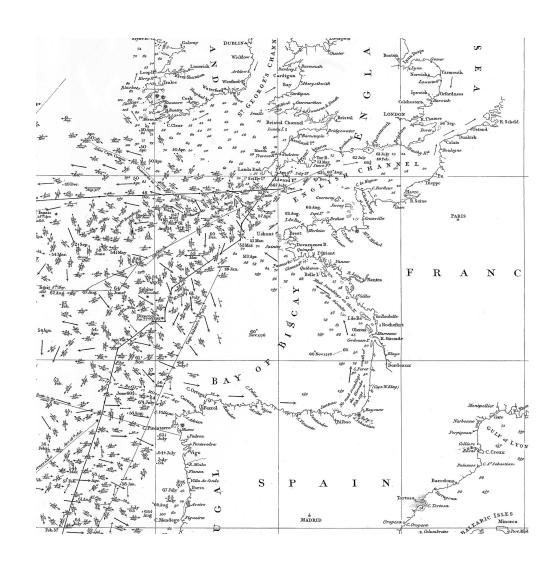
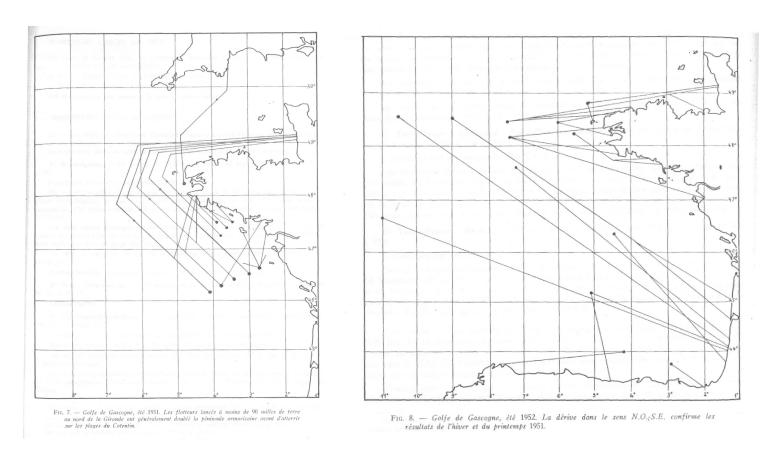
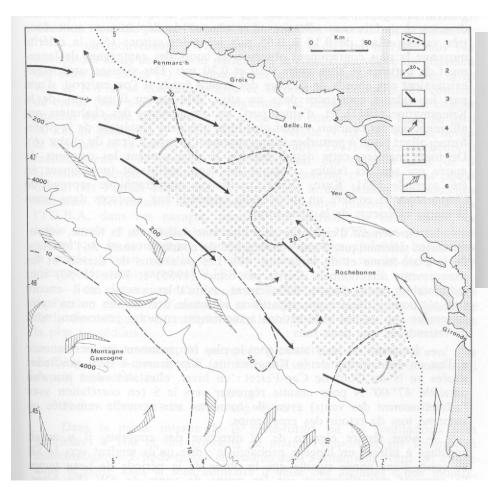
- Evolutions des synthèses de la circulation
- Circulation en automne
- Les besoins





Kurc G., 1956. Observations sur la dérive des flotteurs lancés par le « Président-Théodore-Tissier » pendant les campagnes de 1951 à 1954 ». Rev. Trav. Peches Marit., 20, 225-261.



Vanney, JR.1977. Géomorphologie de la marge continentale sud-armoricaine. Sedes Ed. 473p

### Fig. 89. — Les courants du large.

1. Limite des eaux côtières où prédominent les courants de marée (les flèches indiquent le mouvement le plus fréquent de l'eau diluée); 2. Isocinètes (cm/s) des courants superficiels; 3. Courants superficiels de la plate-forme dominant en saison froide (arrivée d'eau du large); 4. Courants superficiels de la plate-forme en saison chauce (mouvement anticyclonique au N; cyclonique au S); 5. Eau de fond quasi stagnante sur la plate-forme (v < 4 cm/s); 6. Tourbillons de l'eau de la pente et du glacis.

#### Fig. 89. — The offshore currents.

I. Coastal waters lim't with prevailing tide currents (the arrows denote the more frequent drift of the diluted waters); 2. Isocinetes (cm/s) of surficial currents); 3. Superficial shelf currents prevailing in winter season (advection off offshore water); 4. Surficial shelf currents in summer season (clockwise movement in the N; counterclockwise in the S); 5. Almost stagnant bottom water on the shelf (v < 4 cm/s); 6. Eddies of the slope and rise water.

D'après / after: LE FLOCH (1968, 1969, 1970), VINCENT et KURC (1969), CAMUS (1971), HENAFF (1973), VINCENT (1973).

- -Courants côtiers de densité
- -Bourrelet froid= zone de courants faibles
- -Saisonnalité des courants de surface
- -Structures meso échelle proches du talus

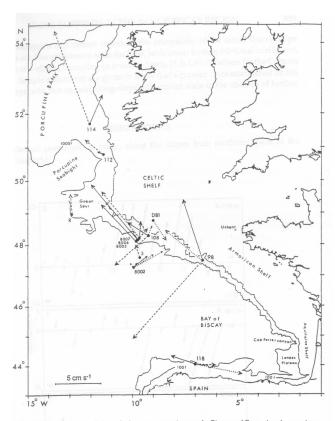
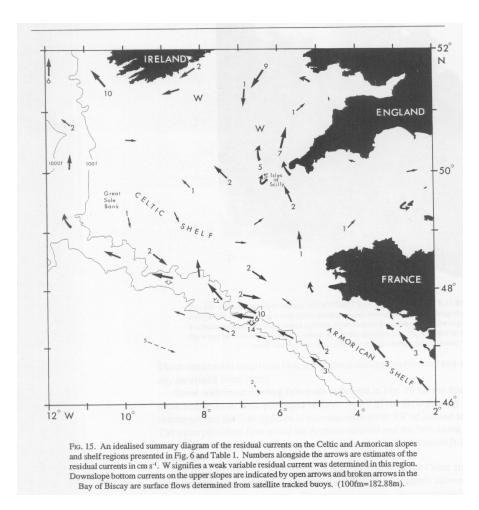


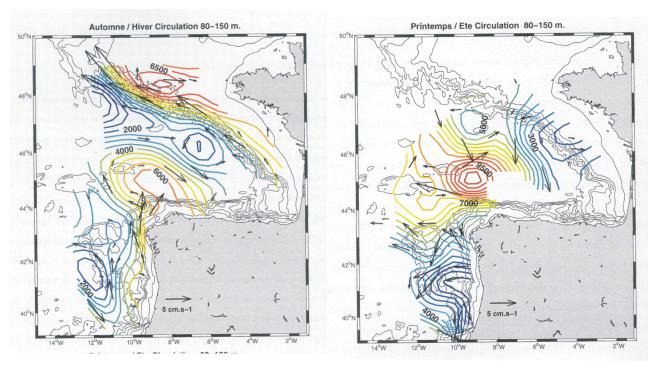
Figure 1. Residual currents from the long term moorings on the Biscay and Porcupine slope regions. Upper, mid-water column and bottom current residuals are depicted by dotted, continuous and dashed lines respectively. More details of position and water depth are given in Table 1. Diagram also gives place names used in the text; 100 fm and 1000 fm water depth contours are indicated.

Pingree RD, Le Cann B., 1990. Structure strength of the slope currents in the Bay of Biscay region. JMBA, 70, 857-885.

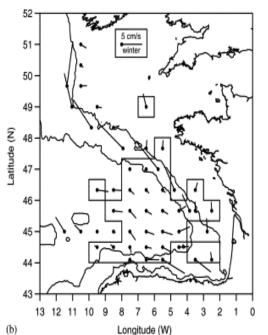


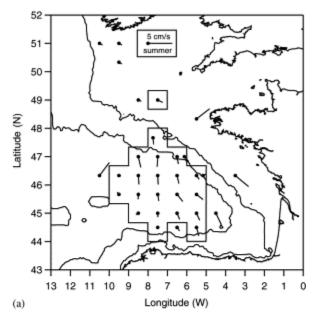
Pingree RD, Le Cann B., 1989. Celtic and Armorican slope and shelf residual currents. Prog.Ocean. 23, pp 303-338

- -Poleward current sur la pente. Variabilité saisonnière
- -Résiduelles vers le NW sur le plateau



Colas F. 2003. Circulation et dispersion lagrangiennes en atlantique Nord-Est. Thèse LPO.253p





Van Aken H., 2002. Surface currents in the Bay of Biscay as observed with drifters between 1995 and 1999. Deep Sea Res., 49, pp1071-1086

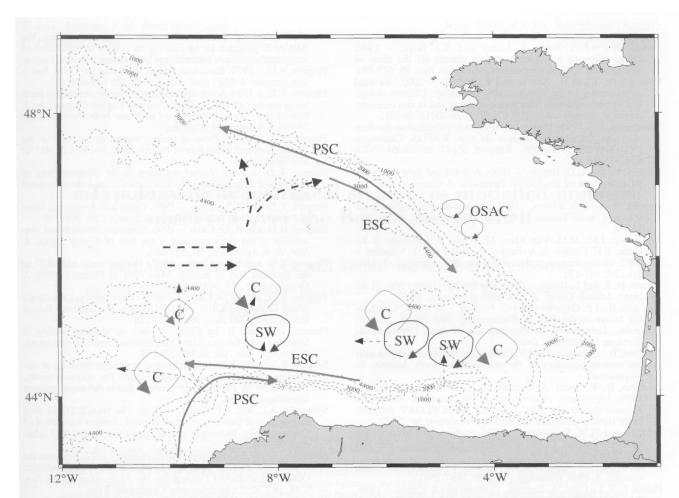
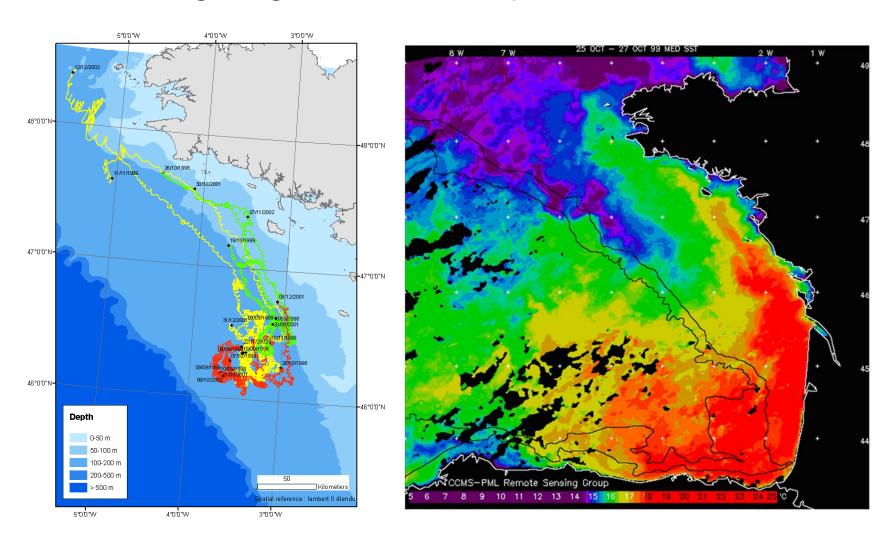


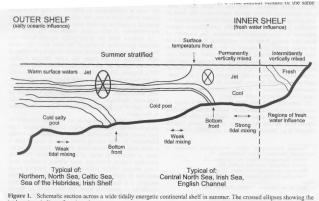
Fig. 10. – Summary sketch of the observed mesoscale features. Abbreviations are: PSC (Poleward Slope Current), ESC (Equatorward Slope Current), C (Cyclone), SW (Slope Water anticyclonic eddy) and OSAC (Outer Shelf AntiCyclone). Thin dashed arrows indicate the mean drift of the eddies (if observed). Thick dashed arrows indicate some observed NACW pathways.

Serpette A, Colas F, Le Cann B., 2006, Sci Mar. 70, 27-42

## Dérives lagrangiennes sur le plateau en automne



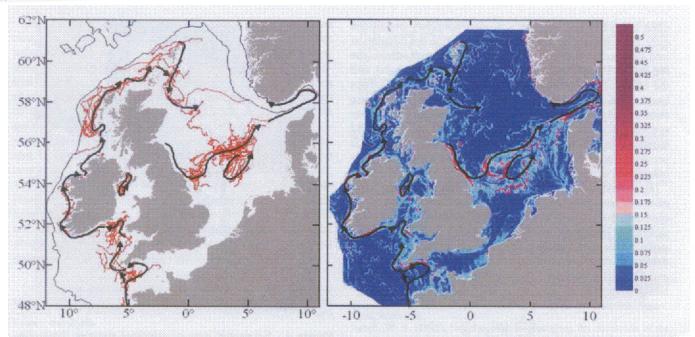
Lazure et al, 2008, J. Mar. Sys. 72, 218-237.



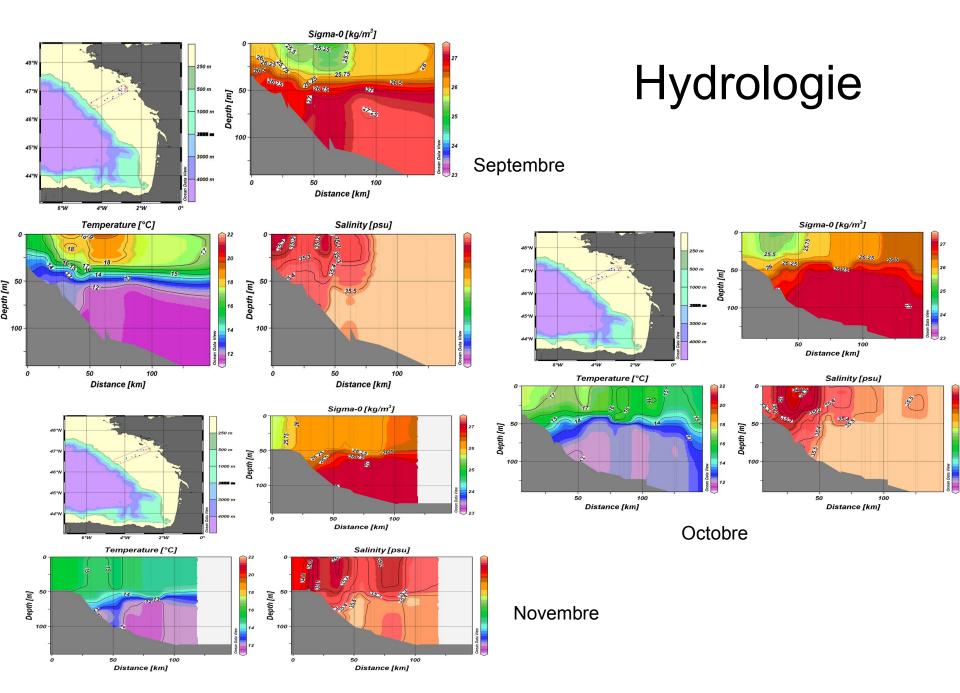
# Rôle des fronts de fond

Figure 1. Schematic section across a wide tidally energetic continental shelf in summer. The crossed ellipses showing jet locations indicate flow into the page.

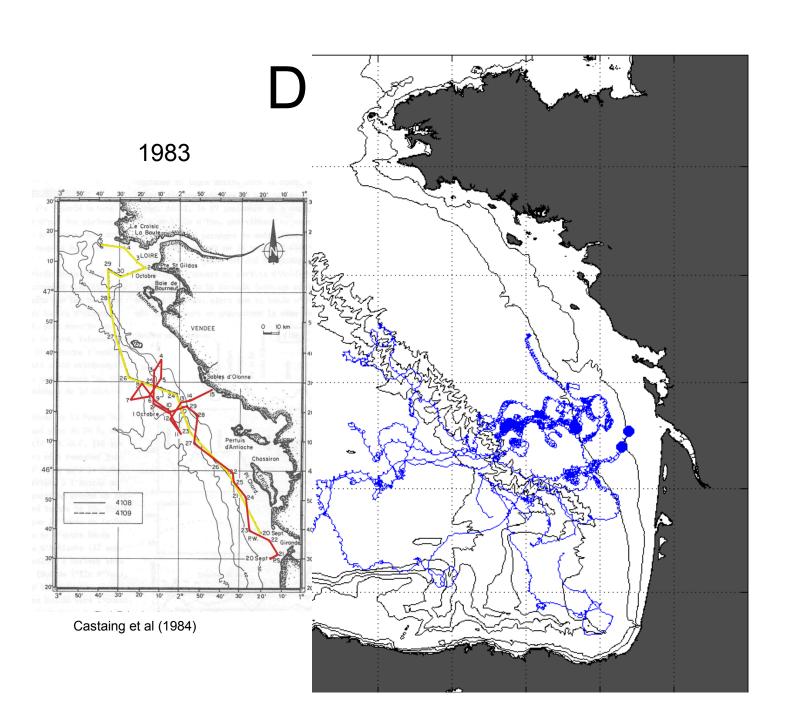
2 of 5



**Figure 2.** Overview of the shallow thermohaline circulation on the northwest European continental shelf. (left) Trajectories (red) of 154 satellite tracked drifters (see Table 1 for details). Frontal jets are indicated by black arrows. (right) Frontal jets superimposed on contours of the gradient of bottom horizontal temperature (15 August 2001) derived from a three-dimensional hydrodynamic model (Units - °C km<sup>-1</sup>).



Lazure et al, 2008, J. Mar. Sys. 72, 218-237.



## Perspectives

### Courant automnal :

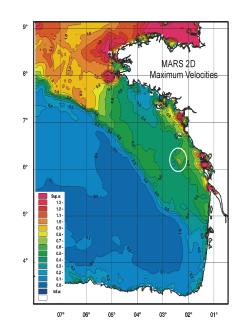
- Courant de plateau limité au nord de 46°N ?
- Mécanisme de génération des fronts profonds

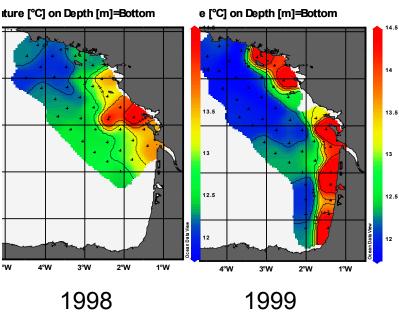
(flux OA+turbulence+rôle de la salinité)

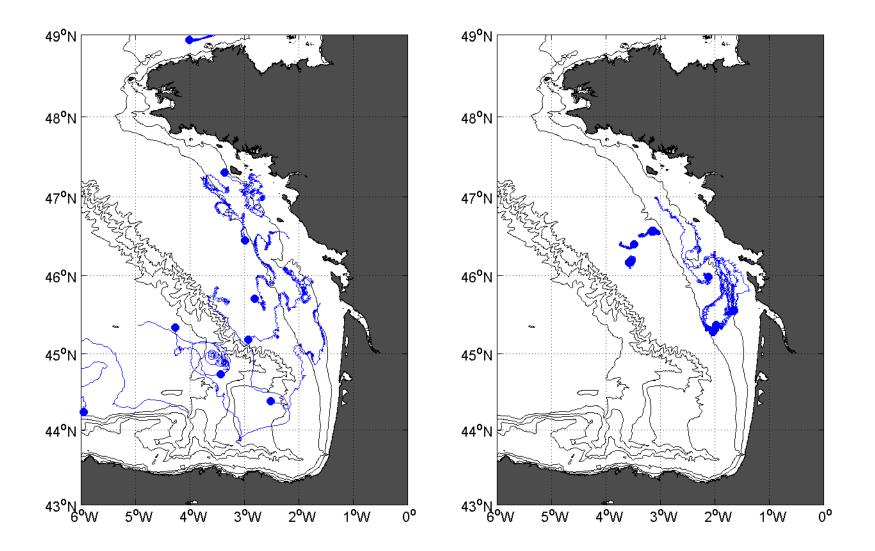
 Influence de la circulation à l'échelle du Golfe.

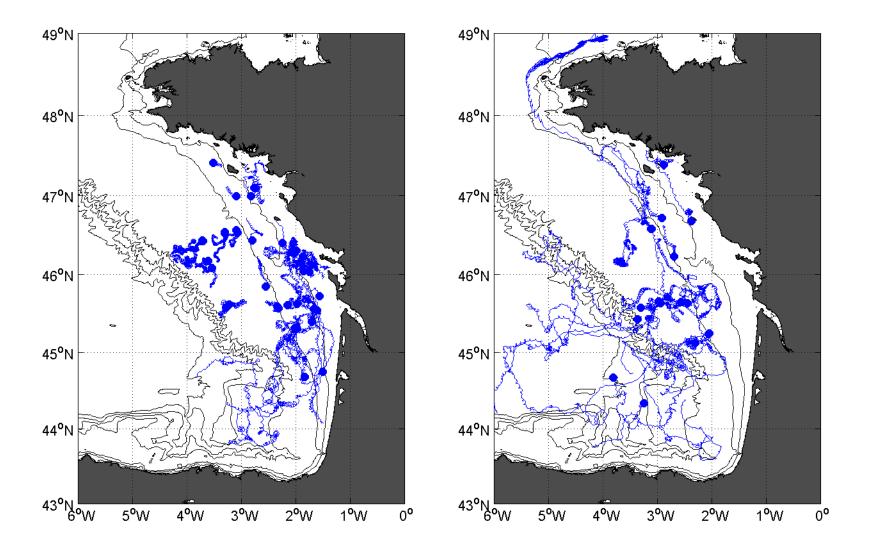
## Circulation générale :

- Mesures de longue durée sur les plateaux armoricains et aquitain et la pente (continuité, variabilité et interactions avec le plateau)
- Cerner le bourrelet froid (côte et talut)

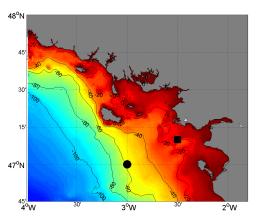




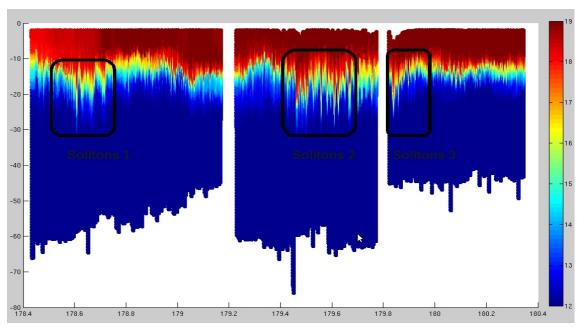


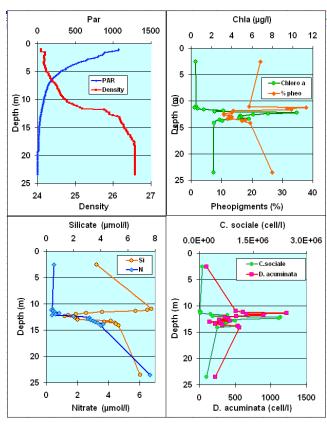


Ete Automne



## Campagnes PER2TONG





Variations des températures du 22 /06/07

Observations en juin 2003

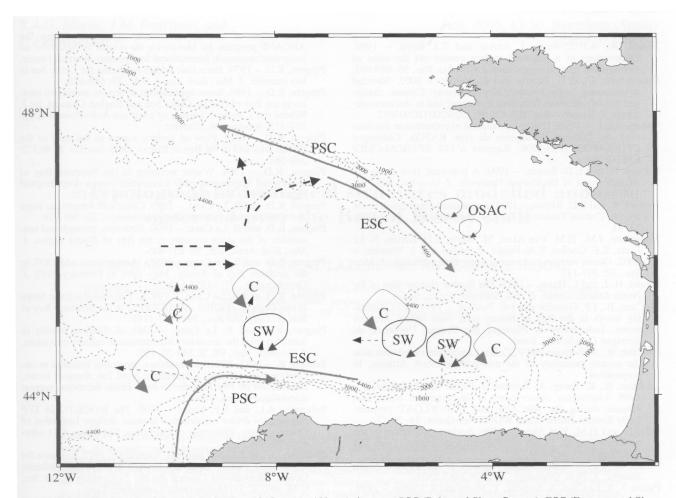


Fig. 10. – Summary sketch of the observed mesoscale features. Abbreviations are: PSC (Poleward Slope Current), ESC (Equatorward Slope Current), C (Cyclone), SW (Slope Water anticyclonic eddy) and OSAC (Outer Shelf AntiCyclone). Thin dashed arrows indicate the mean drift of the eddies (if observed). Thick dashed arrows indicate some observed NACW pathways.

### Serpette A,