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PHOTOGRAPHIC OBSERVATIONS OF 1980 ECLIPSE OF CI CYGNI

Photographs were taken with two cameras, focal lengths 50 and 130 cm, with two emulsions, Tri X and 103a-O. The former was exposed with the yellow-green filter which gives the brightness very close to visual magnitude.

The results between J.D. 2444300 and 4500 are shown in Fig. 1, in which the upper curve is photovisual and the lower curve is photographic.

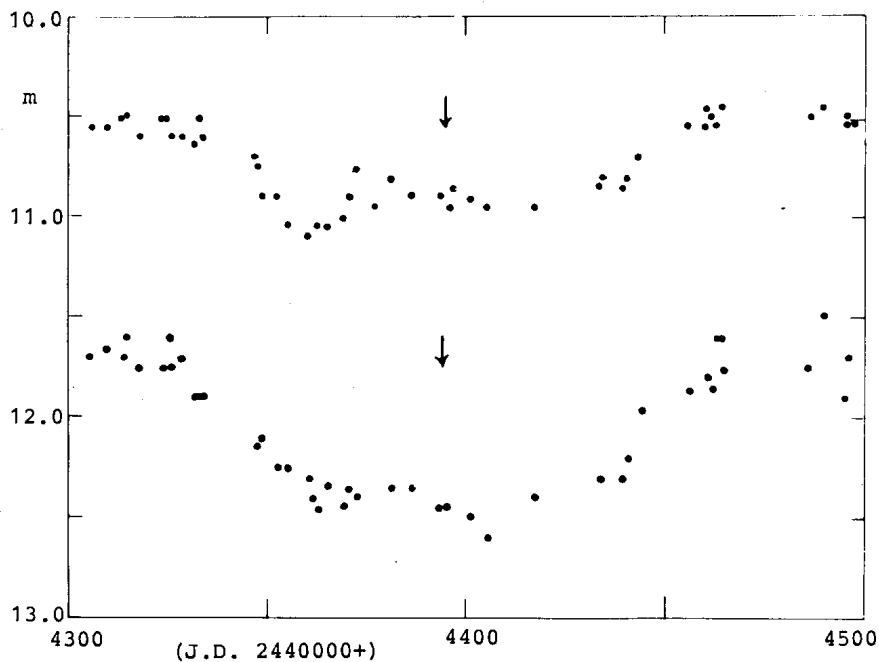


Fig.1.  $m_{pv}$  (upper) and  $m_{pg}$  (lower) light curves of CI Cyg.  
Arrows are estimated dates of minimum.

The depth of the minimum was very shallow compared with the previous minima, being only  $0^m.4$  in visual region and  $0^m.7$  in photographic region, probably because the eclipse occurred when the hot component was near the faintest stage. The minimum magnitudes in both regions are in good agreement with the 1975 and 1977-78 eclipses observed by Belyakina (1976, 1979).

The times of middle of eclipse are estimated and shown by arrows in the Figure. They are on J.D. 2444395 for photovisual curve, and 4394 for photographic curve. Together with the observations by Belyakina in the last two minima, the period  $855^d$  seems to be fairly correct. From the present observations,  $D$  and  $d$  were estimated as  $133^d$  and  $72^d$  respectively, though the estimations were not less difficult due to the irregular variations of short period throughout the eclipse.

The detailed results will be published elsewhere.

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References:

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