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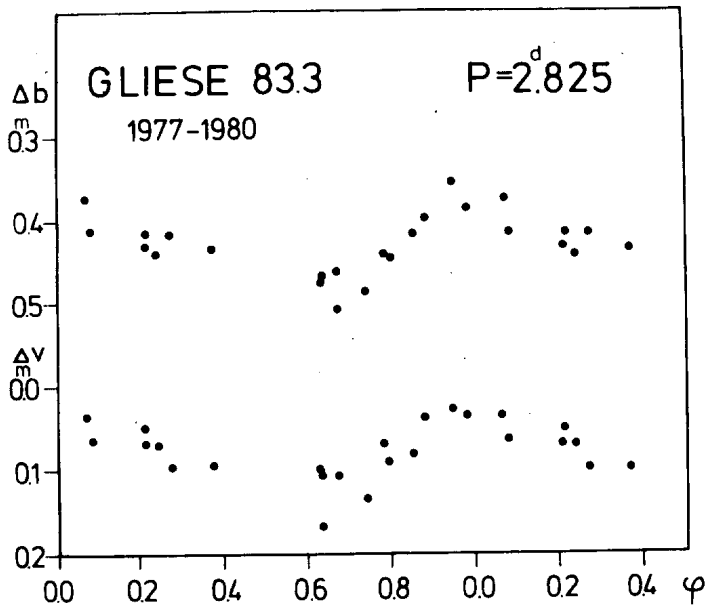
Konkoly Observatory
Budapest
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VARIABILITY OF THE RED DWARF STAR GLIESE 83.3

Bouique (1961) and Bouique et al. (1962) remarked in their publications on photoelectric photometry of stars in the galactic field that Gliese 83.3 was probable variable. They measured the star's brightness and colour and found it to be considerably red: $V=7.47$, $B-V=+1.70$.

Petit's (1976) list of probable variable red dwarf stars also included Gliese 83.3.

As one of the stars of our survey program searching for BY Dra type variables, Gliese 83.3=CSV 102367=BD+61°366=HD 12208 was observed at the Konkoly Observatory with the 60 cm telescope close to the UBV system on 18 nights between 1977-1980. The com-



parison and check stars used were BD+60^o400=HD 11865 (V=7.44, B-V=+1.28) and BD+59^o397=HD 12482 (V=7.36, B-V=+0.53), respectively. The mean scatter of our observations was ± 0.005 in V band and ± 0.008 in B band.

After reducing the data the star was found to be indeed variable. A systematic search for period was carried out and a period of 2.825 days has been found. In the Figure the yellow (Δv) and blue (Δb) light curves in our instrumental system are seen. The amplitude of light variation is about $0^m.12$ in both colours.

This star was also monitored on two nights during 6 hours 20 minutes, but no flare event was recorded. The star's red colour, spectral type and low amplitude light variation indicate, that Gliese 83.3 belongs to the BY Dra type stars. The B-V colour index shows no variation (exceeding the observational error) which is also characteristic of this kind of spotted stars.

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References:

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Bouique, R., Boulon, J., Pédossaut, A., 1962, Publ. Obs. Hte-Provence 5. No. 49
Petit, M., 1976, Inf. Bull. Var. Stars No. 1135