

Correlation of Pi2 Magnetic Pulsations and Ionospheric Conductivity

Yuko Seki[1], Teiji Uozumi[2], Hideaki Kawano[2], Akimasa Yoshikawa[2], Kiyohumi Yumoto[2], Shin-ichi Ohtani[3], John V. Olson[4], Brian J. Fraser[5], Ray J. Morris[6]

[1] Earth and Planetary Sci., Kyushu Univ, [2] Earth and Planetary Sci., Kyushu Univ., [3] JHU/APL, [4] Geophysical Institute, Alaska Univ, [5] Physics, Newcastle Univ, [6] Australian Antarctic Division

We have analyzed Pi2 magnetic pulsations observed at two ground-based stations, Kotzebue ($L=5.49$) and Macquarie ($L=5.47$) which are high-latitude conjugate stations. To study the effect of the ionospheric conductivity on Pi2, two types of events are selected:

- (1) Sun shone on Kotzebue but not on Macquarie.
- (2) Sun shone on Macquarie but not on Kotzebue.

Analysis results showed that Pi2 amplitudes in H-component and D-component tended to be higher at Kotzebue than at Macquarie in both types.