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PHOTOELECTRIC OBSERVATIONS OF EV Lac DURING THE 1973 AUGUST
 22 - SEPTEMBER 4 INTERNATIONAL PATROL

According to the observation schedule proposed by the I.A.U. Working Group on flare stars (Chugainov, IBVS 744, 1972) EV Lac has been observed at the Catania Astrophysical Observatory using

- i) a synchronous UBV photometer fed by a 61 cm universal type reflector, or
- ii) three similar one-channel photometers fed by a 91 cm cassegrain reflector and two 30 cm cassegrain reflectors, respectively. The 30 cm reflectors were fixed on a common mounting.

Table 1. Detailed Coverage

Date 1973	Tel.	Light	Coverage (U.T.)	Total coverage	$\frac{3\sigma}{I_0}$
Aug. 23	91	u	00 ^h 23 ^m -0045,	22	.04
	91/30/				
	/30	u/b/v	0045-0134, 0148-0247, 0254-0303;	117	.04/06/05
24	91	u	0027-0134.	67	.04
	91/30/				
	/30	u/b/v	0134-0305;	91	.04/07/02
24-25	61	u/b/v	2158-2301, 2307-2347.	103	.17/03/02
	30/30	b/v	0010-0114.	64	.04/03
	91/30/				
	/30	u/b/v	0114-0139.	25	.08/04/03
25-26	61	u/b/v	2110-2228, 2238-2324, 2333-2338.	129	.13/03/02
26-27	61	u/b/v	2104-2139, 2213-2245, 2250-2354.	131	.16/03/03
	30/30	b/v	0041-0050, 0053-0259.	135	.03/03
29-30	61	u/b/v	2109-2152, 2222-2324.	105	.15/03/03
	30/30	b/v	2333-2400, 0000-0122.	109	.05/03
30-31	91	u	2152-2249.	57	.08
	91/30/				
	/30	u/b/v	2254-2302, 2306-2333, 2357-2400, 0000-0315.	233	.08/05/04
Aug. 31-					
Sep. 1	61	u/b/v	2109-2123.	14	.16/03/03
Sep. 3-4	61	u/b/v	2101-2202.	61	.14/03/03
	30/30	b/v	2145-2216, 2239-2251.	43	.07/04
	91/30/				
	/30	u/b/v	2254-2338, 0056-0218, 0221-0309.	174	.12/07/04

D.C. amplifiers and strip chart recorders with a time-constant of 1 sec.f.s. were used.

Some preliminary results of the observations are here presented.

Table 1 gives the detailed coverage in U.T. Patrol interruption longer than one minute are noted. During 28.0 hours of effective cov-

erage 4 flares were observed. Some characteristics of these flares are given in Table 2. Their light curves, as relative intensities in the instrumental photometric system versus U.T. are shown in the accompanying figures. The error bars indicate the maximum noise fluctuations of the recordings.

The explanation of symbols and further details both on the observing equipment and on the reduction procedure can be found in Cristaldi and Rodonò Astr.Astrophys.Suppl. 10, 47.1973.

R.Barbagallo, A.Cali and C.Lo Presti have cooperated in this work.

Table 2

No.	Tel.	Light	t_{\max} 1973	(U.T.)	J.D.hel.d _b	d _a	$3\sigma/I_{\text{or}}$	$(I_f/I_o)_{\max}$	Energy P erg	Air mass
1	91	u	00	27.9	917.5226	0.4 5.1	0.04	5.09	5.80 1.83x10 ³¹	0.827
2	91	u	24	(0049.3)	918.5375	- 13.6	0.04	(0.40) (1.75)	5.53x10 ³⁰	.841
3	91	u	30	2223.7	925.4366	0.2 8.8	0.08	1.78	1.52 4.82x10 ³⁰	.826
4	91	u	03	2256.9	929.4598	0.4 38.6	0.12	13.86	26.23	.817
	30	b		2256.9		0.4 18.6	.07	2.91	4.68	
	30	v		2256.9		0.4 9.5	.04	0.72	0.97	
		U						15.80	29.90	9.45x10 ³¹
		B						1.89	3.03	6.68x10 ³¹
		V						0.62	0.84	4.13x10 ³¹

Catania Astrophysical Observatory
95125 Catania, Italy

S. CRISTALDI
M. RODONÒ



