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ON THE VARIABILITY OF V1068 CYGNI

In 1977 D. Hoffleit (I.B.V.S. No. 1282, 1977) published a new value of the period of the eclipsing binary star V 1068 Cyg.

$$\text{Min} = \text{JD } 2437876.1 + 42^{d}.68 \cdot E \qquad (1)$$

The star was estimated from the Moscow plates by S.Shugarov (A.Ts., No. 949, 1977; No. 1094, 1979), who confirmed this period. It was shown that the light elements derived by R. Weber (I.B.V.S. No. 39, 1963) and given in the GCVS (Moscow, 1969) were not correct. However, about half of the minima published by Weber was not consistent with the new period of $42^{d}.68$.

We have estimated this star on the Odessa plates, spanning 1957-1977. Among 711 plates the star was found at minimum on 51, some observations were obtained on two plates taken at the same time in photographic and photovisual systems, respectively. In the photographic system the star's light varied from $10^{m}.98$ to $12^{m}.06$. 34 moments were found when the star was at minimum, 17 of these from two plates. Besides deep minima the decrease of light by $0^{m}.3$-$0^{m}.5$ was observed, but the number of such estimations is little.

The dates of the observed minima and close maxima (M), deviations (O-C) and epochs relative to elements (1), the system of plates (pg, pgvis) and the observer's name (D-V.G.Derevyagin, Ch-R.I.Chuprina) are given in Table I.

There were 9 cases when the star had minimum light on several plates taken on neighbouring nights (from 2 to 4). The longest minimum was observed in October 1962 (JD 2437960, 961, 962, 963), and the decrease was seen on the plates of two cameras.

Using Odessa observations and those published by other

authors as well as original observations by S.Shugarov kindly presented to us, we tried to make a search for the period. No other value of the period has been found. It seems to be necessary to carry out systematic observations of this system.

Table I

	JD	O-C	E	System of plates		Observer
M	2436080.403					
	82.397	-1d.2	-42	pg	pgvis	Ch
	83.400	-0.2		pg		Ch
	84.437	+0.9		pg		Ch
	381.499	-0.8	-35	pg		Ch
	425.449	+0.4	-34		pgvis	Ch
	426.438	+1.4		pg	pgvis	Ch
M	428.445					
M	465.365					
	466.354	-1.4	-33	pg		Ch
	809.436	+0.3	-25	pg		D
	894.194	-0.3	-23		pgvis	Ch
	37193.397	+0.2	-16	pg	pgvis	Ch, D
M	195.380					
	492.511	+0.5	- 9		pgvis	Ch
	493.477	+1.5			pgvis	Ch
	.501			pg		D
M	494.478					
	578.277	+1.0	- 7	pg	pgvis	Ch, D
	.304			pg		D
	960.265	-1.3	+ 2	pg	pgvis	Ch, D
	961.271	-0.2		pg		D
	962.277	+0.8		pg	pgvis	Ch, D
	.304			pg		D
	963.296	+1.8		pg	pgvis	D, Ch
M	964.276					
	39027.314	-1.2	+27	pg		D
	.346			pg		D
	28.345	-0.2		pg		D
	29.328	+0.8		pg		D
	412.297	-0.3	+36	pg	pgvis	Ch
	414.428	+1.8		pg		Ch
M	415.249					
M	709.484					
	711.470	+0.4	+43	pg	pgvis	Ch
M	713.468					
	40478.360	-1.3	+61	pg	pgvis	Ch
	479.355	-0.2		pg	pgvis	Ch
	480.356	+0.8		pg	pgvis	Ch
	41162.483	0.0	+77	pg	pgvis	Ch
	163.472	+1.0		pg	pgvis	Ch
M	544.404					
	545.442	-1.2	+86	pg	pgvis	Ch
M	42355.222					
	357.229	-0.3	+105	pg	pgvis	Ch

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