

EPHEMERIS OF COMET 1888 *e* (BARNARD),

By LEWIS BOSS.

[Continued from No. 182.]

1888 Gr. M.T.	App. α	App. δ	$\log r$	$\log \Delta$	Light	1888 Gr. M.T.	App. α	App. δ	$\log r$	$\log \Delta$	Light
Nov. 17.5	3 ^h 50 ^m 48 ^s	-2° 29.5'	0.31081	0.0399	11.7	Dec. 5.5	1 ^h 52 ^m 8 ^s	-6° 56.0'	0.29053	0.0769	
18.5	3 43 54	2 49.7	0.30960	0.0380		6.5	1 46 39	7 3.3	0.28950	0.0824	
19.5	3 36 58	3 9.4	0.30840	0.0367		7.5	1 41 20	7 9.8	0.28849	0.0881	10.4
20.5	3 29 59	3 28.8	0.30721	0.0358		8.5	1 36 12	7 15.6	0.28749	0.0940	
21.5	3 22 59	3 47.7	0.30603	0.0355	12.2	9.5	1 31 14	7 20.7	0.28651	0.1000	
22.5	3 15 59	4 6.1	0.30486	0.0356		10.5	1 26 26	7 25.2	0.28554	0.1061	
23.5	3 9 0	4 23.9	0.30369	0.0362		11.5	1 21 49	7 29.0	0.28459	0.1124	9.5
24.5	3 2 3	4 41.0	0.30254	0.0373		12.5	1 17 21	7 32.2	0.28365	0.1188	
25.5	2 55 9	4 57.4	0.30139	0.0389	12.3	13.5	1 13 4	7 34.9	0.28272	0.1253	
26.5	2 48 19	5 13.0	0.30026	0.0409		14.5	1 8 56	7 37.1	0.28179	0.1318	
27.5	2 41 34	5 27.9	0.29913	0.0434		15.5	1 4 58	7 38.7	0.28090	0.1383	8.5
28.5	2 34 56	5 41.9	0.29801	0.0464		16.5	1 1 9	7 39.9	0.28003	0.1449	
29.5	2 28 23	5 55.0	0.29691	0.0497	11.9	17.5	0 57 29	7 40.7	0.27815	0.1515	
30.5	2 21 59	6 7.3	0.29582	0.0534		18.5	0 53 58	7 41.0	0.27730	0.1581	
Dec. 1.5	2 15 42	6 18.7	0.29474	0.0575		19.5	0 50 36	-7 41.0	0.27746	0.1646	7.7
2.5	2 9 35	6 29.3	0.29367	0.0619		Observations on October 18 show no appreciable correction to the ephemeris of this comet contained in No. 182, of which the above is a continuation.					
3.5	2 3 36	6 39.0	0.29261	0.0667	11.3						
4.5	1 57 47	-6 47.9	0.29156	0.0717							

NEW ASTEROIDS.

A planet of the 13th magnitude, or fainter, was discovered by PALISA at Vienna, Oct. 25, in the following position :

1888 Oct. 25.2486 Gr. M.T. $\alpha = 13^{\circ} 24' 6''$ $\delta = +2^{\circ} 54' 58''$

The asteroid discovered by BORRELLY, May 12 (*A.J.* VIII, 32), proved to be no. 116, *Sirona*. Consequently, that found by PALISA, May 16, became no. 278; and this one is no. 279. Names have been assigned, as follows, to some of those recently discovered.

(272) *Antonia*. (274) *Philagoria*. (275) *Sapientia*. (276) *Adelheid*. (278) *Paulina*.

Another, of the 12th magnitude, was discovered by PALISA, Oct. 31, in the position,

1888 Oct. 31.5165 Gr. M.T. $\alpha = 2^{\text{h}} 2^{\text{m}} 46^{\text{s}}.2$ $\delta = +13^{\circ} 34' 29''$

This is no. 280.

NEW COMET, 1888 *f* (BARNARD, Oct. 30).

A despatch received from Professor E. S. HOLDEN, Oct. 31, announces the discovery of a new comet by Professor E. BARNARD, at the Lick Observatory, in the following position :

1888 Oct. 31.0399 Gr. M.T. $9^{\text{h}} 43^{\text{m}} 22^{\text{s}}.2$ $-15^{\circ} 18' 52''$ Daily motion in R.A., $+1^{\text{m}} 32^{\text{s}}$; in Decl. $+9'$.

Its physical appearance is as follows: Slightly elongated; 1' in diameter; 11^m or fainter; strong central condensation.

An observation by Mr. TUTTLE has been telegraphed by the Superintendent of the Washington Observatory :

1888 Nov. 1.8612 Gr. M.T. $\alpha = 9^{\text{h}} 46^{\text{m}} 14^{\text{s}}.3$ $\delta = -15^{\circ} 1' 37''$

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NEW ASTEROIDS.

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