

Morphological Characteristics and Development of the Estuary Area of Lam River, Vietnam

Authors : Hai Nguyen Tien

Abstract : On the basis of the structure of alluvial sediments explained by echo sounding data and remote sensing images, the following results can be given: The estuary of Lam river (from Ben Thuy bridge to Cua Hoi) is divided into 3 channel (location is calculated according to the river bank on the Nghe An province) : i) channel I (from Ben Thuy bridge to Hung Hoa) is the branching river; ii) channel II (from Hung Hoa to Nghi Thai is a channel develops in a meandering direction with a concave side toward Ha Tinh province; iii) channel III, from Nghi Thai to Cua Hoi is a channel develops in a meandering direction with a concave side toward Nghe An province. This estuary area is formed in the period from after the sea level dropped below 0m (current water level) to the present: i) Channel II developed moving towards Ha Tinh province; ii) Channel III developed moving towards Nghe An province; iii) In channel I, a second river branch is formed because the flow of river cuts through the Hong Lam- Hong Nhat mudflat, at the same time creating an island. Morphological characteristics of the estuary area of Lam River are the main result of erosion and deposition activities corresponding to two water levels: low water level below 0 m and water level 0 m (current water level). Characteristics of the sediment layers on the riverbed in the estuary can be used to determine the sea levels in Late Holocene-Present.

Keywords : Lam River, development, Cua Hoi, river morphology

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