

ASSESSMENT OF COASTLINE CHANGES BY USING  
GEOSPATIAL TECHNIQUE AT PANTAI DUNGUN,  
TERENGGANU

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TECHNIQUE AT PANTAI DUNGUN, TERENGGANU**

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**Thesis submitted to the Universiti Teknologi MARA Malaysia  
in partial fulfilment for the award of the degree of the  
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## **AUTHORS' DECLARATION**

I declare that the work on this project/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). This project/dissertation is original and it is the result of my work, unless otherwise indicated or acknowledged as referenced work.

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## **ABSTRACT**

This study aims to assess coastline changes at Pantai Dungun, Terengganu, by employing geospatial techniques. Specifically, the objectives are to extract the coastline of Pantai Dungun using Google Earth Pro for the years 2012 and 2023, and to calculate the rate of erosion and accretion over this period. The research addresses two main questions which the first is how can the coastline of Pantai Dungun be accurately extracted? and what are the rates and spatial patterns of coastal erosion and accretion along Pantai Dungun? By analyzing geospatial data, this study seeks to provide a comprehensive understanding of the coastal changes that have occurred over the past decade. The findings will contribute to better coastal management and mitigation strategies in response to erosion and accretion patterns observed in the area. The results indicate significant variations in coastline dynamics, highlighting the need for continuous monitoring and effective coastal zone management practices.

**Keywords:** Coastline Changes, Geospatial Techniques, Pantai Dungun, Erosion, Accretion, Coastal Management

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