**D-region electron density measurements from tweek radio atmospherics observed in India**

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**Abstract:**

In this work, dispersive property of tweeks observed at low latitude Indian stations Allahabad and Nainital has been utilized for the estimation of night time \(D\)-region electron densities at the ionospheric reflection heights. To determine tweeks path of propagation, geographic source locations of their causative lightning discharge is also determined. To validate the results, electron density profile obtained from IRI-2007 model and rocket data from the flight probes in Indian region are compared. The tweek analysis method has unique advantage of monitoring lower boundary of the ionosphere over a wide area of several thousands kilometers surrounding receiving stations.