

LONGITUDINAL BEHAVIOUR OF O^+/H^+ TRANSITION LEVEL IN THE TOPSIDE IONOSPHERE DURING PERIOD OF LOW SOLAR ACTIVITY 2004-2008

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Plasma probe data from DEMETER satellite are used to examine the longitudinal behaviour of O^+/H^+ transition level in the topside equatorial ionosphere during prolonged period of low solar activity 2004-2008. French DEMETER (Detection of Electro-Magnetic Emissions Transmitted from Earthquake Regions) micro-satellite was launched on June 29 2004 at near circular Sun synchronous orbit (SSO) with 98° inclination at 710-730km initial height with approximate local time of the orbital ascending node $\sim 22:30$ LT. Onboard satellite, thermal plasma instrument called "Instrument Analyser de Plasma" (IAP) provides ion mass and densities and ion temperature measurements. Since late 2005 satellite operates at ~ 670 km. Here we use IAP data to estimate long term trends in O^+/H^+ transition level during prolonged period of low solar activity level.

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