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PNSWSH

Public Information Notice
National Weather Service Headquarters Washington DC
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From: Jason Tuell
Chief, Meteorological Services Division

Subject: Seeking Comments on Increasing the Resolution in the National Digital Forecast Database (NDFD) Effective August 28, 2012

Effective Tuesday, August 28, 2012, at 10:00 am EDT, 1400 Coordinated Universal Time (UTC), the NDFD spatial resolution will become available in experimental status at 2.5km resolution for all forecast times. The NDFD temporal resolution will be available in experimental status at 1 hour resolution for the first 36 hours from NDFD issuance time. These are the finest spatial and temporal resolutions at which Weather Forecast Offices in the Conterminous United States (CONUS) provide forecasts. Forecasts from NWS offices and centers employing coarser resolutions will be mapped onto the finer resolution NDFD grid.

This change will affect files which contain data for the entire CONUS, but will not include Alaska, Hawaii, Guam, Puerto Rico and the Virgin Islands, or the 16 CONUS subsectors which will remain at their current operational resolutions.

Specifications for operational and experimental NDFD grids can be viewed at the following URL:

http://graphical.weather.gov/docs/ndfdSRS.htm

Operational NDFD data will continue to be provided in parallel at current spatial and temporal resolutions throughout the experimental 120 day period. Experimental fine resolution forecasts will be updated approximately 15 minutes after operational NDFD forecasts. NDFD graphics and SOAP/REST/XML services will continue to be provided from operational NDFD grids during the experimental 120 day period.

To access experimental fine resolution grids, go to:

ftp://tgftp.nws.noaa.gov/sl.us008001/st.expr/df.gr2/dc.ndfd/ar.conus/

or

http://weather.noaa.gov/pub/sl.us008001/st.expr/df.gr2/dc.ndfd/ar.conus

Experimental grids for forecast days 1 through 3 will be provided in individual files for each day to limit file sizes.
Experimental grids for selected elements will be more tightly packed in GRIB2 format with both decimal and binary scaling applied. GRIB2 encoding characteristics for each NDFD element can be viewed at the following URL:

http://graphical.weather.gov/docs/grib_design.html#element_encoding_lo

File structures and GRIB2 packing for operational NDFD files will remain unchanged during the experimental period. Experimental Ice Accumulation and daily Maximum and Minimum Relative Humidity grids will also remain unchanged, i.e., stay at 5km resolution.

WMO headers and file structures for current operational and experimental NDFD files can be viewed at:

http://www.nws.noaa.gov/ndfd/resources/NDFDelem_current.xls

WMO headers and files structure for the new experimental fine resolution files can be viewed at:

http://www.nws.noaa.gov/ndfd/resources/NDFDelem_fullres.xls

At the conclusion of the 120 day period, NWS will evaluate any comments and decide whether to proceed with operational implementation for the entire CONUS. Current operational resolutions will continue for Alaska, Hawaii, Guam, Puerto Rico and the Virgin Islands, and the 16 CONUS subsectors.

The NWS will accept comments and feedback on the increase in resolution during the experimental period through at least December 31, 2012. The survey link is online at:

http://www.nws.noaa.gov/survey/nws-survey.php?code=ndfd-grids25

General information on accessing and using NDFD elements is online at:

http://ndfd.weather.gov/technical.htm

For general questions regarding NDFD data, please email:

nws.ndfd@noaa.gov

For technical questions regarding NDFD data, please contact:

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For questions regarding this notice, please contact:

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Technical Implementation Notices specifically related to NDFD are online at:

http://www.weather.gov/ndfd/tins.htm

National Public Information Notices are online at:

http://www.weather.gov/os/notif.htm

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