1. INTRODUCTION

San Quintin Bay, Mexico, is a hypersaline coastal lagoon where the main external forcing of physical and biogeochemical processes is oceanic. The neighboring ocean, under the influence of the California Current, is a typical wind-driven coastal upwelling system. However, during 2014 anomalous upwelling conditions were observed. The Bay can be divided in three zones with different behavior and residence time: the mouth of the Bay (MoB), Bahia Falsa (BF) and brazo San Quintin (bSQ).

2. OBJECTIVES

- How do different upwelling intensities affect the biogeochemistry and carbon fluxes in the bay?
- Is the bay sink or source of CO₂ during the studied period?

3. METHODS

- Dates: 27 May and 7 July 2005 (14 transects). 20 stations
- Dates: November 2013 to November 2014. 10 stations covered ten times and one anchored buoy with temperature, salinity, oxygen and pH sensors.
- Spatial sampled during spring tides.

4. RESULTS and CONCLUSIONS

During Positive Anomalous Upwelling Conditions for 2005

During Negative Anomalous Upwelling Conditions from 2014

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