

PRESS RELEASE

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FOR IMMEDIATE RELEASE

MULTINATIONAL OCEANOGRAPHIC CRUISES TO STUDY CLIMATE CHANGE IN THE MEDITERRANEAN & BLACK SEA

Following the first simultaneous cruises to the Mediterranean and the Black Sea in the months of March-April 2008, the SESAME project is embarking upon a follow-up set of cruises for data collection purposes in the Mediterranean and the Black Sea. Another unique scientific and educational experience is in store for everyone, as for the first time, the scientific community will join efforts to sample the two ecosystems at the same time. The results will be combined with these from the first set of cruises to complete the picture of the two seas at different times and thus assess the seasonal variability in the Southern European Seas. The SESAME database will be filled with all the new data and the researchers will then begin to produce scenarios that will predict the future changes that may affect these ecosystems in the next 50 years.

Nine different cruises have been planned, beginning in June and up until September, arising from the different partners involved in the SESAME project. Oceanographic vessels from Greece, Italy, Spain, France, Romania, Russia, Turkey, Bulgaria and Israel will simultaneously sample the Mediterranean and the Black Sea this summer, in order to collect data for the SESAME database. This set of cruises will trace the same sea routes as the *Ünlüata* cruises of March-April 2008, in order to study and compare the two seas at different times of the year and thus assess the seasonal variability of the ecosystems.

The main objective of the SESAME Autumn Cruises is to sample the two environments at the same time, and thus prepare high quality datasets of new hydrographical, chemical and biological data collected. Some of the parameters to be measured include temperature, salinity, dissolved oxygen, nutrients and chlorophyll-a. Additionally, samples for inorganic and organic dissolved carbon measurements, total alkalinity, as well as bacterial, phytoplankton and zooplankton biomass and production will also be taken. Finally samples of the CO₂ concentrations in the sea water and the air will be measured to identify the role of the sea in terms of carbon sequestration. All these will be incorporated into the SESAME database and will be used for the implementation, tuning and evaluation of the ecological models.

The innovation of the project is that for the first time in March-April 2008 the two seas were sampled simultaneously; these new cruises will add more data to the project's database especially for the summer season and thus help produce a clear and accurate snapshot of the state of the two ecosystems to help reproduce the model outputs as accurate as possible. All sampling activities fall under the project's work frame, and this newly collected data will be compared to historical data sets from 50 years ago. The results will, in turn, feed the models which will produce scenarios to predict possible changes in these ecosystems in the next 50 years to come.

Scientists, journalists, the general public, and schools in particular are invited to

'follow' the cruises online, as a special map with all stations, a cruise diary, and photos from aboard the research vessels will be uploaded daily on the website. A special area to host the cruises online has been created, where each vessel is shown with clear location coordinates, and also includes photos, as well as the daily diary both in the respective language and in English, thus making it accessible to a wide audience. Additionally, some schools will be able to connect to the researchers via a telephone connection, thus further strengthening the education initiatives and public outreach that underpin the project.

These cruises will not only collect crucial data for these ecosystems, but they add a societal and educational perspective to science, which will encourage the involvement of school children, and the society at large, in research activities, with the hope of raising awareness about the sea and climate change in general.

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1. The project's website, where further information regarding the cruises and the project in general can be found is <http://www.sesame-ip.eu/index.php>
2. The direct link to the cruise page on the website is <http://www.sesame-ip.eu/public/follow-the-cruises>