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PHOTOELECTRIC LIGHT CURVES OF TY PUPPIS

The variability of TY Pup was discovered by Hertzsprung (1928). Campbell (1928) made the first photometric measurements, and proved that TY Pup is a W UMa-type eclipsing binary, with a period of about 0.58 days. Spectrographic observations were made by Struve (1950), but only one component spectrum, classified as around A9n, was detected. In 1957, Huruhata et al. carried out photoelectric observations in three colours. Later, Van Houten (1971) gave out a correct period of about 0.82 days.

The present BV-band observations of TY Pup were made one nine nights during January to February, 1985 at Yunnan Observatory with a 35cm reflecting telescope and single-channel photoelectric photometer. The comparison and check star were BD-20°2015 and BD-21°1986, respectively. 612 observations were obtained at each effective wavelength.

We determined three minima from the observations. They are given in Table 1. These three minima along with another minimum time (Van Houten, 1971) were introduced into a least squares solution to obtain the following improved ephemeris. This ephemeris was used in calculating the O-C values in Table 1.

$$\text{JD Hel Min. I} = 2446087.1142 + 0^d 81929882 \times E$$

$\pm 10 \qquad \pm 14$

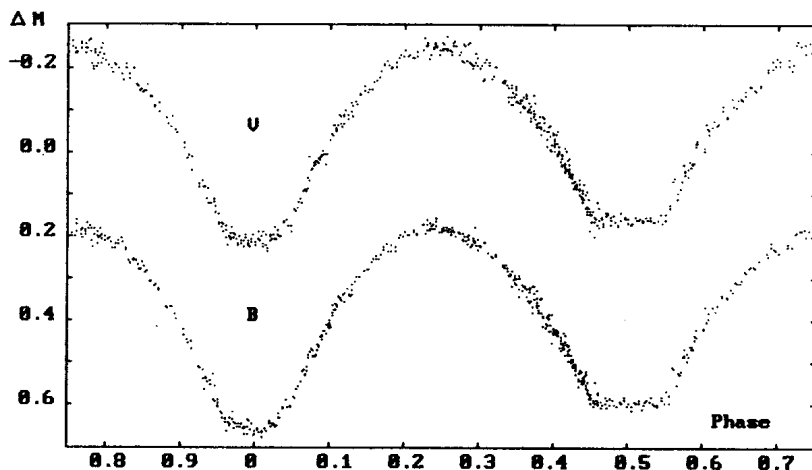


Fig.1 Light curves of TY Pup

Table 1

JD Hel	Minimum	Cycles	O-C
2446000+			
86.2934	I	-1.0	-0.0015
87.1161	I	0.0	0.0019
107.1867	II	24.5	-0.0003

The B, V light curves are shown in Figure 1. The new light curves are different from Huruhata et al.'s light curves. The analysis of the observations will be published in a Chinese or a foreign astronomy journal.

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