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THE J LIGHT CURVE OF CG CYGNI

We present the J light curve of the eclipsing binary CG Cygni ($P=0.63^d$) obtained with the 1.5 m infrared flux collector at the Observatorio del Teide, Tenerife, using a cooled InSb detector. The data were obtained during 4 out of 5 consecutive nights in September 1984. The comparison star was BD+34^o4216 and the principal standard star was BS8430.

In Figure 1 is the J light curve of CG Cygni with the differential magnitude plotted against the phase, calculated using the ephemeris of Milone and Ziebarth (1974)

$$JD(\text{phase}=0) = 2439425.1221 + 0.6311410 E.$$

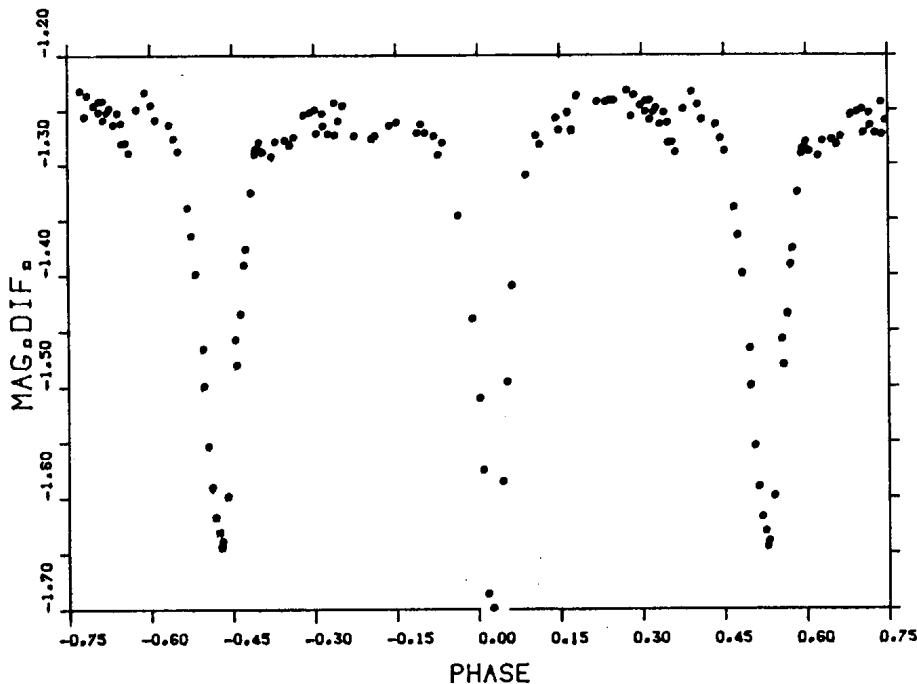


Figure 1: J light curve of CG Cygni.

The J light curve shows the asymmetry of the minima that has been previously observed in optical curves of CG Cygni (Milone et al. 1979; Jassur, 1980) and some other short period RS CVn-type binaries. Figure 1 also shows that the minima have advanced in phase by about 2.5% since 1966, confirming conclusively the progressive change first noted by Milone et al. A fuller account of this work is being prepared for publication.

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