

NOUS41 KWBC 111507 AAA
PNSWSH

Technical Implementation Notice 15-33, Amended
National Weather Service Headquarters Washington DC
1105 AM EDT Fri Sep 11 2015

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

From: Tim McClung
Chief Operating Officer
NWS Office of Science and Technology Integration

Subject: Amended: Changes to North American Mesoscale Model
(NAM)-based Model Output Statistics (MOS) Guidance
Effective October 6, 2015

Amended to change the implementation date from Tuesday, September
29, 2015, to Tuesday, October 6, 2015

On or about Tuesday, October 6, 2015, beginning with the 1200
Coordinated Universal Time (UTC) model run, the NWS
Meteorological Development Laboratory (MDL) will implement
updates to the cool-season NAM-based MOS guidance. These updates
will include new equations for snowfall amount forecasts, which
will remove any remaining influence of data collected from the
older eta-coordinate model on MOS forecasts for this element. In
addition, MDL will introduce new NAM MOS probabilistic and
categorical guidance for cool-season precipitation type.

Prior to the implementation date, users may find parallel data
for download on NOAA's Operational Model Archive and Distribution
System (NOMADS) at the following link (files will reside in
nam_mos.YYYYMMDD):

<http://para.nomads.ncep.noaa.gov/pub/data/nccf/com/gfs/para/>

The addition of precipitation type will increase the length of
the cool-season NAM MOS messages by the addition of three lines
in the body of text for each station contained in the MOS
alphanumeric (MET) bulletins, and by three additional records for
each station in the BUFR messages. These added lines will
contain probabilistic forecasts for the occurrence of frozen
precipitation and snow (labeled POZ, POS), as well as a
categorical forecast of the most likely precipitation type
(labeled TYP). Users should take the necessary steps for ingest
of this additional information. Following implementation of these
changes, the format of the cool-season NAM MOS messages will be

identical to those being generated for the companion short-range GFS MOS text (MAV) and BUFR products.

Due to changes in reporting frequencies, sufficient data were not available for development of new precipitation type equations at 14 sites currently contained in the NAM MOS system. Therefore, precipitation type guidance will not be produced and no additional information will appear in the MET and BUFR messages for these sites. These sites are listed in Table 1 below.

Finally, the NWS will change the identifier used for Tazewell City, VA in the NAM MOS text bulletins and BUFR messages from K6V3 to KJFZ.

Table 1: Sites for which NAM MOS precipitation type guidance will not be available

ID	STATION	LAT	LON
K3A6	NEWHALL	CA	34.37N 118.57W
K47A	CHEROKEE CNTY ARPT	GA	34.31N 84.42W
K48I	SUTTON/BRAXTON CO AP	WV	38.69N 80.65W
K4BL	BLANDING	UT	37.62N 109.47W
K4HV	HANKSVILLE	UT	38.37N 110.72W
KHMS	HANFORD	WA	46.57N 119.60W
KNHZ	BRUNSWICK NAS	ME	43.89N 69.94W
KPFN	PANAMA CITY	FL	30.20N 85.80W
KRZZ	ROANOKE_RAPIDS	NC	36.44N 77.71W
KTDO	TOLEDO	WA	46.48N 122.80W
PADT	SLANA AIRPORT	AK	62.70N 143.98W
PALV	BIG RIVER LAKE	AK	60.82N 152.30W
PASP	SHEEP MOUNTAIN	AK	61.82N 147.51W
PAWR	WHITTIER	AK	60.77N 148.68W

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

Table 2: Communication identifiers for the NAM-based MOS Public weather text products

WMO HEADING	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 3: Communication identifiers for the NAM-based MOS BUFR

messages

WMO HEADING

JSML10 KWNO
JSML11 KWNO
JSML12 KWNO
JSML13 KWNO
JSML14 KWNO
JSML15 KWNO
JSML16 KWNO
JSML17 KWNO

For questions regarding the updates to the NAM MOS guidance and associated message changes please contact:

Mark Antolik
MDL/Silver Spring, Maryland
301-427-9480
Mark.Antolik@noaa.gov

or

Matthew Peroutka
MDL/Silver Spring, Maryland
301-427-9483
Matthew.Peroutka@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>

\$\$