PADMAC

* Unit for the study of Palaeolithic Artefacts and associated Deposits Mapped As Clay-with-flints, UK.
* Palaeolithic Artefacts and associated Deposits in a Middle Eastern (Arabian) Context.

A Heritage Most Ancient: Discovering the Palaeolithic of the United Arab Emirates

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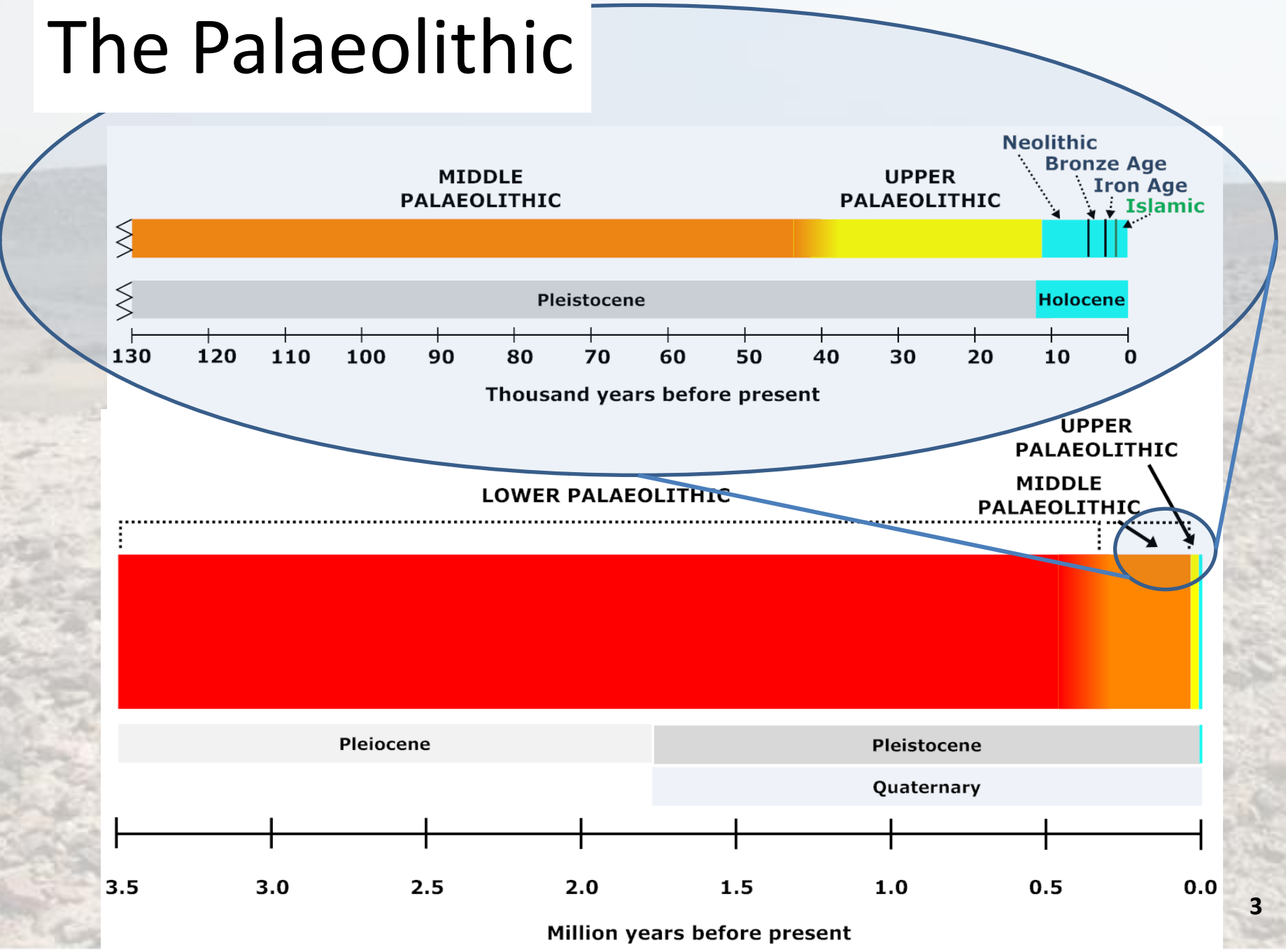
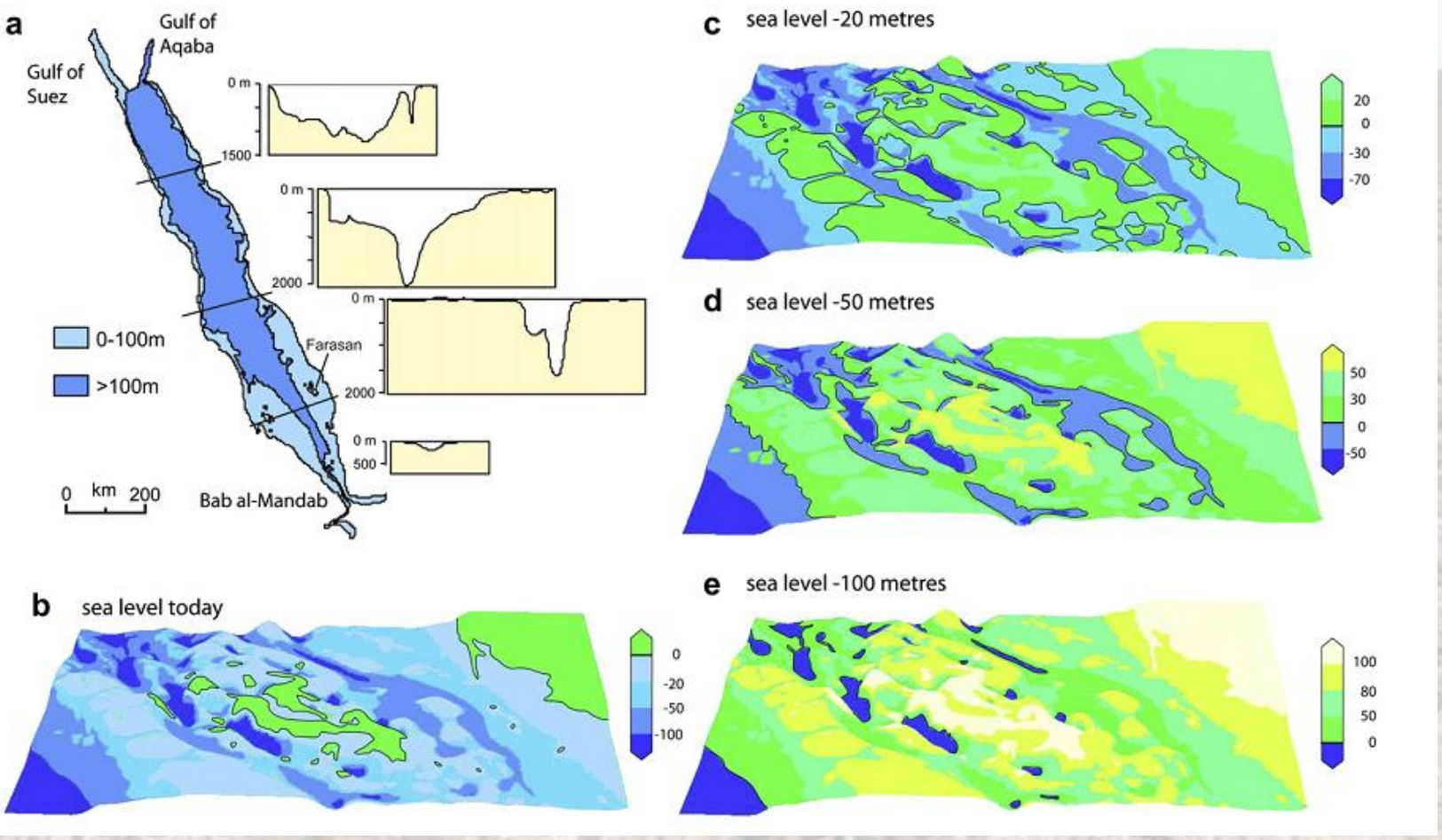
Out of Africa

The Palaeolithic



Bathymetry of the Red Sea Basin and the region of the Farasan Islands.

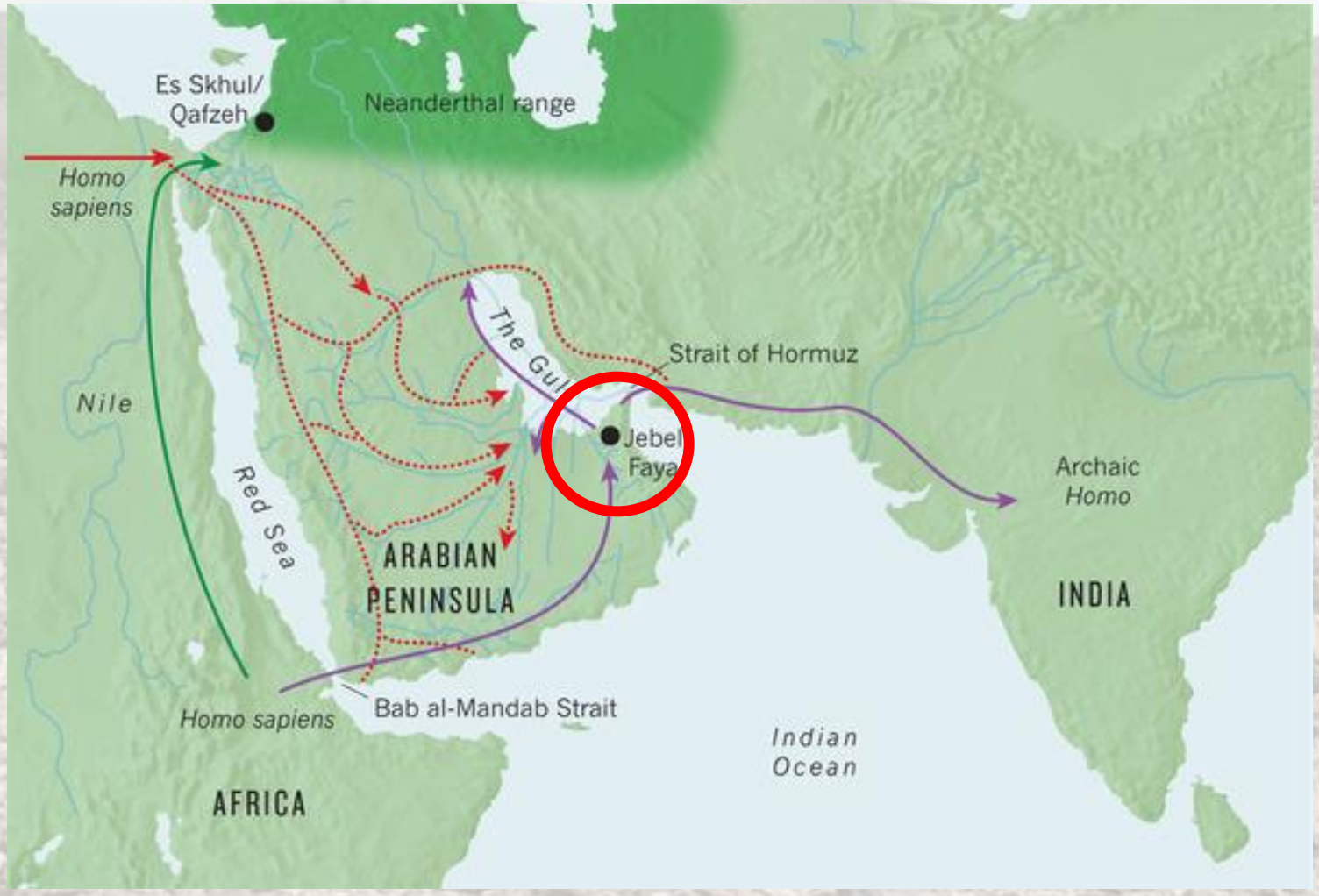


Bailey, G.N., King, G.C., Dynamic landscapes and human dispersal patterns: Tectonics, coastlines, and the reconstruction of human habitats. Quaternary Science Reviews (2010), doi:10.1016/j.quascirev.2010.06.019

Paleolithic Surface Site in Sharjah Emirate (ESF07S14)

PADMAC Unit (2010) ES07S14 June 2010 Fieldwork. PADMAC Unit Working Paper, Oxford

Jebel Faya Site (FAY-NE1)



Petraglia , M. **Archaeology: Trailblazers across Arabia.** Nature Volume: 470, Pages: 50–51 2011

Jebel Faya: Dating

- **Assemblage A:** overlain by ~ 40cm of sterile sand.

  Dates: Two single –grain optically simulated luminescence (OSL) samples from within assemblage A yielded ages of 38 ± 3.1- and 40.2 ±3.0 kya, and two samples from the overlying sterile layer yielded ages of 38.6 ± 3.2 and 34.1 ± 2.8 kya.

- **Assemblage B:**

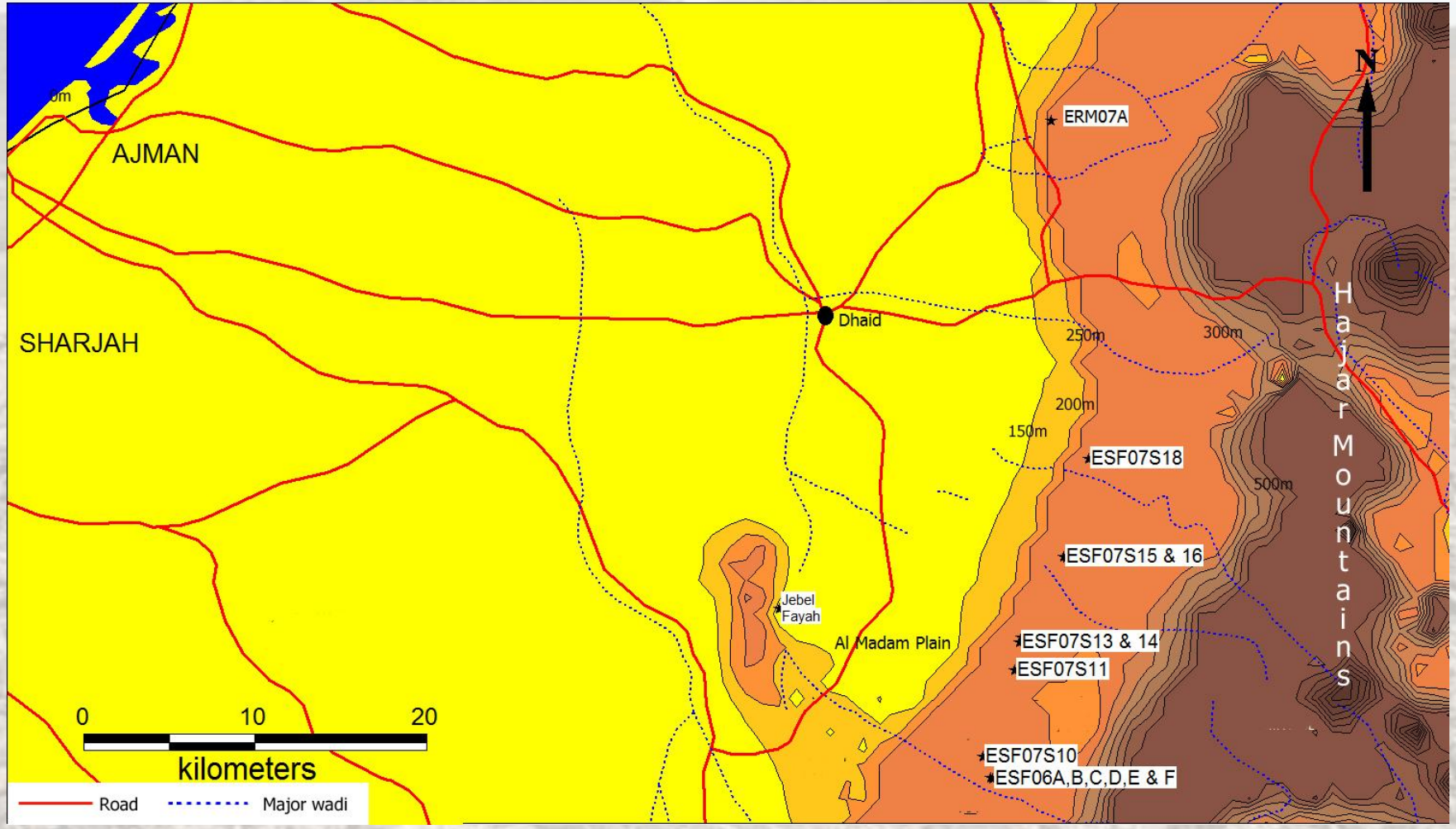
  No dates given.

  Assemblages A and B are considered by the excavators to have been local developments as they bear no affinities with the: Middle Stone Age and Late Stone Age from East Africa, Upper Palaeolithic from the Levant or the Zagros.

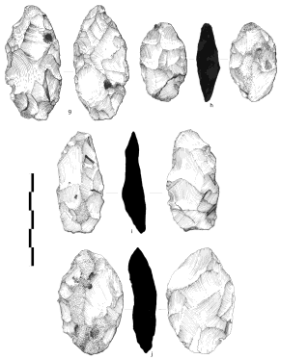
- **Assemblage C:**

  Dates: Three, (OSL) dating samples yielded ages of 127 ± 16 (1SE uncertainties), 123 ± 10, and 95 ± 13 kya.

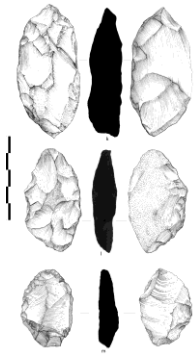
Palaeolithic Surface sites in Sharjah and Ras Al Khaimah Emirates (UAE)



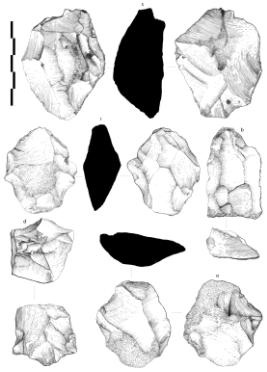
Group A3 Surface Find Assemblage



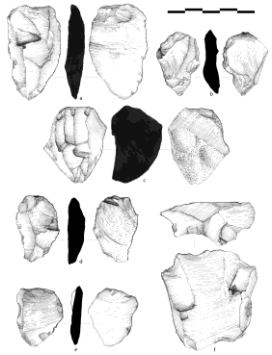
Foliates



Backed bifaces



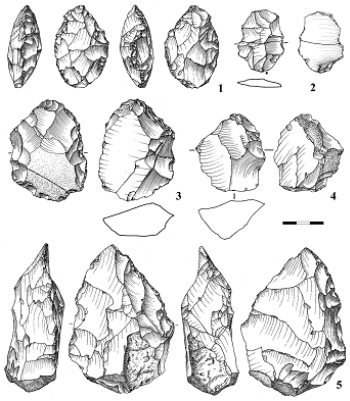
Unipolar cores (o,q)
Centripetal Levallois cores/discoids (p,r,s)



Levallois blanks (a,e)
Retouched points (b,d)
Unipolar Levallois cores (c,f)

Scott-Jackson, J.E., Scott-Jackson, W.B. Rose, J.I. Palaeolithic Stone Tool Assemblages from Sharjah and Ras al Khaimah in the United Arab Emirates. In: Petraglia, M, Rose, J. editors. *The Evolution of Human Populations in Arabia*. Springer, Netherlands. 2009: 125-138.

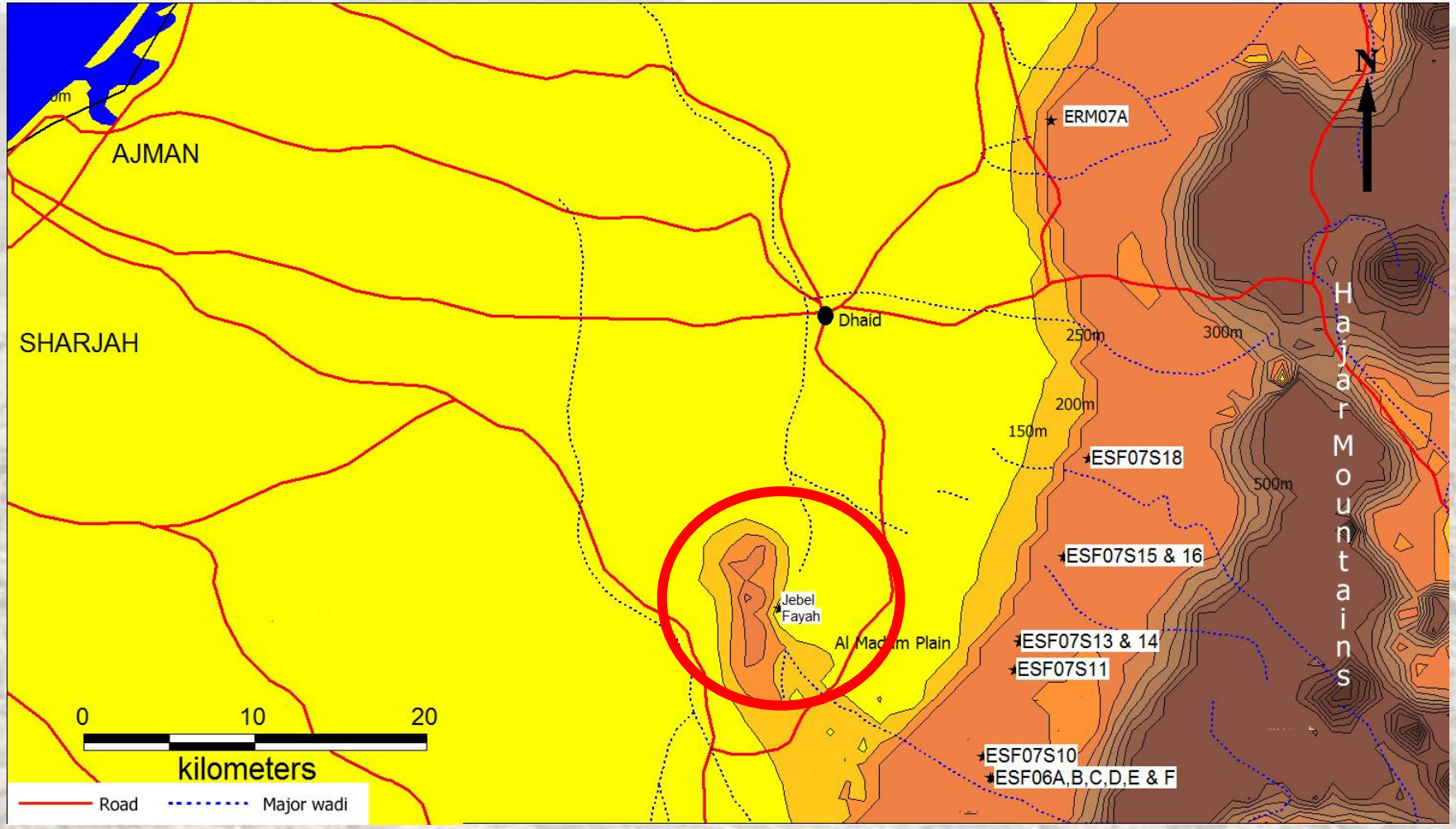
Jebel Faya Assemblage C



1, bifacial foliate;
2, Levallois flake;
3, bifacial preform;
4, radial core;
5, handaxe preform.

Armitage, S.J., et al., The Southern Route "Out of Africa": Evidence for an Early Expansion of Modern Humans into Arabia. *Science*, 2011. 331(28): p. 453-456

Palaeolithic Surface sites in Sharjah and Ras Al Khaimah Emirates (UAE)



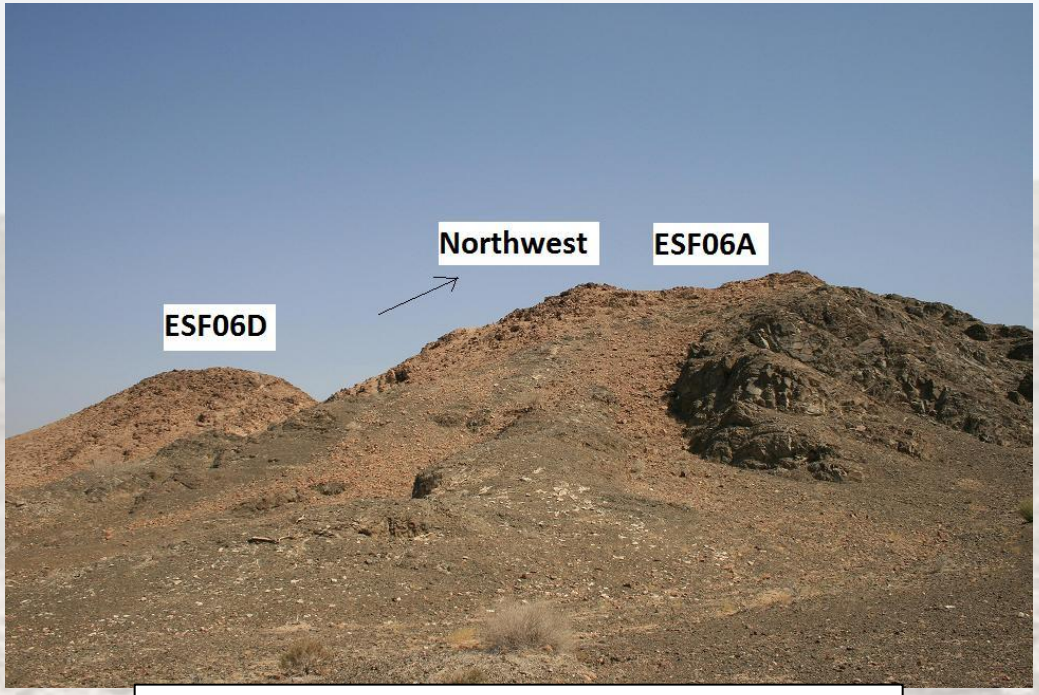
ESF06A

Aerial photograph (from tethered dirigible)

Photograph from west of site

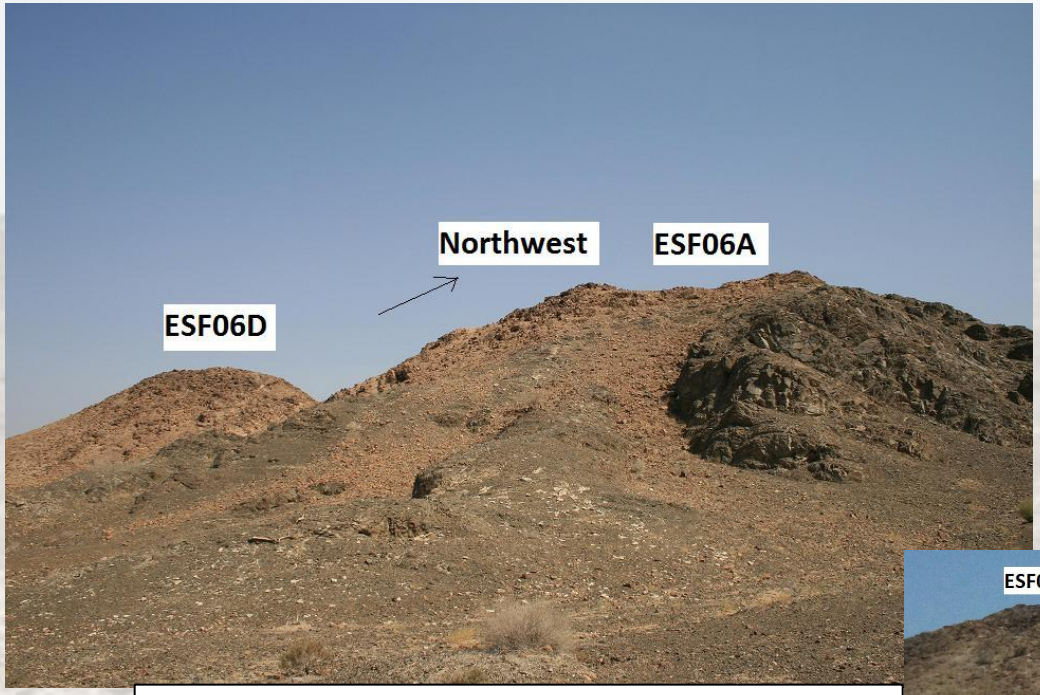
Chert debitage

ESF06A



ESF06A and ESF06D before Pipeline works
(from South East)

ESF06A



ESF06A and ESF06D before Pipeline works
(from South East)

ESF06A and ESF06D after Pipeline works
(from South West)

Acknowledgements

- His Highness Dr Shaikh Sultan Bin Mohammad Al Qasimi, Member of the Supreme Council and Ruler of Sharjah, Emirate
- Dr Sabah Jasim, Director of Antiquities in Sharjah

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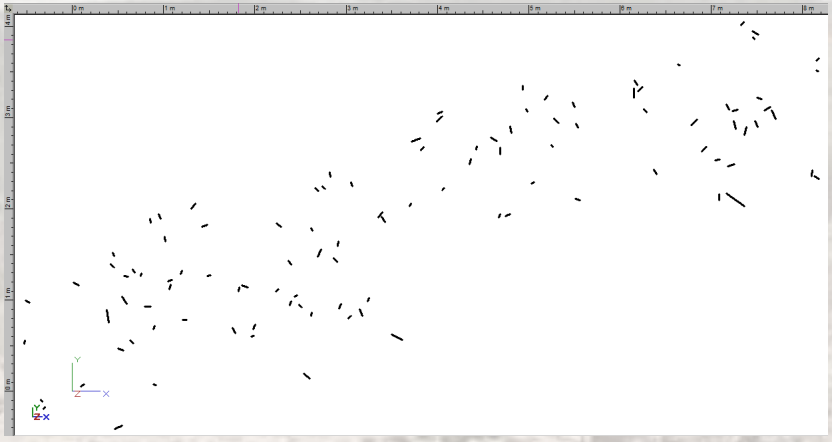
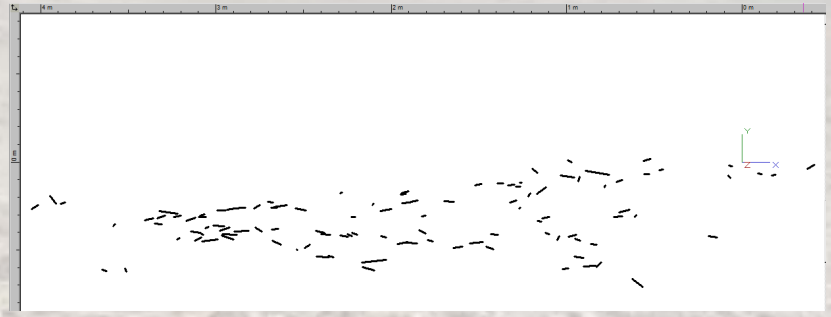
  - The most valuable contribution made to the 2007 field surveys by Gary Feulner; Angela Manthorpe; Stephen Manthorpe and David Palmer (all of the Dubai Natural History Society).
  - Stephen Green (together with Gary Feulner) for sharing the results of their earlier field surveys.
  - Helpful advice and practical assistance by Eisa Abbas of the Sharjah Directorate of Antiquities,
  - Professor Andrew Goudie (University of Oxford) and Dr Adrian Parker for drawing our attention to the Ras Al Khaimah site.
  - Dr Christian Velde of the Ras al-Khaimah Department of Antiquities and Museums for kind permission to investigate the area.
  - Dr Mark Beech and Dr Walid Jassim of ADACH for the invitation to investigate Al Barakah and related areas.

ESF06A

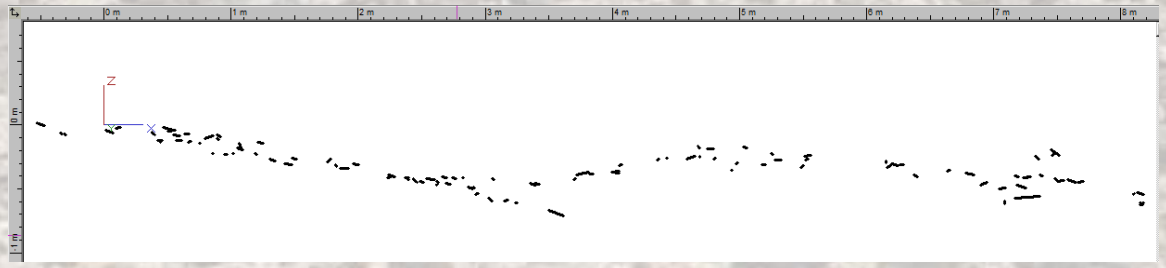
Photogrammetric Analysis of artefact distribution and orientations



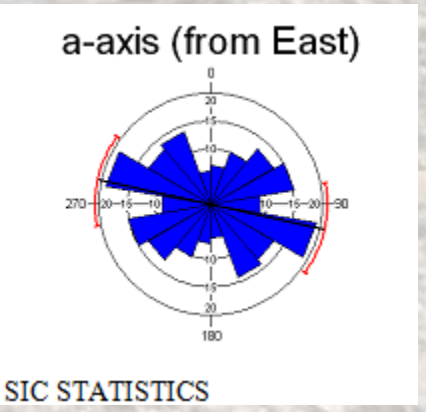
Plan View



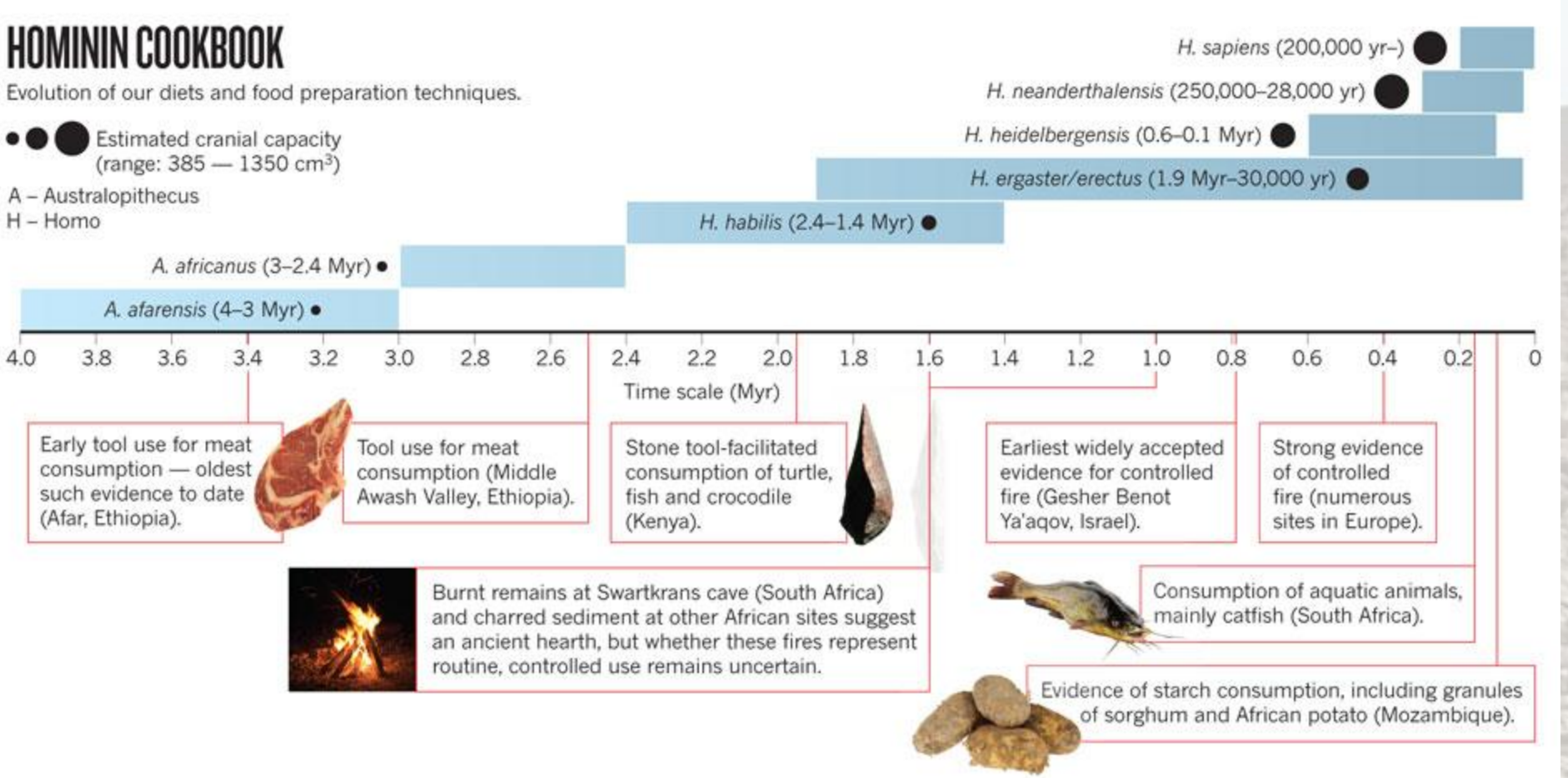
Width of site



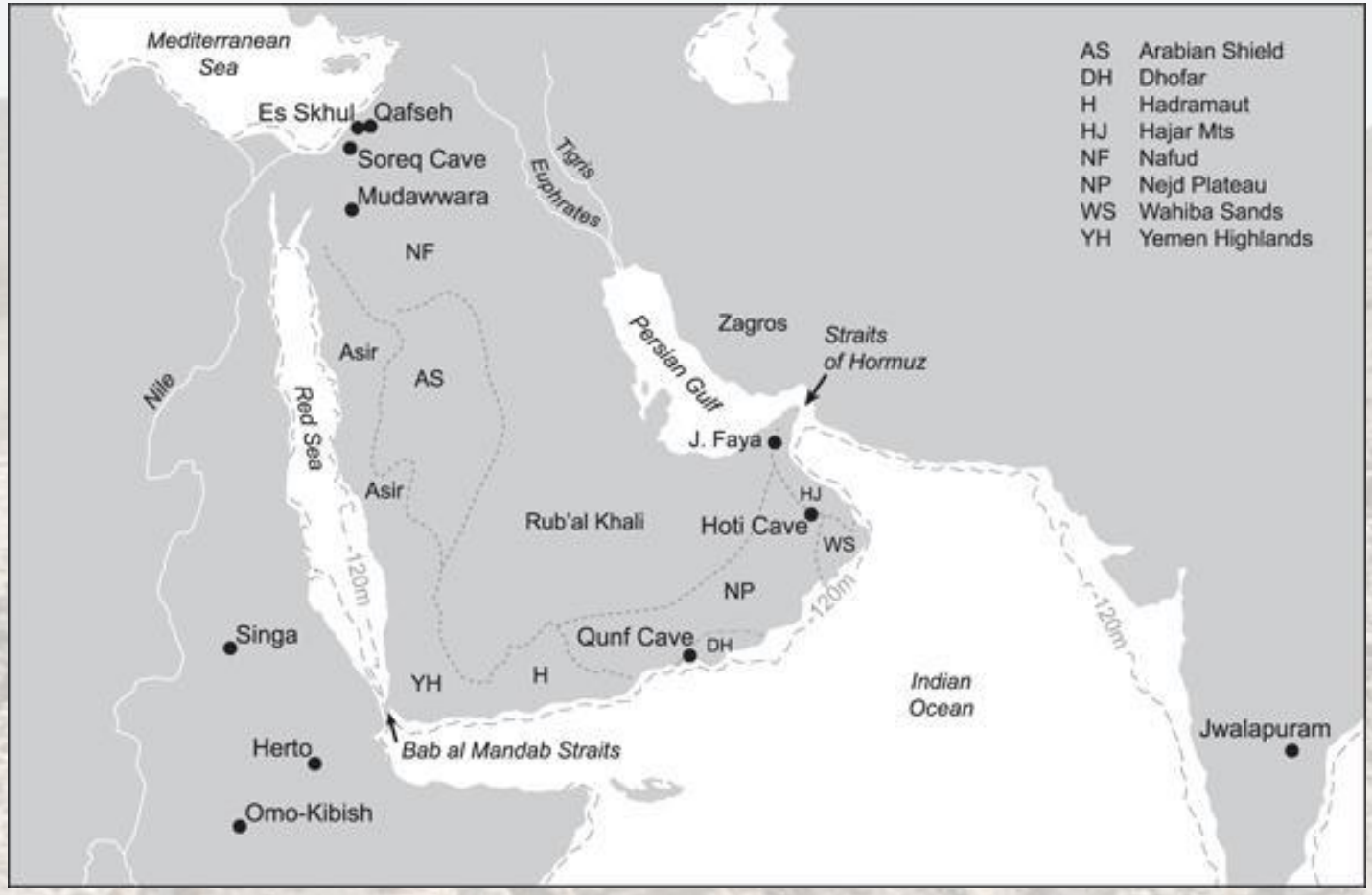
Profile (length of site)



Orientation of A-Axis

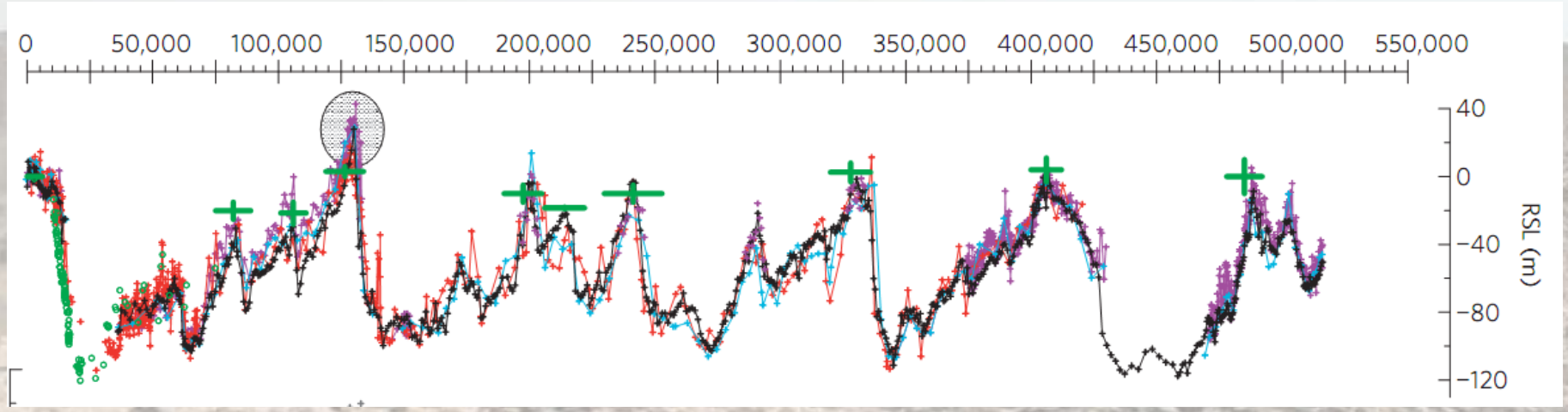


Michael Eisenstein **Evolution: The first supper** Nature 468, S8–S9 (23 December 2010)

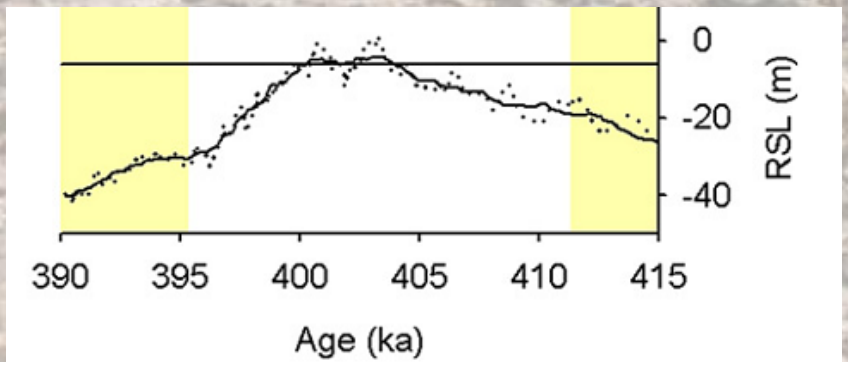


The location of Jebel Faya, United Arab Emirates. The dashed line indicates the maximum exposure of land during marine lowstands. Ewen Callaway **Early human migration written in stone tools** Published online 27 January 2011 | Nature News

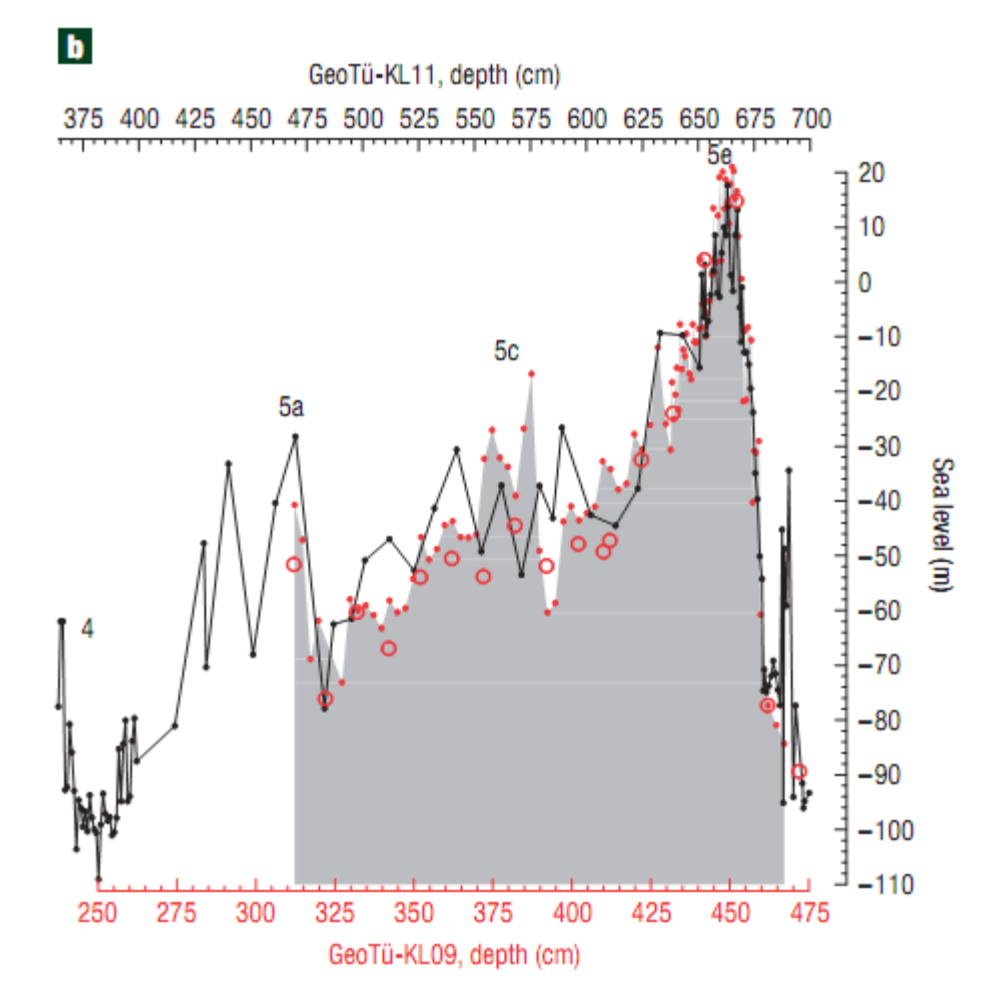
Relative Sea levels in the past 550,000 years (based on Red Sea Data)



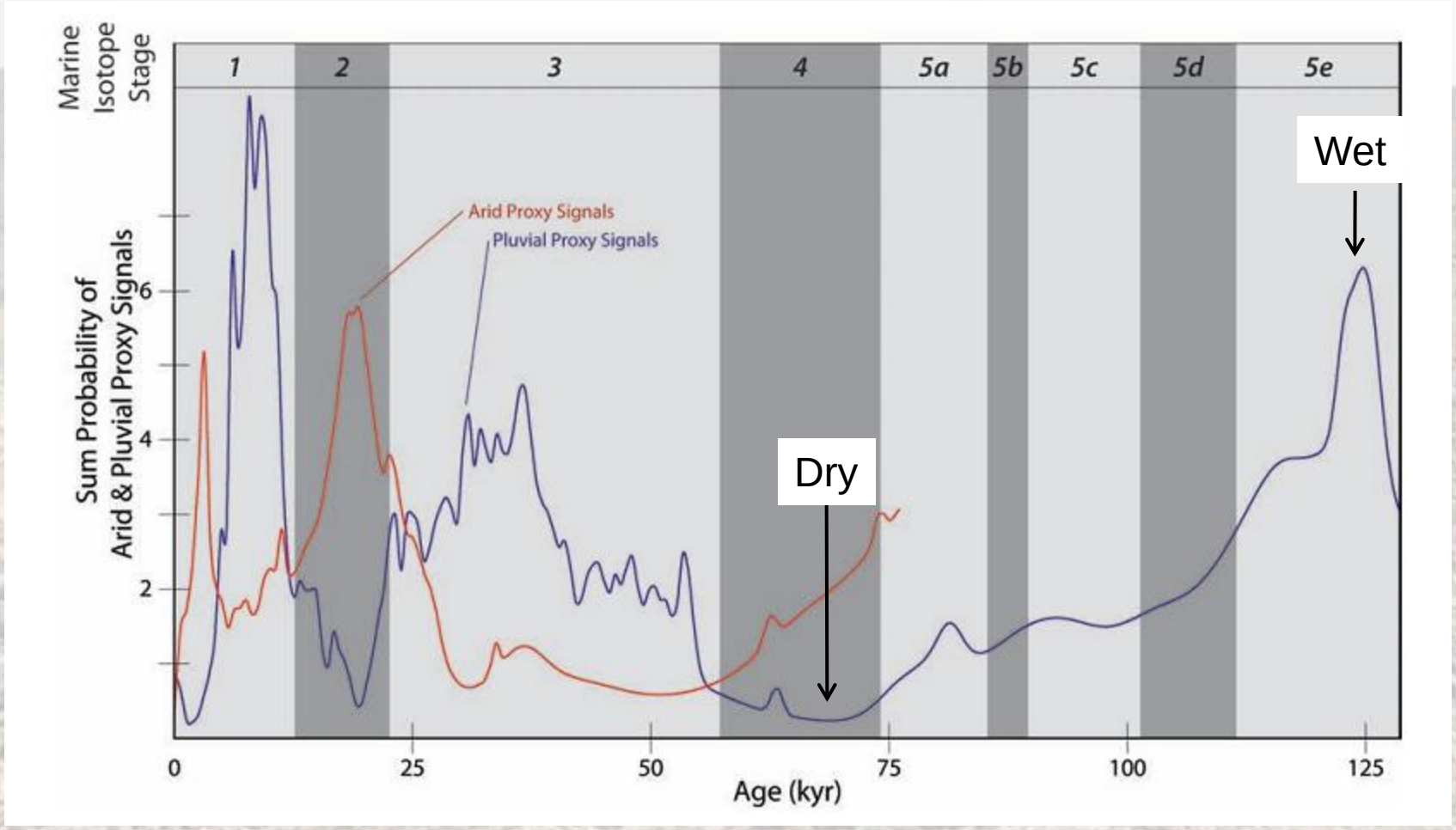
Composite Red Sea relative sea-level reconstruction (RSL). (Rohling et al 2009)



Relative Sea Levels during MIS 11 (Rohling et al 2010:99)



MIS 4, 5a, 5c and 5e: Stable isotope and derived sea-level records for central Red Sea cores KL11 and KL09. (Rohling 2007:39)



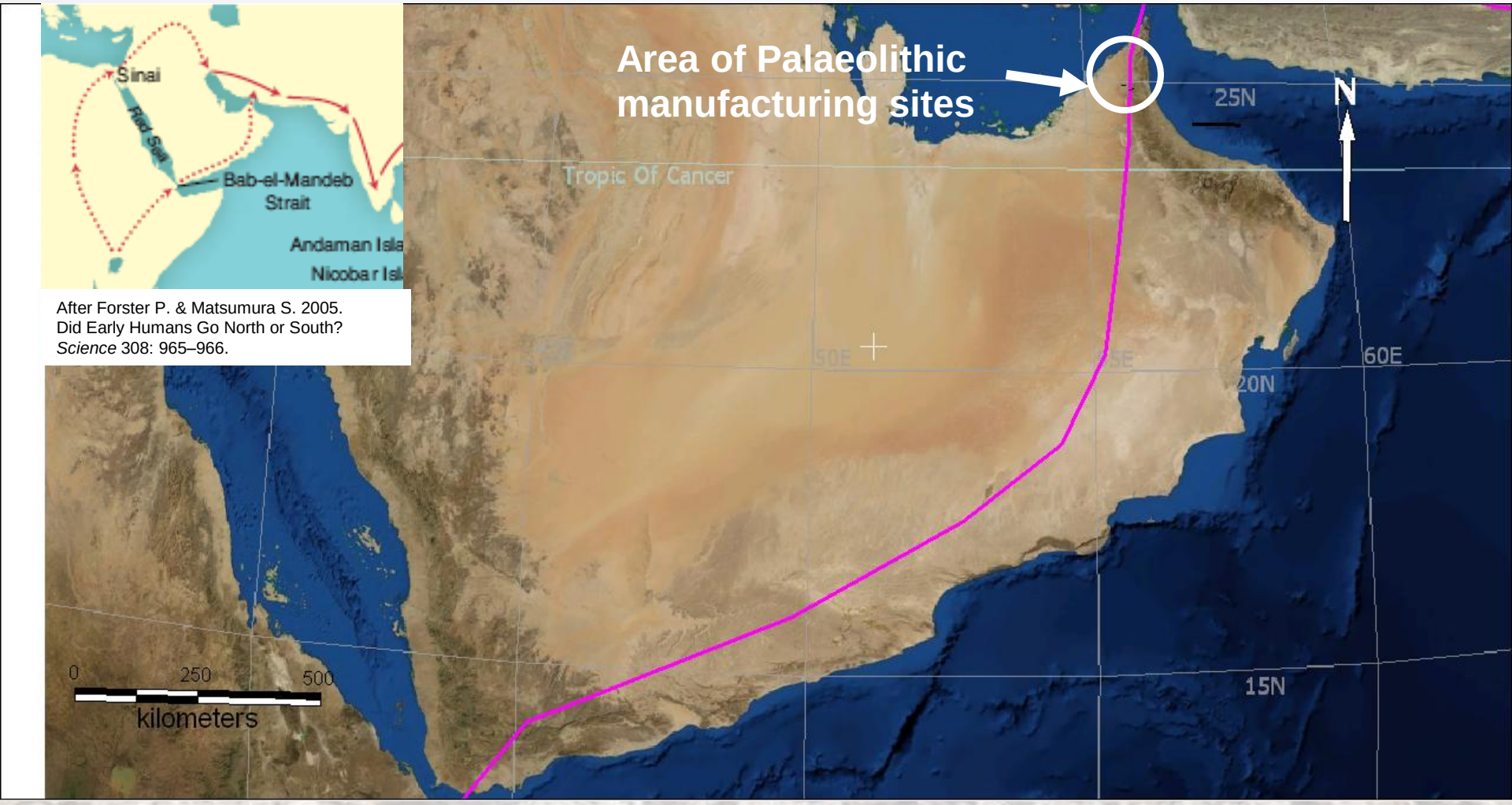
HOPE ENV sum probability curve depicting wet/dry signals throughout Arabia during the Upper Pleistocene. Parker & Rose 2008:31

West quadrant of ESF06A

Out of Africa

Forster P. & Matsumura S. 2005. Did Early Humans Go North or South? *Science* 308: 965–966.

Location of Palaeolithic manufacturing sites and proposed ‘southern route’:



After Forster P. & Matsumura S. 2005. Did Early Humans Go North or South? *Science* 308: 965–966.