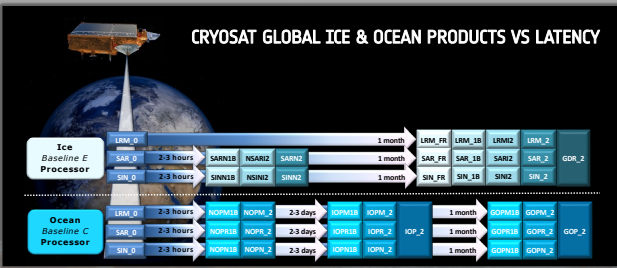
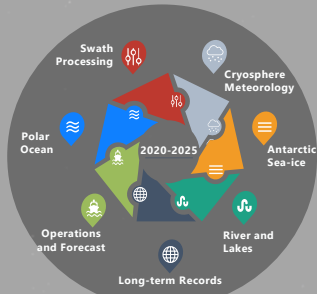


→ **Mission Status & Global Ice/Ocean Products**

- After 13 years in orbit, the overall performance of the mission is **excellent**
- Mission operation **extended until Dec25**
- Fuel leakage under control, RCS-B switch in Nov 2024 to ensure fuel beyond 2030
- Ice Baseline E since Sept 2021, full reprocessing completed. Baseline F planned for Q3 2025
- Ocean Baseline C since Nov 2017. Baseline D planned for Q2 2024
- Continuous operational & scientific QCV activities at transponder and tide gauges show that SIRAL is largely within mission requirements, despite instrument aging

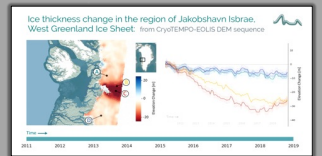
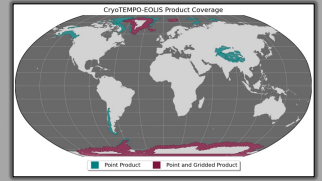
MISSION EXTENSION OBJECTIVES



→ **Cryo-TEMPO EOLIS Swath Products & CS2EO Platform**

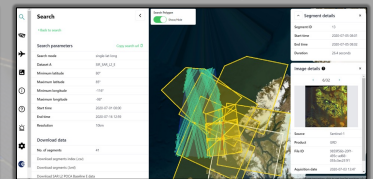
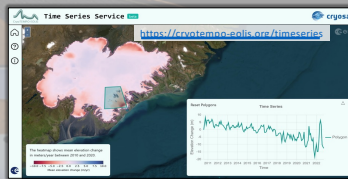
EOLIS PRODUCT

- Operational L2 SARIn **swath processing** on land ice since 2020
- Point & gridded products covering ice sheets & major glaciers
- Key geo. variables+ **traceable uncertainty**
- Non-expert altimetry users (modellers, meteo & services...)
- Baseline B available since March 2023
- Increasing glacier coverage and many other improvements in Q1 2024**



CS2EO PLATFORM (cs2eo.org)

- Search & download (**coincident**) data from CryoSat, ICESat-2, CryoVEx, Operation IceBridge, ...with nearby SAR images!
- New timeseries service** based on EOLIS data



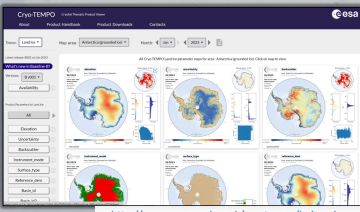
→ **Cryo-TEMPO Thematic Products**

CONCEPT & THEMATIC REGIONS

- Operational L2+ thematic products since 2022
- State-of-the-art** thematic processing
- Key geophysical variables + traceable uncertainty
- Non-expert altimetry users (modellers, meteo & services...)
- Cover 5 thematic areas



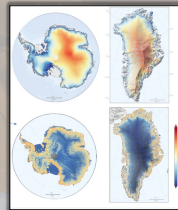
- Rapidly evolving!** Baseline C to be released in Q1 2024!
- User-friendly Quality Control portal



CURRENT COVERAGE & MAIN BASELINE C EVOLUTIONS (Q1 2024)

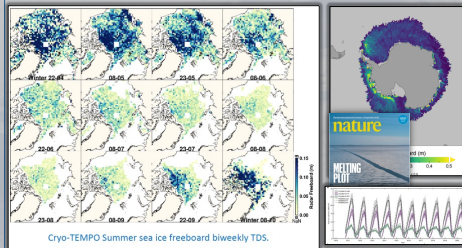
Land Ice

- Greenland and Antarctic Ice Sheets
- Improve LRM echo relocation algorithm**



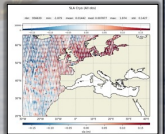
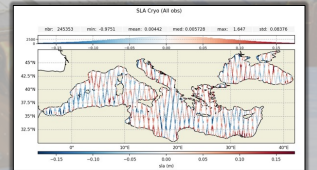
Sea ice & Polar Ocean

- Arctic Ocean
- From TFMRA retracker to SAMOSA+**
- New Snow Climatology**
- Near-Real-Time products**
- Improve NN waveform classification & uncertainty estimation**
- Antarctic Ocean products**
- Summer radar freeboard product**



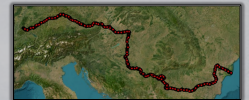
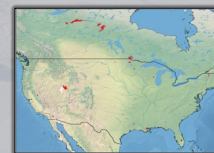
Coastal Ocean

- Mediterranean Sea
- Add SARIn observations**
- Add distance to coast parameter**
- North Atlantic Ocean product**

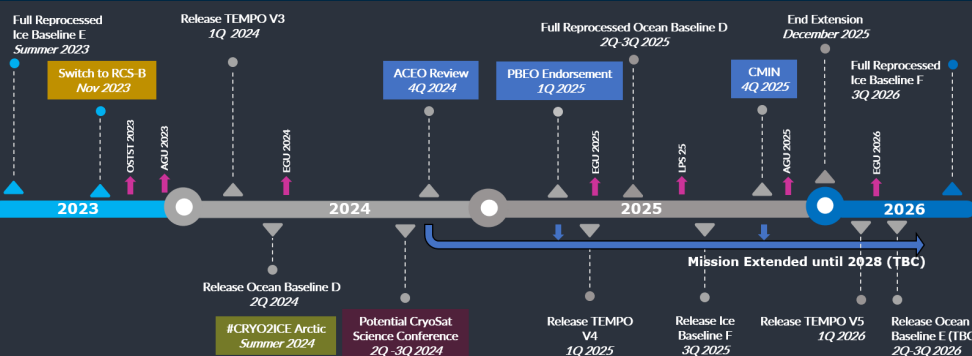


Inland water

- Lakes in USA, Canada, Sweden. Po and Tiber rivers
- Add SAMOSA+ retracker solution**
- Addition of new lake targets in US, Canada and Sweden**



→ **CryoSat Mission Timeline [2023-26]**



NEW EXPERIMENTAL SNOW DEPTH PRODUCT (Q1 2025)

- Based on ESA CryoSat-2 and NASA ICESat-2 data & the #CRYO2ICE campaign**
- Gridded monthly product (?)**

