COMMISSIONS 27 AND 42 OF THE IAU
INFORMATION BULLETIN ON VARIABLE STARS
Number 4288

Konkoly Observatory
Budapest
16 January 1996
HU ISSN 0374 – 0676

UPDATE ON THE ECLIPSING BINARY V514 Per

The eclipsing binary V514 Per was originally identified by Prosser (1993), who provides a finding chart for the system. V514 Per is located at RA = $3^h16^m4\overset{s}{.}6$, DEC = $49°56'3''$ and has magnitude approximately V$\simeq$11.4. The observations by Prosser (1993) suggested a relatively short period of 21.6 hrs for the system. In order to check the reality of this solution, intensive monitoring of the system was undertaken over a seven night period in early October 1995. The CCD photometry was obtained with the Whipple Observatory 48inch telescope on Mt. Hopkins, Arizona. Relative photometry was obtained using the same set of comparison stars as in Prosser (1993). Approximately 140 observations were obtained and are available upon request.

Working with this larger dataset of observations, a new period of P $\simeq$ 1.8 days has been found using estimates of the times of primary and secondary minima; essentially double the initial period reported in Prosser (1993). The corresponding light curve is shown in Figure 1, phased at primary minimum that occurred at JD $\simeq$ 2449996.7.

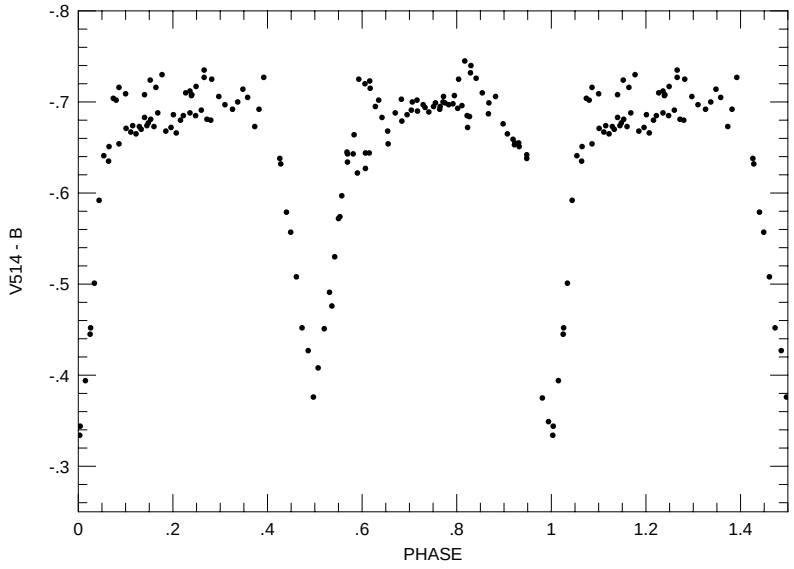

Figure 1

The available observations indicate that the primary and secondary eclipses are very similar, with primary eclipse being only ~ 0.04 mag fainter than that for secondary eclipse. This longer period concurs with information from Popper (1994), in which echelle spectral observations indicated that the system contained approximately equal components having a period double that initially reported in Prosser (1993). Popper notes that the spectral type in this near equal mass system is roughly F5 and that the interstellar (or circumstellar) Na D lines are unusually strong and broader than usual for interstellar lines.

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