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1988 BV PHOTOMETRIC OBSERVATIONS OF CG Cyg

There are several observed light curves of CG Cyg (BD+34<sup>o</sup>4217) reported in the literature. From his visual light curve Williams (1922) suggested irregularities outside the eclipse. It is among the eclipsing binaries with unequal light curve maxima studied by O'Connell (1951). This star fulfills Hall's (1976) three criteria for being a short-period RS CVn - type star. First the period is less than one day long, (0.<sup>d</sup>631141) although it has been shown by Milone and Ziebarth (1974) to be variable.

Second, Naftilan and Milone (1979) studied the system spectroscopically and found CaII H and K emission lines, and third, the two stars were classified as G9.5V (the hotter component) and K3 IV-V (the cooler one).

Castle et al. (1977), Milone et al. (1979), Jassur (1980) and Naftilan and Milone (1985) and finally Sowell et al. (1987) have also presented photometric observations for this star.

The object, an eclipsing binary, was observed from 30 August through 4 September 1988 with the 1.2 m Kryonerion Telescope and a single channel photon counting photometer described by Dapergolas and Korakitis (1987). The photometer employs a high gain 9789 QB phototube and BV conventional filters. Its output is fed directly to a microcomputer enabling rapid data access.

The data reduction method is the standard one. The comparison and check stars are the stars a and b, respectively named by Yü (1923). The data were obtained with an accuracy of  $\pm 0.015$  mag.

Table I lists the dates of observations and phases covered whereas Figures 1 and 2 summarise the results for B and V colours.

Table I

Date	Phase
30-8-88	.46 .77
31-8-88	.98 .38
1-9-88	.69 .85
2-9-88	.19 .50
3-9-88	.83 .96
4-9-88	.33 .74

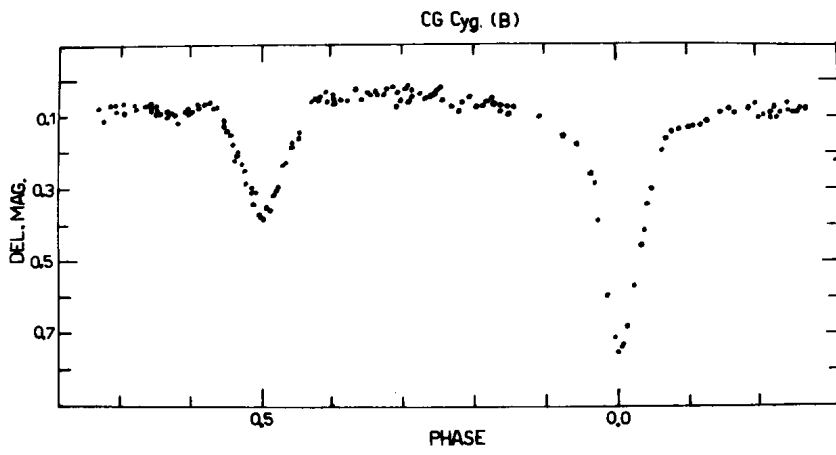


Figure 1

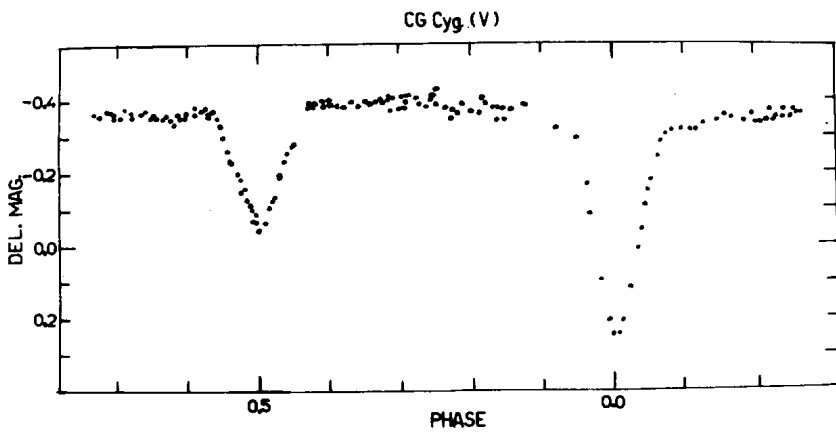


Figure 2

Previously reported light curves show remarkable similarities and the most notable event is the significant difference in depth between the primary and secondary minima ( $\sim 0.3$  mag).

Our data confirm these results and, in addition, we noticed that the intrinsic scatter of the magnitudes seems larger outside the eclipse than during them.

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