



TROPICAL ATLANTIC OCEAN CIRCULATION FROM ALTIMETRY AND ARAMIS data

Sabine Arnault (1) and Jean Luc Melice (2)

(1) IRD, LOCEAN, Paris cedex 05, France (sa@locean-ipsl.upmc.fr, +33-(0)1-44277159), (2) IRD, LOCEAN, Paris cedex 05, France (jlmelice@locean-ipsl.upmc.fr, +33-(0)1-44277159)

Surface layer variability is investigated in the tropical and sub-tropical Atlantic using Jason altimetry and in situ measurements collected during the Altimétrie sur un Rail Atlantique et Mesures In Situ (ARAMIS) experiment.

The ARAMIS project, funded by the french CNES (Centre National d'Etudes Spatiales) and IRD (Institut de Recherche pour le Développement) organizations, implemented a long term survey (2002-2008) of temperature and salinity structures in the tropical Atlantic. The AX11 World Ocean Circulation Experiment XBT merchant ship line from Europe to South America, was selected for the project. The ship line crosses the major equatorial currents, the InterTropical Convergence Zone and the Atlantic regions of Salinity Maximum Water. The line is also superimposed to a JASON track.

The tropical Atlantic surface layers variability is investigated with special emphasis on the low frequency variations of the surface circulation and their relation with other climatic indexes.