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PNSWSH

Service Change Notice 19-36  
National Weather Service Headquarters Silver Spring MD  
1110 AM EDT Mon Apr 29 2019

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From: Bob Maxson, Acting Director  
National Centers for Environmental Prediction

Subject: Upgrade of WSA-Enlil Heliospheric Model and  
Downscaled Products Effective May 28, 2019

Effective on or about Tuesday, May 28, 2019, beginning with the 1200 Universal Coordinated Time (UTC) run, the Space Weather Prediction Center (SWPC) will upgrade the WSA-Enlil Heliospheric model. There will be no changes to the WSA coronal component. Changes will include:

- Upgrade of Enlil from version 2.6 to 2.9, compatible with time-dependent driving in anticipation of subsequent upgrades
- Retuned Enlil model free parameters, providing a more accurate representation of ambient solar wind structure

Changes in WSA-Enlil output

The following WSA-Enlil changes will apply to products on the NCEP Web Services:  
[https://nomads.ncep.noaa.gov/pub/data/nccf/com/wsa\\_enlil/prod/wsa\\_enlil.YYYYMMDD/](https://nomads.ncep.noaa.gov/pub/data/nccf/com/wsa_enlil/prod/wsa_enlil.YYYYMMDD/)  
[https://www.ftp.ncep.noaa.gov/data/nccf/com/wsa\\_enlil/prod/wsa\\_enlil.YYYYMMDD/](https://www.ftp.ncep.noaa.gov/data/nccf/com/wsa_enlil/prod/wsa_enlil.YYYYMMDD/)  
[ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/wsa\\_enlil/prod/wsa\\_enlil.YYYYMMDD/](ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/wsa_enlil/prod/wsa_enlil.YYYYMMDD/)

Where YYYYMMDD is year, month, and day

A) The wsa\_enlil.CC.suball.nc (Where CC is cycle) NetCDF files will no longer contain FLD arrays which consist of all points along magnetic field lines connecting the respective observing points (Earth, StereoA, StereoB) to the solar surface:

- EARTH\_FLD\_\*
- STEREO\_A\_FLD\_\*
- STEREO\_B\_FLD\_\*

B) Within the NetCDF files, the following changes have been made to the header information:

- "crpos" field removed

- Valid entries for the "observatory" field have been changed from "gong" to "gongb"/"gongz" indicating whether non-zero point corrected (gongb) or zero point corrected (gongz) input maps were used

C) The hosting time of the files will be earlier, with the new range of time being from HH:17-HH:25. The previous version would post between HH:26-HH:31 (Where HH is hour).

NCEP will evaluate all comments and decide whether to proceed. For questions regarding these changes, please contact:

Eric Adamson  
NOAA Space Weather Prediction Center  
Boulder, Colorado  
Phone: 303-497-7009  
Email: [eric.adamson@noaa.gov](mailto:eric.adamson@noaa.gov)

For questions regarding the dataflow aspects of these data sets, please contact:

Carissa Klemmer  
NCEP Central Operations, IDSB Chief  
College Park, MD  
Phone: 301-683-0567  
Email: [ncep.list.pmb-dataflow@noaa.gov](mailto:ncep.list.pmb-dataflow@noaa.gov)

NWS Service Change Notice are online at:  
<https://www.weather.gov/notification>

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