



## Laboratory of Geophysical – Satellite Remote Sensing & Archaeoenvironment: Monitoring, Mapping and Modeling the Cultural and Natural Environment through Geoinformatic Approaches

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### ABSTRACT

The Laboratory of Geophysical – Satellite Remote Sensing & Archaeoenvironment (GeoSat ReSeArch) of the Institute for Mediterranean Studies, Foundation for Research and Technology, Hellas (IMS-FORTH) was funded in 1996. The Lab of IMS has been the first in the area of Eastern Mediterranean offering an integrated and specialized suite of tools dealing with the ground based-satellite remote sensing prospection and GIS management of environmental resources and cultural heritage monuments and sites protection. Specifically, the Laboratory of Geophysics - Satellite Remote Sensing & Archaeoenvironment (GeoSat ReSeArch Lab) is active in the field of Geoinformatics, covering a wide range of Geophysical Surveys, Geographic Information Systems (GIS), Satellite Remote Sensing, Photogrammetry 3D visualization and Landscape modelling. Emphasis is placed on both the natural and cultural environment. The Laboratory conducts basic and applied research in the above research fields through International, European and National research programs. At the same time, the Lab has developed a training and education program for researchers of geophysical, Earth Observation and Geographic Information Systems applications in archeology and culture, while at the same time is conducting studies on the anthropogenic effects on the natural environment over time. Equipped with the most modern geophysical equipment for the investigation of shallow depths and with the development of algorithms for processing geophysical data and tools for spatial analysis and models through Geographic Information Systems and satellite image processing, the Laboratory offers a complete package of services related to imaging surface, subsoil and shallow submarine targets, mapping of natural / cultural resources, developing Web GIS applications and developing web geographic databases. The Laboratory has entered into numerous collaborations with university and research institutions from Greece and abroad beyond the borders of the Mediterranean. The continuous activities of the Laboratory are disseminated through scientific publications, international conferences and workshops.