ASSESSMENT OF SHORELINE CHANGES FOR PAHANG COASTAL AREA BY USING DIGITAL SHORELINE ANALYSIS SYSTEM (DSAS) APPROACH.

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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

Pahang's coastal region in Malaysia is vital for its nature and economy. It stretches 322 km along the south China Sea, with beaches, mangroves, and diverse wildlife. Pahang is located on Peninsular Malaysia's east coast and boasts a number of beautiful coastlines with intriguing landscapes that might draw tourists in. The five (5) significant coasts, Pantai Cherating, Kampung Sungai Ular, Pantai Balok, Pantai Batu Hitam and Pantai Beserah are classified as facing the problem of coastal erosion, specifically with anthropogenic activities along this shoreline having social, environmental, and economic value. This research purpose is to extract shoreline by using satellite imageries within the year 2014-2023, where year 2006 as the baseline to calculate the erosion rate throughout all the study area by using End Point Rate (EPR) method. The average erosional rate across all areas is -2.01 m/year, with Pantai Balok experiencing the highest erosion at -6.55 m/year from 2014 to 2023. The average accretional rate is 1.42 m/year overall, with Pantai Balok also recording the highest accretion at 13.43 m/year during the same period, respectively. Implementation of Digital Shoreline Analysis System (DSAS) provide a comprehensive assist in computing shoreline change and provide the rate-of-change information. This study plays a crucial role in assisting authorities in finding effective solutions to erosion challenges and encourages information exchange among coastal communities. It is essential to raise awareness about erosion, particularly among those most affected, to improve mitigation strategies and preparation for potential impacts.

Keywords: Shoreline, Erosion, Accretion, Digital Shoreline Analysis System (DSAS), End Point Rate (EPR), Pahang.

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