Investigation on radio interferometer observations of the sudden change in Jupiter's synchrotron radiation

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An unusual change in the total flux density of Jupiter's synchrotron radiation (JSR) has been identified by the ground-based radio observation (Nomura et al. 2007). The Galileo observation showed a signature of substorm onset at the time of the unusual change.

We investigated radio interferometer observations of this event and found that even a two-element interferometer could observe the spatial characteristic of JSR during the event.