UNIVERSITI TEKNOLOGI MARA

Chlorophyll-a Concentration Mapping in Northern Region of Peninsular Malaysia Waters

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Thesis submitted in fulfillment
of the requirements for the degree of
Bachelor of Surveying Science and Geomatics
(Honours)

Faculty of Architecture, Planning and Surveying

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Phytoplankton which is the indicator for fish presence in the sea have chlorophyll to capture and convert the solar energy into organic matter, the amount of phytoplankton present in the ocean can be assessed by measuring chlorophyll concentrations. Chlorophyll concentration and distribution in one area is changing from time to time and it is not fixed because the chlorophyll affected indirectly by climatic factors, such as changes in sea surface temperatures and surface winds, which affect mixing within the water column and the availability of nutrients. Monitoring the chlorophyll concentration and distribution especially for large area such as Northern Region of Peninsular Malaysia Waters using remote sensing technique which is by satellite image' extraction using specific algorithms can map the trend changes of fish distribution and can know the effect of climatic factors such as changes in sea surface temperatures to the chlorophyll concentration. From the result, it can help fisherman know the location that consist of high concentration of chlorophyll and they can save their cost and time for finding potential area for catching fish.

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