The Decision Support Division (DSD) of the Meteorological Development Laboratory (MDL) is proposing to implement Localized Aviation MOS Program (LAMP) and Gridded LAMP (GLMP) Version 2.3 this winter. The NWS is seeking public comments on this proposed upgrade through September 23, 2020. If approved, a Service Change Notice (SCN) will be issued at least 30 days prior to the implementation of this upgraded product with more detailed information.

LAMP/GLMP v2.3, which is scheduled to be implemented in January 2021, will include the following enhancements in support of the National Blend of Models (NBM) and other NWS initiatives:

1) Addition of GLMP ceiling height and visibility guidance for Alaska on the NBM domain out to 38 hours. These new products extend the “Meld” approach used over the CONUS to Alaska, and leverage the Rapid Refresh (RAP) model. These new gridded elements for Alaska will be made available as input to the NBM and made available publicly on NCEP web services.

2) Addition of GLMP 1-hour convection and 1-hour lightning probability and potential guidance for Alaska on the NBM domain out to 38 hours. These new products use lightning data and Multi-Radar Multi-Sensor radar data to specify the occurrence of lightning and convection, and also leverage the RAP. These new gridded elements for Alaska will be made available as input to the NBM and made available publicly on NCEP web services.

3) Addition of LAMP 1-hour, 6-hour, and 12-hour probability of measurable precipitation (POP) and 1-hour best category Yes/No occurrence of measurable precipitation guidance for CONUS stations out to 38 hours. The 1-hour POP and Y/N guidance will be added to the LAV text bulletins for CONUS stations. The 6-hour POP will replace the current 6-hour POP guidance in the LAV text bulletins for CONUS stations. The 6- and 12-hour POP guidance will replace the current 6-hour and 12-hour POP
guidance in the LAMP BUFR messages for CONUS stations. The 1-hour POP and Y/N guidance will be added to the BUFR messages in a future implementation when the new BUFR messages can be used by AWIPS.

4) Expansion of CONUS GLMP sky cover guidance to the NBM CONUS domain and extension of forecast projections to 38 hours. The expanded sky cover guidance utilizes the recently-adopted “Meld” approach and incorporates the High Resolution Rapid Refresh (HRRR) model data over the CONUS and incorporates the RAP model data outside the extent of HRRR over Canada, the Gulf of Mexico, and ocean areas.

5) Refresh of CONUS conditional ceiling height and conditional visibility guidance at stations to incorporate the HRRR and extension to 38 hours. This updated guidance at stations will replace the current guidance in the 1-25 hour period in the LAV text bulletins and the LAMP BUFR messages. The new guidance for 26-38 hours will be added to the LAMP text bulletins (26-38 hours and 1-38 hours).

6) Addition of ceiling height, visibility, 1-hour convection, and 1-hour lightning guidance for 76 remote stations in Alaska. A separate LAMP text bulletin will be made available on NCEP web services for these 76 remote Alaska stations.

Expected benefits of this LAMP upgrade include:

1) Addition of GLMP ceiling, visibility, convection, and lightning over Alaska will support the NBM and benefit aviation and wildfire management users.

2) Expansion of CONUS sky cover will support the NBM and benefit aviation users and the general public.

3) Addition of CONUS 1-hour PoP will benefit aviation users, the general public, and users of the station guidance.

4) Conditional ceiling and visibility will leverage the HRRR and benefit users of the station guidance as well as users of the NWS Aviation Forecast Preparation System (AvnFPS).

5) Ceiling and visibility guidance will now be available for 76 new, remote stations in Alaska, which may be used for the NWS Alaska Aviation Guidance (AAG). More elements will be added to these stations in a future implementation.

The website below contains additional information about the LAMP/GLMP v2.3 upgrade and links to present prototype guidance:

https://www.weather.gov/mdl/lamp_experimental

The NWS will evaluate all comments on the proposed LAMP/GLMP v2.3 upgrade to determine whether to implement the upgrade.
Any questions, comments or requests regarding this upgrade should be directed to the MDL contact below. MDL will review any feedback and decide whether to proceed with the implementation.

For questions regarding the implementation of LAMP/GLMP v2.3 guidance, please contact:

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Links to LAMP products and descriptions can be found at:

http://www.weather.gov/mdl/lamp_home

National Public Information Statements are online at:

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

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