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NEW OUTBURST OF V1118 Ori

Since 1983, when V1118 Ori became known as a new EXor (Herbig, 1990, refer to this species as EXors, after the example first recognized, EX Lupi or Subfuor, Parsamian and Gasparian, 1987) and entered into an active stage of fuor-like outbursts, two outbursts have been observed. As of now we have information concerning outbursts during the period 1983-84 (Chanal, 1983, Parsamian and Gasparian, 1987) and 1988-90, when another outburst of the star was observed (Parsamian et al., 1993).

Table 1 shows the stellar magnitudes during minimum light (Parsamian et al., 1992).

Table 1

U	B(pg)	V	R
$\geq$ 18.8	17.6-18.2	16.3-17.3	15.2-15.8

We report here the results of new observations taken over the region of the Orion association, and carried out at Instituto de Astrofisica, Optica y Electronica (INAOE, Tonantzintla), at Instituto de Astrofisica de Canarias and in Sevilla [1]. The observations (in V) were carried out at Instituto de Astrofisica, Optica y Electronica (INAOE, Tonantzintla) with the 26″ Schmidt telescope on Kodak 103aD plates, in Sevilla with 20cm Schmidt-Cassegrain telescope with CCD camera and infrared observations were performed during service time at the 1.5m Carlos Sánchez Telescope (Tenerife, Spain). A two mirror focal plane chopper was used and a liquid N2 cool InSb detector, together with standard J, H and K filters. A set of standard stars was used for atmospheric extinction correction and flux calibration (Arribas and Martinez, 1987).

A new outburst of the star was observed in V beginning in January 1993, when the V magnitude reached 14.7. According to further spectral observations of V1118 Ori taken with the 2.1 m telescope at the Guillermo Haro observatory in Cananea (Mexico), the star was already undergoing an outburst phase on 30 Nov. 1992 (E.P.). The spectrum was characteristic of an emission line star (T Tau type), as was indeed observed during the 1989 outburst (Gasparian et al., 1990). In Figure 1 the light curve of the star V1118 Ori is given.

Brightness fluctuations, which were observed during the previous outburst, were also observed during this period. The amplitude of the outburst in V could be larger than 2 mag, given that our observations were performed subsequent to the period of maximum outburst activity. In that case, the duration of the outburst might be longer than 2.5 yrs. Errors in the measurements are $\pm$0.1 mag.

[1] Private telescope

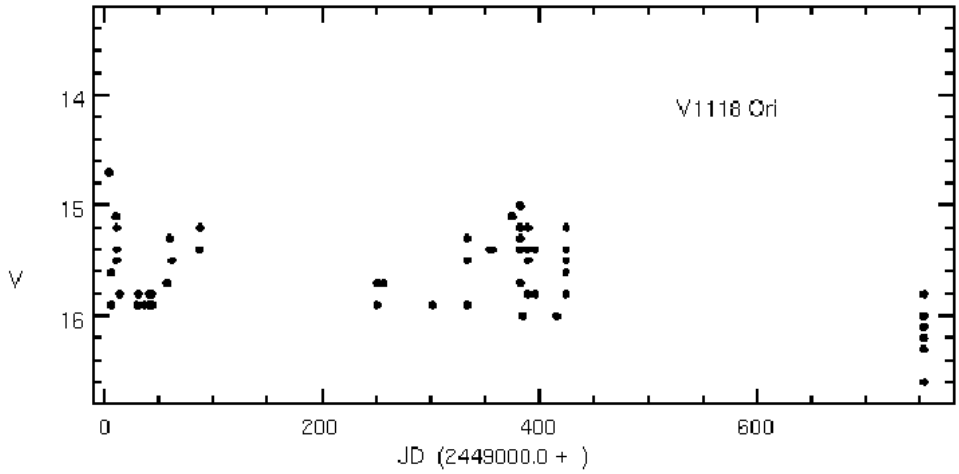

Figure 1. The light curve of V1118 Ori

Infrared magnitudes of the star during the outburst:

Julian Date	J	H	K
2449426.9420	8.52±0.05	8.04±0.04	7.94±0.03

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