



The heat and salt transport of the Mediterranean waters with the intra-thermocline eddies in the eastern part of the North Atlantic for the period 1970 - 2000

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Mediterranean waters (MW) comes with a bottom currents through the Strait of Gibraltar, and determine the hydrologic regime at intermediate depths of 800 - 1400 m in a large area in the North-Eastern Atlantic. The MW spreads at large distances from the source with the intra-thermocline eddies. All the collected data on temperature and salinity in the eddy cores for the period from 1968 to 2006 were analyzed. Distribution of the lenses position in space shows the existence of the main MW jets at intermediate layers: flows to the west, north-west and two jets in the south-west. The most of the lenses (more than 70%) are located at depths of 1000-1400 m and at a distance of up to 2000 km from the source (Gulf of Cadiz). The T-S and -S indexes in the core of lenses, its ranges at depth layers and distances to their source of origin were studied. According to the T-S indices the lenses vary in a wide range of density - from 27.5 to 27.9. This confirms the complicate nature of the conditions of lenses formation in their area of origin.