

NOUS41 KWBC 031245
PNSWSH

Service Change Notice 21-27A
National Weather Service Headquarters Silver Spring MD
845 AM EDT Mon May 3 2021

To: Subscribers
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPort
 Other NWS Partners, Users and Employees

From: Jeffrey Craven
 NWS Office of Science and Technology Integration
 Meteorological Development Laboratory

Subject: Update to the National Blend of Model's (NBM)
 Quantile Mapping and Dressing (QMD) to Fix an
 Issue with Unrealistically High Probability of
 Precipitation values over Northwest Mexico

Effective on or about Tuesday May 11, 2021, beginning with the 1200 Universal Time Coordinated (UTC) model run, the NWS National Centers for Environmental Prediction (NCEP) Central Operations 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-March, stakeholders including NWS's Forecast Offices in Arizona and New Mexico identified anomalous high Probability of Precipitation (PoP) values over northwestern Mexico (Baja California peninsula, Gulf of California, and interior Mexico).

Upon investigation, it was determined that there was a missing check for a certain condition in the QMD system. The missing check was causing zero amount precipitation forecast values from direct model output to be quantile-mapped, yielding light precipitation amounts, strong enough to exceed the PoP threshold of 0.01 inches. This update will apply the check, which should alleviate the artificially high PoP values in the above mentioned region.

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

David Rudack
MDL/Silver Spring, Maryland
301-427-9456
David.Rudack@noaa.gov

or

Jeff Craven
MDL/Silver Spring, Maryland
301-427-9475
Jeffrey.Craven@noaa.gov

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

Anne Myckow
NCEP Central Operations Dataflow Team Lead
ncep.pmb.dataflow@noaa.gov

A web page describing the NBM can be found at:

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

NWS National Service Change Notices are online at:

<http://www.weather.gov/notification>

NNNN