

# JUPITER RADIO FINE STRUCTURES OBSERVED IN DECAMETRIC FREQUENCY RANGE BY URAN-2 RADIO TELESCOPE

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## Abstract

We report the observations of fine radio structures in Jovian decametric radio emission. In our study we have used the data obtained by the large ground-based radio telescope URAN-2 during four observation campaigns from September 2012 to March 2016. The campaigns included long-term continuous observation of Jovian radio emission (during periods of Jupiter's visibility) in the frequency range 8–32 MHz, with time–frequency resolution 0.1 s and 4 kHz. A unique observational material has been obtained including many events of Io controlled DAM, non-Io DAM as well as fine spectral radio structures such as trains of S-bursts, quasi-continuous narrowband emissions, narrow-band splitting events and zebra stripe-like patterns. We performed a preliminary statistical analysis of observations of narrow band events. Such parameters as occurrence in Central Meridian Longitude of Jupiter, intensity, duration of the events, frequency range and frequency drift have been defined. The first results are presented.

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