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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

Sergeev E., Zykov E., Akchurin A., Nasyrov I., Vertogradov G., Vertogradov V., Kim V., Polimatidi V., Grach S. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

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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