
Juli	9	57.02	7	29.8	42.55	83.0	59.80	20.7
	19	56.93	12	29.8	42.42	84.0	59.63	20.8
	29	56.81	2	29.6	42.27	84.7	59.43	20.8
Aug.	8	56.67	14	29.2	42.12	85.1	59.20	20.9
	18	56.53	14	28.8	41.95	85.1	58.96	20.9
	28	56.38	15	28.3	41.78	84.8	58.71	20.9
Sept.	7	56.24	13	27.6	41.62	84.1	58.47	21.6
	17	56.11	11	26.9	41.46	83.0	58.25	21.3
	27	56.00	7	26.2	41.33	81.6	58.06	21.5
Okt.	7	55.93	3	25.5	41.23	79.9	57.93	21.8
	17	55.90	1	24.9	41.17	77.8	57.85	21.1
	27	55.91	7	24.4	41.15	75.4	57.84	21.9
Nov.	6	55.98	7	24.1	41.18	72.8	57.91	21.8
	16	56.12	14	23.9	41.27	69.6	58.07	21.5
	26	56.30	23	24.1	41.41	66.6	58.30	21.5
Dez.	6	56.53	28	24.5	41.60	63.6	58.61	21.2
	16	56.81	31	25.1	41.85	60.6	58.97	21.1
	26	57.12	31	26.0	42.13	57.6	59.39	21.0
	36	57.46	34	27.1	42.44	54.9	59.84	20.6
Mittl. Ort		54.96	12.4		40.48	84.8	57.29	19.3
		556)			557)		558)	560)

1912	δ Bootis. 3 <sup>m</sup> .2.		β Librae. 2 <sup>m</sup> .5.		ι II. Urs. min. 5 <sup>m</sup> .3.		ψ <sup>1</sup> Lupi. 3 <sup>m</sup> .5.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. -
	15 <sup>h</sup> 11 <sup>m</sup>	33° 38'	15 <sup>h</sup> 12 <sup>m</sup>	9° 3'	15 <sup>h</sup> 13 <sup>m</sup>	67° 40'	15 <sup>h</sup> 16 <sup>m</sup>	35° 56'
Jan.	56.17	33	19.4	27	14.80	34.6	35.92	31.5
	56.50	35	16.7	24	15.12	33	36.47	28.7
	56.85	35	14.3	18	15.45	33	37.07	26.5
Febr.	57.20	36	12.5	14	15.78	33	37.71	24.9
	57.56	35	11.1	9	16.11	41.3	38.36	23.9
März	57.91	33	10.2	2	16.43	42.7	39.00	23.6
	58.24	30	10.0	-	16.73	30	39.62	24.1
	58.54	28	10.3	8	17.01	26	40.20	25.1
	58.82	24	11.1	12	17.27	23	40.71	26.7
April	59.06	24	12.3	12	17.50	46.2	41.14	28.9
	59.26	20	14.0	20	17.70	18	41.49	31.4
	59.43	13	16.0	22	17.88	15	41.74	34.3
Mai	59.56	9	18.2	23	18.03	12	41.90	37.3
	59.65	6	20.5	24	18.15	9	41.97	40.4
	59.71	2	22.9	23	18.24	6	41.94	43.5
Juni	59.73	2	25.2	22	18.30	3	41.81	46.5
	59.71	5	27.4	21	18.33	0	41.60	49.2
	59.66	8	29.5	18	18.33	2	41.32	51.5
Juli	59.58	11	31.3	15	18.31	6	40.96	53.5
	59.47	11	32.8	11	18.25	8	40.55	55.1
	59.33	17	33.9	8	18.17	10	40.08	56.2
Aug.	59.16	17	34.7	4	18.07	12	39.58	56.8
	58.99	20	35.1	1	17.95	13	39.06	56.9
	58.79	19	35.2	-	17.82	4	38.52	56.5
	58.60	19	34.8	4	17.68	3	37.98	55.5
Sept.	58.41	17	34.0	12	17.55	13	37.46	54.0
	58.24	16	32.8	15	17.42	11	36.97	52.0
	58.08	13	31.3	20	17.31	8	36.52	49.6
Okt.	57.95	8	29.3	23	17.23	4	36.14	46.8
	57.87	5	27.1	26	17.19	0	35.83	43.6
	57.82	1	24.5	29	17.19	4	35.60	40.1
Nov.	57.83	7	21.6	32	17.23	11	35.47	36.4
	57.90	7	18.2	34	17.34	15	35.46	32.1
	58.03	18	15.0	33	17.49	20	35.56	28.2
Dez.	58.21	11.7	-	-	17.69	24	35.77	24.4
	58.44	28	8.4	31	17.93	27	36.09	20.7
	58.72	31	5.3	29	18.20	49.3	36.51	17.3
Mitt. Ort	59.03	2.4	-	-	18.52	50.9	37.01	14.3

1912	$\gamma$ Ursae min. 3 <sup>m</sup> .0.		$\mu$ Bootis. 4 <sup>m</sup> .1.		$\epsilon$ Draconis. 3 <sup>m</sup> .2.		$\beta$ Coron. bor. 3 <sup>m</sup> .7.		
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	
	15 <sup>h</sup> 20 <sup>m</sup>	72° 8'	15 <sup>h</sup> 21 <sup>m</sup>	37° 40'	15 <sup>h</sup> 22 <sup>m</sup>	59° 15'	15 <sup>h</sup> 24 <sup>m</sup>	29° 24'	
Jan.	I	49.70 62	30.4 28	8.75 33	52.3 28	56.82 42	68.4 29	10.84 31	17.6 27
	II	50.32 70	27.6 22	9.08 35	49.5 25	57.24 47	65.5 24	11.15 33	14.9 24
	21	51.02 76	25.4 16	9.43 37	47.0 19	57.71 50	63.1 18	11.48 34	12.5 20
	31	51.78 78	23.8 10	9.80 36	45.1 14	58.21 51	61.3 12	11.82 34	10.5 15
Febr.	10	52.56 77	22.8 3	10.16 36	43.7 8	58.72 50	60.1 5	12.16 34	9.0 9
	20	53.33 75	22.5 4	10.52 35	42.9 3	59.22 49	59.6 2	12.50 33	8.1 5
März	I	54.08 70	22.9 11	10.87 32	42.6 4	59.71 45	59.8 8	12.83 30	7.6 1
	II	54.78 62	24.0 16	11.19 29	43.0 8	60.16 41	60.6 14	13.13 27	7.7 6
	21	55.40 54	25.6 21	11.48 25	43.8 14	60.57 35	62.0 19	13.40 25	8.3 11
	31	55.94 43	27.7 26	11.73 22	45.2 18	60.92 30	63.9 24	13.65 21	9.4 15
April	10	56.37 31	30.3 29	11.95 18	47.0 21	61.22 23	66.3 27	13.86 18	10.9 18
	20	56.68 19	33.2 31	12.13 14	49.1 24	61.45 15	69.0 29	14.04 14	12.7 20
	30	56.87 10	36.3 31	12.27 10	51.5 25	61.60 9	71.9 31	14.18 11	14.7 22
Mai	10	56.94 7	39.4 31	12.37 7	54.0 25	61.69 2	75.0 30	14.29 7	16.9 23
	20	56.89 16	42.5 30	12.44 2	56.5 26	61.71 4	78.0 30	14.36 4	19.2 22
Juni	30	56.73 28	45.5 28	12.46 2	59.1 23	61.67 11	81.0 27	14.40 0	21.4 22
	9	56.45 5	48.3 24	12.44 5	61.4 22	61.56 17	83.7 25	14.40 3	23.6 20
	19	56.08 45	50.7 21	12.39 9	63.6 20	61.39 22	86.2 22	14.37 6	25.6 18
	29	55.63 54	52.8 16	12.30 13	65.6 16	61.17 27	88.4 17	14.31 10	27.4 15
Juli	9	55.09 60	54.4 11	12.17 15	67.2 13	60.90 30	90.1 13	14.21 12	28.9 12
	19	54.49 65	55.5 7	12.02 18	68.5 9	60.60 34	91.4 9	14.09 15	30.1 10
	29	53.84 67	56.2 1	11.84 19	69.4 5	60.26 37	92.3 3	13.94 16	31.1 5
Aug.	8	53.17 70	56.3 4	11.65 21	69.9 1	59.89 38	92.6 2	13.78 18	31.6 2
	18	52.47 69	55.9 9	11.44 22	70.0 4	59.51 38	92.4 7	13.60 19	31.8 2
	28	51.78 68	55.0 15	11.22 21	69.6 8	59.13 38	91.7 12	13.41 18	31.6 6
Sept.	7	51.10 64	53.5 19	11.01 19	68.8 12	58.75 35	90.5 16	13.23 18	31.0 9
	17	50.46 58	51.6 24	10.82 18	67.6 16	58.40 33	88.9 22	13.05 15	30.1 13
	27	49.88 52	49.2 27	10.64 15	66.0 20	58.07 28	86.7 26	12.90 12	28.8 17
Okt.	7	49.36 43	46.5 32	10.49 11	64.0 24	57.79 23	84.1 29	12.78 10	27.1 21
	17	48.93 32	43.3 34	10.38 6	61.6 26	57.56 16	81.2 33	12.68 5	25.0 23
	27	48.61 21	39.9 37	10.32 1	59.0 30	57.40 9	77.9 36	12.63 0	22.7 27
Nov.	6	48.40 8	36.2 42	10.31 5	56.0 35	57.31 0	74.3 41	12.63 6	20.0 31
	16	48.32 7	32.0 40	10.36 11	52.5 34	57.31 9	70.2 38	12.69 11	16.9 31
	26	48.39 21	28.0 38	10.47 17	49.1 34	57.40 17	66.4 39	12.80 17	13.8 31
Dez.	6	48.60 33	24.2 37	10.64 22	45.7 34	57.57 26	62.5 36	12.97 22	10.7 31
	16	48.93 46	20.5 34	10.86 28	42.3 32	57.83 33	58.9 35	13.19 26	7.6 31
	26	49.39 57	17.1 30	11.14 31	39.1 30	58.16 39	55.4 31	13.45 29	4.5 28
	36	49.96 14.1		11.45 36.1		58.55 52.3		13.74 1.7	
Mittl. Ort		51.55	49.7	9.94	67.0	58.22	86.5	12.04	30.6
		569)		568)		571)		572)	

1912	v <sup>1</sup> Bootis. 4 <sup>m</sup> .8.		γ Lupi. 2 <sup>m</sup> .9.		γ Librae. 4 <sup>m</sup> .1.		α Coron. bor. 2 <sup>m</sup> .2.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. +
	15 <sup>h</sup> 27 <sup>m</sup>	41° 7'	15 <sup>h</sup> 29 <sup>m</sup>	40° 52'	15 <sup>h</sup> 30 <sup>m</sup>	14° 29'	15 <sup>h</sup> 30 <sup>m</sup>	27° 0'
Jan.								
I	44.84	33	41.9	29	14.20	13.6	34.57	50.0
II	45.17	36	39.0	25	14.59	14.0	34.88	51.5
21	45.53	38	36.5	20	15.00	14.7	35.21	53.0
31	45.91	37	34.5	15	15.42	15.6	35.55	54.5
Febr.	46.28	37	33.0	8	15.84	16.8	35.88	55.9
20	46.66	38	32.2	2	16.24	18.1	36.21	57.3
März	47.02	36	32.0	4	16.63	19.6	36.53	58.5
II	47.35	33	32.4	9	17.00	21.2	36.82	59.6
21	47.66	31	33.3	7	17.34	22.9	37.10	60.5
31	47.93	27	34.7	14	17.66	24.6	37.34	61.2
April	48.16	23	36.6	19	17.94	26.4	37.57	61.7
20	48.35	15	38.8	22	18.18	28.1	37.76	62.1
Mai	48.50	11	41.3	26	18.39	29.8	37.93	62.3
10	48.61	6	43.9	26	18.57	31.4	38.07	62.4
20	48.67	2	46.6	26	18.70	33.0	38.19	62.5
30	48.69	2	49.2	25	18.80	34.4	38.27	62.4
Juni	48.67	6	51.7	24	18.85	35.8	38.32	62.3
9	48.61	9	54.1	20	18.86	37.0	38.34	62.1
19	48.52	14	56.1	17	18.83	38.0	38.33	61.9
Juli	48.38	16	57.8	14	18.76	38.8	38.28	61.6
9	48.22	19	59.2	9	18.66	39.4	38.21	61.4
19	48.03	21	60.1	6	18.52	39.8	38.11	61.1
Aug.	47.82	22	60.7	1	18.35	39.9	37.99	60.7
8	47.59	23	60.8	1	18.16	39.7	37.86	60.4
18	47.36	23	60.5	3	17.97	39.3	37.71	60.1
Sept.	47.13	22	59.7	13	17.77	38.6	37.57	59.7
17	46.91	19	58.4	16	17.59	37.7	37.43	59.4
Okt.	46.72	17	56.8	21	17.43	36.6	37.31	59.2
7	46.55	17	54.7	21	17.31	35.3	37.22	59.0
17	46.42	13	52.3	24	17.23	34.0	37.17	58.9
27	46.34	2	49.5	31	17.20	32.7	37.15	59.0
Nov.	46.32	3	46.4	33	17.24	31.4	37.18	59.2
16	46.35	10	43.1	37	17.34	30.2	37.27	59.7
26	46.45	16	39.4	36	17.53	29.2	37.42	60.4
Dez.	46.61	22	35.8	34	17.76	28.4	37.61	61.3
16	46.83	27	32.4	33	18.05	28.0	37.84	62.3
26	47.10	31	29.1	31	18.39	27.9	38.11	63.5
36	47.41	26	26.0	29	18.77	28.1	38.41	64.9
Mittl. Ort	46.09	57.2	16.25	18.0	36.07	48.0	57.70	37.0

## SCHEINBARE STERNÖRTER.

1912	$\alpha$ Serpentis. $2^m.5.$		$\beta$ Serpentis. $3^m.4.$		$\gamma$ Serpentis. $4^m.0.$		$\mu$ Serpentis. $3^m.3.$	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
.	15 <sup>h</sup> 39 <sup>m</sup>	6° 41'	15 <sup>h</sup> 42 <sup>m</sup>	15° 41'	15 <sup>h</sup> 44 <sup>m</sup>	18° 24'	15 <sup>h</sup> 45 <sup>m</sup>	3° 9'
Jan.								
I	54.59	29	58.9	22	6.21	29	37.7	25
II	54.88	31	56.7	21	6.50	31	35.2	22
21	55.19	32	54.6	18	6.81	32	33.0	20
31	55.51	32	52.8	16	7.13	33	31.0	16
Febr.	10	55.83	31	51.2	7.46	29.4	46.28	28.2
	20	56.14	31	50.0	7.78	28.2	46.60	26.6
März	I	56.45	29	49.1	6	8.08	30	47.23
II	56.74	26	48.5	1	8.38	27	47.53	2
21	57.00	24	48.4	2	8.65	24	47.80	6
31	57.24	22	48.6	4	8.89	22	48.05	25
April	10	57.46	19	49.0	8	9.11	19	48.27
	20	57.65	16	49.8	10	9.30	16	48.47
	30	57.81	14	50.8	11	9.46	14	48.63
Mai	10	57.95	10	51.9	12	9.60	10	48.76
	20	58.05	8	53.1	13	9.70	7	48.87
Juni	30	58.13	5	54.4	12	9.77	4	48.94
9	58.18	1	55.6	13	9.81	1	48.98	0
19	58.19	2	56.9	11	9.82	3	48.98	3
29	58.17	4	58.0	11	9.79	6	48.95	6
Juli	9	58.13	8	59.1	9	9.73	8	48.89
	19	58.05	10	60.0	7	9.65	11	48.80
	29	57.95	12	60.7	6	9.54	14	48.69
Aug.	8	57.83	12	61.3	4	9.40	15	45.0
	18	57.69	14	61.7	1	9.25	16	45.4
	28	57.55	15	61.8	0	9.09	16	45.5
Sept.	7	57.40	15	61.8	2	8.93	15	45.4
	17	57.25	13	61.6	5	8.78	14	44.9
	27	57.12	10	61.1	7	8.64	12	44.1
Okt.	7	57.02	7	60.4	10	8.52	8	43.1
	17	56.95	4	59.4	12	8.44	5	41.7
	27	56.91	1	58.2	14	8.39	0	40.0
Nov.	6	56.92	6	56.8	17	8.39	5	38.1
	16	56.98	12	55.1	20	8.44	11	35.9
	26	57.10	16	53.1	21	8.55	16	33.4
Dez.	6	57.26	21	51.0	22	8.71	20	30.8
	16	57.47	25	48.8	22	8.91	24	28.2
	26	57.72	28	46.6	22	9.15	27	25.6
	36	58.00		44.4		9.42	23	23.1
Mittl. Ort		55.94	66.6		7.54	47.6	46.69	45.6
					582)	583)	584)	585)

## SCHEINBARE STERNÖRTER.

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1912	$\varepsilon$ Serpentis. 3 <sup>m</sup> .5.		$\zeta$ Ursae min. 4 <sup>m</sup> .3.		$\beta$ Triang. austr. 2 <sup>m</sup> .9.		$\varepsilon$ Coron. bor. 4 <sup>m</sup> .0.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +
	15 <sup>h</sup> 46 <sup>m</sup>	4° 44'	15 <sup>h</sup> 47 <sup>m</sup>	78° 3'	15 <sup>h</sup> 47 <sup>m</sup>	63° 9'	15 <sup>h</sup> 53 <sup>m</sup>	27° 7'
Jan.								
1	24.30	28	23.5	21	7.42	76	37.6	28
11	24.58	31	21.4	20	8.18	91	34.8	24
21	24.89	32	19.4	18	9.09	101	32.4	19
31	25.21	32	17.6	16	10.10	108	30.5	12
Febr.	10	25.53	31	16.0	11.18	29.3	6	21.69
20	25.84	31	14.8	9	12.28	109	28.7	2
März	1	26.15	29	13.9	6	13.37	105	28.9
11	26.44	27	13.3	2	14.42	95	29.7	14
21	26.71	24	13.1	1	15.37	84	31.1	19
31	26.95	23	13.2	4	16.21	68	33.0	24
April	10	27.18	19	13.6	6	16.89	53	35.4
20	27.37	17	14.2	9	17.42	36	38.2	30
30	27.54	15	15.1	10	17.78	27	41.2	31
Mai	10	27.69	11	16.1	12	17.95	2	44.3
20	27.80	9	17.3	12	17.93	19	47.5	32
Juni	30	27.89	5	18.5	12	17.74	37	50.5
9	27.94	2	19.7	11	17.37	53	53.4	27
19	27.96	1	20.8	11	16.84	67	56.1	22
29	27.95	21.9	10	16.17	80	58.3	19	
Juli	9	27.91	4	22.9	15.37	60.2	10	26.38
19	27.84	10	23.8	7	14.46	99	61.6	10
29	27.74	12	24.5	6	13.47	106	62.6	25
Aug.	8	27.62	12	25.1	4	12.41	109	63.0
18	27.48	14	25.5	2	11.32	111	62.9	6
28	27.34	14	25.7	0	10.21	109	62.3	38
Sept.	7	27.19	15	25.7	1	9.12	105	61.2
17	27.04	13	25.6	4	8.07	100	59.6	20
Okt.	27	26.91	11	25.2	6	7.07	90	57.6
7	26.80	7	24.6	11	6.17	79	55.0	26
17	26.73	4	23.7	9	5.38	52.1	53.4	22
Nov.	27	26.69	1	22.6	13	4.74	48	48.9
6	26.70	21.3	21.3	16	4.26	30	45.4	35
16	26.75	5	19.7	19	3.96	11	41.7	42
26	26.87	12	17.8	19	3.85	11	37.5	38
Dez.	6	27.02	15	15.9	21	3.96	32	33.7
16	27.23	24	13.8	21	4.28	51	30.0	35
26	27.47	27	11.7	21	4.79	68	26.5	32
36	27.74		9.6		5.47	32	23.3	32
Mittl. Ort		25.69	31.0		10.60	56.4	22.72	36.0

## SCHEINBARE STERNÖRTER.

1912	δ Scorp. 2 <sup>m</sup> .3.		θ Draconis. 3 <sup>m</sup> .8.		β Scorp. 2 <sup>m</sup> .6.		δ Ophiuchi. 2 <sup>m</sup> .8.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl.
	15 <sup>h</sup> 55 <sup>m</sup>	22° 22'	16 <sup>h</sup> 0 <sup>m</sup>	58° 47'	16 <sup>h</sup> 0 <sup>m</sup>	19° 33'	16 <sup>h</sup> 9 <sup>m</sup>	3° 28'
Jan.								
I	5.92	31	20.8	12.54	42.9	17.35	57.6	12.8
II	6.23	34	21.8	12.91	39.8	17.66	58.6	14.5
21	6.57	34	22.8	13.33	37.1	17.99	59.7	16.2
31	6.91	34	24.0	13.79	34.9	18.33	60.9	17.8
Febr.	10	7.26	25.2	14.27	33.2	18.67	62.1	19.2
		34	12	49	9	34	12	12
20	7.60	34	26.4	14.76	32.3	19.01	63.3	20.4
März	I	7.94	27.5	15.25	32.0	19.34	64.4	21.4
II	8.26	32	28.6	15.72	32.4	19.65	65.4	22.1
21	8.56	30	29.6	16.15	33.5	19.95	66.3	22.5
31	8.84	26	30.5	16.54	35.1	20.23	67.1	22.7
April	10	9.10	31.3	16.88	37.2	20.48	67.7	22.6
	20	9.32	31.9	17.17	39.7	20.71	68.2	22.3
	30	9.52	32.5	17.39	42.6	20.91	68.6	21.8
Mai	10	9.70	33.0	17.54	45.6	21.09	68.9	21.2
	20	9.84	33.4	17.62	48.7	21.24	69.2	20.5
	30	9.95	8	17.64	51.9	21.35	69.3	19.7
Juni	9	10.03	34.1	17.59	54.9	21.43	69.4	18.8
	19	10.08	5	17.48	57.7	21.48	69.5	18.0
	29	10.09	34.3	17.31	60.2	21.49	69.5	17.2
Juli	9	10.06	34.5	17.08	62.4	21.47	69.5	16.5
	19	10.00	34.6	16.80	64.1	21.41	69.4	15.8
	29	9.91	12	16.48	65.5	21.32	69.3	15.2
Aug.	8	9.79	34.4	16.12	66.3	21.21	69.2	14.8
	18	9.65	16	15.74	66.7	21.07	69.0	14.4
	28	9.49	33.9	15.35	66.5	20.92	68.7	14.1
Sept.	7	9.33	15	14.95	65.8	20.77	68.4	14.0
	17	9.18	33.2	14.56	64.7	20.62	68.0	13.9
	27	9.04	14	14.19	63.0	20.48	67.7	14.0
Okt.	7	8.93	11	13.86	60.8	20.36	67.4	14.3
	17	8.85	8	13.58	58.3	20.28	67.1	14.7
	27	8.81	4	13.36	55.3	20.24	66.9	15.3
Nov.	6	8.82	1	13.20	52.0	20.24	66.8	16.2
	16	8.88	6	13.12	48.5	20.30	66.8	17.2
	26	9.01	13	13.13	44.4	20.42	67.1	18.4
Dez.	6	9.19	18	13.23	40.6	20.58	67.5	19.9
	16	9.41	26	13.41	36.8	20.79	68.2	21.5
	26	9.67	30	13.67	33.2	21.05	69.0	23.1
	36	9.97	9	14.00	29.9	21.35	69.9	24.8
Mittl. Ort		7.64	19.5	14.31	60.1	19.05	55.3	43.95
								6.6

1912	γ <sup>2</sup> Normae. 4 <sup>m</sup> .2.		ι9 Ursae min. 5 <sup>m</sup> .8.		ε Opibuchi. 3 <sup>m</sup> .2.		τ Herculis. 3 <sup>m</sup> .6.	
	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl.	AR.	Dekl. +
	16 <sup>h</sup> 13 <sup>m</sup>	49° 56'	16 <sup>h</sup> 13 <sup>m</sup>	76° 5'	16 <sup>h</sup> 13 <sup>m</sup>	4° 28"	16 <sup>h</sup> 17 <sup>m</sup>	46° 30'
Jan.								
I	12.33 41	23.0	15.68 59	40.6 31	38.24 28	49.7 16	4.06 29	65.6 32
II	12.74 44	22.5 5	16.27 71	37.5 27	38.52 30	51.3 17	4.35 34	62.4 28
21	13.18 46	22.3 2	16.98 84	34.8 22	38.82 31	53.0 15	4.69 36	59.6 24
31	13.64 48	22.5 4	17.82 91	32.6 16	39.13 32	54.5 14	5.05 39	57.2 18
Febr.	14.12 47	22.9 8	18.73 95	31.0 9	39.45 32	55.9 12	5.44 39	55.4 13
20	14.59 47	23.7 9	19.68 95	30.1 3	39.77 31	57.1 10	5.83 39	54.1 6
März	15.06 45	24.6 12	20.63 93	29.8 5	40.08 30	58.1 7	6.22 38	53.5 1
II	15.51 44	25.8 14	21.56 88	30.3 11	40.38 29	58.8 4	6.60 36	53.6 7
21	15.95 40	27.2 15	22.44 78	31.4 16	40.67 26	59.2 2	6.96 33	54.3 12
31	16.35 38	28.7 17	23.22 68	33.0 22	40.93 25	59.4 0	7.29 29	55.5 18
April	16.73 34	30.4 18	23.90 55	35.2 26	41.18 22	59.4 3	7.58 26	57.3 21
20	17.07 30	32.2 18	24.45 40	37.8 29	41.40 20	59.1 5	7.84 21	59.4 26
Mai	17.37 26	34.0 18	24.85 25	40.7 31	41.60 18	58.6 6	8.05 17	62.0 27
10	17.63 21	35.8 19	25.10 10	43.8 32	41.78 14	58.0 7	8.22 12	64.7 30
20	17.84 17	37.7 19	25.20 6	47.0 32	41.92 12	57.3 7	8.34 7	67.7 29
Juni	18.01 11	39.6 18	25.14 21	50.2 31	42.04 8	56.6 8	8.41 2	70.6 29
9	18.12 7	41.4 17	24.93 36	53.3 28	42.12 6	55.8 8	8.43 3	73.5 27
19	18.19 2	43.1 16	24.57 49	56.1 26	42.18 1	55.0 7	8.40 7	76.2 26
Juli	18.21 5	44.7 14	24.08 49	58.7 22	42.19 1	54.3 7	8.33 7	78.8 22
9	18.16 11	46.1 12	23.46 72	60.9 18	42.18 5	53.6 7	8.20 13	81.0 19
19	18.05 14	47.3 9	22.74 81	62.7 14	42.13 8	52.9 6	8.04 20	82.9 15
29	17.91 19	48.2 7	21.93 88	64.1 8	42.05 11	52.3 4	7.84 23	84.4 11
Aug.	17.72 19	48.9 7	21.05 93	64.9 4	41.94 13	51.9 4	7.61 26	85.5 7
18	17.51 24	49.2 0	20.12 95	65.3 2	41.81 14	51.5 3	7.35 27	86.2 1
28	17.27 25	49.2 3	19.17 95	65.1 7	41.67 15	51.2 2	7.08 28	86.3 3
Sept.	17.02 25	48.9 7	18.20 94	64.4 12	41.52 16	51.0 0	6.80 28	86.0 8
17	16.77 23	48.2 10	17.26 91	63.2 17	41.36 14	51.0 1	6.52 27	85.2 12
Okt.	16.54 19	47.2 12	16.35 84	61.5 21	41.22 12	51.1 2	6.25 24	84.0 17
7	16.35 15	46.0 14	15.51 75	59.4 26	41.10 9	51.3 3	6.01 21	82.3 22
17	16.20 10	44.6 16	14.76 64	56.8 30	41.01 5	51.6 6	5.80 16	80.1 25
27	16.10 3	43.0 17	14.12 51	53.8 33	40.96 2	52.2 8	5.64 11	77.6 29
Nov.	16.07 5	41.3 17	13.61 35	50.5 35	40.94 4	53.0 9	5.53 5	74.7 32
16	16.12 12	39.6 16	13.26 19	47.0 38	40.98 8	53.9 11	5.48 1	71.5 35
26	16.24 22	38.0 16	13.07 1	43.2 41	41.06 15	55.0 15	5.49 9	68.0 35
Dez.	16.46 27	36.4 12	13.06 18	39.1 38	41.21 19	56.5 14	5.58 15	64.1 36
16	16.73 33	35.2 10	13.24 35	35.3 36	41.40 22	57.9 16	5.73 22	60.5 35
26	17.06 33	34.2 6	13.59 54	31.7 33	41.62 26	59.5 17	5.95 27	57.0 33
36	17.45 39	33.6 6	14.13 28.4		41.88 61.2		6.22 15	53.7 36
Mittl. Ort	14.94	25.8	19.07	58.3	39.81	43.6	5.69	80.9
	604)		606)		605)		608)	

## SCHEINBARE STERNÖRTER.

1912	$\gamma$ Herculis. 3 <sup>m</sup> .5.		$\gamma$ Apodis. 3 <sup>m</sup> .9.		$\eta$ Draconis. 2 <sup>m</sup> .7.		$\alpha$ Scorp. 1 <sup>m</sup> .2.	
	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —
	16 <sup>h</sup> 18 <sup>m</sup>	19 <sup>°</sup> 21 <sup>'</sup>	16 <sup>h</sup> 19 <sup>m</sup>	78° 41'	16 <sup>h</sup> 22 <sup>m</sup>	61° 42'	16 <sup>h</sup> 23 <sup>m</sup>	26° 14'
Jan.								
I	0.76 <sup>h</sup> 1.02 <sup>h</sup>	25 <sup>m</sup> 29 <sup>m</sup>	21.9 <sup>°</sup> 19.3 <sup>°</sup>	26 <sup>'</sup> 23 <sup>'</sup>	47.09 <sup>h</sup> 48.18 <sup>h</sup>	109 <sup>m</sup> 122 <sup>m</sup>	59.0 <sup>°</sup> 57.2 <sup>°</sup>	18 <sup>'</sup> 12 <sup>'</sup>
II								
21	1.31 <sup>h</sup>	31 <sup>m</sup>	17.0 <sup>°</sup>	21 <sup>'</sup>	49.40 <sup>h</sup>	132 <sup>m</sup>	56.0 <sup>°</sup>	8 <sup>'</sup>
31	1.62 <sup>h</sup>	32 <sup>m</sup>	14.9 <sup>°</sup>	17 <sup>'</sup>	50.72 <sup>h</sup>	137 <sup>m</sup>	55.2 <sup>°</sup>	3 <sup>'</sup>
Febr.	1.94 <sup>h</sup>	32 <sup>m</sup>	13.2 <sup>°</sup>	13 <sup>'</sup>	52.09 <sup>h</sup>	140 <sup>m</sup>	54.9 <sup>°</sup>	1 <sup>'</sup>
10	2.26 <sup>h</sup>	31 <sup>m</sup>	11.9 <sup>°</sup>	9 <sup>'</sup>	53.49 <sup>h</sup>	140 <sup>m</sup>	55.0 <sup>°</sup>	7 <sup>'</sup>
März	2.57 <sup>h</sup>	30 <sup>m</sup>	11.0 <sup>°</sup>	3 <sup>'</sup>	54.89 <sup>h</sup>	136 <sup>m</sup>	55.7 <sup>°</sup>	11 <sup>'</sup>
I	2.87 <sup>h</sup>	29 <sup>m</sup>	10.7 <sup>°</sup>	1 <sup>'</sup>	56.25 <sup>h</sup>	131 <sup>m</sup>	56.8 <sup>°</sup>	15 <sup>'</sup>
II	3.16 <sup>h</sup>	27 <sup>m</sup>	10.8 <sup>°</sup>		57.56 <sup>h</sup>	123 <sup>m</sup>	58.3 <sup>°</sup>	20 <sup>'</sup>
31	3.43 <sup>h</sup>	25 <sup>m</sup>	11.3 <sup>°</sup>	5 <sup>'</sup>	58.79 <sup>h</sup>	112 <sup>m</sup>	60.3 <sup>°</sup>	22 <sup>'</sup>
April	3.68 <sup>h</sup>	22 <sup>m</sup>	12.3 <sup>°</sup>	13 <sup>'</sup>	59.91 <sup>h</sup>	101 <sup>m</sup>	62.5 <sup>°</sup>	25 <sup>'</sup>
10	3.90 <sup>h</sup>	19 <sup>m</sup>	13.6 <sup>°</sup>	16 <sup>'</sup>	60.92 <sup>h</sup>	87 <sup>m</sup>	65.0 <sup>°</sup>	27 <sup>'</sup>
20	4.09 <sup>h</sup>	17 <sup>m</sup>	15.2 <sup>°</sup>	18 <sup>'</sup>	61.79 <sup>h</sup>	73 <sup>m</sup>	67.7 <sup>°</sup>	29 <sup>'</sup>
Mai	4.26 <sup>h</sup>	17 <sup>m</sup>	17.0 <sup>°</sup>		62.52 <sup>h</sup>	70.6 <sup>m</sup>	70.6 <sup>°</sup>	
10	4.40 <sup>h</sup>	14 <sup>m</sup>	19.0 <sup>°</sup>	20 <sup>'</sup>	63.07 <sup>h</sup>	55 <sup>m</sup>	73.7 <sup>°</sup>	31 <sup>'</sup>
20	4.55 <sup>h</sup>	10 <sup>m</sup>	20 <sup>°</sup>		63.19 <sup>h</sup>	39 <sup>m</sup>	73.7 <sup>°</sup>	
Juni	4.50 <sup>h</sup>	6 <sup>m</sup>	21.0 <sup>°</sup>	20 <sup>'</sup>	63.46 <sup>h</sup>	20 <sup>m</sup>	76.7 <sup>°</sup>	31 <sup>'</sup>
9	4.56 <sup>h</sup>	3 <sup>m</sup>	23.0 <sup>°</sup>	19 <sup>'</sup>	63.66 <sup>h</sup>	2 <sup>m</sup>	79.8 <sup>°</sup>	30 <sup>'</sup>
19	4.59 <sup>h</sup>	0 <sup>m</sup>	24.9 <sup>°</sup>	18 <sup>'</sup>	63.68 <sup>h</sup>	16 <sup>m</sup>	82.8 <sup>°</sup>	27 <sup>'</sup>
29	4.59 <sup>h</sup>	26 <sup>m</sup>	26.7 <sup>°</sup>		63.52 <sup>h</sup>	33 <sup>m</sup>	85.5 <sup>°</sup>	
Juli	4.55 <sup>h</sup>	7 <sup>m</sup>	28.4 <sup>°</sup>	14 <sup>'</sup>	63.19 <sup>h</sup>	88.1 <sup>m</sup>	50.98 <sup>°</sup>	24 <sup>'</sup>
9	4.48 <sup>h</sup>	11 <sup>m</sup>	29.8 <sup>°</sup>	12 <sup>'</sup>	62.68 <sup>h</sup>	65 <sup>m</sup>	90.3 <sup>°</sup>	19 <sup>'</sup>
19	4.37 <sup>h</sup>	31 <sup>m</sup>	31.0 <sup>°</sup>		62.03 <sup>h</sup>	77 <sup>m</sup>	92.2 <sup>°</sup>	
Aug.	4.24 <sup>h</sup>	13 <sup>m</sup>	31.9 <sup>°</sup>	9 <sup>'</sup>	61.26 <sup>h</sup>	88 <sup>m</sup>	93.6 <sup>°</sup>	14 <sup>'</sup>
8	4.09 <sup>h</sup>	15 <sup>m</sup>	32.5 <sup>°</sup>	6 <sup>'</sup>	60.38 <sup>h</sup>	93 <sup>m</sup>	94.5 <sup>°</sup>	5 <sup>'</sup>
18	3.92 <sup>h</sup>	17 <sup>m</sup>	32.8 <sup>°</sup>	3 <sup>'</sup>	59.45 <sup>h</sup>	95.0 <sup>m</sup>	95.0 <sup>°</sup>	
Sept.	3.75 <sup>h</sup>	18 <sup>m</sup>	32.8 <sup>°</sup>	3 <sup>'</sup>	58.49 <sup>h</sup>	94 <sup>m</sup>	94.8 <sup>°</sup>	6 <sup>'</sup>
17	3.57 <sup>h</sup>	16 <sup>m</sup>	32.5 <sup>°</sup>	7 <sup>'</sup>	57.55 <sup>h</sup>	89 <sup>m</sup>	94.2 <sup>°</sup>	12 <sup>'</sup>
Okt.	3.41 <sup>h</sup>	15 <sup>m</sup>	31.8 <sup>°</sup>		56.66 <sup>h</sup>	79 <sup>m</sup>	93.0 <sup>°</sup>	17 <sup>'</sup>
7	3.26 <sup>h</sup>	12 <sup>m</sup>	30.8 <sup>°</sup>	10 <sup>'</sup>	55.87 <sup>h</sup>	65 <sup>m</sup>	91.3 <sup>°</sup>	21 <sup>'</sup>
17	3.14 <sup>h</sup>	8 <sup>m</sup>	29.4 <sup>°</sup>	16 <sup>'</sup>	55.22 <sup>h</sup>	89.2 <sup>m</sup>	48.77 <sup>°</sup>	29 <sup>'</sup>
27	3.06 <sup>h</sup>	4 <sup>m</sup>	27.8 <sup>°</sup>	19 <sup>'</sup>	54.74 <sup>h</sup>	27 <sup>m</sup>	86.7 <sup>°</sup>	25 <sup>'</sup>
Nov.	3.02 <sup>h</sup>	0 <sup>m</sup>	25.9 <sup>°</sup>	22 <sup>'</sup>	54.47 <sup>h</sup>	6 <sup>m</sup>	84.0 <sup>°</sup>	28 <sup>'</sup>
6	3.02 <sup>h</sup>	6 <sup>m</sup>	23.7 <sup>°</sup>		54.41 <sup>h</sup>	18 <sup>m</sup>	81.2 <sup>°</sup>	
16	3.08 <sup>h</sup>	21 <sup>m</sup>	21.3 <sup>°</sup>	24 <sup>'</sup>	54.59 <sup>h</sup>	45 <sup>m</sup>	78.3 <sup>°</sup>	31 <sup>'</sup>
26	3.20 <sup>h</sup>	12 <sup>m</sup>	18.4 <sup>°</sup>	29 <sup>'</sup>	55.04 <sup>h</sup>	64 <sup>m</sup>	75.2 <sup>°</sup>	26 <sup>'</sup>
Dec.	3.20 <sup>h</sup>	17 <sup>m</sup>	27 <sup>°</sup>		55.04 <sup>h</sup>	64 <sup>m</sup>	75.2 <sup>°</sup>	
6	3.37 <sup>h</sup>	20 <sup>m</sup>	15.7 <sup>°</sup>	27 <sup>'</sup>	55.68 <sup>h</sup>	84 <sup>m</sup>	72.6 <sup>°</sup>	23 <sup>'</sup>
16	3.57 <sup>h</sup>	25 <sup>m</sup>	13.0 <sup>°</sup>	26 <sup>'</sup>	56.52 <sup>h</sup>	102 <sup>m</sup>	70.3 <sup>°</sup>	20 <sup>'</sup>
26	3.82 <sup>h</sup>	10.4 <sup>m</sup>			57.54 <sup>h</sup>	68.3 <sup>m</sup>	46.77 <sup>°</sup>	19.7 <sup>'</sup>
Mittl. Ort	2.23	32.9	55.16	64.3	47.78	47.5	60.54	15.1
	609,		611)		615)		616,	

1912	$\beta$ Herculis. 2 <sup>m</sup> .6.		$\delta$ Draconis. 5 <sup>m</sup> .0.		$\sigma$ Herculis. 4 <sup>m</sup> .1.		$\zeta$ Ophiuchi. 2 <sup>m</sup> .6.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	16 <sup>h</sup> 26 <sup>m</sup>	21° 40'	16 <sup>h</sup> 28 <sup>m</sup>	68° 57'	16 <sup>h</sup> 31 <sup>m</sup>	42° 36'	16 <sup>h</sup> 32 <sup>m</sup>	10° 23'
Jan.								
I	24.67	25	39.1	26	14.28	27	17.02	27
II	24.92	29	36.5	25	14.55	30	17.29	29
II	25.21	30	34.0	21	14.85	34	17.58	31
III	25.51	32	31.9	18	15.19	36	17.89	32
Febr.	25.83	32	30.1	13	15.55	37	18.21	32
IO								
20	26.15	32	28.8	9	15.92	37	18.53	32
März	26.47	32	27.9	5	16.29	37	18.85	31
II	26.78	29	27.6	1	16.66	37	19.16	30
II	27.07	28	27.7	6	17.01	35	19.46	28
III	27.35	25	28.3	10	17.33	32	19.74	27
April	27.60	23	29.3	14	17.62	26	20.01	24
IO	27.83	20	30.7	17	17.88	22	20.25	22
30	28.03	17	32.4	19	18.10	18	20.47	19
Mai	28.20	14	34.3	21	18.28	14	20.66	17
IO	28.34	11	36.4	21	18.42	9	20.83	14
Juni	28.45	7	38.5	21	21.2	5	20.97	11
9	28.52	4	40.6	21	18.56	0	21.08	7
19	28.56	1	42.7	19	18.56	5	21.15	3
29	28.55	4	44.6	18	18.51	9	21.18	0
Juli	28.51	7	46.4	15	18.42	24	21.18	3
9	28.44	10	47.9	13	11.98	49	21.15	7
19	28.34	13	49.2	10	11.49	54	21.08	10
Aug.	28.21	16	50.2	7	10.95	59	20.98	12
18	28.05	17	50.9	3	10.36	61	20.86	14
28	27.88	18	51.2	1	9.75	63	20.72	16
Sept.	27.70	18	51.3	4	9.12	62	20.56	16
17	27.52	18	50.9	6	8.50	60	20.40	14
27	27.34	15	50.3	10	7.90	56	20.26	14
Okt.	27.19	13	49.3	14	7.34	51	20.12	10
17	27.06	10	47.9	17	6.83	43	20.02	7
27	26.96	5	46.2	20	6.40	34	19.95	2
Nov.	26.91	0	44.2	23	6.06	24	19.93	2
16	26.91	4	41.9	25	5.82	13	19.95	7
26	26.95	11	39.4	29	5.69	1	20.02	13
Dez.	27.06	15	36.5	28	5.68	12	20.15	17
16	27.21	20	33.7	28	5.80	24	20.32	22
26	27.41	24	30.9	27	6.04	35	20.54	26
36	27.65		28.2		6.39	30	20.80	37.9
Mitt. Ort	26.18	50.5			8.96	30.8	15.94	64.9
					618)	619)	621)	622)

## SCHEINBARE STERNÖRTER.

1912	α Triang. austr. 1 <sup>m</sup> .9.		η Herculis. 3 <sup>m</sup> .3 <sup>s</sup>		Gr. 2377. 4 <sup>m</sup> .9.		ε Scorpii. 2 <sup>m</sup> .3 <sup>s</sup> .	
	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	16 <sup>h</sup> 39 <sup>m</sup>	68° 51'	16 <sup>h</sup> 39 <sup>m</sup>	39° 4'	16 <sup>h</sup> 43 <sup>m</sup>	56° 55'	16 <sup>h</sup> 44 <sup>m</sup>	34° 8'
Jan.								
I	15.52	60	51.05	26	67.1	29	64.2	30
II	16.12	69	51.31	29	63.9	32	55.78	34
21	16.81	73	51.60	33	61.1	25	36.13	36
31	17.54	78	51.93	34	58.6	20	36.53	20
Febr.	10	18.32	56.0	4	52.27	56.6	36.96	15
		79	0		35	15	53.1	38
	20	19.11	56.0	5	52.62	36	55.1	8
März	1	19.91	56.5	8	52.98	35	54.3	3
	11	20.70	57.3	12	53.33	33	38.34	4
	21	21.45	58.5	15	53.66	32	38.78	12
	31	22.18	60.0	15	53.98	29	39.20	12
April	10	22.85	61.8	21	54.27	26	56.8	17
	20	23.47	63.9	23	54.53	23	39.91	28
	30	24.02	66.2	24	54.76	21	40.19	22
Mai	10	24.50	68.6	26	54.95	14	40.41	29
	20	24.90	71.2	27	55.09	11	40.56	15
	30	25.20	73.9	26	55.20	6	40.66	3
Juni	9	25.41	76.5	26	55.26	2	69.0	28
	19	25.52	79.1	25	55.28	2	71.8	27
	29	25.53	81.6	23	55.26	7	74.5	26
Juli	9	25.44	83.9	20	55.19	12	77.1	23
	19	25.25	85.9	18	55.07	15	40.55	16
	29	24.98	87.7	14	54.92	18	40.39	22
Aug.	8	24.62	89.1	9	54.74	18	79.4	20
	18	24.20	90.0	6	54.53	23	38.49	39
	28	23.74	90.6	49	54.30	24	81.4	1
Sept.	7	23.25	90.6	4	54.06	25	85.8	5
	17	22.76	90.2	10	53.81	23	85.3	8
	27	22.29	89.2	13	53.58	22	84.5	14
Okt.	7	21.86	87.9	18	53.36	19	83.1	17
	17	21.50	86.1	21	53.17	15	81.4	22
	27	21.24	84.0	17	53.02	11	79.2	25
Nov.	6	21.07	81.7	23	52.91	6	76.7	29
	16	21.03	79.2	25	52.85	0	73.8	31
	26	21.12	76.7	26	52.85	7	70.7	36
Dez.	6	21.36	74.1	35	52.92	13	67.1	34
	16	21.71	71.8	21	53.05	18	63.7	34
	26	22.18	69.7	18	53.23	23	60.3	33
	36	22.74	67.9	56	53.46	57.0	54.5	35
Mittl. Ort	20.14	62.8	52.72	80.8	37.58	79.6	27.62	3.4
			625)	626)	627)	628)		

## SCHEINBARE STERNÖRTER.

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1912	49 Herculis. 6 <sup>m</sup> .5.		ζ <sup>2</sup> Scorp. 3 <sup>m</sup> .8.		ζ Arae. 3 <sup>m</sup> .0.		ζ Ophiuchi. 3 <sup>m</sup> .2.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. +
	16 <sup>h</sup> 48 <sup>m</sup>	15° 6'	16 <sup>h</sup> 48 <sup>m</sup>	42° 12'	16 <sup>h</sup> 51 <sup>m</sup>	55° 51'	16 <sup>h</sup> 53 <sup>m</sup>	9° 30'
Jan.								
1	2.84	23	65.9	24	20.84	42.4	16.89	7.4
II	3.07	27	63.5	23	21.17	33	17.30	6.3
21	3.34	29	61.2	21	21.53	40	17.76	5.4
31	3.63	31	59.1	17	21.93	40	18.26	4.9
Febr.	10		3.94	57.4	22.33	41.9	18.77	4.6
20							54	1
März	1		4.24	51	56.1	40	19.31	4.7
II	4.55	31	55.1	4	23.17	41	19.84	5.1
21	4.86	30	54.7	1	23.58	39	20.37	5.8
31	5.16	28	54.6	—	23.97	39	20.88	6.7
April	10		5.44	26	55.0	8	21.37	7.9
20							14	26
Mai	10		5.70	24	55.8	11	21.84	9.3
20			5.94	22	56.9	14	22.27	10.8
30			6.16	20	58.3	16	22.67	12.6
Juni	10		6.36	16	59.9	18	23.02	14.4
20			6.52	13	61.7	19	23.32	16.4
29			6.65	10	63.6	20	23.56	18.4
Juli	9		6.75	6	65.6	20	23.75	20.4
19			6.81	3	67.4	18	23.87	22.4
29			6.84	1	69.2	—	23.93	24.3
Aug.	8		6.83	5	70.9	17	23.92	26.1
18			6.78	8	72.3	13	23.92	28.55
28			6.70	11	73.6	10	23.92	30.55
Sept.	7		6.59	11	74.6	13	23.92	32.55
17			6.45	14	75.3	7	23.92	33.7
Okt.	7		6.30	15	75.8	5	23.92	34.7
17			6.13	18	76.0	1	23.92	35.0
27			5.95	17	75.9	4	23.92	36.1
27			5.78	17	75.5	—	23.92	37.0
Nov.	7		5.62	16	74.8	7	23.92	37.7
17			5.49	13	73.8	10	23.92	38.2
27			5.39	6	72.4	16	23.92	38.4
26			5.33	2	70.8	18	23.92	38.5
26			5.31	2	69.0	22	23.92	38.6
Dez.	6		5.34	10	66.8	25	23.92	38.7
16			5.44	13	64.3	24	23.92	38.8
26			5.57	18	61.9	25	23.92	38.9
36			5.75	22	59.4	24	23.92	39.0
Mitt. Ort			5.97		57.0		23.92	

629)

630)

631)

633)

## SCHEINBARE STERNÖRTER.

1912	$\varepsilon$ Herculis. 3 <sup>m</sup> .6.		$\eta$ Ophiuchi. 2 <sup>m</sup> .4.		$\zeta$ Draconis. 3 <sup>m</sup> .0.		$\alpha$ Herculis. (3 <sup>m</sup> .0.)	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	16 <sup>h</sup> 56 <sup>m</sup>	31° 2'	17 <sup>h</sup> 5 <sup>m</sup>	15° 37'	17 <sup>h</sup> 8 <sup>m</sup>	65° 48'	17 <sup>h</sup> 10 <sup>m</sup>	14° 29'
Jan.								
I	53.66	23	67.0		17.98	6.3 9	28.92	68.0
II	53.89	27	64.0	28	18.23	7.2 9	29.21	64.5
21	54.16		61.2		18.50	8.1 9	29.58	61.3
31	54.45	32	58.8	20	18.80	9.0 9	30.03	58.5
Febr. 10	54.77		56.8		19.12	9.9 9	30.54	56.2
20	55.10	33	55.3	10	19.44	10.8 7	31.09	54.6
März								
I	55.43	32	54.3	4	19.76	11.5 5	31.66	53.5
II	55.75	32	53.9	1	20.09	12.0 4	32.25	53.2
21	56.07		54.0		20.40	12.4 3	32.82	53.5
31	56.38	31	54.7	7	20.70	12.7 3	33.37	54.5
April								
10	56.66	26	55.9	16	20.99	12.8 0	33.87	56.1
20	56.92	24	57.5	20	21.26	12.8 1	34.32	58.2
30	57.16	20	59.5	23	21.51	12.7 2	34.70	60.8
Mai								
10	57.36	16	61.8		21.74	12.5 2	35.01	63.7
20	57.52	13	64.2		21.95	12.2 3	35.23	66.8
30	57.65	9	66.8	26	22.12	11.9 3	35.36	70.1
Juni								
9	57.74	5	69.4	26	22.27	11.6 3	35.41	73.4
19	57.79	1	72.0	24	22.37	11.3 3	35.36	76.6
29	57.80	3	74.4	22	22.44	11.0 3	35.23	79.7
Juli								
9	57.77	7	76.6	20	22.47	10.8 2	35.01	82.5
19	57.70	11	78.6	17	22.46	10.6 2	34.72	85.0
29	57.59	15	80.3	14	22.41	8 10.4	34.35	87.2
Aug.								
8	57.44	15	81.7	10	22.33	10.2 1	33.92	88.9
18	57.27	19	82.7	6	22.21	10.1 2	33.44	90.1
28	57.08	21	83.3	2	22.08	9.9 1	32.93	90.9
Sept.								
7	56.87	22	83.5	1	21.92	9.8 1	32.38	91.2
17	56.65	21	83.4	6	21.76	9.7 1	31.83	90.9
27	56.44	20	82.8		21.60	9.6 1	31.27	90.1
Okt.								
7	56.24	17	81.8	10	21.45	9.5 1	30.75	88.8
17	56.07	14	80.4	18	21.33	9.4 1	30.25	87.0
27	55.93	10	78.6	22	21.24	9.5 1	29.82	84.8
Nov.								
6	55.83	6	76.4	25	21.19	9.6 2	29.45	82.0
16	55.77	0	73.9	27	21.18	9.8 2	29.16	79.0
26	55.77	6	71.2	30	21.22	10.1 3	28.97	75.6
Dez.								
6	55.83	12	68.2	33	21.31	10.6 5	28.88	72.0
16	55.95	16	64.9	31	21.47	11.2 7	28.90	67.9
26	56.11	21	61.8	31	21.66	11.9 8	29.03	64.1
36	56.32		58.7	31	21.89	12.7	29.26	60.6
Mittl. Ort	55.34		79.4		19.79	0.3	31.77	82.6
	634)				637)		639)	640)

## SCHEINBARE STERNÖRTER.

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1912	δ Herculis.		ζ <sup>m</sup> .ο.		π Herculis.		ζ <sup>m</sup> .ι.		θ Ophiuchi.		ζ <sup>m</sup> .2.		β Arae.		ζ <sup>m</sup> .7.			
	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	-	AR.	Dekl.	-	AR.	Dekl.	-			
Jan.	17 <sup>h</sup>	11 <sup>m</sup>	24° 56'	17 <sup>h</sup>	11 <sup>m</sup>	36° 54'	17 <sup>h</sup>	16 <sup>m</sup>	24° 54'	17 <sup>h</sup>	17 <sup>m</sup>	55° 26'						
	23.30	22	21.0	28			57.10	22	15.4	32	34.24	26	50.3	3	55.80	37	53.9	13
	23.52	25	18.2	26	57.32	26	12.2	29	34.50	29	50.6	4	56.17	42	52.6	12		
	23.77	23	15.6	23	57.58	29	9.3	26	34.79	31	51.0	5	56.59	47	51.4	8		
Febr.	24.05	29	13.3	20	57.87	32	6.7	22	35.10	32	51.5	5	57.06	50	50.6	6		
	24.34	31	11.3	16	58.19	33	4.5	16	35.42	34	52.0	5	57.56	51	50.0			
März	24.65	32	9.7	10	58.52	34	2.9	11	35.76	34	52.5	5	58.07	53	49.7	1		
	24.97	32	8.7	5	58.86	34	1.8	5	36.10	35	53.0	5	58.60	52	49.8	2		
	25.29	31	8.2	0	59.20	34	1.3	1	36.45	33	53.5	4	59.12	52	50.0	6		
	25.60	31	8.2	5	59.54	32	1.4	6	36.78	33	53.9	4	59.64	51	50.6	8		
April	25.90	30	8.7	5	59.86	32	2.0		37.11	31	54.3	2	60.15	48	51.4	10		
	26.18	26	9.7	13	60.17	28	3.2	17	37.42	30	54.5	3	60.63	46	52.4	12		
	26.44	24	11.0	18	60.45	26	4.9	21	37.72	28	54.8	2	61.09	42	53.6	15		
Mai	26.68	22	12.8		60.71	22	7.0	25	38.00	25	55.0	2	61.51	39	55.1	15		
	26.90	18	14.8	20	60.93	18	9.5	26	38.25	23	55.2	2	61.90	34	56.6	18		
	27.08	15	17.1	23	61.11	12	12.1	28	38.48	20	55.4	2	62.24	28	58.4	18		
Juni	27.23	11	19.4	24	61.25	10	14.9	28	38.68	16	55.6	2	62.52	23	60.2	19		
	27.34	7	21.8	24	61.35	6	17.7	28	38.84	12	55.8	2	62.75	17	62.1	19		
	27.41	7	24.2		61.41	1	20.5	27	38.96	9	56.0	3	62.92	10	64.0	19		
Juli	27.45	4	26.5	23	61.42	3	23.2	25	39.05	4	56.3	2	63.02	10	65.9	19		
	27.44	1	28.6		61.39	8	25.7	22	39.09	0	56.5	3	63.06	4	67.8	17		
Aug.	27.39	8	30.5	17	61.31	12	27.9	20	39.09	4	56.8	2	63.02	10	69.5	15		
	27.31	12	32.2	14	61.19	15	29.9	16	39.05	8	57.0	2	62.92	15	71.0	13		
	27.19	15	33.6	10	61.04	19	31.5	12	38.97	12	57.2	1	62.77	21	72.3	10		
Okt.	27.04	18	34.6	7	60.85	22	32.7	8	38.85	14	57.3	1	62.56	26	73.3	7		
	26.86	18	35.3		60.63	23	33.5		38.71	16	57.4	0	62.30	28	74.0	4		
Sept.	26.68	20	35.7	1	60.40	24	33.9	1	38.55	17	57.4	1	62.02	30	74.4	0		
	26.48	20	35.6		60.16	24	33.8	5	38.38	17	57.3	2	61.72	29	74.4	4		
	26.28	20	35.2	4	59.92	23	33.3	10	38.21	16	57.1	2	61.43	28	74.0	8		
Okt.	26.09	19	34.5	7	59.69	20	32.3	14	38.05	14	56.9	3	61.15	24	73.2	11		
	25.93	14	33.3	15	59.49	17	30.9	18	37.91	11	56.6	3	60.91	20	72.1	14		
Nov.	25.79	10	31.8	18	59.32	14	29.1	22	37.80	6	56.3	4	60.71	13	70.7	16		
	25.69	5	30.0		59.18	8	26.9	26	37.74	1	55.9	3	60.58	6	69.1	18		
	25.64	1	27.8	24	59.10	3	24.3	28	37.73	3	55.6	2	60.52	2	67.3	19		
Dez.	25.63	5	25.4	27	59.07	3	21.5	32	37.76	9	55.4	1	60.54	11	65.4	19		
	25.68	5	22.7		59.10	9	18.3	35	37.85	15	55.3	1	60.65	21	63.5	21		
	25.79	11	31	10	59.19	14	14.8		38.00	19	55.2	1	60.86	27	61.4	17		
	25.94	15	19.6	28	59.33	19	11.6	32	38.19	24	55.3	3	61.13	34	59.7	15		
Mittl. Ort	26.13	19	14.0		59.52	8	8.4		38.43	15	55.6	3	61.47	34	58.2			
	24.99	32.4			58.90	28.0			36.20	45.1			58.89	51.9				
	641)				643)				644)				645)					

## SCHEINBARE STERNÖRTER.

1912	δ Arae. 3 <sup>m</sup> .6.		α Arae. 2 <sup>m</sup> .8.		λ Scorp. 1 <sup>m</sup> .7.		β Draconis. 2 <sup>m</sup> .7.	
	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. —	AR.	Dekl. + —
	17 <sup>h</sup> 23 <sup>m</sup>	60° 36'	17 <sup>h</sup> 24 <sup>w</sup>	49° 48'	17 <sup>h</sup> 27 <sup>m</sup>	37° 2'	17 <sup>h</sup> 28 <sup>m</sup>	52° 21'
Jan.								
I	5.58	43.2	59.45	29.8	35.59	28	24.40	45.1
II	5.99	41.5	59.78	33	35.87	28	24.61	41.6
21	6.46	40.1	60.15	37	36.18	31	24.88	38.4
31	6.97	39.0	60.56	41	36.52	34	25.20	35.5
Febr.	10	7.53	38.2	61.00	44	36.88	36	25.55
		58	5	46	3	29.2	1	33.1
	20	8.11	37.7	61.46	46	37.26	39	25.94
März	1	8.71	37.6	61.92	47	37.65	38	26.35
II	9.31	37.8	62.39	46	38.03	38	26.77	29.3
21	9.90	38.2	62.85	46	38.41	38	27.19	29.3
31	10.48	39.0	63.31	47	38.79	38	27.59	30.0
		56	11	43	8	30.6	4	30.0
April	10	11.04	40.1	63.74	42	39.15	34	27.97
	20	11.57	41.4	64.16	38	39.49	33	28.32
	30	12.06	42.9	64.54	36	39.82	30	28.63
Mai	10	12.50	44.7	64.90	31	40.12	26	28.90
	20	12.89	46.6	65.21	31	40.38	28	29.12
		33	20	27	15	33.8	8	41.1
Juni	30	13.22	48.6	65.48	22	40.62	19	29.28
9	13.48	50.7	65.70	17	40.81	15	29.39	47.4
19	13.67	52.9	65.87	11	40.96	10	29.43	50.6
29	13.78	55.0	65.98	9	41.06	6	29.42	53.7
Juli	9	13.82	57.1	66.03	5	41.12	0	56.6
		5	20	1	14	38.2	8	29.35
	19	13.77	59.1	66.02	7	41.12	4	29.22
	29	13.66	60.8	65.95	13	41.08	9	29.03
Aug.	8	13.47	62.4	65.82	12	40.99	7	28.80
	18	13.22	63.6	65.65	21	40.86	16	28.52
	28	12.92	64.4	65.44	24	40.70	3	28.21
		33	5	24	4	41.4	2	66.1
Sept.	7	12.59	64.9	65.20	26	40.52	20	27.88
	17	12.24	65.0	64.94	25	40.32	20	27.53
	27	11.89	64.6	64.69	24	40.12	19	27.19
Okt.	7	11.56	63.8	64.45	22	39.93	17	26.85
	17	11.26	62.6	64.23	21	39.76	13	26.53
		24	16	17	12	40.5	7	27
	27	11.02	61.0	64.06	12	39.63	9	26.26
Nov.	6	10.85	59.3	63.94	13	39.54	9	26.02
	16	10.76	57.4	63.89	5	39.51	3	25.84
	26	10.77	55.2	63.91	9	39.53	8	25.73
Dez.	6	10.87	53.1	64.00	18	39.61	9	25.69
	16	11.08	50.7	64.18	24	39.77	20	25.73
	26	11.37	48.7	64.42	30	39.97	25	25.83
	36	11.74	46.9	64.72	33	40.22	34	26.00
Mittl. Ort	9.11	41.2	62.20	26.7	37.85	25.7	26.63	58.1

## SCHEINBARE STERNÖRTER.

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1912	α Ophiuchi.		2 <sup>m</sup> .I.		δ Scorpii.		1 <sup>m</sup> .9.		ξ Serpentis.		3 <sup>m</sup> .5.		ι Herculis.		3 <sup>m</sup> .6.		
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. +	
	17 <sup>h</sup> 30 <sup>m</sup>	12° 37'	17 <sup>h</sup> 30 <sup>m</sup>	42° 56'	17 <sup>h</sup> 32 <sup>m</sup>	15° 20'	17 <sup>h</sup> 36 <sup>m</sup>	46° 2'									
Jan.																	
1	49.22	21	14.0	23	57.15	28	38.3	8	30.95	22	45.4	8	56.74	19	57.1	34	
11	49.43	23	11.7	21	57.43	34	37.5	7	31.17	26	46.2	8	56.93	24	53.7	32	
21	49.66	26	9.6	20	57.77	36	36.8	4	31.43	28	47.0	8	57.17	29	50.5	29	
31	49.92	28	7.6	17	58.13	39	36.4	3	31.71	30	47.8	7	57.46	32	47.6	24	
Febr.	10	50.20		5.9	58.52		36.1		32.01		48.5		57.78	35	45.2	19	
		29	14		41		1		31		7						
März	20	50.49	30	4.5	10	58.93	41	36.0	0	32.32	32	49.2	6	58.13	37	43.3	13
1	50.79	31	3.5	5	59.34	42	36.0	2	32.64	32	49.8	4	58.50	37	42.0	8	
11	51.10	31	3.0	5	59.76	42	36.2	3	32.96	32	50.2	2	58.87	38	41.2	0	
21	51.40	30	2.8	2	60.17	41	36.5	5	33.28	31	50.4	1	59.25	37	41.2	6	
31	51.69	29	3.1	3	60.58	41	37.0	6	33.59	31	50.5	0	59.62	37	41.8	11	
April	10	51.98	29	3.8	10	60.97	38	37.6	7	33.89	29	50.5	2	59.97	33	42.9	17
	20	52.25	24	4.8	10	61.35	35	38.3	8	34.18	27	50.3	3	60.30	29	44.6	22
Mai	30	52.49	23	6.1	13	61.70	32	39.1	10	34.45	25	50.0	3	60.59	26	46.8	25
10	52.72	20	7.7	17	62.02	29	40.1	10	34.70	23	49.7	4	60.85	22	49.3	29	
20	52.92	18	9.4	19	62.31	25	41.1	11	34.93	20	49.3	4	61.07	17	52.2	30	
Juni	30	53.10	14	11.3	19	62.56	21	42.2	12	35.13	16	48.9	4	61.24	12	55.2	31
9	53.24	10	13.2	19	62.77	16	43.4	13	35.29	14	48.5	5	61.36	7	58.3	31	
19	53.34	7	15.1	18	62.93	11	44.7	12	35.43	9	48.0	3	61.43	2	61.4	31	
29	53.41	3	16.9	18	63.04	7	45.9	12	35.52	5	47.7	3	61.45	3	64.5	28	
Juli	9	53.44	1	18.7	15	63.11	0	47.1	12	35.57	1	47.4	3	61.42	9	67.3	26
19	53.43	20.2	63.11	5	48.3	10	35.58	—	47.1	2	61.33	14	69.9	24			
29	53.38	5	21.6	14	63.06	5	49.3	10	35.55	6	46.9	1	61.19	18	72.3	19	
Aug.	8	53.29	9	22.8	12	62.97	9	50.3	7	35.49	10	46.8	1	61.01	22	74.2	16
	18	53.18	11	23.7	9	62.83	18	51.0	6	35.39	13	46.7	1	60.79	26	75.8	12
	28	53.03	15	24.4	7	62.65	5	51.6		35.26	14	46.6	1	60.53	28	77.0	6
Sept.	7	52.87	17	24.8	4	62.44	22	51.9	0	35.12	17	46.5	1	60.25	29	77.6	3
	17	52.70	18	24.9	2	62.22	22	51.9	2	34.95	17	46.4	0	59.96	29	77.9	3
Okt.	27	52.52	17	24.7	4	62.00	21	51.7	5	34.78	16	46.4	1	59.67	29	77.6	8
7	52.35	15	24.3	7	61.79	18	51.2	7	34.62	13	46.3	0	59.38	27	76.8	12	
17	52.20	12	23.6	10	61.61	15	50.5	9	34.49	11	46.3	1	59.11	24	75.6	17	
Nov.	27	52.08	9	22.6	13	61.46	11	49.6	10	34.38	8	46.4	1	58.87	20	73.9	22
6	51.99	5	21.3	16	61.35	4	48.6	12	34.30	3	46.5	3	58.67	15	71.7	26	
16	51.94	1	19.7	18	61.31	1	47.4	13	34.27	2	46.8	3	58.52	9	69.1	29	
26	51.93	4	17.9	20	61.32	9	46.1	12	34.29	7	47.1	4	58.43	9	66.2	29	
Dez.	6	51.97	10	15.9	24	61.41	16	44.9	13	34.36	12	47.5	6	58.40	3	63.0	32
	15	52.07	14	13.5	22	61.57	20	43.6	11	34.48	16	48.1	6	58.43	11	59.6	38
	26	52.21	19	11.3	23	61.77	27	42.5	9	34.64	21	48.7	7	58.54	16	55.8	34
	36	52.40		9.0	23	62.04	41	41.6		34.85		49.4		58.70		52.4	
Mittl. Ort		50.93	24.0			59.59	34.1			32.80	38.3			58.81	69.4		
		656)				654)				658)				663)			

## SCHEINBARE STERNÖRTER.

1912	$\eta$	Pavonis.	$3^m.5.$	$\omega$	Draconis.	$4^m.9.$	$\beta$	Ophiuchi.	$2^m.8.$	$\mu$	Herculis.	$3^m.3.$	
	AR.	Dekl.	-	AR.	Dekl.	+	AR.	Dekl.	+	AR.	Dekl.	+	
	17 <sup>h</sup>	37 <sup>m</sup>	64° 40'	17 <sup>h</sup>	37 <sup>m</sup>	68° 47'	17 <sup>h</sup>	39 <sup>m</sup>	4° 35'	17 <sup>h</sup>	42 <sup>m</sup>	27° 45'	
Jan.	I	1.54	61.0	20	24.42	23	42.5	36	5.75	20	62.5	19	
	II	1.97	59.0	17	24.65	33	38.9	34	5.95	23	60.6	17	
	21	2.47	57.3	15	24.98	43	35.5	29	6.18	26	58.9	17	
	31	3.04	61	11	25.41	52	32.6	25	6.44	27	57.2	14	
Febr.	10	3.65	54.7		25.93	30.1			6.71	29	55.8	12	
	20	4.30	67	4	26.50	62	28.1	14	7.00	30	54.6	9	
	März	1	4.97	68	53.6	1	27.12	64	26.7	6	7.30	31	53.7
April	11	5.65	67	2	27.76	64	26.1	0	7.61	30	53.2	2	
	21	6.32	67	2	28.40	63	26.1	6	7.91	29	53.0	2	
	31	6.99	64	9	29.03	60	26.7		8.20	28	53.2		
	10	7.63	61	12	29.63	54	28.0	18	8.48	28	53.7	8	
Mai	20	8.24	57	16	30.17	47	29.8	24	8.76	25	54.5	11	
	30	8.81	57	17	30.64	39	32.2	28	9.01	24	55.6	12	
	10	9.33	52	17	31.03	39	35.0		9.25	21	56.8	14	
	20	9.80	47	19	31.33	30	38.0	30	9.46	19	58.2	14	
Juni	30	10.19	32	22	31.54	11	41.2	34	9.65	15	59.7	16	
	9	10.51	23	23	31.65	0	44.6	33	9.80	12	61.3	15	
	19	10.74	15	24	31.65	10	47.9	33	9.92	8	62.8	15	
	29	10.89	6	23	31.55	21	51.2	31	10.00	5	64.3	14	
Juli	9	10.95	—	21	31.34	29	54.3	28	10.05	0	65.7	13	
	19	10.91	12	20	31.05	39	57.1	24	10.05	3	67.0	11	
	29	10.79	21	18	30.66	46	59.5	21	10.02	8	68.1	9	
	Aug.	8	10.58	27	78.8	30.20	61.6		9.94	10	69.0	9	
Okt.	18	10.31	34	14	29.67	53	63.3	12	9.84	13	69.7	6	
	28	9.97	38	11	29.09	58	64.5		9.71	13	70.3	19	
	7	9.59	41	7	28.48	64	65.2	2	9.56	17	70.7	1	
Nov.	17	9.18	42	2	27.84	65	65.4	3	9.39	16	70.8	1	
	27	8.76	42	2	27.19	64	65.1	9	9.23	17	70.7	3	
	7	8.36	40	7	26.55	60	64.2	13	9.06	14	70.4	5	
	17	8.00	36	11	25.95	55	62.9		8.92	12	69.9	7	
Dez.			30	15		55	19			12	7	17	
	27	7.70	23	18	25.40	49	61.0	23	8.80	9	69.2	9	
	6	7.47	13	21	24.91	40	58.7	28	8.71	5	68.3	12	
	16	7.34	4	23	24.51	31	55.9	32	8.66	0	67.1	14	
Mittl. Ort	26	7.30	7	23	24.20	19	52.7	34	8.66	4	65.7	15	
	6	7.37	18	24	24.01	8	49.3	36	8.70	9	64.2	17	
	16	7.55	31	25	23.93	5	45.7	40	8.79	15	62.5	12	
	26	7.86	38	21	23.98	16	41.7	37	8.94	18	60.6	19	
	36	8.24	63.2		24.14	38.0			9.12	19	58.7	19	
		5.55	58.0		27.87	55.4			7.49	71.7	60.81	77.5	
			661)		664)				665)		667)		

# SCHEINBARE STERNÖRTER.

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1912	ψ Drac. austr. 4 <sup>m</sup> .7.		ξ Draconis. 3 <sup>m</sup> .6.		θ Herculis. 3 <sup>m</sup> .8.		35 Draconis. 5 <sup>m</sup> .1.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	17 <sup>h</sup> 43 <sup>m</sup>	72° 11'	17 <sup>h</sup> 51 <sup>m</sup>	56° 52'	17 <sup>h</sup> 53 <sup>m</sup>	37° 15'	17 <sup>h</sup> 53 <sup>m</sup>	76° 58'
Jan.								
I	25.98	23	19.7	36	57.86	17	58.3	35
II	26.21	35	16.1	33	58.03	25	54.8	34
21	26.56	47	12.8	31	58.28	30	51.4	31
31	27.03	57	9.7	26	58.58	36	48.3	26
Febr.	10	27.60	65	7.1	58.94	40	45.7	21
20	28.25	71	5.1	14	59.34	43	43.6	15
März	I	28.96	74	3.7	59.77	45	42.1	9
II	29.70	75	2.9	0	60.22	46	41.2	2
21	30.45	73	2.9	6	60.68	44	41.0	5
31	31.18	70	3.5	12	61.12	41	41.5	11
April	10	31.88	63	4.7	61.55	40	42.6	17
	20	32.51	63	6.4	61.95	37	44.3	22
	30	33.06	55	8.7	62.32	31	46.5	26
Mai	I	33.52	46	11.4	62.63	27	49.1	29
20	33.88	36	14.4	30	62.90	20	52.0	32
Juni	30	34.11	12	17.6	63.10	14	55.2	33
9	34.23	0	20.9	33	63.24	8	58.5	33
19	34.23	13	24.2	33	63.32	0	61.8	33
29	34.10	24	27.5	31	63.32	6	65.1	32
Juli	9	33.86	30.6	30.6	63.26	13	68.3	28
	19	33.50	47	33.4	63.13	20	71.1	26
	29	33.03	55	35.9	62.93	25	73.7	22
Aug.	8	32.48	63	38.1	62.68	30	75.9	18
18	31.85	70	39.8	13	62.38	34	77.7	14
	28	31.15	75	41.1	62.04	38	79.1	10
Sept.	7	30.40	77	41.8	61.66	39	80.1	4
	17	29.63	78	42.1	61.27	40	80.5	1
	27	28.85	77	41.9	60.87	40	80.4	6
Okt.	7	28.08	74	41.1	60.47	38	79.8	11
	17	27.34	68	39.8	60.09	34	78.7	17
Nov.	27	26.66	60	38.0	59.75	30	77.0	21
6	26.06	52	35.7	23	59.45	25	74.9	26
16	25.54	40	33.0	31	59.20	18	72.3	29
26	25.14	27	29.9	34	59.02	10	69.4	33
Dez.	6	24.87	14	26.5	58.92	36	66.1	35
	16	24.73	0	22.9	58.89	3	62.6	40
	26	24.73	15	18.9	58.95	13	58.6	36
	36	24.88	15	15.3	59.08	55.0	55.0	31
Mittl. Ort		30.03	32.3		60.42	70.2	14.08	41.8
					670)	671)	672)	675)

## SCHEINBARE STERNÖRTER.

1912	ν Ophiuchi. 3 <sup>m</sup> .4.		γ Draconis. 2 <sup>m</sup> .3.		67 Ophiuchi. 4 <sup>m</sup> .0.		γ Sagittarii. 3 <sup>m</sup> .0.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. —
	17 <sup>h</sup> 54 <sup>m</sup>	9° 45'	17 <sup>h</sup> 54 <sup>m</sup>	51° 29'	17 <sup>h</sup> 56 <sup>m</sup>	2° 55'	18 <sup>h</sup> 0 <sup>m</sup>	30° 25'
Jan.								
I	9.06	19	57.2	9	31.42	16	44.2	18
II	9.25	24	58.1	10	31.58	23	40.7	22
21	9.49	26	59.1	10	31.81	28	37.4	30
31	9.75	28	60.1	8	32.09	33	34.4	27
Febr.	10.03	30	60.9	7	32.42	33	31.7	21
					36		29	11
20	10.33	30	61.6	6	32.78	39	29.6	15
März	10.63	31	62.2	3	33.17	40	28.1	9
II	10.94	31	62.5	2	33.57	41	27.2	2
21	11.25	31	62.7	1	33.98	41	27.0	—
31	11.56	31	62.6	—	34.39	41	27.4	4
April	11.86	29	62.4	5	34.77	37	28.5	16
20	12.15	28	61.9	6	35.14	33	30.1	21
30	12.43	25	61.3	7	35.47	30	32.2	26
Mai	12.68	25	60.6	7	35.77	25	34.8	28
20	12.92	24	59.9	7	36.02	20	37.6	31
30	13.13	18	59.0	8	36.22	14	40.7	32
Juni	13.31	14	58.2	8	36.36	9	43.9	33
19	13.45	12	57.4	7	36.45	3	47.2	32
29	13.57	6	56.7	7	36.48	4	50.4	31
Juli	13.63	3	56.0	6	36.44	9	53.5	28
19	13.66	2	55.4	5	36.35	15	56.3	26
29	13.64	5	54.9	4	36.20	20	58.9	21
Aug.	13.59	9	54.5	3	36.00	25	61.1	18
18	13.50	12	54.2	2	35.75	29	62.9	14
28	13.38	14	54.0	2	35.46	31	64.3	10
Sept.	13.24	16	53.8	0	35.15	34	65.3	4
17	13.08	16	53.8	0	34.81	34	65.7	0
27	12.92	16	53.8	1	34.47	34	65.7	6
Okt.	12.76	15	53.9	2	34.13	32	65.1	11
17	12.61	12	54.1	2	33.81	29	64.0	16
27	12.49	9	54.3	4	33.52	25	62.4	20
Nov.	12.40	5	54.7	5	33.27	20	60.4	25
16	12.35	0	55.2	6	33.07	15	57.9	29
26	12.35	4	55.8	7	32.92	8	55.0	31
Dez.	12.39	9	56.5	8	32.84	1	51.9	34
16	12.48	15	57.3	9	32.83	7	48.5	39
26	12.63	18	58.2	10	32.90	13	44.6	35
36	12.81	18	59.2	10	33.03	41	54.8	17
Mittl. Ort	10.88	48.8	33.74	55.8	14.24	66.2	9.24	33.7
	673)		676)		677)		679)	

## SCHEINBARE STERNÖRTER.

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1912	72 Ophiuchi. 3 <sup>m</sup> .6		ο Herculis. 3 <sup>m</sup> .8.		μ Sagittarii. 3 <sup>m</sup> .9.		η Serpentis. 3 <sup>m</sup> .2.		
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl.	
	18 <sup>h</sup> 3 <sup>m</sup>	9° 32'	18 <sup>h</sup> 4 <sup>m</sup>	28° 44'	18 <sup>h</sup> 8 <sup>m</sup>	21° 4'	18 <sup>h</sup> 16 <sup>m</sup>	2° 55'	
Jan.									
1	8.87	18 52.5 21	4.70	16 48.5 29	28.08	20 66.0 2	43.57	16 30.0 14	
11	9.05	20 50.4 19	4.86	20 45.6 28	28.28	23 66.2 3	43.73	21 31.4 13	
21	9.25	24 48.5 18	5.06	24 42.8 25	28.51	27 66.5 3	43.94	23 32.7 12	
31	9.49	26 46.7 16	5.30	26 40.3 22	28.78	28 66.8 2	44.17	26 33.9 10	
Febr.	10	9.75	28 45.1 13	5.56	38.1	29.06	67.0	44.43	27 34.9 9
März	20	10.03	28 43.8 9	5.85	30 36.3 14	29.37	31 67.3 2	44.70	29 35.8 7
1	10.31	30 42.9 6	6.15	32 34.9 8	29.68	33 67.5 1	44.99	30 36.5 4	
11	10.61	30 42.3 2	6.47	32 34.1 2	30.01	33 67.6 0	45.29	30 36.9 1	
21	10.91	30 42.1 2	6.79	31 33.9 2	30.34	33 67.6 1	45.59	30 37.0 2	
31	11.21	30 42.3 6	7.10	31 34.1 9	30.67	33 67.5 2	45.89	30 36.8 4	
April	10	11.50	29 42.9 9	7.41	30 35.0 12	30.99	31 67.3 2	46.19	29 36.4 7
20	11.79	26 43.8 13	7.71	28 36.2 18	31.30	31 67.1 3	46.48	28 35.7 9	
Mai	30	12.05	26 45.1 15	7.99	26 38.0 20	31.61	28 66.8 3	46.76	26 34.8 10
10	12.31	22 46.6 16	8.25	23 40.0 24	31.89	27 66.5 3	47.02	25 33.8 12	
20	12.53	21 48.2 18	8.48	20 42.4 25	32.16	27 66.2 3	47.27	22 32.6 12	
Juni	30	12.74	17 50.0 19	8.68	16 44.9 27	32.40	20 65.9 3	47.49	19 31.4 13
9	12.91	13 51.9 18	8.84	12 47.6 27	32.60	18 65.6 2	47.68	16 30.1 12	
19	13.04	10 53.7 19	8.96	8 50.3 26	32.78	13 65.4 1	47.84	12 28.9 12	
Juli	29	13.14	6 55.6 19	9.04	4 52.9 25	32.91	8 65.3 0	47.96	8 27.7 11
9	13.20	2 57.3 16	9.08	1 55.4 24	32.99	5 65.3 0	48.04	8 26.6 9	
19	13.22	— 58.9 14	9.07	5 57.8 21	33.04	0 65.3 0	48.08	0 25.7 9	
29	13.20	6 60.3 12	9.02	10 59.9 19	33.04	4 65.3 1	48.08	4 24.8 7	
Aug.	8	13.14	10 61.5 10	8.92	13 61.8 15	33.00	8 65.4 2	48.04	8 24.1 6
18	13.04	12 62.5 7	8.79	17 63.3 12	32.92	12 65.6 1	47.96	11 23.5 4	
28	12.92	12 63.2 7	8.62	17 64.5 12	32.80	12 65.7 1	47.85	11 23.1 3	
Sept.	7	12.77	17 63.8 2	8.43	20 65.4 4	32.66	16 65.8 1	47.72	16 22.8 2
17	12.60	18 64.0 1	8.23	21 65.8 1	32.50	17 65.9 0	47.56	16 22.6 1	
Okt.	27	12.42	64.1 3	8.02	22 65.9 1	32.33	17 65.9 1	47.40	17 22.7 1
7	12.25	17 63.8 3	7.80	20 65.5 8	32.16	17 66.0 1	47.23	17 22.8 1	
17	12.10	15 63.3 5	7.60	17 64.7 11	32.01	15 65.9 0	47.08	15 23.1 4	
27	11.96	11 62.6 11	7.43	15 63.6 16	31.88	10 65.9 1	46.95	11 23.5 7	
Nov.	6	11.85	61.5 11	7.28	11 62.0 19	31.78	6 65.8 1	46.84	7 24.2 7
16	11.78	7 60.3 12	7.17	6 60.1 22	31.72	1 65.7 0	46.77	3 24.9 9	
26	11.75	3 58.8 15	7.11	1 57.9 25	31.71	3 65.7 0	46.74	2 25.8 10	
Dez.	6	11.77	6 57.1 17	7.10	— 55.4 28	31.74	8 65.7 1	46.76	6 26.8 12
16	11.83	12 55.2 22	7.13	10 52.6 31	31.82	15 65.8 1	46.82	11 28.0 13	
26	11.95	15 53.0 20	7.23	13 49.5 29	31.97	18 65.9 2	46.93	15 29.3 13	
36	12.10	51.0	7.36	13 46.6 29	32.15	66.1	47.08	30.6 13	
Mitt. Ort	10.64	62.2	6.57	59.0	30.02	57.8	45.36	20.8	
			680)	681)	682)		688)		

1912	ε Sagittarii. 1 <sup>m</sup> .9.		109 Herculis. 3 <sup>m</sup> .9.		α Telescopii. 3 <sup>m</sup> .7.		χ Draconis. 3 <sup>m</sup> .6.		
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +	
	18 <sup>h</sup> 18 <sup>m</sup>	34° 25'	18 <sup>h</sup> 19 <sup>m</sup>	21° 43'	18 <sup>h</sup> 20 <sup>m</sup>	46° 1'	18 <sup>h</sup> 22 <sup>m</sup>	72° 41'	
Jan.									
I	17.68	21	45.2	6	55.03	15	34.4	26	
II	17.89	25	44.6	5	55.18	18	31.8	25	
21	18.14	29	44.1	5	55.36	23	29.3	23	
31	18.43	31	43.6	4	55.59	24	27.0	20	
Febr.	10		43.2	4	55.83	27	25.0		
	20		42.8	4	56.10	29	23.3	13	
März	I	19.43	37	42.5	1	56.39	30	22.0	8
II	19.80	37	42.4	2	56.69	31	21.2	3	
21	20.17	37	42.2	1	57.00	30	20.9	2	
31	20.54	37	42.1	1	57.30	21	21.1		
April	10	37	42.0	0	57.61	29	21.8	7	
	20	21.27	42.0	1	57.90	29	22.9	15	
Mai	30	21.61	34	42.1	1	58.19	26	24.4	19
I	10	21.94	53	42.2	2	58.45	24	26.3	21
20	22.25	27	42.4	4	58.69	21	28.4	23	
Juni	30	22.52	42.8	4	58.90	18	30.7	24	
9	22.76	21	43.2	4	59.08	14	33.1	24	
19	22.97	15	43.8	6	59.22	11	35.5	24	
29	23.12	11	44.4	7	59.33	6	37.9	24	
Juli	9	23.23	6	45.1	8	59.39	2	40.3	21
	19	23.29	1	45.9	7	59.41	3	42.4	20
Aug.	8	23.30	—	46.6	8	59.38	6	44.4	18
18	23.26	4	47.4	8	59.32	11	46.2	14	
28	23.17	13	48.1	7	59.21	13	47.6	12	
Sept.		23.04	15	48.7	4	59.08	17	48.8	8
	7	22.89	19	49.1	3	58.91	18	49.6	6
17	22.70	19	49.4	2	58.73	19	50.2	1	
27	22.51	19	49.6	0	58.54	20	50.3	2	
Okt.	7	22.32	19	49.6	2	58.34	18	50.1	6
17	22.13	15	49.4	4	58.16	17	49.5	9	
	27	21.98	13	49.0	5	57.99	13	48.6	13
Nov.	6	21.85	8	48.5	6	57.86	11	47.3	16
16	21.77	3	47.9	7	57.75	6	45.7	19	
26	21.74	3	47.2	8	57.69	1	43.8	22	
Dez.	6	21.77	8	46.4	7	57.68	—	41.6	
	16	21.85	14	45.7	8	57.71	8	39.3	25
26	21.99	19	44.9	7	57.79	13	36.8	29	
36	22.18	20	44.2	7	57.92	23	33.9	29	
Mittl. Ort	19.85	37.2	56.86	44.3	26.91	3.8	38.67	41.7	
		689)	690)	691)	691)		695)		

# SCHEINBARE STERNÖRTER.

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1912	<i>b</i> Draconis. 5 <sup>m</sup> .1.		<i>ζ</i> Pavonis. 4 <sup>m</sup> .0.		<i>α</i> Lyrae <sup>*)</sup> . 1 <sup>m</sup> .		II <sup>o</sup> Herculis. 4 <sup>m</sup> .1.	
	AR.	Dekl. +/-	AR.	Dekl. —	AR.	Dekl. +/-	AR.	Dekl. +/-
	18 <sup>h</sup> 22 <sup>m</sup>	58° 44'	18 <sup>h</sup> 32 <sup>m</sup>	71° 30'	18 <sup>h</sup> 33 <sup>m</sup>	38° 41'	18 <sup>h</sup> 41 <sup>m</sup>	20° 27'
Jan.								
1	34.72	11	48.2		40.40	26.1	55.44	12
11	34.83	20	44.5	37	40.79	39	55.56	17
21	35.03	26	41.0	35	41.29	61	55.73	21
31	35.29	33	37.8	32	41.90	69	55.94	20
Febr.	10		35.62	35.0	42.59	16.4	56.20	28
20	38.00	42	32.6	18	43.35	82	56.48	31
März	1		36.42	30.8	44.17	85	56.79	33
11	36.87	45	29.6	12	45.02	89	57.12	34
21	37.34	47	29.0	6	45.91	89	57.46	5
31	37.81	47	29.2	2	46.80	11.4	57.80	34
April	10		38.27	29.9	47.68	87	58.15	33
20	38.71	44	31.3	14	48.55	83	58.48	31
Mai	30		39.12	41	49.38	78	58.79	30
10	39.49	37	33.3	24	50.16	14.1	59.09	26
20	39.80	31	35.7	28	50.87	71	59.35	25
Juni	30		40.06	41.6	51.50	17.6	59.58	19
9	40.25	12	44.9	33	52.04	54	59.77	15
19	40.37	—	48.3	34	52.48	22.0	59.92	10
29	40.42	5	51.7	34	52.81	33	60.02	30
Juli	9		40.40	10	53.01	27.0	60.07	5
19	40.30	17	58.1	29	53.09	5	60.06	5
Aug.	8		40.13	23	53.04	18	60.01	10
18	39.90	29	63.6	22	52.86	28	59.91	14
28	39.61	34	65.8	18	52.58	39	59.77	19
Sept.	7		39.27	38	52.19	38.1	59.58	21
17	38.89	41	68.9	9	51.72	53	59.37	24
27	38.48	—	69.8	9	51.19	40.4	59.13	25
Okt.	7		38.06	42	50.62	57	58.88	25
17	37.63	43	70.2	2	50.04	58	58.63	25
27	37.21	42	69.3	7	49.47	57	58.38	22
Nov.	6		36.82	36	48.96	44	58.16	20
16	36.46	30	66.3	22	48.52	35	57.96	16
26	36.16	24	64.1	26	48.17	23	57.80	12
Dez.	6		35.92	17	61.5	30	57.68	7
16	35.75	10	58.5	33	47.84	3	57.61	2
26	35.65	1	55.2	35	47.87	17	57.59	4
36	35.64	8	51.7	40	48.04	25.6	57.63	10
Mitt. Ort			35.72	47.7	48.38	34	57.73	33
	37.54	58.0	45.47	18.1	57.53	64.3	52.45	41.1
	694)		698)		699)		703)	

<sup>\*)</sup> Die jährliche Parallaxe ist bereits angebracht.

## SCHEINBARE STERNÖRTER.

1912	$\lambda$ Pavonis. 4 <sup>m</sup> .3.		$\beta$ Lyrae. (3 <sup>m</sup> .3).		$\sigma$ Sagittarii. 2 <sup>m</sup> .1.		$\sigma$ Draconis. 4 <sup>m</sup> .6.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. +
	18 <sup>h</sup> 44 <sup>m</sup>	62° 17'	18 <sup>h</sup> 46 <sup>m</sup>	33° 15'	18 <sup>h</sup> 49 <sup>m</sup>	26° 24'	18 <sup>h</sup> 49 <sup>m</sup>	59° 16'
Jan.								
I	0.40	29	31.5	25	47.84	27.2	46.56	34.7
II	0.69	35	29.0	22	47.95	23.9	46.73	34.3
21	1.04	42	26.8	21	48.10	21.0	46.93	34.1
31	1.46	48	24.7	18	48.30	18.3	47.17	33.9
Febr. 10	1.94	52	22.9	17	48.53	15.8	47.44	33.6
20	2.46	57	21.2	13	48.79	13.8	47.73	33.3
März	3.03	59	19.9	11	49.08	12.2	48.04	33.0
II	3.62	61	18.8	7	49.39	11.1	48.36	32.7
21	4.23	62	18.1	5	49.71	10.5	48.69	32.3
31	4.85	63	17.6	1	50.03	10.5	49.03	31.9
April	5.48	61	17.5	2	50.36	11.1	49.37	31.5
20	6.09	60	17.7	5	50.68	12.2	49.71	31.0
30	6.69	56	18.2	8	50.99	13.8	50.05	30.5
Mai	7.25	56	19.0	11	51.29	15.9	50.37	30.1
20	7.78	53	20.1	11	51.56	18.2	50.67	29.8
30	8.26	48	21.5	16	51.80	20.8	50.95	29.5
Juni	8.67	41	23.1	19	52.00	23.7	51.21	29.3
19	9.02	35	25.0	20	52.17	26.6	51.42	29.2
29	9.30	28	27.0	21	52.29	29.5	51.60	29.3
Juli	9.49	19	29.1	21	52.36	32.3	51.74	29.4
9	9.49	10	29.1	21	52.36	2	51.74	9
19	9.59	2	31.2	22	52.38	35.1	51.83	29.7
29	9.61	8	33.4	20	52.36	37.6	51.87	30.0
Aug.	9.53	15	35.4	19	52.29	39.9	51.86	30.4
18	9.38	23	37.3	16	52.17	41.9	51.80	30.8
28	9.15	38	38.9	13	52.02	43.6	51.71	31.3
Sept.	8.86	40.2	40.2	10	51.84	44.9	51.58	31.7
17	8.52	34	41.2	5	51.63	45.8	51.43	32.0
27	8.15	37	41.7	1	51.41	46.3	51.25	32.2
Okt.	7.77	37	41.8	3	51.18	46.3	51.08	32.4
17	7.40	34	41.5	7	50.96	45.9	50.91	32.5
27	7.06	29	40.8	12	50.75	45.1	50.75	32.5
Nov.	6.77	22	39.6	16	50.56	43.9	50.62	32.3
16	6.55	15	38.0	18	50.41	42.2	50.53	32.1
26	6.40	6	36.2	21	50.30	40.1	50.48	31.9
Dez.	6.34	2	34.1	23	50.23	37.8	50.48	31.6
16	6.36	12	31.8	24	50.21	35.2	50.52	31.3
26	6.48	25	29.4	25	50.24	32.3	50.61	31.0
36	6.73	25	26.9	25	50.33	29.1	50.76	30.6
Mittl. Ort	3.95	22.2	49.85	35.9	48.55	24.8	54.22	49.8
	704)		705)		706)		707)	

## SCHEINBARE STERNÖRTER.

1912	$\lambda$ Telescopii. 5 <sup>m</sup> .1.		$\vartheta$ Serpentis pr. 4 <sup>m</sup> .5.		$R$ Lyrae. (4 <sup>m</sup> .5.).		$\gamma$ Lyrae. 3 <sup>m</sup> .2.	
	AR.	Dekl.	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	18 <sup>h</sup> 51 <sup>m</sup>	53° 3'	18 <sup>h</sup> 51 <sup>m</sup>	4° 5'	18 <sup>h</sup> 52 <sup>m</sup>	43° 49'	18 <sup>h</sup> 55 <sup>m</sup>	32° 33'
Jan.	22.67	24	26.5	21	48.89	8.5	37.20	38.6
	22.91	27	24.4	18	49.03	6.8	37.29	35.1
	23.18	33	22.6	16	49.19	5.2	37.43	31.8
	23.51	37	21.0	16	49.39	3.8	37.63	28.8
Febr.	23.88	41	19.4	14	49.62	2.5	37.87	26.0
					25	10	27	23
	24.29	45	18.0	12	49.87	1.5	38.14	23.7
	24.74	46	16.8	10	50.13	0.7	38.45	21.8
März	25.20	48	15.8	8	50.41	0.2	38.79	20.5
	25.68	50	15.0	5	50.70	0.1	39.14	19.8
	26.18	49	14.5	3	51.00	0.3	39.50	19.7
					30	6	36	5
April	26.67	49	14.2	1	51.30	0.9	39.86	20.2
	27.16	49	14.1	2	51.60	1.8	40.22	21.3
	27.64	48	14.3	4	51.89	2.9	40.56	22.9
	28.10	46	14.7	7	52.17	4.3	40.88	25.1
Mai	28.53	43	15.4	10	52.44	5.8	41.18	27.6
					24	17	26	28
	28.92	35	16.4	11	52.68	7.5	41.44	30.4
	29.27	30	17.5	14	52.90	9.2	41.65	33.4
Juni	29.57	25	18.9	15	53.08	11.0	41.82	36.6
	29.82	17	20.4	16	53.23	12.7	41.94	39.9
	29.99	11	22.0	17	53.34	14.3	42.00	43.1
					6	14	1	30
Juli	30.10	4	23.7	17	53.40	15.7	42.01	46.1
	30.14	3	25.4	17	53.43	17.1	41.97	49.0
	30.11	10	27.1	16	53.41	18.2	41.87	51.6
	30.01	16	28.7	14	53.35	19.2	41.72	53.9
Aug.	29.85	20	30.1	12	53.26	19.9	41.53	55.9
					13	6	23	15
	29.65	25	31.3	9	53.13	20.5	41.30	57.4
	29.40	27	32.2	5	52.98	20.9	41.05	58.5
Okt.	29.13	28	32.7	2	52.82	21.1	40.78	59.2
	28.85	28	32.9	1	52.66	21.0	40.50	59.4
	28.57	25	32.8	5	52.50	20.7	40.22	59.1
					15	4	26	8
Nov.	28.32	22	32.3	9	52.35	20.3	39.96	58.3
	28.10	16	31.4	12	52.22	19.6	39.72	57.0
	27.94	11	30.2	14	52.13	18.7	39.51	55.3
	27.83	11	28.8	16	52.07	17.6	39.35	53.1
Dez.	27.79	4	27.2	16	52.05	16.4	39.24	50.6
					2	14	5	29
	27.82	10	25.3	19	52.07	15.0	39.19	47.7
	27.92	18	23.4	20	52.14	13.4	39.18	44.6
	28.10	33	21.4		52.26	11.7	39.25	41.1
Mittl. Ort	25.48	16.5			50.69	17.9	39.45	46.7
					708)	709)	711)	713)

## SCHEINBARE STERNÖRTER.

1912	$\zeta$ Aquilac. 3 <sup>m</sup> .o.		$\lambda$ Aquilae. 3 <sup>m</sup> .2.		$\alpha$ Coron. austr. 4 <sup>m</sup> .1.		$\pi$ Sagittarii. 2 <sup>m</sup> .9.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. -
	19 <sup>h</sup> 1 <sup>m</sup>	13° 43'	19 <sup>h</sup> 1 <sup>m</sup>	5° 0'	19 <sup>h</sup> 3 <sup>m</sup>	38° 2'	19 <sup>h</sup> 4 <sup>m</sup>	21° 9'
Jan.								
I	20.09	12	46.0	23	32.94	14	64.6	11
II	20.21	15	43.7	20	33.08	16	65.7	10
21	20.36	19	41.7	19	33.24	20	66.7	9
31	20.55	21	39.8	18	33.44	22	67.6	8
Febr.	20.76		38.0		33.66		68.4	
	24	14	25	7			31	9
20	21.00	26	36.6	11	33.91	27	69.1	4
März	21.26	27	35.5	7	34.18	28	69.5	1
II	21.53	29	34.8	3	34.46	29	69.6	0
21	21.82	30	34.5	1	34.75	30	69.6	4
31	22.12	30	34.6	6	35.05	31	69.2	4
April	22.42	30	35.2	9	35.36	30	68.7	8
20	22.72	29	36.1	13	35.66	30	67.9	10
30	23.01	29	37.4	16	35.96	29	66.9	11
Mai	23.30	27	39.0	19	36.25	28	65.8	13
20	23.57	24	40.9	20	36.53	26	64.5	13
30	23.81	22	42.9	22	36.79	23	63.2	13
Juni	24.03	19	45.1	22	37.02	20	61.9	13
19	24.22	14	47.3	22	37.22	16	60.6	12
29	24.36	11	49.5	21	37.38	13	59.4	12
Juli	24.47	7	51.6	20	37.51	8	58.2	10
19	24.54	3	53.6	18	37.59	4	57.2	9
29	24.57	2	55.4	16	37.63	0	56.3	7
Aug.	24.55	7	57.0	15	37.63	5	55.6	6
18	24.48	10	58.5	11	37.58	8	55.0	4
28	24.38	13	59.6	9	37.50	12	54.6	3
Sept.	24.25	15	60.5	6	37.38	13	54.3	1
17	24.10	17	61.1	4	37.25	16	54.1	0
27	23.93	18	61.5	0	37.09	16	54.1	1
Okt.	23.75	17	61.5	2	36.93	16	54.2	2
17	23.58	16	61.3	6	36.77	14	54.4	3
27	23.42	14	60.7	8	36.63	13	54.7	5
Nov.	23.28	12	59.9	12	36.50	9	55.2	6
16	23.16	7	58.7	13	36.41	6	55.8	7
26	23.09	4	57.4	16	36.35	2	56.5	8
Dez.	23.05	0	55.8	18	36.33	2	57.3	9
16	23.05	5	54.0	20	36.35	7	58.2	9
26	23.10	10	52.0	23	36.42	12	59.1	11
36	23.20		49.7		36.54		60.2	
Mittl. Ort	21.92	54.9	34.75	54.9	29.17	32.7	31.87	51.5
	716)		717)		718)		720)	

## SCHEINBARE STERNÖRTER.

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1912	δ Draconis. 3 <sup>m</sup> .0.		θ Lyrae. 4 <sup>m</sup> .3.		ω Aquilae. 5 <sup>m</sup> .4.		ζ Cygni. 3 <sup>m</sup> .8.		
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	
	19 <sup>h</sup> 12 <sup>m</sup>	67° 29'	19 <sup>h</sup> 13 <sup>m</sup>	37° 58'	19 <sup>h</sup> 13 <sup>m</sup>	11° 25'	19 <sup>h</sup> 15 <sup>m</sup>	53° 11'	
Jan.									
I	28.37	2	78.5	39	16.67	7	27.9	21	
II	28.35	9	74.6	35	16.74	12	24.6	30	
21	28.44	20	71.1	34	16.86	17	21.6	29	
31	28.64	30	67.7	32	17.03	20	18.7	27	
Febr.	10				17.23	25	16.0	23	
	28.94	38	64.5	28			39.97	14	
20	29.32	46	61.7	23	17.48	27	13.7	18	
März	I	29.78	53	59.4	17	17.75	31	11.9	14
II	30.31	53	57.7	12	18.06	5	10.5	8	
21	30.88	60	56.5	5	18.38	33	9.7	2	
31	31.48	61	56.0	2	18.71	34	9.5	4	
April	10	32.09	60	56.2	8	19.05	9	41.59	31
	20	32.69	57	57.0	14	19.40	15	41.90	29
	30	33.26	53	58.4	20	19.73	32	42.19	29
Mai	10	33.79	48	60.4	25	20.05	30	42.48	28
	20	34.27	40	62.9	28	20.35	26	42.76	25
Juni	30	34.67	33	65.7	29	20.61	23	43.01	23
9	35.00	23	68.9	32	20.84	20	43.24	20	
19	35.23	13	72.2	35	21.04	14	25.2	31	
29	35.36	4	75.7	35	21.18	10	28.3	31	
Juli	9	35.40	6	79.2	35	21.28	14	43.72	8
	19	35.34	16	82.7	21	21.33	1	34.4	28
	29	35.18	25	86.0	33	21.32	5	37.2	26
Aug.	8	34.93	34	89.1	31	21.27	11	39.8	24
18	34.59	41	92.0	24	21.16	14	42.2	20	
	28	34.18	49	94.4	21	21.02	19	44.2	17
Sept.	7	33.69	54	96.5	17	20.83	21	45.9	12
	17	33.15	57	98.2	11	20.62	24	47.1	8
Okt.	27	32.58	60	99.3	7	20.38	24	47.9	4
7	31.98	61	100.0	1	20.14	24	48.3	1	
	17	31.37	59	100.1	5	19.90	24	48.2	5
	27	30.78	56	99.6	10	19.66	21	47.7	11
Nov.	6	30.22	51	98.6	15	19.45	19	46.6	14
	16	29.71	46	97.1	21	19.26	15	45.2	19
	26	29.25	38	95.0	25	19.11	10	43.3	23
Dez.	6	28.87	28	92.5	29	19.01	6	41.0	26
	16	28.59	18	89.6	32	18.95	1	38.4	28
	26	28.41	9	86.4	34	18.94	4	35.6	30
	36	28.32	9	83.0	34	18.98	32.6	42.50	17
Mittl. Ort		32.27	84.1	18.79	35.1	41.15	69.6	4.18	80.5

## SCHEINBARE STERNÖRTER.

1912	$\tau$ Draconis. 4 <sup>m</sup> .5.		$\alpha$ Sagittarii. 4 <sup>m</sup> .0.		$\delta$ Aquilae. 3 <sup>m</sup> .3.		$\beta$ Cygni. 3 <sup>m</sup> .0.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	19 <sup>h</sup> 17 <sup>m</sup>	73° 11'	19 <sup>h</sup> 17 <sup>m</sup>	40° 46'	19 <sup>h</sup> 21 <sup>m</sup>	2° 56'	19 <sup>h</sup> 27 <sup>m</sup>	27° 46'
Jan.								
I	10.09	10	27.7		45.22	17	67.8	
II	9.99	7	23.9	38	45.39	19	66.4	14
21	10.06	20	20.4	34	45.58	24	65.2	12
31	10.26	34	17.0	32	45.82	28	63.9	12
Febr.	10		13.8		46.10		62.7	
			47	29	31	12	23	10
20	11.07	56	10.9	24	46.41	34	61.5	10
März	1	11.63	66	8.5	46.75	37	60.5	10
II	12.29	72	6.7	12	47.12		59.5	9
21	13.01	77	5.5	6	47.49	37	58.6	8
31	13.78	78	4.9	0	47.88	39	57.8	
April	10	14.56	76	4.9	48.28	40	57.1	7
	20	15.32	74	5.6	48.68	40	56.6	5
	30	16.06	67	6.9	49.08	40	56.2	4
Mai	10	16.73	60	8.8	49.47	39	55.9	3
	20	17.33	50	11.2	49.84	37	55.9	0
			28		35	1	5.33	
30	17.83	40	14.0		50.19	32	56.0	
Juni	9	18.23	28	17.1	50.51	28	56.4	4
	19	18.51	20.4	20.4	50.79	24	56.9	5
29	18.66	15	23.9	35	51.03	18	57.6	7
Juli	9	18.68	2	27.4	51.21	13	58.5	9
	19	18.57	23	30.8	51.34	8	59.5	12
	29	18.34	36	34.2	51.42	1	60.7	11
Aug.	8	17.98	36	37.3	51.43	4	61.8	12
	18	17.51	47	40.2	51.39	9	63.0	10
	28	16.94	66	42.8	51.30	14	64.0	10
Sept.	7	16.28	73	45.0	51.16	17	65.0	9
	17	15.55	79	46.7	50.99	20	65.9	6
	27	14.76	81	48.0	50.79	21	66.5	
Okt.	7	13.95	82	48.7	50.58	21	66.9	4
	17	13.13	81	48.9	50.37	20	67.1	1
			3				15	
27	12.32	78	48.6	8	50.17	17	67.0	3
Nov.	6	11.54	72	47.8	50.00	14	66.7	6
	16	10.82	65	46.3	49.86	9	66.1	8
	26	10.17	55	44.4	49.77	5	65.3	9
Dez.	6	9.62	44	42.0	49.72	1	64.4	11
	16	9.18	31	39.2	49.73	6	63.3	12
	26	8.87	17	36.0	49.79	12	62.1	13
	36	8.70	32.7	32.7	49.91		60.8	13
Mittl. Ort	15.II	32.7		47.45	56.2		3.70	18.9
			729)		728)		730)	732)

1912	ι Cygni. 3 <sup>m</sup> .9.		h Sagittarii. 4 <sup>m</sup> .6.		θ Cygni. 4 <sup>m</sup> .5.		γ Aquilae. 2 <sup>m</sup> .7.			
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +		
	19 <sup>h</sup> 27 <sup>m</sup>	51° 32'	19 <sup>h</sup> 31 <sup>m</sup>	25° 4'	19 <sup>h</sup> 34 <sup>m</sup>	50° 0'	19 <sup>h</sup> 42 <sup>m</sup>	10° 23'		
Jan.										
I	26.67	25.2	19.31	54.4 3	2.37	55.4 32	2.78	44.9 17		
II	26.69	21.9	19.43	54.1 4	2.38	52.2 36	2.85	43.2 19		
II	26.78	9	18.2	19.60	2.46	48.6 33	2.97	41.3 17		
III	26.93	15	14.9	19.79	53.7 4	2.60	45.3 30	3.12	39.6 15	
Febr.	10	27.14	11.9	20.01	52.9	2.80	42.3 27	3.30	38.1 12	
		26	27		5	24				
20	27.40	9.2	20.26	52.4 6	3.04	39.6 22	3.50	36.9 10		
März	I	27.70	7.0	20.54	51.8 6	3.33	37.4 17	3.73	35.9 7	
II	28.04	34	5.3	20.84	51.2	3.66	35.7 12	3.98	35.2 2	
II	28.42	38	4.2	21.15	50.5 7	4.02	34.5 5	4.26	35.0 1	
III	28.81	39	5	21.47	49.8	4.40	34.0 1	4.54	35.1 5	
April	10	29.22	3.8	21.81	49.0 9	4.80	34.1 7	4.84	35.6 9	
		40	8	22.15	48.1 8	5.20	34.8 13	5.14	36.5 13	
30	30.02	40	13	22.49	47.3 8	5.59	36.1 19	5.45	37.8 15	
Mai	10	30.40	38	7.8	22.82	46.5 7	5.97	38.0 23	5.75	39.3 18
		36	24	23.15	45.8 7	6.32	40.3 27	6.04	41.1 19	
20	30.76	10.2	27	31	6	32				
Juni	30	31.07	12.9	23.46	45.2 5	6.64	43.0 30	6.31	43.0 21	
9	31.34	22	16.0	23.74	44.7 4	6.91	46.0 32	6.56	45.1 22	
19	31.56	17	19.3	23.99	44.3 2	7.14	49.2 34	6.78	47.3 21	
29	31.73	10	22.7	24.21	44.1 1	7.31	52.6 34	6.97	49.4 21	
Juli	9	31.83	26.1	24.38	44.0 1	7.42	56.0	7.12	51.5 19	
		4	34	13	5	34				
19	31.87	3	29.5	24.51	44.1 2	7.47	59.4 33	7.23	53.4 19	
29	31.84	9	32.7	24.59	44.3 3	7.46	62.7 30	7.29	55.3 16	
Aug.	8	31.75	15	35.8	24.62	44.6 3	7.39	65.7 28	7.31	56.9 14
		20	27	24.61	6	44.9 5	7.26	68.5 25	7.29	58.3 12
28	31.40	41.0	25	24.55	45.4	7.07	71.0 21	7.22	59.5 10	
Sept.	7	31.15	28	43.1 16	24.44	45.9 5	6.84	73.1 17	7.12	60.5 7
		27	12	24.31	15	46.4 4	6.57	74.8 13	6.99	61.2 5
17	30.87	44.7	24.16	46.8 3	6.28	76.1 8	6.84	61.7 2		
Okt.	7	30.56	33	45.9 7	23.99	47.1 3	5.97	76.9 3	6.68	61.9 1
		34	2	23.82	16	47.4 2	5.65	77.2 3	6.51	61.8 3
17	29.89	46.8	32	23.82	16	47.4 2	31			
27	29.57	46.5	8	23.66	47.6 0	5.34	76.9 7	6.35	61.5 6	
Nov.	6	29.26	31	45.7	23.51	47.6 0	5.04	76.2 13	6.20	60.9 8
16	28.98	24	44.3	23.40	8	47.6 1	4.77	74.9 18	6.08	60.1 11
26	28.74	19	42.4	23.32	47.5 1	4.54	73.1 22	5.98	59.0 13	
Dez.	6	28.55	40.1	23.28	4	47.4 3	4.35	70.9 27	5.92	57.7 15
		14	27	1	3					
16	28.41	8	37.4	23.29	4	47.1 3	4.21	68.2 29	5.90	56.2 16
26	28.33	1	34.4	23.33	9	46.8 3	4.14	65.3 31	5.91	54.6 17
36	28.32	31.2	32	23.42	46.5	4.12	62.2	5.97	52.9	
Mittl. Ort										
	29.26	30.6		21.21	43.0	4.89	60.5	4.56	53.4	
				736)		738)		741)		

## SCHEINBARE STERNÖRTER.

1912	δ Cygni. 2 <sup>m</sup> .8.		δ Sagittae. 3 <sup>m</sup> .8.		α Aquilae. 1 <sup>m</sup> .		ε Draconis. 3 <sup>m</sup> .8.	
	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-
	19 <sup>h</sup> 42 <sup>m</sup>	44° 54'	19 <sup>h</sup> 43 <sup>m</sup>	18° 18'	19 <sup>h</sup> 46 <sup>m</sup>	8° 37'	19 <sup>h</sup> 48 <sup>m</sup>	70° 2'
Jan.								
I	11.16	50.6	26.00	51.9	27.62	58.3	24.21	35.0
II	11.17	8	26.06	6	27.69	56.7	24.06	31.7
21	11.25	13	26.17	14	27.81	54.9	24.04	27.9
31	11.38	18	26.31	17	27.95	53.4	24.15	24.5
Febr. 10	11.56	38.1	26.48	21	28.13	52.0	24.38	21.2
20	11.78	27	26.69	23	28.33	50.8	24.71	18.2
März								
I	12.05	30	26.92	25	28.56	50.0	25.14	15.5
II	12.35	31.6	27.17	28	28.81	49.4	25.66	13.4
21	12.68	33	27.45	29	29.08	49.2	26.25	11.8
31	13.03	35	27.74	30	29.36	49.4	26.88	10.9
April								
10	13.40	30.0	28.04	30	29.66	49.9	27.55	10.6
20	13.77	37	28.34	31	29.96	50.8	28.22	10.9
30	14.14	37	28.65	41.6	30.27	52.1	28.88	11.9
Mai								
10	14.50	36	28.96	43.3	30.57	53.6	29.51	13.5
20	14.83	33	29.25	45.2	30.86	55.3	30.09	15.6
30	15.14	27	29.52	47.4	31.14	57.3	30.60	18.2
Juni								
9	15.41	23	29.77	49.7	31.39	59.3	31.03	21.2
19	15.64	18	29.99	52.2	31.62	61.4	31.36	24.4
29	15.82	13	30.18	54.6	31.82	63.4	31.60	27.8
Juli								
9	15.95	51.2	30.32	57.1	31.97	65.4	31.72	31.4
19	16.02	7	30.42	6	32.09	67.3	31.74	35.0
29	16.04	54.5	30.48	61.7	32.16	69.1	31.65	38.5
Aug.								
8	16.00	4	30.49	63.7	32.18	70.7	31.44	41.9
18	15.90	10	30.46	65.5	32.16	72.1	31.14	45.0
28	15.75	15	30.39	67.0	32.11	73.2	30.74	47.9
Sept.								
7	15.56	23	30.28	68.3	32.01	74.1	30.26	50.5
17	15.33	25	30.14	69.3	31.89	74.8	29.70	52.6
27	15.08	25	29.97	70.0	31.74	75.3	29.10	54.3
Okt.								
7	14.81	27	29.80	70.4	31.58	75.5	28.45	55.6
17	14.53	28	29.62	70.4	31.42	75.4	27.78	56.3
27	14.25	26	29.45	70.1	31.26	75.1	27.11	56.4
Nov.								
6	13.99	23	29.29	69.4	31.12	74.6	26.45	56.0
16	13.76	21	29.15	68.4	31.00	73.8	25.83	55.0
26	13.55	16	29.05	67.2	30.90	72.8	25.27	53.5
Dez.								
6	13.39	11	28.97	65.6	30.84	71.6	24.77	51.4
16	13.28	6	28.93	63.9	30.82	70.2	24.36	48.9
26	13.22	1	28.94	61.9	30.83	68.7	24.04	46.0
36	13.21	30	28.98	59.8	30.88	67.1	23.84	42.8
Mittl. Ort	13.49	55.6	27.83	59.5	29.38	66.9	28.61	37.6
	742)		743)		745)		747)	

## SCHEINBARE STERNÖRTER.

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1912	ε Pavonis. 3 <sup>m</sup> .8.		β Aquilae. 3 <sup>m</sup> .7.		ψ Cygni. 5 <sup>m</sup> .0.		9 <sup>1</sup> Sagittarii. 4 <sup>m</sup> .3.	
	AR.	Dekl. —	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. —
	19 <sup>h</sup> 50 <sup>m</sup>	73° 8'	19 <sup>h</sup> 50 <sup>m</sup>	6° 10'	19 <sup>h</sup> 53 <sup>m</sup>	52° 11'	19 <sup>h</sup> 53 <sup>m</sup>	35° 30'
Jan.								
I	21.18	12	52.8		57.69	61.9 15	18.67	74.1 32
II	21.30	30	49.8 30		57.76	60.4 16	18.65	70.9 36
21	21.60	40	46.5 30		57.88	58.8 15	18.70	67.3 33
31	22.00	52	43.5 29		58.02	57.3 12	18.81	64.0 30
Febr.	22.52	63	40.6 27		58.19	56.1 11	18.97	61.0 28
März	23.15	72	37.9 25		58.39	55.0 8	19.20	58.2 25
I	23.87	79	35.4 21		58.61	54.2 5	19.48	55.7 19
II	24.66	86	33.3 19		58.86	53.7 1	19.80	53.8 13
21	25.52	93	31.4 15		59.12	53.6 2	20.15	52.5 8
31	26.42	93	29.9 15		59.41	53.8 5	20.54	51.7 1
April	27.35	95	28.8 11		59.70	54.3 9	20.95	51.6 5
20	28.30	95	28.1 7		60.00	55.2 12	21.36	52.1 11
Mai	29.25	95	27.8 3		60.31	56.4 15	21.77	53.2 16
10	30.18	93	27.9 6		60.61	57.9 17	22.18	54.8 22
20	31.06	84	28.5 9		60.90	59.6 18	22.55	57.0 26
Juni	31.90	76	29.4 14		61.18	61.4 19	22.90	59.6 30
9	32.66	67	30.8 17		61.44	63.3 20	23.21	62.6 31
19	33.33	57	32.5 20		61.67	65.3 19	23.46	65.7 34
Juli	33.90	44	34.5 23		61.87	67.2 19	23.66	69.1 35
9	34.34	31	36.8 24		62.03	69.1 18	23.80	72.6 34
19	34.65	18	39.2 26		62.15	70.9 16	23.88	76.0 34
Aug.	34.83	3	41.8 26		62.23	72.5 15	23.89	79.4 32
8	34.86	11	44.4 25		62.26	74.0 12	23.83	82.6 30
18	34.75	25	46.9 24		62.25	75.2 10	23.72	85.6 27
28	34.50	36	49.3 21		62.19	76.2 9	23.55	88.3 24
Sept.	34.14	47	51.4 18		62.10	77.1 6	23.32	90.7 19
17	33.67	55	53.2 14		61.98	77.7 3	23.06	92.6 15
Okt.	33.12	61	54.6 9		61.84	78.0 1	22.76	94.1 22
7	32.51	64	55.5 4		61.69	78.1 0	22.44	95.2 6
17	31.87	63	55.9 1		61.53	78.1 4	22.11	95.8 0
27	31.24	60	55.8 7		61.37	77.7 5	21.77	95.8 5
Nov.	30.64	54	55.1 12		61.23	77.2 7	21.45	95.3 10
16	30.10	45	53.9 17		61.10	76.5 10	21.16	94.3 16
26	29.65	35	52.2 21		61.01	75.5 11	20.90	92.7 20
Dez.	29.30	22	50.1 24		60.95	74.4 13	20.68	90.7 25
16	29.08	8	47.7 27		60.92	73.1 14	20.50	88.2 28
26	29.00	6	45.0 30		60.93	71.7 15	20.39	85.4 31
36	29.06	42.0	42.0		60.98	70.2 18	20.34	82.3 3
Mitt. Ort	25.86	38.0	59.44	70.7	21.30	77.7	60.62	54.0
	748)		749)		750)		751)	

## SCHEINBARE STERNÖRTER.

1912	$\gamma$ Sagittae. 3 <sup>m</sup> .6.		$\delta$ Pavonis. 3 <sup>m</sup> .5.		$\theta$ Aquilae. 3 <sup>m</sup> .1.		$\alpha^1$ seq. Cygni. 4 <sup>m</sup> .3.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. +
	19 <sup>h</sup> 54 <sup>m</sup>	19° 14'	20 <sup>h</sup> 0 <sup>m</sup>	66° 24'	20 <sup>h</sup> 6 <sup>m</sup>	1° 4'	20 <sup>h</sup> 10 <sup>m</sup>	46° 28'
Jan.								
I	48.77	61.9	2.76	42.1	44.20	68.9	49.26	23.2
II	48.82	5	59.7	22	2.86	10	42.1	20.2
21	48.92	13	57.4	21	3.09	23	44.25	30
31	49.05	16	55.3	19	3.38	29	44.36	31
Febr. 10	49.21		53.4		3.76	31.0	44.49	17.1
20	49.40	23	51.7	13	4.22	28.5	44.65	13.7
März I	49.63	24	50.4	10	4.74	52	45.06	10.8
II	49.87	27	49.4	5	5.32	62	45.30	29
21	50.14	28	48.9	1	5.94	67	45.56	27
31	50.42		48.8		6.61	20.5	45.84	14
April 10	50.72	31	49.1	9	7.29	71	46.13	8.1
20	51.03	31	50.0	12	8.00	71	46.43	24
Mai 10	51.34	31	51.2	16	8.71	71	46.74	5.7
20	51.65	30	52.8	19	9.42	68	47.05	3.8
30	51.95	28	54.7	22	10.10	18.0	47.35	1.6
Juni 9	52.23	26	56.9	24	10.74	59	47.64	2
19	52.49	23	59.3	24	11.33	54	47.91	30
19	52.72	19	61.7	26	11.87	46	48.16	12
29	52.91	16	64.3	25	12.33	37	48.38	39
Juli 9	53.07	11	66.8		12.70	28	48.56	37
19	53.18	7	69.2		12.98	18	48.69	28
29	53.25	2	71.5	21	13.16	7	48.79	15
Aug. 8	53.27	2	73.6	19	13.23	4	48.84	14
18	53.25	7	75.5	17	13.19	34.0	48.85	14
28	53.18		77.2		13.06	36.2	48.81	13
Sept. 7	53.08	14	78.6	10	12.83	30	48.74	34
17	52.94	15	79.6	8	12.53	40.1	48.64	21
27	52.79		80.4		12.16	37	48.51	12
Okt. 7	52.62	17	80.8	4	11.75	41	48.36	11
17	52.44	18	81.0		11.31	43.2	48.21	10
27	52.27	16	80.7		10.87	41	48.06	9
Nov. 6	52.11		80.2	5	10.46	37	47.92	8
16	51.96	15	79.3	9	10.09	42.0	47.80	7
26	51.85	11	78.1	12	9.78	31	47.70	6
Dez. 6	51.76	9	76.6	15	9.54	24	47.64	5
16	51.72	4	74.8	18	9.40	14	47.60	4
26	51.71	1	72.9	19	9.35	5	47.61	3
36	51.74	3	70.8		9.40	31.7	47.65	2
Mittl. Ort	50.60	69.0	6.18	26.8	45.90	59.4	51.63	26.2

## SCHEINBARE STERNÖRTER.

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1912	z Cephei. 4 <sup>m</sup> .3.		24 Vulpecul. 5 <sup>m</sup> .7.		z <sup>2</sup> Capricorni. 3 <sup>m</sup> .6.		z Pavonis. 1 <sup>m</sup> .9.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —	AR.	Dekl. —
	20 <sup>h</sup> 11 <sup>m</sup>	77° 26'	20 <sup>h</sup> 12 <sup>m</sup>	24° 23'	20 <sup>h</sup> 13 <sup>m</sup>	12° 49'	20 <sup>h</sup> 18 <sup>m</sup>	57° 0'
Jan.								
I	45.61	39	48.4	31	59.29	2	52.1	22
II	45.22	21	45.3	33	59.31	7	49.9	24
II	45.01	1	42.0	37	59.38	11	47.5	25
III	45.00	19	38.3	34	59.49	14	45.0	21
Febr.	45.19	37	34.9	31	59.63	18	42.9	19
							20	
März	45.56	55	31.8	28	59.81	20	41.0	16
I	46.11	70	29.0	24	60.01	24	39.4	12
II	46.81	82	26.6	19	60.25	26	38.2	8
II	47.63	91	24.7	13	60.51	29	37.4	3
III	48.54	23.4			60.80		37.1	2
April	49.52	98	7		61.10	31	37.3	7
	50.53	100	22.7	6	61.41	32	38.0	11
							11.01	32
Mai	51.53	97	23.3	13	61.73	31	39.1	16
I	52.50	89	24.6	17	62.04	31	40.7	20
II	53.39	80	26.3	23	62.35	30	42.7	22
							11.96	31
Juni	54.19	68	28.6	27	62.65	27	44.9	25
9	54.87	55	31.3	31	62.92	25	47.4	26
19	55.42	39	34.4	33	63.17	21	50.0	
29	55.81	22	37.7	35	63.38	17	52.7	28
Juli	56.03	6	41.2	36	63.55	13	55.5	27
							13.25	16
	56.09	11	44.8	36	63.68	8	58.2	26
	55.98	28	48.4	34	63.76	3	60.8	24
Aug.	55.70	43	51.8	34	63.79	1	63.2	24
18	55.27	59	55.2	31	63.78	6	65.4	19
28	54.68		58.3		63.72	10	67.3	17
Sept.	53.96	84	61.2	25	63.62	13	69.0	14
17	53.12	93	63.7	21	63.49	15	70.4	10
27	52.19	101	65.8	16	63.34	18	71.4	7
Okt.	51.18	107	67.4	12	63.16	18	72.1	3
17	50.11	108	68.6	6	62.98	18	72.4	0
							13.00	16
	49.03	109	69.2	1	62.80	18	72.4	5
Nov.	47.94	69.3			62.62	16	71.9	8
16	46.89	105	68.7	11	62.46	13	71.1	11
26	45.90	99	67.6	16	62.33	11	70.0	15
Dez.	44.99	78	66.0	21	62.22	7	68.5	18
16	44.21	65	63.9	26	62.15	3	66.7	20
26	43.56	61.3	61.3	29	62.12	0	64.7	22
36	43.08	48	58.4		62.12		62.5	
Mittl. Ort	52.29	48.6	61.15	57.9	10.40		5.6	
	759)		760)		761)		764)	

1912	7 Cygni. 2 <sup>m</sup> .3.		9 Cephei. 4 <sup>m</sup> .1.		ε Delphini. 3 <sup>m</sup> .9.		α Indi. 3 <sup>m</sup> .0.	
	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl.
	20 <sup>h</sup> 19 <sup>m</sup>	39° 58'	20 <sup>h</sup> 28 <sup>m</sup>	62° 41'	20 <sup>h</sup> 28 <sup>m</sup>	10° 59'	20 <sup>h</sup> 31 <sup>m</sup>	47° 35'
Jan.								
I	2.02	1	25.0	28	3.07	14	53.1	31
II	2.01	3	22.2	29	2.93	7	50.0	32
21	2.04	9	19.3	32	2.86	1	46.8	37
31	2.13	13	16.1	27	2.89	3	43.1	33
Febr. 10	2.26	18	13.4	25	3.00	20	39.8	31
20	2.44	21	10.9	23	3.20	28	36.7	28
März	2.65	26	8.6	17	3.48	35	33.9	24
I	2.91	28	6.9	13	3.83	41	31.5	19
II	3.19	32	5.6	7	4.24	46	29.6	12
31	3.51	33	4.9	1	4.70	49	28.4	7
April 10	3.84	35	4.8	4	5.19	52	27.7	0
20	4.19	36	5.2	10	5.71	53	27.7	6
30	4.55	35	6.2	15	6.24	52	28.3	13
Mai 10	4.90	35	7.7	20	6.76	49	29.6	17
20	5.24	34	9.7	23	7.25	47	31.3	24
30	5.57	30	12.0	28	7.72	41	33.7	27
Juni 9	5.87	26	14.8	29	8.13	36	36.4	31
19	6.13	22	17.7	31	8.49	28	39.5	33
29	6.35	20	20.8	31	8.77	21	42.8	22
Juli 9	6.52	17	24.1	33	8.98	13	46.3	35
19	6.65	13	27.3	32	9.11	4	49.9	36
29	6.72	7	30.5	30	9.15	4	53.5	36
Aug. 8	6.74	2	33.5	28	9.11	12	57.1	33
18	6.70	4	36.3	26	8.99	19	60.4	32
28	6.61	9	38.9	27	8.80	19	63.6	20
Sept. 7	6.48	17	41.2	19	8.53	33	66.5	26
17	6.31	20	43.1	16	8.20	38	69.1	21
Okt. 7	6.11	22	44.7	11	7.82	42	71.2	17
27	5.89	24	45.8	6	7.40	45	72.9	12
Nov. 6	5.65	24	46.4	2	6.95	46	74.1	7
27	5.41	23	46.6	3	6.49	45	74.8	1
16	5.18	22	46.3	7	6.04	45	74.9	5
26	4.96	19	45.6	13	5.59	41	74.4	10
Dez. 6	4.77	16	44.3	16	5.18	38	73.4	16
16	4.61	12	42.7	21	4.80	32	71.8	21
26	4.49	8	40.6	24	4.48	25	69.7	25
36	4.41	4	38.2	26	4.23	19	67.2	29
Mittl. Ort	4.37		35.6		4.04		64.3	

1912	73 Draconis. 5 <sup>m</sup> .3.		$\beta$ Delphini. 3 <sup>m</sup> .5.		9 Capricorni. 5 <sup>m</sup> .5.		$\alpha$ Delphini. 3 <sup>m</sup> .7.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +
	20 <sup>h</sup> 32 <sup>m</sup>	74° 38'	20 <sup>h</sup> 33 <sup>m</sup>	14° 17'	20 <sup>h</sup> 35 <sup>m</sup>	18° 26'	20 <sup>h</sup> 35 <sup>m</sup>	15° 35'
Jan.								
I	35.35	36	72.9	30	23.64	2	11.6	18
II	34.99	22	69.9	32	23.66	5	9.8	17
II	34.77	7	66.7	37	23.71	10	8.1	19
III	34.70	10	63.0	34	23.81	13	6.2	16
Febr.	34.80	26	59.6	31	23.94	15	4.6	14
	35.06	40	56.5	30	24.09	19	3.2	12
März	35.46	53	53.5	25	24.28	22	2.0	8
II	35.99	65	51.0	21	24.50	24	1.2	4
II	36.64	73	48.9	15	24.74	26	0.8	1
III	37.37	80	47.4	9	25.00	0.7	—	—
April	38.17	83	46.5	2	25.29	30	1.1	8
II	39.00	85	46.3	3	25.59	31	1.9	11
III	39.85	83	46.6	10	25.90	31	3.0	15
Mai	40.68	79	47.6	16	26.21	31	4.5	18
II	41.47	72	49.2	22	26.52	31	6.3	20
III	42.19	64	51.4	25	26.82	28	8.3	23
Juni	42.83	53	53.9	30	27.10	26	10.6	23
II	43.36	41	56.9	32	27.36	23	12.9	24
II	43.77	28	60.1	33	27.59	19	15.3	24
Juli	44.05	15	63.6	35	27.78	19	17.6	23
II	44.20	1	67.2	37	27.93	11	19.9	22
II	44.21	14	70.9	36	28.04	7	22.1	20
Aug.	44.07	14	74.5	35	28.11	1	24.1	18
II	43.81	26	78.0	33	28.12	2	25.9	16
II	43.41	40	81.3	31	28.10	6	27.5	13
Sept.	42.90	62	84.4	27	28.04	10	28.8	11
II	42.28	70	87.1	23	27.94	13	29.9	8
II	41.58	78	89.4	20	27.81	14	30.7	5
Okt.	40.80	83	91.4	14	27.67	16	31.2	3
II	39.97	85	92.8	9	27.51	16	31.5	1
II	39.12	87	93.7	4	27.35	15	31.4	3
Nov.	38.25	85	94.1	3	27.20	14	31.1	6
II	37.40	81	93.8	8	27.06	12	30.5	9
II	36.59	74	93.0	14	26.94	10	29.6	12
Dez.	35.85	67	91.6	19	26.84	6	28.4	13
	35.18	56	89.7	24	26.78	4	27.1	16
	34.62	87.3	87.3	28	26.74	1	25.5	17
	34.18	44	84.5	—	26.75	—	23.8	—
Mittl. Ort	40.88	71.5	25.35	18.2	2.53	—	56.9	33.04
	770)		771)		773)		63.6	774)

## SCHEINBARE STERNÖRTER.

1912	$\beta$ Pavonis. 3 <sup>m</sup> .3.		$\alpha$ Cygni. 1 <sup>m</sup> .3.		$\varepsilon$ Cygni. 2 <sup>m</sup> .4.		$\varepsilon$ Aquarii. 3 <sup>m</sup> .6.		
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. —	
	20 <sup>h</sup> 36 <sup>m</sup>	66° 31'	20 <sup>h</sup> 38 <sup>m</sup>	44° 57'	20 <sup>h</sup> 42 <sup>m</sup>	33° 38'	20 <sup>h</sup> 42 <sup>m</sup>	9° 48'	
Jan.									
I	59.49	0	30.8	26	23.62	5	21.6	25	
II	59.49	9	28.2	29	23.57	1	19.1	26	
21	59.58	22	25.3	33	23.56	6	16.5	28	
31	59.80	28	22.0	30	23.62	10	13.7	25	
Febr.	10				23.72	16	11.2		
	20				27	15	23		
20	60.44	44	16.2	28	23.88	20	8.9	20	
März	I	60.88	13.4	26	24.08	24	6.9	16	
II	61.38	50	10.8		24.32	29	5.3	12	
21	61.94	56	8.4	24	24.61	32	4.1	7	
31	62.55	61	6.2	22	24.93	32.5	3.4	7	
April	10	63.20	68	4.4	25.27	32.1	3.2	4	
20	63.88	69	3.0	11	25.64	38	3.6	9	
30	64.57	70	1.9	7	26.02	38	4.5	14	
Mai	10	65.27	69	1.2	26.40	34.4	5.9	14	
20	65.96	67	0.9	3	26.76	36	7.8	19	
Juni	30	66.63	63	1.0	27.12	38.5	10.0	25	
9	67.26	59	1.6	6	27.44	41.2	12.5	28	
19	67.85	59	2.5	9	27.73	44.1	15.3	30	
29	68.36	51	3.8	13	27.98	47.3	18.3	30	
Juli	9	68.80	44	5.5	28.18	50.6	21.3	30	
19	69.15	35	7.4	19	28.33	54.0	21.3	31	
29	69.40	25	9.6	22	28.42	57.3	27.4	30	
Aug.	8	69.55	15	12.0	28.46	60.6	30.4	27	
18	69.59	4	14.4	24	28.44	63.7	33.1	25	
28	69.52	7	16.8	24	28.36	66.5	35.6	25	
Sept.	7	69.36	25	19.0	28.23	69.1	37.8	19	
17	69.11	21.1	21.1	17	28.05	71.3	39.7	16	
27	68.78	33	22.8		27.85	73.2	41.3	12	
Okt.	7	68.39	39	24.3	10	27.61	74.6	42.5	7
17	67.98	45	25.3	5	27.36	75.6	40.84	43.2	
27	67.53	25.8	25.8	0	27.10	76.1	40.64	43.6	
Nov.	6	67.09	44	25.8		26.84	76.1	40.44	43.5
16	66.68	41	25.3	5	26.59	75.6	40.25	43.0	
26	66.32	36	24.3	10	26.37	74.6	40.07	42.0	
Dez.	6	66.01	31	22.8	19	26.17	73.1	39.93	40.6
16	65.79	14	20.9	23	26.01	71.2	39.82	38.9	
26	65.65	5	18.6	25	25.89	68.9	39.74	36.8	
36	65.60	5	16.1	25	25.81	66.3	39.70	34.5	
Mittl. Ort		62.49	13.0		25.89	55.4	39.01	24.4	

# SCHEINBARE STERNÖRTER.

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1912	$\eta$ Cephei. 3 <sup>m</sup> .5.		$\lambda$ Cygni. 4 <sup>m</sup> .6.		$\beta$ Indi. 3 <sup>m</sup> .6.		32 Vulpecula. 5 <sup>m</sup> .3.		
	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. -/+	AR.	Dekl. +/-	
	20 <sup>h</sup> 43 <sup>m</sup>	61° 29'	20 <sup>h</sup> 43 <sup>m</sup>	36° 9'	20 <sup>h</sup> 47 <sup>m</sup>	58° 47'	20 <sup>h</sup> 50 <sup>m</sup>	27° 43'	
Jan.									
I	26.90	17	49.2	29	56.80	3	58.3	25	
II	26.73	8	46.3	31	56.77	1	55.8	26	
21	26.65	0	43.2	37	56.78	7	53.2	30	
31	26.65	8	39.5	32	56.85	10	50.2	26	
Febr.	10				56.95	14	47.6		
	26.73	17	36.3	31		24			
20	26.90	24	33.2	28	57.09	18	45.2	21	
März	I	27.14	32	30.4	24	57.27	23	43.1	18
II	27.46	37	28.0	20	57.50	26	41.3	12	
21	27.83	43	26.0	13	57.76	28	40.1	8	
31	28.26	47	24.7	8	58.04	32	39.3		
April	10	28.73	49	23.9	3	58.36	33	39.0	3
	20	29.22	51	23.7	5	58.69	34	39.3	9
Mai	30	29.73	52	24.2	11	59.03	40.2	41.6	14
I	30.25	49	25.3	17	59.38	35	41.6	18	
20	30.74	47	27.0	22	59.72	43.4	43.4		
Juni	30	31.21	42	29.2	26	60.05	31	45.6	26
9	31.63	37	31.8	30	60.36	28	48.2	28	
19	32.00	31	34.8	33	60.64	24	51.0	30	
Juli	29	32.31	24	38.1	35	60.88	21	54.0	31
9	32.55	16	41.6	36	61.09	15	57.1	32	
	19	32.71	8	45.2	37	61.24	11	60.3	31
Aug.	8	32.79	0	48.9	36	61.35	5	63.4	30
18	32.79	8	52.5	35	61.40	0	66.4	28	
28	32.71	15	56.0	33	61.40	5	69.2	26	
Sept.		32.56	23	59.3	30	61.35	7	71.8	
7	32.33	29	62.3	27	61.26	13	74.1	20	
17	32.04	34	65.0	23	61.13	16	76.1	16	
Okt.	27	31.70	38	67.3	19	60.97	19	77.7	13
7	31.32	41	69.2	14	60.78	21	79.0	8	
17	30.91	43	70.6	9	60.57	21	79.8		
	27	30.48	43	71.5	4	60.36	22	80.2	0
Nov.	6	30.05	43	71.9	4	60.14	20	80.2	5
16	29.63	42	71.6	3	59.94	18	79.7	10	
26	29.23	40	70.8	8	59.76	15	78.7	14	
Dez.	6	28.86	37	69.5	13	59.61	13	77.3	18
	16	28.54	26	67.6	19	59.48	9	75.5	21
26	28.28	19	65.2	24	59.39	5	73.4	24	
36	28.09	32	62.5	27	59.34	71.0	59.31	3	
Mittl. Ort	30.10	48.1	58.81	60.7	56.36	12.5	48.54	20.7	

## SCHEINBARE STERNÖRTER.

1912	ν Cygni. 3 <sup>m</sup> .9.		ζ Microscopii. 5 <sup>m</sup> .4.		61 Cygni pr. <sup>*)</sup> . 5 <sup>m</sup> .4.		ν Aquarii. 4 <sup>m</sup> .4.	
	AR.	Dekl. +/-	AR.	Dekl. —	AR.	Dekl. +/-	AR.	Dekl. —
	20 <sup>h</sup> 53 <sup>m</sup> <sup>n</sup>	40° 49'	20 <sup>h</sup> 57 <sup>m</sup>	38° 58'	21 <sup>h</sup> 2 <sup>m</sup>	38° 18'	21 <sup>h</sup> 4 <sup>m</sup>	11° 43'
Jan.								
I	51.40	5 39.2 26	19.06	2 48.6 12	55.06	4 57.0 23	46.63	2 54.0 3
II	51.35	1 36.6 27	19.08	6 47.4 14	55.02	0 54.7 26	46.65	4 54.3 2
21	51.34	3 33.9 28	19.14	10 46.0 15	55.02	4 52.1 26	46.69	8 54.5 1
31	51.37	9 31.1 31	19.24	16 44.5 18	55.06	9 49.5 28	46.77	12 54.6 0
Febr.	10	51.46 14 26	19.40	42.7 19	55.15	14 46.7 24	46.89	14 54.6 1
	20	51.60 17 23	19.59	41.0 18	55.29	18 44.3 21	47.03	17 54.5 4
März	I	51.77 23 19	19.81	39.2 19	55.47	22 42.2 18	47.20	20 54.1 5
II	52.00	21.2 15	20.06	30 37.3 18	55.69	26 40.4 13	47.40	23 53.6 7
21	52.25	19.7 10	20.36	32 35.5 18	55.95	29 39.1 8	47.63	25 52.9 10
31	52.55	18.7 4	20.68	33.7 18	56.24	32 38.3 3	47.88	28 51.9 11
April	10	52.87 35 1	21.02	31.9 16	56.56	34 38.0 2	48.16	29 50.8 12
	20	53.22 35 7	21.38	30.3 15	56.90	36 38.2 9	48.45	31 49.6 15
	30	53.57 35 13	21.77	28.8 14	57.26	37 39.1 13	48.76	32 48.1 15
Mai	10	53.94 36 13	22.16	27.4 11	57.63	36 40.4 18	49.08	33 46.6 16
	20	54.30 34 22	22.56	26.3 9	57.99	42.2 35 23	49.41	32 45.0 16
Juni	30	54.64 33 25	22.95	25.4 6	58.34	33 44.5 26	49.73	31 43.4 16
9	54.97 33 28	23.32	24.8 4	58.67	31 47.1 29	50.04	29 41.8 15	
19	55.27 26 31	23.68	24.4 0	58.98	27 50.0 31	50.33	27 40.3 14	
29	55.53 21 32	24.00	24.4 2	59.25	24 53.1 32	50.60	24 38.9 12	
Juli	9	55.74 17 33	24.28	24.6 5	59.49	18 56.3 33	50.84	20 37.7 10
	19	55.91 12 33	24.52	25.1 7	59.67	13 59.6 33	51.04	16 36.7 9
29	56.03 6 42.5	24.71	25.8 10	59.80	8 62.9 32	51.20	11 35.8 6	
Aug.	8	56.09 0 45.6	24.84	26.8 11	59.88	6 66.1 30	51.31	7 35.2 4
	18	56.09 5 48.7	24.91	27.9 13	59.91	3 69.1 29	51.38	2 34.8 3
	28	56.04 5 1.5	24.92	29.2 13	59.88	7 72.0 25	51.40	2 34.5 1
Sept.	7	55.95 14 22	24.89	30.5 13	59.81	11 74.5 23	51.38	6 34.4 1
	17	55.81 17 19	24.80	31.8 12	59.70	15 76.8 19	51.32	9 34.5 2
Okt.	27	55.64 20 15	24.67	33.0 12	59.55	17 78.7 16	51.23	12 34.7 3
7	55.44 22 10	24.51	34.2 9	59.38	20 80.3 11	51.11	13 35.0 4	
	17	55.22 23 6	24.33	35.1 7	59.18	20 81.4 7	50.98	14 35.4 4
	27	54.99 23 1	24.14	35.8 5	58.98	21 82.1 2	50.84	14 35.8 4
Nov.	6	54.76 22 3	23.95	36.3 2	58.77	20 82.3 3	50.70	13 36.2 5
	16	54.54 21 8	23.77	36.5 1	58.57	18 82.0 7	50.57	11 36.7 5
	26	54.33 18 2	23.62	36.4 4	58.39	16 81.3 12	50.46	9 37.2 4
Dez.	6	54.15 15 17	23.50	36.0 6	58.23	13 80.1 15	50.37	7 37.6 4
	16	54.00 11 21	23.41	35.4 10	58.10	10 78.6 19	50.30	3 38.0 4
	26	53.89 8 24	23.36	34.4 11	58.00	6 76.7 22	50.27	0 38.4 3
	36	53.81 5 2.6	23.35	33.3 5	57.94	7 74.5 15	50.27	3 38.7 3
Mittl. Ort	53.51	40.2	20.76	32.7	57.09	58.2	48.13	42.8
			788)	790)	793)		794)	

\*) Die jährliche Parallaxe ist bereits angebracht.

## SCHEINBARE STERNÖRTER.

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1912	Br. 2777. 6 <sup>m</sup> .O.		$\zeta$ Cygni. 3 <sup>m</sup> .I.		$\alpha$ Equulei. 3 <sup>m</sup> .9.		$\alpha$ Cephei. 2 <sup>m</sup> .5.	
	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-	AR.	Dekl. +/-
	21 <sup>h</sup> 7 <sup>m</sup>	77° 45'	21 <sup>h</sup> 9 <sup>m</sup>	29° 51'	21 <sup>h</sup> 11 <sup>m</sup>	4° 52'	21 <sup>h</sup> 16 <sup>m</sup>	62° 12'
Jan.								
I	10.12	60	75.6	26	9.60	4	53.5	22
II	9.52	45	73.0	30	9.56	0	51.3	23
21	9.07	26	70.0	32	9.56	3	49.0	24
31	8.81	7	66.8	34	9.59	9	46.6	25
Febr.	10	8.74	63.1	37	9.68	44.1	24.18	10
	20	8.88	34	59.9	31	9.79	16	42.0
März	I	9.22	52	56.8	28	9.95	19	40.1
II	9.74	68	54.0	24	10.14	22	38.5	11
21	10.42	81	51.6	19	10.36	26	37.4	7
31	11.23	91	49.7	13	10.62	36.7	25.09	24
April	10	12.14	99	48.4	7	10.91	30	36.5
	20	13.13	103	47.7	1	11.21	33	36.8
30	14.16	104	47.6	—	11.54	33	37.6	12
Mai	10	15.20	101	48.1	11	11.87	34	38.8
	20	16.21	95	49.2	17	12.21	40.5	26.57
Juni	30	17.16	87	50.9	22	12.54	31	42.6
9	18.03	75	53.1	26	12.85	29	45.0	26
19	18.78	62	55.7	30	13.14	27	47.6	28
29	19.40	47	58.7	30	13.41	22	50.4	29
Juli	9	19.87	62.0	33	13.63	19	53.3	30
	19	20.18	15	65.6	36	13.82	13	56.3
Aug.	8	20.33	3	69.2	37	13.95	9	59.2
	18	20.30	19	72.9	37	14.04	9	62.0
	28	19.76	35	76.6	26	14.08	4	64.7
Sept.		51	80.2	—	14.07	1	67.1	24
	7	19.25	65	83.6	31	14.02	5	69.3
	17	18.60	77	86.7	28	13.93	12	71.3
Okt.	27	17.83	87	89.5	24	13.81	16	72.9
7	16.96	97	91.9	20	13.65	17	74.1	9
	17	15.99	102	93.9	15	13.48	18	75.0
Nov.	27	14.97	106	95.4	9	13.30	18	75.5
6	13.91	107	96.3	4	13.12	18	75.6	3
16	12.84	106	96.7	2	12.94	16	75.3	8
26	11.78	99	96.5	8	12.78	14	74.5	11
Dez.	6	10.79	93	95.7	14	12.64	12	73.4
	16	9.86	82	94.3	19	12.52	9	72.0
	26	9.04	69	92.4	24	12.43	5	70.2
	36	8.35	90.0	—	12.38	21	68.1	21
Mittl. Ort		16.74	71.0	11.41	55.7	25.52	60.5	28.80
		795)		797)		800)		803)

## SCHEINBARE STERNÖRTER.

1912	I Pegasi. 4 <sup>m</sup> .2.		γ Pavonis. 4 <sup>m</sup> .2.		Capricorni. 3 <sup>m</sup> .8.		β Aquarii. 2 <sup>m</sup> .9.		
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. -	
	21 <sup>h</sup> 17 <sup>m</sup>	19° 25'	21 <sup>h</sup> 19 <sup>m</sup>	65° 45'	21 <sup>h</sup> 21 <sup>m</sup>	22° 47'	21 <sup>h</sup> 26 <sup>m</sup>	5° 57'	
Jan.									
I	59.35	34.8	8.43	9	74.2	25	37.29	0	
II	59.32	33.0	8.34	1	71.7	27	37.29	2	
21	59.33	31.2	8.33	—	69.0	30	37.31	7	
31	59.37	29.4	8.40	18	66.0	—	37.38	11	
Febr.	10	59.45	27.4	8.58	62.6	34	37.49	13	
		11	16	25	31		46.5	9	
	20	59.56	25.8	8.83	59.5	31	37.62	17	
März	I	59.71	24.4	9.16	53	56.4	30	37.79	20
II	59.89	23.3	9.55	46	53.4	29	37.99	22	
21	60.10	22.6	10.01	52	50.5	27	38.21	26	
31	60.33	22.3	10.53	47.8	38.47	28	40.6	14	
April	10	60.60	22.4	11.10	61	45.4	20	38.75	30
	20	60.89	22.9	11.71	64	43.4	18	39.05	32
	30	61.20	23.9	12.35	67	41.6	13	39.37	34
Mai	10	61.51	25.2	13.02	67	40.3	9	39.71	34
20	61.83	26.9	13.69	67	39.4	5	40.05	32	
		32	20				34	15	
	30	62.15	28.9	14.36	64	38.9	1	40.39	34
Juni	9	62.46	31.2	15.00	62	38.8	—	40.73	32
19	62.75	33.6	15.62	56	39.2	9	41.05	29	
29	63.01	36.1	16.18	50	40.1	12	41.34	27	
Juli	9	63.24	38.7	16.68	41.3	41.61	27	26.9	7
		20	26	41	16	23	6	58.17	25
	19	63.44	41.3	17.09	33	42.9	19	41.84	18
Aug.	8	63.59	43.8	17.42	24	44.8	22	42.02	14
	18	63.69	46.2	17.66	13	47.0	23	42.16	9
	28	63.75	48.4	17.79	2	49.3	24	42.25	4
		63.76	50.4	17.81	—	51.7	7	42.29	0
Sept.	7	63.74	52.1	17.74	17	54.2	23	42.29	5
	17	63.67	53.6	17.57	24	56.5	20	42.24	9
	27	63.57	54.9	17.33	33	58.5	18	42.15	11
Okt.	7	63.45	55.8	17.00	37	60.3	15	42.04	13
	17	63.31	56.4	16.63	41	61.8	10	41.91	15
		16	3					7	29.9
	27	63.15	56.7	16.22	43	62.8	5	41.76	14
Nov.	6	63.00	56.7	15.79	40	63.3	0	41.62	14
	16	62.85	56.3	15.39	39	63.3	5	41.48	13
	26	62.71	55.6	15.00	34	62.8	5	41.35	10
Dez.	6	62.60	54.7	14.66	29	61.7	15	41.25	8
		10	12			15		32.2	0
	16	62.50	53.5	14.37	22	60.2	20	41.17	5
	26	62.43	52.0	14.15	13	58.2	23	41.12	2
	36	62.39	50.4	14.02	29	55.9	15	41.10	2
Mittl. Ort		60.98	38.9	10.80	54.4	38.72	35.0	55.64	31.7
			804)		805)		806)	808)	

1912	$\beta$ Cephei. 3 <sup>m</sup> .1.		ν Octantis. 3 <sup>m</sup> .7.		74 Cygni. 5 <sup>m</sup> .1.		ε Pegasi. 2 <sup>m</sup> .3.	
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. +	AR.	Dekl. +
	21 <sup>h</sup> 27 <sup>m</sup>	70° 10'	21 <sup>h</sup> 31 <sup>m</sup>	77° 46'	21 <sup>h</sup> 33 <sup>m</sup>	40° 0'	21 <sup>h</sup> 39 <sup>m</sup>	9° 28'
Jan.								
I	27.61	37	32.9	25	39.92	34	74.7	28
II	27.24	28	30.4	28	39.58	18	71.9	32
21	26.96	17	27.6	31	39.40	0	68.7	34
31	26.79	6	24.5	36	39.40	17	65.3	34
Febr.	10 <sup>9</sup>	26.73	—	20.9	39.57	61.9	23.15	55.3
	7	33			38	39	9	28
20	26.80	18	17.6	31	39.95	50	58.0	10
März	1	26.98	31	14.5	28	40.45	65	54.5
II	27.29	41	11.7	25	41.10	78	51.1	31
21	27.70	49	9.2	19	41.88	90	48.0	30
31	28.19	58	7.3	15	42.78	100	45.0	29
April	10	28.77	63	5.8	8	43.78	109	42.5
20	29.40	67	5.0	2	44.87	115	40.3	18
30	30.07	69	4.8	—	46.02	120	38.5	14
Mai	10	30.76	68	5.2	4	47.22	119	37.1
20	31.44	66	6.2	10	48.41	121	36.3	36
30	32.10	62	7.8	21	49.62	116	35.9	2
Juni	9	32.72	55	9.9	26	50.78	111	36.1
19	33.27	48	12.5	30	51.89	101	36.7	11
29	33.75	40	15.5	33	52.90	90	37.8	16
Juli	9	34.15	29	18.8	35	53.80	77	39.4
19	34.44	20	22.3	36	54.57	60	41.4	22
29	34.64	9	25.9	38	55.17	42	43.6	26
Aug.	8	34.73	3	29.7	37	55.59	24	46.2
18	34.70	12	33.4	36	55.83	4	48.9	28
28	34.58	23	37.0	35	55.87	15	51.7	28
Sept.	7	34.35	32	40.5	32	55.72	33	54.5
17	34.03	40	43.7	29	55.39	50	57.1	25
Okt.	27	33.63	48	46.6	26	54.89	65	59.6
7	33.15	54	49.2	21	54.24	76	61.6	20
17	32.61	51	51.3	17	53.48	85	63.3	11
27	32.04	61	53.0	11	52.63	89	64.4	5
Nov.	6	31.43	62	54.1	5	51.74	91	64.9
16	30.81	61	54.6	0	50.83	85	65.0	6
26	30.20	59	54.6	7	49.98	79	64.4	12
Dez.	6	29.61	54	53.9	12	49.19	70	63.2
16	29.07	49	52.7	17	48.49	57	61.4	22
26	28.58	41	51.0	23	47.92	42	59.2	27
36	28.17	54	48.7	23	47.50	56.5	56.5	27
Mittl. Ort	31.77	27.3	43.67	53.7	25.23	64.0	51.83	15.8
	809)		810)		811)		815)	

## SCHEINBARE STERNÖRTER.

1912	δ Capricorni.		2 <sup>m</sup> .8.		π <sup>2</sup> Cygni.		4 <sup>m</sup> .3.		γ Cris.		3 <sup>m</sup> .0.		16 Pegasi.		5 <sup>m</sup> .2.		
	AR.	Dekl.	—	AR.	Dekl.	—	AR.	Dekl.	—	AR.	Dekl.	—	AR.	Dekl.	—	AR.	Dekl.
	21 <sup>h</sup> 42 <sup>m</sup>	16° 31'		21 <sup>h</sup> 43 <sup>m</sup>	48° 53'		21 <sup>h</sup> 48 <sup>m</sup>	37° 46'		21 <sup>h</sup> 49 <sup>m</sup>	25° 30'						
Jan.	9.80	2	49.8	0	30.24	14	70.7	23	34.87	4	62.2	10	1.83	6	37.2	18	
II	9.78	1	49.8	1	30.10	10	68.4	26	34.83	0	61.2	13	1.77	3	35.4	19	
21	9.79	4	49.7	2	30.00	5	65.8	28	34.83	3	59.9	15	1.74	0	33.5	20	
31	9.83	8	49.5	4	29.95	0	63.0	29	34.86	8	58.4	17	1.74	3	31.5	20	
Febr. 10	9.91		49.1	6	29.95		60.1		34.94		56.7		1.77		29.5	21	
12	10.02	11		13	7	31	11	31	12	20	14	8					
März 1	10.16	14	48.5	7	30.02	12	57.0	27	35.06	16	54.7	20	1.85	11	27.4	17	
II	10.33	17	47.8	9	30.14	18	54.3	24	35.22	19	52.7	21	1.96	15	25.7	14	
21	10.53	20	46.9	11	30.32	23	51.9	20	35.41	22	50.6	22	2.11	19	24.3	10	
31	10.76	23	45.8	13	30.55	27	49.9	15	35.63	27	48.4	21	2.30	22	23.3	7	
April 10	11.02	28	43.1	16	31.15	35	47.3	4	36.20	33	44.1	21	2.77	29	22.4	2	
20	11.30	30	41.5	16	31.50	39	46.9	1	36.53	35	42.0	20	3.06	30	22.6		
30	11.60	32	39.9	17	31.89	40	47.0	6	36.88	37	40.0	18	3.36	32	23.3	7	
Mai 10	11.92	32	38.2	17	32.29	40	47.6		37.25	37	38.2		3.68	33	24.4	11	
20	12.25	33	36.5	17	32.69		48.8		37.64	39	36.5	17	4.01	33	25.9	15	
30	12.59	33	34.8	17	33.10	39	50.6	22	38.02	39	35.0	11	4.34	33	27.8	22	
Juni 9	12.92	33	33.1	15	33.49	37	52.8	25	38.41	38	33.9	9	4.67	31	30.0	24	
19	13.24	32	31.6	13	33.86	33	55.3	29	38.79	35	33.0	6	4.98	29	32.4	26	
29	13.54	30	30.3	11	34.19	29	58.2		39.14	32	32.4	2	5.27	26	35.0	28	
Juli 9	13.81	27	29.2	9	34.48		61.4		39.46	32	32.2	1	5.53	22	37.8	28	
19	14.04	20	28.3	7	34.72	18	64.8	34	39.74	24	32.3	5	5.75	18	40.6	27	
29	14.24		27.6		34.90	13	68.2		39.98	18	32.8	7	5.93	14	43.3	27	
Aug. 8	14.39	15	27.1	5	35.03	6	71.7	35	40.16	14	33.5	9	6.07	14	46.0	26	
18	14.49	10	26.8	3	35.09	1	75.1	33	40.30	7	34.4	12	6.16	9	48.6	26	
28	14.55	1	26.8		35.10		78.4		40.37	2	35.6		6.20	4	51.0	24	
Sept. 7	14.56	2	27.0	4	35.05	10	81.5	28	40.39	3	37.0	14	6.20	5	53.1	19	
17	14.54	6	27.4	4	34.95	15	84.3	26	40.36	8	38.4	14	6.15	7	55.0	17	
27	14.48		27.8		34.80		86.9		40.28		39.8	14	6.08		56.7	13	
Okt. 7	14.38	10	28.4	6	34.61	19	89.1	18	40.16	12	41.2	14	5.97	14	58.0	10	
17	14.27	13	29.0	6	34.39		90.9		40.02	17	42.5	11	5.83	14	59.0	7	
27	14.14	14	29.6	6	34.15	26	92.2	8	39.85	17	43.6	9	5.69	16	59.7		
Nov. 6	14.00		30.2		33.89	26	93.0	3	39.68	18	44.5	6	5.53	15	60.0	3	
16	13.87	13	30.7	5	33.63	25	93.3	2	39.50	16	45.1	3	5.38	15	59.9	4	
26	13.75	10	31.2	5	33.38	24	93.1	7	39.34	15	45.4	0	5.23	14	59.5	8	
Dez. 6	13.65	8	31.7	3	33.14	22	92.4	11	39.19	12	45.4	3	5.09	12	58.7	11	
16	13.57	6	32.0	2	32.92	20	91.3	17	39.07	9	45.1	6	4.97	10	57.6		
26	13.51	4	32.2	1	32.72	16	89.6	21	38.98	6	44.5	9	4.87	8	56.2	16	
36	13.47		32.3		32.56		87.5		38.92		43.6		4.79		54.6		
Mitt. Ort	11.13		37.5		32.46		67.0		36.22		45.2		3.43		38.5		
	819)				821)				822)						823)		

## SCHEINBARE STERNÖRTER.

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1912	$\alpha$ Aquarii. 2 <sup>m</sup> .9.		$\iota$ Aquarii. 4 <sup>m</sup> .2.		20 Cephei. 5 <sup>m</sup> .7.		$\alpha$ Gruis. 1 <sup>m</sup> .8.		
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	
	—	—	—	—	+	—	—	—	
	22 <sup>h</sup> 1 <sup>m</sup>	0° 44'	22 <sup>h</sup> 1 <sup>m</sup>	14° 17'	22 <sup>h</sup> 2 <sup>m</sup>	62° 21'	22 <sup>h</sup> 2 <sup>m</sup>	47° 23'	
Jan.									
I	14.59	4	59.9	7	39.94	4	60.7	2	
II	14.55	1	60.6	8	39.90	0	60.9	0	
21	14.54	1	61.4	6	39.90	2	60.9	1	
31	14.55	5	62.0		39.92	5	60.8	3	
Febr.	10	14.60	5	62.5	5	39.97	5	60.5	5
	17	8			17	9	5	17	
20	14.68	11	63.0	2	40.06	11	60.0	7	
März	1	14.79	14	63.2	1	40.17	15	59.3	8
II	14.93	17	63.1	3	40.32	18	58.5	10	
21	15.10	20	62.8	6	40.50	21	57.5	13	
31	15.30	24	62.2	8	40.71	24	56.2	14	
April	10	15.54	26	61.4	11	40.95	26	54.8	16
	20	15.80	28	60.3	14	41.21	30	53.2	17
	30	16.08	30	58.9	16	41.51	31	51.5	18
Mai	10	16.38	32	57.3	17	41.82	32	49.7	18
	20	16.70	32	55.6	19	42.14	33	47.9	18
	30	17.02	32	53.7	20	42.47	33	46.1	18
Juni	9	17.34	31	51.7	20	42.80	32	44.3	16
	19	17.65	29	49.7	20	43.12	31	42.7	16
	29	17.94	26	47.7	18	43.43	27	41.1	1
Juli	9	18.20	24	45.9	18	43.70	25	39.8	13
	19	18.44	20	44.1	16	43.95	21	38.6	9
	29	18.64	15	42.5	14	44.16	17	37.7	6
Aug.	8	18.79	12	41.1	12	44.33	12	37.1	4
	18	18.91	7	39.9	10	44.45	8	36.7	2
	28	18.98	7	38.9		44.53	36.5	0	
Sept.	7	19.01	3	38.1	6	44.56	3	36.5	2
	17	19.00	5	37.5	3	44.55	4	36.7	4
	27	18.95	8	37.2	1	44.51	8	37.1	5
Okt.	7	18.87	10	37.1	0	44.43	10	37.6	6
	17	18.77	11	37.1	2	44.33	12	38.2	6
	27	18.66	12	37.3		44.21	12	38.8	6
Nov.	6	18.54	12	37.6	3	44.09	13	39.4	6
	16	18.42	12	38.0	4	43.96	12	40.0	5
	26	18.20	11	38.6	6	43.84	11	40.5	5
Dez.	6	18.19	9	39.2		43.73	9	41.0	4
	16	18.10	7	39.9	7	43.64	7	41.4	4
	26	18.03	5	40.6	8	43.57	5	41.8	1
	36	17.98	41.4			43.52	41.9		
Mittl. Ort		15.88	52.0			41.17	49.2		

## SCHEINBARE STERNÖRTER.

1912	θ Pegasi. 3 <sup>m</sup> .6.		π Pegasi. 4 <sup>m</sup> .3.		ζ Cephei. 3 <sup>m</sup> .4.		24 Cephei. 4 <sup>m</sup> .8.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	22 <sup>h</sup> 5 <sup>m</sup>	5° 45'	22 <sup>h</sup> 6 <sup>m</sup>	32° 44'	22 <sup>h</sup> 7 <sup>m</sup>	57° 45'	22 <sup>h</sup> 8 <sup>m</sup>	71° 54'
Jan.								
I	44.34	46.3	3.00	9	47.1	18	45.40	68.6
II	44.30	45.3	2.91	6	45.3	21	45.17	66.5
21	44.28	44.2	2.85	3	43.2	22	44.99	64.0
31	44.29	43.2	2.82	0	41.0	22	44.86	61.3
Febr.	10	44.32	42.3	9	2.82	6	44.80	58.4
	18	8	8	13	2.82	24	44.80	53.3
	20	44.40	41.5	6	2.88	9	44.80	55.1
März	I	44.50	40.9	3	2.97	13	44.88	52.1
II	44.63	40.6	3.10	18	32.6	15	45.04	49.4
21	44.80	40.5	3.28	21	31.1	10	45.26	47.0
31	45.00	40.8	3.49	30.1	30.1	6	45.55	45.0
April	10	45.23	41.4	8	3.74	29	45.90	43.5
	20	45.48	42.2	12	4.03	31	46.30	42.5
	30	45.76	43.4	15	4.34	29.7	46.74	42.2
Mai	10	46.07	44.9	15	4.68	34	47.21	42.4
	20	46.38	46.6	17	5.02	30.6	47.69	43.2
	30	46.70	48.5	21	5.37	35	48.17	44.5
Juni	9	47.02	50.6	21	5.72	35	48.64	46.4
	19	47.33	52.7	21	6.05	33	49.08	48.7
	29	47.62	54.8	21	6.36	28	49.49	51.5
Juli	9	47.88	56.9	21	6.64	24	49.85	54.6
	19	48.12	59.0	19	6.88	20	50.15	57.9
	29	48.32	60.9	18	7.08	15	50.39	61.4
Aug.	8	48.48	62.7	16	7.23	11	50.57	65.0
	18	48.59	64.3	13	7.34	5	50.67	68.6
	28	48.67	65.6	13	7.39	1	50.70	72.2
Sept.	7	48.70	66.8	12	7.40	—	50.67	75.7
	17	48.69	67.7	9	7.37	3	50.57	78.9
	27	48.64	68.4	7	7.30	7	50.41	81.9
Okt.	7	48.57	68.9	5	7.19	11	50.20	84.6
	17	48.47	69.2	3	7.06	13	49.95	86.8
	27	48.36	69.2	1	6.91	16	49.66	88.7
Nov.	6	48.24	69.1	4	6.75	18	49.34	90.1
	16	48.12	68.7	5	6.57	16	49.01	90.9
	26	48.00	68.2	6	6.41	16	48.68	91.2
Dez.	6	47.89	67.6	8	6.25	15	48.35	91.0
	16	47.79	66.8	9	6.10	13	48.04	90.1
	26	47.71	65.9	10	5.97	10	47.75	88.7
	36	47.66	64.9	—	5.87	65.4	47.50	86.9
Mitt. Ort	45.66	52.2	4.66	45.7	47.95	61.8	7.10	27.2
	834)		835)		836)		837)	

1912	θ Aquarii. 4°.2.		α Tucanae. 2°.8.		γ Aquarii. 3°.7.		δ Lacertae. 4°.5.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	22 <sup>h</sup> 12 <sup>m</sup>	8° 13'	22 <sup>h</sup> 12 <sup>m</sup>	60° 41'	22 <sup>h</sup> 17 <sup>m</sup>	1° 49'	22 <sup>h</sup> 20 <sup>m</sup>	51° 46'
Jan.								
I	10.28	28.4	27.51	16	76.3	19	60.1	7
II	10.23	5	27.35	11	74.4	23	54.4	3
21	10.21	2	27.24	3	72.1	26	54.1	1
31	10.22	4	27.21	3	69.5	29	54.2	3
Febr.	10	10.26	29.5	1	27.24	9	66.6	30
	20	10.33	29.4	3	27.33	17	63.6	35
März	I	10.44	29.1	6	27.50	23	60.1	31
II	10.57	17	27.73	29	57.0	32	5.73	16
21	10.74	19	28.02	10	53.8	30	5.89	19
31	10.93	26.8	28.37	35	50.8	30	6.08	19
April	10	11.16	25.7	14	28.77	45	47.9	27
	20	11.42	24.3	16	29.22	50	45.2	24
	30	11.70	22.7	18	29.72	50	42.8	21
Mai	10	12.00	20.9	18	30.25	53	40.7	17
	20	12.32	32	19.1	30.80	55	39.0	13
	30	12.64	17.2	19	31.37	57	37.7	8
Juni	9	12.97	33	15.3	31.94	57	36.9	4
	19	13.28	31	13.4	32.49	55	36.5	0
	29	13.58	30	11.7	33.02	53	36.5	5
Juli	9	13.86	10.1	16	33.51	49	37.0	10
	19	14.11	22	8.6	33.94	38	38.0	13
	29	14.33	17	7.3	34.32	29	39.3	17
Aug.	8	14.50	17	6.3	34.61	22	41.0	20
	18	14.63	8	5.5	34.83	13	43.0	23
	28	14.71	4.9		34.96	4	45.3	23
Sept.	7	14.75	0	4.6	35.00	4	47.6	24
	17	14.75	3	4.5	34.96	12	50.0	24
	27	14.72	7	4.5	34.84	19	52.4	22
Okt.	7	14.65	9	4.7	34.65	25	54.6	19
	17	14.56	11	5.1	34.40	29	56.5	16
	27	14.45	12	5.5	34.11	31	58.1	12
Nov.	6	14.33	12	6.0	33.80	34	59.3	7
	16	14.21	12	6.6	33.46	60.0	60.2	2
	26	14.09	10	7.2	33.13	31	60.0	2
Dez.	6	13.99	9	7.8	32.82	28	60.0	8
	16	13.90	8	8.3	32.54	24	59.2	13
	26	13.82	5	8.8	32.30	20	57.9	18
	36	13.77	5	9.2	32.10	56.1	8.89	40.8
Mitt. Ort		11.47	18.6		28.93	55.2	6.69	52.2
					840)	841)	842)	844)



## SCHEINBARE STERNÖRTER.

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1912	$\beta$	Gruis.	2 <sup>m</sup> .O.	$\eta$	Pegasi.	2 <sup>m</sup> .9.	$\lambda$	Pegasi.	3 <sup>m</sup> .9.	$\varepsilon$	Gruis.	3 <sup>m</sup> .5.
	AR.	Dekl.	—									
	22 <sup>h</sup>	37 <sup>m</sup>	47° 20'	22 <sup>h</sup>	38 <sup>m</sup>	29° 45'	22 <sup>h</sup>	42 <sup>m</sup>	23° 5'	22 <sup>h</sup>	43 <sup>m</sup>	51° 46'
Jan.	I	23.99	II	62.1	12	51.07	10	40.6	15	16.13	9	68.6
	II	23.88	9	60.9	15	50.97	9	39.1	18	16.04	7	67.2
	21	23.79	4	59.4	19	50.88	5	37.3	19	15.97	4	65.7
	31	23.75	0	57.5	22	50.83	2	35.4	20	15.93	2	64.1
Febr.	10	23.75	4	55.3	24	50.81	1	33.4	20	15.91	2	62.4
	20	23.79	10	52.9	29	50.82	6	31.4	20	15.93	6	60.7
März	I	23.89	14	50.0	27	50.88	10	29.4	16	15.99	9	59.1
	II	24.03	19	47.3	28	50.98	14	27.8	14	16.08	9	57.8
	21	24.22	23	44.5	28	51.12	18	26.4	10	16.21	13	56.8
	31	24.45	28	41.7	28	51.30	22	25.4	6	16.38	7	56.1
April	10	24.73	31	38.9	28	51.52	25	24.8	2	16.59	25	55.8
	20	25.04	36	36.1	25	51.77	29	24.6	3	16.84	28	55.9
	30	25.40	39	33.6	23	52.06	32	24.9	7	17.12	30	56.4
Mai	10	25.79	41	31.3	22	52.38	33	25.6	12	17.42	32	57.3
	20	26.20	43	29.1	18	52.71	26	26.8	12	17.74	33	58.6
Juni	30	26.63	44	27.3	14	53.06	35	28.3	20	18.07	34	60.2
	9	27.07	45	25.9	11	53.41	34	30.3	22	18.41	33	62.2
	19	27.50	43	24.8	7	53.75	32	32.5	25	18.74	31	64.4
	29	27.92	42	24.1	2	54.07	30	35.0	27	19.05	30	66.9
Juli	9	28.32	36	23.9	1	54.37	27	37.7	28	19.35	27	69.4
	19	28.68	32	24.0	6	54.64	23	40.5	28	19.62	23	72.0
	29	29.00	26	24.6	10	54.87	19	43.3	29	19.85	19	74.7
Aug.	8	29.26	20	25.6	13	55.06	14	46.2	28	20.04	14	77.3
	18	29.46	15	26.9	15	55.20	10	49.0	26	20.18	11	79.7
	28	29.61	8	28.4	18	55.30	5	51.6	25	20.29	6	82.1
Sept.	7	29.69	2	30.2	20	55.35	1	54.1	23	20.35	1	84.3
	17	29.71	4	32.2	20	55.36	3	56.4	20	20.36	2	86.2
	27	29.67	9	34.2	20	55.33	6	58.4	18	20.34	5	87.9
Okt.	7	29.58	14	36.2	18	55.27	10	60.2	14	20.29	8	89.4
	17	29.44	17	38.0	17	55.17	12	61.6	11	20.21	10	90.5
	27	29.27	19	39.7	13	55.05	13	62.7	8	20.11	12	91.3
Nov.	6	29.08	21	41.0	11	54.92	15	63.5	4	19.99	13	91.9
	16	28.87	21	42.1	7	54.77	15	63.9	0	19.86	14	92.1
	26	28.66	20	42.8	2	54.62	14	63.9	4	19.72	13	92.0
Dez.	6	28.46	19	43.0	2	54.48	14	63.5	7	19.59	12	91.6
	16	28.27	16	42.8	6	54.34	13	62.8	10	19.47	12	90.9
	26	28.11	14	42.2	10	54.21	11	61.8	14	19.35	9	89.9
	36	27.97	14	41.2	—	54.10	—	60.4	—	19.26	13	88.6
Mittl. Ort		24.99	42.8		52.51	38.3		17.46	68.1		14.63	47.7
		856)			857)			859)			860)	

## SCHEINBARE STERNÖRTER.

1912	ι Cephei. 3 <sup>m</sup> .5.		λ Aquarii. 3 <sup>m</sup> .8.		ρ Indi. 6 <sup>m</sup> .3.		δ Aquarii. 3 <sup>m</sup> .2.		
	AR.	Dekl. +	AR.	Dekl. -	AR.	Dekl. -	AR.	Dekl. -	
	22 <sup>h</sup> 46 <sup>m</sup>	65° 43'	22 <sup>h</sup> 48 <sup>m</sup>	8° 2'	22 <sup>h</sup> 48 <sup>m</sup>	70° 32'	22 <sup>h</sup> 49 <sup>m</sup>	16° 17'	
Jan.									
I	29.74	85.3 16	0.46	62.3 4	31.94	61.3 20	57.93	32.0 2	
II	29.35	83.7 21	0.39	62.7 3	31.57	59.3 25	57.86	32.2 0	
21	29.01	81.6 25	0.34	63.0 2	31.28	56.8 28	57.81	32.2 3	
31	28.75	79.1 28	0.32	63.2 1	31.07	54.0 32	57.79	31.9 4	
Febr.	10	28.55 11	76.3 30	0.32	63.3 2	30.96	50.8 33	57.79	31.5 6
	20	28.44 1	73.3 33	0.35	63.1 3	30.94	47.5 36	57.82	30.9 9
März	I	28.43 9	70.0 30	0.42	62.8 6	31.02	43.9 39	57.88	30.0 11
II	28.52 19	67.0 27	0.51	62.2 8	31.21	40.0 36	57.98	28.9 13	
21	28.71 28	64.3 25	0.64	61.4 10	31.49	36.4 36	58.11	27.6 15	
31	28.99 37	61.8 20	0.81	60.4 12	31.86	32.8 33	58.28	26.1 16	
April	10	29.36 44	59.8 15	1.01	59.2 15	32.32	29.5 31	58.48	24.5 18
	20	29.80 51	58.3 11	1.24	57.7 17	32.87	26.4 28	58.71	22.7 20
	30	30.31 57	57.2 4	1.50	56.0 18	33.48	23.6 25	58.98	20.7 20
Mai	10	30.86 55	56.8 2	1.79	54.2 19	34.16	21.1 21	59.27	18.7 20
	20	31.45 60	57.0 7	2.09	52.3 20	34.88	19.0 16	59.58	16.7 21
	30	32.05 60	57.7 13	2.41	50.3 20	35.64	17.4 11	59.91	14.6 19
Juni	9	32.65 58	59.0 18	2.74	48.3 20	36.41	16.3 6	60.24	12.7 19
	19	33.23 54	60.8 24	3.06	46.3 18	37.18	15.7 1	60.58	10.8 17
	29	33.77 50	63.2 27	3.38	44.5 18	37.93	15.6 4	60.90	9.1 14
Juli	9	34.27 43	65.9 31	3.68	42.7 16	38.64	16.0 10	61.21	7.7 13
	19	34.70 36	69.0 53	3.95	41.1 13	39.29	17.0 14	61.49	6.4 10
	29	35.06 29	72.3 36	4.19	39.8 12	39.86	18.4 18	61.74	5.4 7
Aug.	8	35.35 20	75.9 36	4.39	38.6 9	40.34	20.2 22	61.95	4.7 4
	18	35.55 11	79.6 37	4.55	37.7 6	40.71	22.4 24	62.12	4.3 2
	28	35.66 11	83.3 37	4.67	37.1 4	40.96	24.8 24	62.24	4.1 1
Sept.	7	35.69 3	87.0 37	4.74	36.7 1	41.09	27.5 28	62.32	4.2 3
	17	35.64 5	90.6 36	4.78	36.6 0	41.10	30.3 27	62.36	4.5 6
	27	35.51 13	94.1 35	4.78	36.6 2	40.98	33.0 26	62.36	5.1 8
Okt.	7	35.31 27	97.3 32	4.74	36.8 4	40.75	35.6 23	62.32	5.9 6
	17	35.04 32	100.1 25	4.67	37.2 4	40.43	37.9 20	62.26	6.5 8
	27	34.72 38	102.6 20	4.59	37.6 6	40.02	39.9 16	62.17	7.3 8
Nov.	6	34.34 41	104.6 16	4.49	38.2 6	39.55	41.5 11	62.06	8.1 8
	16	33.93 41	106.2 10	4.38	38.8 6	39.04	42.6 5	61.95	8.9 7
	26	33.50 43	107.2 4	4.27	39.4 6	38.50	43.1 0	61.83	9.6 6
Dez.	6	33.05 44	107.6 2	4.16	40.0 6	37.97	43.1 6	61.72	10.2 5
	16	32.61 44	107.4 8	4.06	40.6 6	37.47	42.5 13	61.61	10.7 4
	26	32.18 43	106.6 13	3.97	41.2 4	37.00	41.2 17	61.52	11.1 1
	36	31.78 40	105.3 13	3.90	41.6 4	36.59	39.5 17	61.44	11.2 1
Mittl. Ort	32.64	74.5	1.47	53.3	33.03	38.6	58.88	20.6	

## SCHEINBARE STERNÖRTER.

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1912	$\alpha$ Pisc. austr. 1 <sup>m</sup> .2.		$\delta$ Andromed. 3 <sup>m</sup> .5.		$\beta$ Pegasi. 2 <sup>m</sup> .4.		$\alpha$ Pegasi. 2 <sup>m</sup> .4.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	22 <sup>h</sup> 52 <sup>m</sup>	30° 5'	22 <sup>h</sup> 57 <sup>m</sup>	41° 50'	22 <sup>h</sup> 59 <sup>m</sup>	27° 36'	23 <sup>h</sup> 0 <sup>m</sup>	14° 43'
Jan.								
I	46.53	8	35.1	4	50.57	16	76.4	15
II	46.45	7	34.7	7	50.41	13	74.9	19
21	46.38	3	34.0	9	50.28	11	73.0	21
31	46.35	0	33.1	12	50.17	6	70.9	22
Febr.	46.35	3	31.9	15	50.11	3	68.7	24
20	46.38	6	30.4	16	50.08	2	66.3	24
März	46.44	10	28.8	20	50.10	8	63.9	24
II	46.54	14	26.8	21	50.18	12	61.5	19
21	46.68	18	24.7	22	50.30	17	59.6	17
31	46.86	21	22.5	23	50.47	23	57.9	12
April	47.07	25	20.2	23	50.70	27	56.7	8
20	47.32	29	17.9	23	50.97	31	55.9	3
30	47.61	31	15.6	23	51.28	34	55.6	2
Mai	47.92	34	13.3	22	51.62	37	55.8	7
20	48.26	35	11.1	21	51.99	38	56.5	7
30	48.61	36	9.0	18	52.37	38	57.6	17
Juni	48.97	37	7.2	17	52.75	38	59.3	20
19	49.34	35	5.5	13	53.13	37	61.3	24
29	49.69	33	4.2	10	53.50	34	63.7	27
Juli	50.02	31	3.2	7	53.84	31	66.4	29
19	50.33	27	2.5	3	54.15	27	69.3	31
29	50.60	24	2.2	0	54.42	22	72.4	32
Aug.	50.84	19	2.2	3	54.64	17	75.6	32
18	51.03	14	2.5	6	54.81	13	78.8	31
28	51.17	17	3.1	1	54.94	81.9	81.9	31
Sept.	51.26	9	9	7		30		24
17	51.30	4	4.0	11	55.01	2	84.9	29
27	51.30	0	5.1	13	55.03	2	87.8	27
Okt.	51.30	5	6.4	14	55.01	7	90.5	24
7	51.25	8	7.8	13	54.94	10	92.9	21
17	51.17	10	9.1	13	54.84	13	95.0	17
27	51.07	13	10.4	12	54.71	15	96.7	14
Nov.	50.94	13	11.6	11	54.56	18	98.1	9
16	50.81	14	12.7	8	54.38	18	99.0	5
26	50.67	14	13.5	6	54.20	18	99.5	0
Dez.	50.53	12	14.1	3	54.02	19	99.5	4
16	50.41	12	14.4	0	53.83	18	99.1	9
26	50.29	9	14.4	3	53.65	16	98.2	13
36	50.20	14.1			53.49	13	96.9	32.20
Mitt. Ort	47.41	19.8	52.16	69.9	30.37	18.8	22.57	53.5

## SCHEINBARE STERNÖRTER.

1912	δ Gruis. 4 <sup>m</sup> .2.		ε <sup>2</sup> Aquarii. 3 <sup>m</sup> .7.		π Cephei. 4 <sup>m</sup> .5.		Br. 3077. 5 <sup>m</sup> .8.	
	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.	AR.	Dekl.
	23 <sup>h</sup> 1 <sup>m</sup>	43° 59'	23 <sup>h</sup> 4 <sup>m</sup>	21° 38'	23 <sup>h</sup> 4 <sup>m</sup>	74° 54'	23 <sup>h</sup> 8 <sup>m</sup>	56° 40'
Jan.								
I	54.74	64.2	44.53	8	73.8	1	60.59	55.1
II	54.61	13	63.3	9	44.45	6	60.89	53.8
21	54.51	10	62.0	16	44.39	4	60.26	52.0
31	54.44	7	60.4	20	44.35	1	59.72	49.7
Febr. 10	54.41	3	58.4	22	44.34	1	59.30	47.1
20	54.42	5	56.2	24	44.35	4	59.02	44.2
März	54.47	10	53.8	29	44.39	9	58.88	41.0
II	54.57	14	50.9	27	44.48	12	58.91	37.6
21	54.71	19	48.2	29	44.60	16	59.10	34.7
31	54.90	23	45.3	28	44.75	15	59.45	31.9
April	55.13	28	42.5	28	44.94	23	59.94	29.6
10	55.41	31	39.7	27	45.17	26	60.55	27.7
30	55.72	35	37.0	26	45.43	29	61.27	26.2
Mai	56.07	35	34.4	26	45.72	32	62.07	25.4
10	56.45	38	32.1	23	46.04	32	62.92	25.1
30	56.85	40	30.0	21	46.37	34	63.81	25.4
Juni	57.26	41	28.2	18	46.71	34	64.70	26.2
9	57.68	42	26.8	14	47.05	34	65.57	27.7
19	58.08	40	25.8	10	47.39	32	66.39	29.7
Juli	58.47	39	25.2	6	47.71	32	67.14	32.1
9	58.83	36	25.2	2	48.01	30	68	28
19	59.15	32	25.0	2	48.28	27	67.82	34.9
Aug.	59.43	28	25.2	6	48.50	22	68.39	38.1
8	59.65	22	25.8	10	48.69	19	68.84	41.6
18	59.82	17	26.8	14	48.83	14	69.18	45.3
28		11	28.2	16		10	69.40	49.1
Sept.	59.93	5	29.8	18	48.93	5	69.48	52.9
17	59.98	0	31.6	19	48.98	2	69.43	56.7
27	59.98	6	33.5	20	49.00	3	69.27	60.4
Okt.	59.92	6	35.5	19	48.97	5	68.98	63.9
7	59.83	9	37.4	18	48.92	9	68.58	67.1
17	59.69	16	39.2	15	48.83	10	68.09	70.0
Nov.	59.53	18	40.7	13	48.73	12	67.50	72.5
16	59.35	19	42.0	9	48.61	12	66.84	74.5
26	59.16	19	42.9	5	48.49	12	66.13	76.0
Dez.	58.97	18	43.4	1	48.37	11	65.39	76.9
16	58.79	16	43.5	3	48.26	11	64.62	77.2
26	58.63	15	43.2	6	48.15	9	63.86	76.8
36	58.48	15	42.6		48.06	5	63.14	75.9
Mitt. Ort	55.51	45.5			45.37	60.9	65.72	41.9
					872)	873)	874)	875)

1912	$\gamma$ Tucanae.		$3^m.9.$	$\gamma$ Sculptoris.		$4^m.4.$	$\tau$ Pegasi.		$4^m.5.$
	AR.	Dekl.	—	AR.	Dekl.	—	AR.	Dekl.	—
	23 <sup>h</sup> 12 <sup>m</sup>	58° 42'		23 <sup>h</sup> 14 <sup>m</sup>	33° 0'		23 <sup>h</sup> 16 <sup>m</sup>	23° 15'	
Jan. 1	17.32	23	87.4	3.77	11	57.7	15.62	32.4	
11	17.09	19	86.0	3.66	8	57.3	15.51	31.2	12
21	16.90	14	84.2	3.58	6	56.6	15.42	29.9	15
31	16.76		82.0	3.52	4	55.5	15.35	28.4	15
Febr. 10	16.67	9	79.4	3.48	0	54.2	15.30	26.9	
20	16.63	2	76.5	3.48	4	52.6	15.29	25.4	15
März 1	16.65	9	73.4	3.52	8	50.8	15.31	23.9	
11	16.74	15	69.8	3.60	11	48.5	15.37	22.5	11
21	16.89	22	66.5	3.71		46.3	15.46	21.4	
31	17.11	27	63.1	3.86	15	43.9	15.60	20.7	
April 10	17.38	34	59.8	4.06	23	41.4	15.78	20.3	1
20	17.72	38	56.6	4.29	27	38.8	16.00	20.2	
30	18.10	38	53.6	4.56	31	36.3	16.26	20.6	4
Mai 10	18.54	44	50.8	4.87		33.8	16.54	21.3	
20	19.02	48	48.4	5.20	33	31.5	16.85	22.5	
	50		42.5	5.20	35	29.2		33	15
30	19.52	53	46.3	5.55	37	27.2	17.18	24.0	18
Juni 9	20.05	53	44.7	5.92	37	25.5	17.52	25.8	
19	20.58	53	43.4	6.29	36	24.1	17.86	27.8	
29	21.10	52	42.7	6.65		23.0	18.19	30.1	23
Juli 9	21.60	50	42.5	7.00	35	22.3	18.50	32.6	
19	22.08	42	42.8	7.33	29	22.3	18.79	35.1	26
29	22.50	37	43.5	7.62	26	21.9	19.05	37.7	25
Aug. 8	22.87	37	44.7	7.88	21	22.0	19.27	40.2	
18	23.16	29	46.3	8.09	17	22.4	19.45	42.7	23
28	23.39	23	48.3	8.26	11	23.1	19.59	45.0	
	15	22				10	10	22	
Sept. 7	23.54	6	50.5	8.37	7	24.1	19.69	47.2	21
17	23.60	0	52.9	8.44	2	25.4	19.75	49.3	18
27	23.60		55.4	8.46	3	26.8	19.77	51.1	15
Okt. 7	23.51	9	57.8	8.43		28.3	19.75	52.6	
17	23.36	15	60.2	8.36	7	29.9	19.70	53.8	
	21	21		9		15	7	10	
27	23.15	24	62.3	8.27	12	31.4	19.63	54.8	7
Nov. 6	22.91	29	64.1	8.15	13	32.8	19.53	55.5	
16	22.62	29	65.6	8.02	14	34.0	19.42	55.9	4
26	22.33	31	66.5	7.88	15	35.0	19.30	56.0	
Dez. 6	22.02		67.0	7.73	14	35.8	19.18	55.8	
	29	1		4			12	5	
16	21.73	28	66.9	7.59	13	36.2	19.06	55.3	8
26	21.45	25	66.3	7.46	11	36.3	18.94	54.5	10
36	21.20		65.2	7.35		36.0	18.83	53.5	
Mittl. Ort	17.95		66.0	4.48		41.8	16.77	30.4	
				877)		879)		880)	

## SCHEINBARE STERNÖRTER.

1912	4 Cassiopejae.		5 <sup>m</sup> .5.		z Piscium.		5 <sup>m</sup> .1.		70 Pegasi.		4 <sup>m</sup> .7.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	23 <sup>h</sup> 20 <sup>m</sup>	61° 47'	23 <sup>h</sup> 22 <sup>m</sup>	0° 46'	23 <sup>h</sup> 24 <sup>m</sup>	12° 16'						
Jan.												
I	53.15	70.5	24.39	8	20.1	7	41.20	9	28.3	9		
II	52.81	69.3	24.31	7	19.4	6	41.11	8	27.4	10		
21	52.50	67.5	24.24	5	18.8	6	41.03	6	26.4	11		
31	52.24	65.4	24.19	4	18.2	5	40.97	4	25.3	10		
Febr.	10	52.04	62.9	24.15	0	17.7	4	40.93	2	24.3	10	
	20	51.89	60.2	24.15	2	17.3	1	40.91	—	23.3	8	
März	1	51.83	57.3	24.17	6	17.2	0	40.93	5	22.5	7	
	9	51.85	54.2	24.23	9	17.2	3	40.98	9	21.8	4	
	11	51.96	51.5	24.32	13	17.5	5	41.07	13	21.4	2	
	31	52.15	49.0	24.45	16	18.0	8	41.20	16	21.2	2	
April	10	52.42	46.9	24.61	20	18.8	11	41.36	21	21.4	5	
	20	52.77	45.2	24.81	25	19.9	13	41.57	24	21.9	8	
	30	53.18	44.0	25.06	26	21.2	16	41.81	27	22.7	12	
Mai	10	53.64	43.3	25.32	30	22.8	18	42.08	29	23.9	14	
	20	54.15	43.2	25.62	30	24.6	19	42.37	31	25.3	17	
	30	54.69	43.6	25.92	32	26.5	20	42.68	33	27.0	19	
Juni	9	55.23	44.6	26.24	32	28.5	21	43.01	33	28.9	21	
	19	55.77	46.1	26.57	33	30.6	21	43.34	32	31.0	22	
	29	56.28	48.1	26.89	32	32.7	21	43.66	31	33.2	23	
Juli	9	56.77	50.6	27.20	31	34.8	19	43.97	29	35.5	22	
	19	57.22	53.4	27.48	26	36.7	19	44.26	25	37.7	23	
	29	57.61	56.6	27.74	22	38.6	16	44.51	23	40.0	21	
Aug.	8	57.93	59.9	27.96	19	40.2	16	44.74	19	42.1	20	
	18	58.20	63.4	28.15	15	41.6	14	44.93	14	44.1	18	
	28	58.39	67.0	28.30	15	42.8	12	45.07	11	45.9	16	
Sept.	7	58.50	70.7	28.41	6	43.7	7	45.18	7	47.5	14	
	17	58.55	74.3	28.47	3	44.4	5	45.25	3	48.9	12	
	27	58.53	77.7	28.50	0	44.9	3	45.28	0	50.1	9	
Okt.	7	58.44	81.0	28.50	3	45.2	0	45.28	3	51.0	7	
	17	58.29	84.0	28.47	6	45.2	1	45.25	6	51.7	5	
	27	58.08	86.6	28.41	8	45.1	2	45.19	8	52.2	2	
Nov.	6	57.83	88.9	28.33	9	44.9	4	45.11	9	52.4	0	
	16	57.53	90.7	28.24	10	44.5	5	45.02	10	52.4	2	
	26	57.21	92.0	28.14	10	44.0	6	44.92	11	52.2	4	
Dez.	6	56.87	92.8	28.04	10	43.4	6	44.81	11	51.8	5	
	16	56.51	93.0	27.94	10	42.8	7	44.70	10	51.3	7	
	26	56.16	92.6	27.84	8	42.1	7	44.60	9	50.6	9	
	36	55.81	91.7	27.76	8	41.4	7	44.51	9	49.7	9	
Mittl. Ort	55.39	58.3	25.27	25.3	42.18	29.6						
			882)	884)	885)							

1912	Andromedae. 4 <sup>m</sup> .I.		Piscium. 4 <sup>m</sup> .I.		Cephei. 3 <sup>m</sup> .3.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. +
	23 <sup>h</sup> 33 <sup>m</sup>	42° 46'	23 <sup>h</sup> 35 <sup>m</sup>	5° 8'	23 <sup>h</sup> 35 <sup>m</sup>	77° 8'
Jan. I	47.59 17	59.2 11	24.55 9	53.7 8	39.42 87	43.4 9
II	47.42 16	58.1 16	24.46 8	52.9 8	38.55 81	42.5 13
21	47.26 14	56.5 18	24.38 6	52.1 7	37.74 72	41.2 19
31	47.12 11	54.7 21	24.32 4	51.4 7	37.02 60	39.3 24
Febr. 10	47.01 7	52.6 22	24.28 2	50.7 6	36.42 46	36.9 27
20	46.94 3	50.4 22	24.26 0	50.1 4	35.96 29	34.2 29
März I	46.91 3	48.2 23	24.26 4	49.7 3	35.67 11	31.3 31
II	46.94 8	45.9 22	24.30 9	49.4 1	35.56 9	28.2 33
21	47.02 13	43.7 18	24.39 11	49.5 2	35.65 27	24.9 28
31	47.15 19	41.9 14	24.50 16	49.7 6	35.92 44	22.1 26
April 10	47.34 24	40.5 11	24.66 19	50.3 8	36.36 61	19.5 22
20	47.58 28	39.4 6	24.85 23	51.1 11	36.97 75	17.3 18
30	47.86 33	38.8 1	25.08 26	52.2 14	37.72 87	15.5 13
Mai 10	48.19 33	38.7 1	25.34 29	53.6 16	38.59 95	14.2 7
20	48.55 36	39.1 4	25.63 30	55.2 18	39.54 101	13.5 1
30	48.93 39	39.9 13	25.93 32	57.0 20	40.55 103	13.4 4
Juni 9	49.32 39	41.2 17	26.25 33	59.0 21	41.58 104	13.8 10
19	49.71 39	42.9 22	26.58 32	61.1 21	42.62 99	14.8 16
29	50.10 37	45.1 24	26.90 31	63.2 21	43.61 95	16.4 21
Juli 9	50.47 37	47.5 24	27.21 29	65.3 21	44.56 86	18.5 25
19	50.81 31	50.2 29	27.50 27	67.4 20	45.42 76	21.0 29
29	51.12 27	53.1 31	27.77 23	69.4 18	46.18 64	23.9 32
Aug. 8	51.39 22	56.2 31	28.00 20	71.2 16	46.82 52	27.1 35
18	51.61 17	59.3 31	28.20 16	72.8 15	47.34 38	30.6 37
28	51.78 12	62.4 30	28.36 12	74.3 12	47.72 24	34.3 38
Sept. 7	51.90 8	65.4 30	28.48 9	75.5 9	47.96 8	38.1 39
17	51.98 3	68.4 28	28.57 4	76.4 8	48.04 5	42.0 38
27	52.01 2	71.2 25	28.61 1	77.2 5	47.99 20	45.8 37
Okt. 7	51.99 5	73.7 23	28.62 3	77.7 3	47.79 34	49.5 34
17	51.94 9	76.0 20	28.59 4	78.0 1	47.45 47	52.9 32
27	51.85 12	78.0 17	28.55 7	78.1 1	46.98 58	56.1 29
Nov. 6	51.73 15	79.7 12	28.48 8	78.0 2	46.40 68	59.0 24
16	51.58 16	80.9 9	28.40 9	77.8 4	45.72 77	61.4 19
26	51.42 17	81.8 4	28.31 10	77.4 5	44.95 84	63.3 14
Dez. 6	51.25 18	82.2 1	28.21 10	76.9 6	44.11 88	64.7 8
16	51.07 19	82.1 5	28.11 10	76.3 7	43.23 90	65.5 2
26	50.88 18	81.6 9	28.01 10	75.6 8	42.33 88	65.7 5
36	50.70	80.7 9	27.91	74.8	41.45	65.2
Mitt. Ort	48.99	50.7	25.40	57.0	43.60	28.2
	891)		892)		893)	

1912	ω <sup>2</sup> Aquarii. 4 <sup>m</sup> .5.		41 H. Cephei. 5 <sup>m</sup> .2.		Lac. δ Sculptoris. 4 <sup>m</sup> .4.	
	AR.	Dekl. —	AR.	Dekl. +	AR.	Dekl. —
	23 <sup>h</sup> 38 <sup>m</sup>	15° 1'	23 <sup>h</sup> 43 <sup>m</sup>	67° 18'	23 <sup>h</sup> 44 <sup>m</sup>	28° 36'
Jan.						
1	8.92	63.7	39.26	78.5	20.11	75.4
11	8.83	63.9	38.81	77.7	20.00	75.3
21	8.75	64.0	38.38	76.3	19.89	74.9
31	8.68	63.9	38.00	74.4	19.81	74.2
Febr.	10	8.64	63.6	37.68	19.75	73.2
	20	8.62	63.0	37.44	19.72	71.9
März	1	8.63	62.2	37.28	19.72	70.3
	11	8.67	61.2	37.23	19.76	68.5
	21	8.75	59.8	37.29	19.84	66.3
	31	8.87	58.4	37.46	19.95	64.1
April	10	9.02	56.7	37.73	20.10	61.7
	20	9.21	54.8	38.10	20.29	59.2
	30	9.44	52.8	38.56	20.53	56.6
Mai	10	9.70	50.7	39.09	20.80	54.1
	20	9.99	48.5	39.67	21.10	51.6
	30	10.30	46.3	40.29	21.43	49.2
Juni	9	10.63	44.2	40.94	21.77	47.0
	19	10.96	42.1	41.59	22.13	45.0
	29	11.29	40.2	42.22	22.48	43.3
Juli	9	11.61	38.5	42.83	22.83	41.8
	19	11.92	37.0	43.39	23.16	40.7
	29	12.20	35.7	43.89	23.46	40.0
Aug.	8	12.44	34.8	44.32	23.73	39.6
	18	12.65	34.1	44.68	23.96	39.6
	28	12.82	33.8	44.96	24.15	40.0
Sept.	7	12.95	33.8	45.15	24.29	40.7
	17	13.04	34.0	45.25	24.39	41.8
	27	13.08	34.5	45.27	24.45	43.0
Okt.	7	13.09	35.1	45.21	24.46	44.4
	17	13.07	35.9	45.07	24.43	45.8
	27	13.02	36.8	44.85	24.37	47.3
Nov.	6	12.95	37.7	44.57	24.28	48.8
	16	12.86	38.6	44.24	24.18	50.1
	26	12.76	39.5	43.85	24.06	51.3
Dez.	6	12.65	40.3	43.42	23.93	52.2
	16	12.55	41.0	42.98	23.80	52.9
	26	12.44	41.5	42.52	23.67	53.2
	36	12.34	41.9	42.06	23.55	53.3
Mittl. Ort		9.59	53.6	41.69	20.63	61.2
		894)		895)		896)

1912	φ Pegasi. 5°.4.		ω Piscium. 3°.9.		ε Tucanae. 4°.5.	
	AR.	Dekl. +	AR.	Dekl. +	AR.	Dekl. -
	23 <sup>h</sup> 47 <sup>m</sup>	18° 37'	23 <sup>h</sup> 54 <sup>m</sup>	6° 22'	23 <sup>h</sup> 55 <sup>m</sup>	66° 3'
Jan. 1	59.63	11	55.1	9	46.74	10
11	59.52	10	54.2	11	46.64	9
21	59.42	8	53.1	11	46.55	8
31	59.34	7	52.0	13	46.47	7
Febr. 10	59.27	4	50.7	12	46.42	5
20	59.23	1	49.5	11	46.38	2
März 1	59.22	2	48.4	10	46.36	3
11	59.24	7	47.4	9	46.39	6
21	59.31	11	46.5	5	46.45	9
31	59.42	14	46.0	2	46.54	14
April 10	59.56	19	45.8	1	46.68	18
20	59.75	22	45.9	4	46.86	21
30	59.97	27	46.3	8	47.07	25
Mai 10	60.24	29	47.1	12	47.32	28
20	60.53	31	48.3	15	47.60	29
30	60.84	33	49.8	17	47.89	32
Juni 9	61.17	33	51.5	19	48.21	33
19	61.50	33	53.4	22	48.54	32
29	61.84	34	55.6	23	48.86	32
Juli 9	62.16	30	57.9	23	49.18	32
19	62.46	28	60.2	24	49.48	27
29	62.74	24	62.6	23	49.75	25
Aug. 8	62.98	24	64.9	23	50.00	21
18	63.19	17	67.1	22	50.21	18
28	63.36	14	69.3	19	50.39	14
Sept. 7	63.50	9	71.2	18	50.53	10
17	63.59	5	73.0	15	50.63	6
27	63.64	2	74.5	14	50.69	3
Okt. 7	63.66	1	75.9	10	50.72	0
17	63.65	4	76.9	9	50.72	3
27	63.61	6	77.8	5	50.69	5
Nov. 6	63.55	8	78.3	4	50.64	7
16	63.47	10	78.7	1	50.57	9
26	63.37	10	78.8	2	50.48	9
Dez. 6	63.27	11	78.6	4	50.39	10
16	63.16	11	78.2	6	50.29	10
26	63.05	12	77.6	8	50.19	10
36	62.93		76.8		50.09	
Mitt. Ort	60.55		53.3		47.49	

Allgemeine Präzession =  $50''.259$

$$\begin{aligned} A &= t - 0.02526 \sin 2\odot \\ &\quad + 0.00293 \sin (\odot + 81^\circ 48') \\ &\quad - 0.34213 \sin \Omega \\ &\quad + 0.00409 \sin 2\Omega \\ [A' &= - 0.00405 \sin 2\mathfrak{C} \\ &\quad + 0.00134 \sin (\mathfrak{C} - 122^\circ 59')] \end{aligned}$$

$$\begin{aligned} C &= - 20''.47 \cos \odot \cos \varepsilon \\ D &= - 20''.47 \sin \odot \end{aligned}$$

$$\begin{aligned} a &= 46''.0883 + 20''.0458 \sin \alpha \operatorname{tg} \delta \\ b &= \cos \alpha \operatorname{tg} \delta \\ c &= \cos \alpha \sec \delta \\ d &= \sin \alpha \sec \delta \end{aligned}$$

$\odot$  = wahre Länge der Sonne

$\Omega$  = Länge des aufsteigenden Knotens der Mondbahn auf der Ekliptik

$\mathfrak{C}$  = mittlere Länge des Mondes

$m, m'$  = jährliche Eigenbewegung in AR. und Dekl.

$t$  = Zeit seit Anfang des Jahres, in Teilen des Jahres ausgedrückt.

Scheinb. AR. = AR.  $1912.0 + tm + Aa + Bb + Cc + Dd + E + [A'a + B'b]$

Scheinb. Dekl. = Dekl.  $1912.0 + tm' + Aa' + Bb' + Cc' + Dd' + [A'a' + B'b']$

Setzt man  $f = 46''.0883 A + E$

$g \cos G = 20''.0458 A$

$g \sin G = B$

$[f' = 46''.0883 A']$

$[g' \cos G' = 20''.0458 A']$

$[g' \sin G' = B']$ ,

so wird

Scheinb. AR. = AR.  $1912.0 + tm + f + g \sin(G + \alpha) \operatorname{tg} \delta + h \sin(H + \alpha) \sec \delta + [f' + g' \sin(G' + \alpha) \operatorname{tg} \delta]$

Scheinb. Dekl. = Dekl.  $1912.0 + tm' + g \cos(G + \alpha) + h \cos(H + \alpha) \sin \delta + i \cos \delta + [g' \cos(G' + \alpha)]$

Korrektion für die tägliche Aberration, wenn  $\Theta$  die Sternzeit,  $\varphi$  die Polhöhe ist:

$$\Delta \alpha = + 0.0213 \cos \varphi \cos(\Theta - \alpha) \sec \delta$$

$$\Delta \delta = + 0''.320 \cos \varphi \sin(\Theta - \alpha) \sin \delta.$$

## Konstanten für die Sternzeitepochen

 $18^{\text{h}} 40^{\text{m}}$  des Normalmeridians oder  $0^{\text{h}} 50^{\text{m}}$  Berlin,

ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

Datum in Mittl. Zeit	<i>t</i>	log. <i>A</i>	log. <i>B</i>	log. <i>C</i>	log. <i>D</i>	<i>E</i>
				Bibl. Jag.		
1912 Jan. 1.26	0.000	9.1574 <sub>n</sub>	0.8820 <sub>n</sub>	0.5115 <sub>n</sub>	1.3045	-0.02
11.23	0.027	9.0228 <sub>n</sub>	0.8897 <sub>n</sub>	0.8103 <sub>n</sub>	1.2838	0.02
21.20	0.055	8.8397 <sub>n</sub>	0.9000 <sub>n</sub>	0.9763 <sub>n</sub>	1.2474	0.02
31.18	0.082	8.5519 <sub>n</sub>	0.9119 <sub>n</sub>	1.0855 <sub>n</sub>	1.1927	0.01
Febr. 10.15	0.109	7.7202 <sub>n</sub>	0.9240 <sub>n</sub>	1.1612 <sub>n</sub>	1.1144	0.01
	20.12	8.3432	0.9350 <sub>n</sub>	1.2138 <sub>n</sub>	1.0022	-0.01
März 1.09	0.164	8.6687	0.9440 <sub>n</sub>	1.2483 <sub>n</sub>	0.8320	0.01
11.07	0.191	8.8407	0.9501 <sub>n</sub>	1.2678 <sub>n</sub>	0.5242	0.01
21.04	0.218	8.9588	0.9532 <sub>n</sub>	1.2737 <sub>n</sub>	9.2714 <sub>n</sub>	0.01
31.01	0.246	9.0517	0.9531 <sub>n</sub>	1.2665 <sub>n</sub>	0.5673 <sub>n</sub>	0.02
April 9.98	0.273	9.1315	0.9500 <sub>n</sub>	1.2461 <sub>n</sub>	0.8494 <sub>n</sub>	-0.02
19.96	0.300	9.2038	0.9445 <sub>n</sub>	1.2114 <sub>n</sub>	1.0096 <sub>n</sub>	0.02
29.93	0.328	9.2716	0.9373 <sub>n</sub>	1.1601 <sub>n</sub>	1.1161 <sub>n</sub>	0.02
Mai 9.90	0.355	9.3357	0.9294 <sub>n</sub>	1.0878 <sub>n</sub>	1.1910 <sub>n</sub>	0.02
19.88	0.382	9.3964	0.9219 <sub>n</sub>	0.9864 <sub>n</sub>	1.2439 <sub>n</sub>	0.02
	29.85	9.4534	0.9157 <sub>n</sub>	0.8377 <sub>n</sub>	1.2798 <sub>n</sub>	-0.01
Juni 8.82	0.437	9.5063	0.9118 <sub>n</sub>	0.5898 <sub>n</sub>	1.3016 <sub>n</sub>	0.01
18.79	0.464	9.5548	0.9107 <sub>n</sub>	9.9004 <sub>n</sub>	1.3107 <sub>n</sub>	0.01
28.77	0.491	9.5986	0.9128 <sub>n</sub>	0.3648	1.3078 <sub>n</sub>	0.01
Juli 8.74	0.519	9.6377	0.9179 <sub>n</sub>	0.7294	1.2927 <sub>n</sub>	0.01
	18.71	9.6722	0.9255 <sub>n</sub>	0.9171	1.2644 <sub>n</sub>	-0.01
28.68	0.573	9.7024	0.9349 <sub>n</sub>	1.0390	1.2211 <sub>n</sub>	0.01
Aug. 7.66	0.601	9.7285	0.9449 <sub>n</sub>	1.1245	1.1593 <sub>n</sub>	0.01
17.63	0.628	9.7510	0.9547 <sub>n</sub>	1.1857	1.0723 <sub>n</sub>	0.01
27.60	0.655	9.7705	0.9633 <sub>n</sub>	1.2287	0.9471 <sub>n</sub>	0.01
Sept. 6.58	0.683	9.7876	0.9700 <sub>n</sub>	1.2566	0.7507 <sub>n</sub>	-0.01
16.55	0.710	9.8031	0.9740 <sub>n</sub>	1.2711	0.3488 <sub>n</sub>	0.01
26.52	0.737	9.8176	0.9752 <sub>n</sub>	1.2729	0.0967	0.01
Okt. 6.49	0.765	9.8320	0.9735 <sub>n</sub>	1.2618	0.6734	0.01
16.47	0.792	9.8467	0.9690 <sub>n</sub>	1.2371	0.9063	0.01
	26.44	9.8623	0.9622 <sub>n</sub>	1.1967	1.0486	-0.01
Nov. 5.41	0.846	9.8790	0.9540 <sub>n</sub>	1.1371	1.1457	0.01
15.38	0.874	9.8968	0.9454 <sub>n</sub>	1.0518	1.2142	0.01
25.36	0.901	9.9154	0.9375 <sub>n</sub>	0.9277	1.2618	0.01
Dez. 5.33	0.928	9.9346	0.9314 <sub>n</sub>	0.7317	1.2924	0.01
	15.30	9.9539	0.9281 <sub>n</sub>	0.3306	1.3083	-0.01
25.27	0.983	9.9727	0.9282 <sub>n</sub>	0.0729 <sub>n</sub>	1.3103	0.01
35.25	1.010	9.9905	0.9318 <sub>n</sub>	0.6505 <sub>n</sub>	1.2984	0.00

## REDUKTIONSTAFELN.

Konstanten für die mittleren Tage 1912,  
ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

<sup>12<sup>h</sup></sup>	Mittl. Zeit	f	log. g	G	log. h	H	log. i	C
Jan.	1	-6.60	0.9108	249° 26'	1.3100	35° 37'	0.1594 <sub>n</sub>	191
	2	6.41	0.9099	249 59	1.3098	349 41	0.2002 <sub>n</sub>	228
	3	6.23	0.9091	250 31	1.3096	348 44	0.2375 <sub>n</sub>	264
	4	6.05	0.9083	251 4	1.3093	347 48	0.2716 <sub>n</sub>	301
	5	5.88	0.9076	251 37	1.3090	346 51	0.3032 <sub>n</sub>	337
	6	-5.70	0.9070	252 10	1.3087	345 55	0.3324 <sub>n</sub>	374
	7	5.52	0.9065	252 43	1.3084	344 58	0.3597 <sub>n</sub>	410
	8	5.35	0.9060	253 16	1.3080	344 1	0.3853 <sub>n</sub>	447
	9	5.17	0.9057	253 49	1.3077	343 4	0.4093 <sub>n</sub>	484
	10	5.00	0.9054	254 22	1.3073	342 7	0.4319 <sub>n</sub>	520
	11	-4.83	0.9052	254 55	1.3069	341 10	0.4532 <sub>n</sub>	557
	12	4.65	0.9050	255 28	1.3065	340 13	0.4734 <sub>n</sub>	593
	13	4.48	0.9049	256 1	1.3060	339 15	0.4926 <sub>n</sub>	630
	14	4.31	0.9049	256 33	1.3056	338 18	0.5109 <sub>n</sub>	667
	15	4.14	0.9050	257 6	1.3051	337 20	0.5282 <sub>n</sub>	703
	16	-3.97	0.9051	257 38	1.3046	336 22	0.5448 <sub>n</sub>	740
	17	3.81	0.9053	258 10	1.3041	335 25	0.5607 <sub>n</sub>	776
	18	3.64	0.9055	258 42	1.3036	334 27	0.5758 <sub>n</sub>	813
	19	3.48	0.9058	259 14	1.3031	333 29	0.5903 <sub>n</sub>	850
	20	3.31	0.9062	259 45	1.3026	332 31	0.6042 <sub>n</sub>	886
	21	-3.15	0.9066	260 16	1.3020	331 32	0.6175 <sub>n</sub>	923
	22	2.99	0.9071	260 47	1.3015	330 34	0.6303 <sub>n</sub>	959
	23	2.83	0.9077	261 18	1.3009	329 35	0.6425 <sub>n</sub>	996
	24	2.67	0.9083	261 48	1.3003	328 36	0.6544 <sub>n</sub>	1033
	25	2.51	0.9090	262 18	1.2997	327 37	0.6657 <sub>n</sub>	1069
	26	-2.36	0.9097	262 47	1.2991	326 38	0.6767 <sub>n</sub>	1106
	27	2.21	0.9105	263 16	1.2985	325 39	0.6872 <sub>n</sub>	1142
	28	2.06	0.9113	263 45	1.2979	324 40	0.6974 <sub>n</sub>	1179
	29	1.91	0.9121	264 14	1.2972	323 40	0.7072 <sub>n</sub>	216
	30	1.76	0.9130	264 42	1.2966	322 41	0.7166 <sub>n</sub>	252
Febr.	31	-1.61	0.9139	265 10	1.2960	321 41	0.7257 <sub>n</sub>	289
	1	1.46	0.9148	265 37	1.2953	320 41	0.7344 <sub>n</sub>	325
	2	1.31	0.9158	266 4	1.2947	319 41	0.7429 <sub>n</sub>	362
	3	1.17	0.9168	266 31	1.2940	318 40	0.7511 <sub>n</sub>	399
	4	1.03	0.9178	266 57	1.2933	317 40	0.7589 <sub>n</sub>	435
	5	-0.89	0.9189	267 23	1.2927	316 39	0.7665 <sub>n</sub>	472
	6	0.75	0.9200	267 48	1.2920	315 38	0.7739 <sub>n</sub>	508
	7	0.61	0.9211	268 13	1.2914	314 37	0.7809 <sub>n</sub>	545

Konstanten für die mittleren Tage 1912,  
ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

<sup>12<sup>h</sup></sup>	Mittl. Zeit	f	log. g	G	log. h	H	log. i	C
Febr.	7	-0.61	0.9211	268° 13'	1.2914	314° 37'	0.7809 <sub>n</sub>	545
	8	0.47	0.9222	268° 38'	1.2907	313° 36'	0.7878 <sub>n</sub>	582
	9	0.34	0.9233	269° 2	1.2900	312° 35'	0.7944 <sub>n</sub>	618
	10	0.21	0.9244	269° 26'	1.2894	311° 33'	0.8007 <sub>n</sub>	655
	11	-0.08	0.9256	269° 49'	1.2887	310° 32'	0.8068 <sub>n</sub>	691
	12	+0.05	0.9267	270° 12'	1.2881	309° 30'	0.8127 <sub>n</sub>	728
	13	0.18	0.9279	270° 35'	1.2874	308° 28'	0.8184 <sub>n</sub>	765
	14	0.31	0.9290	270° 57'	1.2868	307° 26'	0.8239 <sub>n</sub>	801
	15	0.44	0.9302	271° 19'	1.2861	306° 24'	0.8292 <sub>n</sub>	838
	16	0.56	0.9313	271° 41'	1.2855	305° 21'	0.8343 <sub>n</sub>	874
	17	+0.69	0.9325	272° 2	1.2849	304° 18'	0.8392 <sub>n</sub>	911
	18	0.81	0.9337	272° 23'	1.2843	303° 15'	0.8439 <sub>n</sub>	948
	19	0.93	0.9348	272° 44'	1.2837	302° 12'	0.8484 <sub>n</sub>	984
	20	1.05	0.9360	273° 4	1.2831	301° 9'	0.8527 <sub>n</sub>	021
	21	1.17	0.9371	273° 24'	1.2825	300° 6'	0.8568 <sub>n</sub>	057
	22	+1.28	0.9382	273° 44'	1.2820	299° 3'	0.8608 <sub>n</sub>	094
	23	1.40	0.9393	274° 3	1.2814	298° 0'	0.8646 <sub>n</sub>	131
	24	1.51	0.9404	274° 22'	1.2809	296° 56'	0.8682 <sub>n</sub>	167
	25	1.63	0.9415	274° 41'	1.2803	295° 53'	0.8717 <sub>n</sub>	204
	26	1.74	0.9426	275° 0	1.2798	294° 49'	0.8750 <sub>n</sub>	240
	27	+1.85	0.9437	275° 18'	1.2793	293° 45'	0.8782 <sub>n</sub>	277
	28	1.96	0.9448	275° 36'	1.2789	292° 41'	0.8812 <sub>n</sub>	314
	29	2.07	0.9458	275° 54'	1.2784	291° 37'	0.8840 <sub>n</sub>	350
März	1	2.18	0.9468	276° 12'	1.2780	290° 33'	0.8867 <sub>n</sub>	387
	2	2.29	0.9478	276° 29'	1.2775	289° 28'	0.8892 <sub>n</sub>	423
	3	+2.40	0.9488	276° 46'	1.2771	288° 24'	0.8916 <sub>n</sub>	460
	4	2.50	0.9497	277° 3	1.2767	287° 19'	0.8939 <sub>n</sub>	497
	5	2.60	0.9506	277° 20'	1.2764	286° 15'	0.8960 <sub>n</sub>	533
	6	2.71	0.9515	277° 37'	1.2761	285° 10'	0.8980 <sub>n</sub>	570
	7	2.81	0.9524	277° 54'	1.2757	284° 5'	0.8998 <sub>n</sub>	606
	8	+2.92	0.9532	278° 10'	1.2754	283° 0'	0.9014 <sub>n</sub>	643
	9	3.02	0.9541	278° 27'	1.2752	281° 56'	0.9029 <sub>n</sub>	680
	10	3.12	0.9549	278° 43'	1.2749	280° 51'	0.9043 <sub>n</sub>	716
	11	3.23	0.9557	278° 59'	1.2747	279° 46'	0.9056 <sub>n</sub>	753
	12	3.33	0.9565	279° 15'	1.2745	278° 41'	0.9067 <sub>n</sub>	789
	13	+3.43	0.9572	279° 31'	1.2743	277° 36'	0.9077 <sub>n</sub>	826
	14	3.53	0.9579	279° 47'	1.2741	276° 31'	0.9086 <sub>n</sub>	863
	15	3.63	0.9586	280° 3	1.2740	275° 26'	0.9093 <sub>n</sub>	899

Konstanten für die mittleren Tage 1912,  
ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

$\text{12}^{\text{h}}$ Mittl. Zeit	$f$	$\log. g$	$G$	$\log. h$	$H$	$\log. i$	$\mathbb{C}$
März 15	+3.63	0.9586	280° 3'	1.2740	275° 26'	0.9093 <sub>n</sub>	899
16	3.73	0.9592	280 19	1.2739	274 21	0.9099 <sub>n</sub>	936
17	3.83	0.9599	280 35	1.2738	273 16	0.9104 <sub>n</sub>	972
18	3.93	0.9605	280 50	1.2737	272 11	0.9107 <sub>n</sub>	009
19	4.03	0.9611	281 6	1.2737	271 6	0.9109 <sub>n</sub>	046
20	+4.12	0.9617	281 21	1.2737	270 1	0.9110 <sub>n</sub>	082
21	4.22	0.9623	281 36	1.2737	268 56	0.9109 <sub>n</sub>	119
22	4.32	0.9628	281 52	1.2737	267 51	0.9107 <sub>n</sub>	155
23	4.42	0.9633	282 7	1.2738	266 46	0.9104 <sub>n</sub>	192
24	4.52	0.9638	282 23	1.2739	265 42	0.9099 <sub>n</sub>	229
25	+4.62	0.9643	282 39	1.2740	264 37	0.9093 <sub>n</sub>	265
26	4.72	0.9647	282 55	1.2741	263 32	0.9086 <sub>n</sub>	302
27	4.82	0.9651	283 11	1.2743	262 28	0.9078 <sub>n</sub>	338
28	4.92	0.9655	283 27	1.2745	261 23	0.9068 <sub>n</sub>	375
29	5.02	0.9659	283 43	1.2747	260 19	0.9057 <sub>n</sub>	412
30	+5.13	0.9663	283 59	1.2749	259 15	0.9045 <sub>n</sub>	448
April 1	5.23	0.9666	284 15	1.2751	258 11	0.9031 <sub>n</sub>	485
2	5.33	0.9670	284 32	1.2754	257 7	0.9016 <sub>n</sub>	521
3	5.43	0.9673	284 48	1.2757	256 3	0.9000 <sub>n</sub>	558
4	5.54	0.9676	285 5	1.2760	254 59	0.8982 <sub>n</sub>	595
5	+5.64	0.9679	285 22	1.2763	253 55	0.8963 <sub>n</sub>	631
6	5.75	0.9682	285 39	1.2767	252 52	0.8943 <sub>n</sub>	668
7	5.85	0.9685	285 56	1.2771	251 48	0.8921 <sub>n</sub>	704
8	5.96	0.9687	286 13	1.2775	250 45	0.8897 <sub>n</sub>	741
9	6.06	0.9690	286 30	1.2779	249 42	0.8873 <sub>n</sub>	778
10	+6.17	0.9692	286 48	1.2783	248 39	0.8847 <sub>n</sub>	814
11	6.28	0.9694	287 5	1.2787	247 36	0.8820 <sub>n</sub>	851
12	6.39	0.9696	287 23	1.2792	246 34	0.8791 <sub>n</sub>	887
13	6.50	0.9699	287 41	1.2797	245 31	0.8760 <sub>n</sub>	924
14	6.61	0.9701	287 59	1.2802	244 29	0.8729 <sub>n</sub>	961
15	+6.72	0.9703	288 17	1.2807	243 27	0.8696 <sub>n</sub>	997
16	6.84	0.9705	288 36	1.2812	242 25	0.8661 <sub>n</sub>	034
17	6.95	0.9707	288 55	1.2817	241 23	0.8625 <sub>n</sub>	071
18	7.07	0.9709	289 14	1.2823	240 22	0.8587 <sub>n</sub>	107
19	7.18	0.9711	289 33	1.2828	239 21	0.8547 <sub>n</sub>	144
20	+7.30	0.9714	289 52	1.2834	238 20	0.8506 <sub>n</sub>	180
21	7.42	0.9716	290 11	1.2840	237 19	0.8463 <sub>n</sub>	217
22	7.54	0.9719	290 31	1.2845	236 18	0.8419 <sub>n</sub>	254

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<sup>I2<sup>h</sup></sup> Mittl. Zeit	<i>f</i>	log. <i>g</i>	<i>G</i>	log. <i>h</i>	<i>H</i>	log. <i>i</i>	<i>C</i>
April 21	+ 7.54	0.9719	290° 31'	1.2845	236° 18'	0.8419 <sub>n</sub>	254
22	7.66	0.9722	290° 51'	1.2851	235° 17'	0.8372 <sub>n</sub>	290
23	7.78	0.9724	291° 11'	1.2857	234° 17'	0.8325 <sub>n</sub>	327
24	7.91	0.9727	291° 31'	1.2863	233° 17'	0.8276 <sub>n</sub>	363
25	8.03	0.9730	291° 52'	1.2870	232° 17'	0.8224 <sub>n</sub>	400
26	+ 8.15	0.9733	292° 12'	1.2876	231° 17'	0.8171 <sub>n</sub>	437
27	8.28	0.9737	292° 33'	1.2882	230° 17'	0.8116 <sub>n</sub>	473
28	8.41	0.9741	292° 54'	1.2888	229° 18'	0.8059 <sub>n</sub>	510
29	8.54	0.9745	293° 15'	1.2895	228° 19'	0.8000 <sub>n</sub>	546
30	8.67	0.9749	293° 36'	1.2901	227° 20'	0.7938 <sub>n</sub>	583
Mai 1	+ 8.81	0.9753	293° 58'	1.2907	226° 21'	0.7875 <sub>n</sub>	620
2	8.94	0.9757	294° 20'	1.2914	225° 23'	0.7810 <sub>n</sub>	656
3	9.08	0.9762	294° 42'	1.2920	224° 25'	0.7742 <sub>n</sub>	693
4	9.21	0.9767	295° 4	1.2926	223° 26'	0.7672 <sub>n</sub>	729
5	9.35	0.9772	295° 26'	1.2932	222° 28'	0.7600 <sub>n</sub>	766
6	+ 9.49	0.9777	295° 48'	1.2939	221° 31'	0.7525 <sub>n</sub>	803
7	9.63	0.9783	296° 10'	1.2945	220° 33'	0.7448 <sub>n</sub>	839
8	9.77	0.9789	296° 32'	1.2951	219° 36'	0.7368 <sub>n</sub>	876
9	9.91	0.9796	296° 55'	1.2957	218° 39'	0.7285 <sub>n</sub>	912
10	10.05	0.9803	297° 17'	1.2964	217° 42'	0.7200 <sub>n</sub>	949
11	+ 10.20	0.9810	297° 40'	1.2970	216° 45'	0.7112 <sub>n</sub>	986
12	10.35	0.9817	298° 3	1.2976	215° 48'	0.7020 <sub>n</sub>	1022
13	10.50	0.9825	298° 26'	1.2982	214° 52'	0.6926 <sub>n</sub>	1059
14	10.65	0.9833	298° 49'	1.2988	213° 55'	0.6828 <sub>n</sub>	1095
15	10.80	0.9842	299° 12'	1.2993	212° 59'	0.6726 <sub>n</sub>	1132
16	+ 10.95	0.9851	299° 35'	1.2999	211° 3	0.6621 <sub>n</sub>	1169
17	11.10	0.9860	299° 58'	1.3004	211° 8	0.6512 <sub>n</sub>	1205
18	11.25	0.9870	300° 21'	1.3010	210° 12'	0.6399 <sub>n</sub>	1242
19	11.41	0.9880	300° 44'	1.3015	209° 17'	0.6282 <sub>n</sub>	1278
20	11.56	0.9890	301° 7	1.3021	208° 21'	0.6161 <sub>n</sub>	1315
21	+ 11.72	0.9901	301° 30'	1.3026	207° 26'	0.6034 <sub>n</sub>	1352
22	11.88	0.9912	301° 53'	1.3031	206° 31'	0.5903 <sub>n</sub>	1388
23	12.04	0.9924	302° 16'	1.3036	205° 37'	0.5766 <sub>n</sub>	1425
24	12.20	0.9936	302° 39'	1.3041	204° 42'	0.5624 <sub>n</sub>	1461
25	12.36	0.9948	303° 2	1.3046	203° 47'	0.5476 <sub>n</sub>	1498
26	+ 12.52	0.9961	303° 25'	1.3050	202° 53'	0.5321 <sub>n</sub>	1535
27	12.69	0.9974	303° 47'	1.3055	201° 59'	0.5160 <sub>n</sub>	1571
28	12.85	0.9987	304° 10'	1.3059	201° 5	0.4990 <sub>n</sub>	1608

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$\text{12}^{\text{h}}$ Mittl. Zeit	$f$	$\log. g$	$G$	$\log. h$	$H$	$\log. i$	$\zeta$
Mai 28	+12.85	0.9987	304 10	1.3059	201 ° 5	0.4990 <sub>n</sub>	608
	13.02	1.0001	304 32	1.3063	200 11	0.4814 <sub>n</sub>	644
	13.18	1.0015	304 54	1.3067	199 17	0.4628 <sub>n</sub>	681
	13.35	1.0030	305 16	1.3071	198 23	0.4432 <sub>n</sub>	718
Juni 1	13.52	1.0045	305 38	1.3075	197 29	0.4226 <sub>n</sub>	754
	+13.69	1.0061	306 0	1.3078	196 36	0.4009 <sub>n</sub>	791
	13.86	1.0077	306 22	1.3082	195 42	0.3779 <sub>n</sub>	827
	14.03	1.0093	306 43	1.3085	194 49	0.3535 <sub>n</sub>	864
	14.20	1.0109	307 5	1.3088	193 56	0.3275 <sub>n</sub>	901
	14.37	1.0126	307 26	1.3091	193 3	0.2998 <sub>n</sub>	937
	+14.54	1.0143	307 47	1.3093	192 9	0.2700 <sub>n</sub>	974
	14.72	1.0161	308 8	1.3096	191 16	0.2379 <sub>n</sub>	010
	14.89	1.0179	308 29	1.3098	190 23	0.2033 <sub>n</sub>	047
	15.07	1.0197	308 49	1.3100	189 30	0.1653 <sub>n</sub>	084
	15.24	1.0215	309 9	1.3102	188 38	0.1236 <sub>n</sub>	120
12	+15.42	1.0234	309 29	1.3104	187 45	0.0774 <sub>n</sub>	157
	15.59	1.0253	309 48	1.3105	186 52	0.0255 <sub>n</sub>	193
	15.77	1.0273	310 7	1.3107	185 59	9.9665 <sub>n</sub>	230
	15.94	1.0293	310 26	1.3108	185 7	9.8980 <sub>n</sub>	267
	16.12	1.0313	310 45	1.3109	184 14	9.8166 <sub>n</sub>	303
	+16.29	1.0333	311 4	1.3110	183 22	9.7161 <sub>n</sub>	340
18	16.47	1.0353	311 22	1.3111	182 29	9.5850 <sub>n</sub>	376
	16.65	1.0374	311 40	1.3111	181 36	9.3964 <sub>n</sub>	413
	16.82	1.0394	311 58	1.3111	180 44	9.0550 <sub>n</sub>	450
	17.00	1.0415	312 15	1.3111	179 51	8.3463	486
	+17.18	1.0437	312 32	1.3111	178 59	9.1981	523
23	17.35	1.0458	312 49	1.3111	178 6	9.4675	559
	17.53	1.0480	313 5	1.3110	177 14	9.6322	596
	17.70	1.0502	313 21	1.3110	176 21	9.7514	633
	17.88	1.0524	313 37	1.3109	175 29	9.8447	669
	+18.05	1.0546	313 53	1.3108	174 36	9.9214	706
28	18.23	1.0568	314 8	1.3106	173 44	9.9864	742
	18.40	1.0590	314 23	1.3105	172 51	0.0428	779
	18.58	1.0612	314 37	1.3103	171 58	0.0926	816
	18.76	1.0634	314 52	1.3101	171 6	0.1372	852
	+18.93	1.0656	315 6	1.3099	170 13	0.1775	889
Juli 1	19.11	1.0679	315 20	1.3097	169 20	0.2142	925
	19.28	1.0701	315 33	1.3095	168 27	0.2480	962

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<sup>12<sup>h</sup></sup>	Mittl. Zeit	<i>f</i>	log. <i>g</i>	<i>G</i>	log. <i>h</i>	<i>H</i>	log. <i>i</i>	<i>C</i>
Juli	4	+19.28	1.0701	315° 33	1.3095	168° 27	0.2480	962
	5	19.45	1.0724	315 46	1.3092	167 35	0.2793	999
	6	19.62	1.0746	315 59	1.3090	166 42	0.3083	035
	7	19.79	1.0769	316 12	1.3087	165 48	0.3354	072
	8	19.96	1.0791	316 24	1.3084	164 55	0.3608	108
	9	+20.13	1.0814	316 36	1.3080	164 2	0.3847	145
	10	20.30	1.0836	316 48	1.3077	163 9	0.4072	182
	11	20.47	1.0859	316 59	1.3074	162 16	0.4285	218
	12	20.64	1.0881	317 10	1.3070	161 22	0.4487	255
	13	20.81	1.0904	317 21	1.3066	160 29	0.4679	291
	14	+20.97	1.0926	317 31	1.3062	159 35	0.4861	328
	15	21.14	1.0948	317 41	1.3058	158 41	0.5035	365
	16	21.30	1.0970	317 51	1.3054	157 47	0.5202	401
	17	21.46	1.0992	318 1	1.3049	156 53	0.5361	438
	18	21.63	1.1014	318 10	1.3045	155 59	0.5513	474
	19	+21.79	1.1036	318 20	1.3040	155 5	0.5659	511
	20	21.95	1.1057	318 29	1.3035	154 11	0.5799	548
	21	22.11	1.1079	318 38	1.3030	153 17	0.5933	584
	22	22.27	1.1100	318 47	1.3025	152 22	0.6062	621
	23	22.43	1.1121	318 55	1.3020	151 27	0.6187	657
	24	+22.58	1.1142	319 3	1.3015	150 32	0.6306	694
	25	22.74	1.1163	319 11	1.3009	149 37	0.6422	731
	26	22.89	1.1184	319 18	1.3004	148 42	0.6533	767
	27	23.04	1.1205	319 26	1.2998	147 46	0.6641	804
	28	23.19	1.1225	319 33	1.2992	146 51	0.6744	840
	29	+23.34	1.1246	319 40	1.2987	145 55	0.6844	877
	30	23.49	1.1266	319 47	1.2981	144 59	0.6941	914
	31	23.64	1.1286	319 54	1.2975	144 3	0.7034	950
Aug.	1	23.78	1.1306	320 0	1.2969	143 7	0.7124	987
	2	23.93	1.1326	320 7	1.2963	142 11	0.7211	023
	3	+24.07	1.1345	320 13	1.2957	141 14	0.7296	060
	4	24.21	1.1365	320 19	1.2951	140 17	0.7377	097
	5	24.36	1.1384	320 25	1.2944	139 21	0.7456	133
	6	24.50	1.1403	320 31	1.2938	138 24	0.7532	170
	7	24.64	1.1422	320 36	1.2932	137 26	0.7606	206
	8	+24.78	1.1440	320 41	1.2926	136 29	0.7678	243
	9	24.91	1.1458	320 47	1.2919	135 31	0.7747	280
	10	25.05	1.1476	320 52	1.2913	134 34	0.7814	316

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<sup>12<sup>h</sup></sup>	Mittl. Zeit	<i>f</i>	log. <i>g</i>	<i>G</i>	log. <i>h</i>	<i>H</i>	log. <i>i</i>	$\zeta$
Aug. 10	+25.05	1.1476	320° 52'	1.2913	134° 34'	0.7814	316	
	25.18	1.1494	320 57	1.2907	133 36	0.7879	353	
	25.31	1.1512	321 2	1.2901	132 37	0.7941	389	
	25.44	1.1529	321 7	1.2894	131 39	0.8001	426	
	25.57	1.1546	321 12	1.2888	130 40	0.8060	463	
	+25.70	1.1563	321 16	1.2882	129 42	0.8116	499	
	25.83	1.1580	321 21	1.2876	128 43	0.8171	536	
	25.95	1.1597	321 25	1.2870	127 44	0.8224	572	
	26.08	1.1614	321 30	1.2864	126 45	0.8274	609	
	26.20	1.1630	321 34	1.2858	125 45	0.8323	646	
	+26.32	1.1646	321 38	1.2852	124 46	0.8371	682	
	26.45	1.1661	321 42	1.2846	123 46	0.8416	719	
	26.57	1.1677	321 46	1.2840	122 46	0.8460	755	
	26.69	1.1692	321 51	1.2834	121 45	0.8503	792	
	26.80	1.1707	321 55	1.2829	120 45	0.8544	829	
Sept. 1	+26.92	1.1722	321 59	1.2823	119 44	0.8583	865	
	27.03	1.1737	322 3	1.2818	118 44	0.8620	902	
	27.15	1.1751	322 7	1.2812	117 43	0.8656	938	
	27.26	1.1765	322 11	1.2807	116 41	0.8691	975	
	27.38	1.1779	322 15	1.2802	115 40	0.8724	012	
	+27.49	1.1793	322 19	1.2797	114 39	0.8756	048	
	27.60	1.1806	322 23	1.2793	113 37	0.8786	085	
	27.71	1.1820	322 27	1.2788	112 35	0.8814	122	
	27.82	1.1833	322 31	1.2784	111 33	0.8842	158	
	27.93	1.1846	322 35	1.2779	110 31	0.8868	195	
	+28.04	1.1859	322 39	1.2775	109 29	0.8892	231	
	28.14	1.1871	322 43	1.2772	108 27	0.8915	268	
	28.25	1.1883	322 47	1.2768	107 24	0.8937	305	
	28.35	1.1895	322 51	1.2764	106 21	0.8958	341	
	28.45	1.1907	322 55	1.2761	105 19	0.8977	378	
14	+28.56	1.1919	322 59	1.2758	104 16	0.8995	414	
	28.66	1.1931	323 4	1.2755	103 13	0.9011	451	
	28.77	1.1943	323 8	1.2752	102 10	0.9026	488	
	28.87	1.1954	323 13	1.2750	101 6	0.9040	524	
	28.97	1.1965	323 17	1.2747	100 3	0.9053	561	
	+29.07	1.1976	323 22	1.2745	98 59	0.9064	597	
	29.17	1.1987	323 26	1.2743	97 56	0.9074	634	
	29.27	1.1997	323 31	1.2742	96 52	0.9083	671	

## Konstanten für die mittleren Tage 1912,

ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

$\text{12}^{\text{h}}$ Mittl. Zeit	$f$	log. $g$	$G$	log. $h$	$H$	log. $i$	$\zeta$
Sept. 16	+29.27	1.1997	323° 31'	1.2742	96° 52'	0.9083	671
17	29.37	1.2008	323 36	1.2740	95 49	0.9091	707
18	29.47	1.2018	323 40	1.2739	94 45	0.9097	744
19	29.57	1.2029	323 45	1.2738	93 41	0.9102	780
20	29.67	1.2039	323 50	1.2737	92 37	0.9106	817
21	+29.77	1.2049	323 55	1.2737	91 33	0.9108	854
22	29.87	1.2059	324 0	1.2737	90 29	0.9109	890
23	29.97	1.2069	324 5	1.2737	89 25	0.9109	927
24	30.07	1.2078	324 10	1.2737	88 21	0.9108	963
25	30.17	1.2088	324 15	1.2738	87 17	0.9105	000
26	+30.27	1.2097	324 21	1.2738	86 13	0.9101	037
27	30.37	1.2107	324 26	1.2739	85 8	0.9096	073
28	30.47	1.2116	324 32	1.2740	84 4	0.9090	110
29	30.58	1.2125	324 38	1.2742	83 0	0.9082	146
30	30.68	1.2134	324 44	1.2744	81 56	0.9073	183
Okt. 1	+30.78	1.2143	324 50	1.2746	80 52	0.9063	220
2	30.88	1.2152	324 56	1.2748	79 48	0.9051	256
3	30.98	1.2161	325 2	1.2750	78 44	0.9038	293
4	31.08	1.2170	325 8	1.2753	77 40	0.9024	329
5	31.19	1.2179	325 14	1.2755	76 36	0.9008	366
6	+31.29	1.2188	325 21	1.2758	75 32	0.8991	403
7	31.40	1.2197	325 28	1.2762	74 28	0.8973	439
8	31.50	1.2205	325 35	1.2765	73 24	0.8953	476
9	31.61	1.2214	325 42	1.2769	72 20	0.8932	512
10	31.71	1.2223	325 49	1.2773	71 16	0.8909	549
11	+31.82	1.2232	325 56	1.2777	70 13	0.8885	586
12	31.93	1.2240	326 3	1.2781	69 9	0.8859	622
13	32.04	1.2249	326 10	1.2785	68 6	0.8832	659
14	32.15	1.2257	326 17	1.2790	67 3	0.8804	695
15	32.26	1.2266	326 24	1.2795	65 59	0.8774	732
16	+32.38	1.2275	326 32	1.2799	64 56	0.8743	769
17	32.49	1.2283	326 39	1.2804	63 53	0.8710	805
18	32.61	1.2292	326 47	1.2810	62 50	0.8675	842
19	32.72	1.2301	326 55	1.2815	61 47	0.8639	878
20	32.84	1.2310	327 3	1.2821	60 45	0.8601	915
21	+32.96	1.2319	327 11	1.2826	59 42	0.8561	952
22	33.08	1.2328	327 19	1.2832	58 40	0.8520	988
23	33.20	1.2337	327 27	1.2838	57 37	0.8477	025

Konstanten für die mittleren Tage 1912,  
ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

I <sup>21</sup> Mittl. Zeit	f	log. g	G	log. h	H	log. i	C
Okt. 23	+ 33.20	1.2337	327° 27'	1.2838	57° 37'	0.8477	025
24	33.32	1.2347	327 36	1.2844	56 35	0.8432	061
25	33.44	1.2356	327 44	1.2850	55 33	0.8385	098
26	33.57	1.2366	327 53	1.2856	54 31	0.8337	135
27	33.69	1.2376	328 1	1.2862	53 29	0.8286	171
28	+ 33.82	1.2385	328 10	1.2868	52 28	0.8233	208
29	33.95	1.2395	328 18	1.2875	51 27	0.8179	244
30	34.08	1.2404	328 27	1.2881	50 25	0.8123	281
31	34.21	1.2414	328 36	1.2888	49 24	0.8064	318
Nov. 1	34.34	1.2424	328 45	1.2894	48 23	0.8004	354
2	+ 34.47	1.2434	328 54	1.2900	47 22	0.7941	391
3	34.61	1.2444	329 3	1.2907	46 22	0.7875	427
4	34.74	1.2454	329 12	1.2914	45 21	0.7807	464
5	34.88	1.2465	329 21	1.2920	44 21	0.7737	501
6	35.02	1.2475	329 30	1.2927	43 20	0.7665	537
7	+ 35.16	1.2486	329 39	1.2933	42 20	0.7589	574
8	35.30	1.2497	329 48	1.2940	41 20	0.7511	610
9	35.45	1.2508	329 57	1.2946	40 21	0.7430	647
10	35.59	1.2519	330 6	1.2953	39 21	0.7346	684
11	35.74	1.2531	330 15	1.2959	38 21	0.7260	720
12	+ 35.89	1.2542	330 24	1.2966	37 22	0.7170	757
13	36.04	1.2554	330 33	1.2972	36 23	0.7076	793
14	36.19	1.2566	330 42	1.2978	35 24	0.6980	830
15	36.34	1.2578	330 51	1.2985	34 25	0.6879	867
16	36.49	1.2590	331 0	1.2991	33 26	0.6775	903
17	+ 36.65	1.2602	331 9	1.2997	32 27	0.6666	940
18	36.81	1.2614	331 18	1.3003	31 29	0.6554	976
19	36.97	1.2627	331 27	1.3008	30 31	0.6437	013
20	37.13	1.2639	331 36	1.3014	29 32	0.6315	050
21	37.29	1.2652	331 45	1.3020	28 34	0.6189	086
22	+ 37.45	1.2665	331 54	1.3025	27 36	0.6057	123
23	37.62	1.2678	332 3	1.3031	26 38	0.5920	159
24	37.78	1.2691	332 12	1.3036	25 41	0.5777	196
25	37.95	1.2705	332 20	1.3041	24 43	0.5627	233
26	38.12	1.2718	332 29	1.3046	23 46	0.5471	269
27	+ 38.29	1.2732	332 37	1.3051	22 48	0.5307	306
28	38.46	1.2746	332 45	1.3055	21 51	0.5135	342
29	38.63	1.2760	332 53	1.3060	20 54	0.4955	379

Konstanten für die mittleren Tage 1912,  
ohne Berücksichtigung der von der Mondlänge abhängenden Glieder der Nutation.

<sup>12<sup>h</sup></sup>	Mittl. Zeit	f	log. g	G	log. h	II	log. i	C
Nov. 29	+38.63	1.2760	332 53	1.3060	20° 54'	0.4955	379	
30	38.80	1.2774	333 1	1.3064	19 57	0.4766	416	
Dez. 1	38.97	1.2788	333 9	1.3068	19 0	0.4567	452	
2	39.14	1.2802	333 17	1.3072	18 3	0.4356	489	
3	39.32	1.2816	333 25	1.3076	17 6	0.4133	525	
4	+39.49	1.2830	333 33	1.3080	16 9	0.3897	562	
5	39.67	1.2845	333 41	1.3083	15 13	0.3645	599	
6	39.85	1.2860	333 49	1.3087	14 16	0.3377	635	
7	40.03	1.2875	333 56	1.3090	13 20	0.3089	672	
8	40.21	1.2890	334 3	1.3093	12 23	0.2779	708	
9	+40.39	1.2905	334 10	1.3095	11 27	0.2444	745	
10	40.57	1.2920	334 17	1.3098	10 30	0.2079	782	
11	40.75	1.2935	334 24	1.3100	9 34	0.1679	818	
12	40.93	1.2950	334 31	1.3102	8 38	0.1238	855	
13	41.11	1.2965	334 38	1.3104	7 42	0.0744	891	
14	+41.29	1.2980	334 45	1.3106	6 45	0.0185	928	
15	41.48	1.2996	334 51	1.3107	5 49	9.9542	965	
16	41.66	1.3011	334 57	1.3108	4 53	9.8785	001	
17	41.84	1.3027	335 3	1.3109	3 57	9.7865	038	
18	42.02	1.3042	335 9	1.3110	3 1	9.6696	074	
19	+42.21	1.3058	335 15	1.3111	2 5	9.5088	111	
20	42.40	1.3073	335 21	1.3111	1 9	9.2504	148	
21	42.58	1.3089	335 26	1.3111	0 13	8.5211	184	
22	42.77	1.3104	335 32	1.3111	359 17	9.0480 <sub>n</sub>	221	
23	42.95	1.3120	335 37	1.3111	358 21	9.4091 <sub>n</sub>	257	
24	+43.13	1.3136	335 42	1.3110	357 25	9.6035 <sub>n</sub>	294	
25	43.32	1.3151	335 47	1.3110	356 29	9.7372 <sub>n</sub>	331	
26	43.50	1.3167	335 52	1.3109	355 32	9.8391 <sub>n</sub>	367	
27	43.69	1.3183	335 56	1.3108	354 36	9.9215 <sub>n</sub>	404	
28	43.87	1.3199	336 1	1.3106	353 40	9.9907 <sub>n</sub>	440	
29	+44.05	1.3214	336 5	1.3105	352 44	0.0502 <sub>n</sub>	477	
30	44.23	1.3230	336 9	1.3103	351 47	0.1024 <sub>n</sub>	514	
31	44.42	1.3245	336 13	1.3101	350 51	0.1489 <sub>n</sub>	550	
32	44.60	1.3261	336 17	1.3099	349 55	0.1907 <sub>n</sub>	587	
33	44.78	1.3276	336 21	1.3096	348 58	0.2287 <sub>n</sub>	623	
34	+44.96	1.3292	336 25	1.3094	348 2	0.2636 <sub>n</sub>	660	
35	45.14	1.3307	336 28	1.3091	347 5	0.2957 <sub>n</sub>	697	
36	45.32	1.3323	336 32	1.3088	346 8	0.3255 <sub>n</sub>	733	

Konstanten zur Berücksichtigung der Nutationsglieder von kurzer Periode für 1912.

$\mathfrak{C}$	log. $A'$	log. $B'$	$f'$	log. $g'$	$G'$	$\mathfrak{C}$	log. $A'$	log. $B'$	$f'$	log. $g'$	$G'$
000	7.051 <sub>n</sub>	8.946 <sub>n</sub>	-0.05	8.960	255.7	350	7.593	8.436	+0.18	8.920	19.2
010	7.224 <sub>n</sub>	8.943 <sub>n</sub>	-0.08	8.973	249.0	360	7.616	8.219	+0.19	8.926	11.3
020	7.345 <sub>n</sub>	8.933 <sub>n</sub>	-0.10	8.984	242.6	370	7.631	7.744	+0.20	8.934	3.7
030	7.436 <sub>n</sub>	8.915 <sub>n</sub>	-0.13	8.995	236.3	380	7.639	7.744 <sub>n</sub>	+0.20	8.942	356.4
040	7.508 <sub>n</sub>	8.889 <sub>n</sub>	-0.15	9.004	230.2	390	7.641	8.219 <sub>n</sub>	+0.20	8.951	349.3
050	7.565 <sub>n</sub>	8.854 <sub>n</sub>	-0.17	9.011	224.2	400	7.636	8.436 <sub>n</sub>	+0.20	8.959	342.5
060	7.611 <sub>n</sub>	8.809 <sub>n</sub>	-0.19	9.018	218.2	410	7.625	8.576 <sub>n</sub>	+0.20	8.966	336.0
070	7.648 <sub>n</sub>	8.751 <sub>n</sub>	-0.21	9.023	212.3	420	7.608	8.675 <sub>n</sub>	+0.19	8.973	329.7
080	7.677 <sub>n</sub>	8.675 <sub>n</sub>	-0.22	9.027	206.4	430	7.583	8.751 <sub>n</sub>	+0.18	8.978	323.7
090	7.699 <sub>n</sub>	8.576 <sub>n</sub>	-0.23	9.030	200.6	440	7.550	8.809 <sub>n</sub>	+0.16	8.982	317.8
100	7.715 <sub>n</sub>	8.436 <sub>n</sub>	-0.24	9.031	194.7	450	7.508	8.854 <sub>n</sub>	+0.15	8.984	312.1
110	7.725 <sub>n</sub>	8.219 <sub>n</sub>	-0.24	9.032	188.8	460	7.456	8.889 <sub>n</sub>	+0.13	8.984	306.5
120	7.729 <sub>n</sub>	7.744 <sub>n</sub>	-0.25	9.032	182.9	470	7.391	8.915 <sub>n</sub>	+0.11	8.982	300.9
130	7.728 <sub>n</sub>	7.744	-0.25	9.030	177.0	480	7.308	8.933 <sub>n</sub>	+0.09	8.977	295.4
140	7.721 <sub>n</sub>	8.219	-0.24	9.028	171.1	490	7.200	8.943 <sub>n</sub>	+0.07	8.970	289.9
150	7.708 <sub>n</sub>	8.436	-0.23	9.025	165.0	500	7.051	8.946 <sub>n</sub>	+0.05	8.960	284.3
160	7.689 <sub>n</sub>	8.576	-0.22	9.020	158.9	510	6.821	8.943 <sub>n</sub>	+0.03	8.948	278.6
170	7.663 <sub>n</sub>	8.675	-0.21	9.015	152.8	520	6.306	8.933 <sub>n</sub>	+0.01	8.933	272.7
180	7.629 <sub>n</sub>	8.751	-0.20	9.010	146.6	530	6.392 <sub>n</sub>	8.915 <sub>n</sub>	-0.01	8.916	266.6
190	7.587 <sub>n</sub>	8.809	-0.18	9.003	140.2	540	6.831 <sub>n</sub>	8.889 <sub>n</sub>	-0.03	8.896	260.1
200	7.534 <sub>n</sub>	8.854	-0.16	8.996	133.8	550	7.034 <sub>n</sub>	8.854 <sub>n</sub>	-0.05	8.874	253.2
210	7.468 <sub>n</sub>	8.889	-0.14	8.988	127.2	560	7.162 <sub>n</sub>	8.809 <sub>n</sub>	-0.07	8.850	245.7
220	7.383 <sub>n</sub>	8.915	-0.11	8.980	120.5	570	7.252 <sub>n</sub>	8.751 <sub>n</sub>	-0.08	8.825	237.6
230	7.272 <sub>n</sub>	8.933	-0.09	8.971	113.7	580	7.318 <sub>n</sub>	8.675 <sub>n</sub>	-0.09	8.800	228.7
240	7.116 <sub>n</sub>	8.943	-0.06	8.962	106.6	590	7.365 <sub>n</sub>	8.576 <sub>n</sub>	-0.11	8.777	219.0
250	6.864 <sub>n</sub>	8.946	-0.03	8.952	99.4	600	7.399 <sub>n</sub>	8.436 <sub>n</sub>	-0.12	8.757	208.5
260	6.180 <sub>n</sub>	8.943	-0.01	8.943	92.0	610	7.422 <sub>n</sub>	8.219 <sub>n</sub>	-0.12	8.744	197.4
270	6.626	8.933	+0.02	8.935	84.3	620	7.434 <sub>n</sub>	7.744 <sub>n</sub>	-0.13	8.738	185.8
280	6.992	8.915	+0.05	8.927	76.5	630	7.437 <sub>n</sub>	7.744	-0.13	8.741	174.2
290	7.182	8.889	+0.07	8.920	68.5	640	7.430 <sub>n</sub>	8.219	-0.12	8.752	162.9
300	7.308	8.854	+0.09	8.915	60.4	650	7.414 <sub>n</sub>	8.436	-0.12	8.769	152.3
310	7.399	8.809	+0.12	8.912	52.1	660	7.388 <sub>n</sub>	8.576	-0.11	8.791	142.4
320	7.468	8.751	+0.14	8.911	43.8	670	7.349 <sub>n</sub>	8.675	-0.10	8.814	133.4
330	7.521	8.675	+0.15	8.912	35.5	680	7.296 <sub>n</sub>	8.751	-0.09	8.838	125.1
340	7.562	8.576	+0.17	8.915	27.3	690	7.224 <sub>n</sub>	8.809	-0.08	8.861	117.5
350	7.593	8.436	+0.18	8.920	19.2	700	7.126 <sub>n</sub>	8.854	-0.06	8.883	110.5

Konstanten zur Berücksichtigung der Nutationsglieder von kurzer Periode für 1912.

$\zeta$	log. $A'$	log. $B'$	$f'$	log. $g'$	$G'$	$\zeta$	log. $A'$	log. $B'$	$f'$	log. $g'$	$G'$
700	7.126 <sub>n</sub>	8.854	-0.06	8.883	110.5	850	7.577	8.436	+0.17	8.906	19.9
710	6.983 <sub>n</sub>	8.889	-0.04	8.902	104.0	860	7.582	8.219	+0.18	8.894	12.2
720	6.749 <sub>n</sub>	8.915	-0.03	8.919	97.8	870	7.580	7.744	+0.18	8.883	4.2
730	6.147 <sub>n</sub>	8.933	-0.01	8.933	91.9	880	7.570	7.744 <sub>n</sub>	+0.17	8.873	355.8
740	6.466	8.943	+0.01	8.944	86.2	890	7.553	8.219 <sub>n</sub>	+0.16	8.866	347.0
750	6.864	8.946	+0.03	8.952	80.6	900	7.527	8.436 <sub>n</sub>	+0.15	8.862	338.0
760	7.066	8.943	+0.05	8.958	75.1	910	7.491	8.576 <sub>n</sub>	+0.14	8.861	328.8
770	7.201	8.933	+0.07	8.961	69.6	920	7.444	8.675 <sub>n</sub>	+0.13	8.864	319.6
780	7.300	8.915	+0.09	8.961	64.0	930	7.382	8.751 <sub>n</sub>	+0.11	8.871	310.6
790	7.376	8.889	+0.11	8.959	58.4	940	7.299	8.809 <sub>n</sub>	+0.09	8.880	301.8
800	7.435	8.854	+0.13	8.954	52.7	950	7.186	8.854 <sub>n</sub>	+0.07	8.891	293.3
810	7.482	8.809	+0.14	8.947	46.7	960	7.017	8.889 <sub>n</sub>	+0.05	8.904	285.1
820	7.518	8.751	+0.15	8.939	40.4	970	6.716	8.915 <sub>n</sub>	+0.02	8.918	277.2
830	7.546	8.675	+0.16	8.929	33.9	980	5.283 <sub>n</sub>	8.933 <sub>n</sub>	0.00	8.933	269.7
840	7.565	8.576	+0.17	8.918	27.1	990	6.756 <sub>n</sub>	8.943 <sub>n</sub>	-0.03	8.947	262.6
850	7.577	8.436	+0.17	8.906	19.9	000	7.051 <sub>n</sub>	8.946 <sub>n</sub>	-0.05	8.960	255.7

Korrektion der Schiefe der Ekliptik für die Glieder von kurzer Periode.

Argument $\zeta$	$\Delta \varepsilon$	Argument $\zeta$	$\Delta \varepsilon$	Argument $\zeta$	$\Delta \varepsilon$
000	500	+0.09	200	700	-0.07
020	520	+0.09	220	720	-0.08
040	540	+0.08	240	740	-0.09
060	560	+0.07	260	760	-0.09
080	580	+0.05	280	780	-0.08
100	600	+0.03	300	800	-0.07
120	620	+0.01	320	820	-0.06
140	640	-0.02	340	840	-0.04
160	660	-0.04	360	860	-0.02
180	680	-0.06	380	880	+0.01
200	700	-0.07	400	900	+0.03

## REDUKTIONSTAFELN.

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen ob 50m.2 Berlin.

Datum in Mittl. Zeit	<i>t</i>	log. A	log. B	log. C	log. D	C	
Jan.	1.257	0.0000	9.1690 <sub>n</sub>	0.8787 <sub>n</sub>	0.5115 <sub>n</sub>	1.3045	-3.247
	2.254	0.0027	9.1520 <sub>n</sub>	0.8780 <sub>n</sub>	0.5533 <sub>n</sub>	1.3031	3.575
	3.251	0.0055	9.1333 <sub>n</sub>	0.8782 <sub>n</sub>	0.5912 <sub>n</sub>	1.3015	3.901
	4.249	0.0082	9.1139 <sub>n</sub>	0.8796 <sub>n</sub>	0.6260 <sub>n</sub>	1.2998	4.227
	5.246	0.0109	9.0952 <sub>n</sub>	0.8819 <sub>n</sub>	0.6581 <sub>n</sub>	1.2980	4.551
	6.243	0.0136	9.0781 <sub>n</sub>	0.8848 <sub>n</sub>	0.6878 <sub>n</sub>	1.2960	-4.873
	7.241	0.0164	9.0637 <sub>n</sub>	0.8878 <sub>n</sub>	0.7155 <sub>n</sub>	1.2938	5.194
	8.238	0.0191	9.0521 <sub>n</sub>	0.8905 <sub>n</sub>	0.7414 <sub>n</sub>	1.2915	5.513
	9.235	0.0218	9.0430 <sub>n</sub>	0.8926 <sub>n</sub>	0.7657 <sub>n</sub>	1.2891	5.831
	10.232	0.0246	9.0348 <sub>n</sub>	0.8936 <sub>n</sub>	0.7886 <sub>n</sub>	1.2865	6.147
	11.230	0.0273	9.0266 <sub>n</sub>	0.8938 <sub>n</sub>	0.8103 <sub>n</sub>	1.2838	-6.461
	12.227	0.0300	9.0165 <sub>n</sub>	0.8931 <sub>n</sub>	0.8307 <sub>n</sub>	1.2809	
	13.224	0.0328	9.0035 <sub>n</sub>	0.8919 <sub>n</sub>	0.8501 <sub>n</sub>	1.2778	
	14.221	0.0355	8.9868 <sub>n</sub>	0.8906 <sub>n</sub>	0.8686 <sub>n</sub>	1.2746	
	15.219	0.0382	8.9661 <sub>n</sub>	0.8898 <sub>n</sub>	0.8862 <sub>n</sub>	1.2712	
	16.216	0.0410	8.9420 <sub>n</sub>	0.8898 <sub>n</sub>	0.9029 <sub>n</sub>	1.2677	
	17.213	0.0437	8.9156 <sub>n</sub>	0.8908 <sub>n</sub>	0.9189 <sub>n</sub>	1.2640	
	18.211	0.0464	8.8885 <sub>n</sub>	0.8928 <sub>n</sub>	0.9342 <sub>n</sub>	1.2601	
	19.208	0.0491	8.8630 <sub>n</sub>	0.8956 <sub>n</sub>	0.9488 <sub>n</sub>	1.2561	
	20.205	0.0519	8.8405 <sub>n</sub>	0.8989 <sub>n</sub>	0.9628 <sub>n</sub>	1.2518	
	21.202	0.0546	8.8223 <sub>n</sub>	0.9022 <sub>n</sub>	0.9763 <sub>n</sub>	1.2474	
	22.200	0.0573	8.8083 <sub>n</sub>	0.9050 <sub>n</sub>	0.9892 <sub>n</sub>	1.2428	
	23.197	0.0601	8.7971 <sub>n</sub>	0.9071 <sub>n</sub>	1.0016 <sub>n</sub>	1.2381	
	24.194	0.0628	8.7866 <sub>n</sub>	0.9081 <sub>n</sub>	1.0135 <sub>n</sub>	1.2331	
	25.191	0.0655	8.7739 <sub>n</sub>	0.9082 <sub>n</sub>	1.0250 <sub>n</sub>	1.2280	
	26.189	0.0683	8.7562 <sub>n</sub>	0.9076 <sub>n</sub>	1.0360 <sub>n</sub>	1.2226	
	27.186	0.0710	8.7311 <sub>n</sub>	0.9067 <sub>n</sub>	1.0467 <sub>n</sub>	1.2171	
	28.183	0.0737	8.6970 <sub>n</sub>	0.9058 <sub>n</sub>	1.0569 <sub>n</sub>	1.2113	
	29.181	0.0764	8.6532 <sub>n</sub>	0.9055 <sub>n</sub>	1.0668 <sub>n</sub>	1.2053	
	30.178	0.0792	8.5997 <sub>n</sub>	0.9060 <sub>n</sub>	1.0763 <sub>n</sub>	1.1991	
	31.175	0.0819	8.5372 <sub>n</sub>	0.9074 <sub>n</sub>	1.0855 <sub>n</sub>	1.1927	
Febr.	1.172	0.0846	8.4683 <sub>n</sub>	0.9098 <sub>n</sub>	1.0943 <sub>n</sub>	1.1861	
	2.170	0.0874	8.3978 <sub>n</sub>	0.9129 <sub>n</sub>	1.1029 <sub>n</sub>	1.1792	
	3.167	0.0901	8.3314 <sub>n</sub>	0.9162 <sub>n</sub>	1.1111 <sub>n</sub>	1.1720	
	4.164	0.0928	8.2744 <sub>n</sub>	0.9194 <sub>n</sub>	1.1190 <sub>n</sub>	1.1646	
	5.161	0.0956	8.2284 <sub>n</sub>	0.9220 <sub>n</sub>	1.1267 <sub>n</sub>	1.1570	
	6.159	0.0983	8.1914 <sub>n</sub>	0.9238 <sub>n</sub>	1.1341 <sub>n</sub>	1.1491	
	7.156	0.1010	8.1550 <sub>n</sub>	0.9246 <sub>n</sub>	1.1413 <sub>n</sub>	1.1408	

$$E = -0.02$$

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen 0<sup>h</sup> 50<sup>m</sup>.2 Berlin.

Datum in Mittl. Zeit	<i>t</i>	log. <i>A</i>	log. <i>B</i>	log. <i>C</i>	log. <i>D</i>	<i>D</i>
Febr.	7.156	0.1010	8.1550 <sub>n</sub>	0.9246 <sub>n</sub>	1.1413 <sub>n</sub>	1.1408
	8.153	0.1038	8.1079 <sub>n</sub>	0.9246 <sub>n</sub>	1.1482 <sub>n</sub>	1.1323
	9.151	0.1065	8.0342 <sub>n</sub>	0.9239 <sub>n</sub>	1.1548 <sub>n</sub>	1.1235
	10.148	0.1092	7.9085 <sub>n</sub>	0.9230 <sub>n</sub>	1.1612 <sub>n</sub>	1.1144
	11.145	0.1120	7.6674 <sub>n</sub>	0.9223 <sub>n</sub>	1.1674 <sub>n</sub>	1.1050
	12.142	0.1147	6.7924 <sub>n</sub>	0.9221 <sub>n</sub>	1.1734 <sub>n</sub>	1.0952
	13.140	0.1174	7.5717	0.9229 <sub>n</sub>	1.1791 <sub>n</sub>	1.0850
	14.137	0.1201	7.9015	0.9245 <sub>n</sub>	1.1847 <sub>n</sub>	1.0745
	15.134	0.1229	8.0719	0.9270 <sub>n</sub>	1.1900 <sub>n</sub>	1.0635
	16.131	0.1256	8.1746	0.9300 <sub>n</sub>	1.1951 <sub>n</sub>	1.0522
	17.129	0.1283	8.2373	0.9331 <sub>n</sub>	1.2001 <sub>n</sub>	1.0404
	18.126	0.1311	8.2742	0.9359 <sub>n</sub>	1.2048 <sub>n</sub>	1.0282
	19.123	0.1338	8.2953	0.9381 <sub>n</sub>	1.2094 <sub>n</sub>	1.0154
	20.121	0.1365	8.3096	0.9394 <sub>n</sub>	1.2138 <sub>n</sub>	1.0022
	21.118	0.1393	8.3257	0.9398 <sub>n</sub>	1.2180 <sub>n</sub>	0.9884
	22.115	0.1420	8.3506	0.9393 <sub>n</sub>	1.2220 <sub>n</sub>	0.9740
	23.112	0.1447	8.3876	0.9384 <sub>n</sub>	1.2259 <sub>n</sub>	0.9590
	24.110	0.1474	8.4360	0.9373 <sub>n</sub>	1.2296 <sub>n</sub>	0.9433
	25.107	0.1502	8.4909	0.9366 <sub>n</sub>	1.2331 <sub>n</sub>	0.9269
	26.104	0.1529	8.5472	0.9364 <sub>n</sub>	1.2365 <sub>n</sub>	0.9098
	27.101	0.1556	8.5997	0.9372 <sub>n</sub>	1.2397 <sub>n</sub>	0.8918
	28.099	0.1584	8.6454	0.9388 <sub>n</sub>	1.2427 <sub>n</sub>	0.8729
	29.096	0.1611	8.6822	0.9411 <sub>n</sub>	1.2456 <sub>n</sub>	0.8530
März	1.093	0.1638	8.7096	0.9438 <sub>n</sub>	1.2483 <sub>n</sub>	0.8320
	2.090	0.1666	8.7282	0.9465 <sub>n</sub>	1.2509 <sub>n</sub>	0.8098
	3.088	0.1693	8.7396	0.9488 <sub>n</sub>	1.2534 <sub>n</sub>	0.7864
	4.085	0.1720	8.7461	0.9503 <sub>n</sub>	1.2557 <sub>n</sub>	0.7614
	5.082	0.1747	8.7503	0.9510 <sub>n</sub>	1.2578 <sub>n</sub>	0.7348
	6.080	0.1775	8.7553	0.9508 <sub>n</sub>	1.2598 <sub>n</sub>	0.7063
	7.077	0.1802	8.7635	0.9498 <sub>n</sub>	1.2617 <sub>n</sub>	0.6757
	8.074	0.1829	8.7767	0.9485 <sub>n</sub>	1.2634 <sub>n</sub>	0.6426
	9.071	0.1857	8.7948	0.9471 <sub>n</sub>	1.2650 <sub>n</sub>	0.6068
	10.069	0.1884	8.8167	0.9461 <sub>n</sub>	1.2665 <sub>n</sub>	0.5675
	11.066	0.1911	8.8402	0.9459 <sub>n</sub>	1.2678 <sub>n</sub>	0.5242
	12.063	0.1939	8.8631	0.9465 <sub>n</sub>	1.2690 <sub>n</sub>	0.4760
	13.060	0.1966	8.8833	0.9479 <sub>n</sub>	1.2700 <sub>n</sub>	0.4217
	14.058	0.1993	8.8994	0.9499 <sub>n</sub>	1.2709 <sub>n</sub>	0.3595
	15.055	0.2021	8.9108	0.9522 <sub>n</sub>	1.2717 <sub>n</sub>	0.2867
						1.935

$$E = -0.01$$

## REDUKTIONSTAFELN.

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen ob 50<sup>m.2</sup> Berlin.

Datum in Mittl. Zeit	<i>t</i>	log. A	log. B	log. C	log. D	<i>D</i>
März 15.055	0.2021	8.9108	0.9522 <sub>n</sub>	1.2717 <sub>n</sub>	0.2867	+1.935
16.052	0.2048	8.9178	0.9544 <sub>n</sub>	1.2724 <sub>n</sub>	0.1992	1.582
17.050	0.2075	8.9213	0.9560 <sub>n</sub>	1.2729 <sub>n</sub>	0.0893	1.228
18.047	0.2102	8.9225	0.9569 <sub>n</sub>	1.2733 <sub>n</sub>	9.9418	0.874
19.044	0.2130	8.9238	0.9568 <sub>n</sub>	1.2735 <sub>n</sub>	9.7166	0.521
20.041	0.2157	8.9269	0.9560 <sub>n</sub>	1.2737 <sub>n</sub>	9.2224	+0.167
21.039	0.2184	8.9334	0.9544 <sub>n</sub>	1.2737 <sub>n</sub>	9.2714 <sub>n</sub>	-0.187
22.036	0.2212	8.9442	0.9526 <sub>n</sub>	1.2735 <sub>n</sub>	9.7326 <sub>n</sub>	0.540
23.033	0.2239	8.9590	0.9509 <sub>n</sub>	1.2733 <sub>n</sub>	9.9510 <sub>n</sub>	0.893
24.030	0.2266	8.9765	0.9497 <sub>n</sub>	1.2729 <sub>n</sub>	0.0955 <sub>n</sub>	1.246
25.028	0.2294	8.9954	0.9492 <sub>n</sub>	1.2724 <sub>n</sub>	0.2035 <sub>n</sub>	-1.598
26.025	0.2321	9.0136	0.9496 <sub>n</sub>	1.2717 <sub>n</sub>	0.2898 <sub>n</sub>	1.949
27.022	0.2348	9.0299	0.9508 <sub>n</sub>	1.2709 <sub>n</sub>	0.3617 <sub>n</sub>	2.300
28.020	0.2375	9.0429	0.9525 <sub>n</sub>	1.2700 <sub>n</sub>	0.4231 <sub>n</sub>	2.649
29.017	0.2403	9.0525	0.9544 <sub>n</sub>	1.2690 <sub>n</sub>	0.4768 <sub>n</sub>	2.998
30.014	0.2430	9.0586	0.9560 <sub>n</sub>	1.2678 <sub>n</sub>	0.5245 <sub>n</sub>	-3.346
31.011	0.2457	9.0621	0.9570 <sub>n</sub>	1.2665 <sub>n</sub>	0.5673 <sub>n</sub>	3.692
April 1.008	0.2485	9.0642	0.9571 <sub>n</sub>	1.2651 <sub>n</sub>	0.6061 <sub>n</sub>	4.037
2.006	0.2512	9.0661	0.9564 <sub>n</sub>	1.2635 <sub>n</sub>	0.6416 <sub>n</sub>	4.381
3.003	0.2539	9.0694	0.9549 <sub>n</sub>	1.2618 <sub>n</sub>	0.6742 <sub>n</sub>	4.723
4.000	0.2567	9.0749	0.9528 <sub>n</sub>	1.2600 <sub>n</sub>	0.7045 <sub>n</sub>	-5.064
4.998	0.2594	9.0831	0.9506 <sub>n</sub>	1.2580 <sub>n</sub>	0.7326 <sub>n</sub>	5.403
5.995	0.2621	9.0939	0.9486 <sub>n</sub>	1.2559 <sub>n</sub>	0.7589 <sub>n</sub>	5.740
6.992	0.2649	9.1063	0.9471 <sub>n</sub>	1.2537 <sub>n</sub>	0.7836 <sub>n</sub>	6.075
7.989	0.2676	9.1193	0.9465 <sub>n</sub>	1.2513 <sub>n</sub>	0.8068 <sub>n</sub>	6.409
8.987	0.2703	9.1315	0.9468 <sub>n</sub>	1.2488 <sub>n</sub>	0.8286 <sub>n</sub>	
9.984	0.2730	9.1420	0.9478 <sub>n</sub>	1.2461 <sub>n</sub>	0.8494 <sub>n</sub>	
10.981	0.2758	9.1502	0.9492 <sub>n</sub>	1.2433 <sub>n</sub>	0.8690 <sub>n</sub>	
11.979	0.2785	9.1558	0.9506 <sub>n</sub>	1.2404 <sub>n</sub>	0.8876 <sub>n</sub>	
12.976	0.2812	9.1591	0.9518 <sub>n</sub>	1.2373 <sub>n</sub>	0.9054 <sub>n</sub>	
13.973	0.2840	9.1611	0.9522 <sub>n</sub>	1.2340 <sub>n</sub>	0.9223 <sub>n</sub>	
14.970	0.2867	9.1624	0.9517 <sub>n</sub>	1.2306 <sub>n</sub>	0.9385 <sub>n</sub>	
15.968	0.2894	9.1646	0.9504 <sub>n</sub>	1.2271 <sub>n</sub>	0.9539 <sub>n</sub>	
16.965	0.2922	9.1684	0.9483 <sub>n</sub>	1.2234 <sub>n</sub>	0.9687 <sub>n</sub>	
17.962	0.2949	9.1747	0.9458 <sub>n</sub>	1.2196 <sub>n</sub>	0.9829 <sub>n</sub>	
18.959	0.2976	9.1835	0.9432 <sub>n</sub>	1.2156 <sub>n</sub>	0.9965 <sub>n</sub>	
19.957	0.3003	9.1945	0.9410 <sub>n</sub>	1.2114 <sub>n</sub>	1.0096 <sub>n</sub>	
20.954	0.3031	9.2067	0.9395 <sub>n</sub>	1.2071 <sub>n</sub>	1.0221 <sub>n</sub>	

$$E = -0.02$$

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen ob 50°.2 Berlin.

Datum in Mittl. Zeit	<i>t</i>	log. <i>A</i>	log. <i>B</i>	log. <i>C</i>	log. <i>D</i>
April	20.954	0.3031	9.2067	0.9395 <sub>n</sub>	1.2071 <sub>n</sub>
	21.951	0.3058	9.2193	0.9389 <sub>n</sub>	1.2026 <sub>n</sub>
	22.949	0.3085	9.2311	0.9391 <sub>n</sub>	1.1979 <sub>n</sub>
	23.946	0.3113	9.2413	0.9400 <sub>n</sub>	1.1930 <sub>n</sub>
	24.943	0.3140	9.2495	0.9413 <sub>n</sub>	1.1880 <sub>n</sub>
	25.940	0.3167	9.2554	0.9425 <sub>n</sub>	1.1828 <sub>n</sub>
	26.938	0.3195	9.2595	0.9432 <sub>n</sub>	1.1774 <sub>n</sub>
	27.935	0.3222	9.2624	0.9432 <sub>n</sub>	1.1718 <sub>n</sub>
	28.932	0.3249	9.2650	0.9423 <sub>n</sub>	1.1661 <sub>n</sub>
	29.929	0.3277	9.2681	0.9405 <sub>n</sub>	1.1601 <sub>n</sub>
	30.927	0.3304	9.2724	0.9380 <sub>n</sub>	1.1539 <sub>n</sub>
	1.924	0.3331	9.2784	0.9352 <sub>n</sub>	1.1475 <sub>n</sub>
	2.921	0.3358	9.2861	0.9325 <sub>n</sub>	1.1409 <sub>n</sub>
Mai	3.918	0.3386	9.2951	0.9303 <sub>n</sub>	1.1340 <sub>n</sub>
	4.916	0.3413	9.3049	0.9289 <sub>n</sub>	1.1270 <sub>n</sub>
	5.913	0.3440	9.3145	0.9284 <sub>n</sub>	1.1196 <sub>n</sub>
	6.910	0.3468	9.3233	0.9288 <sub>n</sub>	1.1121 <sub>n</sub>
	7.908	0.3495	9.3307	0.9299 <sub>n</sub>	1.1043 <sub>n</sub>
	8.905	0.3522	9.3364	0.9311 <sub>n</sub>	1.0962 <sub>n</sub>
	9.902	0.3550	9.3405	0.9322 <sub>n</sub>	1.0878 <sub>n</sub>
	10.899	0.3577	9.3435	0.9327 <sub>n</sub>	1.0792 <sub>n</sub>
	11.897	0.3604	9.3458	0.9324 <sub>n</sub>	1.0703 <sub>n</sub>
	12.894	0.3631	9.3483	0.9311 <sub>n</sub>	1.0610 <sub>n</sub>
	13.891	0.3659	9.3517	0.9291 <sub>n</sub>	1.0515 <sub>n</sub>
	14.888	0.3686	9.3565	0.9264 <sub>n</sub>	1.0416 <sub>n</sub>
	15.886	0.3713	9.3630	0.9236 <sub>n</sub>	1.0313 <sub>n</sub>
	16.883	0.3741	9.3711	0.9210 <sub>n</sub>	1.0207 <sub>n</sub>
	17.880	0.3768	9.3803	0.9191 <sub>n</sub>	1.0097 <sub>n</sub>
	18.878	0.3795	9.3900	0.9180 <sub>n</sub>	0.9983 <sub>n</sub>
	19.875	0.3823	9.3994	0.9179 <sub>n</sub>	0.9864 <sub>n</sub>
	20.872	0.3850	9.4081	0.9186 <sub>n</sub>	0.9741 <sub>n</sub>
	21.869	0.3877	9.4154	0.9199 <sub>n</sub>	0.9614 <sub>n</sub>
	22.867	0.3904	9.4213	0.9214 <sub>n</sub>	0.9481 <sub>n</sub>
	23.864	0.3932	9.4257	0.9225 <sub>n</sub>	0.9343 <sub>n</sub>
	24.861	0.3959	9.4292	0.9229 <sub>n</sub>	0.9199 <sub>n</sub>
	25.858	0.3986	9.4321	0.9225 <sub>n</sub>	0.9048 <sub>n</sub>
	26.856	0.4014	9.4352	0.9212 <sub>n</sub>	0.8892 <sub>n</sub>
	27.853	0.4041	9.4389	0.9191 <sub>n</sub>	0.8728 <sub>n</sub>
					1.2738 <sub>n</sub>

$$E = -0.02$$

Konstanten für die Sternstage 1912,  
gültig für die Sternzeitepochen  $\text{oh}^{\text{h}} 50^{\text{m}}.2$  Berlin.

	Datum in Mittl. Zeit	$t$	log. A	log. B	log. C	log. D	C
Mai	27.853	0.4041	9.4389	0.9191 <sub>n</sub>	0.8728 <sub>n</sub>	1.2738 <sub>n</sub>	-7.461
	28.850	0.4068	9.4437	0.9165 <sub>n</sub>	0.8556 <sub>n</sub>	1.2769 <sub>n</sub>	7.172
	29.847	0.4096	9.4495	0.9139 <sub>n</sub>	0.8377 <sub>n</sub>	1.2798 <sub>n</sub>	6.882
	30.845	0.4123	9.4565	0.9116 <sub>n</sub>	0.8188 <sub>n</sub>	1.2826 <sub>n</sub>	6.589
	31.842	0.4150	9.4641	0.9102 <sub>n</sub>	0.7990 <sub>n</sub>	1.2852 <sub>n</sub>	6.295
Juni	1.839	0.4178	9.4718	0.9096 <sub>n</sub>	0.7781 <sub>n</sub>	1.2877 <sub>n</sub>	-5.999
	2.837	0.4205	9.4791	0.9101 <sub>n</sub>	0.7560 <sub>n</sub>	1.2901 <sub>n</sub>	5.702
	3.834	0.4232	9.4856	0.9114 <sub>n</sub>	0.7326 <sub>n</sub>	1.2924 <sub>n</sub>	5.403
	4.831	0.4259	9.4909	0.9131 <sub>n</sub>	0.7078 <sub>n</sub>	1.2945 <sub>n</sub>	5.103
	5.828	0.4287	9.4950	0.9148 <sub>n</sub>	0.6813 <sub>n</sub>	1.2964 <sub>n</sub>	4.801
	6.826	0.4314	9.4982	0.9161 <sub>n</sub>	0.6530 <sub>n</sub>	1.2983 <sub>n</sub>	-4.498
	7.823	0.4341	9.5007	0.9166 <sub>n</sub>	0.6226 <sub>n</sub>	1.3000 <sub>n</sub>	4.194
	8.820	0.4369	9.5031	0.9163 <sub>n</sub>	0.5898 <sub>n</sub>	1.3016 <sub>n</sub>	3.889
	9.817	0.4396	9.5059	0.9150 <sub>n</sub>	0.5542 <sub>n</sub>	1.3031 <sub>n</sub>	3.582
	10.815	0.4423	9.5095	0.9130 <sub>n</sub>	0.5153 <sub>n</sub>	1.3044 <sub>n</sub>	3.275
	11.812	0.4451	9.5143	0.9107 <sub>n</sub>	0.4724 <sub>n</sub>	1.3056 <sub>n</sub>	-2.967
	12.809	0.4478	9.5202	0.9085 <sub>n</sub>	0.4247 <sub>n</sub>	1.3067 <sub>n</sub>	2.659
	13.807	0.4505	9.5270	0.9069 <sub>n</sub>	0.3710 <sub>n</sub>	1.3077 <sub>n</sub>	2.349
	14.804	0.4532	9.5344	0.9061 <sub>n</sub>	0.3095 <sub>n</sub>	1.3085 <sub>n</sub>	2.039
	15.801	0.4560	9.5418	0.9063 <sub>n</sub>	0.2377 <sub>n</sub>	1.3093 <sub>n</sub>	1.729
	16.798	0.4587	9.5488	0.9074 <sub>n</sub>	0.1516 <sub>n</sub>	1.3099 <sub>n</sub>	-1.418
	17.796	0.4614	9.5549	0.9093 <sub>n</sub>	0.0439 <sub>n</sub>	1.3104 <sub>n</sub>	1.107
	18.793	0.4642	9.5601	0.9114 <sub>n</sub>	9.9004 <sub>n</sub>	1.3107 <sub>n</sub>	0.795
	19.790	0.4669	9.5641	0.9135 <sub>n</sub>	9.6842 <sub>n</sub>	1.3110 <sub>n</sub>	0.483
	20.787	0.4696	9.5673	0.9150 <sub>n</sub>	9.2343 <sub>n</sub>	1.3111 <sub>n</sub>	-0.172
	21.785	0.4724	9.5699	0.9157 <sub>n</sub>	9.1471	1.3111 <sub>n</sub>	+0.140
	22.782	0.4751	9.5724	0.9155 <sub>n</sub>	9.6552	1.3110 <sub>n</sub>	0.452
	23.779	0.4778	9.5752	0.9144 <sub>n</sub>	9.8829	1.3108 <sub>n</sub>	0.764
	24.776	0.4806	9.5786	0.9127 <sub>n</sub>	0.0314	1.3104 <sub>n</sub>	1.075
	25.774	0.4833	9.5829	0.9108 <sub>n</sub>	0.1417	1.3099 <sub>n</sub>	1.386
	26.771	0.4860	9.5879	0.9092 <sub>n</sub>	0.2296	1.3093 <sub>n</sub>	+1.697
	27.768	0.4887	9.5936	0.9082 <sub>n</sub>	0.3025	1.3086 <sub>n</sub>	2.007
	28.766	0.4915	9.5995	0.9081 <sub>n</sub>	0.3648	1.3078 <sub>n</sub>	2.316
	29.763	0.4942	9.6052	0.9090 <sub>n</sub>	0.4192	1.3068 <sub>n</sub>	2.625
	30.760	0.4969	9.6104	0.9109 <sub>n</sub>	0.4674	1.3058 <sub>n</sub>	2.933
Juli	1.757	0.4997	9.6148	0.9133 <sub>n</sub>	0.5106	1.3046 <sub>n</sub>	-1.3241
	2.755	0.5024	9.6184	0.9159 <sub>n</sub>	0.5499	1.3032 <sub>n</sub>	3.547
	3.752	0.5051	9.6210	0.9182 <sub>n</sub>	0.5858	1.3018 <sub>n</sub>	3.853

$$E = -0.01$$

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen  $0^h 50^m 2$  Berlin.

Datum in Mittl. Zeit	$t$	log. A	log. B	log. C	log. D	C
Juli	3.752	0.5051	9.6210	0.9182 <sub>n</sub>	0.5858	1.3018 <sub>n</sub>
	4.749	0.5079	9.6231	0.9199 <sub>n</sub>	0.6188	1.3002 <sub>n</sub>
	5.746	0.5106	9.6249	0.9207 <sub>n</sub>	0.6494	1.2985 <sub>n</sub>
	6.744	0.5133	9.6268	0.9206 <sub>n</sub>	0.6778	1.2967 <sub>n</sub>
	7.741	0.5160	9.6292	0.9197 <sub>n</sub>	0.7044	1.2947 <sub>n</sub>
	8.738	0.5188	9.6323	0.9184 <sub>n</sub>	0.7294	1.2927 <sub>n</sub>
	9.736	0.5215	9.6363	0.9170 <sub>n</sub>	0.7529	1.2904 <sub>n</sub>
	10.733	0.5242	9.6411	0.9159 <sub>n</sub>	0.7750	1.2881 <sub>n</sub>
	11.730	0.5270	9.6465	0.9155 <sub>n</sub>	0.7960	1.2856 <sub>n</sub>
	12.727	0.5297	9.6521	0.9162 <sub>n</sub>	0.8159	1.2830 <sub>n</sub>
	13.725	0.5324	9.6574	0.9177 <sub>n</sub>	0.8348	1.2803 <sub>n</sub>
	14.722	0.5352	9.6623	0.9201 <sub>n</sub>	0.8528	1.2774 <sub>n</sub>
	15.719	0.5379	9.6664	0.9229 <sub>n</sub>	0.8700	1.2743 <sub>n</sub>
	16.716	0.5406	9.6696	0.9258 <sub>n</sub>	0.8864	1.2712 <sub>n</sub>
	17.714	0.5433	9.6721	0.9282 <sub>n</sub>	0.9021	1.2678 <sub>n</sub>
	18.711	0.5461	9.6740	0.9300 <sub>n</sub>	0.9171	1.2644 <sub>n</sub>
	19.708	0.5488	9.6757	0.9308 <sub>n</sub>	0.9316	1.2608 <sub>n</sub>
	20.706	0.5515	9.6774	0.9308 <sub>n</sub>	0.9454	1.2570 <sub>n</sub>
	21.703	0.5543	9.6796	0.9300 <sub>n</sub>	0.9587	1.2531 <sub>n</sub>
	22.700	0.5570	9.6823	0.9290 <sub>n</sub>	0.9715	1.2490 <sub>n</sub>
	23.697	0.5597	9.6857	0.9279 <sub>n</sub>	0.9838	1.2448 <sub>n</sub>
	24.695	0.5625	9.6897	0.9273 <sub>n</sub>	0.9957	1.2404 <sub>n</sub>
	25.692	0.5652	9.6940	0.9275 <sub>n</sub>	1.0071	1.2358 <sub>n</sub>
	26.689	0.5679	9.6983	0.9286 <sub>n</sub>	1.0181	1.2311 <sub>n</sub>
	27.686	0.5707	9.7023	0.9306 <sub>n</sub>	1.0288	1.2262 <sub>n</sub>
	28.684	0.5734	9.7057	0.9333 <sub>n</sub>	1.0390	1.2211 <sub>n</sub>
	29.681	0.5761	9.7084	0.9363 <sub>n</sub>	1.0489	1.2158 <sub>n</sub>
	30.678	0.5789	9.7103	0.9392 <sub>n</sub>	1.0585	1.2104 <sub>n</sub>
	31.675	0.5816	9.7117	0.9416 <sub>n</sub>	1.0678	1.2047 <sub>n</sub>
Aug.	1.673	0.5843	9.7127	0.9432 <sub>n</sub>	1.0767	1.1989 <sub>n</sub>
	2.670	0.5870	9.7137	0.9440 <sub>n</sub>	1.0853	1.1928 <sub>n</sub>
	3.667	0.5898	9.7149	0.9438 <sub>n</sub>	1.0937	1.1865 <sub>n</sub>
	4.665	0.5925	9.7167	0.9431 <sub>n</sub>	1.1018	1.1801 <sub>n</sub>
	5.662	0.5952	9.7192	0.9421 <sub>n</sub>	1.1096	1.1734 <sub>n</sub>
	6.659	0.5980	9.7224	0.9413 <sub>n</sub>	1.1172	1.1664 <sub>n</sub>
	7.656	0.6007	9.7261	0.9410 <sub>n</sub>	1.1245	1.1593 <sub>n</sub>
	8.654	0.6034	9.7302	0.9416 <sub>n</sub>	1.1316	1.1518 <sub>n</sub>
	9.651	0.6062	9.7342	0.9430 <sub>n</sub>	1.1384	1.1442 <sub>n</sub>

$$E = -0.01$$

## REDUKTIONSTAFELN.

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen ob 50<sup>m.2</sup> Berlin.

Datum in Mittl. Zeit	<i>t</i>	log. A	log. B	log. C	log. D	<i>D</i>
Aug.	9.651	0.6062	9.7342	0.9430 <sub>n</sub>	1.1384	1.1442 <sub>n</sub>
	10.648	0.6089	9.7379	0.9452 <sub>n</sub>	1.1451	1.1362 <sub>n</sub>
	11.645	0.6116	9.7410	0.9480 <sub>n</sub>	1.1515	1.1280 <sub>n</sub>
	12.643	0.6143	9.7435	0.9510 <sub>n</sub>	1.1577	1.1195 <sub>n</sub>
	13.640	0.6171	9.7453	0.9537 <sub>n</sub>	1.1637	1.1107 <sub>n</sub>
	14.637	0.6198	9.7465	0.9558 <sub>n</sub>	1.1695	1.1016 <sub>n</sub>
	15.635	0.6225	9.7474	0.9571 <sub>n</sub>	1.1751	1.0922 <sub>n</sub>
	16.632	0.6253	9.7483	0.9575 <sub>n</sub>	1.1805	1.0825 <sub>n</sub>
	17.629	0.6280	9.7494	0.9571 <sub>n</sub>	1.1857	1.0723 <sub>n</sub>
	18.626	0.6307	9.7510	0.9563 <sub>n</sub>	1.1908	1.0619 <sub>n</sub>
	19.624	0.6335	9.7531	0.9552 <sub>n</sub>	1.1957	1.0510 <sub>n</sub>
	20.621	0.6362	9.7558	0.9545 <sub>n</sub>	1.2004	1.0397 <sub>n</sub>
	21.618	0.6389	9.7588	0.9543 <sub>n</sub>	1.2049	1.0280 <sub>n</sub>
	22.615	0.6417	9.7620	0.9550 <sub>n</sub>	1.2093	1.0158 <sub>n</sub>
	23.613	0.6444	9.7650	0.9565 <sub>n</sub>	1.2135	1.0032 <sub>n</sub>
	24.610	0.6471	9.7677	0.9588 <sub>n</sub>	1.2175	0.9901 <sub>n</sub>
	25.607	0.6498	9.7697	0.9614 <sub>n</sub>	1.2214	0.9763 <sub>n</sub>
	26.604	0.6526	9.7711	0.9641 <sub>n</sub>	1.2251	0.9620 <sub>n</sub>
	27.602	0.6553	9.7719	0.9664 <sub>n</sub>	1.2287	0.9471 <sub>n</sub>
	28.599	0.6580	9.7724	0.9681 <sub>n</sub>	1.2321	0.9316 <sub>n</sub>
	29.596	0.6608	9.7727	0.9689 <sub>n</sub>	1.2354	0.9153 <sub>n</sub>
	30.594	0.6635	9.7731	0.9688 <sub>n</sub>	1.2386	0.8983 <sub>n</sub>
	31.591	0.6662	9.7739	0.9681 <sub>n</sub>	1.2416	0.8804 <sub>n</sub>
Sept.	1.588	0.6690	9.7754	0.9669 <sub>n</sub>	1.2444	0.8616 <sub>n</sub>
	2.585	0.6717	9.7774	0.9658 <sub>n</sub>	1.2471	0.8418 <sub>n</sub>
	3.583	0.6744	9.7800	0.9649 <sub>n</sub>	1.2497	0.8209 <sub>n</sub>
	4.580	0.6771	9.7831	0.9647 <sub>n</sub>	1.2521	0.7989 <sub>n</sub>
	5.577	0.6799	9.7862	0.9654 <sub>n</sub>	1.2544	0.7755 <sub>n</sub>
	6.575	0.6826	9.7892	0.9668 <sub>n</sub>	1.2566	0.7507 <sub>n</sub>
	7.572	0.6853	9.7917	0.9689 <sub>n</sub>	1.2586	0.7242 <sub>n</sub>
	8.569	0.6881	9.7937	0.9713 <sub>n</sub>	1.2605	0.6958 <sub>n</sub>
	9.566	0.6908	9.7951	0.9735 <sub>n</sub>	1.2623	0.6653 <sub>n</sub>
	10.564	0.6935	9.7960	0.9753 <sub>n</sub>	1.2639	0.6323 <sub>n</sub>
	11.561	0.6963	9.7965	0.9764 <sub>n</sub>	1.2655	0.5965 <sub>n</sub>
	12.558	0.6990	9.7969	0.9766 <sub>n</sub>	1.2668	0.5572 <sub>n</sub>
	13.555	0.7017	9.7975	0.9760 <sub>n</sub>	1.2681	0.5140 <sub>n</sub>
	14.553	0.7045	9.7983	0.9747 <sub>n</sub>	1.2692	0.4657 <sub>n</sub>
	15.550	0.7072	9.7997	0.9732 <sub>n</sub>	1.2702	0.4113 <sub>n</sub>

$$E = -0.01$$

-6.621  
6.293  
5.963  
5.632  
5.299  
-4.964  
4.627  
4.288  
3.949  
3.608  
-3.265  
2.922  
2.578

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen ob 50m.2 Berlin.

Datum in Mittl. Zeit	<i>t</i>	log. A	log. B	log. C	log. D	<i>D</i>
Sept. 15.550	0.7072	9.7997	0.9732 <sub>n</sub>	1.2702	0.4113 <sub>n</sub>	-2.578
16.547	0.7099	9.8016	0.9717 <sub>n</sub>	1.2711	0.3488 <sub>n</sub>	2.233
17.544	0.7126	9.8039	0.9707 <sub>n</sub>	1.2718	0.2757 <sub>n</sub>	1.887
18.542	0.7154	9.8065	0.9704 <sub>n</sub>	1.2725	0.1874 <sub>n</sub>	1.540
19.539	0.7181	9.8090	0.9709 <sub>n</sub>	1.2729	0.0763 <sub>n</sub>	1.192
20.536	0.7208	9.8113	0.9722 <sub>n</sub>	1.2733	9.9265 <sub>n</sub>	-0.844
21.533	0.7236	9.8131	0.9740 <sub>n</sub>	1.2736	9.6954 <sub>n</sub>	0.496
22.531	0.7263	9.8144	0.9759 <sub>n</sub>	1.2737	9.1677 <sub>n</sub>	-0.147
23.528	0.7290	9.8151	0.9777 <sub>n</sub>	1.2737	9.3050	+0.202
24.525	0.7318	9.8154	0.9789 <sub>n</sub>	1.2735	9.7412	0.551
25.523	0.7345	9.8155	0.9793 <sub>n</sub>	1.2733	9.9544	+0.900
26.520	0.7372	9.8157	0.9788 <sub>n</sub>	1.2729	0.0967	1.249
27.517	0.7400	9.8161	0.9776 <sub>n</sub>	1.2724	0.2036	1.598
28.514	0.7427	9.8170	0.9759 <sub>n</sub>	1.2717	0.2894	1.947
29.512	0.7454	9.8185	0.9739 <sub>n</sub>	1.2709	0.3608	2.295
30.509	0.7481	9.8206	0.9721 <sub>n</sub>	1.2700	0.4221	+2.643
Okt.	1.506	0.7509	9.8231	0.9709 <sub>n</sub>	1.2690	0.4757
2.503	0.7536	9.8259	0.9704 <sub>n</sub>	1.2678	0.5233	
3.501	0.7563	9.8286	0.9708 <sub>n</sub>	1.2665	0.5662	
4.498	0.7591	9.8311	0.9718 <sub>n</sub>	1.2651	0.6051	
5.495	0.7618	9.8331	0.9733 <sub>n</sub>	1.2635	0.6406	
6.493	0.7645	9.8346	0.9748 <sub>n</sub>	1.2618	0.6734	
7.490	0.7673	9.8356	0.9761 <sub>n</sub>	1.2600	0.7038	
8.487	0.7700	9.8362	0.9766 <sub>n</sub>	1.2580	0.7321	
9.484	0.7727	9.8366	0.9764 <sub>n</sub>	1.2559	0.7586	
10.482	0.7754	9.8371	0.9753 <sub>n</sub>	1.2537	0.7834	
11.479	0.7782	9.8379	0.9735 <sub>n</sub>	1.2513	0.8068	
12.476	0.7809	9.8390	0.9713 <sub>n</sub>	1.2487	0.8288	
13.473	0.7836	9.8407	0.9689 <sub>n</sub>	1.2461	0.8497	
14.471	0.7864	9.8429	0.9669 <sub>n</sub>	1.2432	0.8696	
15.468	0.7891	9.8453	0.9655 <sub>n</sub>	1.2402	0.8884	
16.465	0.7918	9.8478	0.9649 <sub>n</sub>	1.2371	0.9063	
17.462	0.7946	9.8502	0.9651 <sub>n</sub>	1.2338	0.9235	
18.460	0.7973	9.8522	0.9660 <sub>n</sub>	1.2304	0.9398	
19.457	0.8000	9.8538	0.9672 <sub>n</sub>	1.2267	0.9555	
20.454	0.8028	9.8548	0.9684 <sub>n</sub>	1.2230	0.9704	
21.452	0.8055	9.8555	0.9692 <sub>n</sub>	1.2190	0.9848	
22.449	0.8082	9.8559	0.9692 <sub>n</sub>	1.2149	0.9986	

$$E = -0.01$$

## REDUKTIONSTAFELN.

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen  $\text{ob} 50^{\text{m}}.2$  Berlin.

Datum in Mittl. Zeit	$t$	log. A	log. B	log. C	log. D	
Okt.	22.449	0.8082	9.8559	0.9692 <sub>n</sub>	1.2149	0.9986
	23.446	0.8109	9.8562	0.9684 <sub>n</sub>	1.2106	1.0118
	24.443	0.8137	9.8567	0.9668 <sub>n</sub>	1.2062	1.0246
	25.441	0.8164	9.8576	0.9645 <sub>n</sub>	1.2015	1.0368
	26.438	0.8191	9.8591	0.9618 <sub>n</sub>	1.1967	1.0486
	27.435	0.8219	9.8611	0.9593 <sub>n</sub>	1.1917	1.0599
	28.432	0.8246	9.8636	0.9571 <sub>n</sub>	1.1865	1.0709
	29.430	0.8273	9.8663	0.9557 <sub>n</sub>	1.1810	1.0814
	30.427	0.8301	9.8692	0.9551 <sub>n</sub>	1.1754	1.0916
	31.424	0.8328	9.8719	0.9553 <sub>n</sub>	1.1696	1.1014
Nov.	1.422	0.8355	9.8743	0.9562 <sub>n</sub>	1.1636	1.1109
	2.419	0.8382	9.8762	0.9573 <sub>n</sub>	1.1573	1.1201
	3.416	0.8410	9.8777	0.9582 <sub>n</sub>	1.1508	1.1289
	4.413	0.8437	9.8787	0.9586 <sub>n</sub>	1.1441	1.1375
	5.411	0.8464	9.8796	0.9583 <sub>n</sub>	1.1371	1.1457
	6.408	0.8492	9.8804	0.9570 <sub>n</sub>	1.1299	1.1537
	7.405	0.8519	9.8814	0.9550 <sub>n</sub>	1.1224	1.1614
	8.402	0.8546	9.8827	0.9524 <sub>n</sub>	1.1146	1.1688
	9.400	0.8574	9.8845	0.9496 <sub>n</sub>	1.1066	1.1760
	10.397	0.8601	9.8867	0.9469 <sub>n</sub>	1.0983	1.1829
	11.394	0.8628	9.8892	0.9449 <sub>n</sub>	1.0896	1.1896
	12.391	0.8656	9.8919	0.9436 <sub>n</sub>	1.0807	1.1961
	13.389	0.8683	9.8946	0.9433 <sub>n</sub>	1.0714	1.2024
	14.386	0.8710	9.8970	0.9437 <sub>n</sub>	1.0618	1.2084
	15.383	0.8737	9.8990	0.9447 <sub>n</sub>	1.0518	1.2142
	16.381	0.8765	9.9006	0.9458 <sub>n</sub>	1.0415	1.2198
	17.378	0.8792	9.9018	0.9467 <sub>n</sub>	1.0307	1.2252
	18.375	0.8819	9.9027	0.9470 <sub>n</sub>	1.0196	1.2304
	19.372	0.8847	9.9034	0.9464 <sub>n</sub>	1.0080	1.2355
	20.370	0.8874	9.9042	0.9450 <sub>n</sub>	0.9959	1.2403
	21.367	0.8901	9.9053	0.9428 <sub>n</sub>	0.9834	1.2450
	22.364	0.8929	9.9069	0.9401 <sub>n</sub>	0.9703	1.2494
	23.361	0.8956	9.9089	0.9373 <sub>n</sub>	0.9567	1.2537
	24.359	0.8983	9.9114	0.9349 <sub>n</sub>	0.9425	1.2578
	25.356	0.9010	9.9142	0.9332 <sub>n</sub>	0.9277	1.2618
	26.353	0.9038	9.9172	0.9324 <sub>n</sub>	0.9122	1.2656
	27.351	0.9065	9.9201	0.9325 <sub>n</sub>	0.8960	1.2692
	28.348	0.9092	9.9228	0.9333 <sub>n</sub>	0.8790	1.2726

$$E = -0.01$$

Konstanten für die Sterntage 1912,  
gültig für die Sternzeitepochen  $\text{oh}^{\text{h}} 50^{\text{m}}.2$  Berlin.

Datum in Mittl. Zeit	$t$	log. A	log. B	log. C	log. D	C
Nov. 28.348	0.9092	9.9228	0.9333 <sub>n</sub>	0.8790	1.2726	
29.345	0.9120	9.9251	0.9347 <sub>n</sub>	0.8612	1.2759	
30.342	0.9147	9.9270	0.9360 <sub>n</sub>	0.8424	1.2791	
Dez. 1.340	0.9174	9.9285	0.9370 <sub>n</sub>	0.8227	1.2820	
2.337	0.9202	9.9297	0.9373 <sub>n</sub>	0.8019	1.2849	+6.338
3.334	0.9229	9.9308	0.9367 <sub>n</sub>	0.7799	1.2876	+6.024
4.331	0.9256	9.9320	0.9353 <sub>n</sub>	0.7565	1.2901	5.708
5.329	0.9284	9.9334	0.9332 <sub>n</sub>	0.7317	1.2924	5.391
6.326	0.9311	9.9352	0.9307 <sub>n</sub>	0.7052	1.2947	5.072
7.323	0.9338	9.9374	0.9283 <sub>n</sub>	0.6769	1.2968	4.752
8.321	0.9365	9.9399	0.9263 <sub>n</sub>	0.6464	1.2987	+4.430
9.318	0.9393	9.9426	0.9252 <sub>n</sub>	0.6135	1.3005	4.107
10.315	0.9420	9.9453	0.9250 <sub>n</sub>	0.5777	1.3021	3.782
11.312	0.9447	9.9479	0.9258 <sub>n</sub>	0.5385	1.3036	3.456
12.310	0.9475	9.9502	0.9273 <sub>n</sub>	0.4953	1.3050	3.128
13.307	0.9502	9.9521	0.9290 <sub>n</sub>	0.4472	1.3062	+2.800
14.304	0.9529	9.9535	0.9308 <sub>n</sub>	0.3928	1.3073	2.471
15.301	0.9557	9.9546	0.9320 <sub>n</sub>	0.3306	1.3083	2.141
16.299	0.9584	9.9556	0.9325 <sub>n</sub>	0.2577	1.3091	1.810
17.296	0.9611	9.9565	0.9320 <sub>n</sub>	0.1698	1.3098	1.478
18.293	0.9638	9.9576	0.9308 <sub>n</sub>	0.0593	1.3103	+1.146
19.290	0.9666	9.9590	0.9290 <sub>n</sub>	9.9106	1.3107	0.814
20.288	0.9693	9.9609	0.9269 <sub>n</sub>	9.6825	1.3110	0.481
21.285	0.9720	9.9631	0.9250 <sub>n</sub>	9.1716	1.3111	+0.148
22.282	0.9748	9.9657	0.9238 <sub>n</sub>	9.2659 <sub>n</sub>	1.3111	-0.185
23.280	0.9775	9.9685	0.9234 <sub>n</sub>	9.7139 <sub>n</sub>	1.3110	-0.517
24.277	0.9802	9.9713	0.9240 <sub>n</sub>	9.9295 <sub>n</sub>	1.3107	0.850
25.274	0.9830	9.9739	0.9254 <sub>n</sub>	0.0729 <sub>n</sub>	1.3103	1.183
26.271	0.9857	9.9762	0.9275 <sub>n</sub>	0.1804 <sub>n</sub>	1.3097	1.515
27.269	0.9884	9.9781	0.9298 <sub>n</sub>	0.2664 <sub>n</sub>	1.3090	1.847
28.266	0.9911	9.9797	0.9319 <sub>n</sub>	0.3381 <sub>n</sub>	1.3082	-2.178
29.263	0.9939	9.9809	0.9334 <sub>n</sub>	0.3995 <sub>n</sub>	1.3072	2.509
30.260	0.9966	9.9820	0.9341 <sub>n</sub>	0.4531 <sub>n</sub>	1.3061	2.838
31.258	0.9993	9.9831	0.9339 <sub>n</sub>	0.5007 <sub>n</sub>	1.3048	3.167
32.255	1.0021	9.9843	0.9329 <sub>n</sub>	0.5435 <sub>n</sub>	1.3035	3.495
33.252	1.0048	9.9859	0.9314 <sub>n</sub>	0.5823 <sub>n</sub>	1.3019	-3.822
34.250	1.0075	9.9877	0.9299 <sub>n</sub>	0.6178 <sub>n</sub>	1.3003	4.148
35.247	1.0103	9.9898	0.9286 <sub>n</sub>	0.6505 <sub>n</sub>	1.2984	4.472

$$E = -0.01$$

## REDUKTIONSTAFELN.

Konstanten für die mittleren Tage 1912,  
zur Reduktion von dem Mittl. Äquin. 1910.0 auf das jedesmalige wahre  
Äquinoktium.

$\text{I}^{\text{h}}$ Mittl. Zeit	$f$	log. $g$	$G$	$\text{I}^{\text{h}}$ Mittl. Zeit	$f$	log. $g$	$G$
1911 Dez. 29	+ 85.04	1.57712	348° 23.8	April 23	- + 99.96	1.64695	348° 37.3
1912 Jan. 2	85.76	1.58073	348 26.0	27	100.46	1.64894	348 45.0
6	86.48	1.58430	348 27.2	Mai 1	100.98	1.65099	348 53.0
10	87.18	1.58780	348 27.5	5	101.52	1.65312	349 1.1
14	87.86	1.59122	348 26.9	9	102.09	1.65532	349 9.4
18	- + 88.53	1.59456	348 25.5	13	- + 102.67	1.65761	349 17.6
22	89.18	1.59779	348 23.4	17	103.28	1.65997	349 25.6
26	89.81	1.60091	348 20.7	21	103.90	1.66239	349 33.3
30	90.42	1.60392	348 17.7	25	104.54	1.66489	349 40.6
Febr. 3	91.00	1.60680	348 14.4	29	105.20	1.66745	349 47.6
7	- + 91.56	1.60954	348 11.0	Juni 2	- + 105.87	1.67005	349 54.0
11	92.10	1.61216	348 7.5	6	106.55	1.67270	349 59.9
15	92.61	1.61466	348 4.2	10	107.24	1.67540	350 5.1
19	93.10	1.61704	348 1.0	14	107.94	1.67812	350 9.7
23	93.57	1.61931	347 58.2	18	108.64	1.68085	350 13.6
27	- + 94.03	1.62147	347 55.9	22	- + 109.35	1.68359	350 16.7
März 2	94.47	1.62354	347 54.0	26	110.06	1.68633	350 19.1
6	94.89	1.62551	347 52.7	30	110.76	1.68905	350 20.9
10	95.30	1.62740	347 52.2	Juli 4	111.45	1.69175	350 21.9
14	95.70	1.62924	347 52.5	8	112.14	1.69441	350 22.3
18	- + 96.10	1.63102	347 53.5	12	- + 112.81	1.69702	350 22.1
22	96.50	1.63276	347 55.3	16	113.48	1.69957	350 21.3
26	96.90	1.63448	347 58.0	20	114.12	1.70206	350 20.1
30	97.30	1.63619	348 1.5	24	114.75	1.70448	350 18.4
April 3	97.71	1.63791	348 5.7	28	115.37	1.70684	350 16.4
7	- + 98.13	1.63964	348 10.7	Aug. 1	- + 115.96	1.70912	350 14.0
11	98.56	1.64139	348 16.5	5	116.53	1.71131	350 11.4
15	99.01	1.64318	348 22.9	9	117.08	1.71342	350 8.8
19	99.48	1.64503	348 29.9	13	117.62	1.71545	350 6.1
23	99.96	1.64695	348 37.3	17	118.13	1.71740	350 3.4

Konstanten für die mittleren Tage 1912,  
zur Reduktion von dem Mittl. Äquin. 1910.0 auf das jedesmalige wahre  
Äquinoktium.

12 <sup>h</sup> Mittl. Zeit		<i>f</i>	log. <i>g</i>	<i>G</i>	12 <sup>h</sup> Mittl. Zeit		<i>f</i>	log. <i>g</i>	<i>G</i>
Aug.	17	+118.13	1.71740	350° 3.4	Okt.	24	+125.49	1.74316	350° 26.1
	21	118.62	1.71926	350 0.9		28	125.99	1.74476	350 32.3
	25	119.09	1.72104	349 58.7		Nov. 1	126.51	1.74642	350 38.8
	29	119.55	1.72275	349 56.8		5	127.06	1.74814	350 45.5
Sept.	2	119.99	1.72439	349 55.2	Dez.	9	127.63	1.74994	350 52.2
	6	+120.42	1.72596	349 54.0		13	+128.22	1.75181	350 58.9
	10	120.84	1.72747	349 53.4		17	128.83	1.75375	351 5.5
	14	121.25	1.72893	349 53.3		21	129.47	1.75577	351 12.0
	18	121.65	1.73036	349 53.8		25	130.12	1.75786	351 18.2
	22	122.05	1.73176	349 54.9		29	130.80	1.76000	351 24.0
	26	+122.45	1.73315	349 56.6		3	+131.50	1.76219	351 29.4
	30	122.85	1.73452	349 59.0		7	132.21	1.76442	351 34.3
Okt.	4	123.26	1.73590	350 2.1		11	132.92	1.76670	351 38.7
	8	123.68	1.73729	350 5.8		15	133.65	1.76901	351 42.4
	12	124.11	1.73870	350 10.1		19	134.39	1.77133	351 45.5
	16	+124.55	1.74014	350 15.0		23	+135.13	1.77365	351 47.9
	20	125.01	1.74162	350 20.3		27	135.86	1.77597	351 49.7
	24	125.49	1.74316	350 26.1		31	136.59	1.77828	351 50.8

$$\text{Red. in } \alpha = f + g \sin(G + \alpha) \operatorname{tg} \delta$$

$$\text{Red. in } \delta = g \cos(G + \alpha)$$

Im Jahre 1912 werden zwei Sonnen- und zwei Mondfinsternisse stattfinden, von denen in unseren Gegenden die erste Mondfinsternis und die erste Sonnenfinsternis sichtbar sind.

I. Partielle Mondfinsternis 1912 April 1,  
sichtbar in Berlin.

Elemente der Finsternis  
nach mittlerer Berliner Zeit.

φ in AR . . . . .	April 1	10 <sup>h</sup> 13 <sup>m</sup> 46 <sup>s</sup>
⌚ AR. . . . .		12 43 19.6
⌚ Dekl. . . . .		-3° 39' 6.9
⊕ » . . . . .		+4° 39' 39.8
⌚ stündliche Bewegung in AR. .		3° 32.7
⊕ » » » .		2° 16.5
⌚ » » » Dekl. .		-16° 20.7
⊕ » » » » .		+ 57.8
⌚ Äquatorial-Horizontal-Parallaxe		58° 21.3
⊕ » » » » .		8.8
⌚ Halbmesser . . . . .		15 54.1
⊕ » . . . . .		15 59.8

Anfang der Finsternis . . . . .	April 1	10 <sup>h</sup> 19.4	mittl. Berl. Zt.
Mitte der Finsternis . . . . .		11 7.9	» » »
Ende der Finsternis . . . . .		11 56.4	» » »

Der Mond steht um diese Zeiten im Zenit der Orte, deren geographische Lage bezüglich ist:

39° 33' östl. Länge von Greenwich	3° 41'	südl. Br.
27 48' » » » »	3 54'	» »
16 3' » » » »	4 7'	» »

Positionswinkel des Eintretts vom Nordpunkt gezählt = 183°  
» » Austritts » » » = 235

Größe der Verfinsterung in Teilen des Monddurchmessers = 0.188

Die Finsternis wird demnach in der westlichen Hälfte Australiens, in Asien, dem indischen Ozean, Europa, Afrika, dem atlantischen Ozean und in Südamerika sichtbar sein.

II. Ringförmige Sonnenfinsternis 1912 April 16–17,  
sichtbar in Berlin.

Elemente der Finsternis  
nach wahrer Berliner Zeit  $\tau$ .

	23 <sup>h</sup> 14 <sup>m</sup> 50.9	0 <sup>h</sup> 26 <sup>m</sup> 51.6	1 <sup>h</sup> 38 <sup>m</sup> 52.3	2 <sup>h</sup> 50 <sup>m</sup> 53.0	4 <sup>h</sup> 2 <sup>m</sup> 53.7
$\tau$	348°.7120	6°.7150	24°.7179	42°.7208	60°.7237
$\lambda$ (°)	26° 20' 52.5	27° 1' 14.0	27° 41' 38.0	28° 22' 4.7	29° 2' 33.8
$\beta$ (°)	+ 0 26 25.7	+ 0 30 8.4	+ 0 33 51.1	+ 0 37 33.7	+ 0 41 16.3
$\pi$ (°)	0 57 38.4	0 57 40.2	0 57 42.0	0 57 43.8	0 57 45.5
$\Delta \alpha' (\odot)$	— 0 0 7.49	— 0 0 2.28	— 0 0 2.93	— 0 0 8.14	— 0 0 13.36
$\delta' (\odot)$	+ 10 25 19.1	+ 10 26 19.9	+ 10 27 20.7	+ 10 28 21.5	+ 10 29 22.3
$N'$	63 14 10.1	63 14 51.4	63 15 33.1	63 16 15.1	63 16 57.4
$\gamma$	+ 0.527933	+ 0.527971	+ 0.528009	+ 0.528048	+ 0.528088
$n_a$	+ 0.550183	+ 0.550051	+ 0.549887	+ 0.549691	+ 0.549463
$n_i$	- 0.003769	- 0.003638	- 0.003475	- 0.003280	- 0.003052
$\log \sin f_a$	7.668005	7.667998	7.667991	7.667985	7.667978
$\log \sin f_i$	7.665834 <sub>n</sub>	7.665827 <sub>n</sub>	7.665821 <sub>n</sub>	7.665814 <sub>n</sub>	7.665808 <sub>n</sub>
$\log n$	9.736442	9.736461	9.736459	9.736440	9.736408
$\mu$	7°.1048	7°.1064	7°.1072	7°.1073	7°.1069
$k$	63 42 42.8	63 43 28.8	63 44 15.2	63 45 1.8	63 45 48.6
$g$	28 34 52.4	28 34 34.6	28 34 16.7	28 33 58.6	28 33 40.0
$K$	84 47 13.6	84 46 53.0	84 46 32.5	84 46 12.1	84 45 51.8
$G$	19 43 53.9	19 46 11.8	19 48 29.9	19 50 48.2	19 53 6.8

	Mittl. Zeit Berlin	O. L. Gr.	Breite
Beginn der Finsternis überhaupt . . .	21 <sup>h</sup> 47 <sup>m</sup> 7	316° 50'	- 6° 53'
Beginn der ringförmigen Finsternis . .	22 54.1	298 3	+ 4 48
Beginn der zentralen Finsternis . . .	22 54.6	298 11	+ 4 59
Zentrale Finsternis im wahren Mittag . .	0 57.3	358 58	+ 46 58
Ende der zentralen Finsternis . . .	2 1.2	90 40	+ 57 8
Ende der ringförmigen Finsternis . . .	2 1.7	90 56	+ 56 56
Ende der Finsternis überhaupt . . .	3 8.2	68 18	+ 45 35

## Grenzkurven für die Sichtbarkeit der Finsternis.

Westl. Grenze		Südl. Grenze		Östl. Grenze	
O. L. Gr.	Br.	O. L. Gr.	Br.	O. L. Gr.	Br.
162° 35'	+79° 4'	309° 59'	-27° 38'	73° 8'	+25° 11'
232 18	69 40	325 17	23 43	80 10	27 8
248 3	61 18	337 54	18 21	87 27	34 11
264 14	44 22	348 42	11 28	94 57	44 10
269 58	34 38	357 34	- 3 33	103 45	55 24
274 20	25 32	4 50	+ 4 26	116 43	66 36
278 17	16 34	11 13	11 34	143 52	+76 10
282 8	+ 7 37	17 28	17 23		
286 4	- 1 10	24 13	21 51		
290 16	9 31	31 53	25 1		
294 49	17 0	40 43	26 56		
299 45	23 0	50 54	27 34		
304 56	26 49	62 23	26 51		
309 59	-27 38	73 8	+25 11		

Die nördliche Grenzkurve ist imaginär.

## Kurve der zentralen Verfinsterung.

Mittl. Berl. Zeit	O. L. Gr.	Br.	Dauer der ringförmigen bzw. totalen Verfinsterung
22 <sup>h</sup> 54 <sup>m</sup> .6	298° 11'	+ 4° 59'	31 <sup>s</sup>
22 59.7	313 21	9 16	17
23 14.4	324 43	15 18	3
23 37.1	334 3	22 58	6
○ 4.7	342 7	31 28	8
○ 32.8	350 6	39 46	5
○ 57.3	358 58	46 58	2
1 16.7	9 7	52 35	10
1 31.4	20 28	56 34	17
1 42.2	32 46	59 8	24
1 50.1	45 46	60 27	31
1 55.8	59 20	60 38	37
1 59.6	73 24	59 44	
2 1.2	90 40	+ 57 8	

Die Finsternis ist demnach sichtbar in der östlichen Hälfte Nordamerikas, im nordöstlichen Teil von Südamerika, im atlantischen Ozean, im nordwestlichen Teile Afrikas, in Europa und in der westlichen Hälfte Asiens.

In der folgenden Uebersicht über die näheren Umstände der Finsternis im mittleren Europa ist als Einheit von  $\Delta\lambda$  die Zeitminute und die östliche Richtung positiv zu nehmen. Die Phase ist in Teilen des Sonnendurchmessers ausgedrückt.

Polhöhe	Mittlere Ortszeit des Eintrittes	Positions-Winkel	Mittlere Ortszeit des Austrittes	Positions-Winkel	Größte Phase
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Länge von Berlin:  $-30^m$ 

+48°	23 <sup>h</sup> 16 <sup>m</sup> .2 <sub>14</sub>	+ 1.35 Δλ	235.7	2 <sup>h</sup> 0.7 <sup>m</sup> .5 <sub>5</sub>	+ 1.31 Δλ	50.1	0.94
49	17.6 <sub>15</sub>	+ 1.34 »	234.7	1.2 <sup>4</sup>	+ 1.31 »	51.7	0.96
50	19.1 <sub>14</sub>	+ 1.32 »	233.8	1.6 <sup>3</sup>	+ 1.30 »	53.2	0.97
51	20.5 <sub>14</sub>	+ 1.31 »	232.8	1.9 <sup>2</sup>	+ 1.30 »	54.8	0.98
52	21.9 <sub>14</sub>	+ 1.30 »	231.9	2.1 <sup>2</sup>	+ 1.29 »	56.3	0.97
53	23.3 <sub>14</sub>	+ 1.29 »	230.9	2.3 <sup>0</sup>	+ 1.29 »	57.8	0.96
54	24.7 <sub>14</sub>	+ 1.28 »	230.0	2.3 <sup>0</sup>	+ 1.28 »	59.3	0.94
55	26.1 <sub>14</sub>	+ 1.26 »	229.0	2.3 <sup>1</sup>	+ 1.28 »	60.8	0.91
56	27.5 <sub>14</sub>	+ 1.25 »	228.1	2.2 <sup>2</sup>	+ 1.27 »	62.2	0.89
57	28.9 <sub>13</sub>	+ 1.24 »	227.2	2.0 <sup>2</sup>	+ 1.27 »	63.7	0.87
58	30.2 <sub>13</sub>	+ 1.23 »	226.3	1.8	+ 1.26 »	65.1	0.84

Länge von Berlin:  $-15^m$ 

+48°	23 <sup>h</sup> 36 <sup>m</sup> .6 <sub>12</sub>	+ 1.37 Δλ	238.7	2 <sup>h</sup> 20.2 <sup>m</sup> .5 <sub>5</sub>	+ 1.29 Δλ	48.4	0.89
49	37.8 <sub>13</sub>	+ 1.36 »	237.6	20.7 <sup>3</sup>	+ 1.29 »	50.0	0.92
50	39.1 <sub>12</sub>	+ 1.34 »	236.6	21.0 <sup>3</sup>	+ 1.29 »	51.6	0.94
51	40.3 <sub>12</sub>	+ 1.33 »	235.5	21.3 <sup>1</sup>	+ 1.28 »	53.2	0.96
52	41.5 <sub>13</sub>	+ 1.32 »	234.5	21.4 <sup>1</sup>	+ 1.28 »	54.7	0.97
53	42.8 <sub>12</sub>	+ 1.30 »	233.5	21.5 <sup>0</sup>	+ 1.27 »	56.3	0.98
54	44.0 <sub>12</sub>	+ 1.29 »	232.5	21.5 <sup>1</sup>	+ 1.27 »	57.8	0.97
55	45.2 <sub>12</sub>	+ 1.28 »	231.5	21.4 <sup>2</sup>	+ 1.26 »	59.3	0.95
56	46.4 <sub>12</sub>	+ 1.27 »	230.5	21.2 <sup>2</sup>	+ 1.26 »	60.8	0.93
57	47.6 <sub>12</sub>	+ 1.25 »	229.5	21.0 <sup>4</sup>	+ 1.26 »	62.3	0.90
58	48.8	+ 1.24 »	228.5	20.6 <sup>4</sup>	+ 1.25 »	63.8	0.87

Länge von Berlin:  $0^m$ 

+48°	23 <sup>h</sup> 57.3 <sup>m</sup> .10	+ 1.39 Δλ	241.6	2 <sup>h</sup> 39.5 <sup>m</sup> .4 <sub>5</sub>	+ 1.27 Δλ	46.8	0.84
49	58.3 <sub>10</sub>	+ 1.38 »	240.4	39.9 <sup>3</sup>	+ 1.27 »	48.5	0.87
50	23 <sup>h</sup> 59.3 <sup>m</sup> .11	+ 1.36 »	239.3	40.2 <sup>2</sup>	+ 1.27 »	50.1	0.89
51	0.4 <sub>10</sub>	+ 1.35 »	238.2	40.4 <sup>1</sup>	+ 1.26 »	51.7	0.92
52	1.4 <sub>10</sub>	+ 1.33 »	237.1	40.5 <sup>0</sup>	+ 1.26 »	53.3	0.95
53	2.4 <sub>10</sub>	+ 1.32 »	236.0	40.5 <sup>1</sup>	+ 1.26 »	54.9	0.97
54	3.4 <sub>11</sub>	+ 1.30 »	234.9	40.4 <sup>2</sup>	+ 1.25 »	56.5	0.98
55	4.5 <sub>10</sub>	+ 1.29 »	233.8	40.2 <sup>3</sup>	+ 1.25 »	58.1	0.97
56	5.5 <sub>10</sub>	+ 1.28 »	232.7	40.0 <sup>3</sup>	+ 1.24 »	59.6	0.96
57	6.5 <sub>10</sub>	+ 1.26 »	231.6	39.7 <sup>5</sup>	+ 1.24 »	61.1	0.94
58	7.5	+ 1.25 »	230.6	39.2	+ 1.23 »	62.6	0.91

Polhöhe	Mittlere Ortszeit des Eintrittes	Positions-Winkel	Mittlere Ortszeit des Austrittes	Positions-Winkel	Größte Phase
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Länge von Berlin: +15<sup>m</sup>

+48°	○ <sup>h</sup> 18. <sup>m</sup> 8 + 1.41 Δλ	244.5	2 <sup>h</sup> 58. <sup>m</sup> 3 + 1.25 Δλ	45.4	0.80
49	19.1 8 + 1.39 »	243.2	58.8 <sub>2</sub> + 1.25 »	47.1	0.83
50	19.9 8 + 1.38 »	242.0	59.0 <sub>2</sub> + 1.25 »	48.8	0.85
51	20.7 8 + 1.36 »	240.8	59.2 <sub>0</sub> + 1.24 »	50.5	0.88
52	21.5 8 + 1.35 »	239.6	59.2 <sub>0</sub> + 1.24 »	52.2	0.91
53	22.3 8 + 1.33 »	238.4	59.2 <sub>2</sub> + 1.24 »	53.8	0.94
54	23.1 8 + 1.32 »	237.2	59.0 <sub>2</sub> + 1.23 »	55.4	0.96
55	23.9 8 + 1.30 »	236.0	58.8 <sub>3</sub> + 1.23 »	57.0	0.97
56	24.7 8 + 1.29 »	234.9	58.5 <sub>4</sub> + 1.22 »	58.5	0.97
57	25.5 8 + 1.27 »	233.7	58.1 <sub>5</sub> + 1.22 »	60.1	0.96
58	26.3 + 1.26 »	232.6	57.6 <sub>5</sub> + 1.21 »	61.6	0.94

Länge von Berlin: +30<sup>m</sup>

+48°	○ <sup>h</sup> 39. <sup>m</sup> 5 + 1.43 Δλ	247.2	3 <sup>h</sup> 17. <sup>m</sup> 3 + 1.23 Δλ	44.2	0.77
49	40.1 5 + 1.41 »	245.9	17.4 <sub>2</sub> + 1.23 »	46.0	0.79
50	40.6 6 + 1.39 »	244.6	17.6 <sub>1</sub> + 1.23 »	47.7	0.82
51	41.2 6 + 1.38 »	243.3	17.7 <sub>0</sub> + 1.22 »	49.4	0.85
52	41.8 5 + 1.36 »	242.0	17.7 <sub>1</sub> + 1.22 »	51.1	0.88
53	42.3 6 + 1.34 »	240.7	17.6 <sub>2</sub> + 1.22 »	52.8	0.90
54	42.9 6 + 1.33 »	239.5	17.4 <sub>2</sub> + 1.21 »	54.4	0.93
55	43.5 6 + 1.32 »	238.2	17.1 <sub>3</sub> + 1.21 »	56.0	0.95
56	44.1 6 + 1.30 »	237.0	16.7 <sub>4</sub> + 1.21 »	57.6	0.96
57	44.7 6 + 1.29 »	235.8	16.2 <sub>5</sub> + 1.20 »	59.2	0.97
58	45.3 + 1.27 »	234.6	15.7 <sub>5</sub> + 1.20 »	60.8	0.96

## Berlin

—	○ <sup>h</sup> 19 —	236.5	2 <sup>h</sup> 40. <sup>m</sup> 5 —	54.1	0.96
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III. Partielle Mondfinsternis 1912 September 25—26,  
unsichtbar in Berlin.

Elemente der Finsternis  
nach mittlerer Berliner Zeit.

♂ in AR. . . . .	Sept. 25	23 <sup>h</sup> 38 <sup>m</sup> 24 <sup>s</sup>
♀ AR. . . . .		○ 10 52.8
♀ Dekl. . . . .		+○ 11 49.7
⊕ » . . . . .		-I 10 46.5
♀ stündliche Bewegung in AR. . . . .		27 14.8
⊕ » » » » .		2 15.0
♀ » » » Dekl. .		+14 52.3
⊕ » » » » .		- 58.4
♀ Äquatorial-Horizontal-Parallaxe . . . . .		55 15.3
⊕ » » » » .		8.8
♀ Halbmesser . . . . .		15 3.4
⊕ » . . . . .		15 57.6

Aufang der Finsternis . . . . .	Sept. 25	23 <sup>h</sup> 57 <sup>m</sup> 0	mittl. Berl. Zt.
Mitte der Finsternis . . . . .	26	○ 38.5	» »
Ende der Finsternis . . . . .		I 20.0	» »

Der Mond steht um diese Zeiten im Zenit der Orte, deren geographische Lage bezüglich ist:

192° 8' östl. Länge von Greenwich	○ 16'	nördl. Br.
182° 2' » » »	○ 27	» »
171° 56' » » »	○ 37	» »

Positionswinkel des Eintritts vom Nordpunkt gezählt = 352°  
 » » Austritts » » » = 310

Größe der Verfinsterung in Teilen des Monddurchmessers = 0.122

Die Finsternis wird demnach in Nordamerika, dem großen Ozean, in Australien und in der östlichen Hälfte Asiens sichtbar sein.

IV. Totale Sonnenfinsternis 1912 Oktober 9–10,  
unsichtbar in Berlin.

Elemente der Finsternis

nach wahrer Berliner Zeit  $\tau$ .

	<sup>h</sup> <sup>m</sup> <sup>s</sup> ○ 6 42.1	<sup>h</sup> <sup>m</sup> <sup>s</sup> 1 18 42.8	<sup>h</sup> <sup>m</sup> <sup>s</sup> 2 30 43.6	<sup>h</sup> <sup>m</sup> <sup>s</sup> 3 42 44.4	<sup>h</sup> <sup>m</sup> <sup>s</sup> 4 54 45.2
$\tau$	1°.6752	19°.6785	37°.6818	55°.6851	73°.6883
$\lambda \odot$	195° 17' 40.5	196° 0 19.4	196° 42' 55.8	197° 25' 29.9	198° 8' 1.8
$\beta \odot$	—○ 15 54.3	—○ 19 50.5	—○ 23 46.2	—○ 27 41.6	—○ 31 36.5
$\pi \odot$	○ 59 18.4	○ 59 16.8	○ 59 15.1	○ 59 13.4	○ 59 11.7
$\Delta \alpha' \odot$	—○ ○ 13.15	—○ ○ 7.88	—○ ○ 2.61	+○ ○ 2.66	+○ ○ 7.94
$\delta' \odot$	—6 35 37.9	—6 36 43.4	—6 37 48.9	—6 38 54.4	—6 39 59.9
$N'$	118 14 18.0	118 13 50.9	118 13 24.2	118 12 57.4	118 12 30.2
$\gamma$	—○ 415350	—○ 415345	—○ 415340	—○ 415336	—○ 415333
$u'_a$	+○ 0.543947	+○ 0.544137	+○ 0.544294	+○ 0.544417	+○ 0.544505
$u'_i$	+○ 0.002436	+○ 0.002246	+○ 0.002090	+○ 0.001968	+○ 0.001881
log sin $f_a$	7.670625	7.670632	7.670639	7.670645	7.670652
log sin $f_i$	7.668454 <sub>n</sub>	7.668461 <sub>n</sub>	7.668468 <sub>n</sub>	7.668475 <sub>n</sub>	7.668481 <sub>n</sub>
log $n$	9.749114	9.749122	9.749120	9.749106	9.749079
$\mu$	40°.6858	40°.6862	40°.6867	40°.6872	40°.6879
$k$	118° 2' 6.0	118° 1' 35.0	118° 1' 4.6	118° 0' 34.0	118° 0' 2.8
$g$	28 56 10.8	28 55 57.9	28 55 45.5	28 55 33.2	28 55 20.5
$K$	86 28 15.6	86 27 44.7	86 27 13.9	86 26 43.1	86 26 12.2
$G$	192° 4' 8.2	192° 6' 17.3	192° 8' 26.4	192° 10' 35.6	192° 12' 45.0

	Mittl. Zeit Berlin	O. L. Gr.	Breite
Beginn der Finsternis überhaupt . . .	23 50.8	283° 7'	+ 12° 41'
Beginn der totalen Finsternis . . .	○ 52.3	267° 14'	+ 3° 46'
Beginn der zentralen Finsternis . . .	○ 52.6	266° 54'	+ 3° 45'
Zentrale Finsternis im wahren Mittag . . .	2 53.6	326° 45'	- 34° 58'
Ende der zentralen Finsternis . . .	4 6.8	48° 3'	- 52° 23'
Ende der totalen Finsternis . . .	4 7.0	47° 32'	- 52° 23'
Ende der Finsternis überhaupt . . .	5 8.6	30° 28'	- 43° 28'

## Grenzkurven für die Sichtbarkeit der Finsternis.

Westl. Grenze.		Südl. Grenze.		Östl. Grenze.		Nördl. Grenze	
O. L. Gr.	Br.	O. L. Gr.	Br.	O. L. Gr.	Br.	O. L. Gr.	Br.
274° 4'	+35° 34'	242° 39'	-45° 31'	207° 0'	-75° 48'	38° 29'	-20° 47'
264 56	30 34	249 28	46 27	141 23	83 3	22 27	21 35
259 43	22 19	257 20	50 13	80 55	73 41	11 4	20 31
256 30	15 0	263 15	57 47	69 58	64 33	1 20	17 51
254 29	9 33	263 10	65 38	65 36	58 25	353 3	13 40
253 9	5 30	257 33	71 20	63 9	54 13	345 51	7 58
252 3	+ 1 55	246 21	75 7	61 18	50 41	339 3	- 0 45
250 48	- 2 23	235 53	76 33	59 19	46 41	331 44	+ 7 38
249 4	8 43	207 0	-75 48	56 41	41 17	322 58	16 14
246 35	18 25			52 59	34 1	312 12	23 49
243 15	32 26			47 36	25 47	299 31	29 42
242 39	-45 31			38 29	-20 47	285 14	33 42
						274 4	+35 34

## Kurve der zentralen Verfinsterung.

Mittl. Berl. Zeit	O. L. Gr.	Br.	Dauer der totalen Verfinsterung
0 52.6	266 54	+ 3 45	0 46 <sup>s</sup>
0 56.4	281 3	+ 1 0	
1 8.8	292 58	- 3 47	1 9
1 29.3	302 51	10 25	1 32
1 56.1	311 9	18 24	1 50
2 25.6	318 45	26 55	1 59
2 53.6	326 45	34 58	1 56
3 17.1	335 53	41 47	1 44
3 35.1	346 23	47 0	1 29
3 48.2	358 7	50 38	1 13
3 57.3	10 51	52 49	0 58
4 3.2	24 22	53 41	0 45
4 6.3	38 35	53 18	0 33
4 6.8	48 3	-52 23	

Die Finsternis wird demnach in Mittel- und Südamerika, in Südafrika, in der südlichen Hälfte des atlantischen Ozeans und in den südlichen Polargegenden zu sehen sein.

Verzeichnis von Fixsternen, welche im Jahre 1912  
vom Monde bedeckt werden.

Nr.	Name	Gr.	Mittl. AR. 1912.0	Mittl. Dekl. 1912.0
1	$\epsilon$ Piscium . . . .	4.2	$\circ 58^{\text{m}} 22.46$	$+7^{\circ} 24' 59.7''$
2	$\zeta^1$ Piscium . . . .	4.8	1 9 7.94	$+7^{\circ} 6' 36.9$
3	$\pi$ Arietis . . . .	5.5	2 44 22.75	$+17^{\circ} 5' 55.8$
4	$\epsilon$ Arietis . . . .	4.4	2 54 10.61	$+20^{\circ} 59' 20.1$
5	$\delta$ Arietis . . . .	4.3	3 6 35.64	$+19^{\circ} 23' 40.2$
6	$\zeta$ Arietis . . . .	4.5	3 9 50.41	$+20^{\circ} 43' 8.0$
7	$\tau^1$ Arietis . . . .	5.0	3 16 8.63	$+20^{\circ} 49' 49.5$
8	$\tau^2$ Arietis . . . .	5.4	3 17 41.19	$+20^{\circ} 25' 40.8$
9	$\iota_7$ Tauri . . . .	4.0	3 39 38.81	$+23^{\circ} 50' 14.5$
10	$\iota_9$ Tauri . . . .	4.5	3 39 57.97	$+24^{\circ} 11' 31.2$
11	$\varpi$ Tauri . . . .	4.0	3 40 35.25	$+24^{\circ} 5' 36.5$
12	$\vartheta$ Tauri . . . .	4.8	3 41 6.02	$+23^{\circ} 40' 29.4$
13	$\eta$ Tauri . . . .	3.0	3 42 15.03	$+23^{\circ} 50' 1.3$
14	$\varphi_7$ Tauri . . . .	3.8	3 43 55.59	$+23^{\circ} 47' 6.1$
15	$\chi$ Tauri . . . .	5.5	4 17 13.52	$+25^{\circ} 25' 20.5$
16	$\beta$ Tauri . . . .	1.8	5 20 43.68	$+28^{\circ} 32' 2.3$
17	$\iota_{36}$ Tauri . . . .	5.3	5 47 47.80	$+27^{\circ} 35' 32.1$
18	$\alpha$ Aurigae . . . .	4.6	6 9 46.30	$+29^{\circ} 31' 53.0$
19	$\dot{\gamma}_9$ Aurigae . . . .	5.5	6 29 39.57	$+28^{\circ} 5' 30.1$
20	$\iota$ Geminorum . . .	3.8	7 20 15.79	$+27^{\circ} 58' 25.7$
21	$b^1$ Geminorum . . .	5.2	7 23 51.60	$+28^{\circ} 18' 1.1$
22	$b^2$ Geminorum . . .	5.0	7 24 20.46	$+28^{\circ} 5' 54.3$
23	$\nu$ Geminorum . . .	4.4	7 30 30.14	$+27^{\circ} 5' 31.6$
24	$\varphi$ Geminorum . . .	5.0	7 48 6.85	$+26^{\circ} 59' 39.9$
25	$\gamma$ Cancer . . . .	4.4	8 38 11.77	$+21^{\circ} 47' 8.2$
26	$\xi$ Cancer . . . .	5.0	9 4 18.17	$+22^{\circ} 24' 7.2$
27	$\eta$ Leonis . . . .	3.4	10 2 32.22	$+17^{\circ} 11' 31.8$
28	$\iota$ Leonis . . . .	5.4	10 44 37.98	$+11^{\circ} 0' 39.9$
29	$\chi$ Leonis . . . .	4.8	11 0 28.73	$+7^{\circ} 48' 43.1$

Verzeichnis von Fixsternen, welche im Jahre 1912  
vom Monde bedeckt werden.

Nr.	Name	Gr.	Mittl. AR. 1912.0	Mittl. Dekl. 1912.0
30	$\sigma$ Leonis . . . . .	4.1	11 <sup>h</sup> 16 <sup>m</sup> 35.97	+ 6° 30' 42.3
31	$\beta$ Virginis . . . . .	3.5	11 46 6.68	+ 2 15 38.3
32	$\eta$ Virginis . . . . .	3.7	12 15 24.19	- 0 10 40.2
33	$\vartheta$ Virginis . . . . .	4.3	13 5 23.53	- 5 4 10.0
34	$\alpha$ Virginis . . . . .	1.1	13 20 33.30	- 10 42 8.3
35	$\iota$ Librae . . . . .	4.6	15 7 12.12	- 19 27 33.6
36	$A$ Scorp. . . . .	5.0	15 48 19.54	- 25 3 53.7
37	$\sigma$ Scorp. . . . .	3.1	16 15 50.20	- 25 22 56.9
38	$\alpha$ Scorp. . . . .	1.2	16 24 0.54	- 26 14 15.1
39	22 Scorp. . . . .	5.0	16 24 51.55	- 24 55 19.4
40	$A$ Ophiuchi . . . . .	5.0	17 9 56.02	- 26 28 28.3
41	$X$ Sagittarii . . . . .	var.	17 42 1.26	- 27 47 53.0
42	$\gamma^1$ Sagittarii . . . . .	var.	17 59 23.93	- 29 35 5.1
43	B. A. C. 6127 . . .	5.0	18 2 30.56	- 28 28 3.0
44	$\varphi$ Sagittarii . . . . .	3.6	18 40 9.52	- 27 4 55.3
45	$\tau$ Sagittarii . . . . .	3.7	19 1 26.84	- 27 47 59.5
46	$\omega$ Sagittarii . . . . .	5.0	19 50 27.04	- 26 32 1.0
47	$b$ Sagittarii . . . . .	5.0	19 51 32.93	- 27 24 14.3
48	$A$ Sagittarii . . . . .	5.0	19 53 35.58	- 26 26 3.8
49	33 Capricorni . . . . .	5.5	21 19 10.27	- 21 13 34.7
50	$\varepsilon$ Capricorni . . . . .	4.7	21 32 9.30	- 19 51 39.0
51	$\chi$ Capricorni . . . . .	5.2	21 37 44.77	- 19 16 4.2
52	$\delta$ Capricorni . . . . .	2.8	21 42 11.13	- 16 31 37.5
53	$\varphi$ Aquarii . . . . .	4.3	23 9 45.91	- 6 31 24.9
54	$\psi^1$ Aquarii . . . . .	4.7	23 11 16.94	- 9 34 1.9
55	$\chi$ Aquarii . . . . .	5.3	23 12 17.30	- 8 12 23.7
56	$\psi^2$ Aquarii . . . . .	4.7	23 13 19.86	- 9 39 46.7
57	27 Piscium . . . . .	5.1	23 54 10.07	- 4 2 39.2
58	29 Piscium . . . . .	5.3	23 57 18.84	- 3 31 2.4

## Elemente der Sternbedeckungen 1912.

Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$	Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$
Jan.									
15	1 17 20.6	-0.8683	5946	+1470	20	31 21 32.1	-0.7610	6142	-0785
17	3 2 4.1	+0.1485	6201	+0409	21	31 22 48.9	-1.1841	6138	-0830
19	3 16 35.4	-0.1309	6228	-0124	22	31 22 59.1	-1.0002	6137	-0835
20	4 10 10.6	-0.7995	6184	-0762					
21	4 11 26.4	-1.2173	6180	-0806					
Febr.									
22	4 11 36.6	-1.0342	6179	-0812	23	1 1 10.8	-0.2047	6129	-0911
23	4 13 46.8	-0.2366	6166	-0888	24	1 7 29.6	-0.7508	6101	-1123
24	4 20 2.1	-0.7629	6124	-1098	26	2 11 52.0	-0.6517	5884	-1940
26	6 0 23.8	-0.5840	5861	-1904	27	3 11 18.5	-0.6622	5660	-2410
27	7 0 7.7	-0.5266	5605	-2360	28	4 5 27.9	+0.8736	5494	-2641
28	7 18 40.4	+1.0775	5419	-2580	32	6 0 1.9	+0.4529	5220	-2793
32	9 14 31.2	+0.7504	5129	-2729	33	7 0 53.6	-1.3326	5152	-2680
33	10 16 12.6	-1.0310	5065	-2628	35	9 13 38.7	-0.4388	5228	-1943
35	13 6 34.5	-0.1296	5188	-1935	37	10 22 20.0	+0.6538	5342	-1314
37	14 15 43.1	+0.9312	5335	-1324	38	11 2 8.1	+1.1102	5356	-1232
39	14 19 57.0	-0.1184	5350	-1235	39	11 2 31.7	-0.3837	5356	-1223
40	15 16 44.3	-0.4887	5426	-0766	40	11 23 11.5	-0.7202	5418	-0748
41	16 7 15.9	+0.1218	5462	-0414	41	12 13 40.8	-0.0866	5445	-0395
43	16 16 28.4	+0.5900	5472	-0186	43	12 22 52.7	+0.3975	5455	-0166
54	22 22 17.7	+0.9254	4978	+2512	44	13 15 46.0	-1.0632	5452	+0258
55	22 22 50.3	-0.4190	4976	+2516	45	14 1 21.5	+0.0957	5442	+0495
56	22 23 24.1	+1.3077	4974	+2519	46	14 23 44.1	+0.3990	5384	+1025
57	23 21 34.0	+0.9274	4960	+2628	48	15 1 11.4	+0.4404	5380	+1058
58	23 23 16.4	+0.8076	4961	+2632	57	20 3 20.1	+1.1237	4986	+2660
2	25 13 34.5	-0.4135	5070	+2620	58	20 5 1.9	+1.0076	4986	+2665
3	27 11 59.0	+0.5574	5422	+2215	2	21 19 12.9	-0.1582	5074	+2636
5	27 21 51.7	+0.3096	5524	+2059	3	23 18 1.4	+0.8372	5379	+2200
6	27 23 16.5	-0.7573	5539	+2034	5	24 4 5.2	+0.5832	5468	+2038
7	28 1 59.9	-0.3232	5569	+1985	6	24 5 31.7	-0.4968	5480	+2012
8	28 2 39.7	+0.2191	5576	+1973	7	24 8 18.6	-0.0591	5505	+1962
12	28 12 30.8	-1.2380	5682	+1773	8	24 8 59.3	+0.4894	5511	+1950
13	28 12 59.3	-1.3152	5689	+1763	9	24 18 27.5	-1.2697	5600	+1759
14	28 13 40.8	-1.1440	5695	+1748	12	24 19 4.5	-0.9942	5605	+1746
♂	28 14 51.8	+0.6239	5594	+1698	13	24 19 33.7	-1.0728	5610	+1735
15	29 3 2.5	-0.6681	5834	+1423	14	24 20 16.2	-0.9000	5615	+1720
16	30 3 0.2	-1.1873	6051	+0709	15	25 10 0.3	-0.4319	5744	+1394
17	30 12 47.3	+0.2826	6110	+0378	16	26 10 44.9	-0.9925	5936	+0684
19	31 3 39.3	-0.0394	6158	-0148	17	26 20 52.9	+0.4884	5991	+0357

## Elemente der Sternbedeckungen 1912.

Nr.	Zeit der Konj. in AR.	<i>q</i>	<i>p'</i>	<i>q'</i>	Nr.	Zeit der Konj. in AR.	<i>q</i>	<i>p'</i>	<i>q'</i>
Febr.					März				
19	27 12 17.3	+0.1362	6039	-0163	15	23 15 26.5	-0.2851	5739	+1394
20	28 6 48.2	-0.6301	6028	-0790	16	24 16 22.8	-0.8550	5895	+0678
21	28 8 7.5	-1.0628	6024	-0833	17	25 2 39.8	+0.6343	5934	+0351
22	28 8 18.2	-0.8762	6023	-0840	18	25 10 55.6	-1.1575	5957	+0081
23	28 10 34.3	-0.0721	6017	-0914	19	25 18 22.4	+0.2727	5964	-0165
24	28 17 5.6	-0.6390	5992	-1123	20	26 13 21.6	-0.5135	5933	-0785
26	29 22 15.6	-0.5989	5811	-1941	21	26 14 43.2	-0.9528	5929	-0828
März					22	26 14 54.1	-0.7640	5930	-0834
27	1 22 7.0	-0.6643	5621	-2420	23	26 17 14.2	+0.0495	5921	-0907
28	2 16 25.0	+0.8300	5485	-2660	24	26 23 57.1	-0.5299	5893	-1113
30	3 6 54.7	+1.3913	5391	-2778	26	28 6 3.3	-0.5146	5709	-1917
32	4 10 43.5	+0.3049	5265	-2836	27	29 6 40.4	-0.6064	5530	-2392
35	7 22 20.6	-0.6733	5295	-1971	28	30 1 29.3	+0.8840	5412	-2638
37	9 6 18.4	+0.4118	5388	-1323	30	30 16 19.3	+1.4300	5334	-2762
38	9 10 2.2	+0.8658	5398	-1239	32	31 20 34.0	+0.2954	5242	-2836
39	9 10 25.4	-0.6150	5399	-1230	April				
40	10 6 46.0	-0.9400	5444	-0747	35	4 7 46.2	-0.7535	5348	-1996
41	10 21 5.6	-0.3007	5459	-0389	37	5 15 11.7	+0.3159	5445	-1338
43	11 6 12.9	+0.1887	5460	-0158	38	5 18 51.7	+0.7668	5454	-1253
44	11 23 0.9	-1.2520	5445	+0267	39	5 19 14.5	-0.7052	5454	-1244
45	12 8 34.8	-0.0875	5429	+0505	40	6 15 15.6	-1.0295	5489	-0753
46	13 6 56.8	+0.2401	5364	+1035	41	7 5 23.4	-0.3934	5495	-0390
47	13 7 27.3	+1.2570	5361	+1046	43	7 14 24.4	+0.0944	5492	-0157
48	13 8 24.1	+0.2830	5359	+1068	45	8 16 33.8	-0.1759	5436	+0509
49	15 1 23.8	+0.6434	5191	+1876	46	9 14 52.3	+0.1569	5355	+1037
50	15 7 52.2	+0.3904	5166	+1982	47	9 15 22.8	+1.1730	5352	+1048
51	15 10 40.7	+0.3019	5155	+2025	48	9 16 19.7	+0.2004	5347	+1069
53	21 23 37.1	+0.9731	5412	+2222	49	11 9 27.2	+0.5777	5162	+1871
55	22 9 35.6	+0.7255	5492	+2053	50	11 15 57.7	+0.3276	5136	+1975
6	22 11 1.6	-0.3528	5505	+2028	51	11 18 47.1	+0.2403	5125	+2019
7	22 13 47.4	+0.0853	5529	+1976	54	13 19 35.1	+1.0272	5010	+2573
8	22 14 27.8	+0.6336	5534	+1962	55	13 20 7.2	-0.3019	5010	+2578
9	22 23 53.6	-1.1235	5612	+1767	56	13 20 40.5	+1.4112	5009	+2582
11	23 0 17.5	-1.3173	5617	+1759	57	14 18 24.5	+1.1278	5020	+2701
12	23 0 30.5	-0.8476	5617	+1754	58	14 20 4.6	+1.0160	5023	+2701
13	23 0 59.7	-0.9266	5622	+1744	59	15 6 10.4	-0.0840	4555	+2522
14	23 1 42.1	-0.7537	5629	+1727	9	19 6 24.2	-1.0995	5686	+1791

## Elemente der Sternbedeckungen 1912.

Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$	Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$
April					Mai				
11	19 6 47.6	-1.2912	5689	+1782	2	13 18 39.4	-0.0309	5149	+2684
12	19 7 0.3	-0.8262	5690	+1777	17	18 15 32.6	+0.5632	6074	+0350
13	19 7 28.8	-0.9040	5694	+1766	18	18 23 29.6	-1.2053	6083	+0074
14	19 8 10.2	-0.7328	5699	+1750	19	19 6 40.8	+0.1954	6078	-0177
15	19 21 36.9	-0.2685	5806	+1411	20	20 1 7.8	-0.5970	6014	-0802
16	20 22 5.8	-0.8358	5950	+0684	21	20 2 27.5	-1.0330	6007	-0846
17	21 8 14.3	+0.6444	5980	+0353	22	20 2 38.2	-0.8462	6006	-0851
18	21 16 24.7	-1.1402	5990	+0080	23	20 4 55.3	-0.0430	5994	-0925
19	21 23 47.8	+0.2838	5989	-0167	24	20 11 30.7	-0.6230	5949	-1130
20	22 18 43.4	-0.5040	5931	-0786	26	21 17 25.4	-0.6326	5692	-1914
21	22 20 5.1	-0.9442	5928	-0828	27	22 18 20.3	-0.7386	5466	-2365
22	22 20 16.1	-0.7553	5928	-0834	28	23 13 36.9	+0.7648	5320	-2591
23	22 22 36.3	+0.0588	5916	-0907	30	24 4 55.3	+1.3240	5229	-2702
24	23 5 20.7	-0.5230	5878	-1111	32	25 10 12.2	+0.1933	5131	-2767
26	24 11 46.2	-0.5137	5652	-1901	35	28 23 43.1	-0.7447	5328	-1970
27	25 12 52.3	-0.6106	5459	-2363	37	30 7 19.5	+0.3868	5466	-1326
28	26 8 8.4	+0.8940	5335	-2601	38	30 10 59.4	+0.8443	5478	-1241
32	28 4 17.5	+0.2994	5176	-2799	39	30 11 22.2	-0.6307	5480	-1232
Mai					40	31 7 18.9	-0.9200	5531	-0741
					41	31 21 21.0	-0.2603	5542	-0377
35	1 16 30.5	-0.7357	5355	-1995	Juni				
37	2 23 50.7	+0.3462	5474	-1342	43	1 6 17.8	+0.2419	5539	-0142
38	3 3 29.4	+0.7976	5484	-1256	44	1 22 49.1	-1.1643	5509	+0288
39	3 3 52.1	-0.6728	5485	-1247	45	2 8 15.8	+0.0123	5476	+0523
40	3 23 44.6	-0.9885	5525	-0754	46	3 6 29.6	+0.3780	5375	+1053
41	4 13 45.7	-0.3489	5530	-0389	48	3 7 56.9	+0.4235	5366	+1086
43	4 22 42.5	+0.1409	5526	-0154	49	5 1 20.4	+0.8522	5132	+1867
45	6 0 42.0	-0.1196	5459	+0514	50	5 7 56.7	+0.6064	5098	+1967
46	6 22 56.7	+0.2202	5361	+1041	51	5 10 48.9	+0.5205	5082	+2008
47	6 23 27.2	+1.2362	5356	+1052	54	7 12 47.5	+1.3253	4925	+2525
48	7 0 24.0	+0.2641	5354	+1073	55	7 13 20.5	-0.0185	4924	+2528
49	8 17 40.2	+0.6522	5140	+1864	57	8 12 16.6	+1.4073	4936	+2644
50	9 0 13.8	+0.4022	5109	+1966	58	8 13 59.6	+1.2920	4938	+2650
51	9 3 4.8	+0.3150	5097	+2008	2	10 4 9.0	+0.1346	5097	+2646
54	11 4 25.6	+1.1002	4969	+2550	3	12 1 39.8	+1.0478	5499	+2232
55	11 4 58.1	-0.2342	4970	+2555	5	12 11 17.6	+0.7752	5604	+2068
57	12 3 29.9	+1.1902	4987	+2679	6	12 12 40.3	-0.2877	5620	+2042
58	12 5 11.0	+1.0775	4991	+2684					

## Elemente der Sternbedeckungen 1912.

Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$	Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$
Juni					Juli				
7	12 15 19.6	+0.1349	5650	+1991	15	11 2 1.6	-0.1720	5861	+1373
8	12 15 58.4	+0.6707	5655	+1978	16	12 1 46.6	-0.8518	6076	+0645
24	16 19 48.9	-0.7488	6045	-1164	27	16 10 0.5	-1.1248	5630	-2463
26	18 0 50.8	-0.8065	5784	-1958	28	17 4 16.4	+0.2832	5466	-2682
27	19 1 4.6	-0.9442	5541	-2406	30	17 18 50.2	+0.7982	5356	-2782
28	19 19 54.5	+0.5239	5378	-2623	31	18 8 45.6	+1.1835	5274	-2822
30	20 10 55.8	+1.0715	5272	-2726	32	18 22 56.8	-0.3341	5216	-2811
32	21 15 51.9	-0.0467	5144	-2768	35	22 11 22.0	-1.1110	5291	-1926
35	25 5 38.0	-0.8728	5291	-1940	37	23 19 13.9	+0.1391	5416	-1276
37	26 13 32.2	+0.3262	5436	-1299	38	23 22 56.2	+0.6136	5431	-1193
38	26 17 14.1	+0.7936	5450	-1214	39	23 23 19.3	-0.8658	5432	-1184
39	26 17 37.1	-0.6868	5452	-1206	40	24 19 29.5	-1.0765	5488	-0695
40	27 13 43.5	-0.9362	5511	-0718	41	25 9 40.8	-0.3562	5504	-0334
41	28 3 51.1	-0.2446	5529	-0356	43	25 18 43.0	+0.1854	5507	-0999
43	28 12 50.8	+0.2771	5530	-0121	44	26 11 23.0	-1.1572	5486	+0329
44	29 5 26.3	-1.0990	5506	+0308	45	26 20 53.8	+0.0638	5464	+0568
45	29 14 54.8	+0.0997	5479	+0547	46	27 19 14.8	+0.5249	5375	+1092
46	30 13 11.4	+0.5110	5382	+1074	48	27 20 42.5	+0.5770	5368	+1127
48	30 14 38.8	+0.5592	5375	+1106	49	29 14 14.0	+1.1810	5144	+1908
					50	29 20 51.8	+0.9610	5108	+2006
Juli					51	29 23 44.8	+0.8862	5091	+2046
49	2 8 7.2	+1.0678	5137	+1885					
50	2 14 44.9	+0.8332	5102	+1984	August				
51	2 17 37.9	+0.7515	5085	+2023	55	1 2 46.0	+0.5108	4898	+2538
55	4 20 34.7	+0.2732	4899	+2523	1	3 13 39.0	-1.1090	4963	+2611
1	7 6 54.7	-1.3925	4999	+2624	2	3 19 25.6	+0.7228	4990	+2588
2	7 12 35.5	+0.4214	5030	+2604	5	6 5 13.6	+1.2502	5450	+1986
3	9 11 12.4	+1.2730	5429	+2186	6	6 6 40.4	+0.1567	5464	+1960
5	9 21 3.0	+0.9766	5536	+2025	7	6 9 27.7	+0.5796	5494	+1909
6	9 22 27.4	-0.0994	5550	+2000	8	6 10 8.3	+1.1260	5501	+1896
7	10 1 10.0	+0.3210	5582	+1949	9	6 19 36.1	-0.6970	5601	+1705
8	10 1 49.5	+0.8604	5590	+1936	10	6 19 44.2	-1.0398	5602	+1702
9	10 11 1.1	-0.9224	5694	+1745	11	6 19 59.9	-0.8932	5606	+1696
10	10 11 9.0	-1.2598	5695	+1742	12	6 20 12.9	-0.4249	5610	+1692
11	10 11 24.3	-1.1148	5698	+1736	13	6 20 42.0	-0.5065	5614	+1682
12	10 11 36.9	-0.6530	5701	+1732	14	6 21 24.4	-0.3380	5622	+1666
13	10 12 5.2	-0.7328	5707	+1721	15	7 11 3.1	+0.0380	5765	+1336
14	10 12 46.3	-0.5156	5715	+1705	16	8 11 28.2	-0.6965	5986	+0617

## STERNBEDECKUNGEN.

## Elemente der Sternbedeckungen 1912.

Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$	Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$
August					Sept.				
17	8 21 25.2	+0.6982	6047	+0285	14	3 4 2.3	-0.1394	5555	+1645
18	9 5 22.5	-1.1198	6084	+0009	15	3 18 1.4	+0.2333	5685	+1314
19	9 12 30.7	+0.2300	6103	-0244	16	4 19 9.4	-0.5332	5881	+0598
20	10 6 36.9	-0.6728	6097	-0880	17	5 5 25.7	+0.8736	5941	+0270
21	10 7 54.4	-1.1108	6095	-0925	18	5 13 38.8	-0.9824	5976	-0002
22	10 8 4.8	-0.9278	6093	-0930	19	5 21 1.3	+0.3805	5993	-0251
23	10 10 17.9	-0.1512	6087	-1006	20	6 15 43.1	-0.5591	5991	-0879
31	14 18 18.1	+0.9736	5352	-2880	21	6 17 3.1	-1.0052	5991	-0922
32	15 8 5.0	-0.5485	5296	-2870	22	6 17 13.8	-0.8200	5989	-0928
34	16 15 23.6	+1.4200	5246	-2675	23	6 19 31.1	-0.0351	5983	-1003
36	19 13 7.4	+1.3177	5400	-1554	24	7 2 5.2	-0.6645	5960	-1212
37	20 1 33.4	-0.0954	5438	-1273	26	8 7 20.8	-0.9034	5801	-2030
38	20 5 13.1	+0.3798	5446	-1186	34	13 1 15.4	+1.2767	5312	-2721
39	20 5 35.9	-1.0902	5446	-1177	36	15 21 10.5	+1.1395	5465	-1573
40	21 1 35.9	-1.2790	5488	-0684	37	16 9 19.2	-0.2569	5495	-1286
41	21 15 43.3	-0.5441	5498	-0320	38	16 12 54.2	+0.2140	5501	-1198
42	21 23 22.0	+1.2520	5495	-0121	39	16 13 16.5	-1.2410	5501	-1189
43	22 0 44.2	+0.0083	5496	-0086	41	17 22 48.7	-0.6917	5525	-0316
45	23 2 54.6	-0.0744	5446	+0582	42	18 6 21.8	+1.0958	5514	-0116
46	24 1 17.4	+0.4230	5358	+1109	43	18 7 43.1	-0.1395	5513	-0081
48	24 2 45.2	+0.4774	5349	+1141	45	19 9 41.2	-0.2068	5441	+0589
49	25 20 18.7	+1.1580	5139	+1927	46	20 7 59.9	+0.3045	5346	+1115
50	26 2 56.3	+0.9510	5106	+2026	48	20 9 27.6	+0.3597	5338	+1147
51	26 5 49.1	+0.8822	5092	+2068	49	22 3 1.6	+1.0752	5124	+1931
55	28 8 40.8	+0.6073	4914	+2565	50	22 9 39.3	+0.8756	5093	+2031
1	30 19 24.0	-0.9272	4969	+2625	51	22 12 32.2	+0.8098	5079	+2073
2	31 1 11.1	+0.9148	4993	+2600	55	24 15 16.9	+0.5899	4925	+2581
					1	27 1 28.7	-0.8800	5005	+2652
Sept.					2	27 7 11.8	+0.9590	5029	+2626
4	2 5 49.3	-1.3587	5351	+2065	4	29 11 21.1	-1.2827	5375	+2078
6	2 13 0.1	+0.3670	5415	+1943	6	29 18 30.0	+0.4445	5435	+1953
7	2 15 50.5	+0.7938	5442	+1891	7	29 21 19.9	+0.8720	5458	+1900
8	2 16 31.9	+1.3460	5449	+1878	9	30 7 40.4	-0.4234	5545	+1689
9	3 2 11.5	-0.5016	5538	+1685	10	30 7 48.7	-0.7712	5546	+1686
10	3 2 19.8	-0.8486	5540	+1682	11	30 8 4.8	-0.6228	5549	+1680
11	3 2 35.9	-0.7005	5541	+1677	12	30 8 18.1	-0.1475	5550	+1675
12	3 2 49.2	-0.2265	5544	+1671	13	30 8 47.9	-0.2307	5554	+1664
13	3 3 19.0	-0.3096	5550	+1661	14	30 9 31.2	-0.0602	5560	+1648

## Elemente der Sternbedeckungen 1912.

Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$	Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$
Sept.					Okt.				
15	3° 23' 33.3	+0.3147	5674	+1312	11	27 14 18.1	-0.6520	5613	+1695
	a h m				12	27 14 31.2	-0.1802	5616	+1690
Okt.					13	27 15 0.4	-0.2630	5618	+1679
16	2 ° 57.2	-0.4597	5840	+0593	14	27 15 43.0	-0.0939	5625	+1663
17	2 11 24.2	+0.9588	5884	+0266	15	28 5 30.0	+0.2736	5736	+1321
18	2 19 47.3	-0.9190	5906	-0004	16	29 6 32.0	-0.5056	5884	+0594
19	3 3 20.1	+0.4579	5916	-0248	17	29 16 52.9	+0.9050	5920	+0264
20	3 22 32.6	-0.5001	5896	-0869	18	30 1 12.7	-0.9712	5931	-0007
21	3 23 54.9	-0.9532	5894	-0912	19	30 8 43.8	+0.4022	5933	-0254
22	4 ° 6.0	-0.7652	5894	-0918	20	31 3 57.8	-0.5623	5886	-0869
23	4 2 27.4	+0.0301	5886	-0991	21	31 5 20.6	-1.0173	5880	-0912
24	4 9 13.8	-0.6114	5861	-1197	22	31 5 31.7	-0.8285	5880	-0918
26	5 15 28.2	-0.8674	5696	-2000	23	31 7 54.0	-0.0314	5870	-0991
27	6 16 0.7	-1.1695	5541	-2473	24	31 14 43.8	-0.6773	5834	-1193
28	7 10 37.6	+0.1626	5441	-2717	Nov.				
29	7 17 48.6	+1.3835	5408	-2784	26	1 21 26.3	-0.9420	5635	-1978
30	8 1 12.3	+0.6046	5378	-2837	27	2 22 34.8	-1.2488	5460	-2436
36	13 6 30.4	+1.1060	5532	-1594	28	3 17 43.8	+0.1050	5354	-2670
37	13 18 24.2	-0.2795	5564	-1302	29	4 1 7.7	+1.3455	5322	-2734
38	13 21 54.8	+0.1877	5570	-1212	30	4 8 44.7	+0.5598	5295	-2788
39	13 22 16.6	-1.2552	5570	-1203	31	4 22 52.5	+0.8889	5259	-2846
41	15 7 9.7	-0.7078	5579	-0319	32	5 13 2.9	-0.6770	5243	-2854
42	15 14 35.3	-1.0678	5565	-0116	41	11 16 6.7	-0.6073	5629	-0314
43	15 15 55.2	-0.1586	5562	-0080	42	11 23 26.9	+1.1665	5614	-0113
45	16 17 32.8	-0.2222	5470	+0594	43	12 ° 45.9	-0.0536	5611	-0074
46	17 15 41.1	+0.2912	5352	+1118	45	13 2 6.0	-0.0985	5511	+0604
48	17 17 8.3	+0.3466	5344	+1151	46	14 ° 2.6	+0.4266	5381	+1129
49	19 10 39.6	+1.0694	5106	+1927	48	14 1 29.2	+0.4825	5372	+1161
50	19 17 18.2	+0.8710	5073	+2025	49	15 18 54.2	+1.2235	5101	+1925
51	19 20 11.5	+0.8058	5060	+2066	50	16 1 33.8	+1.0266	5064	+2020
55	21 23 4.2	+0.5889	4912	+2574	51	16 4 27.7	+0.9615	5049	+2060
1	24 9 0.0	-0.8834	5031	+2664	55	18 7 42.5	+0.7345	4881	+2551
2	24 14 39.3	+0.9438	5059	+2640	1	20 18 2.2	-0.7974	5017	+2642
4	26 17 58.0	-1.2993	5436	+2098	2	20 23 42.0	+1.0202	5051	+2621
6	27 ° 58.8	+0.4119	5496	+1972	4	23 2 39.9	-1.2930	5476	+2097
7	27 3 45.4	+0.8352	5523	+1918	6	23 9 34.2	+0.3944	5545	+1972
9	27 13 54.2	-0.4539	5610	+1706	7	23 12 18.1	+0.8098	5571	+1919

## STERNBEDECKUNGEN.

## Elemente der Sternbedeckungen 1912.

Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$	Nr.	Zeit der Konj. in AR.	$q$	$p'$	$q'$	
Nov.					Dez.					
9	23 22 15.7	-0.4846	5670	+1706	53	15 14 48.5	-1.1762	4852	+2526	
10	23 22 23.6	-0.8268	5671	+1703	55	15 16 13.9	+1.0395	4849	+2534	
11	23 22 39.2	-0.6814	5676	+1698	1	18 3 29.3	-0.5494	4964	+2602	
12	23 22 51.9	-0.2146	5677	+1692	2	18 9 14.7	+1.2710	4998	+2581	
13	23 23 20.6	-0.2973	5682	+1682	4	20 12 49.6	-1.1610	5451	+2065	
14	24 0 2.3	-0.1308	5688	+1665	6	20 19 45.7	+0.5118	5528	+1943	
15	24 13 31.5	+0.2117	5811	+1324	7	20 22 30.1	+0.9202	5559	+1891	
16	25 13 56.5	-0.5940	5974	+0588	9	21 8 28.0	-0.3990	5669	+1681	
17	26 0 1.2	+0.7858	6011	+0254	10	21 8 35.9	-0.7412	5670	+1678	
18	26 8 8.0	-1.0790	6024	-0021	11	21 8 51.4	-0.5965	5671	+1672	
19	26 15 27.6	+0.2685	6023	-0271	12	21 9 4.2	-0.1307	5676	+1668	
20	27 10 14.0	-0.7087	5966	-0892	13	21 9 32.8	-0.2146	5680	+1657	
21	27 11 35.0	-1.1606	5960	-0935	14	21 10 14.4	-0.0501	5688	+1641	
22	27 11 45.9	-0.9740	5959	-0939	15	21 23 40.0	+0.2570	5826	+1302	
23	27 14 5.1	-0.1876	5946	-1014	16	22 23 47.9	-0.6049	6024	+0568	
24	27 20 46.5	-0.8350	5904	-1217	17	23 9 41.8	+0.7375	6074	+0231	
26	29 3 1.5	-1.1300	5668	-1994	18	23 17 38.4	-1.1275	6097	-0047	
28	30 23 16.4	-0.1024	5334	-2656	19	24 0 47.7	+0.1870	6103	-0299	
	Dez.					20	24 19 4.2	-0.8215	6061	-0929
	Dez.					21	24 20 22.9	-1.2700	6056	-0973
29	1 6 44.3	+1.1447	5291	-2714	22	24 20 33.4	-1.0868	6056	-0979	
30	1 14 26.6	+0.3598	5258	-2761	23	24 22 48.6	-0.3167	6042	-1053	
31	2 4 46.9	+0.7018	5209	-2809	24	25 5 18.0	-0.9698	6006	-1260	
32	2 19 12.9	-0.8612	5186	-2811	25	26 0 17.6	+1.2715	5860	-1800	
34	4 3 22.2	+1.1485	5222	-2652	26	26 10 36.4	-1.3260	5766	-2046	
45	10 10 24.5	+0.0630	5539	+0623	28	28 5 36.7	-0.3865	5398	-2696	
46	11 8 16.0	+0.6252	5409	+1149	29	28 12 54.7	+0.8392	5348	-2750	
48	11 9 42.3	+0.6836	5400	+1180	30	28 20 27.8	+0.0577	5305	-2791	
50	13 9 42.0	+1.2975	5069	+2031	31	29 10 34.4	+0.3920	5241	-2826	
51	13 12 36.2	+1.2353	5052	+2070	32	30 0 51.0	-1.1612	5204	-2816	
52	13 14 55.4	-13187	5038	+2100	34	31 8 55.7	+0.8720	5204	-2630	

## Sternbedeckungen für Berlin 1912.

Tag	Nr.	Name	Eintritt mittl. Zeit	$Q_1$	Austritt mittl. Zeit	$Q_2$	Bemerkungen
Jan.	7	$\iota$ Leonis . .	19 <sup>h</sup> 17.0	141.4	20 <sup>h</sup> 13.4	281.5	⌚ Untg. 22 <sup>h</sup> 42 <sup>m</sup>
	9	$\eta$ Virginis . .	13 24.4	164.9	14 14.8	263.0	⌚ Aufg. 10 51
	27	$\pi$ Arietis . .	12 37.6	75.5	13 32.2	250.5	⌚ Untg. 14 4
	28	$\sigma$ Mars . . .	15 23.0	59.4	16 9.0	279.6	⌚ Untg. 15 32
Febr. 24	8	$\tau^2$ Arietis . .	9 32.1	77.3	10 33.9	251.8	⌚ Untg. 13 15
März	2	$\iota$ Leonis . .	17 0.8	74.4	17 39.4	345.0	⌚ Untg. 19 4
	4	$\eta$ Virginis . .	9 10.0	80.7	9 56.2	344.6	⌚ Aufg. 7 16
	22	$\delta$ Arietis . .	10 10.6	99.3	10 58.2	231.9	⌚ Untg. 11 3
April 21	17	136 Tauri . . .	8 46.6	98.6	9 43.2	269.0	⌚ Untg. 12 56
Mai 30	38	$\alpha$ Scorp. . .	9 57.2	95.1	11 11.8	305.6	⌚ Aufg. 8 21
Juni 20	30	$\sigma$ Leonis . .	11 36.5	110.9	12 28.3	304.3	⌚ Untg. 11 59
Juli	2	$\varepsilon$ Capricorni .	14 14.7	37.2	15 29.3	263.6	⌚ Aufg. 15 44
	18	$\beta$ Virginis . .	9 31.7	131.5	10 24.9	286.0	⌚ Untg. 10 16
Sept.	2	$\tau^1$ Arietis . .	14 54.9	107.1	15 47.3	197.4	⌚ i. Mer. 16 30
	18	$\gamma^1$ Sagittarii .	5 48.4	114.1	7 5.0	247.6	⌚ Untg. 6 7
Okt.	22	$\varepsilon$ Capricorni .	9 9.5	49.4	10 28.7	249.1	⌚ i. Mer. 9 26
	22	$\chi$ Capricorni .	12 56.6	94.6	13 50.8	203.8	⌚ Untg. 13 49
	24	$\chi$ Aquarii . .	15 56.3	80.4	16 52.1	217.8	⌚ Untg. 16 18
Okt. 2	17	136 Tauri . . .	10 0.6	122.3	10 39.8	219.4	⌚ Aufg. 7 59
Nov.	16	$\chi$ Capricorni .	3 16.7	47.4	4 33.5	260.5	⌚ Untg. 4 4
	18	$\chi$ Aquarii . .	7 22.7	36.4	8 37.9	247.4	⌚ i. Mer. 7 22
	23	$\zeta$ Arietis . .	8 59.3	3.1	9 35.9	300.1	⌚ i. Mer. 11 3
	24	$\chi$ Tauri . . .	13 44.4	30.5	14 33.2	305.1	⌚ i. Mer. 11 59
Dez.	26	49 Aurigae . .	15 25.9	55.2	16 18.3	319.8	⌚ i. Mer. 14 4
	1	$\sigma$ Leonis . . .	12 45.9	98.9	13 41.1	315.9	⌚ Aufg. 11 52
	23	17 136 Tauri . .	8 43.8	143.4	9 15.4	199.9	⌚ i. Mer. 11 45

Geoz. Obere Konj. Mittlere Zeit	$\frac{b}{a}$	Geoz. Obere Konj. Mittlere Zeit	$\frac{b}{a}$	Geoz. Obere Konj. Mittlere Zeit	$\frac{b}{a}$	
TRABANT I.						
Jan.	2 II 57.0	-0.0505	März 22 3 43.6	-0.0510	Juni 9 I 7 36.5	
4 6 27.1	505	23 22 11.3	510	11 12 2.5	508	
6 0 57.0	505	25 16 39.0	510	13 6 28.4	507	
7 19 27.0	505	27 11 6.6	510	15 0 54.5	506	
9 13 56.9	505	29 5 34.2	510	16 19 20.6	505	
11 8 26.8	505	31 0 1.6	511	18 13 46.7	504	
13 2 56.5	505	April 1 18 29.0	511	20 8 12.9	503	
14 21 26.4	505	3 12 56.3	511	22 2 39.1	502	
16 15 56.1	505	5 7 23.6	511	23 21 5.4	501	
18 10 25.9	506	7 1 50.7	512	25 15 31.7	500	
20 4 55.6	506	8 20 17.8	512	27 9 58.0	500	
21 23 25.3	506	10 14 44.8	513	29 4 24.5	499	
23 17 54.9	506	12 9 11.9	513	30 22 50.8	498	
25 12 24.4	506	14 3 38.7	513	Juli 2 17 17.3	497	
27 6 53.9	506	15 22 5.6	513	4 11 43.8	496	
29 1 23.4	506	17 16 32.3	513	6 6 10.5	495	
30 19 52.8	506	19 10 59.0	513	8 0 37.1	493	
Febr.	1 14 22.3	506	21 5 25.7	513	9 19 3.9	492
3 8 51.6	506	22 23 52.3	513	11 13 30.6	491	
5 3 21.0	506	24 18 18.8	514	13 7 57.6	490	
6 21 50.1	506	26 12 45.4	514	15 2 24.5	489	
8 16 19.5	506	28 7 11.7	514	16 20 51.4	487	
10 10 48.6	506	30 1 38.1	514	18 15 18.5	486	
12 5 17.8	507	Mai 1 20 4.4	514	20 9 45.7	485	
13 23 46.8	507	3 14 30.8	514	22 4 12.9	484	
15 18 15.8	507	5 8 56.9	514	23 22 40.1	483	
17 12 44.7	507	7 3 23.1	514	25 17 7.5	482	
19 7 13.7	508	8 21 49.3	514	27 11 34.9	482	
21 1 42.6	508	10 16 15.4	514	29 6 2.4	481	
22 20 11.4	508	12 10 41.4	514	31 0 30.0	479	
24 14 40.1	508	14 5 7.6	514	Aug. 1 18 57.7	478	
26 9 8.8	508	15 23 33.5	514	3 13 25.3	477	
28 3 37.3	508	17 17 59.6	513	5 7 53.1	476	
29 22 5.9	508	19 12 25.5	513	7 2 21.0	475	
März 2 16 34.4	508	21 6 51.5	513	8 20 48.9	474	
4 11 2.9	508	23 1 17.3	512	10 15 16.9	472	
6 5 31.2	509	24 19 43.2	512	12 9 44.9	472	
7 23 59.6	509	26 14 9.2	511	14 4 13.0	470	
9 18 27.8	509	28 8 35.0	511	15 22 41.2	469	
11 12 56.0	509	30 3 1.0	511	17 17 9.5	468	
13 7 24.0	509	Juni 1 21 26.9	511	19 11 37.8	467	
15 1 52.1	509	2 15 52.7	510	21 6 6.1	466	
16 20 20.1	509	4 10 18.7	510	23 0 34.6	465	
18 14 48.0	509	6 4 44.6	510	24 19 3.1	464	
20 9 15.8	509	7 23 10.6	509	26 13 31.6	463	

Geoz. Obere Konj.  
Mittlere Zeit

$\frac{b}{a}$

Geoz. Obere Konj.  
Mittlere Zeit

$\frac{b}{a}$

Geoz. Obere Konj.  
Mittlere Zeit

$\frac{b}{a}$

## TRABANT I. (Fortsetzung.)

Aug. 28	8 <sup>h</sup> 0.3	-0.0462	Okt. 9	19 <sup>h</sup> 43.7	-0.0440	Nov. 21	7 <sup>h</sup> 47.5	-0.0416
30	2 29.0	461	11	14 13.6	439	23	2 17.9	415
31	20 57.8	460	13	8 43.5	438	24	20 48.3	414
Sept. 2	15 26.6	459	15	3 13.4	437	26	15 18.8	413
4	9 55.5	458	16	21 43.3	436	28	9 49.1	411
6	4 24.4	457	18	16 13.3	435	30	4 19.7	410
7	22 53.4	456	20	10 43.3	434	Dez. 1	22 50.0	408
9	17 22.5	455	22	5 13.3	433	3	17 20.5	407
11	11 51.6	454	23	23 43.4	432	5	11 50.9	406
13	6 20.7	453	25	18 13.6	431	7	6 21.4	405
15	0 49.9	452	27	12 43.6	430	9	0 51.8	403
16	19 19.3	451	29	7 13.9	430	10	19 22.3	402
18	13 48.6	450	31	1 44.0	429	12	13 52.7	401
20	8 18.0	450	Nov. 1	20 14.2	427	14	8 23.2	400
22	2 47.4	449	3	14 44.4	426	16	2 53.6	398
23	21 16.8	448	5	9 14.7	425	17	21 24.1	397
25	15 46.2	447	7	3 44.9	424	19	15 54.6	395
27	10 15.8	446	8	22 15.3	423	21	10 25.0	394
29	4 45.4	445	10	16 45.4	422	23	4 55.3	392
30	23 15.0	444	12	11 15.8	421	24	23 25.9	391
Okt. 2	17 44.6	443	14	5 46.1	420	26	17 56.2	390
4	12 14.3	442	16	0 16.5	419	28	12 26.6	388
6	6 44.1	442	17	18 46.7	418	30	6 57.1	387
8	1 14.0	441	19	13 17.1	417			

## TRABANT II.

Jan. 1	15 <sup>h</sup> 51.4	-0.0505	März 12	18 <sup>h</sup> 27.3	-0.0509	Mai 22	18 <sup>h</sup> 9.4	-0.0513
5	5 14.1	505	16	7 42.9	509	26	7 17.5	512
8	18 36.5	505	19	20 57.9	509	29	20 24.8	511
12	7 58.7	505	23	10 12.5	510	Juni 2	9 32.9	510
15	21 20.7	505	26	23 26.6	510	5	22 40.2	510
19	10 42.6	506	30	12 40.2	511	9	11 48.3	509
23	0 4.0	506	April 3	1 53.1	511	13	0 56.0	507
26	13 25.1	506	6	15 5.8	512	16	14 4.8	505
30	2 45.9	506	10	4 17.6	513	20	3 13.2	503
Febr. 2	16 6.4	506	13	17 29.3	513	23	16 22.6	501
6	5 26.6	506	17	6 40.1	513	27	5 31.4	500
9	18 46.6	506	20	19 50.8	513	30	18 41.8	498
13	8 6.2	507	24	9 0.8	514	Juli 4	7 51.5	496
16	21 25.3	507	27	22 10.8	514	7	21 2.7	493
20	10 44.1	508	Mai 1	11 19.9	514	11	10 13.4	491
24	0 2.4	508	5	0 29.1	514	14	23 25.8	489
27	13 20.3	508	8	13 37.4	514	18	12 37.5	487
März 2	2 37.8	508	12	2 46.0	514	22	1 50.9	484
5	15 54.7	509	15	15 53.8	514	25	15 3.7	482
9	5 11.3	509	19	5 2.1	513	29	4 18.3	480

Geoz. Obere Konj.	<i>b</i>	Geoz. Obere Konj.	<i>b</i>	Geoz. Obere Konj.	<i>b</i>
Mittlere Zeit	<i>a</i>	Mittlere Zeit	<i>a</i>	Mittlere Zeit	<i>a</i>

## TRABANT II. (Fortsetzung.)

Aug.	1	17	32.3	-0.0478	Sept.	24	1	12.7	-0.0448	Nov.	16	10	8.2	-0.0419
	5	6	48.0	476		27	14	34.2	446		19	23	33.3	417
	8	20	3.1	474	Okt.	1	3	57.2	444		23	12	58.2	415
	12	9	19.8	472		4	17	19.5	443		27	2	23.4	412
	15	22	36.0	469		8	6	42.8	441		30	15	48.3	409
	19	11	53.8	467		II	20	5.6	439	Dez.	4	5	13.6	407
	23	1	11.1	465		15	9	29.4	437		7	18	38.5	404
	26	14	30.1	463		18	22	52.7	435		11	8	3.8	402
	30	3	48.4	461		22	12	16.9	433		14	21	28.7	399
Sept.	2	17	8.2	459		26	1	40.7	431		18	10	53.7	396
	6	6	27.4	457		29	15	5.2	429		22	0	18.7	393
	9	19	48.1	455	Nov.	2	4	29.3	427		25	13	43.6	390
	13	9	8.2	453		5	17	54.2	424		29	3	8.3	388
	16	22	29.6	452		9	7	18.6	423					
	20	11	50.6	450		12	20	43.6	421					

## TRABANT III.

Jan.	5	8	26.8	-0.0505	Mai	6	3	11.7	-0.0514	Sept.	4	15	17.1	-0.0458
	12	12	48.7	505		13	6	32.1	514		11	19	22.4	454
	19	17	9.1	506		20	9	50.1	513		18	23	30.9	450
	26	21	26.6	506		27	13	6.3	511		26	3	43.2	447
Febr.	3	1	41.3	506	Juni	3	16	22.7	510	Okt.	3	7	58.0	443
	10	5	53.2	506		10	19	39.0	508		10	12	15.2	440
	17	10	1.8	507		17	22	57.9	504		17	16	34.6	436
	24	14	7.2	508		25	2	18.3	501		24	20	56.1	432
März	2	18	9.0	508	Juli	2	5	41.5	497	Nov.	1	1	20.2	428
	9	22	7.3	509		9	9	7.9	493		8	5	45.5	423
	17	2	0.7	509		16	12	38.2	488		15	10	12.5	419
	24	5	49.8	510		23	16	13.2	483		22	14	40.0	415
	31	9	34.2	511		30	19	52.9	479		29	19	8.5	410
April	7	13	14.0	512	Aug.	6	23	37.8	475	Dez.	6	23	37.3	405
	14	16	49.3	513		14	3	26.2	470		14	4	6.3	400
	21	20	20.4	513		21	7	19.2	466		21	8	36.2	394
	28	23	48.1	514		28	11	16.2	462		28	13	5.5	388

## TRABANT IV.

Jan.	7	20	16.0	-0.0443	Mai	20	14	55.3	-0.0455	Okt.	1	1	46.4	-0.0385
	24	16	11.3	445	Juni	6	5	4.6	450		17	21	30.9	378
Febr.	10	11	35.2	447		22	19	22.8	441	Nov.	3	17	42.6	370
	27	6	19.9	450	Juli	9	10	14.9	430		20	14	12.7	362
März	15	0	15.4	452		26	1	56.7	420	Dez.	7	10	55.8	353
	31	17	16.5	454	Aug.	11	18	35.5	410		24	7	42.6	342
April	17	9	18.7	456		28	12	10.9	401					
Mai	4	0	27.6	457	Sept.	14	6	37.3	393					

## TRABANT I.

	Eintritte		Eintritte		Eintritte		Austritte
Jan.	2 10 <sup>b</sup> 8 <sup>m</sup> 56 <sup>s</sup>	März	6 3 <sup>b</sup> 11 <sup>m</sup> 23 <sup>s</sup>	Mai	8 20 <sup>b</sup> 12 <sup>m</sup> 33 <sup>s</sup>	Juli	6 8 <sup>b</sup> 2 <sup>m</sup> 23 <sup>s</sup>
4	4 37 27	7	21 39 48	10	14 41 1	8	2 31 1
5	23 5 51	9	16 8 5	12	9 9 25	9	20 59 38
7	17 34 22	11	10 36 28	14	3 37 52	11	15 28 15
9	12 2 47	13	5 4 47	15	22 6 16	13	9 56 55
11	6 31 17	14	23 33 12	17	16 34 46	15	4 25 33
13	0 59 39	16	18 1 29	19	11 3 11	16	22 54 12
14	19 28 9	18	12 29 52	21	5 31 39	18	17 22 50
16	13 56 33	20	6 58 10	23	0 0 5	20	11 51 30
18	8 25 3	22	1 26 35	24	18 28 35	22	6 20 10
20	2 53 24	23	19 54 52	26	12 57 2	24	0 48 50
21	21 21 52	25	14 23 15	28	7 25 31	25	19 17 29
23	15 50 15	27	8 51 34	30	1 53 59	27	13 46 10
25	10 18 44	29	3 19 58	31	20 22 30	29	8 14 51
27	4 47 3	30	21 48 16			31	2 43 31
28	23 15 32	April	1 16 16 38			Aug.	1 21 12 12
30	17 43 54	3	10 44 57				3 15 40 54
Febr.	1 12 12 22	5	5 13 22	Juni	2 16 59 39		5 10 9 36
3	6 40 40	6	23 41 40	4	11 28 10		7 4 38 16
5	1 9 8	8	18 10 3	6	5 56 39		8 23 6 58
6	19 37 29	10	12 38 23	8	0 25 13		10 17 35 40
8	14 5 56	12	7 6 48	9	18 53 43		12 12 4 23
10	8 34 15	14	1 35 7	11	13 22 16		14 6 33 4
12	3 2 41	15	20 3 30	13	7 50 47		16 1 1 46
13	21 31 2	17	14 31 50	15	2 19 21		17 19 30 28
15	15 59 28	19	9 0 16	16	20 47 53		19 13 59 12
17	10 27 46	21	3 28 36	18	15 16 28		21 8 27 54
19	4 56 11	22	21 56 59	20	9 45 0		23 2 56 36
20	23 24 31	24	16 25 21	22	4 13 37		24 21 25 19
22	17 52 57	26	10 53 47	23	22 42 11		26 15 54 4
24	12 21 15	28	5 22 8	25	17 10 46		28 10 22 45
26	6 49 39	29	23 50 33	27	11 39 20		30 4 51 28
28	1 17 58	Mai	1 18 18 56	29	6 7 57		31 23 20 11
29	19 46 23	3	12 47 22	Juli	1 0 36 33	Sept.	2 17 48 56
März	2 14 14 41	5	7 15 44	2	19 5 10		4 12 17 38
4	8 43 4	7	1 44 10	4	13 33 45		6 6 46 21

## TRABANT I. (Fortsetzung.)

Austritte	Austritte	Austritte	Austritte
Sept. 8 1 <sup>h</sup> 15 <sup>m</sup> 4 <sup>s</sup>	Sept. 27 12 <sup>h</sup> 31 <sup>m</sup> 1 <sup>s</sup>	Okt. 16 23 <sup>h</sup> 46 <sup>m</sup> 53 <sup>s</sup>	Nov. 5 11 <sup>h</sup> 2 <sup>m</sup> 34 <sup>s</sup>
9 19 43 49	29 6 59 43	18 18 15 36	7 5 31 14
11 14 12 31	Okt. 1 1 28 29	20 12 44 16	8 23 59 56
13 8 41 14	2 19 57 10	22 7 13 1	10 18 28 34
15 3 9 57	4 14 25 53	24 1 41 42	12 12 57 18
16 21 38 42	6 8 54 35	25 20 10 24	14 7 25 57
18 16 7 24	8 3 23 21	27 14 39 4	16 1 54 38
20 10 36 8	9 21 52 2	29 9 7 49	17 20 23 16
22 5 4 50	11 16 20 45	31 3 36 29	19 14 51 59
23 23 33 36	13 10 49 26	Nov. 1 22 5 11	
25 18 2 18	15 5 18 12	3 16 33 50	

## TRABANT II.

Eintritte	Eintritte	Austritte	Austritte
Jan. 1 13 <sup>h</sup> 8 <sup>m</sup> 43 <sup>s</sup>	März 26 19 <sup>h</sup> 47 <sup>m</sup> 6 <sup>s</sup>	Juni 9 13 <sup>h</sup> 31 <sup>m</sup> 32 <sup>s</sup>	Sept. 2 21 <sup>h</sup> 2 <sup>m</sup> 50 <sup>s</sup>
5 2 25 16	30 9 4 9	13 2 49 26	6 10 21 15
8 15 41 49	April 2 22 21 1	16 16 8 20	9 23 40 40
12 4 58 20	6 11 38 12	20 5 26 20	13 12 59 4
15 18 14 50	10 0 55 8	23 18 45 22	17 2 18 25
19 7 31 20	13 14 12 28	27 8 3 28	20 15 36 47
22 20 47 50	17 3 29 29	30 21 22 37	24 4 56 4
26 10 4 19	20 16 46 57	Juli 4 10 40 47	27 18 14 23
29 23 20 49	24 6 4 4	8 0 0 2	Okt. 1 7 33 34
Febr. 2 12 37 18	27 19 21 42	11 13 18 17	4 20 51 50
6 1 53 49	Mai 1 8 38 54	15 2 37 38	8 10 10 55
9 15 10 20	4 21 56 42	18 15 55 55	11 23 29 8
13 4 26 52	8 11 14 0	22 5 15 21	15 12 48 5
16 17 43 24	12 0 31 58	25 18 33 41	19 2 6 14
20 6 59 58	15 13 49 22	29 7 53 10	22 15 25 4
23 20 16 33	19 3 7 30	Aug. 1 21 11 33	26 4 43 10
27 9 33 8	22 16 25 1	5 10 31 4	29 18 1 51
März 1 22 49 48	26 5 43 20	8 23 49 29	Nov. 2 7 19 52
5 12 6 25	29 19 0 56	12 13 9 1	5 20 38 25
9 1 23 9	Austritte	16 2 27 26	9 9 56 22
12 14 39 50		19 15 46 58	12 23 14 46
16 3 56 39	Juni 2 10 54 58	23 5 5 24	16 12 32 38
19 17 13 23	6 0 12 47	26 18 24 56	20 1 50 53
23 6 30 18		30 7 43 21	

Mitte der Verfinsternung	Halbe Dauer	Mitte der Verfinsternung	Halbe Dauer
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## TRABANT III.

Jan.	5	5 19 12	○ 45 59	Juni	18	○ 37 22	○ 59 45
	12	9 17 23	○ 46 29		25	4 36 22	I ○ 25
	19	13 16 6	○ 46 59	Juli	2	8 35 28	I I 5
	26	17 14 10	○ 47 30		9	12 34 20	I I 45
Febr.	2	21 12 14	○ 48 2		16	16 33 21	I 2 25
	10	1 9 52	○ 48 35		23	20 32 52	I 3 5
	17	5 7 26	○ 49 9		31	○ 32 23	I 3 46
	24	9 5 20	○ 49 43	Aug.	7	4 32 31	I 4 26
März	2	13 3 12	○ 50 17		14	8 32 5	I 5 6
	9	17 1 40	○ 50 52		21	12 31 40	I 5 47
	16	20 59 32	○ 51 28		28	16 30 58	I 6 27
	24	○ 57 26	○ 52 5	Sept.	4	20 30 21	I 7 8
	31	4 54 59	○ 52 42		12	○ 30 12	I 7 48
April	7	8 52 35	○ 53 19		19	4 29 57	I 8 29
	14	12 50 38	○ 53 56		26	8 30 14	I 9 9
	21	16 48 43	○ 54 34	Okt.	3	12 29 53	I 9 50
	28	20 47 27	○ 55 12		10	16 29 28	I 10 30
Mai	6	○ 45 40	○ 55 50		17	20 28 45	I 11 10
	13	4 43 59	○ 56 29		25	○ 28 5	I 11 50
	20	8 42 4	○ 57 7	Nov.	1	4 27 52	I 12 30
	27	12 40 17	○ 57 46		8	8 27 27	I 13 9
Juni	3	16 39 2	○ 58 26		15	12 27 32	I 13 49
	10	20 37 51	○ 59 5				

## TRABANT IV.

Es finden in diesem Jahre keine Verfinsterungen statt.

$\circ^h$	$\alpha$	$\beta$	$p_a$	$a$	$b$	$U'$	$B'$	$P'$
Jan. 2	19.44	17.68	+0.04	43.80	-15.31	237° 50.3	21 59.8	+14 31.7
6	19.31	17.56	0.04	43.51	15.20	237 59.4	22 2.1	14 27.9
10	19.17	17.44	0.04	43.21	15.10	238 8.5	22 4.5	14 24.2
14	19.04	17.32	0.05	42.91	15.00	238 17.6	22 6.8	14 20.4
18	18.90	17.20	0.05	42.60	14.91	238 26.7	22 9.1	14 16.7
22	18.77	17.07	+0.05	42.29	-14.82	238 35.8	-22 11.4	+14 12.9
26	18.63	16.94	0.05	41.98	14.74	238 44.9	22 13.7	14 9.1
30	18.50	16.82	0.05	41.67	14.66	238 54.0	22 16.0	14 5.3
Febr. 3	18.36	16.70	0.05	41.36	14.59	239 3.1	22 18.3	14 1.5
7	18.23	16.58	0.05	41.06	14.52	239 12.2	22 20.6	13 57.7
11	18.10	16.46	+0.05	40.77	-14.46	239 21.3	-22 22.9	+13 53.9
15	17.97	16.35	0.05	40.48	14.41	239 30.4	22 25.2	13 50.1
19	17.85	16.24	0.05	40.20	14.37	239 39.5	22 27.5	13 46.3
23	17.73	16.13	0.05	39.93	14.33	239 48.7	22 29.7	13 42.4
27	17.61	16.03	0.05	39.67	14.30	239 57.8	22 32.0	13 38.6
März 2	17.50	15.93	+0.04	39.42	-14.27	240 7.0	-22 34.2	+13 34.7
6	17.39	15.83	0.04	39.18	14.25	240 16.2	22 36.4	13 30.9
10	17.29	15.74	0.04	38.94	14.24	240 25.4	22 38.6	13 27.0
14	17.19	15.65	0.03	38.72	14.23	240 34.5	22 40.8	13 23.2
18	17.10	15.57	0.03	38.52	14.23	240 43.7	22 43.0	13 19.3
22	17.02	15.50	+0.02	38.33	-14.23	240 52.9	-22 45.2	+13 15.4
26	16.94	15.43	+0.02	38.15	-14.24	241 2.1	-22 47.3	+13 11.5
Okt. 4	19.71	18.05	-0.04	44.42	-18.75	248 31.0	-24 21.7	+ 9 56.1
8	19.83	18.16	0.04	44.69	18.84	248 40.5	24 23.5	9 51.9
12	19.95	18.26	0.03	44.94	18.93	248 50.0	24 25.2	9 47.7
16	20.06	18.36	0.03	45.18	19.01	248 59.5	24 26.9	9 43.5
20	20.16	18.45	0.02	45.41	19.08	249 9.0	24 28.6	9 39.2
24	20.25	18.53	-0.02	45.62	-19.14	249 18.5	-24 30.3	+ 9 35.0
28	20.33	18.60	0.01	45.80	19.19	249 28.0	24 32.0	9 30.7
Nov. 1	20.40	18.66	0.01	45.96	19.23	249 37.5	24 33.7	9 26.5
5	20.46	18.72	0.01	46.10	19.25	249 47.1	24 35.3	9 22.2
9	20.51	18.77	-0.01	46.21	19.26	249 56.6	24 37.0	9 17.9
13	20.55	18.80	0.00	46.29	-19.26	250 6.2	-24 38.6	+ 9 13.6
17	20.58	18.82	0.00	46.34	19.25	250 15.7	24 40.3	9 9.3
21	20.59	18.83	0.00	46.37	19.22	250 25.3	24 41.9	9 5.0
25	20.59	18.83	0.00	46.37	19.18	250 34.8	24 43.5	9 0.7
29	20.58	18.81	0.00	46.34	19.14	250 44.4	24 45.1	8 56.4
Dez. 3	20.55	18.78	0.00	46.28	-19.09	250 54.0	-24 46.7	+ 8 52.1
7	20.51	18.75	0.00	46.19	19.02	251 3.6	24 48.2	8 47.7
11	20.46	18.71	+0.01	46.07	18.94	251 13.2	24 49.8	8 43.4
15	20.40	18.65	0.01	45.93	18.85	251 22.8	24 51.3	8 39.1
19	20.32	18.58	0.01	45.77	18.76	251 32.4	24 52.9	8 34.8
23	20.24	18.50	+0.02	45.58	-18.66	251 42.0	-24 54.4	+ 8 30.4
27	20.15	18.41	0.02	45.37	18.56	251 51.6	24 56.0	8 26.1
31	20.05	18.32	+0.03	45.14	-18.45	252 1.2	-24 57.5	+ 8 21.7

$\circ^h$	<i>U</i>	<i>B</i>	<i>P</i>	$\circ^h$	<i>U</i>	<i>B</i>	<i>P</i>
Jan. 0	275 ° 7.3	— 20 ° 27.8	— 0 ° 37.8	Okt. 4	296 ° 31.7	— 24 ° 58.4	— 3 ° 14.2
2	275 3.9	20 27.5	0 37.4	6	296 27.3	24 57.6	3 13.7
4	275 0.9	20 27.3	0 37.0	8	296 22.4	24 56.7	3 13.1
6	274 58.3	20 27.1	0 36.7	10	296 17.1	24 55.8	3 12.5
8	274 56.2	20 27.1	0 36.4	12	296 11.4	24 54.8	3 11.8
10	274 54.5	— 20 27.3	— 0 36.2	14	296 5.3	— 24 53.8	3 11.1
12	274 53.3	20 27.6	0 36.1	16	295 58.7	24 52.8	3 10.3
14	274 52.6	20 28.0	0 36.0	18	295 51.8	24 51.7	3 9.5
16	274 52.3	20 28.5	0 36.0	20	295 44.5	24 50.6	3 8.6
18	274 52.5	20 29.2	0 36.0	22	295 36.9	24 49.5	3 7.7
20	274 53.2	— 20 30.0	— 0 36.1	24	295 28.9	— 24 48.3	— 3 6.8
22	274 54.3	20 30.9	0 36.2	26	295 20.6	24 47.1	3 5.8
24	274 55.9	20 32.0	0 36.4	28	295 12.0	24 45.9	3 4.8
26	274 57.9	20 33.2	0 36.6	30	295 3.1	24 44.7	3 3.8
28	275 0.4	20 34.5	0 36.9	Nov.		24 43.4	3 2.7
30	275 3.4	— 20 35.9	— 0 37.3	1	294 53.9	— 24 42.1	— 3 1.6
Febr. 1	275 6.8	20 37.4	0 37.7	3	294 44.5	24 40.7	3 0.4
3	275 10.7	20 39.1	0 38.2	5	294 34.8	24 39.4	2 59.2
5	275 15.0	20 40.9	0 38.7	7	294 24.9	24 38.0	2 58.0
7	275 19.7	20 42.8	0 39.3	9	294 14.9	24 36.6	2 56.8
9	275 24.9	— 20 44.8	— 0 39.9	11	294 4.7	24 35.2	— 2 55.6
11	275 30.5	20 47.0	0 40.6	13	293 54.3	24 33.8	2 54.4
13	275 36.5	20 49.3	0 41.4	15	293 43.8	24 32.3	2 53.1
15	275 42.9	20 51.6	0 42.2	17	293 33.3	24 30.8	2 51.9
17	275 49.8	20 54.0	0 43.1	19	293 22.6	24 29.4	2 50.6
19	275 57.0	— 20 56.6	— 0 44.0	21	293 11.9	24 28.0	— 2 49.3
21	276 4.6	20 59.3	0 44.9	23	293 1.2	24 26.6	2 48.0
23	276 12.7	21 2.0	0 45.9	25	292 50.5	24 25.2	2 46.7
25	276 21.1	21 4.8	0 46.9	27	292 39.8	24 23.8	2 45.5
27	276 29.9	21 7.7	0 48.0	29	292 29.2	24 22.5	2 44.2
29	276 39.1	— 21 10.7	— 0 49.2	Dez.		24 21.2	— 2 43.0
März 2	276 48.6	21 13.8	0 50.4	1	292 8.2	24 19.9	2 41.7
4	276 58.4	21 16.9	0 51.6	3	292 57.8	24 18.7	2 40.5
6	277 8.6	21 20.1	0 52.9	5	291 47.6	24 17.5	2 39.3
8	277 19.1	21 23.3	0 54.2	7	291 37.6	24 16.3	2 38.1
10	277 30.0	— 21 26.6	— 0 55.5	9	291 27.8	24 15.1	— 2 37.0
12	277 41.2	21 30.0	0 56.9	11	291 18.2	24 14.0	2 35.9
14	277 52.6	21 33.4	0 58.3	13	291 8.8	24 12.9	2 34.8
16	278 4.4	21 36.9	0 59.8	15	290 59.7	24 11.9	2 33.8
18	278 16.5	21 40.5	1 1.3	17	290 50.9	24 10.9	2 32.8
20	278 28.9	— 21 44.1	— 1 2.8	19	290 42.4	24 9.9	— 2 31.8
22	278 41.5	21 47.7	1 4.4	21	290 34.2	24 9.0	2 30.8
24	278 54.4	21 51.3	1 6.0	23	290 26.3	24 8.2	2 29.9
26	279 7.6	— 21 55.0	— 1 7.6	25	290 18.8	24 7.5	2 29.0
				27	290 11.7	24 7.5	— 2 28.2
				29	290 4.9	— 24 6.9	
				31	290 4.9	— 24 6.9	

## MIMAS.

$\circ^h$	$L$	$M$	$\log \frac{a(p)}{p}$	$\frac{a(p)}{p} \sin B$	$\circ^h$	$L$	$M$	$\log \frac{a(p)}{p}$	$\frac{a(p)}{p} \sin B$		
Jan.	0	254 48.7	243.24	1.47624	-10.46	Okt.	4	250 51.0	321.28	1.48095	-12.78
	2	298 48.8	285.24	1.47483	10.43		6	294 51.0	3.28	1.48229	12.81
	4	342 48.9	327.24	1.47340	10.39		8	338 50.9	45.28	1.48359	12.84
	6	26 48.9	9.24	1.47195	10.36		10	22 50.9	87.28	1.48486	12.87
	8	70 49.0	51.24	1.47047	10.32		12	66 50.9	129.28	1.48610	12.90
	10	114 49.0	93.24	1.46896	-10.29		14	110 50.9	171.28	1.48729	-12.93
	12	158 49.1	135.24	1.46744	10.25		16	154 50.8	213.28	1.48844	12.95
	14	202 49.2	177.24	1.46591	10.22		18	198 50.8	255.28	1.48954	12.98
	16	246 49.2	219.24	1.46436	10.19		20	242 50.8	297.28	1.49059	13.00
	18	290 49.3	261.24	1.46280	10.16		22	286 50.8	339.28	1.49160	13.02
	20	334 49.3	303.24	1.46122	-10.13		24	330 50.7	21.28	1.49255	-13.04
	22	18 49.4	345.24	1.45963	10.10		26	14 50.7	63.28	1.49345	13.06
	24	62 49.5	27.24	1.45804	10.07		28	58 50.7	105.28	1.49430	13.07
	26	106 49.5	69.24	1.45645	10.04		30	102 50.7	147.28	1.49510	13.09
	28	150 49.6	111.24	1.45485	10.01	Nov.	1	146 50.6	189.28	1.49583	13.10
	30	194 49.6	153.24	1.45325	-		3	190 50.6	231.28	1.49650	-13.11
Febr.	1	238 49.7	195.25	1.45166	9.96		5	234 50.6	273.28	1.49712	13.12
	3	282 49.7	237.25	1.45007	9.94		7	278 50.6	315.28	1.49767	13.12
	5	326 49.8	279.25	1.44848	9.92		9	322 50.5	357.28	1.49816	13.13
	7	10 49.8	321.25	1.44690	9.90		11	6 50.5	39.28	1.49858	13.13
	9	54 49.9	3.25	1.44533	-		13	50 50.5	81.28	1.49894	-13.13
	11	98 49.9	45.25	1.44377	9.86		15	94 50.5	123.27	1.49923	13.12
	13	142 50.0	87.25	1.44223	9.84		17	138 50.4	165.27	1.49946	13.12
	15	186 50.0	129.25	1.44069	9.82		19	182 50.4	207.27	1.49962	13.11
	17	230 50.1	171.26	1.43916	9.80		21	226 50.4	249.27	1.49971	13.10
	19	274 50.1	213.26	1.43766	-		23	270 50.4	291.27	1.49973	-13.09
	21	318 50.2	255.26	1.43618	9.78		25	314 50.3	333.27	1.49968	13.07
	23	2 50.2	297.26	1.43472	9.77		27	358 50.3	15.27	1.49957	13.06
	25	46 50.3	339.26	1.43328	9.76		29	42 50.3	57.27	1.49939	13.04
	27	90 50.3	21.26	1.43186	9.75	Dez.	1	86 50.3	99.27	1.49915	13.02
	29	134 50.4	63.26	1.43046	-		3	130 50.2	141.27	1.49884	-13.00
März	2	178 50.4	105.26	1.42909	9.73		5	174 50.2	183.27	1.49846	12.98
	4	222 50.5	147.26	1.42775	9.72		7	218 50.2	225.27	1.49801	12.96
	6	266 50.5	189.26	1.42643	9.71		9	262 50.2	267.27	1.49750	12.94
	8	310 50.6	231.26	1.42514	9.71		11	306 50.1	309.27	1.49692	12.91
	10	354 50.6	273.26	1.42388	-		13	350 50.1	351.27	1.49628	-12.88
	12	38 50.7	315.26	1.42265	9.70		15	34 50.0	33.27	1.49558	12.85
	14	82 50.7	357.26	1.42145	9.70		17	78 50.0	75.26	1.49483	12.82
	16	126 50.8	39.26	1.42028	9.70		19	122 50.0	117.26	1.49402	12.79
	18	170 50.8	81.26	1.41914	9.70		21	166 49.9	159.26	1.49314	12.76
	20	214 50.9	123.27	1.41804	-		23	210 49.9	201.26	1.49221	-12.72
	22	258 50.9	165.27	1.41697	9.70		25	254 49.9	243.26	1.49123	12.69
	24	302 51.0	207.27	1.41593	9.70		27	298 49.8	285.26	1.49020	12.65
	26	346 51.0	249.27	1.41493	-		29	342 49.8	327.26	1.48912	12.61
							31	26 49.8	9.26	1.48799	-12.57

## MIMAS.

$M$	$v - M$	$\log \frac{r}{a}$	$M$	$M$	$v - M$	$\log \frac{r}{a}$	$M$
0°	+ 0° 0.0—	9.99167	360°	90°	+ 2° 10.6—	0.00016	270°
2	○ 4.7	9.99167	358	92	2 10.4	0.00044	268
4	○ 9.3	9.99169	356	94	2 10.1	0.00073	266
6	○ 14.0	9.99172	354	96	2 9.6	0.00101	264
8	○ 18.6	9.99175	352	98	2 8.9	0.00130	262
10	+ 0° 23.2—	9.99180	350	100	- 1° 2 8.1—	0.00158	260
12	○ 27.8	9.99186	348	102	2 7.1	0.00186	258
14	○ 32.3	9.99193	346	104	2 6.0	0.00214	256
16	○ 36.8	9.99201	344	106	2 4.7	0.00241	254
18	○ 41.3	9.99210	342	108	2 3.3	0.00268	252
20	+ 0° 45.7—	9.99220	340	110	- 1° 2 1.7—	0.00295	250
22	○ 50.0	9.99230	338	112	2 0.0	0.00321	248
24	○ 54.3	9.99242	336	114	1 58.2	0.00347	246
26	○ 58.5	9.99255	334	116	1 56.2	0.00373	244
28	1 2.6	9.99269	332	118	1 54.0	0.00398	242
30	+ 1 6.7—	9.99284	330	120	- 1 51.8—	0.00422	240
32	1 10.6	9.99299	328	122	1 49.4	0.00446	238
34	1 14.5	9.99316	326	124	1 46.9	0.00469	236
36	1 18.3	9.99333	324	126	1 44.2	0.00492	234
38	1 22.0	9.99351	322	128	1 41.4	0.00514	232
40	+ 1 25.5—	9.99370	320	130	+ 1 38.6—	0.00536	230
42	1 29.0	9.99390	318	132	1 35.6	0.00557	228
44	1 32.3	9.99410	316	134	1 32.4	0.00577	226
46	1 35.5	9.99431	314	136	1 29.2	0.00597	224
48	1 38.6	9.99453	312	138	1 25.9	0.00616	222
50	+ 1 41.6—	9.99476	310	140	+ 1 22.5—	0.00634	220
52	1 44.5	9.99499	308	142	1 18.9	0.00651	218
54	1 47.2	9.99523	306	144	1 15.3	0.00668	216
56	1 49.7	9.99547	304	146	1 11.6	0.00683	214
58	1 52.2	9.99572	302	148	1 7.9	0.00698	212
60	+ 1 54.5—	9.99598	300	150	+ 1 4.0—	0.00713	210
62	1 56.6	9.99623	298	152	1 0.1	0.00726	208
64	1 58.6	9.99650	296	154	○ 56.1	0.00738	206
66	2 0.5	9.99676	294	156	○ 52.0	0.00750	204
68	2 2.2	9.99704	292	158	○ 47.9	0.00760	202
70	+ 2 3.7—	9.99731	290	160	+ 0 43.7—	0.00770	200
72	2 5.1	9.99759	288	162	○ 39.5	0.00779	198
74	2 6.4	9.99787	286	164	○ 35.2	0.00787	196
76	2 7.5	9.99815	284	166	○ 30.9	0.00794	194
78	2 8.4	9.99843	282	168	○ 26.5	0.00800	192
80	+ 2 9.2—	9.99872	280	170	+ 0 22.2—	0.00805	190
82	2 9.8	9.99900	278	172	○ 17.8	0.00810	188
84	2 10.2	9.99929	276	174	○ 13.3	0.00813	186
86	2 10.5	9.99958	274	176	○ 8.9	0.00815	184
88	2 10.6	9.99987	272	178	○ 4.5	0.00817	182
90	+ 2 10.6—	0.00016	270	180	+ 0 0.0—	0.00817	180

## ENCELADUS.

$\circ^h$	$L$	$M$	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\rho)}{\rho} \sin B$	$\circ^h$	$L$	$M$	$\log \frac{a(\rho)}{\rho}$	$\frac{a(\rho)}{\rho} \sin B$
Jan.					Okt.				
1	64° 14.8	313.7	1.58445	-13.43	4	23° 41.4	179.3	1.58916	-16.39
2	229 42.6	118.5	1.58304	13.38	6	189 9.2	344.1	1.59050	16.43
4	35 10.5	283.3	1.58161	13.33	8	354 37.0	148.9	1.59180	16.47
6	200 38.4	88.1	1.58016	13.29	10	160 4.7	313.7	1.59307	16.51
8	6 6.3	252.9	1.57868	13.24	12	325 32.5	118.4	1.59431	16.55
10	171 34.2	57.7	1.57717	-13.20	14	131 0.3	283.2	1.59550	-16.59
12	337 2.1	222.5	1.57565	13.16	16	296 28.1	88.0	1.59665	16.62
14	142 29.9	27.2	1.57412	13.12	18	101 55.8	252.8	1.59775	16.65
16	307 57.8	192.0	1.57257	13.08	20	267 23.6	57.6	1.59880	16.68
18	113 25.7	356.8	1.57101	13.04	22	72 51.4	222.4	1.59981	16.71
20	278 53.6	161.6	1.56943	-13.00	24	238 19.1	27.2	1.60076	-16.73
22	84 21.5	326.4	1.56784	12.96	26	43 46.9	192.0	1.60166	16.75
24	249 49.4	131.2	1.56625	12.92	28	209 14.7	356.7	1.60251	16.77
26	55 17.2	296.0	1.56466	12.89	30	14 42.4	161.5	1.60331	16.79
28	220 45.1	100.8	1.56306	12.85	Nov.	1	180 10.2	326.3	1.60404
30	26 13.0	265.5	1.56146	-12.82	3	345 37.9	131.1	1.60471	-16.82
Febr.					5	151 5.7	295.9	1.60533	16.83
1	191 40.9	70.3	1.55987	12.79	7	316 33.5	100.7	1.60588	16.84
3	357 8.7	235.1	1.55828	12.76	9	122 1.3	265.4	1.60637	16.84
5	162 36.6	39.9	1.55669	12.73	11	287 29.0	70.2	1.60679	16.84
7	328 4.5	204.7	1.55511	12.70	13	92 56.8	235.0	1.60715	-16.84
9	133 32.4	9.5	1.55354	-12.67	15	258 24.6	39.8	1.60744	16.83
11	299 0.2	174.3	1.55198	12.65	17	63 52.4	204.5	1.60767	16.83
13	104 28.1	339.1	1.55044	12.62	19	229 20.1	9.3	1.60783	16.82
15	269 55.9	143.8	1.54890	12.60	21	34 47.9	174.1	1.60792	16.81
17	75 23.8	308.6	1.54737	12.58	23	200 15.7	338.9	1.60794	-16.79
19	240 51.7	113.4	1.54587	-12.56	25	5 43.4	143.7	1.60789	16.77
21	46 19.5	278.2	1.54439	12.54	27	171 11.2	308.5	1.60778	16.75
23	211 47.4	83.0	1.54293	12.53	29	336 39.0	113.2	1.60760	16.73
25	17 15.3	247.8	1.54149	12.51	Dez.	1	142 6.7	278.0	1.60736
27	182 43.1	52.6	1.54007	12.50	3	307 34.5	82.8	1.60705	-16.68
29	348 11.0	217.4	1.53867	-12.49	5	113 2.2	247.6	1.60667	16.66
März	2	153 38.8	22.1	1.53730	12.48	7	278 30.0	52.4	1.60622
4	319 6.7	186.9	1.53596	12.47	9	83 57.8	217.2	1.60571	16.60
6	124 34.6	351.7	1.53464	12.46	11	249 25.5	22.0	1.60513	16.56
8	290 2.4	156.5	1.53335	12.45	13	54 53.3	186.8	1.60449	-16.52
10	95 30.3	321.3	1.53209	-12.45	15	220 21.1	351.5	1.60379	16.48
12	260 58.1	126.1	1.53086	12.45	17	25 48.8	156.3	1.60304	16.44
14	66 26.0	290.9	1.52966	12.44	19	191 16.6	321.1	1.60223	16.40
16	231 53.8	95.7	1.52849	12.44	21	356 44.3	125.9	1.60135	16.36
18	37 21.7	260.4	1.52735	12.44	23	162 12.1	290.7	1.60042	-16.31
20	202 49.5	65.2	1.52625	-12.44	25	327 39.9	95.5	1.59944	16.27
22	8 17.4	230.0	1.52518	12.44	27	133 7.6	260.3	1.59841	16.22
24	173 45.2	34.8	1.52414	12.45	29	298 35.4	65.1	1.59733	16.17
26	339 13.1	199.6	1.52314	-12.45	31	104 3.2	229.8	1.59620	-16.12

## ENCELADUS.

<i>M</i>	<i>v</i> — <i>M</i>	$\log \frac{r}{a}$	<i>M</i>	<i>M</i>	<i>v</i> — <i>M</i>	$\log \frac{r}{a}$	<i>M</i>
0°	+ 0.0 —	9.99800	360°	90°	+ 31.6 —	0.00001	270°
2	1.1	9.99800	358	92	31.6	0.00008	268
4	2.2	9.99800	356	94	31.5	0.00015	266
6	3.3	9.99801	354	96	31.4	0.00022	264
8	4.4	9.99802	352	98	31.3	0.00029	262
10	+ 5.5 —	9.99803	350	100	+ 31.1 —	0.00035	260
12	6.6	9.99804	348	102	30.9	0.00042	258
14	7.7	9.99806	346	104	30.6	0.00049	256
16	8.8	9.99808	344	106	30.3	0.00056	254
18	9.8	9.99810	342	108	30.0	0.00062	252
20	+ 10.9 —	9.99812	340	110	+ 29.7 —	0.00069	250
22	11.9	9.99814	338	112	29.3	0.00075	248
24	12.9	9.99817	336	114	28.8	0.00082	246
26	13.9	9.99820	334	116	28.3	0.00088	244
28	14.9	9.99823	332	118	27.8	0.00094	242
30	+ 15.9 —	9.99827	330	120	+ 27.3 —	0.00100	240
32	16.8	9.99830	328	122	26.7	0.00106	238
34	17.8	9.99834	326	124	26.1	0.00112	236
36	18.7	9.99838	324	126	25.5	0.00118	234
38	19.6	9.99842	322	128	24.8	0.00123	232
40	+ 20.4 —	9.99847	320	130	+ 24.1 —	0.00129	230
42	21.3	9.99852	318	132	23.4	0.00134	228
44	22.1	9.99856	316	134	22.7	0.00139	226
46	22.8	9.99861	314	136	21.9	0.00144	224
48	23.6	9.99866	312	138	21.1	0.00148	222
50	+ 24.3 —	9.99872	310	140	+ 20.2 —	0.00153	220
52	25.0	9.99877	308	142	19.4	0.00157	218
54	25.7	9.99883	306	144	18.5	0.00162	216
56	26.3	9.99889	304	146	17.6	0.00166	214
58	26.9	9.99895	302	148	16.7	0.00169	212
60	+ 27.5 —	9.99901	300	150	+ 15.7 —	0.00173	210
62	28.0	9.99907	298	152	14.8	0.00176	208
64	28.5	9.99913	296	154	13.8	0.00179	206
66	29.0	9.99919	294	156	12.8	0.00182	204
68	29.4	9.99926	292	158	11.8	0.00185	202
70	+ 29.8 —	9.99932	290	160	+ 10.8 —	0.00187	200
72	30.1	9.99939	288	162	9.7	0.00190	198
74	30.4	9.99946	286	164	8.7	0.00192	196
76	30.7	9.99952	284	166	7.6	0.00193	194
78	31.0	9.99959	282	168	6.5	0.00195	192
80	+ 31.2 —	9.99966	280	170	+ 5.5 —	0.00196	190
82	31.3	9.99973	278	172	4.4	0.00197	188
84	31.5	9.99980	276	174	3.3	0.00198	186
86	31.6	9.99987	274	176	2.2	0.00199	184
88	31.6	9.99994	272	178	1.1	0.00199	182
90	+ 31.6 —	0.00001	270	180	+ 0.0 —	0.00199	180

## TETHYS.

$\circ^b$	$L$	$\log \frac{a(p)}{p}$	$\frac{a(p)}{p} \sin B$	$\circ^b$	$L$	$\log \frac{a(p)}{p}$	$\frac{a(p)}{p} \sin B$		
Jan.	0	299 ° 23.6	1.67715	-16.62	Okt.	4	33 ° 18.0	1.68186	-20.29
	2	320 47.3	1.67574	16.56		6	54 41.7	1.68320	20.35
	4	342 11.0	1.67431	16.50		8	76 5.4	1.68450	20.40
	6	3 34.7	1.67286	16.45		10	97 29.1	1.68577	20.45
	8	24 58.4	1.67138	16.39		12	118 52.8	1.68701	20.49
	10	46 22.1	1.66987	-16.34		14	140 16.6	1.68820	-20.53
	12	67 45.8	1.66835	16.29		16	161 40.3	1.68935	20.57
	14	89 9.5	1.66682	16.24		18	183 4.0	1.69045	20.61
	16	110 33.3	1.66527	16.19		20	204 27.7	1.69150	20.65
	18	131 57.0	1.66371	16.14		22	225 51.4	1.69251	20.68
	20	153 20.7	1.66213	-16.09		24	247 15.1	1.69346	-20.71
	22	174 44.4	1.66054	16.04		26	268 38.8	1.69436	20.74
	24	196 8.1	1.65895	15.99		28	290 2.5	1.69521	20.76
	26	217 31.8	1.65736	15.95		30	311 26.3	1.69601	20.78
	28	238 55.5	1.65576	15.91	Nov.	1	332 50.0	1.69674	20.80
	30	260 19.2	1.65416	-15.87		3	354 13.7	1.69741	-20.82
Febr.	1	281 43.0	1.65257	15.83		5	15 37.4	1.69803	20.83
	3	303 6.7	1.65098	15.79		7	37 1.1	1.69858	20.84
	5	324 30.4	1.64939	15.75		9	58 24.8	1.69907	20.85
	7	345 54.1	1.64781	15.72		11	79 48.5	1.69949	20.85
	9	7 17.8	1.64624	-15.69		13	101 12.2	1.69985	-20.85
	11	28 41.5	1.64468	15.66		15	122 36.0	1.70014	20.84
	13	50 5.2	1.64314	15.63		17	143 59.7	1.70037	20.84
	15	71 28.9	1.64160	15.60		19	165 23.4	1.70053	20.83
	17	92 52.7	1.64007	15.57		21	186 47.1	1.70062	20.81
	19	114 16.4	1.63857	-15.55		23	208 10.8	1.70064	-20.79
	21	135 40.1	1.63709	15.53		25	229 34.5	1.70059	20.77
	23	157 3.8	1.63563	15.51		27	250 58.2	1.70048	20.75
	25	178 27.5	1.63419	15.49		29	272 21.9	1.70030	20.72
	27	199 51.2	1.63277	15.48	Dez.	1	293 45.7	1.70006	20.69
	29	221 14.9	1.63137	-15.46		3	315 9.4	1.69975	-20.66
März	2	242 38.6	1.63000	15.45		5	336 33.1	1.69937	20.62
	4	264 2.3	1.62866	15.44		7	357 56.8	1.69892	20.58
	6	285 26.0	1.62734	15.43		9	19 20.5	1.69841	20.54
	8	306 49.7	1.62605	15.42		11	40 44.2	1.69783	20.49
	10	328 13.4	1.62479	-15.41		13	62 7.9	1.69719	-20.45
	12	349 37.1	1.62356	15.41		15	83 31.6	1.69649	20.40
	14	11 0.8	1.62236	15.40		17	104 55.3	1.69574	20.35
	16	32 24.5	1.62119	15.40		19	126 19.0	1.69493	20.30
	18	53 48.2	1.62005	15.40		21	147 42.7	1.69405	20.25
	20	75 12.0	1.61895	-15.40		23	169 6.4	1.69312	-20.19
	22	96 35.7	1.61788	15.40		25	190 30.1	1.69214	20.14
	24	117 59.4	1.61684	15.41		27	211 53.8	1.69111	20.08
	26	139 23.1	1.61584	-15.41		29	233 17.5	1.69003	20.02
						31	254 41.2	1.68890	-19.96

## DIONE.

$\circ^h$	$L$	$M$	$\log \frac{a(p)}{p}$	$\frac{a(p)}{p} \sin B$	$\circ^h$	$L$	$M$	$\log \frac{a(p)}{p}$	$\frac{a(p)}{p} \sin B$		
Jan.	0	87° 9.0	62.7	1.78462	-21.29	Okt.	4	293° 49.0	245.8	1.78933	-25.99
	2	350 13.2	325.6	1.78321	21.22		6	196 53.2	148.7	1.79067	26.06
	4	253 17.3	228.5	1.78178	21.14		8	99 57.4	51.6	1.79197	26.12
	6	156 21.5	131.4	1.78033	21.07		10	3 1.6	314.5	1.79324	26.18
	8	59 25.7	34.3	1.77885	21.00		12	266 5.8	217.4	1.79448	26.24
	10	322 29.9	297.2	1.77734	-20.93		14	169 9.9	120.3	1.79567	-26.30
	12	225 34.0	200.1	1.77582	20.86		16	72 14.1	23.2	1.79682	26.35
	14	128 38.2	103.0	1.77429	20.79		18	335 18.3	286.1	1.79792	26.40
	16	31 42.4	5.9	1.77274	20.72		20	238 22.5	189.0	1.79897	26.45
	18	294 46.6	268.8	1.77118	20.66		22	141 26.7	91.9	1.79998	26.49
	20	197 50.7	171.7	1.76960	-20.60		24	44 30.9	354.8	1.80093	-26.53
	22	100 54.9	74.6	1.76801	20.54		26	307 35.1	257.7	1.80183	26.56
	24	3 59.1	337.5	1.76642	20.48		28	210 39.2	160.6	1.80268	26.59
	26	267 3.3	240.4	1.76483	20.43		30	113 43.4	63.5	1.80348	26.62
	28	170 7.4	143.3	1.76323	20.37	Nov.	1	16 47.6	326.4	1.80421	26.64
	30	73 11.6	46.2	1.76163	-20.32		3	279 51.8	229.3	1.80488	-26.66
Febr.	1	336 15.8	309.1	1.76004	20.27		5	182 56.0	132.2	1.80550	26.68
	3	239 20.0	212.0	1.75845	20.22		7	86 0.2	35.1	1.80605	26.69
	5	142 24.1	114.9	1.75686	20.17		9	349 4.4	298.0	1.80654	26.70
	7	45 28.3	17.8	1.75528	20.13		11	252 8.6	200.9	1.80696	26.70
	9	308 32.5	280.7	1.75371	-20.09		13	155 12.8	103.8	1.80732	-26.70
	11	211 36.7	183.6	1.75215	20.05		15	58 16.9	6.7	1.80761	26.69
	13	114 40.9	86.5	1.75061	20.01		17	321 21.1	269.6	1.80784	26.68
	15	17 45.0	349.4	1.74907	19.98		19	224 25.3	172.5	1.80800	26.67
	17	280 49.2	252.3	1.74754	19.95		21	127 29.5	75.4	1.80809	26.65
	19	183 53.4	155.2	1.74604	-19.92		23	30 33.7	338.3	1.80811	-26.63
	21	86 57.6	58.1	1.74456	19.89		25	293 37.9	241.2	1.80806	26.60
	23	350 1.8	321.0	1.74310	19.86		27	196 42.1	144.1	1.80795	26.57
	25	253 6.0	223.9	1.74166	19.83		29	99 46.3	47.0	1.80777	26.53
	27	156 10.2	126.8	1.74024	19.81	Dez.	1	2 50.4	309.9	1.80753	26.49
	29	59 14.3	29.7	1.73884	-19.79		3	265 54.6	212.8	1.80722	-26.45
März	2	322 18.5	292.6	1.73747	19.78		5	168 58.8	115.7	1.80684	26.41
	4	225 22.7	195.5	1.73613	19.77		7	72 3.0	18.6	1.80639	26.36
	6	128 26.9	98.4	1.73481	19.76		9	335 7.2	281.5	1.80588	26.31
	8	31 31.0	1.3	1.73352	19.75		11	238 11.4	184.4	1.80530	26.25
	10	294 35.2	264.2	1.73226	-19.74		13	141 15.6	87.3	1.80466	-26.19
	12	197 39.4	167.1	1.73103	19.73		15	44 19.8	350.2	1.80396	26.13
	14	100 43.6	70.0	1.72983	19.73		17	307 23.9	253.1	1.80321	26.07
	16	3 47.7	332.9	1.72866	19.72		19	210 28.1	156.0	1.80240	26.00
	18	266 51.9	235.8	1.72752	19.72		21	113 32.3	58.9	1.80152	25.93
	20	169 56.1	138.7	1.72642	-19.72		23	16 36.5	321.8	1.80059	-25.86
	22	73 0.3	41.6	1.72535	19.73		25	279 40.7	224.7	1.79961	25.79
	24	336 4.4	304.5	1.72431	19.73		27	182 44.9	127.6	1.79858	25.71
	26	239 8.6	207.4	1.72331	-19.74		29	85 49.1	30.5	1.79750	25.64
							31	348 53.2	293.4	1.79637	25.56

## DIONE.

$M$	$v - M$	$\log \frac{r}{a}$	$M$	$M$	$v - M$	$\log \frac{r}{a}$	$M$
0°	+ 0.0—	9.99913	360°	90°	+ 13.8—	0.00000	270°
2	0.5	9.99913	358	92	13.7	0.00003	268
4	1.0	9.99913	356	94	13.7	0.00006	266
6	1.4	9.99913	354	96	13.7	0.00009	264
8	1.9	9.99914	352	98	13.6	0.00012	262
10	+ 2.4—	9.99914	350	100	+ 13.5—	0.00015	260
12	2.9	9.99915	348	102	13.4	0.00018	258
14	3.3	9.99916	346	104	13.3	0.00021	256
16	3.8	9.99916	344	106	13.2	0.00024	254
18	4.3	9.99917	342	108	13.1	0.00027	252
20	+ 4.7—	9.99918	340	110	+ 12.9—	0.00030	250
22	5.2	9.99919	338	112	12.7	0.00033	248
24	5.6	9.99921	336	114	12.5	0.00035	246
26	6.0	9.99922	334	116	12.3	0.00038	244
28	6.5	9.99923	332	118	12.1	0.00041	242
30	+ 6.9—	9.99925	330	120	+ 11.9—	0.00044	240
32	7.3	9.99926	328	122	11.6	0.00046	238
34	7.7	9.99928	326	124	11.4	0.00049	236
36	8.1	9.99930	324	126	11.1	0.00051	234
38	8.5	9.99931	322	128	10.8	0.00053	232
40	+ 8.9—	9.99933	320	130	+ 10.5—	0.00056	230
42	9.2	9.99935	318	132	10.2	0.00058	228
44	9.6	9.99937	316	134	9.9	0.00060	226
46	9.9	9.99940	314	136	9.5	0.00062	224
48	10.2	9.99942	312	138	9.2	0.00065	222
50	+ 10.6—	9.99944	310	140	+ 8.8—	0.00067	220
52	10.9	9.99947	308	142	8.4	0.00068	218
54	11.1	9.99949	306	144	8.1	0.00070	216
56	11.4	9.99951	304	146	7.7	0.00072	214
58	11.7	9.99954	302	148	7.3	0.00074	212
60	+ 11.9—	9.99957	300	150	+ 6.9—	0.00075	210
62	12.2	9.99959	298	152	6.4	0.00077	208
64	12.4	9.99962	296	154	6.0	0.00078	206
66	12.6	9.99965	294	156	5.6	0.00079	204
68	12.8	9.99967	292	158	5.1	0.00080	202
70	+ 12.9—	9.99970	290	160	+ 4.7—	0.00081	200
72	13.1	9.99973	288	162	4.2	0.00082	198
74	13.2	9.99976	286	164	3.8	0.00083	196
76	13.3	9.99979	284	166	3.3	0.00084	194
78	13.4	9.99982	282	168	2.9	0.00085	192
80	+ 13.5—	9.99985	280	170	+ 2.4—	0.00085	190
82	13.6	9.99988	278	172	1.9	0.00086	188
84	13.7	9.99991	276	174	1.4	0.00086	186
86	13.7	9.99994	274	176	1.0	0.00086	184
88	13.7	9.99997	272	178	0.5	0.00087	182
90	+ 13.8—	0.00000	270	180	+ 0.0—	0.00087	180

## RHEA.

$\circ^b$	$L$	$M$	$\log \frac{a(p)}{p}$	$a(p) \sin B$	$\circ^b$	$L$	$M$	$\log \frac{a(p)}{p}$	$a(p) \sin B$
Jan.					Okt.				
1	334° 38.5	285.6	1.92966	-29.73	4	168° 26.2	111.8	1.93437	-36.30
2	134 1.3	85.0	1.92825	29.62	6	327 49.0	271.1	1.93571	36.39
4	293 24.1	244.3	1.92682	29.52	8	127 11.8	70.4	1.93701	36.48
6	92 46.9	43.6	1.92537	29.42	10	286 34.6	229.8	1.93828	36.57
8	252 9.7	202.9	1.92389	29.32	12	85 57.4	29.1	1.93952	36.65
10	51 32.5	2.2	1.92238	-29.23	14	245 20.1	188.4	1.94071	-36.73
12	210 55.3	161.6	1.92086	29.13	16	44 42.9	347.7	1.94186	36.80
14	10 18.1	320.9	1.91933	29.04	18	204 5.7	147.1	1.94296	36.87
16	169 40.9	120.2	1.91778	28.95	20	3 28.5	306.4	1.94401	36.93
18	329 3.7	279.6	1.91622	28.86	22	162 51.3	105.7	1.94502	36.99
20	128 26.5	78.9	1.91464	-28.77	24	322 14.1	265.0	1.94597	-37.05
22	287 49.3	238.2	1.91305	28.69	26	121 36.9	64.4	1.94687	37.10
24	87 12.1	37.5	1.91146	28.61	28	280 59.7	223.7	1.94772	37.14
26	246 34.9	196.8	1.90987	28.53	30	80 22.5	23.0	1.94852	37.18
28	45 57.7	356.2	1.90827	28.45	Nov.	239 45.3	182.3	1.94925	37.21
30	205 20.5	155.5	1.90667	-28.38	1	39 8.1	341.7	1.94992	-37.24
Febr.					3	39 8.1	341.7	1.94992	-37.24
1	4 43.3	314.8	1.90508	28.31	5	198 30.9	141.0	1.95054	37.26
3	164 6.1	114.2	1.90349	28.24	7	357 53.7	300.3	1.95109	37.27
5	323 28.9	273.5	1.90190	28.18	9	157 16.5	99.6	1.95158	37.28
7	122 51.7	72.8	1.90032	28.12	11	316 39.3	259.0	1.95200	37.28
9	282 14.5	232.1	1.89875	-28.06	13	116 2.1	58.3	1.95236	-37.28
11	81 37.3	31.4	1.89719	28.01	15	275 24.9	217.6	1.95265	37.27
13	241 0.1	190.8	1.89565	27.95	17	74 47.7	16.9	1.95288	37.26
15	40 22.9	350.1	1.89411	27.90	19	234 10.5	176.3	1.95304	37.24
17	199 45.7	149.4	1.89258	27.85	21	33 33.3	335.6	1.95313	37.21
19	359 8.5	308.8	1.89108	-27.81	23	192 56.1	134.9	1.95315	-37.18
21	158 31.3	108.1	1.88960	27.77	25	352 18.9	294.2	1.95310	37.14
23	317 54.1	267.4	1.88814	27.74	27	151 41.7	93.6	1.95299	37.10
25	117 16.9	66.7	1.88670	27.71	29	311 4.5	252.9	1.95281	37.05
27	276 39.7	226.0	1.88528	27.68	Dez.	1 110 27.3	52.2	1.95257	37.00
29	76 2.5	25.4	1.88388	-27.65	3	269 50.1	211.5	1.95226	-36.94
März					5	69 12.9	10.9	1.95188	36.88
2	235 25.3	184.7	1.88251	27.63	7	228 35.7	170.2	1.95143	36.81
4	34 48.1	344.0	1.88117	27.61	9	27 58.5	329.5	1.95092	36.74
6	194 10.9	143.4	1.87985	27.59	11	187 21.3	128.8	1.95034	36.66
8	353 33.7	302.7	1.87856	27.57	13	346 44.1	288.2	1.94970	-36.58
10	152 56.5	102.0	1.87730	-27.56	15	146 6.8	87.5	1.94900	36.50
12	312 19.3	261.3	1.87607	27.55	17	305 29.6	246.8	1.94825	36.41
14	111 42.1	60.6	1.87487	27.55	19	104 52.4	46.1	1.94744	36.32
16	271 4.9	220.0	1.87370	27.54	21	264 15.2	205.5	1.94656	36.22
18	70 27.7	19.3	1.87256	27.54	23	63 38.0	4.8	1.94563	-36.12
20	229 50.5	178.6	1.87146	-27.54	25	223 0.8	164.1	1.94465	36.02
22	29 13.3	338.0	1.87039	27.54	27	22 23.6	323.4	1.94362	35.91
24	188 36.1	137.3	1.86935	27.55	29	181 46.4	122.8	1.94254	35.81
26	347 58.9	296.6	1.86835	-27.56	31	341 9.2	282.1	1.94141	-35.70

## RHEA.

$M$	$v - M$	$\log \frac{r}{a}$	$M$	$M$	$v - M$	$\log \frac{r}{a}$	$M$
0°	+0.0—	9.99961	360°	90°	+6.2—	0.00000	270°
2	0.2	9.99961	358	92	6.2	0.00001	268
4	0.4	9.99961	356	94	6.2	0.00003	266
6	0.6	9.99961	354	96	6.2	0.00004	264
8	0.9	9.99961	352	98	6.1	0.00005	262
10	+1.1—	9.99961	350	100	+6.1—	0.00007	260
12	1.3	9.99962	348	102	6.1	0.00008	258
14	1.5	9.99962	346	104	6.0	0.00009	256
16	1.7	9.99962	344	106	5.9	0.00011	254
18	1.9	9.99963	342	108	5.9	0.00012	252
20	+2.1—	9.99963	340	110	+5.8—	0.00013	250
22	2.3	9.99964	338	112	5.7	0.00015	248
24	2.5	9.99964	336	114	5.7	0.00016	246
26	2.7	9.99965	334	116	5.6	0.00017	244
28	2.9	9.99966	332	118	5.5	0.00018	242
30	+3.1—	9.99966	330	120	+5.4—	0.00019	240
32	3.3	9.99967	328	122	5.2	0.00021	238
34	3.5	9.99968	326	124	5.1	0.00022	236
36	3.6	9.99968	324	126	5.0	0.00023	234
38	3.8	9.99969	322	128	4.9	0.00024	232
40	+4.0—	9.99970	320	130	+4.7—	0.00025	230
42	4.1	9.99971	318	132	4.6	0.00026	228
44	4.3	9.99972	316	134	4.5	0.00027	226
46	4.5	9.99973	314	136	4.3	0.00028	224
48	4.6	9.99974	312	138	4.1	0.00029	222
50	+4.7—	9.99975	310	140	+4.0—	0.00030	220
52	4.9	9.99976	308	142	3.8	0.00031	218
54	5.0	9.99977	306	144	3.6	0.00032	216
56	5.1	9.99978	304	146	3.5	0.00032	214
58	5.2	9.99979	302	148	3.3	0.00033	212
60	+5.4—	9.99980	300	150	+3.1—	0.00034	210
62	5.5	9.99982	298	152	2.9	0.00034	208
64	5.6	9.99983	296	154	2.7	0.00035	206
66	5.7	9.99984	294	156	2.5	0.00036	204
68	5.7	9.99985	292	158	2.3	0.00036	202
70	+5.8—	9.99987	290	160	+2.1—	0.00037	200
72	5.9	9.99988	288	162	1.9	0.00037	198
74	5.9	9.99989	286	164	1.7	0.00037	196
76	6.0	9.99991	284	166	1.5	0.00038	194
78	6.1	9.99992	282	168	1.3	0.00038	192
80	+6.1—	9.99993	280	170	+1.1—	0.00038	190
82	6.1	9.99995	278	172	0.9	0.00039	188
84	6.2	9.99996	276	174	0.6	0.00039	186
86	6.2	9.99997	274	176	0.4	0.00039	184
88	6.2	9.99999	272	178	0.2	0.00039	182
90	+6.2—	0.00000	270	180	+0.0—	0.00039	180

Bewegung der mittleren Länge *L.*

Zeit	Mimas	Enceladus	Tethys	Dione	Rhea
1	22 ° 0.0	262 ° 43.9	190 ° 41.9	131 ° 32.1	79 ° 41.4
2	15 55.0	10 56.8	7 56.7	5 28.8	3 19.2
3	31 50.0	21 53.7	15 53.5	10 57.7	6 38.4
4	47 45.0	32 50.5	23 50.2	16 26.5	9 57.7
5	63 40.0	43 47.3	31 47.0	21 55.3	13 16.9
6	79 35.0	54 44.1	39 43.7	27 24.2	16 36.1
7	95 30.0	65 41.0	47 40.5	32 53.0	19 55.3
8	111 25.0	76 37.8	55 37.2	38 21.9	23 14.6
9	127 20.0	87 34.6	63 34.0	43 50.7	26 33.8
10	143 15.0	98 31.5	71 30.7	49 19.5	29 53.0
11	159 10.0	109 28.3	79 27.5	54 48.4	33 12.2
12	175 5.0	120 25.1	87 24.2	60 17.2	36 31.5
13	191 0.0	131 22.0	95 20.9	65 46.0	39 50.7
14	206 55.0	142 18.8	103 17.7	71 14.9	43 9.9
15	222 50.0	153 15.6	111 14.4	76 43.7	46 29.1
16	238 45.0	164 12.4	119 11.2	82 12.6	49 48.4
17	254 40.0	175 9.3	127 7.9	87 41.4	53 7.6
18	270 35.0	186 6.1	135 4.7	93 10.2	56 26.8
19	286 30.0	197 2.9	143 1.4	98 39.1	59 46.0
20	302 25.0	207 59.8	150 58.2	104 7.9	63 5.3
21	318 20.0	218 56.6	158 54.9	109 36.7	66 24.5
22	334 15.0	229 53.4	166 51.7	115 5.6	69 43.7
23	350 10.0	240 50.2	174 48.4	120 34.4	73 2.9
	6 5.0	251 47.1	182 45.2	126 3.3	76 22.2
m	o 15.9	o 10.9	o 7.9	o 5.5	o 3.3
2	o 31.8	o 21.9	o 15.9	o 11.0	o 6.6
3	o 47.8	o 32.8	o 23.8	o 16.4	o 10.0
4	1 3.7	o 43.8	o 31.8	o 21.9	o 13.3
5	1 19.6	o 54.7	o 39.7	o 27.4	o 16.6
6	1 35.5	1 5.7	o 47.6	o 32.9	o 19.9
7	1 51.4	1 16.6	o 55.6	o 38.4	o 23.2
8	2 7.4	1 27.6	1 3.5	o 43.8	o 26.6
9	2 23.3	1 38.5	1 11.5	o 49.3	o 29.9
10	2 39.2	1 49.5	1 19.4	o 54.8	o 33.2
20	5 18.3	3 38.9	2 38.9	1 49.6	1 6.4
30	7 57.5	5 28.4	3 58.3	2 44.4	1 39.6
40	10 36.7	7 17.9	5 17.8	3 39.2	2 12.8
50	13 15.8	9 7.3	6 37.2	4 34.0	2 46.0
10	o 2.6	o 1.8	o 1.3	o 0.9	o 0.5
20	o 5.3	o 3.6	o 2.6	o 1.8	o 1.1
30	o 7.9	o 5.4	o 3.9	o 2.7	o 1.6
40	o 10.6	o 7.3	o 5.3	o 3.7	o 2.2
50	o 13.2	o 9.1	o 6.6	o 4.6	o 2.7

Bewegung der mittleren  
Anomalie  $M$ . $\log \frac{I}{I + \zeta}$ , in Einheiten der 5. Dezimale.

Zeit	Mimas	Encel.	Dione	Rhea	$u - U$	Mimas	Encel.	Tethys	Dione	Rhea	$u - U$
<sup>d</sup> I	21.00	262.4	131.5	79.7	0	-5	-7	-9	-11	-16	360°
<sup>b</sup> I	15.87	10.9	5.5	3.3	4	-5	-7	-9	-11	-16	356
2	31.75	21.9	11.0	6.6	12	-5	-6	-8	-10	-15	348
3	47.62	32.8	16.4	10.0	16	-5	-6	-8	-10	-15	344
4	63.50	43.7	21.9	13.3	20	-5	-6	-8	-10	-15	340
5	79.37	54.7	27.4	16.6	24	-5	-6	-8	-10	-14	336
6	95.25	65.6	32.9	19.9	28	-5	-6	-8	-9	-14	332
7	111.12	76.5	38.4	23.2	32	-4	-5	-7	-9	-13	328
8	127.00	87.5	43.8	26.6	36	-4	-5	-7	-8	-13	324
9	142.87	98.4	49.3	29.9	40	-4	-5	-7	-8	-12	320
10	158.75	109.3	54.8	33.2	44	-4	-5	-6	-7	-11	316
11	174.62	120.3	60.3	36.5	48	-4	-4	-6	-7	-10	312
12	190.50	131.2	65.7	39.8	52	-3	-4	-5	-6	-10	308
13	206.37	142.1	71.2	43.2	56	-3	-3	-5	-6	-9	304
14	222.25	153.1	76.7	46.5	60	-3	-3	-4	-5	-8	300
15	238.12	164.0	82.2	49.8	64	-3	-3	-4	-4	-7	296
16	254.00	174.9	87.7	53.1	68	-2	-2	-3	-4	-6	292
17	269.87	185.9	93.1	56.5	72	-2	-2	-3	-3	-5	288
18	285.75	196.8	98.6	59.8	76	-1	-1	-2	-3	-4	284
19	301.62	207.7	104.1	63.1	80	-1	-1	-2	-2	-3	280
20	317.50	218.7	109.6	66.4	84	-1	-1	-1	-1	-2	276
21	333.37	229.6	115.1	69.7	88	0	0	0	0	-1	272
22	349.25	240.5	120.5	73.1	92	0	0	0	0	+1	268
23	5.12	251.5	126.0	76.4	96	+1	+1	+1	+1	+2	264
<sup>m</sup>					100	+1	+1	+2	+2	+3	260
1	0.26	0.2	0.1	0.0	104	+1	+1	+2	+3	+4	256
2	0.53	0.4	0.2	0.1	108	+2	+2	+3	+3	+5	252
3	0.79	0.5	0.3	0.1	112	+2	+2	+3	+4	+6	248
4	1.06	0.7	0.4	0.2	116	+3	+3	+4	+4	+7	244
5	1.32	0.9	0.4	0.2	120	+3	+3	+4	+5	+8	240
6	1.58	1.1	0.5	0.3	124	+3	+3	+5	+6	+9	236
7	1.85	1.3	0.6	0.3	128	+3	+4	+5	+6	+10	232
8	2.11	1.4	0.7	0.4	132	+4	+4	+6	+7	+10	228
9	2.38	1.6	0.8	0.4	136	+4	+5	+6	+7	+11	224
10	2.64	1.8	0.9	0.5	140	+4	+5	+7	+8	+12	220
20	5.29	3.6	1.8	1.1	144	+4	+5	+7	+8	+13	216
30	7.93	5.4	2.7	1.6	148	+4	+5	+7	+9	+13	212
40	10.58	7.3	3.7	2.2	152	+5	+6	+8	+9	+14	208
50	13.22	9.1	4.6	2.7	156	+5	+6	+8	+10	+14	204
10	0.04	0.0	0.0	0.0	160	+5	+6	+8	+10	+15	200
20	0.09	0.1	0.0	0.0	164	+5	+6	+8	+10	+15	196
30	0.13	0.1	0.0	0.0	168	+5	+6	+8	+10	+15	192
40	0.17	0.1	0.1	0.0	172	+5	+7	+9	+11	+16	188
50	0.22	0.2	0.1	0.0	176	+5	+7	+9	+11	+16	184

## TITAN.

	$\text{o}^{\text{h}}$	$U$	$B$	$P$		$\text{o}^{\text{h}}$	$U$	$B$	$P$
Jan.	0	276° 43.3	—20° 4.0	—○ 46.8	Okt.	4	298° 6.7	—24° 33.0	—3° 13.6
	2	276 39.9	20 3.6	○ 46.4		6	298 2.3	24 32.2	3 13.1
	4	276 36.9	20 3.4	○ 46.1		8	297 57.5	24 31.4	3 12.6
	6	276 34.3	20 3.3	○ 45.8		10	297 52.2	24 30.5	3 12.0
	8	276 32.2	20 3.3	○ 45.6		12	297 46.5	24 29.6	3 11.4
	10	276 30.6	—20 3.5	—○ 45.4		14	297 40.4	—24 28.7	—3 10.7
	12	276 29.4	20 3.7	○ 45.3		16	297 33.8	24 27.7	3 10.0
	14	276 28.7	20 4.1	○ 45.2		18	297 26.9	24 26.7	3 9.3
	16	276 28.5	20 4.6	○ 45.2		20	297 19.7	24 25.6	3 8.5
	18	276 28.7	20 5.3	○ 45.2		22	297 12.1	24 24.5	3 7.7
	20	276 29.4	—20 6.2	—○ 45.3		24	297 4.2	—24 23.3	—3 6.8
	22	276 30.5	20 7.2	○ 45.4		26	296 56.0	24 22.1	3 5.9
	24	276 32.1	20 8.3	○ 45.6		28	296 47.4	24 20.8	3 4.9
	26	276 34.1	20 9.5	○ 45.8		30	296 38.5	24 19.5	3 3.9
	28	276 36.6	20 10.7	○ 46.1	Nov.	1	296 29.4	24 18.2	3 2.9
	30	276 39.6	—20 12.1	—○ 46.4		3	296 20.0	—24 16.9	—3 1.9
Febr.	1	276 43.0	20 13.6	○ 46.8		5	296 10.4	24 15.6	3 0.8
	3	276 46.9	20 15.3	○ 47.3		7	296 0.6	24 14.3	2 59.7
	5	276 51.2	20 17.1	○ 47.8		9	295 50.6	24 12.9	2 58.6
	7	276 56.0	20 19.0	○ 48.4		11	295 40.4	24 11.5	2 57.5
	9	277 1.2	—20 21.0	—○ 49.0		13	295 30.1	—24 10.1	—2 56.4
	11	277 6.8	20 23.2	○ 49.7		15	295 19.7	24 8.7	2 55.3
	13	277 12.8	20 25.5	○ 50.4		17	295 9.1	24 7.3	2 54.1
	15	277 19.2	20 27.8	○ 51.1		19	294 58.5	24 5.9	2 52.9
	17	277 26.0	20 30.2	○ 51.9		21	294 47.9	24 4.4	2 51.7
	19	277 33.3	—20 32.8	—○ 52.7		23	294 37.2	—24 2.9	—2 50.5
	21	277 41.0	20 35.4	○ 53.6		25	294 26.6	24 1.5	2 49.3
	23	277 49.0	20 38.1	○ 54.6		27	294 16.0	24 0.1	2 48.1
	25	277 57.4	20 40.9	○ 55.6		29	294 5.4	23 58.7	2 47.0
	27	278 6.2	20 43.8	○ 56.6	Dez.	1	293 54.9	23 57.3	2 45.8
	29	278 15.4	—20 46.8	—○ 57.7		3	293 44.5	—23 56.0	—2 44.7
März	2	278 24.9	20 49.9	○ 58.8		5	293 34.2	23 54.7	2 43.5
	4	278 34.8	20 53.0	○ 59.9		7	293 24.1	23 53.5	2 42.4
	6	278 45.0	20 56.2	1 1.1		9	293 14.2	23 52.3	2 41.3
	8	278 55.5	20 59.4	1 2.3		11	293 4.4	23 51.1	2 40.2
	10	279 6.4	—21 2.7	—1 3.6		13	292 54.8	—23 49.9	—2 39.1
	12	279 17.6	21 6.0	1 4.9		15	292 45.5	23 48.8	2 38.0
	14	279 29.0	21 9.4	1 6.3		17	292 36.5	23 47.7	2 37.0
	16	279 40.7	21 12.9	1 7.7		19	292 27.7	23 46.7	2 36.0
	18	279 52.8	21 16.4	1 9.1		21	292 19.2	23 45.7	2 35.1
	20	280 5.2	—21 19.9	—1 10.5		23	292 11.0	—23 44.8	—2 34.2
	22	280 17.8	21 23.5	1 12.0		25	292 3.2	23 44.0	2 33.3
	24	280 30.7	21 27.1	1 13.5		27	291 55.7	23 43.2	2 32.5
	26	280 43.9	—21 30.7	—1 15.0		29	291 48.6	23 42.5	2 31.7
						31	291 41.9	—23 41.8	—2 30.9

## TITAN.

$\circ^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	$\circ^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$				
Jan. 0	+ 4.76	- 5.30	+ 64.1	+ 2.5	Febr. 13	+ 12.44	+ 0.29	- 14.5	+ 24.2
1	- 0.54	- 5.18	+ 66.6	- 8.1	14	+ 12.73	- 1.51	+ 9.7	+ 22.8
2	- 5.72	- 4.23	+ 58.5	- 17.7	15	+ 11.22	- 3.14	+ 32.5	+ 18.0
3	- 9.95	- 2.57	+ 40.8	- 24.5	16	+ 8.08	- 4.33	+ 50.5	+ 10.5
4	- 12.52	- 0.45	+ 16.3	- 26.9	17	+ 3.75	- 4.89	+ 61.0	+ 1.0
5	- 12.97	+ 1.69	- 10.6	- 25.1	18	- 1.14	- 4.69	+ 62.0	- 8.9
6	- 11.28	+ 3.50	- 35.7	- 19.3	19	- 5.83	- 3.72	+ 53.1	- 17.5
7	- 7.78	+ 4.70	- 55.0	- 10.7	20	- 9.55	- 2.12	+ 35.6	- 23.4
8	- 3.08	+ 5.16	- 65.7	- 0.7	21	- 11.67	- 0.19	+ 12.2	- 25.4
9	+ 2.08	+ 4.84	- 66.4	+ 9.1	22	- 11.86	+ 1.76	- 13.2	- 23.2
10	+ 6.92	+ 3.84	- 57.3	+ 17.3	23	- 10.10	+ 3.36	- 36.4	- 17.3
11	+ 10.76	+ 2.30	- 40.0	+ 22.8	24	- 6.74	+ 4.39	- 53.7	- 9.0
12	+ 13.06	+ 0.46	- 17.2	+ 25.2	25	- 2.35	+ 4.73	- 62.7	+ 0.4
13	+ 13.52	- 1.47	+ 8.0	+ 24.0	26	+ 2.38	+ 4.38	- 62.3	+ 9.4
14	+ 12.05	- 3.22	+ 32.0	+ 19.2	27	+ 6.76	+ 3.41	- 52.9	+ 17.0
15	+ 8.83	- 4.52	+ 51.2	+ 11.6	28	+ 10.17	+ 1.97	- 35.9	+ 22.0
16	+ 4.31	- 5.16	+ 62.8	+ 1.9	29	+ 12.14	+ 0.27	- 13.9	+ 24.0
17	- 0.85	- 5.01	+ 64.7	- 8.5	März 1	+ 12.41	- 1.49	+ 10.1	+ 22.5
18	- 5.86	- 4.03	+ 56.2	- 17.7	2	+ 10.92	- 3.07	+ 32.6	+ 17.7
19	- 9.89	- 2.36	+ 38.5	- 24.0	3	+ 7.85	- 4.22	+ 50.3	+ 10.2
20	- 12.25	- 0.32	+ 14.5	- 26.3	4	+ 3.63	- 4.77	+ 60.5	+ 0.9
21	- 12.57	+ 1.75	- 11.8	- 24.2	5	- 1.14	- 4.57	+ 61.4	- 8.9
22	- 10.82	+ 3.49	- 36.0	- 18.5	6	- 5.71	- 3.63	+ 52.5	- 17.5
23	- 7.33	+ 4.61	- 54.5	- 9.9	7	- 9.34	- 2.07	+ 35.0	- 23.3
24	- 2.72	+ 5.01	- 64.4	- 0.1	8	- 11.41	- 0.17	+ 11.7	- 25.2
25	+ 2.29	+ 4.66	- 64.5	+ 9.3	9	- 11.58	+ 1.71	- 13.5	- 22.9
26	+ 6.95	+ 3.66	- 55.2	+ 17.1	10	- 9.87	+ 3.28	- 36.4	- 17.2
27	+ 10.61	+ 2.15	- 38.1	+ 22.5	11	- 6.59	+ 4.28	- 53.6	- 8.9
28	+ 12.76	+ 0.35	- 15.6	+ 24.6	12	- 2.31	+ 4.62	- 62.5	+ 0.5
29	+ 13.11	- 1.51	+ 9.0	+ 23.3	13	+ 2.31	+ 4.28	- 62.0	+ 9.5
30	+ 11.60	- 3.19	+ 32.3	+ 18.5	14	+ 6.59	+ 3.34	- 52.5	+ 16.9
31	+ 8.41	- 4.43	+ 50.8	+ 10.9	15	+ 9.93	+ 1.94	- 35.6	+ 21.9
Febr. 1	+ 3.98	- 5.03	+ 61.7	+ 1.4	16	+ 11.87	+ 0.28	- 13.7	+ 23.9
2	- 1.05	- 4.83	+ 63.1	- 8.7	17	+ 12.15	- 1.44	+ 10.2	+ 22.4
3	- 5.88	- 3.86	+ 54.4	- 17.6	18	+ 10.71	- 2.99	+ 32.6	+ 17.7
4	- 9.74	- 2.22	+ 36.8	- 23.7	19	+ 7.72	- 4.13	+ 50.3	+ 10.2
5	- 11.96	- 0.23	+ 13.1	- 25.7	20	+ 3.59	- 4.67	+ 60.5	+ 0.8
6	- 12.19	+ 1.77	- 12.6	- 23.6	21	- 1.08	- 4.49	+ 61.3	- 9.0
7	- 10.42	+ 3.43	- 36.2	- 17.8	22	- 5.57	- 3.56	+ 52.3	- 17.5
8	- 6.99	+ 4.51	- 54.0	- 9.4	23	- 9.13	- 2.05	+ 34.8	- 23.3
9	- 2.48	+ 4.86	- 63.4	+ 0.2	24	- 11.18	- 0.20	+ 11.5	- 25.1
10	+ 2.38	+ 4.51	- 63.2	+ 9.4	25	- 11.38	+ 1.65	- 13.6	- 23.0
11	+ 6.89	+ 3.51	- 53.8	+ 17.1	26	- 9.73	- 36.6		
12	+ 10.40	+ 2.04	- 36.7	+ 22.2					
13	+ 12.44		- 14.5						

## TITAN.

$\sigma^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	$\sigma^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$
Okt. 4	-11.80	+3.66	-51.2	-22.1	Nov. 17
5	-8.14	+4.90	-73.3	-10.8	18
6	-3.24	+5.40	-84.1	+1.5	19
7	+2.16	+5.12	-82.6	+13.4	20
8	+7.28	+4.09	-69.2	+23.3	21
9	+11.37	+2.49	-45.9	+29.9	22
10	+13.86	+0.52	-16.0	+32.3	23
11	+14.38	-1.57	+16.3	+29.9	24
12	+12.81	-3.50	+46.2	+23.1	25
13	+9.31	-4.95	+69.3	+12.4	26
14	+4.36	-5.66	+81.7	-0.7	27
15	-1.30	-5.46	+81.0	-14.0	28
16	-6.76		+67.0	-25.1	29
17	-11.09	-4.33	+41.9	-32.3	30
18	-13.57	-0.23	+9.6	-33.9	Dez. 1
19	-13.80	+2.01	-24.3	-30.0	2
20	-11.79	+3.88	-54.3	-21.5	3
21	-7.91	+5.10	-75.8	-10.0	4
22	-2.81	+5.52	-85.8	+2.7	5
23	+2.71	+5.15	-83.1	+14.6	6
24	+7.86	+4.05	-68.5	+24.4	7
25	+11.91	+2.36	-44.1	+30.8	8
26	+14.27	+0.32	-13.3	+32.7	9
27	+14.59	-1.81	+19.4	+29.9	10
28	+12.78	-3.74	+49.3	+22.5	11
29	+9.04	-5.15	+71.8	+11.3	12
30	+3.89	-5.77	+83.1	-1.9	13
31	-1.88	-5.48	+81.2	-15.3	14
Nov. 1	-7.36	-4.24	+65.9	-26.3	15
2	-11.60	-2.30	+39.6	-33.0	16
3	-13.90	+0.01	+6.6	-34.2	17
4	-13.89	+2.27	-27.6	-29.6	18
5	-11.62	+4.10	-57.2	-20.6	19
6	-7.52	+5.26	-77.8	-8.9	20
7	-2.26	+5.60	-86.7	+3.9	21
8	+3.34	+5.12	-82.8	+15.9	22
9	+8.46	+3.93	-66.9	+25.5	23
10	+12.39	+2.17	-41.4	+31.3	24
11	+14.56	+0.08	-10.1	+32.7	25
12	+14.64	-1.06	+22.6	+29.4	26
13	+12.58	-3.96	+52.0	+21.7	27
14	+8.62	-5.31	+73.7	+10.1	28
15	+3.31	-5.83	+83.8	-3.4	29
16	-2.52	-5.42	+80.4	-16.6	30
17	-7.94		+63.8		31

## HYPERION.

$\circ^h$	$U$	$B$	$P$	$\circ^h$	$U$	$B$	$P$
Jan.	0 272° 18.0	-19° 43.8	-0° 15.2	Okt.	4 293° 29.2	-24° 26.4	-2° 34.7
2	272 14.6	19 43.4	0 14.8	6	293 24.8	24 25.5	2 34.3
4	272 11.6	19 43.2	0 14.5	8	293 19.9	24 24.6	2 33.8
6	272 9.0	19 43.1	0 14.2	10	293 14.6	24 23.6	2 33.2
8	272 6.8	19 43.1	0 14.0	12	293 8.9	24 22.6	2 32.6
10	272 5.1	-19 43.3	-0 13.8	14	293 2.8	-24 21.6	-2 31.9
12	272 3.9	19 43.6	0 13.7	16	292 56.3	24 20.5	2 31.2
14	272 3.1	19 44.0	0 13.6	18	292 49.4	24 19.4	2 30.5
16	272 2.8	19 44.5	0 13.6	20	292 42.1	24 18.2	2 29.7
18	272 3.0	19 45.2	0 13.6	22	292 34.5	24 17.0	2 28.9
20	272 3.6	-19 46.0	-0 13.6	24	292 26.5	-24 15.7	-2 28.0
22	272 4.7	19 46.9	0 13.7	26	292 18.2	24 14.4	2 27.1
24	272 6.2	19 47.9	0 13.8	28	292 9.6	24 13.1	2 26.2
26	272 8.2	19 49.1	0 14.0	30	292 0.7	24 11.8	2 25.3
28	272 10.6	19 50.4	0 14.3	Nov.	1 291 51.6	24 10.4	2 24.3
30	272 13.5	-19 51.9	-0 14.6	3	291 42.2	-24 9.0	-2 23.3
Febr.	1 272 16.8	19 53.5	0 15.0	5	291 32.6	24 7.6	2 22.3
3	272 20.6	19 55.2	0 15.4	7	291 22.8	24 6.2	2 21.3
5	272 24.8	19 57.1	0 15.9	9	291 12.7	24 4.7	2 20.2
7	272 29.5	19 59.1	0 16.4	11	291 2.5	24 3.2	2 19.1
9	272 34.6	-20 1.2	-0 17.0	13	290 52.2	-24 1.7	-2 18.0
11	272 40.2	20 3.4	0 17.6	15	290 41.8	24 0.2	2 16.9
13	272 46.2	20 5.7	0 18.3	17	290 31.2	23 58.7	2 15.7
15	272 52.5	20 8.1	0 19.0	19	290 20.6	23 57.2	2 14.6
17	272 59.3	20 10.6	0 19.7	21	290 9.9	23 55.7	2 13.4
19	273 6.5	-20 13.2	-0 20.5	23	289 59.2	-23 54.2	-2 12.2
21	273 14.0	20 15.9	0 21.3	25	289 48.5	23 52.8	2 11.1
23	273 21.9	20 18.7	0 22.2	27	289 37.9	23 51.3	2 9.9
25	273 30.2	20 21.6	0 23.1	29	289 27.3	23 49.9	2 8.8
27	273 38.9	20 24.5	0 24.1	Dez.	1 289 16.8	23 48.4	2 7.6
29	273 48.0	-20 27.5	-0 25.1	3	289 6.4	-23 47.0	-2 6.5
März	2 273 57.4	20 30.7	0 26.1	5	288 56.1	23 45.5	2 5.4
4	274 7.2	20 33.9	0 27.2	7	288 46.0	23 44.1	2 4.3
6	274 17.3	20 37.2	0 28.3	9	288 36.0	23 42.7	2 3.2
8	274 27.7	20 40.5	0 29.5	11	288 26.2	23 41.4	2 2.2
10	274 38.5	-20 43.9	-0 30.7	13	288 16.6	-23 40.2	-2 1.1
12	274 49.6	20 47.3	0 31.9	15	288 7.3	23 39.0	2 0.1
14	275 0.9	20 50.8	0 33.2	17	287 58.2	23 37.8	1 59.1
16	275 12.5	20 54.4	0 34.5	19	287 49.4	23 36.7	1 58.2
18	275 24.5	20 58.0	0 35.8	21	287 40.9	23 35.6	1 57.3
20	275 36.7	-21 1.7	-0 37.1	23	287 32.7	-23 34.6	-1 56.4
22	275 49.2	21 5.4	0 38.5	25	287 24.8	23 33.7	1 55.5
24	276 2.0	21 9.2	0 39.9	27	287 17.3	23 32.8	1 54.7
26	276 15.0	-21 13.0	-0 41.4	29	287 10.2	23 32.0	1 53.9
				31	287 3.4	-23 31.4	-1 53.2

## HYPERION.

$\circ^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	$\circ^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$
Jan.	+14.22	-3.15	+30.8	+20.0	
	+11.07	-4.38	+50.8	+14.2	
	+ 6.69	-5.14	+65.0	+ 6.5	
2	+ 1.55	-5.32	+71.5	- 2.2	
3	- 3.77	-4.85	+69.3	-10.5	
4	- 8.62	-3.86	+58.8	-17.1	
5	-12.48	-2.52	+41.7	-21.4	
6	-15.00	-1.06	+20.3	-23.4	
7	-16.06	+0.37	- 3.1	-23.1	
8	-15.69	+1.63	-26.2	-20.9	
9	-14.06	+2.68	-47.1	-17.3	
10	-11.38	+3.46	-64.4	-12.7	
11	- 7.92	+3.98	-77.1	- 7.5	
12	- 3.94	+4.23	-84.6	- 2.0	
13	+ 0.29	+4.19	-86.6	+ 3.7	
14	+ 4.48	+3.88	-82.9	+ 9.1	
15	+ 8.36	+3.30	-73.8	+14.1	
16	+11.66	+2.44	-59.7	+18.4	
17	+14.10	+1.34	-41.3	+21.5	
18	+15.44	+0.04	-19.8	+23.0	
19	+15.48	-1.38	+ 3.2	+22.7	
20	+14.10	-2.80	+25.9	+20.0	
21	+11.30	-4.03	+45.9	+14.9	
22	+ 7.27	-4.86	+60.8	+ 7.8	
23	+ 2.41	-5.13	+68.6	- 0.5	
24	- 2.72	-4.79	+68.1	- 8.6	
25	- 7.51	-3.92	+59.5	-15.4	
26	-11.43	-2.68	+44.1	-20.1	
27	-14.11	-1.30	+24.0	-22.4	
28	-15.41	+0.08	+ 1.6	-22.5	
29	-15.33	+1.32	-20.9	-20.7	
30	-14.01	+2.37	-41.6	-17.5	
31	-11.64	+3.18	-59.1	-13.4	
Febr.	- 8.46	+3.73	-72.5	- 8.5	
	- 4.73	+4.02	-81.0	- 3.2	
	- 0.71	+4.06	-84.2	+ 2.3	
	+ 3.35	+3.82	-81.9	+ 7.6	
	+ 7.17	+3.32	-74.3	+12.6	
	+10.49	+2.57	-61.7	+16.9	
	+13.06	+1.57	-44.8	+20.3	
	+14.63	+0.36	-24.5	+22.3	
	+14.99	-1.00	- 2.2	+22.5	
	+13.99	-2.38	+20.3	+20.4	
	+11.61	-3.62	+40.7	+15.9	
	+ 7.99		+56.6		
	Febr. 13				
	+ 7.99		-4.53	+56.6	+ 9.4
	14				
	- 3.46		-4.92	+66.0	+ 1.5
	15				
	- 1.46		-4.74	+67.5	- 6.6
	16				
	- 6.20		-4.01	+60.9	-13.6
	17				
	-10.21		-2.90	+47.3	-18.7
	18				
	-13.11		-1.60	+28.6	-21.4
	19				
	-14.71		-0.28	+ 7.2	-22.1
	20				
	-14.99		+0.95	-14.9	-20.9
	21				
	-14.04		+2.01	-35.8	-18.1
	22				
	-12.03		+2.84	-53.9	-14.3
	23				
	- 9.19		+3.45	-68.2	- 9.7
	24				
	- 5.74		+3.82	-77.9	- 4.6
	25				
	- 1.92		+3.92	-82.5	+ 0.7
	26				
	+ 2.00		+3.77	-81.8	+ 5.9
	27				
	+ 5.77		+3.39	-75.9	+11.0
	28				
	+ 9.16		+2.74	-64.9	+15.6
	29				
	+11.90		+1.84	-49.3	+19.2
März	+13.74		+0.73	-30.1	+21.7
	1				
	+14.47		-0.56	- 8.4	+22.3
	2				
	+13.91		-1.90	+13.9	+20.9
	3				
	+12.01		-3.17	+34.8	+17.3
	4				
	+ 8.84		-4.15	+52.1	+11.3
	5				
	+ 4.69		-4.70	+63.4	+ 3.8
	6				
	- 0.01		-4.69	+67.2	- 4.3
	7				
	- 4.70		-4.14	+62.9	-11.5
	8				
	- 8.84		-3.17	+51.4	-17.1
	9				
	-12.01		-1.96	+34.3	-20.6
	10				
	-13.97		-0.69	+13.7	-21.8
	11				
	-14.66		+0.52	- 8.1	-21.2
	12				
	-14.14		+1.60	-29.3	-18.9
	13				
	-12.54		+2.48	-48.2	-15.5
	14				
	-10.06		+3.15	-63.7	-11.2
	15				
	- 6.91		+3.58	-74.9	- 6.3
	16				
	- 3.33		+3.79	-81.2	- 1.2
	17				
	+ 0.46		+3.75	-82.4	+ 4.1
	18				
	+ 4.21		+3.46	-78.3	+ 9.3
	19				
	+ 7.67		+2.93	-69.0	+14.0
	20				
	+10.60		+2.16	-55.0	+18.1
	21				
	+12.76		+1.14	-36.9	+21.0
	22				
	+13.90		-0.07	-15.9	+22.4
	23				
	+13.83		-1.38	+ 6.5	+21.7
	24				
	+12.45		-2.66	+28.2	+19.0
	25				
	+ 9.79		+47.2		
	26				

## HYPERION.

$\alpha^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	$\alpha^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$
Okt. 4	+14.12	-3.25	+ 44.5	+24.6	
5	+10.87	-4.55	+ 69.1	+16.4	18
6	+ 6.32	-5.33	+ 85.5	+ 6.4	19
7	+ 0.99	-5.45	+ 91.9	- 4.3	20
8	- 4.46	-5.01	+ 87.6	-13.6	21
9	- 9.47	-4.09	+ 74.0	-21.0	22
10	-13.56	-2.88	+ 53.0	-25.8	23
11	-16.44	-1.54	+ 27.2	-28.1	24
12	-17.98	-0.19	- 0.9	-28.2	25
13	-18.17	+1.09	- 29.1	-26.1	26
14	-17.08	+2.25	- 55.2	-22.5	27
15	-14.83	+3.21	- 77.7	-17.5	28
16	-11.62	+3.96	- 95.2	-11.4	29
17	- 7.66	+4.47	-106.6	- 4.5	30
18	- 3.19	+4.69	-111.1	+ 2.8	Dez. 1
19	+ 1.50	+4.59	-108.3	+10.4	2
20	+ 6.09	+4.14	- 97.9	+17.6	3
21	+10.23	+3.33	- 80.3	+24.1	4
22	+13.56	+2.15	- 56.2	+29.1	5
23	+15.71	+0.62	- 27.1	+31.7	6
24	+16.33	-1.10	+ 4.6	+31.3	7
25	+15.23	-2.83	+ 35.9	+27.2	8
26	+12.40	-4.31	+ 63.1	+19.8	9
27	+ 8.09	-5.29	+ 82.9	+ 9.8	10
28	+ 2.80	-5.63	+ 92.7	- 0.9	11
29	- 2.83	-5.34	+ 91.8	-11.0	12
30	- 8.17	-4.51	+ 80.8	-19.3	13
31	-12.68	-3.34	+ 61.5	-25.0	14
Nov. 1	-16.02	-2.01	+ 36.5	-28.2	15
2	-18.03	-0.60	+ 8.3	-28.8	16
3	-18.63	+0.75	- 20.5	-27.3	17
4	-17.88	+1.97	- 47.8	-24.1	18
5	-15.91	+3.02	- 71.9	-19.4	19
6	-12.89	+3.86	- 91.3	-13.5	20
7	- 9.03	+4.45	-104.8	- 6.7	21
8	- 4.58	+4.75	-111.5	+ 0.6	22
9	+ 0.17	+4.75	-110.9	+ 8.2	23
10	+ 4.91	+4.74	-102.7	+15.8	24
11	+ 9.29	+3.65	- 86.9	+22.6	25
12	+12.94	+2.54	- 64.3	+28.0	26
13	+15.48	+1.08	- 36.3	+31.5	27
14	+16.56	-0.62	- 4.8	+31.9	28
15	+15.94	-2.41	+ 27.1	+28.8	29
16	+13.53	-3.99	+ 55.9	+22.3	30
17	+ 9.54		+ 78.2		31

## JAPETUS.

$\circ^h$	$U$	$B$	$P$	$\circ^h$	$U$	$B$	$P$
Jan.	o 353 55.5	-15 36.2	-14 40.6	Okt.	4 14 59.9	-15 35.2	-14 39.3
2	353 52.2	15 36.6	14 40.5	6	14 55.7	15 35.2	14 39.5
4	353 49.3	15 37.0	14 40.4	8	14 51.0	15 35.2	14 39.7
6	353 46.9	15 37.5	14 40.3	10	14 45.9	15 35.3	14 39.9
8	353 45.0	15 38.0	14 40.3	12	14 40.5	15 35.4	14 40.2
10	353 43.5	-15 38.5	-14 40.3	14	14 34.7	-15 35.5	-14 40.5
12	353 42.5	15 39.1	14 40.3	16	14 28.5	15 35.7	14 40.8
14	353 41.9	15 39.7	14 40.3	18	14 21.9	15 35.9	14 41.1
16	353 41.8	15 40.3	14 40.3	20	14 15.0	15 36.1	14 41.5
18	353 42.2	15 40.9	14 40.4	22	14 7.7	15 36.4	14 41.8
20	353 43.0	-15 41.5	-14 40.5	24	14 0.1	-15 36.7	-14 42.2
22	353 44.3	15 42.2	14 40.6	26	13 52.2	15 37.0	14 42.6
24	353 46.1	15 42.9	14 40.7	28	13 44.0	15 37.4	14 43.0
26	353 48.3	15 43.6	14 40.9	30	13 35.5	15 37.8	14 43.4
28	353 51.0	15 44.3	14 41.0	Nov.	1 13 26.8	15 38.2	14 43.8
30	353 54.2	-15 45.1	-14 41.2	3	13 17.8	-15 38.6	-14 44.2
Febr.	1 353 57.8	15 45.8	14 41.4	5	13 8.6	15 39.1	14 44.6
3	354 1.9	15 46.6	14 41.6	7	12 59.2	15 39.6	14 45.0
5	354 6.4	15 47.3	14 41.9	9	12 49.6	15 40.1	14 45.4
7	354 11.4	15 48.1	14 42.2	11	12 39.9	15 40.7	14 45.8
9	354 16.8	-15 48.8	-14 42.5	13	12 30.0	-15 41.3	-14 46.3
11	354 22.6	15 49.6	14 42.8	15	12 20.0	15 41.9	14 46.8
13	354 28.9	15 50.4	14 43.1	17	12 10.0	15 42.5	14 47.2
15	354 35.6	15 51.2	14 43.4	19	11 59.9	15 43.1	14 47.6
17	354 42.7	15 52.0	14 43.8	21	11 49.7	15 43.7	14 48.0
19	354 50.2	-15 52.9	-14 44.2	23	11 39.5	-15 44.3	-14 48.4
21	354 58.1	15 53.7	14 44.6	25	11 29.3	15 45.0	14 48.8
23	355 6.3	15 54.6	14 45.0	27	11 19.1	15 45.6	14 49.2
25	355 14.9	15 55.5	14 45.4	29	11 9.0	15 46.3	14 49.6
27	355 24.0	15 56.3	14 45.8	Dez.	1 10 59.0	15 46.9	14 50.0
29	355 33.4	-15 57.2	-14 46.2	3	10 49.0	-15 47.6	-14 50.3
März	2 355 43.1	15 58.0	14 46.6	5	10 39.1	15 48.3	14 50.7
4	355 53.2	15 58.8	14 47.0	7	10 29.4	15 49.0	14 51.0
6	356 3.6	15 59.6	14 47.4	9	10 19.9	15 49.8	14 51.4
8	356 14.3	16 0.4	14 47.8	11	10 10.6	15 50.5	14 51.7
10	356 25.4	-16 1.2	-14 48.3	13	10 1.5	-15 51.2	-14 52.0
12	356 36.8	16 2.0	14 48.7	15	9 52.6	15 51.9	14 52.3
14	356 48.5	16 2.8	14 49.1	17	9 44.0	15 52.6	14 52.6
16	357 0.4	16 3.6	14 49.5	19	9 35.6	15 53.3	14 52.8
18	357 12.7	16 4.3	14 50.0	21	9 27.5	15 54.0	14 53.1
20	357 25.2	-16 5.0	-14 50.5	23	9 19.7	-15 54.6	-14 53.3
22	357 38.0	16 5.7	14 50.9	25	9 12.2	15 55.3	14 53.6
24	357 51.0	16 6.4	14 51.3	27	9 5.0	15 56.0	14 53.8
26	358 4.3	-16 7.1	-14 51.7	29	8 58.2	15 56.7	14 54.0
				31	8 51.8	-15 57.4	-14 54.2

## JAPETUS.

$\circ^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	$\circ^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$				
Jan. 0	+35.61	-1.37	+194.4	+ 6.2	Febr. 13	- 25.39	+ 2.05	-187.1	- 1.1
1	+34.24	-1.57	+200.6	+ 4.9	14	- 23.34	+ 2.20	-188.2	+ 0.1
2	+32.67	-1.75	+205.5	+ 3.7	15	- 21.14	+ 2.33	-188.1	+ 1.3
3	+30.92	-1.93	+209.2	+ 2.5	16	- 18.81	+ 2.45	-186.8	+ 2.6
4	+28.99	-2.10	+211.7	+ 1.3	17	- 16.36	+ 2.54	-184.2	+ 3.8
5	+26.89	-2.24	+213.0	0.0	18	- 13.82	+ 2.63	-180.4	+ 4.9
6	+24.65	-2.38	+213.0	- 1.1	19	- 11.19	+ 2.69	-175.5	+ 6.1
7	+22.27	-2.50	+211.9	- 2.4	20	- 8.50	+ 2.73	-169.4	+ 7.1
8	+19.77	-2.61	+209.5	- 3.6	21	- 5.77	+ 2.76	-162.3	+ 8.2
9	+17.16	-2.69	+205.9	- 4.9	22	- 3.01	+ 2.77	-154.1	+ 9.2
10	+14.47	-2.77	+201.0	- 6.0	23	- 0.24	+ 2.76	-144.9	+10.1
11	+11.70	-2.82	+195.0	- 7.1	24	+ 2.52	+ 2.74	-134.8	+10.9
12	+ 8.88	-2.87	+187.9	- 8.1	25	+ 5.26	+ 2.69	-123.9	+11.7
13	+ 6.01	-2.89	+179.8	- 9.2	26	+ 7.95	+ 2.64	-112.2	+12.3
14	+ 3.12	-2.90	+170.6	-10.2	27	+10.59	+ 2.56	-99.9	+12.9
15	+ 0.22	-2.89	+160.4	-11.0	28	+13.15	+ 2.47	-87.0	+13.5
16	- 2.67	-2.86	+149.4	-11.9	29	+15.62	+ 2.36	-73.5	+13.9
17	- 5.53	-2.82	+137.5	-12.6	März 1	+17.98	+ 2.25	-59.6	+14.2
18	- 8.35	-2.76	+124.9	-13.3	2	+20.23	+ 2.11	-45.4	+14.4
19	-11.11	-2.68	+111.6	-14.0	3	+22.34	+ 1.97	-31.0	+14.6
20	-13.79	-2.58	+ 97.6	-14.5	4	+24.31	+ 1.82	-16.4	+14.6
21	-16.37	-2.48	+ 83.1	-14.9	5	+26.13	+ 1.66	- 1.8	+14.6
22	-18.85	-2.35	+ 68.2	-15.3	6	+27.79	+ 1.49	+ 12.8	+14.5
23	-21.20	-2.21	+ 52.9	-15.5	7	+29.28	+ 1.31	+ 27.3	+14.3
24	-23.41	-2.05	+ 37.4	-15.7	8	+30.59	+ 1.12	+ 41.6	+14.1
25	-25.46	-1.89	+ 21.7	-15.8	9	+31.71	+ 0.94	+ 55.7	+13.7
26	-27.35	-1.71	+ 5.9	-15.8	10	+32.65	+ 0.75	+ 69.4	+13.3
27	-29.06	-1.52	- 9.9	-15.6	11	+33.40	+ 0.55	+ 82.7	+12.7
28	-30.58	-1.32	-25.5	-15.5	12	+33.95	+ 0.36	+ 95.4	+12.2
29	-31.90	-1.12	-41.0	-15.1	13	+34.31	+ 0.16	+107.6	+11.5
30	-33.02	-0.90	-56.1	-14.7	14	+34.47	- 0.03	+119.1	+10.8
31	-33.92	-0.67	-70.8	-14.2	15	+34.44	- 0.23	+129.9	+10.1
Febr. 1	-34.59	-0.45	-85.0	-13.5	16	+34.21	- 0.42	+140.0	+ 9.3
2	-35.04	-0.23	-98.5	-12.9	17	+33.79	- 0.60	+149.3	+ 8.4
3	-35.27	+0.01	-111.4	-12.1	18	+33.19	- 0.79	+157.7	+ 7.6
4	-35.26	+0.23	-123.5	-11.3	19	+32.40	- 0.97	+165.3	+ 6.6
5	-35.03	+0.46	-134.8	-10.4	20	+31.43	- 1.14	+171.9	+ 5.7
6	-34.57	+0.69	-145.2	- 9.4	21	+30.29	- 1.30	+177.6	+ 4.7
7	-33.88	+0.91	-154.6	- 8.3	22	+28.99	- 1.46	+182.3	+ 3.7
8	-32.97	+1.12	-162.9	- 7.2	23	+27.53	- 1.60	+186.0	+ 2.6
9	-31.85	+1.33	-170.1	- 6.0	24	+25.93	- 1.74	+188.6	+ 1.6
10	-30.52	+1.53	-176.1	- 4.9	25	+24.19	- 1.88	+190.2	+ 0.6
11	-28.99	+1.71	-181.0	- 3.7	26	+22.31	- 1.98	+190.8	
12	-27.28	+1.89	-184.7	- 2.4					
13	-25.39		-187.1						

## JAPETUS.

$\alpha^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$	$\alpha^h$	$\alpha_{tr} - \alpha_{pl}$	$\delta_{tr} - \delta_{pl}$				
Okt. 4	-38.60	+0.27	-139.5	-12.2	Nov. 17	+37.90	-1.56	+210.0	+ 6.3
5	-38.33	+0.54	-151.7	-11.2	18	+36.34	-1.78	+216.3	+ 5.1
6	-37.79	+0.80	-162.9	-10.1	19	+34.56	-1.99	+221.4	+ 3.7
7	-36.99	+1.06	-173.0	- 9.0	20	+32.57	-2.18	+225.1	+ 2.4
8	-35.93	+1.32	-182.0	- 7.7	21	+30.39	-2.37	+227.5	+ 1.0
9	-34.61	+1.56	-189.7	- 6.4	22	+28.02	-2.54	+228.5	- 0.4
10	-33.05	+1.80	-196.1	- 5.0	23	+25.48	-2.70	+228.1	- 1.8
11	-31.25	+2.02	-201.1	- 3.7	24	+22.78	-2.83	+226.3	- 3.1
12	-29.23	+2.23	-204.8	- 2.2	25	+19.95	-2.96	+223.2	- 4.5
13	-27.00	+2.42	-207.0	- 0.8	26	+16.99	-3.06	+218.7	- 5.9
14	-24.58	+2.60	-207.8	+ 0.6	27	+13.93	-3.14	+212.8	- 7.2
15	-21.98	+2.76	-207.2	+ 2.1	28	+10.79	-3.21	+205.6	- 8.4
16	-19.22	+2.90	-205.1	+ 3.5	29	+ 7.58	-3.25	+197.2	- 9.7
17	-16.32	+3.02	-201.6	+ 4.9	30	+ 4.33	-3.28	+187.5	-10.8
18	-13.30	+3.12	-196.7	+ 6.3	Dez. 1	+ 1.05	-3.28	+176.7	-11.9
19	-10.18	+3.20	-190.4	+ 7.6	2	- 2.23	-3.26	+164.8	-13.0
20	- 6.98	+3.25	-182.8	+ 8.9	3	- 5.49	-3.22	+151.8	-13.9
21	- 3.73	+3.29	-173.9	+10.1	4	- 8.71	-3.17	+137.9	-14.8
22	- 0.44	+3.30	-163.8	+11.3	5	-11.88	-3.09	+123.1	-15.6
23	+ 2.86	+3.29	-152.5	+12.3	6	-14.97	-2.98	+107.5	-16.2
24	+ 6.15	+3.25	-140.2	+13.2	7	-17.95	-2.86	+ 91.3	-16.8
25	+ 9.40	+3.19	-127.0	+14.1	8	-20.81	-2.72	+ 74.5	-17.3
26	+12.59	+3.12	-112.9	+14.9	9	-23.53	-2.55	+ 57.2	-17.7
27	+15.71	+3.02	- 98.0	+15.6	10	-26.08	-2.38	+ 39.5	-17.9
28	+18.73	+2.91	- 82.4	+16.2	11	-28.46	-2.18	+ 21.6	-18.0
29	+21.64	+2.78	- 66.2	+16.7	12	-30.64	-1.98	+ 3.6	-17.9
30	+24.42	+2.63	- 49.5	+17.0	13	-32.62	-1.75	-14.3	-17.9
31	+27.05	+2.46	- 32.5	+17.3	14	-34.37	-1.52	-32.2	-17.6
Nov. 1	+29.51	+2.27	- 15.2	+17.4	15	-35.89	-1.26	-49.8	-17.2
2	+31.78	+2.08	+	2.2	16	-37.15	-1.01	-67.0	-16.8
3	+33.86	+1.88	+	19.6	17	-38.16	-0.74	-83.8	-16.2
4	+35.74	+1.65	+	37.0	18	-38.90	-0.48	-100.0	-15.4
5	+37.39	+1.41	+	54.2	19	-39.38	-0.20	-115.4	-14.6
6	+38.80	+1.17	+	71.1	20	-39.58	+0.08	-130.0	-13.6
7	+39.97	+0.93	+	87.6	21	-39.50	+0.36	-143.6	-12.6
8	+40.90	+0.68	+	103.6	22	-39.14	+0.62	-156.2	-11.5
9	+41.58	+0.43	+	118.9	23	-38.52	+0.89	-167.7	-10.3
10	+42.01	+0.17	+	133.6	24	-37.63	+1.15	-178.0	- 9.1
11	+42.18	-0.08	+	147.5	25	-36.48	+1.40	-187.1	- 7.7
12	+42.10	-0.34	+	160.5	26	-35.08	+1.65	-194.8	- 6.3
13	+41.76	-0.60	+	172.6	27	-33.43	+1.88	-201.1	- 4.9
14	+41.16	-0.84	+	183.6	28	-31.55	+2.09	-206.0	- 3.4
15	+40.32	-1.09	+	193.6	29	-29.46	+2.30	-209.4	- 2.0
16	+39.23	-1.33	+	202.4	30	-27.16	+2.47	-211.4	- 0.5
17	+37.90		+	210.0	31	-24.69		-211.9	

## Elongationen.

## MIMAS.

Jan.	○	<sup>b</sup>	W.	Jan.	21	<sup>b</sup>	○	Febr.	10	<sup>b</sup>	W.	März	1	<sup>b</sup>	○
1	6.7	0.		21	13.0	W.		10	19.4	0.		2	1.8	W.	
1	18.0	W.		22	0.3	0.		11	6.7	W.		2	13.1	0.	
2	5.3	0.		22	11.6	W.		12	18.0	0.		3	0.4	W.	
2	16.6	W.		22	22.9	0.		12	5.3	W.		3	11.7	0.	
3	3.9	0.		23	10.2	W.		12	16.6	0.		3	23.0	W.	
3	15.2	W.		23	21.5	0.		13	3.9	W.		4	10.3	0.	
4	2.5	0.		24	8.8	W.		13	15.2	0.		4	21.6	W.	
4	13.9	W.		24	20.1	0.		14	2.6	W.		5	9.0	0.	
5	1.2	0.		25	7.5	W.		14	13.9	0.		5	20.3	W.	
5	12.5	W.		25	18.8	0.		15	1.2	W.		6	7.6	0.	
5	23.8	0.		26	6.1	W.		15	12.5	0.		6	18.9	W.	
6	11.1	W.		26	17.4	0.		15	23.8	W.		7	6.2	0.	
6	22.4	0.		27	4.7	W.		16	11.1	0.		7	17.5	W.	
7	9.7	W.		27	16.0	0.		16	22.4	W.		8	4.8	0.	
7	21.0	0.		28	3.3	W.		17	9.7	0.		8	16.1	W.	
8	8.3	W.		28	14.6	0.		17	21.0	W.		9	3.5	0.	
8	19.6	0.		29	2.0	W.		18	8.4	0.		9	14.8	W.	
9	6.9	W.		29	13.3	0.		18	19.7	W.		10	2.1	0.	
9	18.3	0.		30	0.6	W.		19	7.0	0.		10	13.4	W.	
10	5.6	W.		30	11.9	0.		19	18.3	W.		11	0.7	0.	
10	16.9	0.		30	23.2	W.		20	5.6	0.		11	12.0	W.	
11	4.2	W.		31	10.5	0.		20	16.9	W.		11	23.3	0.	
11	15.5	0.		31	21.8	W.		21	4.2	0.		12	10.6	W.	
12	2.8	W.	Febr.	1	9.1	0.		21	15.5	W.		12	22.0	0.	
12	14.1	0.		1	20.4	W.		22	2.9	0.		13	9.3	W.	
13	1.4	W.		2	7.8	0.		22	14.2	W.		13	20.6	0.	
13	12.7	0.		2	19.1	W.		23	1.5	0.		14	7.9	W.	
14	0.0	W.		3	6.4	0.		23	12.8	W.		14	19.2	0.	
14	11.3	0.		3	17.7	W.		24	0.1	0.		15	6.5	W.	
14	22.6	W.		4	5.0	0.		24	11.4	W.		15	17.9	0.	
15	10.0	0.		4	16.3	W.		24	22.7	0.		16	5.2	W.	
15	21.3	W.		5	3.6	0.		25	10.0	W.		16	16.5	0.	
16	8.6	0.		5	14.9	W.		25	21.3	0.		17	3.8	W.	
16	19.9	W.		6	2.3	0.		26	8.7	W.		17	15.1	0.	
17	7.2	0.		6	13.6	W.		26	20.0	0.		18	2.4	W.	
17	18.5	W.		7	0.9	0.		27	7.3	W.		18	13.7	0.	
18	5.8	0.		7	12.2	W.		27	18.6	0.		19	1.1	W.	
18	17.1	W.		7	23.5	0.		28	5.9	W.		19	12.4	0.	
19	4.4	0.		8	10.8	W.		28	17.2	0.		19	23.7	W.	
19	15.7	W.		8	22.1	0.		29	4.5	W.		20	11.0	0.	
20	3.0	0.		9	9.4	W.		29	15.8	0.		20	22.3	W.	
20	14.4	W.		9	20.7	0.		März	1	3.2	W.	21	9.6	0.	

## Elongationen.

## MIMAS (Fortsetzung).

März 21	21.0 W.	Okt. 17	14.3 0.	Nov. 6	20.4 W.	Nov. 27	2.6 0.
22	8.3 0.	18	1.6 W.	7	7.7 0.	27	13.9 W.
22	19.6 W.	18	12.9 0.	7	19.0 W.	28	1.2 0.
23	6.9 0.	19	0.2 W.	8	6.3 0.	28	12.5 W.
23	18.2 W.	19	11.5 0.	8	17.6 W.	28	23.8 0.
24	5.5 0.	19	22.8 W.	9	4.9 0.	29	11.1 W.
24	16.9 W.	20	10.1 0.	9	16.3 W.	29	22.4 0.
25	4.2 0.	20	21.4 W.	10	3.6 0.	30	9.7 W.
25	15.5 W.	21	8.7 0.	10	14.9 W.	30	21.0 0.
26	2.8 0.	21	20.0 W.	11	2.2 0.	Dez. 1	8.3 W.
26	14.1 W.	22	7.3 0.	11	13.5 W.	1	19.6 0.
		22	18.6 W.	12	0.8 0.	2	6.9 W.
		23	5.9 0.	12	12.1 W.	2	18.2 0.
		23	17.2 W.	12	23.4 0.	3	5.5 W.
		24	4.5 0.	13	10.7 W.	3	16.9 0.
Okt. 4	9.7 0.	24	15.9 W.	13	22.0 0.	4	4.2 W.
4	21.0 W.	25	3.2 0.	14	9.3 W.	4	15.5 0.
5	8.3 0.	25	14.5 W.	14	20.6 0.	5	2.8 W.
5	19.6 W.	26	1.8 0.	15	7.9 W.	5	14.1 0.
6	6.9 0.	26	13.1 W.	15	19.2 0.	6	1.4 W.
6	18.2 W.	27	0.4 0.	16	6.5 W.	6	12.7 0.
7	5.5 0.	27	11.7 W.	16	17.8 0.	7	0.0 W.
7	16.8 W.	27	23.0 0.	17	5.1 W.	7	11.3 0.
8	4.1 0.	28	10.3 W.	17	16.5 0.	7	22.6 W.
8	15.5 W.	28	21.6 0.	18	3.8 W.	8	9.9 0.
9	2.8 0.	29	8.9 W.	18	15.1 0.	8	21.2 W.
9	14.1 W.	29	20.2 0.	19	2.4 W.	9	8.5 0.
10	1.4 0.	30	7.5 W.	19	13.7 0.	9	19.8 W.
10	12.7 W.	30	18.8 0.	20	1.0 W.	10	7.2 0.
11	0.0 0.	31	6.1 W.	20	12.3 0.	10	18.5 W.
11	11.3 W.	31	17.4 0.	20	23.6 W.	11	5.8 0.
11	22.6 0.	Nov. 1	4.7 W.	21	10.9 0.	11	17.1 W.
12	9.9 W.	1	16.1 0.	21	22.2 W.	12	4.4 0.
12	21.2 0.	2	3.4 W.	22	9.5 0.	12	15.7 W.
13	8.5 W.	2	14.7 0.	22	20.8 W.	13	3.0 0.
13	19.8 0.	3	2.0 W.	23	8.1 0.	13	14.3 W.
14	7.1 W.	3	13.3 0.	23	19.4 W.	14	1.6 0.
14	18.4 0.	4	0.6 W.	24	6.7 0.	14	12.9 W.
15	5.7 W.	4	11.9 0.	24	18.0 W.	15	0.2 0.
15	17.0 0.	4	23.2 W.	25	5.3 0.	15	11.5 W.
16	4.3 W.	5	10.5 0.	25	16.7 W.	15	22.9 0.
16	15.7 0.	5	21.8 W.	26	4.0 0.	16	10.2 W.
17	3.0 W.	6	9.1 0.	26	15.3 W.	16	21.5 0.

## Elongationen.

## MIMAS (Fortsetzung).

Dez. 17	8. <sup>h</sup> W.	Dez. 21	3. <sup>h</sup> W.	Dez. 24	21. <sup>h</sup> W.	Dez. 28	16. <sup>h</sup> W.
17	20.1 0.	21	14.6 0.	25	9.0 0.	29	3.5 0.
18	7.4 W.	22	1.9 W.	25	20.3 W.	29	14.8 W.
18	18.7 0.	22	13.2 0.	26	7.7 0.	30	2.1 0.
19	6.0 W.	23	0.5 W.	26	19.0 W.	30	13.4 W.
19	17.3 0.	23	11.8 0.	27	6.3 0.	31	0.7 0.
20	4.6 W.	23	23.1 W.	27	17.6 W.	31	12.0 W.
20	15.9 0.	24	10.4 0.	28	4.9 0.	31	23.4 0.

## ENCELADUS.

Jan. 0	12. <sup>h</sup> W.	Jan. 21	17. <sup>h</sup> 0.	Febr. 11	23. <sup>h</sup> W.	März 4	5. <sup>h</sup> 0.
I	4.7 0.	22	10.4 W.	12	16.3 0.	4	22.1 W.
I	21.1 W.	23	2.8 0.	13	8.7 W.	5	14.5 0.
2	13.5 0.	23	19.2 W.	14	1.2 0.	6	7.0 W.
3	6.0 W.	24	11.7 0.	14	17.6 W.	6	23.4 0.
3	22.4 0.	25	4.1 W.	15	10.0 0.	7	15.9 W.
4	14.9 W.	25	20.6 0.	16	2.5 W.	8	8.3 0.
5	7.3 0.	26	13.0 W.	16	18.9 0.	9	0.8 W.
5	23.8 W.	27	5.5 0.	17	11.4 W.	9	17.2 0.
6	16.2 0.	27	21.9 W.	18	3.8 0.	10	9.7 W.
7	8.6 W.	28	14.4 0.	18	20.3 W.	11	2.1 0.
8	1.1 0.	29	6.8 W.	19	12.7 0.	11	18.6 W.
8	17.5 W.	29	23.3 0.	20	5.2 W.	12	11.0 0.
9	10.0 0.	30	15.7 W.	20	21.6 0.	13	3.5 W.
10	2.4 W.	31	8.2 0.	21	14.1 W.	13	19.9 0.
10	18.8 0.	Febr. 1	0.6 W.	22	6.5 0.	14	12.4 W.
11	11.3 W.	1	17.1 0.	22	23.0 W.	15	4.8 0.
12	3.7 0.	2	9.5 W.	23	15.4 0.	15	21.3 W.
12	20.2 W.	3	2.0 0.	24	7.8 W.	16	13.7 0.
13	12.6 0.	3	18.4 W.	25	0.3 0.	17	6.2 W.
14	5.1 W.	4	10.9 0.	25	16.7 W.	17	22.6 0.
14	21.5 0.	5	3.3 W.	26	9.2 0.	18	15.1 W.
15	13.9 W.	5	19.8 0.	27	1.6 W.	19	7.6 0.
16	6.4 0.	6	12.2 W.	27	18.1 0.	20	0.0 W.
16	22.8 W.	7	4.7 0.	28	10.5 W.	20	16.5 0.
17	15.3 0.	7	21.1 W.	29	3.0 0.	21	8.9 W.
18	7.7 W.	8	13.6 0.	29	19.4 W.	22	1.4 0.
19	0.1 0.	9	6.0 W.	März 1	11.9 0.	22	17.8 W.
19	16.6 W.	9	22.5 0.	2	4.3 W.	23	10.3 0.
20	9.0 0.	10	14.9 W.	2	20.7 0.	24	2.7 W.
21	1.5 W.	11	7.4 0.	3	13.2 W.	24	19.2 0.

## Elongationen.

## ENCELADUS (Fortsetzung).

März	25	<sup>b</sup> 11.6 W.	Okt.	23	<sup>b</sup> 5.6 0.	Nov.	15	<sup>b</sup> 12.5 0.	Dez.	8	<sup>b</sup> 19.4 0.
	26	4.1 0.		23	22.1 W.		16	5.0 W.		9	11.8 W.
				24	14.5 0.		16	21.4 0.		10	4.3 0.
				25	7.0 W.		17	13.8 W.		10	20.7 W.
				25	23.4 0.		18	6.3 0.		11	13.1 0.
				26	15.8 W.		18	22.7 W.		12	5.6 W.
Okt.	4	1.4 0.		27	8.3 0.		19	15.1 0.		12	22.0 0.
	4	17.8 W.		28	0.7 W.		20	7.6 W.		13	14.5 W.
	5	10.3 0.		28	17.1 0.		21	0.0 0.		14	6.9 0.
	6	2.7 W.		29	9.6 W.		21	16.5 W.		14	23.4 W.
	6	19.1 0.		30	2.0 0.		22	8.9 0.		15	15.8 0.
	7	11.6 W.		30	18.5 W.		23	1.3 W.		16	8.2 W.
	8	4.0 0.		31	10.9 0.		23	17.8 0.		17	0.7 0.
	8	20.5 W.	Nov.	1	3.3 W.		24	10.2 W.		17	17.1 W.
	9	12.9 0.		1	19.8 0.		25	2.6 0.		18	9.6 0.
	10	5.3 W.		2	12.2 W.		25	19.1 W.		19	2.0 W.
	10	21.8 0.		3	4.6 0.		26	11.5 0.		19	18.4 0.
	11	14.2 W.		3	21.1 W.		27	4.0 W.		20	10.9 W.
	12	6.6 0.		4	13.5 0.		27	20.4 0.		21	3.3 0.
	12	23.1 W.		5	6.0 W.		28	12.8 W.		21	19.8 W.
	13	15.5 0.		5	22.4 0.		29	5.3 0.		22	12.2 0.
	14	8.0 W.		6	14.8 W.		29	21.7 W.		23	4.7 W.
	15	0.4 0.		7	7.3 0.		30	14.1 0.		23	21.1 0.
	15	16.8 W.		7	23.7 W.	Dez.	1	6.6 W.		24	13.5 W.
	16	9.3 0.		8	16.1 0.		1	23.0 0.		25	6.0 0.
	17	1.7 W.		9	8.6 W.		2	15.4 W.		25	22.4 W.
	17	18.1 0.		10	1.0 0.		3	7.9 0.		26	14.9 0.
	18	10.6 W.		10	17.5 W.		4	0.3 W.		27	7.3 W.
	19	3.0 0.		11	9.9 0.		4	16.8 0.		27	23.7 0.
	19	19.5 W.		12	2.3 W.		5	9.2 W.		28	16.2 W.
	20	11.9 0.		12	18.8 0.		6	1.6 0.		29	8.6 0.
	21	4.3 W.		13	11.2 W.		6	18.1 W.		30	1.1 W.
	21	20.8 0.		14	3.6 0.		7	10.5 0.		30	17.5 0.
	22	13.2 W.		14	20.1 W.		8	2.9 W.		31	10.0 W.

## TETHYS.

Jan.	0	<sup>b</sup> 9.5 0.	Jan.	5	<sup>b</sup> 2.7 W.	Jan.	9	<sup>b</sup> 20.0 0.	Jan.	14	<sup>b</sup> 13.2 W.
	1	8.1 W.		6	1.4 0.		10	18.6 W.		15	11.9 0.
	2	6.8 0.		7	0.0 W.		11	17.3 0.		16	10.5 W.
	3	5.4 W.		7	22.7 0.		12	15.9 W.		17	9.2 0.
	4	4.1 0.		8	21.3 W.		13	14.6 0.		18	7.8 W.

## Elongationen.

## TETHYS (Fortsetzung).

Jan.	19	6.5	0.	Febr.	28	20.9	W.	Okt.	14	9.4	W.	Nov.	23	23.1	0.
	20	5.1	W.		29	19.6	0.		15	8.0	0.		24	21.7	W.
	21	3.8	0.	März	1	18.2	W.		16	6.7	W.		25	20.4	0.
	22	2.4	W.		2	16.9	0.		17	5.3	0.		26	19.0	W.
	23	1.1	0.		3	15.6	W.		18	4.0	W.		27	17.7	0.
	23	23.8	W.		4	14.2	0.		19	2.6	0.		28	16.3	W.
	24	22.4	0.		5	12.9	W.		20	1.3	W.		29	14.9	0.
	25	21.1	W.		6	11.5	0.		20	23.9	0.		30	13.6	W.
	26	19.7	0.		7	10.2	W.		21	22.5	W.	Dez.	1	12.2	0.
	27	18.4	W.		8	8.9	0.		22	21.2	0.		2	10.9	W.
	28	17.1	0.		9	7.5	W.		23	19.8	W.		3	9.5	0.
	29	15.7	W.		10	6.2	0.		24	18.5	0.		4	8.2	W.
	30	14.4	0.		11	4.9	W.		25	17.1	W.		5	6.8	0.
	31	13.1	W.		12	3.5	0.		26	15.8	0.		6	5.5	W.
Febr.	1	11.7	0.		13	2.2	W.		27	14.4	W.		7	4.1	0.
	2	10.4	W.		14	0.9	0.		28	13.0	0.		8	2.7	W.
	3	9.0	0.		14	23.5	W.		29	11.7	W.		9	1.4	0.
	4	7.7	W.		15	22.2	0.		30	10.3	0.		10	0.0	W.
	5	6.4	0.		16	20.9	W.		31	9.0	W.		10	22.7	0.
	6	5.0	W.		17	19.5	0.	Nov.	1	7.6	0.		11	21.3	W.
	7	3.7	0.		18	18.2	W.		2	6.3	W.		12	20.0	0.
	8	2.4	W.		19	16.9	0.		3	4.9	0.		13	18.6	W.
	9	1.0	0.		20	15.6	W.		4	3.6	W.		14	17.3	0.
	9	23.7	W.		21	14.3	0.		5	2.2	0.		15	15.9	W.
	10	22.3	0.		22	13.0	W.		6	0.8	W.		16	14.5	0.
	11	21.0	W.		23	11.6	0.		6	23.5	0.		17	13.2	W.
	12	19.7	0.		24	10.3	W.		7	22.1	W.		18	11.8	0.
	13	18.3	W.		25	9.0	0.		8	20.8	0.		19	10.5	W.
	14	17.0	0.		26	7.6	W.		9	19.4	W.		20	9.1	0.
	15	15.6	W.						10	18.1	0.		21	7.8	W.
	16	14.3	0.						11	16.7	W.		22	6.4	0.
	17	13.0	W.						12	15.4	0.		23	5.1	W.
	18	11.6	0.						13	14.0	W.		24	3.7	0.
	19	10.3	W.	Okt.	4	23.0	W.		14	12.6	0.		25	2.3	W.
	20	9.0	0.		5	21.6	0.		15	11.3	W.		26	1.0	0.
	21	7.6	W.		6	20.2	W.		16	9.9	0.		26	23.6	W.
	22	6.3	0.		7	18.9	0.		17	8.6	W.		27	22.3	0.
	23	4.9	W.		8	17.5	W.		18	7.2	0.		28	20.9	W.
	24	3.6	0.		9	16.2	0.		19	5.9	W.		29	19.6	0.
	25	2.3	W.		10	14.8	W.		20	4.5	0.		30	18.2	W.
	26	0.9	0.		11	13.5	0.		21	3.2	W.		31	16.9	0.
	26	23.6	W.		12	12.1	W.		22	1.8	0.				
	27	22.2	0.		13	10.7	0.		23	0.4	W.				

## Elongationen.

## DIONE.

Jan.	○	<sup>b</sup> 19.1 W.	Febr. 14	<sup>b</sup> 23.1 0.	Okt. 4	<sup>b</sup> 18.1 0.	Nov. 18	<sup>b</sup> 21.3 W.
	2	3.9 0.		16 8.0 W.	6	2.9 W.	20	6.1 0.
	3	12.8 W.		17 16.9 0.	7	11.7 0.	21	15.0 W.
	4	21.6 0.		19 1.7 W.	8	20.6 W.	22	23.8 0.
	6	6.5 W.		20 10.6 0.	10	5.4 0.	24	8.6 W.
	7	15.3 0.		21 19.4 W.	11	14.2 W.	25	17.4 0.
	9	0.1 W.		23 4.3 0.	12	23.0 0.	27	2.3 W.
	10	9.0 0.		24 13.2 W.	14	7.9 W.	28	11.1 0.
	11	17.8 W.		25 22.0 0.	15	16.7 0.	29	19.9 W.
	13	2.7 0.		27 6.9 W.	17	1.5 W.	Dez.	1 4.7 0.
	14	11.5 W.		28 15.8 0.	18	10.3 0.	2	13.5 W.
	15	20.3 0.	März	1 0.6 W.	19	19.2 W.	3	22.3 0.
	17	5.2 W.		2 9.5 0.	21	4.0 0.	5	7.1 W.
	18	14.0 0.		3 18.4 W.	22	12.8 W.	6	16.0 0.
	19	22.9 W.		5 3.2 0.	23	21.6 0.	8	0.8 W.
	21	7.7 0.		6 12.1 W.	25	6.5 W.	9	9.6 0.
	22	16.6 W.		7 21.0 0.	26	15.3 0.	10	18.4 W.
	24	1.4 0.		9 5.8 W.	28	0.1 W.	12	3.2 0.
	25	10.3 W.		10 14.7 0.	29	8.9 0.	13	12.1 W.
	26	19.1 0.		11 23.6 W.	30	17.8 W.	14	20.9 0.
	28	4.0 W.		13 8.4 0.	Nov.	1 2.6 0.	16	5.7 W.
	29	12.8 0.		14 17.3 W.	2	11.4 W.	17	14.5 0.
	30	21.7 W.		16 2.2 0.	3	20.2 0.	18	23.3 W.
Febr.	1	6.5 0.		17 11.0 W.	5	5.1 W.	20	8.2 0.
	2	15.4 W.		18 19.9 0.	6	13.9 0.	21	17.0 W.
	4	0.3 0.		20 4.8 W.	7	22.7 W.	23	1.8 0.
	5	9.1 W.		21 13.6 0.	9	7.5 0.	24	10.6 W.
	6	18.0 0.		22 22.5 W.	10	16.4 W.	25	19.5 0.
	8	2.8 W.		24 7.4 0.	12	1.2 0.	27	4.3 W.
	9	11.7 0.		25 16.2 W.	13	10.0 W.	28	13.2 0.
	10	20.6 W.			14	18.8 0.	29	22.0 W.
	12	5.4 0.			16	3.7 W.	31	6.8 0.
	13	14.3 W.			17	12.5 0.		

## RHEA.

Jan.	○	<sup>b</sup> 10.4 0.	Jan. 13	<sup>b</sup> 23.7 0.	Jan. 27	<sup>b</sup> 13.0 0.	Febr. 10	<sup>b</sup> 2.3 0.
	2	16.6 W.		16 5.9 W.	29	19.2 W.	12	8.6 W.
	4	22.8 0.		18 12.1 0.	Febr.	1 1.4 0.	14	14.8 0.
	7	5.0 W.		20 18.4 W.	3	7.7 W.	16	21.1 W.
	9	11.2 0.		23 0.6 0.	5	13.9 0.	19	3.4 0.
	11	17.4 W.		25 6.8 W.	7	20.1 W.	21	9.6 W.

## Elongationen.

## RHEA (Fortsetzung).

		Okt.	Nov.	Dez.	
		4	7	11	5.4
Febr.	23	15.9 <sup>b</sup> 0.	12.7 <sup>b</sup> W.	9.1 0.	W.
	25	22.1 W.	18.9 0.	15.3 W.	11.5 0.
	28	4.4 0.	1.0 W.	21.4 0.	17.7 W.
März	1	10.6 W.	7.2 0.	3.6 W.	23.9 0.
	3	16.9 0.	13.3 W.	9.7 0.	6.1 W.
	5	23.1 W.	19.5 0.	15.9 W.	12.2 0.
	8	5.4 0.	1.6 W.	22.1 0.	18.4 W.
	10	11.6 W.	7.8 0.	4.2 W.	0.6 0.
	12	17.9 0.	14.0 W.	10.4 0.	6.8 W.
	15	0.2 W.	20.1 0.	16.5 W.	12.9 0.
	17	6.5 0.	2.3 W.	22.7 0.	
	19	12.8 W.	8.4 0.	4.8 W.	
	21	19.1 0.	14.6 W.	10.9 0.	
	24	1.4 W.	20.8 0.	17.1 W.	
	26	7.7 0.	2.9 W.	23.2 0.	

## TITAN.

		Febr.	Okt.	Nov.	Dec.
		21	10	27	5
Jan.	4	18. <sup>b</sup> 1. W.	15.4 W.	21.5 0.	13.6 0.
	12	20.1 0.	18.3 0.	15.6 W.	7.8 W.
	20	16.8 W.	15.4 W.	19.1 0.	10.8 0.
	28	19.0 0.	18.6 0.	13.2 W.	5.2 W.
Febr.	5	15.9 W.	24 15.8 W.	16.4 0.	8.3 0.
	13	18.4 0.		10.5 W.	

## HYPERION.

		Febr.	Okt.	Nov.	Dec.
		19	12	23	5
Jan.	7	23.0 W.	10.6 W.	10.2 W.	23.6 W.
	19	22.8 0.	11.9 0.	5.0 0.	17.6 0.
	29	4.0 W.	18.7 W.	17.4 W.	5.6 W.
Febr.	10	4.6 0.	20.8 0.	11.6 0.	23.7 0.

## Elongationen und Konjunktionen.

## JAPETUS.

Jan.	16	1.3 <sup>b</sup> Untere Konjunktion	Okt.	4	8. <sup>b</sup> 3 Westliche Elongation
Febr.	4	4.2 Westliche Elongation		23	0.8 Obere Konjunktion
	24	0.7 Obere Konjunktion	Nov.	11	20.6 Östliche Elongation
März	15	6.3 Östliche Elongation	Dez.	2	6.7 Untere Konjunktion
				21	12.2 Westliche Elongation

Jan.	1 6 <sup>b</sup>	♀ gr. nördl. hel. Breite	April	16 18 <sup>b</sup>	♀ ♂ ☽
	1 19	♀ gr. nördl. hel. Breite		17 —	⊖ Finsternis
	3 0	⊕ im Perigäum		18 19	⊜ ♂ ☽
	9 10	♀ ♂ ♀, ♀ 1° 38' nördl.		20 22	♂ Tauri ♂ ☽, Bedeckung
	13 11	♀ ♂ ⊕		22 4	♂ ♂ ☽
	14 19	♀ ♂ ☽		22 6	♀ im ☽
	15 6	♀ ♂ ☽		23 4	♀ gr. südl. hel. Breite
	15 11	♀ gr. westl. Elong., 23° 51'		23 11	⊖ □ ⊕
	16 19	♀ ♂ ☽		27 13	♀ ♂ ♀, ♀ 0° 10' nördl.
	20 8	♂ ♂ ⊕		Mai 2 11	♀ im Aphel
	25 6	♀ im ☽		3 3	α Scorpii ♂ ☽, Bedeckung
	27 13	⊜ ♂ ☽		3 15	♀ ♂ ☽
	28 15	♂ ♂ ☽, Bedeckung		4 5	♂ gr. nördl. hel. Breite
	Febr. 3 9	⊜ □ ⊕		12 16	♂ ♂ ♀, ♂ 2° 9' nördl.
	4 12	♀ im Aphel		12 22	♀ gr. westl. Elong., 26° 3'
März	6 19	♀ ♂ ⊕, ♀ 0° 55' südl.		14 7	⊜ ♂ ⊕
	11 10	♀ ♂ ☽		14 14	♀ ♂ ☽
	11 2	α Scorpii ♂ ☽, Bedeckung		15 11	♀ ♂ ☽
	14 11	♀ ♂ ☽		16 10	⊜ ♂ ☽
	16 17	♀ ♂ ☽		20 13	♂ ♂ ☽
	23 21	⊜ ♂ ☽		22 20	♀ gr. südl. hel. Breite
	24 10	♀ ♂ ⊕, ♀ 0° 39' nördl.		27 9	♀ ♂ ⊜, ♀ 1° 6' nördl.
	24 20	♀ gr. südl. hel. Breite		30 11	α Scorpii ♂ ☽, Bedeckung
	25 17	♂ ♂ ☽		30 17	♀ ♂ ☽
	26 8	♀ im ☽		31 23	♀ ♂ ⊕
	26 11	β Tauri ♂ ☽, Bedeckung		Juni 2 17	♀ ♂ ⊜, ♀ 0° 28' nördl.
	3 3	♀ obere ♂ ⊕		8 20	♂ im Aphel
	4 6	♂ □ ⊕		10 20	♀ im ☽
	4 17	♀ □ ⊕		11 18	♀ ♂ ♀, ♀ 0° 26' nördl.
	9 10	α Scorpii ♂ ☽, Bedeckung		13 2	⊜ ♂ ☽
April	9 23	♀ ♂ ☽		14 10	♀ ♂ ☽
	14 21	♀ im ☽		14 14	♀ ♂ ☽
	15 20	♀ ♂ ☽		15 11	♀ im Perihel
	19 11	♀ im Perihel		17 1	♀ obere ♂ ⊕
	19 17	♀ ♂ ☽		18 0	♂ ♂ ☽
	20 12	⊕ im ♍, Frühlingsanfang		18 11	♀ im ☽
	22 7	⊜ ♂ ☽		21 8	⊕ im ♍, Sommersanfang
	24 16	β Tauri ♂ ☽, Bedeckung		25 18	♀ gr. nördl. hel. Breite
	24 21	♂ ♂ ☽		26 17	α Scorpii ♂ ☽, Bedeckung
	27 14	♀ gr. östl. Elong., 18° 51'		26 17	♀ ♂ ☽
	29 19	♀ gr. nördl. hel. Breite		29 20	♀ ♂ ♀, ♀ 2° 27' nördl.
	31 18	♀ im Aphel		Juli 4 12	⊕ im Apogäum
	—	⊖ Finsternis		5 15	♀ obere ♂ ⊕
	5 19	α Scorpii ♂ ☽, Bedeckung		10 17	⊜ ♂ ☽
	6 9	♀ ♂ ☽		12 2	β Tauri ♂ ☽, Bedeckung
	10 20	♀ □ ⊕		13 9	♀ ♂ ♀, ♀ 1° 27' nördl.
	15 1	♀ untere ♂ ⊕		14 0	♂ ♂ α Leonis, ♂ 0° 42' nördl.
	15 6	♀ ♂ ☽, Bedeckung		14 5	♀ ♂ ☽

Juli	15	18	♀ ♂ ☽	Okt.	10	12	♀ ♂ ☽
	16	○	♀ ♂ ☺		10	18	♂ ♂ ☽
	16	13	♂ ♂ ☽		12	5	♀ ♂ ☽
	19	5	♀ im ♀		13	18	♀ ♂ ♂,      ♀ 0° 12' südl.
	22	2	♀ im Perihel		13	22	α Scorpīi ♂ ☽, Bedeckung
	23	19	♀ ♂ ☽		14	17	♀ im ♀
	23	23	α Scorpīi ♂ ☽, Bedeckung		15	4	♀ im ♀
	24	8	♂ ♂ ☺		19	7	♀ □ ☺
	25	○	♀ ♂ α Leonis, ♀ 1° 38' südl.		22	22	♂ □ ☺
	25	4	♀ gr. östl. Elong., 27° 5'		25	10	♀ im Aphel
	29	10	♀ im Aphel		28	○	♂ ♂ ☽
	Aug.	7	♂ ♂ ☽		29	7	β Tauri ♂ ☽, Bedeckung
	8	11	β Tauri ♂ ☽, Bedeckung		Nov.	4	♂ ♂ ☺
	10	20	♀ ♂ α Leonis, ♀ 1° 3' nördl.		7	17	♀ ♂ ♀,      ♀ 1° 43' südl.
Sept.	12	23	♀ gr. nördl. hel. Breite		8	14	♂ ♂ ☽
	13	1	♀ ♂ ☽		10	2	♀ ♂ α Scorpīi, ♀ 2° 8' nördl.
	13	5	♀ ♂ ☽		10	8	♀ ♂ ☽
	14	5	♂ ♂ ☽		11	2	♀ ♂ ☽
	16	15	α Virginis ♂ ☽, Bedeckung		11	9	♀ ♂ ☽
	18	19	♀ gr. südl. hel. Breite		11	11	♀ im Aphel
	20	2	♀ ♂ ☽		14	18	♀ gr. südl. hel. Breite
	20	5	α Scorpīi ♂ ☽, Bedeckung		17	19	♂ im ♀
	21	22	♀ untere ♂ ☺		19	2	♀ gr. östl. Elong., 22° 14'
	26	23	♂ □ ☺		20	18	♀ ♂ ♀,      ♀ 2° 47' südl.
	30	1	♀ □ ☺		22	19	♂ ♂ ☺
	Sept. 3	15	♂ ♂ ☽		24	4	♂ ♂ ☽
	4	19	β Tauri ♂ ☽, Bedeckung		25	14	β Tauri ♂ ☽, Bedeckung
	6	20	♀ im ♀		27	○	♀ ♂ α Sagittarii, ♀ 1° 28' nördl.
Okt.	7	17	♀ gr. westl. Elong., 17° 58'		Dez.	2	19
	8	22	♀ ♂ ♂,      ♀ 0° 29' nördl.		3	19	♀ im ♀
	9	1	♀ ♂ α Leonis, ♀ 0° 5' nördl.		3	21	♀ gr. südl. hel. Breite
	9	8	♀ ♂ ☽		4	3	α Virginis ♂ ☽, Bedeckung
	11	10	♀ im Perihel		7	11	♂ ♂ ☽
	11	23	♂ ♂ ☽		8	8	♀ ♂ ☽
	12	2	♀ ♂ ☽		8	9	♀ im Perihel
	13	1	α Virginis ♂ ☽, Bedeckung		8	12	♀ untere ♂ ☺
	16	13	α Scorpīi ♂ ☽, Bedeckung		8	22	♀ ♂ ☽
	16	14	♀ ♂ ☽		11	16	♀ ♂ ☽
	21	17	♀ gr. nördl. hel. Breite		13	4	♀ ♂ ♂,      ♀ 1° 36' südl.
	22	23	⊕ in ≈, Herbstanfang		18	9	♀ ♂ ☽
	26	—	⊖ Finsternis		18	16	♀ gr. nördl. hel. Breite
	30	20	♂ ♂ ☽		21	11	♂ ♂ ☽
	Oct. 2	1	β Tauri ♂ ☽, Bedeckung		21	18	⊕ im ♂, Wintersanfang
	3	19	♀ obere ♂ ☺		23	○	β Tauri ♂ ☽, Bedeckung
	5	5	♂ ♂ α Virginis, ♂ 2° 39' nördl.		27	22	♀ gr. westl. Elong., 22° 23'
	8	1	♀ im ♀		31	9	α Virginis ♂ ☽, Bedeckung
	10	—	⊕ Finsternis		31	15	⊕ im Perigäum

## Zur Berechnung der physischen Mondlibration 1912.

$12^h$	$M$	$M'$	$\omega$	$12^h$	$M$	$M'$	$\omega$	Bewegung von $M$
Jan.	1 326. <sup>0</sup>	358. <sup>8</sup>	75. <sup>6</sup>	Juli	9 288. <sup>4</sup>	186. <sup>1</sup>	106. <sup>8</sup>	<sup>d</sup> 1 13. <sup>1</sup> 6 78. <sup>4</sup>
	II 96.7	8.7	77.2		19 59.0	195.9	108.5	2 26.1 7 91.5
	2I 227.3	18.5	78.9		29 189.7	205.8	110.1	3 39.2 8 104.5
	3I 358.0	28.4	80.5		Aug. 8 320.3	215.7	111.8	4 52.3 9 117.6
Febr.	10 128.6	38.2	82.2	Okt.	18 91.0	225.5	113.4	5 65.3 10 130.6
	20 259.3	48.1	83.8		28 221.6	235.4	115.1	
	März I 29.9	58.0	85.5		Sept. 7 352.3	245.2	116.7	<sup>h</sup> 0.5 13 <sup>h</sup> 7.1
	II 160.6	67.8	87.1		17 122.9	255.1	118.3	2 1.1 14 7.6
	2I 291.2	77.7	88.8		27 253.6	264.9	120.0	3 1.6 15 8.2
April	30 61.9	87.5	90.4	Nov.	7 24.2	274.8	121.6	
	10 192.5	97.4	92.0		17 154.9	284.6	123.3	4 2.2 16 8.7
	20 323.2	107.2	93.7		27 285.5	294.5	124.9	5 2.7 17 9.3
	30 93.8	117.1	95.3		6 56.2	304.4	126.6	6 3.3 18 9.8
Mai	10 224.5	126.9	97.0	Dez.	16 186.8	314.2	128.2	7 3.8 19 10.3
	20 355.1	136.8	98.6		26 317.5	324.1	129.8	8 4.4 20 10.9
	30 125.8	146.6	100.3		6 88.1	333.9	131.5	9 4.9 21 11.4
Juni	9 256.4	156.5	101.9		16 218.8	343.8	133.1	10 5.4 22 12.0
	19 27.1	166.4	103.5		26 349.4	353.6	134.8	11 6.0 23 12.5
	29 157.7	176.2	105.2		36 120.1	3.5	136.4	12 6.5 24 13.1

 $M$  = Mittlere Anomalie des Mondes. $M'$  = Mittlere Anomalie der Sonne. $\omega$  = Abstand des Mondperigäums vom aufsteigenden Knoten der Mondbahn auf der Ekliptik. $J = 1^\circ 32' 6''$  = Mittlere Neigung des Mondäquators gegen die Ekliptik. $\tau = -12'' \sin M + 59'' \sin M' + 18'' \sin 2\omega$ . $\rho = -107'' \cos M + 37'' \cos(M + 2\omega) - 11'' \cos(2M + 2\omega)$ . $\sigma \sin J = -109'' \sin M + 37'' \sin(M + 2\omega) - 11'' \sin(2M + 2\omega)$ . $\tau, \rho, \sigma$  sind die Beträge der physischen Mondlibration in selenographischer Länge, der Neigung und dem Knoten des Mondäquators auf der Ekliptik.

## HÜLFSTAFELN.

## Tafel zur Berechnung der optischen Mondlibration.

$\lambda - \vartheta$	$\Delta\lambda$	$\frac{I}{a}$	$B$	$\lambda - \vartheta$	$\Delta\lambda$	$\frac{I}{a}$	$B$
0°	+0.0	+37	+0 0.0 1.6	35°	+0.6	+ 45	+0 52.8 1.3
1	0.0	37	0 1.6 1.6	36	0.6	46	0 54.1 1.3
2	0.0	37	0 3.2 1.6	37	0.6	47	0 55.4 1.3
3	0.1	37	0 4.8 1.6	38	0.6	47	0 56.7 1.3
4	0.1	37	0 6.4 1.6	39	0.6	48	0 58.0 1.2
5	+0.1	+37	+0 8.0 1.6	40	+0.6	+ 49	+0 59.2 1.2
6	0.1	37	0 9.6 1.6	41	0.6	49	I 0.4 1.2
7	0.1	38	0 11.2 1.6	42	0.6	50	I 1.6 1.2
8	0.2	38	0 12.8 1.6	43	0.6	51	I 2.8 1.2
9	0.2	38	0 14.4 1.6	44	0.6	52	I 4.0 1.2
10	+0.2	+38	+0 16.0 1.6	45	+0.6	+ 53	+I 5.2 1.1
11	0.2	38	0 17.6 1.5	46	0.6	54	I 6.3 1.1
12	0.2	38	0 19.1 1.6	47	0.6	55	I 7.4 1.1
13	0.3	38	0 20.7 1.6	48	0.6	56	I 8.5 1.1
14	0.3	38	0 22.3 1.6	49	0.6	57	I 9.6 1.0
15	+0.3	+39	+0 23.9 1.5	50	+0.6	+ 58	+I 10.6 1.1
16	0.3	39	0 25.4 1.6	51	0.6	59	I 11.7 1.0
17	0.3	39	0 27.0 1.5	52	0.6	60	I 12.7 1.0
18	0.4	39	0 28.5 1.6	53	0.6	61	I 13.7 0.9
19	0.4	39	0 30.1 1.5	54	0.6	63	I 14.6 0.9
20	+0.4	+40	+0 31.6 1.5	55	+0.6	+ 65	+I 15.5 0.9
21	0.4	40	0 33.1 1.5	56	0.6	67	I 16.4 0.9
22	0.4	40	0 34.6 1.5	57	0.6	69	I 17.3 0.8
23	0.4	41	0 36.1 1.4	58	0.6	71	I 18.1 0.9
24	0.5	41	0 37.5 1.5	59	0.5	73	I 19.0 0.8
25	+0.5	+41	+0 39.0 1.4	60	+0.5	+ 75	+I 19.8 0.8
26	0.5	41	0 40.4 1.5	61	0.5	77	I 20.6 0.7
27	0.5	42	0 41.9 1.4	62	0.5	79	I 21.3 0.8
28	0.5	42	0 43.3 1.4	63	0.5	82	I 22.1 0.7
29	0.5	43	0 44.7 1.4	64	0.5	85	I 22.8 0.7
30	+0.5	+43	+0 46.1 1.4	65	+0.5	+ 88	+I 23.5 0.6
31	0.5	43	0 47.5 1.3	66	0.5	92	I 24.1 0.7
32	0.6	44	0 48.8 1.3	67	0.4	96	I 24.8 0.6
33	0.6	44	0 50.1 1.3	68	0.4	100	I 25.4 0.6
34	0.6	45	0 51.4 1.4	69	0.4	104	I 26.0 0.5
35	+0.6	+45	+0 52.8	70	+0.4	+109	+I 26.5

## Tafel zur Berechnung der optischen Mondlibration.

$\lambda - \vartheta$	$\Delta\lambda$	$\frac{I}{a}$	$B$	$\lambda - \vartheta$	$\Delta\lambda$	$\frac{I}{a}$	$B$
70°	+0.4	+109	+1° 26' .5 0.6	80°	+0.2	+ 215	+1° 30' .7 0.2
71	0.4	115	1 27.1 0.5	81	0.2	239	1 30.9 0.2
72	0.4	121	1 27.6 0.5	82	0.2	268	1 31.1 0.2
73	0.3	128	1 28.1 0.5	83	0.1	306	1 31.3 0.2
74	0.3	136	1 28.6 0.4	84	0.1	357	1 31.5 0.2
75	+0.3	+144	+1 29.0 0.4	85	+0.1	+ 429	+1 31.7 0.1
76	0.3	154	1 29.4 0.4	86	0.1	535	1 31.8 0.1
77	0.3	166	1 29.8 0.3	87	0.1	713	1 31.9 0.1
78	0.2	180	1 30.1 0.3	88	0.0	1070	1 32.0 0.1
79	0.2	196	1 30.4 0.3	89	0.0	+2139	1 32.1 0.0
80	+0.2	+215	+1 30.7	90	0.0	$\infty$	+1 32.1

$J = 1^\circ 32' 6''$  = Neigung des Mondäquators gegen die Ekliptik.

$\vartheta = 180^\circ + \Omega$  = Länge des absteigenden Knotens der Mondbahn auf der Ekliptik (siehe Tafel S. 88).

$\lambda, \beta$  = Länge und Breite des Mondmittelpunktes, berechnet für den Beobachtungsort.

$$\Delta\lambda = \operatorname{tg} \frac{J^2}{2} \sin 2(\lambda - \vartheta) 3437.75 \quad \frac{I}{a} = \frac{I}{\cos(\lambda - \vartheta) \sin J}$$

$$\operatorname{tg} B = \sin(\lambda - \vartheta) \operatorname{tg} J$$

$l_0$  = Mittlere Länge des Mondes (siehe Tafel S. 88)

$l', b'$  = Optische Libration der Mondmitte in selenographischer Länge und Breite

$$l' = \lambda + \Delta\lambda - \frac{B - \beta}{\frac{I}{a}} - l_0$$

$$b' = B - \beta.$$

Für  $\lambda - \vartheta$  zwischen  $90^\circ$  und  $180^\circ$  gehe man mit dem Argument  $180^\circ - (\lambda - \vartheta)$  in die Tafel ein und nehme  $\Delta\lambda$  und  $\frac{I}{a}$  negativ.

Für  $\lambda - \vartheta$  zwischen  $180^\circ$  und  $270^\circ$  gehe man mit dem Argument  $\lambda - \vartheta - 180^\circ$  in die Tafel ein und nehme  $\frac{I}{a}$  und  $B$  negativ.

Für  $\lambda - \vartheta$  zwischen  $270^\circ$  und  $360^\circ$  gehe man mit dem Argument  $360^\circ - (\lambda - \vartheta)$  in die Tafel ein und nehme  $\Delta\lambda$  und  $B$  negativ.

## HÜLFSTAFELN.

## Bruchteile des Jahres 1912,

für o<sup>h</sup> Mittl. Zeit der mittleren Sonnentage, gezählt vom Beginn  
des annus fictus.

Monats- tag	Januar		Februar		März		April		Mai		Juni	
	Jahres- tag	Jahres- bruch										
1	0	-0.0007	31	0.0842	60	0.1636	91	0.2484	121	0.3306	152	0.4155
2	1	+ 0020	32	0.0869	61	0.1663	92	0.2512	122	0.3333	153	0.4182
3	2	0048	33	0.0896	62	0.1690	93	0.2539	123	0.3361	154	0.4209
4	3	0075	34	0.0924	63	0.1718	94	0.2567	124	0.3388	155	0.4237
5	4	0102	35	0.0951	64	0.1745	95	0.2594	125	0.3415	156	0.4264
6	5	0.0130	36	0.0979	65	0.1773	96	0.2621	126	0.3443	157	0.4291
7	6	0157	37	0.1006	66	0.1800	97	0.2649	127	0.3470	158	0.4319
8	7	0185	38	0.1033	67	0.1827	98	0.2676	128	0.3497	159	0.4346
9	8	0212	39	0.1061	68	0.1855	99	0.2703	129	0.3525	160	0.4374
10	9	0239	40	0.1088	69	0.1882	100	0.2731	130	0.3552	161	0.4401
11	10	0.0267	41	0.1115	70	0.1909	101	0.2758	131	0.3580	162	0.4428
12	11	0294	42	0.1143	71	0.1937	102	0.2786	132	0.3607	163	0.4456
13	12	0322	43	0.1170	72	0.1964	103	0.2813	133	0.3634	164	0.4483
14	13	0349	44	0.1198	73	0.1992	104	0.2840	134	0.3662	165	0.4510
15	14	0376	45	0.1225	74	0.2019	105	0.2868	135	0.3689	166	0.4538
16	15	0.0404	46	0.1252	75	0.2046	106	0.2895	136	0.3717	167	0.4565
17	16	0431	47	0.1280	76	0.2074	107	0.2923	137	0.3744	168	0.4593
18	17	0458	48	0.1307	77	0.2101	108	0.2950	138	0.3771	169	0.4620
19	18	0486	49	0.1335	78	0.2129	109	0.2977	139	0.3799	170	0.4647
20	19	0513	50	0.1362	79	0.2156	110	0.3005	140	0.3826	171	0.4675
21	20	0.0541	51	0.1389	80	0.2183	111	0.3032	141	0.3853	172	0.4702
22	21	0568	52	0.1417	81	0.2211	112	0.3059	142	0.3881	173	0.4729
23	22	0595	53	0.1444	82	0.2238	113	0.3087	143	0.3908	174	0.4757
24	23	0623	54	0.1471	83	0.2265	114	0.3114	144	0.3935	175	0.4784
25	24	0650	55	0.1499	84	0.2293	115	0.3142	145	0.3963	176	0.4812
26	25	0.0677	56	0.1526	85	0.2320	116	0.3169	146	0.3990	177	0.4839
27	26	0705	57	0.1554	86	0.2348	117	0.3196	147	0.4018	178	0.4866
28	27	0732	58	0.1581	87	0.2375	118	0.3224	148	0.4045	179	0.4894
29	28	0760	59	0.1608	88	0.2402	119	0.3251	149	0.4072	180	0.4921
30	29	0787	60	0.1636	89	0.2430	120	0.3278	150	0.4100	181	0.4949
31	30	0.0814			90	0.2457	121	0.3306	151	0.4127	182	0.4976
32	31	0842			91	0.2484			152	0.4155		

## Bruchteile des Jahres 1912,

für o<sup>h</sup> Mittl. Zeit der mittleren Sonnentage, gezählt vom Beginn  
des annus fictus.

Monats- tag	Juli		August		September		Oktober		November		Dezember	
	Jahres- tag	Jahres- bruch										
1	182	0.4976	213	0.5825	244	0.6673	274	0.7495	305	0.8344	335	0.9165
2	183	5003	214	5852	245	6701	275	7522	306	8371	336	9192
3	184	5031	215	5879	246	6728	276	7550	307	8398	337	9220
4	185	5058	216	5907	247	6756	277	7577	308	8426	338	9247
5	186	5085	217	5934	248	6783	278	7604	309	8453	339	9274
6	187	0.5113	218	0.5962	249	0.6810	279	0.7632	310	0.8480	340	0.9302
7	188	5140	219	5989	250	6838	280	7659	311	8508	341	9329
8	189	5168	220	6016	251	6865	281	7686	312	8535	342	9357
9	190	5195	221	6044	252	6892	282	7714	313	8563	343	9384
10	191	5222	222	6071	253	6920	283	7741	314	8590	344	9411
11	192	0.5250	223	0.6098	254	0.6947	284	0.7769	315	0.8617	345	0.9439
12	193	5277	224	6126	255	6975	285	7796	316	8645	346	9466
13	194	5304	225	6153	256	7002	286	7823	317	8672	347	9493
14	195	5332	226	6181	257	7029	287	7851	318	8699	348	9521
15	196	5359	227	6208	258	7057	288	7878	319	8727	349	9548
16	197	0.5387	228	0.6235	259	0.7084	289	0.7905	320	0.8754	350	0.9576
17	198	5414	229	6263	260	7112	290	7933	321	8782	351	9603
18	199	5441	230	6290	261	7139	291	7960	322	8809	352	9630
19	200	5469	231	6317	262	7166	292	7988	323	8836	353	9658
20	201	5496	232	6345	263	7194	293	8015	324	8864	354	9685
21	202	0.5523	233	0.6372	264	0.7221	294	0.8042	325	0.8891	355	0.9712
22	203	5551	234	6400	265	7248	295	8070	326	8918	356	9740
23	204	5578	235	6427	266	7276	296	8097	327	8946	357	9767
24	205	5606	236	6454	267	7303	297	8124	328	8973	358	9795
25	206	5633	237	6482	268	7331	298	8152	329	9001	359	9822
26	207	0.5660	238	0.6509	269	0.7358	299	0.8179	330	0.9028	360	0.9849
27	208	5688	239	6537	270	7385	300	8207	331	9055	361	9877
28	209	5715	240	6564	271	7413	301	8234	332	9083	362	9904
29	210	5743	241	6591	272	7440	302	8261	333	9110	363	9932
30	211	5770	242	6619	273	7467	303	8289	334	9138	364	9959
31	212	0.5797	243	0.6646	274	0.7495	304	0.8316	335	0.9165	365	0.9986
32	213	5825	244	6673			305	8344			366	1.0014

## Julianische Periode.

Anzahl der am Mittag des 1. Januar eines jeden Schaltjahrs seit Anfang der Periode verflossenen Tage.

Jahr n. Chr.	0	100	200	300	400	500	600	700	800	900
0	17	17	17	18	18	19	19	19	20	20
4	21058	57583	94108	30633	67158	03683	40208	76733	13258	49783
8	22519	59044	95569	32094	68619	05144	41669	78194	14719	51244
12	23980	60505	97030	33555	70080	06605	43130	79655	16180	52705
16	25441	61966	98491	35016	71541	08066	44591	81116	17641	54166
20	26902	63427	99952	36477	73002	09527	46052	82577	19102	55627
24	28363	64888	01413	37938	74463	10988	47513	84038	20563	57088
28	29824	66349	02874	39399	75924	12449	48974	85499	22024	58549
32	31285	67810	04335	40860	77385	13910	50435	86960	23485	60010
36	32746	69271	05796	42321	78846	15371	51896	88421	24946	61471
40	34207	70732	07257	43782	80307	16832	53357	89882	26407	62932
44	35668	72193	08718	45243	81768	18293	54818	91343	27868	64393
48	37129	73654	10179	46704	83229	19754	56279	92804	29329	65854
52	38590	75115	11640	48165	84690	21215	57740	94265	30790	67315
56	40051	76576	13101	49626	86151	22676	59201	95726	32251	68776
60	41512	78037	14562	51087	87612	24137	60662	97187	33712	70237
64	42973	79498	16023	52548	89073	25598	62123	98648	35173	71698
68	44434	80959	17484	54009	90534	27059	63584	00109	36634	73159
72	45895	82420	18945	55470	91995	28520	65045	01570	38095	74620
76	47356	83881	20406	56931	93456	29981	66506	03031	39556	76081
80	48817	85342	21867	58392	94917	31442	67967	04492	41017	77542
84	50278	86803	23328	59853	96378	32903	69428	05953	42478	79003
88	51739	88264	24789	61314	97839	34364	70889	07414	43939	80464
92	53200	89725	26250	62775	99300	35825	72350	08875	45400	81925
96	54661	91186	27711	64236	00761	37286	73811	10336	46861	83386
100	56122	92647	29172	65697	02222	38747	75272	11797	48322	84847
	57583	94108	30633	67158	03683	40208	76733	13258	49783	86308
	17	17	18	18	19	19	19	20	20	20

Jahr n. Chr.	Tage	Jahr n. Chr.	Tage
0	1721058	1580	2298153
1	1721424	1581	2298519
2	1721789	1582	2298884
3	1722154	1583	2299239
4	1722519	1584	2299604

## Julianische Periode.

Anzahl der am Mittag des 1. Januar eines jeden Schaltjahrs seit Anfang der Periode verflossenen Tage.

Jahr n. Chr.	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900
o	20	21	21	21	22	22	23	23	23	24
86308	22833	59358	95883	32408	68933	05448	41973*	78497*	15021*	15021*
87769	24294	60819	97344	33869	70394	06909	43433	79957	16481	16481
89230	25755	62280	98805	35330	71855	08370	44894	81418	17942	17942
90691	27216	63741	00266	36791	73316	09831	46355	82879	19403	19403
92152	28677	65202	01727	38252	74777	11292	47816	84340	20864	20864
93613	30138	66663	03188	39713	76238	12753	49277	85801	22325	22325
95074	31599	68124	04649	41174	77699	14214	50738	87262	23786	23786
96535	33060	69585	06110	42635	79160	15675	52199	88723	25247	25247
97996	34521	71046	07571	44096	80621	17136	53660	90184	26708	26708
99457	35982	72507	09032	45557	82082	18597	55121	91645	28169	28169
00918	37443	73968	10493	47018	83543	20058	56582	93106	29630	29630
02379	38904	75429	11954	48479	85004	21519	58043	94567	31091	31091
03840	40365	76890	13415	49940	86465	22980	59504	96028	32552	32552
05301	41826	78351	14876	51401	87926	24441	60965	97489	34013	34013
06762	43287	79812	16337	52862	89387	25902	62426	98950	35474	35474
08223	44748	81273	17798	54323	90848	27363	63887	00411	36935	36935
09684	46209	82734	19259	55784	92309	28824	65348	01872	38396	38396
11145	47670	84195	20720	57245	93770	30285	66809	03333	39857	39857
12606	49131	85656	22181	58706	95231	31746	68270	04794	41318	41318
14067	50592	87117	23642	60167	96692	33207	69731	06255	42779	42779
15528	52053	88578	25103	61628	98153	34668	71192	07716	44240	44240
16989	53514	90039	26564	63089	99604	36129	72653	09177	45701	45701
18450	54975	91500	28025	64550	01065	37590	74114	10638	47162	47162
19911	56436	92961	29486	66011	02526	39051	75575	12099	48623	48623
21372	57897	94422	30947	67472	03987	40512	77036	13560	50084	50084
22833	59358	95883	32408	68933	05448	41973*	78497*	15021*	51545	51545
	21	21	21	22	22	23	23	23	24	24

Anm. Die mit \* bezeichneten Jahre sind Gemeinjahre.

Jahr n. Chr.	Tag	Jahr n. Chr.	Tag	Jahr n. Chr.	Tag
1700	2341973	1800	2378497	1900	2415021
1701	2342338	1801	2378862	1901	2415386
1702	2342703	1802	2379227	1902	2415751
1703	2343068	1803	2379592	1903	2416116
1704	2343433	1804	2379957	1904	2416481

## Zur Verwandlung der Mittl. Zeit in Sternzeit.

Tafel I.		Tafel II.					
Red. auf St.-Zt.	Mittl. Zt.	Red. auf St.-Zt.	Mittl. Zt.	Red. auf St.-Zt.	Mittl. Zt.	Red. auf St.-Zt.	Mittl. Zt.
+ 0 <sup>m</sup> 0 <sup>s</sup>	0 <sup>b</sup> 0 <sup>m</sup> 0 <sup>s</sup>	+ 0.0	0 <sup>m</sup> 0 <sup>s</sup>	+ 4.0	24 <sup>m</sup> 21 <sup>s</sup>	+ 8.0	48 <sup>m</sup> 42 <sup>s</sup>
0 10	1 0 52	0.1	0 37	4.1	24 58	8.1	49 19
0 20	2 1 45	0.2	1 13	4.2	25 34	8.2	49 55
0 30	3 2 37	0.3	1 50	4.3	26 11	8.3	50 32
0 40	4 3 30	0.4	2 26	4.4	26 47	8.4	51 8
0 50	5 4 22	0.5	3 3	4.5	27 24	8.5	51 45
		0.6	3 39	4.6	28 0	8.6	52 21
+ 1 0	6 5 15	0.7	4 16	4.7	28 37	8.7	52 58
1 10	7 6 7	0.8	4 52	4.8	29 13	8.8	53 34
1 20	8 6 59	0.9	5 29	4.9	29 50	8.9	54 11
1 30	9 7 52						
1 40	10 8 44	+ 1.0	6 5	+ 5.0	30 26	+ 9.0	54 47
1 50	11 9 37	1.1	6 42	5.1	31 3	9.1	55 24
		1.2	7 18	5.2	31 39	9.2	56 0
+ 2 0	12 10 29	1.3	7 55	5.3	32 16	9.3	56 37
2 10	13 11 21	1.4	8 31	5.4	32 52	9.4	57 13
2 20	14 12 14	1.5	9 8	5.5	33 29	9.5	57 50
2 30	15 13 6	1.6	9 44	5.6	34 5	9.6	58 26
2 40	16 13 59	1.7	10 21	5.7	34 42	9.7	59 3
2 50	17 14 51	1.8	10 57	5.8	35 18	9.8	59 39
		1.9	11 34	5.9	35 55	9.9	60 16
+ 3 0	18 15 44						
3 10	19 16 36	+ 2.0	12 10	+ 6.0	36 31		
3 20	20 17 28	2.1	12 47	6.1	37 8		
3 30	21 18 21	2.2	13 23	6.2	37 44		
3 40	22 19 13	2.3	14 0	6.3	38 21	Tafel III.	
3 50	23 20 6	2.4	14 36	6.4	38 57		
4 0	24 20 58	2.5	15 13	6.5	39 34		
		2.6	15 49	6.6	40 10	+ 0.01	0 <sup>m</sup> 4 <sup>s</sup>
		2.7	16 26	6.7	40 47	0.02	0 7
		2.8	17 2	6.8	41 23	0.03	0 11
		2.9	17 39	6.9	42 0	0.04	0 15
						0.05	0 18
+ 3.0	18 16	+ 7.0	42 37	0.06	0 22		
3.1	18 53	7.1	43 14	0.07	0 26		
3.2	19 29	7.2	43 50	0.08	0 29		
3.3	20 6	7.3	44 27	0.09	0 33		
3.4	20 42	7.4	45 3	0.10	0 37		
3.5	21 19	7.5	45 40				
3.6	21 55	7.6	46 16				
3.7	22 32	7.7	46 53				
3.8	23 8	7.8	47 29				
3.9	23 45	7.9	48 6				

## Zur Verwandlung der Sternzeit in Mittl. Zeit.

Tafel I.			Tafel II.							
Red. auf Mittl. Zt.	Stern - Zt.		Red. auf Mittl. Zt.	Stern - Zt.						
— 0 0	0 0 0		— 0.0	0 0	— 4.0	24 25	— 8.0	48 50		
0 10	1 1 2		0.1	0 37	4.1	25 2	8.1	49 27		
0 20	2 2 5		0.2	1 13	4.2	25 38	8.2	50 3		
0 30	3 3 7		0.3	1 50	4.3	26 15	8.3	50 40		
0 40	4 4 10		0.4	2 26	4.4	26 51	8.4	51 16		
0 50	5 5 12		0.5	3 3	4.5	27 28	8.5	51 53		
			0.6	3 40	4.6	28 5	8.6	52 30		
— 1 0	6 6 15		0.7	4 16	4.7	28 41	8.7	53 6		
1 10	7 7 17		0.8	4 53	4.8	29 18	8.8	53 43		
1 20	8 8 19		0.9	5 30	4.9	29 55	8.9	54 20		
1 30	9 9 22									
1 40	10 10 24		— 1.0	6 6	— 5.0	30 31	— 9.0	54 56		
1 50	11 11 27		1.1	6 43	5.1	31 8	9.1	55 33		
			1.2	7 19	5.2	31 44	9.2	56 9		
— 2 0	12 12 29		1.3	7 56	5.3	32 21	9.3	56 46		
2 10	13 13 31		1.4	8 32	5.4	32 57	9.4	57 22		
2 20	14 14 34		1.5	9 9	5.5	33 34	9.5	57 59		
2 30	15 15 36		1.6	9 46	5.6	34 11	9.6	58 36		
2 40	16 16 39		1.7	10 22	5.7	34 47	9.7	59 12		
2 50	17 17 41		1.8	10 59	5.8	35 24	9.8	59 49		
			1.9	11 36	5.9	36 1	9.9	60 26		
— 3 0	18 18 44									
3 10	19 19 46		— 2.0	12 12	— 6.0	36 37				
3 20	20 20 48		2.1	12 49	6.1	37 14				
3 30	21 21 51		2.2	13 25	6.2	37 50				
3 40	22 22 53		2.3	14 2	6.3	38 27				
3 50	23 23 56		2.4	14 38	6.4	39 3				
4 0	24 24 58		2.5	15 15	6.5	39 40				
			2.6	15 52	6.6	40 17	— 0.01	0 4		
			2.7	16 28	6.7	40 53	0.02	0 7		
			2.8	17 5	6.8	41 30	0.03	0 11		
			2.9	17 42	6.9	42 7	0.04	0 15		
							0.05	0 18		
— 3.0	18 19		— 7.0	42 44			0.06	0 22		
3.1	18 56		7.1	43 21			0.07	0 26		
3.2	19 32		7.2	43 57			0.08	0 29		
3.3	20 9		7.3	44 34			0.09	0 33		
3.4	20 45		7.4	45 10			0.10	0 37		
3.5	21 22		7.5	45 47						
3.6	21 59		7.6	46 24						
3.7	22 35		7.7	47 0						
3.8	23 12		7.8	47 37						
3.9	23 49		7.9	48 14						

Tafel III.

— 0.01	0 4
0.02	0 7
0.03	0 11
0.04	0 15
0.05	0 18
0.06	0 22
0.07	0 26
0.08	0 29
0.09	0 33
0.10	0 37

Zur Verwandlung von Stunden, Minuten und Sekunden  
in Dezimalteile des Tages und umgekehrt.

Tag	h m s	Tag	h m s	Tag	h m s
0.01	0 14 24	0.36	8 38 24	0.71	17 2 24
0.02	0 28 48	0.37	8 52 48	0.72	17 16 48
0.03	0 43 12	0.38	9 7 12	0.73	17 31 12
0.04	0 57 36	0.39	9 21 36	0.74	17 45 36
0.05	1 12 0	0.40	9 36 0	0.75	18 0 0
0.06	1 26 24	0.41	9 50 24	0.76	18 14 24
0.07	1 40 48	0.42	10 4 48	0.77	18 28 48
0.08	1 55 12	0.43	10 19 12	0.78	18 43 12
0.09	2 9 36	0.44	10 33 36	0.79	18 57 36
0.10	2 24 0	0.45	10 48 0	0.80	19 12 0
0.11	2 38 24	0.46	11 2 24	0.81	19 26 24
0.12	2 52 48	0.47	11 16 48	0.82	19 40 48
0.13	3 7 12	0.48	11 31 12	0.83	19 55 12
0.14	3 21 36	0.49	11 45 36	0.84	20 9 36
0.15	3 36 0	0.50	12 0 0	0.85	20 24 0
0.16	3 50 24	0.51	12 14 24	0.86	20 38 24
0.17	4 4 48	0.52	12 28 48	0.87	20 52 48
0.18	4 19 12	0.53	12 43 12	0.88	21 7 12
0.19	4 33 36	0.54	12 57 36	0.89	21 21 36
0.20	4 48 0	0.55	13 12 0	0.90	21 36 0
0.21	5 2 24	0.56	13 26 24	0.91	21 50 24
0.22	5 16 48	0.57	13 40 48	0.92	22 4 48
0.23	5 31 12	0.58	13 55 12	0.93	22 19 12
0.24	5 45 36	0.59	14 9 36	0.94	22 33 36
0.25	6 0 0	0.60	14 24 0	0.95	22 48 0
0.26	6 14 24	0.61	14 38 24	0.96	23 2 24
0.27	6 28 48	0.62	14 52 48	0.97	23 16 48
0.28	6 43 12	0.63	15 7 12	0.98	23 31 12
0.29	6 57 36	0.64	15 21 36	0.99	23 45 36
0.30	7 12 0	0.65	15 36 0	1.00	24 0 0
0.31	7 26 24	0.66	15 50 24		
0.32	7 40 48	0.67	16 4 48		
0.33	7 55 12	0.68	16 19 12		
0.34	8 9 36	0.69	16 33 36		
0.35	8 24 0	0.70	16 48 0		

Zur Verwandlung von Stunden, Minuten und Sekunden  
in Dezimalteile des Tages und umgekehrt.

Tag	m	s	Tag	m	s	Tag	m	s	Tag		s
0.0001	0	8.64	0.0036	5	11.04	0.0071	10	13.44	0.00001	0.864	
02	0	17.28	37	5	19.68	72	10	22.08	2	1.728	
03	0	25.92	38	5	28.32	73	10	30.72	3	2.592	
04	0	34.56	39	5	36.96	74	10	39.36	4	3.456	
05	0	43.20	40	5	45.60	75	10	48.00	5	4.320	
06	0	51.84	41	5	54.24	76	10	56.64	6	5.184	
07	1	0.48	42	6	2.88	77	11	5.28	7	6.048	
08	1	9.12	43	6	11.52	78	11	13.92	8	6.912	
09	1	17.76	44	6	20.16	79	11	22.56	9	7.776	
10	1	26.40	45	6	28.80	80	11	31.20	10	8.640	
11	1	35.04	46	6	37.44	81	11	39.84			
12	1	43.68	47	6	46.08	82	11	48.48			
13	1	52.32	48	6	54.72	83	11	57.12			
14	2	0.96	49	7	3.36	84	12	5.76			
15	2	9.60	50	7	12.00	85	12	14.40			
16	2	18.24	51	7	20.64	86	12	23.04	0.000001	0.086	
17	2	26.88	52	7	29.28	87	12	31.68	2	0.173	
18	2	35.52	53	7	37.92	88	12	40.32	3	0.259	
19	2	44.16	54	7	46.56	89	12	48.96	4	0.346	
20	2	52.80	55	7	55.20	90	12	57.60	5	0.432	
21	3	1.44	56	8	3.84	91	13	6.24	6	0.518	
22	3	10.08	57	8	12.48	92	13	14.88	7	0.605	
23	3	18.72	58	8	21.12	93	13	23.52	8	0.691	
24	3	27.36	59	8	29.76	94	13	32.16	9	0.778	
25	3	36.00	60	8	38.40	95	13	40.80	10	0.864	
26	3	44.64	61	8	47.04	96	13	49.44			
27	3	53.28	62	8	55.68	97	13	58.08			
28	4	1.92	63	9	4.32	98	14	6.72			
29	4	10.56	64	9	12.96	99	14	15.36			
30	4	19.20	65	9	21.60	100	14	24.00			
31	4	27.84	66	9	30.24						
32	4	36.48	67	9	38.88						
33	4	45.12	68	9	47.52						
34	4	53.76	69	9	56.16						
35	5	2.40	70	10	4.80						

Hülfssgrößen zur Berechnung der Präzession nach Newcomb  
von den Katalogepochen  $t_0$  bis 1912.0.

$t = 1912.0$ .

$t_0$	$m^s(t - t_0)$	$\log [n^s(t - t_0)]$	$\log [n''(t - t_0)]$
1755	+8° 2.162	2.321977	3.498068
1790	6 14.714	2.212405	3.388496
1800	5 44.009	2.175254	3.351345
1810	5 13.304	2.134627	3.310718
1825	4 27.242	2.065532	3.241623
1830	+4 11.887	2.039823	3.215914
1835	3 56.532	2.012495	3.188586
1836	3 53.461	2.006817	3.182908
1840	3 41.176	1.983331	3.159422
1842	3 35.034	1.971096	3.147187
1845	+3 25.820	1.952070	3.128161
1850	3 10.463	1.918382	3.094473
1855	2 55.106	1.881860	3.057951
1860	2 39.748	1.841984	3.018075
1864	2 27.461	1.80722	2.98331
1865	+2 24.390	1.79807	2.97416
1870	2 9.031	1.74922	2.92531
1872	2 2.887	1.72803	2.90412
1875	1 53.672	1.69417	2.87026
1880	1 38.312	1.63111	2.80720
1885	+1 22.952	1.55732	2.73341
1890	1 7.592	1.46838	2.64447
1895	0 52.231	1.35640	2.53249
1900	0 36.869	1.20512	2.38122
1910	0 6.145	0.42696	1.60306

$m$  und  $n$  sind die Newcombschen Konstanten für die Epoche  
 $\frac{1}{2}(t + t_0)$ .

Ist  $\alpha'$ ,  $\delta'$  der genäherte Sternort für die Zeit  $\frac{1}{2}(t + t_0)$ ,  
so ist  $\alpha = \alpha_0 + [m^s(t - t_0)] + [n^s(t - t_0)] \sin \alpha' \operatorname{tg} \delta'$   
 $\delta = \delta_0 + [n''(t - t_0)] \cos \alpha'$ .

Hülfsgrößen zur Übertragung mittlerer Polsternörter  
von dem Äquinoktium  $t_0$  auf 1912.0.

$t = 1912.0$ .

$t_0$	$\zeta_0$	$z$	$\Theta$
1755	60 15.31	60 17.26	52 28.08
1790	46 49.80	46 50.98	40 46.15
1800	42 59.60	43 0.60	37 25.61
1810	39 9.38	39 10.21	34 5.07
1825	33 24.02	33 24.63	29 4.28
1830	31 28.89	31 29.43	27 24.02
1835	29 33.76	29 34.23	25 43.76
1840	27 38.62	27 39.03	24 3.50
1845	25 43.47	25 43.83	22 23.25
1850	23 48.32	23 48.63	20 42.99
1855	21 53.17	21 53.42	19 2.74
1860	19 58.00	19 58.22	17 22.49
1865	18 2.84	18 3.01	15 42.24
1870	16 7.66	16 7.80	14 1.99
1875	14 12.49	14 12.59	12 21.75
1880	12 17.30	12 17.38	10 41.51
1885	10 22.11	10 22.17	9 1.27
1890	8 26.92	8 26.96	7 21.03
1895	6 31.72	6 31.74	5 40.79
1900	4 36.52	4 36.53	4 0.55
1905	2 41.31	2 41.31	2 20.32
1910	0 46.09	0 46.09	0 40.09

Sind  $\alpha_0$ ,  $\delta_0$  die Koordinaten für  $t_0$ ,  $\alpha$ ,  $\delta$  jene für  $t$ , so hat man:

$$\alpha_0 = \alpha_0 + \zeta_0$$

$$p = (\tan \delta_0 + \cos \alpha_0 \tan \frac{1}{2} \Theta) \sin \Theta$$

$$\tan \Delta\alpha = \frac{p \sin \alpha_0}{1 - p \cos \alpha_0}$$

$$\alpha = \alpha_0 + z + \Delta\alpha$$

$$\tan \frac{1}{2} (\delta - \delta_0) = \cos (\alpha_0 + \frac{1}{2} \Delta\alpha) \sec \frac{1}{2} \Delta\alpha \tan \frac{1}{2} \Theta$$

oder, fast immer ausreichend genau:

$$\delta = \delta_0 + \Theta \cos (\alpha_0 + \frac{1}{2} \Delta\alpha) \sec \frac{1}{2} \Delta\alpha.$$

Name	See- höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Abbadia . . . . .	69 <sup>m</sup>	+43° 22' 52.2"	+1° 0' 34.9"	+ 9.95	+43° 11' 22.8"	9.999322
Åbo . . . . .	—	+60° 26' 56.8"	-0° 35' 31.50"	- 5.84	+60° 17' 3.1"	9.998902
Adelaide . . . . .	43	-34° 55' 38.5"	-8° 20' 45.62"	-82.26	-34° 44' 50.9"	9.999529
Albany (N. Stw.) <sup>1)</sup>	40	+42° 39' 12.6"	+5° 48' 41.16"	+57.28	+42° 27' 44.5"	9.999339
Alfred Centre N.Y.	556	+42° 15' 19.8"	+6° 4' 41.93"	+59.91	+42° 3' 52.5"	9.999384
Algier (N. Stw.) <sup>2)</sup> .	342	+36° 47' 50"	+0° 41' 26.42"	+ 6.81	+36° 36' 48"	9.999505
Allegheny (N. Stw.)	370	+40° 28' 58.1"	+6° 13' 40.19"	+61.39	+40° 17' 36.3"	9.999416
Allegheny (A. Stw.)	349	+40° 27' 41.6"	+6° 13' 37.77"	+61.38	+40° 16' 20.0"	9.999415
Altenburg <sup>3)</sup> . . .	229	+50° 58' 20"	+0° 3' 50.64"	+ 0.63	+50° 47' 4"	9.999141
Altona Mer.-Kreis <sup>4)</sup>	31	+53° 32' 45.3"	+0° 13' 48.61"	+ 2.27	+53° 21' 44.5"	9.999065
Amherst (Neue Stw.)	110	+42° 21' 56.5"	+5° 43' 40.78"	+56.46	+42° 10' 29.0"	9.999341
Amherst (Alte Stw.)	122	+42° 22' 17.1"	+5° 43' 39.52"	+56.46	+42° 10' 49.6"	9.999351
Annapolis . . . . .	—	+38° 58' 53.5"	+5° 59' 31.33"	+59.06	+38° 47' 38.5"	9.999428
Ann Arbor . . . . .	285	+42° 16' 48.0"	+6° 28' 30.03"	+63.82	+42° 5' 20.7"	9.999364
Arcetri Zentr. d. St. <sup>5)</sup>	186	+43° 45' 14.4"	+0° 8' 33.50"	+ 1.41	+43° 33' 44.5"	9.999321
Arequipa . . . . .	2451	-16° 22' 28.0"	+5° 39' 46.53"	+55.82	-16° 16' 15.4"	0.000053
Armagh . . . . .	61	+54° 21' 12.7"	+1° 20' 10.2"	+13.17	+54° 10' 17.8"	9.999047
Athen . . . . .	—	+37° 58' 19.7"	-0° 41' 18.12"	- 6.78	+37° 47' 10.3"	9.999453
Bamberg (Remeis' St.)	299	+49° 53' 6.0"	+0° 10' 1.23"	+ 1.65	+49° 41' 45.0"	9.999174
Barcelona <sup>6)</sup> . . . .	—	+41° 24' 2"	+0° 44' 59.7"	+ 7.39	+41° 12' 37"	9.999368
Beloit . . . . .	—	+42° 30' 9"	+6° 49' 42.2"	+67.31	+42° 18' 41"	9.999340
Bergen . . . . .	—	+60° 23' 54"	+0° 32' 22.07"	+ 5.32	+60° 14' 0"	9.998903
Berkeley . . . . .	97	+37° 52' 23.6"	+9° 2' 37.56"	+89.14	+37° 41' 14.7"	9.999462
Berlin Zentr. d. St. <sup>7)</sup>	47	+52° 30' 16.7"	0° 0' 0.00"	0.00	+52° 19' 9.0"	9.999091
Berlin (Urania) . . .	—	+52° 31' 30.7"	+0° 0' 7.40"	+ 0.02	+52° 20' 23.2"	9.999088
Bern . . . . .	573	+46° 57' 8.7"	+0° 23' 49.25"	+ 3.91	+46° 45' 39.5"	9.999266
Besançon . . . . .	312	+47° 14' 59.0"	+0° 29' 37.7"	+ 4.87	+47° 3' 30.3"	9.999241
Bethlehem <sup>8)</sup> . . . .	—	+40° 36' 23.5"	+5° 55' 6.74"	+58.34	+40° 25' 1.3"	9.999388
Birr Castle <sup>9)</sup> . . .	—	+53° 5' 47"	+1° 25' 15.7"	+14.00	+52° 54' 43"	9.999073
Bogota . . . . .	2700	+ 4° 35' 48"	+5° 50' 34"	+57.59	+ 4° 33' 58"	0.000175
Bologna Zentr. d. Stw.	—	+44° 29' 52.8"	+0° 8' 10.32"	+ 1.34	+44° 18' 22.3"	9.999289
Bombay (Colaba) .	19	+18° 53' 36.2"	-3° 57' 40.90"	-39.05	+18° 46' 34.1"	9.999850
Bonn Zentr. d. Stw. .	62	+50° 43' 45.0"	+0° 25' 11.62"	+ 4.14	+50° 32' 27.7"	9.999136
Bordeaux (Floirac)	73	+44° 50' 7.2"	+0° 55' 40.30"	+ 9.14	+44° 38' 36.6"	9.999286
Boston (University)	—	+42° 21' 32.5"	+5° 37' 49.8"	+55.50	+42° 10' 5.0"	9.999344
Bothkamp <sup>10)</sup> . . .	32	+54° 12' 9.6"	+0° 13' 3.6"	+ 2.15	+54° 1' 13.6"	9.999048

<sup>1)</sup> Dudley Observatory, seit Juni 1893. Alte Sternwarte 37°.nördlich, 7°.10' östlich. — <sup>2)</sup> Alte Sternwarte 3°.8 südlich, 8° östlich. — <sup>3)</sup> Fr. Krüger. — <sup>4)</sup> 1873 nach Kiel verlegt. — <sup>5)</sup> Seit Oktober 1872, früher in Florenz. — <sup>6)</sup> J. Comas Solá. — <sup>7)</sup> Seit 1835. Alte Sternwarte 56°.4 nördlich, 0°.39 westlich. — <sup>8)</sup> Sayre Observatory, auch South-Bethlehem. — <sup>9)</sup> Earl of Rosse. — <sup>10)</sup> Herr von Bülow.

Name	See-höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Bremen (Olbers' Stw.) .	—	+53° 4' 36"	+0° 18' 20"	+ 3.01	+52° 53' 32"	9.999074
Breslau Zentr. d. Stw. .	147	+51° 6' 56.5	-0° 14' 33.92	- 2.39	+50° 55' 41.1	9.999132
Brisbane . . . . .	—	-27° 28' 0	-9° 18' 31.6	-91.75	-27° 18' 36	9.999693
Brüssel (Alte St.) Pass. Istr.	56	+50° 51' 10.7	+0° 36' 6.09	+ 5.93	+50° 39' 54.0	9.999133
Brüssel (Uccle) . . . . .	102	+50° 47' 55.5	+0° 36' 7.9	+ 5.94	+50° 36' 38.5	9.999137
Budapest <sup>1)</sup> . . . . .	—	+47° 29' 34.7	-0° 22' 40.5	- 3.73	+47° 18' 6.5	9.999213
Bukarest (Mil. Geogr. Inst.)	—	+44° 24' 34.2	-0° 50' 52.21	- 8.36	+44° 13' 3.7	9.999292
Cambridge Engl. . . . .	28	+52° 12' 51.6	+0° 53' 12.05	+ 8.74	+52° 1 42.2	9.999097
Cambridge Mass. <sup>2)</sup> . . . .	24	+42° 22' 47.6	+5° 38' 5.82	+55.54	+42° 11' 20.1	9.999345
Cap d. gut. Hoffnung	16	-33° 56' 3.2	-0° 20' 19.94	- 3.34	-33° 45' 24.3	9.999551
Catania . . . . .	60	+37° 30' 13.3	-0° 6' 45.8	- 1.11	+37° 19' 6.7	9.999468
Chapultepec (Alte Stw.) <sup>3)</sup>	—	+19° 25' 17.5	+7° 30' 13.08	+73.96	+19° 18' 5.5	9.999841
Charkow . . . . .	138	+50° 0' 10.2	-1° 31' 19.8	-15.01	+49° 48' 49.7	9.999159
Charlottesville <sup>4)</sup> . . . . .	250	+38° 2' 1.2	+6° 7' 40.06	+60.40	+37° 50' 51.4	9.999468
Chicago (Alte Stw.) <sup>5)</sup> . .	—	+41° 50' 1.0	+6° 44' 1.62	+66.37	+41° 38' 34.8	9.999357
Christiania Mer.-Kreis . .	25	+59° 54' 43.7	+0° 10' 41.29	+ 1.76	+59° 44' 43.5	9.998916
Cincinnati (Alte Stw.) . .	—	+39° 6' 26.5	+6° 31' 33.89	+64.32	+38° 55' 10.9	9.999425
Cincinnati (Neue Stw.) <sup>6)</sup>	263	+39° 8' 19.8	+6° 31' 16.13	+64.27	+38° 57' 4.0	9.999442
Cleveland (Case Obs.) . .	—	+41° 30' 14.5	+6° 20' 0.66	+62.43	+41° 18' 49.3	9.999365
Clinton (Litchfield Obs.)	276	+43° 3' 16.5	+5° 55' 12.28	+58.35	+42° 51' 47.6	9.999345
Coimbra . . . . .	99	+40° 12' 25.8	+1° 27' 9.0	+14.32	+40° 1' 5.2	9.999405
Columbia Missouri <sup>7)</sup> . .	225	+38° 56' 51.7	+7° 2' 53.17	+69.47	+38° 45' 36.9	9.999444
Cordoba . . . . .	439	-31° 25' 15.5	+5° 10' 23.0	+50.99	-31° 15' 2.0	9.999638
Danzig . . . . .	3	+54° 21' 18.0	-0° 21' 4.7	- 3.46	+54° 10' 23.1	9.999043
Denver <sup>8)</sup> . . . . .	1650	+39° 40' 36.4	+7° 53' 22.47	+77.76	+39° 29' 18.1	9.999523
Dorpat Mer.-Kreis . .	73	+58° 22' 47.1	-0° 53' 18.43	- 8.76	+58° 12' 29.5	9.998953
Dresden (Neue Stw.) <sup>9)</sup>	121	+51° 2' 16.8	-0° 1' 19.94	- 0.22	+50° 51' 1.0	9.999132
Dresden (Mathem. Salon)	—	+51° 3' 14.7	-0° 1' 21.03	- 0.22	+50° 51' 59.0	9.999124
Dublin (Dunsink Obs.) . .	86	+53° 23' 13.1	+1° 18' 55.9	+12.97	+53° 12' 11.2	9.999072
Düsseldorf (Bilk) . . . .	26	+51° 12' 25.0	+0° 26' 29.9	+ 4.35	+51° 1' 10.0	9.999122
Dunecht <sup>10)</sup> . . . . .	141	+57° 9' 36	+1° 3' 15	+10.39	+56° 59' 6	9.998986
Durham . . . . .	—	+54° 46' 6.2	+0° 59' 54.5	+ 9.84	+54° 35' 14.6	9.999033
Edinburg . . . . .	106	+55° 57' 23.2	+1° 6' 17.85	+10.89	+55° 46' 41.7	9.999012
Edinburg (Blackf. Hill) . .	134	+55° 55' 28.0	+1° 6' 18.8	+10.89	+55° 44' 46.2	9.999014
Evanston (Dearborn Obs.)	—	+42° 3' 33.4	+6° 44' 17.1	+66.41	+41° 52' 6.6	9.999351
Flagstaff (Lowell Obs.) .	—	+35° 12' 30.5	+8° 20' 19.4	+82.19	+35° 1' 40.5	9.999520

<sup>1)</sup> Geod. Observ. des Polytechnikums. — <sup>2)</sup> Harvard College Observatory. — <sup>3)</sup> 1883 nach Tacubaya verlegt. <sup>4)</sup> Leander Mc. Cormick Obs. der University of Virginia. — <sup>5)</sup> 1887 geschlossen. — <sup>6)</sup> Mount Lookout, seit 1873. — <sup>7)</sup> Laws Observatory. — <sup>8)</sup> University Park, Chamberlin Observatory. — <sup>9)</sup> v. Engelhardt; Herbst 1897 aufgelöst. Alte Sternwarte 14°.2 nördlich, 1°.57 westlich. — <sup>10)</sup> Earl of Crawford.

Name	See-höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Florenz (Alte Sternw.) <sup>1)</sup> .	73 <sup>m</sup>	+43° 46' 4.1	+0° 8° 33.50	+ 1.40	+43° 34' 34.2	9.999313
Florenz (Mil. Geogr. Inst.)	—	+43° 46' 49.3	+0° 8° 32.28	+ 1.40	+43° 35' 19.4	9.999308
Genf Mer.-Kreis . . . . .	407	+46° 11' 59.1	+0° 28° 58.19	+ 4.76	+46° 0° 29.0	9.999274
Genua (Mar. Stw.) Mer.-Kr.	—	+44° 25' 9.3	+0° 17° 53.52	+ 2.94	+44° 13' 38.8	9.999291
Georgetown D. C. . . . .	46	+38° 54' 26.2	+6° 1° 53.13	+59.45	+38° 43' 11.6	9.999433
Glasgow Schottl. . . . .	—	+55° 52' 42.6	+1° 10° 45.35	+11.62	+55° 42' 0.4	9.999007
Glasgow Missouri . . . . .	228	+39° 13' 45.6	+7° 4° 52.86	+69.80	+39° 2° 29.4	9.999438
Göttingen Mer.-Kreis . . . .	161	+51° 31' 48.2	+0° 13° 48.58	+ 2.27	+51° 20' 34.6	9.999123
Gohlis <sup>2)</sup> . . . . .	108	+51° 21' 35.0	+0° 4° 5.26	+ 0.67	+51° 10' 20.8	9.999123
Gotha (Neue Stw.) Zentr.d.St. <sup>3)</sup>	320	+50° 56' 37.5	+0° 10° 44.28	+ 1.76	+50° 45' 21.2	9.999149
Graz . . . . .	375	+47° 4° 37.2	-0° 8° 13	- 1.35	+46° 53' 8.2	9.999250
Greenwich Transit Circle	47	+51° 28' 38.1	+0° 53° 34.80	+ 8.80	+51° 17' 24.5	9.999116
Grignon . . . . .	—	+47° 33' 42	+0° 35° 57	+ 5.91	+47° 22' 14	9.999212
Hamburg (Alte Stw.) M.-Kr.	25	+53° 33' 5.2	+0° 13° 41.20	+ 2.25	+53° 22' 4.4	9.999064
Hamburg (Bergedorf) M.-Kr.	40	+53° 28' 46.0	+0° 12° 37.06	+ 2.07	+53° 17' 44.7	9.999067
Hamburg (D. Seewarte) .	30	+53° 32' 51.8	+0° 13° 41.38	+ 2.25	+53° 21' 51.0	9.999065
Hanover N. H. . . . .	—	+43° 42' 15.2	+5° 42° 42.80	+56.30	+43° 30' 45.4	9.999310
Harrow (Col. Tupmann)	66	+51° 34' 47.4	+0° 54° 54.7	+ 9.19	+51° 23' 33.5	9.999115
Hastings on Huds. <sup>4)</sup> . .	—	+40° 59' 25	+5° 49° 4.5	+57.35	+40° 48' 1	9.999378
Haverford . . . . .	—	+40° 0° 36.5	+5° 54° 47.59	+58.28	+39° 49' 16.7	9.999403
Heidelberg (Wolfs Stw.)	—	+49° 24' 35	+0° 18° 46.4	+ 3.08	+49° 13' 12	9.999165
Heidelberg (Königst.) M.-Kr.	570	+49° 23' 54.6	+0° 18° 41.67	+ 3.07	+49° 12' 31.7	9.999204
St. Helena . . . . .	210	-15° 55' 26	+1° 16° 27.0	+12.56	-15° 49' 23	9.999906
Helsingfors Mer.-Kreis .	38	+60° 9° 42.6	-0° 46° 14.30	- 7.60	+59° 59' 45.4	9.998912
Helwan . . . . .	119	+29° 51' 33	-1° 11° 47	-11.79	+29° 41' 38	9.999650
Herény (von Gothard) . .	229	+47° 15' 47.4	-0° 12° 49.8	- 2.11	+47° 4° 18.7	9.999235
Hongkong . . . . .	—	+22° 18' 13.2	-6° 43° 7.1	-66.22	+22° 10° 9.4	9.999792
Hudson . . . . .	—	+41° 14' 42.6	+6° 19° 18.99	+62.31	+41° 3° 18.2	9.999372
Ipswich (Orwell Park) <sup>5)</sup> .	—	+52° 0° 33	+0° 48° 39.0	+ 7.99	+51° 49' 22	9.999100
Jena (Univers.) Zentr. d. St.	156	+50° 55' 35.6	+0° 7° 14.58	+ 1.19	+50° 44' 19.2	9.999137
Jena (Winkler) . . . . .	174	+50° 56' 15.7	+0° 7° 14.07	+ 1.19	+50° 44' 59.4	9.999139
Johannesburg . . . . .	1806	-26° 10' 55.0	-0° 58° 43.20	- 9.65	-26° 1° 49.2	9.999842
Kairo . . . . .	—	+30° 4° 38.2	-1° 11° 34.00	-11.76	+29° 54° 40.2	9.999638
Kalocsa <sup>6)</sup> . . . . .	110	+46° 31' 42	-0° 22° 19.4	- 3.67	+46° 20' 12	9.999245
Karlsruhe <sup>7)</sup> . . . . .	110	+49° 0° 29.6	+0° 19° 59.40	+ 3.28	+48° 49' 5.4	9.999183
Kasan (Univers.) . . . . .	79	+55° 47' 24.3	-2° 22° 54.13	-23.48	+55° 36' 41.3	9.999014

<sup>1)</sup> 1872 nach Arcetri verlegt. — <sup>2)</sup> Hr. Winkler, August 1887 nach Jena verlegt. — <sup>3)</sup> Seit 1853, früher Seeberg. — <sup>4)</sup> Dr. Draper. — <sup>5)</sup> Col. Tomline. — <sup>6)</sup> Erzbischöfl. Haynaldsche Sternwarte. — <sup>7)</sup> 1896 nach Heidelberg verlegt.

Name	See-höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Kasan (Engelhardt) . . . . .	98 <sup>b</sup>	+55° 50' 20.0	-2° 21' 41.6	-23.28	+55° 39' 37.4	9.999014
Kew . . . . .	10	+51° 28' 6	+0° 54' 49.9	+ 9.01	+51° 16' 52	9.999115
Kiel Neuer Mer.-Kreis . . . .	52	+54° 20' 27.6	+0° 12' 59.35	+ 2.13	+54° 9' 32.6	9.999047
Kiel Alter Mer.-Kreis . . . .	47	+54° 20' 28.5	+0° 12' 59.23	+ 2.13	+54° 9' 33.5	9.999047
Kiew Mer.-Kreis . . . . .	179	+50° 27' 12.5	-1° 8' 25.77	-11.24	+50° 15' 53.9	9.999151
Kis Kartal <sup>1)</sup> . . . . .	-	+47° 41' 54.8	-0° 24' 36.8	- 4.04	+47° 30' 27.0	9.999208
Königsberg Reps M.-Kr. <sup>2)</sup>	22	+54° 42' 50.6	-0° 28' 24.18	- 4.67	+54° 31' 58.6	9.999036
Kopenhagen (Neue Stw.) <sup>3)</sup>	14	+55° 41' 12.6	+0° 3' 16.11	+ 0.54	+55° 30' 28.7	9.999012
Kopenhagen (Urania-St.)	10	+55° 41' 19.2	+0° 3' 25.69	+ 0.56	+55° 30' 35.2	9.999012
Krakau Mer.-Kreis . . . . .	221	+50° 3' 51.9	-0° 26' 15.48	- 4.31	+49° 52' 31.6	9.999164
Kremsmünster Mer.-Kr.	384	+48° 3' 23.1	-0° 2' 56.78	- 0.48	+47° 51' 56.1	9.999225
Landstuhl (Fauth) . . . . .	385	+49° 24' 42.5	+0° 23' 18.45	+ 3.83	+49° 13' 19.7	9.999191
La Plata . . . . .	-	-34° 54' 30	+4° 45' 11.9	+46.85	-34° 43' 43	9.999527
Leiden (Neue Stw.) Mer.-Kr. <sup>4)</sup>	6	+52° 9' 20.2	+0° 35' 38.65	+ 5.86	+51° 58' 10.4	9.999097
Leipzig (Neue Stw.) Zentr. <sup>5)</sup>	119	+51° 20' 5.9	+0° 4' 0.87	+ 0.66	+51° 8' 52.0	9.999125
Lemberg . . . . .	338	+49° 50' 11	-0° 42' 29	- 6.98	+49° 38' 50	9.999177
Leyton <sup>6)</sup> . . . . .	-	+51° 34' 34.0	+0° 53' 35.7	+ 8.80	+51° 23' 21.0	9.999111
Lissabon (Neue Stw.) . . . .	94	+38° 42' 31.3	+1° 30' 19.58	+14.84	+38° 31' 17.7	9.999441
Lissabon (Mar. Stw.) . . . .	-	+38° 42' 17.6	+1° 30' 8.4	+14.81	+38° 31' 4.0	9.999435
Liverpool (Neue Stw.) <sup>7)</sup>	61	+53° 24' 3.8	+1° 5' 52.0	+10.82	+53° 13' 2.0	9.999070
London <sup>8)</sup> . . . . .	-	+51° 31' 30	+0° 54' 11.9	+ 8.90	+51° 20' 17	9.999112
Lübeck (Navig.-Sch.) . . . .	19	+53° 51' 31.1	+0° 10' 49.2	+ 1.78	+53° 40' 32.5	9.999056
Lund Zentr. d. Stw. . . . .	34	+55° 41' 52.0	+0° 0' 49.83	+ 0.14	+55° 31' 8.3	9.999013
Lussinpiccolo <sup>9)</sup> . . . . .	-	+44° 32' 11	-0° 4' 17.5	- 0.70	+44° 20' 40	9.999288
Lüttich Ougrée . . . . .	128	+50° 37' 6	+0° 31' 23	+ 5.15	+50° 25' 48	9.999144
Lyon . . . . .	299	+45° 41' 40.8	+0° 34' 26.8	+ 5.66	+45° 30' 10.3	9.999279
Madison (Washburn Obs.)	293	+43° 4' 36.7	+6° 51' 12.70	+67.55	+42° 53' 7.8	9.999345
Madras . . . . .	7	+13° 4' 8.1	-4° 27' 24.53	-43.93	+12° 59' 4.8	9.999926
Madrid Zentr. d. Stw. . . .	655	+40° 24' 29.7	+1° 8' 19.89	+11.23	+40° 13' 8.3	9.999437
Mailand Gr. Turm . . . . .	120	+45° 27' 59.4	+0° 16' 48.91	+ 2.76	+45° 16' 30.1	9.999273
Manila . . . . .	-	+14° 35' 25	-7° 10' 15	-70.68	+14° 29' 49	9.999909
Mannheim Zentr. d. Stw.	98	+49° 29' 11.0	+0° 19' 44.38	+ 3.24	+49° 17' 48.5	9.999170
Marburg . . . . .	248	+50° 48' 46.9	+0° 18' 29.9	+ 3.04	+50° 37' 30.0	9.999147
Mare Island Calif. . . . .	18	+38° 5' 55.8	+9° 2' 40.39	+89.15	+37° 54' 45.6	9.999451
Markree (Col. Cooper) . .	45	+54° 10' 31.7	+1° 27' 23.2	+14.36	+53° 59' 35.5	9.999050
Marseille (N. St.) M.-Kr. <sup>10)</sup>	75	+43° 18' 19.1	+0° 32' 0.24	+ 5.26	+43° 6' 49.8	9.999325

<sup>1)</sup> Baron von Podmaniczky. — <sup>2)</sup> Nach 1898, vor 1898 0°.01 westlich. — <sup>3)</sup> Seit 1861 Nov. 11. Alte Sternwarte 20°.3 südlich, 0°.03 westlich. — <sup>4)</sup> Seit 1860. Alte Sternwarte 8°.0 nördlich, 0°.42 östlich. — <sup>5)</sup> Seit 1861. Alte Sternwarte 14°.2 nördlich, 4°.00 westlich. — <sup>6)</sup> J. Gurney Barclay. — <sup>7)</sup> Alte Sternwarte 44°.0 nördlich, 17°.1 östlich. — <sup>8)</sup> Regents Park, G. Bishop 1836—61. — <sup>9)</sup> Manora-Sternwarte. — <sup>10)</sup> Seit 1866. Alte Sternwarte 30°.1 südlich, 6°.2 westlich; 20m.

Name	See-höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Melbourne . . . . .	28 <sup>m</sup>	-37° 49' 53.1	-8° 46' 19.37	-86.46	-37° 38' 44.5	9.999458
Meudon . . . . .	-	+48° 48' 18	+0° 44' 39.3	+7.34	+48° 36' 53	9.999180
Mexico . . . . .	2277	+19° 26' 1.3	+7° 30' 1.51	+73.93	+19° 18' 49.0	9.999995
Middletown Conn. . .	-	+41° 33' 16.0	+5° 44' 12.0	+56.54	+41° 21' 50.6	9.999364
Modena . . . . .	63	+44° 38' 52.8	+0° 9' 52.0	+1.62	+44° 27' 22.2	9.999289
Moncalieri . . . . .	-	+44° 59' 51	+0° 22' 46	+3.74	+44° 48' 20	9.999277
Montreal . . . . .	20	+45° 30' 17.0	+5° 47' 53.45	+57.15	+45° 18' 46.4	9.999265
Mt. Hamilton (Lieck) Mkr.	1283	+37° 20' 25.6	+9° 0' 9.65	+88.74	+37° 9' 20.1	9.999556
Mt. Wilson Calif. . .	1731	+34° 12' 59.5	+8° 45' 49.13	+86.27	+34° 2' 18.0	9.999661
Moskau Mer.-Kr. . . .	142	+55° 45' 19.5	-1° 36' 42.23	-15.89	+55° 34' 36.2	9.999019
Mundenheim <sup>1)</sup> . . . .	-	+49° 27' 30	+0° 19' 51	+3.26	+49° 16' 7	9.999164
München West-Kuppel	529	+48° 8' 45.5	+0° 7' 8.78	+1.17	+47° 57' 18.8	9.999233
Nashville (Vanderbilt Obs.)	-	+36° 8' 58.2	+6° 40' 47.61	+65.84	+35° 58' 0.9	9.999497
Natal . . . . .	79	-29° 50' 46.6	-1° 10' 26.38	-11.57	-29° 40' 51.3	9.999648
Neapel (Capo di M.) . .	164	+40° 51' 45.4	-0° 3' 26.8	-0.57	+40° 40' 22.3	9.999392
Neuchâtel . . . . .	488	+46° 59' 50.6	+0° 25' 45.05	+4.23	+46° 48' 21.5	9.999259
New Haven (Neue Stw.) <sup>2)</sup>	-	+41° 19' 22.3	+5° 45' 15.33	+56.72	+41° 7' 57.6	9.999369
New York (Rutherford)	-	+40° 43' 48.5	+5° 49' 31.46	+57.42	+40° 32' 25' 8	9.999384
New York (Columb. C.)	-	+40° 45' 23.1	+5° 49' 28.53	+57.41	+40° 34' 0.3	9.999384
Nikolajew . . . . .	55	+46° 58' 22.1	-1° 14' 18.96	-12.21	+46° 46' 51.4	9.999230
Nizza Kl. Mer.-Kr. <sup>3)</sup> . .	378	+43° 43' 16.9	+0° 24' 22.65	+4.01	+43° 31' 47.0	9.999335
Northfield (Goodsell Obs.)	286	+44° 27' 41.6	+7° 6' 10.8	+70.01	+44° 16' 10.6	9.999310
Oakland Californ. <sup>4)</sup> . .	11	+37° 48' 5	+9° 2' 41.1	+89.15	+37° 36' 57	9.999458
Odessa (Univ.-Stw.) Mer.-Kr.	55	+46° 28' 36.2	-1° 9' 27.25	-11.41	+46° 17' 6.3	9.999243
Odessa (Filiale Pulkowa)	-	+46° 28' 36.0	-1° 9' 27.39	-11.41	+46° 17' 6.1	9.999239
Ogden Utah . . . . .	-	+41° 13' 8.6	+8° 21' 34.45	+82.40	+41° 1' 44.3	9.999372
O-Gyalla (Neue Stw.) <sup>5)</sup>	-	+47° 52' 27.3	-0° 19' 10.69	-3.15	+47° 40' 59.9	9.999204
Olmütz <sup>6)</sup> . . . . .	-	+49° 35' 43	-0° 15' 33	-2.55	+49° 24' 21	9.999160
Ottawa . . . . .	84	+45° 23' 37.3	+5° 56' 26.73	+58.55	+45° 12' 6.7	9.999277
Oxford (Radcl. Obs.) . .	65	+51° 45' 35.4	+0° 58' 37.4	+9.63	+51° 34' 23.4	9.999111
Oxford (Univers.) . . .	64	+51° 45' 34.2	+0° 58' 35.2	+9.62	+51° 34' 22.2	9.999110
Oxford Mississippi . .	-	+34° 22' 12.6	+6° 51' 41.9	+67.63	+34° 11' 29.7	9.999540
Padua Mauer-Quadr. . .	31	+45° 24' 1.0	+0° 6' 5.65	+1.00	+45° 12' 30.4	9.999268
Palermo . . . . .	76	+38° 6' 44.0	+0° 0' 9.0	+0.02	+37° 55' 33.8	9.999454
Paramatta . . . . .	-	-33° 48' 49.8	-9° 10' 25.4	-90.42	-33° 38' 12.0	9.999553
Paris (Obs. nat.) Mer. Cassini	59	+48° 50' 11.2	+0° 44' 13.86	+7.27	+48° 38' 46.4	9.999183

<sup>1)</sup> Dr. Max Mündler. — <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> Dr. von Konkoly. — <sup>6)</sup> Herr von Unkrechtsberg.

Name	See-höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Paris (Moutouris) westl. Mer.	—	+48° 49' 18.0"	+0 44 14.10	+ 7.27	+48° 37' 53.2"	9.999180
Parma (Univ.-Stw.) Turm.	—	+44 48 4.7	+0 12 16.01	+ 2.41	+44 36 34.1	9.999282
Perth West.-Austr. . .	60	-31 57 9.6	-6 49 46.94	-67.32	-31 46 50.2	9.999600
Petersburg (Akademie)	20	+59 56 29.7	-1 7 38.55	-11.11	+59 46 29.9	9.998915
Petersburg (Univers.) .	4	+59 56 32.0	-1 7 36.5	-11.11	+59 46 32.2	9.998914
Philadelphia <sup>1)</sup> . . . .	—	+39 57 7.5	+5 54 13.29	+58.19	+39 45 47.9	9.999404
Plonsk <sup>2)</sup> . . . . .	—	+52 37 40.0	-0 27 57.1	- 4.59	+52 26 33.1	9.999085
Pola . . . . .	32	+44 51 48.6	-0 1 48.16	- 0.30	+44 40 18.0	9.999282
Portsmouth . . . . .	—	+50 48 3	+0 57 59.6	+ 9.53	+50 36 46	9.999130
Potsdam (Astrophys. Obs.)	97	+52 22 56.0	+0 1 18.94	+ 0.22	+52 11 47.6	9.999098
Potsdam (Geod. Inst.) Turm	97	+52 22 54.8	+0 1 18.68	+ 0.22	+52 11 46.5	9.999098
Poughkeepsie <sup>3)</sup> . . . .	46	+41 41 18	+5 49 8.4	+57.36	+41 29 52	9.999363
Prag (Univ.-Stw.) Turm .	197	+50 5 16.0	-0 4 5.49	- 0.67	+49 53 55.8	9.999161
Prag (Safarik) . . . . .	—	+50 4 24	-0 4 13	- 0.69	+49 53 4	9.999148
Princeton N. J. (N. Stw.) <sup>4)</sup>	76	+40 20 55.8	+5 52 14.33	+57.86	+40 9 34.6	9.999399
Providence <sup>5)</sup> . . . . .	—	+41 49 46.4	+5 39 12.42	+55.72	+41 38 20.2	9.999357
Pulkowa Zentr. d. Stw.	75	+59 46 18.7	-1 7 43.78	-11.13	+59 36 16.9	9.998922
Quebec Canada . . . . .	—	+46 48 17.3	+5 38 24.2	+55.59	+46 36 47.9	9.999231
Quito . . . . .	2846	- 0 14 0	+6 8 55	+60.60	- 0 13 54	0.000194
Riga (Polytechnikum) Turm	—	+56 57 7	-0 42 53.31	- 7.04	+56 46 35	9.998981
Rio de Janeiro . . . . .	63	-22 54 23.7	+3 46 16.32	+37.17	-22 46 9.7	9.999786
Rochester (Lewis Swift)	172	+43 9 16.8	+6 3 56.67	+59.78	+42 57 47.7	9.999335
Rom (Coll. Rom.) Mer.-Kr.	59	+41 53 53.6	+0 3 39.44	+ 0.61	+41 42 27.3	9.999359
Rom (Capitol) Mer.-Kr.	63	+41 53 33.5	+0 3 38.46	+ 0.60	+41 42 7.2	9.999359
Rom (Vatican) Mer.-Kr.	100	+41 54 16.8	+0 3 45.52	+ 0.62	+41 42 50.4	9.999362
Rousdon . . . . .	157	+50 42 38	+1 5 33.7	+10.76	+50 31 21	9.999143
Rugby . . . . .	—	+52 22 7	+0 58 36.8	+ 9.63	+52 10 59	9.999091
St. Louis Missouri . .	—	+38 38 3.6	+6 54 23.95	+68.08	+38 26 50.4	9.999437
San Fernando . . . . .	31	+36 27 40.4	+1 18 24.17	+12.88	+36 16 40.8	9.999492
San Francisco <sup>6)</sup> . . . .	—	+37 47 28.0	+9 3 17.61	+89.25	+37 36 19.7	9.999457
Santiago de Chile (N. St.)	519	-33 26 42.0	+5 36 21.2	+55.24	-33 16 7.6	9.999596
Santiago de Chile (A. St.)	619	-33 26 25.4	+5 36 11.7	+55.22	-33 15 51.0	9.999603
Scarborough . . . . .	—	+54 16 30	+0 55 13.7	+ 9.07	+54 5 36	9.999045
Schwerin . . . . .	—	+53 37 37.9	+0 7 54.00	+ 1.30	+53 26 37.7	9.999061
Seeberg <sup>7)</sup> . . . . .	356	+50 56 5.2	+0 10 39.70	+ 1.75	+50 44 48.9	9.999151
South Hadley . . . .	—	+42 15 18.2	+5 43 55.18	+56.50	+42 3 50.9	9.999346

<sup>1)</sup> Flower Obs. (Univ. of Pennsylvania). — <sup>2)</sup> Dr. Jedrzejewicz; 1898 nach Warschau verlegt.<sup>3)</sup> Vassar College. — <sup>4)</sup> Alte Sternwarte 2°.o nördlich, 1°.94 östlich; 65<sup>m</sup>. — <sup>5)</sup> Seagrave; Ladd Observatory, 35° nördlich, 1°.57 östlich. — <sup>6)</sup> Davidson Observatory. — <sup>7)</sup> Alte Sternwarte, 1853 nach Gotha verlegt.

Name	See- höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Speyer . . . . .	—	+49° 18' 55.2"	+ 0° 19 49.29	+ 3.26	+49° 7' 32.0"	9.999168
Stockholm Mer.Kreis .	44	+59 20 34.0	— 0 18 39.18	— 3.06	+59 10 27.2	9.998930
Stonyhurst . . . . .	—	+53 50 40.0	+ 1 3 27.5	+ 10.42	+53 39 41.3	9.999055
Straßburg (Prov. Stw.) .	161	+48 34 54.0	+ 0 22 32.43	+ 3.70	+48 23 28.5	9.999197
Straßburg (N.St.), M.-Kr. <sup>1)</sup>	144	+48 35 0.2	+ 0 22 30.27	+ 3.70	+48 23 34.7	9.999196
Sydney . . . . .	44	-33 51 41.1	- 9 11 14.80	- 90.55	-33 41 2.8	9.999555
Tacubaya <sup>2)</sup> . . . . .	2322	+19 24 17.5	+ 7 30 21.33	+ 73.98	+19 17 5.8	9.999999
Taschkent . . . . .	457	+41 19 31.3	- 3 43 35.89	- 36.73	+41 8 6.6	9.999400
Taunton Mass. (Metcalf) .	8	+41 54	+ 5 37 55	+ 55.51	+41 43	9.999355
Teramo (Cerulli) . . . .	398	+42 39 27	- 0 1 21	- 0.22	+42 27 59	9.999363
Tokio . . . . .	—	+35 39 17.5	- 8 25 23.2	- 83.02	+35 28 24.0	9.999509
Toronto . . . . .	—	+43 39 35.9	+ 6 11 9.49	+ 60.97	+43 28 6.1	9.999311
Tortosa (Ebro-Stw.) M.-Kr.	—	+40 49 14	+ 0 51 36.3	+ 8.48	+40 37 51	9.999382
Toulouse . . . . .	194	+43 36 45.3	+ 0 47 43.8	+ 7.84	+43 25 15.6	9.999325
Triest . . . . .	23	+45 38 45.4	- 0 1 28.10	- 0.24	+45 27 14.9	9.999262
Troy N. Y. . . . .	—	+42 43 52.9	+ 5 48 19.4	+ 57.22	+42 32 24.6	9.999334
Tsingtau (Met.-astr. Stat.)	—	+36 4 11.3	- 7 7 41.41	- 70.26	+35 53 14.6	9.999499
Tulse Hill (W.Huggins) .	53	+51 26 47.0	+ 0 54 2.5	+ 8.88	+51 15 33.3	9.999118
Turin Mer.-Kr. . . . .	270	+45 4 7.9	+ 0 22 47.65	+ 3.74	+44 52 37.3	9.999293
Twickenham (G. Bishop)	—	+51 27 4.2	+ 0 54 47.9	+ 9.00	+51 15 50.5	9.999114
Upsala (N.Stw.) Pass.-Instr.	21	+59 51 29.4	- 0 16 55.33	- 2.78	+59 41 28.6	9.998916
Urbana Ill. . . . .	—	+40 6 20.2	+ 6 46 28.77	+ 66.77	+39 55 0.0	9.999400
Utrecht . . . . .	12	+52 5 9.5	+ 0 33 3.2	+ 5.43	+51 53 59.3	9.999099
Valkenburg (Ignatius Coll.)	—	+50 52 29.3	+ 0 30 14.89	+ 4.97	+50 41 12.7	9.999128
Venedig . . . . .	—	+45 25 49.5	+ 0 4 10.0	+ 0.68	+45 14 18.9	9.999266
Warschau Zentr. d. Stw.	110	+52 13 5.7	- 0 30 32.45	- 5.02	+52 1 56.3	9.999102
Warschau <sup>3)</sup> . . . . .	—	+52 13 10	- 0 30 30	- 5.01	+52 2 1	9.999095
Washington (Alte Stw.)	31	+38 53 38.9	+ 6 1 46.93	+ 59.43	+38 42 24.3	9.999432
Washington (Neue Stw.)	—	+38 55 14.0	+ 6 1 50.60	+ 59.44	+38 44 0.1	9.999430
Washington (Kath.Univ.)	—	+38 56 14.8	+ 6 1 34.8	+ 59.40	+38 45 0.0	9.999429
Wellington (Mt. Cook Obs.)	44	-41 16 47.1	-10 45 30.51	-106.04	-41 5 22.6	9.999374
West Point N.Y. (N.Stw.) <sup>4)</sup>	—	+41 23 22	+ 5 49 25.4	+ 57.40	+41 11 57	9.999368
Whitestone (Field Obs.)	—	+40 47 21.6	+ 5 48 42.5	+ 57.28	+40 35 58.6	9.999383
Wien (Alte Sternw.) . . .	167	+48 12 35.5	- 0 11 56.81	- 1.96	+48 1 8.9	9.999206
Wien (Josephstadt) <sup>5)</sup> . .	214	+48 12 53.8	- 0 11 50.37	- 1.94	+48 1 27.2	9.999210
Wien (Neue Sternw.) Zentr.	240	+48 13 55.4	- 0 11 46.56	- 1.93	+48 2 28.9	9.999211

<sup>1)</sup> Seit Anfang 1881. — <sup>2)</sup> Seit März 1883, früher in Chapultepec. — <sup>3)</sup> Dr. Jedrzejewicz; seit 1898, früher in Plonsk. — <sup>4)</sup> Seit 1883. Alte Sternwarte 9° nördlich, 1°.2 östlich. — <sup>5)</sup> von Oppolzers Sternwarte.

Name	See- höhe	Geogr. Breite	Länge von Berlin + westlich	Korr. der Sternzeit	Geoz. Breite	Log. p incl. Seehöhe
Wien (Ottakring) <sup>1)</sup> . . .	285	+48° 12' 46.7"	-0° 11' 36.17"	- 1.91	+48° 1 20.1	9.999215
Wien (Mil. Geogr. Inst.) . . .	-	+48 12 40.0	-0 11 51.45	- 1.95	+48 1 13.4	9.999195
Wien (Techa. Hochschule)	-	+48 11 58.5	-0 11 54.91	- 1.96	+48 0 31.9	9.999196
Wilhelmshaven Mer.-Kr.	9	+53 31 52.1	+0 20 59.74	+ 3.45	+53 20 51.2	9.999064
Williams-Bay Wisc. <sup>2)</sup>	-	+42 34 12.6	+6 47 48.08	+66.99	+42 22 44.7	9.999338
Williamstown Mass. .	-	+42 42 49	+5 46 28.3	+56.92	+42 31 21	9.999335
Williamstown Vict. .	-	-37 52 7.2	-8 46 3.3	-86.42	-37 40 58.4	9.999455
Wilna Pass.-Instr. . . .	122	+54 40 59.1	-0 47 33.96	- 7.81	+54 30 6.8	9.999043
Windsor N. S. W. <sup>3)</sup> .	16	-33 36 30.8	-9 9 45.97	-90.31	-33 25 54.9	9.999559
Zô-sè China . . . . .	100	+31 5 48	-7 11 10.0	-70.83	+30 55 38	9.999622
Zürich . . . . .	470	+47 22 40.0	+0 19 22.5	+ 3.18	+47 11 11.5	9.999248

<sup>1)</sup> v. Kuffner. — <sup>2)</sup> Yerkes Observatory. — <sup>3)</sup> J. Tebbutt. Neue Sternwarte, 0".4 südlich von der alten.







**Bahnelemente,  
Oppositionsangaben und Oppositions-  
Ephemeriden**

der

**kleinen Planeten**

für

**1910.**

Nr. und Name	Opposition 1910	Gr.	$m_a$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
1 Ceres . . . .	Okt. 14	7.7	7.4	4.0	1910 Okt. 20.0	d. Ep.	235° 36' 22.8	68° 15' 57.8
2 Pallas . . . .	Aug. 20	9.0	8.0	4.5	1910 Aug. 17.0	d. Ep.	219 43 41.4 309	I 35.2
3 Juno . . . .	—	—	8.7	5.5	1909 Dez. 4.0	d. Ep.	8 18 12.7 244	28 44.3
4 Vesta . . . .	Okt. 31	6.9	6.5	4.0	1857 Jan. 1.0*)	d. Ep.	198 20 2.8 147	10 40.2
5 Astraea . . . .	Aug. 6	10.9	9.9	6.9	1898 Sept. 11.0	1910.0	224 4 1.2 353	28 9.3
6 Hebe . . . .	Febr. 26	9.2	8.5	5.8	1900 Juli 3.0	1910.0	284 20 20.1 236	56 30.6
7 Iris . . . .	Sept. 28	7.0	8.4	5.8	1900 Jan. 0.0*)	1900.0	9 5 20.1 141	31 26.9
8 Flora . . . .	—	—	8.9	6.8	1848 Jan. 1.0*)	d. Ep.	35 52 49.3 282	38 15.6
9 Metis . . . .	Febr. 12	8.6	8.9	6.3	1858 Juni 30.0	d. Ep.	57 4 34.7 2 32	16.9
10 Hygiea . . . .	Febr. 26	9.3	9.5	5.4	1898 Dez. 20.0	1910.0	291 20 17.9 308	57 0.0
11 Parthenope . . . .	—	—	9.3	6.5	1901 Okt. 26.0	1910.0	65 58 42.7 193	25 55.1
12 Victoria . . . .	April 15	9.5	9.7	7.2	1851 Jan. 0.0*)	d. Ep.	66 2 39.9 66	4 43.3
13 Egeria . . . .	März 31	9.5	9.7	6.7	1850 Jan. 0.0*)	d. Ep.	210 46 34.3 76	58 23.7
14 Irene . . . .	Aug. 13	10.3	9.7	6.6	1898 Okt. 1.0	1910.0	180 47 34.9 92	3 45.6
15 Eunomia . . . .	März 23	9.5	8.6	5.4	1854 Jan. 0.0*)	d. Ep.	122 5 31.5 93	59 46.0
16 Psyche . . . .	Nov. 29	9.1	9.6	5.9	1899 Juli 27.0	1910.0	301 1 33.0 226	3 57.4
17 Thetis . . . .	Febr. 12	10.4	10.1	7.3	1910 Febr. 21.0	1910.0	254 56 36.6 137	59 12.5
18 Melpomene . . . .	März 6	10.2	9.3	6.9	1854 Jan. 0.0*)	d. Ep.	80 4 37.0 225	I 41.3
19 Fortuna . . . .	—	—	9.8	7.1	1909 Juli 16.0	1910.0	283 29 19.9 179	50 56.7
20 Massalia . . . .	März 3	8.7	9.2	6.5	1899 März 29.0	1910.0	76 24 22.5 253	47 7.4
21 Lutetia . . . .	—	—	10.1	7.4	1853 Jan. 2.0*)	1852.0	74 20 5.1 246	36 10.2
22 Kalliope . . . .	Juni 30	10.2	9.8	6.1	1898 Okt. 1.0	1910.0	96 34 37.0 351	57 0.4
23 Thalia . . . .	Juli 3	11.5	10.5	7.3	1900 Jan. 3.0	1910.0	337 2 2.1 56	0 12.2
24 Themis . . . .	Juli 11	11.4	10.8	6.7	1905 Juni 27.0	1900.0	170 16 40.3 105	42 2.7
25 Phocaea . . . .	Dez. 19	11.6	10.5	7.9	1898 Aug. 2.0	1910.0	7 21 33.6 88	49 22.7
26 Proserpina . . . .	Aug. 3	10.3	10.5	7.3	1910 Aug. 20.0	1910.0	68 20 52.2 190	15 14.5
27 Euterpe . . . .	Aug. 21	9.5	9.7	7.2	1873 Jan. 5.0*)	1870.0	90 32 27.0 354	8 6.0
28 Bellona . . . .	Mai 8	10.1	10.1	6.6	1910 April 22.0	1910.0	78 25 23.9 340	38 24.5
29 Amphitrite . . . .	—	—	9.0	6.1	1855 Jan. 0.0*)	1870.0	198 1 40.2 59	42 14.8
30 Urania . . . .	—	—	9.9	7.4	1890 Juni 5.0	1910.0	239 51 48.5 83	41 38.7
31 Euphrosyne . . . .	Okt. 23	10.2	11.0	6.8	1899 Okt. 15.0	1910.0	327 7 12.3 60	23 44.4
32 Pomona . . . .	Febr. 1	10.3	10.6	7.5	1855 Jan. 5.0*)	d. Ep.	223 54 39.3 332	38 53.4
33 Polyhymnia . . . .	Febr. 28	13.4	11.8	8.2	1900 Jan. 0.0	1910.0	137 40 57.3 334	II 19.2
34 Circe . . . .	Nov. 8	11.6	11.5	8.2	1897 Dez. 5.0	1910.0	288 24 37.6 326	54 50.4
35 Leukothea . . . .	Dez. 5	12.8	12.2	8.3	1910 Dez. 18.0	1910.0	252 34 19.4 209	54 45.6
36 Atalante . . . .	Nov. 17	10.1	12.0	8.6	1899 Mai 8.0	1910.0	179 27 12.1 44	26 46.7
37 Fides . . . .	Juli 1	11.1	10.4	7.2	1910 Juni 21.0	1910.0	220 33 32.8 59	47 10.3
38 Leda . . . .	—	—	11.4	8.0	1897 Febr. 8.0	1910.0	31 52 32.7 166	10 19.4
39 Laetitia . . . .	—	—	9.5	6.0	1897 Jan. 19.0	1910.0	111 43 50.9 205	28 15.6
40 Harmonia . . . .	Jan. 13	9.3	9.2	6.9	1863 Jan. 0.0*)	d. Ep.	186 48 19.4 267	19 12.8

\*) Mittlere Elemente.

## KLEINEN PLANETEN.

(3)

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
80° 43' 47.5	10° 36' 51.2	4° 24' 55.5	770.5022	0.4421551	Godward.
172 55 8.7	34 42 24.3	13 48 34.0	769.1263	0.4426726	Farley.
170 49 17.2	13 1 24.2	14 53 49.0	813.7875	0.4263304	Hind.
103 23 20.1	7 8 6.2	5 6 4.4	977.63246	0.3732206	Leveau.
141 39 24.5	5 20 3.2	11 1 8.5	858.1895	0.4109489	Farley.
138 47 54.7	14 47 59.3	11 35 3.1	939.1860	0.3848366	R. Luther.
260 33 44.3	5 28 1.2	13 20 50.2	962.5828	0.3777123	Riem.
110 17 16.7	5 53 7.3	9 0 54.4	1086.3382	0.3426943	Downing.
68 31 35.2	5 36 0.3	7 5 2.4	962.3390	0.3777857	Lesser.
285 58 13.6	3 48 51.6	6 53 27.8	639.1669	0.4962615	E. Becker.
125 23 31.9	4 37 51.4	5 44 1.0	923.9058	0.3895859	R. Luther.
235 34 41.7	8 23 17.7	12 38 44.9	994.8347	0.3681705	Brünnow.
43 11 34.5	16 32 24.6	4 59 47.3	857.9451	0.4110315	Hansen.
87 5 6.2	9 7 32.0	9 20 51.3	851.4287	0.4132389	Maywald.
293 52 14.5	11 44 17.4	10 47 32.2	825.4550	0.4222087	Schubert.
150 39 24.8	3 4 25.9	7 50 18.3	710.5554	0.4656058	Schubert.
125 10 59.8	5 36 36.7	7 42 14.2	913.46549	0.3928764	Maywald.
150 3 49.7	10 9 16.9	12 34 20.2	1020.1198	0.3609036	Schubert.
211 14 22.9	1 32 58.9	9 7 45.4	929.85094	0.3877289	Berberich.
206 49 40.3	0 41 7.9	8 17 46.2	949.0005	0.3818268	Küstner.
80 27 48.5	3 5 9.5	9 19 44.6	933.5544	0.3865780	Lesser.
66 41 31.2	13 43 38.1	5 38 34.5	714.4288	0.4640317	Berberich.
67 58 18.4	10 13 3.3	13 32 59.4	833.5369	0.4193879	Schubert.
35 37 12.3	0 48 2.2	7 49 43.5	641.70063	0.4951161	Krueger.
214 22 20.9	21 36 40.9	14 39 21.4	954.0992	0.3802754	Berberich.
45 53 52.6	3 35 3.0	4 55 46.8	810.72055	0.4242272	P. Neugebauer.
93 51 20.1	1 35 30.4	10 0 56.0	986.6944	0.3705493	Hoppe.
144 40 13.0	9 23 1.3	8 45 7.1	766.65202	0.4436056	v. d. Groeben.
356 40 46.5	6 7 4.6	4 15 25.3	869.0352	0.4073128	E. Becker.
308 25 1.9	2 6 2.7	7 21 5.1	975.3144	0.3739080	Günther.
31 53 23.2	26 28 7.0	12 52 34.7	635.0803	0.4981187	Schubert.
220 42 55.2	5 28 49.9	4 45 43.1	852.5880	0.4128449	Lesser.
9 15 35.3	1 55 20.3	19 41 13.8	731.7057	0.4571134	Newcomb.
184 58 12.9	5 27 21.7	6 4 35.9	805.6011	0.4292575	Auwers.
355 9 38.6	8 4 42.7	12 49 14.4	683.93668	0.4766605	Tietjen.
359 15 7.6	18 39 44.0	17 26 19.0	777.3458	0.4395950	Schubert.
7 56 14.9	3 6 14.8	10 10 31.4	826.75744	0.4217524	R. Luther.
296 37 59.5	6 57 55.1	8 53 45.4	781.8518	0.4379215	Berberich.
157 33 8.6	10 22 6.9	6 23 16.8	769.6407	0.4424791	Tietjen.
93 34 54.2	4 15 48.4	2 40 13.6	1039.3353	0.3555006	Schubert.

Nr. und Name	Opposition 1910	Gr.	$m_o$	$g$	Epochen und Oskulation	Mittl. Äqu.	$M$	$\omega$
41 Daphne . . .	—	—	10.5	7.0	1897 Okt. 6.0	1910.0	338° 8 41.4	41° 50' 23.8
42 Isis . . . . .	Okt. 18	9.6	10.4	7.7	1910 Sept. 29.0	1910.0	38 28 10.7	234 56 28.5
43 Ariadne . . .	Sept. 28	9.8	10.0	7.9	1897 Okt. 6.0	1910.0	80 15 48.4	13 58 23.0
44 Nysa . . . . .	Juni 9	10.4	9.8	7.1	1891 April 1.0	1910.0	101 29 32.1	340 33 5.3
45 Eugenia . . .	Febr. 16	10.5	10.7	7.3	1890 Nov. 12.0	1910.0	180 7 31.7	82 43 5.7
46 Hestia . . . .	Dez. 19	10.5	10.6	7.7	1910 Nov. 28.0	1910.0	68 8 1.2	173 7 5.8
47 Aglaja . . . .	Juni 11	10.7	11.2	7.5	1910 Mai 12.0	1910.0	309 49 40.8	311 59 35.8
48 Doris . . . . .	April 13	11.0	10.9	6.8	1890 Sept. 13.0	1910.0	277 3 7.4	251 36 27.2
49 Pales . . . . .	Mai 17	12.0	11.0	7.0	1898 März 15.0	1910.0	133 1 8.6	104 17 27.1
50 Virginia . . . .	—	—	11.7	8.5	1890 April 6.0	1910.0	193 9 42.2	196 47 34.7
51 Nemausa . . . .	Aug. 17	10.2	9.8	7.3	1889 Nov. 17.0	1910.0	254 26 43.1	358 30 22.4
52 Europa . . . . .	Okt. 4	10.3	10.3	6.2	1891 April 1.0	1910.0	65 39 33.0	335 59 4.0
53 Kalypso . . . .	Juni 29	12.6	11.5	8.4	1910 Juli 11.0	1910.0	186 27 48.0	310 45 38.0
54 Alexandra . . . .	Febr. 7	11.8	10.9	7.6	1884 Aug. 15.0	1910.0	316 55 13.5	341 53 36.7
55 Pandora . . . . .	—	—	10.8	7.4	1885 Jan. 22.0	1910.0	263 33 12.6	0 46 56.4
56 Melete . . . . .	Febr. 8	12.3	11.3	8.2	1900 Dez. 30.0	1910.0	157 16 2.5	101 6 0.1
57 Mnemosyne . . .	Dez. 4	10.1	10.7	6.5	1910 Dez. 18.0	1910.0	21 26 32.5	207 19 49.8
58 Concordia . . . .	Aug. 4	11.7	11.6	8.3	1865 Jan. 7.0*)	d. E.	21 24 4.2	27 50 14.7
59 Elpis . . . . .	—	—	10.9	7.6	1865 Jan. 7.0	1910.0	334 18 57.1	207 58 24.0
60 Echo . . . . .	Febr. 16	10.2	11.1	8.5	1897 Okt. 6.0	1910.0	272 15 22.3	267 57 40.8
61 Danaë . . . . .	März 26	11.7	11.0	7.1	1900 April 14.0	1910.0	244 20 50.4	8 27 28.4
62 Erato . . . . .	Okt. 30	11.3	12.3	8.2	1877 Sept. 21.0	1910.0	358 43 44.3	273 18 12.0
63 Ausonia . . . . .	Juli 22	9.1	9.9	7.3	1898 Febr. 3.0	1910.0	250 44 8.5	292 55 12.7
64 Angelina . . . .	Juni 2	10.8	10.5	7.2	1898 Okt. 1.0	1910.0	239 38 51.2	173 35 10.2
65 Cybele . . . . .	—	—	11.0	6.4	1909 Dez. 23.0	1910.0	181 16 46.7	95 55 15.9
66 Maja . . . . .	Aug. 13	12.0	12.2	9.0	1897 Juli 18.0	1910.0	277 24 16.1	40 10 30.9
67 Asia . . . . .	Mai 23	10.5	11.2	8.5	1897 Dez. 5.0	1910.0	201 20 50.1	103 20 15.8
68 Leto . . . . .	—	—	10.5	7.0	1909 Dez. 3.0	1910.0	57 44 59.8	301 23 56.8
69 Hesperia . . . .	Sept. 18	10.9	10.7	6.8	1889 Jan. 1.0	1910.0	182 52 57.9	284 43 32.6
70 Panopaea . . . .	—	—	10.9	7.8	1890 Dez. 22.0	1910.0	305 21 16.5	252 49 41.9
71 Niobe . . . . .	Febr. 19	10.2	10.7	7.3	1910 Febr. 21.0	1910.0	311 8 21.6	265 15 15.3
72 Feronia . . . . .	Nov. 10	11.2	11.2	8.9	1897 Dez. 25.0	1910.0	166 4 16.3	100 27 8.7
73 Klytia . . . . .	April 5	12.2	12.0	8.8	1898 Aug. 2.0	1910.0	244 29 53.1	52 42 38.5
74 Galatea . . . . .	—	—	11.8	8.3	1897 Febr. 28.0	1910.0	148 4 45.2	170 59 36.6
75 Eurydike . . . .	Okt. 5	9.7	11.6	8.4	1897 Okt. 26.0	1910.0	32 23 13.9	335 34 7.7
76 Freia . . . . .	Juni 4	12.7	12.0	7.4	1910 Juni 1.0	1910.0	159 18 28.1	235 31 8.0
77 Frigga . . . . .	Okt. 6	10.5	11.1	7.9	1897 Okt. 6.0	1910.0	331 13 52.7	56 51 43.2
78 Diana . . . . .	Mai 3	10.7	10.6	7.5	1907 Aug. 16.0	1910.0	206 4 36.9	149 44 7.9
79 Eurynome . . . .	—	—	10.5	7.8	1909 Okt. 24.0	1910.0	355 23 9.4	198 33 28.9
80 Sappho . . . . .	Nov. 13	9.6	10.6	8.2	1896 Okt. 11.0	1910.0	19 11 20.2	136 54 7.7

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
179° 2 48.7	15 55 33.5	15 26 36.4	770.4586	0.4421715	Berberich.
84 18 9.5	8 33 1.0	12 48 4.4	929.11108	0.3879594	L. Becker.
264 53 57.0	3 27 42.6	9 38 32.6	1084.7577	0.3431159	Prey.
131 22 43.4	3 42 0.7	8 48 10.9	941.7363	0.3840515	Powalky.
148 15 53.9	6 35 18.5	4 44 11.6	791.0695	0.4345280	Richter.
181 21 7.7	2 17 38.7	9 38 0.9	884.45090	0.4022219	Karlinski.
3 53 52.7	5 0 32.8	7 26 54.5	725.65957	0.4595153	P. Neugebauer.
184 50 59.0	6 30 23.4	3 30 16.7	645.5014	0.4934063	Powalky.
289 50 20.8	3 8 28.3	12 52 28.4	648.4530	0.4920854	Powalky.
173 55 41.5	2 48 27.0	16 45 58.0	823.5561	0.4228757	Powalky.
176 1 8.9	9 57 11.5	3 51 23.3	975.1593	0.3739540	Berberich.
129 57 19.4	7 26 14.9	6 31 44.8	651.8134	0.4905889	Murmann.
143 53 56.6	5 8 10.8	11 49 42.5	837.95367	0.4178577	Tietjen.
314 2 22.8	11 47 37.5	11 31 49.2	795.5362	0.4328978	Schultz.
11 13 41.5	7 13 26.0	8 18 56.3	774.4612	0.4406713	A. Moeller.
194 10 59.0	8 3 9.4	13 24 5.5	846.11114	0.4150527	R. Luther.
200 4 24.1	15 11 48.8	6 40 10.3	634.42086	0.4984194	Adolph.
161 19 50.3	5 1 50.5	2 26 21.8	799.5964	0.4314238	Oppolzer.
170 58 0.1	8 36 53.1	6 44 2.7	793.9788	0.4334651	Oppolzer.
192 2 8.5	3 35 2.2	10 34 22.7	958.2244	0.3790263	C. H. F. Peters.
334 23 28.2	18 15 3.1	9 29 23.8	688.3554	0.4747959	R. Luther.
126 6 30.1	2 12 15.4	10 6 47.4	642.5659	0.4947260	Oppolzer.
338 6 39.1	5 47 15.9	7 17 58.7	957.1671	0.3793459	Tietjen.
311 1 40.8	1 19 37.6	7 17 59.7	807.9036	0.4284314	Oppolzer.
158 50 52.9	3 28 52.3	5 45 43.0	557.40783	0.5358890	Fritsche.
8 25 31.5	3 5 3.2	10 3 43.4	824.3940	0.422582	Maywald.
203 4 10.5	5 59 10.5	10 47 54.5	942.3560	0.3838611	Frischauf.
44 46 7.6	7 58 30.2	10 46 18.5	765.06274	0.4442064	Th. Wolff.
186 49 25.9	8 29 47.6	9 39 2.0	689.6731	0.4742422	Kowalezyk.
48 23 54.9	11 38 23.5	10 22 15.9	838.9960	0.4174978	Richter.
316 25 26.6	23 16 54.1	10 11 5.9	776.31211	0.4399950	P. Neugebauer.
208 2 57.2	5 23 52.3	6 56 42.6	1040.3544	0.3552169	C. H. F. Peters.
7 43 24.2	2 24 17.7	2 34 3.9	816.0117	0.4255401	Powalky.
197 53 4.9	4 0 22.1	13 43 0.6	764.6230	0.4443728	Maywald.
0 6 45.0	4 59 55.9	17 45 42.2	812.4299	0.4268137	Stockwell.
212 3 47.1	2 3 7.4	9 57 51.3	564.46272	0.5322475	Murmann.
2 12 17.7	2 27 34.5	7 38 43.5	813.8298	0.4263153	Plath.
333 52 20.2	8 40 20.6	11 51 36.2	835.7718	0.4186116	v. Dubjago.
206 38 56.0	4 35 54.5	11 0 38.4	928.22578	0.3882353	Lachmann.
218 49 35.1	8 37 17.6	11 34 29.9	1020.1089	0.3609067	P. V. Neugebauer.

Nr. und Name	Opposition 1910	Gr.	$m_{\circ}$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
81 Terpsichore . . .	April 4	12.6	11.8	8.2	1897 Juli 18.0	1910.0	260° 37' 9.1	46° 14' 50.5
82 Alkmene . . .	Dez. 4	10.4	11.2	7.8	1910 Nov. 28.0	1910.0	318° 1 32.9	106 43 5.1
83 Beatrix . . .	Jan. 28	11.1	11.3	8.6	1891 Jan. 11.0	1910.0	295° 16' 6.4	163 24 40.4
84 Klio . . .	—	—	11.3	8.8	1909 Dez. 3.0	1910.0	61° 50' 37.7	12 46 28.4
85 Io . . .	—	—	10.9	7.7	1889 Febr. 10.0	1910.0	180° 9 35.1	120 16 17.9
86 Semele . . .	—	—	12.4	8.3	1896 Mai 4.0	1910.0	203° 38' 25.9	300 25 58.4
87 Sylvia . . .	Febr. 27	12.4	11.9	7.2	1898 April 24.0	1910.0	236° 42' 47.7	265 34 33.5
88 Thisbe . . .	Jan. 10	11.6	10.8	7.4	1889 Dez. 27.0	1910.0	24° 33' 30.8	30 50 45.1
89 Julia . . .	April 16	10.8	10.1	7.1	1889 Dez. 27.0	1910.0	237° 15' 2.3	42 50 18.7
90 Antiope . . .	Juni 30	10.8	11.6	7.5	1910 Juli 11.0	1910.0	340° 1 11.0	236 42 35.8
91 Aegina . . .	April 16	11.6	10.8	7.7	1897 Febr. 8.0	1910.0	54 32 6.9	71 55 32.8
92 Undina . . .	Jan. 26	11.4	10.9	6.7	1904 Febr. 13.0	1910.0	142° 28' 50.2	220 34 12.4
93 Minerva . . .	—	—	10.8	7.4	1897 Jan. 19.0	1910.0	213° 22' 8.2	270 52 4.5
94 Aurora . . .	Mai 1	11.7	11.3	7.1	1883 Juli 12.0	1910.0	256° 3 4.3	45 22 37.9
95 Arethusa . . .	Nov. 21	10.5	11.3	7.3	1910 Nov. 28.0	1910.0	20° 31 41.1	148 28 54.5
96 Aegle . . .	—	—	11.4	7.4	1897 Sept. 16.0	1910.0	182° 59' 36.0	200 34 30.1
97 Klotho . . .	Dez. 9	9.0	10.6	7.4	1898 Jan. 14.0	1910.0	21° 4 31.9	264 36 8.8
98 Ianthe . . .	Okt. 18	12.0	12.7	9.4	1894 Jan. 15.0	1910.0	331° 2 34.3	154 49 36.4
99 Dike . . .	—	—	14	10.5	1868 Juni 5.0	1910.0	350° 36' 11	198 52 56
100 Hekate . . .	März 15	12.3	11.9	7.8	1898 Jan. 14.0	1910.0	156° 19 38.0	176 49 53.2
101 Helena . . .	Nov. 20	10.6	10.7	7.6	1897 Aug. 27.0	1910.0	8° 56' 38.1	343 58 24.2
102 Miriam . . .	April 5	13.8	12.6	9.4	1898 Juli 13.0	1910.0	319° 11 42.8	143 38 29.9
103 Hera . . .	Jan. 7	10.6	10.2	6.9	1897 Febr. 8.0	1910.0	173° 11 18.9	185 58 53.7
104 Klymene . . .	März 21	12.4	12.2	8.0	1897 Dez. 25.0	1910.0	35° 9 54.6	20° 0 49.1
105 Artemis . . .	—	—	11.1	8.5	1897 Aug. 27.0	1910.0	69 55 41.8	54 43 26.1
106 Dione . . .	Febr. 23	11.8	11.3	7.2	1910 Febr. 21.0	1910.0	108° 23 21.0	324 54 49.2
107 Camilla . . .	März 19	11.0	11.2	6.5	1891 April 21.0	1910.0	97° 7 57.4	293 57 59.6
108 Heuba . . .	Juni 5	11.6	11.7	7.4	1910 Juni 1.0	1910.0	77° 9 32.3	172 29 24.5
109 Felicitas . . .	—	—	12.0	8.7	1898 Jan. 14.0	1910.0	115° 33 32.5	52 23 6.6
110 Lydia . . .	Jan. 29	10.9	10.5	7.1	1901 Febr. 13.0	1910.0	150° 32 10.1	281 13 26.2
111 Ate . . .	Febr. 4	10.7	11.3	8.2	1890 Jan. 16.0	1910.0	91° 26' 4.4	163 34 48.8
112 Iphigenia . . .	Febr. 10	12.2	11.5	8.8	1897 Dez. 25.0	1910.0	88° 12 11.4	14 7 51.7
113 Amalthea . . .	—	—	11.0	8.4	1910 Dez. 28.0	1910.0	290° 17 46.6	76 39 11.9
114 Kassandra . . .	Juli 10	11.5	11.1	7.8	1889 Sept. 18.0	1910.0	211° 30' 3.4	348 48 30.0
115 Thyra . . .	März 17	11.1	10.4	7.8	1897 Okt. 6.0	1910.0	340° 57 26.1	94 2 38.0
116 Sirona . . .	Jan. 11	10.1	10.7	7.3	1889 Juni 10.0	1910.0	158° 3 13.7	89 6 38.1
117 Lomia . . .	Febr. 25	11.5	11.4	7.5	1897 Okt. 6.0	1910.0	332° 35 55.4	48 38 20.1
118 Peitho . . .	März 14	10.7	10.8	8.1	1910 März 13.0	1910.0	72° 9 25.5	31 12 43.9
119 Althaea . . .	Juni 21	10.6	10.6	7.5	1898 Aug. 2.0	1910.0	314° 33 34.0	168 34 50.1
120 Lachesis . . .	Febr. 5	11.7	11.7	7.6	1897 Nov. 15.0	1910.0	202° 19 20.3	238 31 10.8

$\Omega$	$i$	$\varpi$	$\mu$	Log. $a$	Autorität
2° 34' 20.8	7 55 5.5	12 11 52.3	736.4126	0.4552569	Maywald.
26 34 35.4	2 51 1.9	12 44 1.4	772.27663	0.4414891	W. Luther.
27 47 22.4	4 59 49.4	4 51 24.3	935.9122	0.3858476	E. Becker.
327 32 45.5	9 22 2.8	13 44 27.0	977.82672	0.3731631	P. Neugebauer.
203 55 21.1	11 53 47.5	11 10 33.7	821.0524	0.4237571	v. d. Groeben.
88 2 1.0	4 47 35.9	12 46 53.6	650.4530	0.49111939	Riem.
75 15 57.6	10 53 1.7	5 26 44.5	545.3288	0.5422321	v. d. Groeben.
277 51 59.5	5 14 54.8	9 26 6.4	771.1774	0.4419015	Kowalezyk.
312 0 55.5	16 12 32.0	10 33 29.3	871.5645	0.4064714	Th. Wolff.
70 49 30.0	2 15 28.0	8 45 47.0	632.91537	0.4991073	Maywald.
11 4 13.0	2 8 25.1	6 7 10.0	850.8763	0.4134268	Heuer.
102 50 42.0	9 56 23.7	5 22 41.6	622.67957	0.5038280	Anderson.
5 4 31.2	8 35 28.0	8 1 55.7	775.6316	0.4402341	P. Lehmann.
4 33 17.4	8 4 18.6	4 44 18.3	630.6584	0.5001416	Leppig.
244 5 29.9	12 55 44.5	8 53 6.5	661.08804	0.4864982	Schur.
322 47 10.3	16 2 24.5	7 39 35.3	663.1502	0.4855965	Schulhof.
160 57 9.4	11 45 29.3	14 51 9.7	813.5778	0.4264050	Maywald.
354 27 5.1	15 33 47.6	10 49 11.3	805.3086	0.4293629	Riem.
42 17 51	13 53 30	13 47 30	758.662	0.44664	Loewy u. Tisserand.
128 26 39.4	6 23 7.5	9 31 58.5	653.5823	0.4898043	Stark.
343 42 52.6	10 10 32.8	8 1 10.2	854.8620	0.4120737	v. d. Groeben.
211 39 13.0	5 5 24.5	14 44 31.2	817.8380	0.4248929	C. H. F. Peters.
136 26 1.5	5 24 33.0	4 30 21.3	798.0990	0.4319665	Leveau.
43 13 29.2	2 52 54.6	8 32 48.6	632.5948	0.4992540	Berberich.
188 14 55.0	21 30 55.0	10 6 59.0	970.4600	0.3753527	A. Leman.
63 10 51.0	4 35 55.0	9 14 4.3	625.17474	0.5026701	Berberich.
176 14 1.0	9 51 39.6	3 56 39.0	544.1827	0.5428412	Matthiessen.
352 27 18.8	4 23 35.4	6 2 27.4	617.98163	0.5060207	Schulhof.
4 42 21.8	8 1 1.3	17 12 53.0	799.9088	0.4313108	v. d. Groeben.
57 14 3.9	5 59 12.9	4 32 38.7	785.37505	0.436620	Sternberg.
306 39 51.1	4 56 20.2	5 58 35.2	849.9712	0.4137349	Holetschek.
324 13 23.0	2 37 9.3	7 25 29.0	934.8048	0.3861905	Tietjen.
123 18 26.4	5 2 18.1	5 0 32.8	969.10963	0.3757558	W. Luther.
164 40 55.6	4 53 53.8	7 55 32.6	810.5220	0.4274945	Anton.
309 19 50.6	11 35 36.3	11 5 7.8	966.3219	0.3765898	Watson.
64 42 11.5	3 35 10.3	8 3 59.9	770.3736	0.442203	H. Oppenheim.
349 41 19.0	14 56 21.2	1 31 51.9	685.2178	0.4761187	Tietjen.
47 40 42.4	7 46 29.6	9 29 20.0	932.11385	0.3870251	Holetschek.
203 58 4.8	5 44 15.8	4 42 49.9	855.7364	0.4117777	Berberich.
342 45 48.8	7 0 16.6	3 30 1.0	645.4399	0.4934339	Plath.

Nr. und Name	Opposition 1910	Gr.	$m_a$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
121 Hermione . . .	April 27	II.3	II.2	6.6	1910 April 22.0	1910.0	222° 43'	6.5 285° 25' 49.8
122 Gerda . . . .	Jan. 30	II.3	II.5	7.2	1910 Jan. 12.0	1910.0	301° 40'	37.0 12 I 29.0
123 Brunhild . . .	März 7	II.8	II.8	8.5	1898 Juni 23.0	1910.0	210° 35'	25.0 122 14 17.2
124 Alkest . . . .	Juli 10	9.9	II.3	7.1	1890 Dez. 2.0	1910.0	180° 26'	7.9 58 14 32.3
125 Liberatrix . . .	—	—	II.2	7.8	1897 Jan. 19.0	1910.0	202° 46'	5.6 104 32 55.5
126 Velleda . . . .	Okt. 14	10.9	II.5	8.8	1899 Dez. 15.0	1910.0	81° 58'	56.5 325 47 25.0
127 Johanna . . . .	—	—	II.5	7.1	1890 Okt. 3.0	1910.0	251° 23'	46.9 90 26 21.5
128 Nemesis . . . .	Jan. 25	10.8	II.6	7.2	1897 Jan. 19.0	1910.0	144° 20'	2.3 300 34 0.1
129 Antigone . . . .	Dez. 10	II.3	II.3	6.6	1897 Jan. 19.0	1910.0	253° 10'	0.2 103 42 26.3
130 Elektra . . . .	—	—	II.6	6.5	1898 Aug. 22.0	1910.0	337° 5'	55.3 233 46 1.6
131 Vala . . . . .	Jan. 14	12.3	II.2	9.5	1898 Dez. 20.0	1910.0	288° 37'	28.9 155 56 24.1
132 Aethra . . . . .	—	—	II.9	8.0	1895 Nov. 30.5	1910.0	330° 47'	37.2 252 14 56.3
133 Cyrene . . . . .	Juli 23	10.7	II.3	7.3	1898 Jan. 14.0	1910.0	280° 4'	53.4 283 57 33.7
134 Sophrosyne . . .	Okt. 1	10.7	II.1	8.1	1910 Okt. 19.0	1910.0	317° 14'	38.0 82 13 46.4
135 Hertha . . . . .	Dez. 28	II.2	II.5	7.8	1898 Okt. 1.0	1910.0	33° 3'	56.2 337 7 56.5
136 Austria . . . . .	Nov. 21	II.3	II.2	8.9	1898 März 15.0	1910.0	211° 14'	20.2 130 28 54.5
137 Meliboea . . . .	—	—	II.8	7.7	1898 Nov. 10.0	1910.0	80° 12'	0.8 105 35 51.7
138 Tolosa . . . . .	Dez. 42	12.6	II.8	9.1	1896 Febr. 14.0	1910.0	190° 23'	49.0 258 3 38.4
139 Juewa . . . . .	Juli 28	II.5	II.9	7.4	1898 Nov. 30.0	1910.0	299° 0'	11.9 162 8 50.0
140 Siwa . . . . .	Okt. 12	10.8	II.4	8.0	1898 Okt. 1.0	1910.0	173° 35'	23.3 193 12 17.2
141 Lumen . . . . .	März 1	12.3	II.4	8.2	1890 Aug. 24.0	1910.0	321° 2'	54 13 35.4
142 Polana . . . . .	Aug. 8	12.1	II.2	9.5	1896 Dez. 10.0	1910.0	211° 12'	47.7 289 58 40.0
143 Adria . . . . .	Dez. 12	12.4	II.4	9.0	1891 Okt. 18.0	1910.0	160° 45'	41.3 248 47 46.1
144 Vibilia . . . . .	Aug. 3	9.7	II.7	7.5	1888 Juli 18.0	1910.0	289° 54'	28.9 290 45 10.7
145 Adeona . . . . .	Juni 13	II.9	II.3	8.1	1898 Aug. 22.0	1910.0	240° 12'	41.7 40 33 3.5
146 Lucina . . . . .	März 3	II.0	II.1	7.7	1898 Aug. 2.0	1910.0	89° 1'	10.2 140 57 36.7
147 Protogeneia . . .	Dez. 13	12.5	II.5	8.4	1898 Sept. 11.0	1910.0	348° 52'	58.8 122 45 45.6
148 Gallia . . . . .	März 28	II.7	II.0	7.5	1910 April 2.0	1910.0	135° 1'	22.3 251 2 43.2
149 Medusa . . . . .	Juli 25	12.1	II.9	10.0	1910 Juli 31.0	1910.0	262° 49'	18.4 249 52 9.4
150 Nuwa . . . . .	Juni 16	II.4	II.6	7.7	1893 März 1.0	1910.0	155° 36'	25.8 146 41 42.7
151 Abundantia . . .	Jan. 18	II.8	II.9	8.8	1898 März 15.0	1910.0	9° 18'	20.9 130 21 2.4
152 Atala . . . . .	—	—	II.2	8.1	1899 Jan. 29.0	1910.0	27° 31'	7.9 42 37 0.7
153 Hilda . . . . .	Febr. 9	13.2	12.6	7.3	1910 Febr. 21.0	1910.0	234° 34'	7.2 54 51 49.9
154 Bertha . . . . .	Dez. 23	II.4	II.2	7.0	1910 Dez. 18.0	1910.0	260° 14'	33.6 164 40 8.3
155 Scylla . . . . .	—	—	II.5	9.8	1875 Nov. 8.5	1910.0	339° 4'	47 39 9 57
156 Xanthippe . . .	Aug. 25	II.6	II.3	7.9	1903 Jan. 29.0	1900.0	210° 16'	9.4 334 33 43.4
157 Dejanira . . . .	April 27	13.8	13.7	10.6	1904 Nov. 17.5	1904.0	330° 35'	43.9 45 39 12.1
158 Koronis . . . . .	Jan. 7	12.1	12.3	8.7	1898 Aug. 22.0	1910.0	278° 50'	53.8 138 43 15.9
159 Aemilia . . . . .	März 7	12.0	12.3	8.2	1897 Dez. 5.0	1910.0	324° 40'	17.3 331 52 54.3
160 Una . . . . . .	Okt. 24	II.4	II.8	8.4	1897 Dez. 25.0	1910.0	33° 30'	8.8 46 47 30.1

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
75° 41' 3.6	7° 33' 28.8	8° 15' 19.1	555.12285	0.5370783	Berberich.
178° 46 28.4	1° 36 33.0	3° 6 26.0	615.80931	0.5070403	Lange.
308° 38 28.5	6° 25 27.6	7° 1 21.7	802.5894	0.4303421	Berberich.
188° 37 15.4	2° 55 29.2	4° 27 41.2	832.2976	0.4198186	Hall sen.
169° 36 18.8	4° 37 57.0	4° 29 45.0	780.9349	0.4382611	Lange.
23 27 7.7	2 56 26.5	6 3 52.3	931.5192	0.3872099	Heuer.
31 53 43.8	8 15 42.7	3 47 29.9	775.8987	0.4401344	Maywald.
76 45 7.8	6 15 8.3	7 13 52.8	778.9624	0.4389934	de Ball.
137 58 12.8	12 10 1.8	12 15 18.0	730.5585	0.4575677	Austin.
146 16 41.6	22 58 1.8	12 29 21.9	646.4298	0.4929901	Powalky.
65 37 21.8	4 57 47.1	3 51 52.5	935.8550	0.3858654	Berberich.
260 11 30.0	23 32 20.0	19 21 13.8	903.6882	0.3959920	W. Luther.
321 25 52.7	7 13 50.2	8 2 47.1	662.6045	0.4858348	v. d. Groeben.
346 13 52.6	11 36 53.9	6 42 22.6	864.45983	0.4088412	Maywald.
344 13 36.6	2 18 34.4	11 45 17.6	937.0637	0.3854917	Maywald.
186 20 58.5	9 33 12.0	4 52 0.8	1025.7532	0.3593092	H. Oppenheim.
203 47 40.2	13 21 7.8	12 46 22.0	645.4607	0.4934245	Lange.
54 53 56.5	3 13 22.0	9 16 35.8	924.9117	0.3892709	v. d. Groeben.
2 33 1.8	10 55 19.7	9 57 48.4	764.0768	0.4445797	Berberich.
107 14 12.9	3 11 29.4	12 31 19.9	786.6737	0.4361413	v. d. Groeben.
319 28 26.5	11 58 39.3	12 16 57.4	814.6615	0.4260196	Berberich.
292 1 39.9	2 14 29.1	7 44 10.6	943.5246	0.3835023	L. Becker.
333 54 46.0	11 30 13.3	4 8 20.2	773.3958	0.4410699	von Haerdtl.
77 1 15.3	4 48 16.9	13 28 14.3	819.4849	0.4243104	Powalky.
77 55 52.9	12 41 10.3	8 24 20.6	812.2212	0.4268882	Tietjen.
84 26 43.8	13 5 8.8	3 39 14.6	791.4186	0.4344003	Berberich.
251 21 33.7	1 54 15.5	2 2 8.6	638.8069	0.4964247	L. Becker.
145 15 21.7	25 19 6.9	10 34 1.9	767.77183	0.4432035	L. Becker.
158 47 35.8	0 55 46.4	3 52 47.6	1106.37588	0.3374026	Lange.
207 50 0.6	2 8 18.4	7 20 7.3	689.2534	0.474418	H. Oppenheim.
39 1 12.0	6 28 21.2	2 10 51.3	850.1245	0.4136827	Riem.
41 25 0.5	12 13 21.2	4 12 12.4	637.2942	0.4971111	Lange.
228 23 10.3	7 51 42.8	9 20 36.5	450.75682	0.5973762	Kühnert.
37 7 16.3	20 58 23.8	5 2 23.5	624.40618	0.5030263	Anton.
43 20 30	14 4 31	14 49 28	713.7875	0.464292	Schulhof.
242 43 10.3	9 39 1.8	12 55 24.2	785.6858	0.436505	Ebell.
62 9 28.7	12 5 20.1	11 30 39.9	856.508	0.411518	Sternberg.
281 12 13.9	1 0 0.7	3 17 38.9	730.4848	0.4575969	Maywald.
135 12 3.7	6 4 55.0	5 37 45.9	647.4107	0.492551	Berberich.
9 24 54.3	3 51 22.4	3 45 8.1	787.7290	0.435753	P. Neugebauer.

Nr. und Name	Opposition 1910	Gr.	$m_{\circ}$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
161 Athor . . .	Okt. 13	10.6	11.0	8.4	1896 Dez. 30.0	1910.0	142° 39' 1.6	291° 48' 34.3
162 Laurentia . . .	Okt. 17	12.7	12.3	8.4	1899 Sept. 6.0	1910.0	215° 30' 54.3	106° 2 42.9
163 Erigone . . .	Aug. 20	12.0	11.5	9.0	1907 Nov. 4.0	1910.0	334° 40' 45.7	295° 29 18.5
164 Eva . . . .	Mai 19	12.0	11.5	8.3	1910 Juni 1.0	1910.0	274° 53' 39.9	282° 17 32.6
165 Loreley . . .	Okt. 12	11.2	11.1	7.0	1897 April 9.0	1910.0	290° 21' 20.7	342° 30 12.7
166 Rhodope . . .	Mai 2	13.5	12.5	9.2	1897 Juni 8.0	1910.0	213° 52' 27.9	261° 28 49.8
167 Urda . . . .	Sept. 19	12.9	13.0	9.4	1898 Jan. 14.0	1910.0	197° 17' 5.7	121° 7 43.9
168 Sibylla . . . .	Febr. 19	11.9	11.6	7.1	1899 Mai 29.0	1910.0	218° 22' 50.2	174° 26 31.9
169 Zelia . . . .	—	—	11.3	8.8	1890 Aug. 4.0	1910.0	328° 1° 8.3	332° 10 48.8
170 Maria . . . .	März 3	11.6	11.7	8.7	1910 März 13.0	1910.0	66° 0' 9.6	156° 19 5.9
171 Ophelia . . .	—	—	12.1	8.0	1897 Okt. 6.0	1910.0	236° 0' 17.5	50° 27 33.1
172 Baucis . . . .	Febr. 17	11.0	10.4	7.8	1889 Juni 30.0	1910.0	316° 43' 41.4	356° 48 28.3
173 Ino . . . . .	—	—	11.0	7.6	1897 Jan. 19.0	1910.0	71° 13' 19.6	224° 39 41.9
174 Phaedra . . .	Mai 18	10.8	11.6	8.0	1897 Okt. 6.0	1910.0	129° 24' 10.1	286° 21 18.9
175 Andromache	April 10	12.8	12.3	8.0	1908 Jan. 3.0	1910.0	110° 44' 33.6	302° 27 21.5
176 Idunna . . . .	Juni 22	12.4	12.1	7.9	1910 Juli 11.0	1910.0	271° 34' 16.1	182° 41 34.5
177 Irma . . . . .	—	—	12.4	9.0	1897 Jan. 19.0	1910.0	71° 42' 48.0	33° 16 9.9
178 Belisana . . .	März 14	12.0	12.0	9.2	1910 März 13.0	1910.0	273° 56' 20.5	212° 28 52.4
179 Klytaemnestra	Febr. 28	12.1	11.5	7.7	1897 Okt. 6.0	1910.0	14° 32' 37.3	100° 30 2.0
180 Garumna . . .	April 21	13.0	13.3	9.9	1899 Nov. 5.0	1910.0	308° 53' 34.6	169° 12 38.1
181 Eucharis . . .	—	—	11.5	7.4	1887 Okt. 19.0	1910.0	305° 49' 36.6	310° 26 20.5
182 Elsa . . . . .	Sept. 17	10.2	11.0	8.3	1897 März 20.0	1910.0	102° 51' 45.1	308° 16 41.4
183 Istria . . . .	—	—	12.6	9.1	1900 Dez. 10.0	1910.0	15° 39' 20.2	262° 21 44.2
184 Dejopeja . . .	Nov. 28	12.6	12.4	8.2	1910 Dez. 18.0	1910.0	244° 34' 37.1	217° 10 44.9
185 Eunike . . . .	März 24	11.0	10.0	6.6	1889 Aug. 29.0	1910.0	328° 9' 2.3	221° 34 37.8
186 Celuta . . . .	Febr. 4	12.3	11.4	8.9	1897 Aug. 27.0	1910.0	2° 39' 38.6	313° 36 27.2
187 Lambertia . . .	Juni 22	10.3	11.4	8.0	1897 Aug. 27.0	1910.0	94° 42' 30.1	192° 2 46.6
188 Menippe . . . .	Mai 5	12.7	13.0	9.6	1897 Sept. 1.0	1910.0	23° 1' 52.2	66° 36 36.3
189 Phthia . . . .	—	—	11.5	8.8	1900 Mai 24.0	1910.0	234° 17' 27.2	166° 0 10.0
190 Ismene . . . .	Nov. 25	11.3	12.0	6.7	1910 Nov. 8.0	1910.0	327° 17' 17.8	286° 44 42.4
191 Kolga . . . .	Febr. 12	12.2	12.0	8.3	1897 Juli 18.0	1910.0	271° 52' 28.4	224° 21 12.1
192 Nausikaa . . .	Juni 13	9.5	9.3	6.7	1888 Juli 25.0	1910.0	324° 20' 18.4	27° 40 24.5
193 Ambrosia . . .	—	—	12.2	9.2	1879 März 25.5	1910.0	68° 48' 35.8	79° 36 55.8
194 Prokne . . . .	Nov. 3	10.0	10.5	7.4	1899 Jan. 29.0	1910.0	130° 9' 24.2	160° 37 18.4
195 Eurykleia . . .	Sept. 14	12.4	12.6	8.9	1896 Nov. 20.0	1910.0	289° 6' 21.8	118° 7 2.1
196 Philomela . . .	Dez. 43	10.6	10.3	6.3	1901 April 9.0	1910.0	240° 25' 11.6	237° 19 45.5
197 Arete . . . . .	März 20	13.4	12.7	9.3	1900 Jan. 24.0	1910.0	134° 40' 9.5	243° 28 47.4
198 Ampella . . . .	Juni 30	10.4	11.1	8.3	1910 Juli 31.0	1910.0	314° 11' 54.5	88° 1 12.0
199 Byblis . . . .	—	—	12.4	8.2	1909 Nov. 13.0	1910.0	138° 47' 14.4	171° 8 9.7
200 Dynamene . . .	Juni 7	11.9	11.3	7.9	1888 Juli 25.0	1910.0	277° 46' 23.8	82° 43 1.3

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
18° 48' 52.5	9° 3' 17.7	7° 57' 23.4	967.0645	0.3763675	Tietjen.
38 16 1.8	6 5 6.0	10 31 5.3	676.5719	0.4797951	Tietjen.
160 15 7.2	4 46 38.3	11 1 54.1	974.2162	0.3742342	Berberich.
77 25 24.6	24 20 38.1	20 22 0.7	830.75127	0.4205237	Richter.
304 11 19.1	11 12 5.0	3 54 10.6	641.1299	0.4953737	Samter.
129 39 27.9	12 1 54.8	12 13 13.9	806.7683	0.4288385	Richter.
166 38 10.8	2 10 45.6	1 59 3.7	736.5954	0.4551851	Lange.
209 23 56.1	4 36 6.5	4 21 54.0	571.6864	0.5285658	v. d. Groeben.
354 58 8.5	5 30 51.2	7 31 33.7	979.6462	0.3726249	Richter.
301 23 56.1	14 21 9.7	3 38 8.4	868.72749	0.4074153	Lange.
101 3 53.7	2 33 12.1	6 38 28.6	636.3859	0.4975241	Berberich.
332 11 35.0	10 2 10.4	6 32 18.8	965.9899	0.3766893	Berberich.
148 53 6.9	14 15 36.8	11 51 44.6	780.806	0.4383110	Becka.
328 48 32.4	12 6 32.9	8 23 43.8	734.0156	0.456201	II. Oppenheim.
25 26 12.4	3 10 33.3	11 4 20.9	611.29468	0.5091706	Berberich.
200 57 12.2	22 43 20.2	10 16 21.6	628.26359	0.5012431	P. Neugebauer.
349 34 1.8	1 26 55.3	13 32 58.0	768.8406	0.4427802	Richter.
51 1 8.7	1 54 28.5	2 34 36.4	919.16707	0.3910715	Berberich.
253 20 50.4	7 47 52.8	6 37 0.0	692.8578	0.472908	II. Oppenheim.
314 50 1.1	0 53 40.8	9 46 17.7	790.4612	0.4347507	v. d. Groeben.
145 7 22.1	18 35 23.6	12 40 26.5	643.5438	0.4942856	de Ball.
106 46 38.9	2 10 9.1	10 50 51.9	944.5132	0.3831990	Samter.
142 54 44.3	26 25 59.5	20 27 8.2	760.4634	0.4459522	Petrelius.
333 48 39.4	1 9 53.4	3 28 22.0	622.48092	0.5039204	Thraen.
154 3 8.4	23 14 21.7	7 11 14.1	782.8522	0.4375512	Bauschinger.
14 43 53.5	13 11 11.6	8 41 21.3	977.5884	0.3732337	Tietjen.
22 22 32.4	10 41 24.8	13 36 43.5	785.6152	0.4365311	A. Leman.
241 56 25.8	11 44 36.3	10 15 28.9	772.712	0.441326	Conic.
203 32 11.1	5 8 54.2	2 4 18.4	924.2246	0.3894861	II. Oppenheim.
177 0 17.4	6 8 17.0	9 38 10.0	453.68733	0.5955000	Küstner.
159 59 7.7	11 29 25.6	5 13 5.0	720.0541	0.4617609	L. Becker.
343 33 25.4	6 51 40.6	14 9 22.7	952.4502	0.3807762	Lange.
351 40 33.1	11 38 46.5	16 34 52.0	858.2960	0.410913	A. Leman.
159 29 8.2	18 25 4.9	13 50 55.7	839.1447	0.4174465	Tietjen.
7 52 26.6	7 0 9.8	2 25 31.9	727.0481	0.4589623	Riem.
73 27 31.0	7 17 1.5	1 13 48.1	646.0377	0.4931658	P. V. Neugebauer.
82 10 10.5	8 49 20.8	9 22 12.5	782.6498	0.4376261	Lange.
268 24 5.6	9 18 6.5	13 8 54.7	920.04801	0.3907974	v. d. Groeben.
89 40 27.7	15 24 49.2	10 31 43.7	630.79505	0.5000789	Tietjen.
325 35 38.5	6 54 46.3	7 41 20.4	783.6017	0.4372741	Bauschinger.

Nr. und Name	Opposition 1910	Gr.	$m_{\circ}$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
201 Penelope . . .	Okt. 19	11.0	11.9	8.6	1897 Nov. 15.0	1910.0	53 1 33.0	177 43 4.8
202 Chryseis . . .	Juni 18	11.0	10.7	6.7	1896 Nov. 20.0	1910.0	296 12 57.2	355 17 24.9
203 Pompeja . . .	Juli 22	12.7	11.7	8.3	1899 Jan. 9.0	1910.0	65 39 8.5	53 45 33.1
204 Kallisto . . .	Nov. 25	12.8	12.0	8.7	1888 Nov. 2.0	1910.0	140 55 19.4	51 16 26.1
205 Martha . . .	Mai 28	12.8	12.7	9.2	1886 Febr. 26.0	1910.0	139 40 10.2	172 8 41.4
206 Hersilia . . .	Juli 23	12.2	12.0	8.6	1887 Juni 21.0	1910.0	184 57 36.2	300 24 35.6
207 Hedda . . .	Okt. 19	12.0	11.8	9.5	1898 Febr. 3.0	1910.0	280 15 16.2	190 38 50.0
208 Lacrimosa . . .	—	—	12.1	8.4	1899 Nov. 25.0	1910.0	315 23 43.1	105 47 59.3
209 Dido . . .	März 18	11.5	11.5	7.4	1897 Dez. 25.0	1910.0	222 32 56.9	249 39 35.2
210 Isabella . . .	Sept. 6	12.0	12.5	9.1	1897 Okt. 26.0	1910.0	358 48 23.3	10 17 39.2
211 Isolda . . .	Sept. 1	11.4	11.5	7.5	1895 Nov. 26.0	1910.0	1 10 15.0	170 41 36.4
212 Medea . . .	Aug. 18	12.1	12.2	8.1	1899 Juli 28.0	1910.0	276 2 57.4	101 16 7.9
213 Lilaea . . .	Dez. 18	12.4	11.7	8.3	1898 Febr. 23.0	1910.0	229 20 37.9	158 35 27.9
214 Aschera . . .	Mai 1	12.2	12.1	9.0	1897 April 9.0	1910.0	72 5 59.3	128 5 43.8
215 Oenone . . .	Dez. 29	12.8	12.7	9.3	1891 Nov. 7.0	1910.0	55 43 48.8	314 6 30.5
216 Kleopatra . . .	Okt. 3	8.5	10.1	6.6	1886 Juni 26.0	1910.0	277 9 56.8	176 11 54.3
217 Eudora . . .	Dez. 13	13.7	13.1	9.5	1900 Dez. 10.0	1910.0	75 4 1.8	150 32 44.9
218 Bianca . . .	Juli 14	11.1	11.4	8.2	1893 Aug. 28.0	1910.0	96 4 34.6	58 48 58.8
219 Thusnelda . . .	—	—	11.2	8.8	1889 Jan. 21.0	1910.0	130 33 20.7	140 3 44.8
220 Stephania . . .	—	—	13.6	11.0	1887 Jan. 0.5	1910.0	131 12 41.6	75 7 33.9
221 Eos . . .	Juli 16	10.8	11.3	7.4	1898 März 15.0	1910.0	201 46 0.0	188 0 19.7
222 Lucia . . .	März 20	12.6	12.9	8.8	1898 Jan. 14.0	1910.0	225 34 56.4	175 52 41.3
223 Rosa . . .	Mai 12	13.5	13.3	9.2	1891 Dez. 17.0	1910.0	333 23 9.3	58 28 30.7
224 Oceana . . .	Dez. 13	12.0	11.7	8.5	1890 Febr. 5.0	1910.0	225 24 48.8	276 55 27.0
225 Henrietta . . .	Dez. 24	13.8	12.7	8.2	1903 Nov. 5.0	1910.0	88 41 26.8	97 37 49.8
226 Weringia . . .	Dez. 16	14.0	13.0	9.7	1891 Aug. 19.0	1910.0	30 52 14.2	150 8 45.9
227 Philosophia . . .	Sept. 2	13.1	12.9	8.7	1896 Dez. 10.0	1910.0	283 51 33.6	254 29 42.9
228 Agathe . . .	Jan. 26	15.6	14.5	12.4	1892 Nov. 21.5	1910.0	49 45 10.8	16 2 37.2
229 Adelinda . . .	Jan. 9	13.9	13.5	8.9	1901 Aug. 27.0	1910.0	3 50 29.2	303 1 51.4
230 Athamantis . . .	Febr. 25	10.6	10.3	7.7	1897 Okt. 26.0	1910.0	II 22 17.7	137 12 47.9
231 Vindobona . . .	Febr. 5	12.2	12.4	8.6	1898 Nov. 10.0	1910.0	164 53 38.2	263 38 46.4
232 Russia . . .	Dez. 11	13.8	13.4	10.4	1901 Sept. 16.0	1910.0	159 56 8.4	48 35 13.8
233 Asterope . . .	Aug. 26	10.7	11.3	8.1	1897 Aug. 27.0	1910.0	353 18 46.2	122 35 34.5
234 Barbara . . .	—	—	11.7	9.1	1898 Okt. 21.0	1910.0	33 57 10.0	190 6 58.4
235 Carolina . . .	März 27	12.2	12.2	8.5	1897 Sept. 16.0	1910.0	73 32 29.3	207 24 29.7
236 Honoria . . .	—	—	11.4	7.9	1890 Aug. 20.5	1910.0	341 11 56.1	170 30 20.7
237 Coelestina . . .	Jan. 1	13.2	12.8	9.4	1897 März 20.0	1910.0	258 3 0.9	196 24 38.6
238 Hypatia . . .	Dez. 38	11.6	11.7	8.0	1900 Dez. 10.0	1910.0	54 45 6.4	207 2 40.9
239 Adrastea . . .	Okt. 22	12.7	14.0	10.2	1900 Dez. 10.0	1910.0	26 23 21.4	206 1 9.9
240 Vanadis . . .	Aug. 16	12.3	12.5	9.3	1901 Juli 18.0	1910.0	262 20 34.3	298 17 15.6

$\Omega$	$i$	$\varpi$	$\mu$	Log. $a$	Autorität
157° 17' 30.2	5° 43' 18.9	10° 25' 23.2	809.8362	0.4277396	Bauschinger.
137 54 25.3	8 49 26.9	5 51 45.4	659.4551	0.4872142	Berberich.
348 46 39.6	3 12 20.0	3 28 23.6	783.8637	0.4371774	Berberich.
206 2 34.8	8 17 3.5	9 51 34.4	812.2343	0.4268835	Palisa.
212 34 39.7	10 39 53.8	1 54 54.4	765.9190	0.4438825	Küstner.
145 33 33.3	3 45 25.4	2 19 59.5	782.3554	0.437735	Stechert.
29 5 52.3	3 49 3.8	1 39 3.3	1027.9888	0.3586788	Richter.
5 25 26.9	1 47 15.0	0 54 11.9	721.0639	0.4613553	Berberich.
2 8 19.7	7 14 33.2	3 46 48.4	636.9842	0.4972519	Bauschinger.
33 11 5.1	5 18 10.8	7 6 30.8	790.0977	0.4348838	Berberich.
265 28 46.4	3 52 0.2	9 15 38.8	668.6056	0.4832244	Bauschinger.
315 15 56.5	4 16 54.7	6 40 42.2	647.3973	0.4925571	L. Becker.
122 36 4.4	6 46 27.7	8 19 49.1	777.0010	0.4397233	A. Leman.
342 41 30.4	3 27 38.3	1 55 49.3	841.5265	0.416626	Tietjen.
25 28 14.6	1 43 23.1	2 1 15.5	771.4115	0.4418137	Bauschinger.
216 8 54.0	13 2 22.4	14 31 20.7	759.7703	0.4462162	Knopf.
164 9 28.1	10 15 31.0	17 38 25.1	727.0438	0.4589640	Richter.
171 10 12.2	15 12 11.0	6 36 19.6	814.9375	0.4259216	Bauschinger.
201 5 2.9	10 47 16.8	12 54 38.9	982.2924	0.3718439	Darmer.
258 52 26.3	7 34 13.7	14 53 43.7	984.634	0.3711154	Bidschof.
142 45 34.4	10 50 59.6	5 34 47.1	677.3539	0.4794607	Bauschinger.
80 28 19.6	2 10 46.9	8 27 39.8	641.7676	0.4950859	Berberich.
48 48 2.4	1 58 46.6	6 57 0.4	652.9855	0.4900687	Bauschinger.
353 39 57.4	5 52 27.9	2 25 51.0	824.6755	0.4224824	S. Oppenheim.
200 52 24.6	20 41 56.1	15 18 16.8	567.5897	0.530647	Cerulli.
135 39 6.7	15 49 30.5	11 43 4.3	793.2109	0.433745	Kreutz.
331 9 43.9	9 15 0.1	12 2 39.9	637.0300	0.4972311	Lange.
313 44 55.4	2 33 21.6	13 55 0.2	1086.2400	0.3427205	Kreutz.
30 51 11.2	2 9 17.4	8 9 53.2	562.4884	0.5332620	Berberich.
239 53 16.0	9 25 11.6	3 32 52.8	964.9093	0.3770134	Richter.
352 24 25.6	5 8 18.5	8 56 36.2	711.1049	0.4653820	Lange.
152 33 31.6	6 4 17.4	9 51 22.1	869.5956	0.4071263	v. d. Groeben.
222 40 10.4	7 39 4.5	5 49 43.8	817.9445	0.4248552	Knopf.
144 25 8.3	15 21 14.2	14 7 1.5	962.6609	0.3776889	Tietjen.
66 42 2.0	9 4 3.2	3 31 18.9	725.2712	0.4596708	Tietjen.
186 49 0.9	7 36 48.4	10 54 45.4	758.1024	0.446853	Bidschof.
84 44 24.1	9 45 48.7	4 1 30.3	771.8775	0.4416388	Schwarz.
184 35 15.0	12 23 12.7	5 10 15.7	715.9041	0.463434	Berberich.
181 39 47.0	6 9 4.0	13 26 21.7	693.1222	0.472798	Berberich.
114 55 52.6	2 5 52.9	11 54 32.0	814.7587	0.4259851	Berberich.

Nr. und Name	Opposition 1910	Gr.	$m_{\circ}$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
241 Germania . .	Juli 15	10.8	11.2	7.2	1910 Juli 11.0	1910.0	313° 3 13.8	76° 11 10.9
242 Kriemhild . .	Jan. 20	12.0	12.6	9.0	1889 Dez. 27.0	1910.0	307 49 54.4	274 28 16.5
243 Ida . . . . .	Jan. 16	13.2	13.3	9.7	1898 Sept. 11.0	1910.0	276 49 8.8	104 57 1.6
244 Sita . . . . .	Dez. 36	13.7	13.7	11.7	1900 Okt. 11.0	1910.0	6 50 18.3	164 28 0.7
245 Vera . . . . .	Aug. 6	12.1	12.5	8.5	1897 März 20.0	1910.0	141 1 15.6	326 20 12.9
246 Asporina . .	—	—	11.7	8.4	1890 Jan. 16.0	1910.0	316 40 26.7	94 5 7.1
247 Eukrate . . .	Sept. 15	10.1	11.0	7.6	1910 Sept. 9.0	1910.0	316 58 24.1	53 38 32.2
248 Lameia . . . .	Dez. 28	13.3	13.0	10.2	1905 Aug. 6.0	1910.0	71 44 12.3	1 2 34.4
249 Ilse . . . . .	Mai 11	14.5	13.6	11.1	1904 Dez. 29.0	1910.0	69 11 14.1	39 42 30.4
250 Bettina . . . .	Febr. 15	11.0	11.5	7.3	1897 Nov. 15.0	1910.0	332 3 32.7	66 3 47.2
251 Sophia . . . .	April 14	13.9	13.6	9.6	1902 Nov. 10.0	1910.0	335 39 10.4	288 20 55.2
252 Clementina . .	Febr. 9	13.3	13.0	8.8	1901 Juli 18.0	1910.0	317 26 58.9	148 50 33.1
253 Mathilde . . .	Mai 26	13.0	13.4	10.2	1901 April 9.0	1910.0	256 52 2.1	153 38 18.0
254 Augusta . . . .	Nov. 28	13.1	13.4	11.3	1887 Juli 31.0	1910.0	101 27 54.0	230 49 10.4
255 Oppavia . . . .	Aug. 30	14.2	13.8	10.4	1890 Jan. 16.0	1910.0	336 40 35.6	149 6 36.3
256 Walpurga . .	Dez. 32	13.5	13.2	9.3	1906 Febr. 2.0	1910.0	254 22 31.1	48 28 9.1
257 Silesia . . . .	Sept. 12	12.5	12.8	8.7	1902 April 4.0	1910.0	106 36 49.5	25 30 6.8
258 Tyche . . . . .	Jan. 13	11.5	11.1	8.0	1904 Okt. 10.0	1900.0	4 23 24.3	152 52 26.8
259 Aletheia . . . .	Nov. 5	12.7	12.1	8.0	1899 Nov. 25.0	1910.0	162 11 23.4	156 52 33.7
260 Huberta . . . .	Mai 1	14.0	13.9	9.2	1900 Dez. 10.0	1910.0	92 3 1.9	163 58 5.7
261 Prymno . . . .	Juli 4	12.1	11.5	9.0	1897 Nov. 15.0	1910.0	275 46 24.4	63 7 47.9
262 Valda . . . . .	Aug. 18	14.0	14.1	11.1	1901 Mai 19.0	1910.0	189 4 51.8	22 36 56.6
263 Dresden . . . .	Aug. 29	12.9	13.3	9.6	1903 Febr. 18.0	1910.0	133 51 41.8	158 3 22.8
264 Libussa . . . .	Dez. 31	11.8	12.1	8.6	1895 Aug. 18.0	1910.0	316 59 55.7	336 41 5.1
265 Anna . . . . .	Juni 17	9.6	13.8	11.1	1906 März 14.0	1910.0	334 34 37.9	251 23 58.2
266 Aline . . . . .	April 19	12.5	11.7	8.2	1904 Jan. 4.0	1900.0	65 48 59.9	147 50 13.7
267 Tirza . . . . .	Mai 21	13.4	14.0	10.5	1901 Juni 28.0	1910.0	4 14 46.5	193 22 52.6
268 Adorea . . . . .	Sept. 10	13.2	12.5	8.5	1903 Mai 29.0	1910.0	41 9 17.0	58 53 55.4
269 Justitia . . . .	—	—	12.7	9.6	1900 Okt. 31.0	1910.0	91 35 3.3	115 31 13.2
270 Anahita . . . .	Nov. 19	10.8	11.0	8.9	1910 Nov. 28.0	1910.0	69 42 14.1	78 32 57.1
271 Penthesilea . .	Febr. 4	12.9	12.8	8.9	1902 Aug. 22.0	1910.0	303 17 6.1	49 19 54.7
272 Antonia . . . .	—	—	13.6	10.1	1899 Juli 28.0	1910.0	208 59 58.9	65 32 12.4
273 Atropos . . . .	Jan. 28	12.4	11.6	9.0	1888 März 9.5	1910.0	261 20 1.8	118 28 21.5
274 Philagoria . . .	Juli 1	13.2	13.6	9.6	1905 Juli 17.0	1910.0	81 26 30.7	114 39 38.8
275 Sapientia . . . .	—	—	12.0	8.5	1902 April 24.0	1910.0	36 26 14.9	31 7 20.2
276 Adelheid . . . .	April 24	11.7	11.8	7.7	1905 Mai 18.0	1910.0	118 0 50.3	272 32 19.8
277 Elvira . . . . .	Dez. 23	13.0	13.1	9.4	1907 März 9.0	1910.0	156 48 17.8	131 37 27.2
278 Paulina . . . .	Jan. 29	12.4	12.7	9.3	1906 April 23.0	1910.0	4 42 43.8	137 20 17.4
279 Thule . . . . .	Febr. 27	14.2	13.8	8.1	1907 Dez. 6.5	1910.0	121 15 55.9	234 27 55.0
280 Philia . . . . .	Febr. 3	13.9	14.4	10.6	1900 Febr. 13.0	1910.0	39 45 20.2	80 58 25.3

$\Omega$	$i$	$\varpi$	$\mu$	Log. $a$	Autorität
271° 52' 56.1	5° 29' 56.1	5° 44' 3.0	666.34845	0.4842035	W. Luther.
208 16 16.8	11 16 52.0	7 5 15.3	732.9031	0.4566401	Herz.
326 14 27.5	1 9 23.6	2 43 0.0	733.1121	0.456558	Berberich.
208 48 21.5	2 49 38.7	7 52 21.3	1106.6025	0.3373433	Berberich.
62 9 21.1	5 11 20.0	11 37 34.2	651.4943	0.4907307	Tietjen.
162 54 3.3	15 37 35.8	6 2 43.0	802.267	0.4304584	Seydler.
0 18 41.2	25 5 2.6	13 59 44.7	782.08161	0.4378363	W. Luther.
246 45 12.4	4 0 52.7	3 40 49.9	913.94026	0.3927259	Berberich.
334 49 30.7	9 40 10.9	12 28 59.5	968.2498	0.3760128	Berberich.
25 44 44.7	12 56 32.7	7 1 38.3	633.85003	0.498680	P. V. Neugebauer.
156 56 53.5	10 29 21.1	5 38 31.8	650.38006	0.4912263	Knopf.
203 12 39.2	9 59 40.2	4 15 39.6	632.1027	0.4994793	Charlois.
180 9 24.1	6 38 16.5	15 28 16.9	824.9747	0.4223773	Knopf.
28 28 40.6	4 32 3.2	6 58 7.6	1091.0836	0.3414323	Schwarz.
14 21 30.2	9 30 41.9	4 40 24.1	780.0705	0.4385818	Laves.
183 38 34.4	13 17 58.1	3 43 37.0	683.2594	0.4769473	Berberich.
35 32 38.3	3 40 9.7	7 18 8.3	646.6326	0.4928994	Berberich.
207 43 26.2	14 15 2.4	11 52 56.0	838.8243	0.4175571	Stechert.
88 37 4.1	10 42 43.7	6 20 43.1	635.21397	0.4980577	Ernst.
168 3 52.2	6 17 53.3	7 7 16.5	554.7196	0.5372887	v. d. Groeben.
96 28 8.3	3 38 28.6	5 9 55.5	996.7823	0.3676042	Riem.
38 44 43.0	7 44 4.6	12 14 5.8	869.5200	0.4071513	Berberich.
217 47 31.0	1 16 53.0	4 21 32.2	722.5549	0.4607572	v. d. Groeben.
50 12 15.6	10 26 47.1	7 44 47.5	757.7014	0.4470056	Cerulli.
335 26 56.8	25 40 50.5	15 20 26.1	941.9275	0.3839928	Berberich.
236 19 21.7	13 21 1.2	9 1 20.5	755.6505	0.4477904	Berberich.
74 11 19.8	6 1 26.2	5 46 49.5	767.3626	0.4433373	v. d. Groeben.
121 47 54.0	2 25 39.9	7 45 32.6	652.37206	0.4903408	Berberich.
157 37 9.8	5 25 49.2	12 18 39.7	838.9442	0.4175157	Berberich.
254 27 59.2	2 21 38.4	8 38 46.0	1088.54983	0.3421055	Berberich.
337 6 44.8	3 34 52.4	5 47 42.9	679.1966	0.4786741	Knopf.
37 51 15.8	4 28 30.9	1 46 56.3	767.2554	0.4433777	Charlois.
159 7 3.3	20 24 0.8	9 19 0.4	955.4037	0.379880	Lange.
93 45 36.1	3 40 53.3	7 7 6.3	669.09610	0.4830121	Berberich.
134 55 18.6	4 44 44.3	9 18 0.2	769.93398	0.4423688	Lange.
211 36 29.4	21 35 30.5	4 7 12.9	645.07018	0.4935998	Hackenberg.
233 17 5.0	1 8 0.1	5 18 42.5	724.6235	0.4599295	Berberich.
62 20 28.0	7 49 44.6	7 47 48.7	776.6491	0.4398545	Berberich.
75 36 14.8	2 22 29.8	4 37 35.7	404.29239	0.6288740	Wedemeyer.
11 25 17.4	7 27 30.5	6 19 13.9	703.8816	0.4683380	Berberich.

Nr. und Name	Opposition 1910	Gr.	$m_*$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
281 Lucretia . . .	Juli 1	13.4	13.1	11.0	1888 Nov. 2.5	1910.0	353 ° 32' 12.5	14 ° 35' 2.4
282 Clorinde . . .	—	—	13.3	10.8	1905 Aug. 26.0	1910.0	277 9 37.1	294 43 20.3
283 Emma . . .	Jan. 29	12.3	11.8	7.8	1901 Mai 19.0	1910.0	249 24 18.8	49 52 23.4
284 Amalia . . .	Febr. 1	14.0	12.9	10.4	1905 Dez. 24.0	1910.0	168 23 3.0	55 42 58.7
285 Regina . . .	—	—	14.9	10.9	1889 Aug. 19.5	1910.0	357 36 27.2	12 28 58.7
286 Iclea . . .	April 2	13.3	13.2	9.0	1905 Juni 7.0	1910.0	211 56 51.1	243 11 59.6
287 Nephthys . . .	Mai 19	10.6	10.7	8.2	1899 April 19.0	1910.0	311 52 37.9	117 32 38.4
288 Glauke . . .	Sept. 19	13.4	12.5	9.1	1910 Sept. 9.0	1910.0	139 43 47.1	79 57 57.3
289 Nenetta . . .	März 21	13.4	12.5	8.8	1907 Aug. 16.0	1910.0	337 3 13.4	185 22 3.2
290 Bruna . . .	Nov. 21	12.7	13.9	11.5	1890 Mai 7.5	1910.0	56 49 22.1	103 32 41.3
291 Alice . . .	Mai 17	13.6	13.6	11.4	1905 Dez. 24.0	1910.0	337 18 6.1	329 28 13.1
292 Ludovica . . .	April 14	12.6	12.5	9.5	1903 Sept. 6.5	1910.0	3 3 9.9	287 29 17.0
293 Brasilia . . .	Juli 18	13.3	12.9	9.2	1890 Juni 17.5	1910.0	92 28 41.4	82 22 24.6
294 Felicia . . .	Febr. 8	15.5	14.3	10.2	1901 Aug. 7.0	1910.0	353 2 17.9	179 28 13.6
295 Theresia . . .	—	—	13.5	10.0	1900 Dez. 10.0	1910.0	8 35 38.2	143 48 50.9
296 Phaëtusa . . .	Sept. 12	12.2	13.3	11.1	1890 Aug. 22.0	1910.0	330 33 11.7	250 4 4.6
297 Caecilia . . .	Febr. 6	14.0	13.3	9.1	1906 Juni 2.0	1910.0	300 21 16.8	346 24 30.3
298 Baptistina . . .	Aug. 8	14.1	13.5	11.3	1906 Mai 13.0	1910.0	83 33 27.7	132 43 13.3
299 Thora . . .	—	—	14.5	11.7	1903 Jan. 19.5	1910.0	83 26 9.5	147 35 9.9
300 Geraldina . . .	Febr. 5	12.7	12.5	8.2	1895 Juli 10.0	1910.0	336 44 54.3	283 3 2.7
301 Bavaria . . .	Febr. 6	12.9	12.7	9.3	1903 Okt. 16.0	1910.0	95 17 5.1	121 19 7.3
302 Clarissa . . .	—	—	13.9	11.2	1901 Sept. 16.0	1910.0	290 56 54.8	53 3 25.3
303 Josephina . . .	Aug. 16	12.0	12.0	7.9	1908 März 23.5	1910.0	118 30 44.3	70 2 57.9
304 Olga . . .	März 29	13.2	12.4	9.7	1906 Febr. 2.0	1910.0	193 33 14.2	169 45 47.0
305 Gordonia . . .	Aug. 20	13.0	12.5	8.4	1905 Okt. 5.0	1910.0	281 49 57.0	250 36 56.1
306 Unitas . . .	Juli 14	9.7	10.7	8.2	1902 März 15.5	1910.0	240 21 9.1	165 31 57.6
307 Nike . . .	—	—	13.1	9.4	1891 März 8.5	1910.0	74 37 11.8	320 29 5.7
308 Polyoxy . . .	Juni 20	10.8	11.0	7.6	1902 Nov. 10.0	1910.0	97 52 8.3	108 53 30.4
309 Fraternitas . . .	Dez. 1	12.8	12.7	9.5	1891 Mai 11.5	1910.0	239 5 58.0	332 8 15.9
310 Margarita . . .	Aug. 9	13.8	13.5	10.1	1891 Juni 17.5	1910.0	48 49 25.4	320 41 8.3
311 Claudia . . .	April 9	12.9	13.0	9.3	1903 Dez. 15.0	1910.0	301 3 0.2	71 48 18.9
312 Pierretta . . .	Nov. 4	13.0	12.5	9.0	1901 Nov. 15.0	1910.0	149 15 57.6	256 32 46.2
313 Chaldaea . . .	Dez. 5	9.6	10.3	7.7	1906 Okt. 20.0	1910.0	272 0 32.8	313 53 31.3
314 Rosalia . . .	Jan. 22	14.5	14.0	9.9	1907 Juli 7.0	1910.0	304 32 21.0	185 10 13.6
315 Constantia . . .	März 3	14.9	14.0	11.8	1891 Sept. 4.5	1910.0	9 27 44.6	171 22 42.4
316 Goberta . . .	—	—	13.3	9.1	1893 Jan. 0.0	1910.0	11 29 4.9	307 29 39.4
317 Roxane . . .	—	—	12.2	9.8	1904 März 24.0	1910.0	223 53 21.1	185 10 51.7
318 Magdalena . . .	Dez. 42	13.0	13.2	9.0	1903 Sept. 26.0	1910.0	294 58 3.9	273 31 23.8
319 Leona . . .	Okt. 25	13.0	14.2	9.7	1906 Febr. 22.0	1910.0	83 18 24.7	216 19 52.6
320 Katharina . . .	April 16	14.7	13.7	9.8	1891 Dez. 2.5	1910.0	23 36 28.6	142 54 14.8

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
31° 18' 2.7	5° 19' 37.6	7° 35' 40".8	1097.869	0.339637	Seydler.
144 47 14.0	9 1 23.8	4 40 42.6	992.0943	0.3689684	Berberich.
305 51 15.2	8 2 29.8	8 46 12.1	668.5906	0.483231	Berberich.
234 2 0.7	8 4 14.3	12 51 34.8	979.7243	0.3726018	Berberich.
312 19 2.3	17 16 57.9	11 55 35.4	661.4827	0.4863254	Charlois.
149 38 59.4	17 53 34.1	0 45 31.4	620.6276	0.5047837	Berberich.
142 13 54.2	10 1 20.1	1 19 35.4	982.6631	0.371735	Cerulli.
121 4 27.0	4 19 54.9	11 49 38.2	773.44659	0.4410509	R. Luther.
182 36 31.3	6 39 22.0	11 44 54.4	728.0006	0.4585832	Berberich.
10 35 19.4	22 13 28.1	15 4 22.7	995.1925	0.368066	S. Oppenheim.
161 7 22.5	1 50 32.2	5 19 14.8	1071.1737	0.3467645	Berberich.
43 11 16.0	14 52 8.2	1 41 17.2	880.6967	0.4034534	Berberich.
62 20 54.1	15 45 20.9	6 48 2.9	730.8370	0.4574574	Charlois.
137 3 38.4	6 14 57.7	14 21 59.6	638.4006	0.4966088	P. V. Neugebauer.
277 34 14.1	2 40 23.3	9 49 31.5	758.6107	0.4466584	Berberich.
121 1 53.2	1 44 47.3	9 6 25.9	1068.122	0.3475906	Coniel.
333 34 56.7	7 34 41.9	7 57 28.4	629.2581	0.5007852	Berberich.
8 7 5.8	6 17 37.4	5 28 22.7	1041.4193	0.3549207	Berberich.
242 2 9.3	1 35 16.8	3 29 25.0	935.125	0.386091	Berberich.
42 21 30.3	0 47 5.4	2 26 41.4	617.2655	0.5063564	Rodin.
142 45 15.3	4 52 38.1	3 42 13.9	787.7302	0.4357527	Berberich.
7 53 21.9	3 26 4.1	6 22 53.8	950.1028	0.3814907	Berberich.
345 6 47.2	6 55 28.9	4 6 42.7	644.21972	0.4939818	Millosevich.
158 53 56.4	15 47 16.1	12 49 46.2	952.9185	0.3806339	Berberich.
211 11 17.9	4 25 2.2	11 33 54.0	654.8993	0.4892213	Berberich.
141 43 35.3	7 15 13.9	8 40 35.6	980.0925	0.372493	Millosevich.
101 43 34.0	6 6 42.4	8 16 29.7	715.9363	0.4634215	Knopf.
182 8 53.0	4 19 54.1	2 13 1.3	778.7887	0.4390579	Berberich.
358 7 59.8	3 56 18.3	5 1 56.0	831.679	0.420034	Berberich.
230 43 26.5	3 5 55.3	6 31 55.2	775.6563	0.440225	Berberich.
81 17 5.0	3 15 38.0	0 58 32.8	721.5158	0.4611738	Berberich.
7 40 39.7	9 5 3.2	9 13 39.5	765.2695	0.4441281	P. V. Neugebauer.
176 40 23.5	11 36 14.2	10 27 16.0	969.4022	0.3756684	Berberich.
171 17 15.6	12 32 21.5	10 26 41.1	634.7188	0.4982835	Berberich.
161 22 12.5	2 24 30.8	9 40 17.9	1057.2646	0.3505486	Bohlin.
124 39 7.9	2 18 33.4	7 57 58.6	627.7382	0.501485	Berberich.
150 50 32.5	1 45 18.0	4 50 38.8	1025.9378	0.3592571	Berberich.
162 49 53.4	10 33 32.6	3 35 37.4	616.07949	0.506913	Mader.
189 5 22.4	10 44 15.4	12 15 56.9	563.9420	0.5325148	Berberich.
221 12 36.2	9 19 16.0	6 41 30.5	678.726	0.478875	Berberich.

Nr. und Name	Opposition 1910	Gr.	$m_o$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
321 Florentina . . .	Aug. 30	13.2	13.2	9.5	1903 Febr. 18.0	1910.0	72° 54' 39.7	34° 0' 40.1
322 Phaeo . . . . .	Dez. 43	12.4	12.3	8.8	1905 Nov. 14.0	1910.0	38 46 38.3	111 32 54.5
323 Brucia . . . . .	—	—	13.0	11.0	1892 Jan. 1.5	1891.0	43° 0' 42	292 17 48
324 Bamberga . . .	März 16	11.4	9.9	6.6	1906 April 3.0	1910.0	195 13 6.8	40 19 30.5
325 Heidelberga . . .	April 20	13.0	12.4	8.1	1906 Aug. 1.0	1910.0	270 22 12.3	74 39 7.7
326 Tamara . . . . .	Juni 18	10.0	11.1	8.7	1892 März 20.0	1910.0	298 49 14.0	236 57 34.2
327 Columbia . . . . .	Febr. 15	13.3	13.0	9.5	1905 Febr. 7.0	1910.0	181 23 55.4	300 41 58.1
328 Gudrun . . . . .	Juli 13	12.9	12.3	8.2	1906 Okt. 20.0	1910.0	309 12 45.4	102 25 47.4
329 Svea . . . . .	—	—	12.1	9.3	1901 Aug. 27.0	1910.0	120 9 24.9	38 30 56.3
330 Adalberta . . . .	—	—	13.5	11.7	1892 März 20.5	1892.0	181 3 42	— — —
331 Etheridgea . . . .	Nov. 26	12.2	12.5	8.5	1907 Febr. 17.0	1910.0	158 33 59.1	333 35 38.5
332 Siri . . . . .	Febr. 5	13.0	12.6	9.1	1906 März 14.0	1910.0	223 56 59.9	293 37 55.7
333 Badenia . . . . .	—	—	12.7	8.6	1907 April 18.0	1910.0	215 17 59.6	14 14 18.9
334 Chicago . . . . .	—	—	12.0	6.8	1908 Sept. 19.0	1910.0	356 5 54.5	240 27 12.1
335 Roberta . . . . .	Febr. 3	12.4	11.6	8.8	1906 Febr. 2.0	1910.0	205 28 47.7	140 50 43.9
336 Lacadiera . . . .	—	—	11.8	9.6	1902 Juni 23.0	1910.0	49 57 10.9	28 49 41.1
337 Devosa . . . . .	Aug. 17	11.8	11.4	8.8	1901 Jan. 19.0	1910.0	27 7 6.0	95 40 16.9
338 Budrosa . . . . .	April 10	12.2	12.1	8.4	1899 Jan. 9.0	1910.0	72 15 37.1	106 31 3.0
339 Dorothea . . . . .	Jan. 19	13.2	12.8	8.8	1906 April 23.0	1910.0	246 3 47.7	155 59 18.6
340 Eduarda . . . . .	Sept. 8	12.7	12.9	9.5	1906 Nov. 9.0	1910.0	346 36 56.4	39 58 16.1
341 California . . . . .	Jan. 14	14.0	13.1	11.0	1907 Jan. 28.0	1910.0	172 9 40.7	291 20 59.2
342 Endymion . . . . .	Jan. 18	12.1	12.8	9.8	1906 Febr. 2.0	1910.0	33 2 34.6	221 45 48.4
343 Ostara . . . . .	Juli 31	13.4	13.5	10.9	1906 Juni 2.0	1910.0	230 17 35.4	7 5 53.9
344 Desiderata . . . .	—	—	11.7	8.5	1907 März 9.0	1910.0	236 59 21.3	233 57 8.8
345 Tercidina . . . . .	Dez. 23	10.9	11.2	8.8	1906 Okt. 20.0	1910.0	304 42 30.8	229 3 10.0
346 Hermentaria . . .	Aug. 25	11.1	11.5	8.0	1899 März 10.0	1910.0	156 0 38.3	287 6 50.9
347 Pariana . . . . .	—	—	12.0	8.8	1906 Jan. 13.5	1910.0	309 39 11.0	83 32 9.5
348 May . . . . .	Mai 3	13.1	12.9	9.1	1895 Mai 10.0	1910.0	143 12 22.8	4 58 1.5
349 Dembowska . . . .	Mai 16	10.1	9.8	6.0	1896 Aug. 12.0	1910.0	319 16 56.2	340 30 13.5
350 Ornamenta . . . .	Jan. 25	12.3	12.7	8.6	1907 Juli 7.0	1910.0	240 6 7.0	331 59 51.1
351 Yrsa . . . . .	Nov. 4	12.1	12.2	8.8	1907 Jan. 28.0	1910.0	354 50 4.6	27 13 3.4
352 Gisela . . . . .	April 22	12.9	12.1	10.0	1904 Juni 12.0	1910.0	255 25 57.5	142 27 24.3
353 Ruperto-Carola . .	—	—	14.2	10.9	1893 Febr. 22.5	1910.0	44 0 13.0	317 41 4.5
354 Eleonora . . . . .	Nov. 6	10.2	10.0	6.5	1901 Dez. 5.0	1910.0	303 30 35.7	3 34 23.7
355 Gabriella . . . . .	Mai 2	13.4	13.1	10.1	1905 Jan. 2.5	1910.0	12 25 36.0	94 32 55.4
356 Liguria . . . . .	Dez. 11	9.4	11.0	7.6	1907 Febr. 17.0	1910.0	64 49 7.3	74 23 55.2
357 Ninina . . . . .	März 7	12.3	12.2	8.0	1907 Sept. 18.5	1910.0	340 46 14.9	242 29 42.0
358 Apollonia . . . . .	Aug. 31	12.2	12.5	8.8	1893 März 10.5	1910.0	86 52 43.5	248 18 56.9
359 Georgia . . . . .	—	—	12.3	8.9	1902 Mai 2.5	1910.0	203 0 32.1	336 37 38.1
360 Carlova . . . . .	Juni 8	12.7	11.9	8.0	1908 Jan. 3.0	1910.0	33 4 5.4	286 54 56.0

$\Omega$	$i$	$\varpi$	$\mu$	Log. $a$	Autorität
40° 47' 5.0	2° 36' 56.6	2° 39' 3.1	723.6554	0.4603165	Berberich.
253 56 18.3	7 59 8.1	14 15 14.3	763.9060	0.4446445	Berberich.
97 2 30	19 20 54	15 57 36	1119.60	0.333960	Berberich.
329 8 36.3	11 18 40.9	19 47 42.6	807.8079	0.4284657	Berberich.
345 21 18.6	8 33 40.7	9 8 49.5	616.9272	0.5065151	Berberich.
32 9 9.7	23 47 22.4	10 48 17.5	1005.7638	0.365007	Bidschof.
355 39 44.3	7 9 11.2	3 41 18.3	766.8777	0.4435203	Berberich.
353 15 29.5	16 7 1.7	7 2 42.8	649.8767	0.4914504	Berberich.
178 28 13.5	16 0 36.7	1 35 42.6	912.1349	0.3932983	Pannekock.
358 46 36	19 58 36	— — —	1174.9	0.32000	Berberich.
22 52 28.7	6 4 30.0	5 58 43.0	675.6718	0.4801805	Berberich.
32 3 7.2	2 52 35.7	5 10 38.7	768.7492	0.4428147	Berberich.
355 22 47.1	3 50 23.7	10 5 3.7	644.6123	0.4938053	Berberich.
134 20 51.2	4 37 53.7	0 54 49.6	458.6230	0.5923672	Berberich.
147 55 31.6	5 5 49.9	10 22 10.8	912.6621	0.3931311	Berberich.
235 1 13.3	5 38 30.7	5 28 48.1	1049.8478	0.3525869	Berberich.
355 41 19.0	7 51 56.4	7 57 52.0	964.4421	0.3771536	Coniel.
288 39 56.0	6 2 41.2	1 12 38.1	713.531	0.464396	Coniel.
174 26 7.4	9 53 59.7	5 49 6.3	679.2158	0.4786658	Berberich.
27 35 29.8	4 42 11.5	6 46 57.8	779.9016	0.4386445	Berberich.
29 3 57.0	5 40 1.7	11 8 39.8	1087.7152	0.3423276	Berberich.
233 0 11.1	7 20 46.9	7 22 8.5	862.0140	0.4096615	Berberich.
38 42 17.6	3 18 13.3	13 23 25.7	947.4192	0.3823097	Berberich.
49 0 25.8	18 36 32.9	18 20 50.5	850.5213	0.4135476	Berberich.
212 31 31.0	9 44 20.7	3 30 29.0	1000.9051	0.3664092	Viaro.
92 32 7.0	8 45 21.1	5 47 46.6	758.53251	0.446688	Ehrenfeucht.
85 52 47.9	11 42 41.9	9 21 56.3	838.0358	0.4178294	Boccardi.
90 45 49.6	9 45 30.5	3 49 50.1	693.6375	0.472584	P. V. Neugebauer.
33 13 11.3	8 17 24.6	5 8 39.7	709.2917	0.466122	P. V. Neugebauer.
90 39 23.5	24 44 31.8	8 44 29.1	643.0948	0.4944877	Berberich.
99 40 26.2	9 13 56.4	8 52 21.2	770.7562	0.4420597	Berberich.
247 18 51.6	3 22 0.5	8 36 26.8	1091.9690	0.34111975	Berberich.
103 23 14.9	5 34 36.4	19 15 26.7	787.080	0.435992	Berberich.
140 49 23.3	18 22 24.1	6 35 44.4	754.8010	0.4481160	Ciscato.
352 19 52.4	4 21 6.4	6 12 55.9	877.280	0.404580	Berberich.
356 14 1.3	8 16 5.4	14 2 9.4	776.2821	0.4399913	Berberich.
138 47 50.5	15 6 50.1	4 5 44.9	634.456	0.498404	P. V. Neugebauer.
173 8 14.8	3 31 44.7	8 26 24.1	725.563	0.459554	Coniel.
6 41 13.1	6 48 31.7	8 58 30.9	787.647	0.435783	Berberich.
133 23 12.5	11 39 55.5	10 20 45.1	682.0180	0.4774739	Berberich.

Nr. und Name	Opposition 1910		$m_a$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
361 Bononia . .	Mai	9	13.9	13.3	8.0 1906 Okt. 20.0	1910.0	315° 0 55.4	75° 44' 20.7
362 Havnia . .	Mai	5	11.3	11.1	8.0 1905 Febr. 7.0	1910.0	72 40 34.9	29 11 6.7
363 Padua . .	—	—	11.6	8.2	1902 Febr. 23.0	1910.0	150 10 39.9	293 18 1.4
364 Isara . .	Mai	11	12.5	11.7	9.5 1906 Febr. 2.0	1910.0	64 52 29.0	311 1 48.7
365 Corduba . .	Dez.	45	12.0	12.2	8.7 1904 Juli 22.0	1910.0	285 5 51.5	209 40 43.5
366 Vincentina .	April	15	12.4	12.3	8.2 1904 März 24.0	1910.0	241 10 18.0	314 58 42.8
367 Amicitia . .	Juli	27	13.0	12.5	10.3 1906 März 28.5	1910.0	52 40 0.0	53 16 37.5
368 Haidea . .	Sept.	28	12.7	13.5	9.5 1893 Juli 17.5	1910.0	317 18 49.4	85 6 56.3
369 Aëria . .	Mai	24	12.9	12.7	9.5 1906 Juli 12.0	1910.0	287 6 32.8	266 17 7.5
370 Modestia . .	April	14	13.3	12.8	10.4 1907 Juli 7.0	1910.0	294 33 33.7	66 1 12.1
371 Bohemia . .	März	17	11.7	11.8	8.4 1903 Nov. 5.0	1910.0	134 40 33.2	338 44 39.2
372 Palma . .	Sept.	19	9.9	10.5	6.4 1905 Dez. 4.0	1910.0	2 21 33.6	113 11 50.6
373 Melusina . .	Nov.	12	12.3	12.8	8.7 1907 März 9.0	1910.0	165 50 25.5	347 42 45.3
374 Burgundia .	April	2	11.3	11.7	8.2 1906 Juni 2.0	1910.0	20 43 28.8	22 6 54.0
375 Ursula . .	Nov.	21	11.1	11.0	6.9 1901 Jan. 19.0	1910.0	155 15 7.8	344 31 25.5
376 Geometria .	Aug.	13	11.1	11.8	9.4 1904 Nov. 19.0	1910.0	171 38 36.4	314 16 28.2
377 Campania . .	Juli	26	11.6	11.5	8.2 1893 Okt. 7.5	1910.0	338 6 43.1	192 39 34.1
378 Holmia . .	Juni	3	13.0	12.6	9.1 1906 Aug. 21.0	1910.0	301 48 59.4	153 47 51.8
379 Huenna . .	—	—	12.6	8.5	1901 April 9.0	1910.0	210 5 22.9	177 18 16.1
380 Fiducia . .	Nov.	24	12.5	12.6	9.3 1894 Jan. 11.0	1910.0	129 58 51.0	237 3 32.6
381 Myrrha . .	—	—	12.4	8.1	1906 März 14.0	1910.0	266 28 42.8	142 59 18.2
382 Dodona . .	—	—	12.1	8.1	1906 Mai 13.0	1910.0	9 20 17.0	267 5 53.6
383 Janina . .	—	—	13.3	9.2	1908 Aug. 30.0	1910.0	290 32 49.4	313 43 28.9
384 Burdigala . .	Dez.	33	10.9	11.7	8.5 1899 April 9.5	1910.0	119 46 59.6	30 33 43.4
385 Ilmatar . .	Aug.	22	10.9	10.3	6.7 1904 Mai 3.0	1910.0	38 31 8.7	184 18 24.2
386 Siegena . .	Mai	28	11.2	10.5	6.8 1906 Aug. 21.0	1910.0	317 54 55.1	217 39 48.2
387 Aquitania . .	Dez.	10	10.8	9.8	6.4 1895 Juli 3.5	1910.0	353 6 10.2	153 33 34.9
388 Charybdis .	März	27	11.9	11.7	7.8 1906 Juli 12.0	1910.0	338 15 19.8	322 41 28.4
389 Industria . .	—	—	11.1	8.0	1899 Juni 18.0	1910.0	63 27 27.4	262 50 16.2
390 Alma . .	Dez.	38	12.5	13.2	10.0 1899 Mai 17.0	1910.0	88 15 19.6	188 31 9.3
391 Ingeborg . .	Febr.	19	14.7	13.2	10.8 1906 Jan. 13.0	1910.0	82 56 37.0	145 9 23.8
392 Wilhelmina .	—	—	12.2	8.3	1894 Nov. 4.5	1910.0	38 39 10.1	141 27 52.4
393 Lampetia . .	Jan.	12	12.6	11.0	7.6 1904 Dez. 9.0	1910.0	130 40 16.4	86 49 15.1
394 Arduina . .	Febr.	16	14.2	13.0	9.6 1894 Nov. 23.5	1910.0	55 25 12.3	265 38 37.7
395 Delia . .	Febr.	13	13.4	13.0	9.5 1894 Dez. 3.5	1910.0	136 43 41.3	20 38 45.7
396 Aeolia . .	—	—	13.2	9.7	1894 Dez. 2.5	1910.0	156 42 32.8	18 37 12.4
397 Vienna . .	Juni	2	12.8	12.6	9.4 1902 Aug. 2.0	1910.0	334 42 30.6	136 13 17.5
398 Admete . .	Mai	25	14.8	13.7	10.4 1907 Nov. 4.5	1910.0	317 29 32.7	156 33 37.6
399 Persephone .	—	—	13.0	9.0	1907 Juli 7.0	1910.0	99 59 2.0	187 2 29.5
400 Duerosa . .	—	—	14.5	10.4	1895 März 18.5	1910.0	337 44 19.1	229 27 12.8

$\delta$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
19° 36' 14.1	12° 36' 57.4	11° 31' 54.9	451.1434	0.5971280	Berberich.
27 23 27.4	8 4 45.0	2 31 4.1	857.1587	0.4112969	Berberich.
65 8 10.2	5 58 1.3	4 3 32.9	778.9495	0.438998	Antoniazzi.
105 12 52.6	6 0 3.6	8 36 53.9	1072.5804	0.3463845	Berberich.
185 54 15.1	12 43 37.8	8 24 38.7	754.5331	0.448218	Berberich.
347 59 13.4	10 35 26.9	3 27 2.7	636.2125	0.4976029	Berberich.
83 7 23.4	2 57 0.7	5 28 31.2	1072.8626	0.3463083	Berberich.
230 7 47.4	7 48 12.9	11 8 13.1	663.984	0.485231	Berberich.
94 30 31.4	12 43 17.6	5 33 23.3	822.7067	0.4231744	Berberich.
290 58 8.9	7 52 10.3	5 13 41.6	1001.1919	0.3663261	Berberich.
284 12 33.9	7 22 40.8	3 35 43.7	788.36429	0.435520	Mader.
328 25 22.6	23 39 56.7	15 37 36.8	635.9909	0.4977038	Berberich.
4 26 22.4	15 27 4.2	8 34 43.1	646.5817	0.4929222	Berberich.
219 35 36.2	8 57 56.2	4 37 44.9	765.5599	0.4440183	Berberich.
337 27 33.3	15 57 18.0	5 41 17.0	640.8169	0.4955151	Heuer.
302 13 7.9	5 25 21.7	9 54 46.1	1025.0162	0.3595172	Berberich.
210 44 55.0	6 39 37.8	4 26 14.5	804.920	0.429503	Coniel.
233 14 43.6	6 57 56.3	7 20 19.7	766.5723	0.4436357	Berberich.
172 51 58.2	1 36 30.6	11 5 26.6	641.8494	0.4950490	Coniel.
95 22 51.6	6 10 16.7	6 33 30.2	809.782	0.427760	P. V. Neugebauer.
125 23 34.0	12 34 45.8	7 15 16.3	620.6242	0.5047852	Berberich.
315 49 0.2	7 26 3.1	10 9 28.8	645.0171	0.4936236	Berberich.
93 25 27.3	2 39 13.5	9 59 26.2	638.8727	0.4963949	Berberich.
48 21 10.9	5 38 57.3	8 22 34.3	820.6462	0.423900	Kromm.
345 47 13.2	13 41 2.2	7 30 49.9	739.9493	0.4538697	Witt.
167 7 26.1	20 15 35.6	9 34 42.5	719.3456	0.4620460	Berberich.
128 46 8.2	17 57 51.9	13 47 16.3	782.6076	0.4376414	Ogburn.
355 28 53.3	6 28 59.6	3 28 2.8	680.7507	0.4780123	Berberich.
282 46 45.1	8 7 8.8	3 53 14.7	842.4772	0.416299	Peyra.
305 34 11.1	12 8 55.9	7 28 40.3	821.022	0.423768	Coniel.
212 42 11.7	23 2 49.0	18 0 7.6	1004.2640	0.3654391	Berberich.
211 52 31.8	15 42 21.3	10 13 36.9	694.356	0.472283	Berberich.
214 28 57.3	14 54 43.5	19 14 19.0	766.9701	0.4434854	Berberich.
68 21 10.6	6 15 39.4	13 11 32.3	771.095	0.441933	Coniel.
260 2 6.3	3 31 42.0	7 16 9.6	764.391	0.444461	Capon.
251 27 25.2	2 37 50.3	10 18 30.4	782.986	0.437501	Coniel.
228 32 12.0	12 43 25.8	14 22 11.1	829.3549	0.420844	Mader.
280 38 14.2	9 29 36.6	12 49 55.4	782.8137	0.4375654	Franz.
347 18 20.6	13 10 0.0	4 6 33.0	665.0959	0.4847482	Berberich.
328 49 40.9	10 36 55.7	5 15 50.9	641.871	0.495039	Berberich.

Nr. und Name	Opposition 1910	Gr.	$m_{\circ}$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
401 Ottilia . . .	Okt. 18	12.9	12.6	8.2	1905 Dez. 24.0	1910.0	220° 5' 45.6	197° 2' 51.2
402 Chloë . . .	—	—	10.7	7.7	1895 März 27.5	1910.0	28 44 8.7	12 26 25.6
403 Cyane . . .	Aug. 3	12.6	12.0	8.5	1905 Juli 17.0	1910.0	153 9 6.5	247 54 30.1
404 Arsinoë . . .	—	—	13.0	10.0	1905 Nov. 14.0	1910.0	214 53 8.0	118 51 5.8
405 Thia . . .	—	—	11.0	8.0	1895 Juli 27.0	1910.0	73 36 35.0	305 12 7.9
406 Erna . . .	Sept. 4	12.4	13.5	9.8	1905 Aug. 31.5	1910.0	352 15 46.2	34 30 49.2
407 Arachne . .	März 5	12.2	11.9	8.7	1907 Juli 27.0	1910.0	290 1 11.0	78 11 36.7
408 Fama . . .	Mai 17	14.0	13.4	9.2	1895 Okt. 15.5	1910.0	354 28 32.9	100 36 33.0
409 Aspasia . . .	Juni 9	10.2	10.7	7.6	1903 Okt. 19.5	1910.0	163 47 0.0	351 8 7.6
410 Chloris . . .	Febr. 9	12.4	11.9	8.5	1906 April 17.5	1910.0	311 22 7.1	168 47 7.0
411 Xanthe . . .	Dez. 34	13.1	12.5	8.7	1906 Jan. 24.5	1910.0	185 43 46.2	174 42 24.4
412 Elisabetha .	Jan. 27	11.9	11.9	8.5	1904 Dez. 29.0	1910.0	252 59 27.0	92 48 23.5
413 Edburga . .	April 21	13.6	12.2	9.2	1896 Jan. 10.5	1910.0	72 21 21.0	248 52 42.0
414 Liriope . . .	März 26	13.6	13.4	8.6	1898 April 24.0	1910.0	184 57 33.5	299 54 3.1
415 Palatia . . .	Febr. 22	11.1	11.6	8.1	1900 Jan. 0.0	1910.0	351 8 15.5	293 39 15.0
416 Vaticana . .	April 28	10.3	11.5	8.0	1902 Okt. 21.5	1910.0	114 14 16.4	195 25 17.1
417 Suevia . . .	April 28	12.0	12.7	9.2	1907 Sept. 25.0	1910.0	186 5 50.0	343 18 38.4
418 Alemannia .	—	—	12.6	9.5	1905 Dez. 24.0	1910.0	60 41 21.9	123 1 58.9
419 Aurelia . . .	Dez. 37	12.3	11.1	8.0	1907 Jan. 28.0	1910.0	225 26 32.6	40 16 21.9
420 Bertholda . .	Dez. 14	12.1	12.3	7.7	1904 Dez. 29.0	1910.0	359 57 43.4	216 25 36.5
421 Zähringia . .	Febr. 26	14.8	14.2	11.2	1904 Mai 23.0	1910.0	299 14 47.2	205 57 54.3
422 Berolina . . .	—	—	13.4	11.2	1896 Dez. 4.5	1910.0	43 3 30.9	333 4 23.2
423 Diotima . . .	Mai 14	11.0	11.2	7.2	1906 Sept. 30.0	1910.0	87 12 6.0	193 49 7.3
424 Gratia . . .	—	—	12.8	9.3	1903 Mai 29.0	1910.0	174 2 31.1	329 36 33.8
425 Cornelia . . .	Nov. 7	13.3	13.1	9.4	1897 Jan. 20.5	1910.0	295 5 56.3	118 48 56.6
426 Hippo . . .	März 12	11.0	11.5	7.8	1897 Sept. 30.0	1910.0	172 10 55.2	221 45 45.3
427 Galene . . .	Jan. 23	13.5	12.8	9.0	1905 Jan. 14.5	1910.0	184 20 0.0	5 55 16.4
428 Monachia . .	Mai 23	14.3	13.5	11.1	1900 Aug. 7.5	1910.0	300 39 10.6	13 51 45.2
429 Lotis . . .	Dez. 34	12.3	12.6	9.4	1905 Sept. 22.5	1910.0	331 42 21.7	166 36 34.0
430 Hybris . . .	Juni 29	14.1	13.2	9.6	1898 Jan. 21.5	1910.0	15 12 12.0	174 56 25.2
431 Nephela . . .	Febr. 1	13.5	12.6	8.5	1906 Mai 29.5	1910.0	279 57 55.7	209 48 3.8
432 Pythia . . .	April 16	10.8	11.3	8.7	1906 Febr. 2.0	1910.0	258 54 29.7	172 15 56.3
433 Eros . . .	Mai 23	10.5	9.7	10.6	1907 Okt. 15.0	1910.0	285 40 28.0	177 46 3.8
434 Hungaria . . .	—	—	11.8	10.4	1908 März 3.0	1910.0	226 7 44.9	123 1 51.3
435 Ella . . .	Dez. 12	11.9	12.1	9.3	1906 Nov. 9.0	1910.0	44 18 22.6	331 7 16.6
436 Patricia . . .	Nov. 8	12.6	12.9	8.7	1906 Febr. 2.0	1910.0	90 41 57.0	23 21 16.1
437 Rhodia . . .	Dez. 37	13.6	12.7	10.1	1906 Nov. 9.0	1910.0	77 29 16.7	59 5 58.1
438 Zeuxo . . .	Okt. 15	13.5	11.8	8.8	1902 Nov. 23.5	1910.0	149 12 37.6	200 28 41.2
439 Ohio . . .	Dez. 33	12.5	12.7	8.6	1900 Jan. 0.0	1910.0	30 57 55.5	231 8 28.0
440 Theodora . .	Mai 10	12.8	13.1	10.9	1898 Okt. 18.5	1910.0	284 37 41.8	176 6 6.1

$\delta$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
38° 59' 46"	6° 5' 47.1	2° 40' 12.6	583.3070	0.5227396	Berberich.
129 42 3.3	11 50 5.2	6 24 49.0	868.759	0.407405	Coniel.
245 49 39.0	9 8 8.8	5 49 4.3	753.7444	0.4485217	Berberich.
92 48 21.3	14 3 57.8	11 41 13.6	849.07766	0.4140395	Berberich.
256 8 35.2	11 48 17.6	14 32 24.7	856.814	0.411412	Coniel.
317 9 4.5	4 14 56.5	10 10 53.0	710.727	0.465535	Berberich.
295 5 4.9	7 31 34.3	3 59 22.5	834.1108	0.4191886	Berberich.
299 37 51.7	9 6 14.2	7 54 31.1	627.210	0.501729	Berberich.
242 44 32.8	11 12 44.4	3 53 20.9	857.3857	0.411221	Kromm.
97 25 39.4	10 53 15.3	13 45 44.0	788.824	0.435346	P. V. Neugebauer
108 9 35.1	15 36 26.1	6 53 35.1	705.017	0.467871	Berberich.
106 41 22.8	13 45 36.1	2 27 5.2	772.8598	0.4412713	Berberich.
105 12 38.6	18 52 24.9	19 43 23.0	856.555	0.4111501	Berberich.
113 29 44.5	9 38 22.8	5 29 23.8	540.7539	0.544671	Berberich.
128 20 25.3	8 5 38.4	17 36 27.4	762.3720	0.445227	Coddington.
58 38 36.6	12 55 45.4	12 35 49.6	761.6611	0.4454966	Boccardi.
199 56 31.4	6 35 47.5	8 5 25.9	759.1427	0.4464555	Berberich.
249 11 17.0	6 49 0.3	6 49 13.7	850.3282	0.4136133	Berberich.
230 13 39.6	3 57 7.7	14 49 58.8	849.6718	0.4138369	Berberich.
246 23 45.1	6 37 27.3	2 31 41.4	563.6312	0.5326744	Berberich.
188 3 30.6	7 51 32.7	17 0 44.2	879.0133	0.404008	Berberich.
9 0 42.8	5 0 17.4	12 22 39.2	1066.4426	0.348046	Witt.
70 19 25.1	11 15 54.4	1 57 21.5	660.6148	0.4867056	Berberich.
99 33 41.2	8 12 20.8	6 22 47.8	768.5707	0.442882	P. V. Neugebauer.
61 44 9.2	4 4 24.3	3 26 47.8	724.2913	0.460062	Pourteau.
312 6 53.5	19 37 42.9	5 53 54.4	722.4562	0.460797	Pourteau.
298 57 20.1	5 8 14.6	6 53 23.4	693.666	0.4725708	Berberich.
17 29 37.6	6 13 32.7	10 15 44.4	1009.005	0.364076	Villiger.
220 16 20.5	9 30 55.5	7 5 38.8	842.413	0.416321	Berberich.
250 0 10.6	14 33 20.9	14 55 51.9	743.475	0.452494	Berberich.
117 1 48.2	1 49 14.5	10 30 56.1	642.247	0.494870	Kreutz.
88 37 32.4	12 7 37.7	8 24 45.4	973.3410	0.3744944	Berberich.
303 37 3.5	10 49 41.2	12 52 58.8	2015.0581	0.1638127	Witt.
174 44 5.3	22 30 11.2	4 13 50.9	1308.6711	0.2887841	Berberich.
23 9 37.1	1 50 18.7	8 53 54.8	925.2776	0.3891563	Berberich.
352 3 5.4	18 36 7.8	4 45 46.3	622.0996	0.5040978	Berberich.
263 43 57.1	7 22 52.2	14 16 23.4	962.0481	0.3778732	Berberich.
49 27 2.4	7 14 50.7	2 57 7.6	869.450	0.407174	P. V. Neugebauer.
202 36 22.0	19 7 7.5	4 11 33.9	640.6167	0.495606	Coddington.
292 31 23.3	1 35 48.6	6 11 19.0	1079.355	0.344562	Coddington.

Nr. und Name	Opposition 1910	Gr.	$m_{\circ}$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
441 Bathilde . . .	Mai 17	12.7	12.5	9.0	1898 Dez. 14.0	1910.0	345° 51' 15.9	197° 38' 38.4
442 Eichsfeldia . . .	März 24	11.8	12.1	9.6	1904 Sept. 20.0	1910.0	137 33 29.2	82 6 9.8
443 Photographicia . . .	Aug. 22	12.6	12.5	10.2	1906 April 3.0	1910.0	46 36 26.5	347 54 29.7
444 Gyptis . . .	Nov. 9	10.5	11.2	7.7	1903 Jan. 1.5	1910.0	149 27 0.8	151 50 26.2
445 Edna . . . .	Aug. 15	11.6	12.6	8.4	1900 Jan. 0.0	1910.0	19 I 55.0	77 37 38.4
446 Aeternitas . . .	—	—	11.4	7.9	1899 Okt. 30.0	1910.0	55 26 20.6	277 33 39.1
447 Valentine . . .	Dez. 23	12.0	12.1	8.2	1904 Okt. 10.0	1910.0	345 51 50.7	316 23 5.9
448 Natalie . . . .	Okt. 7	12.6	13.4	9.3	1899 Nov. 29.5	1910.0	47 48 18.5	292 17 12.2
449 Hamburga . . .	Juli 2	12.7	12.0	9.0	1901 März 20.0	1910.0	38 7 28.0	44 40 10.3
450 Brigitta . . . .	Dez. 19	13.1	13.2	9.3	1899 Nov. 9.5	1910.0	19 I 7 44.8	358 38 58.0
451 Patientia . . . .	Dez. 30	10.3	10.6	6.6	1907 Mai 8.0	1910.0	146 4 45.4	332 26 55.3
452 Hamiltonia . . .	—	—	16.7	13.1	1899 Dez. 31.0	1910.0	296 42 7.9	46 40 54.3
453 Tea . . . . .	April 13	11.6	12.3	10.2	1902 Dez. 20.0	1910.0	243 0 28.6	217 47 49.9
454 Mathesis . . . .	Okt. 1	12.2	11.6	8.5	1900 April 28.5	1910.0	352 56 10.1	174 34 18.7
455 Bruchsalia . . . .	Dez. 38	11.9	11.6	8.3	1907 Febr. 17.0	1910.0	124 26 46.8	269 25 10.9
456 Abnoba . . . .	Aug. 31	13.1	12.9	9.4	1906 Nov. 9.0	1910.0	154 20 18.2	2 50 8.1
457 Alleghenia . . . .	Juni 19	15.2	15.1	11.0	1900 Okt. 28.5	1910.0	351 0 33.8	129 8 9.7
458 Hereynia . . . .	Aug. 13	13.5	13.1	9.1	1900 Okt. 31.0	1910.0	338 37 5.7	272 19 18.5
459 Signie . . . . .	Jan. 21	13.1	13.7	10.5	1900 Okt. 22.5	1910.0	348 14 27.2	17 55 45.7
460 Seana . . . . .	—	—	13.9	10.5	1900 Okt. 22.5	1910.0	14 38 31.6	163 33 0.4
461 Saskia . . . . .	Juli 19	15.2	14.3	10.1	1900 Okt. 22.5	1910.0	310 1 24.7	301 28 37.0
462 Eriphyla . . . .	Nov. 21	13.1	13.5	9.7	1902 Jan. 14.0	1910.0	119 30 21.2	248 37 32.6
463 Lola . . . . .	—	—	14.0	11.4	1900 Okt. 31.5	1910.0	19 49 32.2	325 32 26.0
464 Megaira . . . .	—	—	12.2	8.6	1901 Jan. 9.5	1910.0	92 54 0.7	252 34 33.5
465 Alekto . . . . .	Nov. 9	14.6	13.5	9.3	1901 Jan. 23.5	1910.0	293 53 59.6	272 32 36.6
466 Tisiphone . . . .	Aug. 24	14.0	11.8	7.3	1901 Jan. 23.5	1910.0	294 33 1.3	263 9 0.3
467 Laura . . . . .	Dez. 42	13.9	14.3	10.5	1901 Febr. 11.5	1910.0	55 52 57.2	91 48 52.6
468 Lina . . . . .	Okt. 23	12.1	13.1	9.0	1901 Febr. 22.5	1910.0	118 51 21.4	331 2 19.6
469 Argentina . . . .	Okt. 23	13.3	12.7	8.5	1907 April 24.5	1910.0	7 31 23.1	201 23 58.5
470 Kilia . . . . .	Nov. 17	12.3	12.9	10.3	1902 Okt. 21.0	1910.0	138 56 9.4	43 50 53.3
471 Papagena . . . .	April 29	11.0	10.1	6.2	1901 Mai 18.5	1910.0	240 50 24.4	311 1 39.0
472 Roma . . . . .	Nov. 18	10.8	11.5	8.5	1908 März 23.0	1910.0	115 27 18.6	295 11 15.8
473 Nolli . . . . .	—	—	13.3	9.5	1901 Febr. 13.5	1910.0	95 13 40.1	57 6 40.8
474 Prudentia . . . .	—	—	13.0	10.2	1901 März 13.5	1910.0	223 19 18.1	142 45 18.1
475 Ocello . . . . .	Dez. 24	13.5	13.5	10.2	1905 Juni 17.0	1910.0	317 7 14	301 29 56
476 Hedwig . . . .	Okt. 12	11.4	11.3	8.1	1902 Dez. 10.0	1910.0	156 21 50.5	356 54 43.2
477 Italia . . . . .	—	—	12.1	9.5	1905 Nov. 3.5	1910.0	45 50 41.6	320 20 13.9
478 Tergeste . . . .	Juni 13	11.3	10.9	7.0	1904 Mai 5.0	1910.0	81 38 55.7	240 34 25.2
479 Caprera . . . .	Nov. 12	11.6	13.0	9.6	1901 Nov. 15.5	1910.0	2 12 53.0	269 14 42.9
480 Hansa . . . . .	Juli 15	11.7	11.5	8.3	1901 Mai 21.5	1910.0	179 11 11.8	196 39 14.2

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
254° 20' 3.7	8° 7' 11.7	4° 37' 18.6	753.698	0.448538	Coniel.
134 38 45.4	6 3 42.0	4 0 17.7	987.3699	0.3703512	Thraen.
175 8 46.6	4 13 15.5	2 17 26.1	1075.9086	0.3454875	Thraen.
196 16 48.3	10 12 42.1	9 58 5.9	768.449	0.442928	Fabry.
293 31 41.4	21 23 34.9	11 57 45.5	624.2829	0.503084	Coddington.
42 40 49.5	10 39 3.8	7 7 3.2	761.5980	0.4455205	Pauly.
72 27 11.5	4 49 5.6	2 40 14.9	686.5435	0.475559	Kreutz.
38 52 17.9	12 41 52.5	9 54 2.5	636.068	0.497668	Berberich.
85 58 49.8	3 6 4.6	10 3 32.4	870.9880	0.406664	J. Möller.
15 37 54.5	10 23 9.4	5 21 56.4	677.749	0.479292	Paetsch.
89 51 4.6	15 14 39.9	4 19 46.7	662.60440	0.4858348	E. Grabowski.
92 51 38.8	3 13 15.1	1 13 23.3	736.622	0.455174	Palmer.
11 34 23.4	5 34 28.0	6 14 36.0	1099.965	0.339085	Hessen.
32 41 20.7	6 19 18.7	6 19 30.5	832.9439	0.419594	Milham.
77 26 56.4	12 1 45.3	16 59 20.2	818.8400	0.4245384	Berberich.
229 44 19.0	14 26 8.9	10 26 41.9	763.4835	0.4448046	Berberich.
250 46 42.0	12 52 29.5	10 20 2.3	651.8517	0.490572	Paetsch.
136 4 46.1	12 36 10.3	14 8 5.4	685.852	0.475851	Riem.
29 49 51.8	10 22 44.4	12 19 50.0	832.007	0.419920	Bauschinger.
205 45 2.7	4 35 26.1	5 53 49.8	791.305	0.434442	Bauschinger.
156 40 56.9	1 22 20.6	11 54 22.6	624.571	0.502950	Bauschinger.
105 51 10.2	3 10 27.9	4 45 25.7	727.9361	0.4586089	Berberich.
36 34 17.3	13 29 59.6	12 42 56.7	960.910	0.378216	Berberich.
103 51 32.4	10 51 46.9	14 39 57.7	742.582	0.452841	Berberich.
305 33 19.5	4 37 48.6	13 45 49.7	622.160	0.504070	Bauschinger.
291 49 53.9	19 16 2.2	4 45 26.8	576.785	0.525995	Berberich.
323 56 20.1	6 24 26.3	6 20 17.4	704.103	0.468247	Berberich.
22 26 55.3	0 29 45.3	11 47 14.8	637.306	0.497106	Bauschinger.
335 11 17.5	11 45 15.4	8 58 51.8	626.309	0.502146	Lamson.
173 15 58.1	7 13 35.5	5 29 58.5	952.3542	0.380805	Kreutz.
84 53 56.1	14 51 29.5	13 9 45.7	722.6458	0.4607207	Strömgren.
127 1 58.8	15 51 45.3	5 37 39.1	875.7359	0.405089	Zappa.
333 35 9.8	27 46 32.2	14 48 41.2	690.051	0.474084	Berberich.
162 55 11.4	7 32 22.0	8 27 23.1	916.700	0.391853	Berberich.
35 53 33	18 38 42	22 22 4	848.6730	0.414177	Strömgren.
286 41 44.8	10 56 39.3	4 16 2.1	823.2035	0.4229996	Strömgren.
10 44 48.5	5 18 41.0	10 57 18.2	944.572	0.383182	G. Abetti.
234 47 14.1	13 9 38.6	4 58 6.5	677.025	0.4796008	de Mello e Simas.
136 31 40.9	8 39 23.8	12 42 44.4	788.048	0.435636	Bauschinger.
237 12 44.8	21 4 48.4	2 25 49.4	826.814	0.421732	Bauschinger.

Nr. und Name	Opposition 1910		$m_a$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
481 Emita . . .	—	—	11.6	8.2	1907 März 9.0	1910.0	104° 59' 56.4	345° 50' 34.8
482 Petrina . . .	Dez. 5	12.5	12.0	8.1	1902 Mai 7.5	1910.0	288 7 6.3	85 31 11.3
483 Seppina . . .	Juli 4	12.3	12.5	7.9	1906 Dez. 19.0	1910.0	127 58 51.7	141 39 57.0
484 Pittsburghia	Febr. 16	13.3	12.9	9.7	1906 April 3.0	1910.0	235 12 27.0	185 49 40.1
485 Genua . . .	—	—	11.4	8.0	1904 Okt. 3.5	1910.0	294 18 38.9	268 33 3.0
486 Cremona . .	Sept. 23	14.1	13.5	11.0	1902 Mai 28.5	1910.0	16 33 54.5	125 7 57.5
487 Venetia . . .	Mai 16	12.3	11.8	8.6	1907 Okt. 15.5	1910.0	348 41 50.6	278 27 28.3
488 Kreusa . . .	Okt. 22	11.9	11.5	7.3	1906 Jan. 0.5	1910.0	302 39 32.2	62 35 51.0
489 Comacina . .	—	—	12.5	8.3	1902 Sept. 2.5	1910.0	139 29 9.0	28 29 52.4
490 Veritas . . .	Jan. 13	12.4	12.3	8.1	1902 Sept. 3.5	1910.0	348 28 27.2	187 46 6.0
491 Carina . . .	Jan. 10	12.5	12.5	8.3	1903 Jan. 0.0	1910.0	340 41 39.1	225 2 45.0
492 Gismonda . .	Jan. 27	13.8	13.1	9.0	1902 Sept. 4.0	1910.0	12 56 28.0	287 27 2.1
493 Griseldis . .	—	—	14.5	10.4	1902 Sept. 7.5	1910.0	329 46 50.6	38 26 36.2
494 Virtus . . .	März 19	12.2	12.3	8.4	1902 Nov. 27.5	1910.0	144 15 51.5	209 9 31.0
495 Eulalia . . .	Dez. 19	12.0	12.5	9.7	1902 Nov. 21.5	1910.0	20 56 40.0	200 0 35.6
496 Gryphia . . .	März 1	12.9	13.0	11.0	1902 Nov. 21.5	1910.0	331 47 44.7	240 34 28.4
497 Jva . . . . .	April 19	14.7	13.5	9.9	1902 Nov. 4.5	1910.0	20 53 34.8	358 54 17.3
498 Tokio . . . .	Juli 28	10.0	11.2	8.1	1904 März 14.0	1910.0	167 52 1.5	237 34 18.5
499 Venusia . . .	—	—	13.0	7.7	1903 Jan. 31.5	1910.0	9 23 52.0	195 51 25.8
500 Selinur . . . .	Nov. 7	11.4	12.0	8.9	1903 März 4.5	1910.0	99 39 4.6	71 48 18.3
501 Urhixidur . .	April 2	13.6	13.0	8.8	1903 Jan. 19.5	1910.0	119 32 12.0	346 41 52.2
502 Sigure . . . .	—	—	13.8	11.2	1907 Febr. 17.0	1910.0	2 59 40.1	16 59 22.3
503 Evelyn . . . .	Sept. 18	12.6	12.3	9.0	1903 April 25.5	1910.0	33 37 22.7	38 7 0.1
504 Cora . . . . .	April 14	13.6	12.7	9.3	1907 Sept. 25.0	1910.0	18 9 10.2	244 36 55.0
505 Cava . . . . .	Mai 24	13.2	12.0	8.7	1907 Okt. 15.0	1910.0	321 50 49.2	333 59 2.7
506 Marion . . . .	Juli 9	13.2	12.5	8.5	1903 Febr. 20.5	1910.0	46 27 14.1	144 59 20.9
507 Laodica . . .	Mai 11	12.9	12.5	8.3	1903 Febr. 24.5	1910.0	104 44 50.4	94 33 57.4
508 Princetonia .	Aug. 20	12.3	12.3	8.1	1903 April 25.5	1910.0	4 34 0.9	161 33 54.7
509 Iolanda . . . .	Sept. 20	11.0	11.5	7.5	1906 Jan. 28.5	1910.0	39 8 50.3	153 10 33.8
510 Mabella . . . .	Jan. 2	13.9	13.0	9.8	1903 Juli 18.5	1910.0	338 1 0.1	87 40 58.5
511 Davida . . . .	Aug. 25	9.7	9.6	5.4	1903 Aug. 15.5	1910.0	182 32 43.8	329 19 55.8
512 Taurinensis .	Dez. 20	12.3	12.5	10.5	1903 Juli 16.5	1910.0	310 15 34.2	246 49 13.6
513 Centesima . . .	—	—	12.3	8.4	1903 Okt. 24.5	1910.0	327 27 39.5	208 58 33.7
514 Armida . . . .	—	—	12.4	8.4	1906 Febr. 22.0	1910.0	136 47 7.0	106 3 52.0
515 Athalia . . . .	—	—	14.0	9.9	1903 Sept. 20.5	1910.0	317 8 30.0	288 44 14.8
516 Amherstia . . .	Jan. 21	11.0	11.0	7.7	1908 Nov. 18.5	1910.0	189 0 21.8	254 6 6.4
517 Edith . . . . .	—	—	13.1	9.0	1903 Okt. 25.5	1910.0	339 41 33.4	125 52 36.5
518 Halawe . . . .	April 20	13.6	13.4	10.5	1903 Okt. 20.5	1910.0	47 47 29.0	118 29 22.7
519 Sylvania . . . .	Febr. 28	12.9	12.0	8.5	1903 Okt. 26.5	1910.0	37 10 6.6	298 37 26.2
520 Franziska . . .	Febr. 4	13.8	13.9	10.0	1903 Okt. 27.5	1910.0	355 18 52.9	16 18 2.0

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
67° 5' 43.9	9° 52' 33.4	9° 10' 37.1	782.8688	0.437545	Osten.
180 20 8.8	14 27 21.8	5 18 49.8	683.838	0.476703	P. V. Neugebauer.
175 32 15.8	18 37 40.3	2 59 43.4	557.6847	0.535745	Paetsch.
127 26 45.0	12 29 12.2	3 23 42.7	813.1477	0.4265580	Berberich.
194 22 25.9	13 48 10.4	10 57 57.6	777.060	0.439700	P. V. Neugebauer.
94 11 26.5	11 6 47.3	9 20 22.6	977.329	0.373311	Berberich.
115 5 36.2	10 14 21.3	4 56 30.7	813.33738	0.4264906	Bianchi.
86 39 37.2	11 36 16.3	9 21 6.0	633.233	0.498962	Morgan.
167 37 5.1	13 24 57.5	3 47 16.7	634.671	0.498305	Berberich.
179 15 21.1	9 13 7.2	5 7 59.7	627.551	0.501572	Münch.
176 1 20.6	18 56 44.4	3 42 55.3	620.5529	0.504821	Lassen.
47 13 18.7	1 39 33.0	10 34 19.0	649.105	0.491795	Hessen.
358 41 15.8	15 25 42.0	9 17 51.5	641.417	0.495244	Berberich.
39 4 55.2	7 8 37.6	3 37 33.6	688.142	0.474886	G. Abetti.
186 27 59.0	2 14 13.1	8 28 23.6	910.120	0.393938	P. V. Neugebauer.
206 45 14.2	3 37 6.6	4 15 29.6	1103.453	0.338168	Berberich.
7 1 39.4	4 53 46.0	17 25 44.2	740.971	0.453470	Berberich.
98 1 47.9	9 33 4.0	12 47 51.8	823.2586	0.422980	P. V. Neugebauer.
256 45 22.3	2 0 25.2	13 34 32.1	457.624	0.592999	Berberich.
290 29 11.7	9 47 15.7	8 8 23.0	840.020	0.417144	Berberich.
358 4 33.5	20 49 30.8	8 14 41.4	630.916	0.500024	P. V. Neugebauer.
132 41 16.8	25 3 43.4	10 17 7.7	965.064	0.376967	Osten.
69 31 24.1	5 3 33.4	10 12 32.5	788.475	0.435479	Liebmamn.
105 17 44.1	12 56 51.7	12 28 13.5	790.4529	0.434754	Osten.
91 8 46.2	9 47 29.5	14 6 50.2	805.8993	0.429151	Osten.
313 36 55.5	16 53 18.3	8 19 48.2	669.497	0.482839	Berberich.
295 14 4.1	9 33 26.6	5 47 47.4	632.696	0.499208	Bauschinger.
45 20 39.5	13 24 2.0	0 40 50.2	631.586	0.499716	Berberich.
218 26 48.9	15 22 46.1	5 34 11.6	660.724	0.486658	P. V. Neugebauer.
203 33 10.2	9 30 37.0	11 4 49.0	838.933	0.417520	Berberich.
108 50 30.7	15 50 35.0	11 8 23.3	630.6576	0.500142	Zinner.
107 9 26.7	8 40 0.2	14 23 28.7	1107.602	0.337032	Berberich.
185 49 9.3	9 28 24.1	5 0 12.4	677.958	0.479204	P. V. Neugebauer.
270 11 57.9	3 52 8.7	2 34 14.7	667.6424	0.4836418	Berberich.
122 6 47.5	2 0 50.7	10 3 36.2	645.556	0.493382	Berberich.
330 26 47.1	13 3 0.9	16 1 27.1	810.64382	0.427451	Fontana.
277 45 24.7	3 9 58.2	10 6 5.7	641.8172	0.4950634	A. Kohlschütter.
203 57 40.2	6 37 46.0	12 42 29.2	885.773	0.401789	Berberich.
45 23 10.7	11 1 48.4	10 53 8.0	761.032	0.445736	Berberich.
35 5 35.2	11 0 18.8	6 0 18.2	680.357	0.478180	Götz.

Nr. und Name	Opposition 1910	Gr.	$m_o$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
521 Brixia . . .	April 28	13.4	12.1	8.7	1909 Febr. 26.5	1910.0	73° 29' 45.1	312° 31' 31.6
522 Helga . . .	—	—	12.6	7.7	1904 Jan. 10.5	1910.0	105 10 19.0	243 3 50.8
523 Ada . . .	April 21	13.2	12.8	9.0	1904 Jan. 27.5	1910.0	27 56 2.5	185 12 52.8
524 Fidelio . .	Aug. 4	12.3	12.4	9.2	1904 März 18.5	1910.0	105 51 23.0	76 39 52.3
525 Adelaide . .	Febr. 18	13.4	13.8	9.3	1904 März 18.5	1910.0	69 22 2.8	281 27 50.8
526 Jena . . .	Mai 16	13.1	13.1	9.0	1909 Febr. 6.0	1910.0	359 19 18.1	357 35 43.8
527 Euryanthe . .	Nov. 13	12.4	12.5	9.2	1904 März 20.5	1910.0	258 56 2.1	199 40 42.4
528 Rezia . . .	März 17	12.5	12.4	7.8	1904 März 24.5	1910.0	156 3 49.2	337 43 36.1
529 Preziosa . .	Mai 21	13.5	13.0	9.1	1904 März 24.5	1910.0	138 10 8.7	336 38 38.9
530 Turandot . .	Mai 4	12.4	12.4	8.2	1904 April 18.5	1910.0	268 13 53.6	188 19 26.3
531 Zerlina . . .	Okt. 12	14.5	14.0	10.5	1904 April 12.5	1910.0	329 16 0.7	53 51 42.6
532 Herculina . .	Sept. 10	10.6	9.8	6.3	1904 Mai 5.5	1910.0	18 56 34.1	72 59 41.2
533 Sara . . .	Juli 16	13.3	13.5	9.6	1904 April 19.5	1910.0	335 57 42.3	58 34 53.1
534 Nassovia . .	Juli 16	13.3	12.8	9.2	1904 Mai 19.5	1910.0	128 10 32.6	344 51 41.9
535 Montague . .	Dez. 9	11.8	11.8	8.8	1904 Juni 3.5	1910.0	86 4 14.8	58 53 6.4
536 Merapi . . .	April 24	12.1	11.7	7.0	1904 Mai 12.0	1910.0	254 58 24.4	292 45 11.7
537 Pauly . . .	Okt. 10	12.5	13.1	9.1	1904 Juli 15.5	1910.0	350 27 47.1	181 9 24.9
538 Friederike . .	Sept. 21	12.2	13.2	9.0	1904 Juli 19.5	1910.0	318 36 36.4	222 52 26.0
539 Pamina . . .	—	—	13.1	9.7	1904 Aug. 5.5	1910.0	325 31 4.8	94 0 8.3
540 Rosamunde . .	Mai 1	11.7	12.1	10.0	1904 Aug. 6.5	1910.0	132 29 40.5	334 20 33.8
541 Deborah . . .	Dez. 15	13.2	12.9	9.4	1904 Aug. 4.5	1910.0	60 42 30.4	349 26 1.9
542 Susanna . . .	Dez. 44	12.9	12.8	9.0	1904 Aug. 16.5	1910.0	345 9 28.2	212 57 44.6
543 Charlotte . . .	Dez. 29	12.1	12.7	8.7	1904 Nov. 11.5	1910.0	348 26 5.2	105 5 43.9
544 Jetta . . .	—	—	12.6	9.5	1904 Nov. 6.5	1910.0	89 4 27.2	338 21 35.6
545 Messalina . .	Nov. 5	12.3	12.2	8.0	1907 Mai 8.0	1910.0	222 1 28.4	326 21 17.4
546 Herodias . .	Jan. 26	11.5	12.1	9.0	1904 Okt. 13.5	1910.0	259 39 22.4	107 27 20.0
547 Praxedis . . .	Jan. 2	12.1	12.7	9.2	1904 Nov. 17.5	1910.0	11 9 44.8	193 3 13.7
548 Kressida . .	Juni 19	14.0	13.2	10.8	1904 Okt. 14.5	1910.0	336 36 46.1	318 28 31.0
549 Jessonda . . .	März 20	13.2	13.5	10.2	1904 Dez. 27.5	1910.0	358 10 57.7	153 34 32.7
550 Senta . . .	Febr. 2	13.0	11.9	8.8	1906 Febr. 22.0	1910.0	202 36 44.3	42 55 16.4
551 Ortrud . . .	—	—	12.8	9.0	1905 Jan. 15.5	1910.0	12 40 32.4	62 4 4.5
552 Sigelinde . .	Dez. 33	12.4	12.2	8.0	1905 Jan. 9.5	1910.0	206 12 40.7	329 48 30.1
553 Kundry . . .	Aug. 19	13.8	13.7	11.5	1905 Jan. 9.5	1910.0	16 23 30.6	357 50 30.4
554 Peraga . . .	Juni 21	11.4	10.8	8.2	1905 Jan. 0.0	1910.0	41 20 15.3	124 24 50.3
555 Norma . . .	—	—	13.9	9.7	1905 Jan. 14.5	1910.0	2 59 42.0	350 52 47.9
556 Phyllis . . .	Juni 14	13.0	12.5	9.7	1905 Jan. 16.5	1910.0	15 36 17.7	175 3 52.5
557 Violetta . . .	Juli 8	14.2	13.7	11.0	1905 Jan. 14.5	1910.0	1 42 52.4	190 0 23.4
558 Carmen . . .	Febr. 15	12.1	12.2	8.5	1905 Febr. 9.5	1910.0	41 17 34.4	314 40 14.0
559 Nanon . . .	Juni 6	12.0	12.3	9.0	1905 April 20.5	1910.0	321 9 51.5	125 30 48.5
560 Delila . . .	Mai 2	13.2	13.4	10.0	1905 März 13.5	1910.0	22 18 46.4	33 12 22.8

$\Omega$	$i$	$\gamma$	$\mu$	Log. $a$	Autorität
90° 27' 43.3	10° 29' 22.5	16° 16' 9.4	780.20191	0.4385331	Millosevich.
119 17 8.3	4 28 18.3	4 32 44.0	513.919	0.559408	Lassen.
262 13 56.0	4 18 47.0	10 8 17.0	694.113	0.472384	Berberich.
327 6 38.6	8 11 46.3	6 24 2.8	825.223	0.422290	Berberich.
125 54 33.5	3 15 5.6	21 46 42.6	581.342	0.523718	P. V. Neugebauer.
137 54 21.8	2 8 33.4	8 5 57.9	644.22959	0.4939773	Knopf.
120 46 3.7	9 39 56.4	8 38 46.0	787.582	0.435808	P. V. Neugebauer.
51 49 29.5	12 42 51.3	1 8 5.7	566.409	0.531251	Berberich.
65 53 19.6	11 3 40.1	5 45 4.2	676.264	0.479926	P. V. Neugebauer.
130 9 13.2	8 26 1.0	10 27 17.8	611.920	0.508874	P. V. Neugebauer.
197 49 0.0	34 33 0.7	10 54 44.6	756.474	0.447475	Berberich.
108 19 46.1	16 22 36.6	10 6 31.8	768.8133	0.4427907	Götz.
180 44 25.0	6 23 16.4	3 25 57.8	685.108	0.476166	P. V. Neugebauer.
93 39 56.2	3 19 29.4	5 47 47.7	725.560	0.459556	Bauschinger.
84 45 17.8	6 48 8.9	1 51 11.1	862.724	0.409423	Dugan.
60 56 14.5	19 24 8.1	5 38 12.5	541.600	0.544219	Strömgren.
121 24 30.4	9 46 21.3	13 3 35.4	659.540	0.487179	P. V. Neugebauer.
142 24 22.1	6 36 23.2	9 22 44.9	630.980	0.499994	P. V. Neugebauer.
275 38 29.8	6 47 21.6	12 20 17.6	782.672	0.437618	P. V. Neugebauer.
202 1 49.9	5 33 15.2	5 3 8.0	1074.237	0.345938	P. V. Neugebauer.
268 30 54.8	5 57 29.6	2 33 35.6	751.048	0.449560	P. V. Neugebauer.
153 36 20.7	12 2 13.0	8 13 33.7	715.690	0.463521	Berberich.
296 40 42.9	8 26 57.2	9 2 0.8	662.328	0.485955	Berberich.
298 53 17.1	8 19 4.4	8 37 38.8	849.653	0.413843	Berberich.
334 27 2.5	11 11 0.7	10 35 10.4	626.1741	0.5022077	Berberich.
22 0 59.4	14 54 14.2	6 30 4.0	847.004	0.414747	Berberich.
193 29 59.2	16 56 38.9	13 46 3.9	769.074	0.442693	Berberich.
108 6 36.2	3 52 2.4	10 43 4.5	1029.495	0.358255	Berberich.
292 25 37.8	3 55 44.4	14 55 43.6	805.659	0.429237	Berberich.
271 4 28.4	10 6 47.1	12 38 44.0	850.6748	0.4134954	Berberich.
9 2 55.5	0 26 16.7	7 2 31.5	694.369	0.472277	Berberich.
268 49 48.1	7 26 1.8	4 3 57.6	631.413	0.499796	Berberich.
71 58 47.4	5 17 7.4	6 21 40.1	1073.630	0.346101	Berberich.
295 48 6.5	2 56 14.3	8 54 53.0	969.164	0.375740	A betti.
130 57 4.1	2 38 44.7	8 50 39.9	624.247	0.503100	Berberich.
285 55 15.3	5 14 18.5	5 46 43.4	915.845	0.392123	Berberich.
293 25 59.7	2 31 9.7	5 35 58.3	926.968	0.388628	Berberich.
144 19 47.1	8 21 1.0	2 14 1.0	715.481	0.463606	Berberich.
112 27 18.8	9 18 13.9	3 45 2.0	794.666	0.433215	Berberich.
103 45 8.8	8 13 39.4	7 5 19.7	778.172	0.439287	Berberich.

Nr. und Name	Opposition 1910	Gr.	$m_o$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
561 Ingwelde . .	Jan. 19	13.1	13.9	9.7	1905 März 30.5	1910.0	67° 22' 32.6	302° 12' 58.7
562 Salome . . .	März 31	13.3	12.9	9.0	1905 April 8.5	1910.0	241 39 15.7	257 21 3.7
563 Suleika . . .	Mai 31	12.3	11.1	7.8	1905 Mai 30.5	1910.0	153 53 28.2	333 32 22.6
564 Dudu . . . .	Sept. 3	12.5	13.7	10.3	1905 Mai 9.5	1910.0	329 11 6.8	211 29 56.6
565 Marbachia .	Sept. 27	13.5	12.9	10.2	1905 Mai 9.5	1910.0	69 45 0.0	290 15 39.7
566 Stereoskopia	März 28	12.0	11.5	7.0	1905 Juni 1.5	1910.0	232 36 44.7	303 22 29.6
567 Eleutheria .	April 10	12.6	13.1	9.0	1905 Juni 3.5	1910.0	34 48 12.4	149 57 2.9
568 Cheruskia . .	Aug. 30	12.0	12.3	8.6	1905 Aug. 21.5	1910.0	291 43 54.1	170 31 48.8
569 Misa . . . .	Dez. 11	11.2	12.4	9.2	1905 Juli 27.5	1910.0	271 43 15.6	137 54 52.4
570 [1905 QX] .	Mai 15	13.1	12.7	8.1	1905 Aug. 3.5	1910.0	323 12 44.3	139 5 21.5
571 [1905 QZ] .	—	—	13.8	11.2	1905 Okt. 2.5	1910.0	345 47 59.8	23 33 36.0
572 [1905 RB] .	Jan. 11	12.6	12.9	10.5	1905 Sept. 19.5	1910.0	339 5 16.1	198 29 16.4
573 [1905 RC] .	Aug. 25	12.6	13.2	9.2	1905 Sept. 19.5	1910.0	346 7 29.5	28 47 17.0
574 [1905 RD] .	Febr. 15	14.2	14.3	12.0	1905 Okt. 29.5	1910.0	339 36 10.0	67 34 41.2
575 [1905 RE] .	Dez. 42	14.0	13.5	10.5	1905 Okt. 4.5	1910.0	28 6 33.6	337 56 22.3
576 Emanuela . .	Juli 27	11.6	12.7	8.8	1905 Sept. 22.5	1910.0	11 14 22.6	31 22 7.0
577 [1905 RH] .	Aug. 19	12.3	13.0	8.9	1905 Okt. 30.5	1910.0	71 29 57.1	321 2 10.2
578 [1905 RZ] .	Dez. 14	12.9	12.0	8.6	1905 Nov. 1.5	1910.0	100 27 0.3	257 57 17.2
579 [1905 SD] .	Nov. 7	11.5	11.5	7.6	1905 Nov. 23.5	1910.0	97 39 16.0	231 12 32.5
580 [1905 SE] .	Okt. 2	13.3	13.7	9.6	1906 Febr. 12.5	1910.0	31 51 48.2	315 13 19.9
581 Tauntonia . .	Nov. 4	13.6	13.7	9.4	1905 Dez. 24.5	1910.0	28 33 46.5	320 23 29.0
582 [1906 SO] .	—	—	12.6	9.5	1906 Jan. 23.5	1910.0	19 35 13.9	308 33 14.2
583 Klotilde . . .	Sept. 25	13.5	13.1	8.9	1906 Jan. 0.0	1910.0	295 18 26.6	239 22 21.6
584 [1906 SY] .	Febr. 14	12.4	11.5	8.9	1906 Jan. 15.5	1910.0	84 51 19.1	83 0 39.3
585 [1906 TA] .	April 10	12.2	12.7	10.0	1906 Febr. 16.5	1910.0	7 29 29.6	326 1 33.1
586 [1906 TC] .	—	—	12.9	9.0	1906 Febr. 21.5	1910.0	49 39 30.5	218 56 14.0
587 [1906 TF] .	April 25	14.1	14.3	11.8	1906 März 18.5	1910.0	3 2 13.5	185 45 37.2
588 Achilles . . .	Juni 10	15.1	14.2	7.7	1906 Febr. 22.5	1910.0	43 45 37.0	129 24 4.8
589 [1906 TM] .	—	—	12.7	8.6	1906 März 23.5	1910.0	141 5 33.1	210 53 18.5
590 [1906 TO] .	—	—	13.1	9.2	1906 April 2.5	1910.0	96 46 55.1	329 50 3.8
591 [1906 TP] .	Jan. 8	13.3	13.5	10.3	1906 März 18.5	1910.0	346 2 9.3	215 31 37.9
592 [1906 TS] .	—	—	12.8	8.9	1906 März 23.5	1910.0	103 51 54.2	248 14 0.9
593 [1906 TT] .	—	—	12.4	9.1	1906 März 20.5	1910.0	49 9 33.4	27 49 39.4
594 [1906 TW] .	Febr. 1	14.6	15.0	11.8	1906 März 30.5	1910.0	336 10 41.3	76 0 16.4
595 [1906 TZ] .	—	—	12.1	7.8	1906 Mai 18.5	1910.0	291 37 29.7	264 26 33.1
596 [1906 UA] .	—	—	12.0	8.2	1906 Febr. 22.5	1910.0	296 49 40.2	172 26 41.9
597 [1906 UB] .	März 25	13.3	12.8	9.5	1906 April 16.5	1910.0	287 19 14.6	273 58 52.1
598 [1906 UC] .	Febr. 16	12.5	12.0	8.5	1906 April 16.5	1910.0	161 51 51.1	285 28 7.5
599 [1906 UJ] .	März 28	13.5	12.4	8.8	1906 April 28.5	1910.0	278 5 44.3	290 3 48.7
600 [1906 UM] .	Mai 7	12.8	13.0	9.8	1906 Juni 22.5	1910.0	12 41 3.5	112 42 34.8

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
160° 33' 57.6	I 30° 49.2	8° 42' 31.0	624.357	0.503049	Berberich.
71 41 19.7	II 8 31.6	5 25 14.8	677.324	0.479473	Berberich.
84 55 34.2	IO 20 46.8	13 56 47.2	792.084	0.434157	Berberich.
71 19 29.8	18 11 23.1	15 49 3.5	778.746	0.439074	Berberich.
225 54 9.2	IO 53 58.1	7 18 40.0	931.272	0.387286	Berberich.
81 31 55.4	5 I 28.0	6 55 16.7	577.344	0.525714	Berberich.
59 IO 18.8	8 59 6.6	4 55 30.7	641.903	0.495025	Berberich.
250 II 39.3	18 21 5.4	9 40 10.3	725.727	0.459489	Berberich.
303 23 10.5	I 17 41.6	10 39 40.4	819.260	0.424390	Hackenberg.
229 45 19.8	I 41 9.4	6 28 5.2	559.597	0.534754	Berberich.
3 24 2.5	5 7 16.2	13 48 56.0	969.479	0.375645	Berberich.
194 51 53.3	9 23 27.6	10 0 31.0	1008.005	0.364362	Berberich.
343 54 36.1	9 52 9.7	6 22 6.9	678.763	0.478859	Berberich.
338 20 14.5	6 IO 51.8	11 46 23.9	1048.529	0.352951	Berberich.
349 39 6.8	14 54 14.6	6 58 24.8	866.098	0.408293	Berberich
300 12 40.5	IO 12 1.3	10 59 27.9	672.075	0.481725	Berberich.
331 16 20.9	5 16 23.6	8 17 18.0	644.417	0.493893	P. V. Neugebauer.
30 35 21.5	6 II 45.6	11 9 8.7	775.472	0.440294	Kreutz.
83 21 40.4	II 2 4.4	4 35 58.0	677.103	0.479568	P. V. Neugebauer.
99 40 3.9	3 40 33.0	7 38 52.2	618.613	0.505726	P. V. Neugebauer.
103 8 5.6	21 55 39.1	2 30 51.4	615.963	0.506968	Morgan.
155 39 3.4	29 57 18.6	13 4 0.2	837.303	0.418083	Berberich.
261 26 58.1	8 17 15.3	8 31 10.8	629.074	0.500870	Osten.
282 44 25.6	10 50 13.4	14 24 37.0	962.562	0.377718	P. V. Neugebauer.
180 14 3.6	7 30 54.9	7 29 19.0	937.316	0.385414	P. V. Neugebauer.
231 I 22.4	I 35 36.2	4 27 6.5	674.790	0.480558	P. V. Neugebauer.
324 13 40.9	25 I 30.4	9 29 40.6	995.965	0.367842	Berberich.
315 34 34.0	IO 16 37.5	8 10 14.6	294.703	0.720415	Bidschof.
178 44 4.8	IO 47 14.6	2 54 51.2	640.839	0.495506	P. V. Neugebauer.
106 47 6.7	II 9 39.0	3 53 41.4	684.296	0.476508	Berberich.
334 51 31.5	12 33 50.6	12 I 41.4	807.881	0.428440	Berberich.
169 15 27.2	IO 6 31.5	7 I 12.3	676.021	0.480030	P. V. Neugebauer.
76 18 2.1	17 0 16.1	12 17 10.9	799.698	0.431387	Berberich.
155 23 47.7	32 45 44.5	20 27 11.7	833.298	0.419471	Berberich.
25 0 50.1	18 21 57.6	4 17 47.8	620.181	0.504992	P. V. Neugebauer.
71 7 48.6	14 38 14.8	9 26 11.2	706.587	0.467228	Berberich.
36 16 35.2	10 17 14.7	10 28 40.2	803.648	0.429960	Berberich.
92 29 18.9	12 10 13.6	14 5 50.8	770.503	0.442154	Berberich.
45 33 2.7	16 33 46.0	17 15 7.2	768.430	0.442925	Frederickson.
139 38 9.7	10 11 18.4	3 8 12.2	817.198	0.425120	Hammond und Frederickson.

Nr. und Name	Opposition 1910	Gr.	$m_*$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
601 [1906 UN]	Febr. 27	13.1	12.6	8.5	1906 Juli 12.0	1910.0	328° 53' 13.5	148° 32' 23.8
602 Marianna .	—	—	12.1	8.0	1907 Jan. 0.0	1910.0	169 19 30.4	41 36 46.0
603 [1906 TJ]	Febr. 3	13.0	13.9	10.9	1907 Jan. 0.0	1910.0	82 16 11.2	155 30 12.8
604 [1906 TK]	Dez. 22	11.4	12.4	8.2	1906 Febr. 16.5	1910.0	85 46 42.3	22 22 2.3
605 [1906 UU]	Juli 16	12.6	12.9	9.0	1906 Aug. 28.5	1910.0	38 19 40.6	13 42 45.9
606 [1906 VB]	Aug. 29	11.6	12.9	9.8	1906 Sept. 18.5	1910.0	354 2 14.3	55 33 48.3
607 [1906 VC]	Juli 20	12.5	12.6	9.0	1906 Sept. 18.5	1910.0	149 52 0.0	285 42 55.8
608 [1906 VL]	Mai 27	14.4	14.1	10.2	1906 Sept. 18.5	1910.0	2 17 9.8	69 12 50.4
609 [1906 VF]	Mai 31	12.7	12.8	8.9	1906 Sept. 24.5	1910.0	104 8 36.7	94 43 37.9
610 [1906 VK]	Mai 10	16.4	15.6	11.6	1906 Sept. 26.5	1910.0	356 4 8.3	352 44 47.4
611 [1906 VL]	Juli 7	14.3	12.3	9.8	1906 Nov. 2.5	1910.0	311 33 44.1	254 17 51.7
612 [1906 VN]	März 30	15.3	14.6	10.4	1906 Okt. 8.5	1910.0	24 11 21.4	296 32 0.0
613 [1906 VP]	Juli 23	13.2	13.0	9.3	1906 Okt. 14.5	1910.0	334 44 46.7	60 58 25.9
614 [1906 VQ]	Aug. 29	13.5	13.7	10.2	1906 Okt. 11.5	1910.0	333 21 2.4	201 42 34.6
615 [1906 VR]	Sept. 29	12.7	12.6	9.4	1906 Okt. 11.5	1910.0	121 12 10.4	243 35 21.6
616 [1906 VT]	Okt. 4	12.7	12.7	9.7	1906 Okt. 8.5	1910.0	284 39 35.2	107 53 55.7
617 Patroclus .	Febr. 12	13.2	12.6	5.9	1907 Dez. 14.0	1910.0	73 1 24.7	302 25 48.2
618 [1906 VZ]	Mai 24	12.5	12.4	8.2	1906 Okt. 25.5	1910.0	33 7 17.6	235 5 21.8
619 [1906 WC]	Nov. 13	11.8	12.1	9.2	1906 Okt. 22.5	1910.0	35 14 23.9	174 46 28.1
620 Drakonia .	Dez. 3	13.4	13.6	10.6	1906 Nov. 6.5	1910.0	58 40 35.1	332 29 0.4
621 [1906 WJ]	Juli 27	14.6	13.9	9.9	1906 Nov. 14.5	1910.0	332 9 17.0	29 15 48.6
622 [1906 WP]	Dez. 43	12.1	12.8	10.1	1906 Dez. 18.5	1910.0	19 40 58.6	253 50 19.2
623 [1907 XJ]	—	—	12.8	10.0	1907 Febr. 5.5	1910.0	51 17 38.0	123 13 4.8
624 Hektor . . .	Mai 19	13.1	13.2	6.4	1907 Febr. 10.0	1910.0	335 47 12.3	183 51 50.9
625 [1907 XN]	—	—	12.1	8.9	1907 Febr. 21.5	1910.0	180 11 33.7	201 26 39.0
626 [1907 XO]	—	—	11.4	8.4	1907 Febr. 21.5	1910.0	97 38 46.1	42 16 40.4
627 [1907 XS]	Nov. 23	13.2	13.1	9.3	1907 März 7.5	1910.0	211 24 57.4	152 11 26.3
628 [1907 XT]	—	—	12.2	9.2	1907 März 12.5	1910.0	185 26 16.9	213 34 40.0
629 [1907 XU]	Sept. 20	14.3	13.8	9.7	1907 März 7.5	1910.0	21 17 50.2	31 40 42.7
630 [1907 XX]	Dez. 36	13.0	13.5	10.3	1907 März 12.5	1910.0	5 28 27.0	42 42 27.6
631 [1907 YJ]	—	—	12.3	8.8	1907 April 11.5	1910.0	66 40 35.6	276 20 22.3
632 [1907 YX]	—	—	14.5	11.3	1907 April 12.5	1910.0	339 21 29.5	248 15 59.6
633 [1907 ZM]	—	—	12.9	9.1	1907 Juni 5.5	1910.0	285 16 53.7	181 45 9.7
634 [1907 ZN]	—	—	13.1	9.1	1907 Juni 5.5	1910.0	273 47 51.4	216 6 7.6
635 [1907 ZS]	—	—	12.6	8.5	1907 Juni 12.5	1910.0	227 8 54.1	214 50 24.0
636 [1907 XP]	Dez. 5	12.5	12.4	8.7	1907 März 2.5	1907.0	171 51 57.8	294 7 53.9
637 [1907 YE]	Okt. 26	14.4	14.0	9.8	1907 April 9.5	1908.0	8 19 36.0	172 25 44.1
638 [1907 ZQ]	—	—	13.5	10.1	1907 Mai 20.5	1908.0	3 29 54.8	125 45 12.0
639 [1907 ZT]	Febr. 1	12.6	12.1	8.2	1907 Juli 31.5	1907.0	338 0 32.2	56 25 58.3
640 [1907 ZW]	Jan. 17	13.3	13.0	8.8	1907 Okt. 22.5	1907.0	81 31 30.9	24 47 52.8

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
170° 30' 11.6	16° 2' 55.2	6° 23' 41".5	640.8147	0.4955162	Svoboda.
333 10 21.1	15 54 49.5	16 16 0.1	650.9343	0.490980	Varnum.
343 40 3.7	8 7 47.4	8 28 45.5	869.24105	0.407243	Zimmer.
12 28 55.2	4 40 7.2	14 12 14.1	627.395	0.501643	Barton.
343 21 36.0	19 40 12.9	7 45 29.6	679.007	0.478756	R. Coniel.
319 2 3.6	8 39 46.5	12 29 1.0	853.184	0.412642	P. V. Neugebauer.
286 5 16.5	10 4 37.8	4 32 56.8	737.698	0.454752	P. V. Neugebauer.
295 1 36.8	9 23 5.6	6 42 29.1	675.233	0.480369	P. V. Neugebauer.
166 26 48.0	4 9 12.5	1 54 54.8	654.955	0.489196	P. V. Neugebauer.
21 8 56.5	12 49 15.5	14 21 25.7	658.573	0.487602	P. V. Neugebauer.
190 21 36.3	13 18 9.4	7 48 13.9	686.547	0.475558	Hammond.
25 8 49.0	20 34 1.4	15 33 35.2	633.186	0.498984	R. Coniel.
355 47 15.7	7 44 34.2	3 9 6.9	712.025	0.465008	P. V. Neugebauer.
217 34 5.6	7 12 58.7	5 27 29.8	801.678	0.430672	P. V. Neugebauer.
14 0 14.0	2 46 28.3	6 12 12.3	831.720	0.420020	P. V. Neugebauer.
356 6 10.9	15 0 22.4	3 40 57.9	868.924	0.407350	P. V. Neugebauer.
43 28 35.9	22 3 15.1	8 14 37.9	300.532	0.714644	Heinrich.
111 30 24.9	17 1 46.8	3 27 5.4	622.091	0.504102	P. V. Neugebauer.
187 39 15.4	13 38 56.9	4 18 7.3	886.616	0.401514	P. V. Neugebauer.
0 18 18.3	7 46 1.1	7 44 31.4	931.23617	0.387298	Stouffer.
67 46 12.3	2 22 7.5	8 44 20.0	646.397	0.493006	P. V. Neugebauer.
142 24 53.6	8 38 44.5	14 8 38.8	944.890	0.383084	Hammond.
308 29 59.6	14 11 32.6	6 35 32.0	918.318	0.391343	Kitzinger.
342 0 56.6	18 7 18.3	2 8 23.6	292.584	0.722504	Strömgren.
127 50 8.5	12 11 42.0	13 20 54.2	828.707	0.421070	P. V. Neugebauer.
341 37 38.6	25 25 19.5	13 52 38.1	859.674	0.410448	P. V. Neugebauer.
142 51 33.8	6 24 23.7	3 20 20.4	708.465	0.466460	P. V. Neugebauer.
112 9 31.8	11 32 38.8	2 36 13.1	860.566	0.410150	P. V. Neugebauer.
88 10 36.6	9 22 49.4	9 42 19.8	636.547	0.497450	P. V. Neugebauer.
105 16 41.7	13 50 34.2	6 35 43.3	825.166	0.422310	P. V. Neugebauer.
225 3 1.6	18 50 0.0	4 36 8.2	761.090	0.445713	P. V. Neugebauer.
358 7 33.5	2 15 26.1	11 11 27.9	816.080	0.425516	P. V. Neugebauer.
147 54 45.4	10 53 4.1	5 53 13.8	672.022	0.481750	P. V. Neugebauer.
134 16 37.2	12 19 26.7	10 49 5.5	666.037	0.484340	P. V. Neugebauer.
184 20 14.5	11 1 17.2	4 46 31.6	637.791	0.496886	P. V. Neugebauer.
35 24 23.5	7 56 27.7	9 57 10.5	714.6833	0.463929	Hall.
357 34 2.6	0 20 7.2	7 22 8.8	625.5773	0.502484	Snow.
103 38 18.3	7 41 31.6	9 19 44.3	784.6983	0.436869	Snow.
281 26 7.9	8 36 14.0	5 43 14.7	681.063	0.477880	P. V. Neugebauer.
235 58 21.3	13 20 41.9	4 27 25.9	631.6072	0.499707	Kobold.

Nr. und Name	Opposition 1910	Gr.	$m_o$	$g$	Epoche und Oskulation	Mittl. Äqu.	$M$	$\omega$
641 [1907 ZX]	Juli 25	14.7	14.5	12.3	1907 Okt. 13.5	1907.0	316° 4 12.8	16° 14 28.8
642 [1907 ZY]	März 19	13.0	13.5	9.3	1907 Okt. 13.5	1907.0	249 13 36.1 114 18	7.8
643 [1907 ZZ]	Febr. 24	13.8	13.9	9.4	1907 Sept. 12.5	1907.0	279 19 21.7 194 48	52.3
644 [1907 AA]	Mai 18	13.6	13.1	10.0	1907 Nov. 6.5	1907.0	22 28 46.4 263 37	32.2
645 [1907 AG]	März 30	14.0	13.5	9.3	1907 Sept. 29.5	1907.0	284 39 33.0 89 8	41.6
646 [1907 AC]	Mai 17	14.5	14.5	12.1	1907 Sept. 18.5	1907.0	13 16 3.9 35 25	9.3
647 [1907 AD]	Juni 22	14.4	13.5	10.8	1907 Sept. 16.5	1907.0	311 18 23.4 173 15	10.9
648 [1907 AE]	April 24	13.4	13.1	8.9	1907 Sept. 16.5	1907.0	285 3 26.1 170 6	17.3
649 [1907 AF]	April 4	16.1	15.1	12.1	1907 Sept. 11.5	1907.0	7 4 30.0 346 49	8.9
650 [1907 AM]	Juni 19	15.1	14.7	11.9	1907 Okt. 4.5	1907.0	3 3 39.3 176 4	27.1
651 [1907 AN]	April 22	14.0	13.5	9.6	1907 Okt. 4.5	1907.0	9 56 25.8 349 23	52.7
652 Jubilatrix	Juni 10	13.3	13.3	10.3	1907 Nov. 4.5	1907.0	43 0 32.1 274 33	0.7
653 [1907 BK]	Mai 30	12.8	12.9	9.0	1907 Dez. 21.5	1909.0	250 49 12.4 49 0	19.2
654 Zelinda .	Sept. 30	11.5	11.1	8.7	1909 Juli 16.5	1910.0	144 23 1.4 212 20	8.2
655 [1907 BF]	April 30	13.0	12.6	8.7	1907 Dez. 11.5	1909.0	359 29 49.3 279 15	13.5
656 [1908 BU]	Juli 14	14.1	13.6	9.5	1908 Jan. 25.5	1908.0	334 23 21.2 321 33	2.4
657 [1908 BV]	Sept. 13	14.3	13.7	10.6	1908 Jan. 28.5	1908.0	311 49 19.6 239 11	47.2
658 [1908 BW]	Juli 12	13.8	13.6	10.0	1908 Febr. 9.5	1908.0	57 58 54.4 65 6	46.0
659 [1908 CS]	Juni 5	14.1	14.4	7.7	1908 März 23.5	1908.0	240 38 5.1 327 31	27.6
660 [1908 CC]	Okt. 20	10.8	10.6	7.6	1908 Jan. 12.5	1908.0	221 57 35.9 107 23	10.3
661 [1908 CL]	Aug. 15	12.9	12.7	8.8	1908 Febr. 26.5	1908.0	20 26 7.8 154 47	9.0
662 [1908 CW]	—	—	13.3	10.3	1908 April 26.5	1910.0	298 23 45.8 163 7	58.8
663 [1908 DG]	—	—	13.0	9.0	1908 Juni 27.5	1908.0	78 4 18.6 308 37	6.3
664 [1908 DH]	Dez. 8	15.3	14.2	10.0	1908 Juni 27.5	1908.0	6 21 50.5 90 4	28.3
665 [1908 DK]	Dez. 17	15.0	12.8	8.7	1908 Juli 27.5	1908.0	40 38 57.9 314 27	8.2
666 [1908 DM]	Febr. 7	13.9	13.6	10.5	1908 Juli 27.5	1908.0	314 31 43.3 171 2	1.5
667 [1908 DN]	—	—	13.4	9.2	1908 Aug. 24.5	1908.0	236 16 13.3 304 30	8.7
668 [1908 DO]	—	—	15.0	11.5	1908 Aug. 21.5	1908.0	358 3 9.6 108 22	10.7
669 [1908 DQ]	—	—	13.7	9.8	1908 Aug. 27.5	1908.0	53 59 9.5 99 54	9.0
670 [1908 DR]	Jan. 14	13.6	13.4	9.9	1908 Nov. 15.0	1908.0	356 26 39.5 191 28	40.9
671 [1908 DV]	—	—	13.1	9.0	1908 Sept. 28.5	1908.0	289 12 29.5 82 2	50.6
672 [1908 DY]	Jan. 5	14.0	13.3	10.3	1908 Sept. 24.5	1908.0	54 53 25.9 308 21	8.9
673 [1908 EA]	Jan. 0	12.9	13.0	9.4	1908 Sept. 24.5	1908.0	265 57 47.1 228 16	8.8
674 Rachel . . .	März 14	10.3	10.7	7.0	1910 März 3.5	1910.0	47 47 16.8 39 1	38.7
[1894 BD]	—	—	13.3	11.3	1894 Nov. 1.5	1900.0	337 18 8.4 356 39	18.9
[1902 JT]	—	—	—	—	1902 Okt. 23.5	1902.0	33 40 54.1 245 30	35.0
[1904 OR]	—	—	—	—	1904 Okt. 3.5	1904.0	357 7 3.9 60 22	31.4
[1906 UT]	—	—	12.3	8.5	1906 Aug. 29.5	1906.0	246 19 17.1 279 19	40.4
[1906 WA]	—	—	13.6	9.5	1906 Okt. 25.5	1906.0	335 44 25.8 235 55	34.2
[1908 CV]	—	—	—	—	1908 Febr. 9.0	1908.0	318 39 29 78 8	18
[1908 DC]	—	—	—	—	1908 April 26.5	1908.0	22 46 15 345 36	5
[1908 DW]	—	—	—	—	1908 Sept. 21.5	1908.0	19 30 32.5 129 26	55.2

$\Omega$	$i$	$\varphi$	$\mu$	Log. $a$	Autorität
40° 38' 27.0	1° 43' 47.5	7° 15' 52.8	1072.478	0.346412	P. V. Neugebauer.
7 21 52.5	8 12 23.4	8 2 31.3	627.201	0.501734	P. V. Neugebauer.
255 22 17.4	13 47 35.6	4 26 16.1	577.5812	0.525596	G. Struve.
108 52 41.9	1 2 20.0	9 18 25.2	841.850	0.416514	Palisa.
0 47 29.7	7 4 16.1	8 56 0.6	620.253	0.504958	Frederickson.
302 54 6.3	6 56 23.4	12 16 10.0	1000.933	0.366401	P. V. Neugebauer.
254 44 6.5	7 18 38.0	11 11 53.9	929.838	0.387734	P. V. Neugebauer.
292 41 59.2	9 59 11.4	12 44 41.0	624.825	0.502832	P. V. Neugebauer.
357 12 59.5	12 46 42.7	16 16 15.1	869.564	0.407136	P. V. Neugebauer.
215 40 20.4	2 33 31.8	10 46 12.3	918.478	0.391292	P. V. Neugebauer.
38 49 59.8	10 45 10.0	5 23 25.2	674.638	0.480624	P. V. Neugebauer.
86 15 29.2	15 43 11.0	7 14 9.8	869.682	0.407097	Hopfner.
133 47 9.9	11 16 46.7	2 46 34.1	679.1475	0.478695	Snow.
278 16 24.9	18 9 40.2	13 16 33.0	1019.03855	0.3612107	Millosevich.
130 36 38.9	6 29 29.5	4 51 28.0	686.4657	0.475592	Lamson.
186 15 21.0	0 26 32.3	7 36 45.5	638.477	0.496574	P. V. Neugebauer.
298 13 21.1	10 16 48.2	6 15 55.4	843.374	0.415991	P. V. Neugebauer.
352 11 10.1	1 32 13.5	3 18 45.4	732.015	0.456992	P. V. Neugebauer.
349 57 41.7	4 31 14.7	6 23 59.1	300.785	0.714500	Ebell.
156 37 21.5	15 14 23.6	5 52 48.2	877.992	0.404344	Frederickson.
336 48 24.2	9 20 55.0	2 22 32.7	678.143	0.479124	Stracke.
133 30 1.7	4 5 50.6	12 44 38.6	870.989	0.406663	Daniel.
233 46 58.4	17 45 16.5	8 42 58.5	659.479	0.487204	P. V. Neugebauer.
175 51 38.6	8 31 5.8	14 2 19.2	628.749	0.501020	P. V. Neugebauer.
299 49 27.4	14 38 7.4	9 49 56.3	634.836	0.498231	P. V. Neugebauer.
215 34 41.9	7 34 9.7	13 56 19.3	850.116	0.413686	P. V. Neugebauer.
153 54 14.8	25 16 0.5	9 49 23.3	618.029	0.505998	P. V. Neugebauer.
216 2 50.2	6 48 13.0	13 20 26.6	759.640	0.446266	P. V. Neugebauer.
171 20 12.8	10 54 45.5	6 5 53.4	676.435	0.479854	P. V. Neugebauer.
175 10 26.8	7 32 37.2	11 16 55.6	756.0233	0.447648	Hellerich.
1 40 8.7	7 52 45.8	4 55 25.3	642.815	0.494614	Stracke.
344 2 11.5	11 0 17.5	7 28 2.9	871.386	0.406530	P. V. Neugebauer.
228 9 40.5	2 49 46.9	0 37 43.5	750.907	0.449614	Stracke.
58 54 7.2	13 35 36.6	10 57 10.3	708.1886	0.466572	Bianchi.
72 35 44.3	3 27 48.4	8 33 50.4	1104.735	0.337832	Berberich.
80 11 55.9	2 28 7.5	11 54 31.0	637.160	0.497172	Berberich.
301 18 11.1	5 28 38.8	9 4 57.1	642.729	0.494652	Berberich.
180 59 31.4	23 18 33.6	2 59 20.8	691.888	0.473314	Kitzinger.
193 50 5.4	9 15 15.4	8 51 34.8	649.218	0.491744	P. V. Neugebauer.
131 54 59	13 42 15	17 46 19	620.44	0.50487	Hirayama.
209 11 4	19 56 6	6 52 25	612.32	0.50869	Burns, Mc. Keelean.
178 11 33.9	6 17 23.5	27 13 22.8	818.534	0.42464	Palisa.

## KREISBAHNEN.

Planet	$m_{\circ}$	Epoche	Argument der Breite	$\Omega$	$i$	$\mu$	Log. $a$
1892 S . .	13.0	1892 Dez. 17.5	77° 35' 50"	358° 7' 42"	3° 27' 18"	835.80	0.41860
1893 C . .	13.5	1893 Jan. 23.5	167 48 0	321 27 42	3 33 48	1182.9	0.31804
1893 U . .	13.0	1893 April 10.5	93 23 42	88 59 54	7 49 6	944.3	0.38330
1893 X . .	13	1893 März 21.5	112 50 17	72 17 48	1 34 4	423.40	0.61550
1893 Y . .	13	1893 April 17.5	79 39 46	124 24 8	0 18 4	549.95	0.53980
1894 AW.	12	1894 Febr. 3.5	62 6 12	21 39 36	4 33 42	996.0	0.36781
1896 CU.	12.0	1896 Sept. 3.5	100 46 25	243 53 26	5 51 46	692.17	0.47320
1898 DW.	13.5	1898 Nov. 19.5	181 1 17	229 11 55	14 40 58	841.15	0.41675
1898 DX.	—	1898 Nov. 19.5	182 5 12	227 3 49	22 26 34	589.39	0.51973
1898 DY.	13.5	1898 Nov. 13.5	198 18 19	216 46 18	3 15 55	673.12	0.48128
1898 DZ.	12.5	1898 Nov. 17.5	174 26 37	239 40 46	3 53 1	881.73	0.40312
1898 EA.	13	1898 Nov. 13.5	181 15 2	227 33 5	27 23 43	508.71	0.56236
1900 FE.	12.5	1900 März 6.5	33 49 36	129 37 12	13 13 24	882.1	0.40300
1900 FL.	14.0	1900 Sept. 28.5	152 4 21	197 51 1	6 39 4	768.78	0.44280
1901 HC.	—	1901 Nov. 12.5	202 51 49	193 51 50	16 21 55	701.06	0.46950
1901 HD.	—	1901 Nov. 15.5	339 15 43	62 43 50	29 31 43	592.93	0.51800
1902 HY.	—	1902 Juni 2.5	164 42 33	68 13 39	9 0 13	656.86	0.48836
1903 LD.	—	1903 Jan. 18.5	181 6 10	300 36 51	15 33 1	754.21	0.44834
1903 LX <sup>a</sup>	—	1903 Sept. 1.5	38 57 42	287 19 24	7 21 12	709.92	0.46587
1903 LZ.	—	1903 Aug. 30.5	153 22 42	189 17 0	9 22 0	759.30	0.44640
1903 MC.	—	1903 Sept. 29.5	185 33 38	167 13 30	26 16 59	564.44	0.53225
1903 MD.	—	1903 Sept. 29.5	358 34 29	354 45 52	14 35 22	654.46	0.48942
1903 MF.	—	1903 Sept. 29.5	183 25 53	171 9 13	10 55 45	783.09	0.43746
1903 MM.	—	1903 Okt. 14.5	181 15 12	195 37 36	4 56 48	714.71	0.46392
1903 MN.	—	1903 Okt. 24.5	350 9 6	39 35 0	7 51 54	945.90	0.38276
1903 NF.	—	1903 Dez. 18.5	216 0 54	230 11 48	15 16 54	849.85	0.41380
1903 NG.	—	1903 Nov. 14.5	178 3 42	230 52 18	8 38 12	649.73	0.49152
1904 OD.	—	1904 Mai 14.5	186 3 33	42 38 38	12 53 11	610.50	0.50954
1904 OP.	—	1904 Sept. 5.5	45 37 34	293 4 6	13 37 4	735.20	0.45572
1904 QW.	—	1904 April 4.5	70 11 57	108 54 13	11 14 22	716.53	0.46318
1905 RN.	—	1905 Okt. 24.5	63 34 0	336 9 12	3 12 42	828.93	0.42100
1906 UK.	12.9	1906 Mai 14.5	102 21 52	131 2 1	12 20 4	776.69	0.43984
1906 VW.	—	1906 Nov. 11.5	190 13 12	207 30 36	9 19 42	799.40	0.43150
1906 VX.	—	1906 Nov. 11.5	350 31 6	46 39 30	7 44 30	588.99	0.51994
1906 WD.	—	1906 Okt. 26.5	195 49 0	203 7 0	48 8 0	387	0.6595
1907 XV.	—	1907 März 12.5	68 19 30	82 27 36	10 52 24	567.56	0.53000
1907 YR.	—	1907 April 18.5	85 46 47	97 13 3	6 59 40	470.40	0.58510

Mittleres Äquinoktium des Jahresanfangs.

## OPPOSITIONEN DER KL. PLANETEN FÜR 1910. (37)

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
673 [1908 EA] . . .	Jan. 0	12.9	6 <sup>b</sup> 36.5	+19° 47'	1.0	0	0.256	1908
237 Coelestina . . .	I	13.2	6 45.1	+27 1	1.0	+ 4	0.296	1901
547 Praxedis . . .	2	12.1	6 48.2	- 4 38	0.9	+ 1	0.192	1908
510 Mabella . . .	2	13.9	6 52.3	+ 9 14	0.9	+ 1	0.332	1908
672 [1908 DY] . . .	5	14.0	7 3.7	+37 13	1.2	0	0.282	1908
103 Hera . . .	7	10.6	7 9.7	+18 22	1.0	+ 3	0.276	1908
158 Koronis . . .	7	12.1	7 11.6	+22 17	1.0	+ 1	0.247	1908
591 [1906 TP] . . .	8	13.3	7 14.5	+37 56	1.3	- 2	0.193	1906
229 Adelinda . . .	9	13.9	7 18.5	+25 7	0.8	+ 2	0.436	1900
88 Thisbe . . .	10	11.6	7 20.3	+20 40	1.0	+ 1	0.343	1908
491 Carina . . .	10	12.5	7 25.9	- 2 57	0.8	+ 4	0.342	1908
572 [1905 RB] . . .	II	12.6	7 31.6	+ 4 44	0.9	+ 3	0.084	1905
116 Sirona . . .	II	10.1	7 32.4	+26 7	1.0	+ 3	0.170	1906
393 Lampetia . . .	12	12.6	7 33.0	+ 1 35	0.8	+ 2	0.438	1908
258 Tyche . . .	13	11.5	7 38.9	- 0 44	0.9	+ 3	0.256	1908
40 Harmonia . . .	13	9.3	7 39.1	+23 56	1.2	+ 5	0.120	1907
490 Veritas . . .	13	12.4	7 39.3	+ 9 20	0.8	+ 3	0.352	1908
341 California . . .	14	14.0	7 40.7	+30 36	1.2	+ 2	0.201	1905
670 [1908 DR] . . .	14	13.6	7 41.8	+11 17	0.9	+ 4	0.280	1908
131 Vala . . .	14	12.3	7 44.9	+27 29	1.1	+ 4	0.173	1908
243 Ida . . .	16	13.2	7 53.2	+21 49	1.0	+ 2	0.250	1906
640 [1907 ZW] . . .	17	13.3	7 55.7	+ 3 36	0.8	+ 1	0.378	1907
151 Abundantia . . .	18	11.8	8 1.5	+31 1	1.1	+ 3	0.192	1904
342 Endymion . . .	18	12.1	8 2.8	+ 8 20	1.0	+ 1	0.111	1907
561 Ingwelde . . .	19	13.1	8 3.7	+18 48	0.9	+ 3	0.239	1905
339 Dorothea . . .	19	13.2	8 6.7	+ 8 38	0.8	+ 4	0.360	1907
242 Kriemhild . . .	20	12.0	8 9.0	+ 1 23	0.8	+ 2	0.192	1906
516 Amherstia . . .	21	11.0	8 10.2	+31 12	1.2	0	0.233	1908
459 Signe . . .	21	13.1	8 11.1	+38 12	1.2	+ 2	0.143	1900
314 Rosalia . . .	22	14.5	8 14.8	+ 6 28	0.8	+ 5	0.390	1908
427 Galene . . .	23	13.5	8 21.7	+18 54	0.9	+ 2	0.370	1908
350 Ornamenta . . .	25	12.3	8 28.0	+39 51	1.0	+10	0.279	1906
128 Nemesis . . .	25	10.8	8 30.5	+26 17	1.0	+ 5	0.262	1908
228 Agathe . . .	26	15.6	8 33.3	+19 22	1.1	+ 3	0.224	1908
546 Herodias . . .	26	11.5	8 33.8	+44 48	1.2	+ 3	0.139	1908
92 Undina . . .	26	11.4	8 35.3	+24 11	0.8	+ 5	0.396	1906
492 Gismonda . . .	27	13.8	8 35.5	+20 59	0.8	+ 3	0.413	1904
412 Elisabetha . . .	27	11.9	8 36.1	+25 57	0.9	+ 8	0.242	1906
83 Beatrix . . .	28	11.1	8 39.7	+27 14	1.1	+ 3	0.131	1904
273 Atropos . . .	28	12.4	8 43.7	+ 2 7	0.9	+ 9	0.242	1897

## (38) OPPOSITIONEN DER KL. PLANETEN FÜR 1910.

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
283 Emma . . . . .	Jan. 29	12.3	8 44.6 <sup>b</sup>	+17° 26'	0.9	+ 2	0.369	1908
278 Paulina . . . . .	29	12.4	8 45.0	+29 52	1.0	+ 5	0.210	1908
110 Lydia . . . . .	29	10.9	8 46.9	+26 46	1.0	+ 6	0.287	1908
*122 Gerda . . . . .	30	11.3	8 49.5	+15 57	0.8	+ 4	0.330	1908
284 Amalia . . . . .	Febr. 1	14.0	8 55.7	+ 4 40	1.0	+ 4	0.265	1907
32 Pomona . . . . .	1	10.3	8 56.5	+ 7 48	0.9	+ 4	0.174	1906
594 [1906 TW] . . . . .	1	14.6	8 56.7	- 3 58	1.0	+15	0.177	1906
639 [1907 ZT] . . . . .	1	12.6	9 0.0	+10 9	0.8	+ 2	0.357	1908
431 Nephele . . . . .	1	13.5	9 1.1	+17 40	0.8	+ 3	0.429	1908
550 Senta . . . . .	2	13.0	9 4.3	+ 5 56	1.0	+ 3	0.339	1908
280 Philia . . . . .	3	13.9	9 5.7	+27 14	1.0	+ 2	0.231	1890
603 [1906 TI] . . . . .	3	13.0	9 6.5	+24 32	1.1	0	0.079	1906
335 Roberta . . . . .	3	12.4	9 8.0	+14 38	0.9	+ 6	0.271	1907
186 Celuta . . . . .	4	12.3	9 9.2	+35 43	1.2	+ 2	0.242	1908
520 Franziska . . . . .	4	13.8	9 9.3	+33 34	1.0	+ 4	0.293	1906
271 Penthesilea . . . . .	4	12.9	9 10.7	+18 22	0.9	+ 3	0.321	1903
111 Ato . . . . .	4	10.7	9 10.7	+14 54	1.0	+ 2	0.133	1908
120 Lachesis . . . . .	5	11.7	9 14.3	+20 58	0.9	+ 2	0.324	1908
300 Geraldina . . . . .	5	12.7	9 14.4	+17 10	0.8	+ 4	0.372	1906
231 Vindobona . . . . .	5	12.2	9 16.8	+20 34	0.9	+ 3	0.324	1902
332 Siri . . . . .	5	13.0	9 17.0	+20 9	0.9	+ 4	0.308	1906
297 Caecilia . . . . .	6	14.0	9 19.7	+18 48	0.8	+ 2	0.418	1907
301 Bavaria . . . . .	6	12.9	9 20.6	+14 50	0.9	+ 6	0.264	1903
666 [1908 DM] . . . . .	7	13.9	9 21.8	+ 3 22	0.9	+ 6	0.238	1908
54 Alexandra . . . . .	7	11.8	9 24.6	+13 40	1.0	+ 2	0.343	1909
294 Felicia . . . . .	8	15.5	9 26.0	+15 25	0.8	+ 5	0.467	1906
56 Melete . . . . .	8	12.3	9 26.0	+ 5 13	0.9	+ 5	0.328	1907
252 Clementina . . . . .	9	13.3	9 32.4	+ 1 42	0.7	+ 5	0.379	1902
*153 Hilda . . . . .	9	13.2	9 32.5	+ 3 57	0.6	+ 3	0.535	1907
410 Chloris . . . . .	9	12.4	9 33.4	+25 46	0.9	+ 7	0.307	1908
112 Iphigenia . . . . .	10	12.2	9 36.0	+14 30	1.0	+ 4	0.241	1906
* 17 Thetis . . . . .	12	10.4	9 37.9	+16 55	1.0	+ 7	0.210	1908
617 Patroclus . . . . .	12	13.2	9 38.6	+42 3	0.7	+ 2	0.690	1909
9 Metis . . . . .	12	8.6	9 41.3	+23 48	1.1	+ 5	0.105	1907
191 Kolga . . . . .	12	12.2	9 41.8	+ 8 52	0.8	+ 7	0.306	1907
395 Delia . . . . .	13	13.4	9 43.6	+ 8 38	0.9	+ 4	0.306	1903
584 [1906 SY] . . . . .	14	12.4	9 53.1	+ 0 2	1.0	+ 3	0.262	1906
327 Columbia . . . . .	15	13.3	9 54.6	+18 35	1.0	+ 3	0.289	1903
250 Bettina . . . . .	15	11.0	9 56.2	+31 18	1.0	+ 2	0.284	1905
558 Carmen . . . . .	15	12.1	9 56.5	+13 6	0.8	+ 7	0.265	1908

# OPPOSITIONEN DER KL. PLANETEN FÜR 1910. (39)

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
574 [1905 RD] . .	Febr. 15	14.2	9 57.4	+14° 55'	1.2	+ 3	0.099	1905
484 Pittsburgh . .	16	13.3	9 59.8	+18° 57	0.8	+ 8	0.264	1907
598 [1906 UC] . .	16	12.5	10 0.1	+27° 18	0.9	+ 6	0.319	1906
394 Arduina . . .	16	14.2	10 0.3	+21° 23	0.9	+ 5	0.382	1906
60 Echo . . . .	16	10.2	10 0.5	+ 7 10	0.9	+ 7	0.031	1908
45 Eugenia . . .	16	10.5	10 0.6	+12° 6	0.9	+ 7	0.227	1906
172 Baucis . . . .	17	11.0	10 2.9	+13° 10	1.1	+ 2	0.221	1906
525 Adelaide . . .	18	13.4	10 7.0	+13° 36	0.8	+ 5	0.328	1904
168 Sibylla . . . .	19	11.9	10 9.0	+ 5 38	0.8	+ 4	0.404	1908
391 Ingeborg . . .	19	14.7	10 9.8	-18° 58	1.0	+ 9	0.310	1908
* 71 Niobe . . . .	19	10.2	10 11.8	- 1 31	1.2	- 4	0.182	1908
415 Palatia . . . .	22	11.1	10 18.8	+16° 14	0.9	+ 8	0.189	1905
* 106 Dione . . . .	23	11.8	10 27.4	+16° 38	0.8	+ 4	0.385	1909
643 [1907 ZZ] . .	24	13.8	10 31.1	-11° 47	0.8	+ 5	0.363	1908
230 Athamantis . .	25	10.6	10 33.9	- 7 22	0.9	+ 5	0.185	1907
117 Lomia . . . .	25	11.5	10 35.1	+14° 59	1.0	+ 1	0.315	1907
421 Zähringia . . .	26	14.8	10 35.1	+ 2 28	0.9	+ 8	0.253	1908
10 Hygiea . . . .	26	9.3	10 35.7	+ 4 0	0.8	+ 4	0.305	1909
6 Hebe . . . .	26	9.2	10 36.9	+16° 9	0.9	+10	0.248	1908
87 Sylvia . . . .	27	12.4	10 39.5	+23° 58	0.8	+ 4	0.455	1907
601 [1906 UN] . .	27	13.1	10 41.1	+ 3 41	0.8	+ 8	0.393	1909
279 Thule . . . .	27	14.2	10 41.9	+11° 30	0.6	+ 4	0.553	1906
179 Klytaemnestra	28	12.1	10 43.6	- 3 55	0.8	+ 5	0.367	1908
519 Sylvania . . .	28	12.9	10 44.6	+23° 56	0.9	+ 4	0.370	1903
33 Polyhymnia . .	28	13.4	10 45.1	+ 9 20	0.8	+ 4	0.452	1904
141 Lumen . . . .	März I	12.3	10 45.9	+ 0 29	1.0	+ 3	0.328	1901
496 Gryphia . . . .	I	12.9	10 48.8	+ 2 22	1.0	+ 7	0.055	1902
315 Constantia . .	3	14.9	10 53.5	+ 7 8	1.0	+ 7	0.209	1891
146 Lucina . . . .	3	11.0	10 56.6	+28° 14	0.8	+ 5	0.230	1906
* 170 Maria . . . .	3	11.6	10 57.8	-11° 55	1.0	+ 1	0.185	1904
20 Massalia . . . .	3	8.7	10 58.5	+ 5 38	0.9	+ 6	0.087	1907
407 Arachne . . . .	5	12.2	11 5.2	- 4 9	0.9	+ 4	0.256	1908
18 Melpomene . .	6	10.2	11 6.9	+10° 4	0.9	+ 9	0.230	1907
123 Brunhild . . .	7	11.8	11 11.4	- 1 52	0.9	+ 4	0.232	1905
357 Ninina . . . .	7	12.3	11 11.9	+14° 54	0.7	+ 8	0.352	1907
159 Aemilia . . . .	7	12.0	11 12.1	+10° 12	0.7	+ 6	0.287	1906
426 Hippo . . . .	12	11.0	11 27.7	-21° 18	1.1	- 1	0.219	1908
674 Rachel . . . .	14	10.3	11 35.0	+24° 56	0.9	+ 1	0.229	1909
* 118 Peitho . . . .	14	10.7	11 35.3	+14° 52	1.0	+ 4	0.146	1908
* 178 Belisana . . .	14	12.0	11 35.4	+ 5 38	0.9	+ 5	0.165	1906

## (40) OPPOSITIONEN DER KL. PLANETEN FÜR 1910.

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
100 Hekate . . . .	März 15	12.3	II 40.4 <sup>b</sup>	+ 8° 46'	0.7	+ 6'	0.378	1909
324 Bamberga . . .	16	11.4	II 44.0	- 6 35	0.8	+ 4	0.409	1909
528 Rezia . . . .	17	12.5	II 45.4	+ 18 32	0.8	+ 3	0.395	1909
115 Thyra . . . .	17	11.1	II 45.8	- 14 5	1.0	+ 4	0.230	1908
371 Bohemia . . . .	17	11.7	II 46.2	- 10 48	1.0	+ 4	0.234	1907
209 Dido . . . .	18	11.5	II 51.4	+ 1 55	0.8	+ 3	0.318	1901
494 Virtus . . . .	19	12.2	II 52.9	+ 8 49	0.8	+ 4	0.285	1905
107 Camilla . . . .	19	11.0	II 55.3	+ 1 7	0.6	+ 7	0.379	1907
642 [1907 ZY] . . .	19	13.0	II 56.7	+ 2 32	0.8	+ 2	0.278	1908
549 Jessonda . . . .	20	13.2	II 57.3	- 6 13	0.9	+ 5	0.197	1908
222 Lucia . . . .	20	12.6	II 59.3	+ 3 37	0.8	+ 5	0.294	1907
197 Arete . . . .	20	13.4	II 59.8	+ 14 7	0.8	+ 5	0.328	1907
289 Nenetta . . . .	21	13.4	I2 1.1	- 0 30	0.7	+ 6	0.390	1909
104 Klymene . . . .	21	12.4	I2 1.9	+ 2 53	0.8	+ 4	0.364	1905
15 Eunomia . . . .	23	9.5	I2 10.4	- 19 0	0.7	+ 3	0.327	1909
442 Eichsfeldia . . .	24	11.8	I2 13.0	+ 7 23	0.8	+ 9	0.086	1906
185 Eunike . . . .	24	11.0	I2 14.5	+ 15 4	0.7	+ 10	0.322	1907
597 [1906 UB] . . .	25	13.3	I2 14.9	+ 8 6	0.9	+ 4	0.290	1906
414 Liriope . . . .	26	13.6	I2 17.4	+ 11 20	0.7	+ 3	0.433	1909
61 Danae . . . .	26	11.7	I2 20.5	- 19 3	0.9	+ 2	0.385	1909
235 Carolina . . . .	27	12.2	I2 21.4	+ 11 21	0.8	+ 4	0.278	1900
388 Charybdis . . . .	27	11.9	I2 24.1	- 4 45	0.8	+ 2	0.322	1909
599 [1906 UI] . . . .	28	13.5	I2 25.9	+ 14 49	0.9	+ 3	0.396	1907
566 Stereoskopia . . .	28	12.0	I2 26.2	+ 4 25	0.7	+ 4	0.437	1909
*148 Gallia . . . .	28	11.7	I2 26.4	+ 21 11	0.8	+ 9	0.348	1908
304 Olga . . . .	29	13.2	I2 29.2	+ 8 51	0.8	+ 10	0.254	1906
612 [1906 VN] . . .	30	15.3	I2 32.2	+ 7 5	0.8	+ 2	0.424	1906
645 [1907 AG] . . .	30	14.0	I2 33.4	- 5 21	0.8	+ 3	0.344	1909
13 Egeria . . . .	31	9.5	I2 36.2	+ 14 53	1.1	+ 1	0.172	1906
562 Salome . . . .	31	13.3	I2 39.7	+ 11 38	0.8	+ 4	0.354	1909
501 Urhixidur . . .	April 2	13.6	I2 44.3	- 14 16	0.9	+ 1	0.404	1909
374 Burgundia . . . .	2	11.3	I2 45.0	- 11 42	0.8	+ 8	0.211	1906
286 Iclea . . . .	2	13.3	I2 45.5	+ 12 39	0.7	+ 8	0.356	1905
81 Terpsichore . . .	4	12.6	I2 50.3	- 8 0	0.8	+ 3	0.362	1903
649 [1907 AF] . . .	4	16.1	I2 52.3	- 12 18	1.0	+ 3	0.319	1907
102 Miriam . . . .	5	13.8	I2 54.2	- 8 1	0.8	+ 6	0.356	1902
73 Klytia . . . .	5	12.2	I2 54.3	- 6 21	0.9	+ 5	0.242	1905
311 Claudia . . . .	9	12.9	I3 11.1	- 2 41	0.8	+ 4	0.268	1905
338 Budrosa . . . .	10	12.2	I3 12.6	- 17 32	0.8	+ 5	0.297	1909
585 [1906 TA] . . .	10	12.2	I3 13.5	- 2 54	0.9	+ 7	0.084	1908

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Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
175 Andromache .	April 10	12.8	13 15.5 <sup>b</sup>	- 7 ° 34'	0.7	+ 4	0.401	1909
567 Eleutheria . .	10	12.6	13 18.4	+ 1 28	0.8	+ 3	0.271	1905
453 Tea . . . . .	13	11.6	13 25.0	- 11 28	1.1	+ 2	9.983	1908
48 Doris . . . . .	13	11.0	13 27.2	- 6 0	0.7	+ 6	0.343	1909
251 Sophia . . . . .	14	13.9	13 28.1	+ 2 14	0.7	+ 6	0.345	1904
292 Ludovica . . . .	14	12.6	13 28.7	+ 0 24	1.0	+ 1	0.200	1899
504 Cora . . . . .	14	13.6	13 29.8	+ 10 42	0.8	+ 5	0.349	1909
370 Modestia . . . .	14	13.3	13 31.5	- 23 30	1.0	+ 6	0.181	1904
366 Vincentina . . .	15	12.4	13 33.7	- 20 33	0.9	+ 2	0.334	1909
12 Victoria . . . . .	15	9.5	13 34.0	- 17 31	1.0	+ 8	0.107	1907
432 Pythia . . . . .	16	10.8	13 35.3	+ 12 11	0.9	+ 3	0.078	1908
91 Aegina . . . . .	16	11.6	13 35.7	- 10 55	0.9	+ 4	0.235	1907
89 Julia . . . . .	16	10.8	13 36.2	- 36 1	1.1	+ 3	0.289	1909
320 Katharina . . . .	16	14.7	13 37.7	- 13 41	0.7	+ 6	0.367	1907
266 Aline . . . . .	19	12.5	13 45.8	- 20 0	0.8	+ 7	0.351	1909
497 Iva . . . . .	19	14.7	13 48.2	- 13 58	0.8	+ 4	0.407	1902
325 Heidelberg . .	20	13.0	13 50.9	- 20 39	0.8	+ 3	0.423	1909
518 Halawe . . . . .	20	13.6	13 51.0	- 10 17	0.9	+ 8	0.209	1903
413 Edburga . . . .	21	13.6	13 54.5	+ 16 46	0.9	+ 4	0.366	1896
523 Ada . . . . .	21	13.2	13 55.1	- 16 57	0.8	+ 5	0.341	1909
180 Garumna . . . .	21	13.0	13 55.3	- 13 20	0.7	+ 4	0.207	1899
651 [1907 AN] . .	22	14.0	14 2.1	- 10 27	0.9	+ 2	0.362	1909
352 Gisela . . . . .	22	12.9	14 3.6	- 15 54	1.0	+ 7	0.180	1908
536 Merapi . . . . .	24	12.1	14 7.0	+ 1 52	0.8	+ 1	0.445	1909
276 Adelheid . . . .	24	11.7	14 7.2	- 11 31	0.7	+ 10	0.320	1907
648 [1907 AE] . .	24	13.4	14 7.9	- 27 33	0.8	+ 5	0.371	1909
587 [1906 TF] . .	25	14.1	14 12.6	- 58 52	1.8	- 3	0.132	1908
157 Dejanira . . . .	27	13.8	14 16.1	- 3 54	1.0	+ 1	0.211	1908
*121 Hermione . . . .	27	11.3	14 17.2	- 6 38	0.7	+ 3	0.452	1908
417 Suevia . . . . .	28	12.0	14 21.5	- 10 36	0.8	+ 7	0.161	1909
416 Vaticana . . . .	28	10.3	14 21.6	- 4 33	0.9	- 1	0.104	1909
521 Brixia . . . . .	28	13.4	14 23.4	- 1 26	0.8	+ 3	0.400	1909
471 Papagena . . . .	29	11.0	14 25.6	+ 2 25	0.8	+ 2	0.410	1909
655 [1907 BF] . .	30	13.0	14 29.7	- 4 52	0.8	+ 4	0.350	1908
214 Aschera . . . . .	Mai 1	12.2	14 31.3	- 19 56	0.9	+ 4	0.214	1905
94 Aurora . . . . .	1	11.7	14 31.4	- 22 14	0.8	+ 2	0.384	1909
260 Huberta . . . . .	1	14.0	14 33.6	- 7 53	0.7	+ 4	0.408	1906
540 Rosamunde . . .	1	11.7	14 34.7	- 11 34	0.9	+ 8	0.026	1908
560 Delila . . . . .	2	13.2	14 35.2	- 2 38	0.9	+ 3	0.222	1905
166 Rhodope . . . .	2	13.5	14 35.4	+ 3 0	0.9	+ 4	0.356	1909

## (42) OPPOSITIONEN DER KL. PLANETEN FÜR 1910.

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
355 Gabriella . . .	Mai 2	13.4	14 <sup>h</sup> 36. <sup>m</sup> 1	-20° 52'	1. <sup>m</sup>	+ 3	0.234	1905
348 May . . . . .	3	13.1	14 40.1	- 3 47	0.9	+ 2	0.317	1905
78 Diana . . . . .	3	10.7	14 40.2	-29 34	1.1	+ 4	0.213	1908
530 Turandot . . .	4	12.4	14 42.6	- 2 54	1.0	+ 5	0.345	1909
188 Menippe . . .	5	12.7	14 47.9	-21 54	0.9	+ 8	0.208	1909
362 Havnia . . . .	5	11.3	14 50.4	-20 38	1.0	+ 2	0.226	1909
600 [1906 UM] . . .	7	12.8	14 54.6	+ 0 46	0.8	+ 4	0.191	1909
* 28 Bellona . . . .	8	10.1	14 59.1	- 1 57	0.8	+ 4	0.254	1909
361 Bononia . . . .	9	13.9	15 3.4	-26 3	0.7	+ 1	0.535	1909
610 [1906 VK] . . .	10	16.4	15 6.1	-26 48	1.0	+ 2	0.413	1906
440 Theodora . . . .	10	12.8	15 7.9	-20 13	1.0	+ 5	0.116	1906
364 Isara . . . . .	11	12.5	15 8.9	- 9 2	1.0	+ 2	0.188	1906
249 Ilse . . . . .	11	14.5	15 11.4	-33 22	1.1	+ 4	0.241	1907
507 Laodica . . . .	11	12.9	15 12.5	-30 20	0.8	+ 4	0.389	1909
223 Rosa . . . . .	12	13.5	15 17.5	-18 23	0.8	+ 2	0.354	1909
423 Diotima . . . .	14	11.0	15 23.4	-13 5	0.9	0	0.294	1909
570 [1905 QX] . . .	15	13.1	15 25.1	-18 32	0.7	+ 3	0.426	1909
526 Jena . . . . .	16	13.1	15 28.1	-15 36	0.8	+ 3	0.323	1909
349 Dembowska . . .	16	10.1	15 28.5	-23 44	0.9	+ 1	0.322	1909
487 Venetia . . . .	16	12.3	15 29.3	- 4 34	0.8	+ 3	0.278	1909
49 Pales . . . . .	17	12.0	15 33.8	-22 47	0.8	+ 3	0.432	1908
408 Fama . . . . .	17	14.0	15 34.1	-30 43	0.8	+ 3	0.412	1906
646 [1907 AC] . . .	17	14.5	15 34.3	-30 44	1.1	+ 5	0.118	1907
441 Bathilde . . . .	17	12.7	15 36.6	- 9 39	0.9	+ 6	0.266	1909
291 Alice . . . . .	17	13.6	15 37.5	-16 7	1.0	+ 4	0.096	1901
174 Phaedra . . . .	18	10.8	15 37.6	-40 24	1.1	+ 2	0.170	1909
644 [1907 AA] . . .	18	13.6	15 39.3	-18 13	0.9	+ 3	0.270	1908
287 Nephthys . . . .	19	10.6	15 41.1	- 1 30	0.9	+ 2	0.121	1907
* 164 Eva . . . . .	19	12.0	15 41.3	- 4 34	1.1	- 2	0.279	1905
624 Hektor . . . . .	19	13.1	15 44.0	-42 23	0.7	+ 1	0.631	1909
267 Tirza . . . . .	21	13.4	15 49.7	-17 27	0.9	0	0.179	1909
529 Preziosa . . . .	21	13.5	15 50.9	-18 23	0.9	0	0.361	1904
428 Monachia . . . .	23	14.3	15 55.0	-27 55	1.2	+ 2	0.210	1897
67 Asia . . . . .	23	10.5	15 55.5	-13 22	1.2	+ 7	0.064	1907
433 Eros . . . . .	23	10.5	15 57.8	-46 32	2.0	+14	9.775	1908
369 Aëria . . . . .	24	12.9	16 2.8	- 9 26	0.9	0	0.245	1907
618 [1906 VZ] . . .	24	12.5	16 3.2	- 0 57	0.8	0	0.356	1909
505 Cava . . . . .	24	13.2	16 6.0	-13 56	0.9	0	0.368	1909
398 Admete . . . .	25	14.8	16 6.1	-29 4	1.0	+ 4	0.366	1909
253 Mathilde . . . .	26	13.0	16 9.7	-10 47	0.9	+ 4	0.163	1906

## OPPOSITIONEN DER KL. PLANETEN FÜR 1910. (43)

Nr. und Name	Tag der Opp.	Gr.	12 <sup>b</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
608 [1906 <i>VD</i> ] . . .	Mai 27	14.4	16 <sup>h</sup> 16. <sup>m</sup> 8	-31° 45'	0.9	+ 3	0.332	1906
205 Martha . . . . .	28	12.8	16 18.9	-12 12	0.9	+ 5	0.266	1907
386 Siegena . . . . .	28	11.2	16 21.3	+ 7 11	0.8	+ 3	0.362	1906
653 [1907 <i>BK</i> ] . . .	30	12.8	16 27.9	- 5 50	0.8	0	0.290	1907
563 Suleika . . . . .	31	12.3	16 29.4	-17 36	0.9	0	0.370	1909
609 [1906 <i>VF</i> ] . . .	31	12.7	16 33.3	-15 39	0.8	+ 2	0.295	1909
397 Vienna . . . . .	Juni 2	12.8	16 37.7	-14 26	1.0	+ 6	0.241	1906
378 Holmia . . . . .	3	13.0	16 43.0	-18 50	0.9	+ 3	0.299	1906
64 Angelina . . . . .	4	10.8	16 45.4	-24 6	1.0	+ 2	0.267	1909
* 76 Freia . . . . .	4	12.7	16 47.1	-20 34	0.8	+ 2	0.471	1909
659 [1908 <i>CS</i> ] . . .	5	14.1	16 49.6	-28 11	0.6	+ 1	0.588	1909
* 108 Hecuba . . . . .	5	11.6	16 52.3	-28 59	0.9	+ 1	0.334	1909
559 Nanon . . . . .	6	12.0	16 58.3	-13 11	0.9	- 2	0.186	1909
200 Dynamene . . . . .	7	11.9	16 58.9	-32 15	1.0	+ 2	0.310	1908
360 Carlova . . . . .	8	12.7	17 2.5	- 8 54	0.8	0	0.402	1908
44 Nysa . . . . .	9	10.4	17 7.3	-18 7	1.0	+ 1	0.229	1909
409 Aspasia . . . . .	9	10.2	17 9.1	-17 47	0.9	+ 3	0.147	1909
588 Achilles . . . . .	10	15.1	17 10.7	-33 18	0.6	+ 1	0.698	1907
652 Jubilatrix . . . . .	10	13.3	17 12.8	-19 38	1.1	- 5	0.195	1909
* 47 Aglaja . . . . .	11	10.7	17 15.1	-30 58	1.0	0	0.212	1909
192 Nausikaa . . . . .	13	9.5	17 24.1	-34 43	1.2	+ 1	0.162	1907
478 Tergeste . . . . .	13	11.3	17 24.8	-14 25	0.8	+ 3	0.346	1909
145 Adeona . . . . .	13	11.9	17 27.0	-24 45	1.0	- 3	0.290	1909
556 Phyllis . . . . .	14	13.0	17 28.6	-26 32	1.0	+ 3	0.227	1909
150 Nuwa . . . . .	16	11.4	17 37.1	-20 36	0.9	+ 1	0.282	1908
265 Anna . . . . .	17	9.6	17 39.2	-71 32	2.2	+ 8	0.010	1902
202 Chryseis . . . . .	18	11.0	17 47.3	-13 27	0.8	- 1	0.355	1904
326 Tamara . . . . .	18	10.0	17 48.5	-63 47	1.9	-II	9.996	1907
548 Kressida . . . . .	19	14.0	17 48.9	-21 14	1.0	- 1	0.217	1909
650 [1907 <i>AM</i> ] . . .	19	15.1	17 51.5	-20 9	1.0	+ 1	0.211	1907
457 Alleghenia . . . . .	19	15.2	17 52.4	-17 46	0.9	+ 3	0.341	1900
308 Polyno . . . . .	20	10.8	17 53.7	-16 27	0.9	0	0.214	1909
119 Althaea . . . . .	21	10.6	17 57.2	-14 55	1.0	+ 1	0.205	1909
554 Peraga . . . . .	21	11.4	17 59.9	-25 31	1.1	+ 1	0.221	1909
647 [1907 <i>AD</i> ] . . .	22	14.4	18 0.4	-20 24	1.0	+ 2	0.267	1907
* 176 Idunna . . . . .	22	12.4	18 2.3	+ 7 1	0.8	+ 2	0.375	1906
187 Lamberta . . . . .	22	10.3	18 5.1	-41 11	1.1	- 1	0.113	1909
* 53 Kalypso . . . . .	29	12.6	18 30.7	-17 45	0.9	- 2	0.330	1909
430 Hybris . . . . .	29	14.1	18 32.4	-13 21	1.0	0	0.374	1897
* 90 Antiope . . . . .	30	10.8	18 33.6	-24 53	0.9	- 2	0.232	1908

## (44) OPPOSITIONEN DER KL. PLANETEN FÜR 1910.

Nr. und Name	Tag der Opp.	Gr.	12 <sup>b</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
*198 Ampella . . .	Juni 30	10.4	18 <sup>h</sup> 35.4 <sup>m</sup>	—20° 14'	1.1	+5	0.083	1908
22 Kalliope . . .	30	10.2	18 37.7	—33 55	1.0	-4	0.325	1909
281 Lucretia . . .	Juli 1	13.4	18 39.2	—31 52	1.2	-3	0.122	1906
* 37 Fides . . . .	1	11.1	18 39.5	—27 50	1.0	-1	0.301	1909
274 Philagoria . .	1	13.2	18 41.2	—23 41	0.9	-2	0.270	1905
449 Hamburga . . .	2	12.7	18 47.3	—24 12	1.1	-2	0.278	1909
23 Thalia . . . .	3	11.5	18 48.2	—31 12	1.0	-3	0.334	1905
483 Seppina . . . .	4	12.3	18 49.2	+ 2 36	0.7	-3	0.368	1909
261 Prymno . . . .	4	12.1	18 50.8	—23 32	1.1	-3	0.150	1909
611 [1906 VL] . . .	7	14.3	19 3.6	— 3 41	0.9	-2	0.377	1908
557 Violetta . . . .	8	14.2	19 6.5	—23 8	1.0	-1	0.219	1909
506 Marion . . . .	9	13.2	19 11.5	—33 57	1.0	+2	0.394	1908
114 Kassandra . . .	10	11.5	19 16.5	—15 58	0.9	-2	0.278	1909
124 Alkestē . . . .	10	9.9	19 17.1	—17 19	0.9	-2	0.163	1909
24 Themis . . . .	11	11.4	19 23.2	—23 10	0.8	-2	0.389	1908
658 [1908 BW] . . .	12	13.8	19 26.3	—24 4	0.9	-1	0.289	1908
328 Gudrun . . . .	13	12.9	19 30.6	—42 37	1.0	0	0.398	1906
218 Bianea . . . .	14	11.1	19 31.9	0 0	0.8	-6	0.183	1904
306 Unitas . . . .	14	9.7	19 33.2	—14 23	0.9	-7	0.000	1907
656 [1908 BU] . . .	14	14.1	19 33.7	—21 6	0.8	-2	0.386	1908
480 Hansa . . . .	15	11.7	19 36.2	+ 7 9	0.9	+1	0.252	1906
*241 Germania . . .	15	10.8	19 37.4	—18 27	0.9	0	0.265	1909
534 Nassovia . . . .	16	13.3	19 39.3	—23 9	0.9	-3	0.321	1909
221 Eos . . . . .	16	10.8	19 41.4	—13 5	0.8	-5	0.246	1909
605 [1906 UV] . . .	16	12.6	19 42.0	—46 12	1.2	+1	0.269	1906
533 Sara . . . . .	16	13.3	19 42.1	—12 15	0.8	-3	0.273	1908
293 Brasilia . . . .	18	13.3	19 46.5	—39 30	1.1	-4	0.333	1890
461 Saskia . . . .	19	15.2	19 53.7	—19 39	0.8	-2	0.440	1900
607 [1906 VC] . . .	20	12.5	19 56.7	—17 32	1.0	+4	0.255	1909
63 Ausonia . . . .	22	9.1	20 3.0	—27 45	1.1	0	0.044	1909
203 Pompeja . . . .	22	12.7	20 3.8	—24 23	0.9	-2	0.244	1909
133 Cyrene . . . .	23	10.7	20 8.2	—24 35	0.9	0	0.245	1908
613 [1906 VP] . . .	23	13.2	20 8.7	—30 14	0.9	-1	0.297	1906
206 Hersilia . . . .	23	12.2	20 11.3	—17 31	0.9	-3	0.259	1906
*149 Medusa . . . .	25	12.1	20 17.1	—18 40	1.1	-4	0.076	1909
641 [1907 ZX] . . .	25	14.7	20 19.4	—22 44	1.1	-3	0.111	1907
377 Campania . . .	26	11.6	20 21.6	— 8 37	0.8	-3	0.233	1906
621 [1906 WI] . . .	27	14.6	20 23.5	—22 11	0.8	-4	0.399	1906
576 Emanuela . . .	27	11.6	20 24.7	—18 6	0.9	+2	0.171	1905
367 Amicitia . . . .	27	13.0	20 26.1	—22 37	1.1	-4	0.148	1909

## OPPOSITIONEN DER KL. PLANETEN FÜR 1910. (45)

Nr. und Name	Tag der Opp.	Gr.	12 <sup>b</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
498 Tokio . . . . .	Juli 28	10.0	20 29.1 <sup>h m</sup>	-27° 19'	0.8	-9	0.045	1909
139 Juewa . . . . .	28	11.5	20 29.1	-33 31	1.0	-3	0.322	1907
343 Ostara . . . . .	31	13.4	20 38.8	-24 26	1.0	-4	0.132	1903
403 Cyane . . . . .	Aug. 3	12.6	20 50.7	-4 44	0.8	-3	0.322	1909
144 Vibilia . . . . .	3	9.7	20 52.2	-24 50	1.0	-5	0.089	1905
* 26 Proserpina . . .	3	10.3	20 54.9	-23 31	0.9	-4	0.194	1909
58 Concordia . . . . .	4	11.7	20 56.8	-13 8	0.8	-5	0.244	1909
524 Fidelio . . . . .	4	12.3	20 57.3	-21 6	1.0	0	0.208	1908
245 Vera . . . . .	6	12.1	21 1.3	-24 50	0.9	-4	0.263	1907
5 Astraea . . . . .	6	10.9	21 3.3	-15 39	0.9	-5	0.313	1905
298 Baptistina . . . . .	8	14.1	21 12.2	-25 12	1.1	-3	0.168	1907
142 Polana . . . . .	8	12.1	21 14.0	-14 23	1.0	-3	0.141	1903
310 Margarita . . . . .	9	13.8	21 17.6	-10 46	0.8	-4	0.280	1891
66 Maja . . . . .	13	12.0	21 29.2	-18 56	0.9	-3	0.189	1909
14 Irene . . . . .	13	10.3	21 30.6	-26 16	0.9	-6	0.273	1907
376 Geometria . . . . .	13	11.1	21 31.4	-11 5	1.0	-2	0.024	1909
458 Hercynia . . . . .	13	13.5	21 32.1	-16 9	0.8	-8	0.250	1905
661 [1908 CL] . . . . .	15	12.9	21 37.2	-18 10	0.9	-1	0.328	1908
445 Edna . . . . .	15	11.6	21 39.8	+ 6 32	1.0	+ 2	0.223	1905
240 Vanadis . . . . .	16	12.3	21 40.8	-15 38	0.9	-5	0.189	1906
303 Josephina . . . . .	16	12.0	21 42.9	-17 55	0.8	-2	0.323	1908
337 Devosa . . . . .	17	11.8	21 44.3	-21 9	1.1	-3	0.192	1905
51 Nemausa . . . . .	17	10.2	21 45.3	-4 34	0.9	-8	0.175	1907
262 Valda . . . . .	18	14.0	21 47.9	-26 33	0.9	-4	0.184	1900
212 Medea . . . . .	18	12.1	21 50.3	-11 53	0.8	-3	0.314	1907
553 Kundry . . . . .	19	13.8	21 54.6	-22 24	0.9	-6	0.098	1905
577 [1905 RH] . . . . .	19	12.3	21 55.4	-13 25	0.8	-2	0.234	1908
508 Princetonia . . . . .	20	12.3	21 56.5	-33 10	0.8	-4	0.344	1908
2 Pallas . . . . .	20	9.0	21 56.7	+ 8 26	0.7	-10	0.371	1908
163 Erigone . . . . .	20	12.0	21 59.3	-10 29	0.9	-7	0.197	1906
305 Gordonia . . . . .	20	13.0	21 59.7	-6 22	0.7	-5	0.384	1905
27 Euterpe . . . . .	21	9.5	22 0.3	-14 29	1.0	-6	0.174	1907
385 Ilmatar . . . . .	22	10.9	22 2.3	-19 3	0.9	-1	0.336	1906
443 Photographica . . . . .	22	12.6	22 5.2	-8 20	0.9	-7	0.111	1909
466 Tisiphone . . . . .	24	14.0	22 10.1	+ 9 11	0.8	-1	0.405	1907
573 [1905 RC] . . . . .	25	12.6	22 12.7	-14 58	0.9	-1	0.241	1908
511 Davida . . . . .	25	9.7	22 12.9	-26 36	0.7	-7	0.356	1909
346 Hermentaria . . . . .	25	11.1	22 13.3	-23 43	0.8	-6	0.206	1908
156 Xanthippe . . . . .	25	11.6	22 15.9	+ 4 58	0.8	-6	0.282	1906
233 Asterope . . . . .	26	10.7	22 17.4	+ 2 24	0.8	-6	0.145	1906

## (46) OPPOSITIONEN DER KL. PLANETEN FÜR 1910.

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
614 [1906 VQ] . . .	Aug. 29	13.5	22 <sup>h</sup> 28.6 <sup>m</sup>	+ 1° 17'	0.8 <sup>m</sup>	- 6	0.214	1906
606 [1906 VB] . . .	29	11.6	22 28.6	- 4 8	1.0	+ 1	0.041	1906
263 Dresden . . . .	29	12.9	22 30.6	- 7 27	0.8	- 5	0.232	1906
321 Florentina . . .	30	13.2	22 31.6	- 13 12	0.8	- 4	0.278	1903
255 Oppavia . . . .	30	14.2	22 32.5	- 19 16	0.9	- 2	0.294	1904
568 Cheruskia . . .	30	12.0	22 35.1	+ 21 54	0.8	- 3	0.249	1907
456 Abnoba . . . .	31	13.1	22 37.2	+ 13 9	0.8	- 7	0.280	1909
358 Apollonia . . .	31	12.2	22 38.3	- 7 4	0.7	- 6	0.246	1905
211 Isolda . . . .	Sept. 1	11.4	22 42.1	- 2 10	0.8	- 4	0.303	1907
227 Philosophia . . .	2	13.1	22 42.3	- 6 3	0.8	- 3	0.358	1908
564 Dudu . . . .	3	12.5	22 49.8	- 42 28	1.0	- 2	0.102	1905
406 Erna . . . .	4	12.4	22 51.8	- 3 53	0.8	- 3	0.147	1905
210 Isabella . . . .	6	12.0	22 57.2	- 14 10	0.9	- 4	0.186	1906
340 Eduarda . . . .	8	12.7	23 7.0	- 11 19	0.9	- 4	0.222	1908
268 Adorea . . . .	10	13.2	23 13.0	- 7 39	0.7	- 5	0.396	1907
532 Herculina . . . .	10	10.6	23 13.8	- 25 46	0.8	- 6	0.354	1909
257 Silesia . . . .	12	12.5	23 20.1	- 8 45	0.8	- 4	0.290	1907
296 Phaëtusa . . .	12	12.2	23 22.6	- 7 2	0.9	- 7	9.948	1902
657 [1908 BV] . . .	13	14.3	23 25.5	+ 10 30	0.9	- 4	0.280	1908
195 Eurykleia . . .	14	12.4	23 29.9	- 6 41	0.8	- 3	0.292	1908
*247 Eukrate . . . .	15	10.1	23 32.1	- 11 52	1.4	+ 5	0.127	1908
182 Elsa . . . .	17	10.2	23 38.1	- 6 28	0.9	- 6	0.054	1908
69 Hesperia . . . .	18	10.9	23 40.1	+ 0 33	0.8	- 7	0.327	1905
503 Evelyn . . . .	18	12.6	23 46.4	- 9 43	0.9	- 3	0.266	1906
167 Urda . . . .	19	12.9	23 46.8	- 2 2	0.8	- 6	0.258	1906
372 Palma . . . .	19	9.9	23 47.0	+ 21 56	1.0	+ 2	0.255	1906
*288 Glauke . . . .	19	13.4	23 47.3	- 6 54	0.8	- 6	0.350	1908
509 Jolanda . . . .	20	11.0	23 47.7	+ 14 48	0.7	- 10	0.254	1909
629 [1907 XU] . . .	20	14.3	23 49.2	- 15 35	0.7	- 5	0.384	1907
538 Friederike . . .	21	12.2	23 52.9	- 7 17	0.7	- 7	0.218	1909
486 Cremona . . . .	23	14.1	23 59.7	- 19 18	1.0	- 7	0.214	1902
583 Klotilde . . . .	25	13.5	0 7.7	+ 13 8	0.7	- 5	0.394	1908
565 Marbachia . . .	27	13.5	0 16.1	+ 13 36	0.9	- 8	0.232	1905
43 Ariadne . . . .	28	9.8	0 16.9	+ 8 50	1.0	- 7	0.052	1907
368 Haidea . . . .	28	12.7	0 17.5	+ 11 16	0.8	- 7	0.213	1893
7 Iris . . . .	28	7.0	0 20.1	+ 14 8	0.7	- 4	9.959	1906
615 [1906 VR] . . .	29	12.7	0 21.1	+ 1 35	0.9	- 5	0.227	1909
654 Zelinda . . . .	30	11.5	0 24.0	+ 35 10	1.1	- 5	0.182	1909
454 Mathesis . . . .	Okt. 1	12.2	0 27.0	- 1 46	0.9	- 4	0.279	1908
*134 Sophrosyne . . .	1	10.7	0 31.1	+ 12 19	1.1	- 1	0.142	1908

# OPPOSITIONEN DER KL. PLANETEN FÜR 1910. (47)

Nr. und Name	Tag der Opp.	Gr.	12 <sup>b</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
580 [1905 SE] . .	Okt. 2	13.3	○ 31.7 <sup>b</sup>	— 2 41	0.7 <sup>m</sup>	— 5	0.277	1905
216 Kleopatra . . .	3	8.5	○ 36.7	+15 ○	0.6	-13	0.053	1905
616 [1906 VT] . . .	4	12.7	○ 38.3	+11 51	1.1	○	0.191	1908
52 Europa . . . .	4	10.3	○ 41.1	— 5 45	0.7	— 6	0.323	1907
75 Eurydike . . . .	5	9.7	○ 41.6	+ 6 47	0.9	— 1	9.976	1907
77 Frigga . . . .	6	10.5	○ 49.2	+ 6 10	0.9	— 4	0.146	1908
448 Natalie . . . .	7	12.6	○ 51.0	— 4 47	0.9	○	0.232	1899
537 Pauly . . . .	10	12.5	I 3.1	— 9 6	0.8	— 4	0.240	1909
140 Siwa . . . .	12	10.8	I 7.1	+ 1 28	0.9	— 5	0.171	1907
165 Loreley . . . .	12	11.2	I 8.7	+24 39	0.8	— 3	0.337	1907
531 Zerlina . . . .	12	14.5	I 8.9	+ 6 34	0.8	-14	0.312	1904
476 Hedwig . . . .	12	11.4	I 9.8	+26 I	0.9	— 6	0.232	1904
161 Athor . . . .	13	10.6	I 13.8	+ 8 10	1.1	— 1	0.089	1909
126 Velleda . . . .	14	10.9	I 16.2	+ 6 48	1.0	— 5	0.084	1908
I Ceres . . . .	14	7.7	I 17.7	— 7 23	0.8	— 3	0.285	1908
438 Zeuxo . . . .	15	13.5	I 20.1	+ 2 18	0.9	— 3	0.215	1906
162 Laurentia . . .	17	12.7	I 29.5	+ 6 56	0.8	— 3	0.347	1905
* 42 Isis . . . .	18	9.6	I 31.6	— 5 48	1.1	— 2	0.053	1909
98 Janthe . . . .	18	12.0	I 32.1	+24 6	1.1	— 1	0.276	1901
401 Ottilia . . . .	18	12.9	I 32.2	+ 7 17	0.7	— 3	0.392	1907
201 Penelope . . .	19	11.0	I 36.1	+ 2 40	0.8	— 6	0.123	1901
207 Hedda . . . .	19	12.0	I 37.3	+ 9 45	1.0	— 4	0.131	1908
660 [1908 CC] . . .	20	10.8	I 38.9	— 8 33	0.8	— 9	0.224	1908
488 Kreusa . . . .	22	11.9	I 47.5	— 4 22	0.8	— 3	0.383	1908
239 Adrastea . . .	22	12.7	I 48.0	+ 5 59	0.7	— 7	0.110	1900
31 Euphrosyne . . .	23	10.2	I 48.1	+ 8 29	1.2	+ 4	0.239	1907
468 Lina . . . .	23	12.1	I 48.8	+11 18	0.8	— 4	0.201	1907
469 Argentina . . .	23	13.3	I 52.6	+26 30	0.8	— 3	0.409	1909
160 Una . . . .	24	11.4	I 56.7	+14 28	0.9	— 3	0.196	1897
319 Leona . . . .	25	13.0	I 59.0	+ 5 31	0.7	— 8	0.233	1904
637 [1907 YE] . .	26	14.4	2 2.2	+12 44	0.8	— 4	0.390	1907
62 Erato . . . .	30	11.3	2 13.0	+ 9 34	0.9	— 4	0.200	1907
4 Vesta . . . .	31	6.9	2 21.1	+ 2 33	1.0	— 3	0.187	1908
194 Prokne . . . .	Nov. 3	10.0	2 33.7	-12 32	0.8	— 6	0.150	1908
312 Pierretta . . .	4	13.0	2 33.9	+23 19	1.0	— 3	0.322	1908
351 Yrsa . . . .	4	12.1	2 37.9	+ 2 4	0.9	— 3	0.233	1907
581 Tauntonia . . .	4	13.6	2 38.2	-15 41	0.8	○	0.342	1907
545 Messalina . . .	5	12.3	2 38.3	+31 28	0.9	— 3	0.354	1907
259 Aletheia . . .	5	12.7	2 38.4	+ 3 31	0.8	— 2	0.394	1905
354 Eleonora . . .	6	10.2	2 43.1	-12 27	0.8	— 2	0.290	1908

## (48) OPPOSITIONEN DER KL. PLANETEN FÜR 1910.

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
579 [1905 SD] . . .	Nov. 7	11.5	2 48. <sup>m</sup> 3	+ 4 ° 50'	0.9	- 1	0.303	1908
500 Selinur . . . .	7	11.4	2 48.8	+32 3	1.0	- 6	0.133	1908
425 Cornelia . . . .	7	13.3	2 49.3	+14 23	0.9	- 3	0.304	1907
34 Circe . . . .	8	11.6	2 53.1	+10 51	0.9	- 5	0.244	1908
436 Patricia . . . .	8	12.6	2 55.0	+41 34	1.2	- 1	0.311	1904
444 Gyptis . . . .	9	10.5	2 56.8	+ 8 11	1.0	- 8	0.169	1909
465 Alekto . . . .	9	14.6	2 56.9	+23 8	0.8	- 4	0.470	1908
72 Feronia . . . .	10	11.2	3 1.9	+13 54	1.0	- 7	0.109	1909
373 Melusina . . . .	12	12.3	3 6.4	+35 54	1.1	0	0.275	1907
479 Caprera . . . .	12	11.6	3 10.9	+ 1 9	0.8	- 2	0.065	1907
80 Sappho . . . .	13	9.6	3 11.9	+14 21	0.9	-10	9.991	1908
619 [1906 WC] . . .	13	11.8	3 12.2	+ 2 6	0.9	- 2	0.151	1909
527 Euryanthe . . . .	13	12.4	3 12.5	+ 2 42	0.9	- 2	0.225	1909
470 Kilia . . . .	17	12.3	3 27.6	+ 8 33	1.0	- 5	0.216	1908
36 Atalante . . . .	17	10.1	3 30.5	+51 44	1.4	+ 5	0.017	1907
472 Roma . . . .	18	10.8	3 36.9	- 7 51	1.0	- 3	0.137	1909
*270 Analita . . . .	19	10.8	3 38.6	+20 51	1.1	- 5	0.052	1909
101 Helena . . . .	20	10.6	3 40.6	+36 2	1.2	- 3	0.201	1908
375 Ursula . . . .	21	11.1	3 44.6	+43 17	1.1	- 2	0.347	1907
290 Bruna . . . .	21	12.7	3 45.5	+56 55	2.0	+13	9.988	1890
462 Eriphyla . . . .	21	13.1	3 46.0	+16 8	0.9	- 2	0.243	1909
* 95 Arethusa . . . .	21	10.5	3 47.1	+21 48	0.9	- 8	0.215	1909
136 Austria . . . .	21	11.3	3 48.1	+ 6 43	1.0	- 6	0.126	1906
627 [1907 XS] . . .	23	13.2	3 53.3	+10 37	0.9	- 2	0.309	1907
380 Fiducia . . . .	24	12.5	4 0.4	+14 58	1.0	- 1	0.218	1905
*190 Ismene . . . .	25	11.3	4 1.0	+12 42	0.7	- 3	0.385	1908
204 Kallisto . . . .	25	12.8	4 4.2	+13 31	0.9	- 4	0.326	1904
331 Etheridgea . . .	26	12.2	4 5.6	+27 6	0.9	- 2	0.277	1905
254 Augusta . . . .	28	13.1	4 16.4	+26 4	1.2	- 1	0.167	1902
*184 Dejopeja . . . .	28	12.6	4 17.7	+23 3	0.9	- 2	0.363	1908
16 Psyche . . . .	29	9.1	4 21.5	+16 34	1.0	- 2	0.218	1908
309 Fraternitas . . .	Dez. 1	12.8	4 29.2	+27 48	1.1	- 2	0.224	1891
620 Drakonia . . . .	3	13.4	4 37.9	+34 31	1.2	- 1	0.170	1908
* 82 Alkmene . . . .	4	10.4	4 43.2	+25 48	1.0	- 1	0.143	1907
* 57 Mnemosyne . . .	4	10.1	4 44.7	+ 3 58	0.8	- 4	0.276	1909
* 35 Leukothea . . .	5	12.8	4 44.9	+33 38	1.0	- 1	0.374	1907
636 [1907 XP] . . .	5	12.5	4 46.4	+29 48	1.0	0	0.295	1908
482 Petrina . . . .	5	12.5	4 47.5	+ 2 46	0.8	- 2	0.365	1908
313 Chaldaea . . . .	5	9.6	4 47.7	+ 1 24	0.9	- 3	0.059	1909
664 [1908 DH] . . .	8	15.3	4 57.4	+11 28	0.8	- 1	0.469	1908

## OPPOSITIONEN DER KL. PLANETEN FÜR 1910. (49)

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
535 Montague . . .	Dez. 9	11.8	5 2.3 <sup>b</sup>	+21° 13'	1.1 <sup>m</sup>	+1	0.190	1909
97 Klo tho . . .	9	9.0	5 3.5	- 0 1	0.8	+1	0.020	1907
129 Antigone . . .	10	11.3	5 9.3	+ 8 2	0.8	+1	0.395	1908
387 Aquitania . . .	10	10.8	5 9.5	+ 2 37	0.9	+2	0.369	1908
356 Liguria . . .	11	9.4	5 10.2	+38 24	1.1	-1	0.052	1907
232 Russia . . .	11	13.8	5 11.3	+13 50	1.0	-1	0.244	1904
569 Misa . . .	11	11.2	5 11.4	+24 39	0.9	-2	0.072	1909
435 Ella . . .	12	11.9	5 16.5	+25 43	1.1	-1	0.140	1908
143 Adria . . .	12	12.4	5 18.4	+39 40	1.2	-1	0.210	1909
147 Protogeneia . .	13	12.5	5 19.8	+22 40	0.9	-1	0.324	1909
224 Oceana . . .	13	12.0	5 20.1	+32 16	1.1	-1	0.250	1905
217 Eudora . . .	13	13.7	5 20.7	+ 8 23	0.9	0	0.344	1909
420 Bertholda . . .	14	12.1	5 23.7	+20 40	0.8	-2	0.359	1909
578 [1905 RZ] . . .	14	12.9	5 26.5	+30 16	1.0	0	0.349	1909
541 Deborah . . .	15	13.2	5 29.4	+24 6	1.0	-2	0.292	1909
226 Weringia . . .	16	14.0	5 34.7	+ 5 14	0.9	+2	0.352	1904
665 [1908 DK] . . .	17	15.0	5 40.2	+34 45	1.0	-3	0.433	1908
213 Lilaea . . .	18	12.4	5 42.3	+17 27	1.0	+1	0.333	1909
25 Phocaea . . .	19	11.6	5 45.2	- 2 43	1.1	-4	0.283	1905
450 Brigitta . . .	19	13.1	5 45.6	+38 14	1.1	0	0.290	1907
* 46 Hestia . . .	19	10.5	5 47.2	+19 37	1.1	0	0.173	1908
495 Eulalia . . .	19	12.0	5 47.5	+19 31	1.1	-1	0.107	1908
512 Taurinensis . . .	20	12.3	5 50.2	+17 58	1.2	+6	0.038	1903
604 [1906 TK] . . .	22	11.4	5 57.0	+30 44	1.0	0	0.214	1906
277 Elvira . . .	23	13.0	6 4.5	+22 23	0.9	0	0.270	1909
345 Tercidina . . .	23	10.9	6 4.7	+ 8 23	1.0	-3	0.086	1909
447 Valentine . . .	23	12.0	6 6.2	+25 48	1.0	+1	0.286	1909
* 154 Bertha . . .	23	11.4	6 6.4	+47 57	1.4	+3	0.367	1906
225 Henrietta . . .	24	13.8	6 9.1	- 2 10	0.7	0	0.511	1908
475 Ocloo . . .	24	13.5	6 12.0	+47 52	1.6	+3	0.240	1908
248 Lameia . . .	28	13.3	6 25.2	+20 10	1.1	-1	0.211	1905
135 Hertha . . .	28	11.2	6 29.3	+26 38	1.2	0	0.241	1908
543 Charlotte . . .	29	12.1	6 29.9	+27 46	0.9	-2	0.245	1909
215 Oenone . . .	29	12.8	6 30.7	+25 47	1.0	+1	0.261	1908
451 Patientia . . .	30	10.3	6 36.8	+26 36	1.0	+6	0.273	1907
264 Libussa . . .	31	11.8	6 43.5	+35 40	1.1	+4	0.224	1903
256 Walpurga . . .	32	13.5	6 45.3	+ 3 53	0.8	+1	0.337	1907
384 Burdigala . . .	33	10.9	6 50.1	+30 50	1.1	+3	0.118	1909
439 Ohio . . .	33	12.5	6 51.9	- 5 9	0.8	+1	0.305	1902
552 Sigelinde . . .	33	12.4	6 52.2	+20 27	0.9	0	0.368	1908

(50) OPPOSITIONEN DER KL. PLANETEN FÜR 1910.

Nr. und Name	Tag der Opp.	Gr.	12 <sup>h</sup> Mittlere Zeit					Letzte Beob- achtung
			AR.	Dekl.	Δα	Δδ	Log. Δ	
429 Lotis . . . . .	Dez. 34	12.3	6 <sup>h</sup> 52.8 <sup>m</sup>	+ 8° 54'	0.7 <sup>m</sup>	0'	0.185	1909
411 Xanthe . . . . .	34	13.1	6 53.3	+20 37	0.9	+5	0.363	1907
244 Sita . . . . .	36	13.7	7 4.2	+17 32	1.2	+1	0.065	1900
630 [1907 <i>XW</i> ] . .	36	13.0	7 4.7	+22 25	1.0	+8	0.154	1907
437 Rhodia . . . . .	37	13.6	7 7.8	+18 11	1.1	0	0.258	1907
419 Aurelia . . . . .	37	12.3	7 8.0	+17 48	1.0	+1	0.349	1908
390 Alma . . . . .	38	12.5	7 11.9	+29 34	1.2	-4	0.134	1909
455 Bruchsalia . . .	38	11.9	7 13.5	+31 21	1.1	+4	0.271	1907
238 Hypatia . . . . .	38	11.6	7 14.3	+ 3 54	0.9	+2	0.273	1907
575 [1905 <i>RE</i> ] . . .	42	14.0	7 26.8	+42 19	1.3	0	0.264	1909
467 Laura . . . . .	42	13.9	7 26.9	+27 39	1.0	0	0.242	1901
318 Magdalena . . . .	42	13.0	7 28.3	+ 9 37	0.8	+4	0.317	1908
138 Tolosa . . . . .	42	12.6	7 28.6	+26 2	1.1	+3	0.261	1908
196 Philomela . . . .	43	10.6	7 30.0	+28 17	0.9	+3	0.345	1908
622 [1906 <i>WP</i> ] . . .	43	12.1	7 30.0	+13 35	1.0	+7	0.065	1908
322 Phaeo . . . . .	43	12.4	7 32.7	+14 2	1.0	0	0.265	1909
542 Susanna . . . . .	44	12.9	7 37.4	+ 9 51	0.8	+5	0.301	1909
365 Corduba . . . . .	45	12.0	7 42.0	+ 2 18	0.9	+3	0.237	1909

Von den mit einem Sternchen (\*) bezeichneten Planeten enthält das Jahrbuch Seite (51)—(86) ausführliche Ephemeriden. — Nicht berücksichtigt sind die Planeten: 99, 132, 155, 193, 220, 285, 323, 330, 353, 392, 396, 400, 452, 463, 473, 474, 489, 493, 515, 517.

## (122) GERDA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Jan. 14	9 <sup>h</sup> 1 <sup>m</sup> 46. <sup>s</sup> 12	-41.77	+15° 3' 9.6"	+3 0.8	0.339348	18 <sup>m</sup> 9 <sup>s</sup>
15	9 1 4.35	42.55	15 6 10.4	3 4.5	0.338314	18 6
16	9 0 21.80	43.29	15 9 14.9	3 7.9	0.337333	18 4
17	8 59 38.51	43.99	15 12 22.8	3 11.1	0.336407	18 2
18	8 58 54.52	-44.63	15 15 33.9	+3 14.1	0.335537	17 59
19	8 58 9.89	45.23	+15 18 48.0	3 16.9	0.334723	17 58
20	8 57 24.66	45.78	15 22 4.9	3 19.4	0.333965	17 56
21	8 56 38.88	46.28	15 25 24.3	3 21.8	0.333265	17 54
22	8 55 52.60	46.74	15 28 46.1	3 23.9	0.332624	17 52
23	8 55 5.86	-47.14	15 32 10.0	+3 25.8	0.332041	17 51
24	8 54 18.72	47.50	+15 35 35.8	3 27.5	0.331516	17 50
25	8 53 31.22	47.81	15 39 3.3	3 28.9	0.331051	17 48
26	8 52 43.41	48.07	15 42 32.2	3 30.1	0.330646	17 47
27	8 51 55.34	48.29	15 46 2.3	3 31.1	0.330301	17 47
28	8 51 7.05	-48.46	15 49 33.4	+3 31.9	0.330017	17 46
29	8 50 18.59	48.56	+15 53 5.3	3 32.5	0.329793	17 45
30	8 49 30.03	48.62	15 56 37.8	3 32.8	0.329631	17 45
31	8 48 41.41	48.63	16 0 10.6	3 32.9	0.329529	17 45
Febr. 1	8 47 52.78	48.58	16 3 43.5	3 32.8	0.329489	17 45
2	8 47 4.20	-48.48	16 7 16.3	+3 32.6	0.329509	17 45
3	8 46 15.72	48.32	+16 10 48.9	3 32.0	0.329591	17 45
4	8 45 27.40	48.11	16 14 20.9	3 31.2	0.329733	17 45
5	8 44 39.29	47.85	16 17 52.1	3 30.2	0.329936	17 46
6	8 43 51.44	47.53	16 21 22.3	3 29.1	0.330201	17 46
7	8 43 3.91	-47.15	16 24 51.4	+3 27.7	0.330526	17 47
8	8 42 16.76	46.72	+16 28 19.1	3 26.1	0.330910	17 48
9	8 41 30.04	46.25	16 31 45.2	3 24.3	0.331354	17 49
10	8 40 43.79	45.72	16 35 9.5	3 22.4	0.331856	17 50
11	8 39 58.07	45.13	16 38 31.9	3 20.2	0.332416	17 52
12	8 39 12.94	-44.49	16 41 52.1	+3 17.8	0.333034	17 53
13	8 38 28.45	43.80	+16 45 9.9	3 15.2	0.333708	17 55
14	8 37 44.65	43.06	16 48 25.1	3 12.4	0.334438	17 57
15	8 37 1.59	42.28	16 51 37.5	3 9.6	0.335224	17 59
16	8 36 19.31	41.45	16 54 47.1	3 6.6	0.336064	18 1
17	8 35 37.86	-40.58	16 57 53.7	+3 3.4	0.336957	18 3
18	8 34 57.28	39.66	+17 0 57.1	3 0.0	0.337903	18 5
19	8 34 17.62		17 3 57.1		0.338899	18 8

Opp. in AR. Jan. 30

Größe = 11.3

P. Neugebauer.

d\*

## (153) HILDA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Jan. 26	9 40° 47.30	-33.66	+3 22° 17.2	+2 0.0	0.542369	28 <sup>m</sup> 58 <sup>s</sup>
27	9 40 13.64	34.08	3 24 17.2	2 5.2	0.541596	28 55
28	9 39 39.56	34.49	3 26 22.4	2 10.3	0.540858	28 52
29	9 39 5.07	34.87	3 28 32.7	2 15.2	0.540155	28 49
30	9 38 30.20	-35.21	3 30 47.9	+2 20.0	0.539488	28 46
31	9 37 54.99	35.52	+3 33 7.9	2 24.8	0.538857	28 44
Febr. 1	9 37 19.47	35.82	3 35 32.7	2 29.4	0.538263	28 42
2	9 36 43.65	36.09	3 38 2.1	2 33.8	0.537706	28 39
3	9 36 7.56	36.33	3 40 35.9	2 38.2	0.537187	28 37
4	9 35 31.23	-36.54	3 43 14.1	+2 42.4	0.536705	28 36
5	9 34 54.69	36.72	+3 45 56.5	2 46.4	0.536261	28 34
6	9 34 17.97	36.87	3 48 42.9	2 50.4	0.535856	28 32
7	9 33 41.10	36.99	3 51 33.3	2 54.2	0.535490	28 31
8	9 33 4.11	37.09	3 54 27.5	2 57.9	0.535163	28 30
9	9 32 27.02	-37.15	3 57 25.4	+3 1.4	0.534875	28 28
10	9 31 49.87	37.18	+4 0 26.8	3 4.7	0.534627	28 27
11	9 31 12.69	37.17	4 3 31.5	3 8.0	0.534419	28 26
12	9 30 35.52	37.14	4 6 39.5	3 11.0	0.534251	28 26
13	9 29 58.38	37.07	4 9 50.5	3 14.0	0.534122	28 25
14	9 29 21.31	-36.97	4 13 4.5	+3 16.7	0.534031	28 25
15	9 28 44.34	36.84	+4 16 21.2	3 19.2	0.533980	28 25
16	9 28 7.50	36.67	4 19 40.4	3 21.6	0.533968	28 25
17	9 27 30.83	36.48	4 23 2.0	3 23.8	0.533996	28 25
18	9 26 54.35	36.26	4 26 25.8	3 25.8	0.534064	28 25
19	9 26 18.09	-36.02	4 29 51.6	+3 27.7	0.534170	28 25
20	9 25 42.07	35.75	+4 33 19.3	3 29.5	0.534315	28 26
21	9 25 6.32	35.45	4 36 48.8	3 31.1	0.534499	28 27
22	9 24 30.87	35.13	4 40 19.9	3 32.5	0.534721	28 28
23	9 23 55.74	34.78	4 43 52.4	3 33.7	0.534982	28 29
24	9 23 20.96	-34.40	4 47 26.1	+3 34.9	0.535280	28 30
25	9 22 46.56	33.99	+4 51 1.0	3 35.8	0.535615	28 31
26	9 22 12.57	33.56	4 54 36.8	3 36.6	0.535987	28 33
27	9 21 39.01	33.11	4 58 13.4	3 37.2	0.536395	28 34
28	9 21 5.90	32.63	5 1 50.6	3 37.7	0.536840	28 36
März 1	9 20 33.27	-32.13	5 5 28.3	+3 38.1	0.537321	28 38
2	9 20 1.14	31.61	+5 9 6.4	3 38.2	0.537838	28 40
3	9 19 29.53		5 12 44.6		0.538390	28 42

Opp. in AR. Febr. 9      Größte = 13.2

P. Neugebauer.

## (17) THETIS 1910.

<sup>12<sup>h</sup></sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Mittl. Zeit						
Jan.	9 53 5.44	-46.94	+14 58 4.1	+6 34.0	0.224842	13 57
	9 52 18.50	48.07	15 4 38.1	6 38.8	0.223377	13 53
	9 51 30.43	49.15	15 11 16.9	6 43.0	0.221978	13 50
	9 50 41.28	50.15	15 17 59.9	6 46.8	0.220646	13 48
	9 49 51.13	-51.10	15 24 46.7	+6 50.3	0.219382	13 46
	9 49 0.03	52.00	+15 31 37.0	6 53.3	0.218188	13 44
	9 48 8.03	52.85	15 38 30.3	6 55.7	0.217064	13 42
	9 47 15.18	53.63	15 45 26.0	6 57.7	0.216012	13 40
	9 46 21.55	54.33	15 52 23.7	6 59.2	0.215033	13 38
	9 45 27.22	-54.98	15 59 22.9	+7 0.3	0.214128	13 36
Febr.	9 44 32.24	55.57	+16 6 23.2	7 1.0	0.213298	13 35
	9 43 36.67	56.09	16 13 24.2	7 1.1	0.212544	13 33
	9 42 40.58	56.53	16 20 25.3	7 0.8	0.211868	13 32
	9 41 44.05	56.90	16 27 26.1	7 0.2	0.211269	13 31
	9 40 47.15	-57.21	16 34 26.3	+6 59.0	0.210747	13 30
	9 39 49.94	57.45	+16 41 25.3	6 57.3	0.210303	13 29
	9 38 52.49	57.60	16 48 22.6	6 55.2	0.209937	13 28
	9 37 54.89	57.68	16 55 17.8	6 52.7	0.209650	13 28
	9 36 57.21	57.67	17 2 10.5	6 49.6	0.209441	13 27
	9 35 59.54	-57.60	17 9 0.1	+6 46.0	0.209312	13 27
März	9 35 1.94	57.45	+17 15 46.1	6 42.1	0.209261	13 27
	9 34 4.49	57.23	17 22 28.2	6 37.8	0.209289	13 27
	9 33 7.26	56.93	17 29 6.0	6 33.0	0.209393	13 27
	9 32 10.33	56.55	17 35 39.0	6 28.0	0.209571	13 28
	9 31 13.78	-56.11	17 42 7.0	+6 22.6	0.209825	13 28
	9 30 17.67	55.60	+17 48 29.6	6 16.7	0.210153	13 29
	9 29 22.07	55.02	17 54 46.3	6 10.5	0.210556	13 30
	9 28 27.05	54.37	18 0 56.8	6 4.1	0.211034	13 30
	9 27 32.68	53.67	18 7 0.9	5 57.5	0.211586	13 31
	9 26 39.01	-52.91	18 12 58.4	+5 50.5	0.212210	13 33
März	9 25 46.10	52.07	+18 18 48.9	5 43.2	0.212905	13 34
	9 24 54.03	51.17	18 24 32.1	5 35.7	0.213669	13 35
	9 24 2.86	50.22	18 30 7.8	5 27.9	0.214501	13 37
	9 23 12.64	49.22	18 35 35.7	5 19.9	0.215401	13 39
1	9 22 23.42	-48.15	18 40 55.6	+5 11.6	0.216366	13 40
	9 21 35.27	47.02	+18 46 7.2	5 3.0	0.217396	13 42
3	9 20 48.25		18 51 10.2	0.218491	13 44	

Opp. in AR. Febr. 12      Größte = 10.4

P. Neugebauer.

## (71) NIOBE 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Febr. 7	10 25 38.58	-64.46	-○ 30 43.7	-5 45.3	0.196918	13 <sup>m</sup> <sub>s</sub> 4
8	10 24 34.12	65.54	○ 36 29.0	5 37.5	0.195261	13 1
9	10 23 28.58	66.56	○ 42 6.5	5 29.6	0.193675	12 59
10	10 22 22.02	67.52	○ 47 36.1	5 21.7	0.192161	12 56
11	10 21 14.50	-68.40	○ 52 57.8	-5 13.8	0.190720	12 53
12	10 20 6.10	69.21	-○ 58 11.6	5 6.0	0.189353	12 51
13	10 18 56.89	69.95	1 3 17.6	4 58.1	0.188063	12 49
14	10 17 46.94	70.61	1 8 15.7	4 50.3	0.186851	12 47
15	10 16 36.33	71.20	1 13 6.0	4 42.5	0.185718	12 45
16	10 15 25.13	-71.70	1 17 48.5	-4 34.6	0.184624	12 43
17	10 14 13.43	72.13	-1 22 23.1	4 26.8	0.183691	12 41
18	10 13 1.30	72.49	1 26 49.9	4 19.1	0.182798	12 39
19	10 11 48.81	72.76	1 31 9.0	4 11.5	0.181986	12 38
20	10 10 36.05	72.94	1 35 20.5	4 3.9	0.181256	12 37
21	10 9 23.11	-73.05	1 39 24.4	-3 56.2	0.180609	12 36
22	10 8 10.06	73.08	-1 43 20.6	3 48.7	0.180046	12 35
23	10 6 56.98	73.03	1 47 9.3	3 41.2	0.179567	12 34
24	10 5 43.95	72.89	1 50 50.5	3 33.8	0.179171	12 33
25	10 4 31.06	72.68	1 54 24.3	3 26.5	0.178856	12 33
26	10 3 18.38	-72.40	1 57 50.8	-3 19.2	0.178623	12 32
27	10 2 5.98	72.03	-2 1 10.0	3 12.2	0.178472	12 32
28	10 0 53.95	71.57	2 4 22.2	3 5.3	0.178404	12 32
März 1	9 59 42.38	71.02	2 7 27.5	2 58.5	0.178418	12 32
2	9 58 31.36	70.40	2 10 26.0	2 51.9	0.178514	12 32
3	9 57 20.96	-69.72	2 13 17.9	-2 45.4	0.178692	12 32
4	9 56 11.24	68.96	-2 16 3.3	2 39.1	0.178950	12 33
5	9 55 2.28	68.11	2 18 42.4	2 32.9	0.179288	12 33
6	9 53 54.17	67.19	2 21 15.3	2 27.0	0.179704	12 34
7	9 52 46.98	66.21	2 23 42.3	2 21.3	0.180198	12 35
8	9 51 40.77	-65.15	2 26 3.6	-2 15.8	0.180769	12 36
9	9 50 35.62	64.00	-2 28 19.4	2 10.6	0.181415	12 37
10	9 49 31.62	62.80	2 30 30.0	2 5.6	0.182136	12 38
11	9 48 28.82	61.53	2 32 35.6	2 0.9	0.182931	12 40
12	9 47 27.29	60.19	2 34 36.5	1 56.5	0.183796	12 41
13	9 46 27.10	-58.77	2 36 33.0	-1 52.3	0.184731	12 43
14	9 45 28.33	57.27	-2 38 25.3	1 48.5	0.185735	12 45
15	9 44 31.06		2 40 13.8	0.186805		12 46

Opp. in AR. Febr. 19

Größe = 10.2

## (106) DIONE 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Febr. 7	10 39 24.84	-	+ 15 23 18.4	+ 4 47.5	0.387818	20 18 <sup>e</sup>
8	10 38 43.11	42.35	15 28 5.9	4 48.0	0.387268	20 16
9	10 38 0.76	42.94	15 32 53.9	4 48.2	0.386770	20 15
10	10 37 17.82	43.48	15 37 42.1	4 48.0	0.386324	20 13
11	10 36 34.34	-43.99	15 42 30.1	+ 4 47.4	0.385930	20 12
12	10 35 50.35	44.45	+ 15 47 17.5	4 46.4	0.385589	20 11
13	10 35 5.90	44.88	15 52 3.9	4 45.2	0.385302	20 11
14	10 34 21.02	45.25	15 56 49.1	4 43.6	0.385068	20 10
15	10 33 35.77	45.59	16 1 32.7	4 41.8	0.384888	20 9
16	10 32 50.18	-45.88	16 6 14.5	+ 4 39.8	0.384763	20 9
17	10 32 4.30	46.14	+ 16 10 54.3	4 37.4	0.384692	20 9
18	10 31 18.16	46.35	16 15 31.7	4 34.7	0.384676	20 9
19	10 30 31.81	46.51	16 20 6.4	4 31.7	0.384713	20 9
20	10 29 45.30	46.63	16 24 38.1	4 28.5	0.384805	20 9
21	10 28 58.67	-46.71	16 29 6.6	+ 4 25.0	0.384951	20 9
22	10 28 11.96	46.75	+ 16 33 31.6	4 21.4	0.385152	20 10
23	10 27 25.21	46.73	16 37 53.0	4 17.4	0.385407	20 11
24	10 26 38.48	46.68	16 42 10.4	4 13.2	0.385715	20 12
25	10 25 51.80	46.59	16 46 23.6	4 8.8	0.386077	20 13
26	10 25 5.21	-46.45	16 50 32.4	+ 4 4.4	0.386493	20 14
27	10 24 18.76	46.25	+ 16 54 36.8	3 59.4	0.386961	20 15
28	10 23 32.51	46.01	16 58 36.2	3 54.4	0.387483	20 17
März 1	10 22 46.50	45.74	17 2 30.6	3 49.2	0.388057	20 18
2	10 22 0.76	45.42	17 6 19.8	3 43.8	0.388683	20 20
3	10 21 15.34	-45.06	17 10 3.6	+ 3 38.1	0.389362	20 22
4	10 20 30.28	44.66	+ 17 13 41.7	3 32.3	0.390092	20 24
5	10 19 45.62	44.20	17 17 14.0	3 26.4	0.390871	20 26
6	10 19 1.42	43.71	17 20 40.4	3 20.2	0.391700	20 29
7	10 18 17.71	43.18	17 24 0.6	3 13.9	0.392579	20 31
8	10 17 34.53	-42.61	17 27 14.5	+ 3 7.5	0.393506	20 34
9	10 16 51.92	41.99	+ 17 30 22.0	3 0.9	0.394481	20 36
10	10 16 9.93	41.33	17 33 22.9	2 54.1	0.395504	20 38
11	10 15 28.60	40.64	17 36 17.0	2 47.3	0.396573	20 41
12	10 14 47.96	39.92	17 39 4.3	2 40.3	0.397688	20 44
13	10 14 8.04	-39.15	17 41 44.6	+ 2 33.1	0.398847	20 48
14	10 13 28.89	38.35	+ 17 44 17.7	2 25.8	0.400049	20 52
15	10 12 50.54		17 46 43.5		0.401294	20 56

Opp. in AR. Febr. 23

Gröfse = 11.8

## (170) MARIA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Aberr.-Zt.
Febr. 21	II 7 53.69	- 57.97	- II 50 29.0	- I 28.9	0.192196	12 56 <sup>s</sup>
22	II 6 55.72	58.68	II 51 57.9	I 14.3	0.191201	12 54
23	II 5 57.04	59.34	II 53 12.2	0 59.9	0.190273	12 53
24	II 4 57.70	59.93	II 54 12.1	0 45.6	0.189413	12 51
25	II 3 57.77	- 60.45	II 54 57.7	- 0 31.4	0.188624	12 50
26	II 2 57.32	60.90	- II 55 29.1	0 17.3	0.187907	12 48
27	II 1 56.42	61.27	II 55 46.4	- 0 3.4	0.187262	12 47
28	II 0 55.15	61.56	II 55 49.8	+ 0 10.3	0.186690	12 46
März 1	10 59 53.59	61.78	II 55 39.5	0 23.8	0.186192	12 45
2	10 58 51.81	- 61.94	II 55 15.7	+ 0 37.2	0.185769	12 45
3	10 57 49.87	62.03	- II 54 38.5	0 50.4	0.185421	12 44
4	10 56 47.84	62.04	II 53 48.1	I 3.3	0.185149	12 44
5	10 55 45.80	61.99	II 52 44.8	I 16.0	0.184952	12 43
6	10 54 43.81	61.87	II 51 28.8	I 28.3	0.184831	12 43
7	10 53 41.94	- 61.68	II 50 0.5	+ 1 40.4	0.184786	12 43
8	10 52 40.26	61.41	- II 48 20.1	I 52.3	0.184817	12 43
9	10 51 38.85	61.07	II 46 27.8	2 3.8	0.184925	12 43
10	10 50 37.78	60.66	II 44 24.0	2 14.8	0.185110	12 43
11	10 49 37.12	60.19	II 42 9.2	2 25.4	0.185372	12 44
12	10 48 36.93	- 59.65	II 39 43.8	+ 2 35.7	0.185709	12 45
13	10 47 37.28	59.04	- II 37 8.1	2 45.6	0.186122	12 45
14	10 46 38.24	58.36	II 34 22.5	2 54.8	0.186611	12 46
15	10 45 39.88	57.60	II 31 27.7	3 3.6	0.187174	12 47
16	10 44 42.28	56.77	II 28 24.1	3 12.1	0.187810	12 48
17	10 43 45.51	- 55.86	II 25 12.0	+ 3 20.0	0.188518	12 49
18	10 42 49.65	54.90	- II 21 52.0	3 27.4	0.189298	12 51
19	10 41 54.75	53.88	II 18 24.6	3 34.3	0.190149	12 52
20	10 41 0.87	52.79	II 14 50.3	3 40.8	0.191069	12 54
21	10 40 8.08	51.64	II 11 9.5	3 46.8	0.192058	12 56
22	10 39 16.44	- 50.44	II 7 22.7	+ 3 52.4	0.193114	12 58
23	10 38 26.00	49.17	- II 3 30.3	3 57.4	0.194237	13 0
24	10 37 36.83	47.83	10 59 32.9	4 2.1	0.195424	13 2
25	10 36 49.00	46.44	10 55 30.8	4 6.2	0.196674	13 4
26	10 36 2.56	45.01	10 51 24.6	4 9.9	0.197986	13 6
27	10 35 17.55	- 43.53	10 47 14.7	+ 4 13.2	0.199359	13 9
28	10 34 34.02	42.02	- 10 43 1.5	4 15.9	0.200791	13 12
29	10 33 52.00		10 38 45.6		0.202282	13 14

Opp. in AR. März 3      Größte = 11.6

## (118) PEITHO 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Febr. 23	II 53 <sup>h</sup> 43. <sup>m</sup> 28 <sup>s</sup>	-51.14	+13° 21' 35.5	+5 27.0	0.145752	II 37
24	II 52 52.14	52.35	13 27 2.5	5 25.4	0.145042	II 36
25	II 51 59.79	53.49	13 32 27.9	5 23.2	0.144408	II 35
26	II 51 6.30	54.57	13 37 51.1	5 20.5	0.143852	II 34
27	II 50 11.73	-55.58	13 43 11.6		0.143375	II 33
28	II 49 16.15	56.51	+13 48 28.6	+5 13.0	0.142977	II 33
März 1	II 48 19.64	57.37	13 53 41.6	5 8.5	0.142660	II 32
2	II 47 22.27	58.15	13 58 50.1	5 3.5	0.142426	II 32
3	II 46 24.12	58.86	14 3 53.6	4 57.9	0.142275	II 32
4	II 45 25.26	-59.49	14 8 51.5	+4 51.7	0.142207	II 32
5	II 44 25.77	60.04	+14 13 43.2	4 45.0	0.142222	II 32
6	II 43 25.73	60.50	14 18 28.2	4 37.9	0.142320	II 32
7	II 42 25.23	60.87	14 23 6.1	4 30.2	0.142501	II 32
8	II 41 24.36	61.17	14 27 36.3	4 22.2	0.142766	II 33
9	II 40 23.19	-61.38	14 31 58.5	+4 13.6	0.143117	II 33
10	II 39 21.81	61.51	+14 36 12.1	4 4.6	0.143553	II 34
11	II 38 20.30	61.55	14 40 16.7	3 55.2	0.144072	II 35
12	II 37 18.75	61.52	14 44 11.9	3 45.4	0.144676	II 36
13	II 36 17.23	61.39	14 47 57.3	3 35.2	0.145363	II 37
14	II 35 15.84	-61.17	14 51 32.5	+3 24.6	0.146132	II 38
15	II 34 14.67	60.86	+14 54 57.1	3 13.8	0.146983	II 39
16	II 33 13.81	60.47	14 58 10.9	3 2.6	0.147915	II 41
17	II 32 13.34	60.01	15 1 13.5		0.148926	II 42
18	II 31 13.33	59.47	15 4 4.7	2 51.2	0.150017	II 44
19	II 30 13.86	-58.86	15 6 44.1	2 39.4	0.151186	II 46
20	II 29 15.00	58.18	+15 9 11.5	2 15.3	0.152431	II 48
21	II 28 16.82	57.43	15 11 26.8	2 3.0	0.153750	II 50
22	II 27 19.39	56.62	15 13 29.8	1 50.5	0.155143	II 53
23	II 26 22.77	55.74	15 15 20.3	1 37.8	0.156609	II 55
24	II 25 27.03	-54.79	15 16 58.1	+1 25.1	0.158146	II 58
25	II 24 32.24	53.79	+15 18 23.2	1 12.4	0.159752	II 0
26	II 23 38.45	52.74	15 19 35.6	0 59.6	0.161426	II 3
27	II 22 45.71	51.62	15 20 35.2	0 46.8	0.163165	II 6
28	II 21 54.09	50.45	15 21 22.0	0 34.1	0.164969	II 9
29	II 21 3.64	-49.21	15 21 56.1	+0 21.6	0.166836	II 12
30	II 20 14.43	47.90	+15 22 17.7	0 9.2	0.168765	II 15
31	II 19 26.53		15 22 26.9		0.170753	II 19

Opp. in AR. März 14

Größe = 10.7

P. Neugebauer.

## (178) BELISANA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Febr. 15	II 56 <sup>h</sup> 29. <sup>m</sup> 04 <sup>s</sup>	-32.07	+3 20 50.9	+3 54 <sup>2</sup>	0.196991	13 <sup>m</sup> 5 <sup>s</sup>
	16 II 55 56.97	33.56	3 24 45.1	4 2.5	0.194963	13 1
	17 II 55 23.41	35.01	3 28 47.6	4 10.4	0.192988	12 57
	18 II 54 48.40	36.43	3 32 58.0	4 18.0	0.191068	12 54
	19 II 54 11.97	-37.83	3 37 16.0	+4 25.4	0.189205	12 51
	20 II 53 34.14	39.19	+3 41 41.4	4 32.4	0.187400	12 47
	21 II 52 54.95	40.49	3 46 13.8	4 39.1	0.185655	12 44
	22 II 52 14.46	41.77	3 50 52.9	4 45.5	0.183972	12 41
	23 II 51 32.69	43.02	3 55 38.4	4 51.6	0.182353	12 39
	24 II 50 49.67	-44.22	4 0 30.0	+4 57.4	0.180798	12 36
	25 II 50 5.45	45.37	+4 5 27.4	5 2.7	0.179310	12 33
	26 II 49 20.08	46.46	4 10 30.1	5 7.7	0.177890	12 31
	27 II 48 33.62	47.52	4 15 37.8	5 12.3	0.176539	12 29
	28 II 47 46.10	48.52	4 20 50.1	5 16.5	0.175259	12 26
	März 1 II 46 57.58	-49.46	4 26 6.6	+5 20.4	0.174051	12 24
	2 II 46 8.12	50.34	+4 31 27.0	5 23.9	0.172917	12 22
	3 II 45 17.78	51.15	4 36 50.9	5 26.9	0.171859	12 20
	4 II 44 26.63	51.92	4 42 17.8	5 29.4	0.170877	12 19
	5 II 43 34.71	52.62	4 47 47.2	5 31.6	0.169972	12 17
	6 II 42 42.09	-53.24	4 53 18.8	+5 33.2	0.169144	12 16
	7 II 41 48.85	53.80	+4 58 52.0	5 34.4	0.168394	12 15
	8 II 40 55.05	54.28	5 4 26.4	5 35.1	0.167724	12 13
	9 II 40 0.77	54.70	5 10 1.5	5 35.4	0.167135	12 12
	10 II 39 6.07	55.04	5 15 36.9	5 35.1	0.166628	12 12
	11 II 38 11.03	-55.30	5 21 12.0	+5 34.3	0.166204	12 11
	12 II 37 15.73	55.48	+5 26 46.3	5 33.0	0.165862	12 10
	13 II 36 20.25	55.60	5 32 19.3	5 31.2	0.165603	12 10
♂ 14	II 35 24.65	55.63	5 37 50.5	5 28.9	0.165427	12 10
15	II 34 29.02	55.59	5 43 19.4	5 26.0	0.165333	12 10
16	II 33 33.43	-55.47	5 48 45.4	+5 22.8	0.165321	12 10
17	II 32 37.96	55.28	+5 54 8.2	5 19.1	0.165392	12 10
18	II 31 42.68	55.01	5 59 27.3	5 14.8	0.165544	12 10
19	II 30 47.67	54.67	6 4 42.1	5 10.2	0.165778	12 10
20	II 29 53.00	54.26	6 9 52.3	5 5.2	0.166091	12 11
21	II 28 58.74	-53.78	6 14 57.5	+4 59.7	0.166483	12 11
22	II 28 4.96	53.23	+6 19 57.2	4 53.8	0.166954	12 12
23	II 27 11.73		6 24 51.0		0.167502	12 13

Opp. in AR. März 14

Größe = 12.0

P. Neugebauer.

## (148) GALLIA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
März 17	12 34 40.44	-43.88	+19 23 54.5	+10 37.7	0.344198	18 21 <sup>5</sup>
18	12 33 56.56	44.30	19 34 32.2	10 28.2	0.344306	18 22
19	12 33 12.26	44.67	19 45 0.4	10 18.2	0.344470	18 22
20	12 32 27.59	45.00	19 55 18.6	10 7.8	0.344690	18 23
21	12 31 42.59	-45.28	20 5 26.4	+ 9 57.0	0.344967	18 23
22	12 30 57.31	45.50	+20 15 23.4	9 45.8	0.345299	18 24
23	12 30 11.81	45.67	20 25 9.2	9 34.2	0.345687	18 25
24	12 29 26.14	45.79	20 34 43.4	9 22.2	0.346130	18 26
25	12 28 40.35	45.88	20 44 5.6	9 10.0	0.346628	18 27
26	12 27 54.47	-45.94	20 53 15.6	+ 8 57.4	0.347180	18 29
27	12 27 8.53	45.94	+21 2 13.0	8 44.4	0.347787	18 30
c 28	12 26 22.59	45.87	21 10 57.4	8 31.2	0.348447	18 32
29	12 25 36.72	45.76	21 19 28.6	8 17.8	0.349159	18 34
30	12 24 50.96	45.61	21 27 46.4	8 4.1	0.349924	18 36
31	12 24 5.35	-45.41	21 35 50.5	+ 7 50.0	0.350740	18 38
April 1	12 23 19.94	45.17	+21 43 40.5	7 35.8	0.351606	18 40
2	12 22 34.77	44.88	21 51 16.3	7 21.4	0.352522	18 42
3	12 21 49.89	44.53	21 58 37.7	7 6.8	0.353488	18 45
4	12 21 5.36	44.14	22 5 44.5	6 52.0	0.354502	18 48
5	12 20 21.22	-43.71	22 12 36.5	+ 6 37.0	0.355563	18 50
6	12 19 37.51	43.24	+22 19 13.5	6 22.0	0.356672	18 53
7	12 18 54.27	42.71	22 25 35.5	6 6.8	0.357827	18 56
8	12 18 11.56	42.14	22 31 42.3	5 51.5	0.359026	19 0
9	12 17 29.42	41.52	22 37 33.8	5 36.1	0.360268	19 3
10	12 16 47.90	-40.86	22 43 9.9	+ 5 20.7	0.361553	19 6
11	12 16 7.04	40.16	+22 48 30.6	5 5.2	0.362879	19 10
12	12 15 26.88	39.43	22 53 35.8	4 49.7	0.364246	19 13
13	12 14 47.45	38.66	22 58 25.5	4 34.2	0.365652	19 17
14	12 14 8.79	37.86	23 2 59.7	4 18.7	0.367096	19 21
15	12 13 30.93	-37.02	23 7 18.4	+ 4 3.2	0.368578	19 25
16	12 12 53.91	36.16	+23 11 21.6	3 47.8	0.370095	19 29
17	12 12 17.75	35.25	23 15 9.4	3 32.6	0.371647	19 33
18	12 11 42.50	34.32	23 18 42.0	3 17.4	0.373232	19 37
19	12 11 8.18	33.37	23 21 59.4	3 2.3	0.374849	19 42
20	12 10 34.81	-32.39	23 25 1.7	+ 2 47.4	0.376497	19 46
21	12 10 2.42	31.39	+23 27 49.1	2 32.7	0.378175	19 51
22	12 9 31.03		23 30 21.8		0.379881	19 55

Opp. in AR. März 28      Gröfse = 11.7

P. Neugebauer.

## (121) HERMIONE 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Aberr.-Zt.
April	4 14 32 <sup>h</sup> 16.24	-33.81	-7 42 32.8	+2 46.1	0.464897	24 14 <sup>m</sup> <sup>s</sup>
	5 14 31 42.43	34.53	7 39 46.7	2 47.5	0.463869	24 11
	6 14 31 7.90	35.21	7 36 59.2	2 48.7	0.462879	24 7
	7 14 30 32.69	35.87	7 34 10.5	2 49.7	0.461928	24 4
	8 14 29 56.82	-36.50	7 31 20.8	+2 50.6	0.461017	24 1
	9 14 29 20.32	37.10	-7 28 30.2	2 51.3	0.460145	23 58
	10 14 28 43.22	37.67	7 25 38.9	2 51.8	0.459314	23 55
	11 14 28 5.55	38.20	7 22 47.1	2 52.2	0.458524	23 53
	12 14 27 27.35	38.71	7 19 54.9	2 52.4	0.457777	23 50
	13 14 26 48.64	-39.18	7 17 2.5	+2 52.4	0.457072	23 48
	14 14 26 9.46	39.62	-7 14 10.1	2 52.1	0.456409	23 46
	15 14 25 29.84	40.03	7 11 18.0	2 51.7	0.455790	23 44
	16 14 24 49.81	40.41	7 8 26.3	2 51.3	0.455215	23 42
	17 14 24 9.40	40.75	7 5 35.0	2 50.6	0.454683	23 40
	18 14 23 28.65	-41.05	7 2 44.4	+2 49.7	0.454196	23 39
	19 14 22 47.60	41.33	-6 59 54.7	2 48.7	0.453753	23 37
	20 14 22 6.27	41.57	6 57 6.0	2 47.5	0.453354	23 36
	21 14 21 24.70	41.78	6 54 18.5	2 46.1	0.453000	23 35
	22 14 20 42.92	41.95	6 51 32.4	2 44.7	0.452691	23 34
	23 14 20 0.97	-42.09	6 48 47.7	+2 43.1	0.452427	23 33
	24 14 19 18.88	42.20	-6 46 4.6	2 41.3	0.452209	23 32
	25 14 18 36.68	42.27	6 43 23.3	2 39.3	0.452037	23 32
	26 14 17 54.41	42.31	6 40 44.0	2 37.1	0.451911	23 31
27	14 17 12.10	42.31	6 38 6.9	2 34.8	0.451830	23 31
	28 14 16 29.79	-42.28	6 35 32.1	+2 32.4	0.451794	23 31
Mai	29 14 15 47.51	42.22	-6 32 59.7	2 29.8	0.451804	23 31
	30 14 15 5.29	42.13	6 30 29.9	2 27.0	0.451858	23 31
	1 14 14 23.16	42.00	6 28 2.9	2 24.0	0.451958	23 31
	2 14 13 41.16	41.82	6 25 38.9	2 20.9	0.452104	23 32
	3 14 12 59.34	-41.62	6 23 18.0	+2 17.7	0.452294	23 32
	4 14 12 17.72	41.38	-6 21 0.3	2 14.3	0.452529	23 33
	5 14 11 36.34	41.12	6 18 46.0	2 10.8	0.452809	23 34
	6 14 10 55.22	40.82	6 16 35.2	2 7.0	0.453133	23 35
	7 14 10 14.40	40.47	6 14 28.2	2 3.2	0.453501	23 36
	8 14 9 33.93	-40.10	6 12 25.0	+1 59.1	0.453912	23 38
9	14 8 53.83	39.69	-6 10 25.9	1 54.9	0.454366	23 39
	10 14 8 14.14		6 8 31.0		0.454863	23 41

Opp. in AR. April 27

Gröfse = 11.3

P. Neugebauer.

## (28) BELLONA 1910.

$\tau^{2h}$ Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. $\Delta$	Aberr.-Zt.
April 16	15 16 <sup>m</sup> 18 <sup>s</sup> .16	-40.11	-3 45 45.8	+5 46.2	0.256951	15 <sup>m</sup> 1
17	15 15 38.05	41.08	3 39 59.6	5 43.5	0.256161	14 59
18	15 14 56.97	42.01	3 34 16.1	5 40.5	0.255430	14 58
19	15 14 14.96	42.89	3 28 35.6	5 37.2	0.254758	14 56
20	15 13 32.07	-43.72	3 22 58.4	+5 33.6	0.254146	14 55
21	15 12 48.35	44.50	-3 17 24.8	5 29.7	0.253595	14 54
22	15 12 3.85	45.24	3 11 55.1	5 25.4	0.253106	14 53
23	15 11 18.61	45.94	3 6 29.7	5 20.8	0.252680	14 52
24	15 10 32.67	46.58	3 1 8.9	5 15.9	0.252316	14 51
25	15 9 46.09	-47.16	2 55 53.0	+5 10.8	0.252015	14 51
26	15 8 58.93	47.70	-2 50 42.2	5 5.3	0.251779	14 50
27	15 8 11.23	48.19	2 45 36.9	4 59.5	0.251607	14 50
28	15 7 23.04	48.62	2 40 37.4	4 53.4	0.251499	14 50
29	15 6 34.42	48.99	2 35 44.0	4 47.1	0.251455	14 50
30	15 5 45.43	-49.30	2 30 56.9	+4 40.4	0.251477	14 50
Mai 1	15 4 56.13	49.55	-2 26 16.5	4 33.4	0.251564	14 50
2	15 4 6.58	49.76	2 21 43.1	4 26.1	0.251716	14 50
3	15 3 16.82	49.92	2 17 17.0	4 18.6	0.251934	14 50
4	15 2 26.90	50.01	2 12 58.4	4 10.7	0.252218	14 51
5	15 1 36.89	-50.05	2 8 47.7	+4 2.7	0.252567	14 52
6	15 0 46.84	50.03	-2 4 45.0	3 54.4	0.252982	14 53
7	14 59 56.81	49.94	2 0 50.6	3 45.8	0.253462	14 54
8	14 59 6.87	49.80	1 57 4.8	3 36.9	0.254006	14 55
9	14 58 17.07	49.60	1 53 27.9	3 27.9	0.254615	14 56
10	14 57 27.47	-49.35	1 50 0.0	+3 18.7	0.255289	14 57
11	14 56 38.12	49.04	-1 46 41.3	3 9.2	0.256025	14 59
12	14 55 49.08	48.67	1 43 32.1	2 59.5	0.256824	15 1
13	14 55 0.41	48.24	1 40 32.6	2 49.8	0.257686	15 2
14	14 54 12.17	47.76	1 37 42.8	2 40.0	0.258608	15 4
15	14 53 24.41	-47.23	1 35 2.8	+2 30.0	0.259590	15 6
16	14 52 37.18	46.66	-1 32 32.8	2 19.9	0.260631	15 8
17	14 51 50.52	46.03	1 30 12.9	2 9.7	0.261731	15 11
18	14 51 4.49	45.35	1 28 3.2	1 59.5	0.262888	15 13
19	14 50 19.14	44.63	1 26 3.7	1 49.2	0.264101	15 16
20	14 49 34.51	-43.87	1 24 14.5	+1 38.8	0.265369	15 18
21	14 48 50.64	43.08	-1 22 35.7	1 28.2	0.266692	15 21
22	14 48 7.56		1 21 7.5	0.268069		15 24

Opp. in AR. Mai 8 Grösse = 10.1

P. Neugebauer.

## (164) EVA 1910.

$\frac{12}{h}$ Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. $\Delta$	Aberr.-Zt.
April 28	16 <sup>h</sup> 2 <sup>m</sup> 47.04	-52.19	-4 15 46.5	+ 8.5	0.305650	16 <sup>m</sup> 48 <sup>s</sup>
29	16 1 54.85	53.41	4 15 38.0	+ 3.6	0.303810	16 43
30	16 1 1.44	54.59	4 15 34.4	- 1.4	0.302018	16 39
Mai I	16 0 6.85	55.73	4 15 35.8	0 6.7	0.300275	16 35
2	15 59 11.12	-56.83	4 15 42.5	- 0 12.1	0.298584	16 31
3	15 58 14.29	57.89	-4 15 54.6	0 17.6	0.296945	16 28
4	15 57 16.40	58.91	4 16 12.2	0 23.5	0.295359	16 24
5	15 56 17.49	59.87	4 16 35.7	0 29.5	0.293827	16 21
6	15 55 17.62	60.80	4 17 5.2	0 35.7	0.292350	16 17
7	15 54 16.82	-61.69	4 17 40.9	- 0 42.1	0.290930	16 14
8	15 53 15.13	62.51	-4 18 23.0	0 48.7	0.289567	16 11
9	15 52 12.62	63.27	4 19 11.7	0 55.5	0.288264	16 8
10	15 51 9.35	63.96	4 20 7.2	1 2.3	0.287021	16 5
11	15 50 5.39	64.61	4 21 9.5	1 9.3	0.285839	16 3
12	15 49 0.78	-65.22	4 22 18.8	- 1 16.5	0.284718	16 0
13	15 47 55.56	65.76	-4 23 35.3	1 23.8	0.283660	15 58
14	15 46 49.80	66.23	4 24 59.1	1 31.2	0.282665	15 56
15	15 45 43.57	66.65	4 26 30.3	1 38.7	0.281733	15 54
16	15 44 36.92	67.02	4 28 9.0	1 46.2	0.280866	15 52
17	15 43 29.90	-67.32	4 29 55.2	- 1 53.9	0.280063	15 50
18	15 42 22.58	67.56	-4 31 49.1	2 1.6	0.279324	15 48
19	15 41 15.02	67.74	4 33 50.7	2 9.4	0.278650	15 47
20	15 40 7.28	67.87	4 36 0.1	2 17.3	0.278041	15 46
21	15 38 59.41	67.95	4 38 17.4	2 25.3	0.277497	15 44
22	15 37 51.46	-67.95	4 40 42.7	- 2 33.2	0.277019	15 43
23	15 36 43.51	67.89	-4 43 15.9	2 41.3	0.276606	15 43
24	15 35 35.62	67.78	4 45 57.2	2 49.4	0.276259	15 42
25	15 34 27.84	67.61	4 48 46.6	2 57.5	0.275978	15 41
26	15 33 20.23	67.38	4 51 44.1	3 5.6	0.275763	15 41
27	15 32 12.85	-67.08	4 54 49.7	- 3 13.8	0.275613	15 40
28	15 31 5.77	66.72	-4 58 3.5	3 22.0	0.275529	15 40
29	15 29 59.05	66.31	5 1 25.5	3 30.1	0.275509	15 40
30	15 28 52.74	65.84	5 4 55.6	3 38.2	0.275553	15 40
31	15 27 46.90	65.31	5 8 33.8	3 46.4	0.275660	15 40
Juni I	15 26 41.59	-64.74	5 12 20.2	- 3 54.6	0.275830	15 41
2	15 25 36.85	64.14	-5 16 14.8	4 2.8	0.276062	15 41
3	15 24 32.71		5 20 17.6		0.276356	15 42

Opp. in AR. Mai 19

Größe = 12.0

## (76) FREIA 1910.

<sup>12<sup>h</sup>Mittl. Zeit</sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Mai	18 16 <sup>h</sup> 59 <sup>m</sup> 20. <sup>s</sup> 19	-40.24	-20° 59' 45.4	+1 24.5	0.475738	24 51 <sup>m</sup> <sup>s</sup>
	19 16 58 39.95	40.77	20 58 20.9	1 25.4	0.475098	24 48
	20 16 57 59.18	41.27	20 56 55.5	1 26.2	0.474498	24 46
	21 16 57 17.91	41.74	20 55 29.3	1 27.0	0.473938	24 44
	22 16 56 36.17	-42.18	20 54 2.3	+1 27.8	0.473419	24 43
	23 16 55 53.99	42.58	-20 52 34.5	1 28.5	0.472941	24 41
	24 16 55 11.41	42.94	20 51 6.0	1 29.2	0.472504	24 40
	25 16 54 28.47	43.26	20 49 36.8	1 29.8	0.472109	24 38
	26 16 53 45.21	43.55	20 48 7.0	1 30.5	0.471756	24 37
	27 16 53 1.66	-43.82	20 46 36.5	+1 31.1	0.471445	24 36
	28 16 52 17.84	44.04	-20 45 5.4	1 31.6	0.471177	24 35
	29 16 51 33.80	44.22	20 43 33.8	1 32.1	0.470951	24 34
	30 16 50 49.58	44.38	20 42 1.7	1 32.5	0.470768	24 34
	31 16 50 5.20	44.51	20 40 29.2	1 32.9	0.470628	24 33
Juni	1 16 49 20.69	-44.59	20 38 56.3	+1 33.2	0.470532	24 33
	2 16 48 36.10	44.64	-20 37 23.1	1 33.4	0.470480	24 33
	3 16 47 51.46	44.65	20 35 49.7	1 33.6	0.470472	24 33
	4 <sup>d</sup> 16 47 6.81	44.62	20 34 16.1	1 33.6	0.470507	24 33
	5 16 46 22.19	44.55	20 32 42.5	1 33.6	0.470586	24 33
	6 16 45 37.64	-44.44	20 31 8.9	+1 33.5	0.470709	24 34
	7 16 44 53.20	44.30	-20 29 35.4	1 33.3	0.470875	24 34
	8 16 44 8.90	44.13	20 28 2.1	1 33.0	0.471085	24 35
	9 16 43 24.77	43.92	20 26 29.1	1 32.6	0.471338	24 36
	10 16 42 40.85	43.66	20 24 56.5	1 32.1	0.471634	24 37
	11 16 41 57.19	-43.38	20 23 24.4	+1 31.5	0.471973	24 38
	12 16 41 13.81	43.06	-20 21 52.9	1 31.0	0.472355	24 39
	13 16 40 30.75	42.69	20 20 21.9	1 30.5	0.472779	24 41
	14 16 39 48.06	42.29	20 18 51.4	1 29.8	0.473245	24 42
	15 16 39 5.77	41.86	20 17 21.6	1 29.1	0.473752	24 44
	16 16 38 23.91	-41.41	20 15 52.5	+1 28.2	0.474300	24 46
	17 16 37 42.50	40.94	-20 14 24.3	1 27.2	0.474889	24 48
	18 16 37 1.56	40.43	20 12 57.1	1 26.2	0.475518	24 50
	19 16 36 21.13	39.88	20 11 30.9	1 25.0	0.476186	24 52
	20 16 35 41.25	39.31	20 10 5.9	1 23.7	0.476893	24 55
	21 16 35 1.94	-38.73	20 8 42.2	+1 22.4	0.477639	24 57
	22 16 34 23.21	38.13	-20 7 19.8	1 21.1	0.478423	25 0
	23 16 33 45.08		20 5 58.7		0.479244	25 3

Opp. in AR. Juni 4 Grösse = 12.7

P. Neugebauer.

## (108) HECUBA 1910.

$12^h$ Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Mai 18	17 7 21.29	-45.38	-29 ° 8' 24.2	-o 7.6	0.340910	18 <sup>m</sup> 13 <sup>s</sup>
	19 6 35.91	46.22	29 8 31.8	-o 3.0	0.340105	18 11
	20 5 49.69	47.00	29 8 34.8	+o 1.5	0.339349	18 9
	21 5 2.69	47.74	29 8 33.3	o 6.0	0.338644	18 7
	22 4 14.95	-48.43	29 8 27.3	+o 10.6	0.337990	18 6
	23 3 26.52	49.07	-29 8 16.7	o 15.2	0.337389	18 4
	24 2 37.45	49.67	29 8 1.5	o 19.8	0.336840	18 3
	25 1 47.78	50.21	29 7 41.7	o 24.4	0.336344	18 2
	26 0 57.57	50.70	29 7 17.3	o 29.1	0.335900	18 0
	27 0 6.87	-51.15	29 6 48.2	+o 33.8	0.335511	17 59
	28 16 59 15.72	51.56	-29 6 14.4	o 38.4	0.335176	17 59
	29 16 58 24.16	51.91	29 5 36.0	o 43.1	0.334896	17 58
	30 16 57 32.25	52.20	29 4 52.9	o 47.7	0.334671	17 57
	31 16 56 40.05	52.43	29 4 5.2	o 52.4	0.334501	17 57
	Juni 1 16 55 47.62	-52.61	29 3 12.8	+o 56.9	0.334388	17 57
	2 16 54 55.01	52.73	-29 2 15.9	1 1.5	0.334331	17 56
	3 16 54 2.28	52.80	29 1 14.4	1 5.9	0.334330	17 56
	4 16 53 9.48	52.81	29 0 8.5	1 10.2	0.334386	17 57
	5 16 52 16.67	52.76	28 58 58.3	1 14.4	0.334499	17 57
	6 16 51 23.91	-52.66	28 57 43.9	+1 18.5	0.334669	17 57
	7 16 50 31.25	52.49	-28 56 25.4	1 22.5	0.334895	17 58
	8 16 49 38.76	52.27	28 55 2.9	1 26.5	0.335177	17 58
	9 16 48 46.49	51.99	28 53 36.4	1 30.3	0.335516	17 59
	10 16 47 54.50	51.65	28 52 6.1	1 33.8	0.335911	18 0
	11 16 47 2.85	-51.26	28 50 32.3	+1 37.3	0.336361	18 2
	12 16 46 11.59	50.82	-28 48 55.0	1 40.7	0.336866	18 3
	13 16 45 20.77	50.32	28 47 14.3	1 43.9	0.337426	18 4
	14 16 44 30.45	49.78	28 45 30.4	1 47.0	0.338040	18 6
	15 16 43 40.67	49.19	28 43 43.4	1 50.0	0.338709	18 7
	16 16 42 51.48	-48.55	28 41 53.4	+1 52.7	0.339431	18 9
	17 16 42 2.93	47.86	-28 40 0.7	1 55.4	0.340205	18 11
	18 16 41 15.07	47.13	28 38 5.3	1 58.0	0.341032	18 13
	19 16 40 27.94	46.36	28 36 7.3	2 0.3	0.341910	18 15
	20 16 39 41.58	45.56	28 34 7.0	2 2.4	0.342838	18 18
	21 16 38 56.02	-44.72	28 32 4.6	+2 4.4	0.343817	18 20
	22 16 38 11.30	43.85	-28 30 0.2	2 6.1	0.344845	18 23
	23 16 37 27.45		28 27 54.1		0.345920	18 26

Opp. in AR. Juni 5

Größte = 11.6

## (47) AGLAJA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Mai	18 17 35 35.25	-38.81	-30° 37' 29.9	-1° 52.8	0.238772	14 24 <sup>m</sup>
	19 17 34 56.44	40.24	30 39 22.7	1 48.8	0.236989	14 20
	20 17 34 16.20	41.63	30 41 11.5	1 44.5	0.235256	14 17
	21 17 33 34.57	42.99	30 42 56.0	1 40.0	0.233575	14 13
	22 17 32 51.58	-44.30	30 44 36.0	-1 35.4	0.231947	14 10
	23 17 32 7.28	45.58	-30 46 11.4	1 30.7	0.230373	14 7
	24 17 31 21.70	46.82	30 47 42.1	1 25.7	0.228853	14 4
	25 17 30 34.88	48.01	30 49 7.8	1 20.7	0.227387	14 1
	26 17 29 46.87	49.15	30 50 28.5	1 15.4	0.225978	I3 59
	27 17 28 57.72	-50.25	30 51 43.9	-1 9.8	0.224627	I3 56
	28 17 28 7.47	51.29	-30 52 53.7	1 4.1	0.223336	I3 54
	29 17 27 16.18	52.28	30 53 57.8	0 58.1	0.222106	I3 51
	30 17 26 23.90	53.21	30 54 55.9	0 52.0	0.220938	I3 49
	31 17 25 30.69	54.07	30 55 47.9	0 46.0	0.219832	I3 47
	Juni 1 17 24 36.62	-54.87	30 56 33.9	-0 39.8	0.218790	I3 45
	2 17 23 41.75	55.61	-30 57 13.7	0 33.5	0.217814	I3 43
	3 17 22 46.14	56.26	30 57 47.2	0 27.1	0.216903	I3 41
	4 17 21 49.88	56.84	30 58 14.3	0 20.7	0.216059	I3 40
	5 17 20 53.04	57.36	30 58 35.0	0 14.2	0.215283	I3 38
	6 17 19 55.68	-57.80	30 58 49.2	-0 7.7	0.214576	I3 37
	7 17 18 57.88	58.16	-30 58 56.9	-0 1.2	0.213937	I3 36
	8 17 17 59.72	58.44	30 58 58.1	+0 5.3	0.213368	I3 35
	9 17 17 1.28	58.64	30 58 52.8	0 11.7	0.212868	I3 34
	10 17 16 2.64	58.78	30 58 41.1	0 17.9	0.212438	I3 33
	11 17 15 3.86	-58.83	30 58 23.2	+0 24.2	0.212078	I3 32
	12 17 14 5.03	58.80	-30 57 59.0	0 30.5	0.211789	I3 32
	13 17 13 6.23	58.70	30 57 28.5	0 36.7	0.211570	I3 31
	14 17 12 7.53	58.51	30 56 51.8	0 42.8	0.211421	I3 31
	15 17 11 9.02	58.25	30 56 9.0	0 48.8	0.211342	I3 31
	16 17 10 10.77	-57.92	30 55 20.2	+0 54.8	0.211333	I3 31
	17 17 9 12.85	57.52	-30 54 25.4	1 0.8	0.211394	I3 31
	18 17 8 15.33	57.05	30 53 24.6	1 6.6	0.211524	I3 31
	19 17 7 18.28	56.50	30 52 18.0	1 12.1	0.211724	I3 32
	20 17 6 21.78	55.90	30 51 5.9	1 17.4	0.211992	I3 32
	21 17 5 25.88	-55.24	30 49 48.5	+1 22.6	0.212328	I3 33
	22 17 4 30.64	54.50	-30 48 25.9	1 27.7	0.212731	I3 34
	23 17 3 36.14		30 46 58.2		0.213201	I3 34

Opp. in AR. Juni 11      Gröfse = 10.7

P. Neugebauer.

## (176) IDUNNA 1910.

<sup>12<sup>b</sup></sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Mittl. Zeit						
Juni 7	18 <sup>h</sup> 13 <sup>m</sup> 13 <sup>s</sup> .87	- <sup>s</sup> 40.74	+6 <sup>h</sup> 6 <sup>m</sup> 41.0	+4 <sup>h</sup> " 54.7	0.383562	20 <sup>m</sup> 6 <sup>s</sup>
8	18 12 33.13	41.35	6 11 35.7	4 44.3	0.382660	20 3
9	18 11 51.78	41.92	6 16 20.0	4 33.7	0.381800	20 1
10	18 11 9.86	42.45	6 20 53.7	4 22.9	0.380982	19 59
11	18 10 27.41	-42.95	6 25 16.6	+4 11.8	0.380206	19 56
12	18 9 44.46	43.40	+6 29 28.4	4 0.6	0.379472	19 54
13	18 9 1.06	43.82	6 33 29.0	3 49.3	0.378782	19 52
14	18 8 17.24	44.20	6 37 18.3	3 37.8	0.378135	19 51
15	18 7 33.04	44.54	6 40 56.1	3 26.2	0.377532	19 49
16	18 6 48.50	-44.84	6 44 22.3	+3 14.3	0.376974	19 47
17	18 6 3.66	45.09	+6 47 36.6	3 2.4	0.376459	19 46
18	18 5 18.57	45.31	6 50 39.0	2 50.4	0.375989	19 45
19	18 4 33.26	45.50	6 53 29.4	2 38.3	0.375564	19 44
20	18 3 47.76	45.64	6 56 7.7	2 26.1	0.375183	19 43
21	18 3 2.12	-45.74	6 58 33.8	+2 13.8	0.374846	19 42
22	18 2 16.38	45.81	+7 0 47.6	2 1.6	0.374554	19 41
23	18 1 30.57	45.83	7 2 49.2	1 49.2	0.374306	19 40
24	18 0 44.74	45.81	7 4 38.4	1 36.8	0.374103	19 40
25	17 59 58.93	45.75	7 6 15.2	1 24.3	0.373945	19 39
26	17 59 13.18	-45.65	7 7 39.5	+1 11.7	0.373833	19 39
27	17 58 27.53	45.50	+7 8 51.2	0 59.3	0.373766	19 39
28	17 57 42.03	45.32	7 9 50.5	0 46.8	0.373744	19 39
29	17 56 56.71	45.10	7 10 37.3	0 34.2	0.373766	19 39
30	17 56 11.61	44.84	7 11 11.5	0 21.8	0.373832	19 39
Juli 1	17 55 26.77	-44.54	7 11 33.3	+0 9.3	0.373942	19 39
2	17 54 42.23	44.18	+7 11 42.6	-0 3.1	0.374096	19 40
3	17 53 58.05	43.79	7 11 39.5	0 15.6	0.374294	19 40
4	17 53 14.26	43.36	7 11 23.9	0 27.9	0.374536	19 41
5	17 52 30.90	42.88	7 10 56.0	0 40.2	0.374821	19 42
6	17 51 48.02	-42.37	7 10 15.8	-0 52.3	0.375148	19 43
7	17 51 5.65	41.82	+7 9 23.5	1 4.4	0.375518	19 44
8	17 50 23.83	41.23	7 8 19.1	1 16.4	0.375930	19 45
9	17 49 42.60	40.60	7 7 2.7	1 28.2	0.376383	19 46
10	17 49 2.00	39.93	7 5 34.5	1 39.9	0.376877	19 47
11	17 48 22.07	-39.24	7 3 54.6	-1 51.4	0.377411	19 49
12	17 47 42.83	38.50	+7 2 3.2	2 2.6	0.377984	19 50
13	17 47 4.33		7 0 0.6		0.378596	19 52

Opp. in AR. Juni 22      Gröfse = 12.4

P. Neugebauer.

## (53) KALYPSO 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Juni 11	18 46 <sup>m</sup> 34.41	-47.78	-17 22 <sup>o</sup> 11. <sup>n</sup> 4	-0 55.8	0.340050	18 <sup>m</sup> <sup>s</sup>
	12 18 45 46.63	48.61	17 23 7.2	0 58.4	0.339051	18 8
	13 18 44 58.02	49.40	17 24 5.6	1 1.0	0.338103	18 6
	14 18 44 8.62	50.13	17 25 6.6	1 3.7	0.337206	18 4
	15 18 43 18.49	-50.83	17 26 10.3	-1 6.2	0.336361	18 2
	16 18 42 27.66	51.48	-17 27 16.5	1 8.5	0.335569	18 0
	17 18 41 36.18	52.08	17 28 25.0	1 10.9	0.334830	17 58
	18 18 40 44.10	52.65	17 29 35.9	1 13.2	0.334145	17 56
	19 18 39 51.45	53.16	17 30 49.1	1 15.4	0.333516	17 54
	20 18 38 58.29	-53.62	17 32 4.5	-1 17.6	0.332942	17 53
	21 18 38 4.67	54.05	-17 33 22.1	1 19.6	0.332423	17 52
	22 18 37 10.62	54.43	17 34 41.7	1 21.6	0.331960	17 51
	23 18 36 16.19	54.76	17 36 3.3	1 23.6	0.331553	17 50
	24 18 35 21.43	55.04	17 37 26.9	1 25.5	0.331203	17 49
	25 18 34 26.39	-55.28	17 38 52.4	-1 27.4	0.330911	17 48
	26 18 33 31.11	55.46	-17 40 19.8	1 29.1	0.330676	17 48
	27 18 32 35.65	55.58	17 41 48.9	1 30.8	0.330499	17 47
	28 18 31 40.07	55.66	17 43 19.7	1 32.4	0.330379	17 47
	29 18 30 44.41	55.70	17 44 52.1	1 34.0	0.330318	17 47
	30 18 29 48.71	-55.68	17 46 26.1	-1 35.6	0.330315	17 47
Juli 1	18 28 53.03	55.60	-17 48 1.7	1 37.0	0.330370	17 47
	2 18 27 57.43	55.47	17 49 38.7	1 38.5	0.330483	17 47
	3 18 27 1.96	55.27	17 51 17.2	1 39.8	0.330655	17 47
	4 18 26 6.69	55.03	17 52 57.0	1 41.1	0.330886	17 48
	5 18 25 11.66	-54.74	17 54 38.1	-1 42.3	0.331175	17 49
	6 18 24 16.92	54.40	-17 56 20.4	1 43.5	0.331521	17 50
	7 18 23 22.52	53.99	17 58 3.9	1 44.7	0.331925	17 51
	8 18 22 28.53	53.53	17 59 48.6	1 45.8	0.332386	17 52
	9 18 21 35.00	53.02	18 1 34.4	1 46.8	0.332903	17 53
	10 18 20 41.98	-52.47	18 3 21.2	-1 47.8	0.333476	17 54
	11 18 19 49.51	51.87	-18 5 9.0	1 48.8	0.334104	17 56
	12 18 18 57.64	51.21	18 6 57.8	1 49.7	0.334786	17 57
	13 18 18 6.43	50.52	18 8 47.5	1 50.5	0.335522	17 59
	14 18 17 15.91	49.79	18 10 38.0	1 51.3	0.336311	18 1
	15 18 16 26.12	-49.01	18 12 29.3	-1 52.0	0.337152	18 3
	16 18 15 37.11	48.17	-18 14 21.3	1 52.7	0.338044	18 6
	17 18 14 48.94		18 16 14.0		0.338986	18 8

Opp. in AR. Juni 29

Größe = 12.6

## (90) ANTIOPE 1910.

12 <sup>h</sup> Mittl. Zeit	AR	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Juni 11	18 <sup>h</sup> 48 <sup>m</sup> 36 <sup>s</sup> .26	- <sup>s</sup> 40.59	-24 19 28.0	- <sup>s</sup> 51.8	0.246634	14 <sup>m</sup> 40 <sup>s</sup>
	12 18 47 55.67	41.64	24 21 19.8	1 52.0	0.245310	14 37
	13 18 47 14.03	42.65	24 23 11.8	1 52.0	0.244042	14 34
	14 18 46 31.38	43.61	24 25 3.8	1 51.9	0.242832	14 32
	15 18 45 47.77	-44.51	24 26 55.7	-1 51.5	0.241681	14 30
	16 18 45 3.26	45.36	-24 28 47.2	1 51.1	0.240590	14 27
	17 18 44 17.90	46.17	24 30 38.3	1 50.6	0.239560	14 25
	18 18 43 31.73	46.92	24 32 28.9	1 49.9	0.238591	14 24
	19 18 42 44.81	47.62	24 34 18.8	1 49.1	0.237684	14 22
	20 18 41 57.19	-48.27	24 36 7.9	-1 48.2	0.236840	14 20
	21 18 41 8.92	48.86	-24 37 56.1	1 47.1	0.236059	14 18
	22 18 40 20.06	49.39	24 39 43.2	1 45.9	0.235342	14 17
	23 18 39 30.67	49.86	24 41 29.1	1 44.6	0.234689	14 16
	24 18 38 40.81	50.28	24 43 13.7	1 43.1	0.234101	14 15
	25 18 37 50.53	-50.65	24 44 56.8	-1 41.6	0.233579	14 14
	26 18 36 59.88	50.95	-24 46 38.4	1 40.0	0.233123	14 13
	27 18 36 8.93	51.19	24 48 18.4	1 38.3	0.232735	14 12
	28 18 35 17.74	51.36	24 49 56.7	1 36.4	0.232414	14 11
	29 18 34 26.38	51.48	24 51 33.1	1 34.5	0.232160	14 11
	30 18 33 34.90	-51.54	24 53 7.6	-1 32.5	0.231974	14 10
Juli 1	18 32 43.36	51.53	-24 54 40.1	1 30.4	0.231857	14 10
	2 18 31 51.83	51.45	24 56 10.5	1 28.2	0.231807	14 10
	3 18 31 0.38	51.31	24 57 38.7	1 26.0	0.231824	14 10
	4 18 30 9.07	51.09	24 59 4.7	1 23.7	0.231910	14 10
	5 18 29 17.98	-50.79	25 0 28.4	-1 21.4	0.232063	14 11
	6 18 28 27.19	50.43	-25 1 49.8	1 19.0	0.232284	14 11
	7 18 27 36.76	50.00	25 3 8.8	1 16.6	0.232572	14 12
	8 18 26 46.76	49.52	25 4 25.4	1 14.2	0.232927	14 12
	9 18 25 57.24	48.98	25 5 39.6	1 11.7	0.233348	14 13
	10 18 25 8.26	-48.36	25 6 51.3	-1 9.2	0.233834	14 14
	11 18 24 19.90	47.68	-25 8 0.5	1 6.8	0.234385	14 15
	12 18 23 32.22	46.95	25 9 7.3	1 4.4	0.235000	14 16
	13 18 22 45.27	46.17	25 10 11.7	1 2.1	0.235678	14 18
	14 18 21 59.10	45.34	25 11 13.8	0 59.8	0.236419	14 19
	15 18 21 13.76	-44.45	25 12 13.6	-0 57.5	0.237221	14 21
	16 18 20 29.31	43.51	-25 13 11.1	0 55.3	0.238084	14 22
	17 18 19 45.80		25 14 6.4	0.239007	14 24	

Opp. in AR. Juni 30 Grösse = 10.8

P. Neugebauer.

## (198) AMPELLA 1910.

<sup>12<sup>h</sup>Mittl. Zeit</sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Juni 11	18 <sup>b</sup> 53 <sup>m</sup> 47.77	-47.64	-21 <sup>h</sup> 38 <sup>m</sup> 32.1	+4 <sup>h</sup> 15.0	0.114872	10 <sup>m</sup> 49 <sup>s</sup>
	12 53 0.13	49.15	21 34 17.1	4 16.2	0.112537	10 46
	13 52 10.98	50.61	21 30 0.9	4 17.6	0.110267	10 43
	14 51 20.37	52.02	21 25 43.3	4 18.9	0.108063	10 39
	15 50 28.35	-53.37	21 21 24.4	+4 20.3	0.105927	10 36
	16 49 34.98	54.66	-21 17 4.1	4 21.7	0.103860	10 33
	17 48 40.32	55.90	21 12 42.4	4 23.1	0.101864	10 30
	18 47 44.42	57.07	21 8 19.3	4 24.4	0.099942	10 28
	19 46 47.35	58.17	21 3 54.9	4 25.6	0.098094	10 25
	20 45 49.18	-59.19	20 59 29.3	+4 26.8	0.096322	10 22
	21 44 49.99	60.15	-20 55 2.5	4 28.0	0.094628	10 20
	22 43 49.84	61.03	20 50 34.5	4 29.1	0.093013	10 18
	23 42 48.81	61.84	20 46 5.4	4 30.2	0.091478	10 15
	24 41 46.97	62.56	20 41 35.2	4 31.1	0.090023	10 13
	25 40 44.41	-63.20	20 37 4.1	+4 32.0	0.088651	10 11
	26 39 41.21	63.78	-20 32 32.1	4 32.8	0.087365	10 10
	27 38 37.43	64.28	20 27 59.3	4 33.5	0.086165	10 8
	28 37 33.15	64.68	20 23 25.8	4 34.1	0.085051	10 6
	29 36 28.47	64.98	20 18 51.7	4 34.6	0.084024	10 5
30	18 35 23.49	-65.20	20 14 17.1	+4 34.9	0.083084	10 4
Juli 1	18 34 18.29	65.33	-20 9 42.2	4 35.2	0.082233	10 2
	2 33 12.96	65.36	20 5 7.0	4 35.2	0.081471	10 1
	3 32 7.60	65.29	20 0 31.8	4 35.2	0.080798	10 0
	4 31 2.31	65.13	19 55 56.6	4 35.0	0.080216	10 0
	5 29 57.18	-64.86	19 51 21.6	+4 34.6	0.079725	9 59
	6 28 52.32	64.50	-19 46 47.0	4 34.0	0.079325	9 58
	7 27 47.82	64.05	19 42 13.0	4 33.3	0.079016	9 58
	8 26 43.77	63.50	19 37 39.7	4 32.5	0.078797	9 58
	9 25 40.27	62.85	19 33 7.2	4 31.4	0.078667	9 58
	10 24 37.42	-62.12	19 28 35.8	+4 30.1	0.078625	9 58
	11 23 35.30	61.29	-19 24 5.7	4 28.7	0.078670	9 58
	12 22 34.01	60.38	19 19 37.0	4 27.1	0.078803	9 58
	13 21 33.63	59.38	19 15 9.9	4 25.3	0.079023	9 58
	14 20 34.25	58.30	19 10 44.6	4 23.4	0.079327	9 59
	15 19 35.95	-57.14	19 6 21.2	+4 21.4	0.079715	9 59
	16 18 38.81	55.90	-19 1 59.8	4 19.2	0.080186	10 0
	17 17 42.91		18 57 40.6		0.080739	10 0

Opp. in AR. Juni 30 Grösse = 10.4

P. Neugebauer.

## (37) FIDES 1910.

I2 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Juni 15	18 <sup>h</sup> 54 <sup>m</sup> 49 <sup>s</sup> .59		-27° 27' 46.7	-1 43.6	0.311678	17 2
	16 53 57.28	-52.31	27 29 30.3	1 41.5	0.310580	16 59
	17 53 4.08	53.20	27 31 11.8	1 39.3	0.309536	16 57
	18 52 10.03	54.05	27 32 51.1	1 36.9	0.308547	16 54
	19 51 15.18	54.85	27 34 28.0	-1 34.4	0.307614	16 52
	20 50 19.57	-55.61	-27 36 2.4	1 31.8	0.306737	16 50
	21 49 23.25	56.32	27 37 34.2	1 29.0	0.305917	16 48
	22 48 26.28	56.97	27 39 3.2	1 26.1	0.305154	16 46
	23 47 28.71	57.57	27 40 29.3	1 23.0	0.304449	16 45
	24 46 30.59	58.12	27 41 52.3	0.303802	16 43	
		-58.62	-1 19.9			
	25 45 31.97	59.07	-27 43 12.2	1 16.6	0.303213	16 42
	26 44 32.90	59.45	27 44 28.8	1 13.2	0.302683	16 41
	27 43 33.45	59.79	27 45 42.0	1 9.8	0.302212	16 40
	28 42 33.66	60.05	27 46 51.8	1 6.1	0.301802	16 39
	29 41 33.61	-60.25	27 47 57.9	-1 2.3	0.301453	16 38
	30 40 33.36	60.39	-27 49 0.2	0.58.5	0.301166	16 37
♂ Juli 1	18 39 32.97	60.47	27 49 58.7	0 54.5	0.300940	16 37
	2 38 32.50	60.48	27 50 53.2	0 50.5	0.300775	16 37
	3 37 32.02	60.43	27 51 43.7	0 46.4	0.300672	16 36
	4 36 31.59	-60.32	27 52 30.1	-0 42.3	0.300632	16 36
	5 35 31.27	60.14	-27 53 12.4	0 38.1	0.300654	16 36
	6 34 31.13	59.90	27 53 50.5	0 33.9	0.300736	16 36
	7 33 31.23	59.59	27 54 24.4	0 29.7	0.300880	16 37
	8 32 31.64	59.22	27 54 54.1	0 25.6	0.301085	16 37
	9 31 32.42	-58.78	27 55 19.7	-0 21.5	0.301351	16 38
	10 30 33.64	58.27	-27 55 41.2	0 17.5	0.301677	16 38
	11 29 35.37	57.70	27 55 58.7	0 13.4	0.302062	16 39
	12 28 37.67	57.08	27 56 12.1	0 9.3	0.302506	16 40
	13 27 40.59	56.42	27 56 21.4	0 5.4	0.303009	16 42
	14 26 44.17	-55.68	27 56 26.8	-0 1.4	0.303569	16 43
	15 25 48.49	54.90	-27 56 28.2	+0 2.6	0.304187	16 44
	16 24 53.59	54.08	27 56 25.6	0 6.4	0.304861	16 46
	17 23 59.51	53.20	27 56 19.2	0 10.2	0.305591	16 48
	18 23 6.31	52.26	27 56 9.0	0 13.9	0.306375	16 49
	19 22 14.05	-51.28	27 55 55.1	+0 17.6	0.307213	16 51
	20 21 22.77	50.27	-27 55 37.5	0 21.2	0.308103	16 53
	21 20 32.50		27 55 16.3	0.309045	16 56	

Opp. in AR. Juli 1

Größe = 11.1

## (241) GERMANIA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Juli 1	19 48 <sup>h</sup> 58. <sup>m</sup> 16 <sup>s</sup>	-45.95	-18 26 <sup>h</sup> 9.2 <sup>m</sup>	+○ 5.5	0.273855	15 36 <sup>m</sup> <sup>s</sup>
2	19 48 12.21	46.72	18 26 3.7	○ 3.4	0.272818	15 34
3	19 47 25.49	47.44	18 26 0.3	+○ 1.4	0.271839	15 32
4	19 46 38.05	48.10	18 25 58.9	-○ 0.4	0.270919	15 30
5	19 45 49.95	-48.71	18 25 59.3	-○ 2.3	0.270059	15 28
6	19 45 1.24	49.26	-18 26 1.6	○ 3.9	0.269259	15 27
7	19 44 11.98	49.76	18 26 5.5	○ 5.5	0.268520	15 25
8	19 43 22.22	50.20	18 26 11.0	○ 6.9	0.267843	15 24
9	19 42 32.02	50.59	18 26 17.9	○ 8.4	0.267228	15 22
10	19 41 41.43	-50.91	18 26 26.3	-○ 9.6	0.266677	15 21
11	19 40 50.52	51.18	-18 26 35.9	○ 10.8	0.266188	15 20
12	19 39 59.34	51.40	18 26 46.7	○ 11.9	0.265763	15 19
13	19 39 7.94	51.55	18 26 58.6	○ 12.8	0.265402	15 18
14	19 38 16.39	51.64	18 27 11.4	○ 13.7	0.265105	15 18
15	19 37 24.75	-51.69	18 27 25.1	-○ 14.4	0.264873	15 17
16	19 36 33.06	51.67	-18 27 39.5	○ 15.2	0.264704	15 17
17	19 35 41.39	51.59	18 27 54.7	○ 15.8	0.264600	15 17
18	19 34 49.80	51.47	18 28 10.5	○ 16.2	0.264560	15 17
19	19 33 58.33	51.27	18 28 26.7	○ 16.7	0.264584	15 17
20	19 33 7.06	-51.04	18 28 43.4	-○ 17.1	0.264672	15 17
21	19 32 16.02	50.73	-18 29 0.5	○ 17.3	0.264824	15 17
22	19 31 25.29	50.39	18 29 17.8	○ 17.6	0.265039	15 18
23	19 30 34.90	49.98	18 29 35.4	○ 17.7	0.265317	15 18
24	19 29 44.92	49.52	18 29 53.1	○ 17.7	0.265658	15 19
25	19 28 55.40	-49.02	18 30 10.8	-○ 17.8	0.266062	15 20
26	19 28 6.38	48.45	-18 30 28.6	○ 17.7	0.266527	15 21
27	19 27 17.93	47.84	18 30 46.3	○ 17.6	0.267054	15 22
28	19 26 30.09	47.17	18 31 3.9	○ 17.5	0.267642	15 23
29	19 25 42.92	46.46	18 31 21.4	○ 17.3	0.268290	15 24
30	19 24 56.46	-45.68	18 31 38.7	-○ 17.0	0.268998	15 26
31	19 24 10.78	44.85	-18 31 55.7	○ 16.7	0.269765	15 28
Aug. 1	19 23 25.93	43.99	18 32 12.4	○ 16.4	0.270590	15 29
2	19 22 41.94	43.07	18 32 28.8	○ 16.0	0.271473	15 31
3	19 21 58.87	42.09	18 32 44.8	○ 15.5	0.272413	15 33
4	19 21 16.78	-41.08	18 33 0.3	-○ 15.0	0.273408	15 35
5	19 20 35.70	40.03	-18 33 15.3	○ 14.4	0.274457	15 38
6	19 19 55.67		18 33 29.7	○ 14.4	0.275560	15 40

Opp. in AR. Juli 15

Größe = 10.8

W. Luther.

## (149) MEDUSA 1910.

<sup>12<sup>h</sup>Mittl. Zeit</sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Juli 9	20 33 2.31	-52.58	-17 39 51.4	-3 20.7	0.091469	10 15
10	20 32 9.73	53.88	17 43 12.1	3 25.4	0.089899	10 13
11	20 31 15.85	55.11	17 46 37.5	3 29.8	0.088405	10 11
12	20 30 20.74	56.27	17 50 7.3	3 34.0	0.086988	10 9
13	20 29 24.47	-57.36	17 53 41.3	-3 37.6	0.085650	10 7
14	20 28 27.11	58.39	-17 57 18.9	3 40.9	0.084393	10 5
15	20 27 28.72	59.34	18 0 59.8	3 44.0	0.083218	10 4
16	20 26 29.38	60.21	18 4 43.8	3 46.6	0.082127	10 2
17	20 25 29.17	61.01	18 8 30.4	3 49.0	0.081120	10 1
18	20 24 28.16	-61.74	18 12 19.4	-3 51.1	0.080199	9 59
19	20 23 26.42	62.38	-18 16 10.5	3 52.7	0.079364	9 58
20	20 22 24.04	62.92	18 20 3.2	3 54.1	0.078617	9 57
21	20 21 21.12	63.40	18 23 57.3	3 55.2	0.077958	9 57
22	20 20 17.72	63.80	18 27 52.5	3 55.9	0.077387	9 56
23	20 19 13.92	-64.12	18 31 48.4	-3 56.3	0.076906	9 55
24	20 18 9.80	64.34	-18 35 44.7	3 56.4	0.076516	9 55
25	20 17 5.46	64.47	18 39 41.1	3 56.1	0.076216	9 54
26	20 16 0.99	64.51	18 43 37.2	3 55.6	0.076006	9 54
27	20 14 56.48	64.47	18 47 32.8	3 54.8	0.075888	9 54
28	20 13 52.01	-64.33	18 51 27.6	-3 53.6	0.075862	9 54
29	20 12 47.68	64.11	-18 55 21.2	3 52.0	0.075928	9 54
30	20 11 43.57	63.79	18 59 13.2	3 50.2	0.076084	9 54
31	20 10 39.78	63.38	19 3 3.4	3 48.2	0.076330	9 54
Aug. 1	20 9 36.40	62.86	19 6 51.6	3 46.0	0.076668	9 55
2	20 8 33.54	-62.25	19 10 37.6	-3 43.5	0.077096	9 55
3	20 7 31.29	61.55	-19 14 21.1	3 40.5	0.077613	9 56
4	20 6 29.74	60.76	19 18 1.6	3 37.3	0.078219	9 57
5	20 5 28.98	59.89	19 21 38.9	3 33.9	0.078913	9 58
6	20 4 29.09	58.92	19 25 12.8	3 30.3	0.079694	9 59
7	20 3 30.17	-57.86	19 28 43.1	-3 26.4	0.080561	10 0
8	20 2 32.31	56.72	-19 32 9.5	3 22.4	0.081512	10 1
9	20 1 35.59	55.51	19 35 31.9	3 18.1	0.082545	10 3
10	20 0 40.08	54.23	19 38 50.0	3 13.6	0.083658	10 4
11	19 59 45.85	52.87	19 42 3.6	3 9.0	0.084850	10 6
12	19 58 52.98	-51.44	19 45 12.6	-3 4.2	0.086120	10 8
13	19 58 1.54	49.94	-19 48 16.8	2 59.4	0.087466	10 10
14	19 57 11.60		19 51 16.2		0.088885	10 12

Opp. in AR. Juli 25

Gröfse = 12.1

## (26) PROSERPINA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Juli 13	21 12 50.29	-42.50	-22 2 21.4	-4 22.3	0.202609	13 15
14	21 12 7.79	43.72	22 6 43.7	4 23.5	0.201532	13 13
15	21 11 24.07	44.90	22 11 7.2	4 24.5	0.200517	13 11
16	21 10 39.17	46.02	22 15 31.7	4 25.2	0.199565	13 9
17	21 9 53.15	-47.09	22 19 56.9	-4 25.6	0.198677	13 8
18	21 9 6.06	48.10	-22 24 22.5	4 25.6	0.197855	13 6
19	21 8 17.96	49.08	22 28 48.1	4 25.2	0.197098	13 5
20	21 7 28.88	49.99	22 33 13.3	4 24.6	0.196408	13 4
21	21 6 38.89	50.84	22 37 37.9	4 23.6	0.195785	13 2
22	21 5 48.05	-51.64	22 42 1.5	-4 22.1	0.195231	13 1
23	21 4 56.41	52.39	-22 46 23.6	4 20.3	0.194746	13 1
24	21 4 4.02	53.07	22 50 43.9	4 18.3	0.194331	13 0
25	21 3 10.95	53.68	22 55 2.2	4 15.8	0.193987	12 59
26	21 2 17.27	54.24	22 59 18.0	4 12.9	0.193715	12 59
27	21 1 23.03	-54.74	23 3 30.9	-4 9.8	0.193514	12 58
28	21 0 28.29	55.17	-23 7 40.7	4 6.4	0.193386	12 58
29	20 59 33.12	55.52	23 11 47.1	4 2.6	0.193331	12 58
30	20 58 37.60	55.81	23 15 49.7	3 58.6	0.193349	12 58
31	20 57 41.79	56.03	23 19 48.3	3 54.2	0.193440	12 58
Aug. 1	20 56 45.76	-56.17	23 23 42.5	-3 49.4	0.193605	12 59
2	20 55 49.59	56.22	-23 27 31.9	3 44.4	0.193844	12 59
3	20 54 53.37	56.20	23 31 16.3	3 39.1	0.194156	13 0
4	20 53 57.17	56.11	23 34 55.4	3 33.4	0.194543	13 0
5	20 53 1.06	55.95	23 38 28.8	3 27.5	0.195004	13 1
6	20 52 5.11	-55.73	23 41 56.3	-3 21.4	0.195539	13 2
7	20 51 9.38	55.43	-23 45 17.7	3 15.2	0.196146	13 3
8	20 50 13.95	55.05	23 48 32.9	3 8.6	0.196825	13 4
9	20 49 18.90	54.59	23 51 41.5	3 1.9	0.197576	13 6
10	20 48 24.31	54.08	23 54 43.4	2 54.9	0.198398	13 7
11	20 47 30.23	-53.50	23 57 38.3	-2 47.9	0.199290	13 9
12	20 46 36.73	52.85	-24 0 26.2	2 40.8	0.200250	13 11
13	20 45 43.88	52.13	24 3 7.0	2 33.4	0.201278	13 13
14	20 44 51.75	51.35	24 5 40.4	2 26.0	0.202374	13 14
15	20 44 0.40	50.51	24 8 6.4	2 18.5	0.203536	13 16
16	20 43 9.89	-49.61	24 10 24.9	-2 10.8	0.204762	13 19
17	20 42 20.28	48.65	-24 12 35.7	2 2.9	0.206052	13 21
18	20 41 31.63		24 14 38.6		0.207404	13 24

Opp. in AR. Aug. 3 Gröfse = 10.3

P. Neugebauer.

## (247) EUKRATE 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Aug. 28	23 54 48.22	-65.93	-13 ° 3' 4.9"	+3 4.1"	0.150544	II 45
	23 53 42.29	67.46	13 0 0.8	3 8.7	0.148570	II 42
	23 52 34.83	68.94	12 56 52.1	3 13.6	0.146665	II 39
	23 51 25.89	70.34	12 53 38.5	3 18.7	0.144831	II 36
Sept. I	23 50 15.55	-71.69	12 50 19.8		0.143071	II 33
	23 49 3.86	72.96	-12 46 55.7	3 30.0	0.141386	II 30
	23 47 50.90	74.16	12 43 25.7	3 36.0	0.139778	II 28
	23 46 36.74	75.28	12 39 49.7	3 42.4	0.138249	II 25
	23 45 21.46	76.33	12 36 7.3	3 49.0	0.136800	II 23
	23 44 5.13	-77.29	12 32 18.3	+3 56.0	0.135433	II 21
	23 42 47.84	78.16	-12 28 22.3	4 3.2	0.134150	II 19
	23 41 29.68	78.96	12 24 19.1	4 10.7	0.132952	II 17
	23 40 10.72	79.66	12 20 8.4	4 18.3	0.131840	II 15
	23 38 51.06	80.28	12 15 50.1	4 26.2	0.130814	II 14
	23 37 30.78	-80.79	12 11 23.9	+4 34.2	0.129877	II 12
	23 36 9.99	81.23	-12 6 49.7	4 42.5	0.129028	II 11
	23 34 48.76	81.55	12 2 7.2	4 50.8	0.128269	II 10
	23 33 27.21	81.81	11 57 16.4	4 59.3	0.127599	II 9
S 15	23 32 5.40	81.95	11 52 17.1	5 8.0	0.127021	II 8
	23 30 43.45	-82.00	11 47 9.1	+5 16.6	0.126533	II 7
	23 29 21.45	81.97	-11 41 52.5	5 25.4	0.126137	II 6
	23 27 59.48	81.84	11 36 27.1	5 34.2	0.125831	II 6
	23 26 37.64	81.61	11 30 52.9	5 43.1	0.125618	II 6
	23 25 16.03	81.30	11 25 9.8	5 51.8	0.125495	II 5
	23 23 54.73	-80.90	11 19 18.0	+6 0.8	0.125463	II 5
	23 22 33.83	80.39	-11 13 17.2	6 9.5	0.125523	II 5
	23 21 13.44	79.81	11 7 7.7	6 18.4	0.125673	II 6
	23 19 53.63	79.12	11 0 49.3	6 27.1	0.125913	II 6
Okt. I	23 18 34.51	78.34	10 54 22.2	6 36.0	0.126243	II 7
	23 17 16.17	-77.47	10 47 46.2	+6 44.6	0.126662	II 7
	23 15 58.70	76.53	-10 41 1.6	6 53.3	0.127168	II 8
	23 14 42.17	75.48	10 34 8.3	7 1.9	0.127762	II 9
	23 13 26.69	74.36	10 27 6.4	7 10.4	0.128441	II 10
	23 12 12.33	73.14	10 19 56.0	7 18.8	0.129206	II 11
	23 10 59.19	-71.86	10 12 37.2	+7 27.2	0.130053	II 12
	23 9 47.33	70.47	-10 5 10.0	7 35.4	0.130983	II 14
	23 8 36.86		9 57 34.6		0.131993	II 15

Opp. in AR. Sept. 15

Gröfse = 10.1

W. Luther.

## (288) GLAUME 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Aug. 28	0 3 31.48	-38.17	-4 46' 47.0	-5 32.5	0.356746	18 <sup>m</sup> 53
29	0 2 53.31	39.01	4 52 19.5	5 35.9	0.355899	18 51
30	0 2 14.30	39.81	4 57 55.4	5 39.1	0.355099	18 49
31	0 1 34.49	40.57	5 3 34.5	5 41.9	0.354349	18 47
Sept. 1	0 0 53.92	-41.31	5 9 16.4	-5 44.3	0.353649	18 45
2	0 0 12.61	41.99	-5 15 0.7	5 46.6	0.353001	18 44
3	23 59 30.62	42.64	5 20 47.3	5 48.5	0.352405	18 42
4	23 58 47.98	43.26	5 26 35.8	5 50.0	0.351862	18 41
5	23 58 4.72	43.83	5 32 25.8	5 51.3	0.351372	18 39
6	23 57 20.89	-44.36	5 38 17.1	-5 52.2	0.350936	18 38
7	23 56 36.53	44.84	-5 44 9.3	5 52.8	0.350555	18 37
8	23 55 51.69	45.29	5 50 2.1	5 53.0	0.350229	18 36
9	23 55 6.40	45.70	5 55 55.1	5 52.9	0.349959	18 36
10	23 54 20.70	46.05	6 1 48.0	5 52.4	0.349745	18 35
11	23 53 34.65	-46.36	6 7 40.4	-5 51.8	0.349587	18 35
12	23 52 48.29	46.63	-6 13 32.2	5 50.6	0.349486	18 35
13	23 52 1.66	46.86	6 19 22.8	5 49.3	0.349442	18 34
14	23 51 14.80	47.03	6 25 12.1	5 47.5	0.349454	18 34
15	23 50 27.77	47.18	6 30 59.6	5 45.5	0.349524	18 35
16	23 49 40.59	-47.26	6 36 45.1	-5 43.2	0.349651	18 35
17	23 48 53.33	47.32	-6 42 28.3	5 40.5	0.349835	18 35
18	23 48 6.01	47.32	6 48 8.8	5 37.6	0.350076	18 36
19	23 47 18.69	47.28	6 53 46.4	5 34.4	0.350374	18 37
20	23 46 31.41	47.20	6 59 20.8	5 30.9	0.350728	18 38
21	23 45 44.21	-47.07	7 4 51.7	-5 27.1	0.351140	18 39
22	23 44 57.14	46.90	-7 10 18.8	5 23.0	0.351608	18 40
23	23 44 10.24	46.69	7 15 41.8	5 18.6	0.352132	18 41
24	23 43 23.55	46.43	7 21 0.4	5 14.0	0.352712	18 43
25	23 42 37.12	46.13	7 26 14.4	5 9.1	0.353347	18 44
26	23 41 50.99	-45.79	7 31 23.5	-5 4.0	0.354038	18 46
27	23 41 5.20	45.39	-7 36 27.5	4 58.5	0.354784	18 48
28	23 40 19.81	44.96	7 41 26.0	4 52.8	0.355584	18 50
29	23 39 34.85	44.47	7 46 18.8	4 46.8	0.356438	18 53
30	23 38 50.38	43.96	7 51 5.6	4 40.7	0.357344	18 55
Okt. 1	23 38 6.42	-43.39	7 55 46.3	-4 34.2	0.358304	18 57
2	23 37 23.03	42.77	-8 0 20.5	4 27.6	0.359315	19 0
3	23 36 40.26		8 4 48.1		0.360376	19 3

Opp. in AR. Sept. 19 Gröfse = 13.4

W. Luther.

## (134) SOPHROSYNE 1910.

12 <sup>b</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Sept. 15	○ 46 <sup>h</sup> 45. <sup>m</sup> 46. <sup>s</sup>	- 52.01	+ 12 <sup>h</sup> 10 <sup>m</sup> 46. <sup>s</sup>	+ 1 <sup>h</sup> 39.8	0.159874	12 <sup>m</sup> ○
	16 ○ 45 53.45	53.19	12 12 25.9	1 30.5	0.158218	11 58
	17 ○ 45 0.26	54.32	12 13 56.4	1 21.0	0.156628	11 55
	18 ○ 44 5.94	55.40	12 15 17.4	1 11.6	0.155105	11 52
	19 ○ 43 10.54	- 56.43	12 16 29.0	+ 1 2.3	0.153651	11 50
	20 ○ 42 14.11	57.41	+ 12 17 31.3	○ 53.0	0.152267	11 48
	21 ○ 41 16.70	58.33	12 18 24.3	○ 43.8	0.150955	11 46
	22 ○ 40 18.37	59.18	12 19 8.1	○ 34.6	0.149716	11 44
	23 ○ 39 19.19	59.96	12 19 42.7	○ 25.5	0.148551	11 42
	24 ○ 38 19.23	- 60.67	12 20 8.2	+ 0 16.5	0.147462	11 40
	25 ○ 37 18.56	61.33	+ 12 20 24.7	+ 0 7.5	0.146450	11 38
	26 ○ 36 17.23	61.92	12 20 32.2	- 0 1.1	0.145517	11 37
	27 ○ 35 15.31	62.42	12 20 31.1	○ 0.6	0.144664	11 36
	28 ○ 34 12.89	62.83	12 20 21.5	○ 9.6	0.143892	11 34
	29 ○ 33 10.06	- 63.14	12 20 3.5	○ 18.0	0.143201	11 33
	30 ○ 32 6.92	63.38	+ 12 19 37.4	○ 33.9	0.142593	11 32
♂ Okt. 1	○ 31 3.54	63.56	12 19 3.5	○ 41.4	0.142068	II 31
	2 ○ 29 59.98	63.66	12 18 22.1	○ 48.7	0.141627	II 31
	3 ○ 28 56.32	63.66	12 17 33.4	○ 55.7	0.141270	II 30
	4 ○ 27 52.66	- 63.56	12 16 37.7	- 1 2.3	0.140998	II 30
	5 ○ 26 49.10	63.37	+ 12 15 35.4	1 8.7	0.140810	II 29
	6 ○ 25 45.73	63.10	12 14 26.7	1 14.6	0.140706	II 29
	7 ○ 24 42.63	62.75	12 13 12.1	1 20.3	0.140688	II 29
	8 ○ 23 39.88	62.31	12 11 51.8	1 25.6	0.140755	II 29
	9 ○ 22 37.57	- 61.81	12 10 26.2	- 1 30.4	0.140907	II 29
	10 ○ 21 35.76	61.25	+ 12 8 55.8	1 34.9	0.141142	II 29
	11 ○ 20 34.51	60.60	12 7 20.9	1 39.0	0.141459	II 30
	12 ○ 19 33.91	59.86	12 5 41.9	1 42.6	0.141859	II 31
	13 ○ 18 34.05	59.06	12 3 59.3	1 45.9	0.142341	II 32
	14 ○ 17 34.99	- 58.18	12 2 13.4	- 1 48.8	0.142903	II 33
	15 ○ 16 36.81	57.22	+ 12 0 24.6	1 51.4	0.143544	II 34
	16 ○ 15 39.59	56.20	11 58 33.2	1 53.4	0.144264	II 35
	17 ○ 14 43.39	55.12	11 56 39.8	1 55.1	0.145062	II 36
	18 ○ 13 48.27	53.97	11 54 44.7	1 56.5	0.145937	II 38
	19 ○ 12 54.30	- 52.75	11 52 48.2	- 1 57.5	0.146888	II 39
	20 ○ 12 1.55	51.47	+ 11 50 50.7	1 58.0	0.147913	II 41
	21 ○ 11 10.08		11 48 52.7	○ 149010		II 43

Opp. in AR. Okt. 1 Größte = 10.7

P. Neugebauer.

## (42) ISIS 1910.

<sup>12<sup>b</sup></sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Mittl. Zeit						
Sept. 27	I 52 <sup>h</sup> 55. <sup>m</sup> 61	-52. <sup>s</sup> 6	-4 <sup>o</sup> 27' 34.4	-5 <sup>'</sup> 14.3	0.045938	9 <sup>m</sup> *
28	I 52 3.55	53.50	4 32 48.7	5 9.6	0.045320	9 13
29	I 51 10.05	54.86	4 37 58.3	5 4.2	0.044790	9 13
30	I 50 15.19	56.16	4 43 2.5	4 58.2	0.044350	9 12
Okt. 1	I 49 19.03	-57.36	4 48 0.7	-4 51.6	0.044000	9 12
2	I 48 21.67	58.46	-4 52 52.3	4 44.4	0.043742	9 11
3	I 47 23.21	59.47	4 57 36.7	4 36.4	0.043577	9 11
4	I 46 23.74	60.40	5 2 13.1	4 27.8	0.043506	9 11
5	I 45 23.34	61.23	5 6 40.9	4 18.8	0.043530	9 11
6	I 44 22.11	-61.96	5 10 59.7	-4 9.3	0.043650	9 11
7	I 43 20.15	62.60	-5 15 9.0	3 59.1	0.043866	9 11
8	I 42 17.55	63.14	5 19 8.1	3 48.4	0.044179	9 12
9	I 41 14.41	63.59	5 22 56.5	3 37.3	0.044590	9 12
10	I 40 10.82	63.95	5 26 33.8	3 25.7	0.045097	9 13
11	I 39 6.87	-64.20	5 29 59.5	-3 13.6	0.045700	9 14
12	I 38 2.67	64.36	-5 33 13.1	3 1.2	0.046398	9 15
13	I 36 58.31	64.42	5 36 14.3	2 48.4	0.047193	9 16
14	I 35 53.89	64.38	5 39 2.7	2 35.3	0.048084	9 17
15	I 34 49.51	64.23	5 41 38.0	2 21.9	0.049070	9 18
16	I 33 45.28	-64.00	5 43 59.9	-2 8.2	0.050151	9 20
17	I 32 41.28	63.70	-5 46 8.1	1 54.2	0.051325	9 21
18	I 31 37.58	63.32	5 48 2.3	1 39.8	0.052592	9 23
19	I 30 34.26	62.83	5 49 42.1	1 25.2	0.053950	9 24
20	I 29 31.43	62.23	5 51 7.3	1 10.6	0.055398	9 26
21	I 28 29.20	-61.56	5 52 17.9	-0 55.8	0.056936	9 28
22	I 27 27.64	60.82	-5 53 13.7	0 40.9	0.058561	9 30
23	I 26 26.82	60.00	5 53 54.6	0 25.7	0.060273	9 33
24	I 25 26.82	59.10	5 54 20.3	-0 10.5	0.062072	9 35
25	I 24 27.72	58.10	5 54 30.8	+0 4.8	0.063955	9 38
26	I 23 29.62	-57.02	5 54 26.0	+0 20.2	0.065920	9 40
27	I 22 32.60	55.88	-5 54 5.8	0 35.7	0.067966	9 43
28	I 21 36.72	54.68	5 53 30.1	0 51.1	0.070091	9 46
29	I 20 42.04	53.39	5 52 39.0	1 6.6	0.072294	9 49
30	I 19 48.65	52.03	5 51 32.4	1 22.1	0.074570	9 52
31	I 18 56.62	-50.61	5 50 10.3	+1 37.5	0.076919	9 55
Nov. 1	I 18 6.01	49.12	-5 48 32.8	1 53.0	0.079339	9 58
2	I 17 16.89		5 46 39.8		0.081828	10 2

Opp. in AR. Okt. 18

Größe = 9.6

## (270) ANAHITA 1910.

<sup>12<sup>h</sup>Mittl. Zeit</sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Nov. 2	3 57 <sup>h</sup> 13.65	-58.69	+22° 11' 37.1	-3 57.2	0.054410	9 25 <sup>a</sup>
3	3 56 14.96	60.07	22 7 39.9	4 4.6	0.053521	9 24
4	3 55 14.89	61.35	22 3 35.3	4 11.6	0.052719	9 23
5	3 54 13.54	62.54	21 59 23.7	4 18.4	0.052009	9 22
6	3 53 11.00	-63.62	21 55 5.3	-4 25.0	0.051391	9 21
7	3 52 7.38	64.61	+21 50 40.3	4 31.2	0.050867	9 21
8	3 51 2.77	65.49	21 46 9.1	4 37.0	0.050437	9 20
9	3 49 57.28	66.27	21 41 32.1	4 42.7	0.050104	9 20
10	3 48 51.01	66.94	21 36 49.4	4 48.1	0.049868	9 19
11	3 47 44.07	-67.50	21 32 1.3	-4 53.1	0.049730	9 19
12	3 46 36.57	67.96	+21 27 8.2	4 57.7	0.049691	9 19
13	3 45 28.61	68.31	21 22 10.5	5 2.0	0.049751	9 19
14	3 44 20.30	68.57	21 17 8.5	5 5.9	0.049909	9 19
15	3 43 11.73	68.71	21 12 2.6	5 9.4	0.050167	9 20
16	3 42 3.02	-68.74	21 6 53.2	-5 12.6	0.050526	9 20
17	3 40 54.28	68.67	+21 1 40.6	5 15.3	0.050985	9 21
18	3 39 45.61	68.50	20 56 25.3	5 17.6	0.051544	9 21
δ 19	3 38 37.11	68.22	20 51 7.7	5 19.6	0.052203	9 22
20	3 37 28.89	67.83	20 45 48.1	5 21.1	0.052962	9 23
21	3 36 21.06	-67.36	20 40 27.0	-5 22.1	0.053820	9 24
22	3 35 13.70	66.78	+20 35 4.9	5 22.7	0.054777	9 26
23	3 34 6.92	66.08	20 29 42.2	5 22.8	0.055834	9 27
24	3 33 0.84	65.28	20 24 19.4	5 22.4	0.056990	9 28
25	3 31 55.56	64.39	20 18 57.0	5 21.6	0.058242	9 30
26	3 30 51.17	-63.40	20 13 35.4	-5 20.3	0.059589	9 32
27	3 29 47.77	62.32	+20 8 15.1	5 18.4	0.061030	9 34
28	3 28 45.45	61.15	20 2 56.7	5 16.0	0.062564	9 36
29	3 27 44.30	59.89	19 57 40.7	5 13.2	0.064190	9 38
30	3 26 44.41	58.54	19 52 27.5	5 10.0	0.065905	9 40
Dez. 1	3 25 45.87	-57.12	19 47 17.5	-5 6.2	0.067707	9 43
2	3 24 48.75	55.63	+19 42 11.3	5 2.0	0.069596	9 45
3	3 23 53.12	54.06	19 37 9.3	4 57.4	0.071569	9 48
4	3 22 59.06	52.41	19 32 11.9	4 52.4	0.073624	9 51
5	3 22 6.65	50.70	19 27 19.5	4 47.0	0.075758	9 54
6	3 21 15.95	-48.93	19 22 32.5	-4 41.1	0.077968	9 57
7	3 20 27.02	47.10	+19 17 51.4	4 34.8	0.080254	10 0
8	3 19 39.92		19 13 16.6		0.082612	10 3

Opp. in AR. Nov. 19

Größe = 10.8

P. Neugebauer.

## (95) ARETHUSA 1910.

I 2 <sup>b</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Nov. 2	4 2 24.79	-41.80	+24 9 40.3	-6 34.6	0.225076	I 3 57
3	4 I 42.99	42.89	24 3 5.7	6 41.9	0.223936	I 3 55
4	4 I 0.10	43.92	23 56 23.8	6 49.0	0.222859	I 3 53
5	4 0 16.18	44.88	23 49 34.8	6 55.8	0.221847	I 3 51
6	3 59 31.30	-45.78	23 42 39.0	-7 2.4	0.220901	I 3 49
7	3 58 45.52	46.59	+23 35 36.6	7 8.6	0.220023	I 3 47
8	3 57 58.93	47.34	23 28 28.0	7 14.8	0.219213	I 3 46
9	3 57 11.59	48.02	23 21 13.2	7 20.8	0.218473	I 3 44
10	3 56 23.57	48.65	23 13 52.4	7 26.4	0.217804	I 3 43
11	3 55 34.92	-49.21	23 6 26.0	-7 31.6	0.217206	I 3 42
12	3 54 45.71	49.71	+22 58 54.4	7 36.6	0.216680	I 3 41
13	3 53 56.00	50.14	22 51 17.8	7 41.4	0.216227	I 3 40
14	3 53 5.86	50.50	22 43 36.4	7 45.8	0.215848	I 3 39
15	3 52 15.36	50.79	22 35 50.6	7 49.8	0.215542	I 3 39
16	3 51 24.57	-51.02	22 28 0.8	-7 53.5	0.215310	I 3 38
17	3 50 33.55	51.18	+22 20 7.3	7 56.8	0.215154	I 3 38
18	3 49 42.37	51.27	22 12 10.5	7 59.7	0.215072	I 3 38
19	3 48 51.10	51.29	22 4 10.8	8 2.3	0.215066	I 3 38
20	3 47 59.81	51.25	21 56 8.5	8 4.5	0.215137	I 3 38
21	3 47 8.56	-51.13	21 48 4.0	-8 6.3	0.215284	I 3 38
22	3 46 17.43	50.94	+21 39 57.7	8 7.8	0.215507	I 3 39
23	3 45 26.49	50.69	21 31 49.9	8 8.7	0.215807	I 3 40
24	3 44 35.80	50.36	21 23 41.2	8 9.3	0.216182	I 3 40
25	3 43 45.44	49.97	21 15 31.9	8 9.4	0.216634	I 3 41
26	3 42 55.47	-49.51	21 7 22.5	-8 9.1	0.217161	I 3 42
27	3 42 5.96	48.97	+20 59 13.4	8 8.4	0.217763	I 3 43
28	3 41 16.99	48.35	20 51 5.0	8 7.3	0.218440	I 3 44
29	3 40 28.64	47.68	20 42 57.7	8 5.7	0.219192	I 3 46
30	3 39 40.96	46.96	20 34 52.0	8 3.7	0.220016	I 3 47
Dez. 1	3 38 54.00	-46.17	20 26 48.3	-8 1.3	0.220912	I 3 49
2	3 38 7.83	45.31	+20 18 47.0	7 58.4	0.221880	I 3 51
3	3 37 22.52	44.40	20 10 48.6	7 55.2	0.222920	I 3 53
4	3 36 38.12	43.45	20 2 53.4	7 51.4	0.224030	I 3 55
5	3 35 54.67	42.45	19 55 2.0	7 47.3	0.225208	I 3 57
6	3 35 12.22	-41.40	19 47 14.7	-7 42.8	0.226452	I 4 0
7	3 34 30.82	40.30	+19 39 31.9	7 37.8	0.227763	I 4 2
8	3 33 50.52		19 31 54.1		0.229138	I 4 5

Opp. in AR. Nov. 21      Größe = 10.5

## (190) ISMENE 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Nov. 6	4 13 <sup>h</sup> 40.31	-35.55	+13° 39' 12.1	-3 11.8	0.395515	20 <sup>m</sup> 39
7	4 13 4.76	36.25	13 36 0.3	3 11.5	0.394526	20 37
8	4 12 28.51	36.92	13 32 48.8	3 10.9	0.393584	20 34
9	4 11 51.59	37.57	13 29 37.9	3 10.2	0.392689	20 32
10	4 11 14.02	-38.17	13 26 27.7	-3 9.4	0.391842	20 29
11	4 10 35.85	38.74	+13 23 18.3	3 8.5	0.391043	20 27
12	4 9 57.11	39.28	13 20 9.8	3 7.4	0.390293	20 25
13	4 9 17.83	39.77	13 17 2.4	3 6.2	0.389593	20 23
14	4 8 38.06	40.23	13 13 56.2	3 4.7	0.388942	20 21
15	4 7 57.83	-40.65	13 10 51.5	-3 3.2	0.388342	20 19
16	4 7 17.18	41.03	+13 7 48.3	3 1.6	0.387792	20 17
17	4 6 36.15	41.37	13 4 46.7	2 59.8	0.387294	20 16
18	4 5 54.78	41.67	13 1 46.9	2 57.8	0.386847	20 15
19	4 5 13.11	41.92	12 58 49.1	2 55.7	0.386453	20 14
20	4 4 31.19	-42.14	12 55 53.4	-2 53.4	0.386110	20 13
21	4 3 49.05	42.30	+12 53 0.0	2 51.1	0.385820	20 12
22	4 3 6.75	42.42	12 50 8.9	2 48.6	0.385584	20 11
23	4 2 24.33	42.49	12 47 20.3	2 45.8	0.385401	20 11
24	4 1 41.84	42.52	12 44 34.5	2 42.8	0.385271	20 10
25	4 0 59.32	-42.51	12 41 51.7	-2 39.8	0.385195	20 10
26	4 0 16.81	42.46	+12 39 11.9	2 36.6	0.385172	20 10
27	3 59 34.35	42.36	12 36 35.3	2 33.3	0.385203	20 10
28	3 58 51.99	42.20	12 34 2.0	2 29.8	0.385287	20 10
29	3 58 9.79	42.00	12 31 32.2	2 26.1	0.385425	20 11
30	3 57 27.79	-41.76	12 29 6.1	-2 22.3	0.385616	20 11
Dez. 1	3 56 46.03	41.47	+12 26 43.8	2 18.4	0.385860	20 12
2	3 56 4.56	41.15	12 24 25.4	2 14.3	0.386157	20 13
3	3 55 23.41	40.77	12 22 11.1	2 10.0	0.386507	20 14
4	3 54 42.64	40.34	12 20 1.1	2 5.7	0.386908	20 15
5	3 54 2.30	-39.88	12 17 55.4	-2 1.3	0.387360	20 16
6	3 53 22.42	39.37	+12 15 54.1	1 56.7	0.387864	20 18
7	3 52 43.05	38.82	12 13 57.4	1 51.9	0.388418	20 19
8	3 52 4.23	38.23	12 12 5.5	1 47.1	0.389022	20 21
9	3 51 26.00	37.61	12 10 18.4	1 42.2	0.389674	20 23
10	3 50 48.39	-36.95	12 8 36.2	-1 37.2	0.390374	20 25
11	3 50 11.44	36.24	+12 6 59.0	1 32.1	0.391122	20 27
12	3 49 35.20		12 5 26.9		0.391917	20 29

Opp. in AR. Nov. 25

Größe = 11.3

## (184) DEJOPEJA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Nov. 10	4 32 <sup>h</sup> 19.36	- 43.75	+ 23 34 5.2	- 1 17.3	0.373656	19 <sup>m</sup> <sup>s</sup> 38
11	4 31 35.61	44.59	23 32 47.9	1 20.4	0.372619	19 36
12	4 30 51.02	45.39	23 31 27.5	1 23.6	0.371631	19 33
13	4 30 5.63	46.15	23 30 3.9	1 26.8	0.370693	19 31
14	4 29 19.48	- 46.86	23 28 37.1	- 1 29.8	0.369804	19 28
15	4 28 32.62	47.54	+ 23 27 7.3	1 32.9	0.368966	19 26
16	4 27 45.08	48.16	23 25 34.4	1 35.9	0.368180	19 24
17	4 26 56.92	48.73	23 23 58.5	1 38.9	0.367446	19 22
18	4 26 8.19	49.27	23 22 19.6	1 41.8	0.366764	19 20
19	4 25 18.92	- 49.77	23 20 37.8	- 1 44.7	0.366136	19 18
20	4 24 29.15	50.21	+ 23 18 53.1	1 47.5	0.365562	19 17
21	4 23 38.94	50.61	23 17 5.6	1 50.2	0.365044	19 15
22	4 22 48.33	50.95	23 15 15.4	1 52.8	0.364580	19 14
23	4 21 57.38	51.24	23 13 22.6	1 55.3	0.364172	19 13
24	4 21 6.14	- 51.48	23 11 27.3	- 1 57.8	0.363820	19 12
25	4 20 14.66	51.66	+ 23 9 29.5	2 0.1	0.363525	19 11
26	4 19 23.00	51.79	23 7 29.4	2 2.3	0.363287	19 11
27	4 18 31.21	51.85	23 5 27.1	2 4.3	0.363107	19 10
28	4 17 39.36	51.86	23 3 22.8	2 6.3	0.362984	19 10
29	4 16 47.50	- 51.81	23 1 16.5	- 2 8.1	0.362919	19 10
30	4 15 55.69	51.71	+ 22 59 8.4	2 9.7	0.362912	19 10
Dez. 1	4 15 3.98	51.56	22 56 58.7	2 11.3	0.362963	19 10
2	4 14 12.42	51.35	22 54 47.4	2 12.7	0.363071	19 10
3	4 13 21.07	51.09	22 52 34.7	2 13.9	0.363237	19 10
4	4 12 29.98	- 50.78	22 50 20.8	- 2 14.9	0.363460	19 11
5	4 11 39.20	50.40	+ 22 48 5.9	2 15.7	0.363740	19 12
6	4 10 48.80	49.97	22 45 50.2	2 16.5	0.364077	19 13
7	4 9 58.83	49.50	22 43 33.7	2 16.9	0.364471	19 14
8	4 9 9.33	48.98	22 41 16.8	2 17.2	0.364920	19 15
9	4 8 20.35	- 48.40	22 38 59.6	- 2 17.4	0.365424	19 16
10	4 7 31.95	47.77	+ 22 36 42.2	2 17.5	0.365983	19 18
11	4 6 44.18	47.10	22 34 24.7	2 17.3	0.366596	19 20
12	4 5 57.08	46.39	22 32 7.4	2 17.0	0.367262	19 21
13	4 5 10.69	45.64	22 29 50.4	2 16.6	0.367981	19 23
14	4 4 25.05	- 44.84	22 27 33.8	- 2 16.0	0.368752	19 26
15	4 3 40.21	43.99	+ 22 25 17.8	2 15.4	0.369574	19 28
16	4 2 56.22		22 23 2.4		0.370447	19 30

Opp. in AR. Nov. 28

Größe = 12.6

P. Neugebauer.

f

## (82) ALKMENE 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Nov. 18	4 58 <sup>m</sup> .16		+25° 49' 49.4	+ 28.3	0.163723	12 <sup>m</sup> .7
	19 457 40.61	-49.55	25 50 17.7	0 23.9	0.161876	12 4
	20 456 49.67	50.94	25 50 41.6	0 19.5	0.160097	12 1
	21 455 57.40	52.27	25 51 1.1	0 15.0	0.158386	II 58
	22 455 3.86	53.54	25 51 16.1	+ 10.4	0.156746	II 55
		-54.75				
	23 454 9.11	55.88	+25 51 26.5	0 5.7	0.155178	II 52
	24 453 13.23	56.94	25 51 32.2	+ 1.0	0.153683	II 50
	25 452 16.29	57.93	25 51 33.2	- 0 3.7	0.152264	II 48
	26 451 18.36	58.84	25 51 29.5	0 8.5	0.150922	II 46
	27 450 19.52	-59.66	25 51 21.0	- 0 13.3	0.149658	II 44
	28 449 19.86	60.40	+25 51 7.7	0 18.0	0.148474	II 42
	29 448 19.46	61.05	25 50 49.7	0 22.8	0.147371	II 40
	30 447 18.41	61.61	25 50 26.9	0 27.5	0.146349	II 38
	Dez. 1 446 16.80	62.08	25 49 59.4	0 32.1	0.145411	II 37
	2 445 14.72	-62.44	25 49 27.3	- 0 36.8	0.144556	II 35
	3 444 12.28	62.73	+25 48 50.5	0 41.2	0.143785	II 34
	4 43 9.55	62.91	25 48 9.3	0 45.7	0.143099	II 33
	5 442 6.64	62.99	25 47 23.6	0 49.9	0.142499	II 32
	6 441 3.65	62.98	25 46 33.7	0 54.1	0.141985	II 31
	7 440 0.67	-62.87	25 45 39.6	- 0 58.2	0.141556	II 31
	8 438 57.80	62.67	+25 44 41.4	1 1.9	0.141213	II 30
	9 437 55.13	62.37	25 43 39.5	1 5.7	0.140957	II 30
	10 436 52.76	61.99	25 42 33.8	1 9.3	0.140786	II 29
	11 435 50.77	61.50	25 41 24.5	1 12.5	0.140700	II 29
	12 434 49.27	-60.93	25 40 12.0	- 1 15.8	0.140700	II 29
	13 433 48.34	60.27	+25 38 56.2	1 18.7	0.140783	II 29
	14 432 48.07	59.54	25 37 37.5	1 21.5	0.140951	II 30
	15 431 48.53	58.72	25 36 16.0	1 24.1	0.141202	II 30
	16 430 49.81	57.81	25 34 51.9	1 26.3	0.141535	II 30
	17 429 52.00	-56.84	25 33 25.6	- 1 28.5	0.141950	II 31
	18 428 55.16	55.78	+25 31 57.1	1 30.3	0.142445	II 32
	19 427 59.38	54.65	25 30 26.8	1 32.0	0.143020	II 33
	20 427 4.73	53.43	25 28 54.8	1 33.3	0.143674	II 34
	21 426 11.30	52.15	25 27 21.5	1 34.4	0.144405	II 35
	22 425 19.15	-50.80	25 25 47.1	- 1 35.2	0.145213	II 36
	23 424 28.35	49.36	+25 24 11.9	1 35.8	0.146096	II 38
	24 423 38.99		25 22 36.1	0.147054		II 39

Opp. in AR. Dez. 4

Größe = 10.4

W. Luther.

## (57) MNemosyne 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Dif.	Dekl.	Dif.	Log. Δ	Aberr.-Zt.
Nov. 18	4 57 <sup>m</sup> 2.06	- 42.12	+ 5 ° 28' 0.5	- 6 33.9	0.280568	15 <sup>m</sup> 51
	19 4 56 19.94	42.91	5 21 26.6	6 27.7	0.279804	15 50
	20 4 55 37.03	43.67	5 14 58.9	6 21.1	0.279098	15 48
	21 4 54 53.36	44.37	5 8 37.8	6 14.3	0.278452	15 46
	22 4 54 8.99	- 45.03	5 2 23.5	- 6 7.2	0.277867	15 45
	23 4 53 23.96	45.63	+ 4 56 16.3	5 59.7	0.277343	15 44
	24 4 52 38.33	46.18	4 50 16.6	5 52.0	0.276880	15 43
	25 4 51 52.15	46.68	4 44 24.6	5 44.0	0.276480	15 42
	26 4 51 5.47	47.12	4 38 40.6	5 35.7	0.276142	15 41
	27 4 50 18.35	- 47.51	4 33 4.9	- 5 27.2	0.275868	15 41
	28 4 49 30.84	47.83	+ 4 27 37.7	5 18.4	0.275658	15 40
	29 4 48 43.01	48.09	4 22 19.3	5 9.3	0.275511	15 40
	30 4 47 54.92	48.30	4 17 10.0	5 0.0	0.275428	15 40
	Dez. 1 4 47 6.62	48.44	4 12 10.0	4 50.5	0.275410	15 40
	2 4 46 18.18	- 48.53	4 7 19.5	- 4 40.7	0.275457	15 40
	3 4 45 29.65	48.55	+ 4 2 38.8	4 30.8	0.275569	15 40
	4 4 44 41.10	48.52	3 58 8.0	4 20.6	0.275745	15 41
	5 4 43 52.58	48.42	3 53 47.4	4 10.3	0.275985	15 41
	6 4 43 4.16	48.27	3 49 37.1	3 59.9	0.276289	15 42
	7 4 42 15.89	- 48.06	3 45 37.2	- 3 49.3	0.276657	15 43
	8 4 41 27.83	47.78	+ 3 41 47.9	3 38.5	0.277088	15 44
	9 4 40 40.05	47.45	3 38 9.4	3 27.7	0.277581	15 45
	10 4 39 52.60	47.05	3 34 41.7	3 16.9	0.278136	15 46
	11 4 39 5.55	46.61	3 31 24.8	3 5.8	0.278754	15 47
	12 4 38 18.94	- 46.13	3 28 19.0	- 2 54.7	0.279433	15 48
	13 4 37 32.81	45.59	+ 3 25 24.3	2 43.5	0.280171	15 50
	14 4 36 47.22	45.00	3 22 40.8	2 32.4	0.280969	15 52
	15 4 36 2.22	44.38	3 20 8.4	2 21.2	0.281825	15 54
	16 4 35 17.84	43.70	3 17 47.2	2 9.9	0.282738	15 56
	17 4 34 34.14	- 42.97	3 15 37.3	- 1 58.7	0.283707	15 58
	18 4 33 51.17	42.20	+ 3 13 38.6	1 47.5	0.284732	16 0
	19 4 33 8.97	41.38	3 11 51.1	1 36.2	0.285812	16 3
	20 4 32 27.59	40.52	3 10 14.9	1 25.0	0.286945	16 5
	21 4 31 47.07	39.61	3 8 49.9	1 13.8	0.288131	16 8
	22 4 31 7.46	- 38.66	3 7 36.1	- 1 2.6	0.289369	16 11
	23 4 30 28.80	37.66	+ 3 6 33.5	0 51.4	0.290658	16 14
	24 4 29 51.14		3 5 42.1		0.291997	16 17

Opp. in AR. Dez. 4

Größe = 10.1

P. Neugebauer.

f\*

## (35) LEUKOTHEA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Nov. 22	4 57 <sup>m</sup> 40.77	- 55.38	+ 33 42 54.7	+ 0 21.4	0.382828	20 <sup>m</sup> 4
23	4 56 45.39	56.17	33 43 15.8	0 14.5	0.381822	20 I
24	4 55 49.22	56.90	33 43 30.3	0 7.6	0.380866	19 58
25	4 54 52.32	57.57	33 43 37.9	+ 0 0.6	0.379960	19 56
26	4 53 54.75	- 58.18	33 43 38.5	- 0 6.5	0.379105	19 53
27	4 52 56.57	58.72	+ 33 43 32.0	0 13.8	0.378302	19 51
28	4 51 57.85	59.23	33 43 18.2	0 21.0	0.377552	19 49
29	4 50 58.62	59.66	33 42 57.2	0 28.2	0.376855	19 47
30	4 49 58.96	60.03	33 42 29.0	0 35.5	0.376212	19 45
Dez. 1	4 48 58.93	- 60.34	33 41 53.5	- 0 42.7	0.375623	19 44
2	4 47 58.59	60.59	+ 33 41 10.8	0 49.8	0.375088	19 42
3	4 46 58.00	60.77	33 40 21.0	0 57.0	0.374609	19 41
4	4 45 57.23	60.89	33 39 24.0	1 4.0	0.374186	19 40
5	4 44 56.34	60.95	33 38 20.0	1 10.9	0.373818	19 39
6	4 43 55.39	- 60.94	33 37 9.1	- 1 17.8	0.373507	19 38
7	4 42 54.45	60.86	- 1 33 35 51.3	1 24.8	0.373251	19 38
8	4 41 53.59	60.71	33 34 26.5	1 31.6	0.373052	19 37
9	4 40 52.88	60.50	33 32 54.9	1 38.3	0.372909	19 37
10	4 39 52.38	60.23	33 31 16.6	1 44.8	0.372821	19 36
11	4 38 52.15	- 59.90	33 29 31.8	- 1 51.3	0.372788	19 36
12	4 37 52.25	59.51	+ 33 27 40.5	1 57.5	0.372812	19 36
13	4 36 52.74	59.07	33 25 43.0	2 3.6	0.372891	19 36
14	4 35 53.67	58.56	33 23 39.4	2 9.5	0.373026	19 37
15	4 34 55.11	58.00	33 21 29.9	2 15.2	0.373215	19 37
16	4 33 57.11	- 57.39	33 19 14.7	- 2 20.7	0.373458	19 38
17	4 32 59.72	56.73	- 1 33 16 54.0	2 26.0	0.373754	19 39
18	4 32 2.99	56.00	33 14 28.0	2 31.1	0.374104	19 40
19	4 31 6.99	55.22	33 11 56.9	2 36.0	0.374508	19 41
20	4 30 11.77	54.40	33 9 20.9	2 40.7	0.374964	19 42
21	4 29 17.37	- 53.53	33 6 40.2	- 2 45.2	0.375472	19 44
22	4 28 23.84	52.60	+ 33 3 55.0	2 49.3	0.376032	19 45
23	4 27 31.24	51.62	33 1 5.7	2 53.2	0.376643	19 47
24	4 26 39.62	50.59	32 58 12.5	2 57.0	0.377304	19 48
25	4 25 49.03	49.51	32 55 15.5	3 0.6	0.378014	19 50
26	4 24 59.52	-- 48.38	32 52 14.9	- 3 4.1	0.378773	19 52
27	4 24 11.14	47.21	+ 32 49 10.8	3 7.5	0.379579	19 55
28	4 23 23.93		32 46 3.3		0.380432	19 57

Opp. in AR. Dez. 5

Größe = 12.8

## (46) HESTIA 1910.

<sup>12<sup>h</sup></sup>	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Mittl. Zeit						
Nov. 28	6 <sup>h</sup> 8 <sup>m</sup> 15.93	-50.81	+19° 47' 34.0	-41.8	0.179126	12 33
29	6 7 25.12	52.21	19 46 52.2	40.5	0.178086	12 31
30	6 6 32.91	53.54	19 46 11.7	39.1	0.177115	12 30
Dez. 1	6 5 39.37	54.80	19 45 32.6	37.7	0.176214	12 28
2	6 4 44.57	-56.00	19 44 54.9	-36.4	0.175385	12 27
3	6 3 48.57	57.14	+19 44 18.5	35.2	0.174630	12 25
4	6 2 51.43	58.19	19 43 43.3	33.9	0.173951	12 24
5	6 1 53.24	59.17	19 43 9.4	32.7	0.173347	12 23
6	6 0 54.07	60.06	19 42 36.7	31.5	0.172820	12 22
7	5 59 54.01	-60.88	19 42 5.2	-30.2	0.172370	12 21
8	5 58 53.13	61.62	+19 41 35.0	29.0	0.171999	12 21
9	5 57 51.51	62.28	19 41 6.0	27.9	0.171708	12 20
10	5 56 49.23	62.85	19 40 38.1	26.8	0.171497	12 20
11	5 55 46.38	63.33	19 40 11.3	25.7	0.171366	12 20
12	5 54 43.05	-63.74	19 39 45.6	-24.5	0.171317	12 20
13	5 53 39.31	64.08	+19 39 21.1	23.4	0.171351	12 20
14	5 52 35.23	64.33	19 38 57.7	22.2	0.171467	12 20
15	5 51 30.90	64.48	19 38 35.5	21.1	0.171665	12 20
16	5 50 26.42	64.55	19 38 14.4	19.9	0.171946	12 21
17	5 49 21.87	-64.56	19 37 54.5	-18.7	0.172310	12 21
18	5 48 17.31	64.47	+19 37 35.8	17.5	0.172756	12 22
19	5 47 12.84	64.30	19 37 18.3	16.3	0.173283	12 23
20	5 46 8.54	64.05	19 37 2.0	15.0	0.173893	12 24
21	5 45 4.49	63.72	19 36 47.0	13.7	0.174585	12 25
22	5 44 0.77	-63.30	19 36 33.3	-12.4	0.175358	12 26
23	5 42 57.47	62.81	+19 36 20.9	11.1	0.176208	12 28
24	5 41 54.66	62.23	19 36 9.8	9.7	0.177143	12 30
25	5 40 52.43	61.57	19 36 0.1	8.2	0.178159	12 31
26	5 39 50.86	60.82	19 35 51.9	6.7	0.179253	12 33
27	5 38 50.04	-60.00	19 35 45.2	-5.2	0.180423	12 35
28	5 37 50.04	59.11	+19 35 40.0	3.7	0.181671	12 37
29	5 36 50.93	58.14	19 35 36.3	2.1	0.182995	12 39
30	5 35 52.79	57.09	19 35 34.2	-0.4	0.184393	12 42
31	5 34 55.70	55.97	19 35 33.8	+1.3	0.185865	12 45
32	5 33 59.73	-54.79	19 35 35.1	+3.1	0.187409	12 48
33	5 33 4.94	53.54	+19 35 38.2	5.0	0.189023	12 51
34	5 32 11.40		19 35 43.2		0.190705	12 53

Opp. in AR. Dez. 19 Grösse = 10.5

P. Neugebauer.

## (154) BERTHA 1910.

12 <sup>h</sup> Mittl. Zeit	AR.	Diff.	Dekl.	Diff.	Log. Δ	Aberr.-Zt.
Nov. 28	6 <sup>h</sup> 37 <sup>m</sup> 25. <sup>s</sup> 07	- 56.76	+ 45° 30' 56.3"	+ 7' " 48.2	0.386075	20 <sup>m</sup> 13 <sup>s</sup>
29	6 36 28.31	58.63	45 38 44.5	7 41.8	0.384753	20 9
30	6 35 29.68	60.47	45 46 26.3	7 35.0	0.383473	20 5
Dez. 1	6 34 29.21	62.27	45 54 1.3	7 27.7	0.382235	20 2
2	6 33 26.94	- 64.03	46 1 29.0	+ 7 19.8	0.381040	19 59
3	6 32 22.91	65.75	+ 46 8 48.8	7 11.6	0.379890	19 56
4	6 31 17.16	67.43	46 16 0.4	7 2.8	0.378784	19 53
5	6 30 9.73	69.04	46 23 3.2	6 53.5	0.377724	19 50
6	6 29 0.69	70.59	46 29 56.7	6 43.7	0.376712	19 47
7	6 27 50.10	- 72.09	46 36 40.4	+ 6 33.5	0.375747	19 44
8	6 26 38.01	73.53	+ 46 43 13.9	6 22.8	0.374830	19 42
9	6 25 24.48	74.90	46 49 36.7	6 11.8	0.373962	19 40
10	6 24 9.58	76.21	46 55 48.5	6 0.4	0.373144	19 37
11	6 22 53.37	77.46	47 1 48.9	5 48.6	0.372377	19 35
12	6 21 35.91	- 78.63	47 7 37.5	+ 5 36.4	0.371661	19 33
13	6 20 17.28	79.72	+ 47 13 13.9	5 23.8	0.370996	19 31
14	6 18 57.56	80.74	47 18 37.7	5 11.0	0.370383	19 29
15	6 17 36.82	81.69	47 23 48.7	4 57.9	0.369823	19 28
16	6 16 15.13	82.55	47 28 46.6	4 44.6	0.369315	19 26
17	6 14 52.58	- 83.33	47 33 31.2	+ 4 31.0	0.368861	19 25
18	6 13 29.25	84.02	+ 47 38 2.2	4 17.1	0.368459	19 24
19	6 12 5.23	84.63	47 42 19.3	4 3.0	0.368111	19 24
20	6 10 40.60	85.16	47 46 22.3	3 48.6	0.367818	19 23
21	6 9 15.44	85.60	47 50 10.9	3 34.2	0.367579	19 23
22	6 7 49.84	- 85.94	47 53 45.1	+ 3 19.6	0.367394	19 22
23	6 6 23.90	86.18	+ 47 57 4.7	3 4.8	0.367264	19 22
24	6 4 57.72	86.32	48 0 9.5	2 49.9	0.367188	19 21
25	6 3 31.40	86.37	48 2 59.4	2 34.9	0.367167	19 21
26	6 2 5.03	86.32	48 5 34.3	2 19.9	0.367201	19 21
27	6 0 38.71	- 86.16	48 7 54.2	+ 2 4.9	0.367289	19 21
28	5 59 12.55	85.89	+ 48 9 59.1	1 49.9	0.367432	19 21
29	5 57 46.66	85.52	48 11 49.0	1 34.8	0.367630	19 22
30	5 56 21.14	85.07	48 13 23.8	1 19.8	0.367882	19 23
31	5 54 56.07	84.53	48 14 43.6	1 4.7	0.368187	19 24
32	5 53 31.54	- 83.89	48 15 48.3	+ 0 49.8	0.368544	19 25
33	5 52 7.65	83.15	+ 48 16 38.1	0 35.0	0.368953	19 26
34	5 50 44.50		48 17 13.1		0.369415	19 27

Opp. in AR. Dez. 23

Größe = 11.4

# NACHWEISUNGEN ÜBER DIE KLEINEN PLANETEN (1) – (674).

Zur genaueren Bezeichnung derjenigen Stellen, an welchen die betreffenden Mitteilungen über die kleinen Planeten sich befinden, sind bei sämtlichen hier benutzten Zeitschriften, nämlich bei den Astronomischen Nachrichten (A. N.), dem Bulletin Astronomique (B. A.), den Monthly Notices (M. N.) die Band- und Seitenzahlen angegeben.

## A. Beobachtungen.

Angaben über genäherte Positionen und Ephemeridenkorrekturen sind durch ein Sternchen neben der Jahreszahl gekennzeichnet.

Nr. und Name	Beobachtungsort	Opposition	Publikation
1 Ceres . . . . .	Hamburg . . .	1903	A. N. 179, 247
	Nizza . . .	1908	B. A. 26, 77
	Marseille . . .	»	» » 26, 125
	Uccle . . .	»	A. N. 181, 223
2 Pallas . . . . .	Uccle . . .	»	» » 181, 223
	Nizza . . .	»	B. A. 26, 77
	Marseille . . .	»	» » 26, 124
	Bordeaux . . .	»	» » 26, 315
3 Juno . . . . .	Hamburg . . .	1903	A. N. 179, 247
	Padua . . .	1908	» » 180, 207
	Arcetri . . .	»	» » 181, 317
	Uccle . . .	»	» » 181, 223
4 Vesta . . . . .	Nizza . . .	»	B. A. 26, 77
	Marseille . . .	»	» » 26, 44
	Nizza . . .	»	» » 26, 78
	Utrecht . . .	»	A. N. 181, 173
6 Ilabe . . . . .	Uccle . . .	»	» » 181, 223
	Hamburg . . .	1903	» » 179, 247
	Greenwich . . .	1907	M. N. 69, 43
	Düsseldorf . . .	1908	A. N. 180, 125
7 Iris . . . . .	Arequipa . . .	1898	» » 179, 207
8 Flora . . . . .	Greenwich . . .	1907	M. N. 69, 42
	Düsseldorf . . .	1908	A. N. 180, 125
	Genf . . .	»	» » 180, 361
	Utrecht . . .	»	» » 181, 173
9 Metis . . . . .	Hamburg . . .	1903	» » 179, 247
	Greenwich . . .	1907	M. N. 69, 44
10 Hygiea . . . . .	Arequipa . . .	1900*	A. N. 179, 207
	Hamburg . . .	1902	» » 179, 245
	Heidelberg . . .	1909*	» » 180, 103

## (88) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
11 Parthenope . . . .	Arequipa . .	1900*	A. N. 179, 207
	Hamburg . .	1903	» » 179, 247
	Greenwich . .	1907	M. N. 69, 42
	Düsseldorf . .	1908	A. N. 180, 125
15 Eunomia . . . .	Heidelberg . .	1909*	» » 180, 103
17 Thetis . . . .	Hamburg . .	1903	» » 179, 247
	Bordeaux . .	1906	B. A. 26, 315
	Greenwich . .	1907	M. N. 69, 44
	Düsseldorf . .	1908	A. N. 180, 127
	Jena . . . .	»	» » 180, 333
	Genf . . . .	»	» » 180, 361
	Kasan . . . .	»	» » 181, 51
	Utrecht . . . .	»	» » 181, 173
18 Melpomene . . . .	Hamburg . .	1903	» » 179, 247
19 Fortuna . . . .	Hamburg . .	1902	» » 179, 245
	Marseille . .	1908	B. A. 25, 461
	Düsseldorf . .	»	A. N. 180, 127
	Jena . . . .	»	» » 180, 333
	Genf . . . .	»	» » 180, 361
	Kasan . . . .	»	» » 181, 49
	Utrecht . . . .	»	» » 181, 173
	Mailand . . . .	»	» » 181, 215
	Bordeaux . . . .	»	B. A. 26, 316
	Kopenhagen . .	»	A. N. 179, 361
22 Kalliope . . . .	Hamburg . .	1903	» » 179, 247
	Heidelberg . .	1909*	» » 180, 392, 181, 77
24 Themis . . . .	Hamburg . .	1903	» » 179, 249
	Düsseldorf . .	1908	» » 180, 127
	Bordeaux . . . .	»	B. A. 26, 316
	Kopenhagen . .	»	A. N. 179, 359
26 Proserpina . . . .	Bordeaux . .	1905	{ B. A. 26, 316
	Bordeaux . .	1909	
	Breslau . . . .	1909*	A. N. 180, 359
28 Bellona . . . .	Heidelberg . .	1908/09*	» » 179, 339, 180, 101, 103
	Düsseldorf . .	1908	» » 180, 127
	Jena . . . .	»	» » 180, 335
	Poughkeepsie . .	»	» » 181, 191
	Mailand . . . .	»	» » 181, 215
	Marseille . . . .	»	B. A. 26, 309
	Bordeaux . . . .	1908/09	» » 26, 316
29 Amphitrite . . . .	Hamburg . .	1903	A. N. 179, 249
31 Euphrosyne . . . .	Greenwich . .	1907	M. N. 69, 43
34 Circe . . . .	Kopenhagen . .	1908	A. N. 179, 361
35 Leukothea . . . .	Arequipa . .	1899*	» » 179, 207

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (89)

Nr. und Name	Beobachtungsort	Opposition	Publikation
35 Leukothea . . . . .	Greenwich . . . . .	1907	M. N. 69, 43
37 Fides . . . . .	Marseille . . . . .	»	B. A. 26, 211
	Bordeaux . . . . .	»	» » 26, 317
	Heidelberg . . . . .	1909*	A. N. 181, 14, 48
	Genf . . . . .	»	» » 181, 361
39 Laetitia . . . . .	Hamburg . . . . .	1903	» » 179, 249
40 Harmonia . . . . .	Hamburg . . . . .	1902	» » 179, 245
42 Isis . . . . .	Bordeaux . . . . .	1906	B. A. 26, 317
	Genf . . . . .	1909	A. N. 181, 359
44 Nysa . . . . .	Greenwich . . . . .	1907	M. N. 69, 45
	Heidelberg . . . . .	1908/09*	A. N. 180, 15, 103
46 Hestia . . . . .	Hamburg . . . . .	1902	» » 179, 245
	Kasan . . . . .	1908	» » 181, 49
	Marseille . . . . .	»	B. A. 25, 461
47 Aglaja . . . . .	Kopenhagen . . . . .	»	A. N. 179, 359
	Heidelberg . . . . .	1909*	» » 180, 391
48 Doris . . . . .	Hamburg . . . . .	1902	» » 179, 245
	Heidelberg . . . . .	1909*	» » 180, 213, 181, 14
49 Pales = [1908 BS]. . . . .	Wien . . . . .	1908	» » 180, 221
50 Virginia . . . . .	Arequipa . . . . .	1899*	» » 179, 207
51 Nemausa . . . . .	Hamburg . . . . .	1903	» » 179, 249
53 Kalypso . . . . .	Greenwich . . . . .	1907	M. N. 69, 46
	Genf . . . . .	1909	A. N. 181, 359
54 Alexandra . . . . .	Heidelberg . . . . .	1909*	» » 180, 103
57 Muemosyne . . . . .	Hamburg . . . . .	1903	» » 179, 249
	Greenwich . . . . .	1907	M. N. 69, 43
	Bordeaux . . . . .	»	
	Bordeaux . . . . .	1908	{ B. A. 26, 317
	Marseille . . . . .	»	» » 25, 462
	Rom . . . . .	»	A. N. 179, 329
	Kopenhagen . . . . .	»	» » 179, 361
	Genf . . . . .	»	» » 180, 361
	Kasan . . . . .	»	» » 181, 51
	Düsseldorf . . . . .	»	» » 180, 127
	Düsseldorf . . . . .	1909*	» » 182, 61
58 Concordia . . . . .	Kopenhagen . . . . .	1907	» » 179, 357
	Mundenheim . . . . .	1909	» » 182, 75
59 Elpis . . . . .	Heidelberg . . . . .	1909*	» » 182, 251
61 Danaë . . . . .	Heidelberg . . . . .	»	» » 180, 103
63 Ausonia . . . . .	Heidelberg . . . . .	»	» » 180, 103, 104, 109
	Kopenhagen . . . . .	1909	» » 180, 119
64 Angelina . . . . .	Kopenhagen . . . . .	»	» » 180, 119
	Heidelberg . . . . .	1909*	» » 180, 101, 102, 104
65 Cybele . . . . .	Greenwich . . . . .	1907	M. N. 69, 44
	Jena . . . . .	1908	A. N. 180, 335

## (90) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
65 Cybele . . . . .	Genf . . . . .	1908	A. N. 180, 361
	Utrecht . . . . .	» » 181, 173	
66 Maja . . . . .	Heidelberg . . . . .	1909*	» » 181, 48
68 Leto . . . . .	Greenwich . . . . .	1907	M. N. 69, 43
70 Panopaea . . . . .	Arequipa . . . . .	1899*	A. N. 179, 208
71 Niobe . . . . .	Greenwich . . . . .	1907	M. N. 69, 45
	Düsseldorf . . . . .	1908	A. N. 180, 127
	Jena . . . . .	»	» » 180, 335
72 Feronia . . . . .	Heidelberg . . . . .	1909*	» » 181, 14
74 Galatea . . . . .	Heidelberg . . . . .	1908*	» » 179, 43
	Wien . . . . .	1908	» » 180, 217
76 Freia . . . . .	Heidelberg . . . . .	1909*	» » 181, 47
77 Frigga . . . . .	Kopenhagen . . . . .	1908	» » 179, 361
78 Diana . . . . .	Heidelberg . . . . .	1908*	» » 179, 275
	Rom . . . . .	1908	» » 179, 331
	Düsseldorf . . . . .	»	» » 180, 127
	Jena . . . . .	»	» » 180, 335
	Kasan . . . . .	»	» » 181, 51, 59
	Utrecht . . . . .	»	» » 181, 173
	Poughkeepsie . . . . .	»	» » 181, 191
79 Eurynome . . . . .	Hamburg . . . . .	1903	» » 179, 249
	Bordeaux . . . . .	1905	B. A. 26, 317
	Greenwich . . . . .	1907	M. N. 69, 42
	Rom . . . . .	1908	A. N. 179, 329
	Marseille . . . . .	»	B. A. 25, 462
	Nizza . . . . .	»	» » 26, 131
80 Sappho . . . . .	Arequipa . . . . .	1899*	A. N. 179, 208
82 Alkmene . . . . .	Bordeaux . . . . .	1905	B. A. 26, 317
	Greenwich . . . . .	1907	M. N. 69, 43
83 Beatrix . . . . .	Arequipa . . . . .	1899*	A. N. 179, 208
84 Klio . . . . .	Rom . . . . .	1908	» » 179, 329
86 Semele . . . . .	Greenwich . . . . .	1907	M. N. 69, 44
88 Thisbe . . . . .	Heidelberg . . . . .	1908*	A. N. 179, 100
89 Julia . . . . .	Heidelberg . . . . .	1909*	» » 180, 101, 102
	Kopenhagen . . . . .	1909	» » 180, 119
90 Antiope . . . . .	Hamburg . . . . .	1903	» » 179, 249
92 Undina . . . . .	Bordeaux . . . . .	1905	B. A. 26, 317
94 Aurora . . . . .	Hamburg . . . . .	1903	A. N. 179, 249
	Heidelberg . . . . .	1909*	» » 180, 214
95 Arethusa . . . . .	Düsseldorf . . . . .	»	» » 181, 387
	Heidelberg . . . . .	»	» » 182, 63
97 KloTho . . . . .	Hamburg . . . . .	1903	» » 179, 249
100 Hekate . . . . .	Arequipa . . . . .	1900	» » 179, 208
	Heidelberg . . . . .	1909*	» » 180, 103, 167
103 Hera . . . . .	Hamburg . . . . .	1902	» » 179, 245

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (91)

Nr. und Name	Beobachtungsort	Opposition	Publikation
103 Hera . . . . .	Heidelberg . . .	1908*	A. N. 179, 99
106 Dione . . . . .	Jena . . . .	1908	» » 180, 335
	Nizza . . . .	1908	B. A. 26, 131
	Marseille . . .	1908/09	» » 26, 310
108 Hecuba . . . . .	Hamburg . . .	1903	A. N. 179, 251
	Kopenhagen . . .	1907	» » 179, 357
	Heidelberg . . .	1909*	» » 180, 214
110 Lydia . . . . .	Heidelberg . . .	1908*	» » 179, 148
	Düsseldorf . . .	1908	» » 180, 127
	Nizza . . . .	»	B. A. 26, 131
111 Ate . . . . .	Taunton . . .	1908*	A. N. 179, 43
	Heidelberg . . .	»	» » 179, 44
113 Amalthea . . . . .	Düsseldorf . . .	1908	» » 180, 127
	Kasan . . . .	»	» » 181, 51
	Utrecht . . . .	»	» » 181, 173
	Mundenheim . .	»	» » 182, 75
	Marseille . . .	»	B. A. 25, 462
	Bordeaux . . .	»	» » 26, 317
114 Kassandra . . . . .	Heidelberg . . .	1909*	A. N. 180, 391
115 Thyra . . . . .	Krakau . . . .	1908*	» » 179, 47
117 Lomia . . . . .	Greenwich . . .	1907	M. N. 69, 45
118 Peitho . . . . .	Arequipa . . .	1899*	A. N. 179, 208
	Düsseldorf . . .	1908	» » 180, 127
	Jena . . . .	»	» » 180, 335
	Utrecht . . . .	»	» » 181, 173
119 Althaea . . . . .	Heidelberg . . .	1909*	» » 180, 213
120 Lachesis . . . . .	Heidelberg . . .	1908*	» » 179, 241
122 Gerda . . . . .	Greenwich . . .	1907	M. N. 69, 45
	Jena . . . .	1908	A. N. 180, 335
	Kasan . . . .	»	» » 181, 51
124 Alkest . . . . .	Heidelberg . . .	1909	» » 181, 387
	Greenwich . . .	1909*	» » 181, 131
128 Nemesis . . . . .	Heidelberg . . .	1908*	» » 179, 82
129 Antigone . . . . .	Genf . . . .	1908	» » 180, 361
	Nizza . . . .	»	B. A. 26, 78, 131
131 Vala . . . . .	Heidelberg . . .	1908*	A. N. 179, 82
134 Sophrosyne . . . . .	Düsseldorf . . .	1908	» » 180, 127
	Jena . . . .	»	» » 180, 335
	Kasan . . . .	»	» » 181, 49
	Bordeaux . . .	»	B. A. 26, 317
135 Hertha . . . . .	Hamburg . . .	1902	A. N. 179, 245
	Kopenhagen . . .	1908	» » 179, 359
143 Adria . . . . .	Heidelberg . . .	1909*	» » 182, 225
145 Adeona . . . . .	Heidelberg . . .	»	» » 180, 104
147 Protogeneia . . . . .	Kopenhagen . . .	»	» » 182, 225

## (92) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
148 Gallia . . . .	Greenwich . .	1907	M. N. 69, 44
	Heidelberg . .	1908*	A. N. 179, 82
149 Medusa . . . .	Heidelberg . .	1909*	» » 180, 214
	Nizza . . . .	1909	B. A. 26, 311
156 Xauthippe . . . .	Bordeaux . .	1905	» » 26, 318
157 Dejanira . . . .	Heidelberg . .	1908*	A. N. 179, 163
158 Koronis . . . .	Taunton . .	»	» » 179, 93
159 Aemilia . . . .	Arequipa . .	1900*	» » 179, 208
161 Athor . . . .	Heidelberg . .	1909*	» » 181, 14, 48
163 Erigone . . . .	Hamburg . .	1903	» » 179, 251
166 Rhodope . . . .	Heidelberg . .	1909*	» » 180, 104
168 Sibylla . . . .	Heidelberg . .	1908*	» » 179, 276
174 Phaedra . . . .	Heidelberg . .	1909*	» » 180, 103
175 Andromache . . . .	Heidelberg . .	»	» » 180, 104
179 Klytaemnestra . . . .	Heidelberg . .	1908*	» » 179, 276
184 Dejopeja . . . .	Nizza . . . .	1908	B. A. 25, 422
185 Eunike . . . .	Greenwich . .	1907	M. N. 69, 44
186 Celuta . . . .	Heidelberg . .	1908*	A. N. 179, 81
	Taunton . .	»	» » 179, 93
187 Lamberta . . . .	Heidelberg . .	1909*	» » 180, 101
188 Menippe . . . .	Heidelberg . .	»	» » 180, 103
189 Plithia . . . .	Arequipa . .	1900*	» » 179, 208
190 Ismene . . . .	Greenwich . .	1907	M. N. 69, 44
	Nizza . . . .	1908	B. A. 26, 131
192 Nausikaa . . . .	Marseille . .	1907	» » 26, 211
	Greenwich . .	»	M. N. 69, 46
195 Eurykleia . . . .	Wien . . . .	1908	A. N. 180, 217
196 Philomela . . . .	Rom . . . .	»	» » 179, 329
	Arectri . . . .	»	» » 181, 317
198 Ampella . . . .	Kopenhagen . .	1907/08	» » 179, 359
199 Byblis . . . .	Greenwich . .	1907	M. N. 69, 44
203 Pompeja . . . .	Heidelberg . .	1909*	A. N. 181, 14
213 Lilaea . . . .	Heidelberg . .	»	» » 182, 251
216 Kleopatra . . . .	Arequipa . .	1899*	» » 179, 208
	Bordeaux . .	1905	B. A. 26, 318
217 Eudora . . . .	Wien . . . .	1909*	A. N. 181, 387
221 Eos . . . .	Heidelberg . .	»	» » 180, 391, 181, 77
223 Rosa . . . .	Heidelberg . .	»	» » 180, 104
225 Henrietta . . . .	Nizza . . . .	1908	B. A. 25, 422
241 Germania . . . .	Hamburg . .	1903	A. N. 179, 251
	Düsseldorf . .	1908	» » 180, 129
	Marseille . .	»	B. A. 25, 461
	Heidelberg . .	1909*	A. N. 181, 13
247 Eukrate . . . .	Genf . . . .	1909	» » 181, 361
	Hamburg . .	1903	» » 179, 251

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (93)

Nr. und Name	Beobachtungsort	Opposition	Publikation
247 Eukrate . . . . .	Düsseldorf . . .	1908	A. N. 180, 129
	Marseille . . .	»	B. A. 25, 46
258 Tyche . . . . .	Düsseldorf . . .	»	A. N. 180, 129
261 Prymno . . . . .	Heidelberg . . .	1909*	» » 180, 103
266 Aline . . . . .	Heidelberg . . .	»	» » 180, 103
267 Tirza . . . . .	Heidelberg . . .	»	» » 180, 103, 104
270 Anahita . . . . .	Arequipa . . .	1899	» » 179, 208
	Hamburg . . .	1903	» » 179, 251
	Genf . . .	1909	» » 181, 359
277 Elvira . . . . .	Wien . . .	»	» » 182, 111
	Heidelberg . . .	1909*	» » 182, 251
278 Paulina . . . . .	Heidelberg . . .	1908*	» » 179, 147
	Nizza . . .	1908	B. A. 26, 127
283 Emma . . . . .	Nizza . . .	»	» » 26, 127
	Kopenhagen . . .	»	A. N. 181, 217
288 Glauke . . . . .	Kopenhagen . . .	1907/08	» » 179, 359
289 Nenetta . . . . .	Heidelberg . . .	1909*	» » 180, 101
	Nizza . . .	1909	B. A. 26, 209
303 Josephina . . . . .	Rom . . .	1908	A. N. 179, 327
308 Polyxo . . . . .	Heidelberg . . .	1909*	» » 180, 214
312 Pierretta . . . . .	Wien . . .	1908	» » 180, 217
	Kasan . . .	»	» » 181, 49
313 Chaldaca . . . . .	Rom . . .	»	» » 179, 327
	Genf . . .	»	» » 180, 361
	Kasan . . .	»	» » 181, 49
	Utrecht . . .	»	» » 181, 173
	Mailand . . .	»	» » 181, 215
	Heidelberg . . .	1909*	» » 181, 387
	Kopenhagen . . .	1909	» » 182, 95
314 Rosalia . . . . .	Heidelberg . . .	1908*	» » 179, 242
	Nizza . . .	1908	B. A. 26, 128
322 Phaeo . . . . .	Heidelberg . . .	1909*	A. N. 181, 387
	Kopenhagen . . .	1909	» » 182, 95
324 Bamberga . . . . .	Hamburg . . .	1903	» » 179, 251
	Heidelberg . . .	1909*	» » 180, 102, 103
	Nizza . . .	1909	B. A. 26, 209
325 Heidelberga . . . . .	Heidelberg . . .	1909*	A. N. 180, 104
326 Tamara . . . . .	Greenwich . . .	1907	M. N. 69, 46
336 Lacadiera . . . . .	Arequipa . . .	1898*	A. N. 179, 208
338 Budrosa . . . . .	Heidelberg . . .	1909*	» » 180, 103, 104, 168
340 Eduarda . . . . .	Kopenhagen . . .	1908	» » 179, 359
345 Tercidina . . . . .	Heidelberg . . .	1909*	» » 182, 63
346 Hermentaria . . . . .	Kopenhagen . . .	1908	» » 179, 359
349 Dembowska . . . . .	Heidelberg . . .	1909*	» » 180, 104, 214
351 Yrsa . . . . .	Bordeaux . . .	1907	B. A. 26, 318

(94) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
352 Gisela . . . .	Kopenhagen .	1908	A. N. 181, 217
360 Carlova . . . .	Rom . . .	1907/08	» » 179, 325
	Utrecht . . .	1908	» » 181, 171
	Kopenhagen .	»	» » 179, 359
361 Bononia . . . .	—	1909*	» » 180, 327
362 Havnia . . . .	Heidelberg .	»	» » 180, 102, 103
	Nizza . . .	1909	B. A. 26, 210
365 Corduba . . . .	Heidelberg .	1909*	A. N. 182, 163
	Kopenhagen .	1909	» » 182, 225
366 Vincentina . . . .	Heidelberg .	1909*	» » 180, 104, 199
367 Amicitia . . . .	Heidelberg .	»	» » 180, 104
376 Geometria . . . .	Heidelberg .	»	» » 180, 104
382 Dodona . . . .	Nizza . . .	1908	B. A. 26, 128
384 Burdigala . . . .	Arequipa .	1899*	A. N. 179, 208
	Heidelberg .	1909*	» » 182, 63
387 Aquitania . . . .	Paris . . .	1908	B. A. 26, 123
388 Charybdis . . . .	Heidelberg .	1909*	A. N. 180, 103
390 Alma . . . .	Heidelberg .	»	» » 182, 195
391 Ingeborg . . . .	Rom . . .	1908	» » 179, 331
	Wien . . .	»	» » 180, 217
	Kopenhagen .	»	» » 181, 217
	Nizza . . .	»	B. A. 26, 131
393 Lampetia . . . .	Greenwich .	1907	M. N. 69, 44
	Kopenhagen .	1908	A. N. 181, 217
398 Admete = [1907 AB]	Heidelberg .	1909*	» » 180, 199
		»	» » 180, 247
	Nizza . . .	1909	B. A. 26, 311
402 Chloë . . . .	Hamburg .	1903	A. N. 179, 251
	Bordeaux .	1907	B. A. 26, 318
	Greenwich .	»	M. N. 69, 42
403 Cyane . . . .	Heidelberg .	1909*	A. N. 181, 48
405 Thia . . . .	Hamburg .	1903	» » 179, 251
	Taunton .	1908*	» » 179, 93
407 Arachne . . . .	Heidelberg .	»	» » 179, 241
409 Aspasia . . . .	Arequipa .	1899*	» » 179, 208
	Kopenhagen .	1909	» » 180, 119
410 Chloris . . . .	Nizza . . .	1908	B. A. 26, 128
414 Liriope = [1907 BE]	Heidelberg .	1909*	A. N. 180, 103
416 Vaticana . . . .	Heidelberg .	»	» » 180, 102
417 Suevia . . . .	Heidelberg .	»	» » 180, 213
419 Aurelia . . . .	Marseille .	1908	B. A. 25, 462
420 Bertholda . . . .	Heidelberg .	1909*	A. N. 182, 252
421 Zähringia . . . .	Rom . . .	1908	» » 179, 331
	Wien . . .	»	» » 180, 217
423 Diotima . . . .	Kopenhagen .	1909*	» » 180, 183

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (95)

Nr. und Name	Beobachtungsort	Opposition	Publikation
423 Diotima . . . . .	Heidelberg . . .	1909*	A. N. 180, 213
426 Hippo . . . . .	Heidelberg . . .	1908*	» » 179, 275
	Rom . . . . .	»	» » 179, 307
427 Galene . . . . .	Heidelberg . . .	»	» » 179, 242
429 Lotus. . . . .	Rom . . . . .	1908	» » 179, 327
	Wien . . . . .	»	» » 180, 217
	Kopenhagen . . .	1909	» » 182, 95
431 Nephele . . . . .	Greenwich . . .	1907	M. N. 69, 45
	Nizza . . . . .	1908	B. A. 26, 128
432 Pythia . . . . .	Hamburg . . . .	1903	A. N. 179, 251
	Heidelberg . . .	1908*	» » 179, 339
	Bordeaux . . . .	1905	B. A. 26, 318
433 Eros . . . . .	Denver . . . . .	1907/08	A. N. 180, 345
	Greenwich . . .	1907	M. N. 69, 46
	Kopenhagen . . .	»	A. N. 179, 357
434 Hungaria . . . . .	Bordeaux . . . .	1906	B. A. 26, 318
	Rom . . . . .	1908	A. N. 179, 327
	Wien . . . . .	»	» » 180, 217
435 Ella . . . . .	Wien . . . . .	»	» » 180, 217
440 Theodora . . . . .	Wien . . . . .	1906	» » 180, 240
441 Bathilde . . . . .	Greenwich . . .	1907	M. N. 69, 46
	Heidelberg . . .	1909*	A. N. 180, 103
	Rom . . . . .	»	» » 180, 247
442 Eichsfeldia . . . . .	Hamburg . . . .	1903	» » 179, 251
443 Photographica . . . . .	Heidelberg . . .	1909*	» » 180, 391
	Rom . . . . .	»	» » 180, 391
	Nizza . . . . .	1909	B. A. 26, 311
	Bordeaux . . . .	1905	» » 26, 318
444 Gyptis . . . . .	Marseille . . . .	1908	» » 25, 461
	Rom . . . . .	»	A. N. 179, 327
	Algier . . . . .	»	» » 181, 201
	Heidelberg . . .	1909*	» » 181, 77
	Mundenheim . .	1909	» » 182, 75
	Düsseldorf . . .	1909*	» » 181, 89
447 Valentine . . . . .	Wien . . . . .	1906	» » 180, 239
	Rom . . . . .	1908	» » 179, 329
	Kopenhagen . . .	1909*	» » 182, 225
	Heidelberg . . .	»	» » 182, 251
449 Hamburga . . . . .	Heidelberg . . .	»	» » 180, 214
451 Patientia . . . . .	Bordeaux . . . .	1907	B. A. 26, 319
	Greenwich . . .	»	M. N. 69, 43
453 Tea . . . . .	Heidelberg . . .	1908*	A. N. 179, 241, 242
	Nizza . . . . .	1908	B. A. 26, 128, 131
456 Abuoba . . . . .	Rom . . . . .	1909*	A. N. 181, 15
	Heidelberg . . .	»	» » 181, 13

## (96) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
462 Eriphyla . . . .	Heidelberg . .	1909*	A. N. 181, 387
465 Alekto = [1907 YD] .	Taunton . .	1908*	» » 179, 43
	Nizza . . .	1908	B. A. 26, 132
469 Argentina . . . .	Heidelberg . .	1909*	A. N. 182, 251
470 Kilia . . . . .	Bordeaux . .	1905	B. A. 26, 319
	Rom . . .	1908	A. N. 179, 327
	Wien . . .	»	» » 180, 217
471 Papagena . . . .	Marseille . .	1907	B. A. 26, 211
	Heidelberg . .	1909*	A. N. 180, 104
	Rom . . .	»	» » 180, 135
	Genf . . .	1909	» » 181, 359
	Nizza . . .	»	B. A. 26, 311
472 Roma . . . . .	Rom . . .	1908	A. N. 179, 327
	Jena . . .	»	» » 180, 335
	Kasan . . .	»	» » 181, 49
	Rom . . .	1909*	» » 181, 179
	Heidelberg . .	»	» » 181, 226
477 Italia . . . . .	Rom . . .	1908	» » 179, 329
	Nizza . . .	»	B. A. 26, 132
478 Tergeste . . . .	Hamburg . .	1903	A. N. 179, 251
	Rom . . .	1907	» » 179, 325
	—	1909*	» » 180, 327
481 Emita . . . . .	Rom . . .	1908	» » 179, 329
482 Petrina . . . . .	Wien . . .	»	» » 180, 217
	Wien . . .	1909*	» » 182, 179
483 Seppina . . . .	Rom . . .	»	» » 181, 15
	Heidelberg . .	»	» » 181, 13
485 Genua . . . . .	Wien . . .	1904	» » 180, 239
	Greenwich . .	1907	M. N. 69, 44
	Rom . . .	1908	A. N. 179, 329
	Wien . . .	»	» » 180, 217
	Nizza . . .	»	B. A. 26, 132
	Aretri . . .	»	A. N. 181, 319
487 Venetia . . . .	Kopenhagen . .	1909*	» » 180, 183
488 Kreusa . . . . .	Wien . . .	1905/06	» » 180, 240
	Greenwich . .	1907	M. N. 69, 43
	Nizza . . .	1908	B. A. 26, 132
490 Veritas . . . . .	Heidelberg . .	1908*	A. N. 179, 148
	Wien . . .	1908	» » 180, 217
	Kopenhagen . .	»	» » 181, 217
	Nizza . . .	»	B. A. 26, 128
491 Carina . . . . .	Nizza . . .	»	» » 26, 128
495 Eulalia . . . . .	Wien . . .	»	A. N. 180, 219
498 Tokio . . . . .	Rom . . .	»	» » 179, 325

## NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (97)

Nr. und Name	Beobachtungsort	Opposition	Publikation
498 Tokio . . . .	Heidelberg . .	1909*	A. N. 180, 359, 181, 14, 47
	Rom . . . .	»	» » 180, 391
	Nizza . . . .	1909	B. A. 26, 311
500 Selinur . . . .	Wien . . . .	1908	A. N. 180, 219
501 Urhixidur . . . .	Wien . . . .	1903	» » 180, 237
	Heidelberg . .	1909*	» » 180, 104
502 Sigune . . . .	Wien . . . .	1904	» » 180, 239
503 Evelyn . . . .	Wien . . . .	1903	» » 180, 237
504 Cora . . . .	Rom . . . .	1907	» » 179, 325
	Heidelberg . .	1909*	» » 180, 103
505 Cava . . . .	Wien . . . .	1904	» » 180, 239
	Heidelberg . .	1909*	» » 180, 311
	Nizza . . . .	1909	B. A. 26, 311
506 Marion . . . .	Rom . . . .	1908	A. N. 179, 327
	Wien . . . .	»	» » 180, 219
	Kopenhagen . .	»	» » 179, 359
507 Laodica . . . .	Heidelberg . .	1909*	» » 180, 200
	Rom . . . .	»	» » 180, 359
	Nizza . . . .	1909	B. A. 26, 312
508 Princetonia . . . .	Wien . . . .	1903	A. N. 180, 238
	Wien . . . .	1908	» » 180, 219
	Kasan . . . .	»	» » 181, 49
	Kopenhagen . .	»	» » 179, 359
509 Iolanda . . . .	Rom . . . .	1908	» » 179, 327
	Rom . . . .	1909*	» » 181, 243
	Wien . . . .	»	» » 181, 217
	Heidelberg . .	»	» » 181, 225
510 Mabella . . . .	Düsseldorf . .	1908	» » 180, 129
	Wien . . . .	»	» » 180, 219
	Nizza . . . .	»	B. A. 26, 128
511 Davida . . . .	Greenwich . .	1907	M. N. 69, 42
	Rom . . . .	1908	A. N. 179, 327
	Kopenhagen . .	»	» » 179, 361
	Düsseldorf . .	»	» » 180, 129
	Wien . . . .	»	» » 180, 219
	Kasan . . . .	»	» » 181, 49
	Mailand . . . .	»	» » 181, 215
	Besançon . . . .	1909*	» » 181, 189
	Heidelberg . .	»	» » 181, 226
513 Centesima . . . .	Wien . . . .	1903	» » 180, 238
	Rom . . . .	1908	» » 179, 329
	Arcetri . . . .	»	» » 181, 319
	Nizza . . . .	»	B. A. 26, 132
514 Armida . . . .	Wien . . . .	1903	A. N. 180, 238

## (98) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
516 Amherstia . . . .	Greenwich . . .	1907	M. N. 69, 45
	Heidelberg . . .	1908*	A. N. 179, 148
	Rom . . . .	1908	» » 179, 331
	Kopenhagen . . .	»	» » 181, 217
	Nizza . . . .	»	B. A. 26, 132
518 Halawa . . . .	Wien . . . .	1903	A. N. 180, 238
521 Brixia . . . .	Wien . . . .	1904	» » 180, 239
	Heidelberg . . .	1909*	» » 180, 104
	Rom . . . .	»	» » 180, 149
	Genf . . . .	1909	» » 181, 359
523 Ada . . . .	Heidelberg . . .	1908/09**	» » 180, 15
	Rom . . . .	1909*	» » 180, 47
	Nizza . . . .	1909	B. A. 26, 210
524 Fidelio . . . .	Rom . . . .	1908	A. N. 179, 327
	Wien . . . .	»	» » 180, 219
526 Jena . . . .	Rom . . . .	1909*	» » 180, 59
	Heidelberg . . .	»	» » 180, 102
	Arcetri . . . .	1909	» » 182, 161
	Nizza . . . .	»	B. A. 26, 210
527 Euryanthe . . . .	Wien . . . .	1909*	A. N. 181, 217
	Heidelberg . . .	»	» » 181, 225
528 Rezia . . . .	Rom . . . .	1907	» » 179, 325
	Heidelberg . . .	1908/09**	» » 180, 15, 47, 102
	Rom . . . .	1909*	» » 180, 47
	Nizza . . . .	1909	B. A. 26, 210
530 Turandot . . . .	Heidelberg . . .	1909*	A. N. 180, 214
532 Herculina . . . .	Rom . . . .	1907/08	» » 179, 325
	Düsseldorf . . .	1908	» » 180, 129
	Utrecht . . . .	»	» » 181, 171
	Mailand . . . .	»	» » 181, 215
	Nizza . . . .	»	B. A. 26, 79
	Marseille . . . .	»	» » 26, 211
	Bordeaux . . . .	»	» » 26, 319
	Besançon . . . .	1909*	A. N. 181, 79
	Heidelberg . . .	»	» » 181, 77
533 Sara . . . .	Mundenheim . . .	1909	» » 182, 75
534 Nassovia . . . .	Wien . . . .	1904	» » 180, 239
	Wien . . . .	»	» » 180, 239
	Heidelberg . . .	1909*	» » 181, 14
535 Montague . . . .	Wien . . . .	1908	» » 180, 219
	Heidelberg . . .	1909*	» » 182, 63
536 Merapi . . . .	Heidelberg . . .	»	» » 180, 213
	Rom . . . .	»	» » 180, 359
537 Pauly . . . .	Wien . . . .	1904	» » 180, 239
	Kopenhagen . . .	1909*	» » 181, 79

# N. NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (99)

Nr. und Name	Beobachtungsort	Opposition	Publikation
537 Pauly . . . . .	Rom . . .	1909	A. N. 181, 79
	Heidelberg . .	1909*	» » 181, 77
538 Friederike . . . . .	Heidelberg . .	»	» » 181, 179
540 Rosamunde . . . . .	Wien . . .	1904	» » 180, 239
	Heidelberg . .	1908*	» » 179, 163
	Nizza . . .	1908	B. A. 26, 129
541 Deborah . . . . .	Wien . . .	1909*	A. N. 182, 195
542 Susanna . . . . .	Rom . . .	1908	» » 179, 329
	Nizza . . .	»	B. A. 26, 132
	Heidelberg . .	1909*	A. N. 182, 252
543 Charlotte . . . . .	Heidelberg . .	»	» » 182, 63
	Kopenhagen . .	»	» » 182, 225
544 Jetta . . . . .	Taunton . .	1908*	» » 179, 93
	Wien . . .	1908	» » 180, 219
	Nizza . . .	»	B. A. 26, 129
546 Herodias . . . . .	Heidelberg . .	1908*	A. N. 179, 82
	Taunton . .	»	» » 179, 93
547 Praxedis . . . . .	Wien . . .	1904	» » 180, 239
	Wien . . .	1908	» » 180, 219
	Rom . . .	»	» » 179, 329
	Arcetri . .	»	» » 181, 319
	Nizza . . .	»	B. A. 25, 422
548 Kressida . . . . .	Heidelberg . .	1909*	A. N. 180, 214
549 Jessonda . . . . .	Heidelberg . .	1908*	» » 179, 44, 81
550 Senta . . . . .	Wien . . .	1904/05	» » 180, 239
	Rom . . .	1908*	» » 179, 211
	Heidelberg . .	»	» » 179, 241, 276
	Nizza . . .	1908	B. A. 26, 129
551 Ortrud . . . . .	Wien . . .	»	A. N. 180, 219
552 Sigelinde . . . . .	Rom . . .	»	» » 179, 329
	Wien . . .	»	» » 180, 219
	Nizza . . .	»	B. A. 26, 132
554 Peraga . . . . .	Greenwich . .	1907	M. N. 69, 45
	Besançon . .	»	B. A. 26, 42
	Kopenhagen . .	1909*	A. N. 180, 183
	Heidelberg . .	»	» » 180, 213
	Nizza . . .	1909	B. A. 26, 312
556 Phyllis . . . . .	Heidelberg . .	1909*	A. N. 180, 103
	Kopenhagen . .	»	» » 180, 119
557 Violetta . . . . .	Heidelberg . .	»	» » 180, 214
558 Carmen . . . . .	Heidelberg . .	1908*	» » 179, 242
	Rom . . .	»	» » 179, 339
	Heidelberg . .	1909*	» » 180, 104, 199
559 Nanon . . . . .	Wien . . .	1905	» » 180, 240
560 Delila . . . . .	Heidelberg . .	1909*	» » 180, 102, 103
562 Salome . . . . .			

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## (100) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
562 Salome . . . . .	Rom . . .	1909*	A. N. 180, 183
563 Suleika . . . . .	Greenwich . .	1907	M. N. 69, 46
	Besançon . .	»	B. A. 26, 42
	Marscille . .	»	» » 26, 212
	Heidelberg . .	1909*	A. N. 180, 311
	Rom . . .	»	» » 180, 327
	Nizza . . .	1909	B. A. 26, 312
566 Stereoskopia . . . . .	Heidelberg . .	1909*	A. N. 180, 101
	Kopenhagen . .	1909	» » 180, 119
	Nizza . . .	»	B. A. 26, 210
569 Misa . . . . .	Wien . . .	1909*	A. N. 181, 387
570 [1905 QX] . . . . .	Heidelberg . .	»	» » 180, 391
	Nizza . . .	1909	B. A. 26, 312
573 [1905 RC] . . . . .	Wien . . .	1908	A. N. 180, 219
575 [1905 RE] . . . . .	Heidelberg . .	1909*	» » 182, 225
577 [1905 RH] . . . . .	Wien . . .	1908	» » 180, 219
578 [1905 RZ] . . . . .	Wien . . .	»	» » 180, 219
	Heidelberg . .	1909*	» » 182, 225
579 [1905 SD] . . . . .	Rom . . .	1908	» » 179, 329
	Wien . . .	»	» » 180, 219
582 [1906 SO] . . . . .	Wien . . .	»	» » 180, 221
585 [1906 TA] . . . . .	Heidelberg . .	1908*	» » 179, 147
	Wien . . .	1908	» » 180, 221
	Nizza . . .	»	B. A. 26, 129
587 [1906 TF] . . . . .	Heidelberg . .	1908*	A. N. 179, 148
588 Achilles . . . . .	Greenwich . .	1907	M. N. 69, 43
589 [1906 TM] . . . . .	Rom . . .	1908	A. N. 179, 329
	Wien . . .	»	» » 180, 221
	Arcetri . . .	»	» » 181, 319
	Nizza . . .	»	B. A. 26, 132
595 [1906 TZ]=[1908 EE]	Heidelberg . .	1908*	A. N. 179, 81, 99
	Wien . . .	1908	» » 180, 231
	Nizza . . .	»	B. A. 26, 129
596 [1906 UA] . . . . .	Heidelberg . .	1908*	A. N. 179, 100
	Nizza . . .	1908	B. A. 26, 129
599 [1906 UJ] . . . . .	Marseille . .	1907	» » 26, 212
600 [1906 UM] . . . . .	Heidelberg . .	1909*	A. N. 180, 101, 103
601 [1906 UN] . . . . .	Wien . . .	1906	» » 180, 240
	Heidelberg . .	1909*	» » 180, 101
605 [1906 UU] . . . . .	Wien . . .	1906	» » 180, 240
607 [1906 VC] . . . . .	Heidelberg . .	1909*	» » 180, 392
609 [1906 VF] . . . . .	Heidelberg . .	»	» » 180, 214
615 [1906 VR] . . . . .	Wien . . .	1908	» » 180, 221
	Heidelberg . .	1909*	» » 181, 48
	Rom . . .	»	» » 181, 79

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (101)

Nr. und Name	Beobachtungsort	Opposition	Publikation
617 Patroclus . . . .	Rom . . . .	1907	A. N. 179, 325
	Greenwich . . . .	»	M. N. 69, 46
	Heidelberg . . . .	1909*	A. N. 180, 103
		1909	» » 180, 45
618 [1906 VZ] . . . .	Heidelberg . . . .	1909*	» » 180, 311
619 [1906 WC] . . . .	Heidelberg . . . .	»	» » 181, 225
622 [1906 WP] . . . .	Rom . . . .	1908	» » 179, 327
	Wien . . . .	»	» » 180, 221
623 [1907 XJ] . . . .	Heidelberg . . . .	1909*	» » 182, 195
	Kopenhagen . . . .	»	» » 182, 225
624 Hektor . . . .	Rom . . . .	1908	» » 179, 327
	Wien . . . .	»	» » 180, 221
	Heidelberg . . . .	1909	» » 182, 25
635 [1907 ZS] = [1908 DP]	Wien . . . .	1908	» » 180, 227
638 [1907 ZQ] . . . .	Taunton . . . .	1908*	» » 179, 93
639 [1907 ZT] . . . .	Heidelberg . . . .	»	» » 179, 241, 276
642 [1907 ZY] . . . .	Heidelberg . . . .	»	» » 179, 275
643 [1907 ZZ] . . . .	Arequipa . . . .	1899*	» » 179, 287
	Heidelberg . . . .	1908*	» » 179, 339
	Washington . . . .	1909*	» » 181, 192
645 [1907 AG] . . . .	Heidelberg . . . .	1909*	» » 180, 103, 213
648 [1907 AE] . . . .	Heidelberg . . . .	»	» » 180, 104
651 [1907 AN] . . . .	Heidelberg . . . .	»	» » 180, 101
652 Jubilatrix . . . .	Heidelberg . . . .	»	» » 179, 359
654 Zelinda . . . .	Kopenhagen . . . .	1908	» » 179, 325
	Rom . . . .	»	» » 180, 129
	Düsseldorf . . . .	»	» » 180, 221
	Wien . . . .	»	» » 180, 293
	Acretri . . . .	»	» » 180, 335
	Jena . . . .	»	» » 181, 27
	Straßburg . . . .	»	B. A. 26, 212
	Marseille . . . .	»	A. N. 181, 259
	Rom . . . .	1909*	» » 180, 221
656 [1908 BU] . . . .	Wien . . . .	1908	» » 180, 223
657 [1908 BV] . . . .	Wien . . . .	»	» » 180, 223
658 [1908 BW] . . . .	Wien . . . .	»	» » 180, 223
659 [1908 CS] . . . .	Heidelberg . . . .	1909	» » 182, 25
660 [1908 CC] . . . .	Washington . . . .	1909*	» » 181, 92
663 [1908 DG] . . . .	Wien . . . .	1908	» » 180, 223
664 [1908 DH] . . . .	Wien . . . .	»	» » 180, 225
665 [1908 DK] . . . .	Wien . . . .	»	» » 180, 225
666 [1908 DM] . . . .	Wien . . . .	»	» » 180, 225
667 [1908 DN] . . . .	Wien . . . .	»	» » 180, 227
668 [1908 DO] . . . .	Wien . . . .	»	» » 180, 227
669 [1908 DQ] . . . .	Heidelberg . . . .	1908*	» » 179, 81
	Wien . . . .	1908	» » 180, 227

## (102) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Opposition	Publikation
670 [1908 DR] . . . .	Heidelberg . . .	1908*	A. N. 179, 81
	Wien . . . .	1908	» » 180, 229
671 [1908 DV] . . . .	Wien . . . .	»	» » 180, 229
672 [1908 DY] . . . .	Heidelberg . . .	1908*	» » 179, 44
	Wien . . . .	1908	» » 180, 231
673 [1908 EA] . . . .	Heidelberg . . .	1908*	» » 179, 44
	Taunton . . .	»	» » 179, 94
	Wien . . . .	1908	» » 180, 231
674 Rachel . . . .	Heidelberg . . .	1908*	» » 179, 148, 241
	Nizza . . . .	1908/09	» » 179, 227, 323, 181, 43
	Wien . . . .	»	» » 180, 231
	Düsseldorf . . .	1908/09	» » 180, 129, 181, 159
	Utrecht . . . .	»	» » 181, 95
	Rom . . . .	»	» » 181, 289
	Genf . . . .	»	» » 181, 359
	Acretri . . . .	»	» » 182, 161
	Marseille . . .	1908	B. A. 26, 309

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (103)

Nr. und Name	Beobachtungsort	Datum der Beobachtung	Publikation
[1908 BP]	Wien . . .	1908 Jan. 30 . . . . .	A. N. 180, 221
[1908 BY]	Wien . . .	» Jan. 30 . . . . .	» » 180, 223
[1908 CK]	Wien . . .	» März 11, 22, 27, April 1 . . .	» » 180, 223
[1908 CR]	Wien . . .	» März 27, April 1 . . . .	» » 180, 223
	Kopenhagen .	» März 27, April 1 . . . .	» » 179, 359
[1908 CT]	Wien . . .	» März 27, 28, April 1 . . . .	» » 180, 223
[1908 DE]	Wien . . .	» Juni 4 . . . . .	» » 180, 223
[1908 DO <sup>a</sup> ]	Taunton . .	» Juli 30*. . . . .	» » 179, 94
[1908 DS]	Heidelberg .	» Sept. 30* . . . . .	» » 179, 81
[1908 DT]	Greenwich .	» Aug. 24, 25, 27, 28, 29, 30, Sept. 1, 2, 4 . . . . .	M. N. 69, 212, A. N. 179, 94
[1908 DT <sup>a</sup> ]	Taunton . .	» Aug. 28* . . . . .	A. N. 179, 44
[1908 DU]	Taunton . .	» Aug. 30*, 31* . . . .	» » 179, 44
[1908 DW]	Wien . . .	» Sept. 21, 22, 24, 28, 30, Okt. 2, 4, 5 . . . . .	» » 180, 229
[1908 DX]	Wien . . .	» Sept. 24, 25, Okt. 1, 2, 4	» » 180, 229
	Heidelberg .	» Sept. 21* . . . . .	» » 179, 43
[1908 DZ]	Wien . . .	» Sept. 24, 25, 30, Okt. 2, 4	» » 180, 231
	Heidelberg .	» Sept. 21*. . . . .	» » 179, 44
[1908 EB]	Heidelberg .	» Sept. 21*, 30* . . . .	» » 179, 44, 81
[1908 EC]	Heidelberg .	» Sept. 30* . . . . .	» » 179, 81
[1908 ED]	Heidelberg .	» Sept. 30* . . . . .	» » 179, 81
[1908 EF]	Heidelberg .	» Okt. 2* . . . . .	» » 179, 82
[1908 EG]	Heidelberg .	» Okt. 6*, 20* . . . .	» » 179, 82, 100
	Wien . . .	» Okt. 29, Nov. 2 . . . .	» » 180, 231
[1908 EH]	Heidelberg .	» Okt. 6* . . . . .	» » 179, 82
[1908 EJ]	Taunton . .	» Sept. 30*, Okt. 3* . . . .	» » 179, 94
[1908 EK]	Taunton . .	» Okt. 4* . . . . .	» » 179, 94
[1908 EL]	Heidelberg .	» Okt. 27* . . . . .	» » 179, 147
[1908 EM]	Heidelberg .	» Okt. 27* . . . . .	» » 179, 147
	Wien . . .	» Nov. 2 . . . . .	» » 180, 231
[1908 EN]	Heidelberg .	» Okt. 27* . . . . .	» » 179, 147
	Wien . . .	» Okt. 31 . . . . .	» » 180, 231
[1908 EO]	Heidelberg .	» Okt. 27* . . . . .	» » 179, 147
[1908 EQ]	Heidelberg .	» Okt. 28* . . . . .	» » 179, 148
	Wien . . .	» Nov. 2, 3 . . . . .	» » 180, 231
[1908 ER]	Heidelberg .	» Nov. 1* . . . . .	» » 179, 163
[1908 ES]	Heidelberg .	» Nov. 1* . . . . .	» » 179, 163
[1908 ET]	Heidelberg .	» Nov. 27*, 28* . . . .	» » 179, 241
[1908 EU]	Heidelberg .	» Nov. 27*, 28* . . . .	» » 179, 241, 242
[1908 EV]	Heidelberg .	» Nov. 28* . . . . .	» » 179, 241
[1908 EW]	Heidelberg .	» Nov. 28* . . . . .	» » 179, 242
[1908 EX]	Heidelberg .	» Nov. 28* . . . . .	» » 179, 242
[1908 EY]	Heidelberg .	» Nov. 29* . . . . .	» » 179, 242
[1908 EZ]	Greenwich .	» Dez. 17* . . . . .	» » 179, 339

## (104) NACHWEISUNGEN ÜBER DIE KL. PLANETEN.

Nr. und Name	Beobachtungsort	Datum der Beobachtung	Publikation
[1908 FA]	Heidelberg	1908 Dez. 16*, 1909 Febr. 13*, 18*	A. N. 179, 339 180, 213
[1908 FB]	Heidelberg	» Dez. 16* . . . . .	» » 179, 339
[1908 FC]	Heidelberg	» Dez. 16* . . . . .	» » 179, 339
[1908 FD]	Heidelberg	» Dez. 16* . . . . .	» » 179, 339
[1908 FE]	Heidelberg	» Dez. 16* . . . . .	» » 179, 340
[1908 FF]	Heidelberg	» Dez. 16* . . . . .	» » 179, 340
[1908 FG]	Heidelberg	» Dez. 16* . . . . .	» » 179, 340
[1908 FH]	Heidelberg	» Dez. 31* . . . . .	» » 179, 387
[1908 FJ]	Heidelberg	» Dez. 31 . . . . .	» » 179, 387
[1908 FK]	Heidelberg	» Dez. 31*, 1909 Jan. 9*, 20* Febr. 19*, April 8*, 21*	» » 179, 387, 180, 47, 102 213, 391 181, 14
[1909 FL]	Heidelberg	1909 Jan. 9*, 20*	» » 180, 47, 102
[1909 FM]	Heidelberg	» Jan. 9*, 20* . . . . .	» » 180, 47, 102
[1909 FN]	Greenwich	» Jan. 16* . . . . .	» » 180, 47
[1909 FO]	Heidelberg	» Jan. 18*, 19* . . . . .	» » 180, 101, 102
[1909 FP]	Heidelberg	» Jan. 18* . . . . .	» » 180, 101,
[1909 FQ]	Heidelberg	» Jan. 18*, 26* . . . . .	» » 180, 101, 103
[1909 FR]	Heidelberg	» Jan. 18*, 26*. Febr. 8*	» » 180, 101, 103, 167
[1909 FS]	Kopenhagen	» Febr. 15 . . . . .	» » 180, 183
[1909 FT]	Heidelberg	» Jan. 22*, 26*. Febr. 18*	» » 180, 103, 213
	Heidelberg	» Jan. 24*, 26*, Febr. 18*	» » 180, 103, 104, 199
[1909 FU]	Heidelberg	» Jan. 26*, Febr. 18* . . .	» » 180, 104, 199
[1909 FV]	Heidelberg	» Jan. 26*, Febr. 18* . . .	» » 180, 104, 199
[1909 FW]	Heidelberg	» Jan. 28* . . . . .	» » 180, 104
[1909 FX]	Heidelberg	» Jan. 28* . . . . .	» » 180, 104
[1909 FY]	Heidelberg	» Jan. 28*, Febr. 9* . . .	» » 180, 104, 168
	Rom	» Jan. 29, 31 . . . . .	» » 180, 135
[1909 FZ]	Heidelberg	» Jan. 28* . . . . .	» » 180, 104
[1909 GB]	Heidelberg	» Jan. 28* . . . . .	» » 180, 104
[1909 GC]	Heidelberg	» Jan. 18*, 26*, Febr. 8*	» » 180, 167, 168
[1909 GD]	Heidelberg	» Febr. 18*, 19*, 20* . . .	» » 180, 199, 213
[1909 GE]	Heidelberg	» Febr. 18*, 19*, 20* . . .	» » 180, 199, 213
[1909 GF]	Heidelberg	» Febr. 18* . . . . .	» » 180, 200
[1909 GG]	Heidelberg	» Febr. 19* . . . . .	» » 180, 213
[1909 GH]	Heidelberg	» Febr. 20* . . . . .	» » 180, 214
[1909 GJ]	Heidelberg	» Febr. 21* . . . . .	» » 180, 214
[1909 GK]	Heidelberg	» Febr. 21* . . . . .	» » 180, 214
[1909 GL]	Heidelberg	» Febr. 25* . . . . .	» » 180, 214
[1909 GM]	Heidelberg	» März 9*, 14* . . . . .	» » 180, 295, 311

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (105)

Nr. und Name	Beobachtungsort	Datum der Beobachtung	Publikation
[1909 GN]	Heidelberg . .	1909 März 14*	A. N. 180, 311
[1909 GO]	Heidelberg . .	» April 8*, 21*	» » 180, 391, 181, 14
[1909 GP]	Heidelberg . .	» April 9*	» » 180, 391
[1909 GQ]	Heidelberg . .	» April 9*	» » 180, 391
[1909 GR]	Heidelberg . .	» April 11*	» » 180, 392
[1909 GS]	Heidelberg . .	» April 11*	» » 180, 392
[1909 GT]	Heidelberg . .	» April 15*, 19*	» » 180, 392, 181, 13
[1909 GU]	Heidelberg . .	» April 19*	» » 181, 13
[1909 GV]	Heidelberg . .	» April 19*	» » 181, 13
[1909 GW]	Heidelberg . .	» April 22*, Mai 9*	» » 181, 14, 47
[1909 GX]	Heidelberg . .	» April 22*	» » 181, 14
[1909 GY]	Heidelberg . .	» Mai 11*	» » 181, 48
[1909 GZ]	Heidelberg . .	» Mai 13*	» » 181, 77
[1909 HA]	Heidelberg . .	» Juni 17*	» » 181, 225
[1909 HB]	Greenwich . .	» April 7, 8, 9, 10, 14, 16, 18	» » 182, 11
[1909 HC]	Heidelberg . .	» Juli 23*, 24*	» » 182, 47
[1909 HD]	Heidelberg . .	» Aug. 8*, 19*	» » 182, 47, 95
[1909 HE]	Heidelberg . .	» Aug. 12*	» » 182, 63
[1909 HF]	Heidelberg . .	» Aug. 15*	» » 182, 95
	Kopenhagen . .	» Aug. 19, 21, 23, 26, 27, 28, Sept. 1, 2, 5, 7, 8, 9, 10, 11, 12	» » 182, 95, 163, 225
[1909 HG]	Wien . . .	» Aug. 16, 17	» » 182, 95
[1909 HH]	Wien . . .	» Aug. 25	» » 182, 163
[1909 HJ]	Wien . . .	» Sept. 12	» » 182, 195
[1909 HK]	Heidelberg . .	» Sept. 16*	» » 182, 225
[1909 HL]	Heidelberg . .	» Sept. 16*	» » 182, 225
[1909 HM]	Heidelberg . .	» Sept. 21*	» » 182, 251
[1909 HN]	Heidelberg . .	» Sept. 21*	» » 182, 252

Ausserdem sind A. N. 179, 209, 210 Beobachtungen unbekannter Planeten aus den Jahren 1898—1901 in Arequipa gegeben.

## B. Berechnungen.

Durch ein Sternchen (\*) sind die Ephemeriden mit ausführlich gerechneten Positionen kenntlich gemacht.

Nr. und Name	Ort der Publikation	Gegenstand
7 Iris . . .	A. N. 181, 261 . .	Säkularstörungen.
8 Flora . . .	M. N. 69, 619 . .	Ephemeride*.
49 Pales . . .	A. N. 179, 93 . .	Elemente, mit 655 [1908 BS] bezeichnet.
58 Concordia . . .	» » 180, 311 . .	Ephemeride.
110 Lydia . . .	» » 179, 43 . .	Ephemeride.
163 Erigone . . .	» » 181, 45 . .	Ephemeride.
313 Chaldaea . . .	B. A. 26, 289 . .	Ephemeride.
318 Magdalena . . .	A. N. 182, 227 . .	Ephemeride.
328 Gudrun . . .	» » 180, 371 . .	Ephemeride.
398 Admete . . .	» » 179, 93 . .	Elemente.
	» » 179, 371 . .	Identität mit 645 [1907 AB].
402 Chloë . . .	B. A. 26, 305 . .	Ephemeride.
437 Rhodia . . .	A. N. 181, 209 . .	Ephemeride.
444 Gyptis . . .	» » 180, 373 . .	Ephemeride.
447 Valentine . . .	» » 182, 15 . .	Ephemeride*.
451 Patientia . . .	» » 182, 109 . .	Ephemeride.
471 Papagena . . .	B. A. 25, 464 . .	Ephemeride.
472 Roma . . .	A. N. 181, 79 . .	Elemente, Ephemeride*.
511 Davida . . .	» » 181, 29 . .	Ephemeride.
	B. A. 26, 288 . .	Ephemeride.
516 Amherstia . . .	A. N. 179, 63 . .	Elemente, Ephemeride*.
521 Brixia . . .	» » 180, 61 . .	Elemente, Ephemeride*.
532 Herculina . . .	» » 180, 389 . .	Ephemeride.
	B. A. 26, 238 . .	Ephemeride.
539 Pamina . . .	» » 26, 306 . .	Ephemeride.
588 Achilles . . .	A. N. 180, 295 . .	Ephemeride.
592 [1906 TS] . . .	B. A. 26, 308 . .	Ephemeride.
603 [1906 TJ] . . .	A. N. 179, 94 . .	Ephemeride.
605 [1906 UU] . . .	» » 180, 211 . .	Ephemeride.
616 [1906 VT]		
= [1908 CM]	» » 181, 15 . .	Elemente, Ephemeride.
617 Patroclus . . .	» » 179, 223, 180, 45	Ephemeride.
624 Hektor . . .	» » 180, 327 . .	Ephemeride.
639 [1907 ZT] . . .	» » 179, 93 . .	Elemente.
640 [1907 ZW] . . .	» » 179, 93 . .	Elemente.
641 [1907 ZX] . . .	» » 179, 93 . .	Elemente.
642 [1907 ZY] . . .	» » 179, 93 . .	Elemente.
643 [1907 ZZ] . . .	» » 179, 93 . .	Elemente.

# NACHWEISUNGEN ÜBER DIE KL. PLANETEN. (107)

Nr. und Name	Ort der Publikation				Gegenstand
		.	.	.	
645 [1907 AG]	A. N. 181, 191	.	.	.	Elemente.
	» » 181, 363	.	.	.	Vermutete Identität mit Planet Wolf 1892 Jan. 19 20.
646 [1907 AC]	» » 179, 93	.	.	.	Elemente.
647 [1907 AD]	» » 179, 93	.	.	.	Elemente.
648 [1907 AE]	» » 179, 93	.	.	.	Elemente.
649 [1907 AF]	» » 179, 93	.	.	.	Elemente.
650 [1907 AM]	» » 179, 93	.	.	.	Elemente.
651 [1907 AN]	» » 179, 93	.	.	.	Elemente.
652 Jubilatrix	» » 179, 303	.	.	.	Elemente, Ephemeride.
653 [1907 BK]	» » 179, 115, 243	.	.	.	Identität mit 1893 D und 1905 QQ.
655 [1907 BF]	» » 180, 261	.	.	.	Elemente, Ephemeride.
656 [1908 BU]	» » 179, 93	.	.	.	Elemente.
657 [1908 BV]	» » 179, 93	.	.	.	Elemente.
658 [1908 BW]	» » 179, 93	.	.	.	Elemente.
659 [1908 CS]	» » 180, 213	.	.	.	Ephemeride.
660 [1908 CC]	» » 181, 91	.	.	.	Elemente, Ephemeride.
674 Rachel	» » 179, 241	.	.	.	Kreisbahn, Ephemeride.
	» » 180, 47	.	.	.	Ephemeride.
	» » 181, 291	.	.	.	Elemente.
[1908 DC]	» » 181, 95	.	.	.	Elemente, Ephemeride.



# Erläuterungen zu den Ephemeriden und Tafeln des Jahrbuchs für 1912.

Das Jahrbuch gibt die Örter der Wandelsterne in zwei Gattungen von Koordinaten an, in Ekliptikal- und Äquatorial-Koordinaten.

Bei den Ekliptikal-Koordinaten ist im allgemeinen als Anfangspunkt der Sonnenmittelpunkt angenommen und eine feste Lage der Ekliptik und des Äquinoktiums zu Grunde gelegt.

Bei den Äquatorial-Koordinaten ist als Anfangspunkt der Erdmittelpunkt angenommen und die jedesmalige wahre Lage des Äquators und des Äquinoktiums zu Grunde gelegt.

Die Zeitangaben für die im Jahrbuch mitgeteilten Örter sind überall, wo nicht ausdrücklich eine andere Zeit erwähnt wird, in mittlerer Berliner Sonnenzeit ausgedrückt. Die Lage des Berliner Meridians gegen diejenigen Meridiane, auf deren Zeitangaben sich die im Jahrbuch benutzten Sonnen-, Mond- und Planetentafeln begründen, ist nach den neusten Bestimmungen angenommen:

Berlin östlich von Paris um  $44^{\text{m}} 13^{\text{s}} .86$ ,

Berlin östlich von Greenwich um  $53^{\text{m}} 34^{\text{s}} .80$ .

Der Anfang des Tages ist der Mittag; die Zählung der Stunden ist durchgängig bis 24 angenommen worden, so dass die Stunden unter 12 die Nachmittagstunden desselben bürgerlichen Tages, die Stunden über 12, wenn man sie um 12 vermindert, die Vormittagstunden des nächstfolgenden bürgerlichen Tages sind.

Das Jahrbuch enthält außer den Angaben über die Zeit- und Festrechnung folgende

## Hauptabschnitte:

	Seite		Seite
1) Reduktionselemente . . . . .	1	Erläut.	[2]
2) Sonnenephemeride und rechtwinkelige Sonnenko- ordinaten . . . . .	2	»	[3]
3) Mondephemeride . . . . .	42	»	[4]
4) Ephemeride für den Mondkrater Mösting A . . .	82	»	[6]
5) Lage des Mondäquators und Angaben über die Mondbewegung . . . . .	87	»	[8]

## ERLÄUTERUNGEN.

	Seite	Seite
6) Auf- und Untergang von Sonne und Mond in Berlin	89	Erläut. [9]
7) Wahre geozentrische Örter der Planeten: Merkur, Venus, Mars, Jupiter, Saturn, Uranus und Neptun	94	» [9]
8) Heliozentrische Koordinaten der Planeten: Merkur, Venus, Erde, Mars, Jupiter, Saturn, Uranus und Neptun . . . . .	144	» [11]
9) Mittlere Örter von 925 Fixsternen	149	» [11]
10) Scheinbare Örter von 573 Fixsternen	176	» [11]
11) Reduktionstafeln für die Bewegungen der Koordi- natensysteme und die Aberration . . . . .	376	» [12]
12) Sonnen- und Mondfinsternisse . . . . .	402	» [14]
13) Sternbedeckungen durch den Mond . . . . .	410	» [16]
14) Angaben über die Jupiterstrabanten . . . . .	420	» [22]
15) Angaben über den Saturnsrings . . . . .	426	» [24]
16) Angaben über die Saturnstrabanten . . . . .	428	» [25]
17) Konstellationen . . . . .	455	» [29]
18) Hülftstafeln . . . . .	457	» [30]
19) Koordinaten der Sternwarten . . . . .	470	» [31]
20) Bahnelemente der kleinen Planeten . . . . .	(2)	» [31]
21) Oppositionsdaten der kleinen Planeten für 1910 . .	(37)	» [32]
22) Oppositionsphemeriden von 36 kleinen Planeten für 1910 . . . . .	(51)	» [32]
23) Nachweisungen über die kleinen Planeten . . . . .	(87)	» [32]

## 1) Reduktionselemente.

Die auf Seite 1 gegebene Übersicht der Reduktionselemente enthält für die mittleren Mitternacht von 10 zu 10 Tagen fortschreitend folgende Angaben:

1) Die mittlere Schiefe der Ekliptik, berechnet nach der Angabe von Newcomb (*Tables of the Motion of the Earth*, S. 10), nämlich:

$$\varepsilon = 23^\circ 27' 8''.26 - 0''.4685 (t - 1900 \text{ Jan. } \odot).$$

2) Die scheinbare Schiefe der Ekliptik, entstanden aus der vorhergehenden unter Hinzufügung der Nutation in Schiefe, nämlich:

$$\Delta\varepsilon = +0''.5519 \cos 2\odot + 0''.0092 \cos (\odot + 281^\circ 25') \\ + 9''.210 \cos \Omega - 0''.0895 \cos 2\Omega.$$

Das kurzperiodische Glied

$$+ 0''.0884 \cos 2\zeta$$

ist hier weggelassen, findet sich aber in der letzten Kolumne der Sonnenephemeride von Tag zu Tag aufgeführt.

3) Die Präzession in Länge, berechnet mit der Newcombschen Präzessionskonstante:

Jährliche Präzession in Länge für 1912:  $50''.2590$ .

4) Die Nutation in Länge, berechnet aus:

$$\begin{aligned} & - 1''.2725 \sin 2\odot + 0''.1477 \sin(\odot + 81^\circ 48') \\ & - 17''.2335 \sin \Omega + 0''.2070 \sin 2\Omega. \end{aligned}$$

Die kurzperiodischen Glieder

$$- 0''.2038 \sin 2\zeta + 0''.0676 \sin(\zeta - \Gamma')$$

sind hier weggelassen, finden sich aber in der Sonnenephemeride in der vorletzten Kolumne von Tag zu Tag aufgeführt.

Die angegebene Nutation entspricht dem Zeichen nach der Reduktion von mittlerer Länge auf wahre.

5) Die Aberration der Sonne, mit der von der Pariser Konferenz angenommenen Konstanten  $20''.47$  berechnet.

6) Die Parallaxe der Sonne, mit der von der Pariser Konferenz angenommenen Konstanten  $8''.80$  berechnet.

## 2) Sonnenephemeride.

Bei der Sonnenephemeride, welche nach den Sonnentafeln von Newcomb (*Astr. Papers Vol. VI, Part. I*) berechnet ist, enthält die linke Seite diejenigen Angaben, welche bei der Beobachtung der Sonne gebraucht werden; ihre Epoche ist der mittlere Berliner Mittag.

Sie enthält außer dem Datum des Monats und dem Wochentage in sieben neben einander stehenden Kolumnen:

1) Die Zeitgleichung oder den Unterschied zwischen wahrer und mittlerer Zeit.

- 2) Die scheinbare Rektascension der Sonne.
- 3) Die ersten Differenzen dieser Zahlenreihe.
- 4) Die scheinbare Deklination der Sonne.
- 5) Die ersten Differenzen dieser Zahlenreihe.
- 6) Die Durchgangsdauer der Sonne in Sternzeit.
- 7) Die scheinbaren Halbmesser der Sonnenscheibe.

Bei der Rektascension und Deklination ist die Aberration bereits angebracht, dieselben sind daher direkt mit den Beobachtungen vergleichbar.

Gemäß den Beschlüssen der Pariser Konferenz sind die Nutationsglieder kurzer Periode hier ebenso wie bei den folgenden Planetenephemeriden weggelassen.

Auf der rechten Seite stehen, ebenfalls mit der Epoche des mittleren Berliner Mittags, außer dem Monats- und Jahrestage in acht Kolumnen neben einander:

- 1) Die Sternzeit im mittleren Mittage oder die wahre Rektascension der mittleren Sonne.
- 2) Die Länge der Sonne bezogen auf die mittlere Ekliptik und das mittlere Äquinoktium 1912.0 (*annus fictus*).
- 3) Die ersten Differenzen dieser Zahlenreihe.
- 4) Die Breite der Sonne bezogen auf die mittlere Ekliptik und das mittlere Äquinoktium 1912.0 (*annus fictus*).
- 5) und 6) Der Logarithmus des Radius vector der Sonne mit den Differenzen.
- 7) und 8) Die von der Mondlänge abhängigen Glieder der Nutation in Länge und Schiefe der Ekliptik, nämlich:

$$d\lambda = -0''.2038 \sin 2\zeta + 0''.0676 \sin(\zeta - \Gamma')$$

$$d\varepsilon = +0''.0884 \cos 2\zeta.$$

Die Koordinaten dieser Seite sollen bei Bahnberechnungen und der gleichen dienen, sie sind deshalb frei von Aberration, deren Berücksichtigung nur bei ihrer Anwendung zur Vorausberechnung von Finsternissen erforderlich wäre. Für diesen Fall findet man die Korrektion, die man von der Länge abziehen muß, in der vorletzten Kolumne der Seite 1.

Für die Berechnung des scheinbaren Sonnenhalbmessers ist nach Professor Auwers 15' 59''.63 angenommen.

Auf Seite 22—41 folgen die rechtwinkeligen Sonnenkoordinaten von 12<sup>h</sup> zu 12<sup>h</sup> mittlerer Zeit, bezogen auf die mittlere Lage des Äquators und Äquinoktiums für den Anfang des *annus fictus* 1912 (1912 Jan. 1.26).

Diese Koordinaten sind bekanntlich mit entgegengesetzten Zeichen die Koordinaten des Erdmittelpunktes gegen den Sonnenmittelpunkt als Ursprung, bezogen auf eine *X*-Achse, deren positive Richtung in einer durch den Sonnenmittelpunkt parallel der Ebene des Erdäquators gelegten Ebene durch die Linie des aufsteigenden Knotens der Erdbahn in dieser heliozentrischen Äquatorialebene bestimmt wird, deren positive *Y*-Achse in der heliozentrischen Äquatorialebene 90° in der Richtung der Erdbewegung von der *X*-Achse absteht, und deren positive *Z*-Achse parallel der Erdachse nach der nördlichen Seite gerichtet ist.

Neben den Koordinaten stehen von Tag zu Tag die Reduktionen derselben auf das mittlere Äquinoktium des benachbarten Jahrzehnt-Anfanges 1910.0 in Einheiten der letzten Dezimale; sie dienen zur bequemen Verbindung der Koordinatenangaben aufeinanderfolgender Jahre.

### 3) Mondephemeride.

Von den die Mondephemeride enthaltenden Seiten 42—81 geben die links liegenden Seiten für mittleren Mittag und Mitternacht:

- 1) Die wahre Rektascension des Mondes mit den Differenzen.
- 2) Die wahre Deklination des Mondes mit den Differenzen.
- 3) Den log. Sinus der Äquatorial-Horizontal-Parallaxe des Mondes mit den Differenzen.
- 4) Den scheinbaren Halbmesser des Mondes.

Unterhalb dieser Kolumnen sind die Epochen der Mondphasen angegeben.

Auf den rechts liegenden Seiten befinden sich die Angaben, welche die Meridianbeobachtungen des Mondes und ihre Reduktion unterstützen sollen, sowie nach dem Verzeichnis des *Nautical Almanac* die genäherten Örter der sogenannten Mondsterne, deren korrespondierende Beobachtung in Verbindung mit dem Monde besonders die Genauigkeit der Längenbestimmungen aus Mondkulminationen, sowie auch der Parallaxenbestimmungen aus Zenitdistanzen erhöhen soll.

Die abgekürzte Ortsangabe der Mondsterne, welche für die Aufsuchung derselben hinreicht, wird als genügend betrachtet werden können, wenn man bedenkt, dass der Hauptzweck der Mondsternangaben die Herbeiführung korrespondierender Beobachtungen derselben ist, dass aber bei solchen die Örter dieser Sterne eliminiert werden, und dass bei einem Mangel an korrespondierenden Beobachtungen entweder eine sehr sorgfältige und selbständige Diskussion der für die Mondposition zu Grunde zu legenden Sternörter oder deren Beziehung auf die Meridianbeobachtungen benachbarter Fundamentalsterne eintreten müfs.

Es enthalten auf diesen Seiten:

Die 1. Kolumne den Monatstag und die Bezeichnung des oberen oder unteren Berliner Meridiandurchganges des Mondes durch *O* und *U*.

Die 2. Kolumne die Mittl. Berl. Zeit des Meridiandurchganges des Mondes.

Die 3. Kolumne die Rektascension des Mondes zur Zeit der Kulmination.

Die 4. Kolumne die halbe Durchgangsdauer in Sternzeit berechnet mit Hülfe des geozentrischen Halbmessers des Mondes und der stündlichen Bewegung in AR.

Die 5. Kolumne die stündliche Bewegung in Rektascension einschließlich der Veränderung des Halbmessers, hier für die besonderen Zwecke nicht auf eine Stunde mittlerer Zeit sondern auf das Zeitintervall bezogen, welches zwischen zwei der Epoche benachbarten Durchgängen des Mondes durch zwei um eine Stunde von einander abstehende Meridiane verfliesst.

Die 6. Kolumne die Deklination des Mondes zur Zeit der Kulmination.

Die 7. Kolumne die stündliche Bewegung in Deklination (auf dasselbe Intervall bezogen wie die Bewegung in AR.).

Die 8., 9., 10. Kolumne die Rektascension, Deklination und Gröfse der allgemein angenommenen Mondsterne oder Vergleichsterne des Mondes nach dem *Nautical Almanac*. Bei deren Auswahl ist das Prinzip befolgt, dass von den jedesmal zu benutzenden 4 Sternen die beiden dem Monde folgenden am folgenden Tage als die beiden vorangehenden beobachtet werden. Es gehören also zu jeder oberen Kulmination (Berlin) die 4 aufeinanderfolgenden Sterne, deren erster auf gleicher Linie mit der Angabe des zugehörigen Monatstages steht.

Dieselben Seiten enthalten endlich unterhalb jener Kolumnen die Epochen des Perigäums und Apogäums des Mondes.

Von den Mondörtern ist nur eine geringe Anzahl für die Finsternisse direkt nach den *Tables de la lune, construites d'après le principe Newtonien de la gravité universelle par P. A. Hansen*, mit Berücksichtigung von *Newcombs Corrections to Hansens Tables of the Moon*, berechnet worden; für die Berechnung der Ephemeride ist dagegen die ausführliche Mondephemeride des *Nautical Almanac* benutzt worden, die der Redaktion infolge Übereinkommens mit der *Nautical Almanac Office* in den Anshängebogen zur Verfügung stand. Doch ist zu beachten, dass für die Berechnung des Mondhalbmessers der von J. Peters ermittelte mittlere Wert  $15^{\circ} 32''\cdot59$  angenommen ist.

#### 4) Ephemeride für den Mondkrater Mösting A.

Die Ephemeride des Mondkraters Mösting A, Seite 82—86, dient zwei verschiedenen Zwecken: erstens zur genauen Bestimmung von Mondörtern am Himmel durch Meridianbeobachtung des Kraters, zweitens zur Bestimmung der selenographischen Koordinaten weiterer Punkte der Mondoberfläche durch deren mikrometrischen Anschluss an Mösting A.

Sie gilt für die mittlere Mitternacht in Berlin und enthält für die Tage, an welchen Mösting A innerhalb der Beleuchtungsgrenze liegt, die Unterschiede  $\alpha_{\zeta} - \alpha_k$  in Rektascension und  $\delta_{\zeta} - \delta_k$  in Deklination zwischen der Mondmitte und dem Krater vom Erdmittelpunkt aus gesehen mit ihren Differenzen, sowie den Logarithmus des Sinus der Äquatorialhorizontal-Parallaxe  $p_k$  des Kraters, welche von der des Mondes  $p_{\zeta}$  zu unterscheiden ist, mit den zugehörigen Differenzen.

Zur Anwendung der Ephemeride auf Meridianbeobachtungen des Kraters interpoliere man unter strenger Berücksichtigung der zweiten Differenzen  $\alpha_{\zeta} - \alpha_k$ ,  $\delta_{\zeta} - \delta_k$  und  $\log \sin p_k$  mit der Zeit des Durchgangs des Kraters durch den Meridian. Dann befreie man die beobachtete Deklination des Kraters von der Höhenparallaxe, indem man diese in der bekannten Weise mit dem Argument der wahren Kraterdeklination (nicht Monddeklination), unter Benutzung von  $p_k$ , berechnet. Bringt man alsdann

$\alpha_{\text{C}} - \alpha_k$  und  $\delta_{\text{C}} - \delta_k$  an die Beobachtung an, so hat man die AR. und Dekl. des Mondes, wie sie vom Erdmittelpunkt aus beobachtet wären, für die Beobachtungszeit, d. h. für die Kulmination des Kraters (nicht des Mondes).

Für Beobachtungen außerhalb des Meridians interpoliere man  $\alpha_{\text{C}} - \alpha_k$ ,  $\delta_{\text{C}} - \delta_k$  und  $\log \sin p_k$  mit der Zeit der Beobachtung. Man findet dann die gesehene, mit Parallaxe behaftete Differenz  $\alpha'_{\text{C}} - \alpha'_k$  offenbar, indem man die mit  $p_{\text{C}}$  und dem Mondort berechnete Parallaxe  $\alpha'_{\text{C}} - \alpha_{\text{C}}$  des Mondes in AR. zu  $\alpha_{\text{C}} - \alpha_k$  addiert und dann die mit  $p_k$  und dem Kraterort berechnete Parallaxe  $\alpha'_k - \alpha_k$  des Kraters in AR. subtrahiert. Es ist nämlich:

$$\alpha'_{\text{C}} - \alpha'_k = \alpha_{\text{C}} - \alpha_k + (\alpha'_{\text{C}} - \alpha_{\text{C}}) - (\alpha'_k - \alpha_k)$$

und ebenso

$$\delta'_{\text{C}} - \delta'_k = \delta_{\text{C}} - \delta_k + (\delta'_{\text{C}} - \delta_{\text{C}}) - (\delta'_k - \delta_k).$$

Verbindet man die so erhaltenen scheinbaren Abstände zwischen der Mondmitte und Mösting A mit mikrometrischen Messungen zwischen Mösting A und einem zweiten Krater, so erhält man die scheinbare Lage des letzteren gegen die Mondmitte und kann hieraus mit Hülfe von  $\alpha'_{\text{C}}$  und  $\delta'_{\text{C}}$ , mit der auf Seite 87 angegebenen Lage des Mondäquators und der mit den Angaben auf Seite 457 berechneten physischen Mondlibration die selenographische Länge und Breite des zweiten Kraters berechnen. Hierzu dienen die im folgenden angeführten Formeln.

Bezeichnet man mit  $\alpha'$  und  $\delta'$  die scheinbare AR. und Dekl. des an Mösting A angeschlossenen Kraters, so hat man:

$$\begin{aligned} s \sin \pi_m &= (\alpha' - \alpha'_{\text{C}}) \cos \frac{1}{2}(\delta' + \delta'_{\text{C}}) \\ s \cos \pi_m &= (\delta' - \delta'_{\text{C}}) \\ \pi &= \pi_m - \frac{1}{2}(\alpha' - \alpha'_{\text{C}}) \sin \frac{1}{2}(\delta' + \delta'_{\text{C}}) \\ \sin(K + s) &= \sin s \operatorname{cosec} h'. \end{aligned}$$

$h'$  ist der scheinbare Radiusvector des Kraters, der aus  $h$ , dem vom Erdmittelpunkt aus gesehenen Radiusvector, 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 eingesetzt werden.

$$\begin{aligned} \sin d &= -\sin \delta'_{\text{C}} \cos K + \cos \delta'_{\text{C}} \sin K \cos \pi \\ \cos d \cos(a - \alpha'_{\text{C}}) &= -\cos \delta'_{\text{C}} \cos K - \sin \delta'_{\text{C}} \sin K \cos \pi \\ \cos d \sin(a - \alpha'_{\text{C}}) &= \sin K \sin \pi \\ \sin \beta &= \sin d \cos i - \cos d \sin i \sin(a - \Omega') \\ \cos \beta \sin \lambda' &= \sin d \sin i + \cos d \cos i \sin(a - \Omega') \\ \cos \beta \cos \lambda' &= \cos d \cos(a - \Omega'). \end{aligned}$$

# ERLÄUTERUNGEN.

Die Größen  $i$  und  $\Omega'$  entnehme man der Seite 87.

$$\lambda = \lambda' - 180^\circ - L - (\vartheta - \Omega).$$

$L$ , die mittlere Länge des Mondes, findet sich auf Seite 88, wie  $\vartheta - \Omega$  auf Seite 87.

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:

$$d\lambda = +12'' \sin M - 59'' \sin M' - 18'' \sin 2\omega \\ + \operatorname{tg} \beta [-108'' \cos(\omega + \lambda) + 37'' \cos(\omega - \lambda) - 11'' \cos(M + \omega - \lambda)] \\ d\beta = +108'' \sin(\omega + \lambda) + 37'' \sin(\omega - \lambda) - 11'' \sin(M + \omega - \lambda).$$

Die Größen  $M$ ,  $M'$ ,  $\omega$  sind der Seite 457 zu entnehmen.

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 (Selenographische Koordinaten III, Seite 49) zugrunde:

$$\lambda_0 = -5^\circ 10' 13'', \quad \beta_0 = -3^\circ 10' 58'' \\ h = 15' 34''.71 \text{ entsprechend der Parallaxe } 57' 2''.27.$$

Für die Reduktion auf den mittleren Mondäquator wurden die Werte angenommen:

$$d\lambda = -12'' \sin M + 59'' \sin M' + 18'' \sin 2\omega \\ d\beta = -145'' \sin \omega + 11'' \sin(M + \omega)$$

so dass die auf den mittleren Mondäquator bezogenen selenographischen Koordinaten des Kraters Mösting A sind:

$$\lambda = \lambda_0 + d\lambda, \quad \beta = \beta_0 + d\beta.$$

## 5) Lage des Mondäquators. Mondbewegung.

Die beiden Tafeln auf Seite 87 und 88 dienen neben dem oben angegebenen Zweck zur Berechnung der optischen Libration des Mondes (in Verbindung mit der Tafel auf Seite 458 und 459) und zur Ermittelung des Winkels  $C$ , welchen der Mondmeridian des Mittelpunktes der scheinbaren Mondscheibe mit dem Deklinationskreise bildet.

Die Formeln für die Berechnung der optischen Libration sind auf Seite 459 vollständig aufgeführt. Der Winkel  $C$  ergibt sich aus folgender Formel:

$$\sin C = -\sin i \frac{\cos(l + A - \Omega)}{\cos \delta} = -\sin i \frac{\cos(\alpha - \Omega)}{\cos b'},$$

worin

- $i$  . . . die Neigung des Mondäquators gegen den Erdäquator,
  - $A$  . . . das Stück des Mondäquators vom aufsteigenden Knoten im Erdäquator bis zum aufsteigenden Knoten in der Ekliptik,
  - $\Omega'$  . . . den aufsteigenden Knoten des Mondäquators im Erdäquator,
  - $\Omega$  . . . den aufsteigenden Knoten des Mondäquators in der Ekliptik,
  - $\alpha, \delta$  . . . Rektascension und Deklination des Mittelpunktes der Mondscheibe, gesehen vom Beobachtungsort aus,
  - $l', b'$  . . . die optische Libration in selenographischer Länge und Breite,
  - $l_0$  . . . die mittlere Länge des Mondes
- bezeichnen und  $l = l' + l_0$  gesetzt wird.

$C$  wird vom nördlichen Teil des Deklinationskreises nach Osten positiv gerechnet.

Bei der Berechnung von  $i, A, \Omega'$  ist die Neigung des Mondäquators gegen die Ekliptik nach F. Hayn (Selenographische Koordinaten III, Seite 49) zu  $J = 1^\circ 32' 6''$  angenommen worden. Die Angaben sind frei von physischer Libration.

Die in der ersten Kolumne der Tafel auf Seite 88 aufgeführte Länge des aufsteigenden Knotens der Mondbahn auf der Ekliptik dient auch zur Berechnung der Nutationsausdrücke.

## 6) Auf- und Untergang von Sonne und Mond für Berlin.

Auf Seite 89—93 sind die Zeiten der Auf- und Untergänge von Sonne und Mond für Berlin in mittlerer Berliner Zeit aufgeführt, welche als Grundlage für die Kalenderrechnungen benachbarter Orte häufig Verwendung finden.

## 7) Planetenephemeriden.

Von Seite 94—143 folgen die wahren geozentrischen Örter der Hauptplaneten. Dieselben sind für Merkur, Venus und Mars von Tag zu Tag, für Jupiter, Saturn, Uranus und Neptun von 2 zu 2 Tagen gegeben. Überall sind den mit der Beobachtung zu vergleichenden Angaben die ersten Differenzen beigefügt, die für eine genaue Interpolation zweckmäßiger erscheinen als die Angabe der Bewegung in 1<sup>h</sup> Länge.

Sämtliche geozentrische Koordinaten beziehen sich auf die jedesmalige wahre Lage des Äquators und des Äquinoktiums, sind aber frei von der *Aberratio fixarum*, so dass man bei ihrer Vergleichung mit den Beobachtungen bekanntlich von den Beobachtungszeiten die jedesmalige Aberrations- oder Lichtzeit abziehen muss, dann aber mit den so kor-

rigierten Epochen im Jahrbuche diejenigen wahren Richtungen findet, welche mit den beobachteten scheinbaren, nur von Parallaxe befreiten, direkt vergleichbar sind. Dieses Verfahren ist bis zu den Grenzen unseres Planetensystems ausreichend genau, da der Maximalfehler desselben nahezu  $0''.001$  beträgt, also selbst bei Neptun  $0''.03$  nicht übersteigt.

Die »Log. A« überschriebene Kolumne gibt den für Berechnung der Lichtzeit und der Parallaxe erforderlichen Wert des Log. der Entfernung der Planeten vom Erdmittelpunkte in der bekannten Einheit ausgedrückt.

Die vorletzte Kolumne jeder Seite enthält unter der Bezeichnung »Östlicher Stundenwinkel« des Planeten einen genäherten Wert für die mittlere Zeit seiner oberen Kulmination. Die letzte Kolumne gibt den halben Tagbogen für die im Berliner Mittag stattfindende Deklination. Aus beiden Reihen von Werten wird man alles Erforderliche für Auf- und Untergang leicht ableiten können.

Als Grundlage für die Berechnung haben neben den Newcombschen Sonnentafeln gedient:

für Merkur, Venus und Mars die Newcombschen Tafeln in *Astronomical Papers*, Vol. VI, Part 2, 3 und 4,

für Jupiter und Saturn die Tafeln von G. W. Hill in *Astronomical Papers*, Vol. VII, Part 1 und 2,

für Uranus und Neptun die Newcombschen Tafeln in *Astronomical Papers*, Vol. VII, Part 3 und 4.

Die Reduktionen auf den wahren Ort sind durchweg mit den im Jahrbuch allgemein angewandten Präzessions- und Nutationsausdrücken berechnet, über welche unten näheres folgt. Die von der Mondlänge abhängenden Nutationsglieder sind durchweg fortgelassen.

Für die Reduktion und die Vergleichung der Planetenbeobachtungen mit der Ephemeride ist die Kenntnis der scheinbaren Halbmesser erforderlich. Man kann für dieselben in der Einheit der Entfernung annehmen:

für	Merkur	Halbmesser	.	.	.	.	.	$3''.34$
»	Venus	»	.	.	.	.	.	$8.78$
»	Mars	»	.	.	.	.	.	$4.68$
»	Jupiter	»	(Äquatorial)					$99.8$
»		»	(Polar)	.	.			$92.6$
»	Saturn	»	(Äquatorial)					$81.4$
»		»	(Polar)	.	.			$73.4$
»	Uranus	»	.	.	.	.	.	$34.7$
»	Neptun	»	.	.	.	.	.	$45$

## 8) Heliozentrische Örter.

Auf die geozentrischen Ephemeriden der Hauptplaneten folgen Seite 144—148 die heliozentrischen Koordinaten derselben, und zwar der Log. des Radius vector, die Länge in der Bahn und die Reduktion auf die Ekliptik, die Breite und bei den Planeten Jupiter, Saturn, Uranus und Neptun noch der Winkel  $B_\circ$ , welchen der Radius vector mit derjenigen Bahnebene macht, für welche die bei jedem Planeten unter den Kolumnen hinzugefügten Angaben über  $\Omega$  und  $i$  gelten. (Siehe die ausführlichere Erläuterung im Jahrbuch für 1880 und 1881.)

Da diese heliozentrischen Koordinaten hauptsächlich zur Berechnung der speziellen Störungen dienen sollen, so ist die Genauigkeit und Ausführlichkeit ihrer Angaben dem ihrem Zweck entsprechenden Maße angepasst worden.

Hinzugefügt sind endlich außer  $\Omega$  und  $i$  noch die Angaben betreffend die Masse der Planeten, und zwar:

- für Merkur, Venus und (Erde + Mond) nach Newcomb (*Tables of the Sun*, Seite 12),
- für Mars nach A. Hall,
- für Jupiter nach Newcomb,
- für Saturn nach Bessel,
- für Uranus nach Hill (*Tables of Saturn*, Seite 167),
- für Neptun nach Newcomb (*Tables of Uranus*, Seite 293).

## 9) Mittlere Örter von 925 Fixsternen.

Die mittleren Sternörter für 1912.0 auf Seite 149 bis 175 sind aus dem Neuen Fundamentalkatalog des Berliner Astronomischen Jahrbuchs nach den Grundlagen von A. Auwers, für die Epochen 1875 und 1900 bearbeitet von Dr. J. Peters (Veröffentlichung des Königlichen Astronomischen Recheninstituts Nr. 33) mit den daselbst angegebenen Hülfsgrößen für Präzession und Eigenbewegung abgeleitet worden. Nur die mittleren Örter der 20 nördlichen und südlichen Polsterne sind durch mechanische Quadratur berechnet.

## 10) Scheinbare Örter von 573 Fixsternen.

Die scheinbaren Örter der Sterne (Seite 176—375) sind für die 18 weniger als  $10^\circ$  von den Polen entfernten Sterne von Tag zu Tag, für die übrigen 555 Sterne von 10 zu 10 Tagen angegeben und beziehen sich auf die Epoche derjenigen oberen Kulmination im Berliner Meridian, welche an dem nebenstehenden wahren Sonnentage stattfindet. Der Übergang einer

Kulmination auf den vorangehenden wahren Sonnentag ist dadurch bezeichnet, dass das Datum des Tages, an welchem zwei obere Kulminationen stattfinden, vor den Rektascensionen aufgeführt ist.

Am Fuß der Ephemeride für jeden Stern ist sein mittlerer Ort für den Anfang des Jahres wieder angegeben, außer bei den Polsternen, für welche an dieser Stelle der Betrag der täglichen Aberration in Rektascension für die Kulminationszeit steht. Hierbei liegt der auch auf Seite 375 angegebene Zahlenwert  $0^{\circ}.0213$  zu Grunde.

Bei den von 10 zu 10 Tagen fortschreitenden Ephemeriden sind die scheinbaren Örter auf  $0^{\circ}.01$  in Rektascension und  $0''.1$  in Deklination angesetzt. Die kurzperiodischen Mondglieder der Nutation sind bei der Berechnung weggelassen worden und müssen in den Fällen, wo ihre Mitnahme wünschenswert erscheint, nach den Formeln auf Seite 376 und mit Hülfe der Tafel auf Seite 388 u. 389 besonders berechnet werden.

Bei den von Tag zu Tag berechneten scheinbaren Örtern der 18 den Polen nächsten Sterne sind, im Einklange mit der Bedeutung der Hundertteile der Zeitsekunde für die Rektascensionen dieser Sterne, die Deklinationen auf Hundertteile der Bogensekunde angegeben; bei diesen Sternen sind auch die kurzperiodischen Mondglieder der Nutation angebracht, mit Ausnahme von  $f''$ .

Die der Berechnung der scheinbaren Örter zu Grunde gelegten Konstanten der Präzession, Nutation und Aberration entsprechen den Beschlüssen der Pariser Konferenz und sind aus der Formelübersicht Seite 376 zu ersehen. Man sehe hierüber auch den nächsten Abschnitt ein.

Der Betrag der jährlichen Parallaxe ist bei folgenden drei Sternen, bei denen diese ansehnlich und ihrem Werte nach hinreichend verbürgt ist, nämlich bei

$\alpha$ Canis maj.	mit der Parallaxe	$0''.38$
$\alpha$ Lyrae	»	$0.18$
61 Cygni	»	$0.3$

bereits berücksichtigt. Der gegen die frühere Annahme geänderte Wert der Parallaxe von 61 Cygni beruht auf den »Untersuchungen über das Doppelsternsystem 61 Cygni von Östen Bergstrand.«

## 11) Reduktionstafeln.

Auf die scheinbaren Örter der Sterne folgt Seite 376 eine Zusammenstellung der Formeln, nach welchen die Reduktionskonstanten der darauf folgenden Tafeln berechnet sind. Hierbei sind die Präzessionsgrößen nach Newcomb, die Nutationskonstante  $9''.21$  und die Aberrationskonstante  $20''.47$  gemäß den Beschlüssen der Pariser Konferenz zu Grunde gelegt.

Für den Gebrauch der Reduktionstafel für die Sterntage 1912 (Seite 377) ist erläuternd hinzuzufügen, daß derjenige absolute Moment, in welchem die mittlere Sonnenlänge  $280^\circ$  oder die Rektascension der mittleren Sonne  $= 18^\text{h} 40^\text{m}$  ist, als die Anfangsepoke des astronomischen annus fictus und als der bequeme Ausgangspunkt der Zählung aller scheinbaren Bewegungen der Sterne, die von der Sonnenlänge abhängig sind, angenommen ist. An diesen Moment reihen sich die Epochen der Tafel (Seite 377) nach Sterntagen. Die Sonne erreicht jene Stellung um  $0^\text{h} 50^\text{m}.2$  Sternzeit Berlin 1912 Jan. 1. Die Angaben der ersten Kolumne »Datum in mittlerer Zeit« drücken, von dieser Anfangsepoke beginnend, in Hundertteilen des mittleren Tages von Berlin die Zeitpunkte aus, welche der Folge der Sternzeiten entsprechen, und für welche die Zahlen der Tafel gelten. Man wird hiernach auf jeden beliebigen Zeitpunkt, gegeben durch mittleres Datum, Sternzeit und Längendifferenz mit Berlin, leicht und sicher übergehen können.

Diese Tafel dient für Berechnung von Sternephemeriden für die Epochen der Meridiandurchgänge, ohne Berücksichtigung der von der Mondlänge abhängigen Nutationsglieder. Wegen ihrer logarithmischen Form ist sie zur Interpolation nicht geeignet. Man wird deshalb mit Vorteil die Interpolation erst nach der Summierung der einzelnen Korrekturen, welche unmittelbar für die Epochen der Tafeln berechnet werden können, eintreten lassen.

Die zweite Tafel (Seite 378—387) gibt nach den Anweisungen der Seite 376 für die mittlere Mitternacht Berlin die bekannten Konstanten zur Reduktion auf den scheinbaren Ort und zwar unter Weglassung der von der Mondlänge abhängigen Nutationsglieder, da diese Tafel überwiegend zu Reduktionen bei Vergleichungen von Beobachtungen mit Ephemeriden dienen soll. In der letzten Kolumne ist jedoch, um die Mondglieder in derselben Form hinzufügen zu können, unter dem Zeichen  $\zeta$  das Argument »mittlere Mondlänge« für die Tafeln der Seiten 388 und 389 angeführt, wobei die Peripherie in 1000 Teile geteilt gedacht ist.

Die Tafeln für die schnell veränderlichen Mondglieder der Nutation (Seite 388 und 389) enthalten die Hülfsmittel für die Reduktionen auf den scheinbaren Ort in derselben Form wie die vorangehenden beiden Tafeln.

Denselben liegen folgende Formeln zu Grunde:

$$A' = -0.00405 \sin 2\zeta + 0.00134 \sin(\zeta - 122^\circ 59')$$

$$B' = -0.0884 \cos 2\zeta$$

$$\text{und } f' = -0''.1865 \sin 2\zeta + 0''.0618 \sin(\zeta - 122^\circ 59')$$

$$g' \sin G' = -0.0884 \cos 2\zeta$$

$$g' \cos G' = -0.0811 \sin 2\zeta + 0.0269 \sin(\zeta - 122^\circ 59').$$

Die hauptsächlichste Vernachlässigung dabei liegt in der für das ganze Jahr konstanten Annahme des für 1912.5 berechneten Perigäums der Mondbahn:  $\Gamma' = 122^\circ 59'$ .

In der Tafel Seite 390—399 sind die kurzperiodischen Mondglieder mit den Reduktionskonstanten vereinigt worden. Um den Gebrauch dieser Tafel zu erleichtern, sind jedesmal an derjenigen Stelle, wo die Werte einer der beiden Konstanten  $C, D$  durch Null gehen, neben den logarithmischen Angaben die Numeri der betreffenden Konstante beigesetzt. Im übrigen gilt hinsichtlich der Einrichtung der Tafel dasselbe, was oben über den Gebrauch der Tafel Seite 377 gesagt wurde.

Die darauf folgende Tafel Seite 400 und 401, welche als notwendige Zugabe zu den Koordinatenangaben für den benachbarten Jahrzehntanfang dient, bedarf keiner besonderen Erläuterung.

## 12) Sonnen- und Mondfinsternisse.

Die Sonnenfinsternisse sind in der Form berechnet worden, welche Hansen (Theorie der Sonnenfinsternisse und verwandten Erscheinungen. Abhandlungen der K. Sächsischen Gesellschaft der Wissenschaften IV) der Behandlung dieses Problems gegeben hat.

Die Bezeichnungen und Einführungen von Hansen sind auch im Jahrbuch bei der tabellarischen Aufstellung der Rechnungsresultate durchgängig beibehalten worden, so dass es genügen wird, zu ihrer Erläuterung auf die erwähnte Abhandlung zu verweisen (siehe besonders die übersichtliche Anführung der einzelnen Formeln von Seite 434 an).

Es wird hier nur erforderlich sein, in aller Kürze anzugeben, auf welche Weise man mit Hülfe der auf Seite 403 und 408 gegebenen Hansenschen Elementen der Sonnenfinsternisse Zeit und Umstände der Finsternis für jeden Ort innerhalb der Grenzkurven berechnen kann.

Der Ort sei gegeben durch seine (nach Osten gezählte) Länge von Berlin . . .  $\lambda$ , oder von Greenwich . . .  $\lambda_0 = \lambda + 13^\circ 23' 7$  und durch seine geographische Breite  $\varphi$ .

Man bilde zuerst  $\tan \varphi_1 = (1 - c) \tan \varphi$ , wo  $c$  die Abplattung der Erde ist, also  $\log(1 - c) = 9.99855$  angenommen werden kann, sodann:

$$\xi = \cos \varphi_1$$

$$\eta = (1 - c) \sin \varphi_1.$$

Hierauf muss man für die Epoche des fraglichen Phänomens, sei es nun erste und letzte äußere oder innere Berührung oder größte Phase, einen Näherungswert der wahren Ortszeit annehmen.

Hierzu kann man die anderweitigen Angaben des Jahrbuchs, insbesondere die eventuelle Angabe der Epochen des Eintritts der größten Phase auf der Zentrallinie zu Rate ziehen. Ein für die erste Annäherung hinreichender und bequemer Näherungswert der Ortszeit ist  $\mu + \lambda$ , wo  $\mu$  die wahre Berliner Zeit der geozentrischen größten Phase ist. (Siehe Elemente der Finsternis.)

Sei der Näherungswert der Ortszeit  $t_0$ , so bilde man mit Hülfe der in dem Elementenverzeichnis des Jahrbuchs gegebenen Werte von

$\gamma, \mu, n, u', f, \delta', g, G, k, K$ , welche man beiläufig mit dem Argumente der wahren Berliner Zeit  $t = t_0 - \lambda$  entnimmt, folgende Ausdrücke, welche als gemeinsame Grundlage der Annäherung für die Berechnung aller Phasen dienen können:

$$m \sin M = \gamma - \eta \cos g + \xi \sin g \sin (G + t_0)$$

$$m \cos M = (t_0 - \lambda - \mu) \frac{n}{15} - \eta \cos k + \xi \sin k \cos (K + t_0)$$

$$m' \sin M' = -\kappa' \xi \sin g \cos (G + t_0)$$

$$m' \cos M' = n - \kappa' \xi \sin k \sin (K + t_0)$$

$$u_0 = u' - (\eta \sin \delta' + \xi \cos \delta' \cos t_0) \tan J$$

$$\text{wo } x = \frac{15 \cdot 3600}{206265} \quad \lg x = 9.41797.$$

Bei der Entnahme von  $u'$  und  $f$  hat man für innere Berührungen  $u'_i$  und  $f_i$ , für äußere Berührungen  $u'_a$  und  $f_a$  zu wählen.

Hierauf berechnet man:

$$\sin \chi' = \frac{m}{u_0} \sin (M + M')$$

$$t = t_0 - 15 \frac{m}{m'} \cos (M + M') + 15 \frac{u_0}{m'} \cos \chi'$$

wobei man, da zu  $\sin \chi'$  ein negativer und ein positiver Wert von  $\cos \chi'$  sich ergibt, zwei Werte von  $t$  (zur ersten oder letzten Berührung gehörig) findet.

Mit jedem dieser beiden Werte von  $t$  rechnet man nun in zweiter Annäherung, wobei die Elemente  $\gamma, \mu, n, u', f, \delta', g, G, k, K$  mit den wahren Berliner Zeiten  $t - \lambda$  aus dem Elementenverzeichnis zu entnehmen sind:

$$m \sin M = \gamma - \eta \cos g + \xi \sin g \sin (G + t_0)$$

$$m \cos M = (t_0 - \lambda - \mu) \frac{n}{15} - \eta \cos k + \xi \sin k \cos (K + t_0)$$

$$m' \sin M' = -\kappa' \xi \sin g \cos [G + \frac{1}{2} (t_0 + t)]$$

$$m' \cos M' = n - \kappa' \xi \sin k \sin [K + \frac{1}{2} (t_0 + t)]$$

$$u = u_0 + \kappa' \xi \cos \delta' \tan f \sin \frac{1}{2} (t_0 + t) \frac{(t - t_0)}{15}$$

$$\text{wo } \kappa' = 30 \cdot \frac{\sin \frac{1}{2} (t - t_0)}{t - t_0};$$

$(t - t_0)$  ist hierbei stets in Graden auszudrücken.

Mit den so gefundenen  $m, m', M, M'$  und  $u$  bildet man dann wieder

$$\sin \chi' = \frac{m}{u} \sin (M + M')$$

$$t = t_0 - 15 \frac{m}{m'} \cos (M + M') + 15 \frac{u}{m'} \cos \chi'.$$

Von den beiden Lösungen für  $t$  benutzt man bei der zweiten und den folgenden Näherungen für den Eintritt natürlich nur die zum Eintritt, ebenso bei den Näherungen für den Austritt die zum Austritt gehörige.

Die in zweiter oder dritter Näherung gefundenen Werte  $t$  sind meistens schon genau genug die wahren Ortszeiten des gesuchten Eintritts oder Austritts, und die Positionswinkel der Eintritts- und Austrittspunkte (am Sonnenmittelpunkt von der Richtung zum Nordpol nach der Seite der wachsenden Rektascensionen oder nach Osten hin gezählt) sind mit den beiden Werten von  $\chi'$ , die der Sinus ergibt:

$$\vartheta = N' + M' - \chi',$$

wo  $N'$  aus dem Elementenverzeichnis zu entnehmen ist.

Um die Zeit der größten Phase zu berechnen, kann man zunächst die Werte  $t_0$ ,  $m$ ,  $m'$ ,  $M$ ,  $M'$  aus der obigen ersten Annäherung benutzen und damit bilden:

$$t_1 = t_0 - 15 \frac{m}{m'} \cos(M + M').$$

Mit dem so gefundenen Werte  $t_1$  bildet man für die Epoche  $t_1 - \lambda$  wieder die Werte der Elemente und berechnet damit in zweiter Annäherung die Werte  $m$ ,  $m'$ ,  $M$ ,  $M'$ , indem man in den Gleichungen der ersten Annäherung  $t_0$  durchgängig mit  $t_1$  vertauscht. Man hat dann den genaueren Wert der Ortszeit der größten Phase:

$$t = t_1 - 15 \frac{m}{m'} \cos(M + M')$$

und zur Kontrolle für diese Zeit  $M + M' = 90^\circ$  oder  $= 270^\circ$ , je nachdem der Mondmittelpunkt nördlich oder südlich vom Sonnenmittelpunkt vorbeigeht.

Zur Bestimmung der Größe der Verfinsternung hat man zugleich:

$$u = m,$$

welcher Wert bei zentraler Verfinsternung  $= 0$  wird.

Die Größe in Teilen des Durchmessers  $i$  findet man mit einer für diese rohe Angabe genügenden Näherung:

$$i = \frac{u'_a - u}{u'_a - u'} \dots$$

Zu den Angaben über die Mondfinsternisse (Seite 402 und 407) sei bemerkt, dass als Vergrößerungsfaktor des Erdschattens  $\frac{1}{50}$  angenommen ist.

### 13) Sternbedeckungen durch den Mond.

Bei den Sternbedeckungen findet man zunächst (Seite 410 und 411) ein Verzeichnis derjenigen helleren Sterne (bis zur 5. Größe), welche im Laufe des Jahres 1912 für irgend einen Ort der Erdoberfläche vom Monde bedeckt werden können. Die Größenangaben der nicht in dem Verzeichnis der mittleren Sternörter des Jahrbuchs enthaltenen Sterne beruhen zum größten Teil auf den Schätzungen von Argelander und Heis, in einzelnen wenigen Fällen sind außerdem für diese Angaben die Schätzungen Goulds benutzt; die mittleren Örter sind nach den Angaben verschiedener Kataloge mit Berücksichtigung der Eigenbewegung auf 1912.0 reduziert.

Hierauf folgen in den zweispaltigen Seiten 412—418 die Hülfsmittel zur Berechnung der einzelnen Bedeckungen:

in der 1. Kolumne die Nr. des Sterns, welcher bedeckt wird, nach dem voranstehenden Verzeichnisse;

in der 2. Kolumne die Zeit der geozentrischen Konjunktion in AR. von Stern und Mondmittelpunkt in Monatstagen, Stunden und Minuten;

in der 3., 4. und 5. Kolumne die Werte folgender Ausdrücke:

$$q = \frac{\delta - D}{\pi} \quad p' = \frac{\Delta\alpha \cdot \cos \delta}{\pi} \quad q' = \frac{\Delta\delta}{\pi}$$

$p'$  und  $q'$  in Einheiten der 4. Dezimale.

In diesen Ausdrücken bedeutet:

$\delta$  die geozentrische Deklination des Mondes für die geozentrische Konjunktionszeit  $T$ .

$D$  die Deklination des Sterns.

$\pi$  die Äquatorial-Horizontal-Parallaxe des Mondes (bezw. vermindert um die Parallaxe des Planeten bei Planetenbedeckungen) für die geozentrische Konjunktionszeit  $T$ .

$\Delta\alpha$  und  $\Delta\delta$  die Veränderung der geozentrischen Rektascension und Deklination des Mondes (bezw. vermindert um die Veränderung des Planetenortes bei den Planetenbedeckungen), für eine Stunde mittlerer Zeit, gültig für die Konjunktionszeit  $T$ .

Nennt man ferner die geozentr. AR. des Mondes zur Zeit  $T \dots \alpha$ , die AR. des Sterns  $\dots A$ , den geozentr. scheinbaren Halbmesser des Mondes  $\dots r$ , die Längendifferenz des Beobachtungsortes gegen Berlin  $\dots d$  (östlich positiv), die der mittleren Zeit  $T + d$  entsprechende Sternzeit des Ortes  $\dots \mu$ , seine geozentrische Breite  $\dots \varphi'$ , seinen geozentrischen Radius vector in Teilen des Radius des Äquators  $\dots \varrho$ ; setzt man endlich (nach J. Peters *Astron. Nachr.* 3297)

$$\frac{r}{\pi} = k = 0.2725, \quad \log k = 9.4354$$

$$\text{und } \log (15 \cdot 3609.9 \sin 1'') = \log \lambda = 9.41916,$$

so wird die Aufgabe der Vorausberechnung der Ortszeit etc. für die betreffende Bedeckung in Verbindung mit den obigen in den Tafeln gegebenen Werten gelöst durch die Bildung folgender Ausdrücke und die Ausführung folgender Rechnungen (nach Bessels Näherungsformeln im Jahrbuch für 1831):

$$p = \frac{(\alpha - A) \cos \delta}{\pi} \quad (= 0 \text{ für das Zeitmoment } T)$$

$$u = \varrho \cos \varphi' \sin (\mu - A)$$

$$v = \varrho \sin \varphi' \cos D - \varrho \cos \varphi' \cos (\mu - A) \sin D$$

$$\begin{aligned}
 u' &= \lambda \varrho \cos \varphi' \cos (\mu - A) & = \left( \frac{du}{dt} \right) \\
 v' &= \lambda \varrho \cos \varphi' \sin (\mu - A) \sin D & = \left( \frac{dv}{dt} \right) \\
 m \sin M &= p - u & n \sin N &= p' - u' \\
 m \cos M &= q - v & n \cos N &= q' - v' \\
 && (m \text{ und } n \text{ stets positiv}) \\
 \tau &= -\frac{m}{n} \cos (M - N).
 \end{aligned}$$

Die Momente des Eintritts und des Austritts  $T_1$  und  $T_2$  des Sterns werden dann gefunden, wenn noch  $\cos \psi = \frac{m \sin (M - N)}{k}$  (wo  $\psi$  immer kleiner als  $180^\circ$ ) berechnet ist:

$$T_1 = T + d + \tau - \frac{k}{n} \sin \psi \quad T_2 = T + d + \tau + \frac{k}{n} \sin \psi.$$

Die Örter des Eintritts und Austritts an der Mondscheibe in dem auf Seite [16] erläuterten Positionswinkel-Ausdruck sind:

$$Q_1 = N - 90^\circ + \psi \quad Q_2 = N - 90^\circ - \psi.$$

Die so gefundenen Resultate werden indes von der Wahrheit sehr entfernt sein können, wenn die Korrektion  $\tau$ , welche zu der Ortszeit der geozentrischen Konjunktion hinzugefügt werden muss, um die Ortszeit des auf den Beobachtungsort bezüglichen kleinsten Abstandes des Sterns vom Mondmittelpunkt zu finden, sehr beträchtlich ist; mit anderen Worten, wenn an dem betreffenden Ort zur Zeit  $T + d$  der Stundenwinkel des Mondes gross ist. In diesem Falle nämlich ist hauptsächlich die Berechnung der der Zeit folgenden Veränderungen von  $u$  und  $v$  durch die ersten Differentialquotienten  $u'$  und  $v'$  bei der starken Änderung des Winkels ( $\mu - A$ ) nicht mehr genügend, sondern man muss jetzt die zweite Näherung ausführen, indem man für die Ortszeit  $T + d + \tau$  oder die Berliner Zeit  $T + \tau = T_0$  berechnet:

$$p_0 = \tau p' \quad q_0 = q + \tau q' \quad \mu_0 = \mu + \tau + \varepsilon \quad t = \mu_0 - A$$

(wo  $\varepsilon$  die Reduktion des mittleren Zeitintervall's  $\tau$  auf Sternzeit bedeutet)

$$\begin{aligned}
 u &= \varrho \cos \varphi' \sin t \\
 v &= \varrho \sin \varphi' \cos D - \varrho \cos \varphi' \sin D \cos t \\
 u' &= \lambda \varrho \cos \varphi' \cos t \\
 v' &= \lambda \varrho \cos \varphi' \sin D \sin t.
 \end{aligned}$$

Berechnet man mit diesen Werten

$$\Delta \tau = -\frac{m}{n} \cos (M - N),$$

so wird diese Näherung schon ziemlich ausreichend sein, um die Zeiten und Örter des Eintritts und Austritts zu finden, wie oben:

$$\cos \psi = \frac{m \sin(M-N)}{k}$$

$$T_1 = T + d + \tau + A\tau - \frac{k}{n} \sin \psi \text{ u. s. w.}$$

Bei der Berechnung der ersten Näherung, welche  $\tau$  ergibt, wird es aber nicht nötig sein, nach den ausführlichen Formeln bis

$$\tau = -\frac{m}{n} \cos(M-N)$$

zu rechnen, sondern man wird eine wesentliche Abkürzung und eine hinreichende Kohvergenz der Näherung erreichen, wenn man setzt:

$$\tau = \frac{u}{p' - u'} \dots$$

Wenn man hier noch statt des jedesmaligen, in den Elementen der Sternbedeckungen angegebenen  $p'$  den Durchschnittswert 0.5646 annimmt, läfst sich der Ausdruck

$$\tau = \frac{\varrho \cos \varphi' \sin(\mu - A)}{0.5646 - \lambda \varrho \cos \varphi' \cos(\mu - A)}$$

für eine bestimmte Polhöhe  $\varphi'$  sehr leicht mit dem Argumente des Stundenwinkels ( $\mu - A$ ) in eine Hülftstafel bringen, aus der man ohne Mühe den zur ersten Näherung hinreichenden Wert von  $\tau$  bei westlichem Stundenwinkel positiv, bei östlichem negativ entnimmt.

Um für jeden Ort die erste Korrektion  $\tau$  in Minuten ausgedrückt zu finden, kann die Tafel Seite [20] mit dem Horizontalargument » $\varphi'$ « und dem Vertikalargument »Stundenwinkel« dienen. Zur genäherten Bildung des letzteren Argumentes werden die Kolumnen der Mondephemeride, welche »Mond im Meridian« überschrieben sind, von Nutzen sein können.

Für Orte, die nicht zu weit von Berlin entfernt sind, wird man aus dem für Berlin gegebenen Verzeichnis häufig schon ersehen können, ob eine Sternbedeckung stattfindet oder nicht; für näher gelegene Orte dürfte es in diesem Falle schon genügen, wenn man an die für Berlin gegebenen Zeiten des Ein- und Austritts nur die Längendifferenz anträgt. Wenn nämlich die Sehne vom Punkte des Eintritts zu dem des Austritts dem Mondmittelpunkt nahe liegt, so müfste der Unterschied der Parallaxe für Berlin und den anderen Ort schon nahe den Betrag des Mondhalbmessers erreichen, wenn dort die Sternbedeckung nicht sichtbar sein sollte; für nahe liegende Orte sind die Wirkungen kleiner Unterschiede der Parallaxen gerade in diesem Falle sehr gering.

Um allgemein für irgend einen Ort, dessen östliche Länge  $d$  und dessen geozentrische Breite  $\varphi'$  näherungsweise bekannt sind, im voraus zu bestimmen, welche Sternbedeckungen sichtbar werden, hat man nach den im Jahrbuch gegebenen Elementen folgendes zu beachten:

## ERLÄUTERUNGEN.

$\varphi'$

Nach den Angaben der Mondephemeride kennt man die Zeiten des Meridiandurchganges des Mondes ( $M$ ), seine Deklination ( $\delta$ ) und die Deklination der Sonne. Nachdem man dann ( $T + d$ ) gebildet, wird man mit Hilfe einer Tafel der halben Tagbögen (wie sie in den Handbüchern der Nautik für alle Breiten sich berechnet finden) meist sogleich entscheiden können:

1) Ob Eintritt und Austritt nach Sonnenuntergang und Mondaufgang oder vor Sonnenaufgang und Monduntergang stattfinden. Auf die Vergrößerung des Tagbogens durch die Bewegung des Mondes und auf dessen Parallaxe ist vorläufig hierbei keine Rücksicht geboten, da deren Wirkungen in ihren mittleren Werten mittelst der Tafel Seite [20] durch  $\tau$  berücksichtigt werden.

Aus vorstehender Tafel, in welcher  $\tau$  das Zeichen des Stundenwinkels hat, erhält man sogleich mit  $\varphi'$  und  $T + d - M$  einen Näherungswert für  $\tau$  und hiermit den genauereren Stundenwinkel  $t = T + d - M + \tau$  und  $q_0 = q + \tau q'$ . Einen genähereten Wert von  $v$  erhält man durch Berechnung von

$$\sin(\varphi' - D) + \cos \varphi' \sin D (1 - \cos t)^*.$$

2) Ist nun  $q_0 - v < k$  ( $k = 0.27$ ), so findet in der Regel eine Bedeckung statt, im entgegengesetzten Falle nicht. Da aber  $\tau$  zuerst nur annäherungsweise bekannt ist, so muss, wenn  $q_0 - v$  dem Werte von  $k$  nur nahe kommt, eine ausführlichere Berechnung angestellt werden.

In vielen Fällen dieser Art genügen indes schon einige weitere Betrachtungen zur Entscheidung, ob der aus der Tafel entnommene Wert von  $\tau$  dem wahren Werte von  $\tau$  sehr nahe kommt, größer oder kleiner ist. Man wird nämlich leicht entscheiden können, ob  $(q' - v')$  sehr klein, positiv oder negativ wird, das Zeichen von  $(q_0 - v)$  ist in den erwähnten zweifelhaften Fällen sehr bestimmt zu erkennen. Der Wert von  $u$  hängt für eine bestimmte Breite des Ortes nur von  $\sin t$  ab und kann nie größer als  $\cos \varphi'$  werden. — Hiernach gilt folgende Regel:

3) Sind  $(q_0 - v)$  und  $(q' - v')$  gleichnamig (beide positiv oder beide negativ), so muss  $p_0 - u = \tau p' - u$  negativ, sind jene ungleichnamig, so muss  $\tau p' - u$  positiv, ist  $(q' - v')$  sehr klein (also das Vorzeichen noch unbestimmt), so muss  $\tau p'$  nahe gleich  $u$  werden, wonach man den Tafelwert von  $\tau$  sogleich um ein oder ein paar Zehntel der Stunde im richtigen Sinne verbessern kann.

Seite 419 enthält die Vorausberechnung der Sternbedeckungen für Berlin.

\*) Um für einen Ort eine allgemeine, für diesen Zweck genügende Tafel der  $v$  zu bilden, hat man höchstens 5 Werte von  $\sin(\varphi' - D)$  und 2 Werte von  $\cos \varphi' \sin D$  auf 2 oder 3 Stellen zu berechnen.

### 14) Jupiterstrabanten.

Auf die Sternbedeckungen folgen Seite 420—425 die Erscheinungen der vier älteren Jupiterstrabanten, und zwar für sämtliche Trabanten zunächst die Angaben, aus denen man ihren Ort, wie sie vom Mittelpunkte der Erde aus gesehen zu einer beliebigen Zeit in Bezug auf den Mittelpunkt der Jupiterscheibe erscheinen, herleiten kann; sodann die Zeitangaben für die Verfinsterungen der Trabanten in dem Schattenkegel des Jupiter, welche von ihrem Stande gegen die Sonne abhängen. Bei den Verfinsterungen ist für die beiden inneren Trabanten die Zeit des Ein- oder Austritts, für die beiden äusseren Trabanten die Mitte der Verfinsterung und ihre halbe Dauer angegeben, alles in mittlerer Berliner Zeit und so, wie man die Erscheinung unmittelbar beobachten kann.

Für den geozentrischen Ort ist die Zeit der jedesmaligen scheinbaren oberen Konjunktion des Trabanten mit der Erde, oder die Zeit, wann Jupiter sich in einer auf die Ebene der Trabantenbahn senkrecht gelegten Ebene zwischen der Erde und dem Trabanten befindet, angesetzt. Für jeden Trabanten sind in den Jahrbüchern bis zum Jahrang 1871 Hülftafeln gegeben, welche für die mittlere synodische Umlaufzeit die Abscissen und Ordinaten des Ortes des Trabanten in seiner als kreisförmig angenommenen Bahn ergeben. Die Achse der Abscissen liegt senkrecht auf der Konjunktionsebene, beide Koordinaten natürlich in der Ebene der Trabantenbahn und ihr Anfangspunkt im Mittelpunkte der Jupiterscheibe. Die Einheit, in welcher die Koordinaten ausgedrückt sind, ist der Halbmesser des Jupiter. Die kreisförmige Bahn wird sich der Erde als eine Ellipse darstellen, deren kleine Achse in der Konjunktionsebene liegt, so dass die Abscissen ungeändert bleiben, die Ordinaten aber in dem Verhältnis der halben kleinen zur halben grossen Achse vermindert werden müssen. Dieses Verhältnis, und zwar  $\frac{b}{a}$ , ist neben den Zeiten der oberen Konjunktion angesetzt. Wünscht man nun für eine Zeit  $T$ , welche zwischen zwei auf einander folgende Zeiten  $t$  und  $t'$  der oberen Konjunktion fällt, den Ort des Trabanten zu haben, so geht man mit dem Argument

$$T - t$$

in die Hülftafeln ein, nimmt daraus die entsprechenden Werte von  $x$  und  $y'$ , und hat damit in Halbmessern des Jupiter den Stand des Trabanten in Bezug auf den Mittelpunkt des Jupiter gegeben durch

$$x \text{ und } y = y' \frac{b}{a},$$

wobei man die Zeichen von  $x$ ,  $y'$  und  $\frac{b}{a}$  zu berücksichtigen hat. Das Zeichen der letzten Grösse deutet an, welche Fläche der Trabantenbahn

man sieht, ob die obere (nördliche, dem Nordpole der Ekliptik zugewandte bei positivem  $\frac{b}{a}$ ), oder die untere (südliche).

Die Zeichen von  $x$  und  $y$  sind so gewählt, dass für Berlin zur Zeit der Kulmination der Trabant für den Anblick im Fernrohre bei positivem  $x$  rechts, bei negativem  $x$  links vom Jupiter erscheint; bei positivem  $y$  ist er nördlich und beim negativen  $y$  südlich von einer Linie, welche mit den Streifen parallel durch das Zentrum des Jupiter gezogen werden kann.

Man könnte hier mit Leichtigkeit noch eine kleine Korrektion anbringen, wenn die Zwischenzeiten zweier auf einander folgenden oberen Konjunktionen beträchtlich von der mittleren synodischen Umlaufszeit verschieden wären. Wäre die letztere  $T'$ , so würde man mit dem Argument

$$(T - t) \frac{T'}{t' - t}$$

eingehen müssen. Ebenso findet man die Vorübergänge der Trabanten vor der Jupiterscheibe durch die Zeiten der unteren Konjunktion, das Mittel aus den oberen, und die Ein- und Austritte der Trabanten in die Jupiterscheibe durch die Zeiten, zu denen

$$\sqrt{x^2 + y^2} = 1,$$

wobei man von der elliptischen Gestalt des Jupiter absieht. Indessen sind diese letzteren Momente nur als beiläufige Näherungen zu betrachten, da für diese feineren und genaueren Bestimmungen die Tafeln sich nicht einfach genug einrichten ließen, und aus gleichem Grunde wird die erwähnte Verbesserung wegen des Unterschiedes zwischen der wahren und mittleren synodischen Umlaufszeit unnötig sein.

Statt auf die in den früheren Jahrbüchern gegebenen Elongations-tafeln zurückzugreifen, kann man auch leicht die Koordinaten der Trabanten aus den folgenden Formeln berechnen:

$$\begin{aligned} x &= (0.7559) \sin [203^\circ.40 \cdot t] \\ y' &= (0.7559) \cos [203^\circ.40 \cdot t] \end{aligned} \left\{ \text{Trabant I.} \right.$$

$$\begin{aligned} x &= (0.9576) \sin [101^\circ.29 \cdot t] \\ y' &= (0.9576) \cos [101^\circ.29 \cdot t] \end{aligned} \left\{ \text{Trabant II.} \right.$$

$$\begin{aligned} x &= (1.16017) \sin [50^\circ.235 \cdot t] \\ y' &= (1.16017) \cos [50^\circ.235 \cdot t] \end{aligned} \left\{ \text{Trabant III.} \right.$$

$$\begin{aligned} x &= (1.40552) \sin [21^\circ.488 \cdot t] \\ y' &= (1.40552) \cos [21^\circ.488 \cdot t] \end{aligned} \left\{ \text{Trabant IV.} \right.$$

wo  $t$  die seit der letzt vorangehenden oberen Konjunktion verflossene Zeit bezeichnet, ausgedrückt in Tagen, und wo die eingeklammerten Zahlen

Logarithmen bedeuten. Die zu Grunde gelegten Werte der mittleren Entfernungen vom Jupiterszentrum (in Halbmessern der Jupiterscheibe) und die synodischen Umlaufszeiten sind beziehungsweise:

Trabant I.	5.70		1 <sup>d</sup> 18 <sup>h</sup> 28 <sup>m</sup> .6
» II.	9.07		3 13 17 .9
» III.	14.46		7 3 59 .6
» IV.	25.44		16 18 5 .1.

Die Angaben für die Jupiterstrabanten sind nach den Tafeln von Damoiseau und deren Fortsetzung von Pottier berechnet.

Über die Verbesserungen, deren die Damoiseauschen Tafeln und die danach berechneten Verfinsterungen der Trabanten bedürftig sind, ist in dem Jahrbuche für 1880 näheres an dieser Stelle mitgeteilt worden.

### 15) Saturnsring.

Auf den Seiten 426 und 427 stehen die Angaben für die scheinbare Größe des Saturn und für die Lage und Größe des Saturnsrings, deren Bedeutung folgende ist:

- $\alpha$  Große Achse des Saturn.
- $\beta$  Scheinbare kleine Achse des Saturn.
- $p_a$  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 Breitenkreise; 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 Deklinationskreise; östlich positiv, westlich negativ.

	1912 April 11	Aug. 17	Dez. 23
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N Aufsteigender Knoten der Ringebene im Erdäquator, gezählt vom Äquinoktium an	$\left\{ \begin{array}{l} 126^{\circ} 54.1 \\ 126^{\circ} 54.9 \end{array} \right.$	$126^{\circ} 54.9$	$126^{\circ} 55.8$
J Neigung der Ringebene gegen den Erdäquator	$\left\{ \begin{array}{l} 6^{\circ} 52.5 \\ 6^{\circ} 52.4 \end{array} \right.$	$6^{\circ} 52.4$	$6^{\circ} 52.3$
o Entfernung der Ekliptik vom Erdäquator, gemessen auf der Ringebene	$\left\{ \begin{array}{l} 42^{\circ} 31.2 \\ 42^{\circ} 30.6 \end{array} \right.$	$42^{\circ} 30.6$	$42^{\circ} 30.0$

Es liegen folgende Bestimmungen nach Struve zu Grunde:

Durchmesser des Saturn in der Entfernung 9.53887

Äquatorial  $17^{\prime\prime}.47$

Polar  $15^{\prime\prime}.65$

Lage des Saturnsringes gegen die Ekliptik und das Äquinoktium von 1889.25

$$\Omega_1 = 167^{\circ} 57'.0 \quad \text{und} \quad i_1 = 28^{\circ} 5'.6;$$

Durchmesser des Ringes in der Entfernung 9.53887

$$2 R = 39^{\prime\prime}.35.$$

Will man statt der Struveschen Werte für die Durchmesser des Saturn diejenigen Werte, welche Bessel in Band 12 der *Astron. Nachr.* abgeleitet hat, verwenden, nämlich:

$$\text{den Äquatorialdurchmesser} = 17^{\prime\prime}.053$$

$$\text{den Polardurchmesser} = 15^{\prime\prime}.381$$

in der Entfernung, deren Logarithmus = 0.9796480,

so braucht man die Größen  $\alpha$  und  $\beta$  der Ephemeride nur mit den Zahlen

$$0.9761 \quad \text{bezüglich} \quad 0.9828$$

zu multiplizieren.

## 16) Saturnstrabanten.

Die Seiten 428 bis 454 enthalten die Angaben über die Saturnstrabanten. Alle Berechnungen für dieselben sind mit den von H. Struve in:

I. Beobachtungen der Saturnstrabanten, 1. Abteilung, 1. Supplementheft zu den »Observations de Poukova«;

II. *Publications de l'Observatoire Central Nicolas*, Série II, Vol. XI, abgeleiteten und in folgendem kurz angeführten Elementen durchgeführt. Einzelne Verbesserungen zu den Elementen hat Herr Prof. H. Struve handschriftlich mitgeteilt. Für die Halbachsen der 6 inneren Trabanten sind die auf Seite 239 der zweiten Abhandlung mittels der Saturnmasse  $\mu = \frac{1}{3500}$  rechnerisch abgeleiteten Werte angenommen.

**Mimas**

(II, Seite 195).

Epoche: 1889 April 0.0 mittl. Gr. Zt.

$E_0 = 127^\circ 19' 0$

$n = 381^\circ .9945$

$\delta l = -44^\circ .243 \sin(116^\circ .46 + 5^\circ .075 t) - 0^\circ .75 \sin 3(116^\circ .46 + 5^\circ .075 t)$

$l_1 = E_0 + nt_d + \delta l$

$\Theta = 54^\circ .7 - 365^\circ .3 t$

$\gamma = 1^\circ 36' 5$

$H_1 = 107^\circ .2 + 365^\circ .3 t$

$e = 0.0190$

$a = 26''.814$

**Enceladus**

(II, Seite 183).

Epoche: 1889 April 0.0 mittl. Gr. Zt.

$E_0 = 199^\circ 19' 8$

$n = 262^\circ .73199$

$\delta l = +11'.24 \sin(143^\circ + 92^\circ .4 t) + 20'.0 \sin(75^\circ + 29^\circ .3 t)$

$l_1 = E_0 + nt_d + \delta l$

$\Theta = 328^\circ - 152^\circ .7 t$

$\gamma = 1'.4$

$H_1 = 308^\circ .38 + 123^\circ .43 t$

$e = 0.0046$

$a = 34''.401$

**Tethys**

(II, Seite 195).

Epoche: 1889 April 0.0 mittl. Gr. Zt.

$E_0 = 284^\circ 31' 0$

$n = 190^\circ .69795$

$\delta l = +118'.90 \sin(116^\circ .46 + 5^\circ .075 t) + 2'.02 \sin 3(116^\circ .46 + 5^\circ .075 t)$

$l_1 = E_0 + nt_d + \delta l$

$\Theta = 110^\circ .55 - 72^\circ .5 t$

$\gamma = 1^\circ 4' 36$

$e = 0.0000$

$a = 42''.586$

**Dione**

(II, Seite 183).

Epoche: 1889 April 0.0 mittl. Gr. Zt.

$E_0 = 253^\circ 51' 4$

$n = 131^\circ .534955$

$\delta l = -1'.21 \sin(143^\circ + 92^\circ .4 t) - 2'.13 \sin(75^\circ + 29^\circ .3 t)$

$l_1 = E_0 + nt_d + \delta l$

$\Theta = 276^\circ - 31^\circ .0 t$

$\gamma = 4'.0$

$H_1 = 165^\circ + 31^\circ .0 t$

$e = 0.0020$

$a = 54''.543$

**Rhea**

(II, Seite 176).

Epoche: 1889 April 0.0 mittl. Greenw. Zeit.

$E_0 = 358^\circ 23' 8$

$n = 79^\circ .690087$

$E - E_0 = +4'.95 \sin(347^\circ .3 - 10^\circ .1 t)$

$l = E_0 + nt_d + (E - E_0)$

$(\Omega - \Omega_1) \sin i_1 = 19'.77 \sin(347^\circ .3 - 10^\circ .1 t) - 0'.38$

$+ 1'.00 \sin(48^\circ .5 - 0^\circ .50 t)$

$i - i_1 = 19'.77 \cos(347^\circ .3 - 10^\circ .1 t) - 2'.79 + 1'.00 \cos(48^\circ .5 - 0^\circ .50 t)$

$H = 305^\circ + 10^\circ .1 t$

$e = 0.0009$

$a = 76''.170$

 $\Omega_1$  und  $i_1$  bezeichnen die Lage des Saturnsringes.

**Titan**

(II, Seite 172).

Epoche: 1890 Jan. 0.0 mittl. Greenw. Zeit.

$$E_{\circ} = 260^{\circ} 25'.1$$

$$n = 22^{\circ}.577009$$

$$E - E_{\circ} = +4'.05 \sin(47^{\circ}.8 - 0^{\circ}.51 t)$$

$$l = E_{\circ} + n t_d + (E - E_{\circ})$$

$$\Omega = 167^{\circ} 51'.2 + 35'.84 \sin(47^{\circ}.8 - 0^{\circ}.506 t) + 0'.837 t$$

$$i = 27^{\circ} 28'.4 + 16'.88 \cos(47^{\circ}.8 - 0^{\circ}.506 t)$$

$$H = 276^{\circ} 15' + 31'.7 t + 22'.0 (\sin 2g - \sin 2g_{\circ})$$

$$e = 0.02886 + 0.000186 (\cos 2g_{\circ} - \cos 2g)$$

$$g = H - \Omega - 4^{\circ}.5$$

$$g_{\circ} = g \text{ für } t = 0$$

$$a = 176''.578$$

**Hyperion**

(II, Seite 290).

Epoche: 1890 Jan. 0.0 mittl. Greenw. Zeit.

$$E_{\circ} = 304^{\circ}.53$$

$$n = 16^{\circ}.919983$$

$$\delta l = 9'.16 \sin(200^{\circ}.5 + 0^{\circ}.56206 t_d)$$

$$l = E_{\circ} + n \cdot t_d + \delta l$$

Äquinoktium: 1890.0.      Epoche: 1890.0 + t.

$$\Omega = 167^{\circ} 49'.7 + 42'.4 \sin(47^{\circ}.8 - 0^{\circ}.50 t) + 78'.1 \sin(121^{\circ}.7 - 2^{\circ}.0 t)$$

$$i = 27^{\circ} 20'.8 + 19'.6 \cos(47^{\circ}.8 - 0^{\circ}.50 t) + 36'.2 \cos(121^{\circ}.7 - 2^{\circ}.0 t)$$

Epoche und Äquinoktium: 1888.890 + t.

$$H = 276^{\circ}.50 - 18'.663 t + 14'.0 \sin(-0'.84 + 19'.191 t)$$

$$- 1'.5 \sin(-1'.68 + 38^{\circ}.382 t)$$

$$e = 0.1043 + 0.0230 \cos(-0'.84 + 19'.191 t) + \delta e$$

$$e \delta e = -0.00044 \cos(200^{\circ}.5 + 0^{\circ}.56206 t_d)$$

$$a = 213''.92 + \delta a$$

$$\delta a = -0.00354 a \cos(200^{\circ}.5 + 0^{\circ}.56206 t_d)$$

**Japetus**

(I, Seite 87; II, Seite 139).

Epoche: 1885 Sept. 1.0 mittl. Greenw. Zeit.

$$E_{\circ} = 75^{\circ} 26'.4$$

$$i = 18^{\circ} 28'.3 - 0'.54 t$$

$$n = 4^{\circ}.537997$$

$$H = 354^{\circ} 30' + 7'.9 t$$

$$l = E_{\circ} + n \cdot t_d$$

$$e = 0.02836 + 0.000015 t$$

$$\Omega = 142^{\circ} 12'.4 - 1'.48 t$$

$$a = 514''.59$$

## ERLÄUTERUNGEN.

$l_1, l$	Mittlere Länge in der Bahn
$n$	Tropische mittlere tägliche Bewegung
$\delta l$	Libration
$t_d$	Anzahl der Tage seit der Anfangsepoke
$t$	Anzahl der Jahre seit der Anfangsepoke
$\Theta$	Knoten auf dem Saturnsäquator
$\Omega$	Knoten auf der Ekliptik
$\gamma$	Neigung der Trabantenbahn gegen den Saturnsäquator
$i$	Neigung der Trabantenbahn gegen die Ekliptik
$H_1, H_2$	Perisaturnium
$e$	Exzentrizität
$a$	Halbachse der Trabantenbahn in der mittleren Entfernung $(\varrho) = 9.53887$

$l_1, H_1$  und  $\Theta$  werden gezählt vom Äquinoktium aus in der Ekliptik, weiter im Saturnsäquator und dann erst in der Trabantenbahn,  $l$  und  $H$  vom Äquinoktium aus in der Ekliptik und weiter in der Trabantenbahn.

Zunächst sind für die fünf inneren Trabanten auf den Seiten 428 bis 438 die Hülfsmittel gegeben, um in bequemer Weise ihre Positionen ableiten zu können. Sieht man hierbei von den Neigungen  $\gamma$  ab, so erhält man die rechtwinkeligen 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 Saturnsmittelpunkt gehenden Deklinationskreise den Winkel  $P$  einschließt, aus den Gleichungen:

$$x = \frac{a(\varrho)}{\varrho} \frac{1}{1 + \zeta} \frac{r}{a} \sin(u - U)$$

$$y = \frac{a(\varrho)}{\varrho} \frac{1}{1 + \zeta} \frac{r}{a} \sin B \cos(u - U).$$

Die Größen  $U$  und  $B$  sind Seite 427 zu entnehmen.  $(\varrho) = 9.53887$  bezeichnet den mittleren Wert der Entfernung Sonne—Saturn,  $\varrho$  ist die Entfernung Erde—Saturn,  $u = L + (v - M)$  ist die wahre Länge des Trabanten vom Erdäquator an gezählt.

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:

$$x = \frac{a(\varrho)}{\varrho} \frac{1}{1 + \zeta} \frac{r}{a} \sin(u - U)$$

$$y = \frac{a(\varrho)}{\varrho} \frac{1}{1 + \zeta} \frac{r}{a} \sin B [\cos(u - U) + \sin \gamma \cotg B \sin(u - \vartheta)];$$

hierin bezeichnet  $\vartheta$  die Länge des aufsteigenden Knotens der Trabantenbahn

auf dem Saturnsäquator, gezählt vom Schnittpunkte des Saturnsäquators mit dem Erdäquator;  $\vartheta$  ergibt sich aus:

$$\vartheta = \Theta - \Omega_1 + \omega$$

$$\text{für Tethys ist } \frac{r}{a} = 1.$$

Will man aus  $x$  und  $y$  noch Rektascensions- 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 439 bis 447 finden sich für die drei äusseren Trabanten Titan, Hyperion und Japetus, außer den Hülfssgrößen  $U$ ,  $B$  und  $P$ , die Rektascensions- und Deklinationsunterschiede gegen den Saturn in dem Sinne Trabant minus Planet. Die aus den Angaben des Berliner Jahrbuchs ermittelten Trabantenörter sind wahre bis März 26, vom Oktober 4 an mittlere.

Zum Schluss enthalten die Seiten 448—454 die Zeitangaben für die östlichen und westlichen Elongationen der Saturntrabanten und für die oberen und unteren Konjunktionen von Japetus mit Saturn.

Die Zeitangaben für die Elongationen und Konjunktionen sind bereits für Aberration korrigiert, also ohne weiteres mit den Beobachtungen vergleichbar.

## 17) Konstellationen.

In der Übersicht der Konstellationen des Jahres 1912 (Seite 455 und 456) sind die hauptsächlichsten Planeten-Konstellationen gegeneinander und gegen Sonne, Mond und die Sterne 1. und 2. Gröfse, sowie die Angaben der Epochen, zu welchen sich die Planeten in gewissen Hauptpunkten ihrer Bahn und ihres synodischen Laufes befinden, zusammengestellt. Die Bedeckungen der Planeten und der helleren Fixsterne (bis 2. Gröfse) durch den Mond auf der Erde überhaupt sind hier ebenfalls nochmals mit aufgeführt. — Die Konjunktionen der Planeten mit dem Mond und untereinander sind als Konjunktionen in AR. zu verstehen. Letztere sind nur insoweit berücksichtigt als die Differenz der Deklinationen beider Planeten den Betrag von  $3^\circ$  nicht übersteigt. Die Epochen der grössten Helligkeit der Venus sind nach derjenigen Formel für die Lichtstärke, welche G. Müller in der *Publikation des Astrophys. Observatoriums zu Potsdam*, Bd. VIII, Seite 197 ff. gegeben hat, berechnet.

Als Abkürzungen sind in dieser Übersicht folgende gebraucht:

♈ Widder.	⊙ Sonne.	
♉ Stier.	☽ Mond.	
♊ Zwillinge.	☿ Merkur.	♂ Konjunktion.
♋ Krebs.	♀ Venus.	□ Quadratur.
♌ Löwe.	⊕ Erde.	♂ Opposition.
♍ Jungfrau.	♂ Mars.	
♎ Wage.	♃ Jupiter.	♂ Aufsteigender
♏ Skorpion.	♄ Saturn.	♃ Niedersteigender } Knoten.
♐ Schütze.	♅ Uranus.	
♑ Steinbock.	♆ Neptun.	
♒ Wassermann.		
♓ Fische.		

### 18) Hülftafeln.

Es folgt eine Reihe von häufig gebrauchten Hülftafeln.

1) Die Tafel zur Berechnung der physischen Mondlibration (Seite 457). Die zur Berechnung der physischen Mondlibration dienenden Ausdrücke sind auf Seite 457 vollständig gegeben. Sie beruhen auf der Annahme  $f = 0.75$ , worüber F. Hayn (Selenographische Koordinaten III, Seite 49) einzusehen ist.

2) Die Tafel zur Berechnung der optischen Mondlibration (Seite 458 und 459) reproduziert (mit  $J = 1^\circ 32' 6''$  berechnet) die bekannte Enckesche Tafel (Berl. Jahrb. 1843); sie gestattet in Verbindung mit den Angaben der Seite 88 die rasche Berechnung der optischen Libration in selenographischer Länge und Breite nach den Formeln, die auf Seite 459 vollständig aufgeführt sind. Hierbei scheint die Kenntnis der wahren Längen und Breiten des Mondes notwendig zu sein, welche im Jahrbuch vermisst werden; indessen werden die Längen und Breiten zu diesem Zweck mit merklichem Vorteil aus der mit Hinzufügung der Parallaxe berechneten AR. und Dekl. abgeleitet, wozu man sich der gewöhnlichen Umwandlungsformeln oder, wenn nicht grösere Genauigkeit erfordert wird, der Enckeschen Hülftafel in der Veröffentlichung Nr. 14 des Recheninstituts bedienen kann.

3) Eine Tafel mit Angabe der Bruchteile des tropischen Jahres, die den nebenstehenden mittleren Daten ( $0^h$  Mittl. Zeit Berlin) entsprechen. (Seite 460 und 461.)

4) Eine Tafel für die Ermittelung eines Datums in der julianischen Periode. (Seite 462 und 463.)

5) Die Hülftafeln zur Verwandlung von mittlerer Zeit und Sternzeit (Seite 464 und 465).

- 6) Eine Tafel zur Verwandlung von Stunden, Minuten und Sekunden in Dezimalteile des Tages und umgekehrt (Seite 466 und 467).  
 7) Eine Tafel mit Angabe der Hülfsgrößen zur Berechnung der Präzession von den hauptsächlichsten Sternkatalog-Epochen bis 1912.0 (Seite 468).  
 8) Eine Tafel mit Angabe der Hülfsgrößen zur Übertragung mittlerer Polsternörter von verschiedenen Äquinoktien auf 1912.0 (Seite 469).

## 19) Koordinaten der Sternwarten.

Die Seiten 470 bis 477 enthalten die geographischen und geozentrischen Koordinaten der Sternwarten.

Die Seehöhen sind in allen Fällen angegeben worden, wo sie sich einigermaßen sicher ermitteln ließen; zumeist sind sie dem Verzeichnis von Prof. Auwers im *Geographischen Jahrbuch* entnommen worden; bei der Berechnung von  $\log \varrho$  sind sie berücksichtigt.

Die geozentrischen Koordinaten sind nach den Besselschen Erddimensionen berechnet.

Die Kolumne »Korrektion der Sternzeit« enthält für jeden Ort die Differenz: Sternzeit im mittleren Mittag minus Sternzeit im mittleren Berliner Mittag.

Das Verzeichnis hat im vorliegenden Jahrgang Änderungen bezw. Zusätze für die Lage folgender Sternwarten erfahren:

Allegheny (Neue Stw.)	nach Mitteilung von Direktor Schlesinger.
Athen	» <i>Comptes Rendus</i> Bd. 148, S. 1577.
Brüssel (Uccle)	» <i>Annuaire astronomique</i> 1910.
Gotha (Neue Stw.)	» Mitteilung von Prof. Albrecht, Potsdam.
Helwan	» dem <i>Nautical Almanac</i> 1912.
Jena (Universität) {	» Mitteilung von Prof. Albrecht, Potsdam.
Jena (Winkler) }	»
Johannesburg	» dem <i>Nautical Almanac</i> 1912.
Kiel (Nener Mer.-Kreis)	» Mitteilung von Prof. Harzer.
Ottawa	» dem <i>Nautical Almanac</i> 1912.
Seeberg	» Mitteilung von Prof. Albrecht, Potsdam.
Wellington (Mt. Cook Obs.)	» dem <i>Nautical Almanac</i> 1912.

## 20) Bahnelemente der kleinen Planeten.

Die Seiten (2)—(36) enthalten die Bahnelemente der kleinen Planeten nach den neuesten der Redaktion bekannt gewordenen Bestimmungen. Die unmittelbar den Namen folgenden Kolumnen geben auch das Datum der Opposition im Jahre 1910 und die Grösse zur Zeit derselben.

Ferner sind gegeben zwei Kolumnen  $m_*$  und  $g$ , welche zur Berechnung der Gröfse des Planeten dienen. Es bedeutet  $m_*$  die mittlere Gröfse, d. h. diejenige Gröfse, welche der Planet in seiner mittleren Entfernung  $a$  von der Sonne und der gleichzeitigen Entfernung  $a - r$  von der Erde haben würde; ferner ist  $g$  eine Gröfse, welche aus  $m_*$  nach der Formel

$$g = m_* - 5 \cdot \log a (a - r)$$

berechnet ist, und welche dazu dient, für einen beliebigen geozentrischen Ort des Planeten seine Gröfsenklasse  $M$  zu berechnen. Ist  $\Delta$  die Entfernung des Planeten von der Erde,  $r$  seine Entfernung von der Sonne, so ist seine Gröfse

$$M = g + 5 (\log \Delta + \log r).$$

## 21) Oppositionsdaten der kleinen Planeten.

Von den 538 im Jahre 1910 und zu Anfang des Jahres 1911 stattfindenden Oppositionen der kleinen Planeten (1)—(674) ist Seite (37)—(50) eine übersichtliche Zusammenstellung, nach der Oppositionszeit geordnet, gegeben. In diesem Verzeichnisse ist neben dem Namen des Planeten der Tag der Opposition in AR., die Gröfse, der genäherte geozentrische Ort, die tägliche Bewegung an jenem Tage, der Logarithmus der Entfernung des Planeten von der Erde und außerdem das Jahr, in welchem der Planet zum letzten Male beobachtet wurde, angegeben.

Für 36 Planeten, welche in dem Oppositionsverzeichnis durch ein Sternchen (\*) bezeichnet sind, enthalten die Seiten (51)—(86) ausführliche Ephemeriden; für etwa 60 weitere Planeten, deren Beobachtung im Jahre 1910 erwünscht erscheint, sind genäherte Oppositionsephemeriden in den Veröffentlichungen des Recheninstitutes Nr. 38 und 39 gegeben.

## 22) Ausführliche Oppositionsephemeriden.

Diese Ephemeriden, Seite (51)—(86), die neben der Erleichterung der Beobachtungen einer künstlichen Theorie der entsprechenden Planeten zur Grundlage dienen sollen, sind zum größten Teil im Recheninstitut berechnet, zum Teil von den unterzeichneten Herren der Redaktion gütigst zur Verfügung gestellt worden. Für die Lichtzeit ist hierbei angenommen:  $498^{*}4$ .

## 23) Nachweisungen über die kleinen Planeten.

Das die Nachweisungen über die kleinen Planeten enthaltende Verzeichnis, Seite (87)—(107), gibt in zwei Abschnitten eine Übersicht der Stellen in den verbreitetsten Publikationsmitteln, wo A. Beobachtungen,

B. Berechnungen in bezug auf die kleinen Planeten sich vorfinden. Das Nähere ist aus dem Verzeichnisse selbst unmittelbar zu ersehen. — Die Übersicht umfasst Band 179, S. 33 bis Band 182, S. 252 einschl. der *Astronomischen Nachrichten* (bezeichnet mit A. N.), das *Bulletin Astronomique* Band 25, S. 369 bis Band 26, S. 368 (bezeichnet mit B. A.), und die *Monthly Notices* Band 69 (bezeichnet mit M. N.). Die angenommenen Grenzen dieser Übersicht entsprechen den Zeitgrenzen der Publikation 1908 Okt. 1 bis 1909 Okt. 1.

### Zur Statistik der kleinen Planeten im Jahre 1909.

Seit dem Erscheinen des letzten Jahrbuches sind bis Ende Dezember 1909 folgende 15 neue Planeten entdeckt, bezw. als solche erkannt worden, welche zu der Gruppe zwischen Erde und Jupiter gehören:

660	<i>CC</i>	entdeckt 1908	Jan.	8 von	
661	<i>CL</i>	»	Febr.	22	»
662	<i>CW</i>	»	März	30	»
663	<i>DG</i>	»	Juni	24	»
664	<i>DI</i>	»	Juni	24	»
665	<i>DK</i>	»	Juli	22	»
666	<i>DM</i>	»	Juli	23	»
667	<i>DN</i>	»	Juli	23	»
668	<i>DO</i>	»	Juli	27	»
669	<i>DQ</i>	»	Aug.	20	»
670	<i>DR</i>	»	Aug.	20	»
671	<i>DV</i>	»	Sept.	21	»
672	<i>DY</i>	»	Sept.	21	»
673	<i>EA</i>	»	Sept.	21	»
674	Rachel	»	Okt.	28	»
					{ Metcalf, Taunton, Mass.
					{ Kopff
					{ Lorenz
					{ Königstuhl
					{ Kopff
					{ Palisa, Wien
					{ Kopff
					{ Königstuhl.
					{ Lorenz

Aufser den genannten sind bis Ende 1909 noch etwa 50 bisher anscheinend unbekannte Planeten gefunden, für welche zum Teil Bahnberechnungen wegen unzureichenden Beobachtungsmaterials nicht ausführbar, zum Teil die Rechnungen noch nicht abgeschlossen sind.

Unter den 674 jetzt bekannten kleinen Planeten sind im gegenwärtigen Zeitpunkte (Ende März 1910), soviel der Redaktion bekannt geworden ist,

## ERLÄUTERUNGEN.

453 Planeten, welche in mindestens 4 Oppositionen beobachtet sind, nämlich die Planeten (1) bis (391) mit Ausnahme von (99), (132), (155), (157), (188), (193), (220), (272), (280), (281), (285), (290), (293), (296), (299), (307), (309), (310), (315), (316), (319), (320), (323), (327), (328), (330), (353), (355), (357), (368) und (370) und außerdem:

(393) Lampetia	(425) Cornelia	(460) Scania	(509) Iolanda
(394) Arduina	(426) Hippo	(462) Eriphyla	(510) Mabella
(397) Vienna	(429) Lotis	(470) Kilia	(511) Davida
(399) Persephone	(431) Nephele	(471) Papagena	(513) Centesima
(401) Ottilia	(432) Pythia	(472) Roma	(514) Armida
(402) Chloë	(433) Eros	(475) Occko	(516) Amherstia
(403) Cyanæ	(434) Hungaria	(477) Italia	(521) Brixia
(404) Arsinoë	(435) Ella	(478) Tergeste	(526) Jena
(405) Thia	(437) Rhodia	(481) Emitta	*(528) Rezia
(407) Arachne	(439) Ohio	(482) Petrina	(530) Turandot
(409) Aspasia	(441) Bathilde	(483) Seppina	(532) Herculina
(410) Chloris	(442) Eichsfeldia	(484) Pittsburghia	(535) Montague
(411) Xanthe	(443) Photographicia	(485) Genua	(536) Merapi
(412) Elisabetha	(444) Gyptis	(487) Venetia	(537) Pauly
(414) Liriöpe	(446) Aeternitas	*(488) Krœusa	(541) Deborah
(415) Palatia	(447) Valentine	(490) Veritas	(542) Susanna
(416) Vaticana	(449) Hamburga	(491) Carina	(543) Charlotte
(417) Suevia	(451) Patientia	(498) Tokio	(544) Jetta
(418) Alemannia	(453) Tea	(500) Selinur	(550) Senta
(419) Aurelia	(454) Mathesis	(504) Cora	(554) Peraga
(420) Bertholda	(455) Bruchsalia	(505) Cava	(578)
(421) Zähringia	(456) Abnoba	(507) Laodica	(589) Croatia
(423) Diotima	(458) Hercynia	(508) Princetonia	(617) Patroclus
(424) Gratia			

56 Planeten, welche in 3 Oppositionen beobachtet sind, nämlich:

(157) Dejanira	(440) Theodora	(527) Euryanthe	(569) Misa
(188) Menippe	(445) Edna	(534) Nassovia	(570)
(272) Antonia	(450) Brigitte	(538) Friederike	(579)
(281) Lucretia	(469) Argentina	(539) Pamina	(582)
(299) Thora	(476) Hedwig	(546) Herodias	(583) Klotilde
(307) Nike	(480) Hansa	(549) Jessonda	(592)
(328) Gudrun	(494) Virtus	(551) Ortrud	(595)
(357) Ninima	(501) Urhixidur	(552) Sigelinde	(596)
(370) Modestia	(502) Sigune	(556) Phyllis	(599)
(398) Admete	(503) Evelyn	(558) Carmen	(600)
(406) Erna	(506) Marion	(559) Nanon	(615)
(422) Berolina	(520) Franziska	(562) Salome	(624) Hektor
(427) Galene	(523) Ada	(563) Suleika	(639)
(438) Zeuxo	(524) Fidelio	(566) Stereoskopia	(642)

## 64 Planeten, welche nur in 2 Oppositionen beobachtet sind, nämlich:

(280) Philia . . .	17	(557) Violetta . . .	4	(623) . . . . .	3
(296) Phaētusa . . .	14	(568) Cheruskia . .	4	(628) . . . . .	3
(319) Leona . . .	16	(573) . . . . .	4	(631) . . . . .	3
(320) Katharina . .	15	(575) . . . . .	4	(633) . . . . .	3
(327) Columbia . .	14	(577) . . . . .	4	(635) . . . . .	3
(355) Gabriella . .	13	(581) Tauntonia . .	4	(636) . . . . .	3
(395) Delia . . .	12	(585) . . . . .	3	(638) . . . . .	3
(408) Fana . . .	12	(587) . . . . .	3	(643) . . . . .	3
(436) Patricia . .	10	(588) Achilles . .	4	(645) . . . . .	2
(465) Alekto . . .	8	(593) . . . . .	4	(648) . . . . .	2
(466) Tisiphone . .	8	(598) . . . . .	3	(649) . . . . .	2
(468) Lina . . .	8	(601) . . . . .	3	(651) . . . . .	2
(479) Caprera . . .	7	(603) . . . . .	3	(652) Jubilatrix .	2
(492) Gismonda . .	6	(607) . . . . .	3	(654) Zelinda . .	2
(495) Eulalia . . .	6	(609) . . . . .	3	(655) . . . . .	2
(517) Edith . . .	6	(611) . . . . .	3	(659) . . . . .	2
(533) Sara . . . .	5	(616) . . . . .	3	(660) . . . . .	2
(540) Rosamunde .	4	(618) . . . . .	3	(662) Newtonia .	2
(545) Messalina . .	5	(619) . . . . .	3	(670) . . . . .	2
(547) Praxedis . .	5	(620) . . . . .	3	(673) . . . . .	2
(548) Kressida . .	4	(622) . . . . .	3	(674) Rachel . .	2
(555) Norma . . .	5				

## 101 Planeten, welche bisher nur in 1 Opposition beobachtet sind, nämlich:

(99) Dike . . . . —		(430) Hybris . . .	10	*(522) Helga . . .	6
(132) Aethra . . . . —		(448) Natalie . . .	9	(525) Adelaide . .	5
(155) Scylla . . . . —		(452) Hamiltonia .	9	*(529) Preziosa . .	5
(193) Ambrosia . . . —		(457) Alleghenia .	8	(531) Zerlina . . .	5
(220) Stephania . . . —		(459) Signe . . .	7	(553) Kundry . . .	4
(285) Regina . . .	17	(461) Saskia . . .	8	(560) Delila . . .	4
(290) Bruna . . .	15	(463) Lola . . .	7	(561) Ingwelde . .	4
(293) Brasilia . . .	16	(464) Megaira . .	8	(564) Dudu . . .	4
(309) Fraternitas .	15	(467) Laura . . .	8	(565) Marbachia .	4
(310) Margarita . .	15	(473) Nolli . . .	8	(567) Eleutheria .	4
(315) Constantia .	13	(474) Prudentia .	7	(571) . . . . .	4
(316) Goberta . . .	16	(486) Cremona . .	6	(572) . . . . .	4
(323) Brucia . . .	13	(489) Comacina .	6	(574) . . . . .	3
(330) Adalberta .	12	(493) Griseldis .	6	(576) Emanuela .	4
(353) Ruperto-C. .	14	(496) Gryphia . .	5	(580) . . . . .	4
(368) Haidea . . .	14	(497) Jva . . .	6	(584) . . . . .	3
(392) Wilhelmina .	13	(499) Venusia . .	7	(586) . . . . .	4
(396) Aeolia . . .	12	(512) Taurineensis	6	(590) . . . . .	4
(400) Duerosa . . .	13	(515) Athalia . .	6	(591) . . . . .	4
(413) Edburga . . .	11	(518) Halawe . .	5	(594) . . . . .	3
(428) Monachia . .	9	(519) Sylvania .	5	(597) . . . . .	3

(602) Marianna . . . . .	4	(629) . . . . .	3	(657) . . . . .	2
(604) . . . . .	4	(630) . . . . .	3	(658) . . . . .	2
(605) . . . . .	3	(632) . . . . .	3	(661) . . . . .	2
(606) . . . . .	3	(634) . . . . .	3	(663) . . . . .	2
(608) . . . . .	3	(637) . . . . .	3	(664) . . . . .	2
(610) . . . . .	3	(640) . . . . .	3	(665) . . . . .	2
(612) . . . . .	3	(641) . . . . .	2	(666) . . . . .	2
(613) . . . . .	3	(644) . . . . .	2	(667) . . . . .	2
(614) . . . . .	3	(646) . . . . .	2	(668) . . . . .	2
(621) . . . . .	3	(647) . . . . .	2	(669) . . . . .	2
(625) . . . . .	3	(650) . . . . .	2	(671) . . . . .	2
(626) . . . . .	3	(653) . . . . .	2	(672) . . . . .	2
(627) . . . . .	3	(656) . . . . .	2		

In den vorstehenden Angaben bezeichnen die hinter den Planetennamen befindlichen Ziffern die Anzahl der bisher, mit Einschluss der Entdeckungerscheinung, stattgefundenen Oppositionen. Von den mit einem \* bezeichneten Planeten sind nachträglich noch ältere vor der Entdeckungszeit liegende hier nicht berücksichtigte Beobachtungen aufgefunden.

