NOUS41 KWBC 101228 AAB
PNSWSH

Technical Implementation Notice 11-46 Amended
National Weather Service Headquarters Washington DC
828 AM EDT Tue Jul 10 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
Chief, Science Plans Branch
Office of Science and Technology

Subject: Amended: Changes to Localized Aviation Model Output Statistics Program (LAMP) Products: Effective July 17, 2012

Amended to set the implementation date for Tuesday, July 17, 2012. Users are cautioned that if a Critical Weather Day (CWD) designation is in effect on July 17, this implementation will be delayed until the conclusion of CWD. You can monitor the CWD status at the following webpage:

http://www.nco.ncep.noaa.gov/pmb/cwd/

Effective on Tuesday, July 17, 2012, beginning with the 1600 Coordinated Universal Time (UTC) run, the NWS Meteorological Development Laboratory (MDL) will update the Localized Aviation Model Output Statistics Program (LAMP) system.

The LAMP changes include:

Replacing the current LAMP total sky cover guidance with new opaque sky cover guidance, which is dependent on cloud opacity.

The LAMP sky cover guidance predicts an estimate of the total percentage of the sky covered by clouds in terms of the five categories reported in the Meteorological Terminal Air Report (METAR) observations: clear, few, scattered, broken, or overcast. The current LAMP total sky cover guidance does not distinguish between opaque and translucent cloud cover.

The new LAMP sky cover will produce an estimate of opaque clouds.

The anticipated effect of this change will be to decrease the number of broken or overcast forecasts and to increase the number of clear or few forecasts when only cirrus clouds are expected. This change will make the LAMP guidance consistent with both the NWS definition of sky cover, as well as the Global Forecast System (GFS)-based MOS definition of sky cover. See Technical Implementation Notice (TIN) 07-34 for details on GFS-based MOS opaque sky cover change:

https://www.weather.gov/media/notification/tins/tin07-34juncloud.pdf

The LAMP total sky cover currently available in the LAMP public text bulletins (known by their Advanced Weather Interactive Processing System (AWIPS) identifier LAV) and labeled as CLD will be replaced with the LAMP opaque sky cover. The CLD label will not change. Likewise, the LAMP total sky cover currently available in the Binary Universal Form for the Representation of meteorological data (BUFR) message will be replaced with the LAMP opaque sky cover. This change to the LAMP BUFR message will be transparent to users with no changes to the descriptors in the BUFR file.

Redeveloped ceiling height and conditional ceiling height equations to produce improved forecast guidance.

NWS will add 119 stations to the LAMP text bulletins and BUFR products. These changes will be reflected in the new equations for opaque sky cover, and the redeveloped ceiling height and conditional ceiling height equations. These changes will also be reflected in the guidance for the following elements:

Precipitation occurring on the hour
Precipitation in a 6-hour period
Precipitation in a 12-hour period
Thunderstorms in a 2-hour period
Precipitation type
Visibility
Conditional visibility
Obstruction to vision

These changes will slightly alter the format of the LAV text products because new lines will be added to the existing bulletins to accommodate the new stations. In addition, some stations might not have had guidance for all of the above elements prior to this change, and with this change, guidance will now be produced for those elements for those stations.

These changes will also alter the contents of the LAMP BUFR messages because new guidance will be available. The communication identifiers for the text and BUFR products are shown in Tables 1 and 2 below.

Table 1: Communication Identifiers for the GFS-based LAMP Products in American Standard Code for Information Interchange (ASCII) Format. Listed below are the World Meteorological Organization (WMO) heading and the AWIPS identifier.

WMO heading	AWIPS ID
FOUS11 KWNO	LAVUSA

Table 2: Communication identifiers for the GFS-based LAMP products in BUFR format. Listed below are the WMO headings.

WMO heading	Region
JSMF10 KWNO	LAMP BUFR Pacific Region
JSMF11 KWNO	LAMP BUFR Northeast Region
JSMF12 KWNO	LAMP BUFR Southeast Region
JSMF13 KWNO	LAMP BUFR North Central Region
JSMF14 KWNO	LAMP BUFR South Central Region
JSMF15 KWNO	LAMP BUFR Rocky Mountains Region
JSMF16 KWNO	LAMP BUFR West Coast Region
JSMF17 KWNO	LAMP BUFR Alaska Region

A webpage providing additional details of these changes, including a link to the list of new stations, is online at:

www.nws.noaa.gov/mdl/gfslamp/docs/change_notice_01242012.php

If you have technical comments or questions, please contact:

Judy Ghirardelli
National Weather Service
Meteorological Development Laboratory
judy.ghirardelli@noaa.gov
301-713-0056, x 194

Links to the LAMP products and descriptions can found at:

http://www.nws.noaa.gov/mdl/gfslamp/gfslamp.shtml

National Technical Implementation Notices are online at:

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

$$
NNNN