

Pc1 band pulsation newly observed by induction magnetometer at magnetic low latitude

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Kyushu University Space Environmental Research Center has been observing geomagnetic data at Kuju(MLat=26.13) with induction magnetometer since 2003. We found some impulsive pulsation(We call this I-type event) during magnetic storm. The characteristic of I-type event similar to that of Intervals of Pulsations of Diminishing Period(IPDP) which observed at high latitude. The goal of this study is to investigate the characteristic of I-type event.

We analyzed data of year 2003,2004,2010 and 2011. The data were characterized based on "Magnetic storm day data(S-data)" and "Quiet day data(Q-data)". There were 21 S-data in the analyzed period.

We found 7 I-type event from 21 S-data. During I-type event frequency increases with time. ($\Delta f=0.8\sim 5$ [Hz], $t=10\sim 30$ [min]) I-type event is only observed from S-data(not from Q-data) and occurred after 5 to 30 minutes from sub-storm onset. Considering these facts, it is clear that I-type event associates with magnetosphere disturbances.

We will discuss the details of I-type event at the presentation.

Keywords: Pc1, Induction magnetometer, magnetic low-latitude, IPDP