

# IGS Troposphere Working Group

2022 IGS Workshop, Virtual June 2022

S Byram

Earth Orientation Department, US Naval Observatory, Washington DC USA sharyl.m.byram.civ@us.navy.mil





- Who is in attendance?
- Charter Updates
- IGS Final Troposphere Estimates: status report
- Updates to FTEs?
- Looking Forward: Recommendations, Next Meetings
- Topics for discussion?



- Lets go around the "room".....difficult in virtual meetings
- Can join the working group mailing list at: https://igs.org/mail/

Charter can be found at:

charter

Please send suggestions to me by end of July

<u>https://igs.org/wg/troposphere/#charter</u>

• Per IGS request to working groups, time to review current

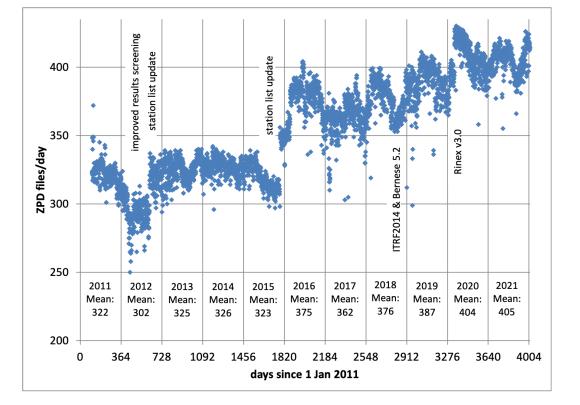
June 2022

### Tropo WG Charter Updates?



### Status report: IGS FTEs

- USNO/Dr S Byram and Mr Jeffrey Crefton generate
- ZTD, gradients every five min for most IGS receivers
- 405 stations/d in 2021
- Computed using Bernese GPS SW 5.2, GMF, PPP using IGS Final Orbits/EOPs/ SV clocks
- Available on CDDIS



Number of quality-checked IGS Final Troposphere Estimate files submitted to IGS per measurement day.

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- Repro 2 computation:
  - Clock products not recommended for use
  - Interest in creating tropo *Repro 2* with those orbits/clocks/EOPs?
- Rinex 3 observation files:
  - Prioritize using v3 if v2 also available, increasing availability
  - Increased number of stations processed ~25/day
- Missed stations
  - Attempting to fill in any missed stations in past years
- Repro 3 orbit and clock solutions available

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#### June 2022

# Updates to IGS FTEs?

- Is it time to make changes to the IGS FTEs?
  - Models?
    - GMF currently, test others?
  - Elevation cutoff?
    - 7 deg currently
    - 3 deg asked from ACs for Repro3
  - Multi-GNSS?
    - GPS only currently
    - Repro3 Multi-GNSS AC solutions
- Updates to screening and quality control measures?
  - How to access quality of IGS ZPD files?
- Other changes?



## Next TWG Project?

- Repro 3 AC comparisons?
- Multi-GNSS solution?
- Any suggestions?



#### • 2022 AGU Fall Meeting

- 12-16 December 2022
- San Francisco, CA

#### 2023 EGU General Assembly ?

- 3-8 May 2023
- Vienna, Austria

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# Think of something later? Email me at <a href="mailto:sharyl.m.byram.civ@us.navy.mil">sharyl.m.byram.civ@us.navy.mil</a> (note: this is a new email address)

Thank you for attending. Enjoy the rest of the workshop!