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The Marine Landscape of an Island Settlement 8.000 Years Old in the Aegean: A Comment on Global Warming-Looking Back

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Opinion

(Figure 1)

Figure 1: The islet of Agios Petros (courtesy of N. Efstratiou).

The aim of the currently running 5 year project (2021-2025) at the site by the Department of Archaeology, Aristotle University of Thessaloniki, Greece and the Underwater Department, Ministry of Culture, Athens, Greece [supported by the Honor Frost Foundation and local private sources], is to re-examine the underwater Neolithic remains of the submerged section of this 8.000 years old Early Neolithic site (6.000 BC), one of the oldest island settlements found so far in Greece.

1. The Early Neolithic settlement of Agios Petros is already well known among Aegean prehistorians. Founded by a community of farmers, fishermen and seafarers, who arrived by sea from the east in this safe anchorage and well protected bay of the Northern Sporades just before 6.000 BC, the site presents a unique archaeological example of an island settlement with a dozen stone structures (houses) which were gradually submerged as the sea level was rising at a rate which is difficult to estimate without detailed geoarchaeological studies.

2. The Aegean archaeological record for the period between 9000 and 6000cal BP is crucial for the investigation of the settling of the area by farming communities moving from the Near East and the interaction with local hunter-gatherers that managed terrestrial and marine resources in coastal areas and the islands since at least the beginning of the Holocene amelioration. In this line, the Sporades archipelago was an exceptional case for the investigation of human responses to the Early Holocene climatic and palaeoenvironmental characteristics.

3. Interdisciplinary archaeological research has brought together cultural evidence, palaeoenvironmental data and insights to the effect of global climate events. At the big scale, the aim was to discuss and gain a better understanding of human presence in relation to global climate change.

4. Underwater investigations at the now partly submerged site have provided new evidence for cultural and environmental aspects of the period that involves the well known 8.2cal BP cold episode. Despite its signal in the Aegean palaeoenvironmental record, this global climatic episode is thus far hardly perceived in the archaeological record. There is secure archaeological and radiometric evidence that the Neolithic farming way of life was established in the area before the 8.2 climatic event. Climate changes do not seem to have affected settlement patterns and the subsistence economy of Neolithic communities on the mainland and where changes have been observed these are mostly indicated by lateral shifts of the settlement areas.

5. But how would such an event have been felt in an island environment? To this end, the research project at Agios Petros has provided data for human responses to climatic and environmental change, which in this case- study be for the moment reflected in

a) Sea-level changes occurring in the life span of the Neolithic village and

b) Collection of organic bio-markers (seeds, seashells) in order to extract information about possible climatic changes in the past.

Research in such an environmental setting and involving periods of abrupt climatic change is timely.

6. The effects of on-going climate change and the threats for coastal areas around the globe are at the heart of research, activist campaigns and political decision-making; even more so given that coastal areas have always attracted human populations.

7. To this end alongside simulations, climate modeling and prevention efforts the present archaeological paradigm has provided insights to the responses of human societies in times of crisis and environmental change.

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