

Ephemeris of Psyche for the opposition in 1869.

By *E. Schubert*.(Communicated by Prof. *J. H. C. Coffin*, Superintendent of the American Nautical Almanac.)

12 ^h Washington Mean Time.				
	α	δ	$\log \Delta$	$\log r$
June 29	20 ^h 25 ^m 25 ^s .92	—16° 30' 48".6	0,26865	0,44772
30	24 50,33	33 11,6	26700	
July 1	24 13,61	35 39,9	26539	44730
2	23 35,78	38 13,2	26383	
3	22 56,87	40 51,2	26232	44088
4	22 16,92	43 33,8	26087	
5	21 35,98	46 20,9	25947	44646
6	20 54,05	49 12,2	25812	
7	20 11,18	52 7,6	25683	44603
8	19 27,42	55 6,9	25560	
9	18 42,83	—16 58 9,8	25443	44561
10	17 57,44	—17 1 16,3	25332	
11	17 11,32	4 26,1	25226	44519
12	16 24,52	7 39,1	25127	
13	15 37,08	10 55,0	25034	44477
14	14 49,06	14 13,7	24948	
15	14 0,50	17 34,9	24867	44435
16	13 11,46	20 58,3	24793	
17	12 21,99	24 24,0	24726	44393
18	11 32,16	27 51,5	24665	
19	10 42,01	31 20,7	24611	44351
20	9 51,60	34 51,2	24563	
21	9 1,00	38 22,9	24522	44309
22	8 10,25	41 55,7	24488	
23	7 19,42	45 29,4	24460	44267
24	6 28,57	49 3,7	24439	
25	5 37,76	52 38,4	24424	44225
26	4 47,03	56 13,3	24416	
27	3 56,43	—17 59 48,2	24415	0,44184
28	20 3 6,01	—18 3 22,9	0,24421	

♂ July 22, 13^h 21^m 0^s Wash. M. T. Intensity of light = 1,33.

12 ^h Washington Mean Time.				
	α	δ	$\log \Delta$	$\log r$
July 29	20 ^h 2 ^m 15 ^s .84	—18° 6' 57".2	0,24433	0,44142
30	1 25,99	10 31,0	24452	
31	20 0 36,52	14 3,9	24477	44100
Aug. 1	19 59 47,51	17 35,8	24509	
2	58 59,00	21 6,4	24538	44059
3	58 11,03	24 35,8	24593	
4	57 23,68	28 3,7	24644	44017
5	56 36,98	31 29,9	24702	
6	55 51,00	34 54,2	24766	43976
7	55 5,82	38 16,6	24836	
8	54 21,46	41 36,9	24912	43934
9	53 38,03	44 54,8	24994	
10	52 55,53	48 10,3	25082	43893
11	52 14,02	51 23,3	25176	
12	51 33,55	54 33,5	25276	43851
13	50 54,16	—18 57 40,8	25382	
14	50 15,90	—19 0 45,1	25492	43810
15	49 38,80	3 46,2	25606	
16	19 49 2,90	—19 6 43,9	0,25730	0,43769

Osculating Elements.

1869 July 23,0 Washington Mean Time.

$$\begin{aligned}
 M &= 299^{\circ} 18' 31''.5 \\
 \pi &= 15 \ 47 \ 8.8 \\
 \Omega &= 150 \ 35 \ 12.0 \\
 i &= 3 \ 3 \ 59.8 \\
 \phi &= 7 \ 48 \ 50.1 \\
 \mu &= 710'' 6411 \\
 \log a &= 0,465571.
 \end{aligned}
 \quad \left. \begin{array}{l} \\ \\ \\ \\ \\ \end{array} \right\} \text{M. Eq. Ep.}$$

Observations of the Comet II. 1867, made at the Hamilton College Observatory. By Prof. *C. H. F. Peters*.

1867	Ham. Coll. M. T.	$\Delta \alpha$	$\Delta \delta$	N ^o of Comp.	α	δ	$\log (p'' \Delta)$ in α	in δ	Comp.-star.
June 19	10 ^h 21 ^m 0 ^s .1	— 13 ^s .42	+2' 40".0	10	15 ^h 11 ^m 52 ^s .17	—10° 18' 23".8	0,240	0,851	<i>a</i>
21	10 2 47,3	+ 56,30	—1 54,2	10	13 24,00	—10 48 13,1	0,148	0,855	<i>b</i>
22	10 45 4,3	— 11,21	+1 27,7	10	14 13,66	—11 3 41,0	0,426	0,852	<i>c</i>
23	10 17 23,0	+1 54,21	—1 41,4	10	15 3,60	—11 18 28,6	0,300	0,856	<i>d</i>
24	9 44 36,3	+ 6,79	+1 4,8	10; 8	15 54,68	—11 33 6,5	0,062	0,860	<i>e</i>
29	11 12 20,9	+ 4,50	— 55,7	12	20 48,36	—12 49 11,9	0,572	0,851	<i>f</i>
July 2	10 16 54,4	+1 0,72	—1 4,0	12	24 4,17	—13 33 24,8	0,436	0,864	<i>g</i>
7	10 37 52,0	— 50,30	—1 4,2	10	15 30 8,56	—14 17 1,2	0,561	0,860	<i>h</i>

The comet usually was very well seen, and a starlike nucleus admitted of very accurate pointing. The observations are made in the usual way by the filarmicrometer with illu-

minated wires, power 270. Correction for refraction has been applied in the differences. — The places of the stars have been assumed for 1867,0 upon the following authorities: