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NEW PHOTOELECTRIC MINIMA TIMES OF VW CEPHEI

VW Cep (HD 197433 = BD+75<sup>o</sup>752) is a W Uma eclipsing binary with a variable light curve and short and long term periodic changes in its period. For these reasons it is frequently observed.

Photoelectric observations of VW Cep, in B and V, were carried out during 1981 and 1983. The observations were made with a two-beam, multi-mode, nebular-stellar photometer attached to the 48-inch Cassegrain reflector at the Kryonerion Astronomical Station of the National Observatory of Athens.

The stars HD 192889 and HD 192635 were used for comparison and checking, respectively. Reduction of the observations has been made using Hardie's method (1962) and the two filters used are in close accordance with the standard ones.

During two observational nights (17/18 Sept. 1981 and 12/13 Sept. 1983) the observations were carried out for several hours and thus two complete light curves were obtained which will be appeared elsewhere. Here we shall give the eight (8) new minima times obtained during our observations.

Table I gives the Hel. JD of the 8 minima, the mean errors  $\sigma$ , the differ-

Table I

Hel.JD	$\sigma$ days	(O-C) <sub>I</sub> days	(O-C) <sub>II</sub> days	Min Type
2440000.+				
4859.3171	±0.0005	-0.1189	+0.0763	I
4862.5187	±0.0004	-0.1180	+0.0973	II
4864.4621	±0.0004	-0.1228	+0.0724	II
4865.4454	±0.0003	-0.1144	+0.0816	I
4865.5811	±0.0004	-0.1171	+0.0781	II
4869.3378	±0.0004	-0.1171	+0.0775	I
5586.4147	±0.0006	-0.1269	-0.0912	II
5590.4471	±0.0006	-0.1301	-0.0944	I

ences  $(O-C)_I$  and  $(O-C)_{II}$  and the type of minimum. The times of minima and the mean errors have been calculated using Kwee and Van Woerden's method (1956) and are the mean values of B and V observations. The residuals  $(O-C)_I$  and  $(O-C)_{II}$  have been computed using Kwee's (1966) ephemeris formula:

$$\text{Min I} = (\text{Hel. JD}) 2433898.44100 + 0^d.27831793E$$

and Kukarkin's et al. (1976):

$$\text{Min I} = (\text{Hel. JD}) 2433163.959 + 0^d.27831993E,$$

respectively.

The  $(O-C)_I$  values given in the foregoing Table are in good agreement with the O-C diagram of VW Cep based on Kwee's (1966) ephemeris formula (Van't Veer, 1973, Karimie, 1983).

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