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Environmental transformations and cultural changes: A multidisciplinary case study for the Late Glacial and Final Palaeolithic from Northern Germany

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In contrast to younger periods, studies integrating archaeological and environmental records for the Palaeolithic are still rare. Especially our knowledge about interactions between the drastic climatic/environmental changes and cultural developments during the Late Glacial is very limited.
This multidisciplinary case study from river Jeetzel, a western Elbe tributary in Northern Germany, combines high resolution palaeoenvironmental investigations with fine-scaled archaeological research on stratified and surface sites. Various dating methods (palynostratigraphy, radiocarbon- and OSL-dating) and analyses of environmental and climatological proxies (pollen and plant macro-remains, ostracods, diatoms and green algae) on river palaeochannel sediments allow detailed reconstruction of interactions between Late Glacial climate, vegetation and fluvial developments. Biostratigraphical analyses on stratified archaeological sites and dating of charcoal / bone fragments from artefact scatters place the Late Palaeolithic occupation of Early Federmesser groups in an environmental context. Thus the former production of hitherto unknown amber art (amongst others a figurine representing a moose) can be ascribed to the Older Dryas and Early Allerød, which are the periods of main Late Glacial afforestation. Therewith our investigations suggest that Final Palaeolithic cultural changes may have been triggered by climatic and environmental transformations.