

Status Report of the IDS AAC at GFZ

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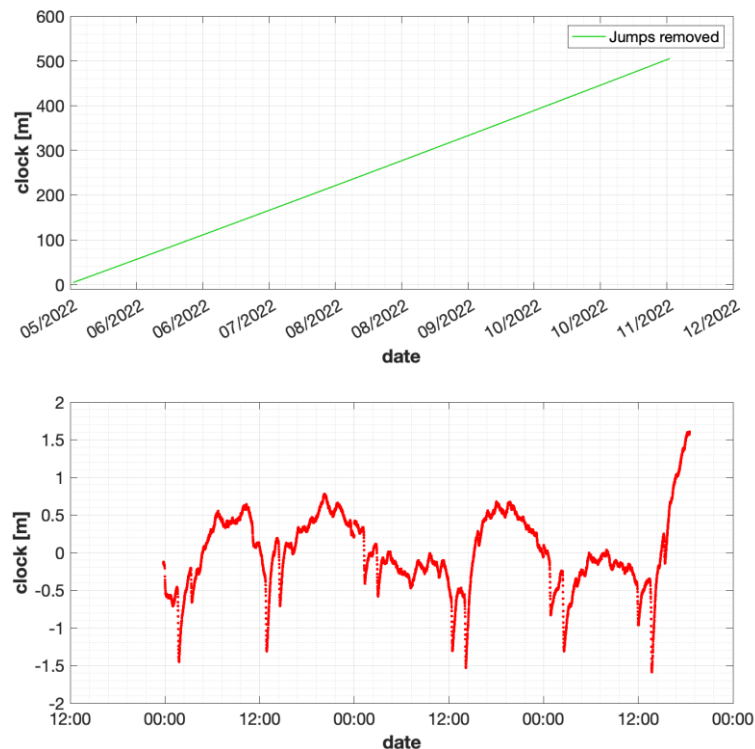
IDS - AWG meeting 2025
Athen – November 6, 2025

Content

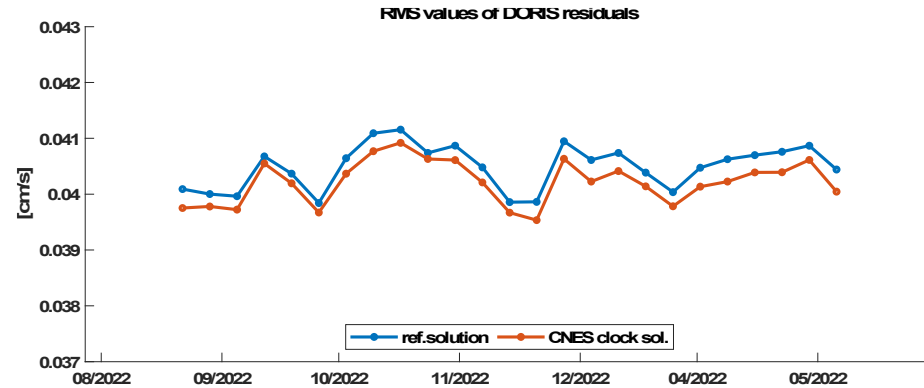
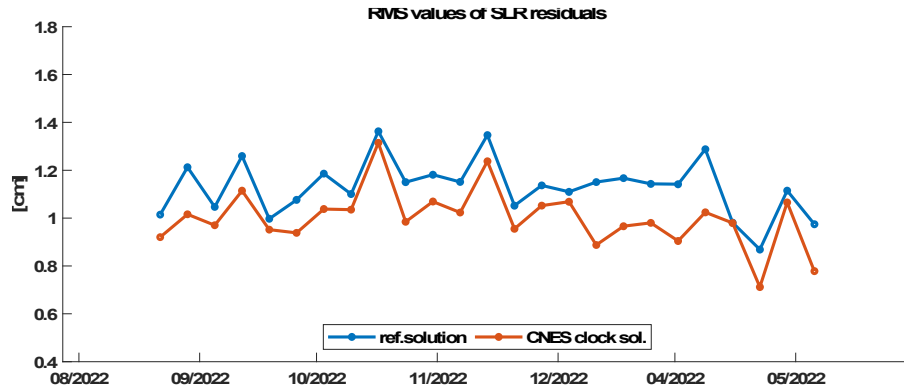
1. Status Update
2. General and Outlook

1.1 Clocks

- Raw clock from CNES/CLS
- 10 ms clock jumps are corrected
- Daily third degree polynomial fit is removed
 - The timestamp of DORIS RINEX is edited by this correction

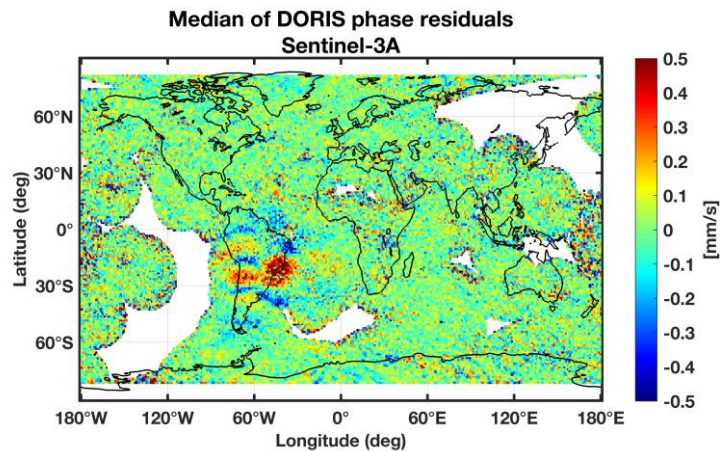


1.2 Orbital Fit

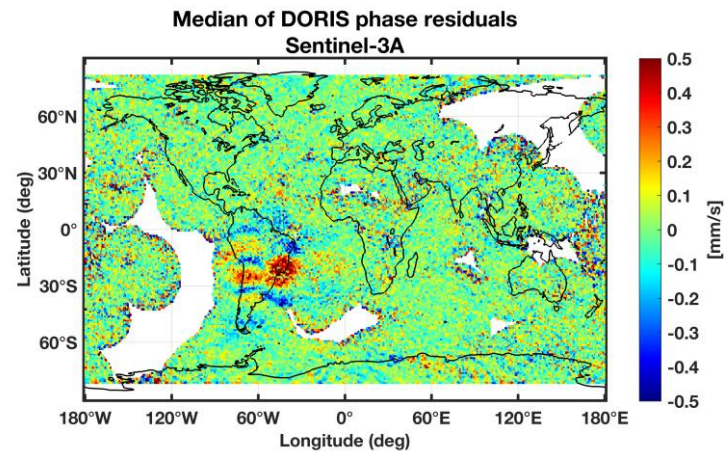


	SLR [cm]	DORIS [mm/s]
Reference	1.13	0.405
+ CNES clock	1.00	0.402

1.3 Geographic Residual Analysis



Reference 2022

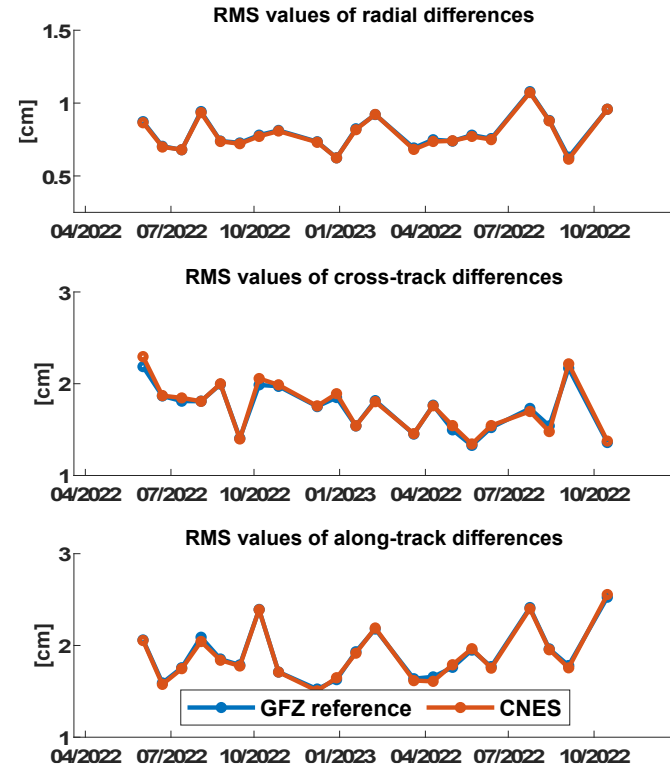


Reference + CNES clock 2022

Preliminary evaluation - no obvious change in the analysis of geographic residuals → under further investigation

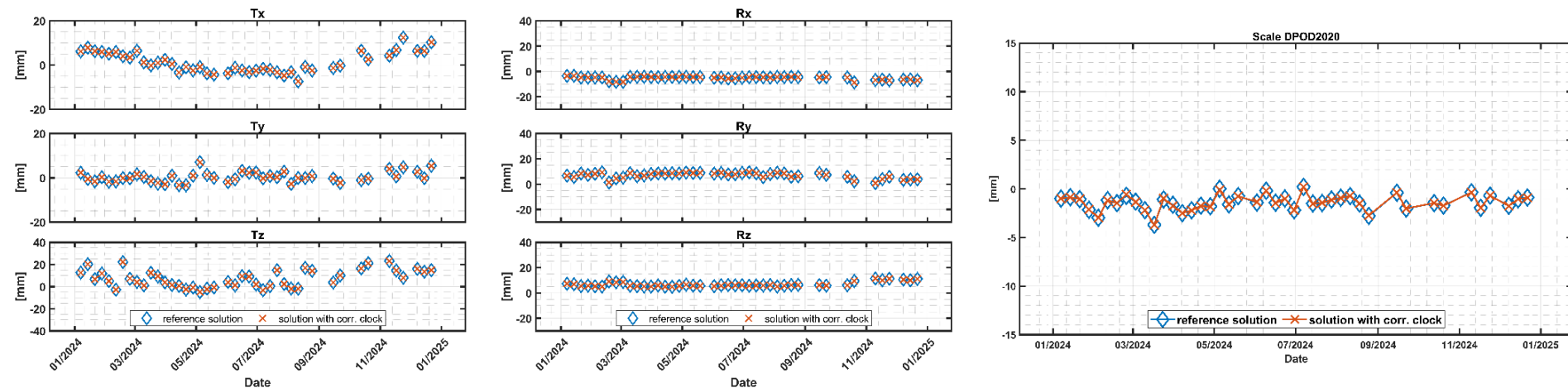
1.4 External Orbit Comparison

- Orbit comparison against the combined CPOD solution
 - Overall similar orbital differences



1.5 TRF

- Helmert parameters to a priori

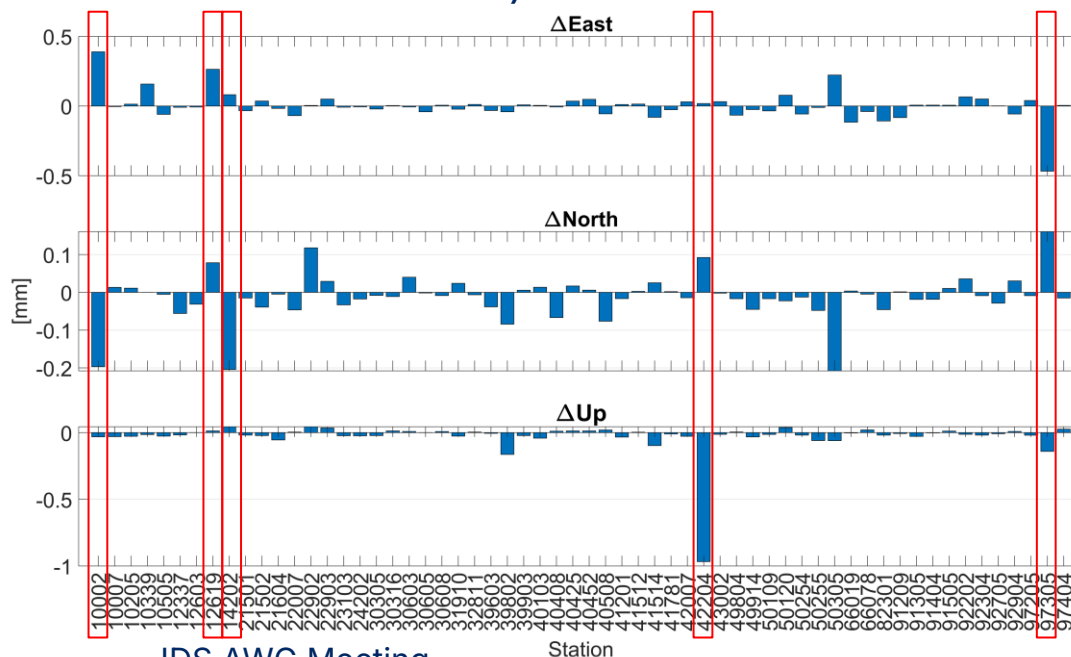


➤ No significant differences between both solutions

1.6 Station RMS

Estimation of station coordinates:

- Differences between mean RMS of station coordinate correction to a priori (reference solution vs. solution with corrected clock)
- 10002: Grasse
- 12619 : Gavdos
- 14202: Wettzell
- 42204: Arequipa
- 97305: Kourou



2 General and Outlook

- Delivered Technical Note on POD/TRF analysis (Jan 2025)
 - Awaiting feedback
 - Ongoing clarifications with IDS-CC on SINEX solutions
- Integrated SWOT quaternions into database
- Operational processing for 7 satellites
- Preparations for Sentinel-3C and -6B
- Testing new experimental DORIS processing in EPOS-OC
- GENESIS-D Project
 - Genesis end-to-end simulations
 - EPOS-OC capable of processing and simulating all four techniques (including full POD capability for VLBI-to-satellite)