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NEW FLARE STARS IN THE γ CYGNI REGION

This paper presents the results of systematic observations of the γ Cygni region according to the programme of regular search for flare stars in different stellar aggregates. We obtained 123 plates with effective time 116^h between April and October 1981 with the 20in/28in Schmidt-telescope of the National Astronomical Observatory at Rojen.

The multiple exposure plates were made on ORWO ZU21 emulsion through a Schott UG2 filter.

Six new flare stars were discovered.

Table I gives the data for flare stars: the serial number of the flare stars (we continue the designations of flare stars that was begun in our previous paper (Tsvetkova (1980))); coordinates for 1950.0; the approximate minimum brightness in U-light; the observed amplitude of flares in U-light and the date of the flare up.

Table I

Number	RA(1950.0)	D(1950.0)	m_U min	m_U	Date of flare up
R6	20 ^h 15 ^m .5	42 ^o 28.0	19 ^m .6	2 ^m .6	19.9.1981
R7	23.6	41 54.9	18.0	1.0	27.8.1981
R8 ^x	24.6	40 18.5	18.3	3.3	3.8.1981
"	"	"	"	2.1	20.9.1981
R9	25.4	41 32.1	20.0	3.8	3.6.1981
R10	25.6	41 9.4	17.5	2.3	31.7.1981
R11	33.8	41 1.0	17.8	1.0	29.8.1981

^xThe flare star R8 has shown 2 flares, it is situated in the nebulosity IC 1318b.

Taking into account of the known data on flare stars in the γ Cygni region (Melikian et al. (1980), Tsvetkova (1980) and present paper) the lower limit of the total number of flare stars in this region according to Ambartsumian's formulae (Ambartsumian et al. (1970)) is equal to 98.

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