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ORION FLARE STARS IN FEBRUARY 1971

According to shedule (1) during the Orion region X-ray monitoring the region has been observed photographically. Observations have been carried out at the 40 cm astrograph of the Sternberg Institute South Station; ZU-2 plates have been used. Multiple exposure method has been used to search for flares of stars. Data of observations fulfilled are gathered in Table I. Total monitoring time is about 10^h.

Table I

Date 1971 Febr.	Time of observation (UT)	Exposure numbers	Duration of exposures
18	16 ^h 45 ^m -18 ^h 16 ^m	7	12 ^m
	18 28 -19 11	7	5 ^m
19	17 46 -19 01	6	12 ^m
	19 39 -20 44	5	12 ^m
20	18 09 -19 19	7	9 ^m
22	17 19 -18 23	5	12 ^m
23	17 00 -18 15	6	12 ^m
	18 20 -18 37	2	12 ^m , 5 ^m
	20 00 -20 38	4	6 ^m , 6 ^m , 12 ^m , 12 ^m

The plates obtained have been measured at the iris photometer using Andrews' standards (2) for calibration curves. The known flare stars listed in (3,4) have been measured. Data for two flares found are given in Table II.

Table II

Number of star in (3,4)	Date of observ.	R.A. 1900.0	D.	m _B	Δm _B
206	18	5 ^h 29 ^m .1	-5°41'	15 ^m .5	>1 ^m
231	23	5 ^h 31 ^m .3	-5°16'	16 ^m .2	0 ^m .8

Number of star in (3,4)	Time of flare maxima (UT)	Duration of flares
206	17 ^h 51 ^m -18 ^h 03 ^m	>40 ^m
231	17 ^h 37 ^m .5-17 ^h 49 ^m .5	> 1h

In both cases the following stellar images - the exposure 18^h04^m-18^h16^m for star N 206 and the exposure 17^h50^m-18^h02^m for star N 231 - are overlapped by neighbour stars and therefore they cannot be measured.

1. IBVS, 1971, N 516.
2. Andrews A. D., 1970, Bol.Obs.Tonantzintla y Tacubaya, 34, 195.
3. Haro G., 1968, Stars and Stellar Systems, Vol. VII, "Nebulae and Interstellar Matter", eds. Middlehurst, B.M., and Aller, L.H., (Univ.Chicago Press) p.141.
4. Haro G., 1969, Bol.Obs.Tonantzintla y Tacubaya, 32, 79.

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