

# **STUDY OF IONOSPHERIC IRREGULARITIES BASED ON HF RADAR NETWORK DATA**

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We present the results of ionospheric irregularity studies conducted at ISTP SB RAS using data from Russian (EKB and MGW) and SuperDARN HF radars. The scope of the studies refers to the irregularities of two types: wave-like traveling ionospheric disturbances (TIDs) and ionospheric decameter-scale field-aligned irregularities (FAIs). The report presents techniques developed at RAS to determine irregularity parameters, results of case-studies, statistical patterns revealed based on long-term observations, and their comparison with existing models. Prospects for the development of the existing Russian HF radar network are discussed. The work was supported by the Ministry of Science and Higher Education of the Russian Federation.