

Long-term variation of Pi 2 magnetic pulsations derived from CPMN database

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The Circum-pan Pacific Magnetometer Network (CPMN) organized by Kyushu University has continuously observed global ground magnetic variations. The period of duration is over one solar activity cycle, and the total number of data obtained over 50 stations located from the magnetic equator to high-latitude stations exceeds 100000 days. The MAGnetic Data Acquisition System (MAGDAS/CPMN) is evolved from the present CPMN, and is conducive to the space weather/climate research. The MAGDAS/CPMN has realized the semi-realtime data acquisition and monitoring the ground magnetic variations, which reflects the electromagnetic and plasma environment in the geospace region. It is useful for the analysis of the semi-realtime data to summarize the statistical characteristics and long-term variation of various magnetic phenomena from archived data. For the above purpose, we investigated the statistical characteristics and long-term variation of Pi 2 magnetic pulsations by using CPMN database. At the previous meeting, we partially presented the statistical characteristics and long-term variation of Pi 2 observed at low-latitude stations Kagoshima ($L=1.22$) and Moshiri ($L=1.60$). In this paper, we extended the study by analyzing the data obtained at all CPMN stations from 1991 to 2003. Saito [1969] is famous about the long-term variation of various characteristics of Pi 2 connected with the solar activity cycle. We re-examined the long-term variation of various characteristics of Pi 2 including the latitudinal and Dst dependence, which have not been reported so far. We will discuss the long-term variation of Pi 2s derived from CPMN database during the last solar activity cycle.