

## Investigation of Jupiter's Decametric Radio Source by the Modulation Method

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<http://www.jupiter.jp/>

In previously published works we have developed a model to explain the production of modulation lanes in the dynamic spectra of Jupiter's decametric emission.

In this paper we use the model with newly available data to test the model and to measure emission source and beam parameters. Some of the data were wideband, providing for the first time the opportunity to verify the accuracy of the model in fitting the considerable lane curvature exhibited in such a case.

Narrowband data enabled us to measure for the first time the beam cone half-angle for Non-*Io-A* radiation. The measured cone half-angles for the two sources were both within about 2 or 3 degrees of 60 degrees. This measurement is consistent with the long-held idea that the sources *Io-B*, *Io-A*, and Non-*Io-A* are due to the same rotating hollow-cone beam, and that the only difference between the latter two is the intensification of *Io-A* radiation by the connection with *Io* in comparison with that of Non-*Io-A*.