Results of integrated studies of the perturbed ionosphere region using short-wave ranging in a wide frequency band and stimulated electromagnetic emission of the ionosphere

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Abstract

We present the results of studying simultaneously the dynamics of artificial plasma irregularities in the range of decameter scales $I\perp \approx 7-125$ m being perpendicular to the magnetic field and diagnostic stimulated electromagnetic emission of the ionosphere, which were obtained during heating experiments on the "Sura" facility and several remote points where aspect-scattered signals were received. The daily dependence of the times of evolution and relaxation of the irregularities and the diagnostic emission of the ionosphere are analyzed and compared. © 2012 Springer Science+Business Media, Inc.

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