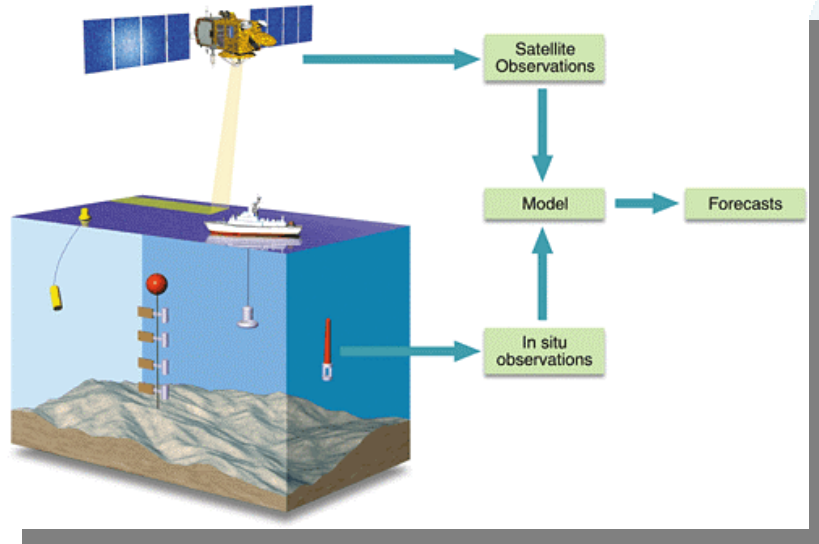


# MERCATOR-Ocean in a few words...



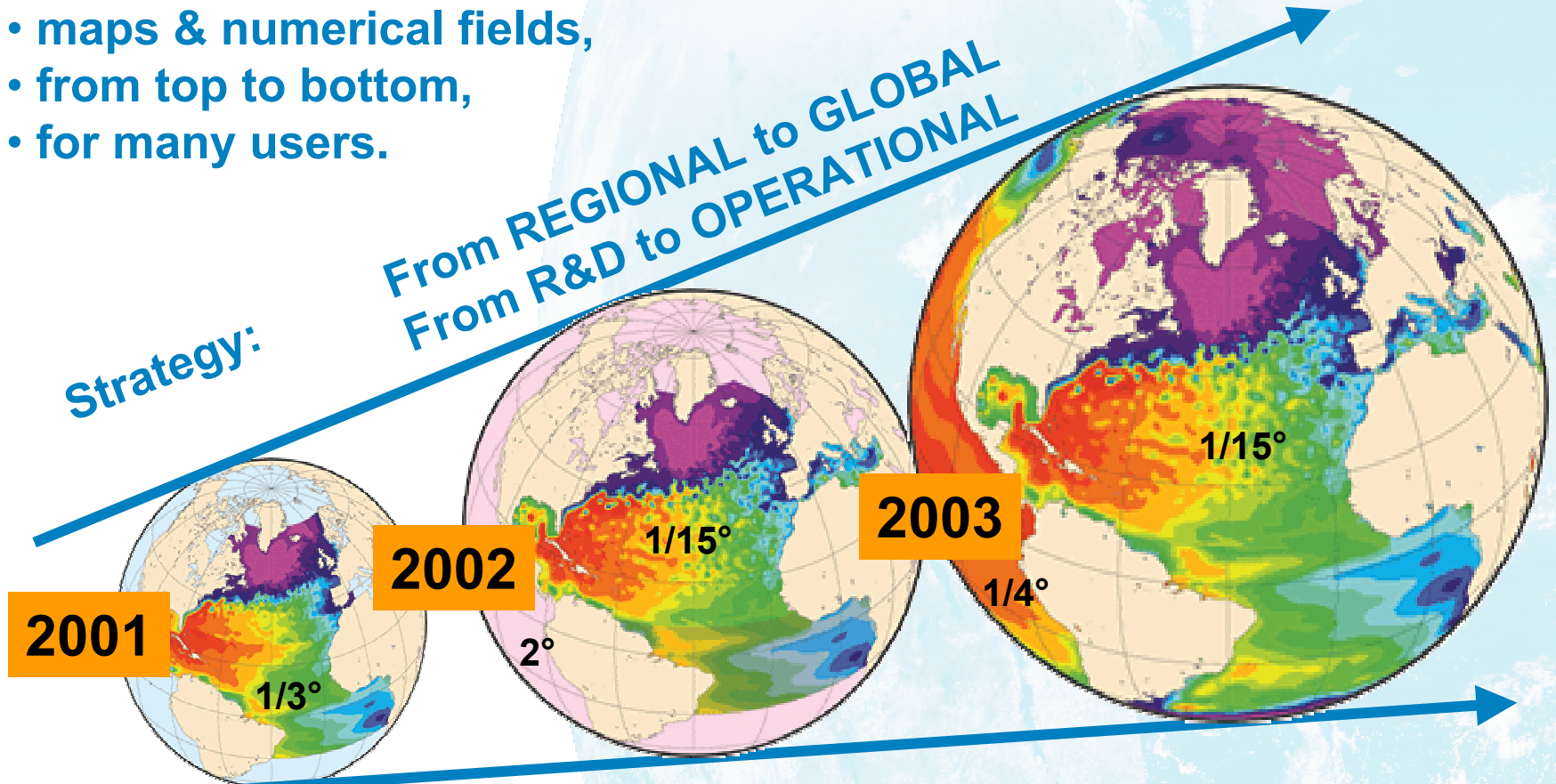
- French Project : 6 major organizations
- Operational Oceanography

- Analyse and predict the global ocean, in real time, from top to bottom
- Based on modelling and data assimilation (both satellite and in situ)



# MERCATOR-Ocean in a few words...

- Every week since January 17, 2001:
  - analysis,
  - 2 weeks of daily forecasts,
  - maps & numerical fields,
  - from top to bottom,
  - for many users.



# MERCATOR-Ocean system

3 components




**SATELLITE observations**



**SSALTO**

**IN SITU observations**

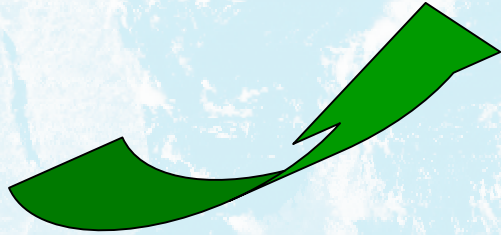
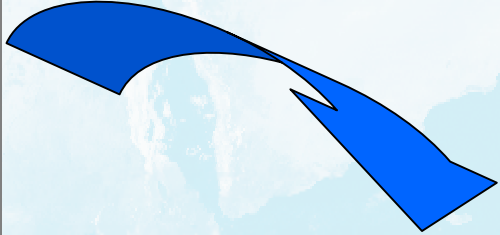


**CORIOLIS**

**MODELISATION ASSIMILATION**

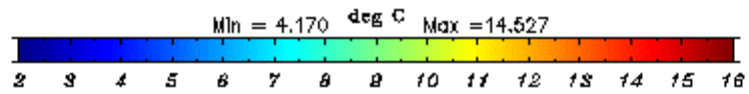
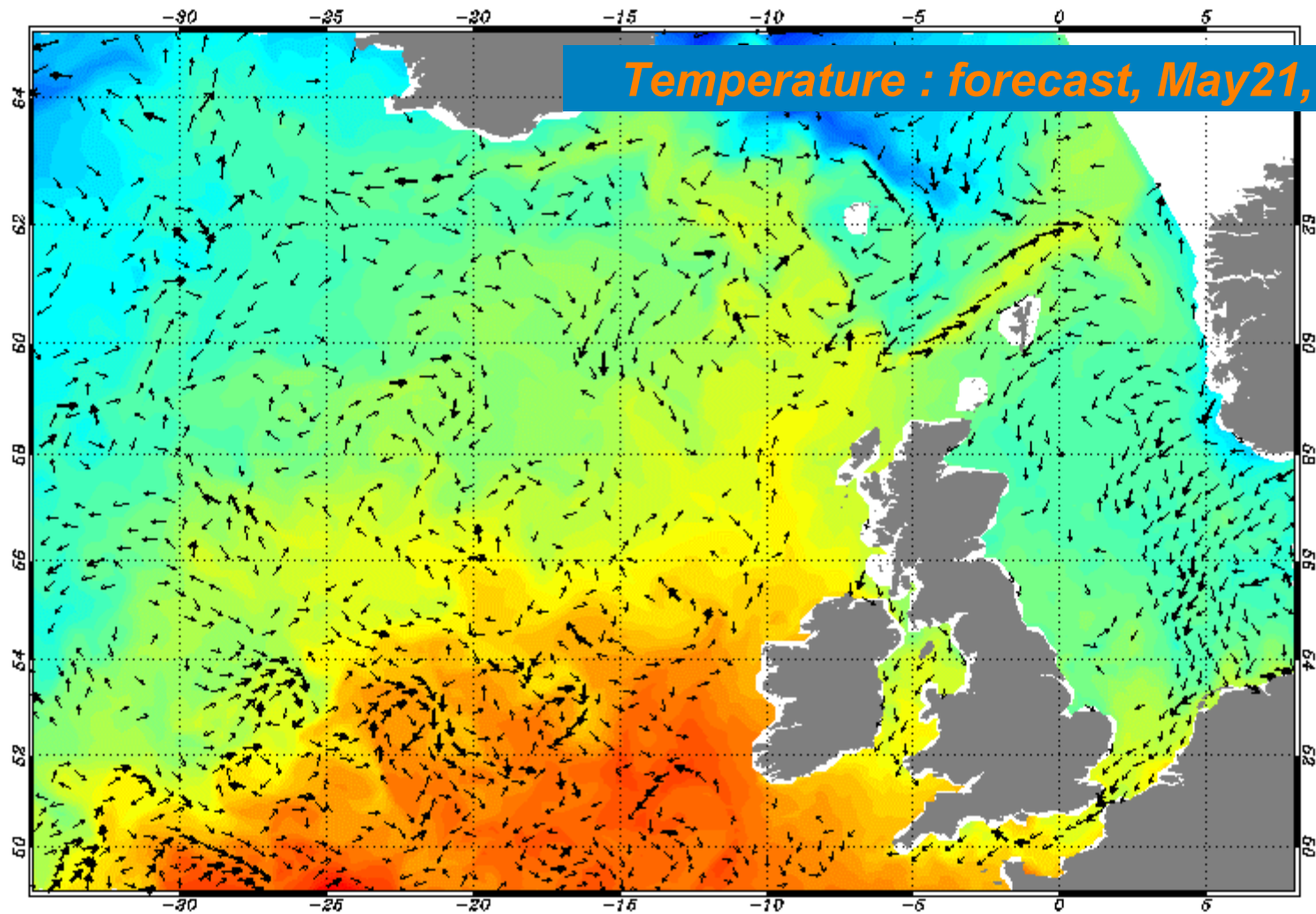


**MERCATOR**



# MERCATOR-Ocean products

2 weeks forecast temperature : T on 28-05-2003 near 3m



jul dec 19605



# MERCATOR-Ocean numerical products

- Numerical outputs available every Thursday
- 3D fields : U, V, T, Z and optionally Kz (to be discussed)
- 2D fields : 19 variables (forcing, ...)
- Mercator projection, netcdf format
- PSY1v2 : 1/3° in one file, Summer 2003
- PSY2 : 1/6° Atlantic, 1/8° Méditerranée, June 2003
- Possible extractions operated by MERCATOR-Ocean people
- Distribution process to be set before end of 2003
- Any question: [Vincent.Toumazou@mercator-ocean.fr](mailto:Vincent.Toumazou@mercator-ocean.fr)  
[products@mercator-ocean.fr](mailto:products@mercator-ocean.fr)
- Website: <http://www.mercator-ocean.fr>

# Modeling Coastal Upwellings

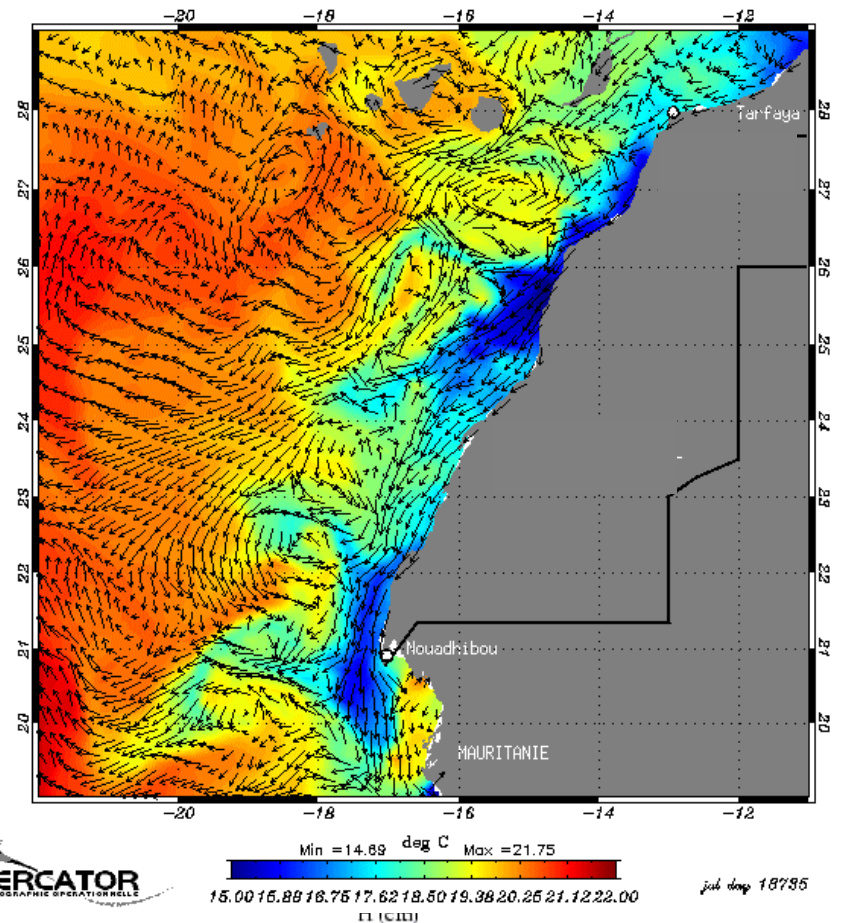
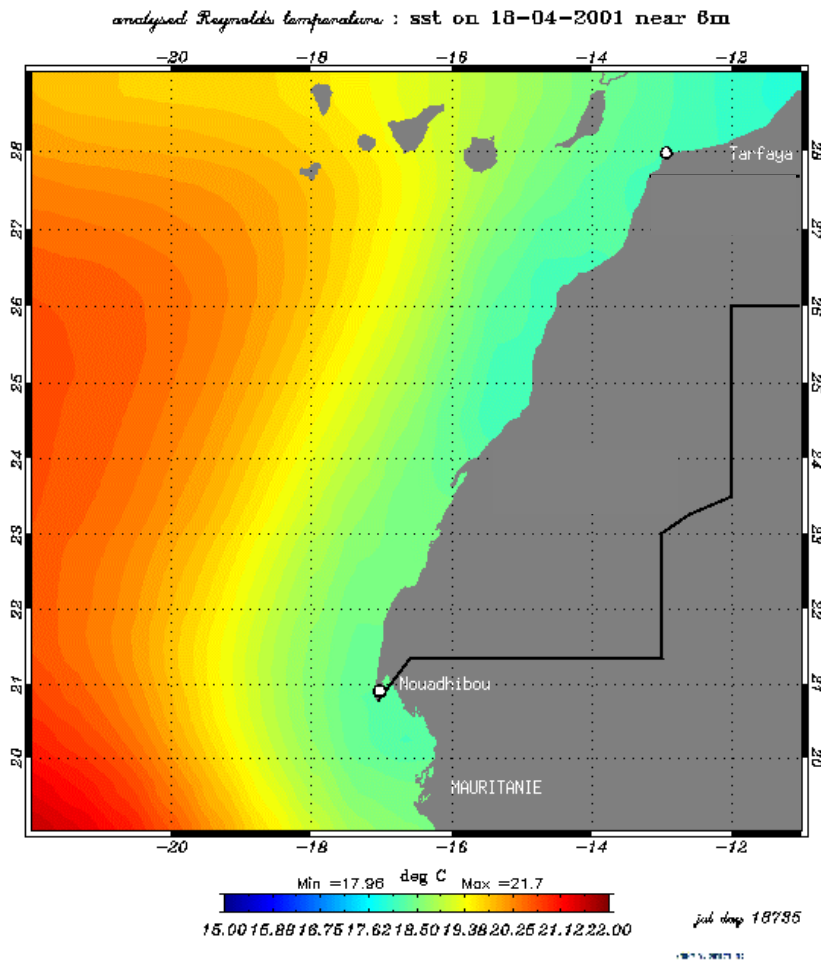
## Western African Coast - 18 April 2001

### MERCATOR Models Sea Surface Temperature and Currents

Assimilation of Topex/Poseidon and ERS-2 Altimeter Data into

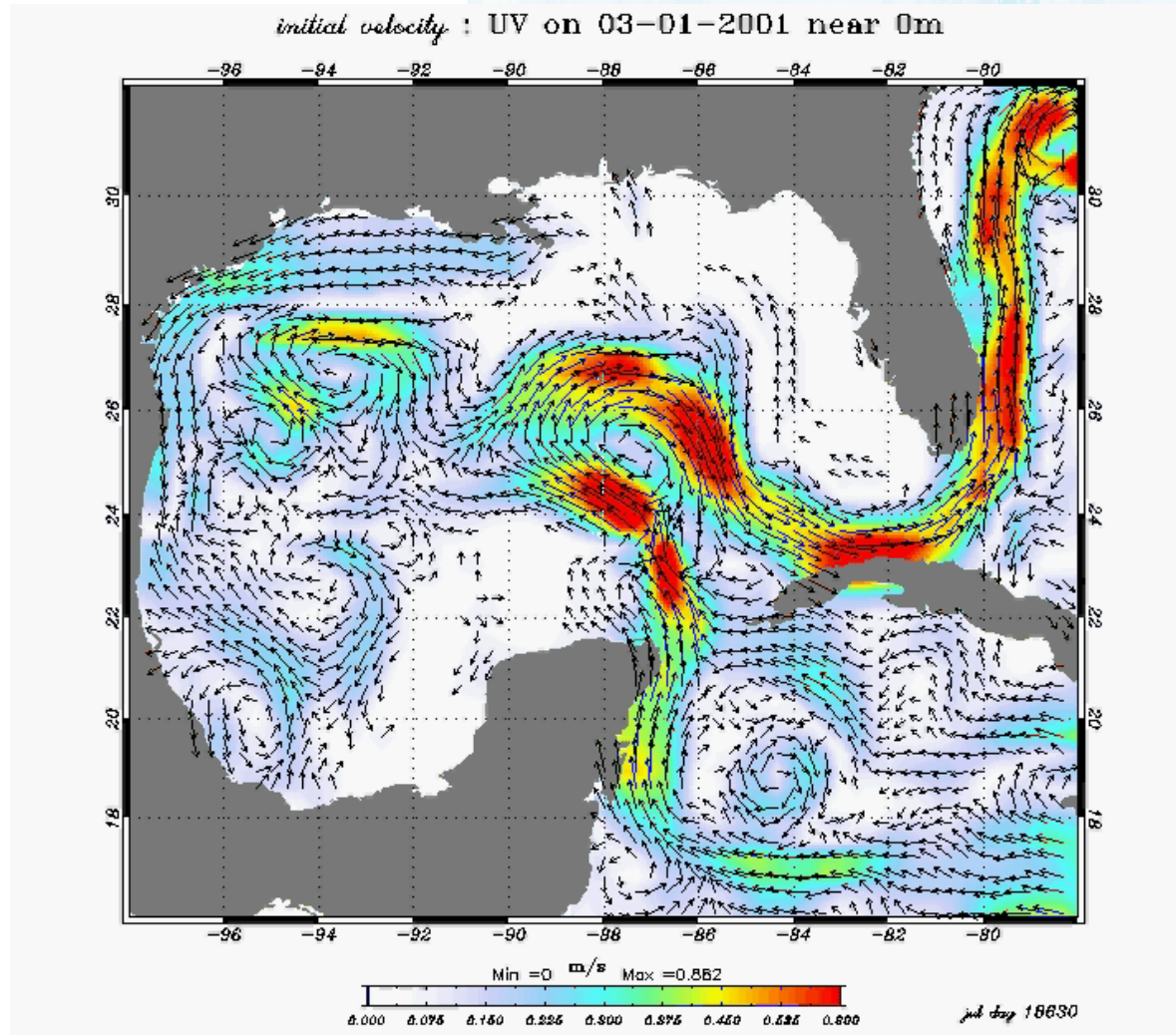
*The BOUDES Mercator Model*

analysed temperature : T on 18-04-2001 near 3m



# Eddies in the Gulf of Mexico

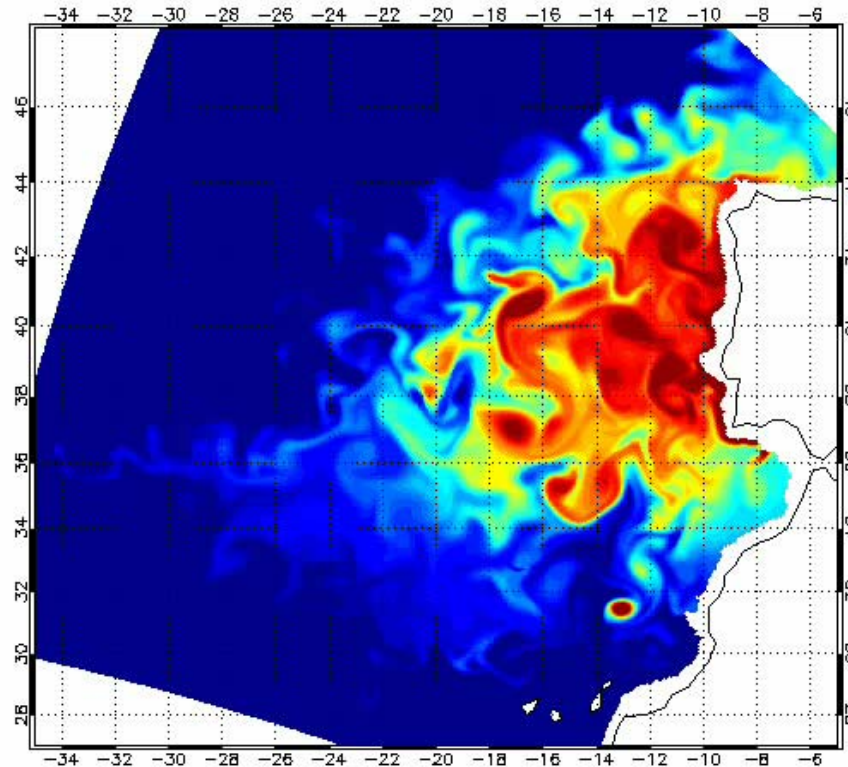
## Surface currents data



# Meddies in Eastern Atlantic

## Salinity data at 900 m

Exp: PAM-20, Date: y1998m01d14, Field: Salinity, Depth: 868 m



Color field: Min= 34.93 PSU , Max= 38.43 PSU , Int= 0.02

