



# 3<sup>RD</sup> SEADATAACLOUD ANNUAL MEETING

*GILBERT MAUDIRE*

*IFREMER, BRITTANY CENTRE*

*DEPUTY DIRECTOR OF THE INFRASTRUCTURE DEPARTMENT*

# Welcome in Western Brittany!

- **The « Blue Economy » : a key point for this territory!**
  - more than 40000 jobs linked to the sea
  - Navy, Shipping, Shipyards, Fishery, Aquaculture, Marine energies, Tourism, Yachting ...
  - in a sustainable way!
- **The Ocean : a day-to-day environment for many people**
  - education, preservation, risks, health, recreational activities...

# Marine Sciences and technologies

- **24 Research Units**
  - oceanography, geophysics, ecosystems, biodiversity, data sciences, spatial planning, economy, laws...
- **750 researchers**
- **200 doctoral students**
- **Institutions and Universities**
  - CNRS, Ifremer, IRD, SHOM, Museum, AFB...
  - UBO/IUEM, Sorbonne University, IMTA, ENSTA...
- **80 infrastructures and scientific platforms :**
  - Observation systems, offshore experimentation, controlled environment experimentation (wind and waves...), computing facilities, ...  
(5 with a national label)
- **more than 30 innovative SME's :**
  - instrumentation, models, data processing...

# Ifremer

Exploring, understanding and predicting the ocean



**5** CENTRES  
AND  
**19** AFFILIATED  
COASTAL  
STATIONS



ON **3**  
OCEANS

WORKFORCE OF  
**1500**  
PEOPLE



INCLUDING 600 ENGINEERS  
& RESEARCHERS



**11** VESSELS

INCLUDING 6 IFREMER SHIPS  
+ 1 MANNED SUBMERSIBLE  
+ 2 REMOTELY OPERATED VEHICLES  
+ 2 AUTONOMOUS UNDERWATER VEHICLES

run and operated by the French Oceanographic Fleet

## Research areas



Marine and Digital Infrastructures



Biological Resources and Environment



Oceanography and Ecosystem Dynamics



Physical Resources and Deep-Sea Ecosystems

also acting for several international observation infrastructures : ARGO, EMSO, JERICO...

# SISMER

## Data management at Ifremer

### ➤ Team

- 55 staff (38 permanent positions)
- data managers, software developers, computer engineers
- with strong links with scientists and observatory PI's

### ➤ Computing facilities

- A HPC cluster (12000 cores) for data processing and modelling
- 15 PetaBytes storage (inc. 5PB per year)

### ➤ Managed data

- oceanography, geophysics, coastal and deep ecosystems, fishery
- satellite and in-situ datasets
- From the coast to the deep se

### ➤ Quality

- Certified ISO 9001
- Accredited NODC by IODE-XXIV
- Ongoing RDA-ICSU certification  
« Core Trust Seal »



# A strong ambition : develop cooperation

- **Ocean too large and too expensive to be observed alone!**
- **Sharing marine data is a necessity**
- **Aggregating marine data sets of reference for Europe**
  - Global and regional scales
  - Climate change and evolving ecosystems
- **An evolving context for research data management**
  - Application of the FAIR Principles
  - European Open Science Cloud (EOSC) & associated projects
  - Research Data Alliance

**That's why SeaDataNet & SeaDataCloud are so important!**

- To establish the guidelines and the services ourselves
- To better fit with the community needs : PI's, data managers, data users
- In close relationships with Copernicus Marine Services and EMODnet

**We will find solutions to continue after SeaDataCloud!**



**A VERY FRUITFUL MEETING**

**A PLEASANT STAY IN BREST**