



## **Geoarchaeological investigation at Al-Khiday (central Sudan): late Quaternary palaeoenvironment and site formation**

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The micromorphological investigation on several pluristratified archaeological sites in central Sudan (Al-Khiday, left bank of the White Nile, Khartoum region, Sudan) permitted to elucidate depositional and post-depositional processes playing a role in the formation and preservation of the archaeological record. At Al-Khiday sites are located at the top of small mounds, representing the remains of Pleistocene sandy fluvial bars, and were attended since the beginning of the Holocene. The first occupation of the area corresponds to a pre-Mesolithic cemetery; than Mesolithic groups lived upon the mounds and their occupation is testified by several archaeological features: pits filled by ash and bones and living floors. Preserved Neolithic features are scarce and limited to few graves (V millennium BC). After this phase, a long gap in human attendance is registered, during which wind continued to dismantling the mounds and the sites; at ca. 2000 years BP Meroitic/Post-Meroitic groups built their tombs at the top of the archaeological sequences and altered most of the stratigraphic record. Thanks to micromorphology, it was possible to distinguish between archaeological strata still in situ and those disturbed by natural and anthropic processes; furthermore, this approach allowed to interpret the significance of several archaeological features (living floors, fireplaces, and garbage pits). In this case micromorphology of archaeological deposits was a key tool to reconstruct the depositional and post-depositional processes that contributed to the formation and preservation of the archaeological record.