

Agenda for the 2016 EGU ILRS ASC Meeting

Friday, April 22, TU Wien, Vienna, Austria, 9:00 – 17:00

NEW VENUE: 1, Erzherzog Johann Platz, IT Faculty Building
(The building across from the usual venue)

ORBITAL PRODUCT PUBLIC RELEASE REVIEW

ASI CC report

ITRF2014 IMPLEMENTATION STATUS AT AC/CC

- AC Reports
- ASI – CC
- JCET – CC

DTRF2014 & JTRF2014 EVALUATIONS

AC Results?

CC Results?

SYSTEMATIC ERROR MONITORING PILOT PROJECT

- AC Reports on the status of their contributions
- CC Reports on the results from the submitted series
- Path forward, AC commitments for an eventual operational product

MAJOR TOPICS FOR DISCUSSION:

1. *Revision of analysis procedures and modeling standards (ITRF2014 reanalysis)*
2. *Estimation of low-degree SH of the gravity field*
3. *Inclusion of LARES as a 5th satellite in our operational product development*
4. *Revisit NT Atm. Loading & Gravity implementation as an internal PP*
5. *Other topics?*

Revision of analysis procedures and modeling standards:

- Need to plan how we will migrate the current operational series to a design like the one used during our ITRF2014 reprocessing effort
- Steps needed to achieve the switch:
 - All ACs should be able to easily switch to the new approach, provided the required input is readily available;
 - We are in the process of developing a mechanism that would provide the ACs with gravitational coefficients for the lowest degrees as a substitute to the series provided by CSR for the reanalysis;
 - Once we include the estimation of low degree harmonics in our operational products, this will be a trivial step;

Estimation of low-degree SH of the gravity field (PP):

- Clarify which ACs are now ready to support this product (ESA & NSGF???)
- Decide on the test-period for a PP comparing results to independently developed series (e.g. the CSR series used in our ITRF2014 reanalysis);
- Since this capability will be required for the optimal incorporation of the LARES

data into our operational products, this PP needs to be completed before or in tandem with that of the addition of LARES to our target list;

Inclusion of LARES in our operational product development (PP):

- LARES can add a lot of strength to our products and at the same time allow us to deliver low-degree harmonics (e.g. 5x5) on a weekly-arc basis routinely;
- A PP following (as an extension) the PP for the validation of estimation of low-degree SH would help iron out any modeling differences between ACs and ensure that everyone is on the same page;
- Need to adopt state-of-the art gravitational and tidal models in order that higher degrees have negligible errors and those errors will not leak and corrupt our estimates;
- We will need to have some test results for various such models, so the ACs that are involved through other efforts in the evaluation of such models should provide guidance on the subject (publications, etc.);

Revisit NT Atm. Loading & Gravity implementation as an internal **PP**:

- Results of the GGFC/ITRS-run PP were inconclusive and mixed, indicating possible errors in the development of the input loading data sets in various s/w-compatible formats from the original release at GGFC;
- SLR suffers of the blue sky effect and adopting the correct application of NT Atm. Loading at the stations will improve our operational products;
- ITRS' reservations about the application of the models do not apply here since for TRF development purposes we always resort to a dedicated reanalysis in which case we can always forego the application of such models to conform with the ITRS rules;

Other topics, next meeting...

– Next ASC meeting at GFZ Potsdam, Saturday, October 8, 2016

Last meeting action items:

✓ = DONE

1. UPDATE ASC pages on ILRS recently launched website (send comments/suggestions to ECP)
14. JCET, DGFI, HITU and SAO to discuss the procedure for quick coordinate updates for QC process
16. ACs must send their updated description files for their operational products to Carey
19. **STATUS:** ESA & NSGF AC must implement the gravity coefficient parameter estimation???

ECP AIs: New Mean Pole, GGFC contact, Gravitational Model tests

GA AIs: LARES CoM inclusion in the s/w distributed through ILRS (as well as Starlette/Stella and Ajisai)

CL – Cinzia Luceri
GP – Gilda Pace
DT – Daniela Thaller
ECP – E. C. Pavlis
FD – Florent Deleflie
GA – Graham Appleby
HM – Horst Müller
RK – Rolf König
ZA – Zuheir Altamimi