

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
Number 1842

Konkoly Observatory
Budapest
1980 September 13
HU ISSN 0374-0676

PHOTOELECTRIC MINIMA OBSERVATIONS OF THE
ECLIPSING BINARY SV CENTAURI

SV Cen is an early type contact binary (B1 III + B4) which has shown the largest known period decreases of $(dP/dT)/P = -2 \times 10^{-5} \text{y}^{-1}$ (cf. e.g. Drechsel et al. 1977 and literature quoted therein). Photoelectric UBV observations of this close eclipsing binary were carried out in 1978, 1979 and 1980 to determine further times of minima. For the observations we used the ESO 50 cm telescope and the double channel photometer, the Bochum 61 cm telescope with its standard photometric equipment, and the ESO 50 cm telescope with the single channel photometer, respectively. For a description of the photometric facilities cf. the ESO Users Manual.

We used CoD-59^o3946 as a nearby comparison star. The times of minima T_{min} were reduced to the Sun and are given in the Table below.

Table
Times of primary minima of SV Cen

	T_{min}	S.D.
JD _o	244 3601.6566 ± 0.0018	
	244 4024.5668 ± 0.0003	
	244 4299.8849 ± 0.0020	
	244 4304.8624 ± 0.0002	

The first entry in the table denotes a graphically determined minimum derived from a complete lightcurve (Drechsel et al., 1980b). The other minima were obtained using the method described by Kwee and van Woerden (1956). The standard deviation was calculated from the individual minima determined from the UBV measurements.

The first two minima given in the table show the continuing

decrease of the orbital period as expected from previous observations. The last two minima however were observed delayed by more than 20 minutes (compared to the expected times of minima), which implies that the period has increased between our observations in 1979 and 1980. It is suggested that this change of sign of $(dP/dT)/P$ is caused by a variation in the mass loss from the binary system. In fact SV Cen has been proved recently to be a mass losing star by Drechsel et al. (1980a).

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