



*This project
is supported by:*

The NATO Science for Peace
and Security Programme

Protecting the Gulf of Aqaba from Anthropogenic and Natural Stress

(ref. SFP-981883)

Since January 2007, experts from Jordan, Israel and Turkey have worked on a project to protect the Gulf of Aqaba from anthropogenic damage in the face of global climate change. The project involves the establishment of quantitative relationships between water optics and water quality, the correlation of algal pigment composition with the structure of phytoplankton, and the relationship between this pigmentation and photosynthesis in the presence of nutrients, pollutants and dust. Plans also include comparing satellite spectral images with historical images. Every month since the start of the project, a scientific expedition has been undertaken in the Gulf of Aqaba, accompanied by analyses of phytoplankton composition, pigmentation and both phytoplankton and zooplankton taxonomy. In the coming months, expeditions will continue, along with laboratory studies of the effects of nutrients and dust on phytoplankton. In implementing the results of the study, end-users will be able to use a model in which changes in bio-optical parameters and in the structure of plankton assemblages can be interpreted as a warning that corrective action is required.



Israeli and Jordanian scientists undertake a joint sampling expedition on the Gulf of Aqaba.

Project Co-Directors:

- Dr. Dilek Ediger, TÜBİTAK, Marmara Research Ctr., Gebze-Kocaeli, Turkey (NPD)
- Dr. David Iluz, Bar-Ilan University, Ramat Gan, Israel (PPD)
- Dr. Tariq Al-Najjar, University of Jordan, Marine Science Station, Aqaba, Jordan
- Prof. Levent Bat, University of Ondokuz Mayıs, Sinop, Turkey

Approval Date: July 2006

Effective Date: January 2007

Duration: 3 years; expected completion by December 2009