ULF Waves at Dayside Equator During Disturbed Geomagnetic Conditions

ANAND K. SINGH, A. K. SINHA, and B. M. PATHAN

Indian Institute of Geomagnetism, Navi Mumbai

Ground-based magnetic fields at polar cap and dayside equatorial region have been investigated in conjunction with interplanetary conditions. During disturbed conditions the magnetic field perturbations at polar region and dayside dip-equator show good interdependence depending upon prevailing interplanetary magnetic field (IMF) conditions. The penetration of polar electric field to the dayside equator is evident as observed in magnetic field perturbations in ULF range (period: 1-1000 s). Amplitudes of ULF disturbances at dip-equator get enhanced as compared to those at low latitudes during morning and daytime.