



## **Complex types of modulation events observed in the dynamic spectra of the Jovian decameter emission**

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In spite of the more than 50 years of the extensive exploration of the Jovian DAM radiation, the different kinds of modulation effects, appearing on the decameter dynamic spectra and presenting very cognitive and perspective field of research, are not sufficiently studied. This fact can be explained by the following reasons: first, the used experimental technique was not sufficiently perfect (low sensitivity, small dynamic range and resolution capability of equipments), second, the used mathematical methods for the data processing are not fully adapted to the requirements in order to define the fine-scale sporadic, non-stationary structures. In the last decade the new high sensitive recording facilities, such as the digital spectro-polarimeter (DSP and waveform receiver (WFR) are developed. In the given work we analyzed the data obtained with the DSP and WFR installed into the largest decameter band antenna array UTR-2 (Ukrainian T-shape Radio telescope, second modification, Kharkov, Ukraine). It can be noted that in the present time this combination (antenna + equipments) gives the best sensitiveness, band of analysis, dynamic range, time and frequency resolutions. The present work is centered on the analysis of the different modulation effects combination observed in one dynamic spectrum. Several new intriguing kinds of spectrum modulation have been found over the scale of tens of seconds.