

The ODATIS ocean data and services cluster is a component of the **Data Terra Research Infrastructure**, alongside 3 other clusters : **AERIS** for the Atmosphere, **FORM@TER** for the Solid Earth and **THEIA** for Land Surfaces.

The main task of the ODATIS Ocean Cluster is to facilitate/promote the discovery and use of data, to develop derived products, to make available software, tools and services.

ODATIS is based on a network of distributed **9 Data and Services Centres** operated by french research organizations: CNRS, CNES, Ifremer, IRD, Shom, Marine Universities.

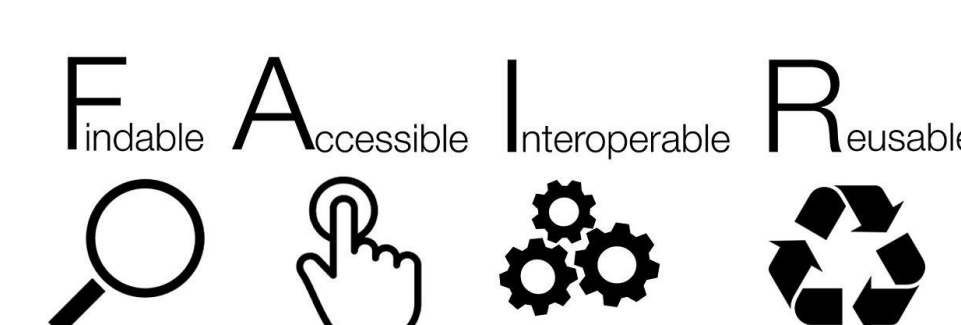
The Data and Service Centres offer the guarantee of services on data management : record data, process data, control data quality, and provide routine access to marine data.



AVISO+ (operated by CNES) and **CERSAT** (operated by Ifremer) are the 2 Data and Service Centres dedicated to **satellite data**, particularly altimetry data.



*in situ and
satellite data
assembling*



The Data and Services Centers of the ODATIS Ocean cluster manage and provide multi-sensor datasets, over long homogeneous time series, by applying FAIR principles offering guaranteed data management services in terms of referencing, hosting, dissemination and interoperability



Analyze process and large volumes of data remotely (HPC),

access to Virtual Research Environments (VRE). Technical workshops offer hands-on experience with several data manipulation, processing and visualization software.

Services



Data
management

Scientific
expertise

Promotion and
support for
data usage

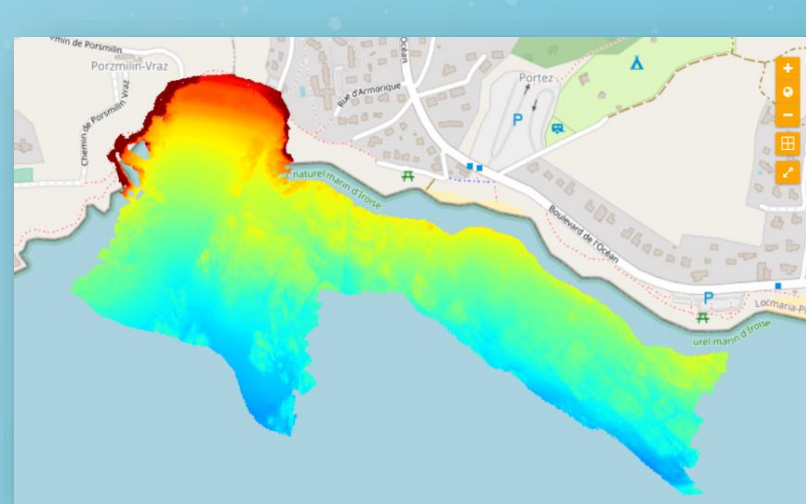


The ODATIS Ocean cluster relies on **Scientific Expertise Consortia** to promote and develop processing methods and innovative products for satellite, airborne and *in situ* observations of the ocean and its interfaces. These Consortia network and federate scientific and technical experts around a topic : pH/CO₂, O₂, Ocean color, flow cytometry...

The ODATIS **data and products catalog** provides access to 200 metadata sheets to access data sets provided by the national community and their links with international programs.

- search with selection filters,
- description of the data,
- visualization capable of overlaying several datasets,
- direct download or via the local partner portal

Examples

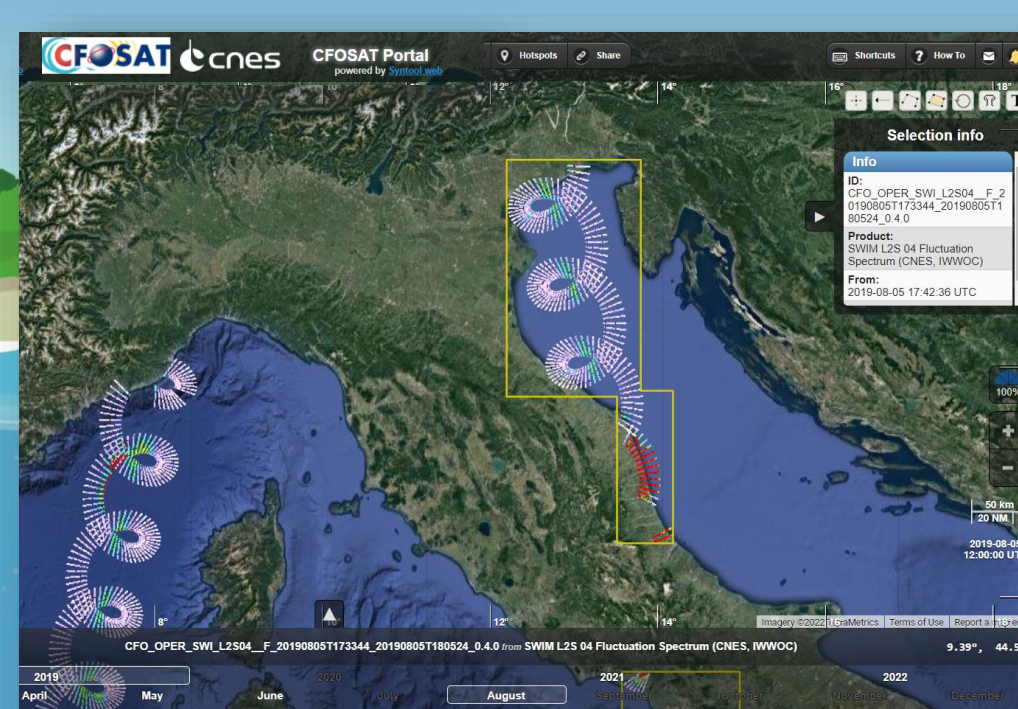


Coastline dynamic

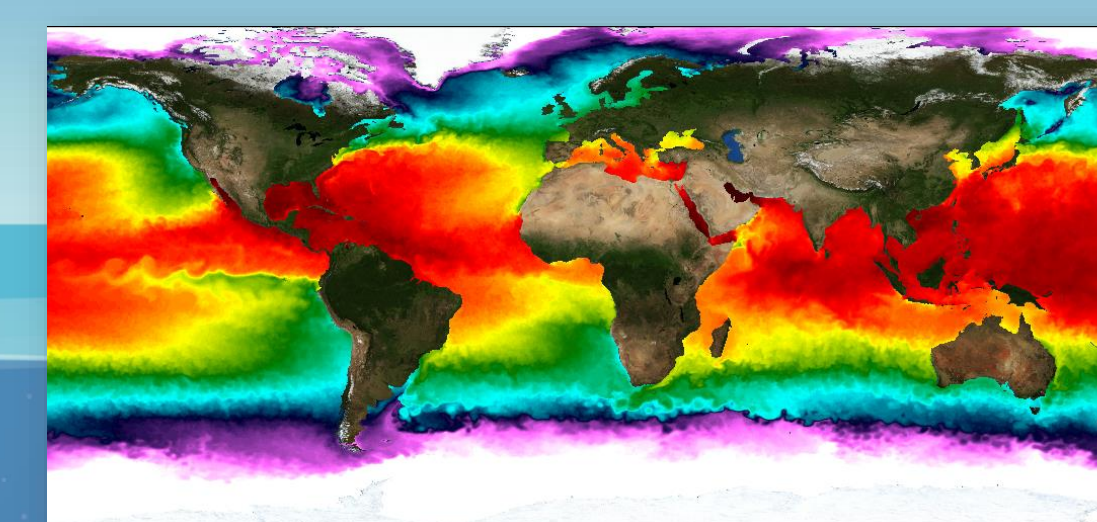
Mean Sea Level rise

Sea ice extent and thickness

Deoxygenation

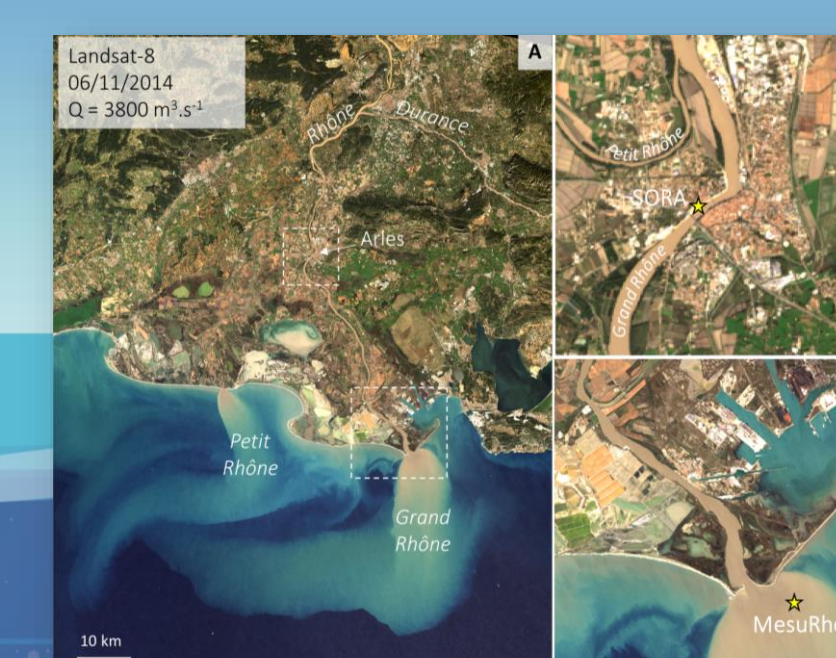


Wave parameters

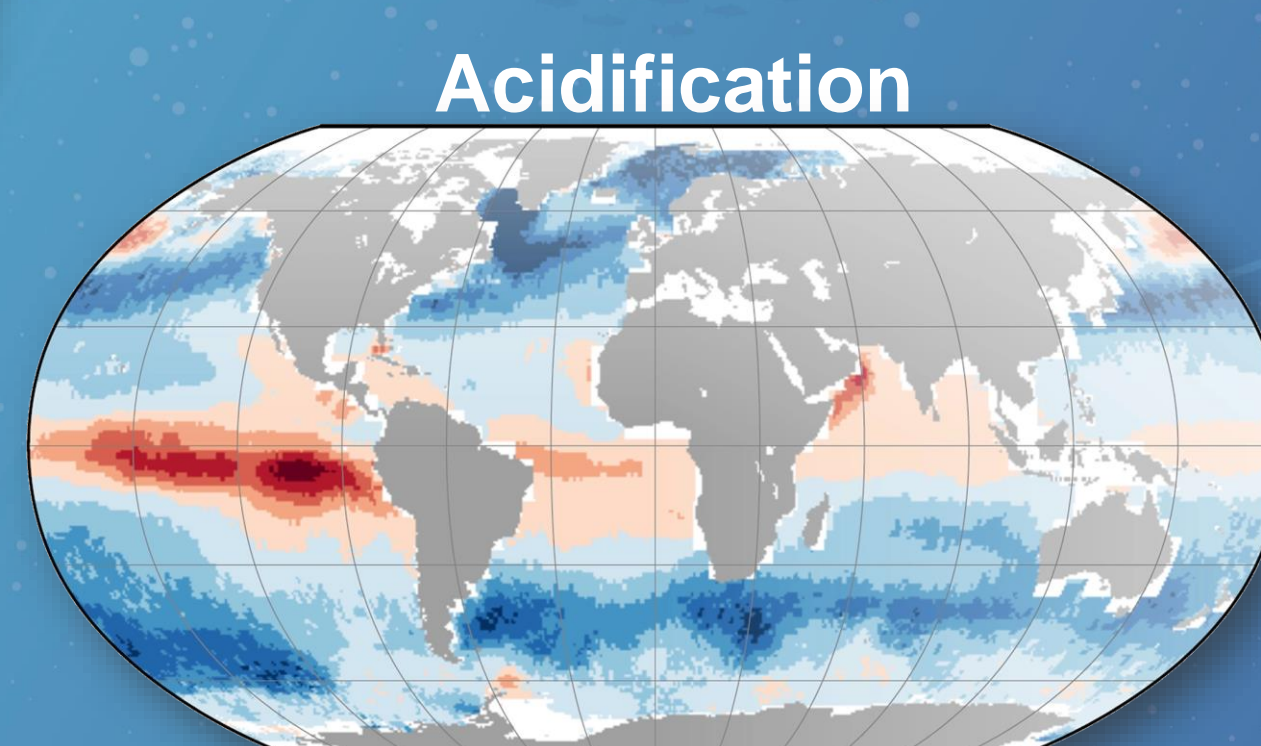


Marine Heatwaves

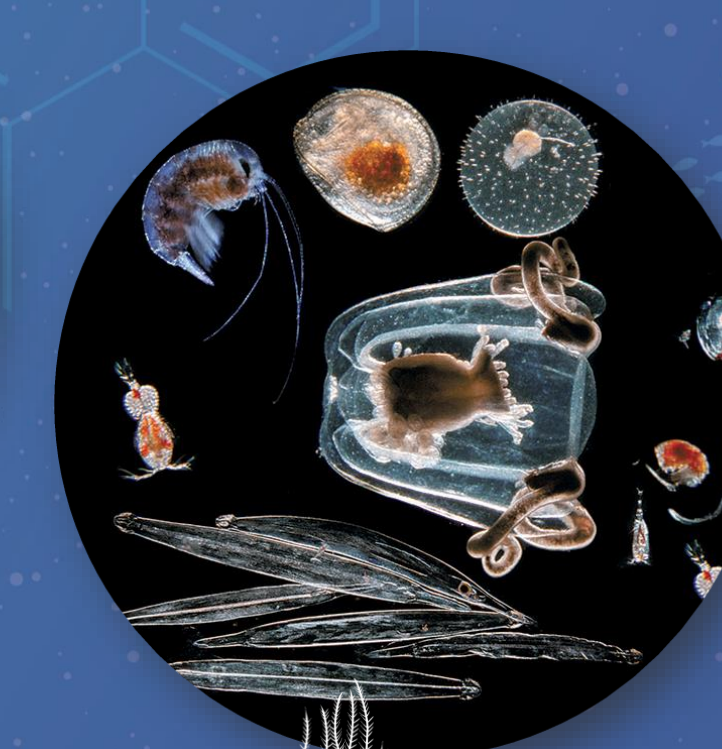
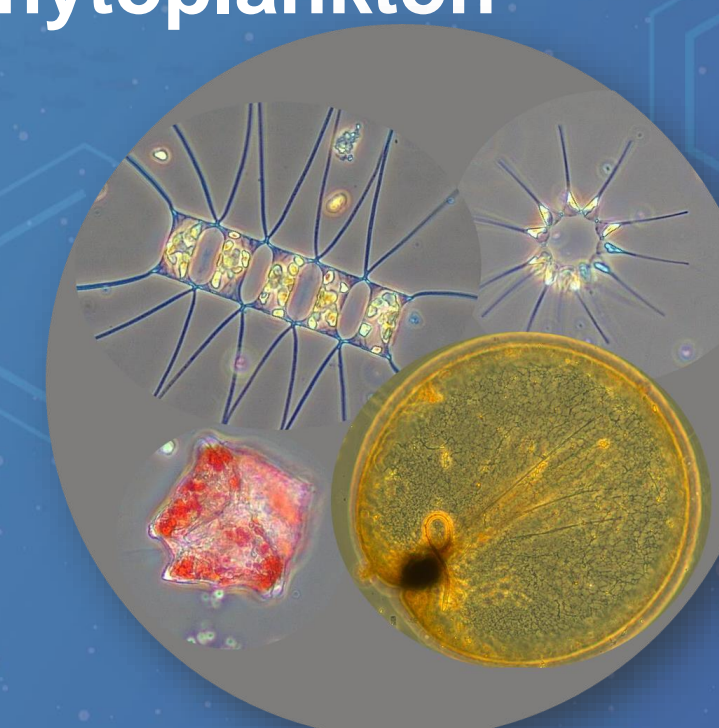
Phytoplankton



Phytoplankton blooming
Turbidity
Suspended matters



Acidification



Zooplankton

