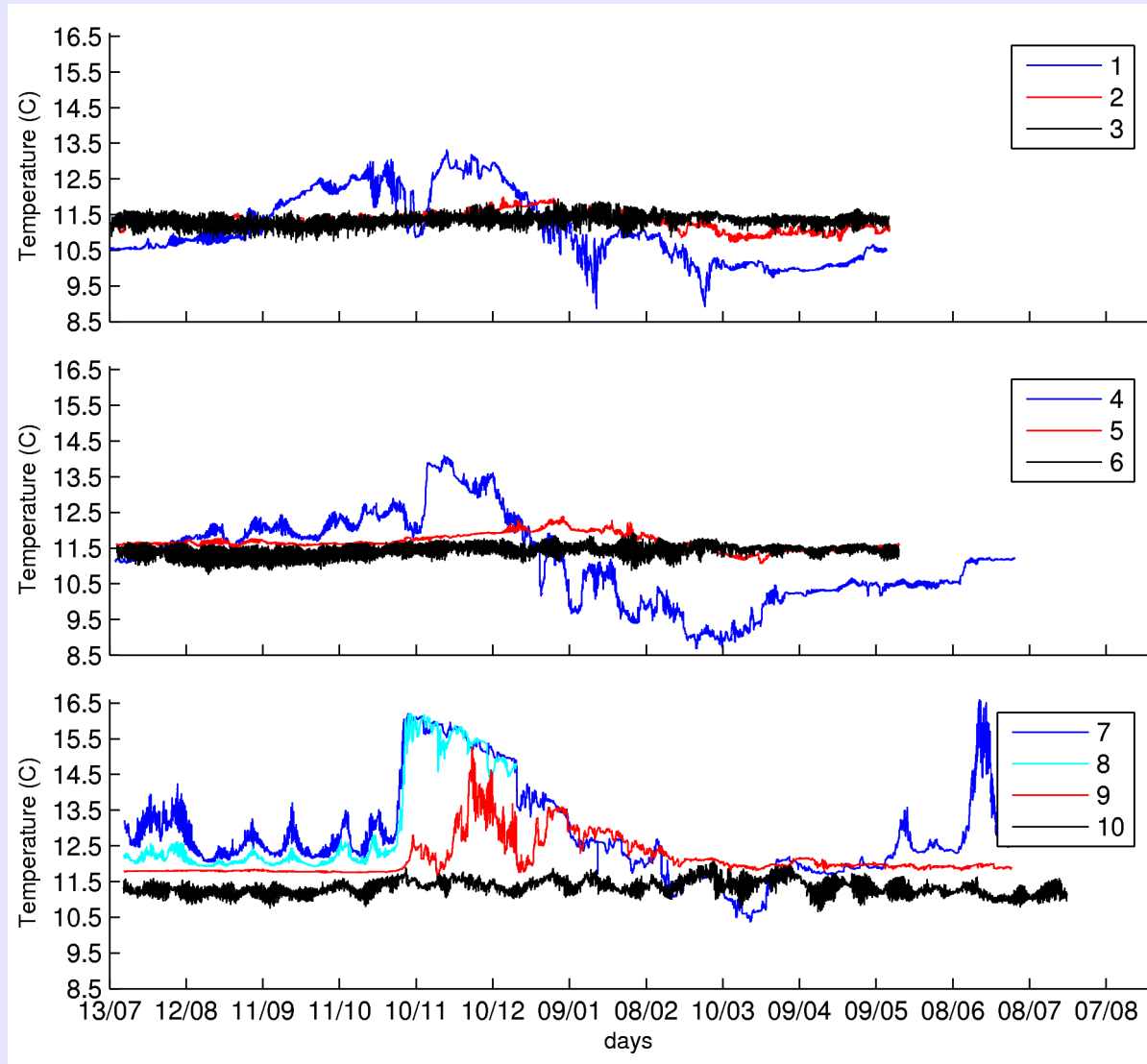
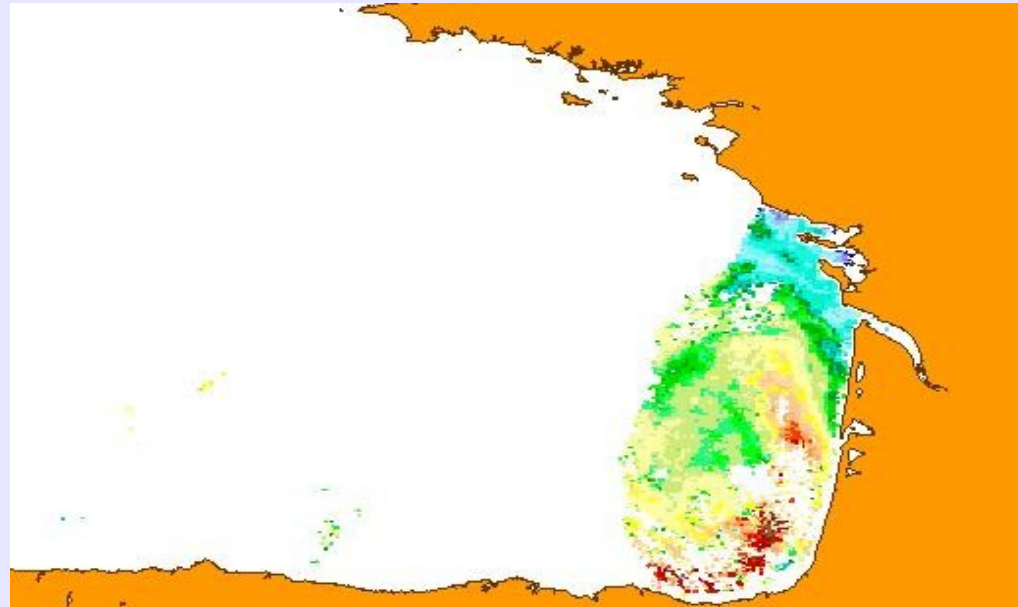


Temperature event along the 60 m depth isobath in November 2009

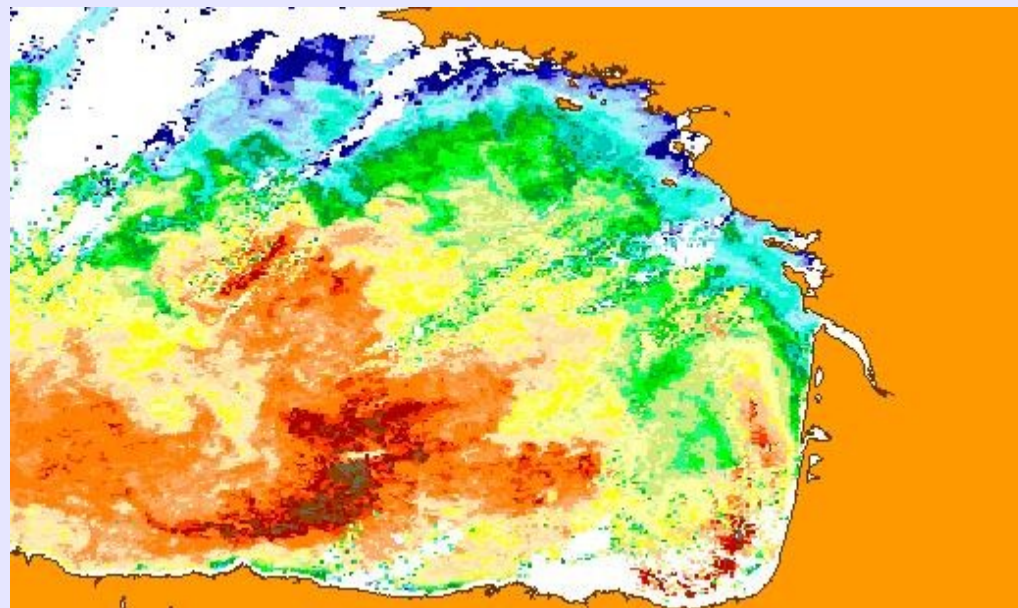


NOAA
9th November 2009
20h



Color range 13°C – 16,5°C

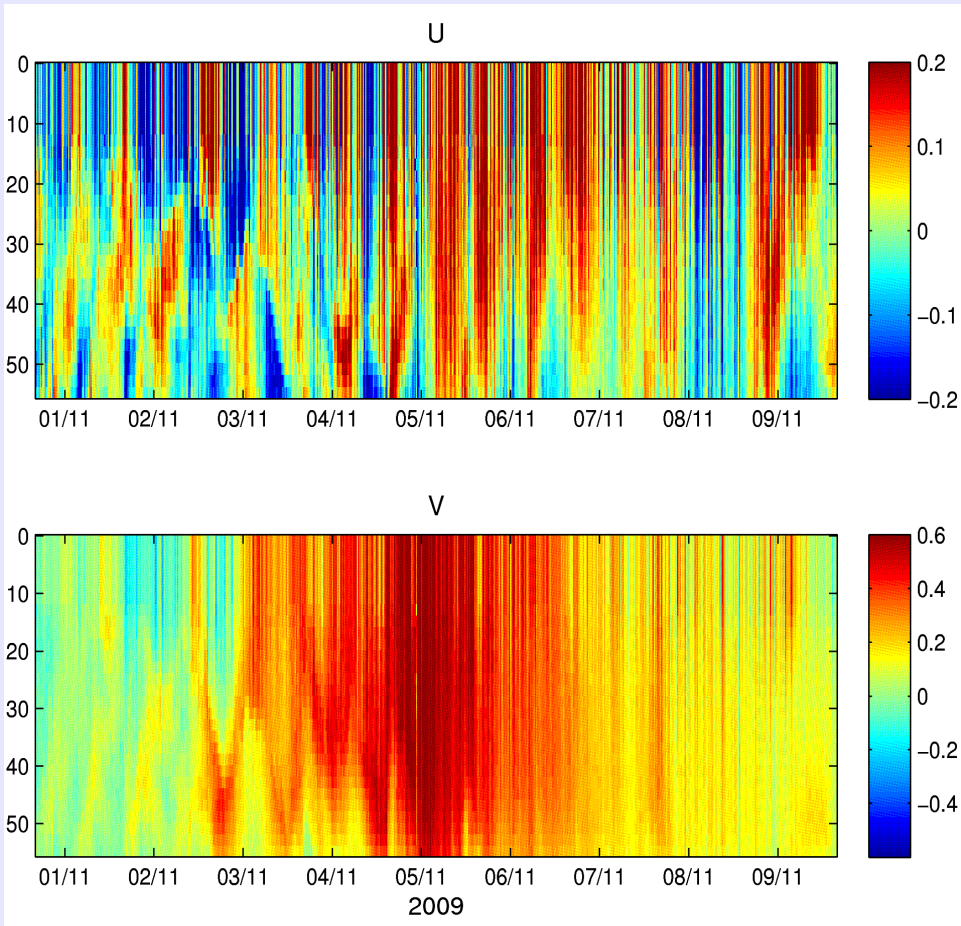
NOAA
18th November 2009
20h



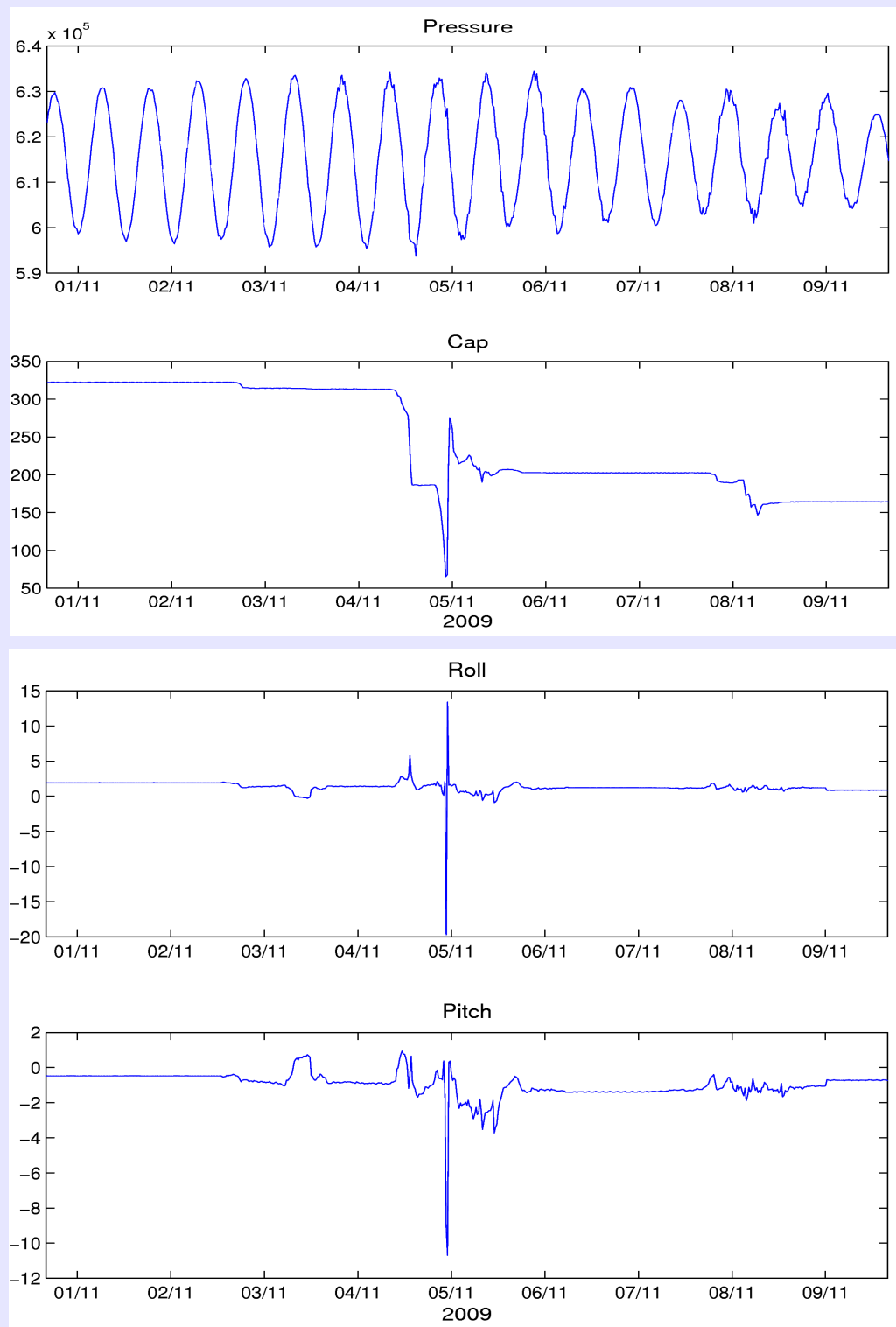
Outlines

- I. Uncertainties ...
- II. Impact on the internal tide
- III. Genese : Wind forcing ?
- IV. Warm water Advection ?
- V. Conclusion / Prospects

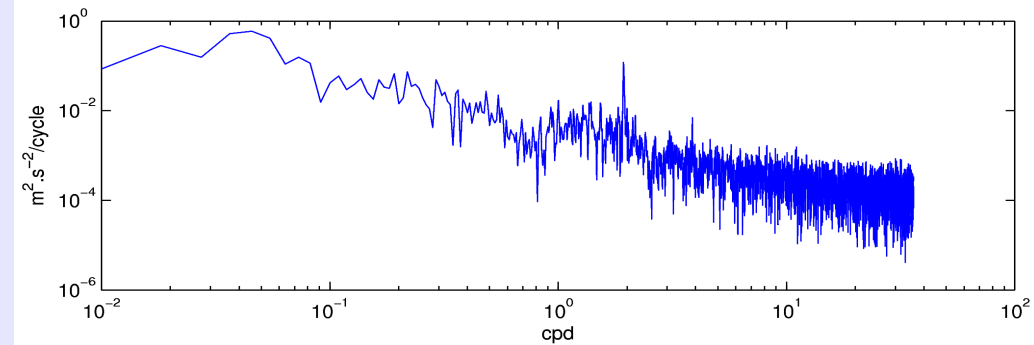
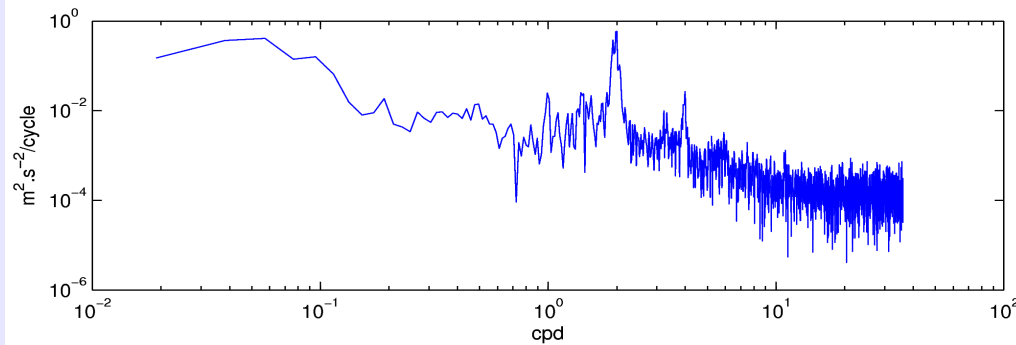
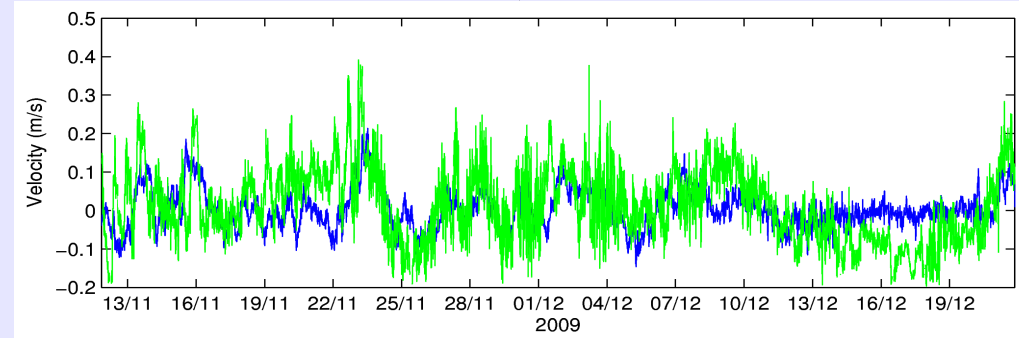
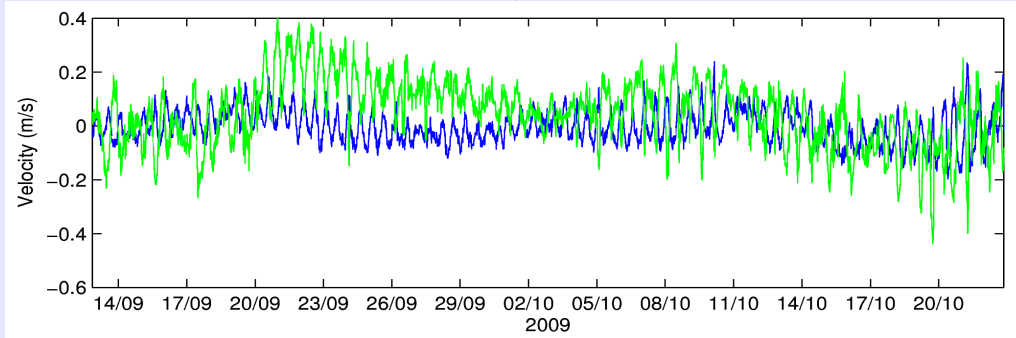
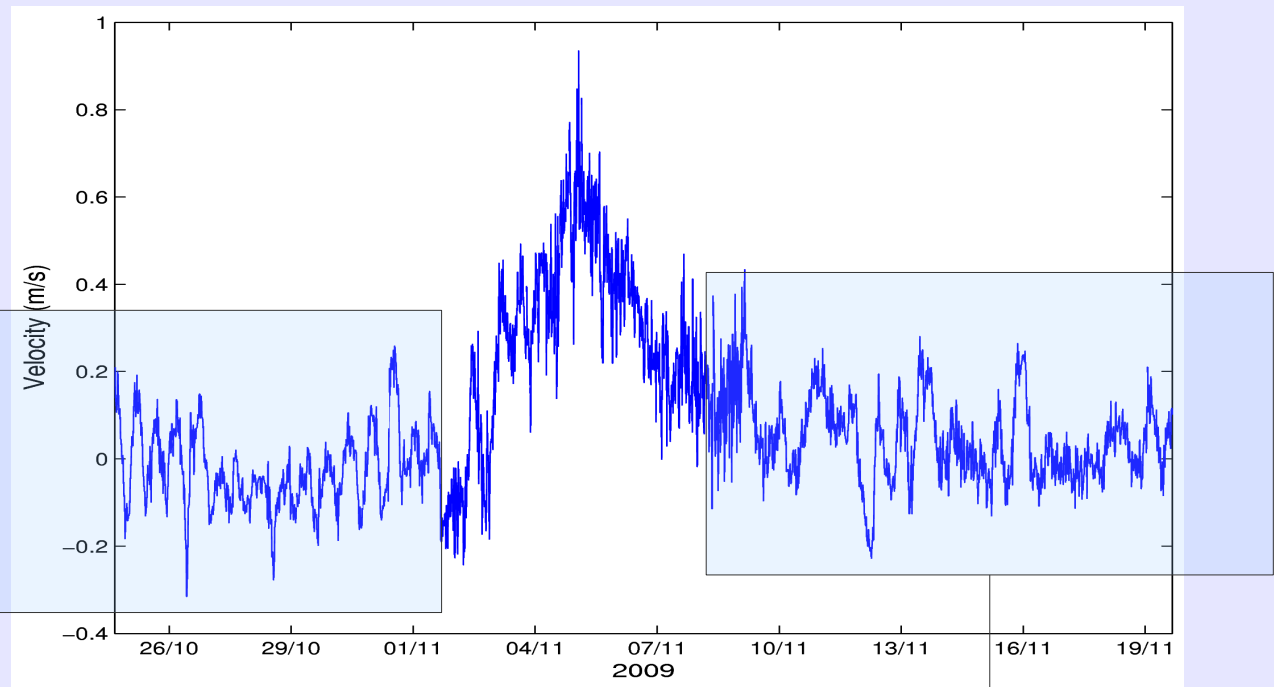
Uncertainties



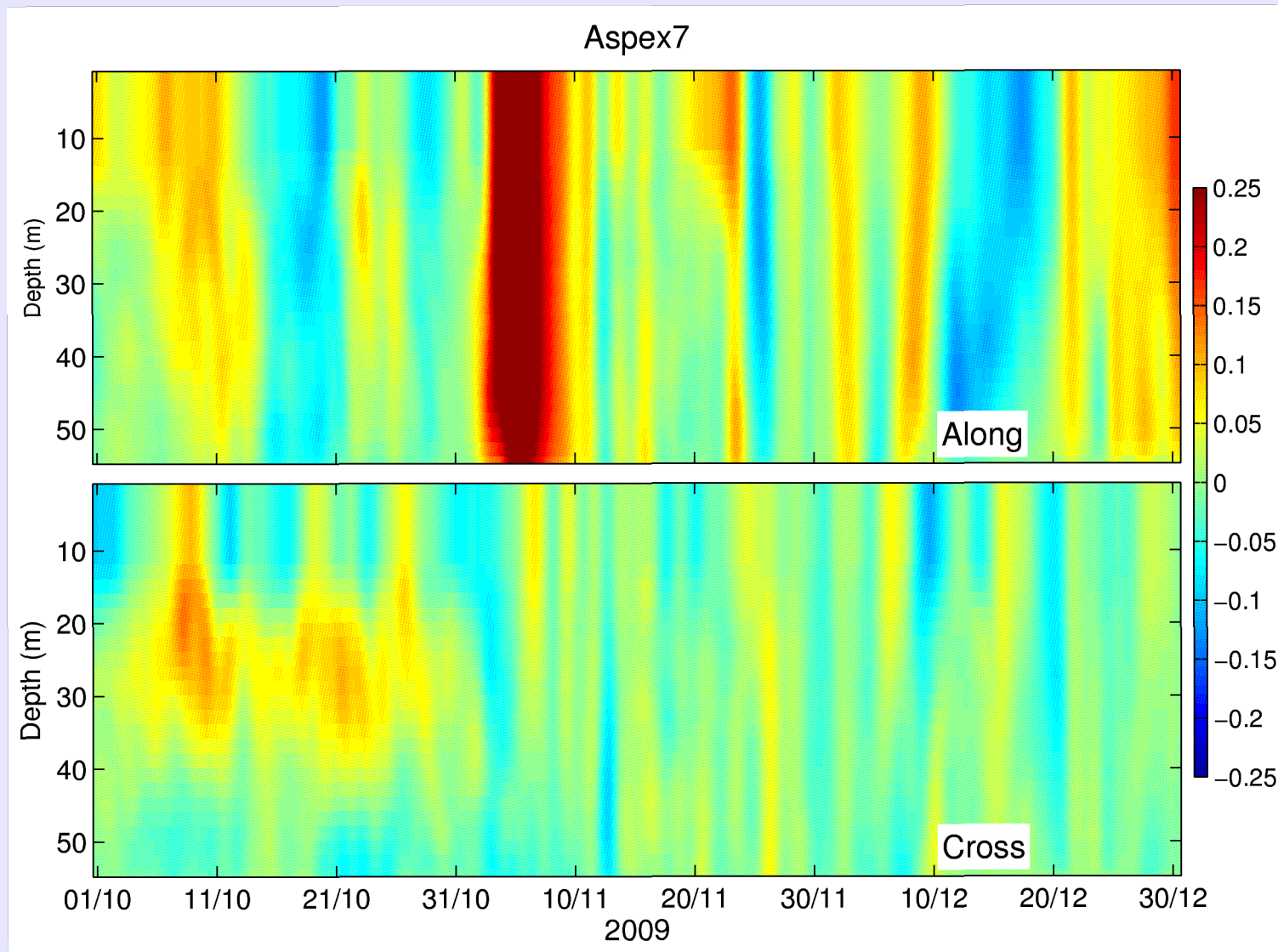
V error ~ 1cm/s



Event Impact on the tide

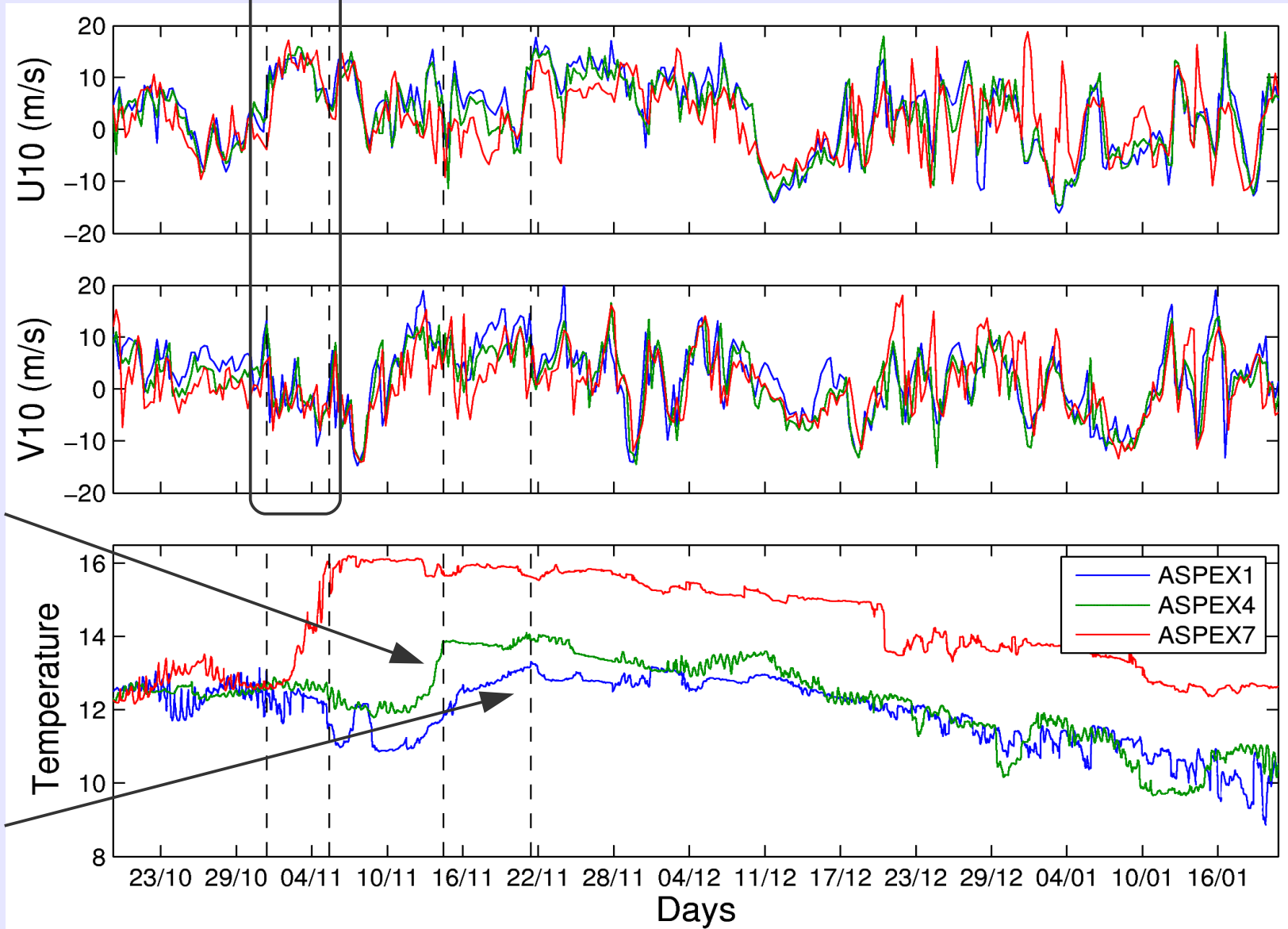


Description



Genese : Wind Forcing ?

Strong Westerlies
From 1st to 6th November 2009



ASPEX 4 :
Temperature increase
15th november 2009

ASPEX 1 :
Temperature increase
22th november 2009

Warm water advection ?

Vertically averaged velocities

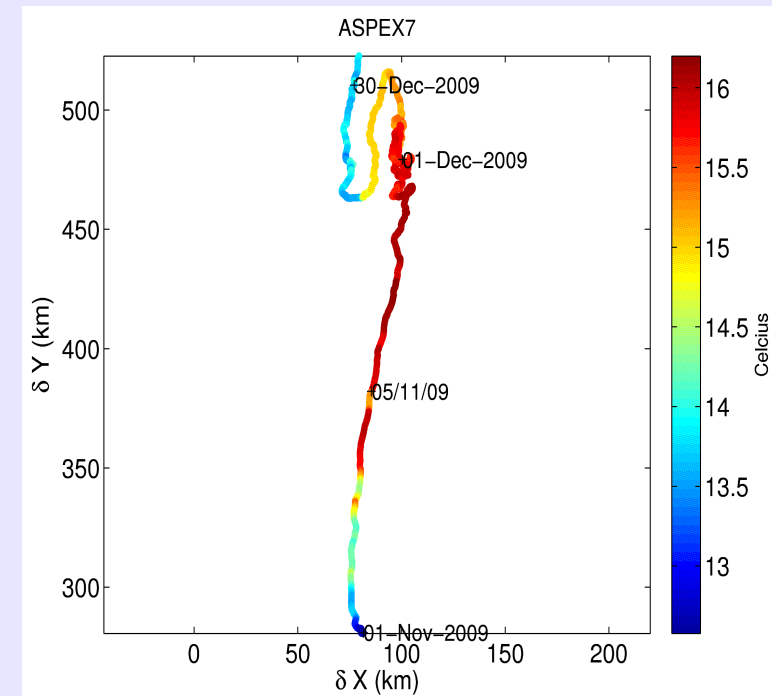
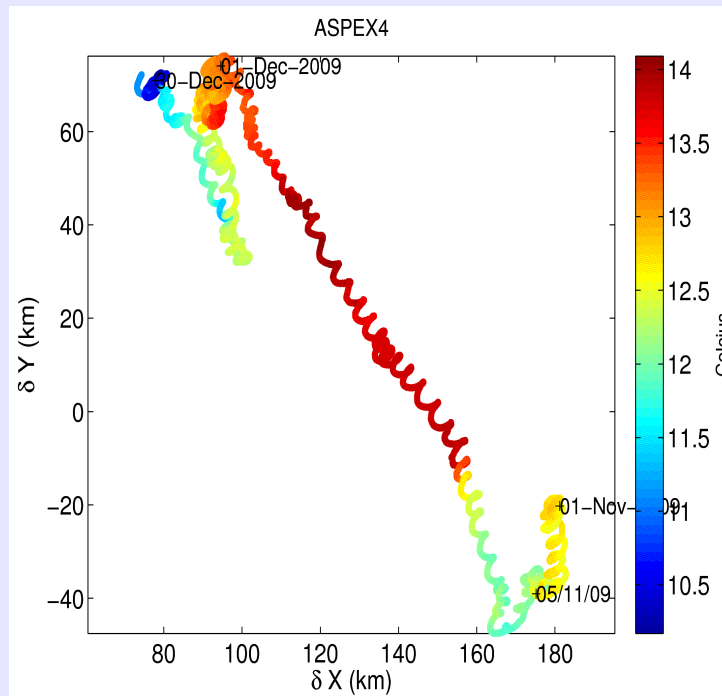
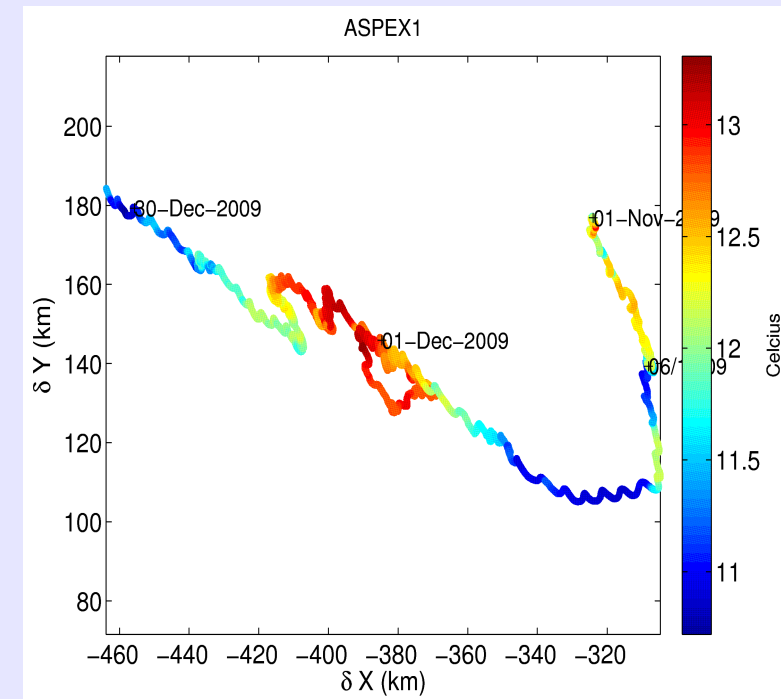
1 november 2009 to 1 december 2009 :

ASPEX 1 : 200km

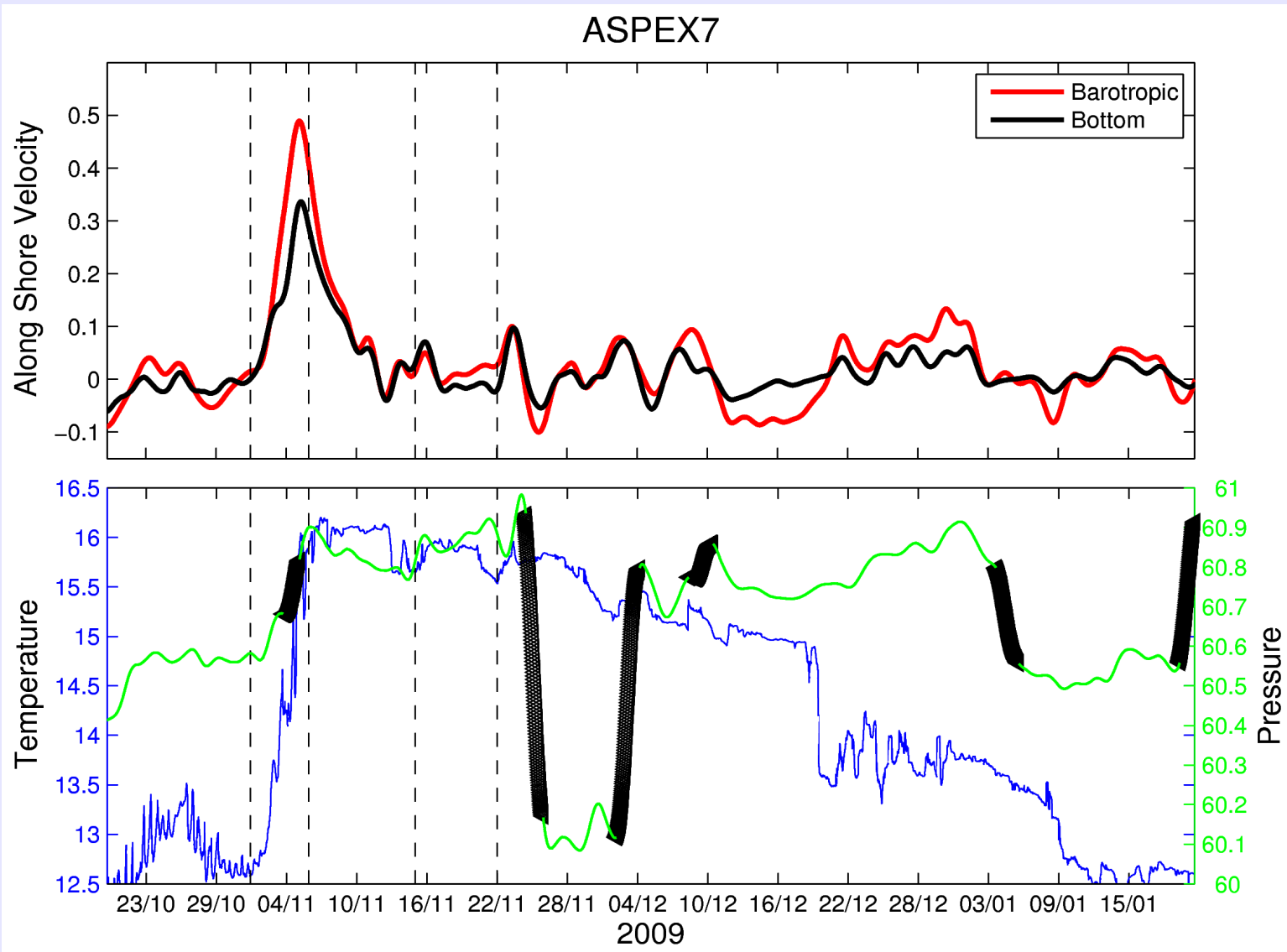
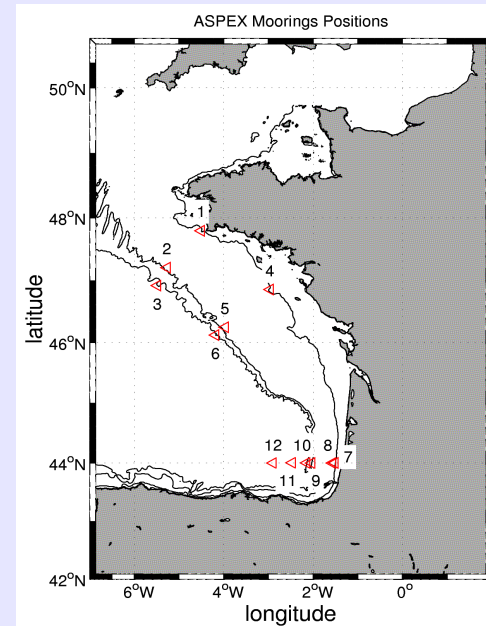
ASPEX 4 : 160km

ASPEX 7 : 180km

Advection ?



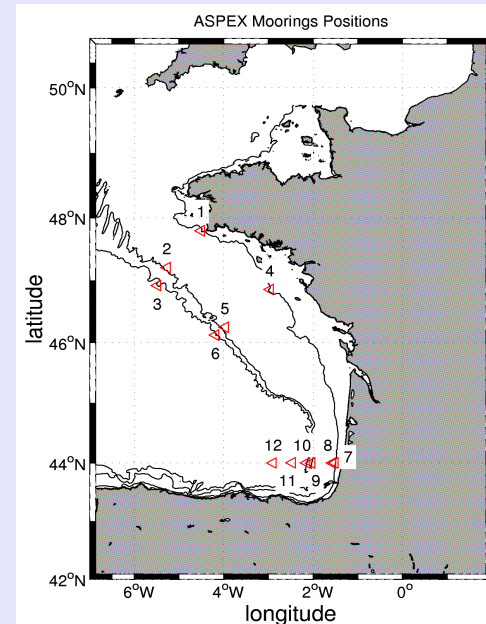
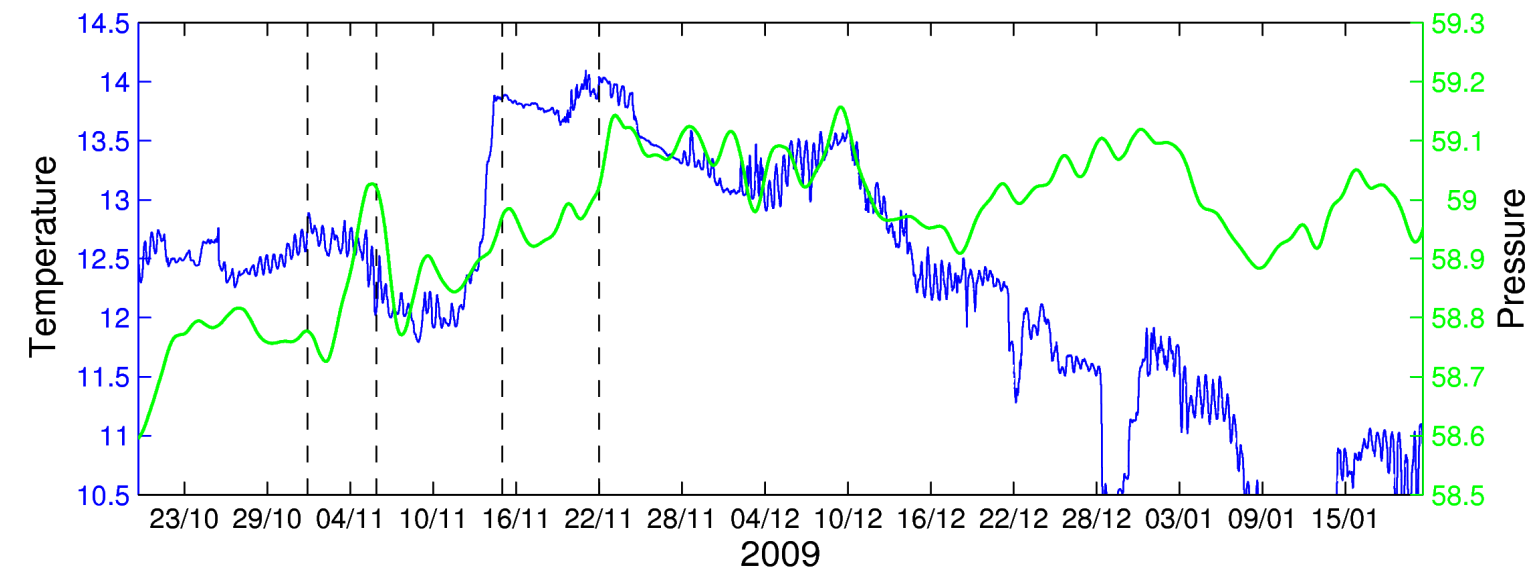
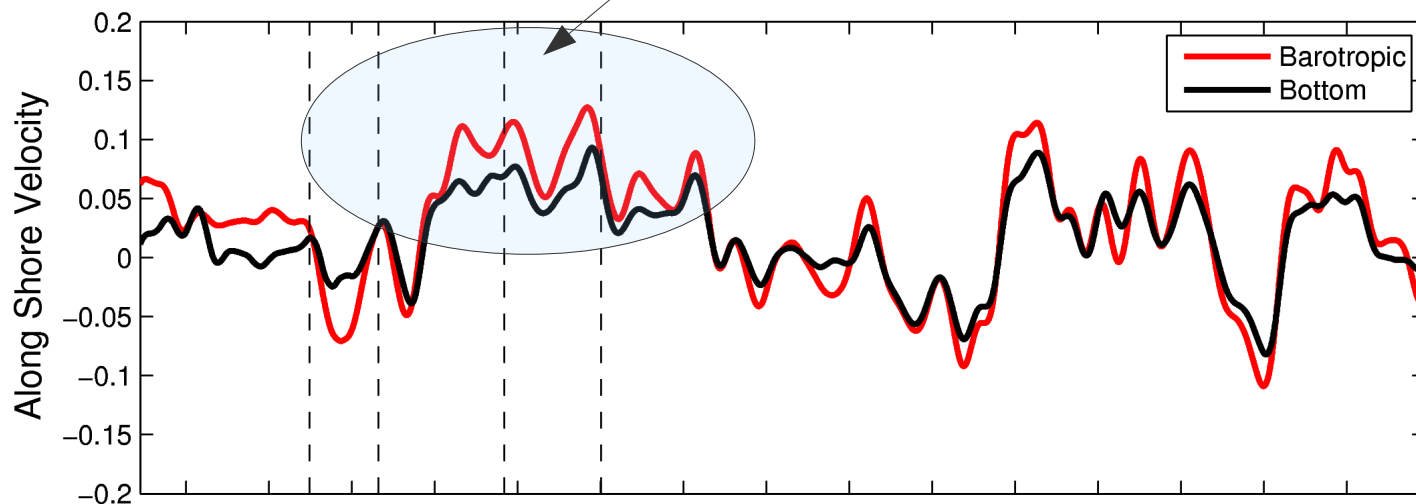
Warm Water Advection ?



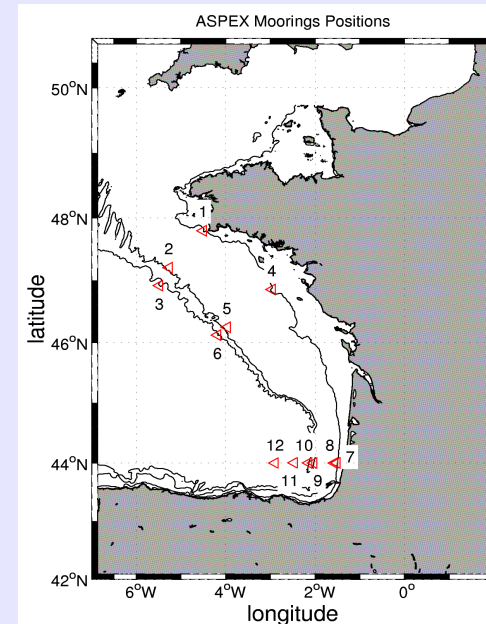
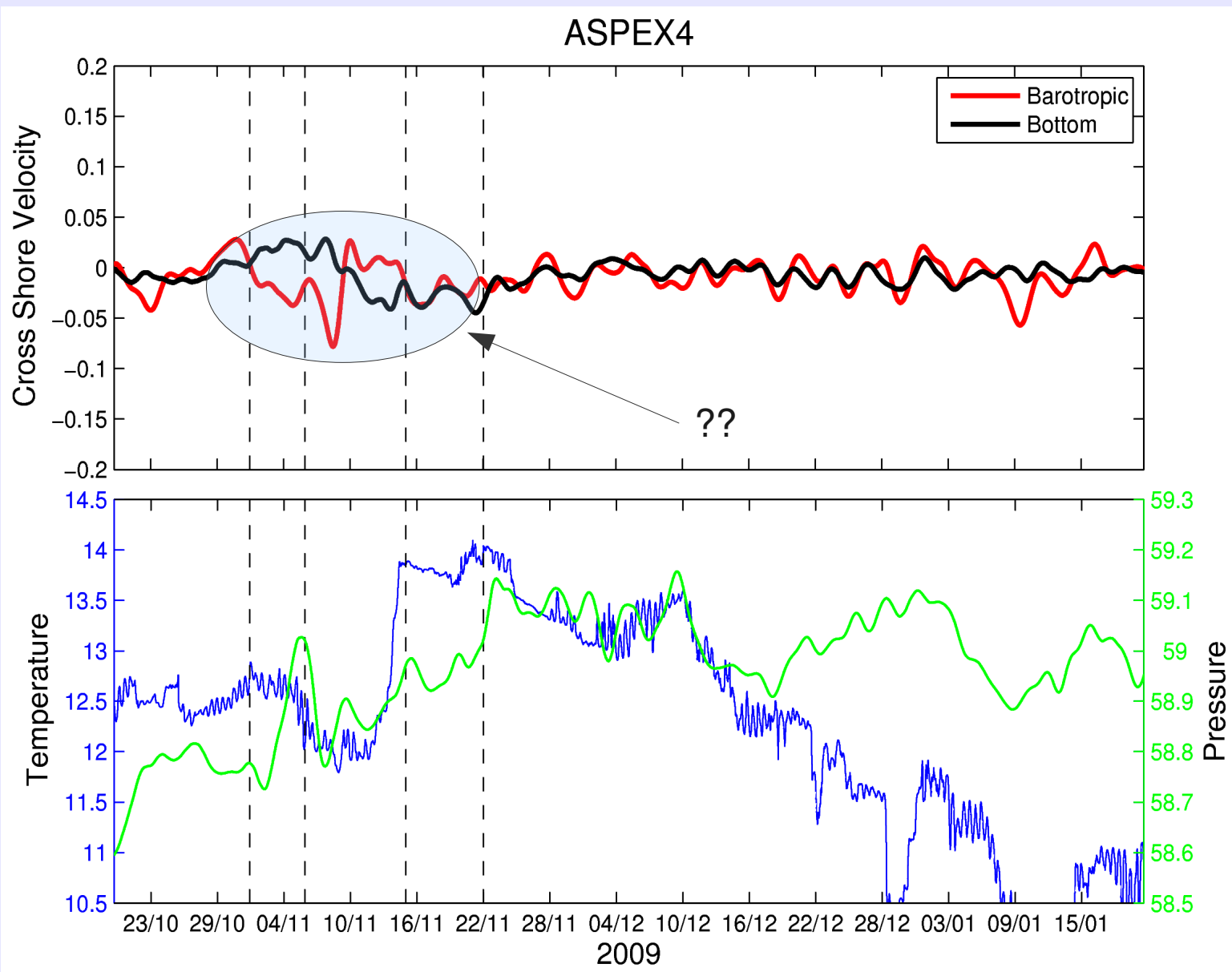
Warm Water Advection ?

Northward velocities

ASPEX4



Warm Water Advection or downwelling ?



Conclusion / Prospect

Strong Westerlies

Warm water tongue along the Aquitanian Shelf

Satellites shows this pattern stopped before the Gironde Outflow

Possibly Warm water advection :

- Temperature increase associated to Northward speed
- Speed advection : 0,4 m/s
- Intense local Speed : ~0,6m/s

Prospect : Dynamical Analysis of the event.