

Review of the recommendations of IERS workshop 2002

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ITRF PC

Recommendation 1:

The CCs to evaluate the consistency of the two combination approaches:

One step vs two step procedures

- **Done partly within the ITRF CCs in stacking the IGS time series submitted to ITRF2004: global consistency within 1 mm.**
- **Impact on the combined frame datum definition to be evaluated**

Recommendation 2

TRF Origin

- **ILRS, IGS and IDS to investigate refinement of their origin estimates**
 - **Antenna effect: GPS, DORIS (?)**
 - **Good agreement between ILRS ACs (ITRF2004 preliminary analysis)**

Recommendation 3

TRF Scale

- **TCs to refine/investigate their various modelling:**
 - **Troposphere : IVS, IGS, IDS**
 - **Antenna effects: IVS, IGS, IDS**
 - **Antenna thermal deformation: IVS**
 - **Range Bias: ILRS (still to be investigated more !)**

Recommendation 4

TRF Orientation & NNRC Condition

- **ITRS PC to adopt a list of core sites for the orientation and NNRC application**
- **ITRS PC to adopt an optimal method to ensure the accuracy of NNRC**
 - **Core sites to be adopted per technique (IGS done, other TCs to be confirmed)**
 - **ITRF PC to propose a list for ITRF2004**
 - **NNRC:**
 - **APKIM2004**
 - **ITRF2000**
 - **Other NNR models to be tested**

Recommendation 5

Investigation of non-linear motion

- **All research groups to investigate non-linear motion**
 - **Still a research area**
 - **Sites with non linear motion not to be listed as core sites for datum definition**
 - **ITRF2004: Breaks are introduced when appropriate**

Recommendation 6

Discontinuity list

- **TCs to establish their unique list of discontinuities**
 - **IGS: Done**
 - **IVS: List prepared by J. Ray**
 - **ILRS: List initiated by Z. Altamimi**
 - **IDS: Preliminary list to be confirmed**

Recommendation 7, 8 & 9

Co-locations & ties improvement

- **International effort to improve VLBI-SLR Co-locations (SLR2000 ?)**
- **IVS to schedule repeated Global-TRF sessions**
- **Working group on local ties to organize repeated local surveys in the co-location sites**
- **Local ties to be provided in SINEX format:**
 - **Some progress to be noted: New surveys are now in SINEX:**
 - **Wettzell & Concepcion**
 - **Medicina (with repeated surveys) & Noto**
 - **Australian sites (with repeated surveys)**
 - **HBK, Shanghai and Wuhan by IGN**
 - **All DORIS co-location ties in SINEX (in progress by IGN)**