

CURRENT DISTRIBUTION ALONG PENINSULAR
MALAYSIA FROM BLUELINK

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FACULTY OF MARITIME STUDIES AND MARINE SCIENCES
UNIVERSITI MALAYSIA TERENGGANU

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**CURRENT DISTRIBUTION ALONG PENINSULAR MALAYSIA FROM
BLUELINK**

By

Chong Shu Ting

**Research Report submitted in partial fulfillment of
the requirements for the degree of
Bachelor of Science (Marine Science)**

**Department of Marine Science
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**DEPARTMENT OF MARINE SCIENCE
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE
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**DECLARATION AND VERIFICATION REPORT
FINAL YEAR RESEARCH PROJECT**

It is hereby declared and verified that this research report entitled:

Current distribution along peninsular Malaysia from BLUElink by Chong Shu Ting, Matric No.14725 have been examined and all errors identified have been corrected. This report is submitted to the Department of Marine Science as partial fulfillment towards obtaining the Degree Bachelor of Science (Marine Science), Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu.

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ABSTRACT

The climate pattern of Malaysia mostly influenced by monsoon winds where there is two types of monsoons, the Northeast monsoon (November to March) and Southwest monsoon (May to September). The ocean circulation patterns off the Peninsular Malaysia (South China Sea) also affected by the monsoon winds where the ocean current is flow from the north toward the south of peninsular Malaysia during Northeast monsoon while during Southwest monsoon, the ocean current is move from the south toward the north of the Peninsular Malaysia. The temperature in the South China Sea is influenced by the water intrude from the north or south of the Peninsular Malaysia where the ocean current bring in the colder water to mix with the usually warmer water in the sea off the Peninsular Malaysia. Besides, a coastal current had been observed along the east coast of Peninsular Malaysia where the coastal current is flow parallel to the east coast and the direction of its flow is follow the trend of monsoon season winds blow. The coastal current speed and width is proportional to the winds stress during the season which mean stronger and wider when it is in the middle of Northeast monsoon seasons compared to Southwest monsoon seasons and inter-monsoon seasons where the strength of the Northeast monsoon winds is greater than the Southwest monsoon winds and also the inter-monsoon winds.

PERTABUHAN ARUS LAUT SEPANJANG SEMENANJUNG MALAYSIA DARIPADA BLUElink

ABSTRAK

Pola iklim Malaysia dipengaruhi oleh angin monsoon di mana terdapat dua jenis musim monsoon iaitu angin monsoon timur laut (November hingga March) dan angin monsoon barat daya (May hingga September). Pola arus laut di luar Semenanjung Malaysia (Laut China Selatan) juga dipengaruhi oleh angin monsoon di mana arus laut mengalir dari utara ke selatan Semenanjung Malaysia semasa angin monsoon timur laut manakala arus laut mengalir dari selatan ke utara Semenanjung Malaysia semasa angin monsoon barat daya. Suhu di Laut China Selatan dipengaruhi oleh kemasukan air dari utara dan selatan yang dibawa masuk oleh arus laut, air yang lebih sejuk dari utara dan selatan bercampur dengan air yang biasanya lebih tinggi di Laut China Selatan di luar Semenanjung Malaysia. Selain daripada itu, arus persisiran pantai telah diperhatikan sepanjang persisiran pantai timur Semenanjung Malaysia di mana arus itu mengalir secara selari dengan persisiran pantai timur dan arah pengalirannya mengikuti arah tiupan angin monsoon. Kelajuan dan lebar arus persisiran pantai tersebut adalah propotional dengan ketekanan angin mengikuti musim monsoon iaitu lebih kuat dan lebar semasa di tengah musim angin monsoon timur laut berbanding dengan musim angin monsoon barat daya dan di antara musim monsoon di mana kekuatan angin Northeast monsoon adalah lebih besar daripada angin semasa angin monsoon barat daya dan di antara musim monsoon.