

## **Preliminary study on the abrupt density enhancement in low latitude region detected by KOMPSAT-I**

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Space Physics Sensor onboard the KOMPSAT-I had transmitted ionospheric data during the solar max. period ranging from June 2000 to August 2001. Occasionally they detected abrupt plasma density enhancement in low-latitude region, in which the plasma density increases in a narrow region. Statistical analysis of the data shows that the occurrence probability of these events has its maxima at the Atlantic and the Hawaiian region. There exists seasonal asymmetry in their distribution, and the occurrence frequency has no correlation with geomagnetic Dst or F10.7 index. The correlation between plasma density and the electron temperature shows several different trends from event to event, but the anti-correlated cases are dominant.