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PHOTOELECTRIC OBSERVATIONS OF VW CEPHEI

The eclipsing binary star of the W UMa type, VW Cep, was observed photoelectrically with the 30-cm reflector at the Mitaka campus of the Tokyo Astronomical Observatory during the nights of December 2, 3, 16 and 17, 1981. The photometer was furnished with an uncooled 1P21 photomultiplier tube and U, B, V filters in close accordance with the standard ones of Johnson. Actual observations were made with the B and V filters only, against the comparison star HD 192635 (Sp=F5). Altogether, 139 observations in V and 143 in B were obtained and they are plotted in Figure 1, where the

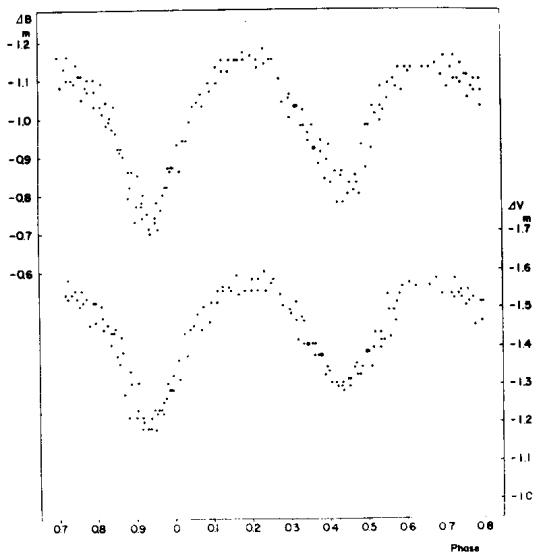


Figure 1

phases are calculated with

$$\text{Prim.Min.} = \text{JD Hel } 2443448.2663 + 0.2783176 E^d$$

which has been taken from the work of Niarchos (1980).

The present observations cover 4 primary minima and 3 secondary. The following table gives their heliocentric times with the O-C values from the above ephemeris.

Observed date	O - C	Type of minimum
Hel.JD 2444000+		
941.1435	- 0. ^d 0180	Prim.
941.9806	- 0.0163	Prim.
942.1181	- 0.0179	Sec.
954.9207	- 0.0179	Sec.
955.0581	- 0.0197	Prim.
955.8936	- 0.0191	Prim.
956.0337	- 0.0182	Sec.

From these O-C values, it is found that no appreciable period change has occurred since 1976 (Pohl et al. 1977). All the observational data given in $m_v - m_c$ are not published here, but are available on request.

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