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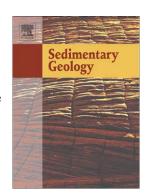
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A late Pleistocene linear dune dam record of aeolian-fluvial dynamics at the fringes of the northwestern Negev dunefield

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Abstract

A late Pleistocene aeolian-fluvial record within a rare vegetated linear dune-like structure at the fringe of the northwestern Negev dunefield, Israel, provides direct evidence of dune-damming dynamics within the structure and its environs. Study methods included high resolution morphology and stratigraphy, micromorphology and sedimentological analyses. Chronology was based on eight archaeological sites from the structure and the INQUA Dune Atlas chronologic database. Low-energy fine-grained fluvial deposits underlying the structure and extending from its flanks indicate deposition by low energy hyper-concentrated flows in a floodplain environment and later in water bodies that formed by dune-damming of a mid-sized drainage basin. Interbedded sand with fine-grained deposits within the linear structure indicates interchanging dominances between aeolian sand incursion and seasonal floods. Sand deposition

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