

R005-41

Zoom meeting C : 11/2 PM1 (13:45-15:30)
14:45-15:00

Statistical analysis of seasonal and solar activity dependences of MSTID occurrence using the SuperDARN Hokkaido pair of radars

#Wataru Hazeyama¹⁾, Nozomu Nishitani¹⁾, Tomoaki Hori¹⁾

¹⁾ISEE, Nagoya Univ.

We presented the latest results of the statistical analysis of medium-scale traveling ionospheric disturbances (MSTIDs) using the SuperDARN Hokkaido pair of (HOP) radars data. We applied the three-dimensional fast Fourier transform algorithm developed by Matsuda et al. (2014) to the dataset and studied diurnal and seasonal variations of propagation directions of MSTIDs and solar activity dependence of the MSTID power spectrum density (PSD). The nighttime MSTIDs propagate mainly southwestward whereas some of them propagate northward, and the daytime MSTIDs propagate mainly southward. On the other hand we also found the negative correlation between the PSD of MSTIDs and solar activity. However, our result of daytime MSTIDs propagation direction seems to be affected by radar field-of-view boundary effects. Attempt to remove these effect is now in progress.