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PNSWSH

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-NOAA Weather Wire Service
-Emergency Managers Weather Information Network
-NOAAPORT
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From: Timothy McClung
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Office of Science and Technology Integration

Subject: Soliciting public comments on the removal of legacy
Global Forecast System (GFS) gridded output through
March 25, 2016

The National Centers for Environmental Prediction (NCEP) is seeking comments through March 25, 2016, on removing some legacy gridded products from the GFS. These products would no longer be disseminating via NOAAPORT and the NWS ftp server.

The operational GFS model currently runs on a T1534 (~13 km resolution) Semi-Lagrangian grid. Output is made available from the GFS on grids ranging in resolution from 2.5km up to 5 degrees latitude/longitude. Many of these legacy low-resolution grids are available for limited forecast hours and fields and are not produced for all cycles of the GFS. The same information is provided on expanded grids with finer-resolution and more variables. Removing these legacy products is crucial to free up compute and network resources for newer products to be distributed. If approved, NCEP would remove the following products:

- NOAAPORT GFS gridded output
- Web services WAFS GRIB1 output
- NOAAPORT Vessel Sea Ice and Fog gridded output

In 2014, the NWS did an analysis to determine the optimal set of output grids from the GFS to meet the needs of NWS forecasters. From this analysis, the regional 20 km grids and global 1 degree were added to NOAAPORT in March 2015.

http://www.nws.noaa.gov/os/notification/tin14-54gfs_noaaport.htm

Any one of these new grids will serve as a replacement to the proposed discontinued grids, covering more area and containing additional variables alongside the legacy ones.

Table 1: Gridded GFS products on NOAAPORT for proposed removal

Grid	Res	Area	Map Projection
#160	47 km	Alaska	North Polar Stereographic
#161	0.5 deg	Puerto Rico	Latitude/Longitude
#211	80 km	CONUS	Lambert Conformal
#212	40 km	Regional CONUS	Lambert Conformal
#213	95 km	Alaska	Polar Stereographic
#225	80 km	Hawaii	Mercator
#254	40 km	Pacific Region	Mercator

Please see the link below for a graphical representation of the old grids and the new grids.

http://www.nco.ncep.noaa.gov/pmb/changes/gfs_AWIPS_grids.pdf

WMO headers for these grids slated for removal are listed at:

http://www.nco.ncep.noaa.gov/pmb/changes/gfs_AWIPS_grids.shtml

Table 2: GRIB1 files on NWS web servers for proposed removal

weather.noaa.gov/pub/SL.us008001/ST.opnl/MT.gfs_CY.CYCLE/RD.YYYYMMDD/PT.grid_DF.gr1/

ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/MT.gfs_CY.CYCLE/RD.YYYYMMDD/PT.grid_DF.gr1/

where CYCLE is 00, 06, 12, 18

where YYYYMMDD is Year, Month, Day

where FFF is forecast hour from 000-120

Grid	Res	Area	File Name
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#37-44	1.25 deg	WAFS	fh.FFF_tl.press_ar.octant[ijklmnop]
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Replacement GRIB2 output is available today with the same naming convention under this path:

ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/MT.gfs_CY.CYCLE/RD.YYYYMMDD/PT.grid_DF.gr2/

3) Table 3: GRIB1 files on the NCEP web servers for proposed removal

<http://nomads.ncep.noaa.gov/pub/data/nccf/pcom/gfs/>

<ftp://ftp.ncep.noaa.gov/pub/data/nccf/pcom/gfs/>

where CC is cycle 00, 06, 12, 18

where YYYYMMDD is Year, Month, Day

where FF is forecast hour from 00-72

Grid	Res	Area	File name
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#37-44	1.25 deg	WAFS	xtrn.wfsgfsCCFF.gfs_wafs_fff_CC
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#37-44	1.25 deg	WAFS	xtrn.wfsgfsCCFFa.gfs_wafs_fff_CC
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#37-44	1.25 deg	WAFS	xtrn.wfsgfsCCFFb.gfs_wafs_fff_CC
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WAFS replacement GRIB2 output is available today with all of the same variables, plus a few additional as well as extended

forecast hours.

http://www.nco.ncep.noaa.gov/pmb/changes/gfs_wafs_vars.txt

The same grid output can be found here:

ftp://tgftp.nws.noaa.gov/SL.us008001/ST.opnl/MT.gfs_CY.CC/RD.YYY YMMDD/PT.grid_DF.gr2/

With names like fh.FFF_tl.press_ar.octant[ijklmnop]

where [ijklmnop] equate to grids [37,38,39,40,41,44,43,44]

Table 4: Vessel Sea Ice (ice growth rate) and Fog (visibility) GRIB2 products on NOAAPORT for proposed removal

Grid	Res	Area	Map Projection
#232	1 deg	Northern Hem	latitude/longitude

There are no known users of either of these gridded outputs, therefore we have no replacement products.

WMO headers for these grids slated for removal are listed at:

http://www.nco.ncep.noaa.gov/pmb/changes/omb_AWIPS_grids.shtml

The NWS will evaluate all comments to determine whether to proceed with these changes. If approved, a TIN will be issued giving 30 days notice of the implementation date.

Send comments on this proposal to:

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NWS National Public Information Statements are online at:

<http://www.nws.noaa.gov/os/notif.htm>

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