Status of ITRF2013

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ITRF2013: Status of submissions

- **LLR solution from Hanover Univ. but does not comply with ITRF2013 CfP specifications**

- **IDS: submitted a V0 preliminary solution**

- **ILRS, IVS: Promised to deliver their solutions by end of April, but now in July!!**

- **IGS:**
  - **5 ACs are ready: ESA, GFZ, CODE, GRGS, ULR**
  - **EMR, JPL, MIT promised to deliver their solutions by end of May**

- **Solutions with no NT load corrections**

Preparation for ITRF2013 (1/2)

- **Expected Improvements & Developments:**
  - **Reprocessed solutions from the 4 techniques ;**
  - **Revisiting the weighting of Local Ties and Space Geodesy solutions included in the ITRF combination;**
  - **Improving the process of detection of discontinuities in the time series;**
  - **Applying NT-ATML (+) corrections to ITRF2013 input data**
  - **Modeling non-linear station motions:**
    - **Periodic signals (at least annual & semi-annual)**
    - **Co- & Post-seismic deformation**

Preparation for ITRF2013 (2/2)

- **Revisiting the weighting of Local Ties**
  - Use a variance factor per LT SNX, with 3 mm lower bound sigma
  - Weighting as a function of LT and SG agreement
  - down-weighting discrepant ties, iteratively
- **Velocity equalities at co-location sites: as a function of technique uncertainties**
- **Annual & semi annual terms: equal for all stations within the same site**
- **ITRF2013 specifications:**
  - Origin: SLR
  - Scale : average of VLBI & SLR
  - If no change wrt ITRF2008, scale of the latter will be retained
  - Scale rate from GPS could be used!
  - DORIS origin and scale will be evaluated

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