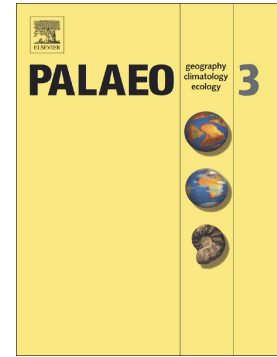


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Millennial scale climate oscillations recorded in the Lower Danube loess over the last glacial period

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Abstract

In this study we provide a correlative age model for last glacial loess at the Rasova-Valea cu Pietre site in the Lower Danube region, based on the correlation of palaeoenvironmental proxies to independently dated palaeoclimate archives, luminescence dating and independent age control provided by the geochemically confirmed presence of the Campanian Ignimbrite (CI) tephra. The CI tephra, originating in the Phlegrean fields of southern Italy, has been dated elsewhere by $^{40}\text{Ar}/^{39}\text{Ar}$ to 39-40 ka BP, and is frequently found in the Lower Danube loess. As such, the CI tephra represents a valuable temporal and stratigraphic marker across loess deposits in the region. Our age model facilitates high-resolution correlation of palaeoenvironmental features observed at Rasova to palaeoclimate archives in Greenland and the Black Sea – Mediterranean area. We observe semi-cyclic

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