

Relationships between ionospheric conductivity, electric field, and field-aligned current

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The present study aims at assessing the relationships between the ionospheric conductivity and the electric field based on EISCAT radar and satellite data. Particularly we focus on correlations between the ionospheric conductivity and the electric field in the dusk sector, the characteristics of ionospheric currents during substorms around midnight, and enhanced ionospheric conductivities and particle precipitation in the dawn sector.

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