Natural and Anthropogenic Aerosol Pollution in the Gulf of Aqaba
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Scientists from Israel, Jordan and the United States, are cooperating on a project to assess the impacts of aerosol pollution on the ecosystems of the Gulf of Aqaba. The project has involved making estimates of the input of nutrients, trace metals and other pollutants into the atmosphere, in order to determine the impact they have on marine ecosystems. This includes the integration of field, laboratory, modelling and remote-sensing data. Since the start of the project, the researchers have collected aerosol samples every three days and performed analyses of nutrient and trace metal pollution. Historical remote-sensing data of optical depth and chlorophyll content have also been collected, and experiments have begun on algal growth and genomic make-up. In the coming months, the researchers plan to conduct monthly monitoring of water columns and aerosol sampling. Analyses will also be performed of images acquired from space. Work has begun on a conceptual ecosystem model, which will constitute the final product for the end-users, including the Ministries of the Environment of both Israel and Jordan.

Project Co-Directors:
• Dr. Adina Paytan, University of California-Santa Cruz, Santa Cruz, CA, USA, (NPD)
• Dr. Arnon Karnieli, Ben Gurion University of the Negev, Beersheva, Israel (PPD)
• Dr. Tariq Al-Najjar, University of Jordan Marine Science Station, Aqaba, Jordan
• Dr. Anton Post, Interuniversity Institute for Marine Science, Eilat, Israel

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