Southern European Seas: Assessing and modelling ecosystem changes

Results in Brief

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Opening up predictions for European sea ecosystems

A major project, Sesame, has assessed ecosystem changes in the Mediterranean and Black Seas in the past 50 years. The overall goal was to predict the ability of these two rapidly evolving waters to provide goods and services in the coming five decades.

CLIMATE CHANGE AND ENVIRONMENT

The 'Southern European seas: Assessing and modelling ecosystem changes' (Sesame) project gathered new data during multidisciplinary oceanic cruises. This exercise has provided a completely new picture of the Mediterranean and Black Seas as well as essential data sets for model validation. Predictions will cover ecosystem responses to changes in climate and anthropogenic forces.

The Sesame study incorporated the effect of ecosystem variability on a variety of key goods and services. These included tourism, fisheries, ecosystem stability though conservation of biodiversity, and mitigation of climate change through carbon sequestration in water and sediments.

Scientists in marine biology, biodiversity, physical and chemical oceanography, and socio-economics collaborated to integrate the areas of natural and economic sciences. As both seas are prone to large changes during the time scale of the

decade and even within a year, simulations using data from this range of disciplines promise to provide more accurate models of sustainability.

Sesame has viewed the Mediterranean and Black Seas as one interconnected large system. Identification of major regime shifts in the past 50 years and production of projected forecasts for the same time period in the future will help to create a sustainable management package for their ecosystems.

Project Information

SESAME

Grant agreement ID: 36949

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1 November 2006

End date
30 April 2011

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FP6-SUSTDEV

Overall budget
€ 14 794 318

EU contribution
€ 9 999 121

Coordinated by
HELLENIC CENTRE FOR MARINE RESEARCH
Greece

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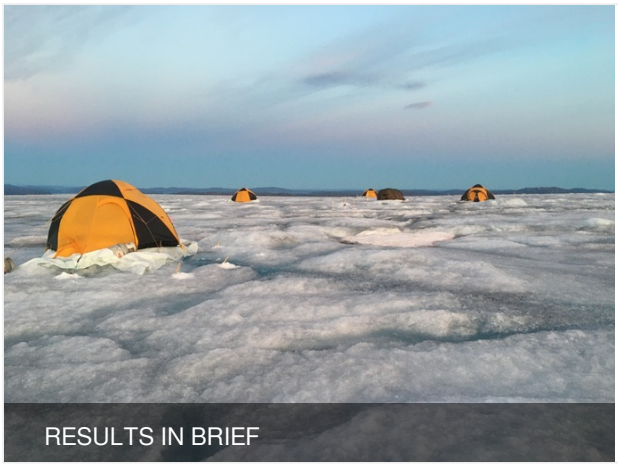

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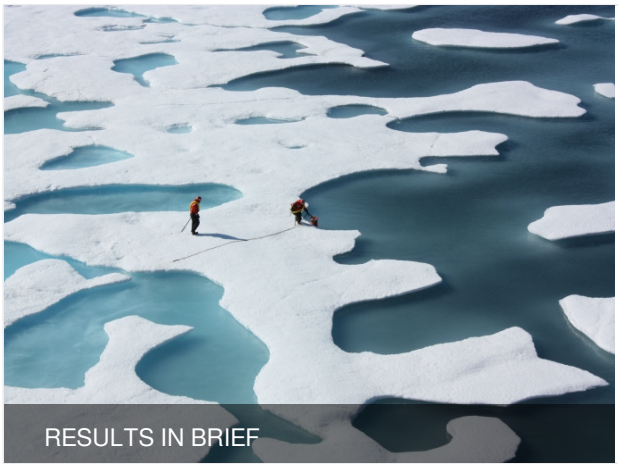

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