

# Upcoming changes: affecting Stage IV and precip URMA

Code handover: 22 Jan/2 Feb

Implementation date: 15:33Z 1 Mar 2016

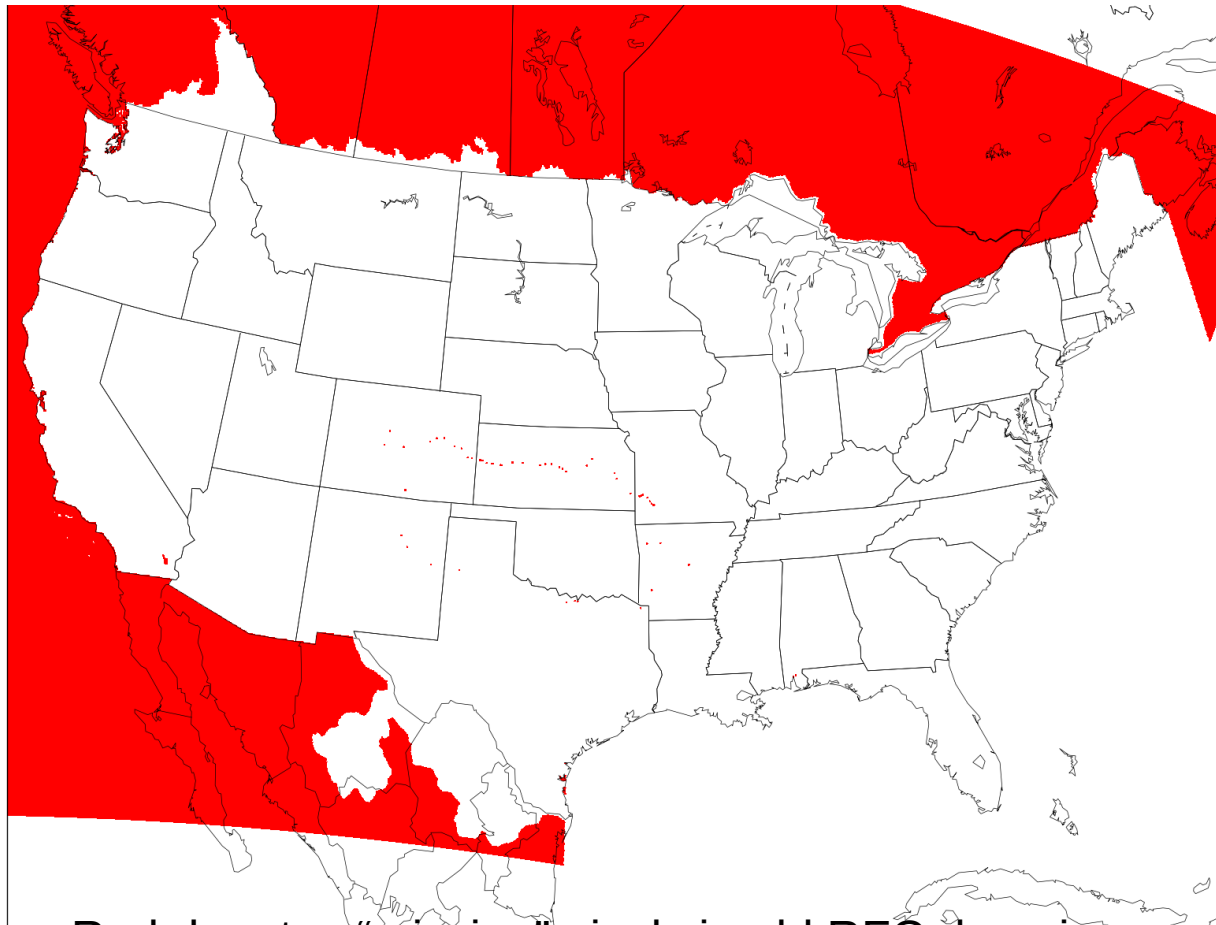
pcpanl.v2.2.1

- Revised RFC domains map: filled in isolated “missing” pixels at RFC boundaries
- Source of 6-hourly Stage IV: if hourly QPE from a central/eastern RFC is missing, then the corresponding 6-hourly QPE for that RFC is used as the source of 6-hourly Stage IV

# The RFC domains mask

The RFC domains mask used to generate Stage IV mosaics contained “holes” (undefined grid points that did not belong to any RFC – visible below at the boundary between CNRFC and CBRFC, and around the boundaries of ABRFC). This became a problem after 6 Jan 2016, when we no longer fill in missing points on the ConUS HRAP grid with coverage from neighboring RFCs: there are “undefined” pixels on the Stage IV mosaics.

Greg Fall (NOAA/NWC) created a new ConUS file from a 2-year-old RFC boundaries Shapefile (w/o gaps). This file was combined with the RFC domain mask files modified to add Great Lakes (created by Ray Davis in fall 2015) for a new RFC domain mask.



Red denotes “missing” pixels in old RFC domains mask

# Change to 6-hourly mosaic

- Since 14 Apr 2015, 6-hourly Stage IV/URMA uses hourly QPEs from central/eastern RFCs as sources for 6-hourly Stage IV. For these RFCs the hourly QPEs are the base product, 6-hourlies are derivative. The setup was to ensure that should a central/eastern RFC failed to update their 6h QPE after a late update of hourly QPE, the update to the hourly QPE would be reflected in the Stage IV
- In case an hourly QPE from a central/eastern RFC is missing (failed to be transmitted) we will now start using the corresponding 6-hourly QPE from that RFC as backup to make the 6-hourly Stage IV/URMA