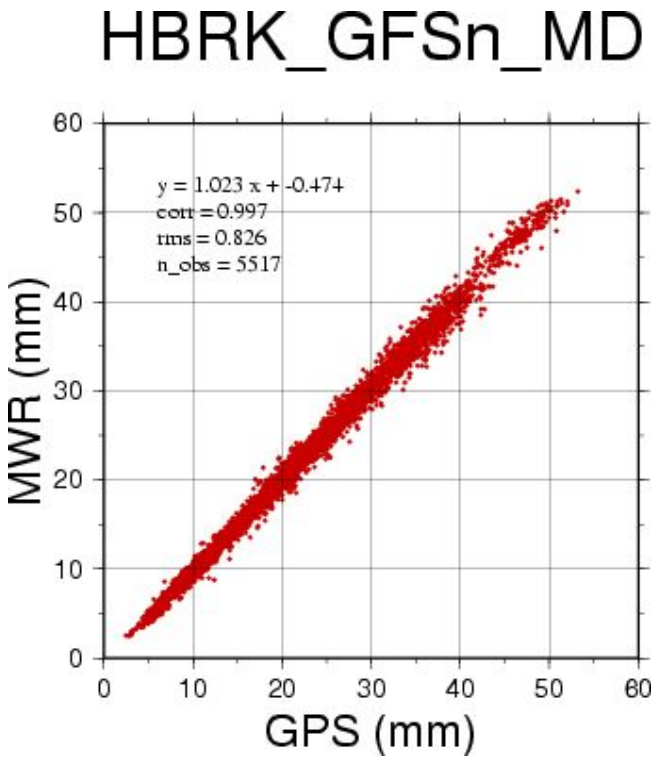
Suominet Bernese Software Update

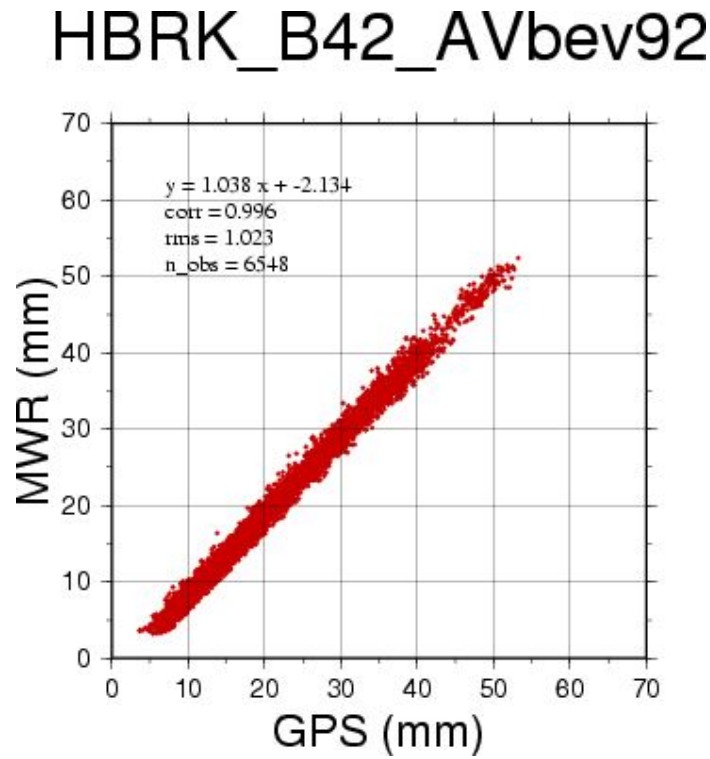
- The following slides show comparison plots of *new PW estimates using B50 compared to the original B42 analysis.

- These results are a composite of our global and North American networks. Collocated microwave water vapor radiometers (MWR) from the tropical western pacific (TWP), southern great plains (SGP), and the north slope of Alaska (NSA) are used as comparisons.

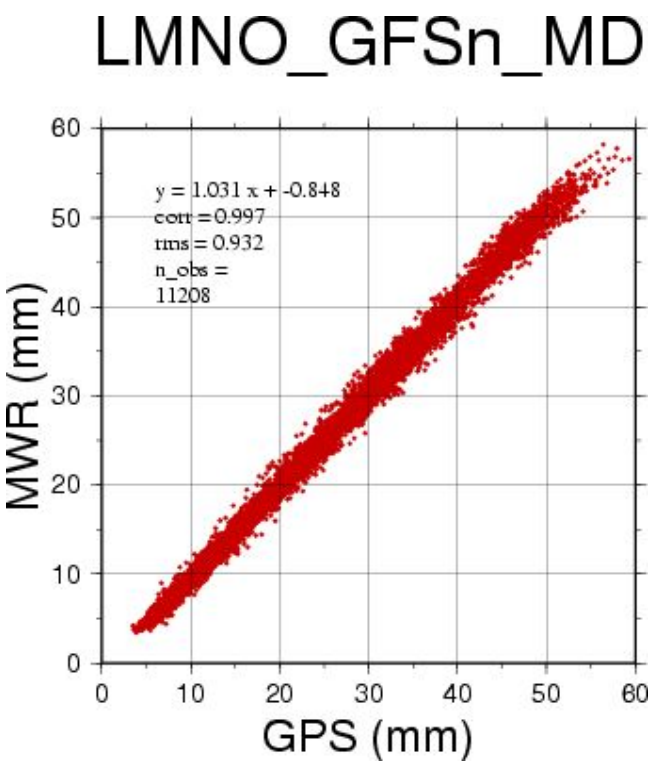
**The transition to B50 made these improvements easier to implement but they could have been done on B42 too.*

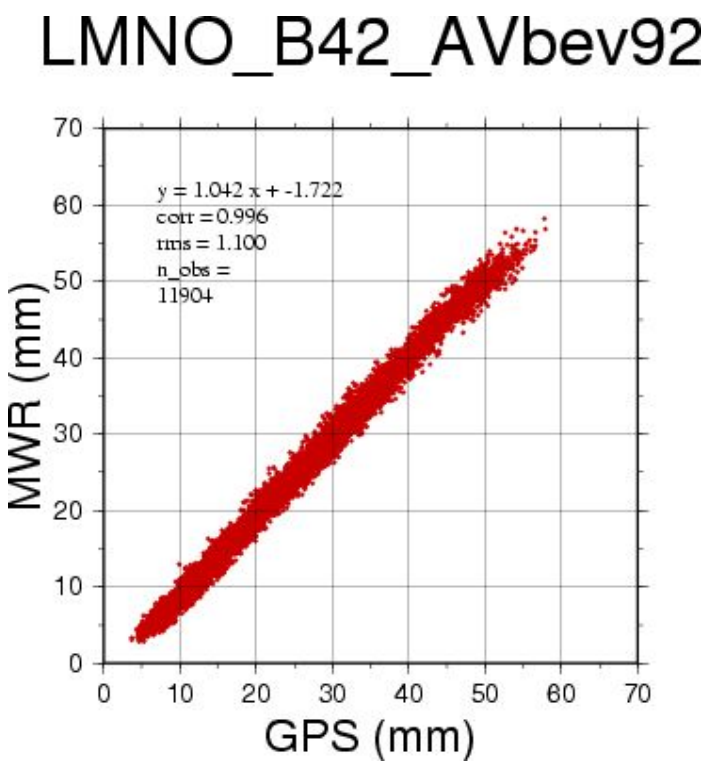
New (B50) on left, old (B42) on right Hillsboro KS FSL/ARM site



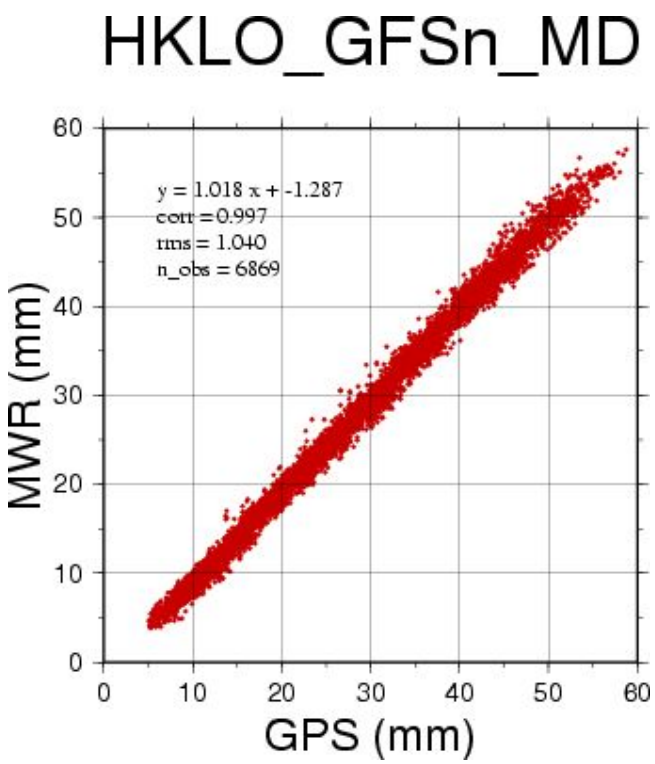


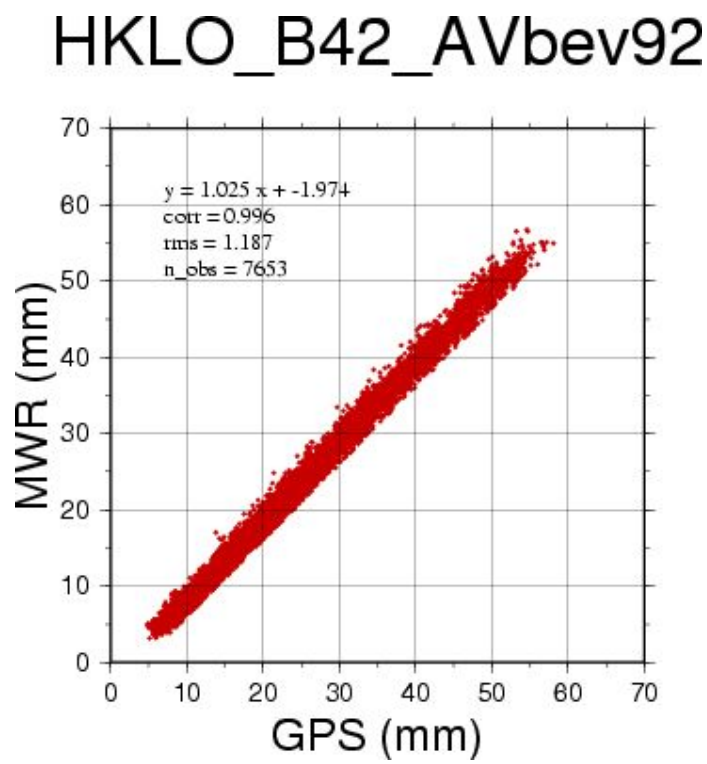
New solution left, old solution right vs ARM MWR at Lamont, OK



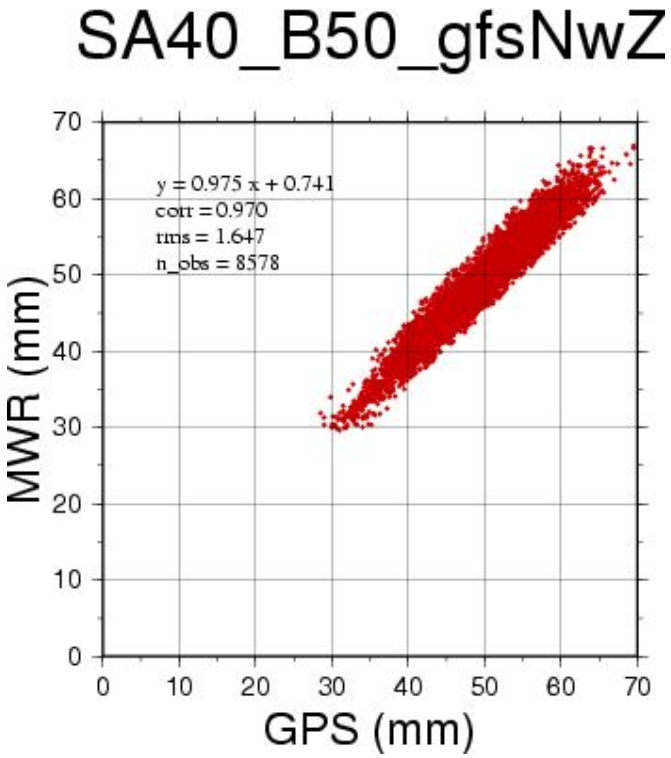


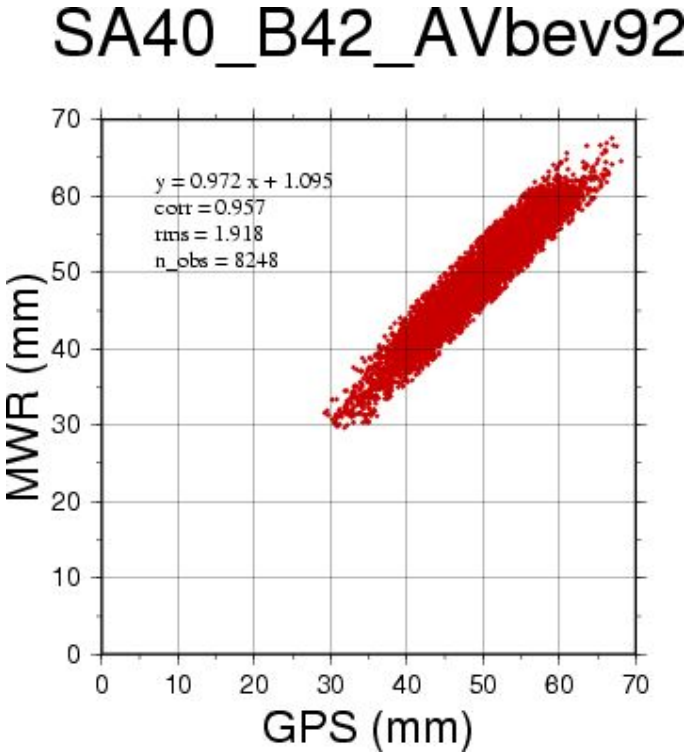
New solution left, old solution right vs ARM MWR at Haskell, OK



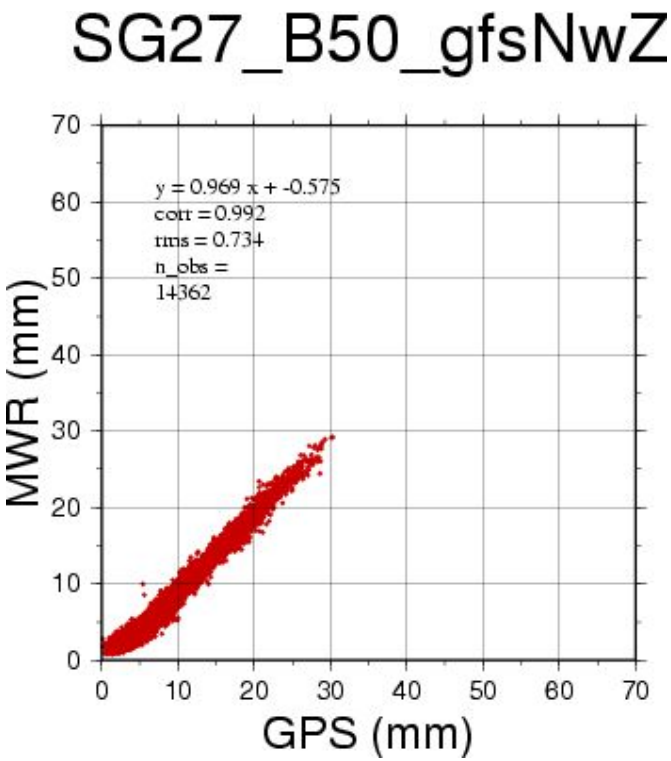


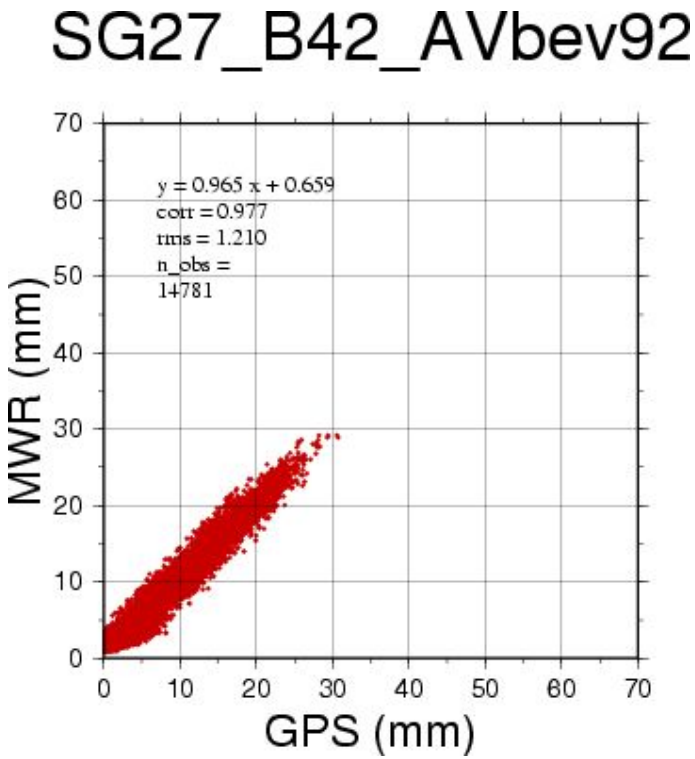
New solution left, old solution right at Nauru ARM TWP



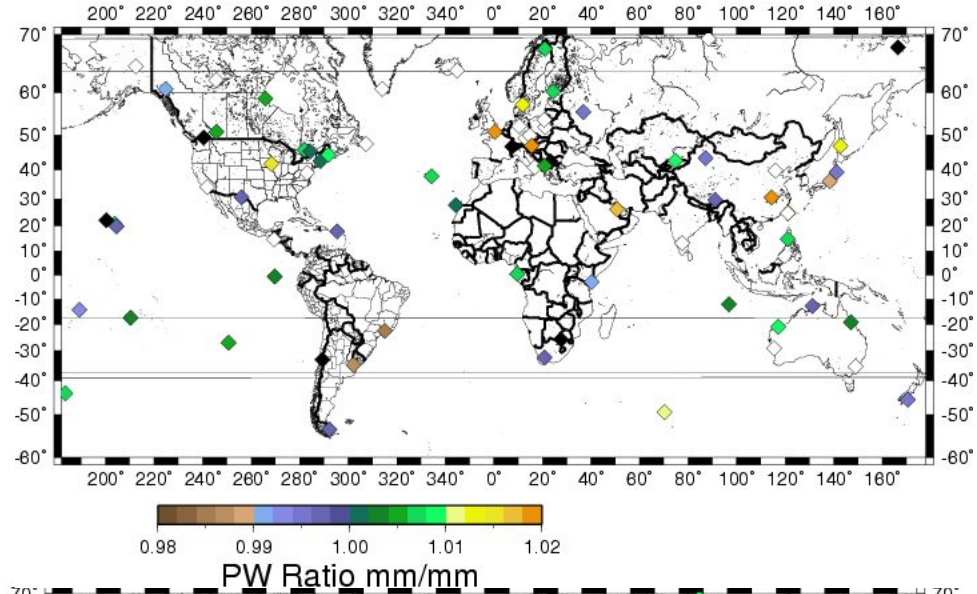


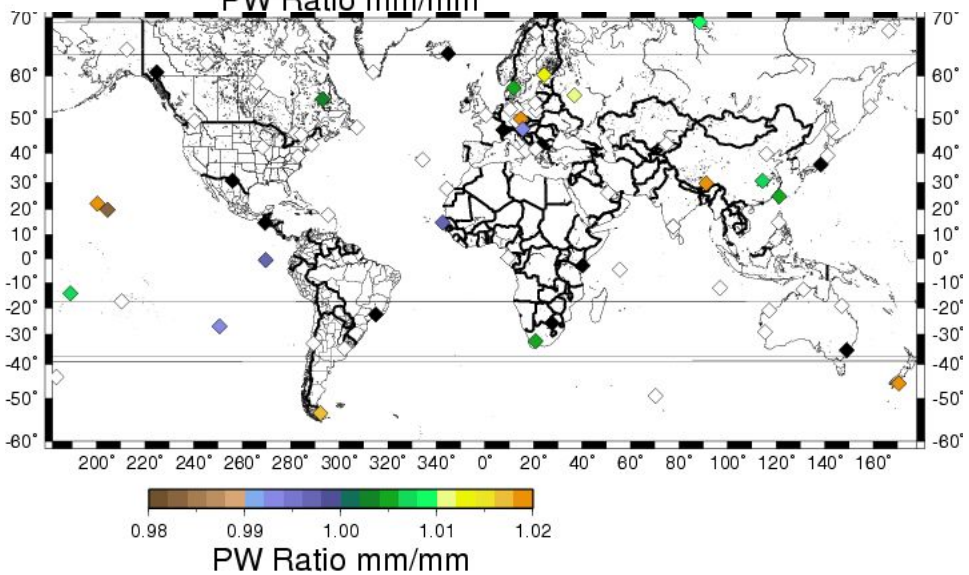
New solution left, old solution right at Barrow ARM NSA





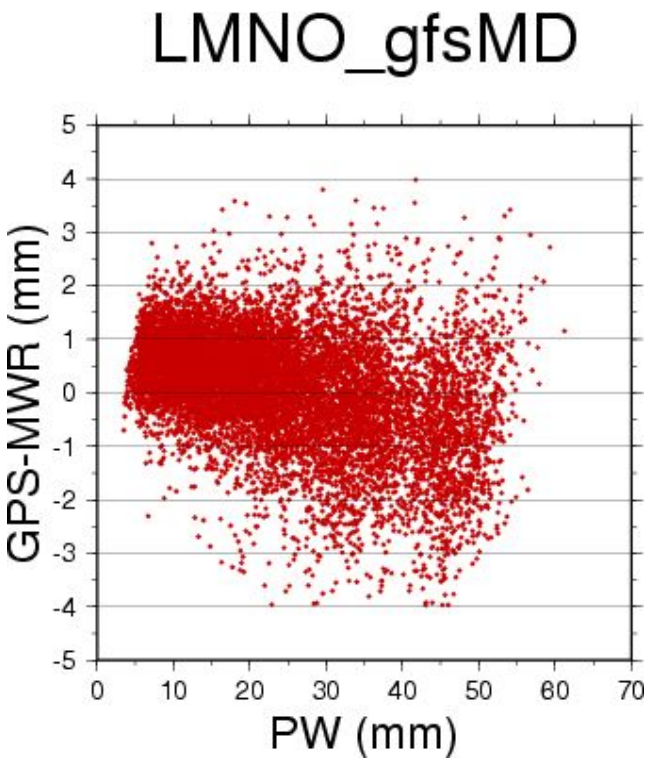
Comparisons vs IGS combined Solutions

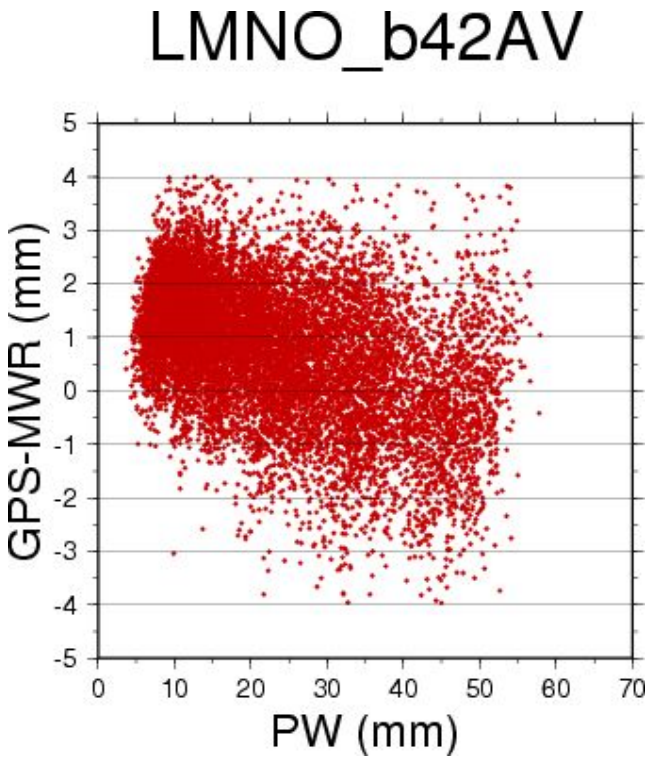


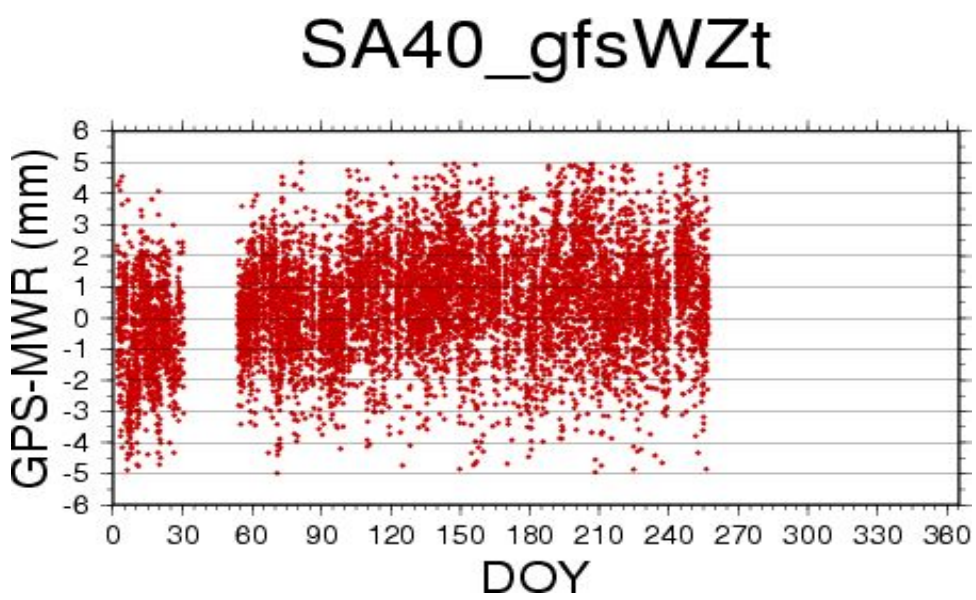


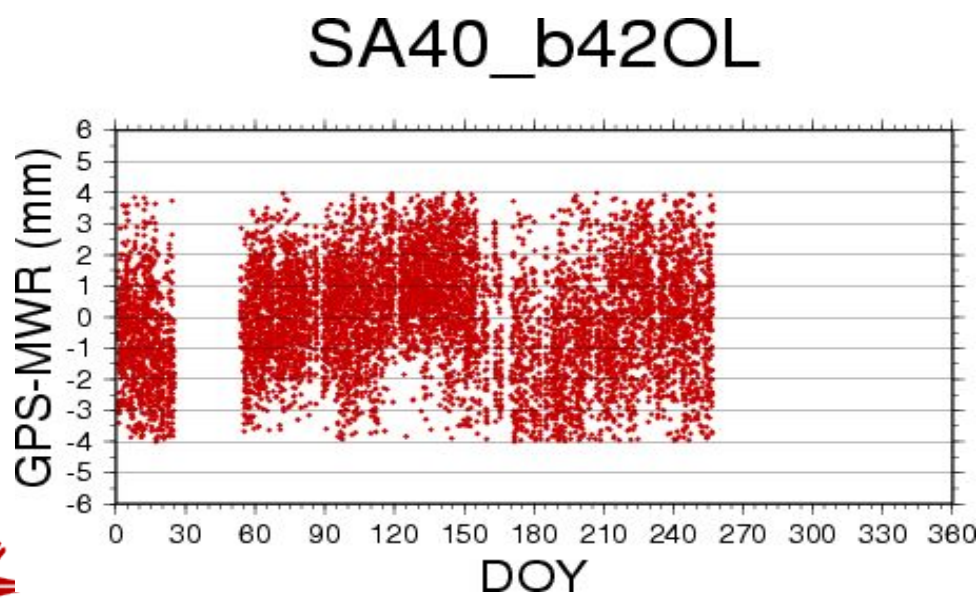
- Comparing old/new Suominet global ZTD estimates to the combined IGS ZTD values.
- Average ratios for 2006
- New solutions top, old solutions bottom.
- White boxes are ratios higher than 1.02

New on left old on right, vs ARM MWR at Lamont OK

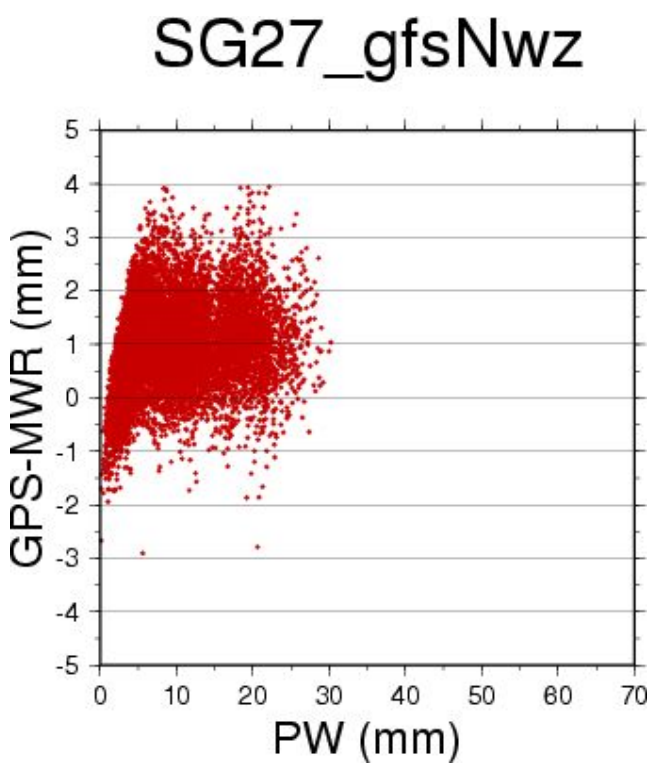
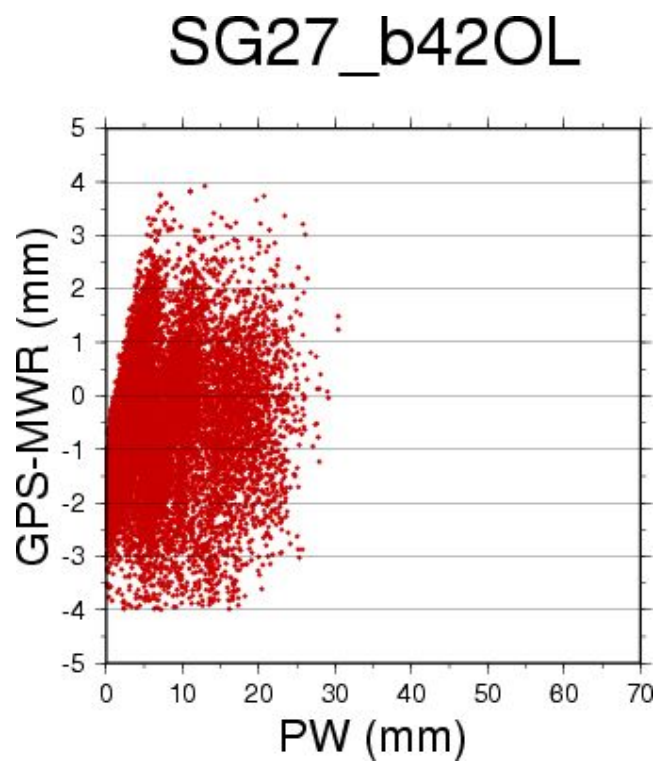








- New solution top, old solution on bottom.
- ARM facility on Nauru Island in the Tropical Western Pacific

New solution left, old solution right

at Barrow AK, vs ARM MWR, North Slope of Alaska facility