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A behavior of EIA during geomagnetic storms

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This research study aims to establish the behavior of Equatorial Ionization Anomaly (EIA) during geomagnetic storms. To identify geomagnetic storms, criteria of $Dst \leq -30$ nT, and where $Kp \geq 4$ indices will be used. The dynamics of the EIA will be studied based on total electron content (TEC) data for the period of five years (2008 to 2013), TEC is derived from Global Navigation Satellite Systems, over the middle, low, and equatorial latitudes will be used for this analysis. This work will focus on establishing the range of electrodynamic magnitudes (vertical $E \times B$ drift magnitude) likely to be reached for EIA to expand beyond the crest of $\pm 20^\circ$ towards mid-latitudes.

Apply to be considered for a student ; award (Yes / No)?

Yes

Level for award;(Hons, MSc, PhD, N/A)?

PhD

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