Geophysical Research Abstracts Vol. 17, EGU2015-1555, 2015 EGU General Assembly 2015 © Author(s) 2014. CC Attribution 3.0 License.



Loess: landform or only land coverage - examples from a geoarchaeological viewpoint

Ludwig Zoeller

Bayreuth, Institute of Geography, Geomorphology Chair, Bayreuth, Germany (ludwig.zoeller@uni-bayreuth.de)

The diachronic approach in geoarchaeology is four-dimensional. It tries to reconstruct landscape evolution before, during and after a human occupation considering site formation processes. Loess is an excellent loose rock to preserve palaeolithic occupation sites. So far, however, loess has mostly been regarded as land coverage only, whereas the geomorphologic diversity of loess landscapes has mainly been restricted to post-sedimentary erosion under the influence of intensive land use by humans. This contribution tries to pinpoint that i), loess landforms are created by interacting sedimentary and erosive site formation processes during loess formation and, ii) that prehistoric sites in loess landscapes are worth to be protected from the viewpoints of geodiversity and geoheritage.

This is demonstrated for two well-known localities: i), the relictic "greda" loess landscape at Nussloch at the eastern margin of the Upper Rhine Graben, Germany, bearing an Aurignacian open air site, and ii), the Lower Gravettian infant burial site at Krems-Wachtberg, Lower Austria. For both sites excellent and detailed geochronologies based on several dating methods are available allowing for a high resolution diachronic approach.