

THE CHALLENGES OF... THE BLUE WORLD” SERIES

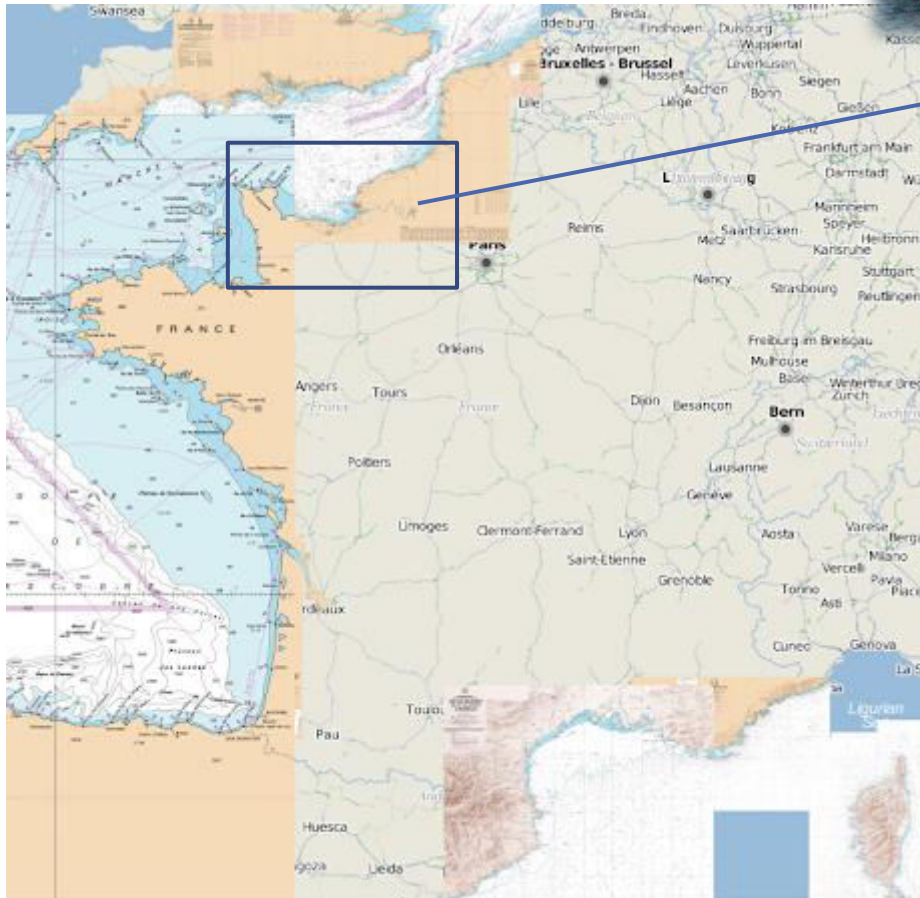
**Application of the satellites for fisheries
and fishermen**

COMITE REGIONAL
DES PECHES MARITIMES



NORMANDIE

Who is CRPM?



**French fishermen
organisation in
Normandy**

**One of many objectives :
To preserve shellfish
resources**



What use of satellite data for fisheries

2 scientists applications in Normandy :

- About marine resources management
- About algal blooms that may be harmful to human health

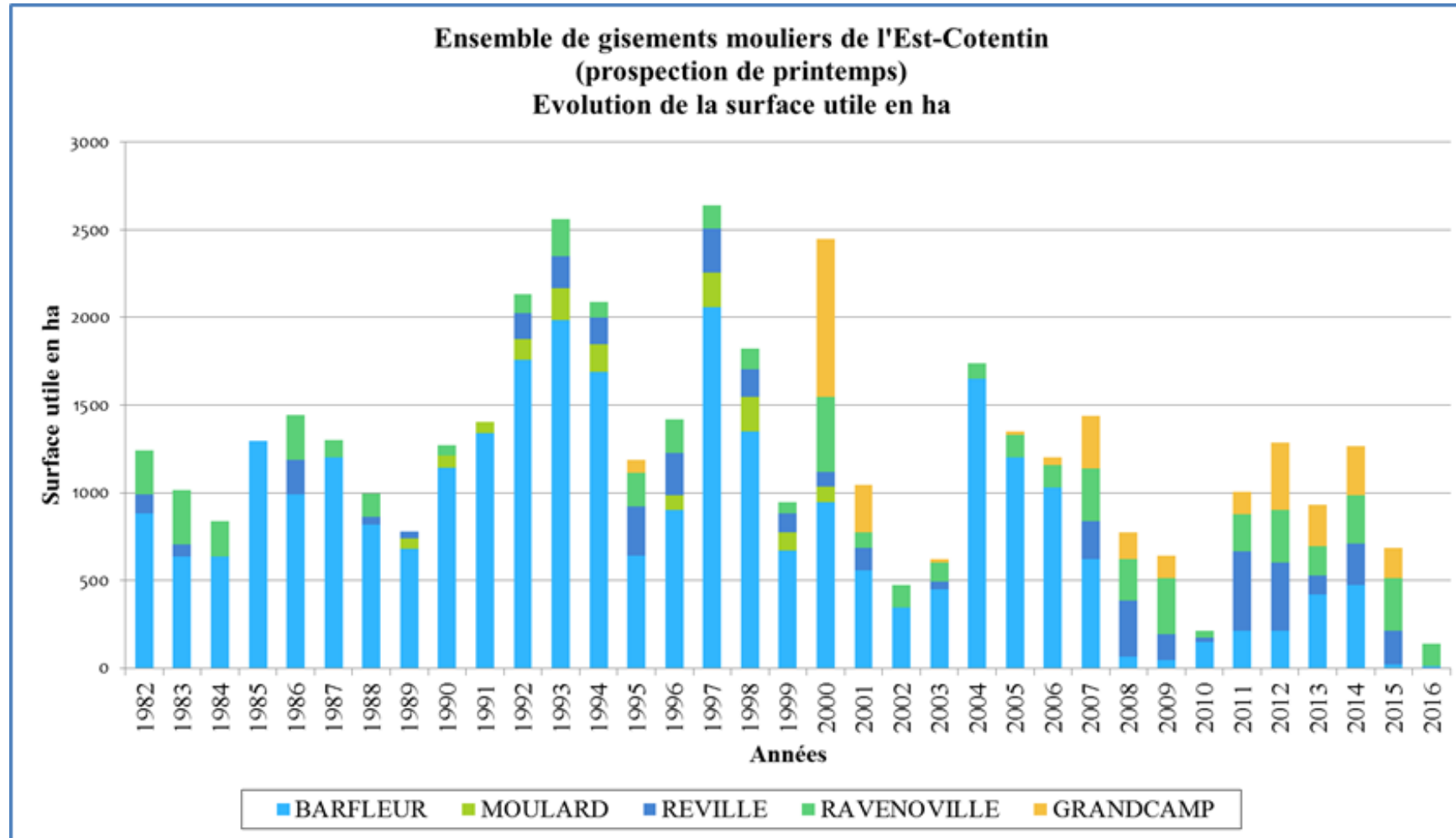


Wild mussels bank in the East Cotentin in Normandy



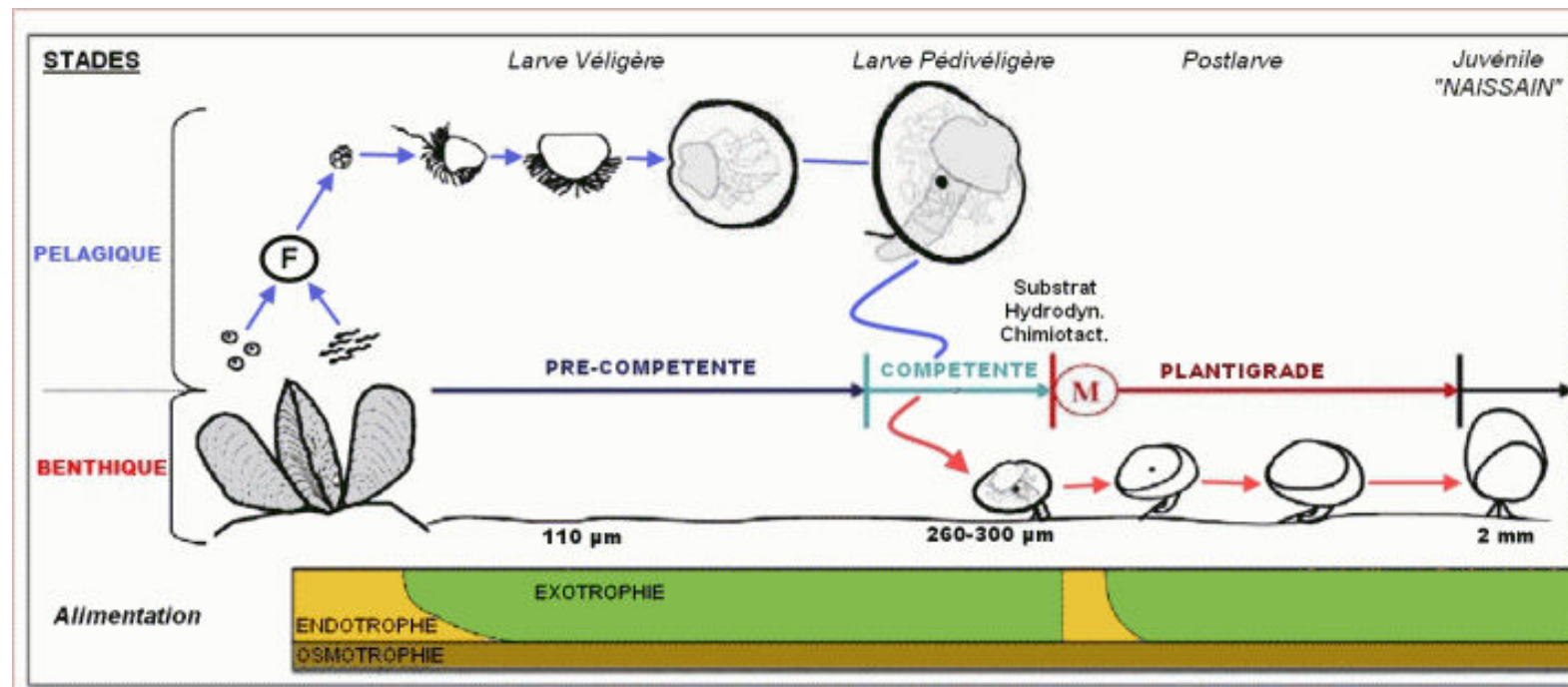
- Historic wild mussels banks in this area
- Variability of the resource

Variability of ressources



Wild mussels banks

- *How do these mussel banks work? Where do the larvae that colonize them come from?*
- *In 2013 : Study DILEMES : larval dispersal of mytilus edulis*
- *Study to identify the origin of the larvae that feed the mussel beds through the development of a model*
- *Mussel cycle*

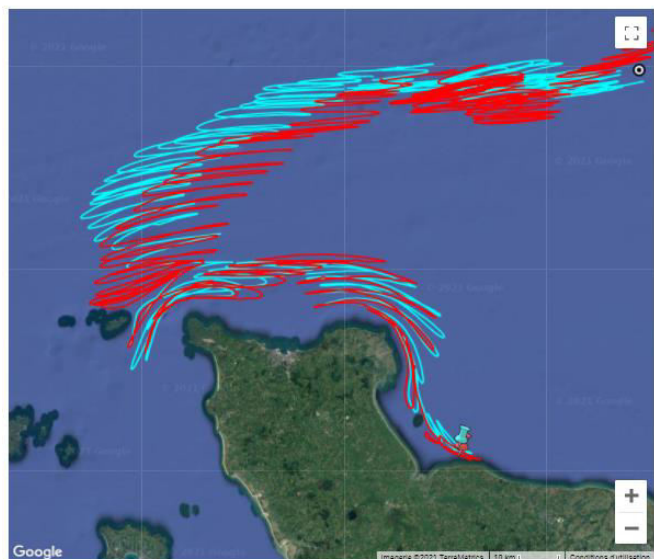


How does the data satellite were used ?

6 drifting buoys with floating anchors were again dropped on 3 sectors of the Calvados coast.

<http://wwz.ifremer.fr/lern/Nos-projets/DILEMES-dispersion-de-la-moule/Lacher-du-28-03-2013>

DILEMES lâcher du 28/03/2013 lern-005 et lern-006

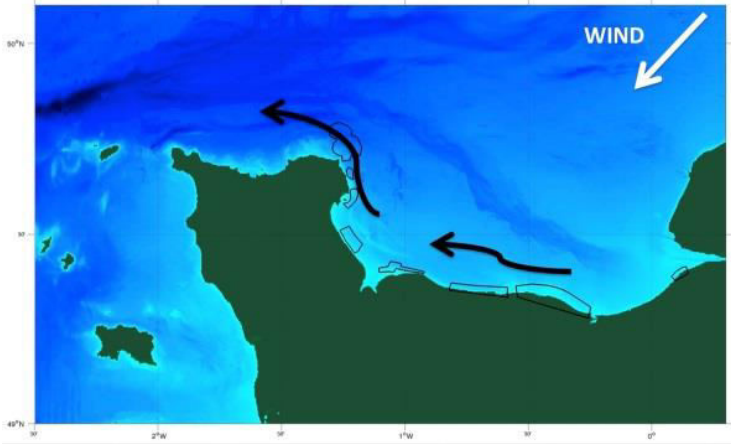


DILEMES lâcher du 28/03/2013 lern-005 et lern-006

DILEMES lâcher du 08/02/2013 LERN-I-0003 et LERN-I-0004



Principles results



Effect of a constant North East wind of 40 days on larval drift: the Calvados mussels banks feed the mussel larvae in Eastern Cotentin



Effect of a constant sud West wind of 40 days on larval drift: the East Cotentin mussels banks feed the mussel larvae in Eastern Cotentin

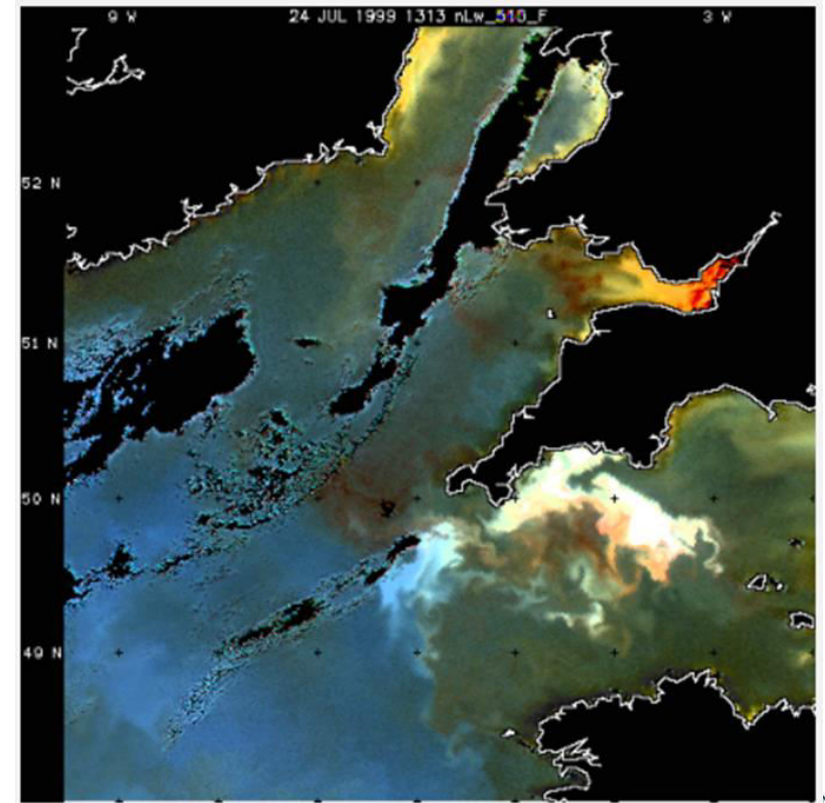
Conclusions

Satellite data permitted to CRPM to collect informations about current with real meteorology

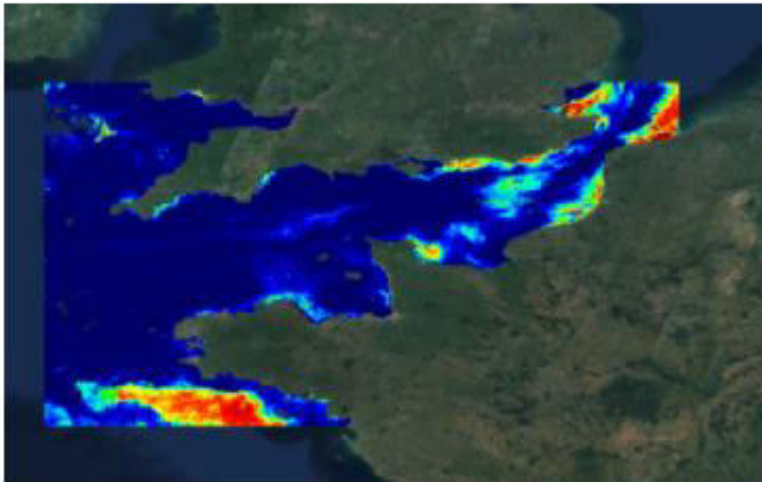
OTHER APPLICATION

- HABS : Harmful Algae Blooms like Amnesic Shellfish Poison or Dinophysis

- The contamination appear with a delay in the shellfishes
- Fishermen must sample and analyse the shellfish in order to allow fishing -> \$\$
- They can't predict the contamination



EUROHABS



INTERREG PROGRAM WITH UK

1. Create a monitoring network and a cross-border data portal to assess the good ecological status of the joint Franco-English waters of the Channel
2. Produce an online alert system to detect water Quality and HABs using data from the European Space Agency and the latest Copernicus satellites
3. Conduct a socio-economic analysis of the impacts caused by HABs in the Channel



Thank you for your attention