
Assessing the impact of the 10.2 cal. ky BP abrupt climatic event in the emergence of agricultural economies in the northern Levant

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Résumé

This paper is aimed at demonstrating the interconnectedness of the first agricultural economies in the Levant and the ecosystems they inhabited, emphasizing the complex nature of human responses to environmental change during the Neolithic period in the region. An analysis of archaeological radiocarbon dates and diagnostic material culture records from a series of key sites in the Euphrates valley revealed a major cultural discontinuity taking place around 10,200 cal BP. This observed transition in archaeological material cultures occurred in synchrony with climatic anomalies present in multiple proxies at \sim 10.2 cal ky BP, showing that the hitherto apparent long-term continuity interpreted as the origins and consolidation of agricultural systems was not linear and uninterrupted. In order to advance our understanding of the potential correlation between human population dynamics and climate-driven changes in terrestrial ecosystem variability in the region, we have expanded our study to cover the whole northern Levant between \sim 11–8 cal ky BP. This allows us to explore human responses to climate variability among Neolithic communities occupying different ecosystems during the proposed 10.2 ky BP event. From the methodological standpoint, efforts have been made to manage the sources of uncertainty associated with radiocarbon dating, as well as intersecting ¹⁴C-data with other lines of evidence in order to better characterize how the first agricultural communities responded to an abrupt climate anomaly in the northern Levant.

Mots-Clés: Neolithic, Near East, Human Environment Interaction, Early Holocene RRCs, Population Dynamics

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