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FLARE STARS IN THE PLEIADES REGION

In the summer 1979 we started a patrol observation programme of flare stars in stellar aggregates at the National Astronomical Observatory of Bulgaria (on Mt. Rodopy, at Rojen, 1760 m above sea level). The observations were made with the 50/70/172 cm Schmidt telescope which had been previously mounted in Potsdam, now being one of the telescopes at the observatory in Rojen.

From October to December 1979, 27 patrol plates were taken by the method of equal multiple exposures. The observations were made on ORWO ZU-21 emulsion using Schott UG-2 filter. The limiting magnitude in U-band was about  $17^m.3$  and the field covered 14.4 square degrees centered on Alcyone. The scale on the telescope is 122" per millimetre. The total effective time of observations is  $26^h50^m$ , they include 161 single 10 minute exposures.

The data of observed flare stars are summarized in Table I.

Table I

Rojen Nos	HII	RA	D	$m_u$ min.	$\Delta m_u$	Date	Ident. Byurakan Nos.
1	133	$3^h30^m.5$	$24^{\circ}23'$	$16^m.9$	$1^m.4$	09.12.1979	397
2	335	38.4	23 45	16.0	0.9	17.10.1979	73
3		45.0	22 22	18.4	3.8	17.10.1979	475
4		45.0	23 38	$20.5$	$>6.1$	17.10.1979	
5	3101	45.7	22 53	15.8	2.6	18.10.1979	111

The successive columns give the following data:

- 1 Rojen designation,
- 2 the Hertzsprung numbers,
- 3-4 coordinates for 1900.0,
- 5 photographic magnitude of the stars at minimum,
- 6 amplitude of the observed flare,
- 7 date of the flare events (U.T.),
- 8 identification of the flare stars by the Byurakan lists.

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