1-15-2019

# CEDAR: The Role of Neutral winds in the Day-to-day Variability of the Ionospheric Mid-Latitude Evening Anomalies

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## Types of data produced

Our data assimilation models will produce model output for several month-long periods. The final data product will consist of model output from our data assimilation models in 15-minute increments for the periods selected. The output will consist of TEC, NmF2, hmF2 and the F-region neutral winds for low- and mid-latitudes.

Our data will be stored on hard drives in the lab, with monthly backups on external hard drives.

## Data and metadata standards

The model data will be written in NetCDF format with each file corresponding to one day worth of model data in 15-minute increments. The NetCDF files will also include the metadata corresponding to the model output. This metadata will consist of the corresponding time, day, month and year of the model output, the version number of the data assimilation models that were used, and the geophysical conditions for the time of the model output (Kp index, F10.7cm flux). All data (TEC, NmF2, hmF2 and the F-region neutral winds) will be made available together with explanatory metadata.

## Policies for access and sharing

The data (NetCDF files) and metadata (included in the NetCDF files) will be digitally archived at USU in the DigitalCommons@USU repository (digitalcommons.usu.edu). The size of each individual file will be <4GB. All data will be made available together with explanatory metadata to any researcher who has access to the internet and can download the files from the Digital Commons repository at USU. The web link will be provided on all publications and will be made available upon request. Data used to create charts and figures will be available at the time of publication.

## Policies for reuse, redistribution, and derivates

The data will be available for use by non-group members under the following conditions: all published work based on the data should follow best practice of data citation and acknowledge the source of the data.

## Plans for access to data used in publications

The data (NetCDF files) and metadata (included in the NetCDF files) will be digitally archived at USU in the DigitalCommons@USU repository (digitalcommons.usu.edu). Data displayed in charts and figures will be available at the time of publication. The web link will be provided on all publications and will be made available upon request.

## Plans for archiving and preservation

We will house our data in a publicly accessed open access repository, Digital Commons, operated by the USU Libraries. This system is an open, web searchable archive of all files we provide, and all data sets will be loaded to this system. Digital Commons has a primary and two backup archives "in the cloud" at servers in three sites.

The PI (Ludger Scherliess) shall be responsible for data management and monitoring the data management plan. The PI will oversee the transfer of files to the Digital Common Repository and will check that each file has a .txt file of metadata that can be accurately interpreted. Decisions for transferring responsibility of the data, once the PI is no longer available, will rest with the custodians of the Digital Commons repository at USU who will follow USU protocols.