

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

Number 2981

Konkoly Observatory  
 Budapest  
 5 February 1987  
 HU ISSN 0374-0676

SEARCH FOR FLARE STARS IN NGC 7000 REGION

Within the framework of the observational programme for investigating the flare stars in the NGC 7000 emission nebula region 95 patrol photographic plates were obtained with the 67/92 cm Schmidt telescope of the Asiago Observatory. The total effective time of observations from August 1972 to September 1974 is 49<sup>h</sup>59<sup>m</sup>. The multiexposure method of observations was used - on most of the plates 5 star images were obtained of 5 minute duration each. Kodak 103 A0 plates with UG 1 filter or without filter were used.

During an earlier examination of the region and a later revision 5 flare-events were found. The following data are summarized in Table I :

1. The serial number of the flare star;
2. The Byurakan designation according to Tsvetkov et. al., IBVS 938,1974; IBVS 1002,1975, only for repeated flare-events;
3. - 4. Coordinates for 1950.0;
5. Photographic magnitude in the undisturbed state in the U- or pg-light;
6. Observed amplitude in the U- or pg-light;
7. Date of the flare-event ( U.T. );

Table I

No	Other designation	R.A. 1950.0	D 1950.0	<sup>m</sup> <sub>U/pg</sub>	<sup>m</sup> <sub>U/pg</sub>	Date
A1	B14	20 <sup>h</sup> 49 <sup>m</sup> .3	44 <sup>o</sup> 00	15.5 <sub>U</sub>	2.6 <sub>U</sub>	5.10.1972
A2		52.0	44 09	16.5 <sub>pg</sub>	0.6 <sub>pg</sub>	19.10.1973
A3	B18	53.7	43 23	20.4 <sub>pg</sub>	4.4 <sub>pg</sub>	4.09.1972
A4		55.3	41 50	19.5 <sub>pg</sub>	3.5 <sub>pg</sub>	9.09.1972
A5		55.8	43 46	16.5 <sub>pg</sub>	2.0 <sub>pg</sub>	4.09.1972

The identification charts of the discovered flare stars and precise photographic photometry will be given later.

L.ROSINO  
Asiago Observatory  
Italy

M. TSVETKOV, KATIYA TSVETKOVA  
Department of Astronomy with  
National Astronomical Observatory,  
Bulgarian Academy of Sciences