

COMMISSION 27 OF THE I. A. U.
 INFORMATION BULLETIN ON VARIABLE STARS
 Number 2672

Konkoly Observatory
 Budapest
 21 February 1985
 HU ISSN 0374 - 0676

TIMES OF MAXIMUM LIGHT OF THE DELTA
 SCUTI STAR CY Aqr

Recently Rolland et al. (1985), and Purgathofer and Schnell (1984) carried out an analysis of the Delta Scuti star CY Aqr including not only their observations, but a compilation of about 350 times of maximum light. With these times of maxima, that covered a time span of about fifty three years they concluded that the best ephemeris was

$$T_{\max} = \text{HJD}2440892.6370 + 0.0610381318 \cdot E - 4.58 \times 10^{-13} E^2.$$

New observations were carried out at the 1 m telescope of the Observatorio de Tonantzintla, Puebla, Mex., with a two-channel high-speed photometer in the white light and an integration time of ten seconds to achieve the highest accuracy possible in determination of the times of maximum light. The star was observed on the nights of 21, 28 and 29 December, 1984.

When these maxima were included in the analysis similar to that described in Rolland et al. (1985) the results were the following :

$$T_{\max} = \text{HJD}2440892.63705 + 0.0610383201 \cdot E - 4.45 \times 10^{-13} E^2.$$

Table I shows the residuals of the O-C analysis and Figure 1 shows graphically their corresponding values.

Table I

Observed times of maximum light of CY Aqr in 1984			
Times of max.light (HJD-2400000.0)	Epoch	O-C (day)	(min)
46055.5612	84 585	0.0010	1.435
46062.5806	84 700	0.0010	1.438
46063.5571	84 716	0.0009	1.320

We feel that this and other stars of this kind have to be monitored continuously to decide unequivocally on its accurate period variation.

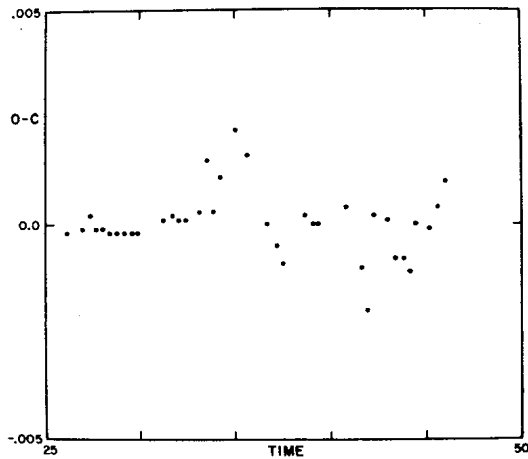


Figure 1 ; O-C vs time diagram with the ephemeris derived in the present study. The O-C axis is in units of day fraction whereas the abscissa, time is in days/1000.

We would like to thank D.Flores for his assistance in the Heliocentric correction, to A.Garcia for the drawing and to R.Escamilla for the typing. J.Miller proofread the text.

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