

NOUS41 KWBC 011820 AAB
PNSWSH

Service Change Notice 20-100 Updated
National Weather Service Headquarters Silver Spring MD
220 PM EST Mon Feb 1 2021

To: Subscribers
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 -Emergency Managers Weather Information Network
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From: Bruce Entwistle
 Chief, Aviation and Space Weather Services Branch

Subject: Updated: Geospace model (SWMF) upgraded to version 2.0
 Effective February 3, 2021

Updated to reflect new implementation date of February 3, 2021.

Effective February 3, 2021, beginning with the 1700 Universal Coordinated Time (UTC) run, the National Weather Service will deploy an upgrade to the Geospace model. This upgrade from v1.5 to v2.0 includes the following:

- Increasing grid resolution in targeted regions of the numerical grid, moving from ~1 million grid cells to 1.9 million.
- Implementing new auroral oval specification yielding improved accuracy.
- Adding 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.YYYYMMDD>
<ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/swmf/prod/swmf.YYYYMMDD>

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/sh1_YYYYMMDDTHHMM_YYYYMMDDTHHMM.txt
GM/IO2/y0_YYYYMMDDTHHMM_YYYYMMDDTHHMM
GM/IO2/z0_YYYYMMDDTHHMM_YYYYMMDDTHHMM
RB/plots/YYYYMMDD_HHMMSS_e.flc

Where YYYY is year, MM is month, DD is day, HH is hour, MM is minute, SS is second, ?? is SR or HR

More information about the upgrade to the Geospace model at SWPC can be found in the news release linked below:

<https://www.swpc.noaa.gov/news/geospace-model-version-20-begins-operations-support-power-grids>

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.

Please send questions, comments or requests regarding this implementation 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:

Dr. Howard Singer
Geospace Project Lead
NOAA Space Weather Prediction Center
Boulder, CO
howard.singer@noaa.gov

and

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

For questions regarding the data flow aspects, please contact:

Anne Myckow
NCEP Central Operations Dataflow Team
ncep.pmb.dataflow@noaa.gov

NWS Service Change Notices are online at:

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

NNNN