



## **Lake Prespa palaeoenvironment since the MIS 5: a continuous record from a mid-altitude site on modern human's way to Europe.**

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Lake Prespa is situated in the Balkans (40°57'50" N, 20°58'41" E) along the eastern trajectory of modern human dispersal. A long (c. 18m) composite sediment core was investigated using geophysical, geochemical and pollen analyses. This study aims to reconstruct the palaeoenvironment and palaeoclimate from a mid-altitude (849m asl) site and evaluate their implications in the migration of our ancestors from Africa to Europe. The age-depth model, based on radiocarbon dating and tephrochronology, indicates continuous sedimentation reaching back to MIS 5. According to the pollen record, the wider Lake Prespa catchment sustained refugial temperate tree populations throughout this period. Following the decline of woodlands at the end of MIS 5, pollen concentration and TOC percentages retain relatively low values until the onset of the Holocene when closed forest formations dominated the landscape signaling the establishment of a warmer and moister climate. Distinct fluctuations of arboreal relative percentages coupled with the occurrence of TIC and Mn peaks can be tentatively correlated to Heinrich events. Climatic oscillations are sensitively recorded in the Lake Prespa sediments at a sub-millennial scale permitting a detailed reconstruction of the regional palaeoenvironment, as well as correlations with other regional and global climate archives. This project is part of the Collaborative Research Center 806: "Our Way To Europe; Culture-Environment Interaction and Human Mobility in the Late Quaternary" ([www.sfb806.de](http://www.sfb806.de)).

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