

NOUS41 KWBC 011815 AAA  
PNSWSH

Technical Implementation Notice 12-09 Amended  
National Weather Service Headquarters Washington DC  
215 PM EDT Thu Nov 1 2012

To:           Subscribers:  
              -Family of Services  
              -NOAA Weather Wire Service  
              -Emergency Managers Weather Information Network  
              -NOAAPort  
              Other NWS Partners, Users and Employees

From:         Tim McClung  
              Science Plans Branch Chief  
              Office of Science and Technology

Subject: Amended: Addition of Experimental 2.5-km GFS-based  
Gridded MOS Guidance for the CONUS to SBN and NOAAPort:  
Effective on or about November 15, 2012

Amended to announce dissemination of experimental 2.5-km Global  
Forecast System (GFS)-based gridded MOS guidance for the CONUS  
across the Satellite Broadcast Network (SBN) and NOAAPort.

On or about Thursday November 15, 2012, beginning with the 1200  
Universal Coordinated Time (UTC) model run, the NWS  
Meteorological Development Laboratory will disseminate  
experimental GFS-based 2.5-km gridded MOS guidance for the CONUS  
across the SBN and NOAAPort. The experimental 2.5-km guidance  
will continue to be available on the NWS FTP server in GRIB2  
format. GRIB2 file names for each gridded MOS element are  
listed in Table 1 below. New World Meteorological Organization  
(WMO) communication identifiers for these products are shown in  
Table 2 below.

These MOS products contain guidance on a 2.5-km Lambert  
Conformal grid covering the same expanse as the National Digital  
Forecast Database (NDFD) CONUS grid. Grids are being generated  
from the 0000 and 1200 UTC model runs at projections of one to  
seven days in advance. Guidance is available for the following  
elements:

Daytime Maximum and Nighttime Minimum Temperature  
2-Meter Temperature  
2-Meter Dewpoint Temperature

Relative Humidity  
 Wind Direction  
 Wind Speed  
 Wind Gusts  
 Probability of Precipitation /6-hour and 12-hour/  
 Probability of a Thunderstorm /3-, 6-, and 12-hour/  
 Quantitative Precipitation Amount /6-hour and 12-hour/  
 Total Sky Cover  
 24-hour Snowfall Amount

A Webpage providing more information regarding grid specifications, GRIB2 encoding and elements for which guidance is available is referenced below.

These GRIB2 products are already available in the experimental area of the National Digital Guidance Database (NDGD) on the NWS ftp server. Forecast guidance for days 1 through 3 is available at:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndgd/GT.mosgfs/AR.conus/VP.001-003/>

Forecast guidance for days four through seven is available at:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndgd/GT.mosgfs/AR.conus/VP.004-007/>

Table 1: GRIB2 Filenames for Each Experimental 2.5-km GFS-Based Gridded MOS Element:

FILE NAME	ELEMENT
-----	-----
ds.sky.bin	Total Sky Cover
ds.wdir.bin	Wind Direction
ds.wspd.bin	Wind Speed
ds.pop12.bin	12-Hour Probability of Precipitation
ds.temp.bin	2-Meter Temperature
ds.td.bin	2-Meter Dew Point Temperature
ds.maxt.bin	Daytime Maximum Temperature
ds.mint.bin	Nighttime Minimum Temperature
ds.qpf06.bin	6-hour Quantitative Precipitation Amount
ds.pts06.bin	6-hour Probability of a Thunderstorm
ds.rhm.bin	Relative Humidity
ds.snw24.bin	24-hour Snowfall Amount
ds.pop06.bin	6-Hour Probability of Precipitation
ds.qpf12.bin	12-hour Quantitative Precipitation Amount
ds.wgust.bin	Wind Gusts

ds.pts12.bin      12-hour Probability of a Thunderstorm  
ds.pts03.bin      3-hour Probability of a Thunderstorm

Table 2: Communication Identifiers for the Experimental GFS-Based 2.5-km Gridded MOS GRIB2 Products. Each GRIB2 Product has a Unique WMO Header. Listed below are Representations of the WMO Headers for each Element. A complete list of the WMO Headers is available at:

<http://www.nws.noaa.gov/mdl/synop/gmos/gmos2p5headers.pdf>

WMO HEADER	ELEMENT
-----	-----
YAUXXX KWBQ	Total Sky Cover
YBUXXX KWBQ	Wind Direction
YCUXXX KWBQ	Wind Speed
YDUXXX KWBQ	12-hour Probability of Precipitation
YEUXXX KWBQ	2-Meter Temperature
YFUXXX KWBQ	2-Meter Dew Point Temperature
YGUXXX KWBQ	Daytime Maximum Temperature
YHUXXX KWBQ	Nighttime Minimum Temperature
YIUXXX KWBQ	6-hour Quantitative Precipitation Amount
YJUXXX KWBQ	6-hour Probability of a Thunderstorm
YRUXXX KWBQ	Relative Humidity
YSUXXX KWBQ	24-hour Snowfall Amount
YUUXXX KWBQ	6-hour Probability of Precipitation
YVUXXX KWBQ	12-hour Quantitative Precipitation Amount
YWUXXX KWBQ	Wind Gusts
YXUXXX KWBQ	12-hour Probability of a Thunderstorm
YYUXXX KWBQ	3-hour Probability of a Thunderstorm

The experimental 2.5-km products are an addition to the gridded MOS suite, not a replacement for the current 5-km gridded MOS guidance. Customers who use the 5-km guidance over the CONUS can continue to use these products without disruption until all customers and systems are able to use the higher resolution guidance.

A Webpage outlining the gridded MOS guidance and the FTP server structure can be found at:

<http://www.nws.noaa.gov/mdl/synop/gmos.php>

For questions regarding the experimental 2.5-km gridded MOS guidance for the CONUS, please contact:

Kathryn Gilbert  
MDL/Silver Spring, MD  
301-713-0023, Ext. 130  
[kathryn.gilbert@noaa.gov](mailto:kathryn.gilbert@noaa.gov)

Links to all MOS products and descriptions are at:

<http://www.nws.noaa.gov/mdl/synop>

National Technical Implementation Notices are online at:

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

\$\$

NNNN