

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

Number 4269

Konkoly Observatory
 Budapest
 16 November 1995

HU ISSN 0374 - 0676

NEW OUTBURST OF V1143 Ori

Since 1982 four outbursts in the EXor V1143 Ori were observed (Sugano, 1983, Natsvlishvili, 1984, Verdenet, 1985, Parsamian and Gasparian, 1987, Parsamian et al., 1991, 1992).

In Table 1 the stellar magnitudes in the minimum light are given (Parsamian et al., 1991).

Table 1

U	B(pg)	V	R
17.6-18.6	17.5-18.2	16.3-17.1	15.0-16.0

We report here the results of new observations of an outburst during 1993-95. 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 when the star was already its maximum light. Infrared observation was 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).

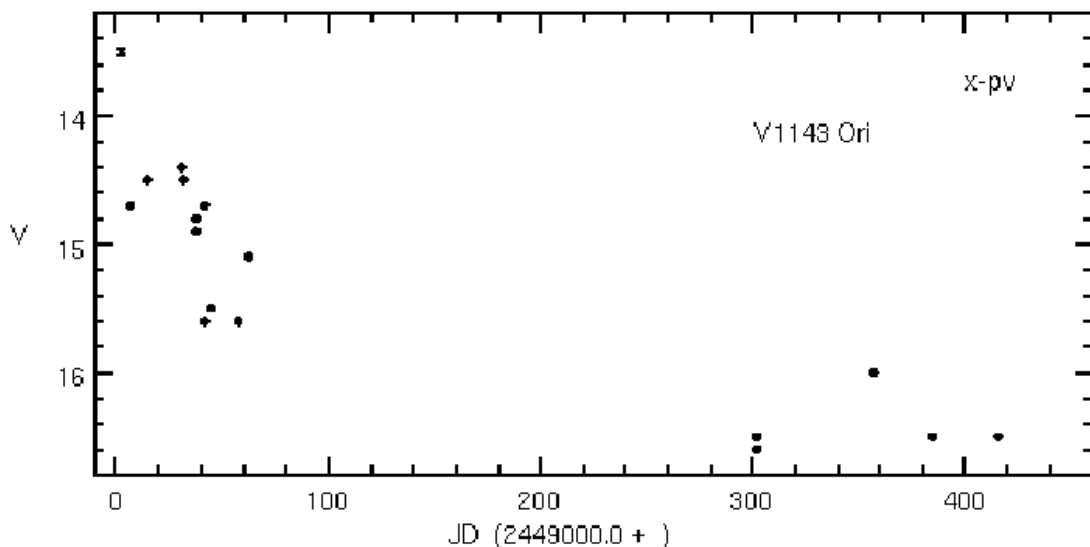


Figure 1. The light curve of V1143 Ori.

In Figure 1 the light curve of V1143 Ori is given. The first two observations were made on 15 Jan. 1993 without filter, when the star's visual magnitude already was 13.5. The amplitude in V could be larger than 3 mag. According to further spectral observations of V1143 Ori taken with the 2.1 m telescope at the Guillermo Haro observatory in Cananea (Mexico), the star was in its minimum light or very near to it on 27 Nov. 1992 (E.P.). The spectrum of the star was typical of an M type, with Balmer emission lines and TiO bands, as it was observed earlier, at minimum during the "active" stage (Peimbert et al., 1991). Therefore, the star undergoes an outburst phase after 21 Nov. 1992. Our first observations were made on 15 Jan. 1993, therefore the interval of increase to the maximum was less than two months if we suppose that the increase of brightness began in December 1992. In the first two outbursts the duration of increase was about three months (Parsamian et al., 1991). Our observations show that until 16 March 1993 the star was in outburst, then there are not observations till 10 Nov., when star already was in its minimum light.

Infrared magnitudes of the star after outburst :

Julian Date	J	H	K
2449426.9191	12.51±0.17	11.79±0.12	11.41±0.12

The authors are grateful to Dr. Mark Kidger for performing the infrared observations and to C. Escamilla for help with the observations.

Antonio MAMPASO
 Instituto de Astrofisica
 de Canarias 38200-La Laguna
 Tenerife, España

Elma S. PARSAMIAN
 Byurakan Astrophysical Observatory
 Armenia
 Instituto de Astronomia, UNAM
 México

References:

- Arribas S. and Martinez Roger, 1987, *A&AS*, **70**, 303
 Natsvlshvili, R.Sh., 1984, *IBVS*, No. 2565
 Parsamian E.S. and Gasparian L.G., 1987, *Astrofizika*, **27**, 447
 Parsamian E.S., Gasparian L.G., Ohanian G.B. and Chavira E., 1991, *Astrofizika*, **34**, 175
 Parsamian Elma S., Gasparian L.G. and Ohanian Greta B., 1992, *Astron. and Astrophys. Transactions*, **2**, 209
 Peimbert M., Parsamian E.S., Gasparian K.G., Melkonian A.S. and Ohanian G.B., 1991, *Astrofizika*, **35**, 181
 Sugano I., 1983, *IAUC*, No. 3763
 Verdenet M., 1985, *IAUC*, No. 4035