

[표IM-29] Simultaneous Water and class I Methanol maser Survey of Shocker H₂ Emitting regions

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We executed a simultaneous survey of 22 GHz water maser and 44 GHz methanol maser toward 290 shocked H₂ emitting regions, which were identified from the galactic plane survey at H₂ 2.122 micrometer (UKIRT Widefield Infrared Survey for H₂; UWISH2). The primary goal of this observation is to characterize the H₂ emission sources whether they are sincerely due to the outflows of young stellar objects or other shocked emission from older/evolved objects. We discovered 15 water maser sources and 15 methanol maser sources which provide the detection rate of around 5 percents. Most of detected sources have IRAS sources, infrared dark clouds, and/or submillimeter sources in the beam size of KVN single dish. In this poster, we will present the detailed results of our survey observation and discuss about the star formation rate in the galactic plane.