

COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS
NUMBER 349

Konkoly Observatory
Budapest
1969 May 5

PHOTOELECTRIC OBSERVATIONS OF UV Ceti

As part of the UV Ceti international patrol the star was monitored at the Boyden Observatory during eight nights in October 1968. The 16" Nishimura reflector was used, fitted with a standard Johnson B-filter and an EMI photomultiplier tube cooled with solid carbendioxide. The phototube output fed directly into a Hewlett Packard type DY-2460A amplifier.

As will be seen from Table I, 18 events were recorded with a total of 23 maxima over an observing time of approximately 30 hours. Inclement weather prevented further observations.

Δm is considered accurate to within 5%, spurious or instrumental flares being eliminated.

Flare activity was absent on two of the nights during the observation period, but on the night of 24-25 October enhanced activity was evident as a flare rate of one per hour, bringing the number for that night up to 6 with 10 maxima.

The flares had 4 typical characteristics of UV Ceti type flare stars. Additionally, about 30% of them showed a rapid decline after the flash phase followed by a secondary maximum and a gradual decline.

A note (1) concerning these observations has been published.

Ref.(1) J.P.EKSTEEN, MNASSA, 27, 145, 1968.

A.H.JARRETT and J.P.EKSTEEN
Boyden Observatory, Bloemfontein
Rep. of South Africa

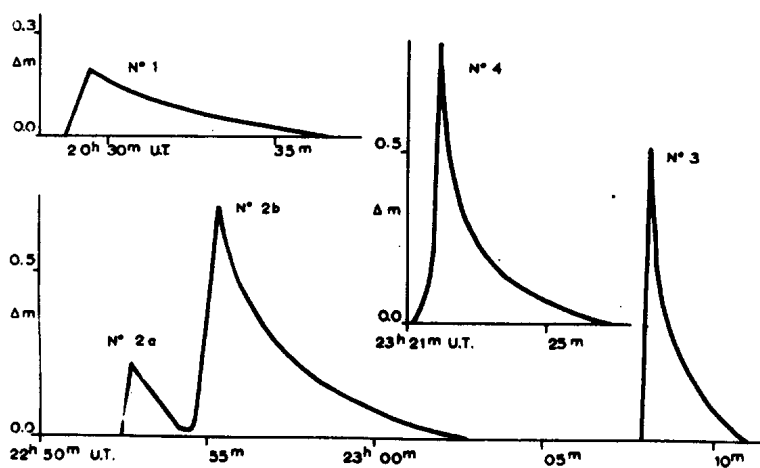
TABLE I.
UV Ceti
Monitoring Time and Observed Flares

Date October 1968	UT	Total Hours Per Night	Flare No.	U.T. of maximum	Dura- tion Min.	Δm
13	19.47-22.12, 22.44-23.40	3 ^h 21 ^m	1	20 ^h 29 ^m 15	8	0.20
			2a	22 52 7	2	0.23
			2b	22 55 4	8	0.70
			3	23 08 5	3	0.86
14	20.34-22.18, 22.28-23.52	3 02	4	23 22 0	7	0.81
			5	19 29 6	3	0.44
			6	20 00 3	3	0.44
			7	23 10 8	7	0.44
15	20.15-21.39	1 24	8	01 03 9	1.5	0.41
19	17.37-21.11, 22.07-23.12	4 39	9	18 23 1	18	0.54
			10a	19 31 5	9	0.61
23	22.03-22.30, 22.36-0.00	1 51	10b	19 39	3	0.90
			11	19 41 9	3	0.39
24	0.00-01.30, 17.34-23.33, 23.47-0.00	7 47	12a	20 43 3	3	0.52
			12b	20 46 9	2	0.52
			13a	22 41 2	3	0.64
			13b	22 46 9	3	0.46
			14	23 08 3	3	0.28
			15	20 48 3	2	1.00
			16a	23 43 5	1	0.30
			16b	23 45 0	3	0.19
			17	0 21 4	3	0.49
			18	0 37 0	6	0.35
25	0.00-01.05, 20.7.3-21.29, 21.36-23.42	4 17				
27	20.54-21.23, 21.37-21.47, 21.57-22.18, 22.24-22.46, 23.00-0.00	2 16				
28	0.00-01.11	1 11				

TOTAL: 29^h43^m (8 nights out of a 16-night period)

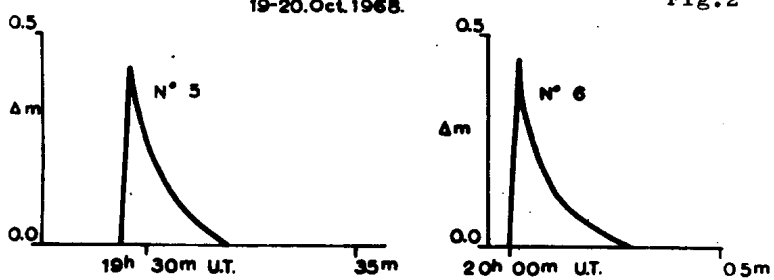
13-14.Oct.1968.

Fig.1



19-20.Oct.1968.

Fig.2



23-24 Oct 1968

Fig.3

