

# PREVICOT

## PREVIision océanique COTière



## The PREVICOT Project

Develop and commercialize specific real time products addressed to a wide range of users in all sectors of the Marine activities

A two-year Pôle Mer project supported by the French Government, the Regional Council and Territorial Collectivities of Brittany, the Regional Council and Territorial Collectivities of Paca

## PREVICOT : target Market

*All sectors of the maritime industry :*

- local authorities and civil engineering firms
- professional unions of fisheries and aquaculture
- harbour authorities
- tourism industry
- research departments
- state services

# A collaborative project

## Private companies



## R&D partners



# PREVICOT : R & D Project

Navigation & Recreational boating / Maritime Civil Engineering / Coastal discharges

Real time systems

High resolution forecasting systems

Human Machine Interface

Instrumentation

Quality of products

**Transversal actions : Modelling, In situ Measurements**

**Marketing and Commercialisation**

# PILOT 1 : Navigation

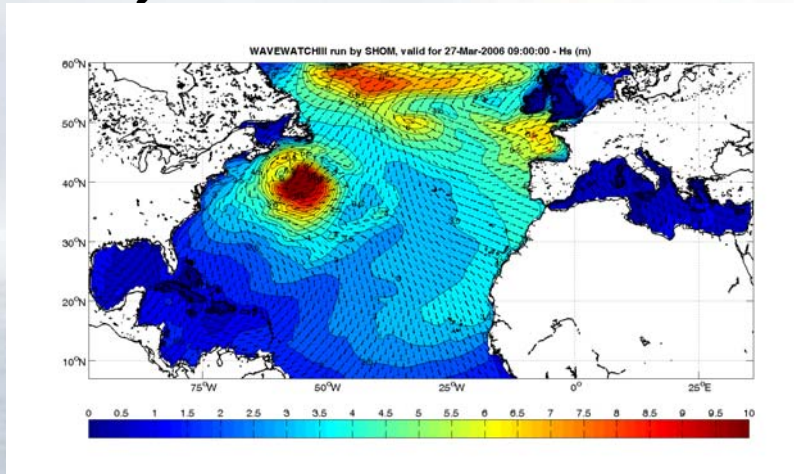
**Clients** Harbour management, fishing,  
Maritime Transport, sailing, surfing

**Products** **Dynamic maps**  
wind, sea states, currents  
**coastal report forecast**  
**shipping optimization**  
**web service for sea activities**

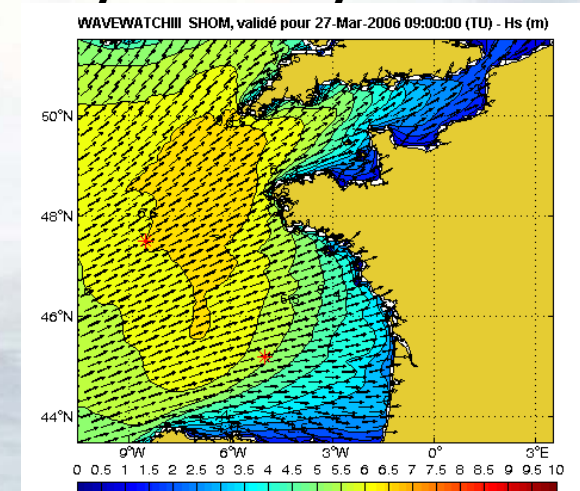
**Area** Finistère: Morlaix - Concarneau  
(spatial resolution ~ 100 m)

# PILOTE 1 : An Exemple of high resolution forecasting system

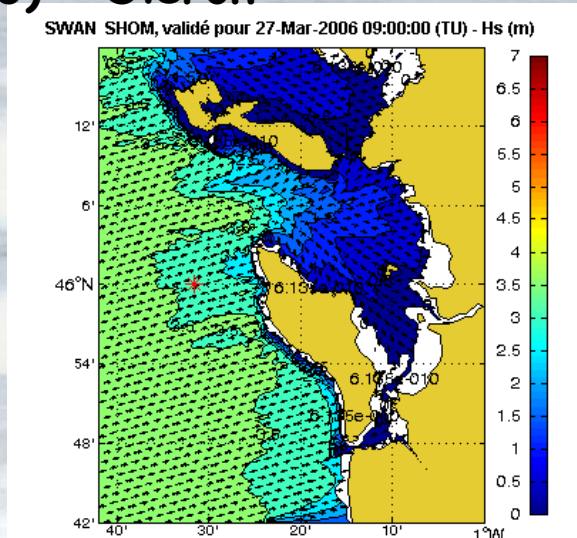
## 1) Atlantic



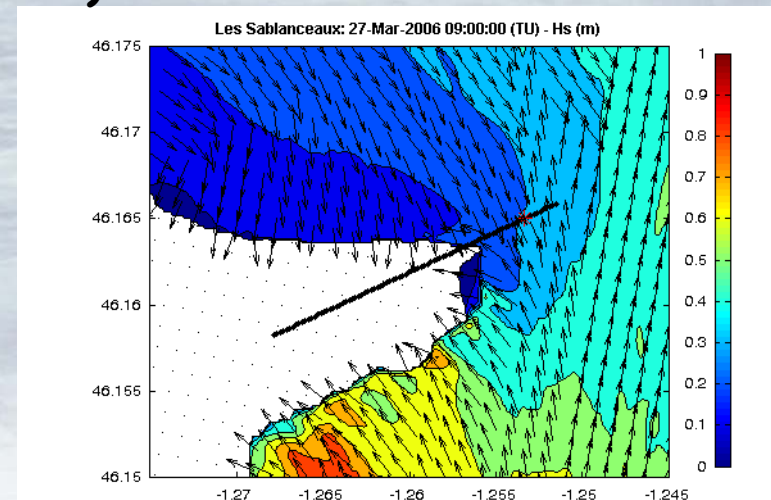
## 2) Bay of Biscay-Channel



## 3) Oléron



## 3) Pointe des Sablanceaux



## **PILOT 2 : Maritime Civil Engineering**

**Clients**

Harbours management, Marine Contractors

**Products**

**high resolution forecasting**  
sea elevation, currents, sea states  
sediment transport

**decision support**  
environmental conditions

**Area**

Brittany (Lorient)

# PILOT 2 : Examples of dredging and rejection



## **PILOT 3 : Sea rejections and macro-waste**

### **Clients**

Syndicats professionnels  
Collectivités territoriales

### **Products**

**real time forecasting**  
Suspended matter  
pollution  
macro-waste

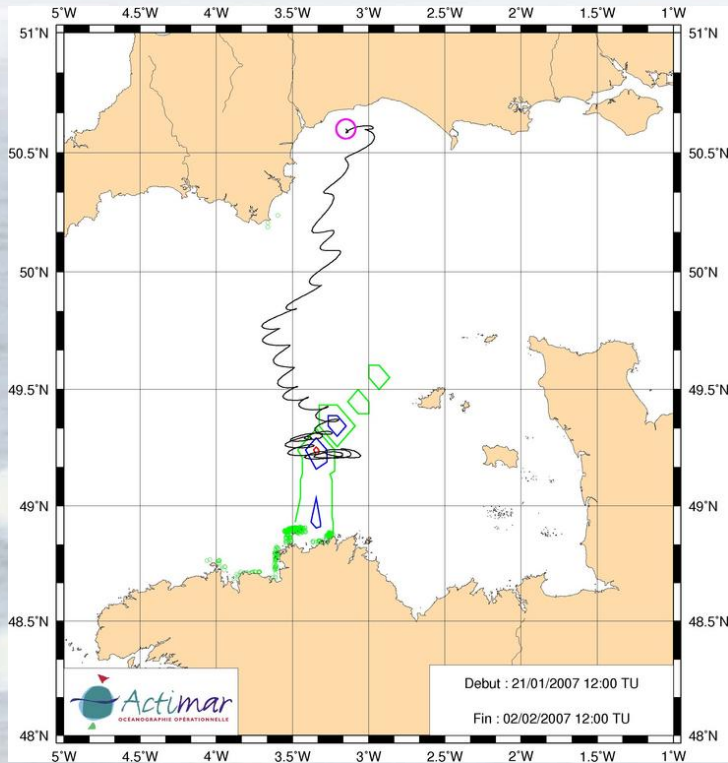
**tracing the source of pollutants**

### **Areas**

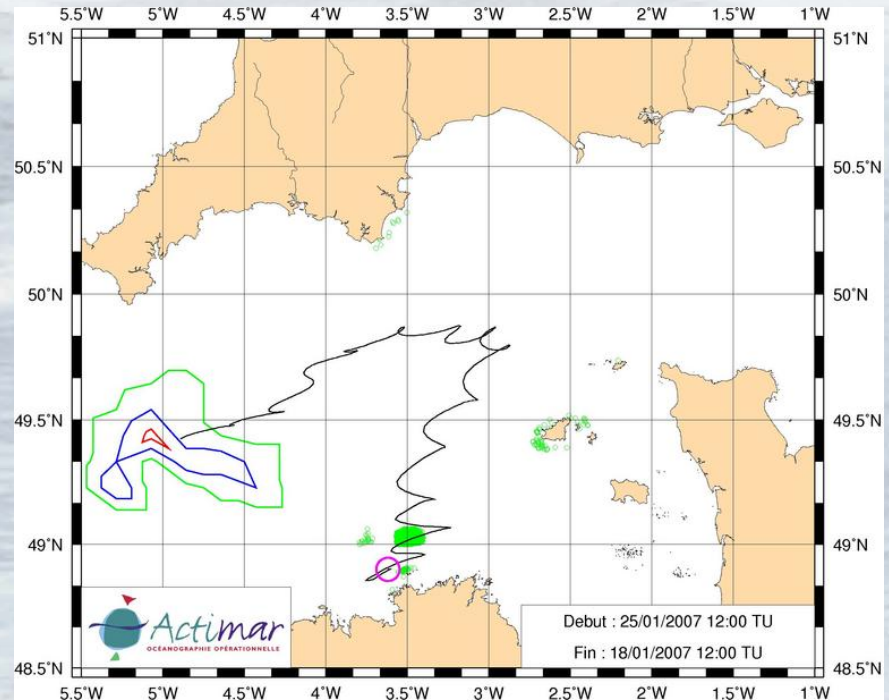
Baie de Quiberon : water quality  
Méditerrananean Sea : macro-waste

# PILOT 3 : Example of drift simulation

## 1) Drift from the source



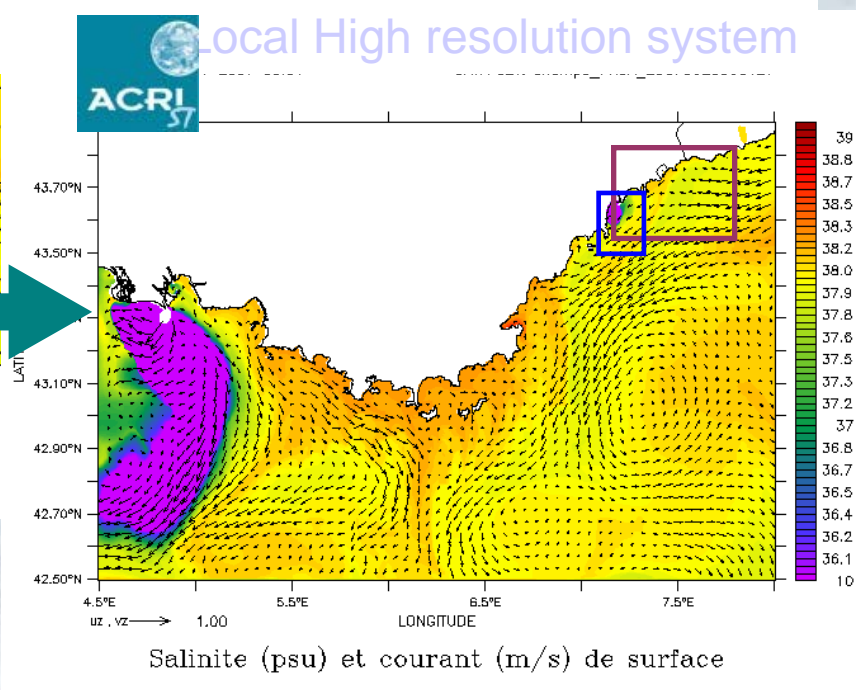
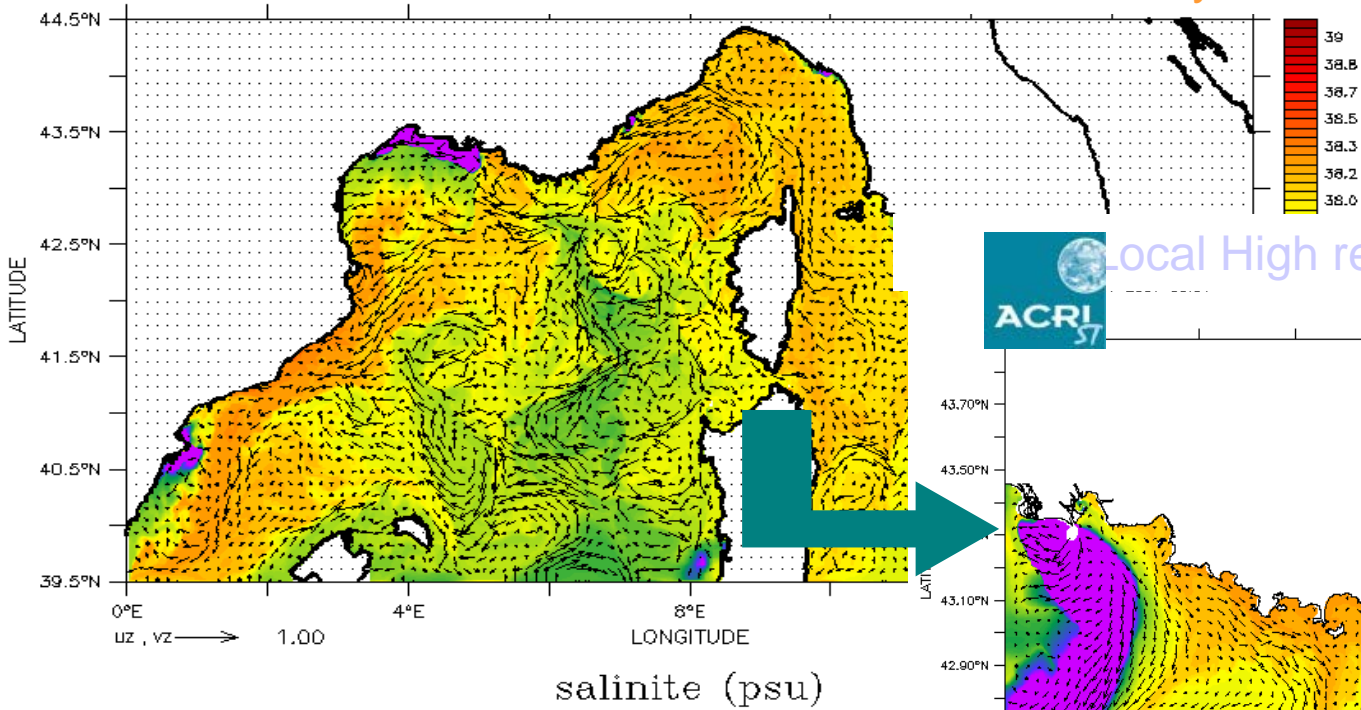
## 2) Inverse Trajectory : tracing the source of pollutants



**PILOTE 3 : macro-waste**

**Ifremer**

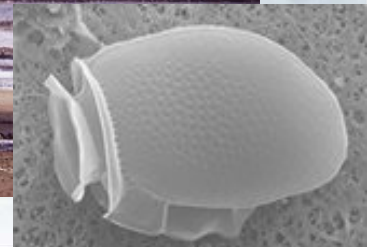
Operational Regional Forecasting System



# Research & Development

**Objectives :** Assess and improve the effectiveness of high resolution forecasting systems

Skill assessment of the forecasting system,  
Data assimilation techniques, Wave- Current interactions, ...



*<http://www.previcote.com>*