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PNSWSH

Technical Implementation Notice 15-50
National Weather Service Headquarters Washington DC
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To: Subscribers:
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-NOAA Weather Wire Service
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-NOAAPORT
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From: Tim McClung
Portfolio Manager
Office of Science and Technology Integration

Subject: Implementation of experimental National Blend
of Models guidance for the CONUS effective
December 15, 2015

On or about Tuesday, December 15, 2015, beginning with the 1200 Coordinated Universal Time (UTC) model run, the NWS Meteorological Development Laboratory (MDL) will implement experimental National Blend of Models (NBM) guidance for the CONUS. Guidance will include blends of deterministic and ensemble mean-based model grids for the following weather elements:

1. Sky cover (3-hourly)
2. 10-m wind direction (3-hourly)
3. 10-m wind speed (3-hourly)
4. 2-m temperature (3-hourly)
5. 2-m dewpoint temperature (3-hourly)
6. Daytime maximum temperature
7. Nighttime minimum temperature
8. 2-m relative humidity (3-hourly)
9. 2-m apparent temperature (3-hourly)
10. 10-m wind gust (3-hourly)

These products will be produced on a 2.5-km Lambert Conformal grid over the CONUS with dimensions NX=2145 and NY=1597. This change represents an expansion to the north by 220 grid lengths compared to the current National Digital Forecast Database (NDFD) CONUS grid to provide coverage for the entire Northwest River Forecast Center basin. Guidance will be available for the 0000 and 1200 UTC model cycles for projections from 6 hours to 192 hours in advance. These products will be disseminated on the Satellite Broadcast Network (SBN), NOAAPORT and the NWS ftp server in GRIB2 format.

These NBM products for the CONUS will be available in GRIB2

format on or about Tuesday, December 15, 2015, in the experimental area of the National Digital Guidance Database (NDGD) on the NWS ftp server at:

ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndgd/GT.b
lend/AR.conus/

This directory will contain subdirectories for each valid period as follows:

VP.001/ Day 1
VP.002/ Day 2
VP.003/ Day 3
VP.004/ Day 4
VP.005-007/ Days 5-7
VP.008-450/ Days 8 and beyond

Each element-specific GRIB2 file will reside in the appropriate valid period subdirectory and contain a WMO superheader and individual headers. A listing of the GRIB2 file names for each element is given in Table 1 below. WMO superheaders for the NBM CONUS products are given in Table 2.

Table 1: GRIB2 file names for the NBM elements

These files will reside in the appropriate valid period subdirectory on tgftp

GRIB2 FILE NAME	ELEMENT
ds.skymean.bin	Sky cover
ds.wdirmean.bin	Wind direction
ds.wspdmean.bin	Wind speed
ds.tempmean.bin	2-m temperature
ds.tdmean.bin	2-m dewpoint temperature
ds.maxtmean.bin	Daytime maximum temperature
ds.mintmean.bin	Nighttime minimum temperature
ds.rhmean.bin	2-m relative humidity
ds.apptmean.bin	2-m apparent temperature
ds.wgustmean.bin	Wind gust

Table 2: WMO superheaders for each CONUS NBM element

Listed below are representations of the superheaders where ii=98 for day 1, ii=97 for day 2, ii=96 for day 3, ii=95 for day 4, ii=94 for days 5-7, and ii=93 for days 8 and beyond.

WMO SUPERHEADER	ELEMENT
LAAZii KWEA	Sky cover
LBAZii KWEA	Wind direction
LCAZii KWEA	Wind speed
LEAZii KWEA	2-m temperature
LFAZii KWEA	2-m dewpoint temperature

LGAZii KWEA	Daytime maximum temperature
LHAZii KWEA	Nighttime minimum temperature
LRAZii KWEA	2-m relative humidity
LTAZii KWEA	2-m apparent temperature
LWAZii KWEA	Wind gust

Beginning approximately 1 month prior to the implementation date, users may find parallel data for download on the Operational Model Archive and Distribution System (NOMADS) at:

<http://para.nomads.ncep.noaa.gov/pub/data/nccf/noaaport/blend/>

For questions regarding the implementation of NBM guidance for the CONUS, please contact:

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NWS National TINs are online at:

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

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