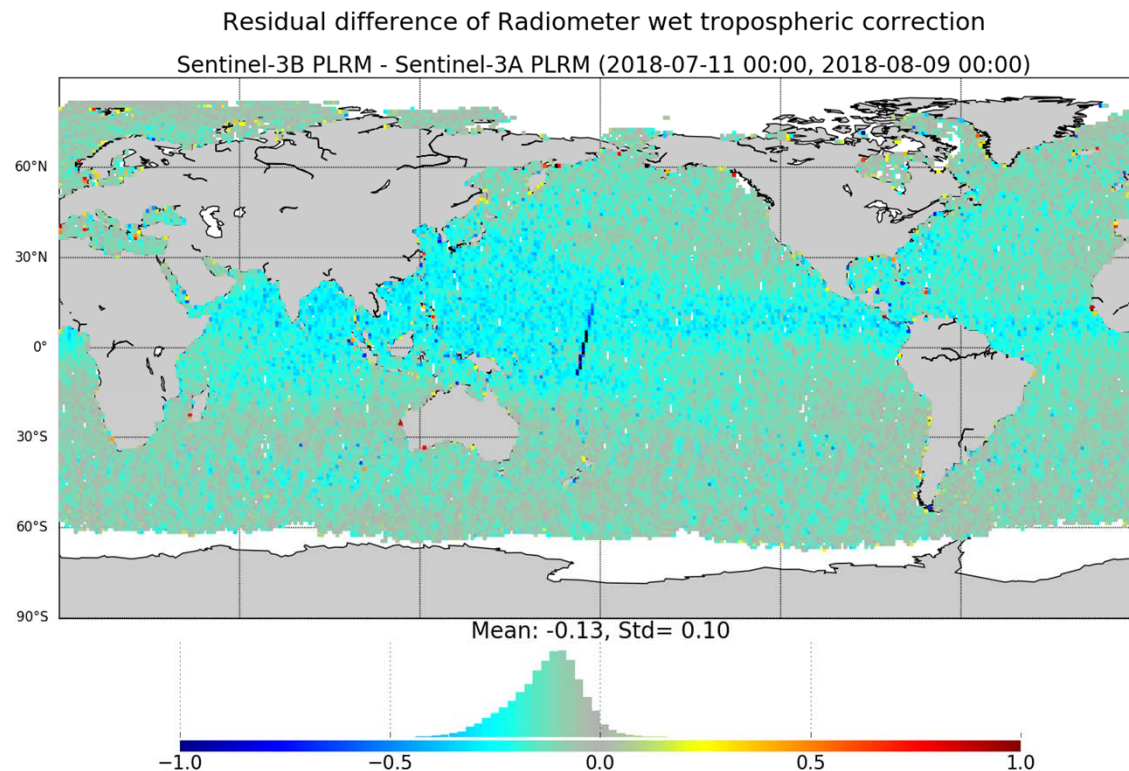


Instrument Processing: Corrections Splinter

S. Brown, E. Obligis

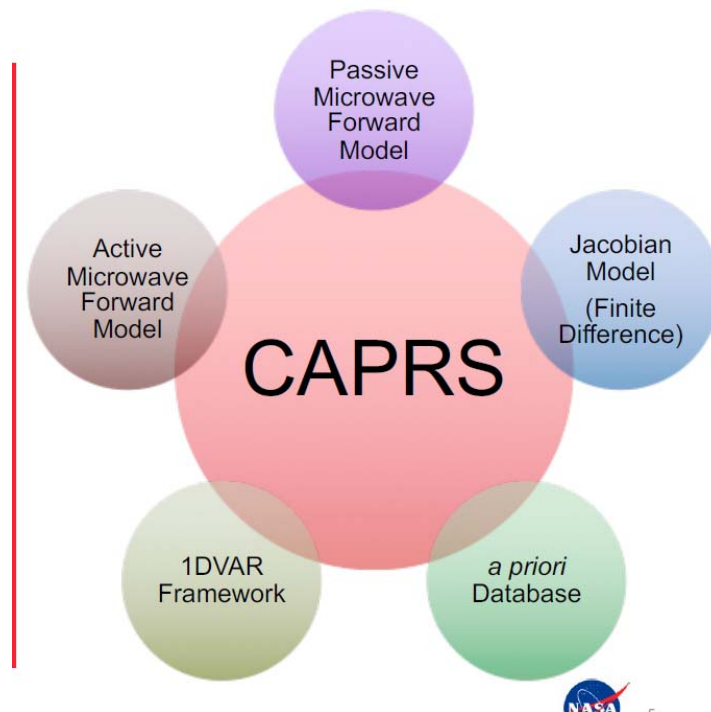
- First calibration results of MWR on Sentinel-3B
 - Very good agreement between S3A and S3B WTC after intercalibration :
 - Still a small signal (2-3mm) depending of the WTC (BT)
 - Same L2 processor (same coefficients) applied to both A&B
- S3 tested cold sky calibration maneuver and moon calibration

Frery et al.



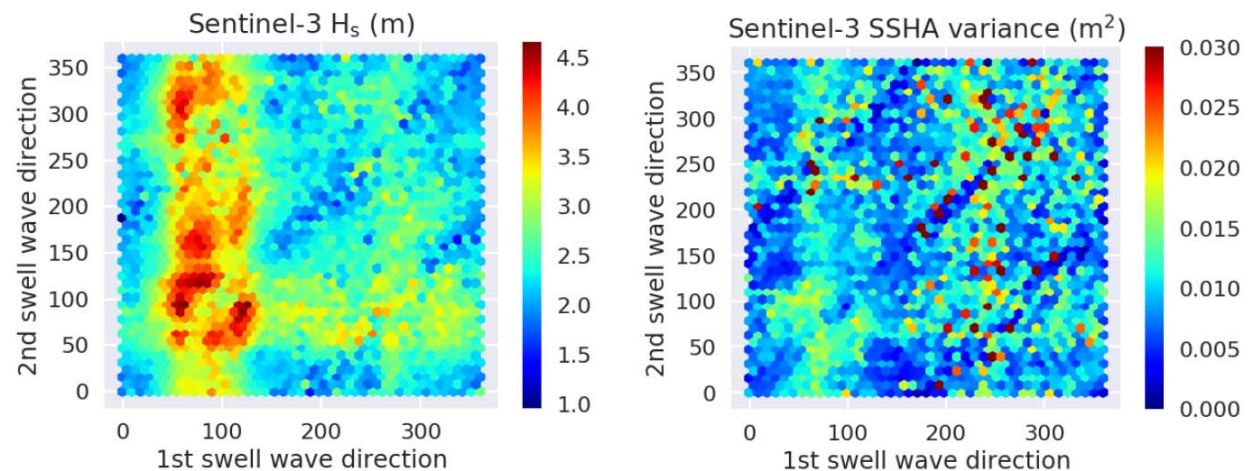
- Unified retrieval framework developed to integrate radar and radiometer information
- Non-mission specific, can be extended to work with any altimeter mission
- Initial results encouraging, significant improvements in radiometer wind speed
- Work will be needed to ensure speed for real-time operations

Isalm et al.



- Intercomparison of Sentinel-1 wave products with Jason-3 and Sentinel-3
- Effect of swell is the same on both J3 and S3 significant wave height retrievals
 - Swell wave direction affects significant wave height and backscatter
 - Swell wavelength impacts backscatter
 - Signal seems to be present in SSHA

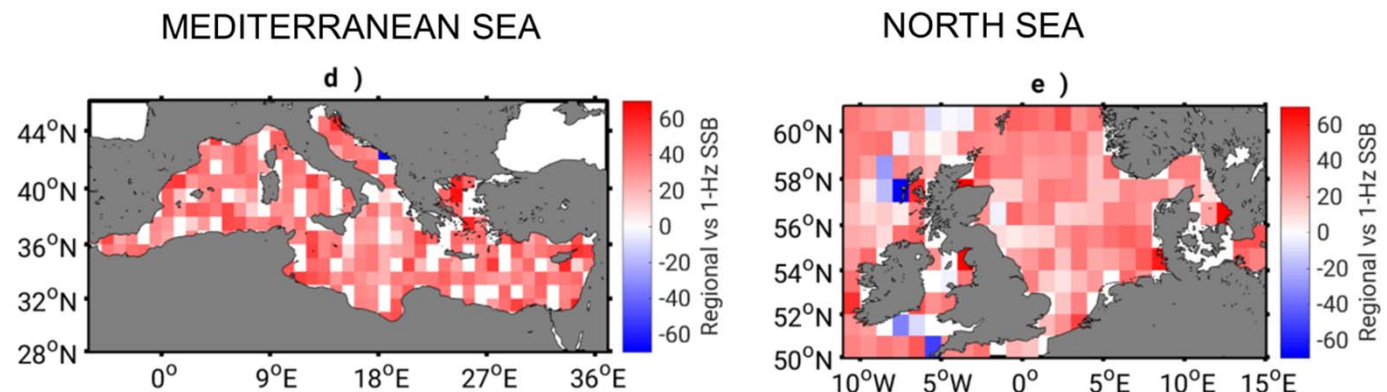
Pires et al.



- Applying the 1Hz SSB model to 20Hz data reduces the high-frequency noise of the LRM data by 15% (download ALES data)
- A simple regional parametric sea state bias model is better than a global non-parametric one. Further improvements in precision (~30% HF noise)
- Work on-going to eliminate tracker correlations within 1Hz then re-estimate SSB model for 1Hz

Passaro et al

Metric of improvement: SLA Variance



- We have made significant progress over the past 25 years to align the radiometer capability to the expectations of the science users
- Sentinel-6 AMR-C represents a significant advancement for both improving the GMSL trend measurement and for coastal altimetry



Looking back and Forward

- Significant progress made over last 25 years in improving algorithms for corrections and instrumentation
 - Inter-calibration, specialized processing (i.e. coastal), climate data extraction
- Looking forward: Unify lessons learned between missions on best techniques, algorithms, instrumentation
- Expand reach of data (e.g. water vapor or wind speed climate data record)