

## Total electron content of plasmasphere and ionosphere before and after geomagnetic storm by using Quazi-Zenith satellite

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Quasi-Zenith satellite system (QZSS) is the regional navigation satellite system covering Japan and Oceania. Altitude of QZS is 32,000km at the perigee and 40,000km at the apogee. Thus, QZS observation is affected by both ionosphere and plasmasphere. Plasmaspheric contribution on QZS observations is considered to be different from that on GPS observations because altitude of GPS(global positioning system) satellite is 20,200km.

In this research, we're trying to measure QZS total electron content from dual-frequency propagation delay. And we will present the results of measured QZS- and GPS-TEC especially before and after geomagnetic storm.

Keywords: QZS, TEC, GPS