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High resolution climatology
- towards climate change services

Response of the Lower and Higher Ionosphere to Strong Tropospheric Disturbances

L.B. Vanina-Dart (1), A.A. Romanov (2), and E.A. Sharkov (1)

(1) Space Research Institute, Earth remote sensing, Moscow, Russian Federation (vandart@seeingear.org, e.sharkov@mail.ru/ 7 495 9133040), (2) The Russian scientific research institute of Space instrument making (RNII KP), Roscosmos,Moscow, Russian Federation(romulas@rniikp.ru,)

The aim of this research is to find the possible influence of a tropical cyclone (TC) on the lower and higher ionosphere. The tomography sounding data of the higher ionosphere at 3 geographical points Uzhnosahalinsk (47°N, 142°E), Poronajsk (49°N, 143°E) , Nogliki (51°N, 143°E) and the rocket sounding of the lower ionosphere at Thumba rocket site (8°N, 77°E) are considered. The main result of analysis demonstrate that the electron concentration at altitudes of 60–80 km and in maximum of F2 –layer falls after several days. Complexities of the morphological analysis of the given phenomenon arise because the TC is wide-spread (in a longitudinal direction, and to a much smaller degree in a horizontal direction) and a long-term source of disturbance.