

Description of the funded research project

1st Call for H.F.R.I. Research Projects to Support Faculty Members & Researchers and Procure High-Value Research Equipment



Title of the research project: Aegean Islands: Palaeoenvironment and Early

Human Settlement

Principal Investigator: Nikos Efstratiou

Reader-friendly title: EGEOLAND

Scientific Area: Humanities and Arts

Institution and Country: Aristotle University of

Thessaloniki, Greece

Host Institution: Aristotle University of

Thessaloniki

Collaborating Institution(s): Malcom H. Wiener Laboratory for Archaeological Science, American School of Classical Studies at Athens (ASCSA)

Project webpage

(if applicable): egeoland.web.auth.gr







Budget: 199.980 e

Duration: 30 months

The issue of the arrival of the first human groups in the Aegean islands and the subsequent colonization of these unique physical and cultural environments has in recent years become one of the main research questions which has drawn the interest of scientists from a wide spectrum of specialties such as archaeology, geology, palaeogeography, micromorphology, palaeoenvironment, marine sciences etc. Although the subject of the first arrival of humans in the islands has been for long the focus of general historical interest, the acquisition of hard scientific data (archaeological, environmental etc) was till recently greatly overlooked and not given a high priority. As it is often the case, an unexpected discovery – in this case the finding of the early site of 'Ouriakos' on Lemnos (11th mill BC) opened a new chapter for Aegean archaeology leading to the revival of the interest for conducting systematic interdisciplinary field research in the islands. Indeed, 'Ouriakos' is the first 'open-air' island site recorded so far in the which is offered for a conclusive geoarchaeological and environmental study aiming at understanding early habitation choices and patterns in an island. The presence of the short-term campsite of 'Ouriakos' on Lemnos, with its rich archaeological record, coastal positioning and surrounding flat plain, is an ideal place to conduct the wellfocused and high-resolution fieldwork proposed by the project, which is targeted at forms of early coastal adaptations by foragers leading a mobile and seasonal way of life within a volatile habitat where the sea and the land are in constant change. In short, our proposal will investigate how the coast and the Fyssini plain looked like 12.000 years ago in terms of its geology, geomorphology, hydrology, environment and human activities.

Research Project Synopsis



The core of the proposed research is to reconstruct the paleogeography and environmental setting of a Final Palaeolithic campsite which is currently archaeologically investigated in the island of Lemnos. The site of Ouriakos has recently produced the first evidence for hunters and gatherers on this island of the Aegean during the time of the climatic episode of Younger Dryas (ca. 10,800-9,600 cal BC), with a large number of chipped stone tools found. It is a matter of particular interest when studying the life of early islanders in the Aegean to incorporate to the little that is currently known, new data regarding the evolution of island landscapes and coastlines, sea level changes, climate and vegetation records, fluctuations in temperature and precipitation, and in general, what can be described as the earth-science side of the story of a site such as Ouriakos. The reconstruction of the coastal (paleodune formation, palaeocoastal changes) and inland (plain, river) area around Ouriakos as well as the high resolution geoarchaeological study of the site itself (sedimentology, micromorphology, biological markers), with its rich and unique for the Aegean area material remains, will be a matter of particular interest regarding the geomorphological and cultural history of the Aegean and the practice and scopes of island archaeology (eustatic changes, archaeological visibility, submerged landscapes, early navigation).

Project originality



The results of the fieldwork relate to two main parameters: i. geoarchaeology / paleo-landscape and ii. palaeoenvironment.

The above objectives are expected to combine considerations, which include predictive modelling of where people would have lived in the reconstructed landscape (physical environment, on-land or submerged), assessment of where archaeological deposits would have been preserved and discovery of locations where the archaeological material is visible and accessible. This is particularly evident in the coastal zone of Fyssini which while it may reflect promising ecological diversities (plant and animal life, supplies of fresh water) in general, we are sort of sound indications which could document human presence based on hunting and gathering. Attaining a geoarchaeological insight of the past landscape of Ouriakos and looking for evidence of day-to-day human activities will be achieved through the successful reconstruction of coastal palaeogeography which specifically concerns with the formation of the eastern shore of the island of Lemnos and its present configuration in the late Pleistocene/early Holocene (13.000 to 12.000 years ago). It is important to note that the proposed study is designed around an archaeologically focused problem and brings together in collaboration earth scientists and archaeologists.

Expected results & Research Project Impact



Funding by ELIDEK was essential to the completion of the scientific tasks set by the archaeological fieldwork in Lemnos and more specifically at the site of Ouriakos. Our field experience in the island over the years had formulated a number of geoarchaeological and archaeometric research questions which could only be answered through a systematic coring program, sampling and costly laboratory analysis. Moreover, specialized studies involving high tech equipment will help the reconstruction of palaeogeographic and eustatic parameters. The wide range of interdisciplinary studies funded by ELIDEK are the only way to understand better the cultural choices taken by the first inhabitants of the Aegean islands.

The importance of this funding



