

## Study of micro structures of Jupiter's radio source by using Jupiter radio e-VLBI

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The radiation mechanism of the Jupiter's decametric radio emissions has not been fully understood. The important parameter of this study is the coherent size of Jupiter's radio source, which can be determined by VLBI (Very Long Baseline Interferometry) observations. In this study, we developed a Jupiter radio e-VLBI system over the next generation Internet, JGN2plus. The Jupiter radio e-VLBI observations by Kashima Space Research Center, Kochi National College of Technology, and Agawa Jupiter Radio Observatory started from February, 2008. We successfully received Jupiter radio emissions by using this e-VLBI system at around 19:50 (UT), May 29th and at around 17:10 (UT), July 7th, 2008. The results of this data analysis show the possibilities of the existence of two radio sources separated by 300m. The micro structures of Jupiter radio source are also considered by the model of Jupiter radio searchlight beam [Imai et al.,2008]. The continuation of Jupiter radio e-VLBI observations are very important to investigate the micro structures of Jupiter radio source.