



Space oceanography at CNES

The launch of the French/US mission Topex/Poseidon (T/P) (CNES/NASA) in August 1992 was the start of a revolution in oceanography. For the first time, a very precise altimeter system optimized for large-scale sea level and ocean circulation observations was flying. Since then, more than 15 altimetry missions have been launched and combined to provide a 30-year Sea Level time series that have contributed to a much better understanding of the role and importance of mesoscale dynamics. With its unique capability to observe the global ocean in near-real-time at high resolution satellite altimetry is today an essential input for global operational oceanography. The launch of the Surface Water and Ocean Topography (SWOT) satellite on December 16th 2022 is a second revolution. This joint mission of NASA, CNES, CSA and UKSA, carrying a Ka-band Radar Interferometer (KaRIn) allows us for the first time to measure 2D images of the ocean topography with unprecedented resolution and opens a new era for oceanography. This presentation will give an overview of the CNES space oceanography program, the latest achievements and the perspectives.

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