

COASTAL CIRCULATION OFF KUALA TERENGGANU

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COASTAL CIRCULATION OFF KUALA
TERENGGANU

By

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ABSTRACT

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Faculty : Faculty of Fisheries and Marine Science

The aim of this study was to determine the type of the current patterns in the coastal waters of Kuala Terengganu. This study was divided in two parts. The first part was to determine the pattern of thermohaline circulation. This was done by sampling 25 stations along the coastal water of Kuala Terengganu. The second part was to measure the subsurface current by ONO-self recording current meter and drogue.

The thermohaline circulation was dominated by mixing during the north-west monsoon period (October 1992, February and March 1993) due to the turbulence

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SEPTEMBER 1994

Chairman : Mohd. Nasir Saadon, Ph.D

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The thermohaline circulation was dominated by mixing during the north-east monsoon period (October 1992, February and March 1993) due to the turbulence

resulting from the action of wind and tide. A dominant feature of this study was the occurrence of upwelling during the south-west monsoon period (May to August 1992). The downwelling occurrences are in the north-east monsoon.

The study showed that the subsurface current in the coastal waters of Kuala Terengganu were influenced by the tide. The current speed throughout this study varied from 0.012 to 2.6 m/s. The tide throughout this study was diurnal in nature. A dominant feature through this study was tidal current while, the winds have no impact on the water movement. Finally the data of surface current illustrated that the water meanders in the month of April 1993. Meander rotated in clockwise direction from the north to south-west direction with an average current speed of about 0.4 m/s.

Bagian pertama adalah mengenai kitaran terbelah. Ini dilakukan ke atas 25 buah stesen kajian sepanjang perairan pantai Kuala Terengganu. Bahagian kedua pula adalah untuk mengukur arus sub-permukaan menggunakan meter arus "CNO self recording" dan "drogue".

Kitaran terbelah telah didominasi percampuran khasnya semasa tempoh Musim Tawar Laut (Oktober, 1992; Februari dan Mac, 1993) akibat daripada pengaliran hasil