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PHOTOELECTRIC OBSERVATION OF THE FLARE STAR UV Cet IN OCTOBER 1983

The UV Cet monitoring was carried out on 5/6 October 1983 from $23^h\ 16^m$ to $01^h\ 23^m$ UT at Crimean Astrophysical Observatory on the 1.25 m Cassegrain telescope with a one-channel counting photoelectric UBV-photometer. The B-band close to the Johnson standard system, 0.52 s time integration and 10" diaphragm were used.

During the mentioned time interval 5 flares have been recorded, their characteristics are given in Table I:

a. The universal time of flare maximum, UT_{max}
b. The flare duration before and after its maximum, t_b and t_a
c. The equivalent duration of the flare, P
d. The amplitude of the flare, Δm.

The light curves of the flares observed have been processed previously by means of a run-medium on three points and are given in Figs. 1-5. The 0.2 mag on 3σ level is the limiting magnitude for a flare detection.

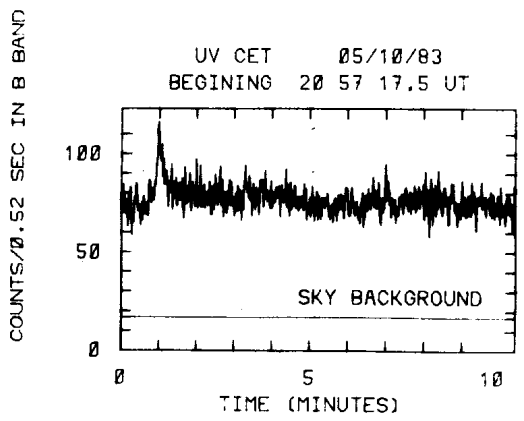

Figure 1

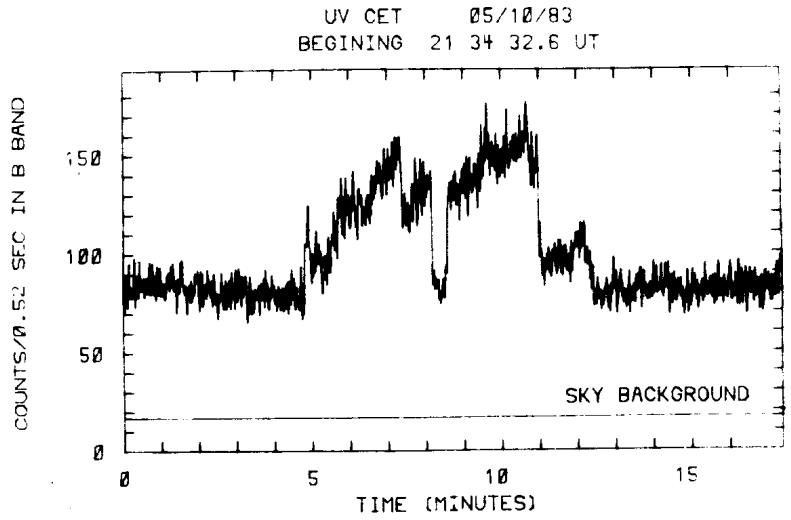

Figure 2

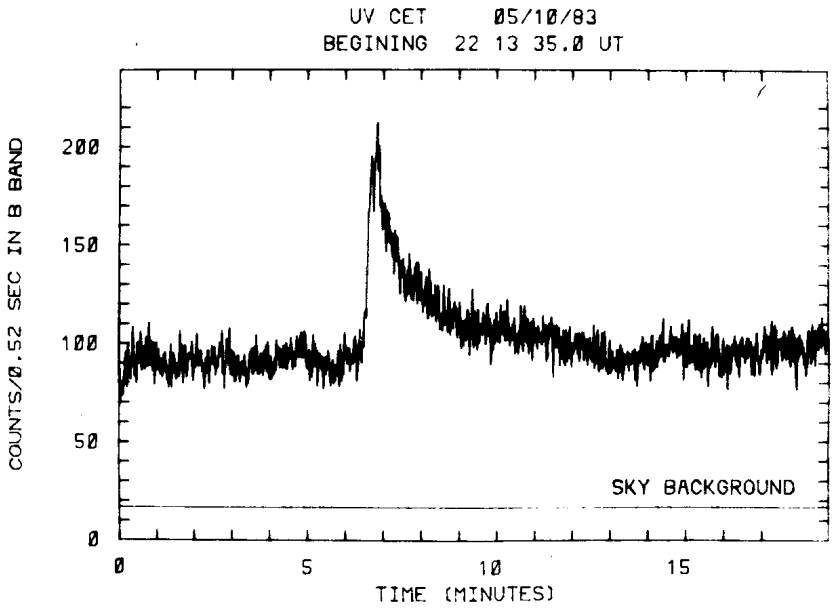

Figure 3

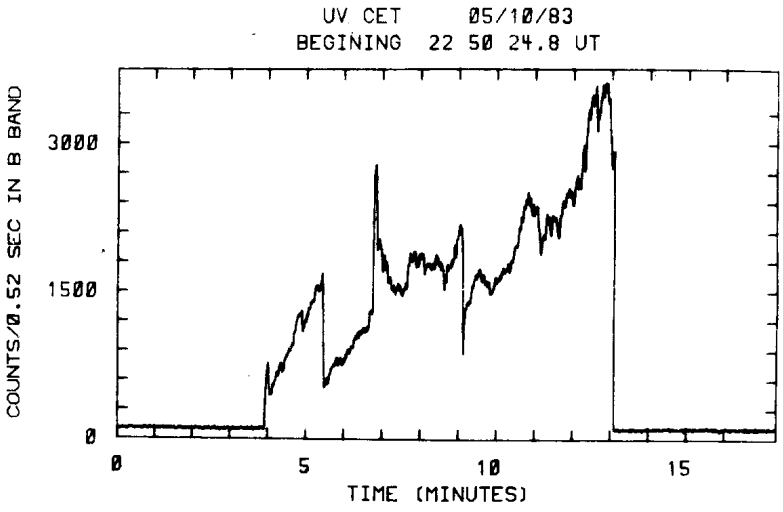

Figure 4

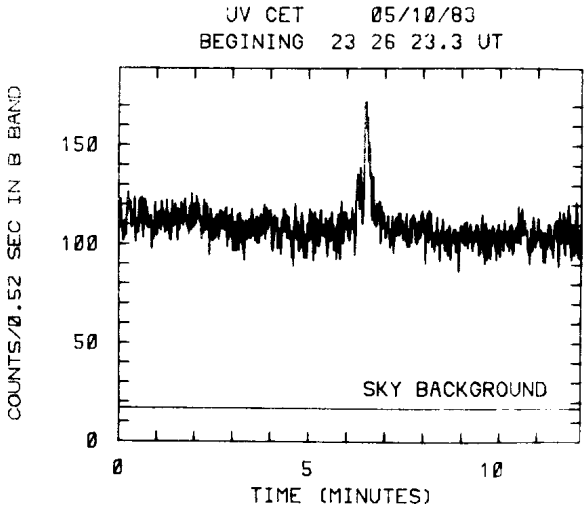

Figure 5

Table I

N	UT_{max}	t_b,min	t_a,min	P,min	Δm
	05.10.83				
1	20 58.3	1	4	0.3	0.6
2	21 45.0	7	2	2.7	0.8
3	22 20.5	0.7	7.2	2.0	1.0
4	23 03.2	8.8	0.2	151	4.0
5	23 32.9	0.7	0.3	0.3	0.5

Figures 1 and 5 show light curves with spikes. Figure 3 shows a flare that may be regarded as a classical one. Figures 2 and 4 show similar curves but their shapes with instant fading suggest a possible malfunction of our equipment.

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