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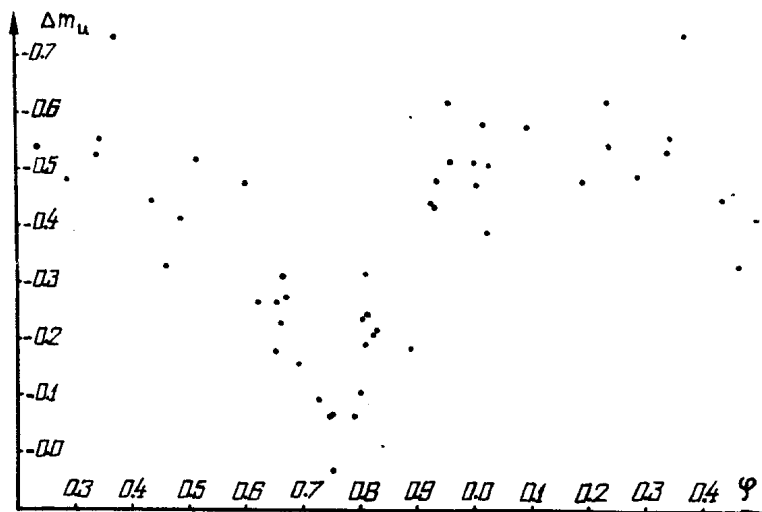
AX MONOCEROTIS

AX Mon is classified as I? (The Gen. Cat. of Var. Stars, 1958). Cowley (1), (2) has obtained in 1963 the corrected orbital period ( $232^d.5$ ) of this binary system and the spectroscopic orbit. The system consists of a B star and a fainter one - the K giant.

The electrophotometry carried on in Abastumani from October 1962 till March 1967 in a quasi UBV system revealed the variations of AX Mon in ultraviolet light with the amplitude  $0^m.4$  and the orbital period  $232^d.5$ .

The Figure shows the light curve in U. The phases are calculated using the elements:

$$\text{Min} = \text{JD } 2438444 + 232.^d.5 \text{ E},$$



were JD 2438444 is the moment of spectroscopic conjunction (1). As it is seen, the minimum of light is reached at 0<sup>p</sup>75, preceding the conjunction moment; hence it cannot be explained as a result of atmospheric eclipse. The spectroscopic data show that close to this phase of the orbital cycle the absorption lines of the ionized metals and hydrogen, characteristic to the gaseous streams, appear.

Thus we come to the conclusion, that the brightness decrease in ultraviolet is apparently connected with the eclipse of the bright star by gaseous streams or a cloud.

The large amplitude in U - light may be considered as an indication that the gaseous stream influences the light of the hotter B-type component, which is radiating mainly in the ultraviolet.

Abastumani Astrophysical Observatory  
July 17, 1967

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(1). Cowley, A. P., A. J. 1963, 68, 276

(2). " Aph. J. 1964, 139, 817