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NEW FLARE STARS IN THE NGC 7000-REGION

In the period from July 1975 to November 1977 we continued the systematic search for flare stars in the NGC 7000-IC 5068-70 region.

Our patrol observations were made with the 40"/52" Schmidt-telescope at Byurakan Astrophysical Observatory on Kodak 103aO- or ORWO ZU-2 plates with 2 mm Schott UG 1- or without filter.

Table I gives the data for the plates, number of exposures and effective time of observations in U- and Pg-light.

Table I			
Colour	Number of plates	Number of exposures	$T_{\text{eff}}$
U	47	284	$44^{\text{h}}10^{\text{m}}$
Pg	40	239	$20^{\text{h}}50^{\text{m}}$

In the most cases the time of an exposition was 10 min in U- and 5 min in Pg-light. Total time of all multiple exposure observations is 65 hours.

In Table II the data are presented for five new flare stars discovered.

Table II					Date of flare-up
Designation	RA	D	$m_{\text{pg}}$	$m_{\text{u/pg}}$	
B 41	$20^{\text{h}}44^{\text{m}}1$	$+43^{\circ}38'$	$17^{\text{m}}1$	$2^{\text{m}}6_{\text{u}}$	13.07.1975
B 42	49.5	40 43	20.0	$4.1_{\text{pg}}$	22.08.1976
B 43	51.7	41 33	20.5	$7.0_{\text{u}}$	11.09.1977
B 44	55.5	42 58	20.5	$5.7_{\text{u}}$	5.11.1977
B 45	58.6	43 04	15.5	$2.1_{\text{u}}$	29.08.1975

Column 1: the serial number of the flare stars discovered at the Byurakan Astrophysical Observatory.

Column 2 and 3: the approximate coordinates for 1950.0

Column 4: the approximate photographic magnitudes at minimum light on POSS-reproductions.

Column 5: the observed amplitude of the flare-up in U- or Pg-light.

Column 6: the date of the flare-up.

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