NOUS41 KWBC 051930 PNSWSH

Service Change Notice 21-73 National Weather Service Headquarters Silver Spring MD 330 PM EDT Thu Aug 5 2021

To: Subscribers:

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From: Jeffrey Craven

NWS Office of Science and Technology Integration

Meteorological Development Laboratory

Subject: Update to the National Blend of Models (NBM) Quantile Mapping and Dressing (QMD) to Fix an Issue with Probability of Precipitation Values in the Alaska Domain: Effective on or about August 17, 2021

Effective on or about Tuesday August 17, 2021, beginning with the 1200 Coordinated Universal Time (UTC) model run, the NWS National Centers for Environmental Prediction (NCEP) Central Operations (NCO) will implement an update to the National Blend of Models (NBM) Quantile Mapping and Dressing (QMD).

In the event that the implementation date is declared a Critical Weather Day (CWD) or significant weather is occurring or is anticipated to occur, implementation of this change will occur at 1200 UTC on the next weekday not declared a CWD and when no significant weather is occurring.

In late-July, NWS Forecast Offices in Alaska identified calibrated Probability of Precipitation (PoP) values for 6-, 12-, and 24-hour periods that did not agree with the accompanying calibrated Percentiles of Quantitative Precipitation Forecasts (PQPF).

Upon investigation, it was determined that an incorrect land/water binary mask is being used for the Alaska domain, leading to un-calibrated PoP values in the product output. This update will apply the correct mask, allowing for the calibrated PoP values to be outputted to the QMD PoP Alaska product where available.

The locations on the NOAA Operational Model Archive and Distribution System (NOMADS) of the affected files include:

https://nomads.ncep.noaa.gov/pub/data/nccf/com/blend/prod/blend.YYYYMMDD/ CC/core

Filenames are blend.tCCz.core.fHHH.ak.grib2.

 $\underline{\texttt{https://nomads.ncep.noaa.gov/pub/data/nccf/com/blend/prod/blend.YYYYMMDD/CC/qmd}$

Filenames are blend.tCCz.qmd.fHHH.ak.grib2.

https://nomads.ncep.noaa.gov/pub/data/nccf/com/blend/prod/blend.YYYYMMDD/ CC/text

Filenames are blend_nbetx.tCCz, blend_nbptx.tCCz, blend_nbstx.tCCz, and blend nbxtx.tCCz, respectively.

In the above paths, YYYYMMDD is the 8-digit year, month, and day, respectively; CC is the Blend cycle time; and HHH is the forecast projection.

A list of the headers that affect PoP06 and PoP12 over Alaska include:

For PoP06: YUAB12 KWEC YUAB18 KWEC YUAB24 KWEC YUAC06 KWEC YUAC12 KWEC YUAC18 KWEC YUAC24 KWEC YUAD06 KWEC YUAD12 KWEC YUAD18 KWEC YUAD24 KWEC YUAE06 KWEC YUAE12 KWEC YUAE18 KWEC YUAE24 KWEC YUAF06 KWEC YUAF12 KWEC YUAF18 KWEC YUAF24 KWEC YUAG06 KWEC YUAG12 KWEC YUAG18 KWEC YUAG24 KWEC YUAH06 KWEC YUAH12 KWEC YUAH18 KWEC YUAH24 KWEC YUAI06 KWEC YUAI12 KWEC YUAI18 KWEC YUAI24 KWEC YUAJ06 KWEC YUAJ12 KWEC YUAJ18 KWEC YUAJ24 KWEC YUAK06 KWEC

YUAK12 KWEC YUAK18 KWEC YUAK24 KWEC

YUAL06 KWEC YUAL12 KWEC YUAL18 KWEC YUAL24 KWEC YUAM06 KWEC YUAM12 KWEC For PoP12: YDAB12 KWEC YDAB24 KWEC YDAC12 KWEC YDAC24 KWEC YDAD12 KWEC YDAD24 KWEC YDAE12 KWEC YDAE24 KWEC YDAF12 KWEC YDAF24 KWEC YDAG12 KWEC YDAG24 KWEC YDAH12 KWEC YDAH24 KWEC YDAI12 KWEC YDAI24 KWEC YDAJ12 KWEC YDAJ24 KWEC YDAK12 KWEC YDAK24 KWEC YDAL12 KWEC YDAL24 KWEC

Any questions, comments or requests regarding this implementation should be directed to the contacts below.

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or

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For questions regarding the dataflow for NWS/NCEP services, please contact:

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A webpage describing the NBM can be found at:

http://www.weather.gov/mdl/nbm home

National Service Change Notices are online at:

https://www.weather.gov/notification

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