

Time Monitoring Observations of SiO Maser Emission toward Orion KL IRc2

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We have carried out time monitoring observations of the $^{28}\text{SiO } v=0, 1, J=2-1$, $^{28}\text{SiO } v=0, 1, 2, J=3-2$ and $^{29}\text{SiO } v=0, J=3-2$ transitions with the 14 m radio telescope at Taeduk Radio Astronomy Observatory (TRAO) toward Orion KL IRc2. The pair of $J=2-1$ and $J=3-2$ transitions of 3 mm and 2 mm bands were simultaneously observed every month from 1999 January to 2000 February. Each transition line shows a different variation. The violent line profile variation of the high velocity component of the $^{28}\text{SiO } v=2, J=3-2$ maser detected in 1996 (Cho et al. 1999) was not detected during our observations. However, the high velocity component of the $v=2, J=3-2$ maser is the most active showing non-detection of its emission in 1999 January 29 and May 11. Our monitoring observations of the $^{28}\text{SiO } v=0, J=3-2$ lines also showed a large variation of peak intensity due to masing. It varied from 2.34 K (1999 March) to 3.84 K (1999 February). The general characteristics of each spectral variation is reported.