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PEM032-P05

Room:Convention Hall

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The Ionospheric Nighttime Electron Density Enhancement by 3D Tomography Method around European Region

Chia Hung Chen^{1*}, Akinori Saito¹, Charles Lin², Jann-Yenq Liu³

¹Kyoto University, Japan, ²National Cheng Kung University, Taiwan, ³National Central University, Taiwan

The nighttime electron density enhancement of the Earth's ionosphere is characterized by the greater electron density in the nighttime than that in the daytime. Recently, this anomaly feature has intensely been studied by using satellite observations and model simulations. Results show that there are three obvious nighttime electron density enhancement regions around South American, European, and Northeast Asian. The 3D tomography method, employs GPS data observed by a network of dual-frequency GPS receivers, is used in this study to study the three-dimensional structure of the nighttime electron density enhancement around European region, where covers a lot of GPS receivers. Furthermore, we compare with the tomography results and the SAMI2 (Sami2 is Another Model of the Ionosphere) model simulation results. The results will be shown in the poster.

Keywords: 3D tomography, nighttime electron density enhancement, GPS-TEC