

NOUS41 KWBC 201140 AAA
PNSWSH

Service Change Notice 20-100 Updated
National Weather Service Headquarters Silver Spring MD
740 AM EST Wed Jan 20 2020

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: Updated: Geospace model (SWMF) upgraded to version 2.0
 Effective January 25, 2021

Updated to reflect new implementation date.

Effective January 25, 2021, beginning with the 1700 Universal Coordinated Time (UTC) run, the NWS will deploy an upgrade to the Geospace model. This upgrade from v1.5 to v2.0 includes the following:

- Increased grid resolution in targeted regions of the numerical grid, moving from ~1 million grid cells to 1.9 million.
- Implementation of new auroral oval specification yielding improved accuracy.
- New composition settings for magnetospheric tail.
- Employing NOMADS dissemination of model results

The Geospace model is run continuously and data files will be available at varying times.

With this upgrade, the following data types will be available on NCEP web services:

<https://nomads.ncep.noaa.gov/pub/data/nccf/com/swmf/prod/swmf.YY YYMMDD>

ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/swmf/prod/swmf.YYYY MMDD

PARAM.in
IMF.dat
GM/IO2/PARAM_YYYYMMDDTHHMM_?? .txt

GM/IO2/IMF_YYYYMMDDTHHMM.dat
GM/IO2/geoindex_YYYYMMDDTHHMM.txt
GM/IO2/log_YYYYMMDDTHHMM.txt
GM/IO2/mag_grid_YYYYMMDDTHHMM_YYYYMMDDTHHMM.txt
GM/IO2/mag_stations_YYYYMMDDTHHMM_YYYYMMDDTHHMM.txt
GM/IO2/lcb_YYYYMMDDTHHMM_YYYYMMDDTHHMM.txt
GM/IO2/shl_YYYYMMDDTHHMM_YYYYMMDDTHHMM.txt
GM/IO2/y0_YYYYMMDDTHHMM_YYYYMMDDTHHMM
GM/IO2/z0_YYYYMMDDTHHMM_YYYYMMDDTHHMM
RB/plots/YYYYMMDD_HHMMSS_e.flr

Where YYYY is year, MM is month, DD is day, HH is hour, MM is minute, SS is second

More information about the upgrade to the Geospace model at SWPC can be found in the news release linked below AFTER implementation, on or about January 25, 2021.
[https://www.swpc.noaa.gov/news/geospace-model-\(SWMF\)-upgraded-to-version-2.0](https://www.swpc.noaa.gov/news/geospace-model-(SWMF)-upgraded-to-version-2.0)

NCEP encourages users to ensure their decoders are flexible and are able to adequately handle changes in content order, changes in the scaling factor component within the product definition section (PDS) of the GRIB files, and any volume changes which may be forthcoming. These elements may change with future NCEP model implementations. NCEP will make every attempt to alert users to these changes prior to any implementations.

Any questions, comments or requests regarding this implementation should be directed to the contacts below. We will review any feedback and decide whether to proceed.

For any comments/feedback on the model upgrade at SWPC please contact:

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and

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For questions regarding the data flow aspects, please contact:

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

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