

INFLUENCE OF EEJ STRENGTH OF Y ON AEJ AND EEJ DAY OVER INDIAN SECTOR

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The geomagnetic data from off equatorial and equatorial stations Alibag (18.64°N , 72.87°E) and Trivandrum (8.48°N , 76.94°E) in Indian zone during 1995 and 1996 are used for the calculation of strength of Equatorial electrojet. The EEJ were categorized according to their strength and direction Viz Normal electrojet (NEJ, When the maximum strength is 50 nT), Abnormal electrojet (AEJ when maximum strength is less than 10 nT) and counter electrojet (CEJ the reversal of EEJ). Correlation between Del Y and EEJ was investigated on days which were characterised by SEJ, NEJ, and CEJ events. The hour to hour variation shows that anticorrelation is observed between Del Y and EEJ strength of all categories. However this behavior was not present on some days. The factors responsible for this variation are analyzed. It is observed that the strength of Sq and EEJ current system play major role in this mechanism. The shifting of Sq system pole wards on NEJ days comparing with AEJ days.

Del Y, EEJ strength, CEJ, Autocorrelation

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