

IFREMER and CERSAT

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IFREMER

- French Research Institute for Exploitation of the Sea
- personnel: 1.385, Genavir (ship owner) 320
- 5 centres (Boulogne-sur-mer, Brest, Nantes, Toulon, Tahiti) and 26 stations
- 25 research departments
- 7 vessels



**Major facilities for
Oceanography**



**Monitoring, use and
enhancement of coastal seas**



**Monitoring and optimising
aquaculture yields**



**Fishery resources, sustainable
use and commercial transfer**



**Exploration, exploitation of
ocean floors and their
biodiversity**



**Ocean circulation and
ecosystems, mechanisms, trends
and forecasts**



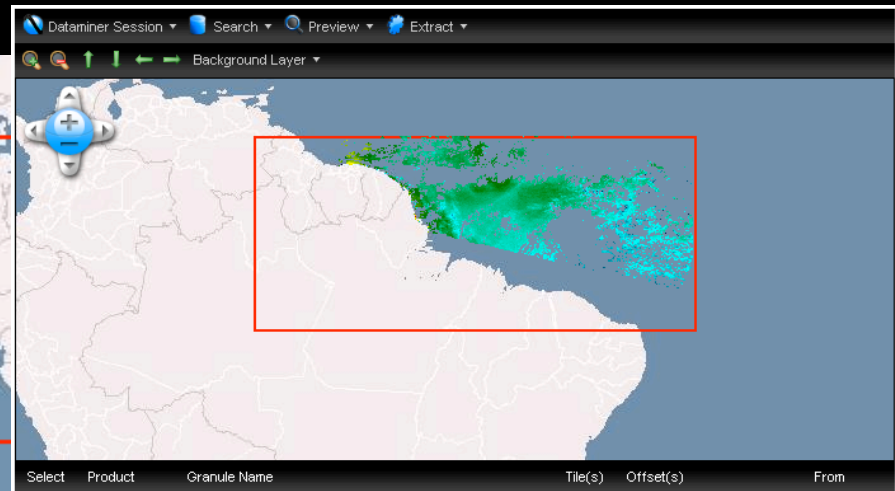
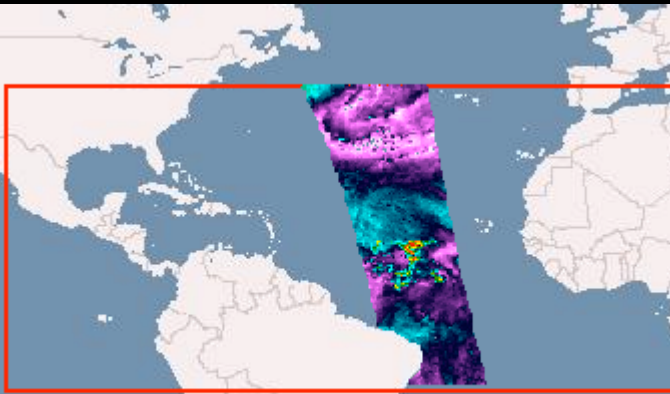
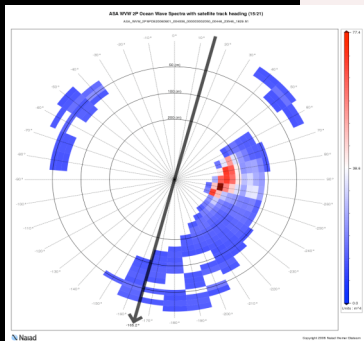
CERSAT / Laboratory of Oceanography from Space

- Exists since 1991
- European Space Agency ground segment for ERS-1 and ERS-2
 - Scatterometer
 - Altimeter
 - SAR Wave mode
- Long-term support by ESA and European community
- Research and Operation
 - Ocean surface remote-sensing : wind, salinity, sea-ice, sea-surface temperature, ocean color, waves, sea-air fluxes,
 - Data management : data archiving and processing center, interoperability, data dissemination
 - About 20 people



- Provides a tool/api for basic and high-level access to data
 - Thematic search
 - Colocation between multiple datasets
 - Time series at fixed points or trajectory
- Extract from full-resolution data significant and compact information that can be exploited, or at least be used as a filter/pointer to relevant information
 - Feature inventories
 - Data content description : synthetic properties such as mean values or variability,...
- Intended to help building knowledge databases and inference engines, classification,...

Improved data dissemination





Integration of CERSAT in operational systems

- Involved in many European or International projects
 - ESA : management and processing of ERS & ENVISAT wave data
 - GHRSSST (SST) : Global archive for all SST data (and in GMES)
 - GMES : wind and sea-ice products
 - MERSEA : sea surface temperature, wind, sea-ice and information systems
 - CNES : SMOS => processing center for salinity and soil moisture
 - Many other ESA / European projects : expertising on remote-sensing, data management, coastal applications,....
- Many close partners (data exchange systems, distributed processing,...) :
Meteo-France, NASA/JPL.PODAAC, EUMETSAT, ESA, CNES