

Coastal Erosion Due to Transition of Mangrove System

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Abstract

A coast in south Vietnam, which is located in a wide and flat alluvial fan and neighbours tidal rivers fringed by wide mangrove swamps, has been eroded continuously with 50m/year since the early year of 20th century at the least. Based on field observations and numerical experiments, it is inferred that this large scale erosion is caused by the transition of mangrove vegetation resulting from human impacts since the end of 19th century.

The eroded coast does not directly contact to mangrove swamps, but is strongly affected by them through the intermediation of a neighboring tidal river. Thus, for preventing the coastal erosion in this type, the mangrove vegetation in the background area should be managed sensitively.