

## GNSS 受信機によって観測された全電子数の緯度変化

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## Latitudinal Variation of Total Electron Content Observed by a World-Wide GNSS Receiver Network

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Latitudinal variation of the plasma density in the F region is characterized by Equatorial Ionization Anomaly (EIA), which is a phenomenon that the ionospheric plasma density is larger around  $\pm 15$  deg. than at magnetic equator. In this study, we investigate latitudinal variation of Total Electron Content (TEC) observed with Global Navigation Satellite System (GNSS) receivers. Using carrier phase and pseudorange data of dual frequency Global Navigation Satellite System (GNSS) signals, total electron content (TEC) along ray paths between satellites and receivers are obtained. We have analyzed the GNSS data provided by the International Geoscience Services (IGS), the University NAVSTAR Consortium (UNAVCO), Scripps Orbit and Permanent Array Center (SOPAC), and other global and regional data centers (more than 50 data providers in all). Absolute values of TEC are obtained from removing the inter-frequency biases from the original TEC by a method of Otsuka et al. (2002). In 2018, in the solar minimum conditions,