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FLARE STAR OBSERVATIONS IN NGC 7000 AND IC 5070

Here we present some results on the systematic search of flare stars in the NGC 7000 and IC 5070 region.

Our observations were carried out with the 40in./52in. Schmidt telescope of Byurakan Astrophysical Observatory of the Armenian Academy of Sciences (USSR) and with the 20in./28in. Schmidt telescope of the Bulgarian National Astronomical Observatory at Rozhen during August 1979 to August 1980.

The data of observational material are given Table I.

Table I

Telescope	Light	Time of exposures	Number of plates	Number of exposures	T _{eff.}
40"/52"	U	10 ^{min}	74	416	69 ^h 20 ^{min}
		5 ^{min}	3	17	1 25
20"/28"	U	10	4	24	4
	pg	10	12	72	12

Total: 86^h45^{min}

The data of discovered flare stars are presented in Table II.

Table II

B or R number	R.A.1950	D.1950	m _U or pg	Δm _U or pg	Date
B 53	20 ^h 43 ^m .3	42 ^o 26 ^t	18.2 U	2.0 U	14.7.1980
R 1	48.3	43 14	21.0 pg	4.2 pg	19.9.1979
B 54	48.8	40 50	18.3 U	1.7 U	11.7.1980
B 55	53.0	40 17	18.6 U	2.3 U	11.8.1980
B 29*	57.1	42 41	18.5 U	2.5 U	16.8.1980
B 56	59.0	43 58	19.0 U	2.4 U	9.8.1980
B 57	59.6	40 29	16.7 U	1.0 U	6.7.1980
B 58	59.9	42 31	17.9 U	1.4 U	8.7.1980

Column 1. Byurakan (B) or Rozhen (R) designation
Columns 2-3. Coordinates for 1950.0
Column 4. Photographic magnitudes at minimum in ultraviolet (U) or photographic (Pg) light
Column 5. Amplitude of flares in ultraviolet (U) or photographic (Pg) light
Column 6. Date of flare up

* The increase of the brightness of this repeating flare up is more than 20 minutes.

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