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Book of Abstracts



**Dynamic of coasts line changes in the Black Sea North-Western part for past 30 years.**

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**Abstract**

In line with the EU Marine Strategy Framework Directive coastal abrasion has been chosen one of indicators of impact on coastal ecosystems including the Black Sea.

Aim of the work has been study of dynamics of changes of coast lines under abrasion and accumulation processes in the North-Western Black Sea (NWBS) under the influence of natural and anthropogenic factors for the past 30 years. Materials of investigations were LANDSAT space images from 1983 till 2013 and own experimental data of authors.

Maps of the NWBS coasts destruction intensity and dynamics of coastline between Danube and Dnieper areas have been presented. Analysis of the maps has shown that processes intensity is different in different NWBS areas. Discussed the reasons of moving of coastline especially depending on geological structure and lithological composition of the material exposing on coastal cliffs; sea level, direction and intensity of waves; composition, direction and rate of sediments flow; and human economic activities.

Very detailed are analysed the main areas with maximal changes of location coastline such as river deltas (Danube, Dnister, Dnipro), as well as bay-bars of practically all the Black Sea limans. It has been shown that velocity of coastline retreat as the result of abrasion is not uniform. Coastline segments of high speed of changes have been revealed in the NWBS. Discussed are peculiarities of coastline changes in the deltaic areas of the Dnipro, the Dnister and the Danube and in the area of the city of Odessa, where natural and anthropogenic displacement of coast towards the sea – formation of new land areas.



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