

Presentation

Appreciations and Recommendations

Remko Scharroo (EUMETSAT, Germany)

Pascal Bonnefond (Observatoire de Paris - LTE, France); Alejandro Egido (ESA/ESTEC, Netherlands); Severine Fournier (NASA/JPL, USA); Eric Leuliette (NOAA, USA); Heather Roman-Stork (NOAA, USA); Josh Willis (JPL, United States)



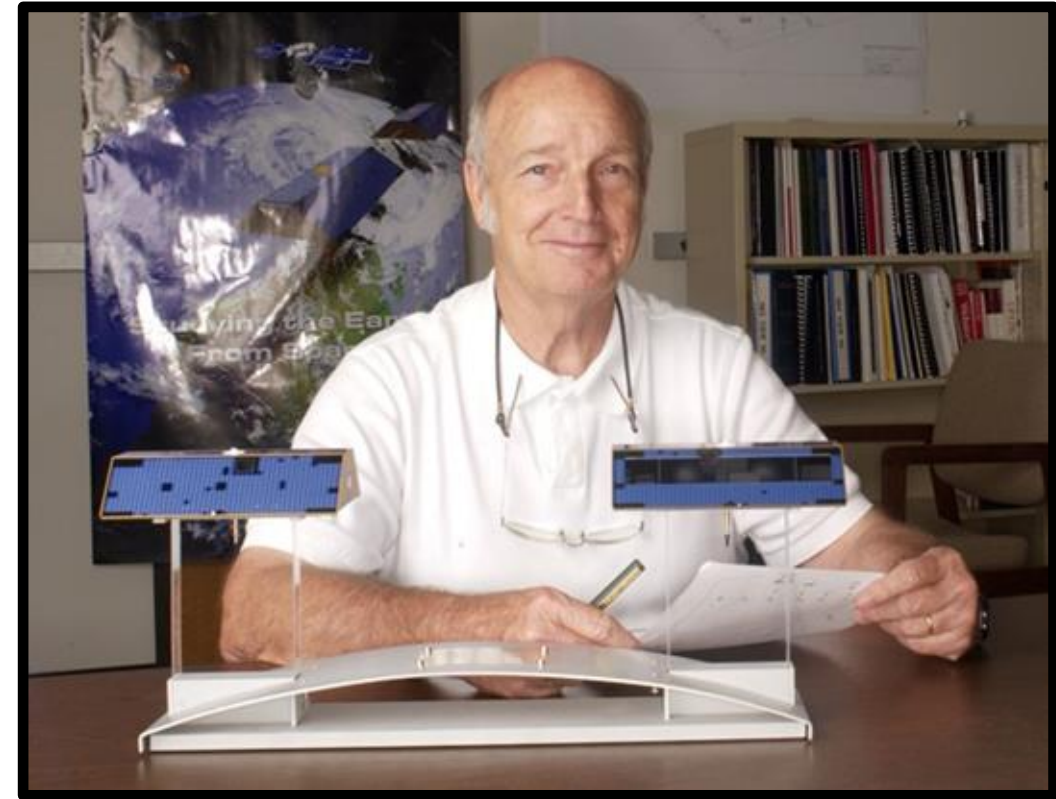
In memory of Prof. Byron D. Tapley

OSTST 2026

Byron D. Tapley was founding member of the satellite altimetry community beginning with the Seasat mission. He was a member of the original TOPEX Science Working Team and was a pivotal leader in orbit determination, guiding the dramatic improvements in precision that enabled observations in oceanography, hydrology, and the cryosphere.

He joined the University of Texas at Austin Department of Aerospace Engineering and Engineering Mechanics faculty in 1959 and served as the department chair from 1966 through 1977. Tapley established the ASE/EM orbit mechanics program in 1961 and the UT Center for Space Research in 1983, both of which he developed into international programs of excellence for study and research. Many of his graduate students and their students have served on the OSTST.

Beginning in 1997 he served as mission Principal Investigator for the Gravity Recovery and Climate Experiment (GRACE), which revolutionized our ability to measure time-varying changes in the Earth's gravity field, providing unprecedented insights into the movement of water, ice, and mass throughout the Earth system.



Appreciation to the Space Agencies

OSTST 2026

The OSTST expresses its appreciation to the EC, EUMETSAT, ESA, NOAA and NASA for the successful development and launch of the Sentinel-6B mission and the continuation of the Sentinel-6MF mission, and CNES for their support.

The OSTST expresses its appreciation of all Space Agencies for their continued dedication to the development and operation of the Altimetry Virtual Constellation.

Appreciation to the Organisers

OSTST 2026

The OSTST expresses its appreciation to EUMETSAT and CNES for organising the OSTST2026 in Wiesbaden.

Big thank you to:

- **The organising committee**
- **The chairs and co-chairs**
- **Mara, Axelle, Laure, Sylwia, Joana**
- **The technical staff of the RheinMain CongressCenter**
- **The members of the OSTST, SWOT-ST and S6VT**

Appreciation to the OSTST participants

OSTST 2026

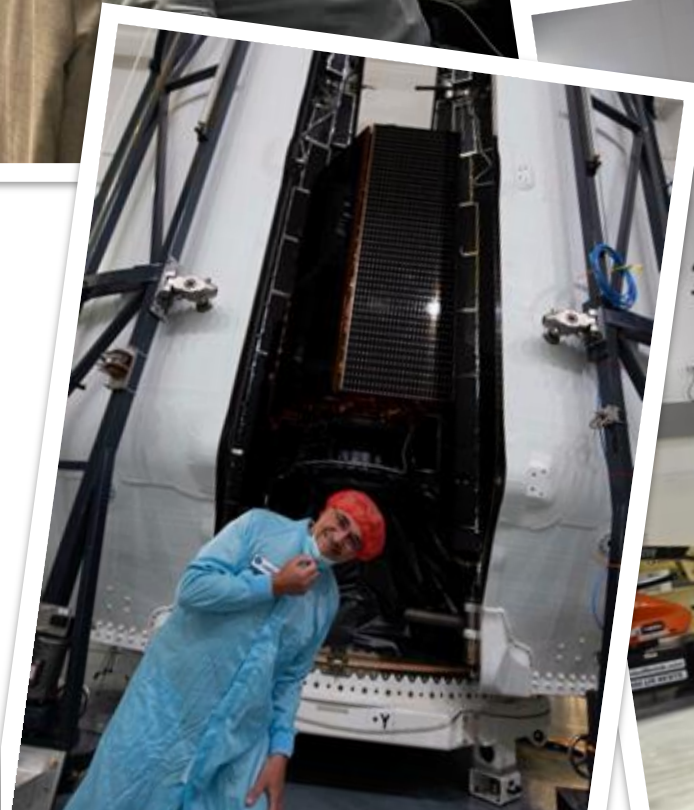
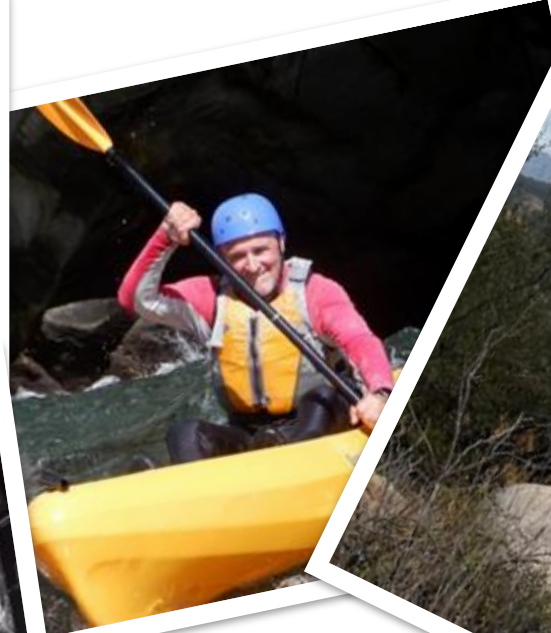
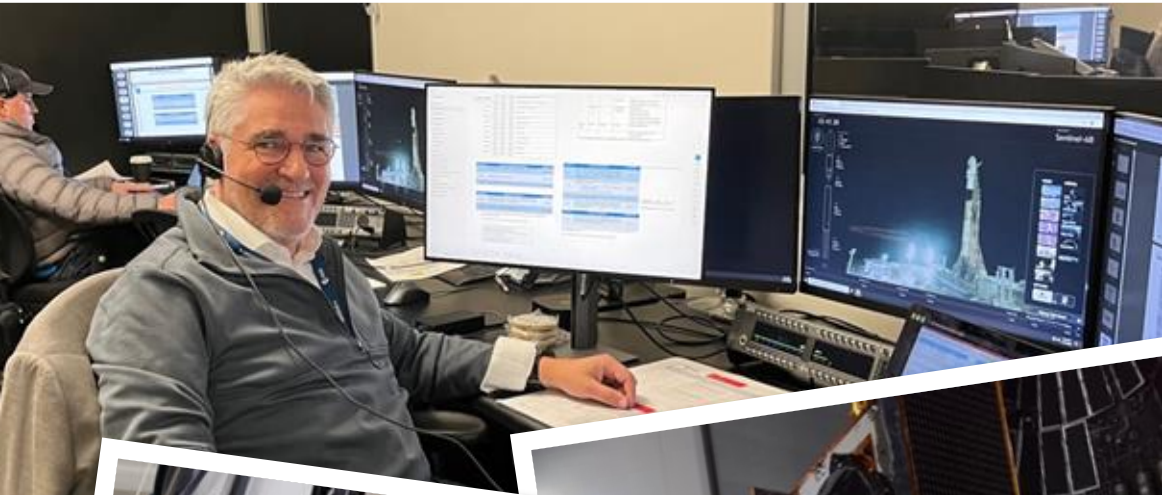
Thank you all for making the meeting such a success



Special appreciation to Pierrik Vuilleumier

The OSTST would like to thank you for your work, dedication, and contribution to the altimetry community.

OSTST 2026



Jason-3 recommendation after 2027

OSTST 2026

The current plan is to continue operating in the J2/J3 Long-Repeat Orbit (LRO). The LRO supports the OSTST and Project Scientist recommendation to map the mean sea surface/geoid to at least 2 km resolution, while supporting operational forecasting. The Jason-3 LRO improves the reduction of residual ocean variability when merged with other datasets and fills data gaps for the SWOT mission.

The Geoid, MSS, and MDT Splinter recommends that after July 2027 (during LRO #5), Jason-3 should prioritize revisiting the ground track during safehold outages in past LROs (particularly LRO #2), such that:

- Jason-3 returns to LRO 2 to complete the 100-day safehold
- Jason-3 then returns to LRO 1 to complete the 30-day safehold

If Jason-3 is funded beyond 2027, an LRO #6 should be considered to fill the X-track gap, providing ± 1 km from a different LRO.

- LRO #1 Jason-2 July 2017 to July 2018
- LRO #2 Jason-2 July 2018 to September 2019 (shifted 4 km from LRO #1) **gaps from safeholds**
- LRO #3 Jason-3 June 2025 to June 2026 (shifted 2 km from LRO #1)
- LRO #4 Jason-3 July 2026 to July 2027 (shifting 4 km from LRO #3, or 2 km from LRO #1)
- LRO #5 Jason-3 July 2027 to December 2027

Future of the reference mission

OSTST 2026

Recognizing the strength of the long-term altimetry data record built by the reference mission series thanks to the essential expertise each partner agency brings to this multi-agency, international collaboration, the OSTST supports the continued participation of all current partners in future reference missions.

(Sentinel-6) Reprocessing Plans

OSTST 2026

EUMETSAT plans to reprocess only the full mission of Sentinel-6B after the end of Commissioning with the upcoming Baseline G02, which is endorsed by the OSTST. The OSTST requests for Space Agencies to allow for sufficient lead time when changing processing baselines, informing all users about those changes and impacts, including the distribution of short test datasets (e.g., from the validation platform).

Second tandem S6B/S6MF

OSTST 2026

Provided the benefits in reducing uncertainty, ensuring consistency between missions, and to achieve accuracy in global and regional sea level as detailed in GCOS requirements, the OSTST recommends a second tandem phase between S6B and S6MF should be scheduled in 5+ years following the present commissioning tandem phase.

Endorsement Argo and GRACE

OSTST 2026

Recognizing the need to overcome sampling limitations and technical challenges from satellite altimetry, GRACE, and Argo observations, the urgency for closure of global and regional sea level budgets at interannual-to-decadal scale, quantifying Earth's energy imbalance, and understanding interaction of the biosphere and ocean physics, the OSTST recommends the full implementation of all components of OneArgo, including integrated global, full depth, and multidisciplinary ocean observing array.

OSTST also supports the continuation of GRACE-FO, its continuation with GRACE-C and the upcoming NGGM MAGIC in order to continue observing the global and regional mass changes from space.

Future of the OSTST

OSTST 2026

Given the overlapping subject matter and participants, the OSTST recommends that the OSTST and SWOT-ST be combined for future meetings following 2027, with the format and merging, as well as a name change that better encompasses both teams, to be decided.

Continuation of Support

OSTST 2026

The OSTST recommends the recruitment and training of new members of the altimetry community, particularly within geodesy given its critical importance for precise orbital determination. This includes the continuation of funding (e.g., graduate student funding to academic institutions). Any lapse in OSTST funding slows down the development of algorithms, techniques, and applications, and also potentially creates data gaps that reduce the overall value of our long-term altimetry record.