COMMISSIONS 27 AND 42 OF THE IAU INFORMATION BULLETIN ON VARIABLE STARS

Number 3816

Konkoly Observatory Budapest 2 December 1992 HU ISSN 0324 - 0676

INVESTIGATION OF FOUR ERUPTIVE STARS ON SONNEBERG PLATES

GRO J0422+32 Per

The locality of this Compton Gamma Ray Observatory transient (first announcement by Paciesas et al. 1992) has been checked on 888 Sonneberg Sky Patrol plates taken between 1928 and 1992 mainly by P. Ahnert, H. Huth and B. Fuhrmann. No further eruption could be detected. The threshold of the examined exposures is between 12.5 and 14.0 pg. Apart from the seasonal sun gaps the plates are fairly uniformly distributed over the time interval quoted. Especially the gaps of the Harvard material (Shao 1992) are filled by good-quality exposures.

V 360 Her

In continuation of my earlier observations (Wenzel 1961) I checked the candidate of the compilation of Duerbeck (1987) on 256 plates taken mainly with astrographs of an aperture of 40 cm by C. Hoffmeister, G. A. Richter, G. Hacke and W. Wenzel. Duerbeck's star does not show any variations larger than the normal scattering of a near-threshold object, nor are there indications of the presence of a variable in the vicinity. The plates are scattered over the years 1938 to 1992. The remark of Parenago (1947), the supposed nova image might be a defect on the Paris discovery plate of 1892, is unfounded because obviously the photographs taken for the Catalogue du Ciel consist of triple exposures, where blemishes can easily be excluded.

V 2109 Oph

There are 9 Sonneberg plates of the time before the date of the discovery plate (1969 June 21, $m_r = 10^m$ 8-MacConnell 1977), showing the star at the following photographic (blue) magnitudes (system of Harvard Selected Area 157):

1969 May	17.9	UT	invis. >12mpg	
June	8.9		8.9	(2 plates)
	9.9		9.5	(2 plates)
	10.9		9.2	, - ,
	11.9		10.0	
	12.9		10.2	
	17.9		10.8	(2 plates)

V 1274 Sgr

A fairly slow course of the discovery maximum is shown by four additional plates of our collection, as given in the following table; the observations of the discoverer Wild (1954) are designated by W:

1954	Aug. 2 UT		12 ^m pg	W
	Aug. 3		12	W
	Aug. 4.9	invis.≥	11	
	Aug. 26.9		10.4	
	Aug. 30		10.5	W
	Sep. 1.9		10.4	
	Sep. 23.9		10.4	
	Oct. 3.9		10.4:	

(system of Harvard SA 134). It should be noted that the map of Li Jing et al. (1984) places the object at a wrong position, whereas the position of the variable on Duerbeck's (1987) chart coincides with our findings.

This work has been supported by funds of the Bundesministerium für Forschung und Technologie under contract no. 05-5S0414.

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