

# IGS Troposphere WG Report/Recommendations

From TWG Splinter Meeting  
2012 IGS Workshop, Olsztyn, Poland  
24 July 2012

C. Hackman, USNO; 27 July 2012

# 24 Jul 2012 Meeting Summary

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- ~ 40 people (thank you, attendees!)
- [Other stuff – turnover of chair/processing to USNO; survey...]
- **Establishing accuracy of IGS FTEs: how?**
- ~~How to vote/make decisions?~~

# Assess accuracy of ZTD, gradients through comparison w/other techniques

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- ▣ Independent-technique comparisons (VLBI, WVR, radiosondes, satellites, num. weather models)
- ▣ Inter-GNSS comparisons (GLONASS vs GPS)
- ▣ GNSS vs GNSS (e.g., compare ACs)
- ▣ At present, ~ 5 mm (+/-) uncertainty in ZTD
  - Worst in high-humidity/equatorial regions

# Recommendation to IGS GB

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By the next IGS workshop,

establish automated, on-going comparison of IGS final troposphere estimates (FTEs) with results from other techniques/ACs,

with the goal of establishing the accuracy of IGS FTEs.

# Execution

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- Focus on “super-sites,” IGS GPS receivers co-located with other ZTD-monitoring equipment.
  - ▣ Somewhere between 6 and 30ish ...
  - ▣ Started prioritized wish-list for other techniques (GPS, VLBI, \*calibrated\* WVRs. Still unsorted: calibrated barometer, known height, radiosondes, GLONASS, DORIS.)
- Also: GNSS-independent reprocessed NWMs.
- Also: compare IGSF with other AC estimates.
- Leverage existing comparisons done by J Dousa, R Heinkelmann; existing SW from Y Bar-Sever.

# Email if you wish to join:

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[christine.hackman@usno.navy.mil](mailto:christine.hackman@usno.navy.mil)

Thank you!