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Modulation effects in the Jovian sporadic decameter emission

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In spite of the long time of investigations the Jovian decameter emission (DAM), many questions concerning the properties and nature of this complex phenomenon still remain poorly explained. This regards, in particular, the S-component of the emission. Among the unclear events are different kinds of modulation effects observable in the dynamic spectra. Modern high sensitive observations of the DAM radiation which were performed with the world largest telescopes UTR-2, NDA, URAN-2, allowed detecting new time-frequency features of the Jovian S-bursts. Along with the known modulation effects (the influence of the Earth's ionosphere, interplanetary medium influence, modulation lanes) a series of the systematically observed modulation phenomena of different frequency and temporal scales was found. The spectral and statistical analyses of these occurrences have been carried out. The obtained experimental results, as well as the theoretical speculations, are presented.