

# Effect of the plasmasphere on the TEC observed by GEONET

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We studied the ratio of TEC to ( $NmF_2 \cdot 200\text{km}$ ) obtained at 5 stations in Japan. The TEC data and the ionosonde data are supplied by the Geographical Survey Institute and Communications Research Laboratory, respectively.

The tentative results are as follows: (1) The ratio is high in the morning of winter. (2) In the low latitude, the ratio shows a peak at 05 JST. In the high latitude, the ratio becomes high at midnight and takes almost constant value till the dawn. These features can be attributed the facts that the plasma density which is stored in the high altitude is diffused along the magnetic field and that the plasma which was produced in the southern hemisphere is transported to the northern hemisphere along the magnetic line of force.