

Behaviour of ionospheric parameters during earthquakes over low latitude F2 region

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ABSTRACT

Ionospheric ion parameters (O^+ and H^+ density) and ion temperature (T_i) as precursory parameters to earthquakes has been analysed from year 1995 - 1998, using SROSS-C2 (average altitude range of ~ 500 km) satellite measurements. The details of earthquake events during this period are downloaded from United State Geological Survey (USGS) and National Earthquake Information Centre (NEIC) website. During seismic affected period, the ion density and temperature shows considerable anomalous behaviour compared to normal days. Electric field and electromagnetic emissions generated due to seismogenic activity could be the plausible initializing agents responsible for change in ion concentration and temperature values during these events.

Keywords: ion density, ion temperature, seismic activity, moderate magnitude earthquakes, satellite measurements