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PHOTOELECTRIC OBSERVATIONS OF THE FLARE STAR UV CETI DURING
THE 1972 OCTOBER 1-15 INTERNATIONAL PATROL.

The preliminary results of UV Cet photoelectric observations carried out at the Catania Astrophysical Observatory during the period proposed by the IAU Working Group on flare stars (P.F. Chugainov 1971, IBVS No.605) are given. The observations were made in b light with a 91 cm cassegrain reflector feeding a classical one channel photometer.

The patrol intervals in U.T. are given in Table 1. During the 8.0 hours of patrol time 8 flares were observed, their characteristics are given in Table 2.

The light curves of the observed flares in the B color are shown in Figures 1, 2 and 3.

The explanation of symbols and details both on observing equipment and on the Catania photometric system can be found in Cristaldi S. and Rodonò M., Astron. and Astrophys. Suppl. 10, 1973.

R. Barbagallo, M. Consoli, C.Lo Presti have collaborated to the present work.

Catania Astrophysical Observatory
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Table 1

Date 1972	Tel.	Light	Coverage U.T.	Total coverage	$\overline{3\sigma/I_0}$
Oct. 4	91	b	0018-0029; 0051-0101; 0102-0111; 0122-0155; 0159-0210; 0219-0230; 0249-0258; 0308-0324.	120 ^m	0.05
Oct. 7	91	b	0039-0204.	085	0.07
Oct.9-10	91	b	2058-2105; 2107-2116; 2117-2140; 2148-2229; 2231-2256; 2300-2321; 2322-2333; 2338-2347; 2350-2400; 0000-0027; 0030-0130; 0133-0147; 0154-0205; 0212-0222.	278	0.05

Table 2

no.	t_{\max} October	J.D. 2441...	d_b	d_a	$3\sigma/I_0$ or	I_f $\frac{I_f}{I_0}$ -max	$\frac{\text{Energy}}{P}$ erg	Air mass	f	sk
1/72	4.002350	594.5215	0 ^m .15	2 ^m .30	0.12	0.39	0.19	8.54x10 ²⁸	1.49	1 2
2/72	4.020815	594.5941	0.10	1.80	0.12	1.43	1.24	54.28x10 ²⁸	1.96	5 2
3/72	7.005065	597.5403	0.45	2.00	0.16	0.38	0.22	9.46x10 ²⁸	1.58	0 1
4/72b	7.005500	597.5433	0.14	4.00	0.16	1.51	1.57	68.87x10 ²⁸	1.60	3 1
5/72	7.012070	597.5612	0.30	2.60	0.16	3.71	1.32	57.65x10 ²⁸	1.71	0 2
6/72	7.012340	597.5631	0.10	5.00	0.16	1.36	1.05	45.97x10 ²⁸	1.73	0 2
7/72b	9.213420	600.4039	0.25	4.50	0.14	0.69	0.44	19.35x10 ²⁸	1.72	3 2
8/72a	10.010995	600.5537	0.15	7.25	0.14	2.62	1.04	45.48x10 ²⁸	1.72	3 2

Telescope: 91 cm, blue filter.

