

Abstract

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Circulation Patterns of South East Sector of the Mediterranean Sea

An Oceanographic survey were taken in the south east sector of the Mediterranean Sea during the period February 1999 to January 2000, covering 16 anchored current stations. The oceanographic survey was carried out by Fugro GEOS Company. From the current moorings, the circulation patterns as well as the wind effect on current system were studied. The maximum current speed (0.89 m/s) occurred in the winter months. The current regime appeared to consist of sustained periods of wind induced, easterly flow, when the dominant wind direction was from the north-west. Periods of consistent westward flow often occurred for several days and coincide with winds from the east, again indicating that the main driving force for the currents is meteorological. During periods of low current speed, diurnal rotation (clockwise) of the current directions was observed. Theses occurred in between periods of sustained flow when the current speeds tended to be higher. Such characteristics were often prevalent in the months between May 1999 and October 1999. At locations in deeper water the current flow varied throughout the water column, with current speeds often decreasing around mid-depth and then increasing near the bed.