Multi-Proxy Analysis of Colluvial Deposits to Reconstruct Land Use Practices in SW-Germany – Preliminary Results

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Our project combines archaeopedological and archaeological knowledge and data for the reconstruction of Bronze Age settlement patterns and land use practices in three landscapes in SW-Germany (Hegau, Western Allgäu, Baar). Being different in physical-geographical conditions and archaeological records, we assess Hegau as favourable and both Western Allgäu and Baar as unfavourable for prehistoric subsistence. However, we also consider a dynamic and relative comprehension of favourability and unfavourability and assume that material and immaterial requirements such as agricultural practices, knowledge, religious and cultural beliefs may have changed through time (JAMES ET AL., 2019, IN PREP.). The presentation focuses on first available archaeopedological and archaeological results at the study site Anselfingen (Hegau).

Archaeological structures from Bronze Age like post holes, fire places, kilns as well as findings like shards, bones and ores within the settlement site are discussed. Hence, initial conclusions can be drawn about settlement chronology, duration and activity areas.

Archaeopedological data acquisition is based on the analysis of multi-layered colluvial deposits (Zádorová et al., 2018, HENKNER ET AL., 2018, PIETSCH AND KÜHN, 2017). Such colluvial deposits are interpreted as the correlative sediments of human-induced soil erosion and as such serve as archives to reconstruct land use practices and landscape evolution (HENKNER ET AL., 2017, LEOPEOLD AND VÖLKEL, 2007). First chronostratigraphies based on luminescence dating techniques (OSL), AMS-14C radiocarbon datings and typological classification of archaeological findings are presented for the study site. Supplemented by pedological data (soil organic carbon, pH, calcium carbonate, grain size distribution, pedogenic oxides) phases of pedogenesis and soil erosion/formation of colluvial deposits will be discussed. Further, data sets of heavy metals, phosphorus, enzymatic activity (e.g. urease) and steroids should decipher human-environment interactions as ore processing, intensified anthropogenic input (waste, dung) and domestication practices in the settlement complex. The results from field work provide us with preliminary archaeological and archaeopedological assumptions for all three landscape units. Additionally, first interpretations of past human-environment interactions can be formulated based on data sets for the site Anselfingen.

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