



New insights for the Late Pleistocene to Mid Holocene landscape reconstruction in the Western part of the Thessaloniki Plain (Greece): evidence for an abrupt transition and consequences on the settling history

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The Neolithic site of Nea Nikomideia is located at the western limit of the Thessaloniki Plain, Northern Greece and the archaeological excavations conducted in the 1960s suggested that the settlement was located close to an ancient coastline during its early occupation. Recently published results indicated that palaeoenvironmental transitions in the area influenced the human occupation from the early Holocene (6000/5800 cal. B.C.). It was also established that a freshwater lake occupied the vicinity of the Neolithic settlement at the early stages (Ghilardi et al., under press). However, the Late Pleistocene landscape configuration has not been clearly established, despite of some attempts (Lykousis, 2001). This study presents new data, which are correlated with more densely dated proxies in order to thoroughly investigate the Late Pleistocene – Holocene transition as well as the impact of following environmental alterations on the settlement. Special attention is given on periods of soil coverage which are considered indicative of periods with favourable conditions for human occupation. A new sequence is used, based on 3 new boreholes, for laser grain size analysis, loss-on-ignition and carbonate content, magnetic susceptibility measurements, microfaunal inspection and radiocarbon datings (A.M.S.) and it is intercorrelated with other sequences from the area. The synthesis of the proxies reveals distinct events of palaeoenvironmental alterations in a very well constructed chronostratigraphic framework of more than 10.000 years. The Pleistocene subsurface is found in circa 9 meters deep and clearly indicates the presence of a large alluvial fan deposition (calm environment) from Aliakmon River. The abrupt transition with early Holocene sediments reveals that an important influx of fresh water helped in creating a limnic environment of deposition. From Neolithic times to the present day, the area turned into a marine bay and subsequently into a freshwater lake where palaeosoils are clearly identified and dated from Bronze Age and Medieval Times. These two periods of high anthropogenic activities within the newly created plain could also be related to arid climatic events which affected the shape of the recent Holocene palaeo-lake.