

## **Analysis and evaluation of erosion and deposition processes in Ca Mau by remote sensing and GIS**

**Abstract:** Shoreline extraction using remote sensing and GIS technology is essential to assess shoreline changes quickly and promptly. Ca Mau is an area with 3 sides bordering the sea, so there is always an erosion and deposition process that occurs strongly. The study used remote sensing and GIS images to map shoreline changes in the Ca Mau area. The results showed that the shoreline in the Ca Mau area was quite complicated. Specifically, in the area in the East of Ca Mau from Dam Doi to Ngoc Hien, most of the erosion process occurred from 1989 – 2017, but in the area near the tip of Ca Mau, the deposition process occurred, while in the western of Ca Mau from Ca Mau cape to U Minh district, the deposition process prevailed in the period 1989 – 2015 but in the period from 2015 – 2017, the process of erosion. This is one of useful information for local authorities to have solutions for coastal area planning and management.

**Keywords:** Shoreline extraction; GIS; erosion; deposition; Ca Mau.