

IAF EARTH OBSERVATION SYMPOSIUM (B1)  
International Cooperation in Earth Observation Missions (1)

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SENTINEL-6/JASON-CS: INTERNATIONAL PARTNERSHIP BUILDING THE UNPRECEDENTED  
LONG TERM DATA CONTINUITY FOR OCEAN SURFACE TOPOGRAPHY EARTH  
OBSERVATION

**Abstract**

Sentinel-6/Jason-CS is the latest in the series of ocean altimetry satellite missions that establish an uninterrupted 30-year record of critical Global Mean Sea Level observations. The two satellites Sentinel-6 Michael Freilich and Sentinel-6 B secure the continuity of high precision observations of ocean surface topography until 2030+ and provide a reference for cross-calibrating other altimetry missions under the CEOS Ocean Surface Topography Virtual constellation.

The international cooperation path started by NASA and CNES with the Topex mission in the nineties has in time developed into a multi-partner endeavour, which gradually involved operational agencies such as NOAA and EUMETSAT, as the mission acquired more and more value in climate, weather and ocean operational forecast applications. In parallel, the ESA ERS, ENVISAT and more recently the Sentinel-3 missions proved essential in further consolidating the altimetry mission products value for society. Sentinel-6/Jason-CS is now thanks to all these efforts an international collaboration within the Copernicus program, with the European Union as powerful institutional stakeholder, serving scientific and operational users on a free and open basis.

This paper will tell the story of this successful cooperation between international agencies. We will describe the challenges, synergies and benefits across a breath of topics including organizational, technical, scientific, and cultural aspects that brought together global resources to help with a global challenge.