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Service Change Notice 25-62
National Weather Service Headquarters Silver Spring MD
1040 AM EDT Tue Aug 12 2025

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From: Geoff Manikin
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Meteorological Development Laboratory

Subject: Changes and additions to LAMP station-based and gridded guidance effective September 16, 2025

On or about September 16, 2025, beginning with the 1400 Coordinated Universal Time (UTC) model run, the NWS Meteorological Development Laboratory (MDL) will implement changes to the Localized Aviation Model Output Statistics Program (LAMP) station-based and Gridded LAMP (GLMP) guidance. Comments/feedback on this upgrade were previously solicited publicly from May 1-30, 2025 via this Public Information Statement: https://www.weather.gov/media/notification/pdf_2025/pns25-28_lamp_glmp_v2.7.pdf

In the event that the implementation date is declared a Critical Weather Day (CWD), an Enhanced Caution Event (ECE), or other significant weather is occurring or is anticipated to occur, implementation of this change will take place at 1630 UTC on the next weekday not declared a CWD and when no significant weather is occurring.

LAMP/GLMP v2.7 will include the following enhancements/changes in support of the National Blend of Models (NBM) and other NWS initiatives:

1) Addition of station-based guidance for ceiling height and visibility that provides the forecasted start and end (aka onset and cessation) times of aviation flight categories and provides probabilistic information. The guidance will be made available on NCEP Web Services (NOMADS) in three text bulletin formats:

A. An expanded sub-hourly bulletin containing guidance valid for 15-minute periods out to six hours, updating every 15 minutes (96 cycles per day), for 1818 CONUS stations. The expanded sub-hourly bulletins will contain guidance for:

i. The lowest forecasted combined flight category during the 15-minute period.
ii. The forecasted start, prevailing, and end times of each combined flight category.

iii. The lowest forecasted LAMP categorical ceiling and categorical visibility during the 15-minute period.
iv. Cumulative probabilities for specific ceiling categories occurring during the 15-minute period.
v. Cumulative probabilities for specific visibility categories occurring during the 15-minute period.

The new sub-hourly file will have the following naming format "lmp.tHHMMz.fltcat.f0015-f0600.txt" (where HH is the LAMP cycle hour and MM is the LAMP cycle minute).

The previous sub-hourly bulletin that contains just the LAMP categories, named "lmp.tHHMMz.subhbull.f0015-f0600.txt" will no longer be produced starting on the change date. Also, the previously advertised “CIGH” line in the bulletin that indicated the lowest ceiling height in hundreds of feet has been removed from the product. Including this information would have resulted in an unacceptable production delay due to a dependence on the GLMP ceiling grids.

B. A new extended flight category bulletin containing guidance for hourly projections out to 38 hours, updating each hour at the nominal HH:30 UTC LAMP cycle times, for 1818 stations. The extended bulletins will contain guidance for:

i. The forecasted combined flight category at the hour.
ii. The forecasted start, prevailing, and end times of each combined flight category.
iii. The forecasted LAMP categorical ceiling and categorical visibility valid at the hour.
iv. Cumulative probabilities for specific ceiling categories occurring at the top of the hour.
v. Cumulative probabilities for specific visibility categories occurring at the top of the hour.

This new file will have the following naming format "lmp.tHH30z.fltcat.f001-f038.txt" (where HH is the LAMP cycle hour).

C. A new simplified bulletin that indicates the start day and time and end day and time in UTC for each flight category, produced every 15 minutes (96 cycles per day) covering the first six hours, and produced hourly (24 cycles per day) covering forecast projections out to 38 hours.

The simplified bulletins will have the following naming format "lmp.tHHMMz.simpbull.f0015-f0600.txt" "lmp.tHH30z.simpbull.f001-f038.txt" (where HH is the LAMP cycle hour and MM is the LAMP cycle minute)

The new and modified text bulletin products described above will be made available on NCEP Web Services (NOMADS) beginning on the implementation date (location and file name details provided below). These products will not be disseminated over the Satellite Broadcast Network (SBN) at this time.

2) Updated hourly categorical visibility guidance at stations to improve over-forecast biases. Presently, national thresholds which do not vary by station are used for each LAMP visibility category. This has led to over-forecasting of the lower visibility categories in some parts of the country, particularly over the Eastern U.S. off the coastal plain. To address this issue, stations were grouped based on deciles of forecast bias for each visibility category, and then thresholds were re-derived for each decile group that apply to all stations in the group. Verification scores for visibility are either unchanged or modestly improved at a majority of LAMP stations using the redeveloped thresholds. Upon implementation, the updated categorical visibility guidance will be reflected in the hourly LAMP "LAV" and "LEV" text bulletins and BUFR message.

3) Addition of ceiling height and visibility guidance for 335 stations in the "LAV" and "LEV" text bulletins and BUFR message. These stations were originally added to the LAMP system in 2023 for temperature, dewpoint, and wind elements. Availability of LAMP guidance for these stations is now being expanded to include categorical ceiling and visibility. A list of the 335 stations with added ceiling and visibility guidance can be viewed here https://vlab.noaa.gov/web/mdl/lamp-stns-add-2023. Note that these stations will be added to the GLMP ceiling and visibility analyses in a future upgrade.

4) A bug fix to correct a misrepresentation of unlimited ceiling height in the Alaska GLMP ceiling grids. Presently, the GLMP deterministic ceiling grids for Alaska can contain values greater than 12,000 feet, which is unintended. This has been corrected to set ceilings greater than 12,000 feet to a value of "-100" in the disseminated GRIB2 output.

More details about LAMP/GLMP products and this implementationcan be found online at the LAMP Documentation web site:
https://vlab.noaa.gov/web/mdl/lamp-documentation

Changes to dissemination:

On the change date, some LAMP and GLMP files that presently reside on NOMADS will have a name change. A list of impacted files with the old and new file names is available at the following link:

https://vlab.noaa.gov/web/mdl/nomads-v2.7-filename-changes

There are no changes to LAMP or GLMP WMO headers or SBN routing with this implementation. Complete lists of LAMP and GLMP WMO headers (unchanged from v2.6) can be found here:
https://vlab.noaa.gov/documents/6609493/7858387/lampheaders_2024_v2.6.docx.pdf
https://vlab.noaa.gov/documents/6609493/7858387/glmpheaders_2024_v2.6.docx.pdf

Current model data is available here:
https://nomads.ncep.noaa.gov/pub/data/nccf/com/lmp/prod
ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/lmp/prod
https://nomads.ncep.noaa.gov/pub/data/nccf/com/glmp/prod

ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/glmp/prod

A consistent parallel feed of data will be available on the NCEP parallel NOMADS site beginning at least 30 days prior to implementation at the following locations:

https://nomads.ncep.noaa.gov/pub/data/nccf/com/lmp/para
ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/lmp/para
https://nomads.ncep.noaa.gov/pub/data/nccf/com/glmp/para
ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/glmp/para

Questions concerning parallel data should be directed to the NCEP HPC Dataflow team at ncep.pmb.dataflow@noaa.gov.

NCEP encourages users to ensure their decoders are flexible and are able to adequately handle changes in content format (including format and order of variables) and any volume changes that may be forthcoming. These elements may change with future NCEP model implementations. NCEP will make every attempt to alert users to these changes prior to any implementations.

Questions, comments or requests regarding this change should be directed to the contacts below.

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For questions relating to dataflow, please contact:

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Links to the LAMP products and descriptions can be found at:

https://vlab.noaa.gov/web/mdl/lamp

NWS Service Change Notices are online at:

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

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