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PHOTOMETRIC OBSERVATIONS OF VW CEPHEI

VW Cep (SAO 9828, BD+75°0752, HD 197433) is a W UMa type eclipsing binary. This system was discovered as a variable star by Schilt in 1926 (Vinkó, 1989).

The observations of VW Cep were made on the two nights 25/26 and 27/28 August 1992, with a 0.4m telescope type Nasmyth at N. Copernicus Observatory and Planetarium in Brno, Czech Republic. The telescope was used with the standard U, B, V filters and uncooled EMI 6256B photomultiplier. The integration time of one measurement was ten seconds.

The comparison and check stars are SAO 9911 (HD 200039) and SAO 9917 (HD 200251), respectively. Photometric data for comparison star was taken from The Bright Star Catalogue (Hoffleit et al., 1982) ( $V=6.05$ ,  $B-V=+0.93$ ), and the  $U-B$  index was derived from photometry of  $\epsilon$  Draconis ( $V=3.82$ ,  $B-V=+0.89$ ,  $U-B=+0.52$ , (Iriarte et al., 1965)) as  $+0.66$  mag. The 105 points obtained in each colour are plotted in Figure 1. Figure 2 shows the 220 points of the color indices.

The following ephemeris was used for computing of the  $O-C$  values because elements in GCVS 1985 indicate very poor agreement with my observations. The analysis of these data will be published in a future paper.

$$JD_{hel} Min I = 2448862^d 5255 + 0^d 27831460 \times E$$

The new times of minima were calculated using the Kwee - van Woerden's (1956) method and are given in Table I.

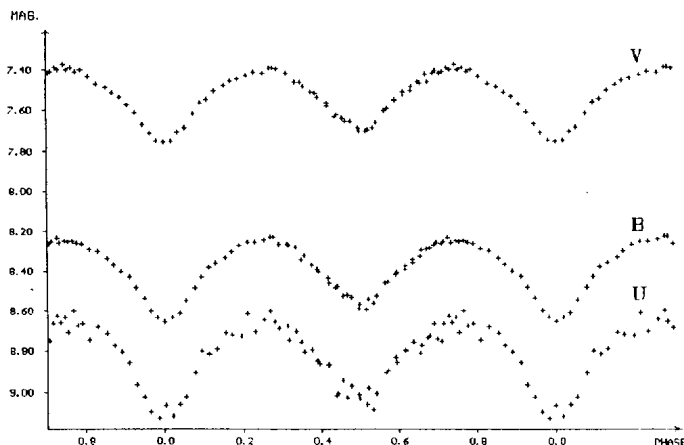


Figure 1. The light curves of VW Cephei

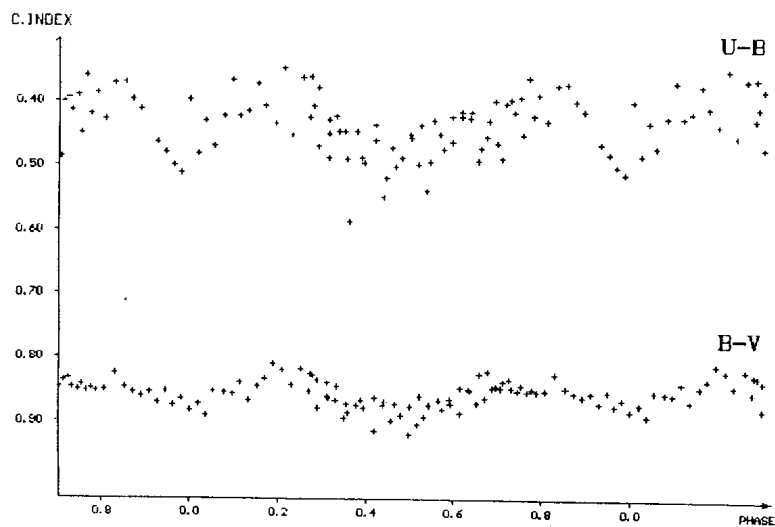


Figure 2. The U-B and B-V colour curves

Table I			
J.D. Hel		Filter	Type of Min.
2400000+			
48860.4386	$\pm 0.0003$	V	II
48860.4378	$\pm 0.0003$	B	II
48860.4364	$\pm 0.0004$	U	II
48862.3862	$\pm 0.0004$	V	II
48862.3870	$\pm 0.0004$	B	II
48862.3868	$\pm 0.0010$	U	II
48862.5257	$\pm 0.0002$	V	I
48862.5256	$\pm 0.0002$	B	I
48862.5252	$\pm 0.0004$	U	I

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## References:

- Hoffleit, D., Warren, W. H., Jr., 1982, *The Bright Star Catalogue*, 5th Revised Edition, Yale University Observatory  
 Iriarte, B., Johnson, H. L., Mitchell, R. I., and Wisniewski, W., *Five-Color Photometry of Bright Stars*, *Sky and Telescope*, July, 1965  
 Kwee, K. K., van Woerden, H., 1956, *Bull. Astron. Inst. Neth.*, **12**, No. 464  
 Vinkó, J., 1989, *Inf. Bull. Var. Stars*, No.3291