

Colorado Basin River Forecast Center (CBRFC – Salt Lake City, UT)

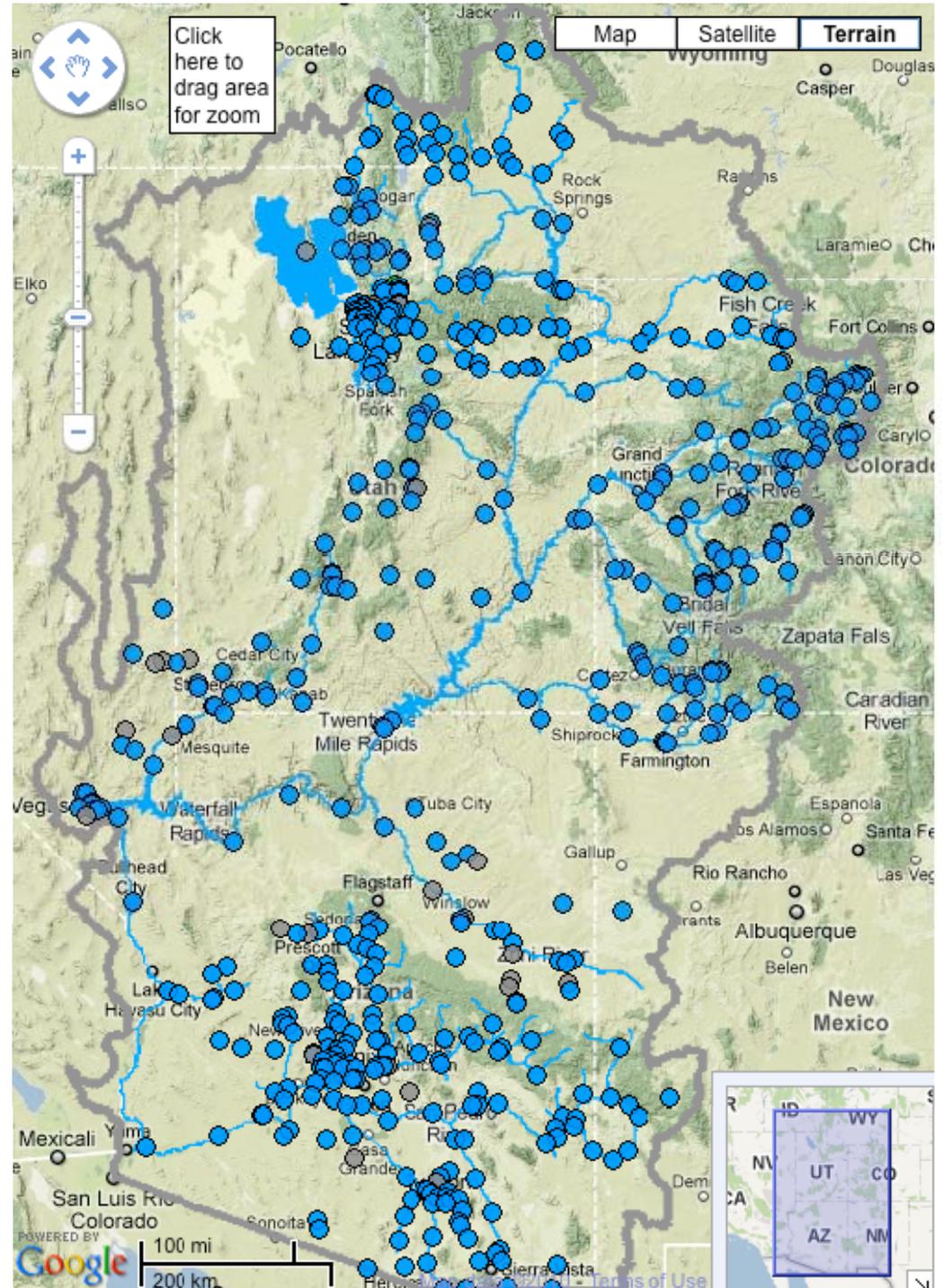
Kevin Werner – Service Coordination Hydrologist

Andy Wood – Development and Operations Hydrologist



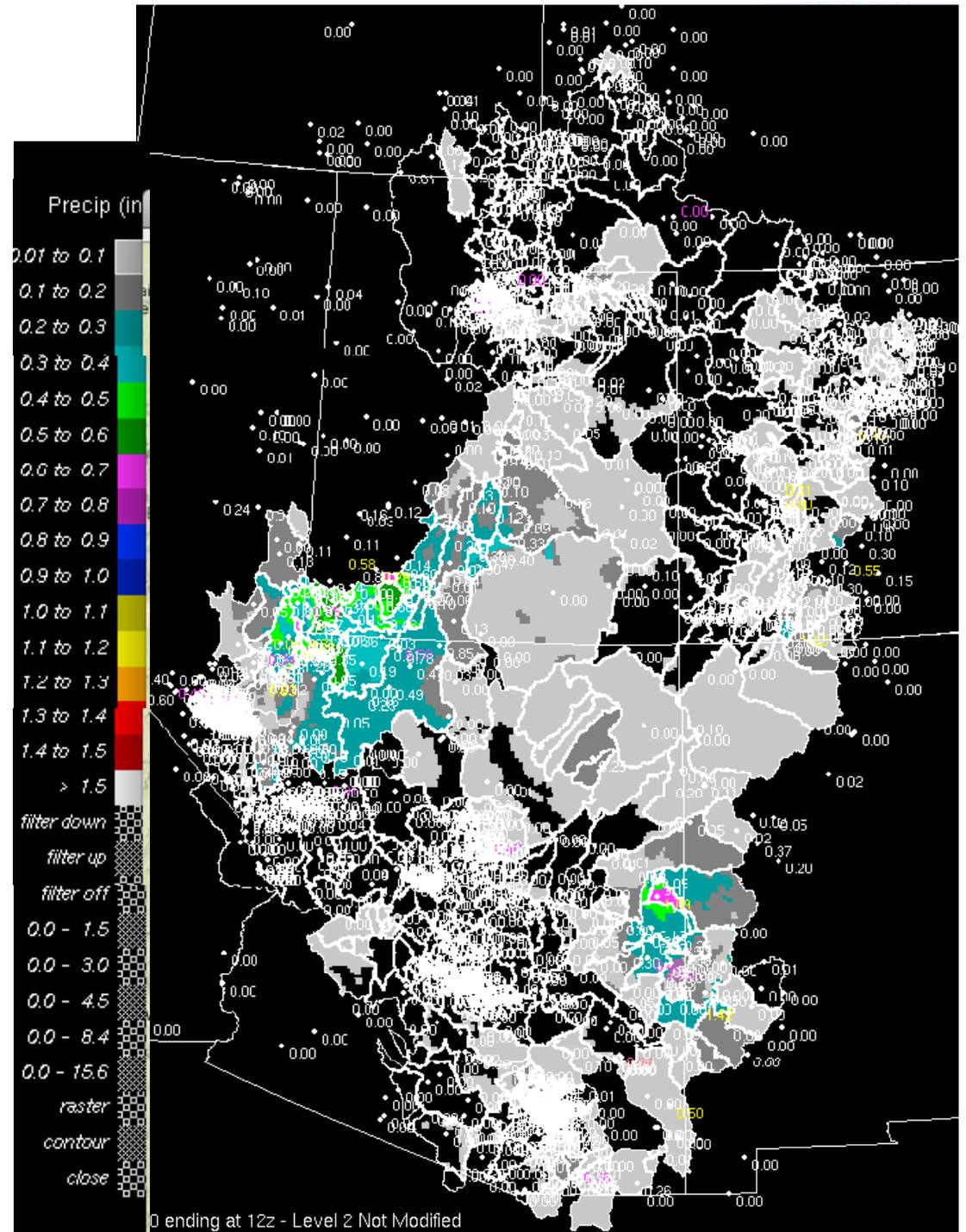
- Operational responsibility for Colorado River basin and eastern Great Basins
- Require hydrometeorological information over portions of eight states and contributing portion of Mexico – including 1 hour rainfall down to 4 km scales (currently)
- Precipitation information is presently taken from gages, snow measurements, and radar in the warm season. Satellite (IR) is also used qualitatively to verify presence/absence of precipitation.

CBRFC River Forecast Points

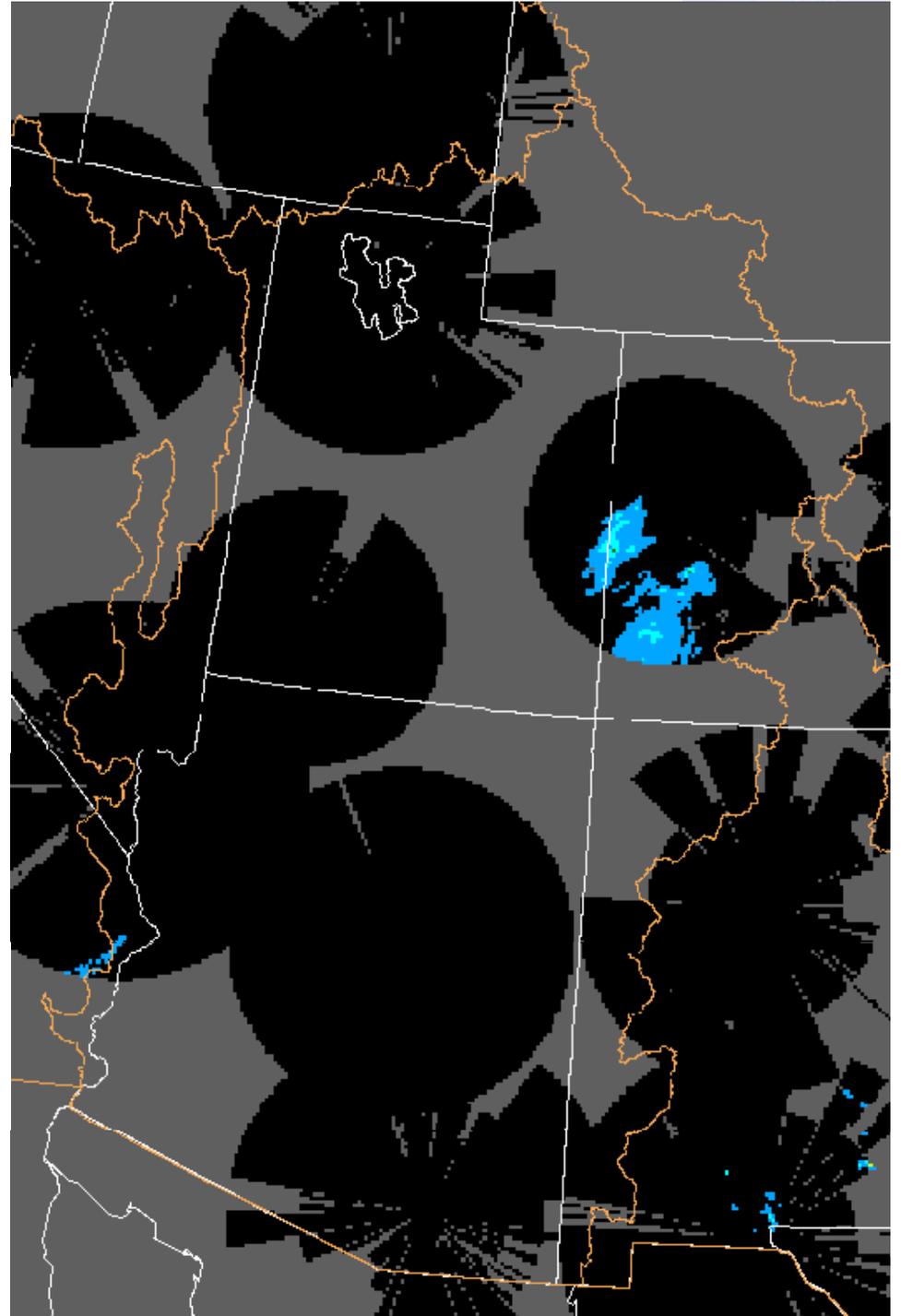


Precipitation
QA/QC and
grids / basin
mean areal
precipitation
constructed
from gauge
reports...

Note scale of catchments



Radar coverage
used in warm
season and
southern domain
(AZ, NM) in
combination with
gauge reports



CBRFC:



Gaps in current satellite product suite

- **Spatial (coverage) gaps:** Radar gaps, lack of radar coverage and limited gauge information over 4 corners region (largest radar “hole” in 48 states).
- **Temporal gaps:** MODIS snow data not available on cloudy days.
- **Accessibility gaps:** MODIS processed snow products are difficult to obtain and tailor for specific geographic areas.
- **Latency gaps:** MODIS snow data VERY difficult to incorporate into NWS RFC operations
- **Accuracy shortcomings:**
 - Snow estimates vary dramatically in accuracy by region, SNOTEL, etc.
 - Precip gauge quality varies. No current way to include this objectively in RFC operations
- **How GPM era products might help:** Better real time availability of precip products; finer scale spatial resolutions than current ⁵



CBRFC:

Next Steps for GPM-era data & products

- No CBRFC funded activities specific to satellite precipitation, at present
- Products would ideally come through AWIPS
- Dataset evaluation stage would be necessary
- RFC-based precipitation analyses may be best verification dataset