

TYPE AND PERIOD PRECISED FOR IY Aur.

Discovered by Weber (1963), IY Aur was considered as an eclipsing star for which Weber (1965) proposed a preliminary ephemeris: $HJD\ 2438116.19 + 2.7934\ E$. A group of GEOS members used the 76-cm telescope of Jungfrauoch Observatory and performed 48 measurements in B and V. The resulting V light curve represents an EB or a semi-detached EA system. The type was already apparent in an old light curve published by Fracastoro (1972) and a composite visual light curve by Platteuw (1990).

Five photoelectric minima along with visual and photographic observations of primary and secondary minima permitted us to precise the ephemeris of that star using least squares method. The photoelectric minima received a weight of 5 against 1 for the visual and photographic observations (see Table 1). Five visual primary minima were rejected due to their large O-C. The new ephemeris (2) correspond to the one published by Danielkiewicz-Krosniak (1993) who used some of the instants listed below:

HJD 2400000 +	E	O-C (2)	Sources	
38116.19	-3641	-.017	Kholopov et al., 1985	photographic
42035.331	-2238	.017	Diethelm, 1974	visual
45401.339	-1033	.006	Diethelm, 1983	visual
46708.622	- 565	-.011	Frank, 1987	photographic
46876.260	- 505	.024	Mavrofridis, 1987	visual
47077.375	- 433	.016	Braune, 1988	visual
47239.379	- 375	.004	Seifert, 1988	visual
47591.349	- 249	.008	Platteuw, 1990	visual
47778.511	- 182	.015	Platteuw, 1990	visual
47862.322	- 152	.024	Platteuw, 1990	visual
47887.436	- 143	-.002	This paper	photoelectric
47894.408	- 140.5	-.014	This paper	photoelectric
47943.327	- 123	.021	Platteuw, 1990	visual
48605.3366	114	.001	Agerer, 1992	photoelectric
48686.3386	143	-.005	Agerer, 1992	photoelectric
48686.3431	143	-.001	Diethelm, 1992	photoelectric

Table 1

$$\begin{aligned} \text{Min I: } HJD\ 2448286.891 + 2.793377\ E & \quad (2) \\ \pm .004 \quad \pm .000005 & \end{aligned}$$

The V range in magnitude is 9.27 to 9.86 with a secondary minimum at 9.49. The B-V colour index varies from 0.19 to 0.11 (see Fig 1).

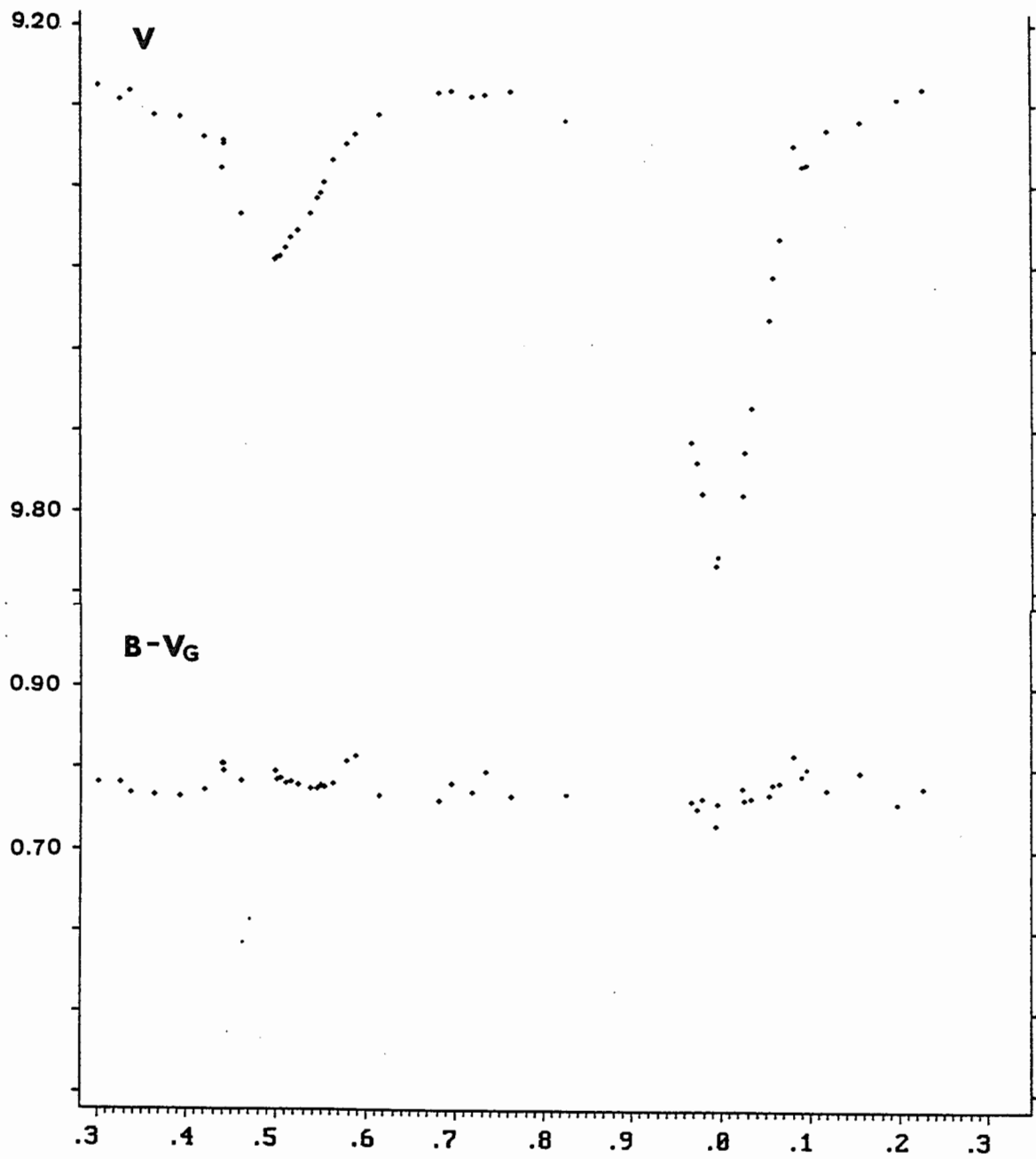


Fig 1: Photoelectric V and B-V (Geneva system) light curves of IY Aur.

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