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THE INVESTIGATION OF THE BINARY SYSTEM TX Cas

The variability of TX Cas (BD +62°480 = HV 2895) was discovered by Leavitt (Pickering, 1907). McDiarmid (1915) first classified its light curve correctly as β Lyr - type. Though its variability is known over 70 years and the star is relatively bright, only one photoelectric minimum by Fernandez (1982) was obtained until now. Koch et al. (1979) called attention to the lack of photoelectric observations and recommended further study of the system.

For this reason the star was put on the observational program at the 0.6 m reflecting telescope of the Skalná Pleso Observatory. The observations were made in the standard B filter during four nights in 1982 and 1983, respectively. The comparison stars BD +62°485 and BD +62°504 were used. The only part of the light curve around primary minimum was observed. From our observations three epochs of primary minima were determined using the tracing paper method. These epochs of primary minima together with their limits of errors are presented below:

JD Hel.	E	O-C
2445233.434	5128	+0.003
+5		
2445280.271	5144	-0.010
+10		
2445593.439	5251	+0.005
+3		

The O-C values were calculated using the ephemeris given by Rätz (1983):

$$\text{Min I} = \text{JD Hel. } 2430224.512 + 2.9268563 \times E$$

It has been found that there is no significant difference from the above mentioned ephemeris. However, the lack of the accurate observations before

those obtained by Fernandez (1982) and by us prevented the study of period changes.

J.M. KREINER
Institute of Physics
Silesian University
Katowice
Poland

J. TREMKO
Astronomical Institute
Slovak Academy of Sciences
Tatranská Lomnica
Czechoslovakia

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