

# **COMPARISON OF ELECTRON PLASMA FREQUENCIES COMPUTED FROM NEQUICK\_2\_0\_1 WITH MEASUREMENTS ON APEX AND CORONAS-I SATELLITES**

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Electron density distribution in the Earth magnetoplasma affects performance of radio links in the very broad range of frequencies as well as separations. Electron density shows very broad geographical, diurnal and seasonal variation. Significant efforts have been put to construct its global, regional and local parametrical models. Data from ground based and topside ionosondes, incoherent radars, rockets and satellites have been assimilated in such models. The global model NeQuick introduced by Di Giovanni and Radicella (1990) is a recognized example of prolonged development. Its status, uses and perspectives were recently described by Nava et al. (2008) and Radicella (2009). Environment variability and diversity of assimilated data influence accuracy of models. This presentation is aimed to compare electron density computed with NeQuick\_2\_0\_1 software with experimental in situ data from the topside ionosphere. In satellite missions ACTIVE (Intercosmos-24), APEX (Intercosmos-25), CORONAS-I (Intercosmos-27), noise and impedance measurements were integrated in one processor-controlled instrument. Local plasma density was deduced from these data. Contribution to model verification and development may follow from presentation.

ionospheric plasma density

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