

# The Caribbean and the Mediterranean Seas: two semi-enclosed but different seas



## Similarities:

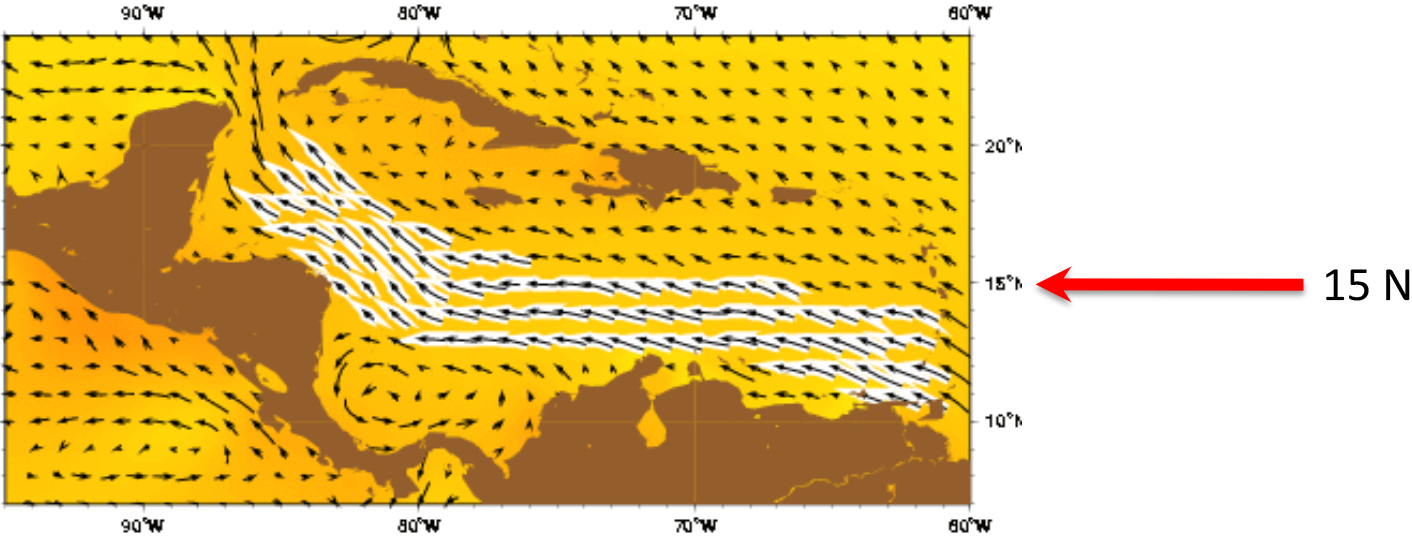
- Deep ocean basins
- Mesoscale dominated flow field
- Seasonal cycle (two seasons)
- River runoff and loads
- Coral reefs and systems
- Tourism
- Fisheries
- Marine Protected Areas
- Low tidal signal

## Differences:

- Northern land boundaries
- Flow entrance at surface (one or two)
- Deep and intermediate water formation
- Atmospheric forcing variability (westerlies and easterlies, hurricanes, etc.)

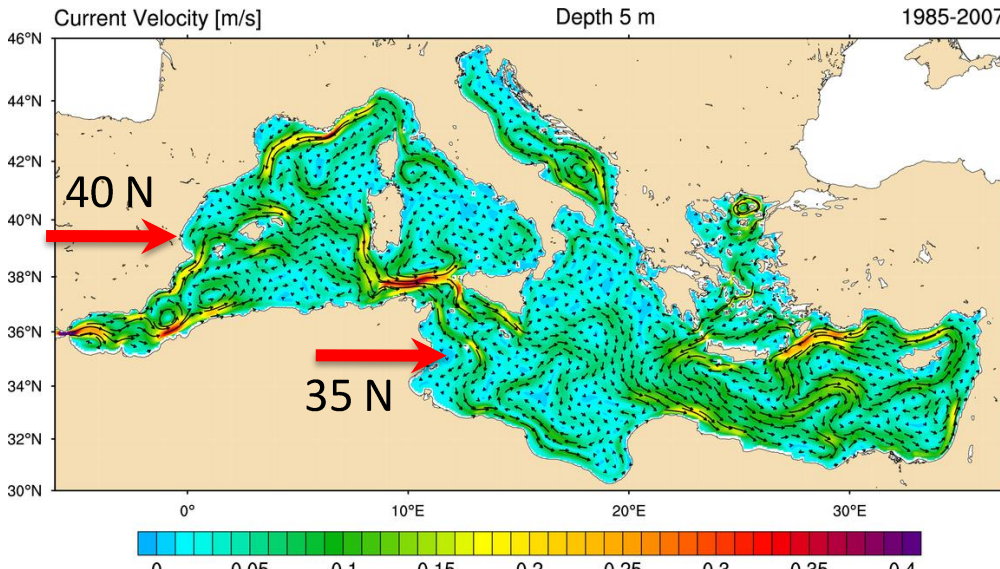


<http://oceancurrents.rsmas.miami.edu/caribbean/>

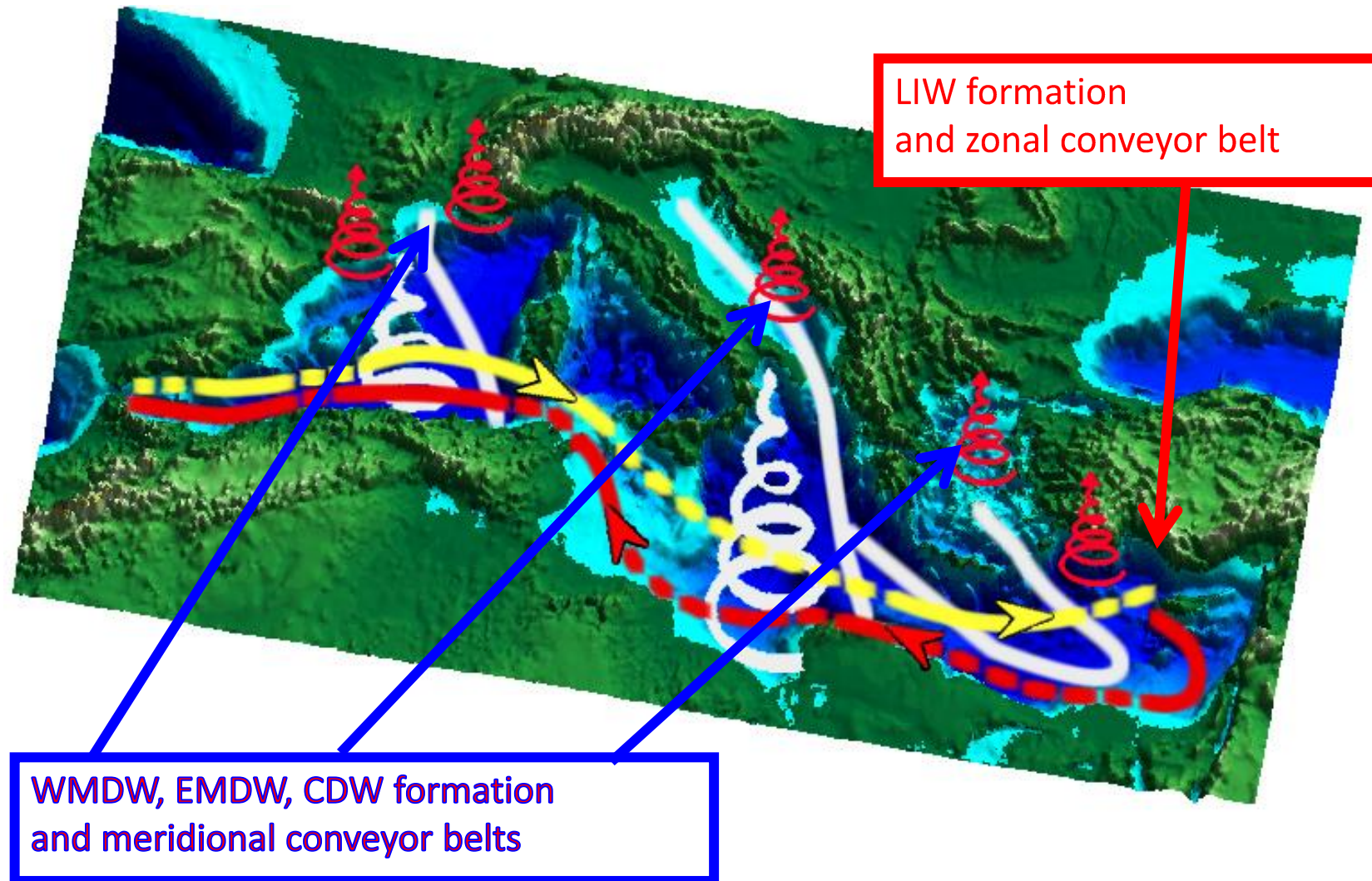


This is the 'Climate of the Ocean':  
How correct is this? OK  
How relevant for practical applications?  
NOT MUCH  
Ed Lorenz says:

*Climate is what you expect,  
weather is what you get*



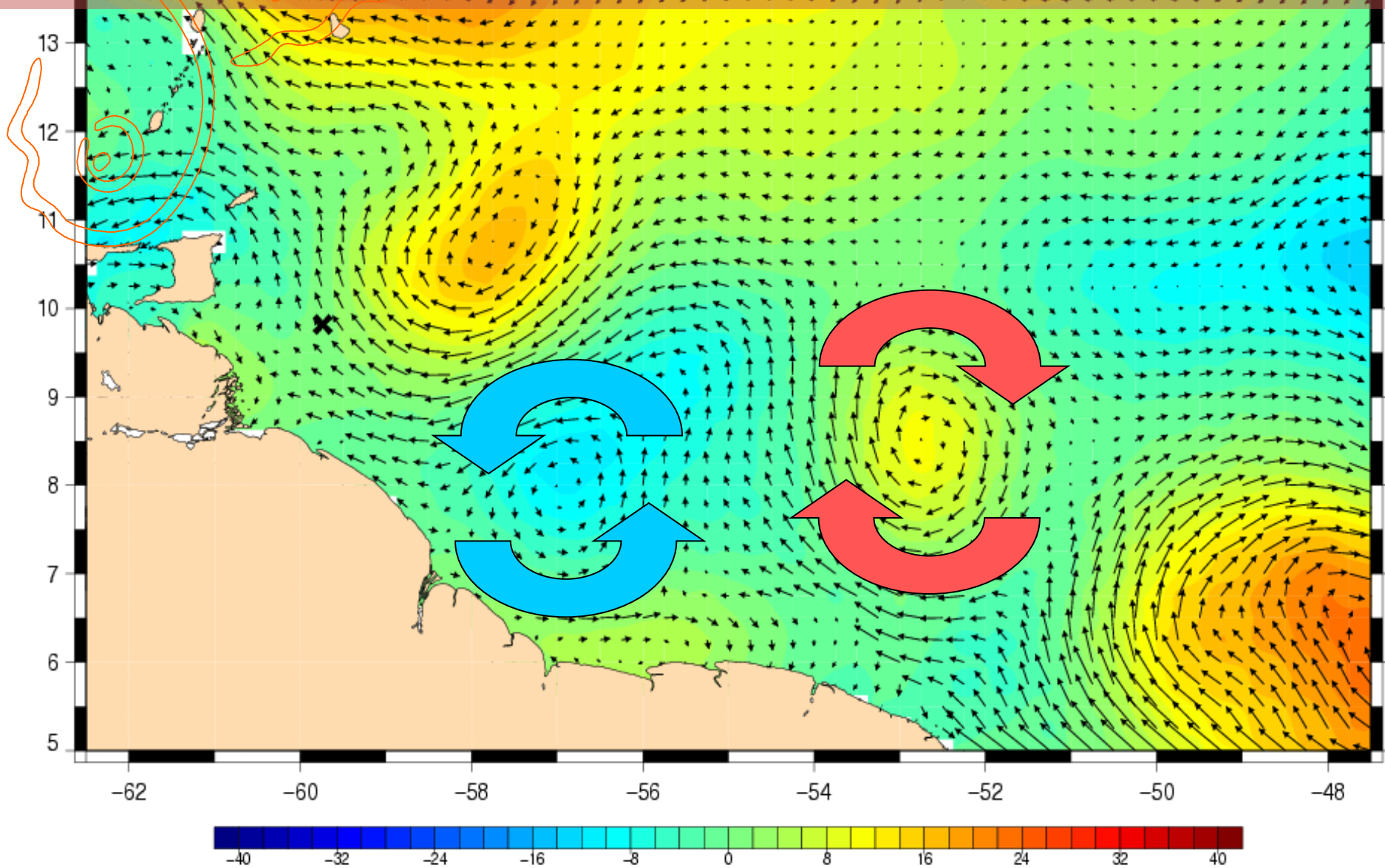
# Differences: The Mediterranean Sea conveyor belts and the water mass formation



Similarities: Photograph of bleached and unbleached colonies of *Oculina patagonica* collected from the Mediterranean coast of Israel.

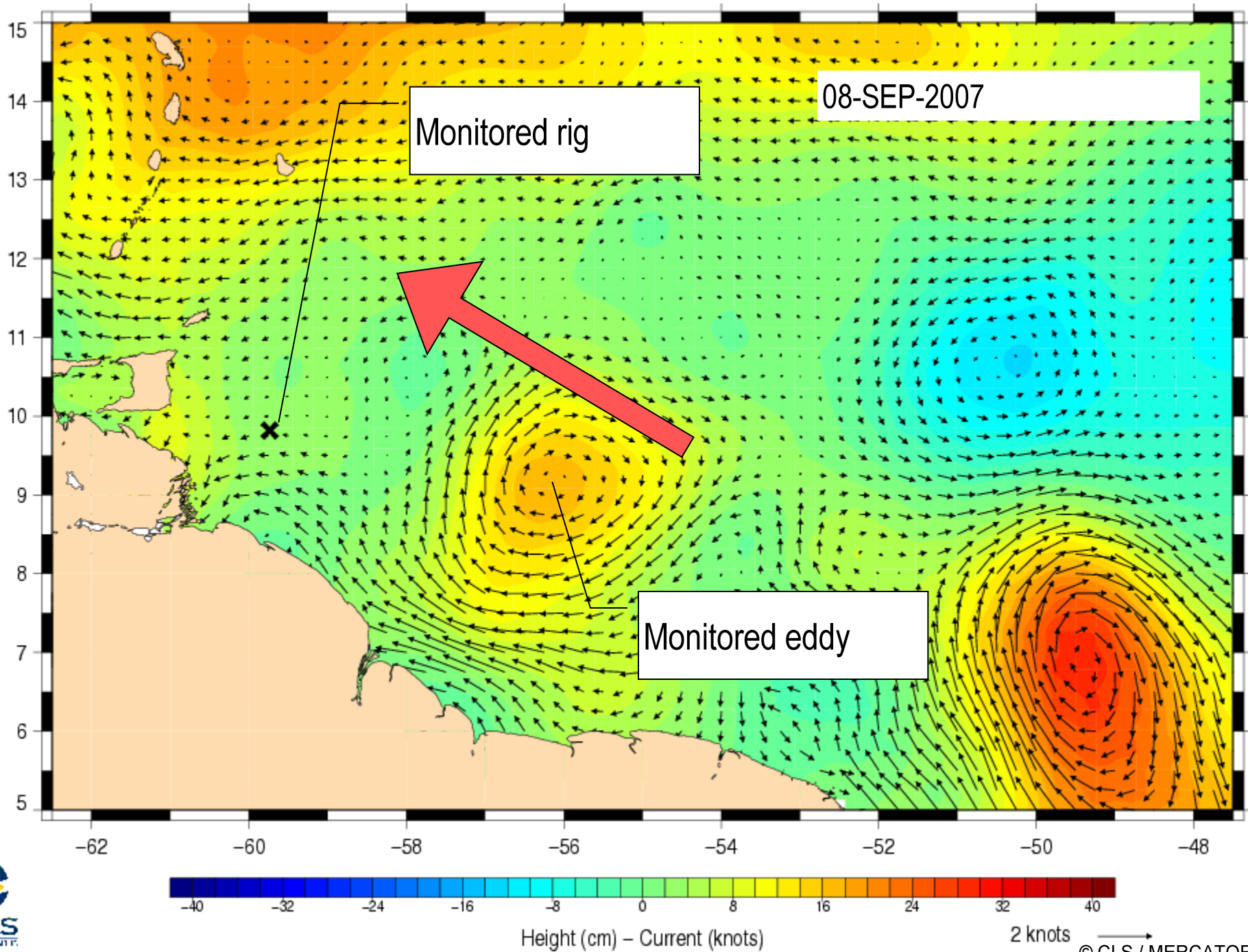


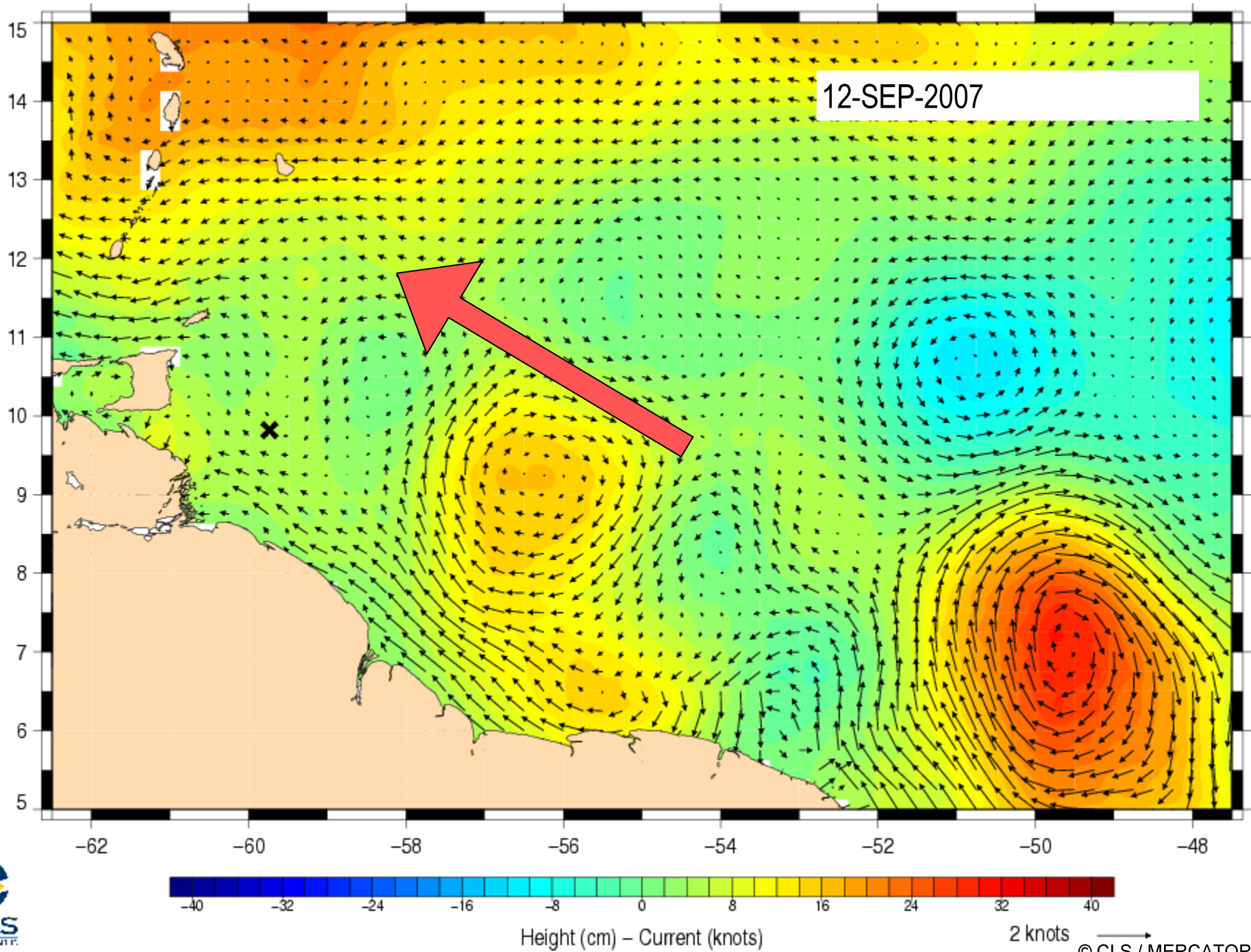
Similarities: eddies and day to day operations in safe conditions

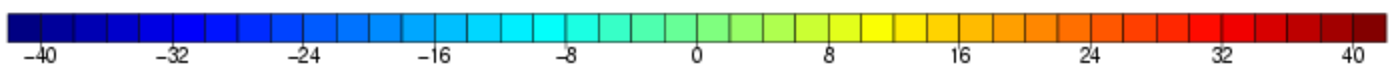
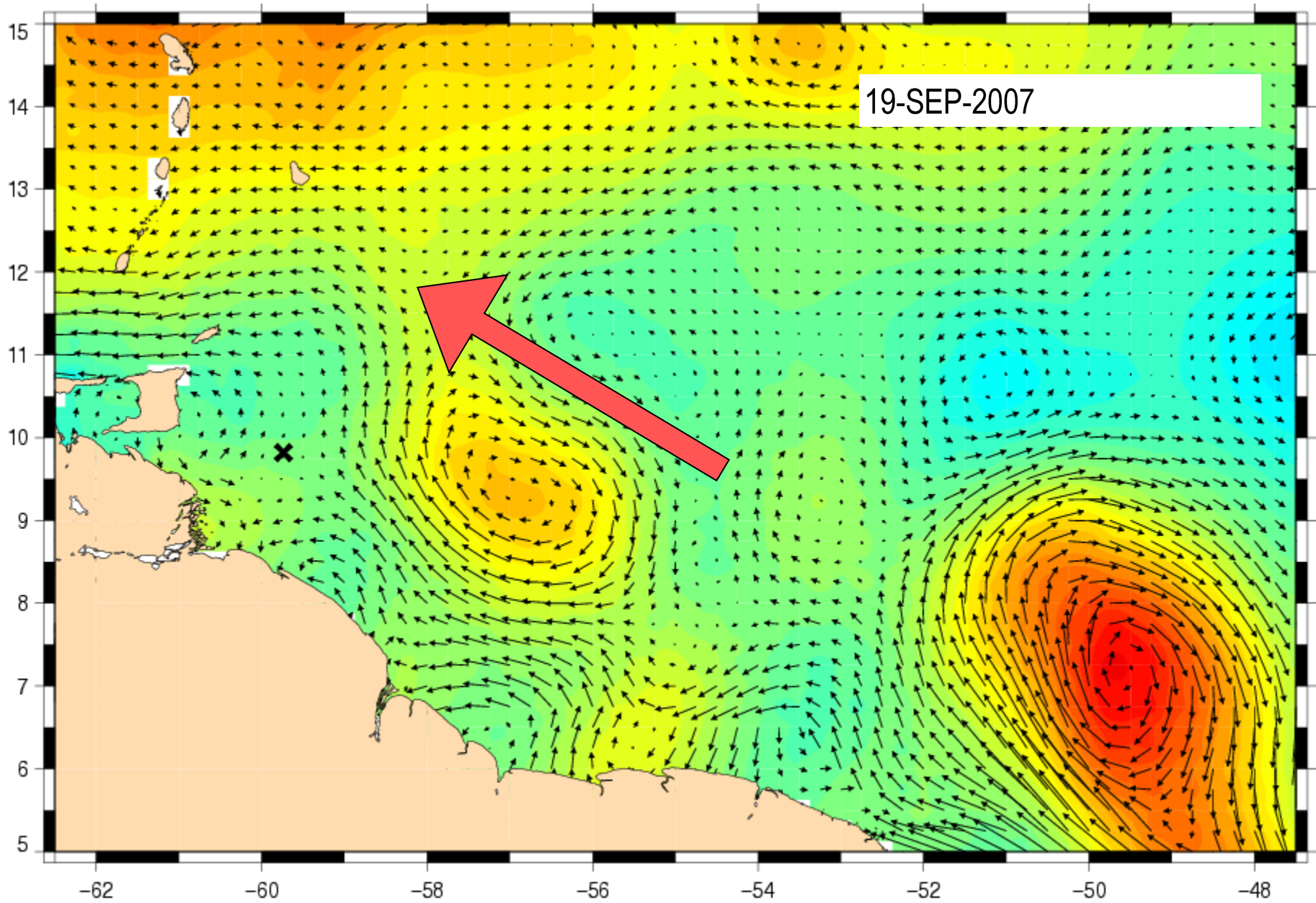


Height (cm) - Current (knots)

2 knots © CLS / MERCATOR



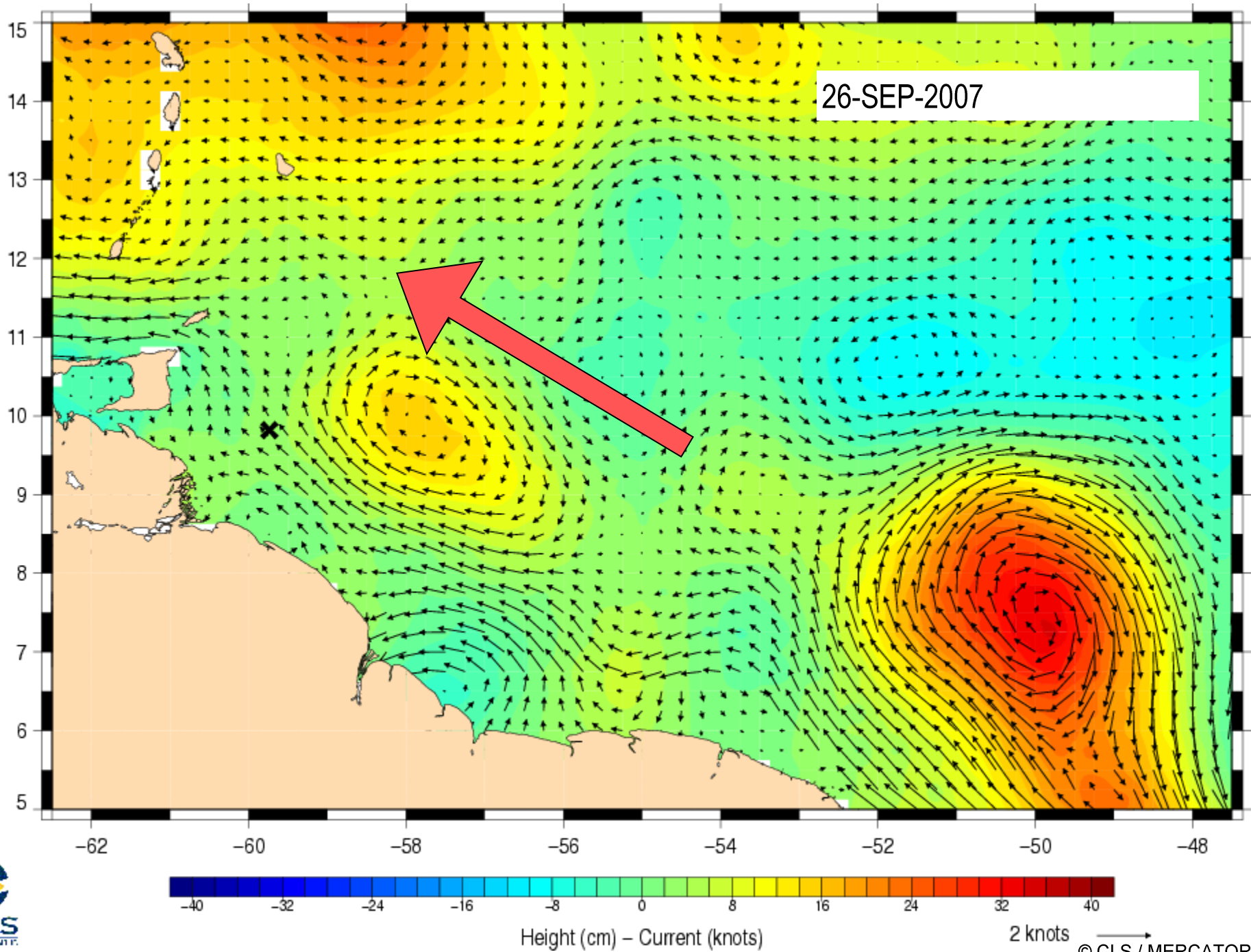


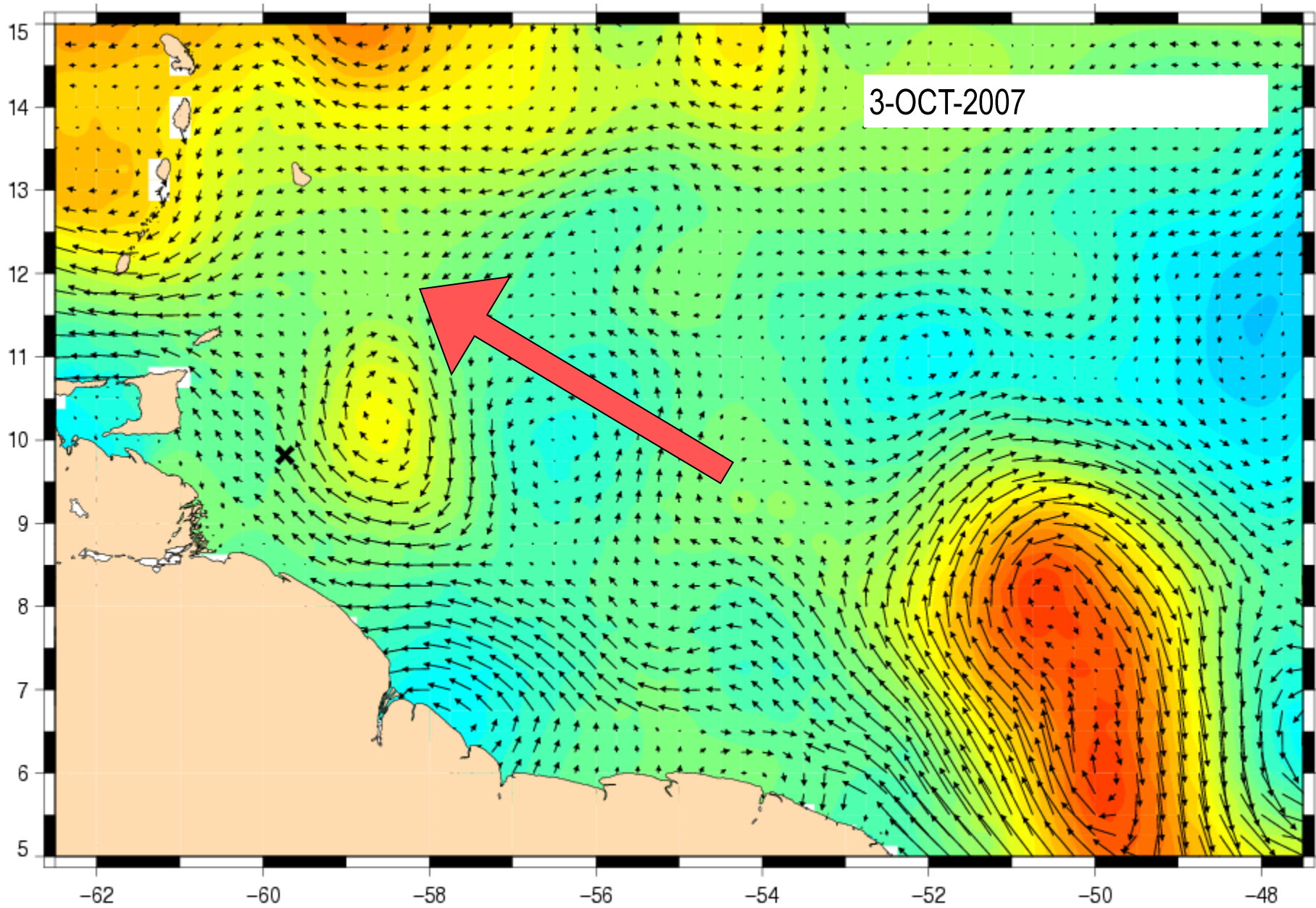


Height (cm) - Current (knots)

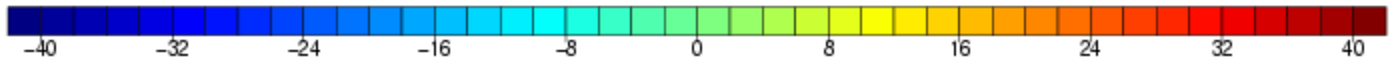
2 knots 







3-OCT-2007

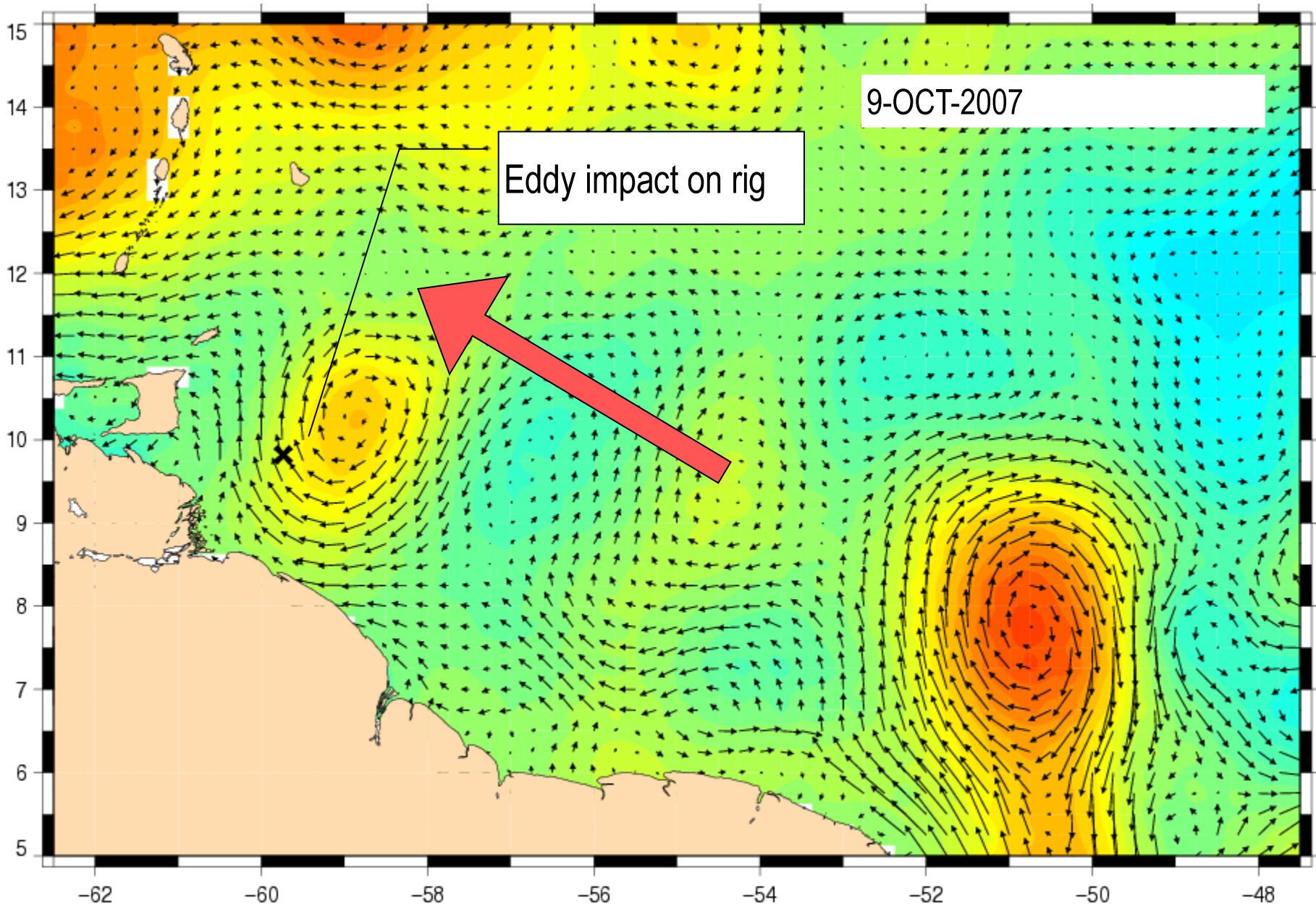


Height (cm) - Current (knots)

2 knots



© CLS / MERCATOR



Height (cm) - Current (knots)

2 knots

→ © CLS / MERCATOR

# Day to day operations in safe conditions

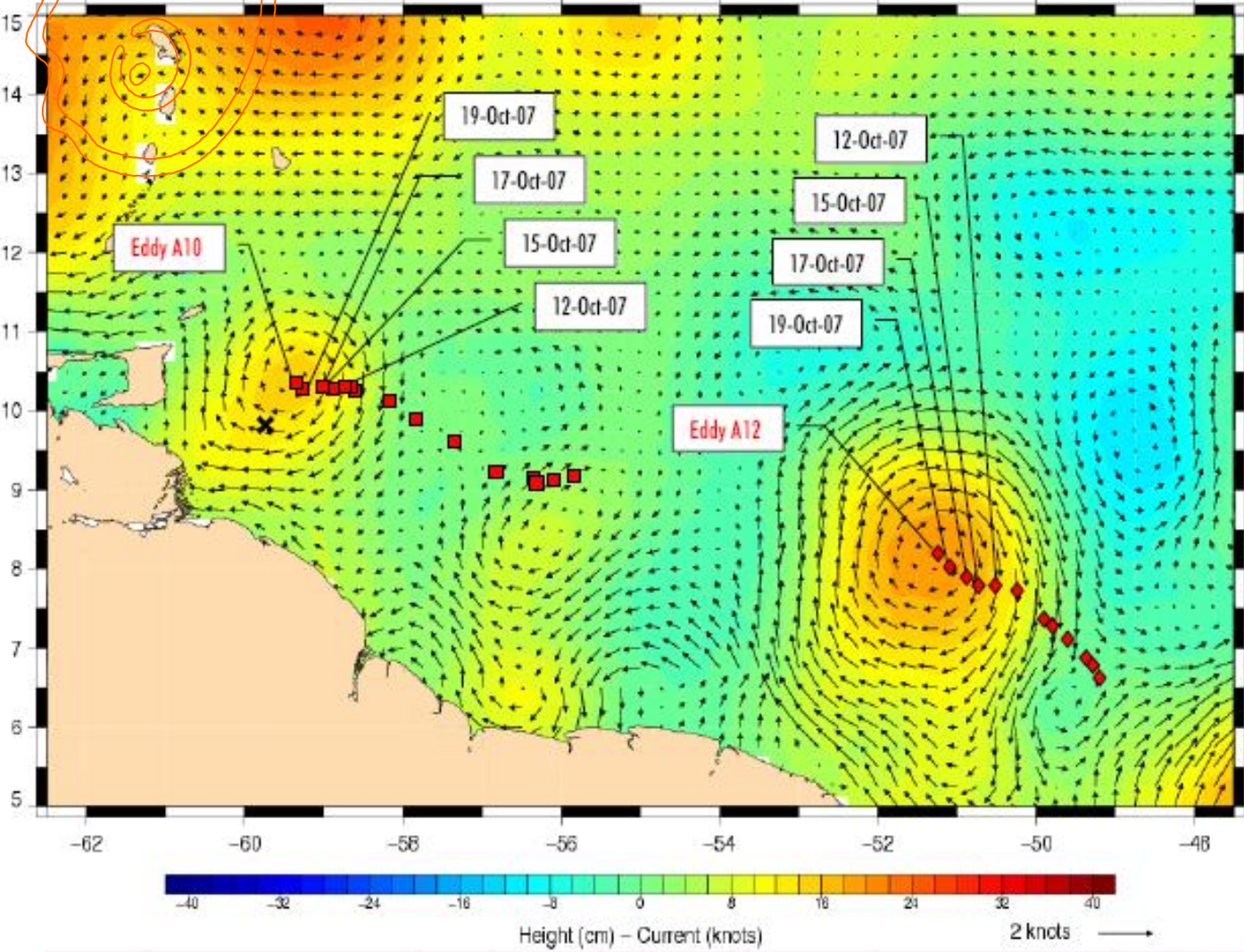
Report issued: 22-Oct-07  
Forecaster: Fabien Defevre  
Helpdesk: [offshore@cls.fr](mailto:offshore@cls.fr)  
Next report due: 24-Oct-07

Client: Statoil  
Client contact: Bjørn Risvik  
Contract ref: 123-456

Facility: Plataforma Delta  
Location: Ballena 1X  
Block: 4  
Water depth: -120m

REPORT VALID FOR 22<sup>ND</sup> OCT 2007

**WARNING**  
Currents at the Orca site are reaching 0.9kn, setting west. They are likely to increase in the next few days.



**Legend**  
This chart shows the latest ocean circulation update. Colour indicates sea surface height. Orange and red indicate warm core anti-cyclonic eddies.

**General description**  
Eddy A10 (red squares) is moving slowly north-westward. Strong currents are generated in its southern part. The generated currents are impacting strongly on the Orca site and are likely to increase in the next few days as the eddy passes through the site.

Eddy A12 (red diamonds) is moving slowly north-westward. Currents are decreasing around the eddy but are still strong. It is likely to have an impact on the Orca site in about 1 to 2 months.