

Epoch June 1. 0^h Greenwich M. T.

Mean Anomaly	48° 13' 33".72	Mean Equinox June 1. 0 ^h
π	178 37 41,88	
Ω	86 50 1,60	
i	9 6 22,08	
ϕ	9 47 20,75	
e	0,1700220	
Log. a	0,4126288	
Log. q	0,3316958	
Log. μ	2,9310634	
μ	853"2248	

Sidereal period 1518,94345 days.

The middle observation is represented in longitude within $\pm 0''42$, and in latitude within $-0''08$; observed — computed place. — The accompanying ephemeris is for Greenwich mean midnight, and by an observation of Mr. *Hartnup's*, at Liverpool, with which he kindly favored me, on July 16, the Right Ascension was 2' of time too large, the N. P. D. exact; it will therefore I trust be sufficient to find the planet during the remainder of its apparition.

1851	AR.	N. P. D.	497° 8' \times Δ	Hor. Par.
July 14	15 ^h 33 ^m 19 ^s	106° 35' 8"	14 ^m 9 ^s 9"	5''03
15	33 31	41,1		
16	33 44	46,4		
17	33 59	51,7		
18	34 16	106 57,1	14 34,1	4,89
19	34 34	107 2,5		
20	34 54	8,0		
21	35 15	13,5		
22	35 38	19,0	14 59,2	4,75
23	36 2	24,5		
24	36 28	30,1		
25	36 55	35,8		
26	15 37 24	107 41,5	15 24,9	4,62

1851	AR.	N. P. D.	497° 8' \times Δ	Hor. Par.
July 27	15 ^h 37 ^m 54 ^s	107° 47' 2"		
28	38 26	52,9		
29	38 59	107 58,6		
30	39 34	108 4,3	15 ^m 51 ^s 2"	4''49
31	40 10	10,0		
Aug. 1	40 47	15,8		
2	41 25	21,6		
3	42 5	27,4	16 18,1	4,37
4	42 46	33,2		
5	43 28	39,1		
6	44 12	44,9		
7	44 58	50,8	16 45,5	4,25
8	45 45	108 56,7		
9	46 32	109 2,6		
10	47 21	8,5		
11	48 11	14,4	17 13,2	4,14
12	49 2	20,3		
13	49 54	26,2		
14	50 48	32,1		
15	51 43	38,0	17 41,2	4,03
16	52 39	43,9		
17	53 36	49,8		
18	54 34	109 55,6		
19	55 34	110 1,4	18 9,4	3,93
20	56 35	7,2		
21	57 36	13,1		
22	58 38	18,9		
23	15 59 41	24,7	18 37,9	3,83
24	16 0 46	30,5		
25	1 51	36,3		
26	2 57	42,1		
27	4 4	47,9	19 6,5	3,73
28	5 12	53,7		
29	6 21	110 59,5		
30	7 31	111 5,2		
31	16 8 42	111 10,9	19 35,3	3,64

Beobachtungen der Irene und Hebe am Fraunhofer'schen Equatoreal der Durham'schen Sternwarte, von Herrn *R. C. Carrington*. (Fortsetzung von Nr. 764 p. 323).

Ser.	1851	Greenw. M. T.	App. R. A.	Log. $\frac{P}{P}$	App. N. P. D.	Log. $\frac{q}{P}$	No. of Comps. in	
							R. A.	N. P. D.
11	June 10	12 ^h 11 ^m 41 ^s 1"	15 ^h 43 ^m 43 ^s 32"	+8,210	104° 12' 13".3	-9,9628	24	8
12	12	12 10 4,4	42 14,37	8,240	18 31,7	9,9624	12	4
13	15	11 11 19,7	40 13,14	8,005	28 18,5	9,9672	7	7
14	15	12 16 44,9	40 11,33	8,315	28 23,6	9,9594	18	6
15	16	11 25 10,6	39 34,53	8,123	31 42,9	9,9656	24	8
16	17	11 51 12,0	38 57,35	8,258	104 35 18,0	9,9622	12	4
17	26	11 41 29,8	34 43,54	8,354	105 10 16,4	9,9588	24	8
18	26	12 6 5,9	34 42,86	8,415	10 18,6	9,9540	23	8
19	28	11 42 53,3	34 5,63	8,382	18 46,6	9,9573	8	4
20	29	11 20 51,8	33 49,46	8,332	23 5,3	9,9607	20	7
21	29	11 48 24,3	33 49,32	8,405	23 12,2	9,9554	12	6
22	30	11 19 46,9	33 35,04	8,843	27 31,5	9,9601	23	8
23	July 4	11 22 0,8	15 32 54,97	+8,393	105 45 56,4	-9,9573	17	6

P is the Equ. Hor. Parallax in seconds of arc: p and q are the required corrections in time and arc respectively.

Mean places of Stars of Comparison: 1851,0.

Set.	Name.	AR.	N. P. D.
11, 12	Weisse 15 ^h 864	15 ^h 44 ^m 56 ^s 62	104° 15' 51 ^u 5
13	838	43 16,56	24 31,5
14, 15, 16	B. A. C. 5188	35 4,00	104 33 40,0
17	Weisse 15 ^h 644	33 40,03	105 5 5,7
18, 19, 20	B. A. C. 5190	35 41,85	11 39,0
21, 22, 23	5184	15 34 23,60	105 31 57,7

N o t e s.

June 12. Sky clear for a very short time.

15 and 16. High wind. The hearing tube used on the 15th.

17. Much interrupted by cloud.

June 28 and 29. Planet very faint.

July 4. No choice of stars. Diff. of N. P. D. large.

5 to 14. Continued cloudy weather. Obs. discontinued

H e b e.

Set.	1851	Greenw. M. T.	App. R. A.	Exc. of Ephem.	App. N. P. D.	Exc. of Ephem.	No. of Comps. in R. A.	N. P. D.
1	June 17	13 ^h 7 ^m 48 ^s 4	19 ^h 38 ^m 49 ^s 31	—	96° 53' 44 ^u 0	—	15	5
2	26	12 56 56,7	32 45,57	—1' 07	97 29 4,1	—4 ^u 6	24	8
3	27	13 7 50,9	31 58,07	1,12	34 9,1	3,1	24	8
4	29	12 39 6,5	30 20,85	0,75	44 52,6	4,2	24	8
5	30	12 9 0,8	29 31,42	0,76	97 50 30,1	4,6	24	8
6	July 4	13 0 43,7	25 58,40	1,02	98 15 52,5	4,2	24	8
7	6	10 47 19,5	19 24 13,14	—0,99	98 29 6,0	—5,6	24	8

The above observations are corrected for refraction and parallax, and compared with the Ephemeris contained in the Supplement to the Naut. Almanac for 1854.

Mean places of Stars of Comparison: 1851,0.

Set.	Name.	AR.	N. P. D.
1	Weisse 19 ^h 895	19 ^h 34 ^m 47 ^s 33	96° 49' 15 ^u 3
2, 3	B. A. C. 6713	28 52,47	97 21 15,4
4, 5	Weisse 19 ^h 689	27 26,87	97 46 52,9
6	621	24 52,78	98 18 40,0
7	561	19 22 36,85	98 29 33,4

Notes. June 17. Clouds troublesome. Planet a good 8th mag. The six last observations of Hebe were all taken under unusually favourable circumstances.

NB. *The minutes in Declination of W. 19,689 should be 50', not 49', for 1825: the star is given correctly in *Bessel's* Zone. Also the precession in R. A. of No. 621 should be 3,255, not 2,887, which latter corresponds to a + declination.

Dr. van Galen, Bahnbestimmung der Parthenope. (Fortsetzung von Nr. 757).

Fortsetzung der Ephemeride.

1850	Gerade Aufsteigung.	Stündl. Beweg.	Red. auf das sch. Aequin.	Abweichung.	Stündl. Beweg.	Red. auf das sch. Aequin.	Log. Entf. von ☿	Aberrationszeit.
Sept. 20	242° 18' 20 ^u 4	+61 ^u 93	+24 ^u 87	—18° 23' 59 ^u 9	—15 ^u 36	+0 ^u 73	0,39505	20 ^u 24 ^u 8
21	242 43 6,6	62,37	24,97	30 8,5	15,24	0,78	39681	29,8
22	243 8 3,6	62,82	25,07	36 14,3	15,11	0,84	39856	34,8
23	243 33 11,2	+63,25	+25,18	—18 42 17,0	—14,98	+0,89	0,40030	• 20 39,7