

COMMISSION 27 OF THE I. A. U.  
 INFORMATION BULLETIN ON VARIABLE STARS  
 Number 1415

Konkoly Observatory  
 Budapest  
 1978 April 21

OBSERVATIONS OF UV Pisc AND XY Cet

Observations of the above stars were recently made at the Kottamia station of Helwan Observatory, Egypt (see also IBVS No. 1381). The observations were made during a three-week period in October-November, 1977, and standard stars were observed on a number of nights during the period in order to relate the photometry to the standard UBV system.

Minima have been timed by an optimal curve fitting method - the essential parameter which is involved for this purpose being the small correction  $\Delta \theta$  to bring the observed phases into correspondence with the theoretical eclipse curves (Budding, 1973), e.g., see Fig. (1).

The details are as follows:

(i) UV Pisc (BD  $6^{\circ}$  189) ; Type G5 ;  $\alpha = 1^{\text{h}}, 14^{\text{m}}, 3$  ;  $\delta = 6^{\circ}, 33'$  (1950)

Main comparison star (BD  $6^{\circ}$  197) ; Type G5 ;  $\alpha = 1^{\text{h}}, 16^{\text{m}}, 9$  ;  $\delta = 7^{\circ}, 14'$  (1950)

UV Pisc:  $m_{\text{V}}(\text{max.}) = 9^{\text{m}}.21 \pm 0^{\text{m}}.03$   
 $m_{\text{V}}(\text{min I}) = 10^{\text{m}}.05 \pm 0^{\text{m}}.03$  (B-V)<sub>out of eclipse</sub> =  $0.85 \pm 0^{\text{m}}.02$

Comp. star:  $m_{\text{V}} = 8.58 \pm 0^{\text{m}}.03$  (B-V) =  $1.07 \pm 0^{\text{m}}.02$

Time of primary minimum:  $\text{HJD}_0 = 2443463.3493$

(ii) XY Cet. (BD  $+2^{\circ}$  460) ; Type A0 ;  $\alpha = 2^{\text{h}}, 56^{\text{m}}, 9$  ;  $\delta = 3^{\circ}, 19'$  (1950)

Main comparison star ( $+2^{\circ}$  464) ; Type A3 ;  $\alpha = 2^{\text{h}}, 59^{\text{m}}, 1$  ;  $\delta = 3^{\circ}, 21'$

XY Cet:  $m_{\text{V}}(\text{max.}) = 8.65 \pm 0^{\text{m}}.02$   
 $m_{\text{V}}(\text{min I}) = 9.54 \pm 0^{\text{m}}.02$  (B-V)<sub>out of eclipse</sub> =  $0.1 \pm 0^{\text{m}}.01$

Comp. star:  $m_v = 8.63 \pm 0.^m02$        $(B-V) = 0.19 \pm 0.^m01$

Time of primary minimum:  $HJD_o = 2443453.3049$

An almost complete light curve of UV Pisc has been observed (cf. IBVS No. 1381) and both minima of XY Cet have been fairly well covered. More observations for XY Cet are planned for later this year.

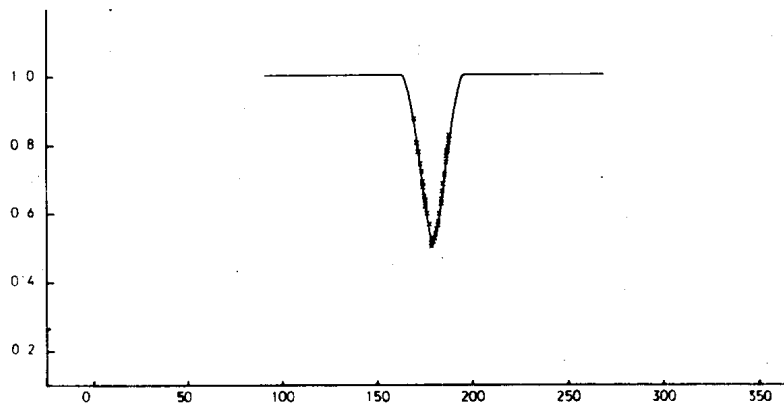


Figure 1. Curve fitting to the primary minimum of XY Cet.

H. AL-NAIMIY, E. BUDDING  
D. JASSUR, A.R. SADIK  
Dept. of Astronomy  
University of Manchester

Reference:

Budding, E., 1973, *Astrophys. Space Sci.*, 22, 87