Some Suggestions for ILRS Official Weekly Combined Solution

Zuheir Altamimi

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Suggestions

- **Include at least 3 AC independent solutions**
- **SLR origin (CoM) and Scale should be preserved:**
  - **Should be the weighted average of (all!) AC solutions**
  - **Large discrepancies btw AC's should be understood/ resolved**
- **TRF orientation: combine using either:**
  - **Free-network approach and then transform into ITRF2000 (3 rotation parameters)**
  - **Minimum constraint equation w.r.t. ITRF2000 (3 rotation parameters)**
  - **Transformation into ITRF2000 should be operated over a Reference Set of « best » stations**

Comments on ASI combined solution
Example: ASI.pos+eop.040320.snx

- **Comparison to ITRF2000/IERS C04 useful but not necessary for the purpose of an official ILRS solution**
- **Orientation is arbitrary (?)**
- **Origin & Scale are not specified**
- **Comparison to a recent multi-technique combination (ITRF-type solution, aligned to ITRF2000):**
  - **Very good agreement : 1 cm WRMS**
  - **Reasonable geocenter offsets: less than 1 cm**
  - **Large scale bias (?) : ~ 3 ppb**

Comments on DGFI combined solution
Example: DGFI.pos+eop.040320.snx

- **Some SINEX format problems**
- **Orientation: rotation parameters small but not specified (alignment to ITRF2000 ???)**
- **Origin & Scale are not specified**
- **Comparison to a recente multi-technique combination (ITRF-type solution, aligned to ITRF2000):**
  - **Very good agreement : 1 cm WRMS**
  - **Reasonable geocenter offsets: less than 1 cm**
  - **Large scale bias (?) : ~ 3 ppb**
- **Is still a test run as stated in the sinex file ?**

Comments on NCL combined solution Example: NCL.pos+eop.040320.snx

- **The solution is constrained to ITRF2000 over 4 stations (constraints are removable, but should be avoided for an official ILRS combined solution)**
- **Origin & Scale are not specified**
- **Comparison to a recente multi-technique combination (ITRF-type solution, aligned to ITRF2000):**
  - **Very good agreement : 1 cm WRMS**
  - **Geocenter offsets: larger than 1 cm (Z-component)**
  - **Large scale bias (?) : ~ 3 ppb**