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Geoarchaeology and chronology of Sodicho – insights into site formation processes and human activity in a volcanic rock shelter, SW Ethiopia

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Rock shelter and cave sites can be suitable archives for archaeological remains and environmental records if the right conditions are complied with. There are a few sediment stratigraphies in the Horn of Africa that preserved information about human occupation during the Upper Pleistocene and Holocene. Unfortunately, little is known about human settlement in Ethiopia during the period corresponding to MIS 2 due to discontinuous archaeological records. The project A1, within the framework of the Collaborative Research Centre 806 (CRC 806 – “Our Way to Europe”), focuses on Late Pleistocene stratigraphies and paleoenvironments of northeast African sites. In this context, during excavations at the Sodicho Rockshelter in the southwestern Ethiopian Highlands, a complex stratigraphy with evidence of several human occupation phases was exposed.

This poster presents the latest research results of the Sodicho Rockshelter. It displays first radiocarbon ages and the site formation processes according to a selection of sedimentological and geochemical methods to understand human settlement history in this tropical environment. A multi-proxy approach has been chosen to detect possible rapid or gradual changes in depositional conditions in the rock shelter. The sedimentological records suggest that the depositional and post-depositional processes varied significantly over time in response to external environmental changes and the use of the shelter by humans. For instance, lithic assemblages in anthropogenic influenced layers alternate with thick volcanic ash layers. In addition, a sterile, clayish horizon refers to a period of increased precipitation and could thus provide evidence for an African Humid Period. The Sodicho Rockshelter could validate the current state of research and possibly close the chronostratigraphic gap.