Topics to be discussed

Eric Leuliette (NOAA)

On behalf of Pascal Bonnefond (CNES), Craig Donlon (ESA),

Remko Scharroo (EUMETSAT) and Josh Willis (NASA)

OSTST 2020 Recommendations

- Jason-3 Extension of Life
- Splinter chairs: If discussions in the forums result in additional recommendations, please send them to the Project/Mission Scientists for discussion during the closing session on Friday.

Jason-3 Extension of Life (EoL)

Recommendation of a plan for Jason-3 operations after the end of the Sentinel-6 MF commissioning phase is needed from the Jason-3 EoL Working Group with input from the OSTST.

Nov 2020	**Mission scientist recommendation**
Dec 2021 to April 2021	**Mission analysis**
April 2021	**Results presented at REVEX 2021**
Sept 2021	**Confirm plan to the Jason-3 Joint Steering Group**
Oct to Nov 2021	**Prepare operations before end of Sentinel-6 MF commissioning phase**

Jason-3 Extension of Life (EoL) REVEX 2020 plan

At REVEX 2020 a "default" plan was proposed:

- **Interleaved tandem phase (3 years; same orbit as the Jason-2 interleaved phase with the ground track position midway between the reference orbit ground tracks, i.e. phased 180° with S6MF)**
  - **– 11/2021 to 11/2024**
- **Second tandem calibration phase (6 months; 30s from S6MF)**
  - **–11/2024 to 5/2025, timed to avoid Atlantic hurricane season)**
- **Mission extension on a geodetic orbit (reference orbit + 47km)**
  - **–5/2025 to ?**

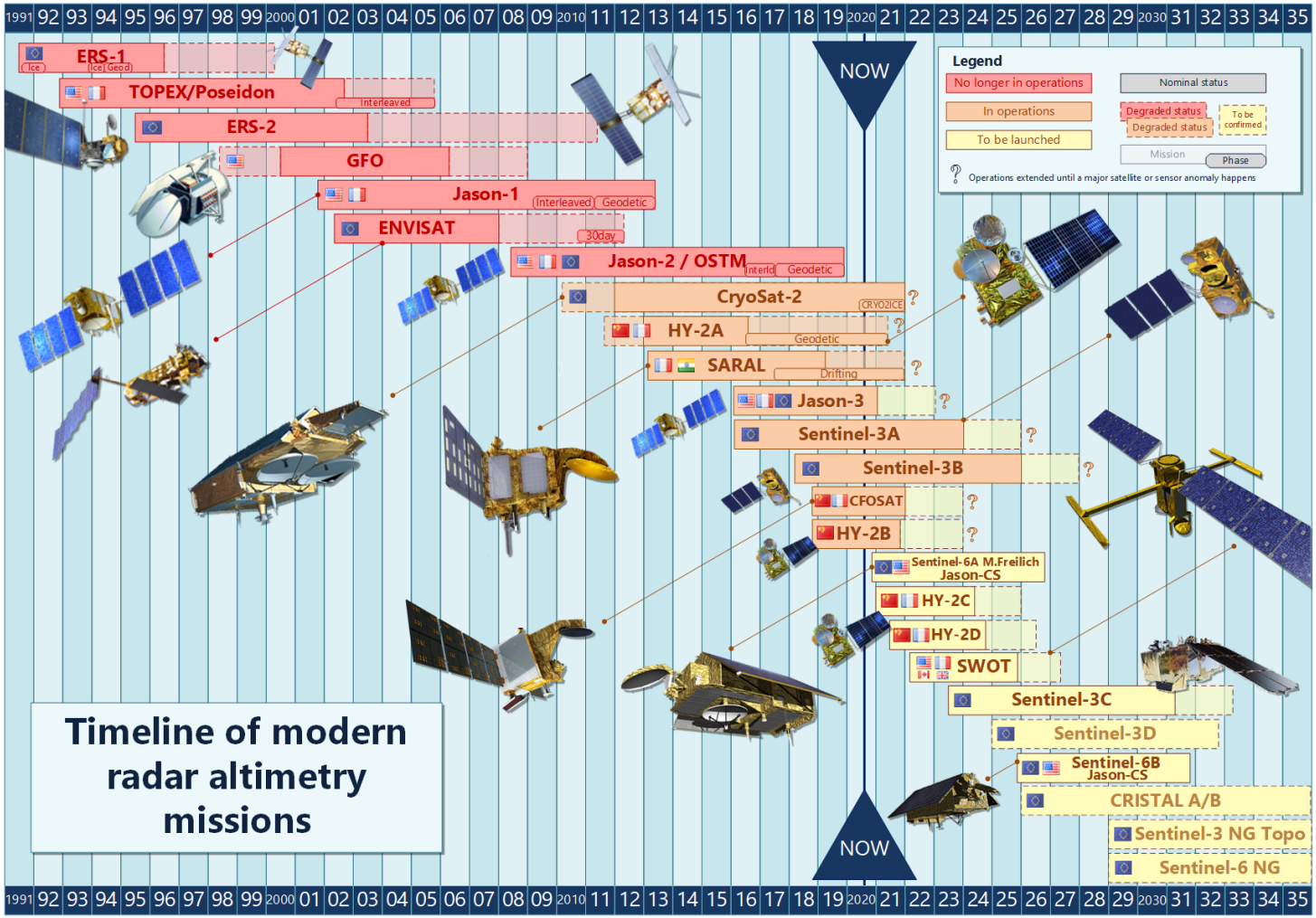
Jason-3 EoL splinter questions

1) **Interleaved phase**
   - Considering the nadir constellation from 2022 to 2026 can science and operational applications be accomplished with an geodetic phase or an interleaved phase?

2) **Second tandem calibration phase**
   - What are the benefits of a second calibration phase for the climate record versus 6 months of additional coverage?

3) **Mission extension on geodetic orbit**
   - What are the recommended orbits and phases for a geodetic phase?

Altimetry constellation



Jason-3 EoL background information to the Working Group

Ablain et al. (2020) Benefit of a second calibration phase to estimate the relative global and regional mean sea level drifts between Jason-3 and Sentinel-6a https://www.essoar.org/doi/10.1002/essoar.10502856.1

Andersen et al. (2020) The Unique Role of Jason-2 Geodetic Mission for high Resolution Gravity Field Modelling https://www.essoar.org/doi/10.1002/essoar.10504204.1

Dibarboure et al. (2020) Jason-3 Extension-of-Life phase technical note (contains additional references)

Smith & Scharroo (2009) Mesoscale ocean dynamics observed by satellite altimeters in non-repeat orbits, *GRL*, https://dx.doi.org/10.1029/2008gl036530