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VZ CANCRI

The short-period variable VZ Cnc was observed at Trieste with a 50-cm Newtonian reflector equipped with a three-channel UBV simultaneous photometer, at Dr. Todoran's suggestion. We report here on the observations made on two nights (Dec.27, 1976 and Jan.17, 1977). The results are given in graphical form in Figs. 2 and 3. We keep the single observations at the disposal of interested persons.

Assuming the elements for the principal period and for the beat period given by Todoran (1976) and the magnitude and colours of the comparison star HD 73938 (BD +11° 1894) given by Fitch (1955), we derive the elements shown in Table 1, according to the corresponding Table 1 of Todoran. The O-Cs fall on the upper border of the strip shown in his Fig.1 (O-C vs. ϕ_b , where ϕ_b is the phase of the beat period) whereas the V_{max} are in perfect agreement with their behaviour, as it is shown in his Fig. 2 (V_{max} vs. ϕ_b).

Our Fig. 1 shows the phase dependent variation of the colours of VZ Cnc in a (U-B)-(B-V) diagram for the night of Dec. 27, 1976. The curve is a free-hand drawing through the observed values. The numbers referring to the phase show that the variation is counter-clockwise, a feature common to many RRc stars. The colours are B-V=+0.23, U-B=+0.11 at maximum light and B-V=+0.37, U-B=+0.05 or 0.06 just after minimum. They correspond to spectral types A7III and F2III (FitzGerald, 1970), in good agreement with the spectroscopic determinations (Abt, 1955).

Table 1

Max.hel. 2443000+	V_{max}	E	O-C	E_b	ϕ_b
140.6090	7.46	53311	-0.0021	13275	0.9612
161.4850	7.50	53428	+0.0053	13304	0.1057

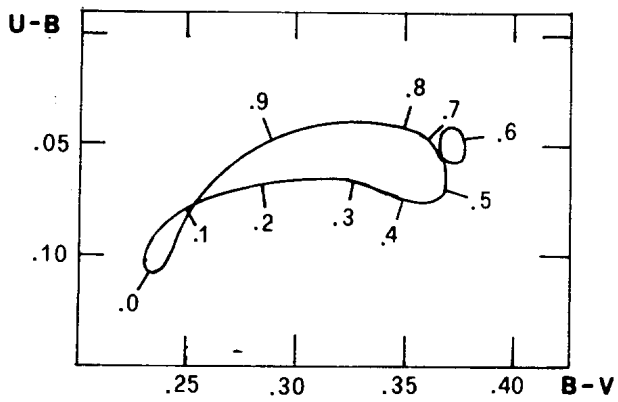


Fig. 1

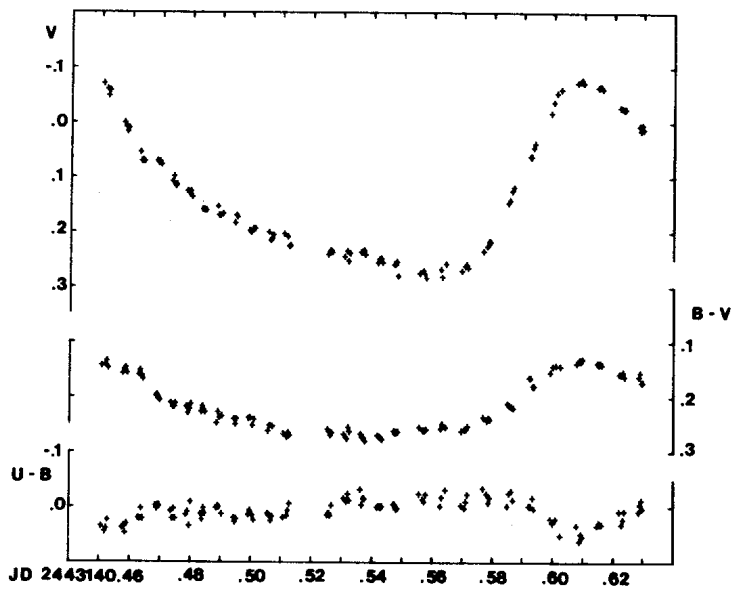


Fig. 2

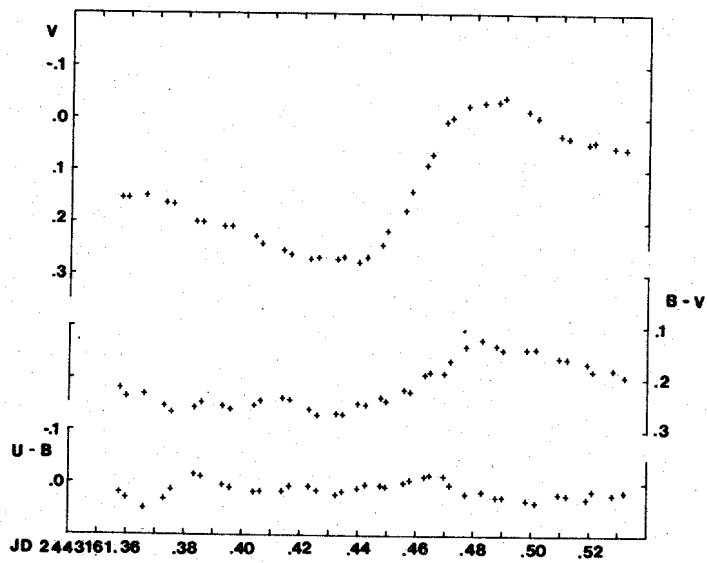


Fig. 3

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