To: Subscribers:
- NOAA Weather Wire Service
- Emergency Managers Weather Information Network
- NOAAPort
Other NWS Partners, Users and Employees

From: Bruce Entwistle, Chief
Aviation and Space Weather Services Branch

Subject: Operational Implementation of the US-Canada 1D Geoelectric Model on June 21, 2023

On June 21, 2023, the National Weather Service (NWS) Space Weather Prediction Center (SWPC) in Boulder, CO will implement the operational version of the US-Canada 1D Geoelectric Model, located at:

https://www.swpc.noaa.gov/products/geoelectric-field-models-1-minute

The new service will supersede the existing Regional Geoelectric 1D Model over the contiguous U.S. (CONUS), which will be discontinued on June 21, 2023, but currently found at:

https://www.swpc.noaa.gov/products/geoelectric-field-1-minute

The US-Canada 1D Geoelectric Model is a joint product between the National Oceanic & Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS) and Natural Resources Canada/Canadian Hazards Information Service(NRCan/CHIS). This upgraded product expands coverage into Canada. Potentially hazardous geoelectric fields can be induced during geomagnetic storms. New 1D conductivity models provided by NRCan/CHIS for Canada are incorporated into the model. The model grid resolution is increased to one-half (1/2) degree in latitude and longitude, resulting in 7,063 grid points of coverage. The model grid has a northern latitude limit of 60.

SWPC is responsible for providing and maintaining this model on their website:

https://www.swpc.noaa.gov/products/geoelectric-field-models-1-minute

A detailed description of the U.S.-Canada 1D Geoelectric Field Model can be found at the following link:

https://nsdesk.servicenowservices.com/api/g_noa/nwspc/res2/954f71651b63a51021dd20eae54bcbb2
If you have any questions, please contact:

Steven Hill  
Geoelectric Project Lead  
NOAA Space Weather Prediction Center  
Boulder, CO  
Email: steven.hill@noaa.gov

and

Dr. Jennifer L. Meehan  
National Space Weather Program Manager  
National Weather Service Headquarters  
Silver Spring, MD  
Email: jennifer.meehan@noaa.gov

National Service Change Notices are online at:

https://www.weather.gov/notification/