

ESTIMATED REGRESSION OF COASTLINE

 Axis
 Bloc 1.1
 Thematic area

 Disciplinary research
 Environment
 Coastal variability and global change

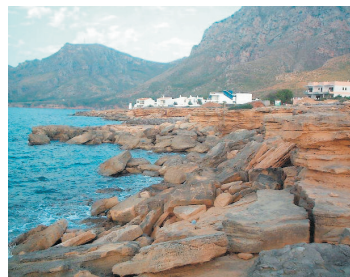

Summary

The interests present in coastal areas and the pressures of urban development to which most of the Balearic coastline is submitted make it necessary to study in depth the key features of regression and the future behaviour of the coast.

The estimation of rates of regression of the coastline, from a perspective of ICAM, can help greatly in making decisions regarding possible action in various coastal areas.

Actions

-Establish the regression of the coastline from aerial photography from 1956, 1973, 1979, 1983, 1990 and 2001 to gain rates of erosion/regression of the coastline over 45 years.



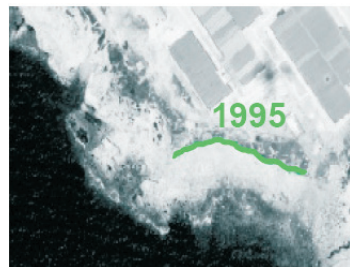
Coastline of Betlem (Artà)



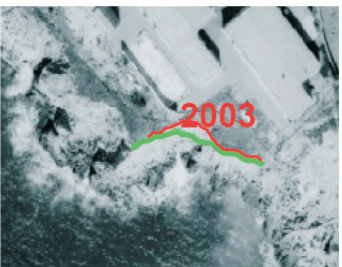
Coastline of s'Alavern (Llucmajor)

-Establish the average rate of regression for the past 45 years for all dunal systems in the Balearic Islands through the same methods as for erosion of rocks, but taking into account changes in the first series of dunes, or 'foredune'.

-For transitional waters and lagoons there will be a calculation of the rate of loss of surface area (m²/year), for which there will be a definition of the impact of man-made changes and changes in climate, etc.



Regression of the coastline at Marivent-Castell de Sant Carles (Palma, Majorca)



Applications

Research

The proliferation of work and research articles referring to the regression of the coastline following similar methods to that mentioned above restates the growing importance of these aspects in the international scientific community from an ICAM perspective. ICAM requires the compiling (or creation, if they are not present) of specific work analysing various processes affecting the coastline in any of its scientific aspects.

Administration

The information generated from the establishment of rates of regression of the Balearic coastline can form a very useful tool for the management of specific aspects, such as for example natural risk, for the relevant departments of the Balearic Ministry of the Environment, island councils, etc.

Enterprise

The establishing of rates of regression of the coastline of the Balearic Islands can facilitate access to information for all businesses with the responsibility of assessing or carrying out any action in the general field of the coast.

Contact

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