

Geoenvironment around the ancient dams at PPNB archaeological sites in Jafr Basin, southern Jordan

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Wadi Abu Tulayha is a small settlement site located north-west of the Jafr Basin in southern Jordan. PPNB agro-pastoral outpost was probably derived from the secondary farming society to the west. Ancient dams set along the wadi channel were excavated at the site and several dams that have similar features were found in Wadi al-Nadiya, Wadi Quweir, and Wadi Ruweishid ash-Sharqi sites located in Jafr Basin. In order to clarify natural backgrounds for these ancient dams, surface drainage and catchment area were estimated by calculating digital elevation model (DEM) and analyzing remotely sensed images. Considering its geological backgrounds, hydrology including underground water in the limestone-based sedimentary rocks may play an important role on the nomadic people's settlement.

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