Summary of CFOSAT session
L. Aouf, D. Vandemark, D. Hauser, J. Staneva
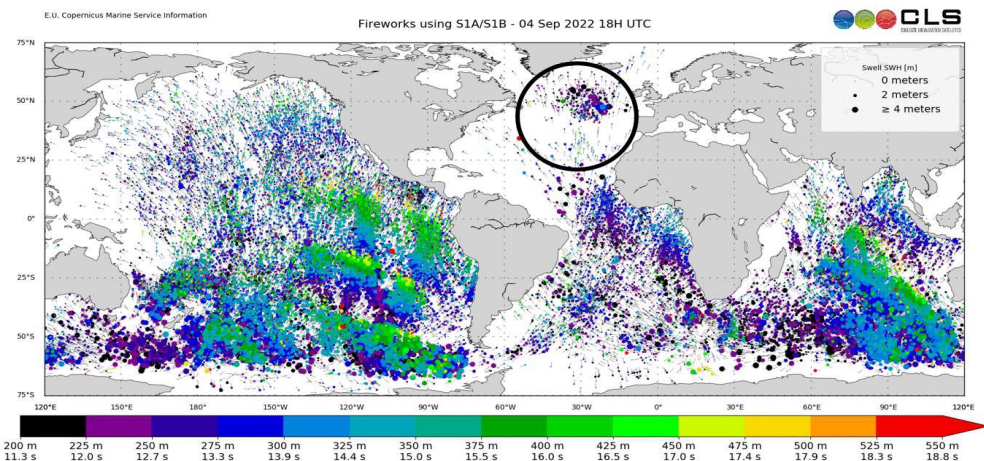

The CFOSAT Mission

Good session attendance : 6 orals (5 forums and 1 poster)

- **Session moved past sensor data processing issues -> CFOSAT Utility**

- **Several themes emerged (extreme conditions, Stokes, coupling, Sea ice,...etc)**

Waves at Lido beach this morning

Swell propagation from fireworks products CMEMS

Short-scale (5-35 km) wave height, wave group, and SSHA variability

- Small scale SWH variability and wave groups using SWIM wave spectra
- Geostrophic currents from CFOSAT : consistent results with multi-missions products and candidate to improve mesoscale ocean cells
- Complementarity between SWIM and SAR of Sentinel-1
- Interesting measurement of wave spectra from drone-LIDAR : coastal out to 50 km

Applications including DA

- Improved ocean/wave coupling with DA of SWIM wave spectra (Trpoics, SO, WBC)
- Promising wave analysis with SWIM data in extreme conditions (Rogue wave detection, wave propagation in hurricane)
- Synergy between SWIM and SCAT for new GMF model to retrieve wind vectors
- SUMOS field campaign data available to science applications

Perspectives :

- Reprocessing of SWIM and SCAT with latest IPF expected beginning 2023
- New products for science applications (Sea ice from SWIM and SCAT, Stokes drift surface and depth, Geostophic currents, Stokes drift)
- Works on going to enhance the good quality of mission products (SWIM and SCAT)