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COOPERATIVE OBSERVATIONS OF EV Lac

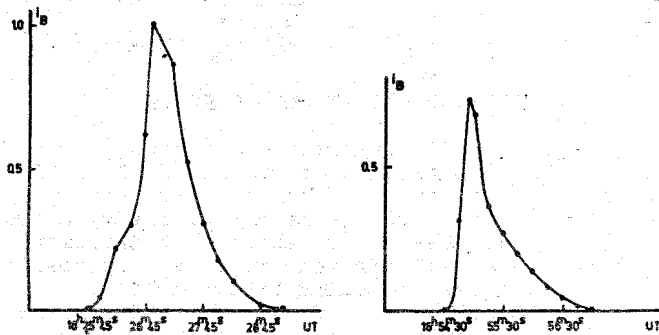
The programme of cooperative observations of flare stars for the year 1970 was published in IBVS 416. According to this programme a series of observations was carried out with the 16" telescope of the Byurakan Observatory in the time interval 23 August - 9 September 1970. The observations were effectuated with a photoelectric polarimeter having a fast rotating polaroid (1).

The photomultiplier used was a multicalyx $\text{CsY} - 79$ having a spectral sensitivity range from 3000 to 8300 Å. with a maximum at 4000-4400 Å.

The observational data are given in the Table below.

Observations of EV Lac

Date of observation	Coverage UT	m	Moment of maximum	Duration of flare	Colour range
23.VIII-70	17 ^h 50 ^m -18 ^h 30 ^m	-	-	-	blue
	18 35 -21 00	-	-	-	yellow
24.VIII	17 30 -21 00	-	-	-	"
25.VIII	17 10 -23 10	-	-	-	"
	23 33 -00 00	-	-	-	"
26.VIII	18 10 -23 35	-	-	-	"
28.VIII	18 00 -23 10	-	-	-	blue
31.VIII	19 43 -22 10	-	-	-	"
2.IX	17 00 -19 35	-	-	-	"
	20 30 -00 10	-	-	-	"
	00 15 -00 45	-	-	-	"
3.IX	18 35 -22 27	-	-	-	"
5.IX	17 00 -23 12	-	-	-	"
6.IX	16 53 -20 30	-	-	-	"
	21 20 -23 00	-	-	-	"
	23 29 -01 10	-	-	-	"
7.IX	17 35 -23 00	-	-	-	"
8.IX	16 40 -01 00	0 ^m 6	16 ^h 54 ^m 24 ^s	2 ^m 30 ^s	"
9.IX	17 05 -23 30	0.75	16 26 50	3 15	"



The star EV Lac has been observed on the whole during 65^h11^m. During this time interval two flares with amplitudes $\Delta m = 0.6$ and $\Delta m = 0.75$ have been registered, both in the blue colour. These magnitudes have been corrected for the influence of the optical companion (2).

The light curves are presented in the Figure. The excess flux of the flare expressed in the units of the normal flux of the star, $i = (n_{fl}/n_{nor} - 1)$, was taken versus UT.

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- 1 M.A. Eritsian, A Photoelectric Polarimeter with a Fast Rotating Polarization Modulator (in press).
- 2 P.F. Chugainov, Izv. Crimean Astrophysical Observatory (in Russian) 26, 171-179, 1961.