Searching for metal-processing activities at prehistoric Thorikos

Andreas Charalambous(1), Liana Philippaki(2), Meropi Manataki(3), Vasiliki Kassianidou(1), Sylviane Déderix(4), Nikolas Papadimitriou(4), Apostolos Sarris(1, 3), Yiannis Bassiakos(2)

(1) Archaeological Research Unit, University of Cyprus, 12 Gladstone Street, Nicosia 1095, Cyprus
(2) Institute of Nanoscience and Nanotechnology, N.C.S.R. ‘Demokritos’, 153 10 Athens, Greece
(3) GeoSat ReSeArch Lab, FORTH, Rethymno 74100, Greece
(4) Institute of Classical Archaeology, University of Heidelberg, Marstallhof 4, Heidelberg 69117, Germany

Abstract

Ancient Thorikos was one of the main habitation sites in the metalliferous area of Laurion, SE Attica. Located on the metal-rich Velatouri hill, it was inhabited from the Final Neolithic until late Antiquity. Although metal-processing activities are well-attested for the Classical period, only indirect evidence is available for the Bronze Age – a period of acme for the site. Such evidence consists of Early Helladic pottery and tools found in Mine 3, and of pieces of litharge and molten lead discovered in late Middle Helladic/early Mycenaean settlement layers on top of the Velatouri hill.

In 2018, a new 5-year research program was launched by the Belgian School at Athens, aiming to fill gaps in the prehistory of Thorikos. A major aim of the project is to identify potential metal-processing facilities. For that purpose, we undertook an integrated program of geophysical and geochemical prospection focusing on the part of the hill where the litharge and molten lead were found. First, geophysics were conducted to highlight areas presenting increased background magnetic values. Then geochemical methods were employed to clarify whether these high magnetic values relate to the local geology or, possibly, to the effect of metal-working. This paper presents the methodology and preliminary results of the project.