

Electrodynamic Coupling of High and Low Latitudes

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In this paper we focus on two main physical processes acting at a planetary scale to couple electrodynamic of high and low latitudes :

- the prompt penetration of the magnetospheric electric field,
- the disturbance dynamo due to the storm wind generated mainly by the dissipation of Joule heating in auroral zones.

We review the main advances during the last decades and the recent studies.