



## **The Application of Numerical models RAMS/HYPACT to study Atmospheric Dispersion of pollutants emitted by Power Plants in the Eastern Mediterranean Coast**

**D. Travinsky** (1), I. Mahrer (1), D. Pedersen (2), M. Luria (2)

(1) Department of Soil and Water Sciences, The Hebrew University of Jerusalem, Israel, (2) Department of Atmospheric Science, The Hebrew University of Jerusalem, Israel, (mahrer@agri.huji.ac.il)

The study presents a numeric simulation of pollutant dispersion emitted by Power stations located on the coastal plane of Israel. The Regional Atmospheric Modeling System (RAMS) and Hybrid Particle and Concentration Transport (HYPACT) were used to analyze the particulate matter (PM 2.5) dispersion emitted by a continuous and high-point source located in Ashdod (31.81N, 34.65E) and Ashkelon (31.66N, 34.59E) relating its behavior with the local circulations. Pollutant concentrations were measured in Nehusha, an inland monitoring station (31.62N,34.95E). The results predicted by the model were compared with measurements made during the period of 9/5 to 6/6. The results correspond closely with the measured values.