

error in the ephemeris is given in the eighth column, and is derived from an approximate light curve. It appears that the period is too long by about 0^m.6, and if this correction is applied, the errors have the values given in the ninth

column. The tenth column gives the mean photographic magnitude, during the entire time of exposure, derived from the corrected ephemeris and light curve.

<i>E</i>	Date	Gr. M. T.	J. D.	Exp.	Magn.	Phase	O - C	O - C'	C. M.
-580	1890 June 2	16 ^h 32 ^m	1521.689	27 ^m	11.81	+0 ^d .488	+0.25	+0.01	11.7
-570	1890 Aug. 1	14 20	1581.597	13	12.75	+0.331	+0.24	+0.02	12.7
-570	1890 » 1	14 57	1581.623	20	12.22	+0.357	+0.16	-0.06	12.5
-557	1890 Oct. 8	11 53	1659.495	10	<12.4	+0.145	—	—	12.8
-508	1891 Aug. 8	16 7	1953.672	20	<11.7	+0.003	—	—	12.1
-443	1892 Sept. 2	14 44	2344.614	16	10.96	+0.522	+0.18	0.00	11.0
-325	1894 Aug. 11	15 7	3052.630	10	10.90	-0.228	+0.13	-0.01	10.9
-257	1895 Sept. 24	10 11	3461.424	102	<12	+0.124	—	—	12.9
-254	1895 Oct. 12	6 45	3479.281	300	<12	-0.039	—	—	12.5
-97	1898 May 12	10 12	4422.425	105	<12	+0.085	—	—	12.9
-84	1898 July 29	10 22	4500.433	125	<12	+0.008	—	—	12.9
0	1899 Dec. 16	3 33	5005.106	125	Ft.	+0.135	—	—	12.5

It appears from this table that while the formula of Professor Ceraski satisfies all the later observations, it is not confirmed by the early observations. For instance, according to this formula the star should have had nearly its full brightness on the first three photographs. On the other hand, all the observations are satisfied by the corrected formula, in which the period is 6^d 0^h 8^m.8. As soon as we obtain accurate observations of subsequent minima, these combined with the photographs taken in 1890, will give a much more precise formula. A comparison of the sixth and tenth columns shows that the observed and computed magnitudes differ in one case only by more than one tenth. A slight defect partially covers the image of the variable on

the second plate taken Aug. 1, 1890, and thus renders the measured value too bright. The period differs so little from exactly 6 days that for a long time the minima cannot be observed in certain longitudes. Accordingly, while valuable observations may be obtained next autumn in Europe, or better still in Asia, minima cannot be observed in America until the following year.

Five stars of the Algol class, S Cancri, U Cephei, W Delphini, BD. +45°30'62, and the star here discussed are especially interesting, owing to the large variation in their light, which amounts to about two magnitudes in each case. It is remarkable that two of these were found by Mme. Ceraski, and one by her distinguished husband.

Harvard College Observatory, 1900 Febr. 12.

Edward C. Pickering.

Observations of the Planet (79) Eurynome

made with the 12 inch Telescope of the Lick Observatory, by *W. F. Hussey.*

1899	M. Ha. M. T.	$\Delta\alpha$	$\Delta\delta$	Cp.	α app.	$\log p.\Delta$	δ app.	$\log p.\Delta$	Red. ad l. app.	*
Jan. 23	10 ^h 3 ^m 43 ^s	+0 ^m 19 ^s 83	+6' 17".2	8.8	8 ^h 59 ^m 38 ^s 01	9.505 _n	+9° 2' 37".1	0.647	+2 ^s 70 — 10".6	1
27	9 42 1	+0 7.87	-5 53.8	8.8	8 55 40.05	9.493 _n	+9 20 45.8	0.641	+2.78 — 10.7	3
28	9 8 54	-0 4.33	+3 15.1	8.8	8 54 41.29	9.548 _n	+9 25 26.9	0.650	+2.78 — 10.7	4
29	7 46 59	-0 12.03	+7 47.9	8.8	8 53 44.49	9.641 _n	+9 30 4.3	0.681	+2.79 — 10.7	5

Mean Places for 1899.0 of Comparison Stars.

*	α	δ	Authority	*	α	δ	Authority
1	8 ^h 59 ^m 15 ^s 48	+8° 56' 30".5	BD. +822115, connected with * 2	3	8 ^h 55 ^m 29 ^s 40	+9° 26' 50".3	AG. Leipzig 4914
2	8 57 12.48	+8 52 54.3	Par. 11110	4	8 54 42.84	+9 22 22.5	AG. Leipzig 4909
				5	8 53 53.73	+9 22 27.1	AG. Leipzig 4902

$\Delta\alpha$ and $\Delta\delta$, in all cases, were obtained by direct micrometer measurements.

Mount Hamilton, California, 1900 Jan. 20.

W. F. Hussey.