ABSTRACT SUBMISSION

Local-scale Holocene geomorphological and palaeoenvironmental evolution in NW Arabia : the case of the Khaybar region

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Abstract

The Khaybar region, in NW Arabia, contains tens of thousands of archaeological structures that attest to dense human occupation from prehistoric times to the present day.
We will present how the environmental geoarchaeology approach can be used to document environments on a local scale, as close as possible to archaeological sites. To this end, we will present the results, collected within the framework of the Khaybar Longue Durée Archaeological Project, of several soundings carried out around the current oasis of Khaybar, which allowed us to study different types of deposits, including a 7-meter-thick alluvial terrace, tufa and palustrine deposits. The lack of data on Holocene sedimentary deposits in the region makes these rare archives for describing environmental changes and their impacts on the hydrosystems of NW Arabia.
We will discuss the methods used, the limitations of arid environments, and the respective roles of climatic and anthropogenic forcings on hydrosedimentary dynamics, through the responses of hydro-ecosystems to Holocene climatic changes, as well as the impact of human activities (such as agricultural practices) on the erosion-sedimentation balance.
Finally, as a perspective, we will discuss how to develop a multi-scalar approach and move from a local-scale analysis to a regional-scale vision.

Keywords

Arid environment, Multi-proxies, Local scale, Anthropogenic forcing, Climate changes

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