Global nature of Pc 5 magnetic pulsation during the WHI observation campaign

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In conjunction with the activities of IHY (International Heliophysical Year), an international observation campaign was planned and carried out from March 20 to April 16 of 2008. The name of this campaign is Whole Heliosphere Interval (WHI). During WHI, the nations of the world worked together to collect relevant scientific data. As a result, there now exists an exceptionally good data set of multi-point ground-based and satellite magnetometer data for this time frame. There were no clear and outstanding geomagnetic storms during WHI, but there were some moderate geomagnetically active moments. For example, on March 26, Dst index decreased from 25 nT to -41 nT for 10 hours (1000 -1900 UT).

The amplitude of Pc 5 pulsation in the frequency band between 1.67 and 6.67 mHz at the MAGDAS stations increased for few days after March 26. Using magnetometer data obtained globally from ULTIMA (Ultra Large Terrestrial International Magnetic Array) stations, we will investigate the occurrence and wave characteristics (amplitude, period and phase) of Pc 5 pulsations. Particularly high-latitude Pc 5 observed at THEMIS (the Time History of Events and Macroscopic Interactions during Substorms), CARISMA (Canadian Array for Realtime Investigations of Magnetic Activity) and McMaC (Mid-continent Magnetoseismic Chain) stations will be compared with equatorial-latitude Pc 5 observed at MAGDAS stations (TIR, DAV, YAP, ANC, EUS, ILR, and UT=LT+5h, +8h, +9h, -5h, -2h and 0h, respectively).