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**Night time D-region ionospheric electron densities profiles
as estimated from tweek radio atmospheric measurements
at Indian low latitude stations**

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The lightning discharges are nature's most powerful generator of electromagnetic radiations, the energy in these electromagnetic pulses vary from few Hz to tens of mega Hz. However major part of this energy is contained in extremely low frequency (ELF, 30-3000 Hz) and very low frequency (VLF, 3-30 kHz) band. The radiations from these lightning discharges travel over thousands of kilometers in the earth-ionosphere wave-guide, to be received as radio atmospherics/tweeks, which are extensively used for the ionospheric studies of the D-region. Using broadband lightning generated tweek atmospherics we have derived equivalent night-time electron densities at reflection height in D-region ionosphere at low latitudes by analyzing fundamental first-order mode cut-off frequency of tweek atmospherics. The calculated distance traveled by these tweeks are also used to finding the source position of respective causative lightning discharge. Tweek atmospheric data analyzed were recorded simultaneously at Allahabad ($\lambda_m = 16.04$) and Nainital ($\lambda_m = 20.29$) sites in India on the night of June 13, 2007. D-region ionospheric electron densities were found in range 20-35 el/cm³ at the ionospheric reflection height of 60-80 km. The obtained electron density profiles are in agreement with profiles obtained from IRI model, MF radar measurements and rocket experiments.