

Millennial aridity cycles as a driver of human occupation in central Spain: a reinterpretation.

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Two main periods of pre-Muslim human occupancy at the surroundings of Las Tablas de Daimiel National Park are documented by archaeological sites and classical sources: the Motillas culture (Bronze Age) and the Ibero-Roman period.

Classical interpretations, based on the presence of hydraulic structures (wells and dams), assumed that the settlement took place during arid periods. However, the sedimentological and geochemical records of Las Tablas de Daimiel National Park point to human occupancy during wet periods and cessation of this occupation at arid periods.

These aridity periods result from a combination of out-of-phase changes in water supply and temperature that took place ca. 1.5 ka BP, ca. 3 ka BP and, the oldest one, ending around 5 ka BP, and they could be correlated to Bond events number 1, 2 and 4. As in other locations, Bond event 3 (around 4.2 ka BP) is not present and, for this period, wet conditions due to enhanced water supply during a colder period are invoked.

These results led to the hypothesis that those hydraulic structures were built to obtain clean water (wells during the Bronze Age) and to sanitize waters and to increase their energy (dams during the Ibero-Roman Period).