Analisis Spasial Perubahan Garis Pantai di Pesisir Kabupaten Subang Tahun 2004-2022 = Spatial Analysis of Coastline Changes on the Coast of Subang Regency 2004-2022

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Abstrak

Indonesia merupakan negara kedua dengan garis pantai terpanjang setelah Kanada sepanjang 81.000 km (Dep. Kelautan RI, 2002). Wilayah pesisir pantai Utara Kabupaten Subang mengalami degradasi fisik pesisir akibat alih fungsi lahan dari mangrove menjadi tambak sehingga memberikan pengaruh terhadap garis pantai (Kalther, J. dan Itaya, A., 2020). Penelitian ini dilakukan untuk mengetahui perubahan garis pantai yang terjadi di pesisir Kabupaten Subang dan hubungannya terhadap faktor pendorong baik hidro-oseanografi maupun antropogenik pada periode tahun 2004 – 2022. Metode analisis Digital Shoreline Analysis System (DSAS) digunakan untuk menghitung perubahan garis pantai, klasifikasi terbimbing maximum likelihood untuk mengetahui jenis tutupan lahan di pesisir Kabupaten Subang dan uji regresi linear berganda untuk mengetahui hubungan antar variabel. Hasil analisis menunjukkan bahwa pesisir Kabupaten Subang mengalami dominasi abrasi terbesar sejauh 1,9 km dan akresi terbesar sejuah 1,48 km. Perubahan garis pantai signifikan disebabkan karena perubahan luasan hutan mangrove dan keberadaan muara sungai dengan interpretasi korelasi yang sangat kuat dan memiliki hubungan yang searah, kecuali variabel gelombang.

.....Indonesia is the second country with the longest coastline after Canada with a length of 81,000 km (Dep. of Maritime Affairs, 2002). The northern coastal area of Subang Regency is experiencing coastal physical degradation due to the conversion of land from mangroves to ponds so that it has an influence on the coastline (Kalther, J. and Itaya, A., 2020). This study was conducted to determine the coastline changes that occur on the coast of Subang Regency and their relationship to the driving factors both hydro-oceanographic and anthropogenic in the period 2004 – 2022. The Digital Shoreline Analysis System (DSAS) analysis method is used to calculate shoreline changes, guided classification maximum likelihood to determine the type of land cover on the coast of Subang Regency and multiple linear regression test to determine the relationship between variables. The results of the analysis showed that the coast of Subang Regency experienced the largest abrasion dominance as far as 1.9 km and the largest accretion as far as 1.48 km. Significant shoreline changes are caused by changes in mangrove forest area and the presence of river estuaries with a very strong correlation interpretation and has a unidirectional relationship, except for the wave variable.