

Loess chronology and archaeology in loess in Western Central Europe

F. Lehmkuhl¹, J. Richter²

¹Department of Geography, RWTH Aachen University, Germany; ²Institute of Prehistoric Archeology, University of Cologne, Germany

DOI: 10.18154/RWTH-2019-10562

During the 20th century, comparative loess chronology essentially relied on loess-paleosol sequences (LPS) linking to regional records. Archaeological data – particularly those of Middle Paleolithic (300–40 ka BP) and Upper Paleolithic (43–14.5 ka BP) open-air sites – had been derived from such composed interregional age models of loess deposition. The growing importance of new methods, such as geochemical description of LPS and OSL-dating, led to revisions and corrections, rather than refinement, of the previous loess chronology: as a general tendency. Loess chronology nowadays appears as much more discontinuous and variable than previously thought. This paper discusses possible consequences concerning our knowledge about environmental change during the Middle and Upper Pleistocene and the associated human population history.