

Minutes of the ILRS Analysis Standing Committee Meeting No. 3/2024

Wednesday, 2024-07-23, online, 12:00–14:30 UTC

Attendees:

Baños Garcia A., Basoni A., Belli A., Bloßfeld M., Desai A., Husson V., Kehm A., König D., Kuzmicz-Cieslak M., Luceri C., Lemoine F., Müller J., Reinhold A., Reinquin F., Sarrocco D., Schönemann E., Schrama E., Schreiner P., Schwatke C., Sośnica K., Susnik A., Woo J.

0) Last meeting + open Action Items (AIs)

NEW ACTIONS		
# AI	Description	AC/person
1_apr2024	Clarify origin of y-pole jump in Sept. 2023	NSGF
2_apr2024	Provide complete v85 time series to ASI/JCET	BKG
3_apr2024	Check implementation of ILRS DHF	JCET
4_apr2024	Make sure that TS models and DHF are consistent	C. Luceri, M. Bloßfeld
5_apr2024	Provide a list of problems related to the ILRS DHF	V. Husson
6_apr2024	Update most recent DLR2020 version for new Tsukuba station coordinates	M. Bloßfeld, F. Lemoine

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6_apr2024	Update most recent DLR2020 version for new Tsukuba station coordinates	M. Bloßfeld, F. Lemoine
1_jan2024	Clarify with GRGS which steps are necessary to get GRGS becoming an ILRS AC in 2024.	F. Deleflie, M. Bloßfeld
2_jan2024	New product-based DSC files (instead of old AC-based DSC files).	M. Bloßfeld
3_jan2024	Compute orbit product based on v85 reprocessed solutions.	all
4_jan2024	Compile report on SINEX format updates wanted by the ILRS for IERS DB; organize test phase for commented new SINEX blocks.	All, M. Bloßfeld
5_jan2024	New format for AC-based DSC files.	M. Bloßfeld
6_jan2024	Investigation of test solutions based on different satellite- and station-weighting strategies.	DGFI/ASI CC/JCET CC
7_jan2024	Investigation of large cross-track orbit differences of NSGF w.r.t. other AC orbits; orbit issues of BKG	NSGF, BKG
1_apr2023	Large scatter of GFZ LOD w.r.t. USNO.	GFZ

3_apr2023	Publication on ILRS contribution to ITRF2020.	E. Pavlis, C. Luceri
5_apr2023	New strategy for the processing of arcs before 1993.	C. Luceri, M. Bloßfeld

Updates on AIs:

Recent AIs:

1_apr2024: not yet done; will be further investigated by A. Susnik.

2_apr2024: finished but some ACs are missing single SINEX files (cf. slides of ASI CC); please revisit slides and send missing SNX files to EDC/CDDIS.

3_apr2024: finished. JCET checked implementation of DHF and fixed minor issues.

4_apr2024: ongoing: in each DHF, a note is given which TS model is consistent with it. Since TS models and the DHF are updated independently, CL and MB should work out a strategy to ensure consistency even more stringent. A potential option as it was discussed some years ago, is to include the TS models into the DHF as a special section. To be discussed at next ASC meeting.

5_apr2024: ongoing: MB will contact VH (and QCB) for current inconsistencies within the DHF.

6_apr2024: ongoing: several stations are currently providing new metadata which requires an update of the SLRF2020 (e.g., Tsukuba, San Fernando, Yebes). MB and FL will further work on this issue.

Old AIs:

1_jan2024: ongoing: MB contacted FL on the progress regarding the implementation of the new DH and FL stated that it requires further action from his side. Both agreed to discuss the progress at a meeting early 2025.

2_jan2024: ongoing: MB claimed that the product-based SDSC files are nearly finished and a result will be presented at the next ASC meeting (in early November or at IWLR).

3_jan2024: after a discussion if the ASC should go for such a reprocessing, all members agreed that it might be worthwhile for some users to have orbits consistent to the reprocessing standards used in the v85 product. This means the ACs should work on a submission of the reprocessed orbits. MB will provide a link to a test folder at EDC.

4_jan2024: ongoing: MB will provide manual which blocks should be included by the ACs in their operational SINEX product submissions. The agreed recommendations are sent to the IERS by MB.

5_jan2024: same as 2_jan2024. Will be deleted.

6_jan2024: AB computed some test combinations with different DGFI solutions based on 4 different satellite- and station.weighting strategies (cf. slides).

7_jan2024: ongoing.

1_apr2023: ongoing: MB will send details of LOD signal to PS.

3_apr2023: ongoing: CL contacted ECP and ECP agreed to forward all material compiled so far to CL. Main author of the publication will be CL with all AC PIs being co-author.

5_apr2023: not yet started.

1) Status reports of SLR CCs

ASI

- Cf. slides.
- ASI highlighted the very good in-time submission status of all ACs since the last ASC meeting!
- DGFI-TUM WRMS values of core and all site transformations are still too high compared to other ACs. MB stated that from 01.08. onwards, DGFI-TUM will switch to a new weighting scheme for the stations. Together with the applied VCE for the satellites, the solution should get more robust w.r.t. outliers and not optimal performing stations.
- JCET and BKG must work on their operational submission of the v320 product (**new AI for JCET and BKG**).

JCET/GSFC

- Cf. slides.
- JCET combination does not, in contrast to the ASI combination, see a larger WRMS for DGFI-TUM compared to the other ACs.

2) Satellite-/station-weighting strategies

- Cf. slides.
- MB presented results that show that the refined weighting strategy is beneficial for the WRMS values (verified by AB). From 01.08. onwards, DGFI-TUM will switch to this new station-weighting scheme.

3) Updates of the SLRF2020 and ILRS ECC files

- cf. slides.
- Update of the SLRF2020 still pending... MB and FL will work out which coordinates in addition to Tsubuka might have changed (e.g., San Fernando; old AI).

4) LARES and SH pilot project

- Cf. slides.
- Not all ACs are currently able to contribute (ASI, JCET and NSGF are unsure).
- DS questioned whether datum-free NEQs or solutions should be submitted. MB clarified that NEQs should be provided comprising TRF, EOP, biases and SH up to d/o 6. The NEQs should be based on the v85 settings used for the ITRF2020 update, i.e. covering the time span 2021-2023.

5) ESA's GENESIS mission

- Cf. slides.
- Start an ASC PP? → postponed to next ILRS ASC meeting.

6) DSC files at ILRS website

- Cf. slides.

7) Any other business and next ASC meeting

- IWLR Kunming: cf. slides.
- JWG 1.2.4 Evaluation of the Terrestrial Reference Frame: cf. slides.

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# AI	Description	AC/person
1_jul2024	Operational submission of v320 product.	BKG, JCET
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