



Multipoint observations of a multiday Pc5 pulsation

T. Sarris(1), X. Li(2) and H. Singer(3)

(1)Demokritus University/Greece, (2)LASP/University of Colorado, (3)NOAA/Space Environment Center

A rare and long lasting, over 5 days, narrow-band magnetospheric pulsation event in the Pc5 frequency range is presented through multipoint measurements at geosynchronous orbit, in the outer and inner magnetosphere as well as on the ground. Magnetic field signatures, plasma density and keVs-electron fluxes are utilized to investigate the excitation mechanism. By performing a cross-station phase analysis on measurements from adjacent ground stations the azimuthal mode number m of the pulsation is estimated. Density measurements combined with calculations of the satellites' L-shells reveals a sharp radial gradient in density around the region that the pulsations are observed, which we associate with the pulsations. It is concluded that the source for the pulsation has to be internal and very long lasting as well.