TIME MONITORING OBSERVATIONS OF SiO J = 2-1 and J = 3-2 MASER EMISSION TOWARD LATE-TYPE STARS

Ji-Na Kang^{1,2}, Se-Hyung Cho¹, Hyun-Soo Chung¹, Hyun-Goo Kim¹, Hyo-Ryoung Kim¹, Duk-Gyoo Roh¹, Chang-Won Lee¹, Sang-Joon Kim²

¹Taeduk Radio Astronomy Observatory, Korea Astronomy Observatory ²Department of Astronomy and Space Science, Kyung Hee University

Time monitoring observations of SiO (v= 1, 2, 3) J= 2-1 and J= 3-2 transitions were carried out for 10 late-stars with the 14m radio telescope at Taeduk Radio Astronomy Observatory(TRAO). Using the 100 /150 GHz band dual channel SIS receiver, each pair of J= 2-1 and J= 3-2 transitions was simultaneously observed from 1999 January to 2001 February every month. Based on these observations, a correlation between SiO massing and the optical phase of the host star was investigated in order to clarify a dynamical effect on SiO maser lines owing to stellar pulsation. The general characteristics of each spectral variations are also reported.