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THE LIGHT CURVE OF STEPANIAN'S STAR

Photoelectric observations of Stepanian's star were made on April 19-22 of this year. The two-beam, multi-mode, nebular-stellar photometer of the National Observatory of Athens was used attached to the 48-inch Cassegrain reflector at Kryonerion Station. Dry ice was used to freeze the photomultiplier. The filters used, B and V, are in close accordance with the standard ones.

Horne et al. (1980a) discovered that this star is an eclipsing binary. Using Horne et al. (1980a) and Horne et al. (1980b) ephemeris formulae the following values for the residuals $(O-C)_a$ and $(O-C)_b$ were found, respectively, for the observed primary minimum:

Hel. J.D.	$(O-C)_a$	$(O-C)_b$
2444349.5908	-0.0028	-0.0070



RA = 15^h 35^m 44^s
 Decl. = +19° 01' 30"

Fig.1. The field of Stepanian's star. (After Stepanian, 1979).
 The underlined star is that one which served as comparison.

Figure 1 gives the variable's field (after Stepanian, 1979) where the star which served as comparison (the underlined) and the variable itself are denoted. Since the two stars are very

close to each other, no extinction reduction has been made. Moreover, no colour reduction has been made since the colour indices for both stars are not known.

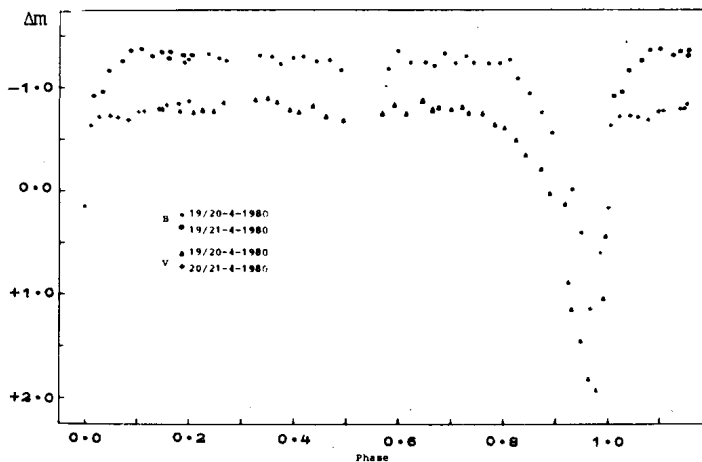


Fig.2. The light curve of Stepanian's star in B and V.

In Figure 2 the obtained light curve is represented in B and V. One can notice a lot of irregularities outside eclipses. Unfortunately there are no observations around secondary minimum. The observations will be continued during August and September.

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References:

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