Space and GIS techniques in the sustainable development of touristic areas

Michael Petrakis, Basil Psiloglou, Christos Chalkias, Eleni-Ioanna Petraki Institute for Environmental Research, National Observatory of Athens

mike@meteo.noa.gr

The purpose of this paper is to present a methodology for the development of a decision support tool that the local authorities of different touristic areas could use, in order to assess and manage the state of the environment in relation with the tourism pressure. The study of human impact from tourism like activities on the environment, is an essential procedure in order to preserve the sustainable development of these areas. Some of these activities—can be assessed by in situ observations, measurements and field campaigns. Other activities—such as oil slicks, transport of effluent discharges, illegal housing, urbanization, coastal erosion and coastal management present a real challenge for the present status of space techniques. In an effort to provide periodic, synthetic, quantitative and cost-effective information on the interaction between tourism carrying capacity and the environmental status of the islands, geographic and environmental data have been collected, processed and incorporated in a decision support system. These modern techniques could provide the local administration and environmental managers with a user friendly interactive managerial tool for the sustainable development of these areas.