

July 17, 2018

**ILRS Quality Control Board (QCB)
Telecon
July 17, 2018**

Next meeting: Wednesday, Aug 14 at 13:00 UTC, 09:00 EDT, 14:00 in UK; 15:00 in Central Europe; 22:00 in Japan.

Participants: Frank Lemoine, Carey Noll, Erricos Pavlis, Mike Pearlman, Toshi Otsubo, Matt Wilkinson

Mt. Stromlo Data Bias Issues

Mt. Stromlo has submitted some data from its new automated system; there is some cleanup, but it is not yet fully automated. JCET is compiling a report to be sent to Chris Moore with the validation analysis results.

Station Systematic Error Monitoring Pilot Project-- SSEM PP (Erricos)

All ACs submitted LAGEOS and ETALON series with all biases adjusted, except for BKG and GFZ who have not yet included Etalon. The SSEM will be updated again later this month, when we receive LAGEOS and ETALON series from all ACs. When Jose's update of the CoM correction model is released later this year, the series will be regenerated using the new model issued. When operational, the SSEM will provide a weekly set of updated biases for the entire network.

Since Etalon will be an important component to the SSEM, we should try to stimulate Etalon data production at stations that have a reasonable potential. Carey has provided a first look at the data from February – March 2018. We should plan to organize a 3-month campaign, February – April 2019. We should choose about a dozen stations to encourage, but all stations may participate.

Erricos will take a look at the data statistics to take a first cut at identifying the stations and the target data yield that we want to encourage. We should have these planned by the 21st IWLR to discuss it with the potential stations and firm up the campaign plans ahead of time.

Web Based Station Performance Tool (Erricos)

The tool has moved to a new platform at UMBC; some upgrades are yet to be implemented. The Russian data in ITRF2014 now runs back more than a year.

JCET Portal:

JCET has added a weather service for the ILRS network stations to its ASC product and information portal. Take a look and comment:

http://geodesy.icet.umbc.edu/ILRS_AWG_MONITORING/

Data Issues

The Russian data do not include the higher moments in their calibration information; Matt had mentioned that he had furnished them with software that included this, but we do not know if it was useful to them. Van is following up on this.

Alexandre has said that the 2017-2018 T2L2 data would be made available by late 2018. Once the data are available they will be included in the future re-analysis for the ITRF2020 development. Furthermore, to check on the quality of the T2L2 estimates, the process should be

applied to LRO data and the results should be compared for consistency at as many sites as possible over a reasonable time-period.

Frank will check on the availability of the T2L2 data.

Mike will ask Mark T. if the LRO results are available.

Site Logs

Mike will ask Randy/Christian where we stand on the implementation of Phase 1 including the on-line update

The new system should be tested at a few stations before going public.

Randy continues to collate and vet items for inclusion in Phase 2; he should make sure that these are discussed with some of the more prolific stations to get their input.

Full-Rate Data and NP Testing

Van is following up on FR delinquent stations.

Matt is working on the NP software to make it more easily transferable; he will then do the NP studies with first priority on the spherical geodetic satellites.

Center-of-Mass Parameters on New Satellites

Missions are expected to provide all physical information required for the development of CoM correction models. In some cases, the correction models may be developed from laboratory measurements or from using already standard arrays (LEO and GNSS). The final correction model will be derived from ranging measurements once in orbit.

We had thought about forming an advisory group to help new missions make educated decisions on retroreflector arrays. This now seems to have morphed into more general guidance for new missions to consider in the early stages of their planning, including retroreflector arrays.

Mike will start with the **ILRS Support for new missions list** and try to draft something.

Data Population on LAGEOS and Other Satellite Passes

The Study Group (with Mark T. and Justine) tasked with recommending new criteria for evaluating (and rewarding) station performance (rather than just number of passes) presented some of their thoughts at the last CB meeting; they will give us feedback at the next CB meeting.

The CB should also issue a document of best practices for tracking operations including pass coverage and time separation of calibrations (as soon as we decide our proper strategies).

Carey will look at the material being prepared for the workshop by the Study Group to see if there is anything relevant on these topics.

Station Tools

Discussions continue on the forum. If you have particular topics that you want to be included, contact Matt.

Engineering Issues

Tests at Herstmonceux have not shown that circular polarization can be preserved through the coude optics of a telescope to reduce polarization effects in ranging. This has been discussed with Dave Arnold and Tom Varghese. This may also be a topic for discussion at the Workshop.

Matt will discuss the polarization issue with Tom Varghese and Georg Kirchner.

Next Meeting

Wednesday, August 14 at 13:00 UTC, 09:00 EDT, 14:00 in UK; 15:00 in Central Europe; 22:00 in Japan. Telecon info: Passcode: 317382, international phone numbers:

<u>USA (toll free)</u>	<u>1-844-467-4685</u>	Italy (toll free)	0 800 977 597
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