



Session 01

## The southern Senegal upwelling center: state and functioning during the UPSEN2/ECOAO field experiments (Feb.-Mar. 2013)

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### Abstract

Upwelling off southern Senegal and Gambia takes place over a wide shelf with a large area where depth is shallower than 20 m. This results in typical upwelling patterns that are distinct from those of other better known systems, including Oregon and Peru where shelves are comparatively narrower. 4 weeks intensive measurement period sheds light on the synoptic and superinertial variability of this upwelling sector. The influence of mesoscale activity extends across the shelf break into the shelf where it impacts the mid-shelf upwelling. Internal tide and solitary waves of large amplitude are ubiquitous over the shelf. Our observations suggest that they play a fundamental role in the overall system functioning, including biogeochemical.

**Keywords:** upwelling patterns, mesoscale, mid-shelf upwelling, Internal tide, solitary waves ECOAO.



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