

P30a Some Results from the VSOP Pre-launch Maser Survey

Migenes V., Fomalont E., Horiuchi, S., Umemoto T., Diamond P., Shibata K.M., Inoue M. and
SWG Team

The Institute of Space and Astronautical Science (ISAS) of Japan will put an 8-meter radio telescope into earth orbit in January, 1997. This telescope will be used with ground telescopes over a three year period in order to produce images of active galaxies and maser sources with unprecedented resolution. The satellite will have receivers at 1.6 GHz, 5.0 GHz and 22 GHz, with LCP only. Approximately 50% of the in-orbit time will be devoted to General Observing Time (GOT) proposals, which will be supported by numerous ground stations and will produce high quality images, about 25% will be used for testing, calibration and repointing of the telescope and 25% will be used to observe a large number of continuum sources and maser (OH and H₂O) sources. This set of observations is called **The VSOP Survey**, led by the Survey Working Group (SWG), and will be conducted with limited ground support. The advantage of a survey program is that a large number of sources can be observed allowing us to determine and study the "global" properties, and their statistical significance, for example: to determine size and structure, flux variability and distribution.

A pre-launch maser survey program has been organized in order to observe a large group of maser sources, with the longest possible ground baselines, to study with high spatial resolution their structure and intensity to determine a list of candidates which can best be observe with the VSOP survey. We have been searching for very strong maser sources with highly compact structure which could "easily" be detected with the very long baselines to VSOP. Many observatories have cooperated with our efforts lending time and resources to this survey. We briefly show and discuss the first results obtained.