

COMMISSION 27 OF THE I. A. U.
 INFORMATION BULLETIN ON VARIABLE STARS
 Number 1887

Konkoly Observatory
 Budapest
 1980 December 16
 HU ISSN 0374-0676

FLARE STARS IN THE γ CYGNI REGION

Systematic observations of the region of γ Cygni were continued. For flare star search a total of 87 plates in U-light (ORWO ZU 21 + UG2 filter) and pg-light (ORWO ZU 21 without filter) centered on BD +40^o4165 have been obtained with effective time 85^h50^m between September 1979 and November 1980. The observations were carried out with the 40"/52" and 21"/21" Schmidt telescopes of the Byurakan Astrophysical Observatory and 20"/28" Schmidt telescope of the Bulgarian Astronomical Observatory at Rojen.

The number of plates, exposures and the effective time of observations for each telescope are presented in Table I.

Table I

Telescope	Light	Number of plates	Number of exposures	T _{eff}
40"/52"	U	15	90	15 ^h
21"/21"	pg	1	5	50 ^m
20"/28"	U	68	402	67 ^h
	pg	3	18	3 ^h

Seven flare stars were discovered. The following data for the observed flares are given in Table II: the serial number of the flare stars, discovered on the Byurakan observational material (B) and (R) - discovered on the Rojen observational material; coordinates for 1950.0; the approximate minimum brightness in U-light and the date of the flare up.

Table II

Number	RA (1950.0)	D (1950.0)	m_U min	Δm_U	Date of flare up
B2	$20^h 26^m.2$	$40^{\circ} 06'$	$18^m.2$	$4^m.2$	13.09.1980
R1	27.3	40 16	21.0	5.5	29.10.1980
R2	30.1	43 01	21.0	4.7	18.06.1980
B3	30.4	43 06	19.5	3.4	12.09.1980
R3	33.3	42 21	17.6	2.2	15.08.1980
R4	34.3	39 51	>21.0	>5.4	16.08.1980
R5	34.5	40 37	>21.0	>4.8	17.07.1980

KATYA P. TSVETKOVA

Department of Astronomy with
National Astronomical Observatory
Bulgarian Academy of Sciences
Sofia-1000, 7-th November Str.1
Bulgaria