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THE PERIOD OF THE CEPHEID CV MONOCEROTIS

During 10 nights in the interval 27 February to 10 March 1976 the Cepheid variable CV Mon was observed photoelectrically with the University of Toronto 61-cm telescope on Cerro Las Campanas. On the night of February 28/29 the variable was observed to go through a maximum, reaching  $V = 9.90$  and  $B = 11.06$ . The estimated time of maximum light,  $JD\ 2442837.605 \pm 0.025$ , occurred 9 hours earlier than the time expected according to the elements calculated by Wachmann (1964, *Astron. Abhand. Hamburger Sternw.* 7, 203). New elements for this variable are clearly needed. However, as we demonstrate here, the available observational data do not yield an unambiguous solution for these.

The newly-observed time of maximum listed above indicates that Wachmann's period of  $5^d.3788$  should be reduced to  $5^d.3786$ . The other possible interpretation, namely that the recently-observed maximum occurred almost a full cycle late, leads to a period of  $5^d.3808$ . The uncertainty in both estimated periods is less than  $0^d.0001$ .

The period of CV Mon has also been derived by fitting the new photoelectrically-observed light curve (Turner, 1976, in preparation) to the observations of Arp (1960, *Astrophys. J.* 131, 322). Care was taken to insure that both sets of observations were on the same system. This analysis resulted in a period of  $5^d.3790 \pm 0^d.0001$  s.e., which disagrees with both of the above estimates.

The discrepancy may result from the comparison of photographic (Wachmann) and photoelectric (Turner, Arp) observations. However, it is also conceivable that a period change has occurred for this variable. Further photoelectric monitoring of CV Mon would clearly be of value for resolving this problem.

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