

COMMISSION 27 OF THE I. A. U.  
INFORMATION BULLETIN ON VARIABLE STARS

NUMBER 404

Konkoly Observatory  
Budapest  
1969 November 12

OBSERVATIONS OF UV Cet DURING THE INTERNATIONAL CAMPAIGN  
OCTOBER 3-18, 1969

The flare star UV Cet was observed at our Observatory for 11.5 hours during the last session of the international campaign organized by the Working Group on flare stars (Andrews et al., 1968). The intervals of the effective time coverage are given in Table 1. According to the recommendations to flare star observers contained in Inf.Bull.var. Stars no 326, only interruptions longer than one minute are noted. But, we should like to point out that some flares of UV Cet last about one minute or less, and so it should be more suitable to notice the interruptions of more than half a minute.

In Table 2 we give the data referring to the nine observed flares. The integrated intensity  $P = \int (I_{o+f} - I_o) / I_o dt$  of the flare no.2 enclosed in brackets is a minimum value because the final part of the flare was lost. The light curves of the observed flares are shown in the Figures. When the observations are missing, even for short intervals, the corresponding part of the flare light curves are drawn with a broken line.

The notations in the tables are the same as in IBVS No.403.

As is known, UV Cet is the B component of the visual binary system L 726-8. The angular distance of the two components is less than  $2''$ , therefore the total light intensity of the system ( $I_A + I_B$ ) was measured.

According to the B magnitudes given by Petit (1961) in his catalogue ( $m_A = 14.16$ ,  $m_B = 14.71$ ) we corrected the observed intensities using the following equation:

$$I_B(\text{UV Cet}) = 0.38 (I_A + I_B)$$

Regarding the flare activity of UV Cet (number of flare events per hour of observation) we note that it was higher during the 1968 campaign than during the 1969 campaign. On the other hand, if we consider the integrated intensity, P, as another activity indicator, the situation is reversed, as is known in the following Table:

Campaign	Hours of observations	Frequency of flares per hour	Mean integr. intensity per hour
1968	51.2	1.3	1.2
1969	11.5	0.8	3.5

Mr. R. Barbagallo and Mr. V. Stancanelli have collaborated in the observations.

Table 1  
Intervals of the effective time coverage  
(Interruptions less than one minute are not noted)

Date	Coverage (U.T.)	TC	$m_{lim+} - m_0$
Oct 1969			
03	00 <sup>h</sup> 02-0022; 0024-0049; 0051-0059; 0102-0108; 0123-0144;	80 <sup>m</sup>	1.9
04	2151-2205; 2208-2230; 2234-2247; 2249-2253; 2257-2303; 2305-2308; 2314-2317; 2319-2321; 2329-2338; 2352-2359;		
05	0007-0028; 0029-0035; 0108-0130; 0133-0143; 0145-0155; 0156-0217; 0228-0233; 0235-0243; 0255-0302; 0304-0306;	195	2.2
06	2220-2236; 2238-2246; 2259-2304; 2307-2334; 2337-2342; 2349-2354;		
07	0007-0009; 0028-0034; 0050-0054; 0056-0057; 0059-0110; 0120-0125; 0127-0130; 0131-0148; 0155-0220. 0222-0243; 0246-0300; 0303-0313; 0316-0322; 0324-0330; 0334-0338.	201	2.2
16	2217-2240; 2242-2342; 2346-2400;		
17	0000-0002; 0008-0018; 0020-0025; 0027-0118; 0127-0204; 0208-0219;	213	3.3
	Total coverage	11.5 <sup>h</sup>	

Fig. 1

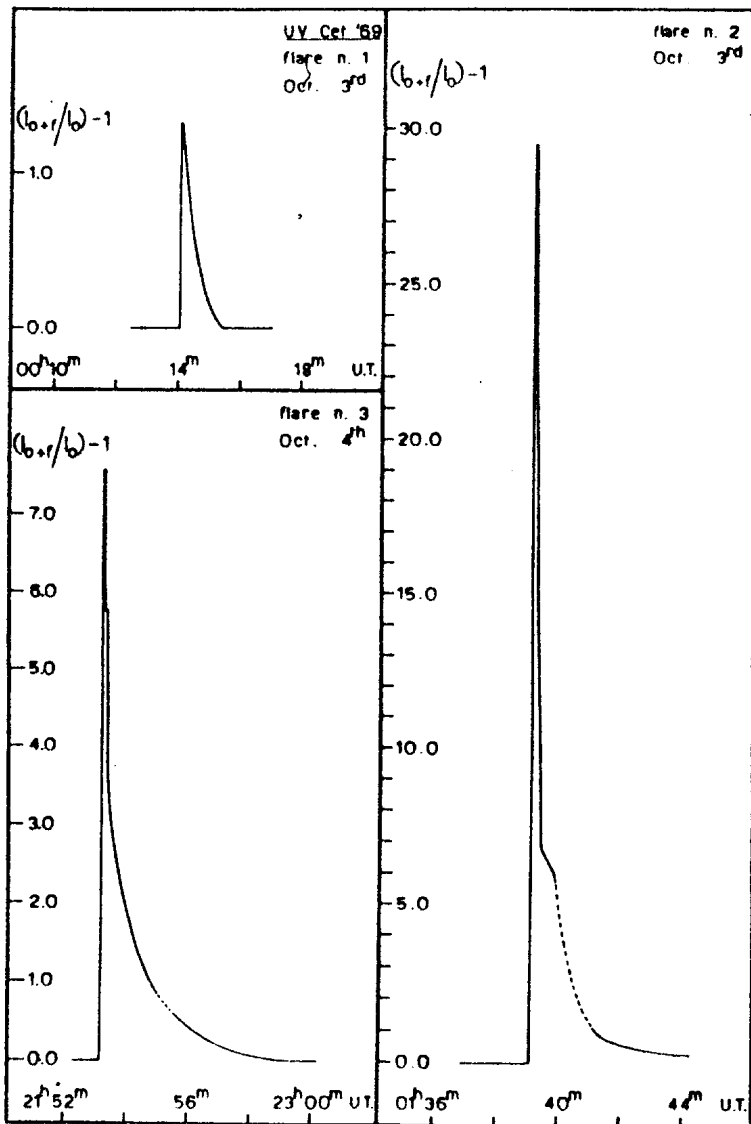


Fig. 2

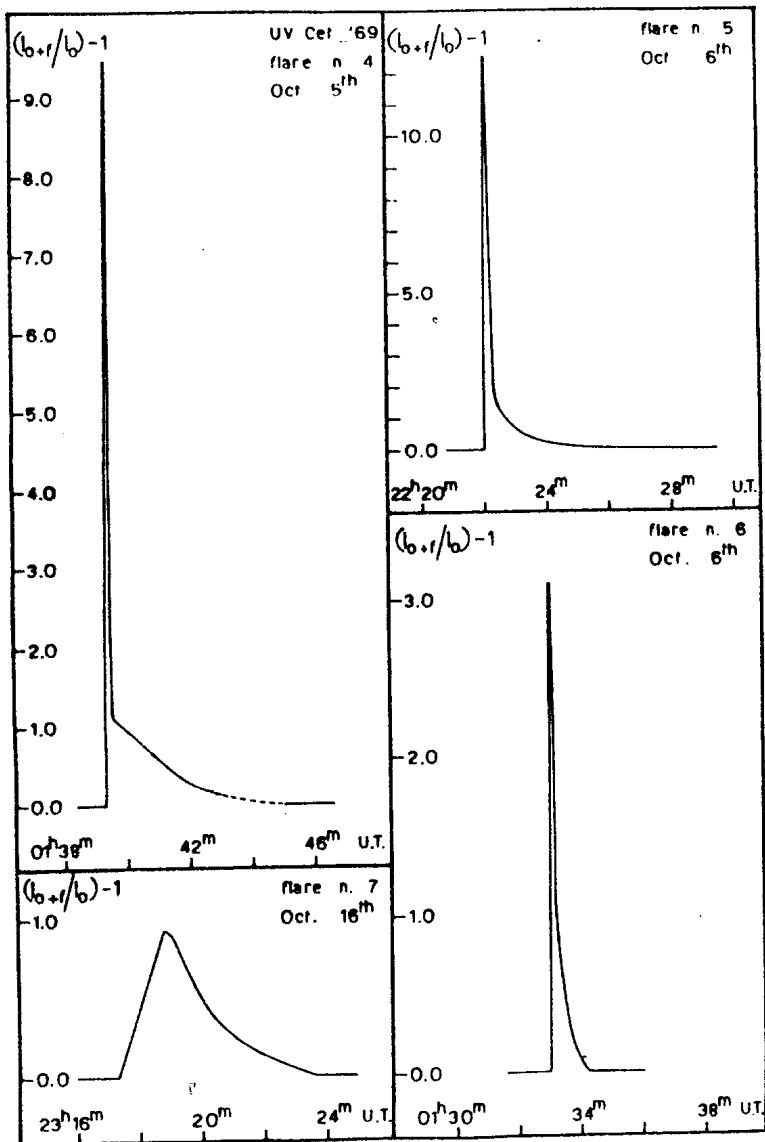


Fig.3

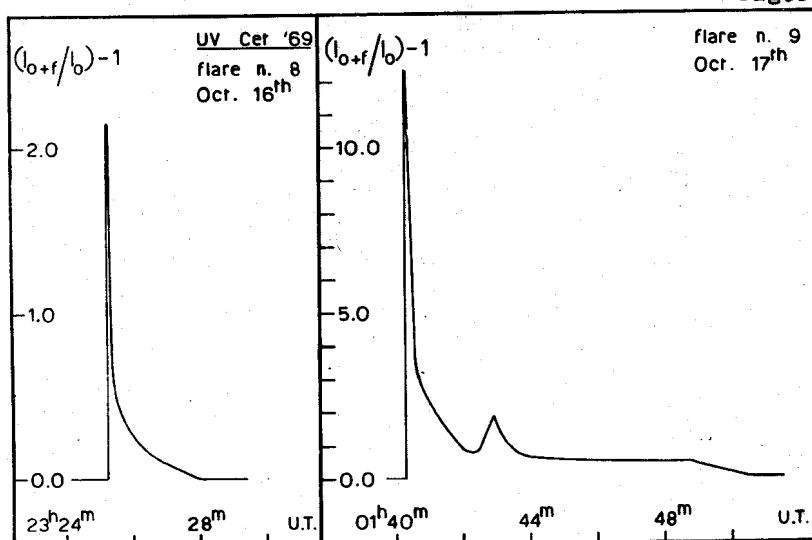


Table 2.  
Observed flares

No	Date Oct 1969	$t_b$	$t_{max}$	$t_e$	$m_1 - m_0$	$(m_1 - m_0)_m$	P	Sky
1	03	00h14m1	00h14m15	00h15m6	1.9	-0.30	0.63	2
2	03	01 40.1	01 40.3	?	1.9	-3.68	(14.10)	3
3	04	21 53.2	21 53.3	21 59.0	2.2	-2.32	5.10	2
4	05	01 39.3	01 39.5	01 45.0	2.2	-2.44	3.30	2
5	06	22 22.0	22 22.1	22 27.0	2.2	-2.75	3.54	2
6	07	01 33.0	01 33.05	01 34.2	2.5	-1.23	0.75	2
7	16	23 17.3	23 18.8	23 24.5	3.6	+0.92	2.20	1
8	16	23 25.3	23 25.35	23 28.0	3.8	+1.70	0.66	1
9	17	01 40.3	01 40.4	01 51.0	3.1	-2.72	10.23	2

References

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October 31, 1969

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