IGS Troposphere Working Group Repro3 Recommendations

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IGS Repro3 Tropo Estimates

- PPP based product
- ***Repro 2* computation issue**
    - Clock combination not recommended for long term PPP (Griffiths, 2016 AGU)
    - Solutions pre-2005ish were created with too few analysis centers

- Need quality clock estimates from Repro3 combination

IGS Repro3 AC Tropo Files

- ## Climate studies based on long time series of GNSS

  - GNSS is reaching the "maturity age" of 30 years when climate normals of ZTD and gradients can be derived

  - Are our tropo solutions good enough to serve as constraints to climate?

- ## AC provided ZTD and gradient estimates is a huge opportunity

  - SINEX_TRO 2.0 format

    http://twg.igs.org/documents/sinex_tro_v2.00.pdf

IGS Repro3 Models

- No specific model recommended
  - Tropo community ok with what works for your processing
  - Please estimate the gradients
- Use the same elevation angle cutoff
  - 3 degrees ideal (but unrealistic?)
    - Kačmařík, M. et al., Sensitivity of GNSS tropospheric gradients to processing options, https://www.ann-geophys-discuss.net/angeo-2018-93
- Report in common interval for comparison