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ON THE DISTRIBUTION OF THE ATLANTIC WATERS IN THE LEVANTINE

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Distribution and circulation of the North Atlantic Water (NAW) in the Levantine Basin of the Eastern Mediterranean is examined in the light of both the past and recent data. Particular attention is given to the circulation of the NAW in the Northern Levantine and the recent data obtained during the November, 1985 cruise of R/V BILIM is utilized for this purpose.

It is found that the meso-scale eddies that are aligned along the Turkish coast, and the semi-permanent gyre located at the western end of the region play a crucial role on the fate of NAW. The sub-surface salinity minimum, which is the signature of NAW in summer-fall is completely or nearly lost at the inner edges of the cyclonic eddies- yre. This is attributed to intense upwelling of the saline waters below the salinity minimum. NAW penetrates primarily from the region to the west Cyprus and appears to meander and breakup into lenses at the northernmost reaches of the Levantine. Only a very diluted amount of NAW in the northeastern Levantine reaches Aegean through the strait between Turkey and Rhodes.