

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

NUMBER 405

Konkoly Observatory
 Budapest
 1969 November 19

UV Cet

A continual photoelectric monitoring of the flare star UV Cet was done with the 91 cm reflector of Okayama Station from 18 to 21 September and from 3 to 12 October 1969, by the request of the Working Group of UV Cet stars. During the 33 hours of monitoring in the magnitude B, 30 flares were observed as shown in the following tables:

The definition of $m_f(B)$, P and σ are as follows:

$$m_f = m_0 - 2.5 \log I_{0+f}/I_0$$

$$P = \int (I_{0+f} - I_0) / I_0 dt$$

$$\sigma(\text{mag}) = 2.5 \log (I_0 + \sigma) / I_0$$

Flares of UV Cet observed at Okayama
 18 to 20 September, 1969

Date 1969 Sept.	Time of Monitoring (UT)	Time of max. (UT)	$m_f(B)$	Flares P	Duration	σ
18	15 ^h 51 ^m -19 ^h 13 ^m	16 ^h 15 ^m .4	0.64 ^{mag}	0.45 ^{min}	1.2 ^{min}	0.10 ^{mag}
		16 29.5	0.52	0.10	0.2	0.15
		17 46.0	0.53	1.29	10.0	0.10
		18 19.3	0.67	4.43	20.0	0.11
		18 26.1	0.80			
19	15 37 -19 20	16 39.6	3.40	21.13	8.3	0.12
20	15 50 -19 06	15 20.7	1.26	0.41	0.7	0.27
		16 05.4	0.66	0.07	0.1	0.14
		17 46.1	1.33	0.55	2.1	0.16
		18 10.1	0.84	1.93	8.3	0.28
		18 58.8	1.53	1.24	1.8	0.35

Flares of UV Cet observed at Okayama
3 to 12 October, 1969

Date 1969 Oct.	Time of Monitoring (UT)	Time of max. (UT)	m_f (B)	P	Flares Duration	σ
6	17 ^h 42 ^m -18 ^h 33 ^m					
8	17 00 -19 00	18 ^h 25 ^m 6	0.70 ^{mag}	0.62 ^{min}	2.0 ^{min}	0.08 ^{mag}
		18 44.9	1.31	0.85	2.3	0.09
9	12 50 -18 30	13 37.5	0.69	0.14	0.5	0.12
10	11 53 -15 19	13 16.3	0.58	0.94	4.7	0.14
		13 45.3	0.89	0.43	1.8	0.12
		14 28.5	0.64	0.10	0.2	0.12
		14 35.3	1.21	0.60	2.7	0.13
	16 32 -18 40	17 03.9	0.60	0.08	0.8	0.13
11	15 47 -18 50	16 50.7	1.02	0.67	2.7	0.06
12	11 55 -18 01	13 51.7	0.58	0.09	0.4	0.09
		13 56.2	2.78	8.45	4.2	0.09
		14 13.9	0.45	0.05	0.5	0.12
		14 15.9	0.74	0.69	2.7	0.12
		15 14.2	1.05			
		15 16.0	0.49	1.02	4.0	0.06
		15 27.3	0.64	0.40	3.0	0.06
		16 00.0	0.80	0.65	2.6	0.06
		17 06.9	0.26	0.28	3.0	0.06
		17 44.1	0.36	0.04	0.2	0.06

The values of m_f , P and σ (mag) are all referred to the total luminosity of L726-8 A+B, and not to L726-8B (UV Cet) only.

Tokyo Astronomical Observatory
14 November 1969

K.OSAWA K.ICHIMURA
T.NOGUCHI E.WATANABE
T.OKADA K.OKIDA