



SNOCO – *In situ observations*

Inter-Institute Working Group
(IFREMER, INSU, SHOM, Météo-France, CETMEF)

Objectives

*SNOCO: Service National d'Océanographie Côtière Opérationnelle
National Service for Coastal Operational Oceanography*

To provide **calibrated and validated data** ...

*... in real time and delayed mode, high frequency (> 1 sample per day),
using automated systems.*

from a **constant observation** of the environment

For:

- **research and applications**
- to supply **operational models**

Observation networks



Observatories



Fixed stations

- Physico-chemical parameters
- Meteorological
- Sea state

Observatories of opportunity

- Recopesca, Ferrybox

Gliders

HF Radar

Tide gauges

Others: Coastal profilers,...

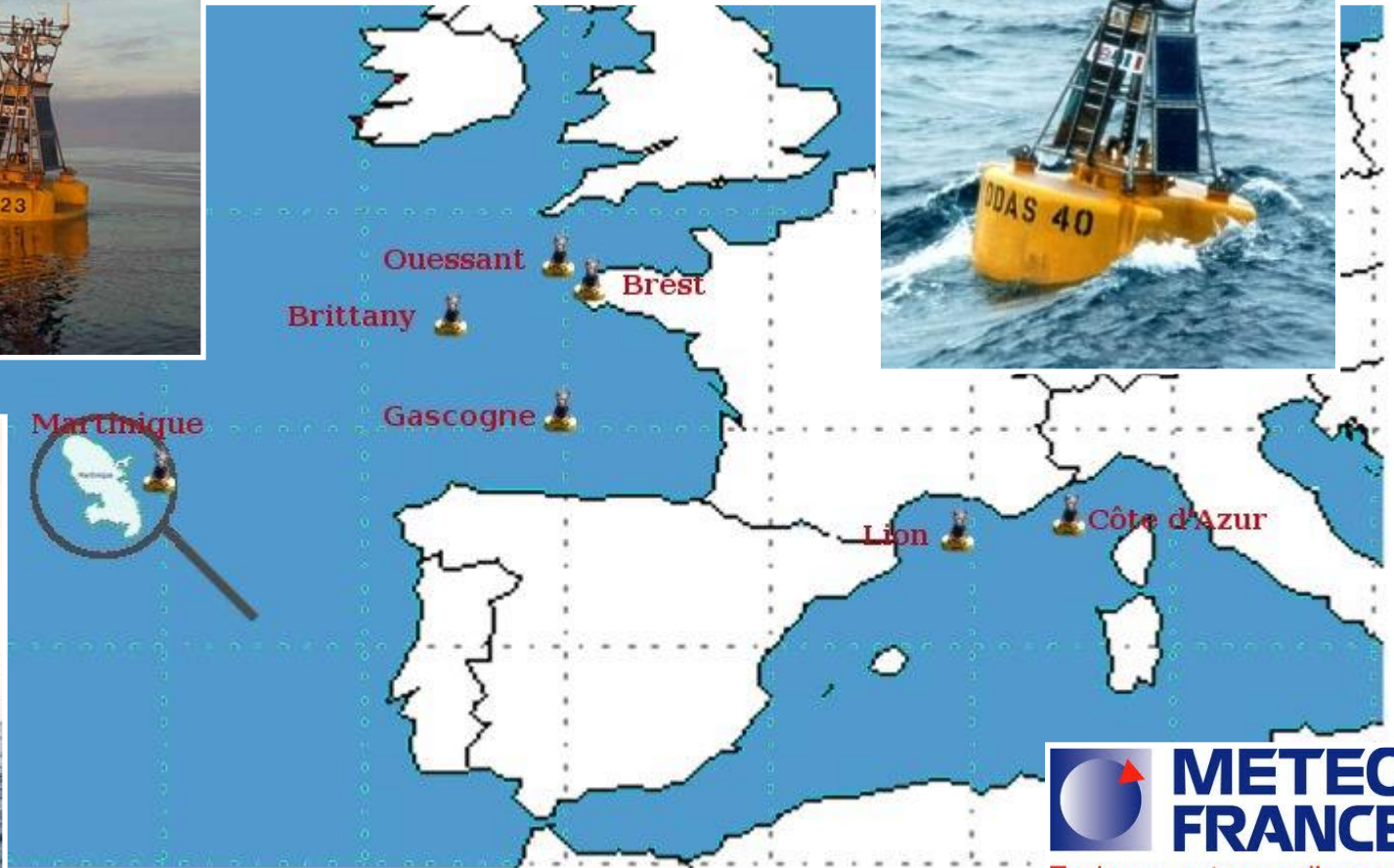
Fixed stations: *multi-instrumented buoys*

Existing networks:

SOMLIT, RESOMAR (INSU)
MAREL (IFREMER)

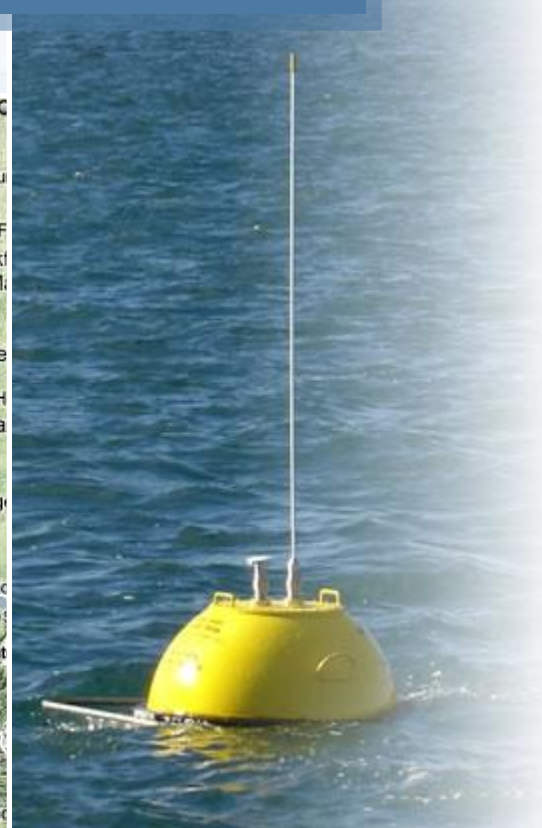
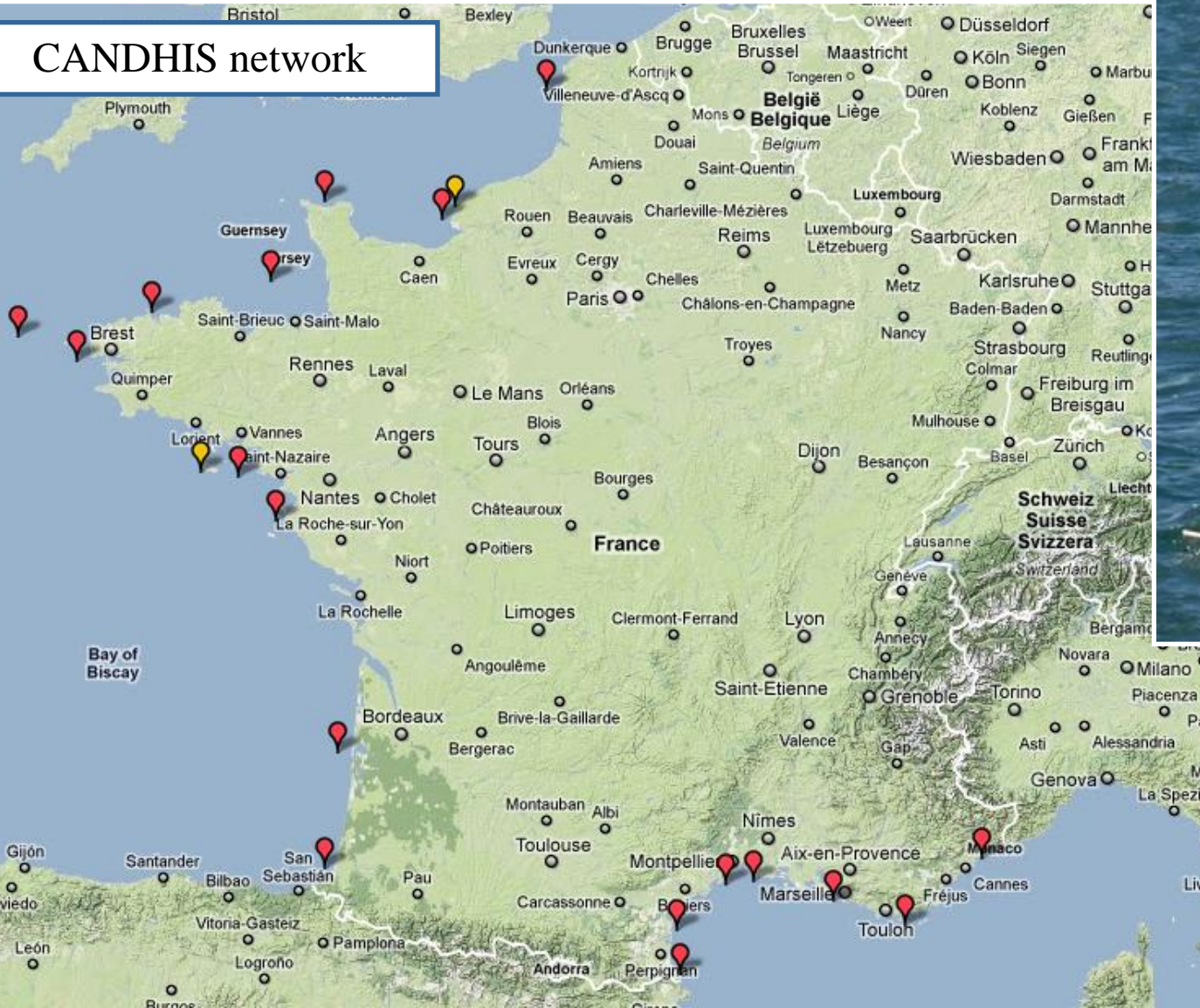


Fixed stations: *meteorological buoys*



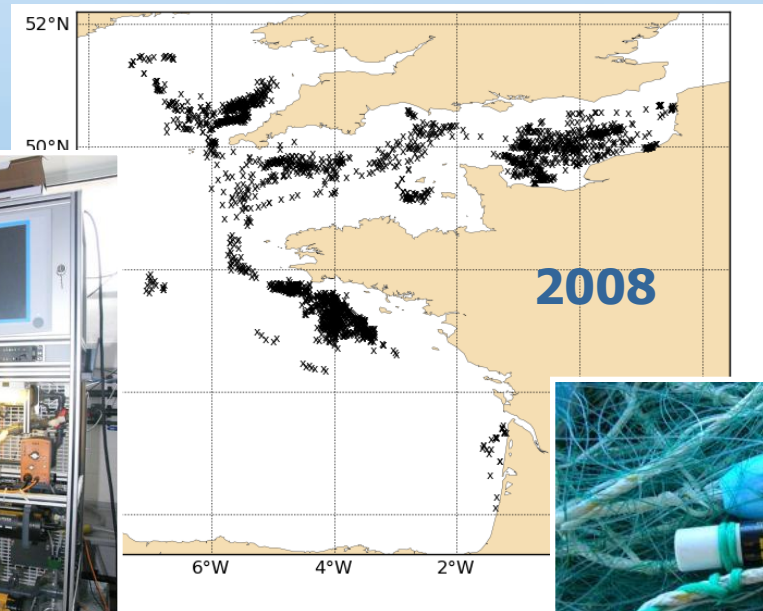
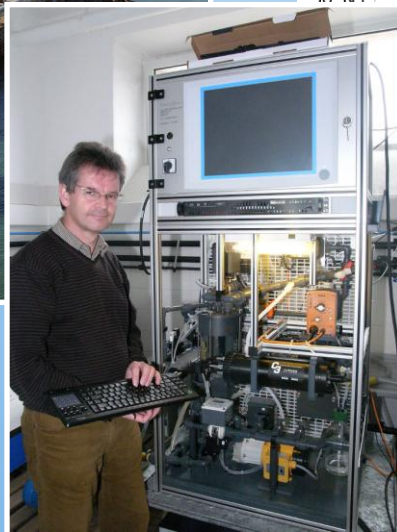
Fixed stations: *wave rider buoys*

CANDHIS network

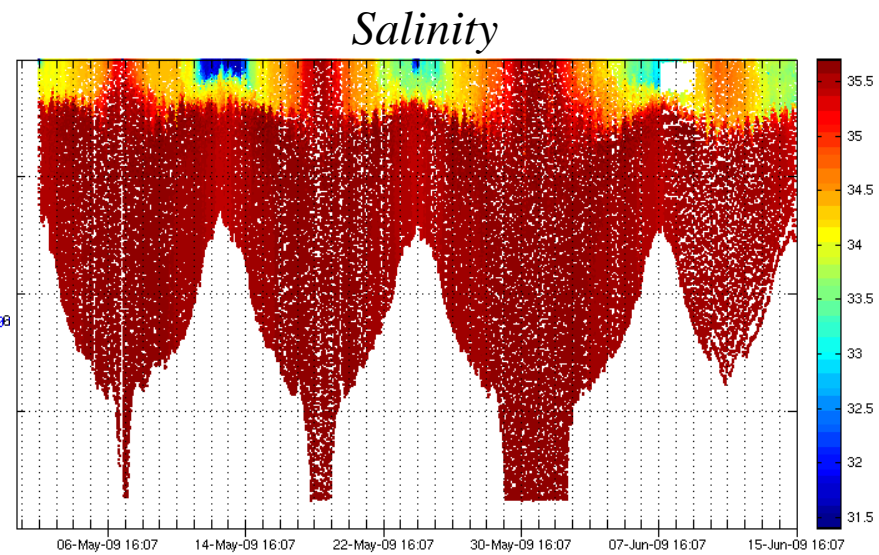
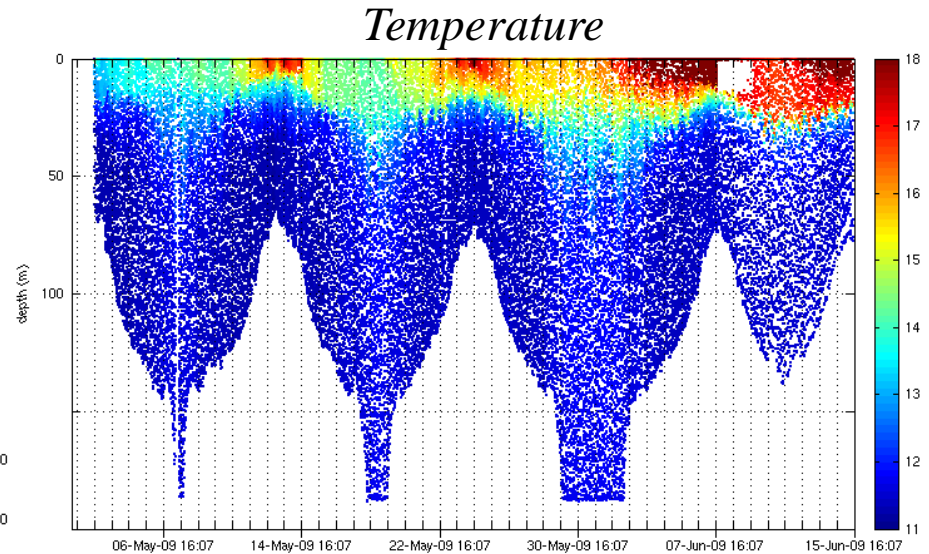
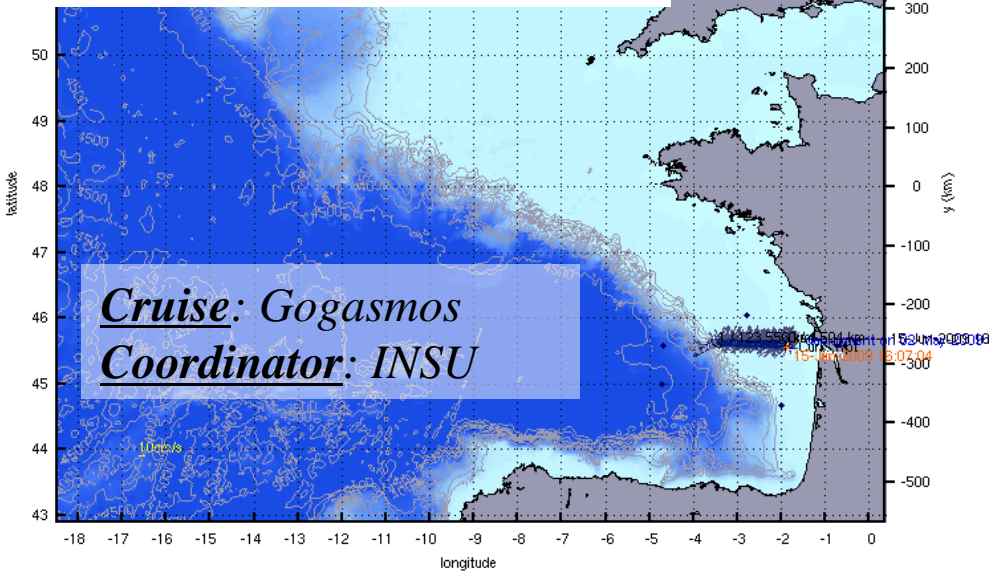
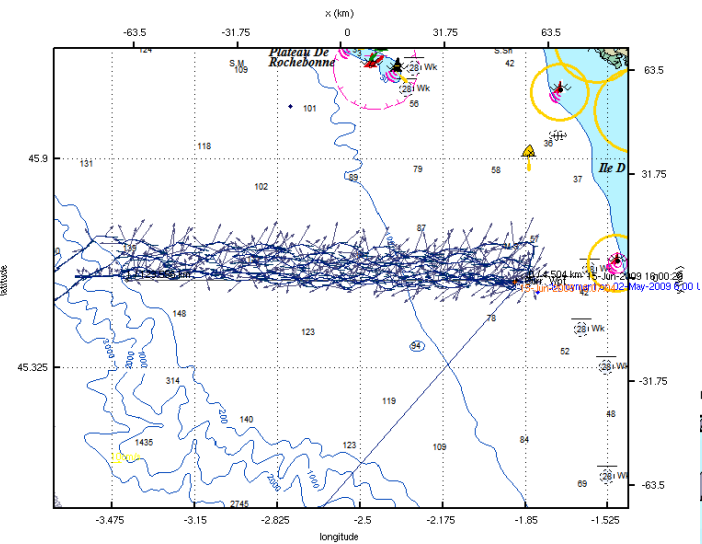


Ships of opportunity

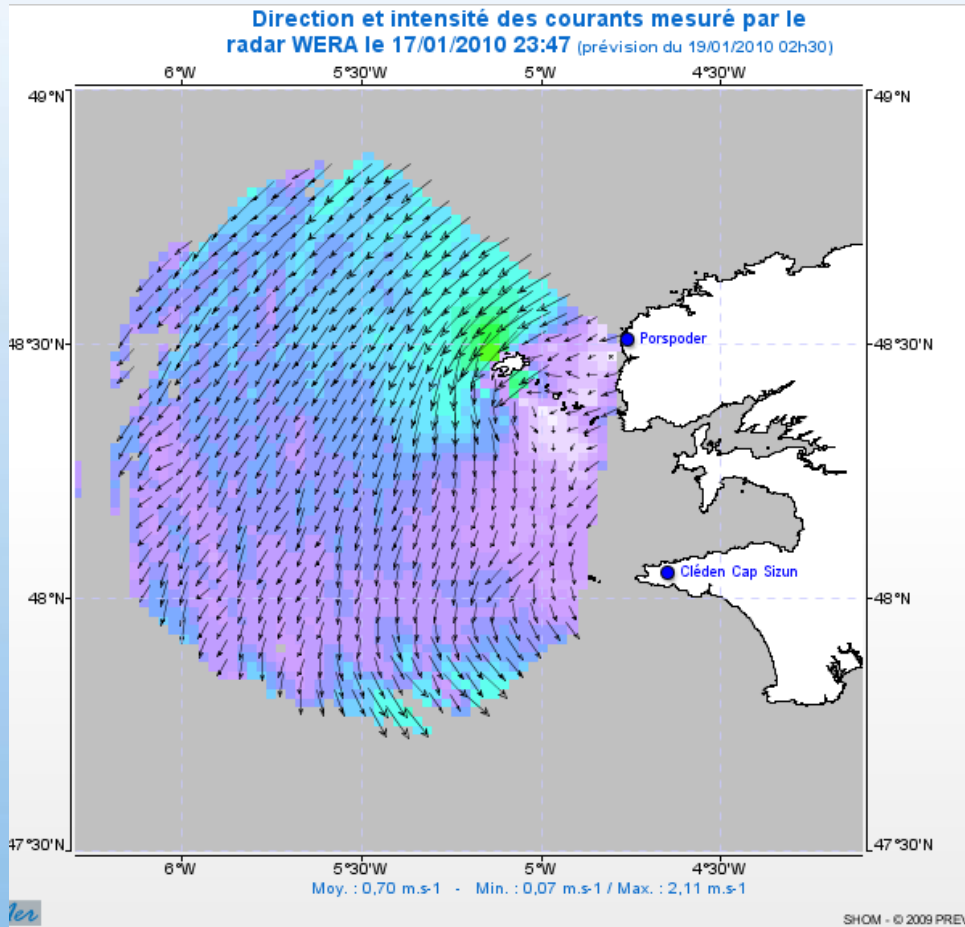
- **Ferrybox**: for T, S, fluorescence, dissolved O₂, CO₂
- RECOPESCA: voluntary **fishing boats** network to monitor the hydrology



Gliders: *Pytheas* example

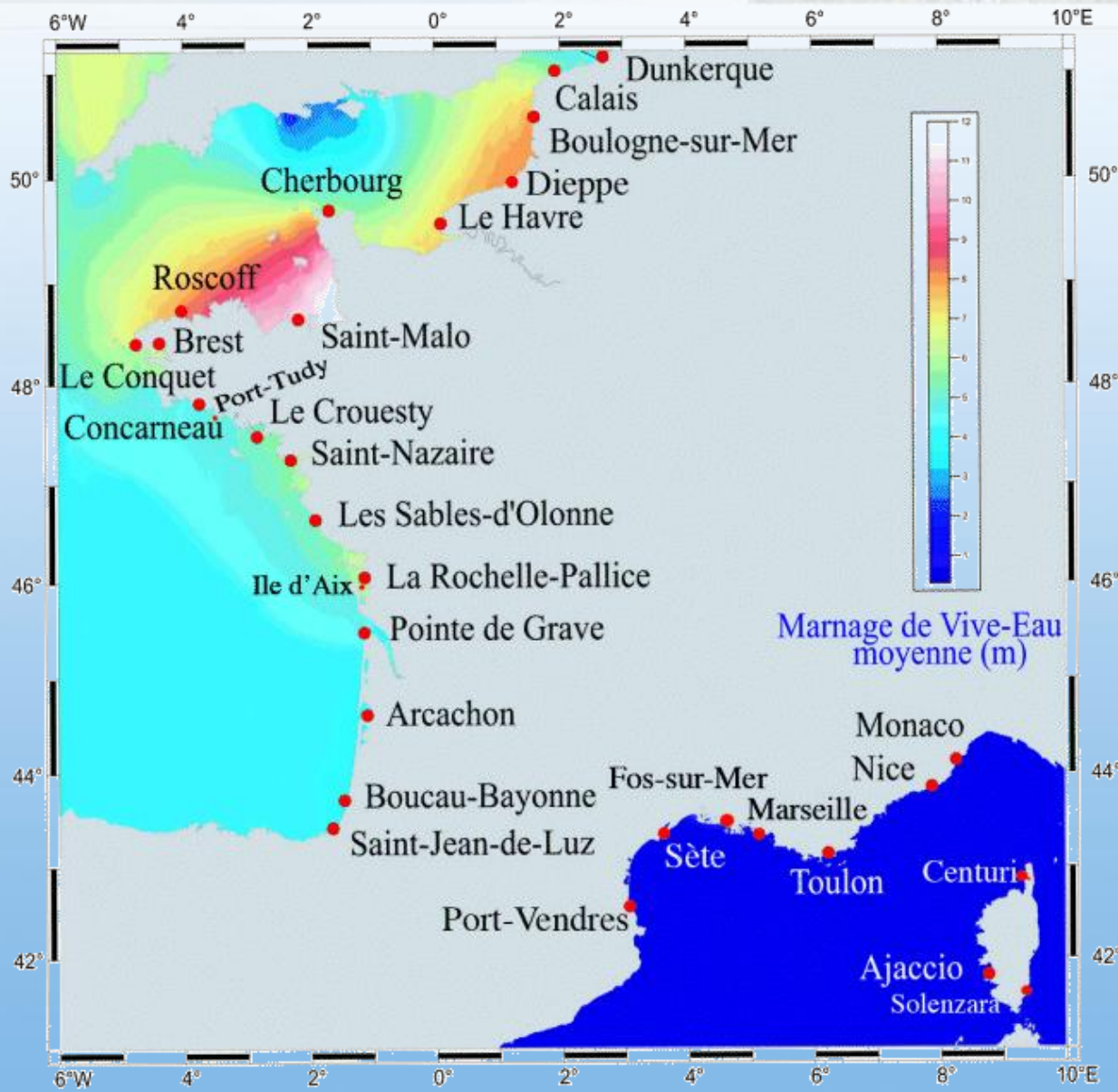


HF Radar



To cover several regions along the coast based on existing networks (e.g. AZTI HF radar easy to extend from the Aquitaine coast)

Tide gauges: *RONIM* network



Other observation sources

- ARVOR-C – coastal vertical profilers ...
- Drifters generally linked to scientific cruises
- Scientific Cruises



The FONCE project
An essential contribution to the SNOCO in situ ...

A first step: CIMER 2009

**Lettre d'intention pour le volet in-situ d'un futur Service National
d'Océanographie Côtière Opérationnelle (SNOCO) et premier
dimensionnement**

Groupe de travail inter-organismes
(Ifremer, SHOM, INSU, Météo France)

P.Y. Le Traon, J. Legrand, G. Charria, F. Dumas, Y.H. De Roeck, M.
Repecaud, Y. Morel, R. Creach, P. Testor, H. Claustre, G. Reverdin, J.
Rolland, M.N. Bouin

30 Novembre 2009



FONCE - *French Observatory Network of Coastal Environment*

Reply to the call for projects: EQUIPEX

Coordination: *Ifremer*

Partners : *CNRS/INSU, CNRS/UBO, SHOM, CETMEF*

Asked budget : *8M€ for investment*
and 460k€ for annual operating

FONCE – *What is it ?*

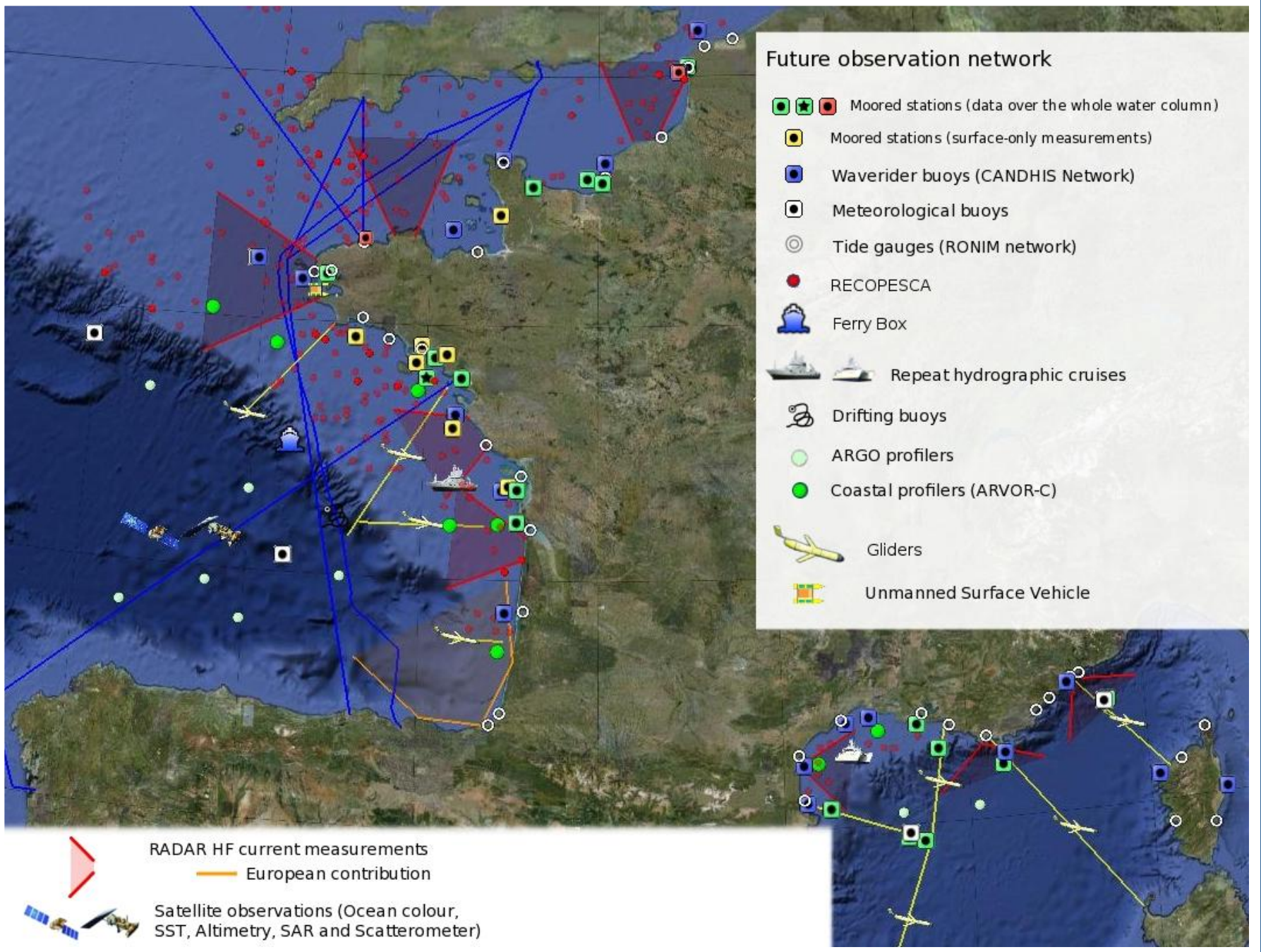
FONCE = instrumentation network
to observe **metropolitan coastal seas**

... proposed in the frame of the SNOCO, to **characterize coastal hydrodynamics, and its interactions with the marine environment** (ecosystems, sediment transports, water quality), for the **research and for operational applications**.

FONCE – *Objectives*

To develop, to acquire, to install and to maintain a **complementary instrument network** to **observe physico-chemical parameters in coastal zones**.

This **progressive** network is based on fixed stations (buoys, acquiring measurements in the whole water column), systems of opportunity measurements (Recopesca sensors on fishing boats and “ferrybox” on ferries), systems of spatially sampled measurements (HR radar, gliders).



In 2011...

- FONCE 2010 not accepted
- Build of a working group - Ifremer, INSU, SHOM, Météo-France, CETMEF – to write a “science plan for the SNOCO in situ” - *in progress* -
- Workshop/Meeting begin of July
- Reply to the next call EQUIPEX: FONCE 2 in **September 2011**
Based on the science plan, a reinforced technological partnership and taking into account previous evaluations

Thank you for your attention ...

