

NEW ECLIPSING BINARY IN ORION

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ABSTRACT. The original observations, photometric elements, the phase light curve, moments of 14 weakening are presented.

Key words: Stars: binary: eclipation; stars: individual: NSV 1754.

The variability of NSV 1754 = CSV 000453 was found by G. Hoffmeister (1944).

The star was observed on photographic plates of the Sky Patrol of Astronomical Observatory of Odessa State University. In an interval JD 2436526-2448926 143 estimations of brightness in rays pg are obtained.

The variability of the star is confirmed. The period of the star was determinate with the Lafler and Kinman (1965) method. The brightnes of the comparison stars was determined by reducing to the standart SA 96.

The phase light curve is presented in Fig.1. The variability type of the star is presumeably (EA).

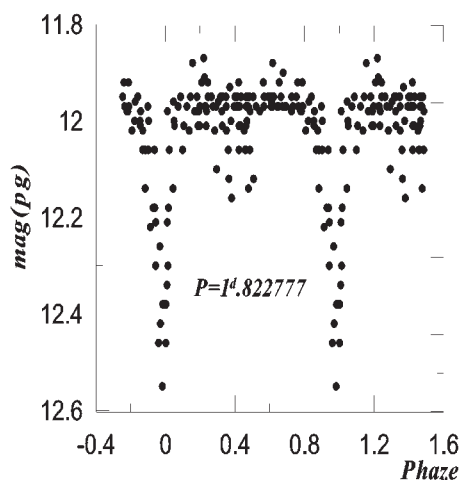


Figure 1: NSV 1754. Phase light curve corresponding to P=1.822777 days.

Table 1:

HJD _{min} 24...	E	O - C
36900.548	0	0.000
36964.290	35	-0.055
38732.442	1005	0.003
39038.591	1173	-0.075
42372.490	3002	0.035
44521.568	4181	-0.011
44986.281	4436	-0.106
45622.549	4785	0.013
47093.485	5592	-0.032
47093.514	5592	-0.003
47146.379	5621	0.001
47474.501	5801	0.024
47855.439	6010	0.001
48183.539	6190	0.001

In Table 1 the minimum points and deviations (O-C) from elements:

$$HJD_{min} = 2436900.548 + 1.^d822777 \times E$$

are listed.

In Table 2 the HJD and photographic magnitudes of the star are presented.

References

- Hoffmeister C.: 1944, AN **274**, 176.
Lafler J., Kinman T.D.: 1965, *Ap. J. Suppl.*, **11**, 216.

Table 2:

HJD 24...d	m_{pg}	HJD 24...d	m_{pg}	HJD 24...d	m_{pg}
36542.379	11.95	39766.590	11.97	46079.346	11.97
36606.282	11.92	40183.447	12.14	46081.316	11.97
36844.570	11.97	40502.546	12.01	46090.269	11.95
36855.616	12.02	40868.555	12.00	46328.583	11.95
36900.548	12.38	40870.586	12.18	46357.540	12.01
36904.416	11.97	40967.295	11.97	46359.527	11.98
36933.375	12.21	40968.286	11.88	46360.547	12.06
36954.273	11.95	41219.590	12.06	46379.503	12.02
36959.319	11.92	41254.524	11.97	46380.492	11.96
36960.310	11.92	41355.254	12.22	46463.265	11.98
36964.290	12.42	41708.343	11.95	46711.587	11.95
36979.326	11.87	42310.588	12.06	46770.434	11.95
37227.591	11.92	42311.584	11.95	46771.419	12.10
37338.319	11.98	42331.523	12.12	46772.415	11.95
37366.241	11.98	42338.554	12.12	46772.440	12.00
37582.549	11.88	42340.558	11.95	46795.370	12.01
37637.429	11.95	42344.552	11.92	47092.518	12.02
37672.373	11.95	42363.492	11.96	47093.485	12.38
37942.578	11.97	42372.490	12.55	47093.514	12.38
37943.584	11.91	42423.335	12.02	47097.503	11.98
37945.593	12.01	43160.304	12.01	47146.379	12.38
37961.497	12.01	43166.301	12.14	47154.360	12.16
37969.541	11.97	44521.568	12.38	47176.312	12.01
37973.550	11.95	44524.569	11.97	47177.304	12.26
37974.542	11.92	44609.332	11.95	47208.239	12.18
37975.548	11.92	44612.321	11.98	47450.539	12.06
38084.248	11.97	44638.255	11.98	47450.566	12.14
38085.248	12.21	44877.572	11.96	47451.558	11.97
38292.559	11.90	44878.580	11.98	47474.501	12.30
38297.564	12.01	44883.564	11.95	47531.332	11.98
38303.585	11.95	44886.578	11.95	47834.513	11.97
38319.544	11.95	44887.551	11.98	47851.439	12.02
38374.471	11.97	44903.527	11.98	47855.439	12.38
38378.435	11.97	44907.505	11.98	47857.438	12.06
38405.370	11.97	44910.502	11.93	47860.419	11.97
38407.415	11.97	44957.379	11.95	47865.396	12.01
38441.291	11.97	44986.281	12.30	47917.280	12.18
38671.573	11.96	44996.250	11.95	47934.226	11.97
38707.514	11.95	45263.537	12.00	48158.594	11.95
38708.555	11.97	45351.300	11.97	48180.549	12.06
38732.442	12.38	45618.564	12.00	48181.533	12.06
38736.413	11.95	45619.575	12.00	48182.549	12.06
39036.577	12.01	45621.565	12.00	48183.539	12.46
39037.604	11.97	45622.549	12.34	48541.547	11.97
39038.591	12.46	45641.490	11.95	48541.571	12.06
39055.490	11.97	45699.340	12.02	48563.514	12.06
39059.581	11.97	46007.500	12.01	48926.513	11.97
39122.396	12.06	46030.407	11.97		