LiMIE: Linear Modeling of Ionospheric Electrodynamics from IMF and Solar Wind Data: Near-Real Time Space Weather Service

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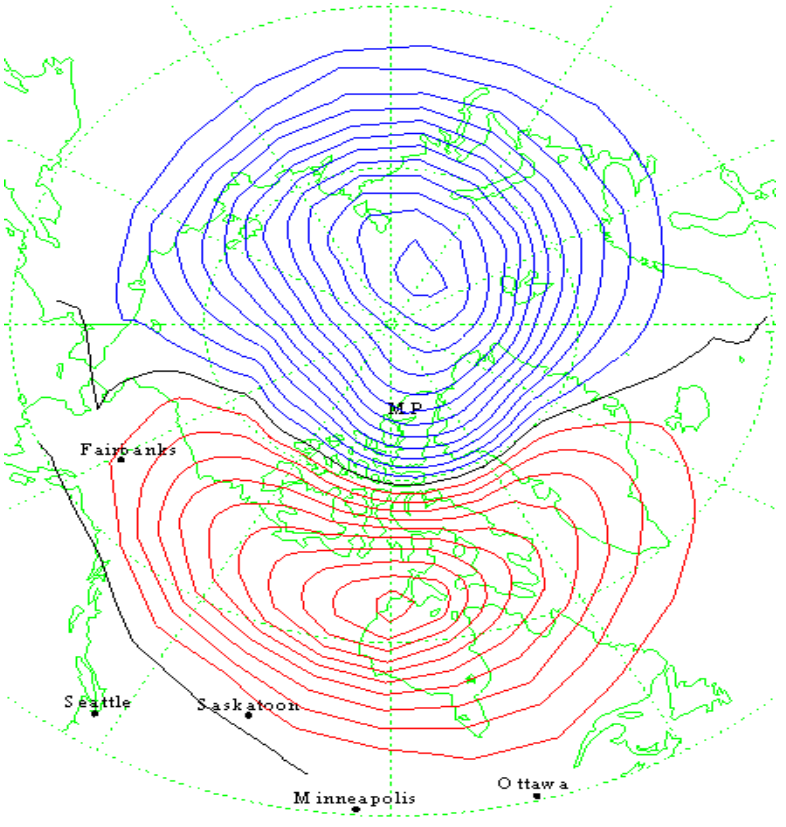
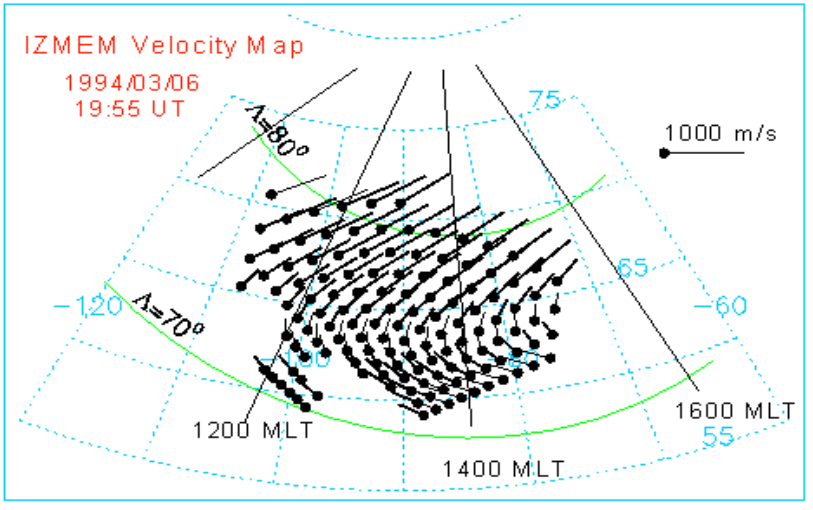
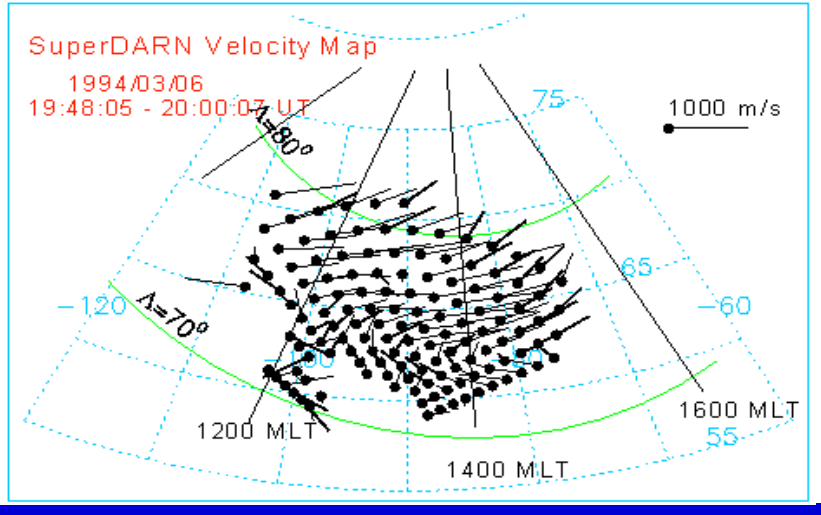
Ionospheric Space Weather Specification



- The LiMIE Web-based interface is capable to map (i.e., specify, nowcast...) instantaneously ionospheric electrodynamics over the polar regions in geographic and/or geomagnetic coordinates - in near-real time or for any past time instances

Ionospheric Space Weather Forecast





- The LiMIE Web-based interface is also capable to forecast ionospheric electromagnetic "space weather" in about an hour ahead from observations made by spacecraft at L1 point

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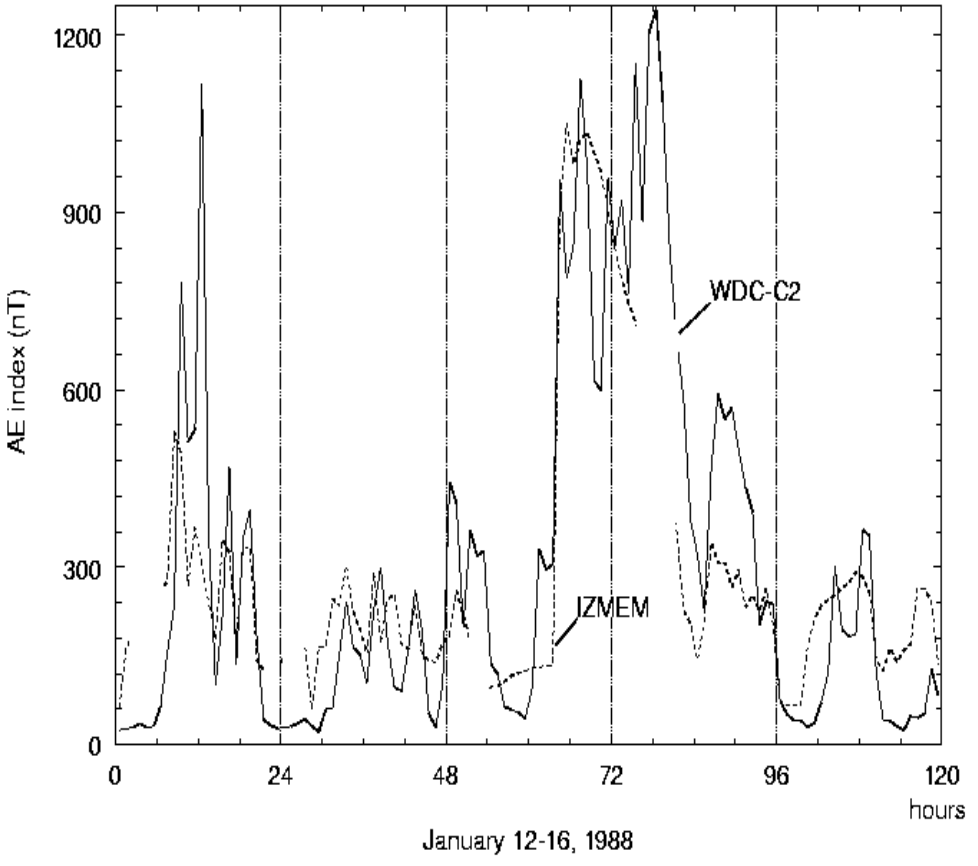
Geomagnetic Activity Indices



- A number of user-oriented parameters and geomagnetic activity indices can be calculated from the LiMIE output, including auroral (AE, AL, AU) and polar cap (PC) magnetic activity indices, as well as the intensity of ground-induced currents (GIS)

Space Weather "Success" List

What we should identify and prioritize:

- Current spacecraft and future missions related to "space weather" data acquisition.
- "Space weather" users and their needs.
- Ionospheric/magnetospheric parameters interested to the "space weather" users.
- Better understand the users' needs for successful transition of available science-based "space weather" models to operation.
- Focus on the models and/or data which are able to fulfil above-mentioned requirements.

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