



## **Certain results of the natural deltaic beaches surveillance based on applications of the GIS-GPS and remote sensing techniques on Romania shore**

Mateescu Razvan, Spinu Alina, and Iordache Gabriel

National Institut for Marine Reaseach an Development "Grigore Antipa" Constanta

Due to the coastal geo/hydrodynamics changes induced by the navigation works on the Romanian Black Sea Littoral, negative changes of the coastline have been registered in the last four decades. The surveillance of the shoreline evolution based on GPS and remote sensing modern techniques, shows the need of the shoreline management together with the priority for coastal protection and rehabilitation. Also, the survey of the existing shore protection facilities had revealed the structural integrity and their degree of effectiveness in erosion control. It was determined the priority actions for the vulnerable coastal areas, together with the several complementary beach protections against the threat of high waves and storm surges.

In the present work will be presented and analyzed from multiple points of view the main results of shoreline changes of the Romanian Black Sea Coast.

Key words: shoreline changes, GIS-GPS techniques, evolution trend, vulnerable areas and shore protection