Understanding settlement-landscape interaction with literary records and geoinformatics: The case of Homer’s Late Bronze Age Southeast Aegean

Athanasios Votsis\textsuperscript{1} and Dina Babushkina\textsuperscript{2}

\textsuperscript{1}Weather and Climate Change Impacts, Finnish Meteorological Institute, Helsinki, Finland (athanasios.votsis@fmi.fi)

\textsuperscript{2}Department of Economic and Political Studies, University of Helsinki, Helsinki, Finland (dina.babushkina@helsinki.fi)

Advances in Digital Humanities are providing increasingly rich research material for understanding (1) the environmental and locational attributes of ancient settlements and (2) the regional structure of systems of settlements. Non-material records, in particular, provide information about the social and cultural drivers of human-landscape interaction in settlements that, when combined with material records, aid in refining existing models of settlement-landscape evolution and sustainability. We present a case study from Late Bronze Age Southeast Aegean that utilizes literary records, biogeophysical data and geoinformatics methods to offer insights into the abovementioned topics in that region. Specifically, we utilize a georeferenced version of the record of cities and their sociocultural and environmental descriptions, provided in the Catalog of Ships in Homer’s Iliad. We combine this information with datasets from the spatial (physiography, climatology) and temporal (continuities/discontinuities, population) context of those settlements. Ultimately, we are interested in deriving identifiable patterns in our dataset – more specifically, whether there exist patterns of settlement-environment interaction that are inherently more sustainable than others, as well as getting a glimpse into the hierarchy of values underlying this interaction.