

A composite image showing a satellite with solar panels and a probe. The satellite is at the top left, and the probe is at the bottom left. The background features a blue and green abstract pattern with white lines and arrows, suggesting a scientific or space theme.

WOC User Consultation meeting 2022

10–12 October | ESA–ESRIN
Frascati (Rome), Italy

#ESAWOC2022



Introduction

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Head of the Applications Section

Pioneer innovative & reliable Earth Observation solutions for the public benefit, in support to international policies on the environment and sustainable development.

The active involvement of stakeholders and end-users.

European policies examples



Major international agreements/frameworks

UN SDG for 2030



Paris Agreement on Climate Change

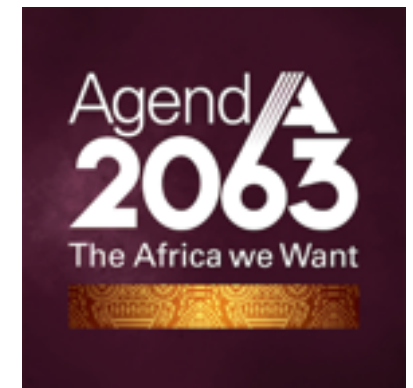


The Sendai Framework for Disaster Risk Reduction 2030

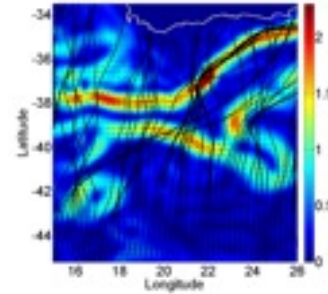
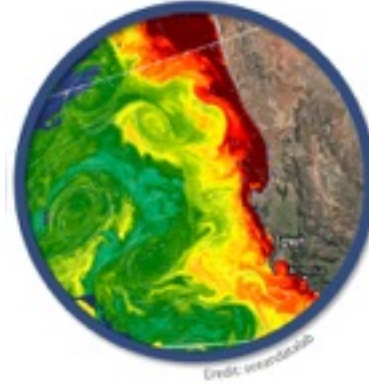
	Reduce	Increase
7 GLOBAL TARGETS	Mortality/ global population 2020-2030 Average << 2005-2015 Average	Countries with national & local DRR strategies 2020 Value >> 2015 Value
	Affected people/ global population 2020-2030 Average << 2005-2015 Average	International cooperation to developing countries 2030 Value >> 2015 Value
	Economic loss/ global GDP 2030 Ratio << 2015 Ratio	Availability and access to multi-hazard early warning systems & disaster risk information and assessments 2030 Values >> 2015 Values
	Damage to critical infrastructure & disruption of basic services 2030 Values << 2015 Values	



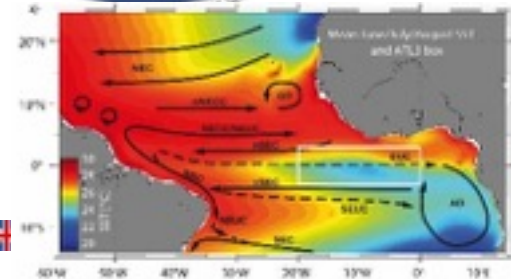
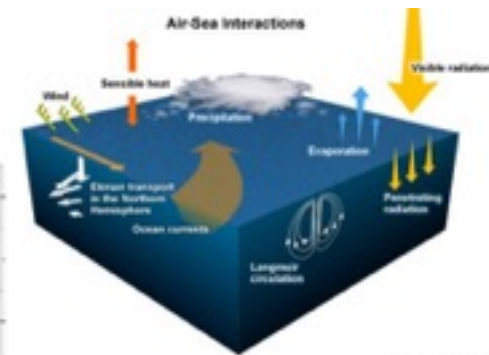
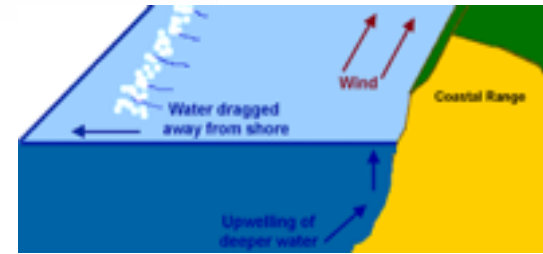
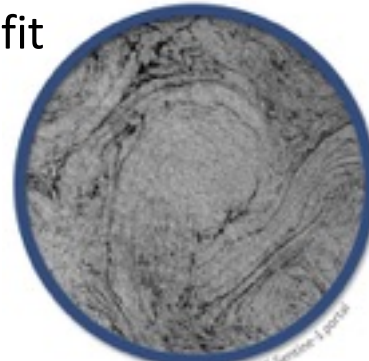
Land Degradation Neutrality Official Use



The WOC Context

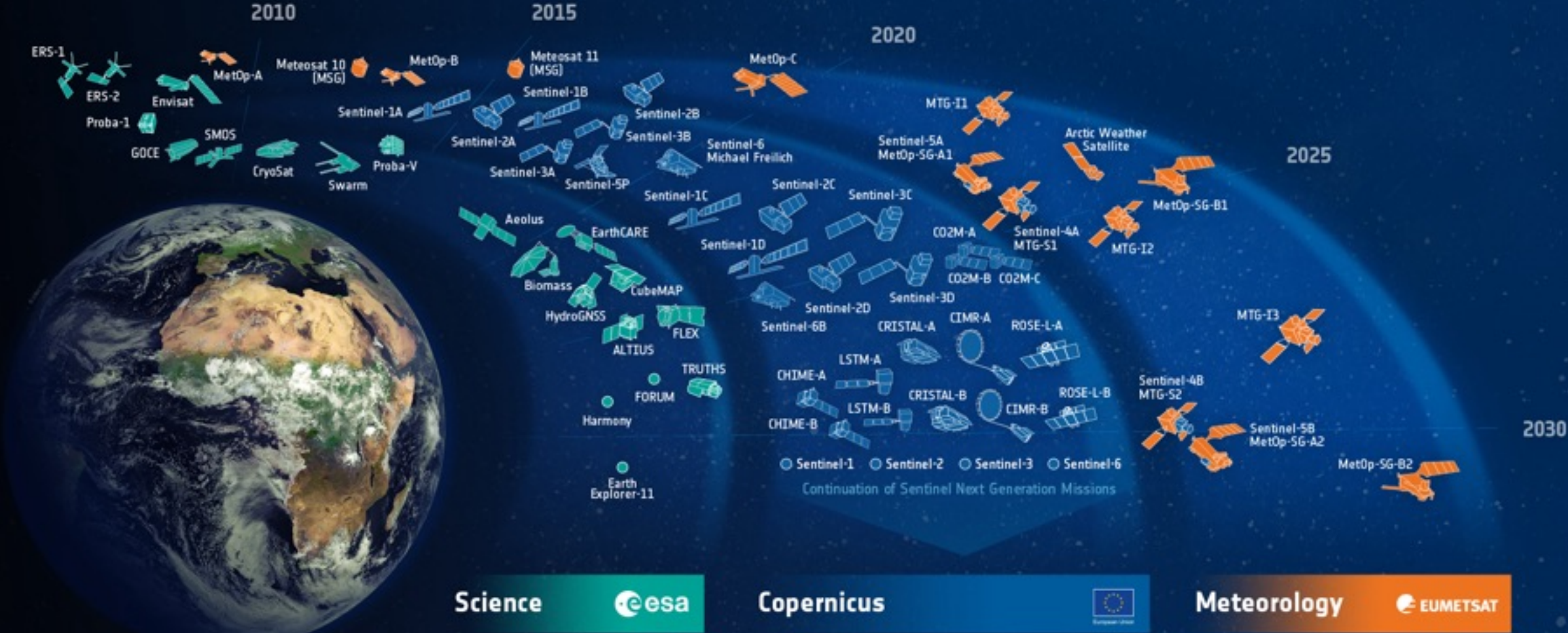


Ocean circulation plays a crucial role in many scientific studies and for environmental and public benefit applications



ESA-developed Earth Observation Mission

No satellite providing direct measurements of ocean currents from space

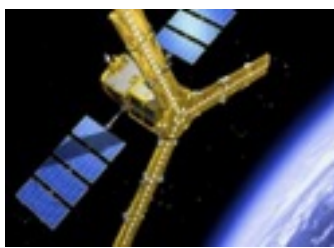


BUT

GOCE



SMOS



Cryosat-2



Sentinel-1



Sentinel-2



Sentinel-3



Sentinel-6



Gradiometer

Radiometer

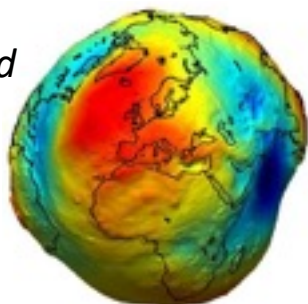
Altimeter

SAR

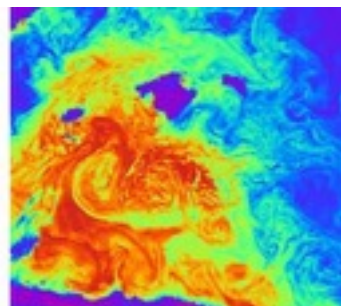
Spectrometer

Scatterometer

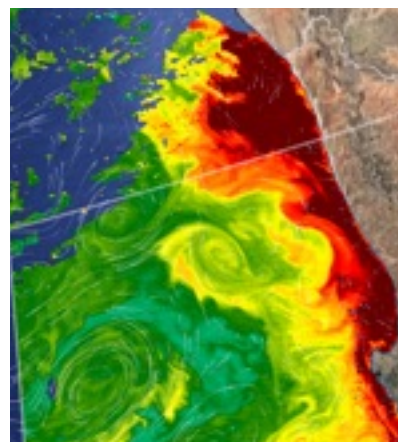
Geoid



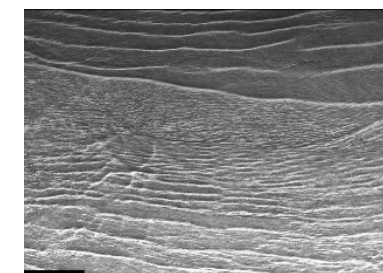
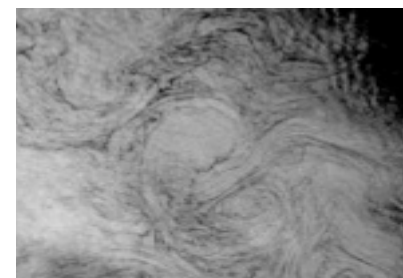
Sea Surface Temperature



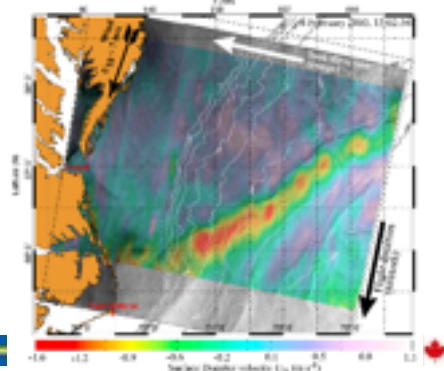
Ocean Colour



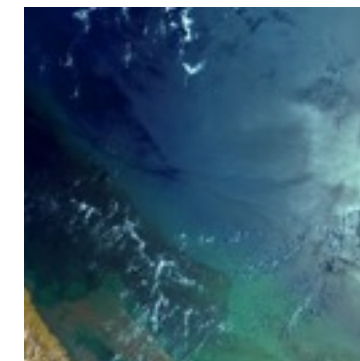
Rugosity



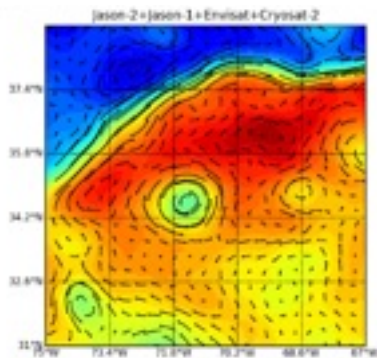
Doppler velocity



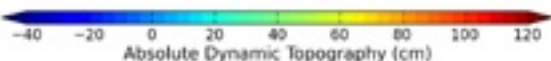
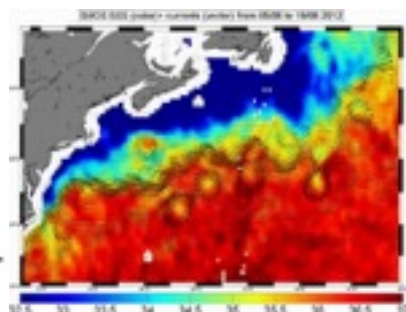
Sun Glitter



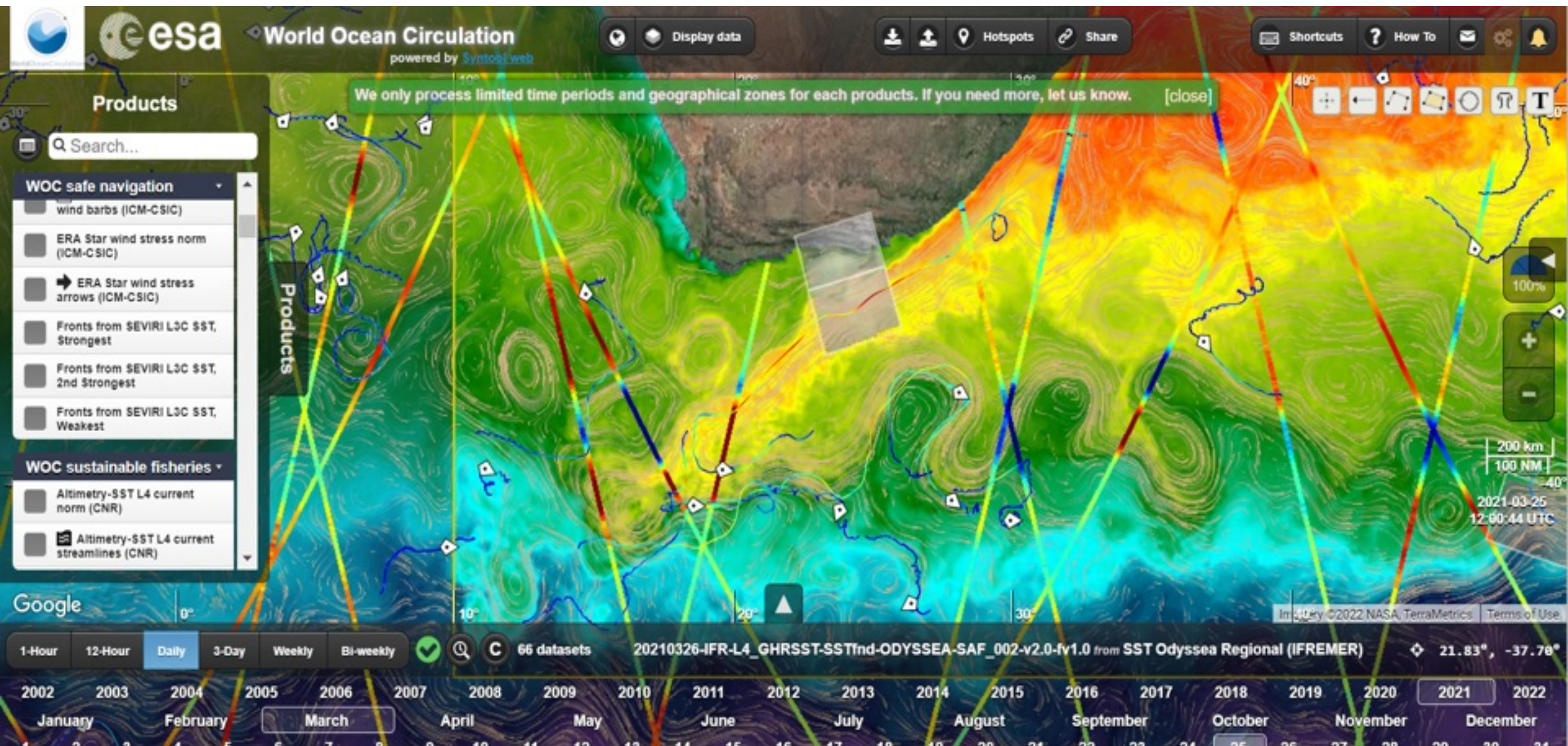
Sea Level



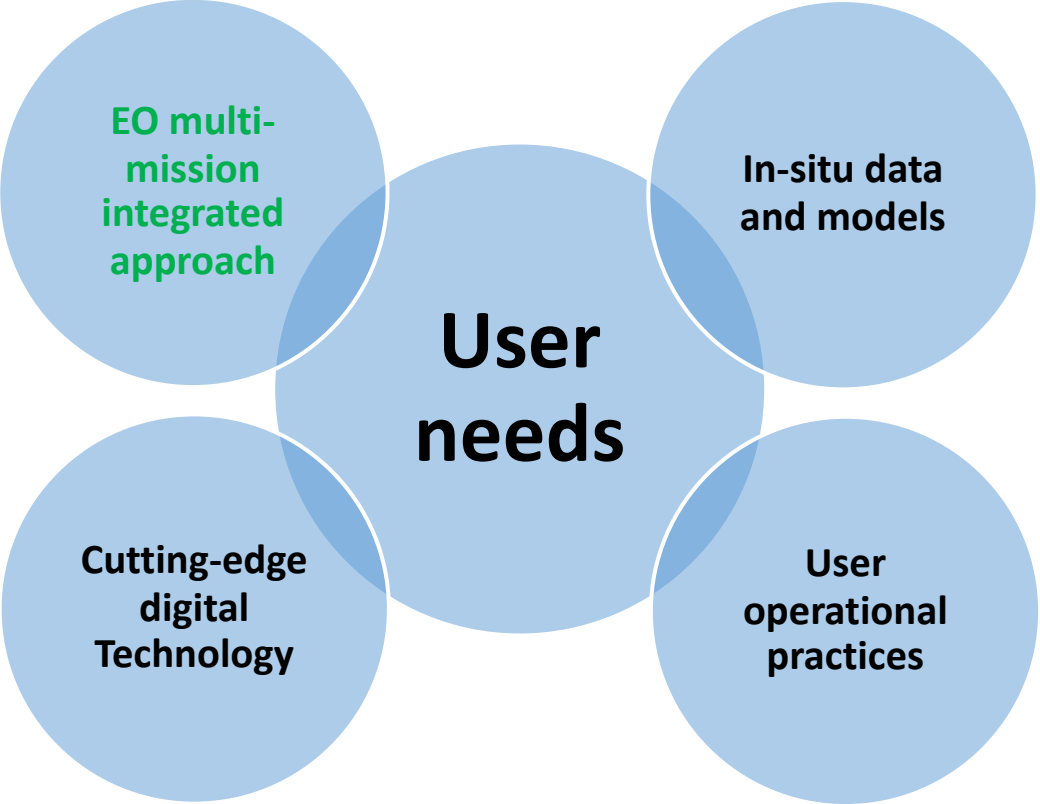
Salinity



<https://woc.oceandatalab.com/>
World Ocean Circulation Syntool instance



Moving towards the EO-integrated approach



Project characterization



WOC

User Consultation Meeting