

August 23, 2018

**ILRS Quality Control Board (QCB)
Telecon
August 16, 2018**

Next meeting: Thursday, October 18 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, and Toshi Otsubo

Mt. Stromlo Data Bias Issues

Test data from the automated system for a period 7 – 8 months was compared with the “manual” operational data; it still is not catching all of the data that should be deleted. Work continues.

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

All the expected AC series with adjusted biases and including Etalon have been received at the JCET portal; next will come the combination process for the data from 1993 to present. Once this is completed; operational weekly processing will start. The series will be regenerated once the new CM models are available from Jose.

A 3-month Etalon Campaign will be scheduled for the February – April 2019 timeframe. We should choose about a dozen stations to encourage, but all stations may participate. We should have this planned by the 21st IWLR to discuss it with the potential stations and firm up the campaign plans ahead of time. Erricos will do some visibility planning. We would be looking for about 80 – 100 passes per year per station.

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 (Erricos)

New series are being uploaded on the JCET Portal. Erricos is asking that data be uploaded every 6 hours or at a minimum sub-daily so the reports can be issued daily to correspond with the daily issue of UTC. Toshi will consider if he can speed up his schedule.

Has everyone looked at the ASC weather service for the ILRS network stations?

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.

Some stations have observed station timing offsets using T2L2. Wettzell was able to reconcile an offset through its connection with its maser. Yarragadee had an offset of ~500 ns, which in spite of considerable scrutiny, has not yet been explained. The problem is probably not in the disciplined oscillator, which should have an rms ~30 nsec; the GNSS rms should be in the neighborhood of 30 microseconds.

If T2L2 and LRO timing data were available, it would provide a good opportunity to compare two high-accuracy timing systems. 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 both T2L2 and LRO results data.

Site Logs

Randy is testing Christian's new site log editing tool; there are still some problems being addressed.

Randy continues to collect new items for inclusion in Phase 2.

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.

Guidelines for New Mission Applicants

Guidelines for new missions applicants to be posted clearly on the ILRS website has been drafted, vetted by the CB, and now sent to the MSC for review.

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 have sent out a document that is available for review.

It was suggested that the CB should 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). Maybe a small committee could work on this.

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. Tom Varghese mentioned the elliptical polarization is inevitable, but that proper coatings could reduce it. Also any tests will require a long periods (several months) of observation to really understand the performance. This may also be a topic for discussion at the Workshop.

General

We agreed that bi-monthly meetings of the QCB would be adequate and that we should narrow the focus to strictly QC issues.

Next Meeting

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