



atlas

UNDERSTANDING DEEP ATLANTIC ECOSYSTEMS



Ocean circulation and water masses distribution in seamounts in the path of the outflow waters

ATLAS 2nd General Assembly (24 – 28 April 2017)

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Outline

1. Objectives
2. Preliminary results. General overview.
 - 2.1. Gazul mud volcano
 - 2.2. Ormonde seamount
 - 2.3. Formigas seamount
 - 2.4. Seco de los Olivos (Chella Bank)



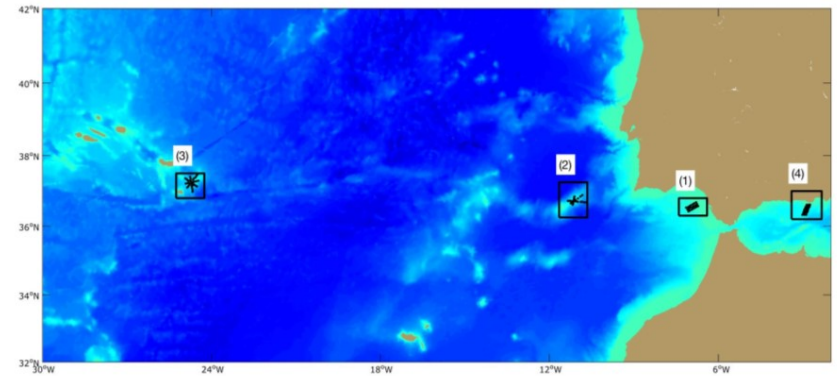


1. Objectives

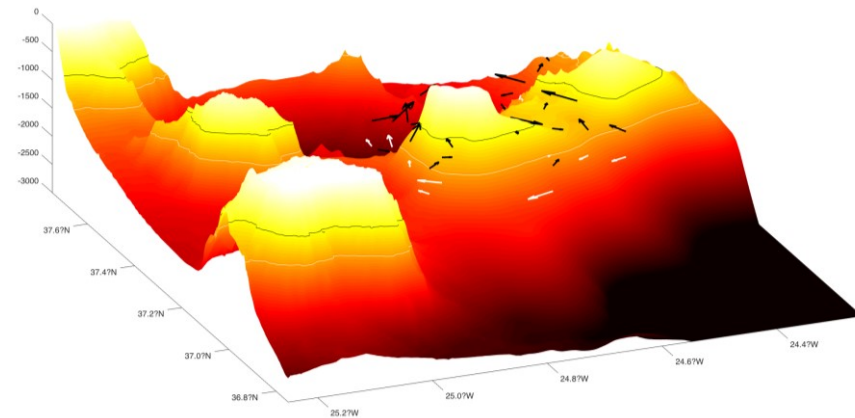
- Characterize the hydrographic conditions and oceanic flow over the Formigas, Ormonde and Seco de los Olivos seamounts, and in the Gazul mud volcano

- Determine the structure of the oceanic circulation over the summits of these seamounts (Taylor columns phenomena?)

- Determine the role of the Mediterranean Water over and around the seamounts (vertical distribution of Cold Water Corals)

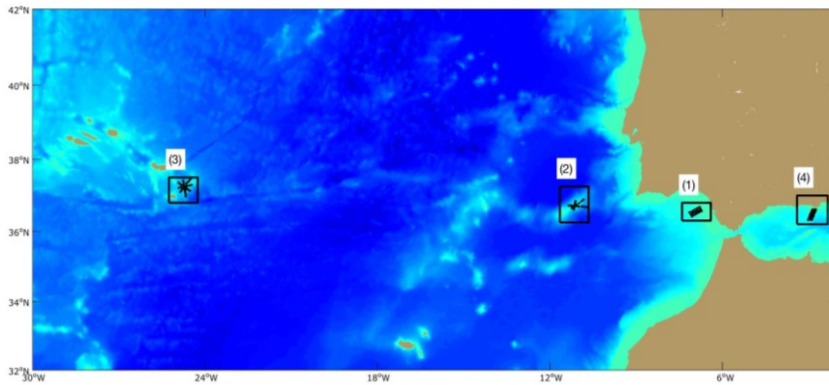


- 1 – Gazul mud volcano
- 2 – Ormonde seamount
- 3 – Formigas seamount
- 4 – Seco de los Olivos

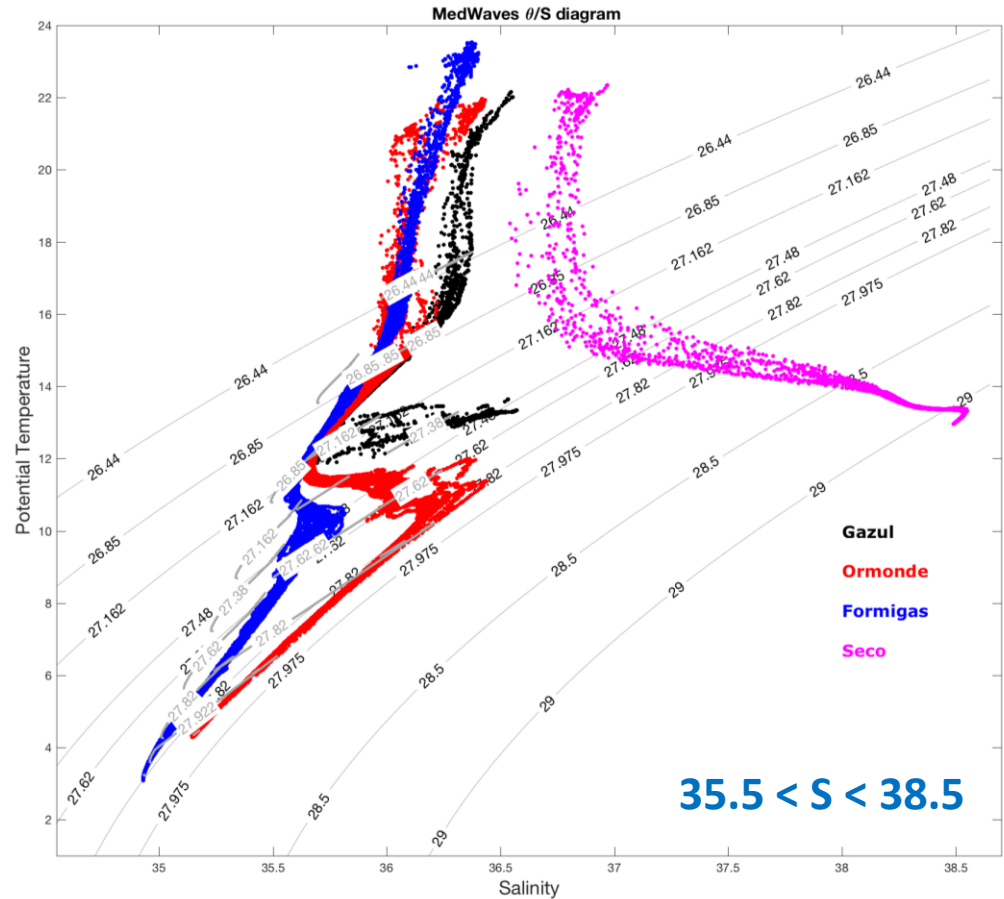




2. General overview

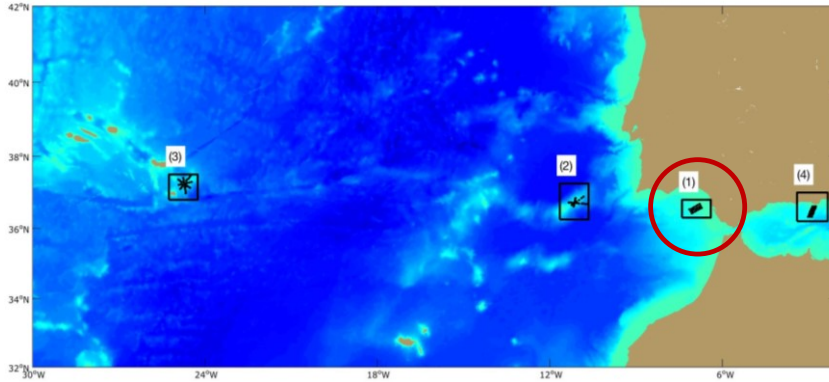


1. Gazul mud volcano
2. Ormonde seamount
3. Formigas seamount
4. Seco de los Olivos

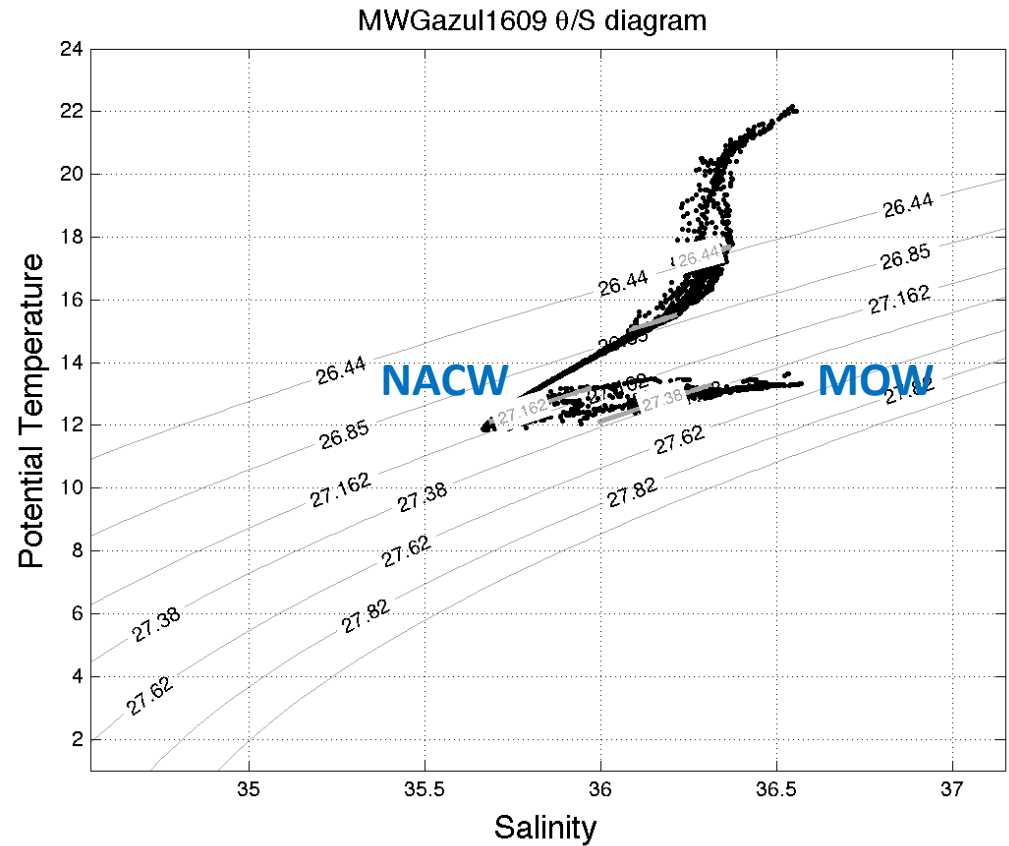




2. General overview

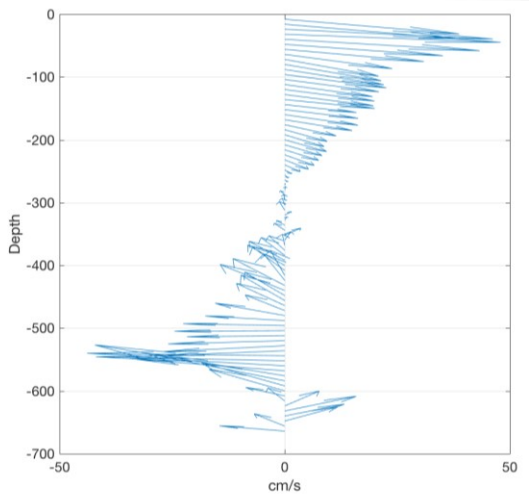
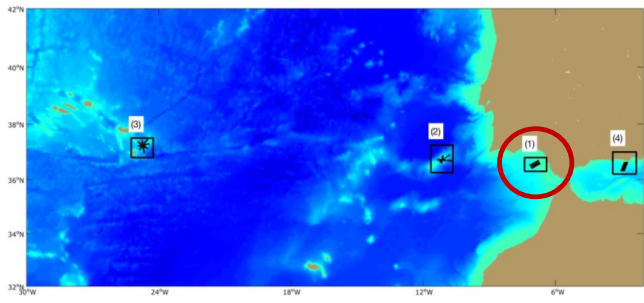


1. Gazul mud volcano
2. Ormonde seamount
3. Formigas seamount
4. Seco de los Olivos

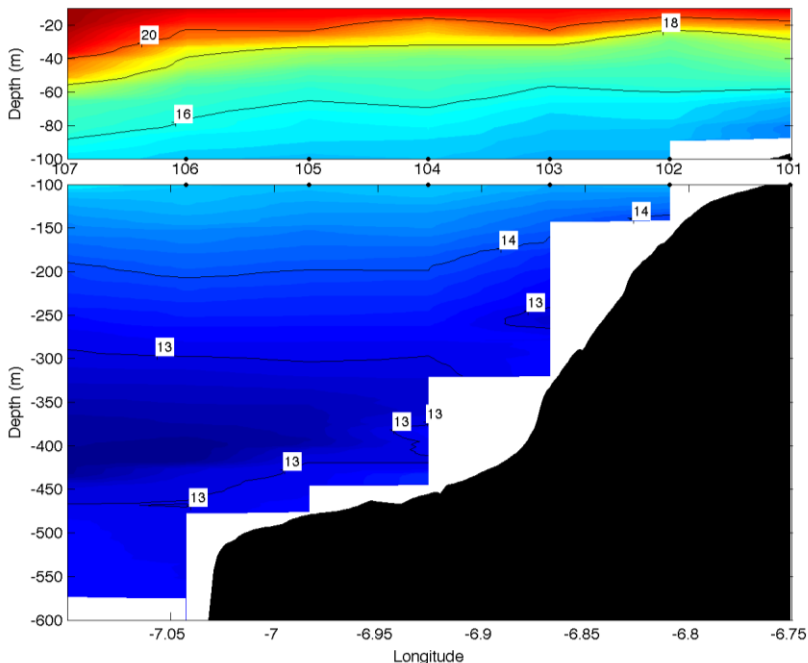




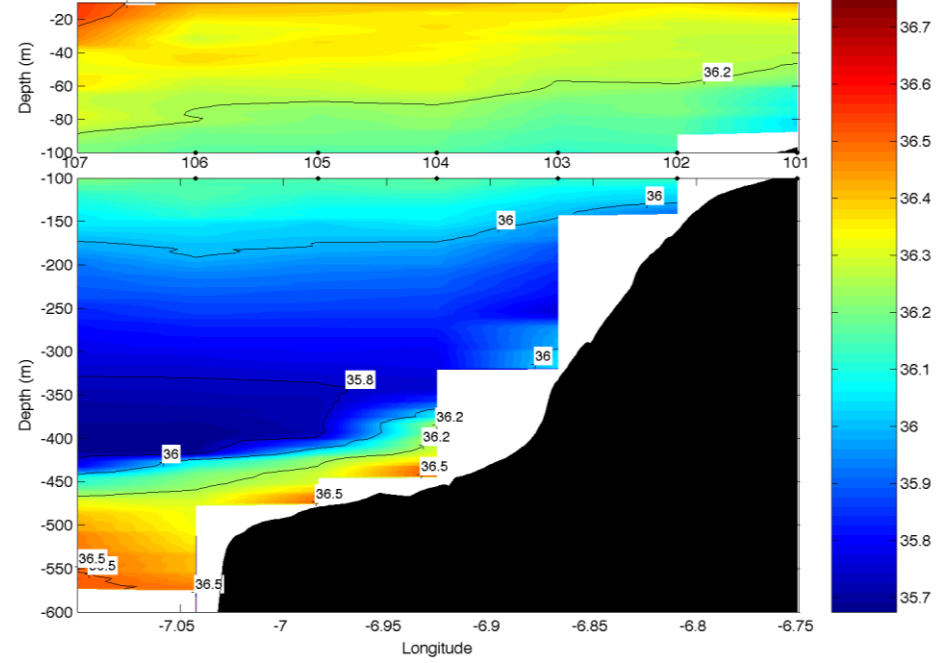
2.1. Gazul mud volcano



MWGazul Central Temperature

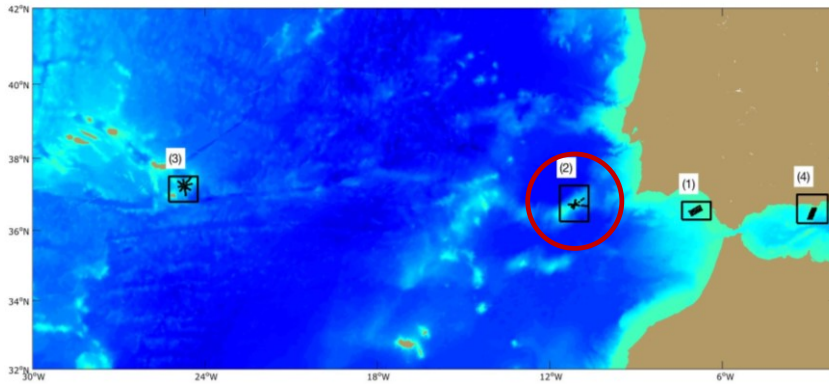


MWGazul Central Salinity

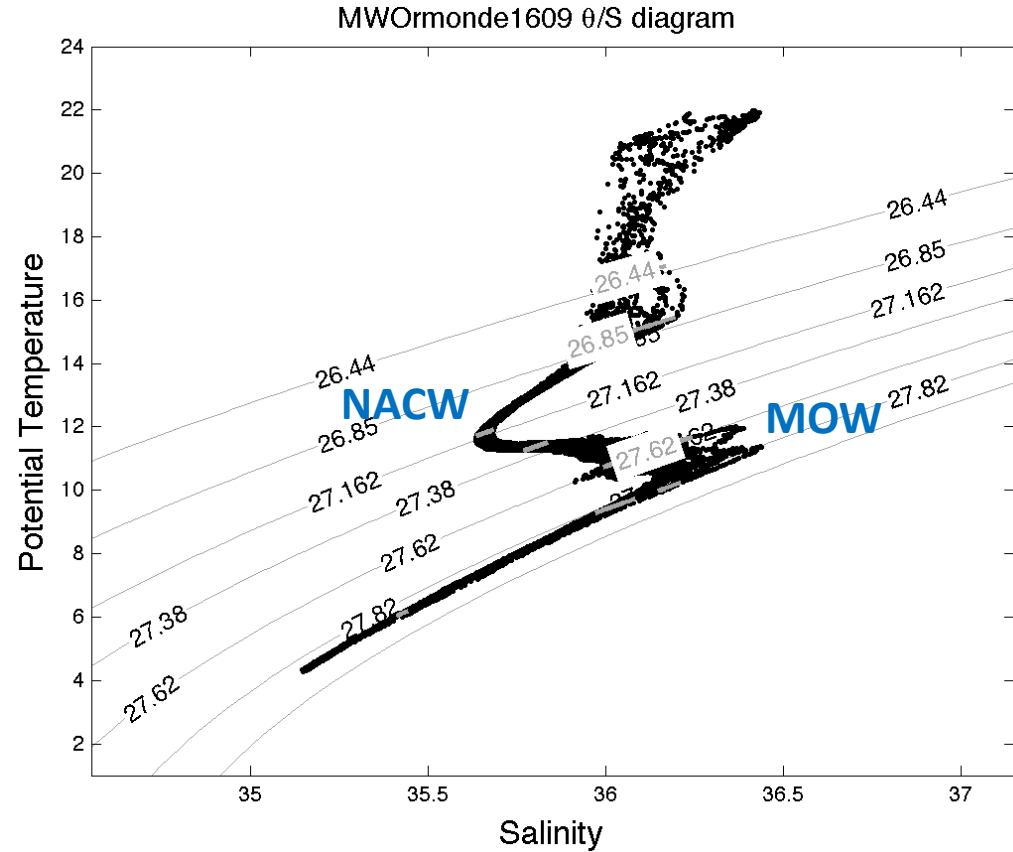




2. General overview

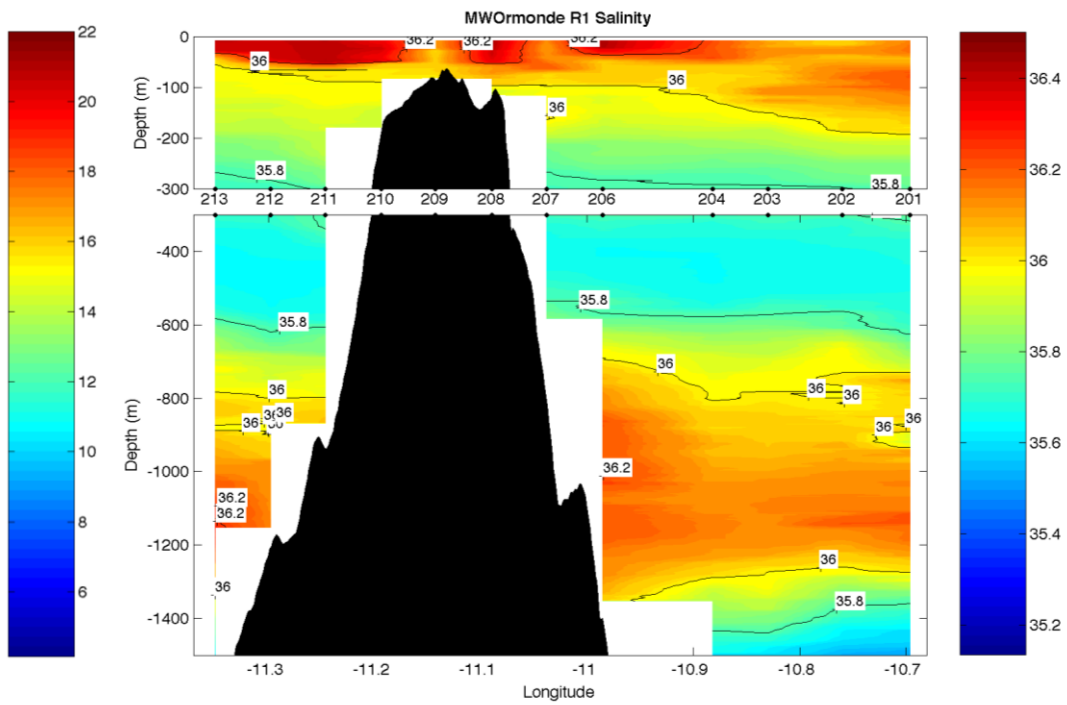
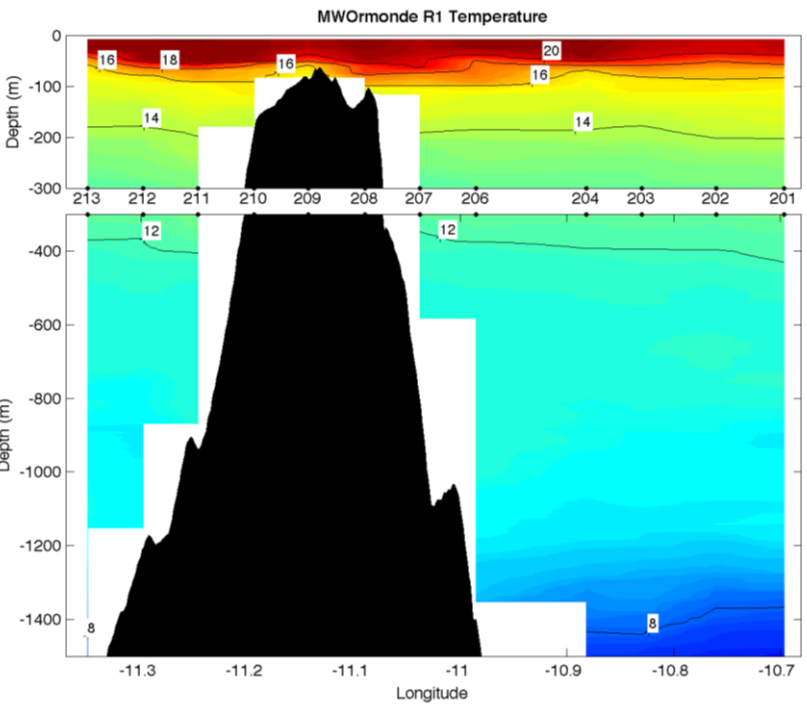
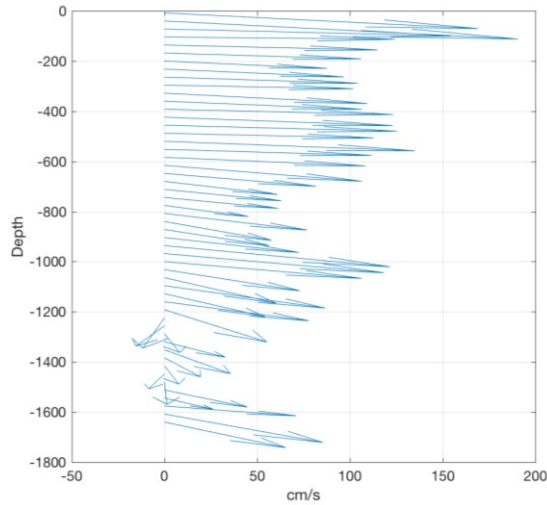
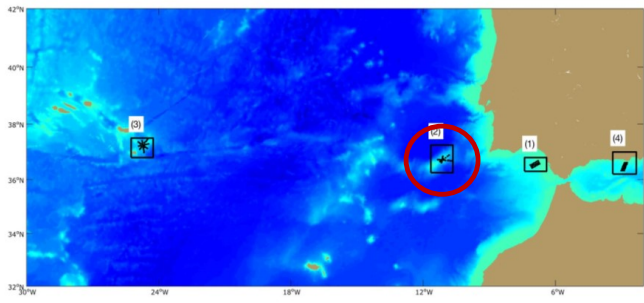


1. Gazul mud volcano
2. **Ormonde seamount**
3. Formigas seamount
4. Secco de los Olivos



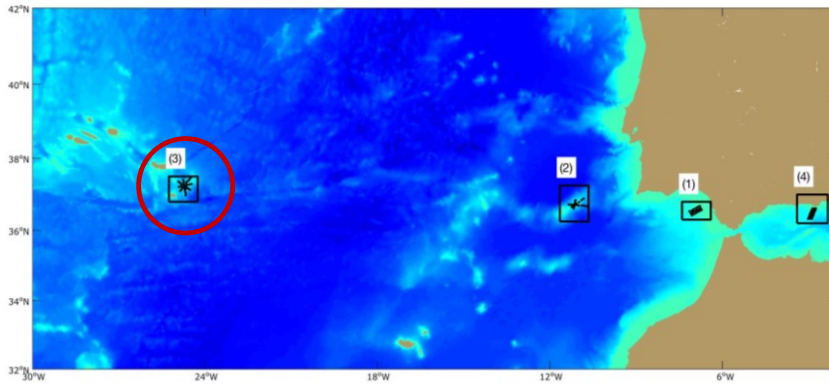


2.2. Ormonde seamount

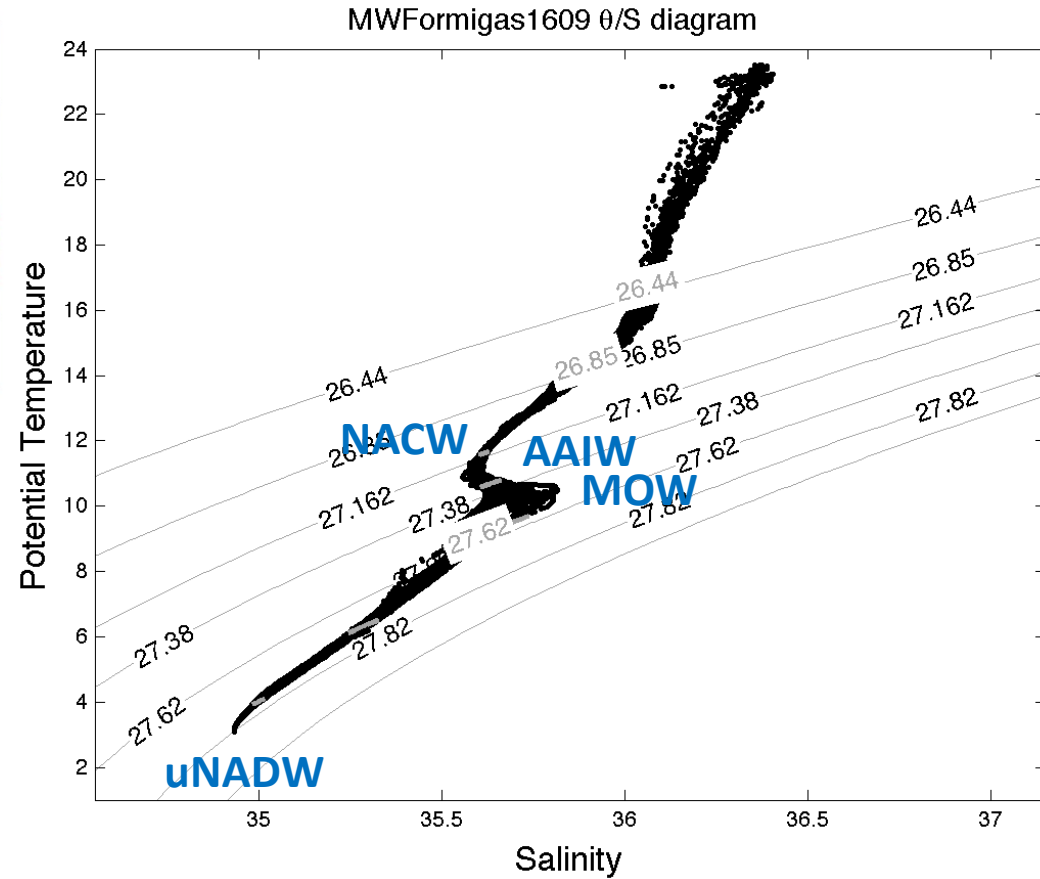




2. General overview

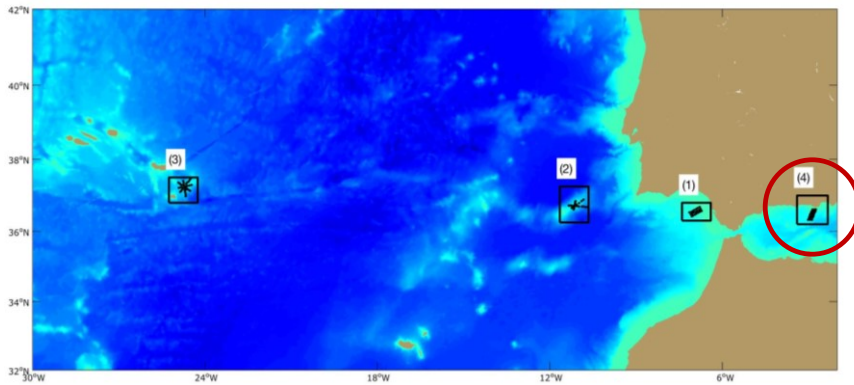


1. Gazul mud volcano
2. Ormonde seamount
3. **Formigas seamount**
4. Seco de los Olivos

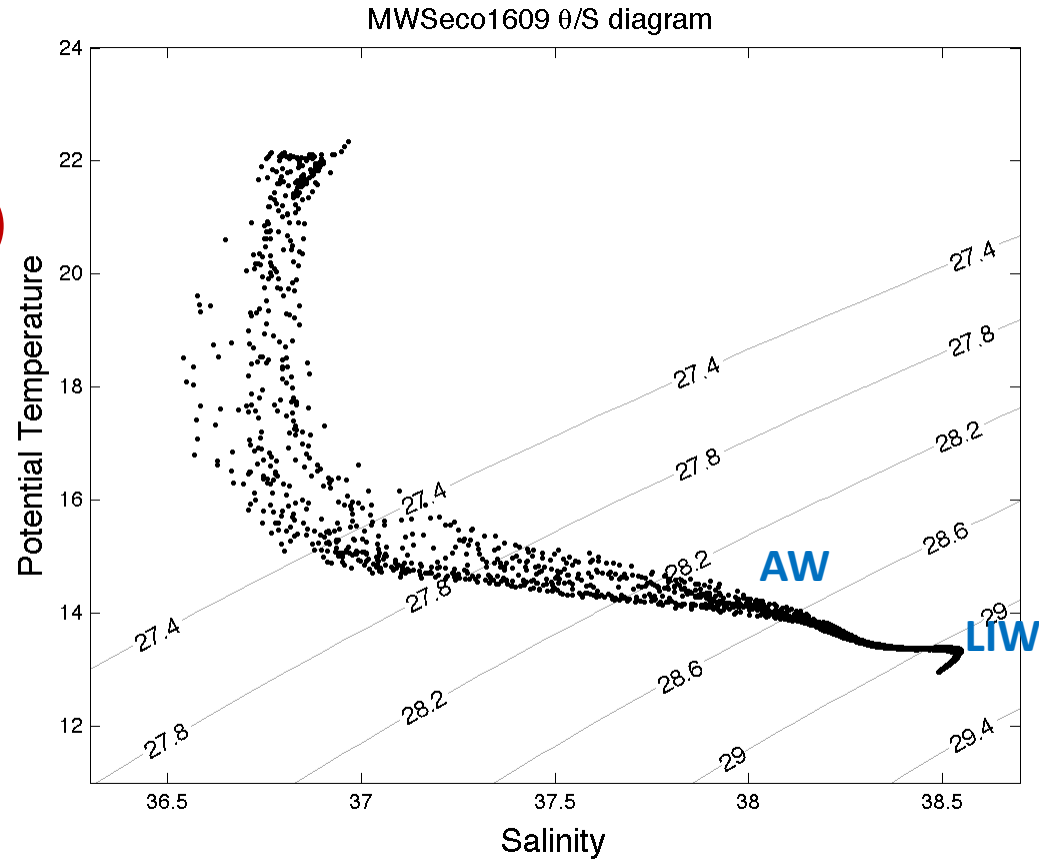




2. General overview

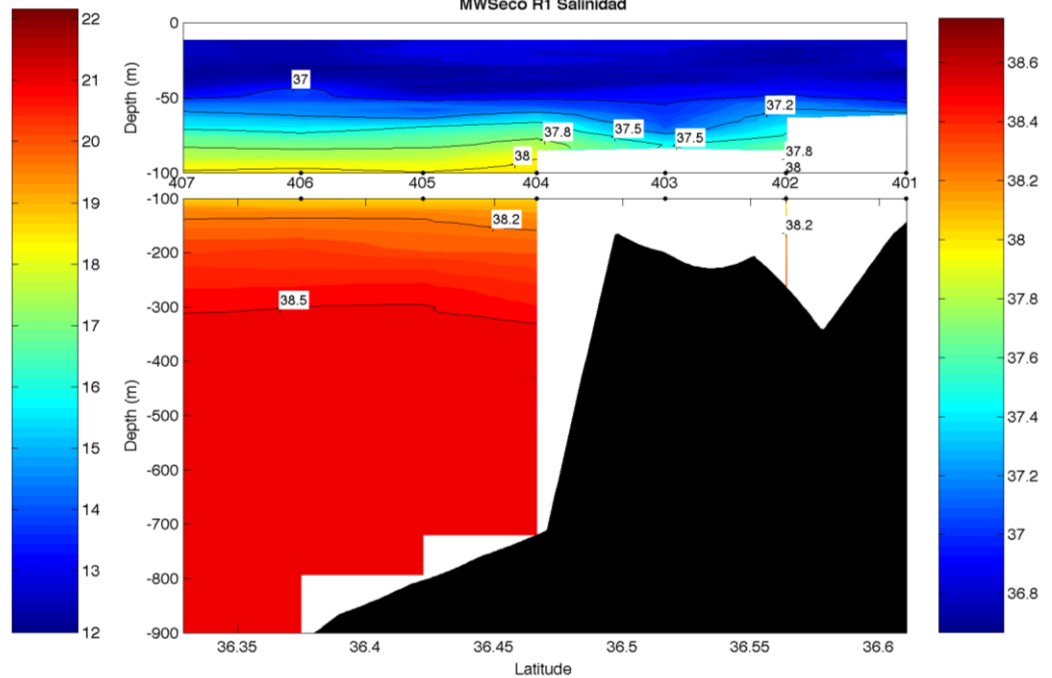
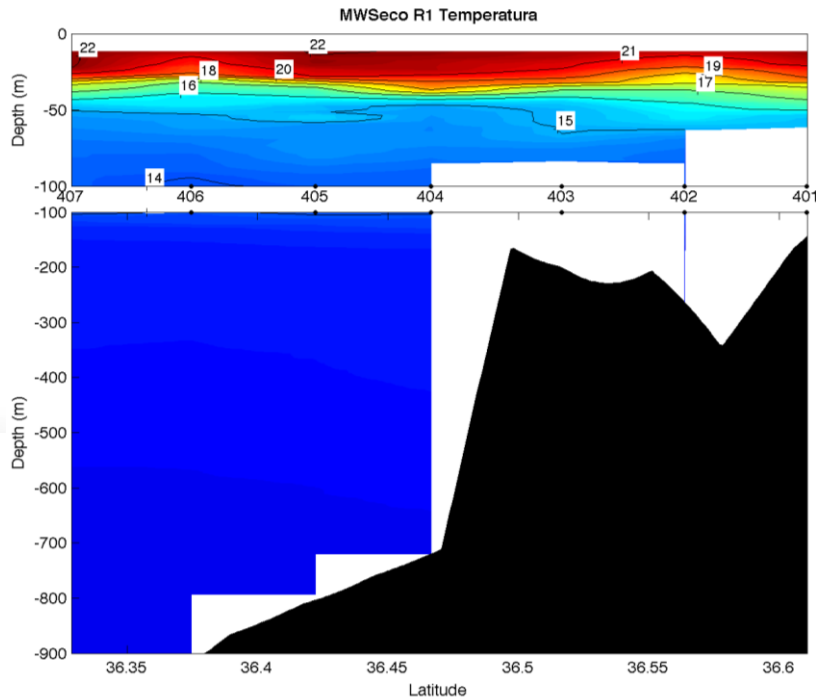
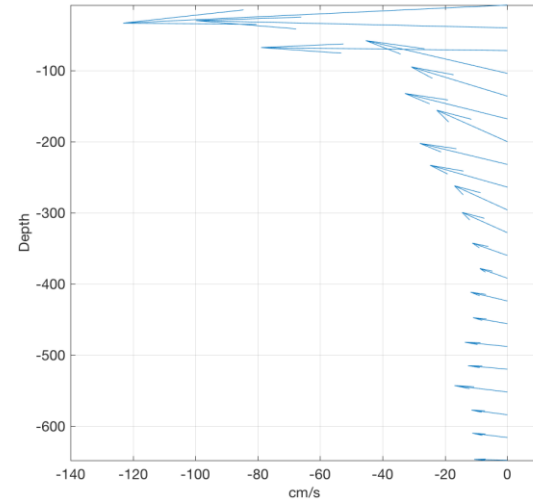
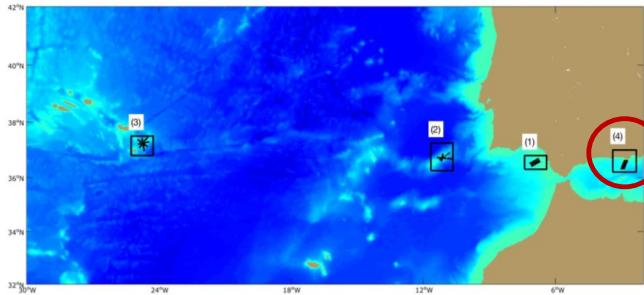


1. Gazul mud volcano
2. Ormonde seamount
3. Formigas seamount
4. **Seco de los Olivos**





2.4. Seco de los Olivos



Thank You!



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Image credit: S. Piñeiro