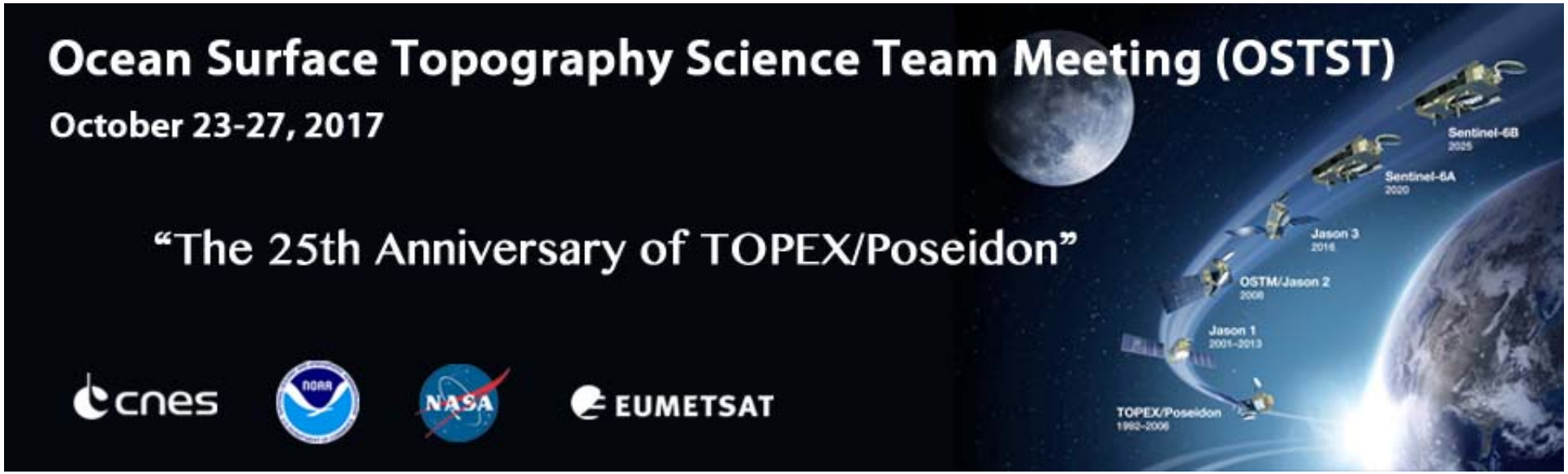


TOPICS TO BE DISCUSSED IN THE SPLINTER SESSIONS

Eric Leuliette
NOAA Laboratory for Satellite Altimetry
on behalf of the 4(5)-Partner Project Scientists

Key Points to be Discussed

1 – Are our cal/val methods sufficient to verify the Jason-CS/Sentinel-6 global and regional mean sea level stability requirements?

2 – Considering the possibility of switching on the redundant altimeter on JCS/S6 during the cal/val phase with Jason-3. If feasible, what is the number of cycles that the redundant altimeter should operate?

3 – Alternative processing approaches such as fully-focused SAR processing are emerging. Will the current Sentinel-3 and Jason-CS/Sentinel-6 systems allow for novel processing approaches to be fully exploited?

4 – What would be the impact of descoping MLE3 fields in the baseline for JCS/S6 products (except for sigma0)?

5 – Would increasing the frequency of the Jason-3 AMR cold sky calibrations to improve the long term stability?

6 – What are the open issues that affect the continuity between LRM and SAR modes from SWH, roughness, swell and their impacts on SSH?

Round tables for each splinter are organized **Thursday the 26th from 11:00 to 12:30. Plenary discussion and recommendations will take place on Friday morning.**

S6/JCS global and regional mean sea level stability

The S6/JCS System Requirements Document adopted drift requirements.

The S6/JCS End User Requirements Document (EURD) calls for stability of global and regional mean sea level measurements. The global stability shall be ***monitored*** *to 1 mm/yr and the regional drift (as defined)* ***measured*** *to 5 mm/yr under assumptions about the errors.*

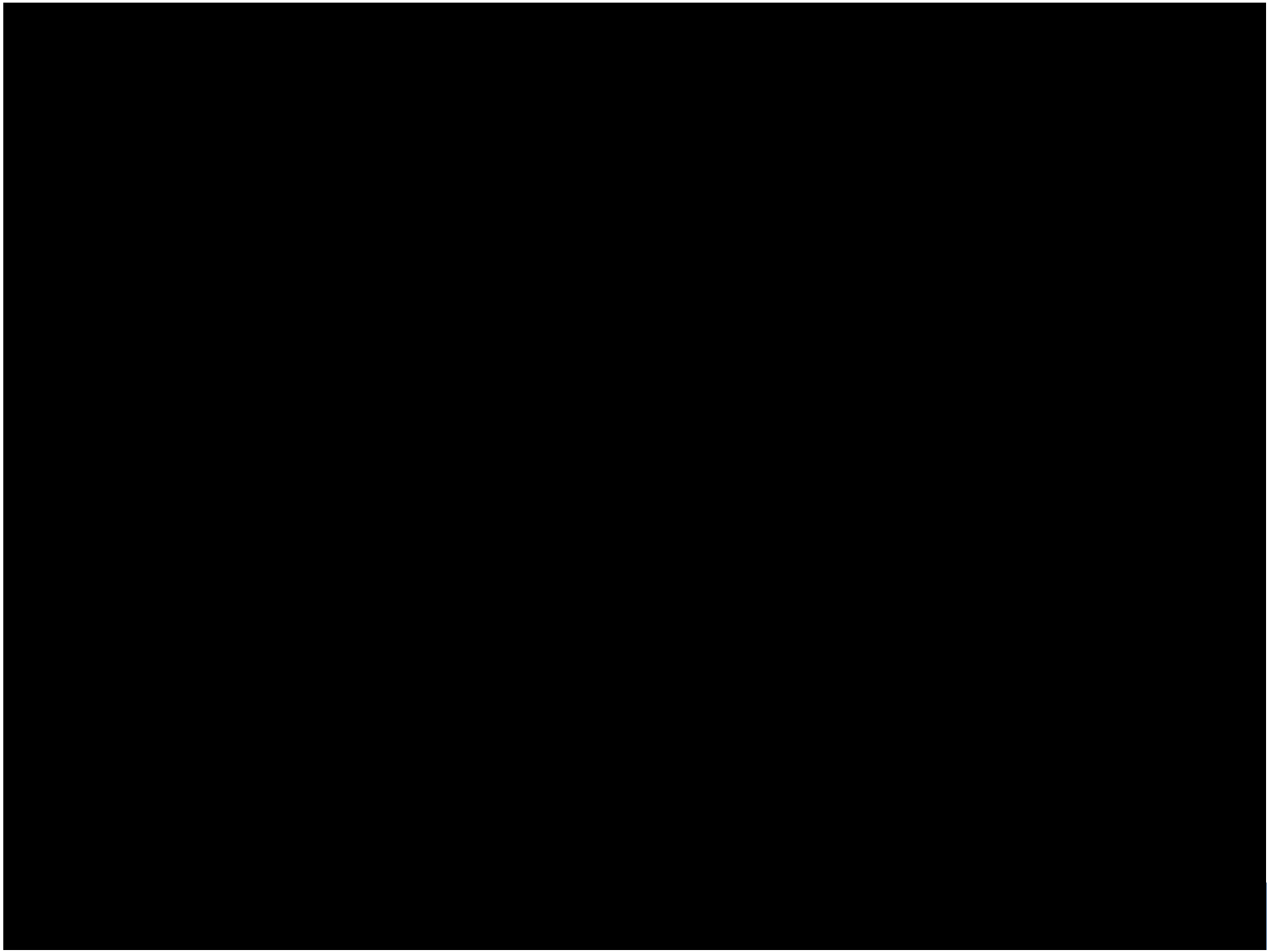
Operations during commissioning

During the commissioning, JCS-A may be run (for some time) on the redundant chain. This has pros and cons:

- *Provides the opportunity to calibrate the secondary chain for the case the primary chain fails … but would this be enough?*
- *Reduces the time to calibrate the primary chain.*

Descoping MLE3 in baseline JCS/S6

The current baseline is to provide outputs of the MLE3 retracker, i.e. range, SWH and sigma0 (20-Hz and 1-Hz) plus statistics, plus some derived quantities. While the 1-Hz MLE3 sigma0 is essential for rain flagging, the others most likely are not. Can they be descoped?



S6/JCS global and regional mean sea level stability goal

*The S6/JCS End User Requirements Document (EURD) calls for stability of global and regional mean sea level measurements. The global stability shall be **monitored** to 1 mm/yr and the regional drift (as defined) **measured** to 5 mm/yr under assumptions about the errors.*

[EURD] R-U-00540 T, A, R

Jason-CS shall monitor the stability of the global mean sea level measurements with a drift less than 1 mm/year (standard error).

Note: As a goal, Jason-CS will attempt to measure global mean sea level (as derived from ALT-NTC Level 2 products) with a drift error of less than 1 mm/year.

Note: See [SRD] Section 13 for the definition of drift error.

Note: Global mean sea level measurements are those obtained by averaging the 1-Hz sea level measurements over any repeat cycle. As such this requirement constrains the relative standard error of those numbers to approximately 6 mm.

[EURD] R-U-00550 T, A, R

Jason-CS shall measure regionally averaged sea level (as derived from ALT-NTC Level 2 products) with a drift error of less than 5 mm/year.

Note: See [SRD] Section 13 for the definition of drift error.

Note: With "regionally averaged sea level" we mean: the average of all sea level measurements within one repeat cycle within an ocean area of approximately 40000 km^2.

Note: Assuming that we are able to correct for all recognized significant systematic effects and given that for NTC products, the combined standard uncertainty (precision) of the 1-Hz sea surface height measurements will be less than 3.2 cm during the whole operational period, we have an implicit local/regional drift requirement of about 3.5 cm in 7 years.