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THE LIGHT VARIATIONS OF THE Ap STAR HD 134793

The magnetic field of the Ap star 134793 was found to be of moderate intensity by Babcock (1958), who also put in evidence magnetic polarity reversals and large spectral changes in the Eu II and Sr II lines into a period of the order of two days. Spectroscopic observations by Bonsack (1974) give evidence of large variations in the line intensities of Ca II, Si II, Mg II and Eu II.

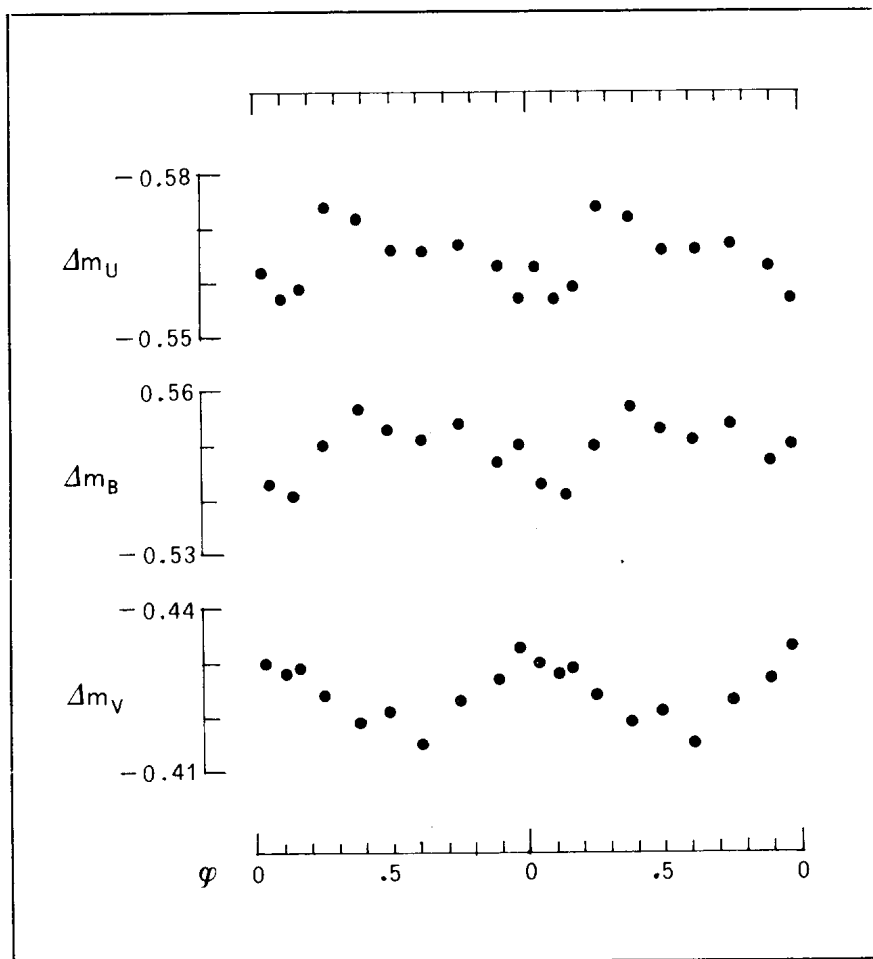
The V magnitude and the colours of this star have been determined by Abt and Golson (1962). A period of 2.7806 days has been determined by Maitzen (1976) from his photoelectric observations.

Photoelectric observations of HD 134793 have been carried out at the 91 cm telescope of the Catania Astrophysical Observatory from 1970 to 1973 in our natural system ($\lambda_{eq}^U = 3500 \text{ \AA} \pm 300$; $\lambda_{eq}^B = 4370 \pm 450$; $\lambda_{eq}^V = 5440 \pm 300$) obtaining 95 measurements in U, 89 in B and 83 in V. The magnitude differences HD 134793 - HD 134827 versus the phase computed by the elements:

$$JD (V \text{ light max}) = 244 1060.^d_5 \pm 2.^d_78 \cdot E$$

are plotted in the Figure. Each point represents the mean value of an average number of eight single measurements. It is remarkable that the V variation goes in opposition of phase with respect to the U and B ones.

The observations by Bonsack (1974) seem to agree with the above value of the period but more spectroscopic and magnetic observations are needed to determine the behaviour of the line intensity variations and to establish their phase relation with the magnetic field and light variations.



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