SESSION: Ionosphere, Thermosphere, TEC, GNSS

Thu, Feb 21, 14:45-15:00

Electron density map of the topside ionosphere by Faceplate data of SWARM Hossein Ghadjari, David Knudsen, Susan Skone

Email: hossein.ghadjari@ucalgary.ca

Electron density in the ionosphere varies under different geomagnetic conditions, sometimes these variations are strong enough to change the medium for GNSS signals and cause scintillation effects. Determining where and when the electron density varies strongly in the topside ionosphere (F region), can lead us to have better ionospheric models including irregularities. In this work I have used Faceplate data of the SWARM mission to find background electron density maps and its seasonal variation. I will compare the maps through different years of the SWARM mission.