





Great work done by the SWOT Science Team and Working Groups these last 2 years...

Oceanography accomplishments

- Advances made on the tide modelling (FES2022) and analyses, and different HR models of balanced/unbalanced motions
- SWOT data inversion/assimilation greatly advanced with different techniques
- multiple groups contributing to Data Challenge for 2D mapping
- Al used with promising results in error reduction, separating dynamics, optimizing assimilation techniques
- Still need to keep working on reducing errors from other sources, improving wave estimates, and 3D reconstruction (incl vertical structure and velocities)
- Good exchanges between groups in regional validation and the funding of in-situ campaigns in the AdAC
- Keep the good exchanges between the Science Team and the Project leading up to launch, particularly for in-situ campaigns and CalVal

Hydrology accomplishments

- Major progress in developing the Confluence engine for producing Discharge Flow Law Parameters
- Hiring of hydrologic technicians & finalization of plans to conduct mission cal/val activities
- Progress in coastal zones, including work on using SWOT to understand tidal signals in rivers/estuaries
- Major advances in SWOT a priori databases for rivers and lakes, and progress towards harmonizing the two datasets
- Improvements in river slope algorithms that will likely allow us to comfortably meet science requirements
- Robust working group exchanges, with regular phone calls and substantial interaction across the Atlantic
 - Development of a robust applications team, with several hack-a-thons & other events

Coming months

- Aug/Sep 2022: FilaChange international conference on fine-scale ocean dynamics and Climate Change (4 sites)
- SWOT Session at AGU Fall Meeting:

OS023. The Surface Water and Ocean Topography (SWOT) Mission: A New Satellite for Earth's Water Cycle

- Nov/Dec 2022: SWOT Launch! Plan your retransmission parties/activities and communication to your institutes
- Mar/May 2023: Cal/Val Phase with virtual updates by Project (bimonthly?)
- Sept 2023 (L+9): Propose a ST meeting for data debrief, and training sessions with real L2 data (To be held in France)
- Feb 2024 (L+14): SWOT Validation Meeting