NOUS41 KWBC 141135 AAA PNSWSH

Technical Implementation Notice 16-15 Amended National Weather Service Headquarters Washington DC 735 AM EDT Thu Jul 14 2016

To: Subscribers:

-NOAA Weather Wire Service

-Emergency Managers Weather Information Network

-NOAAPort

Other NWS Partners, Users and Employees

From: Tim McClung, Portfolio Manager

NWS Office of Science and Technology Integration

Subject: Amended: Changes to North American Mesoscale Model (NAM)-based Model Output Statistics (MOS) Guidance: Effective August 16, 2016

Amended to change the implementation date from Tuesday, July 26, 2016, to Tuesday, August 16, 2016, and to change the locations from which NAM MOS forecasts will be available for public download.

On or about Tuesday, August 16, 2016, beginning with the 1200 Coordinated Universal Time (UTC) model run, the NWS Meteorological Development Laboratory (MDL) will implement updates to the NAM-based MOS temperature and wind guidance. These updates will include new forecast equations for daytime maximum and nighttime minimum temperature, 2-m temperature and dew point, and 10-m wind speed and direction. Equations are being updated for both the warm and cool seasons. The new equations are based on dependent data samples that include a significant amount of operational and reforecast data from the latest version of the model (NAM v3.1.0) implemented in August 2014. Therefore, these equations should be better tuned to current operational NAM bias characteristics.

Due to changes in reporting frequencies, sufficient data were not available for development of new temperature and/or wind guidance at a number of sites currently included in the NAM MOS system. Conversely, it was possible to develop guidance at a number of sites not currently having forecasts for these elements. A complete listing of these changes for both the warm and cool seasons may be found on the MDL website at:

## http://www.weather.gov/mdl/mos changelog namchangelist2016

The upcoming changes will slightly alter the format of the NAM MOS alphanumeric (MET/MME) and Binary Universal Form for the Representation of meteorological data (BUFR) messages because lines will be added or removed in response to the changes in availability of forecast guidance listed in the above tables. No other changes to the format of the NAM MOS messages are expected with this update.

Before the implementation date, users may download parallel NAM MOS data from NOAA's Operational Model Archive and Distribution System (NOMADS) at the following link:

## http://para.nomads.ncep.noaa.gov/pub/data/nccf/noaaport/nam

Parallel BUFR products will reside in: metbufr.xtrn.nam\_mos\_XX, NAM CONUS/OCONUS text products (MET) in: nammet.tran.nam\_mos\_XX, and NAM marine products (MME) in: nammme.tran.nam\_mos\_XX, where XX denotes the particular forecast cycle (00 for 0000 UTC, and 12 for 1200 UTC).

With this implementation, NCEP Central Operations (NCO) also will be changing the address of servers from which the operational NAM MOS forecasts will be available for public download. Specifically, for the NAM MOS CONUS/OCONUS products (MET), the current location:

http://tgftp.nws.noaa.gov/SL.us008001/DF.anf/DC.mos/DS.met/RD.YYYYMMDD/cy.
XX.txt

will change to:

http://ftpprd.ncep.noaa.gov/data/nccf/com/nam/prod/nam mos.YYYYMMDD/mdl na mmet.tXXz,

and for the NAM MOS Marine products (MME), the current server location:

http://tgftp.nws.noaa.gov/SL.us008001/DF.anf/DC.mos/DS.mme/RD.YYYYMMDD/cy.
XX.txt

will change to:

http://ftpprd.ncep.noaa.gov/data/nccf/com/nam/prod/nam mos.YYYYMMDD/mdl na mmme.tXXz,

where XX represents the particular forecast cycle (either 00 or 12 UTC), and YYYYMMDD the 8-digit year, month and date of the NAM MOS forecasts requested. Users who rely upon these servers for dissemination of these data should make preparations to ingest data from the new locations.

The following public weather alphanumeric messages and BUFR products are affected by the above changes:

Table 1: Communication identifiers for the NAM-based MOS public weather text products.

WMO Hea	ading	AWIPS ID
FOAK47	KWNO	METAJK
FOAK48	KWNO	METAFC
FOAK49	KWNO	METAFG
FOPA40	KWNO	METPA0
FOUS44	KWNO	METNE1
FOUS45	KWNO	METSE1
FOUS46	KWNO	METNC1

FOUS47	KWNO	METSC1
FOUS48	KWNO	METRM1
FOUS49	KWNO	METWC1

Table 2: Communication identifiers for the NAM-based MOS marine text products.

WMO Hea	ading	AWIPS ID
FQAK47	KWNO	MMEAK1
FQPA40	KWNO	MMEHI1
FQUS41	KWNO	MMENE1
FQUS42	KWNO	MMESE1
FQUS43	KWNO	MMEGL1
FQUS44	KWNO	MMEGF1
FQUS45	KWNO	MMENW1
FQUS46	KWNO	MMESW1

Table 3: Communication identifiers for the NAM-based MOS BUFR messages.

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WMO Heading:
JSML10 KWNO
JSML11 KWNO
JSML12 KWNO
JSML13 KWNO
JSML14 KWNO
JSML15 KWNO
JSML16 KWNO
JSML17 KWNO
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For questions regarding the updates to the NAM MOS guidance and associated message changes, please contact:

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Links to the MOS products and descriptions are online at:

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

National Technical Implementation Notices are online at:

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

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