

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

Number 2019

Konkoly Observatory
 Budapest
 1981 September 24
 HU ISSN 0374-0676

FLARE STARS IN THE PLEIADES REGION

A re-examination of all the multiple exposure photographic material obtained during the years 1976 through 1980 at Konkoly Observatory on the Pleiades region has been carried out. All these observations were made with the 60 cm Schmidt telescope of Konkoly Observatory on Kodak 103a0 emulsion using Schott UG-2 filter.

Four new flare stars have been discovered and nine already known flare stars showed flare repetitions. For some reason all these flares escaped detection on this observational material (IBVS No. 1455,1456,1626,1696,1780).

Some data of the discovered new flare stars are presented in Table I: the first column gives the number of flare, column two the Hertzsprung number, columns three and four give the approximate coordinates for 1900.0, column five the approximate minimum brightness in U-band, column six the observed amplitude of the flare-ups in U-band and column seven the date of the flare-ups.

Table I

N	HII	RA	P	Mu(min)	ΔU	Date
		(1900.0)				
1	1516	3 ^h 41 ^m .7	23 ^o 59'.6	16 ^m .7	1 ^m .2	11.12.77
2		3 37.0	23 08.2	16.6	1.6	03.03.78
3					1.2	08.11.78
4		3 41.5	24 34.0	> 20.0	>3.2	27.10.79

Table II

N	HII	RA (1900.0)	D(nepp) (1900.0)	m_u (min)	ΔU	Date
19.	1531	3 ^h 41.7 ^m	23 ^o 40.0'	15.7 ^m	1.2 ^m	04.11.78
55.	2411	3 43.7	24 01.0	16.9	0.9	29.12.75
55.					1.2	24.11.78
70.	212	3 38.0	24 06.6	17.2	1.2	03.11.78
82.		3 41.5	24 13.3	18.4	2.5	04.11.78
103.		3 36.9	23 08.0	17.7	2.1	12.12.77
103.					0.8	12.12.77
103.					1.5	04.03.78
105.		3 41.7	23 23.2	18.2	1.7	27.10.79
107.	2208	3 43.3	24 16.0	18.1	1.7	02.01.76
109.	2927	3 45.1	24 25.0	16.5	2.0	07.11.77
334.	1280	3 41.1	23 51.0	17.4	1.6	29.08.79

The flare data for the already known flare stars are given in Table II. The Byurakan designation was used and the Hertzsprung numbers are also given.

N.D. MELIKIAN

Byurakan Astrophysical Observatory
Byurakan, Armenian SSR
378433 USSR

I.JANKOVICS

J.KELEMEN
Konkoly Observatory
1525 Budapest P.O.B. 67
Hungary