ATLANTIC WATER CIRCULATION IN THE ALBORAN SEA. FALL 1981

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ABSTRACT.— From the data obtained during a cruise made in October 1981 we found a similar situation to that of oher authors. A clear front marking the atlantic inflow E. of the Strait, a well defined anticyclonic gyre W. of 3°W and the continuity of the atlantic flow along the argeline coast. Divergence zones and a big meander E. of 3°W are described too.

RESUME.— A partir des données obtenues pendant la campagne d'Octobre 1981 nous trouvons une situation similaire à la décrite par autres auteurs. Un front clair du flux atlantique à l'Est du Détroit, un gyre anticyclonique bien défini à l'Ouest du 3°W, et le prolongement du flux atlantique le long de la côte Algèrienne. On décrit aussi les zones de divergence et un grand méandre à l'Est du 3°W.

The familiar picture of the observed general atlantic circulation can be followed, among another parameters, by the subsurface salinity minimum. The lowest value is found near the Strait (36,29‰, 30 m.). Around 4°15'W where the inflow bifurcates the minimum can be seen going and deapening around the gyre, increasing its value lightly and on the branch that continues E. hugging Algeria. North of the island it is noticeable a big patch where the salinity is also at a minimum, but it can not be elucidated whether it is another branch of the main inflow (Lanoix, 1974) or a NW extension of the eastern meander. This one has an anticyclonic sense and it almost covers the width of the sea from Spain to Africa along the 2°W meridian. The water enclosed by it has similar characteristics than those of the gyre. In another ocasions this zone has been ocuppied by a

cyclonic gyre or meander.

Related to the upwelling, SE the Spanish Coast, its description is a little complicated since isotherms and isohalines have not apparently a very coherent relation ship. Either the upwelling is located just N. of the front away from the coast or there are some intrusion of adjacent waters (atlantic or mediterranean).

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