# ESTABLISHING AND STANDARDIZING COASTLINE

# ON SATELLITE IMAGES

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**ABSTRACT:** It is very important to define accurately coastline in planning land use and managing resource, environment and natural hazard at coastal zone. Many studies established the status quo of coastline from satellite images for various purposes, especially for erosion – accretion coast hazard assessment, but the scientific basis as well as unclearly identified methods affect the accuracy of the research results, even may lead to the wrong conclusions about science. This report clarifies the characteristics of the coastline, the factors influencing on defining and standardizing them outside and on satellite image. On the basis of recognized signs, the subject has been studied and established classification methods combined with Digital picture and multi-band multi-date images to define and standardize coastline on satellite image for the specific type of coastline in Vietnam: the coast with tidal mangrove swamps, origin rocky shore, the impact beaches dominated by waves, shore created by human works. These methods were applied practically to establish automatically coastline at Sam Son (Thanhhoa) and the coast of Haiphong City on satellite image of Landsat 8, Spot 5 to obtain high accuracy results.

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