

NOUS41 KWBC DDHHMM AAB  
PNSWSH

Technical Implementation Notice 11-46 AAB  
National Weather Service Headquarters Washington DC  
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From: Tim McClung  
Science Plans Branch Chief  
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:

1. 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 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 TIN 07-34 for details on GFS-based MOS opaque sky cover change.

<http://www.nws.noaa.gov/os/notification/tin07-34juncloud.txt>

The LAMP total sky cover currently available in the LAMP public text bulletins (known by their AWIPS ids 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 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.

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

3. 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 ASCII format. Listed below are the 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 Web page 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](http://www.nws.noaa.gov/mdl/gfslamp/docs/change_notice_01242012.php)

If you have technical comments or questions, please contact:

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Links to the LAMP products and descriptions can found at:

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

National Public Information Statements are online at:

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

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