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Diagnostics of artificial ionospheric irregularities using short sounding radio paths

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Abstract

In this work, we consider the possibilities of diagnostics of artificial ionospheric irregularities with the transverse size $l_{\perp} \approx 50\text{-}200$ m, which are excited in the Earth's ionosphere by highpower short-wave radio-frequency radiation from the "Sura" facility using the method of vertical sounding of the ionosphere by the ionosonde located near the heating facility. Some results of the performed studies showing the features of such a diagnostics are presented. © 2012 Springer Science+Business Media, Inc.

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