

NOUS41 KWBC 121103  
PNSWSH

Technical Implementation Notice 13-30  
National Weather Service Headquarters Washington DC  
705 AM EDT Thu Sep 12 2013

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

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

Subject: Update to GFS-based Model Output Statistics (MOS) Wind  
Guidance and Resulting Changes to LAMP Wind Guidance  
on or about October 22, 2013

On or about Tuesday, October 22, 2013, beginning with the 1200 Coordinated Universal Time (UTC) model cycle, the NWS Meteorological Development Laboratory will implement new Global Forecast System (GFS)-based Model Output Statistics (MOS) wind speed and direction guidance for sites available in the short-range (MAV) and extended-range (MEX) text bulletins. These new equations correct bias changes in the GFS model upgrade implemented May 10, 2011.

[www.nws.noaa.gov/os/notification/tin11-07gfs\\_update\\_aaa.htm](http://www.nws.noaa.gov/os/notification/tin11-07gfs_update_aaa.htm)

Wind equations for the warm season (valid April 1 through September 30) were updated on June 12, 2012.

[http://www.nws.noaa.gov/om/notification/tin12-25gfs\\_mos-aaa.htm](http://www.nws.noaa.gov/om/notification/tin12-25gfs_mos-aaa.htm)

These changes also will impact the GFS-based Localized Aviation MOS Program (LAMP) beginning with the 1600 UTC cycle.

NWS is replacing cool season wind equations for the majority of stations over CONUS, Alaska, Hawaii, Puerto Rico and Canada.

Three METAR sites in the West no longer report or do not contain a sufficient number of wind observations from which to develop new equations. Forecasts produced from the old equations are significantly degraded. Guidance for wind direction and speed are now missing for the following three sites for all cycles and projections in the GFS MOS bulletins:

K3A6 Newhall, CA  
KTDO Toledo-Winlock Memorial, WA

These changes will slightly alter the format of the GFS MOS text products because lines for wind direction and speed will be removed for the three sites listed above. As a result of the GFS MOS change above, LAMP guidance for wind direction, speed, and gusts will now be missing for those three sites for all cycles and projections in the LAMP LAV bulletins and BUFR messages.

In addition, guidance for wind direction and speed has been added for the following four Air Force sites for all cycles and projections in the Air Force MAV and MEX bulletins:

- K2DP Dare County Gunnery Range, NC
- KBIF Biggs Army Airfield, TX
- KBYS Bicycle Lake Army Airfield, CA
- KL35 Big Bear City Airport, CA

These changes will slightly alter the format of the Air Force MAV and MEX text products because lines for wind direction and speed will be added for these four sites.

The tables below list the communication identifiers for all products affected by these changes.

Table 1: Communication identifiers for the GFS-based MOS public text products affected by the changes.

WMO HEADING (SHORT RANGE)	AWIPS ID	WMO HEADING (EXTENDED RANGE)	AWIPS ID
FOPA20 KWNO	MAVPA0	FEPA20 KWNO	MEXPA0
FOUS21 KWNO	MAVNE1	FEUS21 KWNO	MEXNE1
FOUS22 KWNO	MAVSE1	FEUS22 KWNO	MEXSE1
FOUS23 KWNO	MAVNC1	FEUS23 KWNO	MEXNC1
FOUS24 KWNO	MAVSC1	FEUS24 KWNO	MEXSC1
FOUS25 KWNO	MAVRM1	FEUS25 KWNO	MEXRM1
FOUS26 KWNO	MAVWC0	FEUS26 KWNO	MEXWC0

Table 2: Communication identifiers for the affected Air Force MOS text products

WMO HEADING (SHORT RANGE)	AWIPS ID	WMO HEADING (EXTENDED RANGE)	AWIPS ID
FOUS30 KWNO	MAVF26	FEUS30 KWNO	MEXF26

Table 3: Communication identifiers for the GFS-based MOS BUFR products affected by the changes

WMO HEADING (SHORT RANGE)	WMO HEADING (EXTENDED RANGE)	REGION
JSML30 KWNO	JSMT30 KWNO	PACIFIC REGION

JSML31 KWNO	JSMT31 KWNO	NORTHEAST CONUS
JSML32 KWNO	JSMT32 KWNO	SOUTHEAST CONUS
JSML33 KWNO	JSMT33 KWNO	NORTH CENTRAL CONUS
JSML34 KWNO	JSMT34 KWNO	SOUTH CENTRAL CONUS
JSML35 KWNO	JSMT35 KWNO	ROCKY MOUNTAIN CONUS
JSML36 KWNO	JSMT36 KWNO	WEST COAST CONUS

Table 4: Communication identifiers for the GFS-based LAMP public text product affected by the changes

WMO HEADING	AWIPS ID
FOUS11 KWNO	LAVUSA

Table 5: Communication identifiers for the GFS-based LAMP BUFR products affected by the changes

WMO HEADING	REGION
JSMF10 KWNO	PACIFIC REGION
JSMF11 KWNO	NORTHEAST CONUS
JSMF12 KWNO	SOUTHEAST CONUS
JSMF13 KWNO	NORTH CENTRAL CONUS
JSMF14 KWNO	SOUTH CENTRAL CONUS
JSMF15 KWNO	ROCKY MOUNTAIN CONUS
JSMF16 KWNO	WEST COAST CONUS

For questions regarding the update to the GFS MOS wind guidance and resulting changes to the MAV and MEX bulletins contact:

Eric Engle  
 MDL/Silver Spring, Maryland  
 301-713-0023, Ext. 146  
 Eric.Engle@noaa.gov

For questions regarding the changes to LAMP guidance, contact:

Judy Ghirardelli  
 MDL/Silver Spring, Maryland  
 301-713-0056, Ext. 194  
 Judy.Ghirardelli@noaa.gov

Links to the MOS products and descriptions are online at:

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

NWS National Technical Implementation Notices are online at:

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

\$\$