Evidence for human occupation of Southeast Arabia during the supposedly hyper-arid MIS 6 (c. 190-130 ka)

It has been argued that marine isotope stage (MIS) 6 (c. 190-130 ka) was a period of hyper-arid conditions in Arabia and that these conditions prevented human settlement in the region. Here, first archaeological evidence for human occupation of Arabia during MIS 6 is shown. New chronometric data (Fig. 2) from site FAY-NE 1 at Jebel Faya, UAE (Fig.1) indicates that human occupation of the site started at about 210 ka and covers multiple occupation phased during the early Middle Paleolithic (Fig. 3). Of particular importance is the evidence from layer AH VII, which indicated human presence in SE Arabia during MIS 6. The lithic assemblages from AH VII (c. 170 ka) and AH VI (c. 130-120 ka) feature typo-technological similarities.

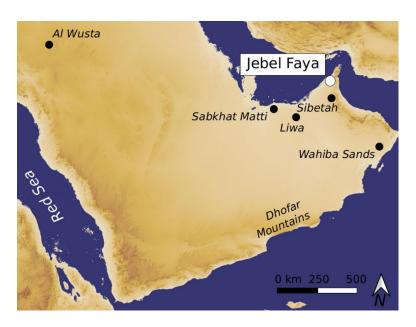


Figure 1. Location of site FAY-NE1 at Jebel Faya in Southeast Arabia (white circle).

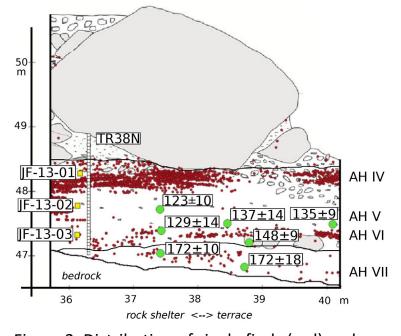


Figure 2. Distribution of single finds (red) and location of OSL samples (green), sediment samples (white) and micromorpological samples (yellow).

Reference: Bretzke, K., Preusser, F., Jasim, S., Miller, C., Preston, G., Raith, K., Underdown, S.J., Parton, A., Parker, A.G., 2022. Multiple phases of human occupation in Southeast Arabia between 210,000 and 120,000 years ago. Scientific Reports 12, 1600.

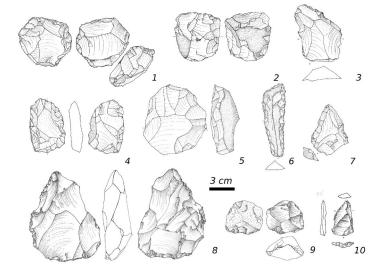


Figure 4. Examples of lithic artifacts from AH V (1-3), AH VI (4-7) and AH VII (8-10)

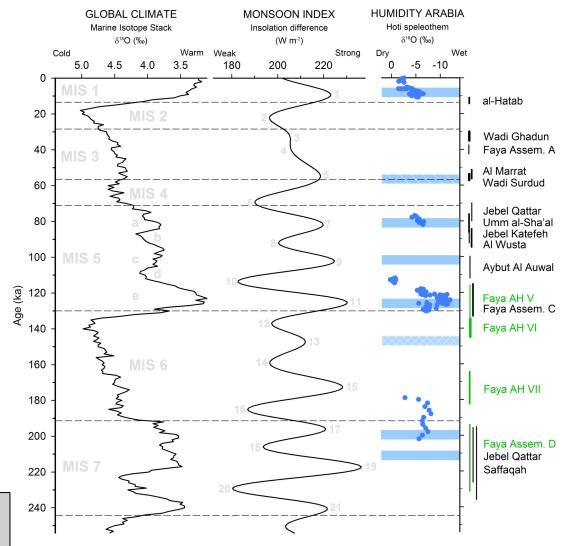


Figure 3. Climate proxy data, dated Pleistocene archaeological sites from Arabia and new data from Jebel Faya.