



4th International Conference on Biodiversity Las Vegas, USA june 2015

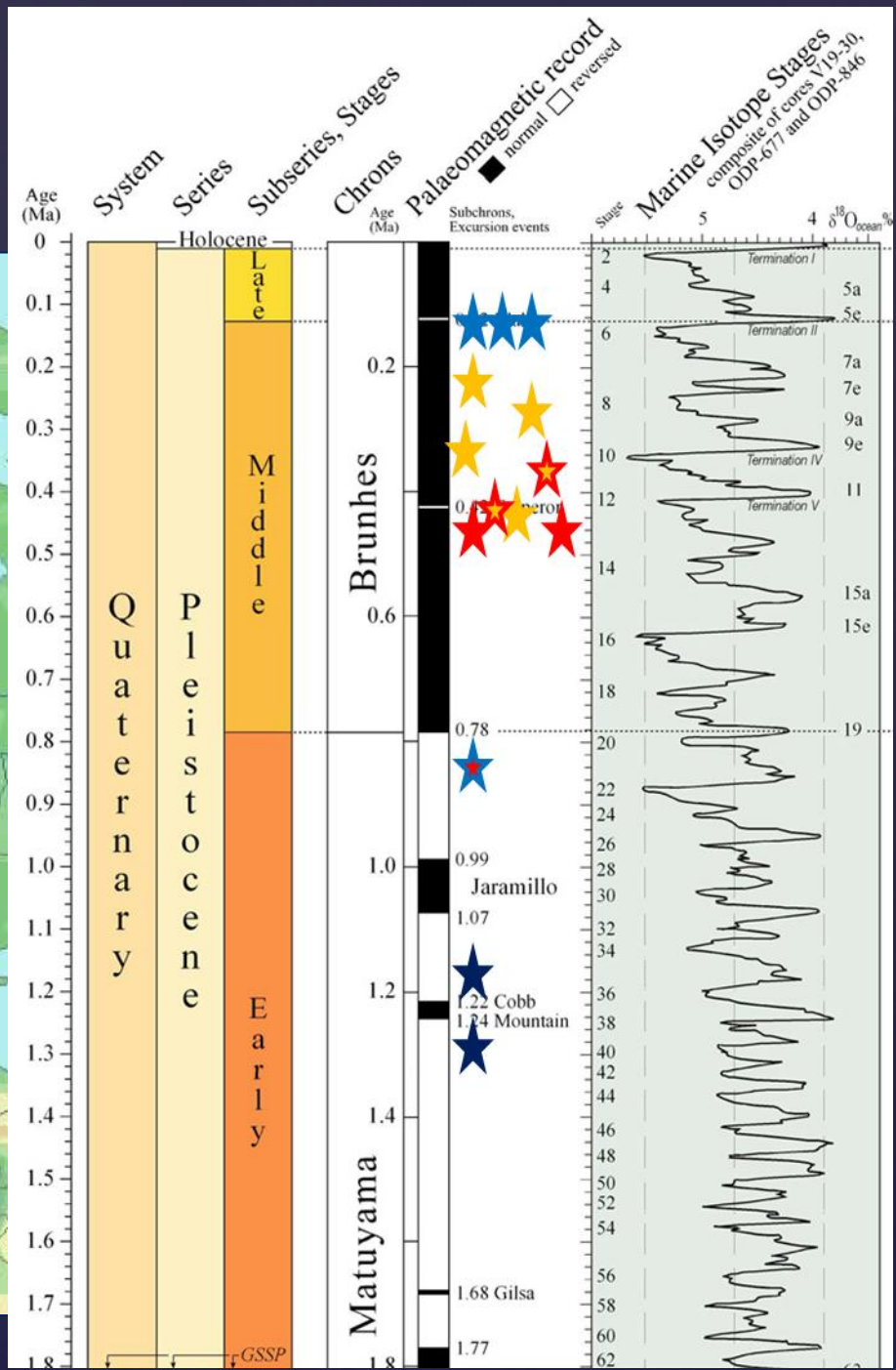
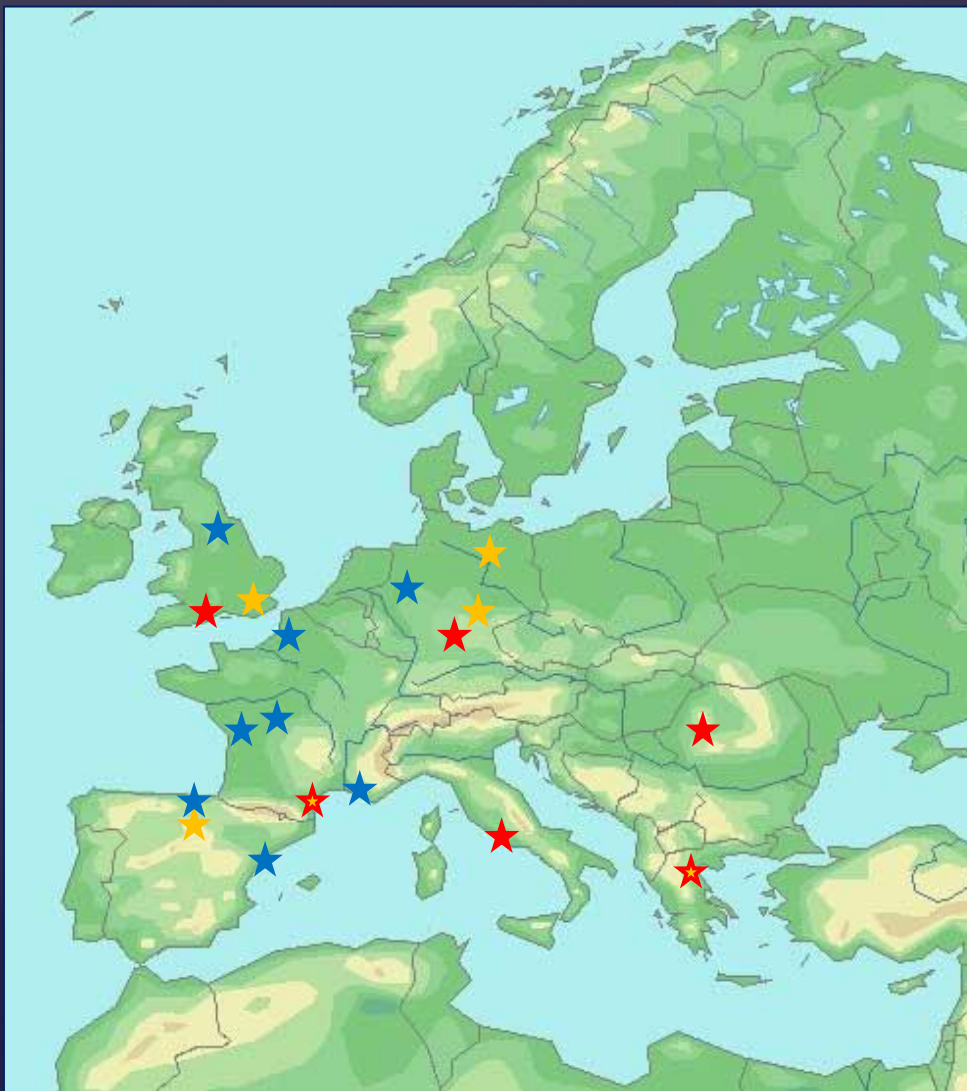
*"Share and Enhance
Ecological & Geological
Conservation research"*

**Biodiversity, impact, vulnerability
and adaptation in human evolution**

Gloria Cuenca-Bescós, University of Zaragoza, Spain

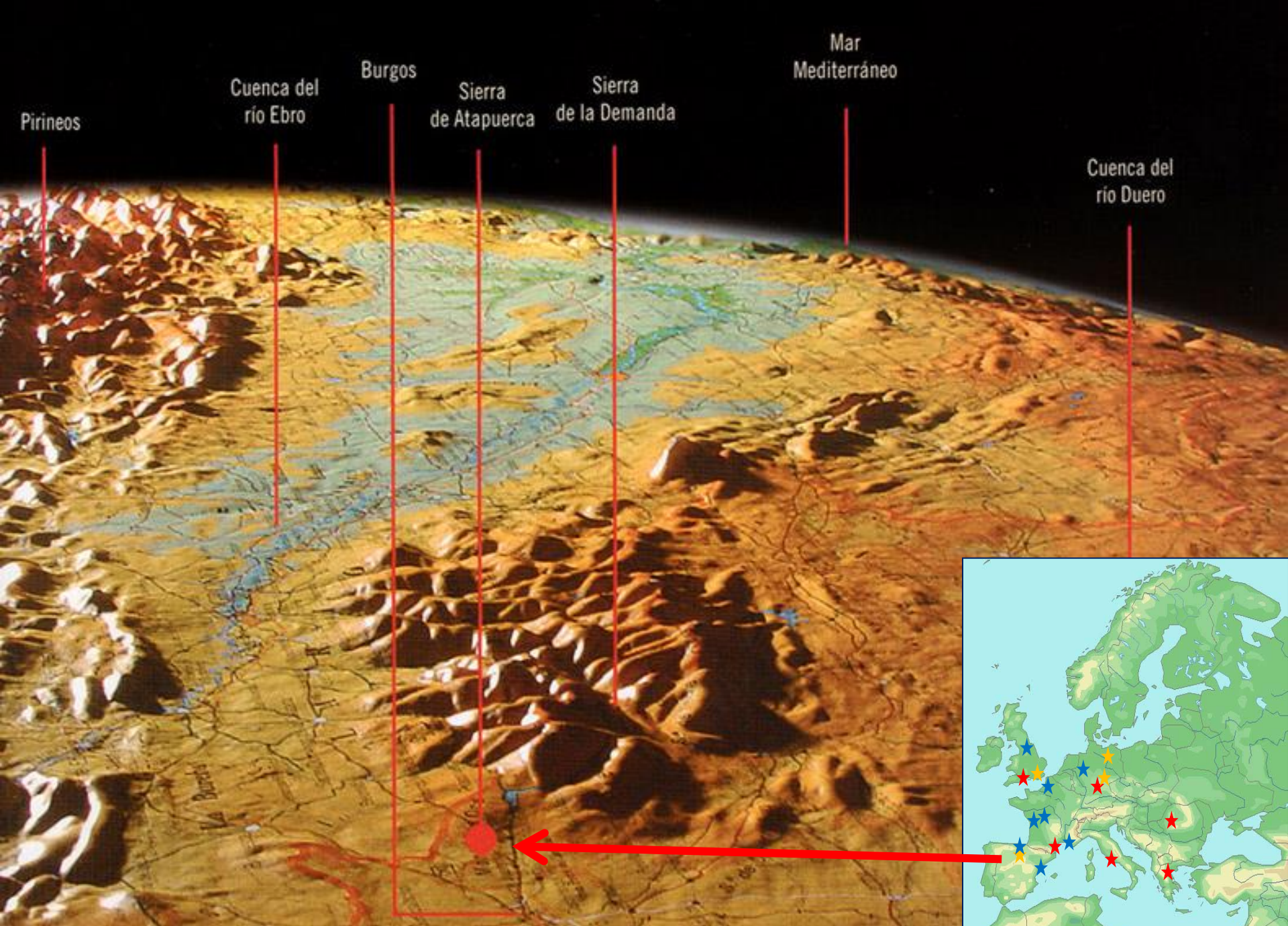


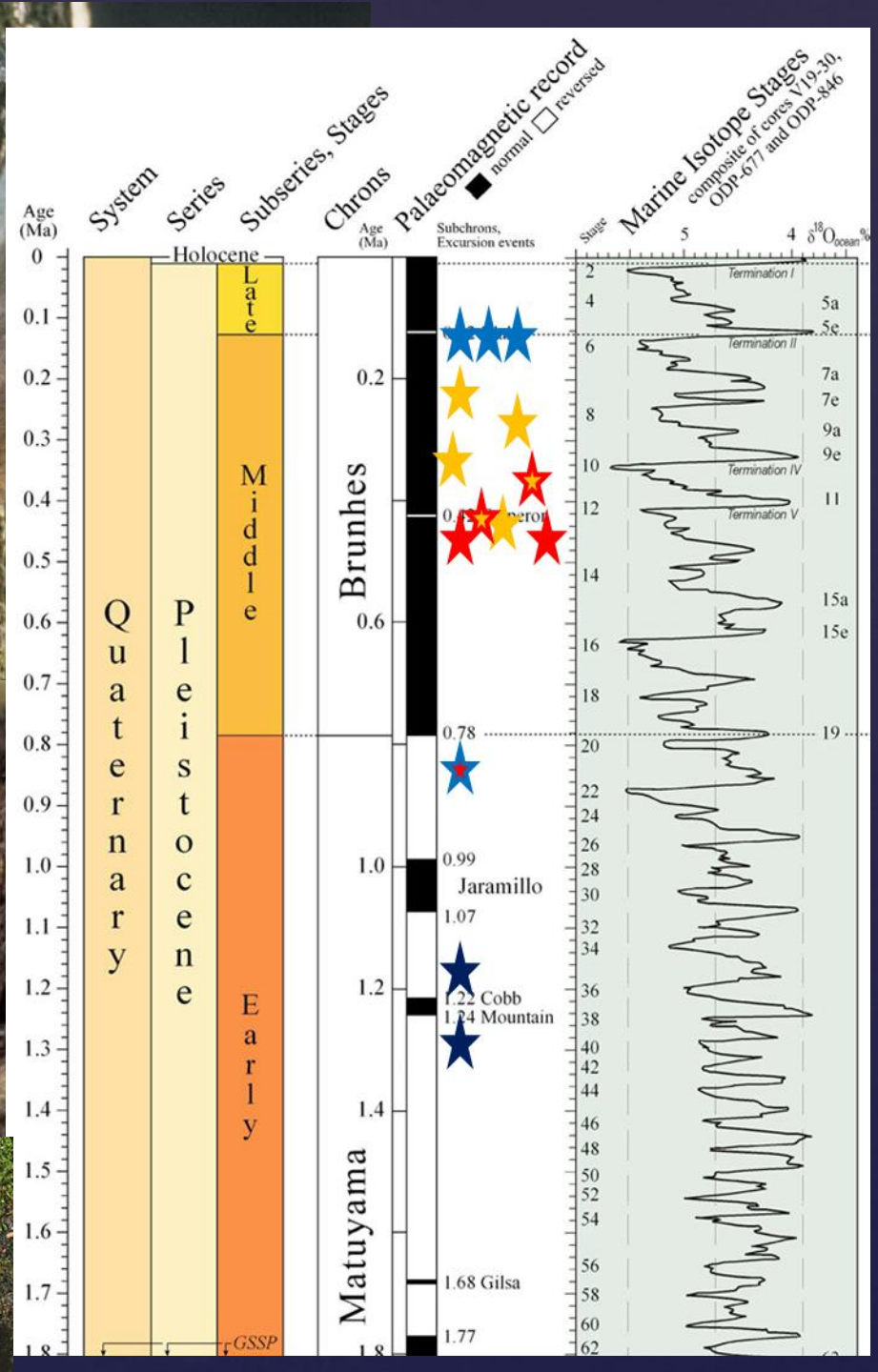
Geology, chronology & Geography



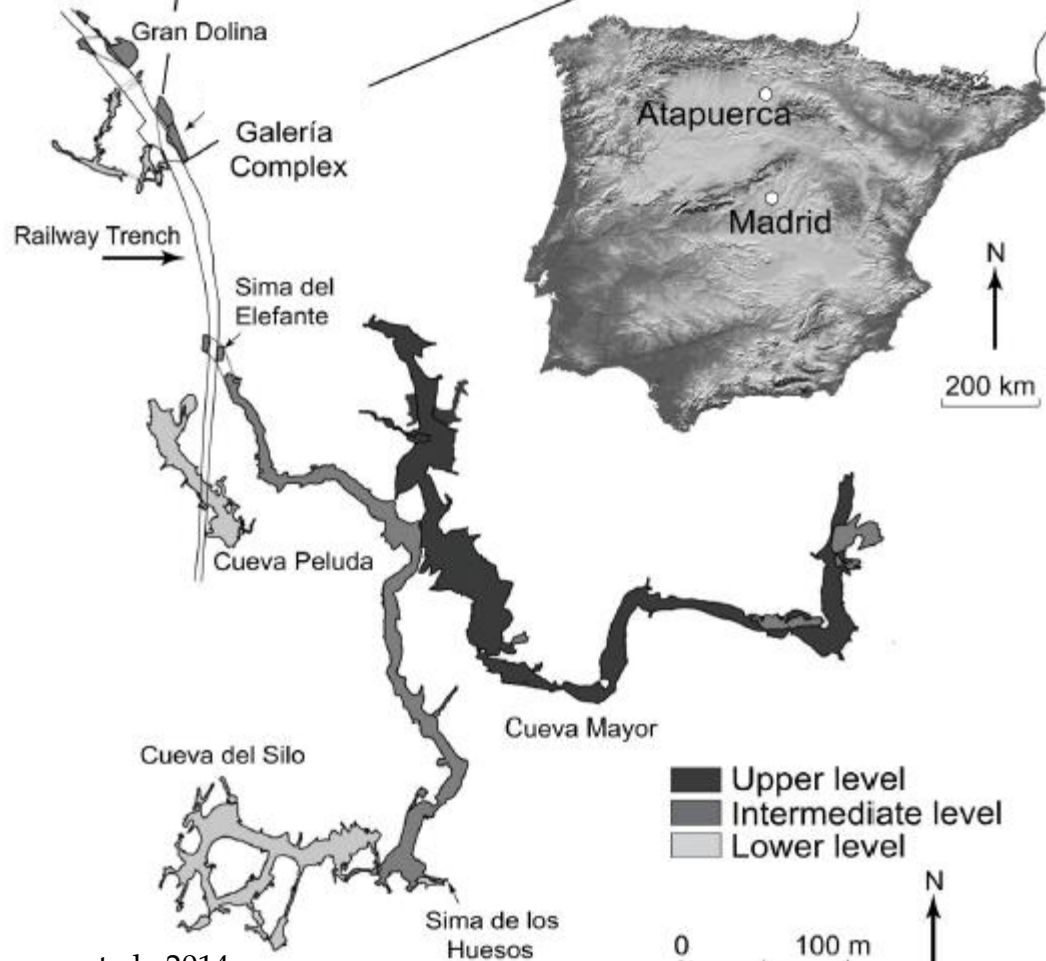
A wide-angle landscape photograph showing a vast field of tall, golden-brown grass in the foreground. In the middle ground, a low, rounded hill covered in dense green trees and shrubs stretches across the horizon. The sky is a vibrant blue, filled with scattered white and grey clouds. The overall scene is bright and open.

The paleo-biodiversity of the
Sites from the Atapuerca Hill.

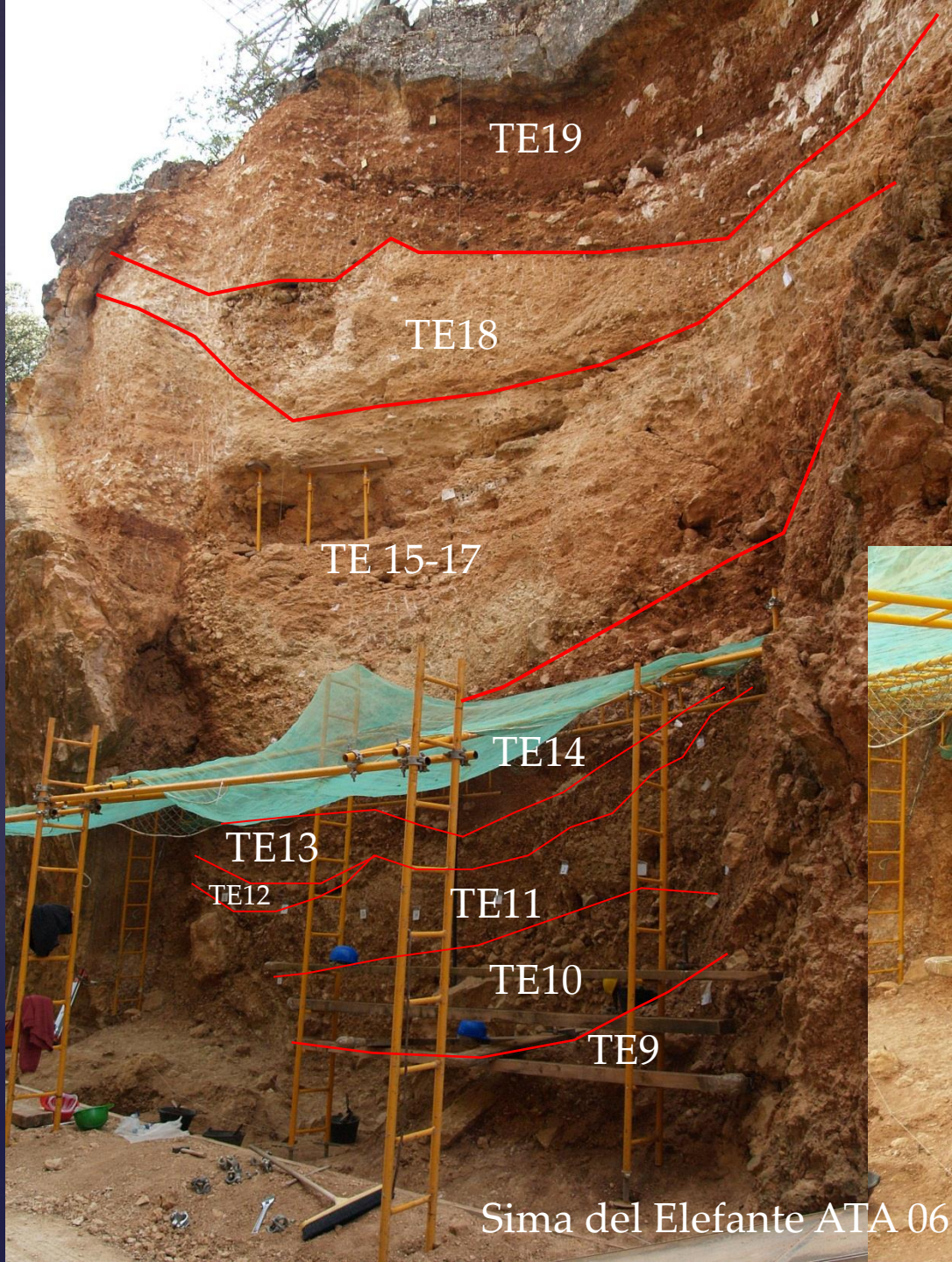




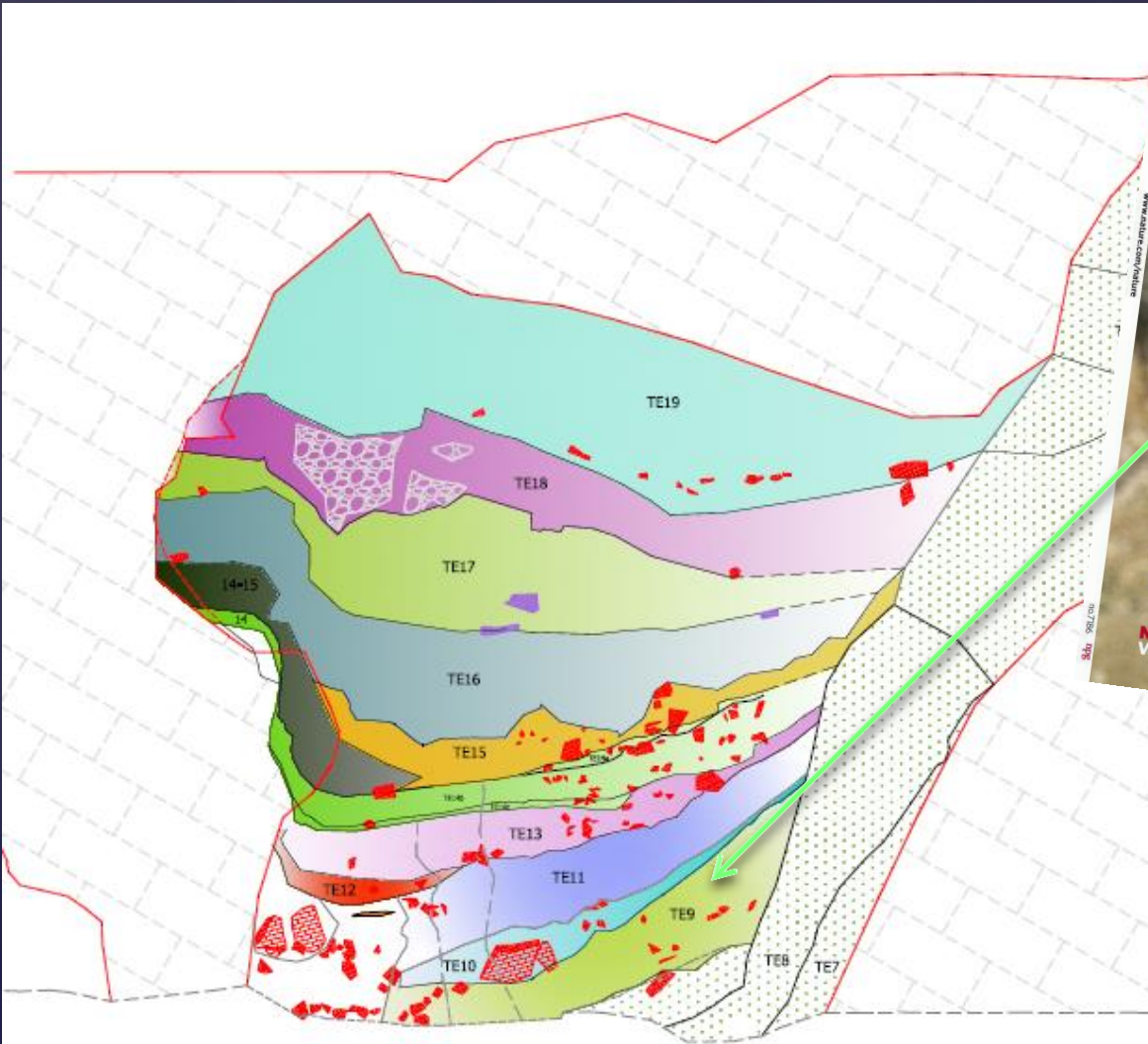




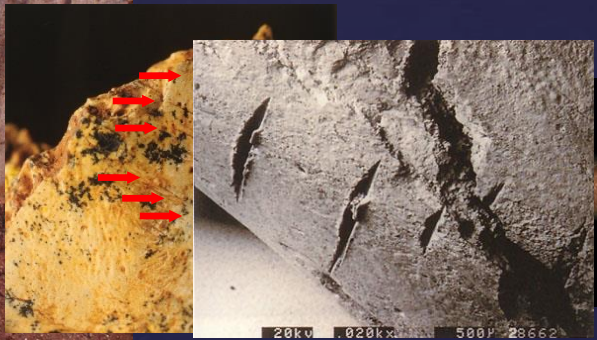
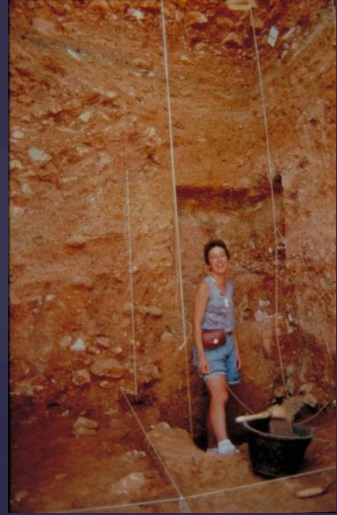
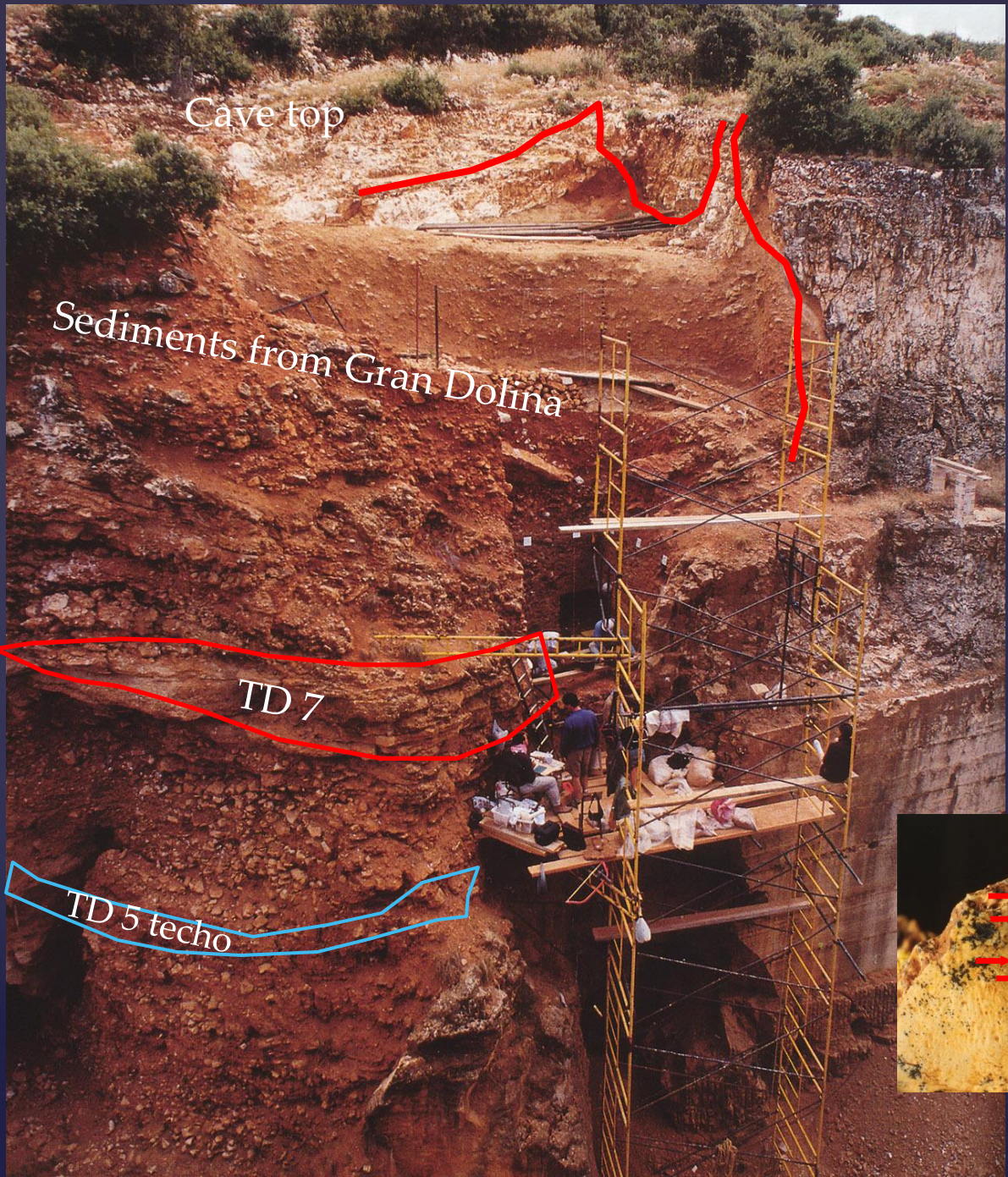
Demuro et al., 2014

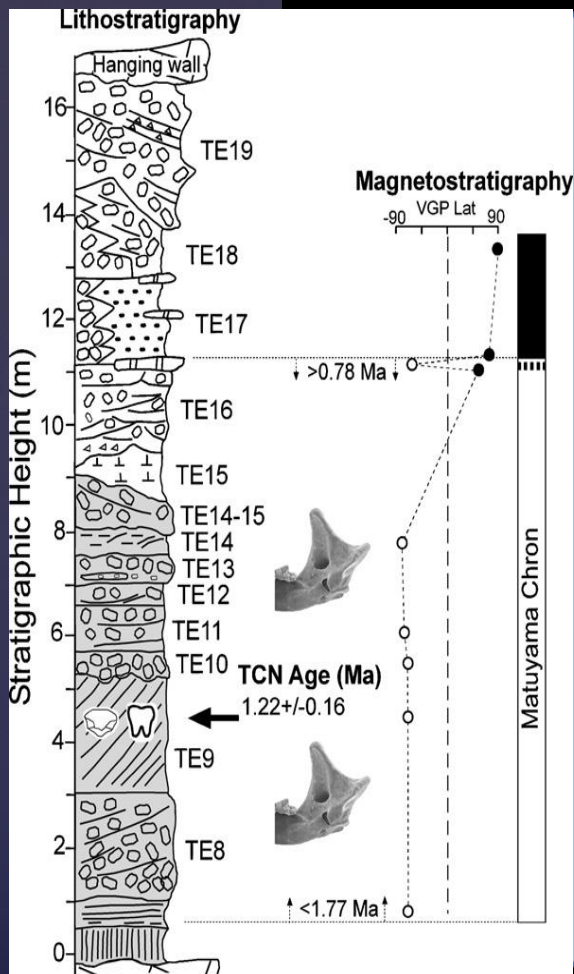


The Site of Sima del Elefante , Atapuerca



Huguet 2007





CR PALEVOL 2008

TE15-19

FU 6

Crocota crocuta



Stephanorhinus hemitoechus

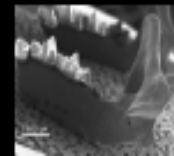


FAD: *Homo heidelbergensis*, *Ursus deningeri*, *Stephanorhinus hemitoechus*, *Arvicola cantianus*

Ursus dolinensis



Asoriculus gibberodon



TE9-14

FU 1

FAD & LAD: 3 *Allophaiomys* spp, *Castillomys*, *Asoriculus*.

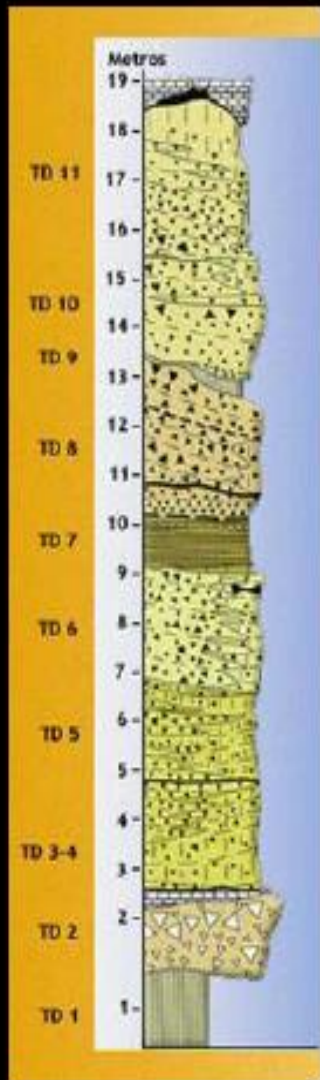
Beremendia fissidens



Castor fiber



1 2 cm



FU 6
TD8b-11

FAD: *Homo heidelbergensis*, *Ursus deningeri*,
Stephanorhinus hemitoechus, *Arvicola*
cantianus

FU 5
TD7-8a

FAD: *Microtus ratticepoides*
LAD: *Beremendia*, *Mimomys savini*

FU 4
TD 6b

FAD & LAD: *Homo antecessor*.

FU 3
TD5-6a

FAD: *Sus scrofa*, *Homotherium*

FU 2
TD3-4

FAD: *Iberomys huescarensis*, *Allocricetus*,
Crocuta.



Homo antecessor
TD-6, FU 4



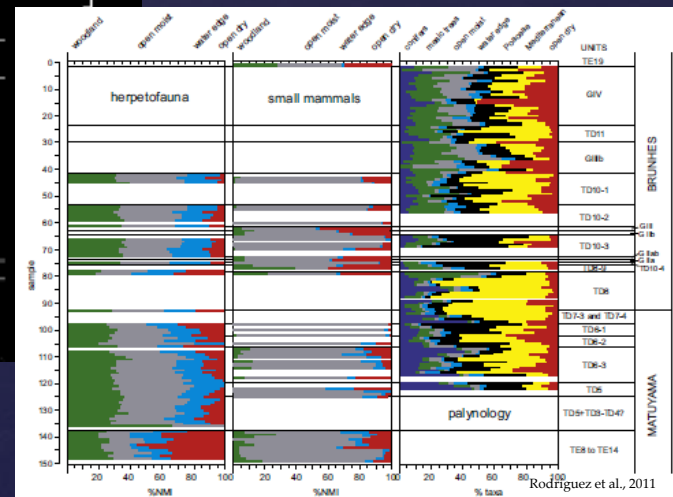
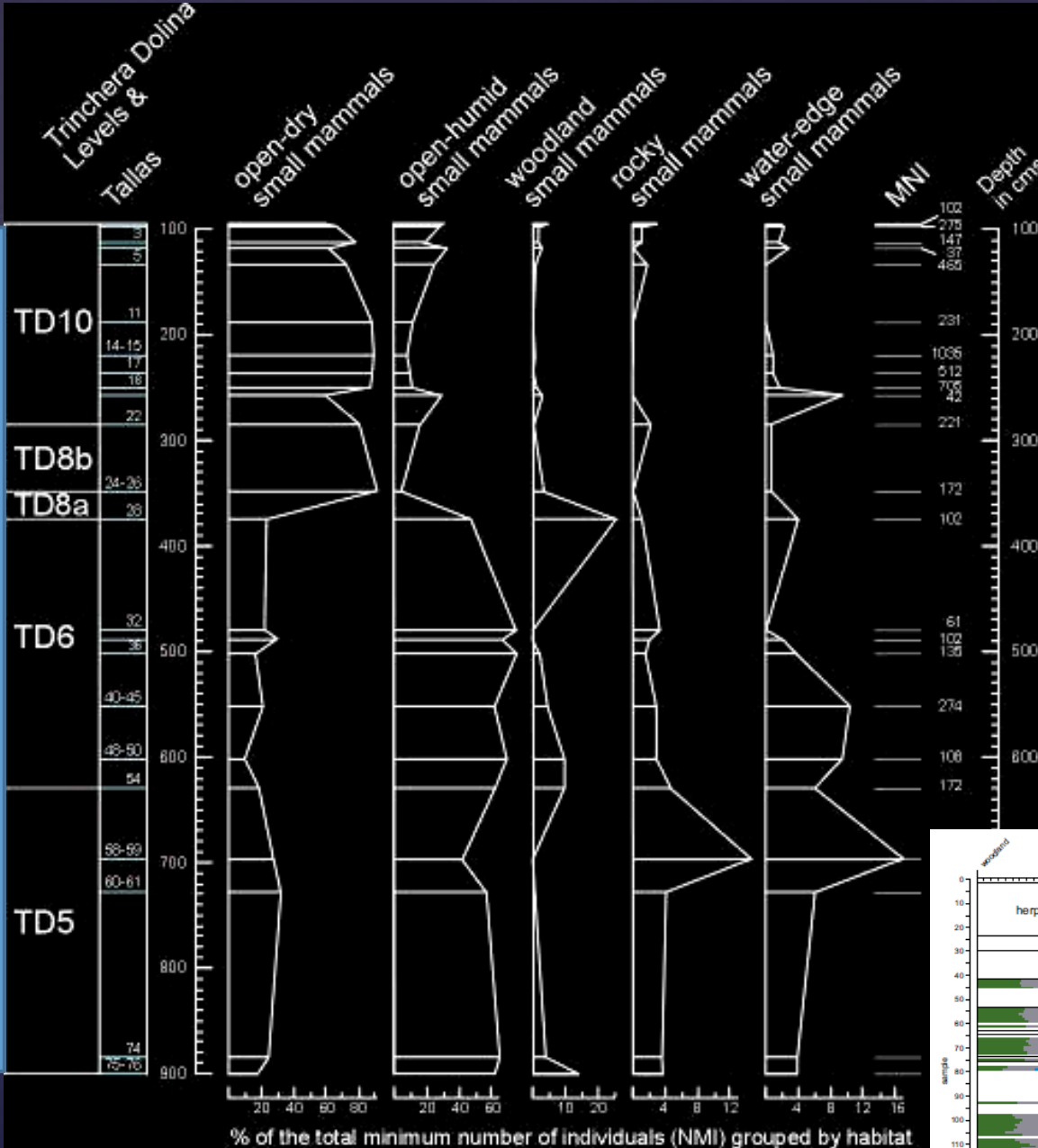
Crocuta crocuta
TD-3, FU 2

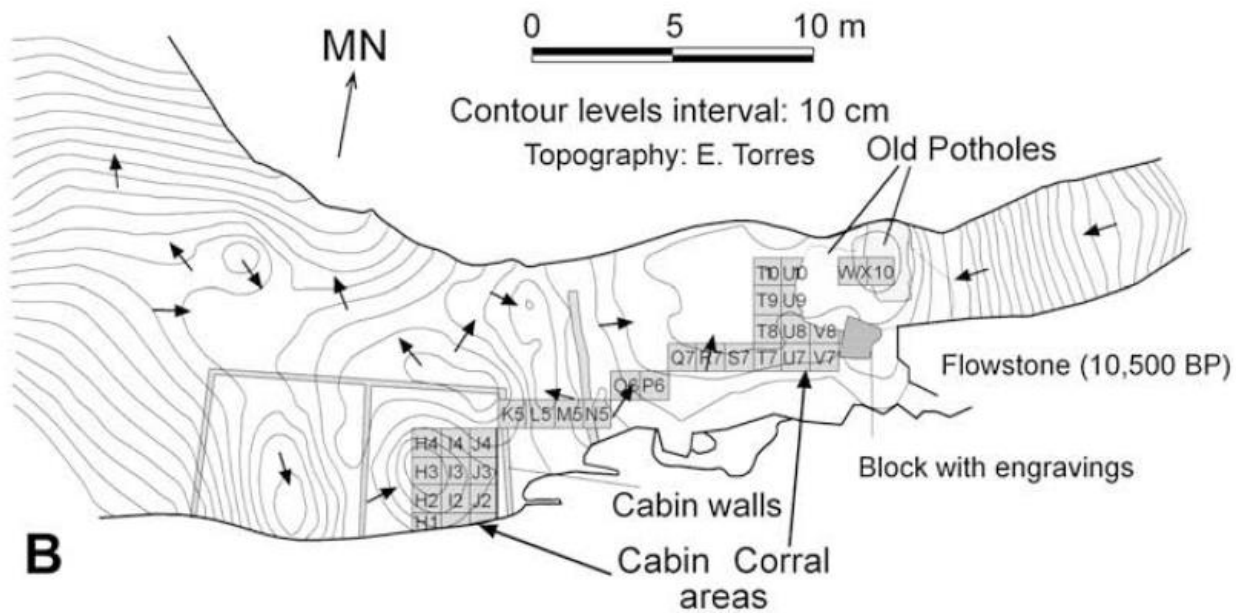
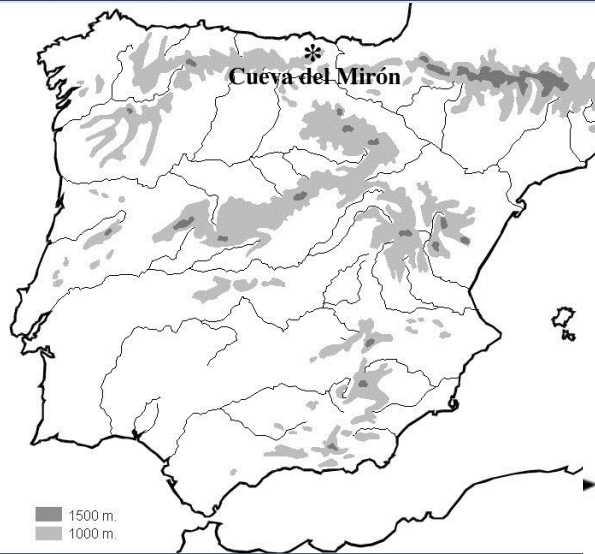


460 ky

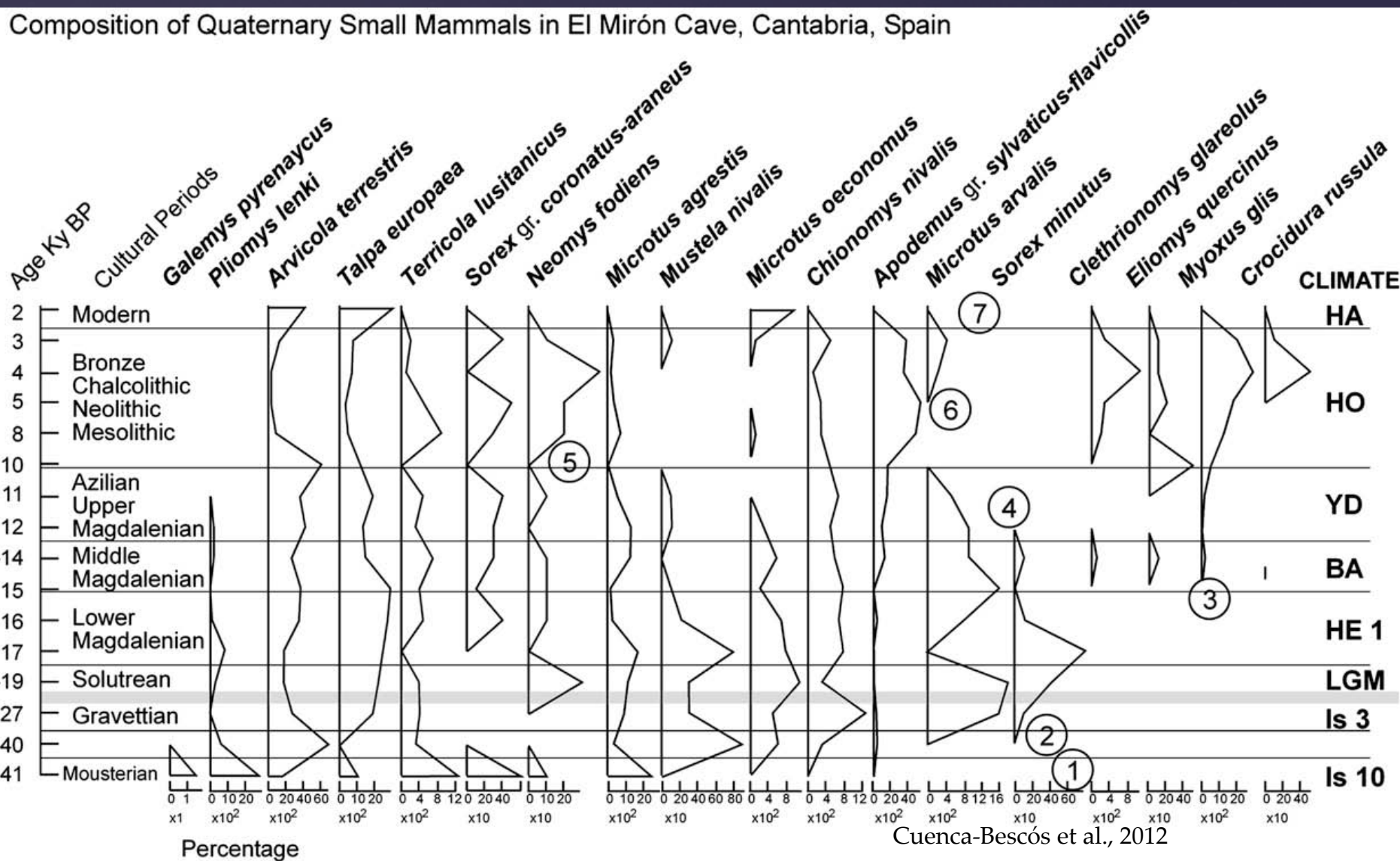
780 ky

900 ky



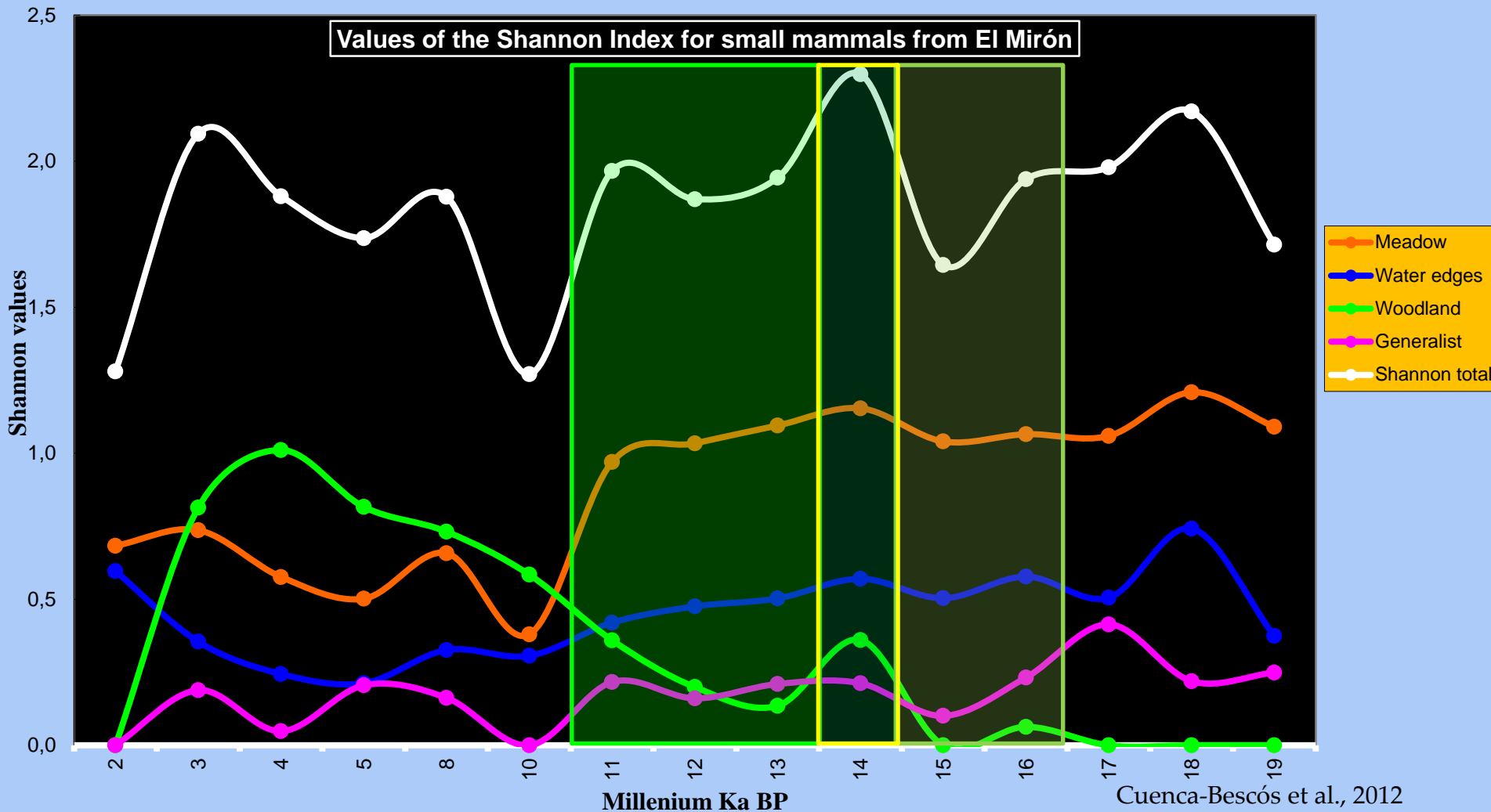


Composition of Quaternary Small Mammals in El Mirón Cave, Cantabria, Spain



Cuenca-Bescós et al., 2012

Values of the Shannon Index for small mammals from El Mirón



Cuenca-Bescós et al., 2012



Thanks!