“Understanding the Athenian silver mines at Laurion through hydrological analyses”

The Laurion area, located in the southeast of Attica in Greece, was intermittently exploited for its silver resources from the Final Neolithic until late Roman times, with a peak in the Classical period. Triggered by the active interference of Athens, this silver rush left dramatic traces in the landscape. Even 2500 years later, the Laurion is still scattered with industrial features, such as mine shafts, spoil heaps and ore washing workshops.

The most impressive features in the current landscape are undoubtedly the large cisterns, providing water for the ore washeries. These reservoirs reveal a larger concern among the miners and metallurgists over the pressing water scarcity in the Laurion. In order to address this issue, they developed high-level water technologies, aimed at the harvesting and distribution of rainwater runoff. The spread of workshops in the Laurion valleys suggests that the competition for appropriate water catchments was fierce, causing both regional and local inequalities between sites in terms of silver processing. During this presentation, I will discuss regional differences between ore washing workshops through hydrological analyses – specifically runoff accumulation and water balance models – in two distinct regions in the Laurion: the coastal area of Thorikos and the central Laurion valleys.

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