



The Abdus Salam
International Centre
for Theoretical Physics



Physics and Archaeology

Claudio Tuniz

'Abdus Salam' International Centre for Theoretical Physics



Miramare castle

ICTP

University Trieste

ELETTRA



ICTP

ELETTRA

Roman military fort

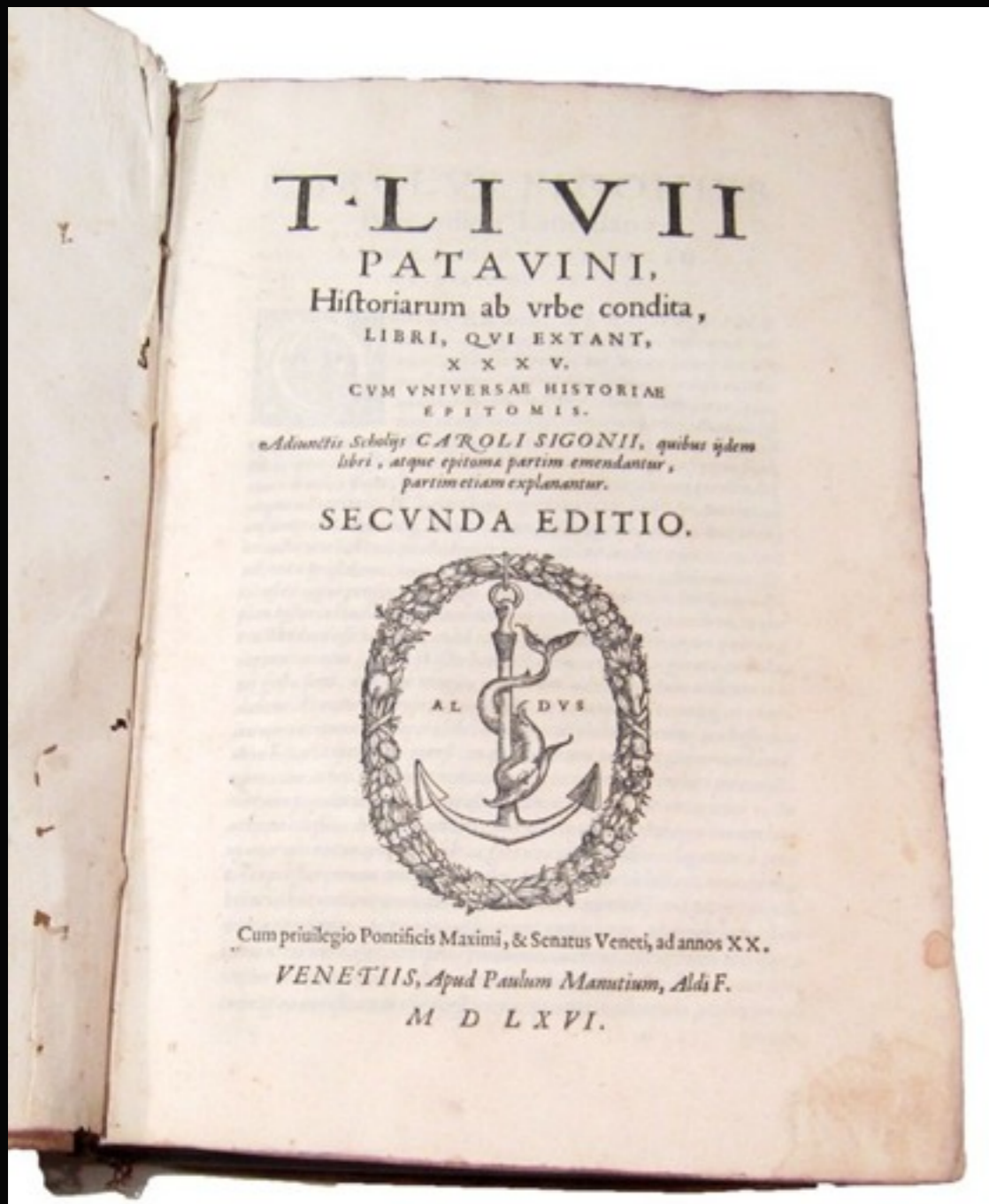
prehistoric dental filling

6275 Loka, Sloveni

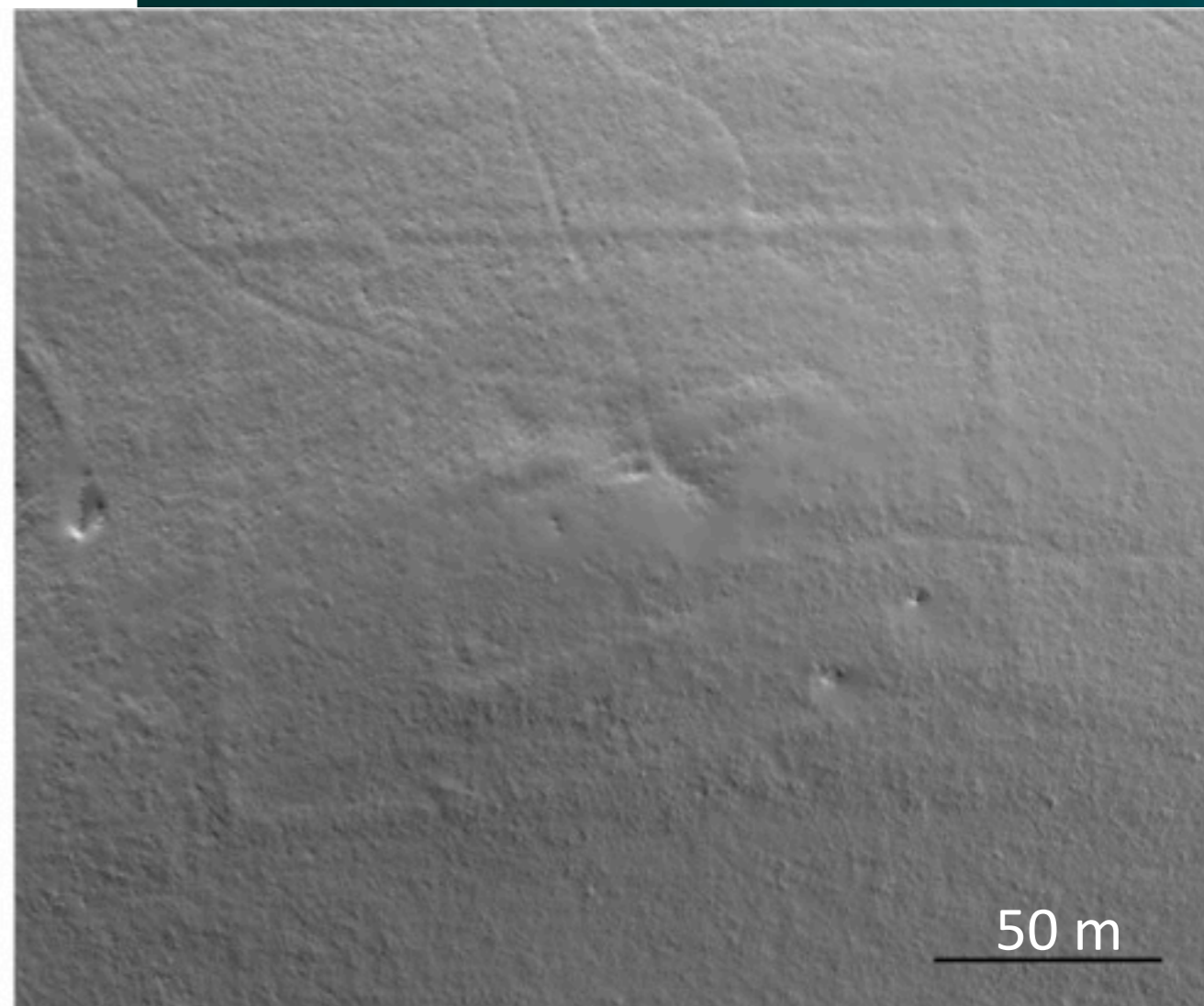
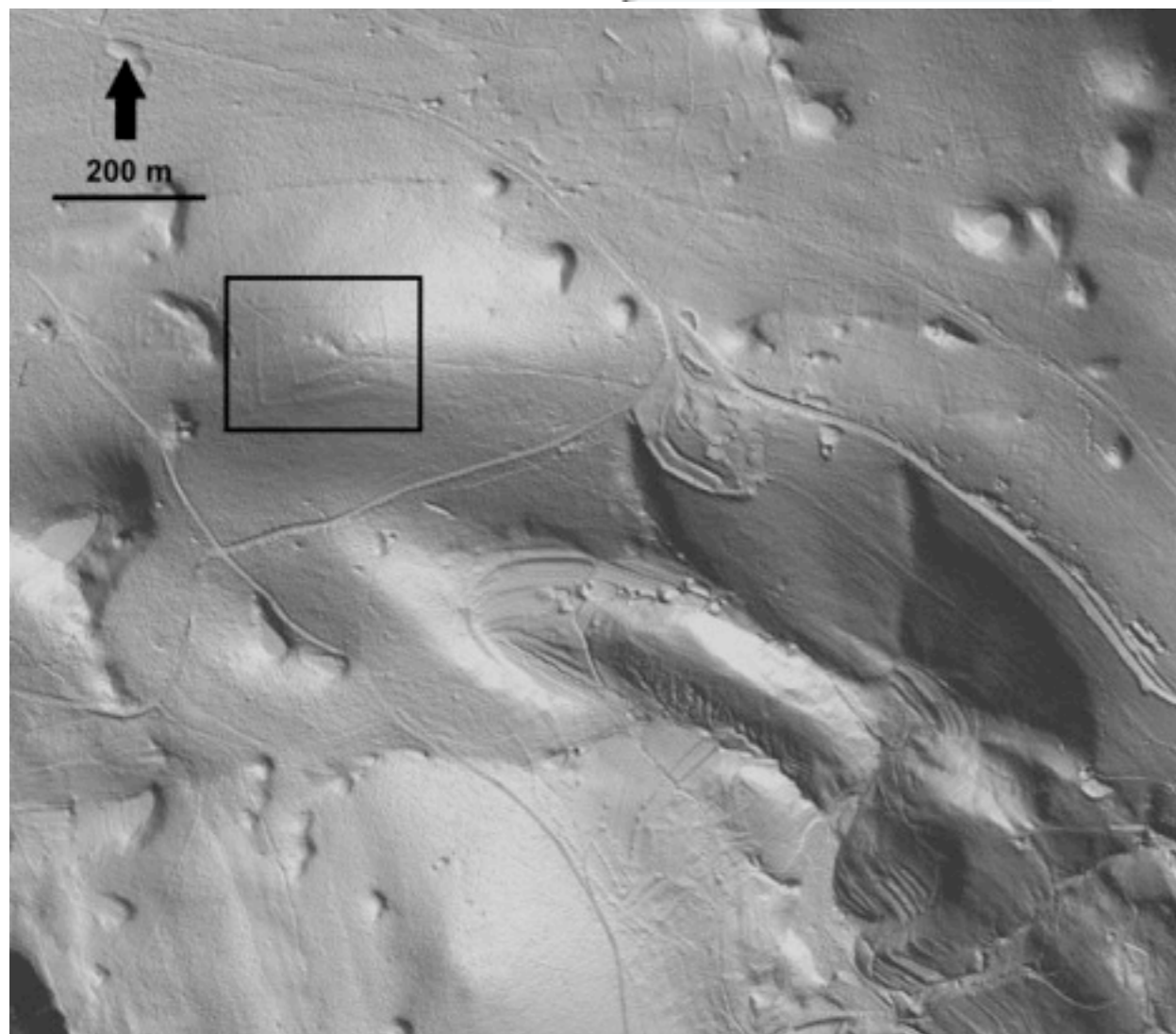
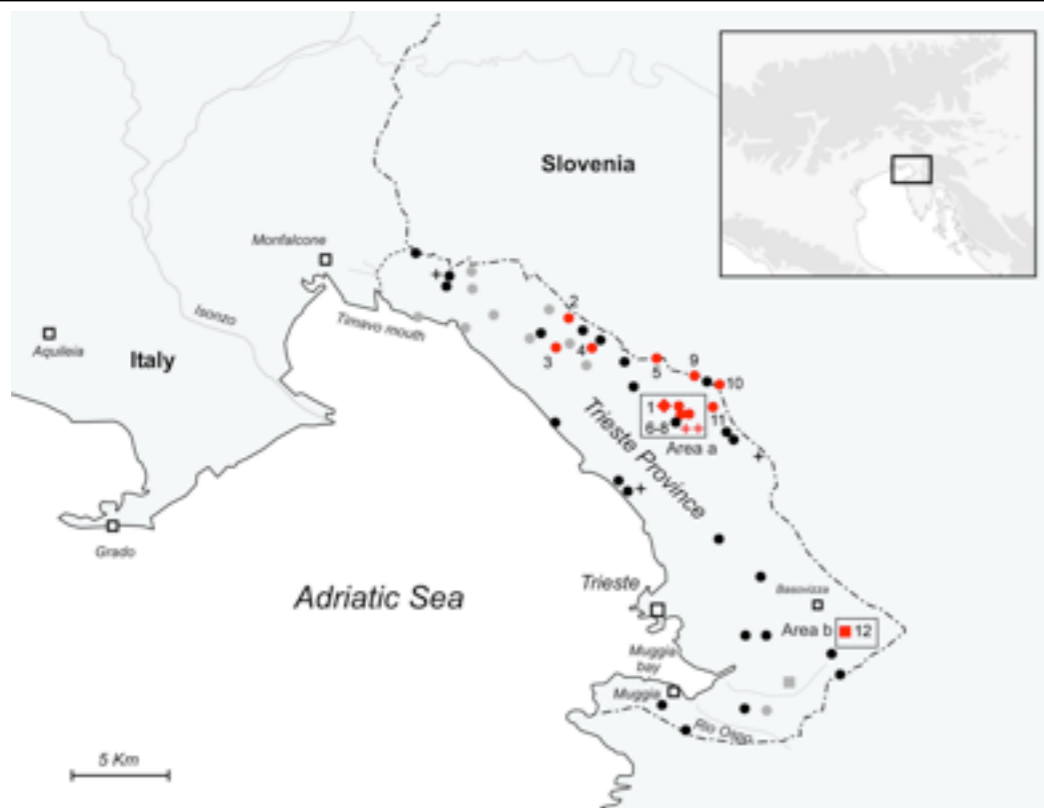
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image © 2013 DigitalGlobe
Image © 2013 GeoEye

The oldest Roman military camp in Europe



Aquileia

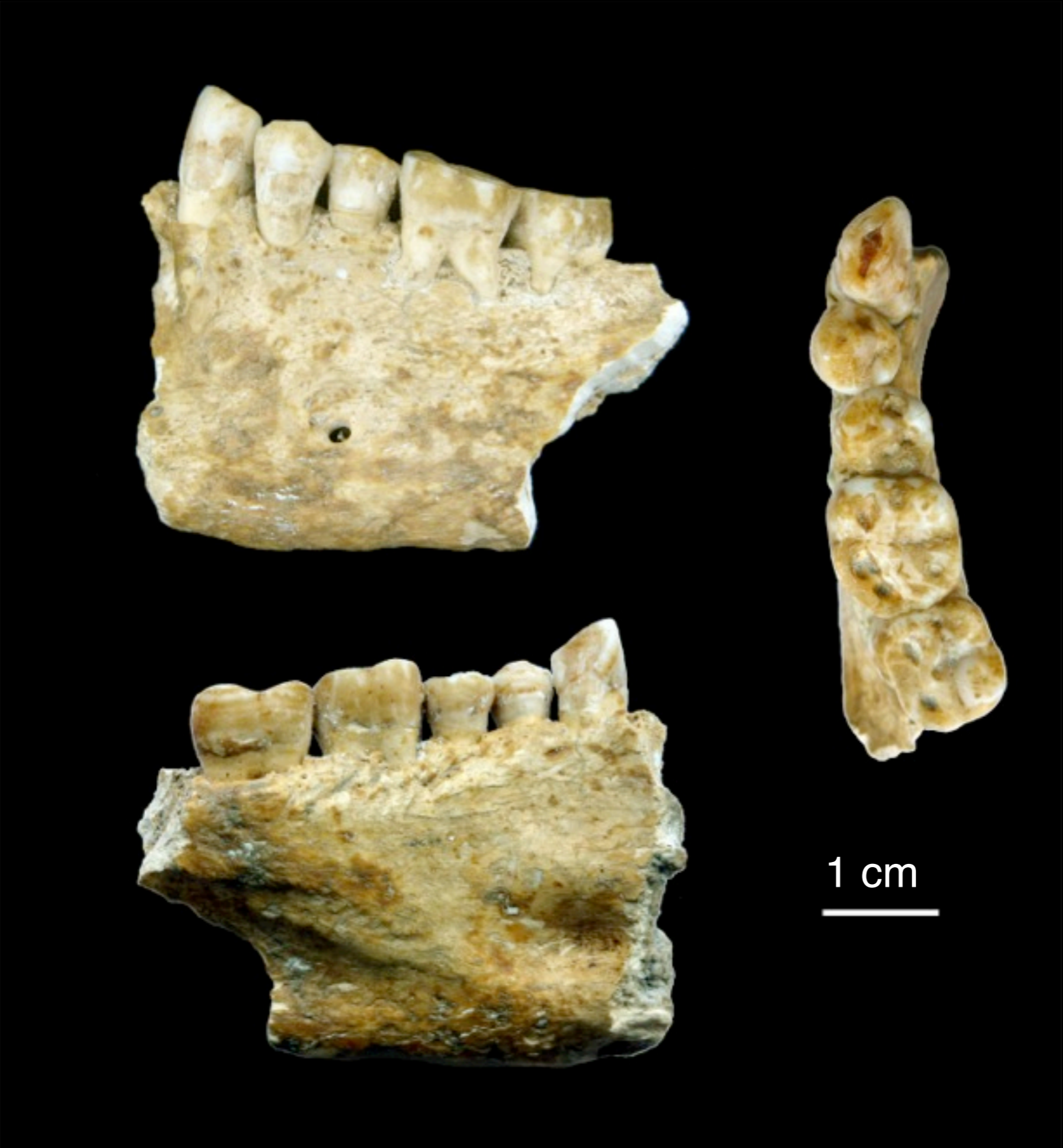


Dentistry during the Stone Age



Giuseppe Müller (1880-1964)





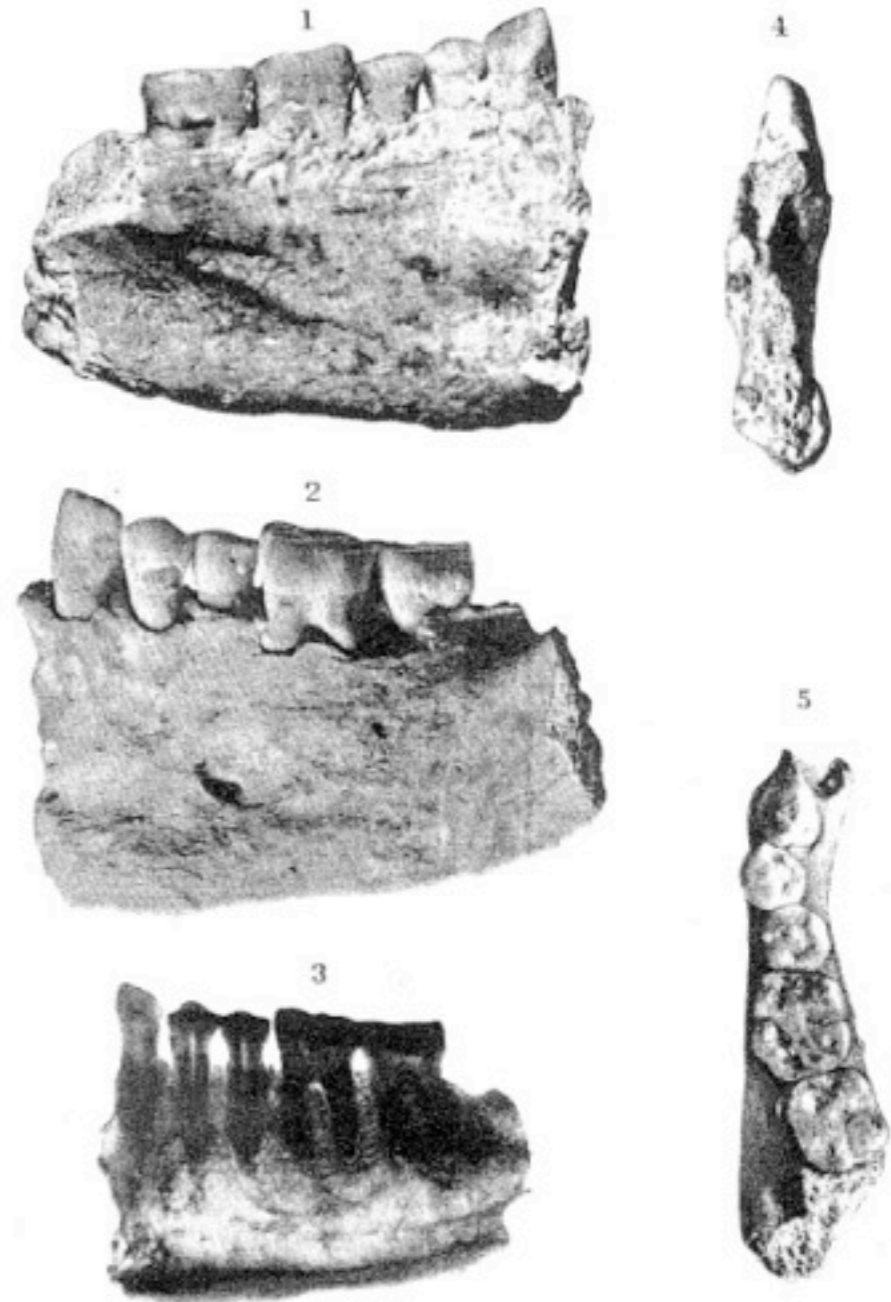
*Cenni preliminari su un ritrovamento di mandibola umana
fossile in una caverna dell'Istria settentrionale*
Roberto Lepori, Trieste, 1937

MUSEO CIVICO DI
STORIA NATURALE
TRIESTE
N. 29083

ATTI
DEL
MUSEO CIVICO DI STORIA NATURALE
DI TRIESTE

VOLUME XIII
(1935-1941)

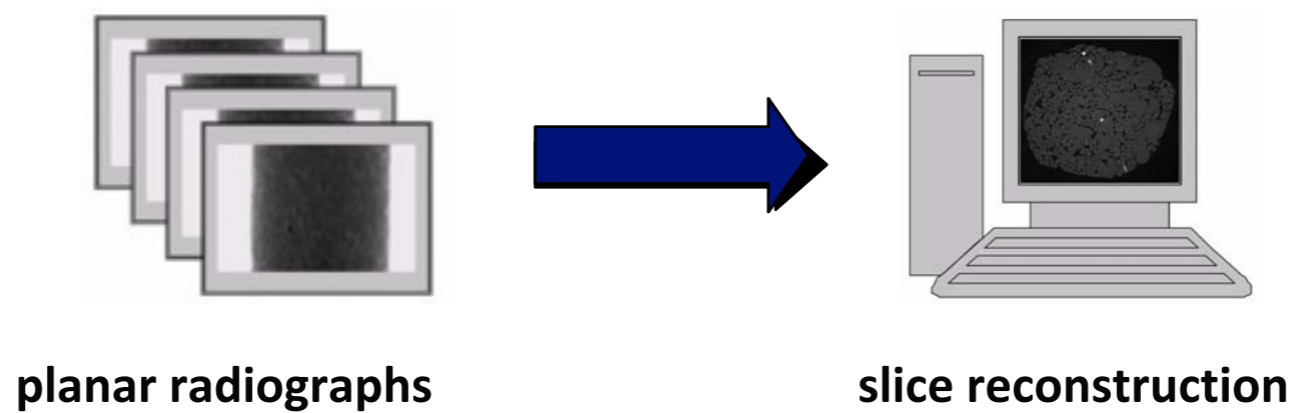
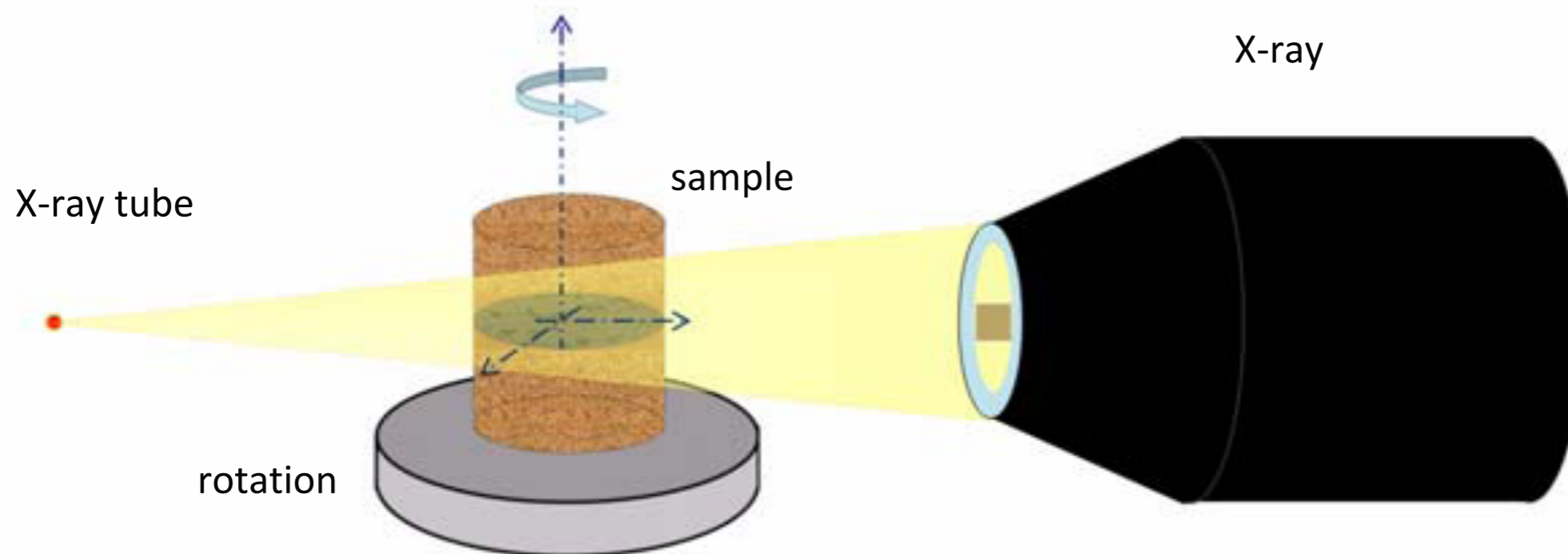
CASA EDITRICE IDEA
UDINE



Atti del Museo di Storia Naturale, Trieste - Vol. XIII.



Thursday, May 2, 13

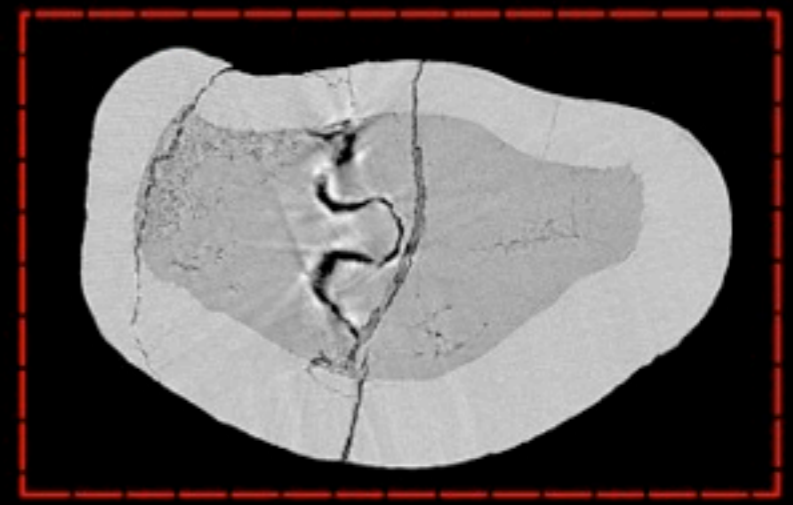
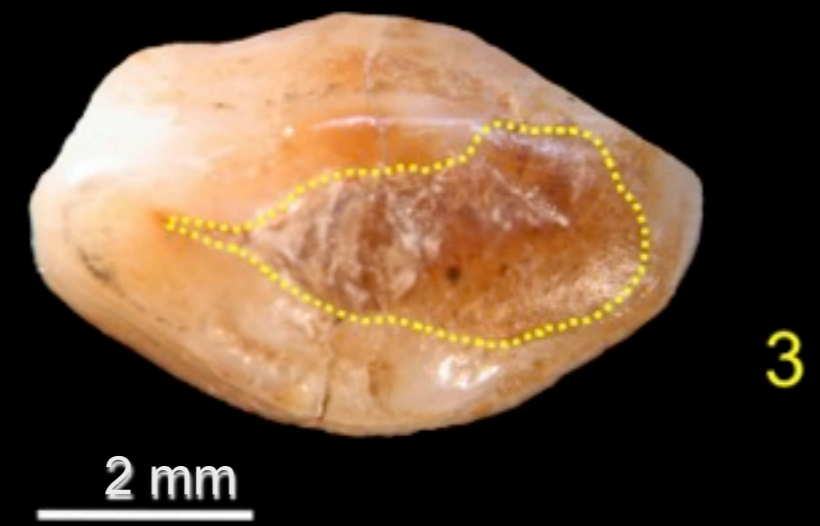
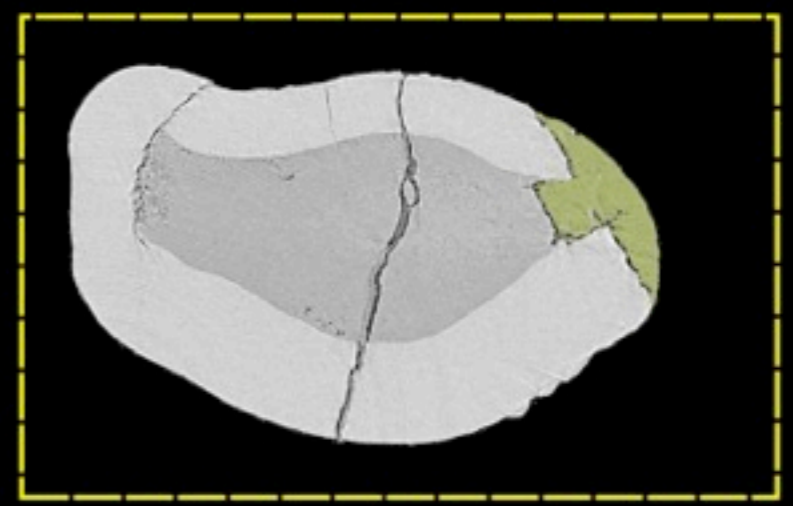
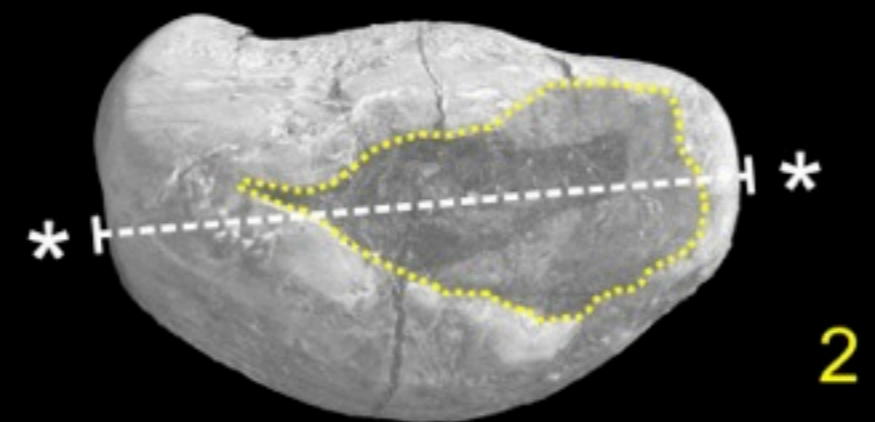
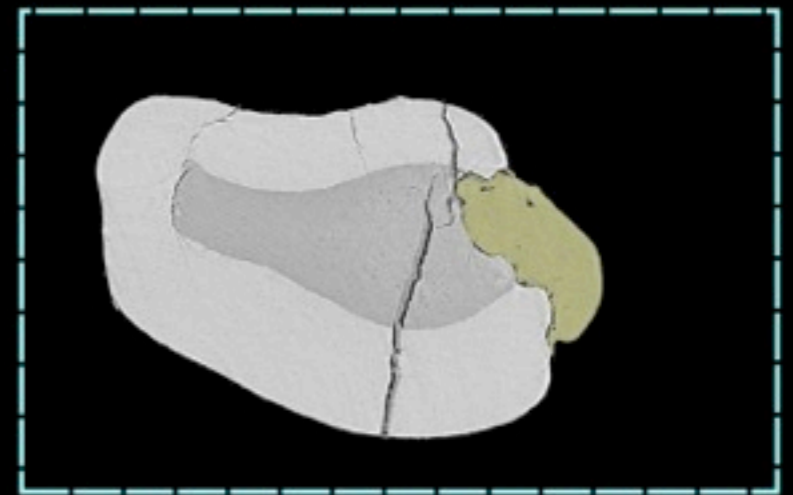
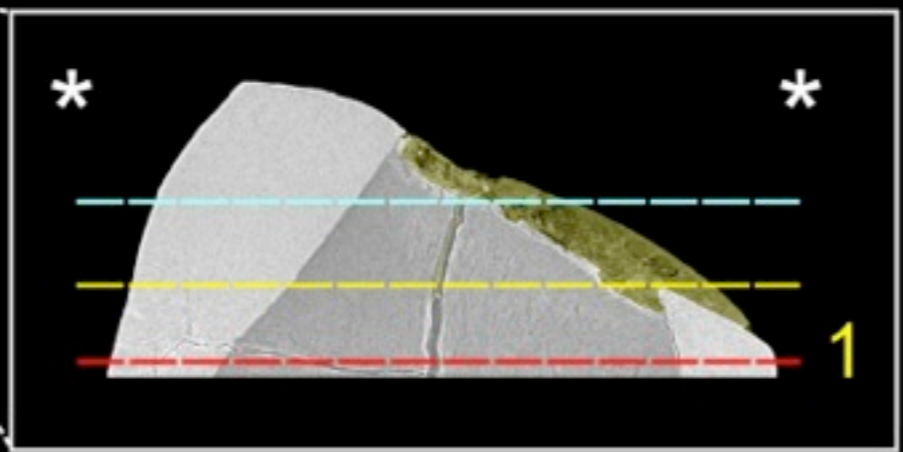
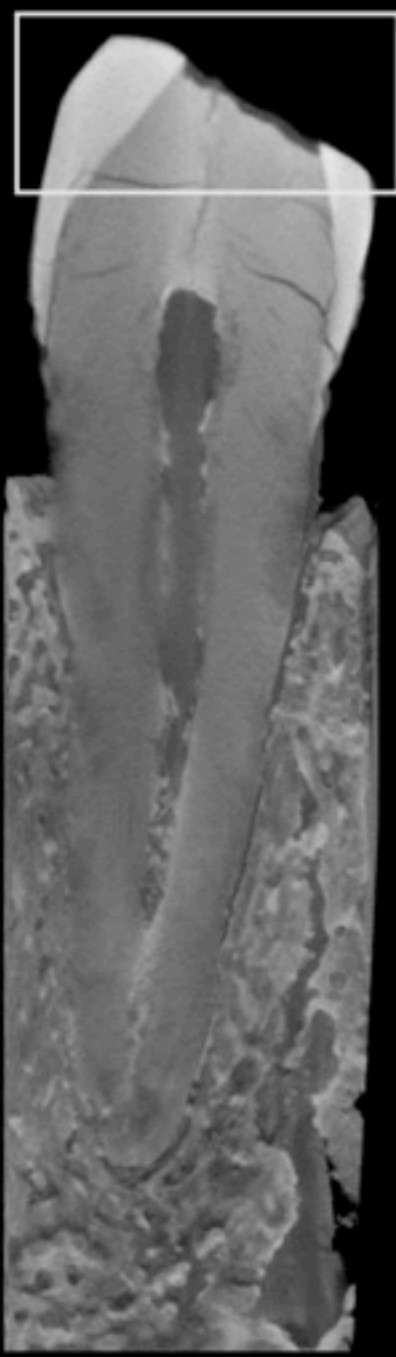


Lingual

A

B

C



Mesial

2 mm

2 mm

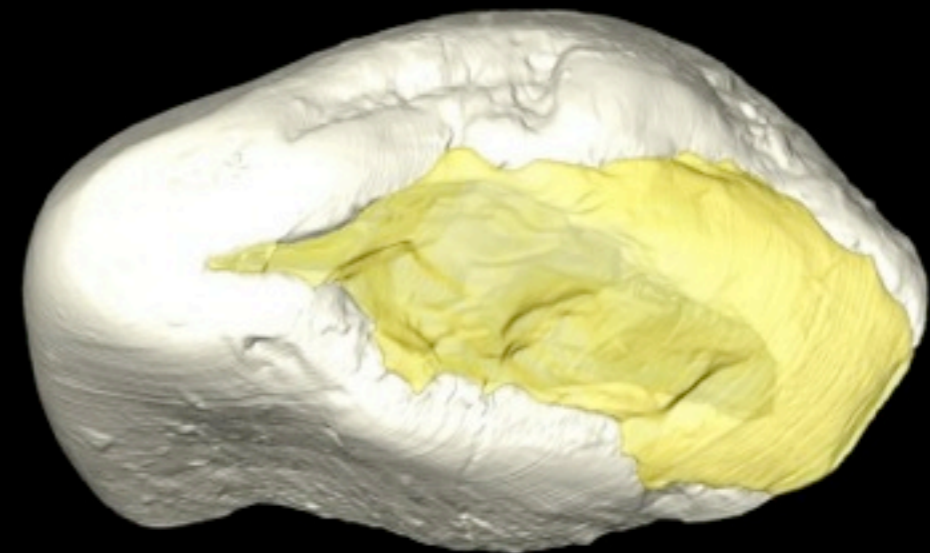
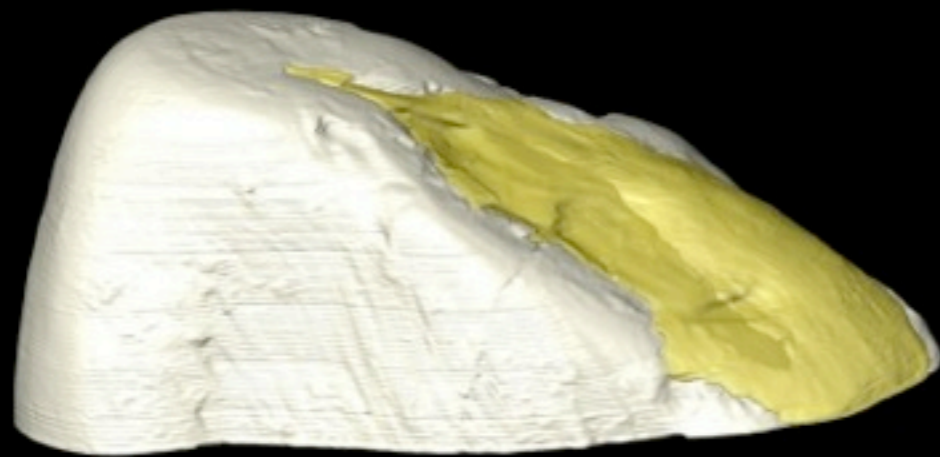
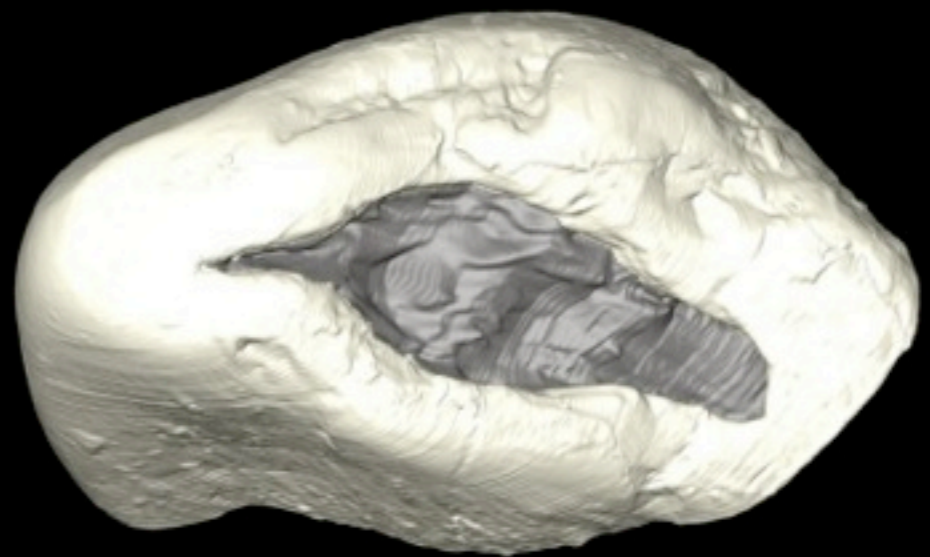
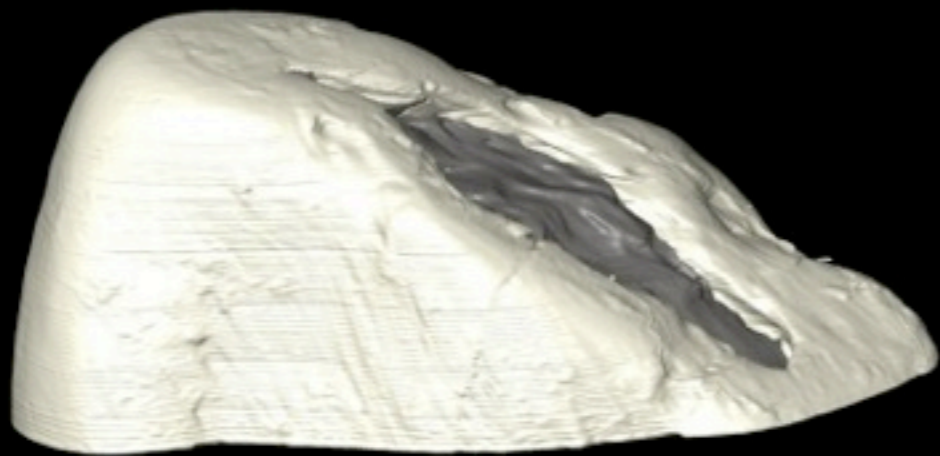
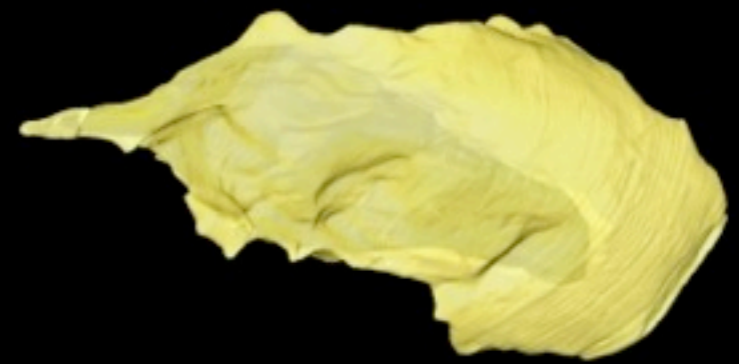
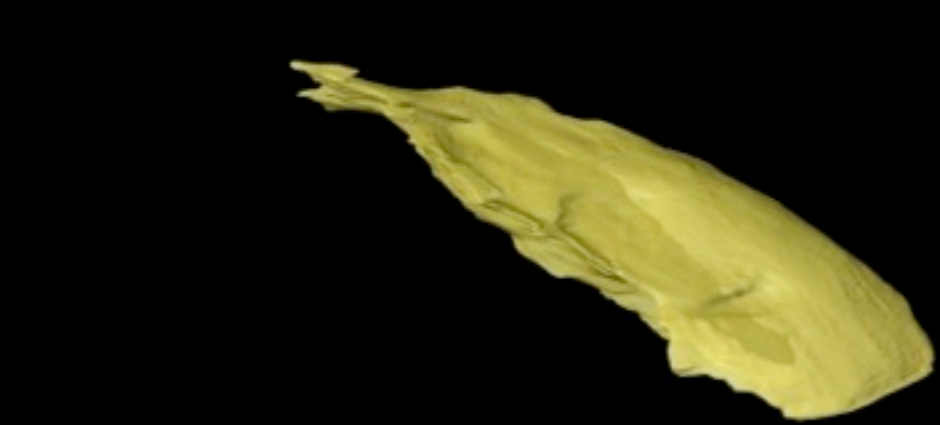
3

2

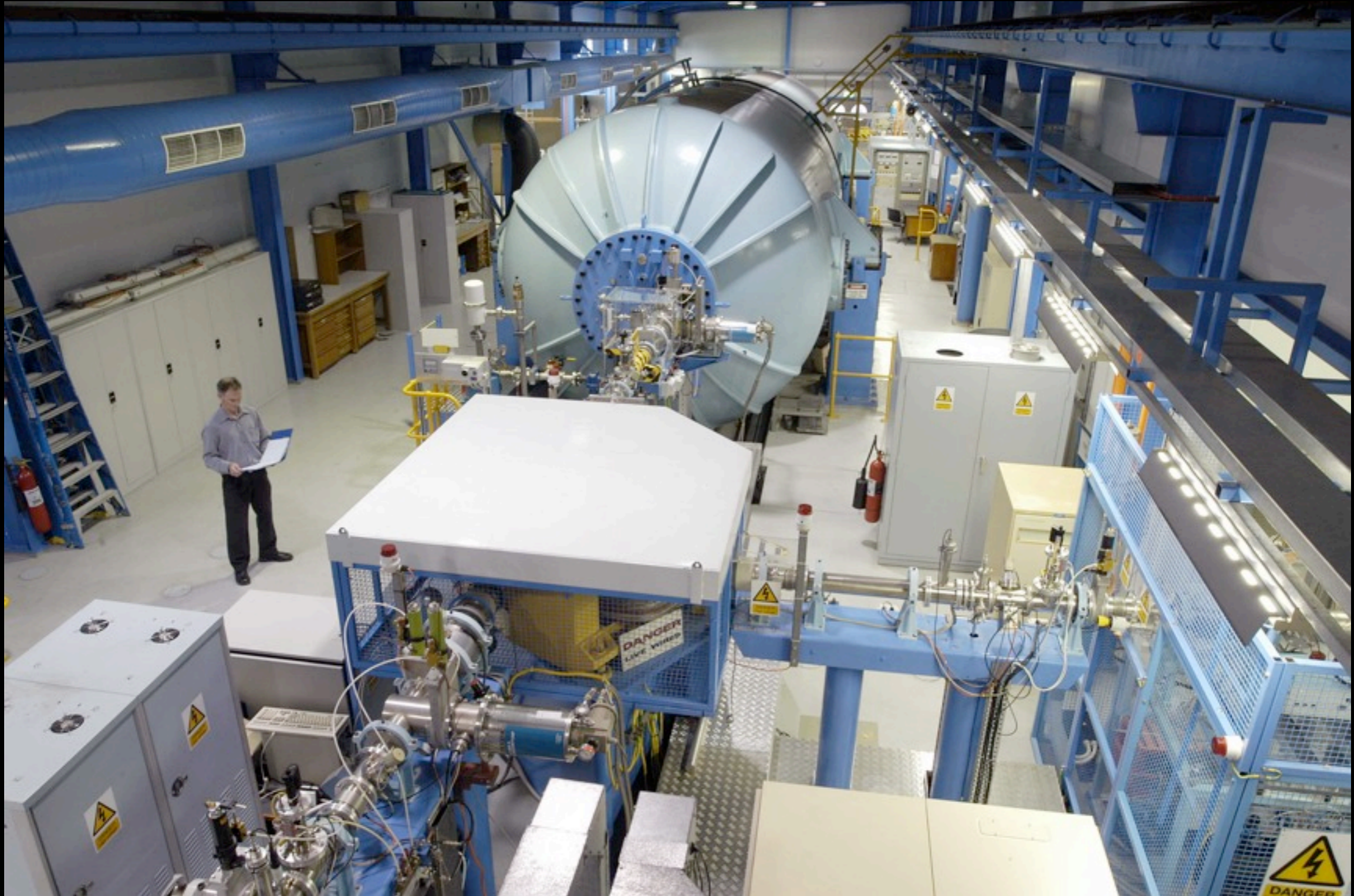
1

Radiocarbon



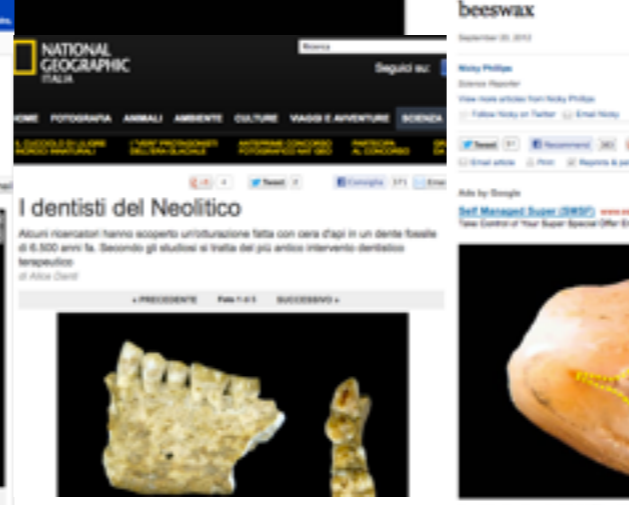
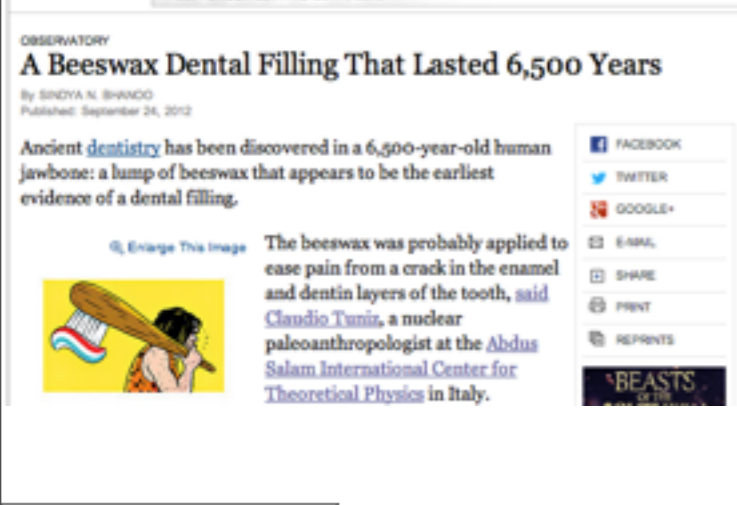
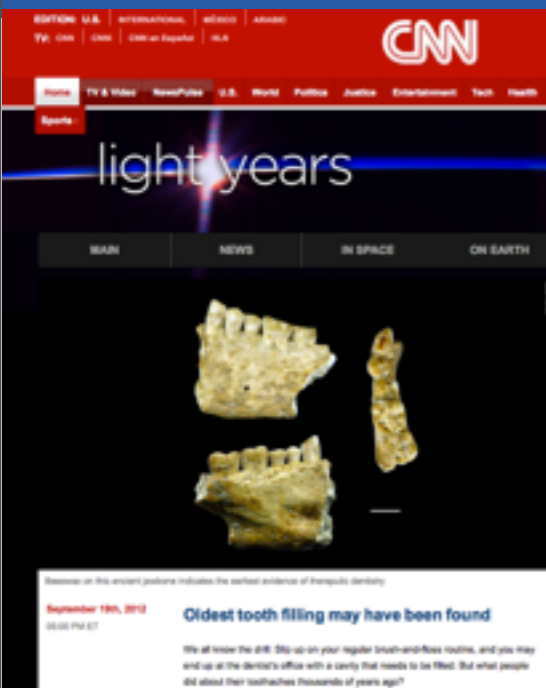


Sydney 2012





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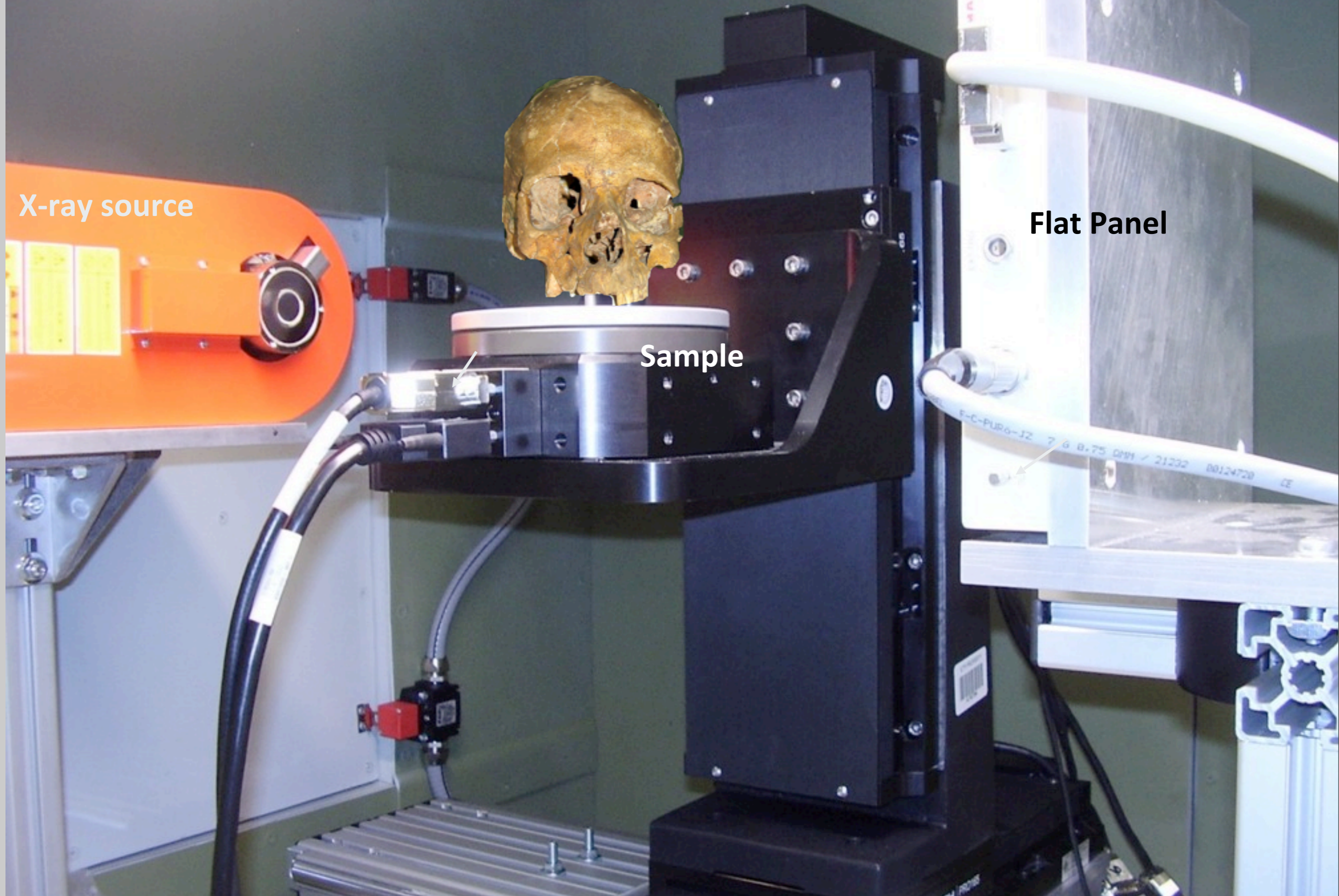


Inside the facility

X-ray source

Flat Panel

Sample



The Neanderthal Molare jaw

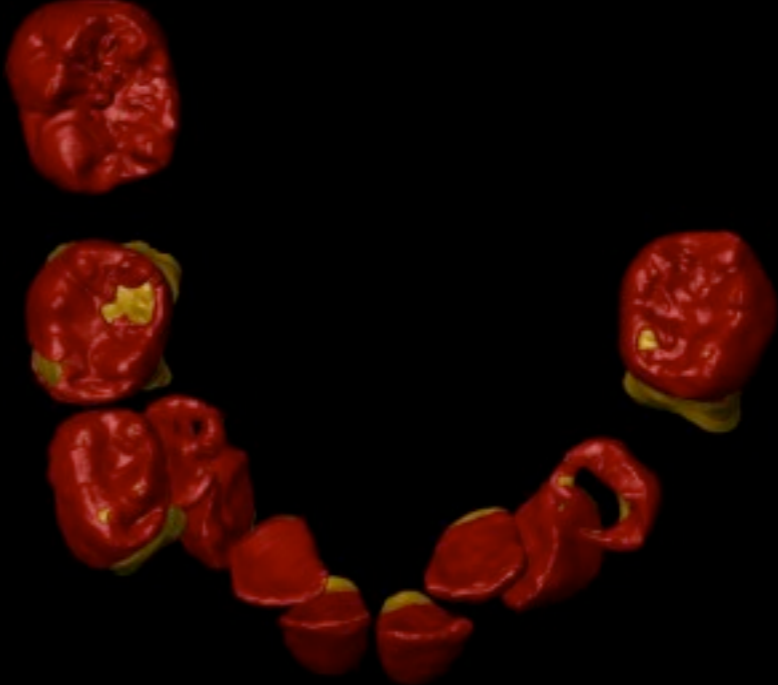
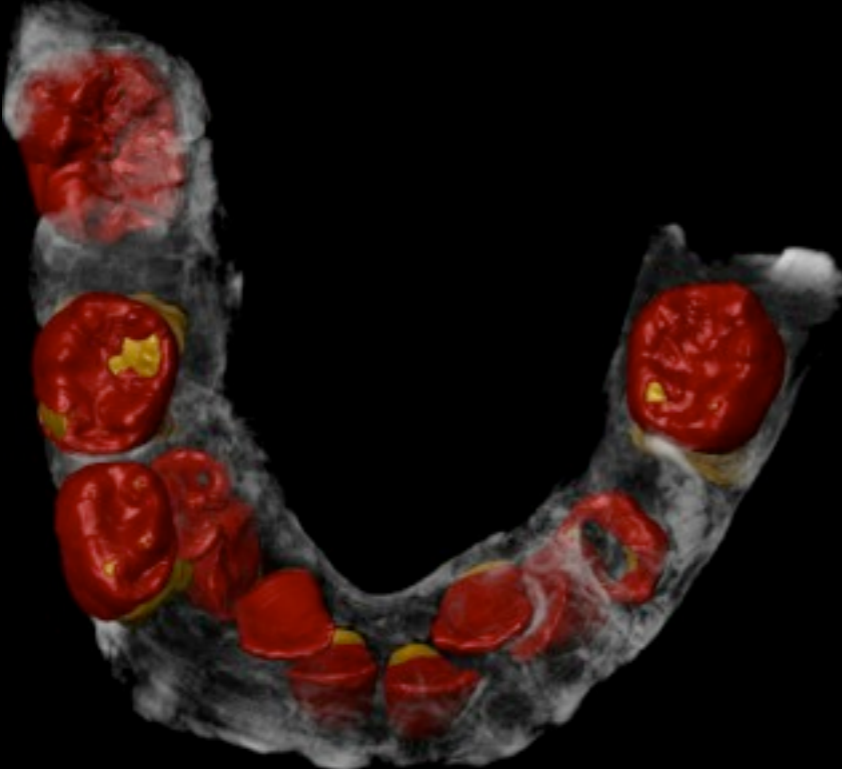
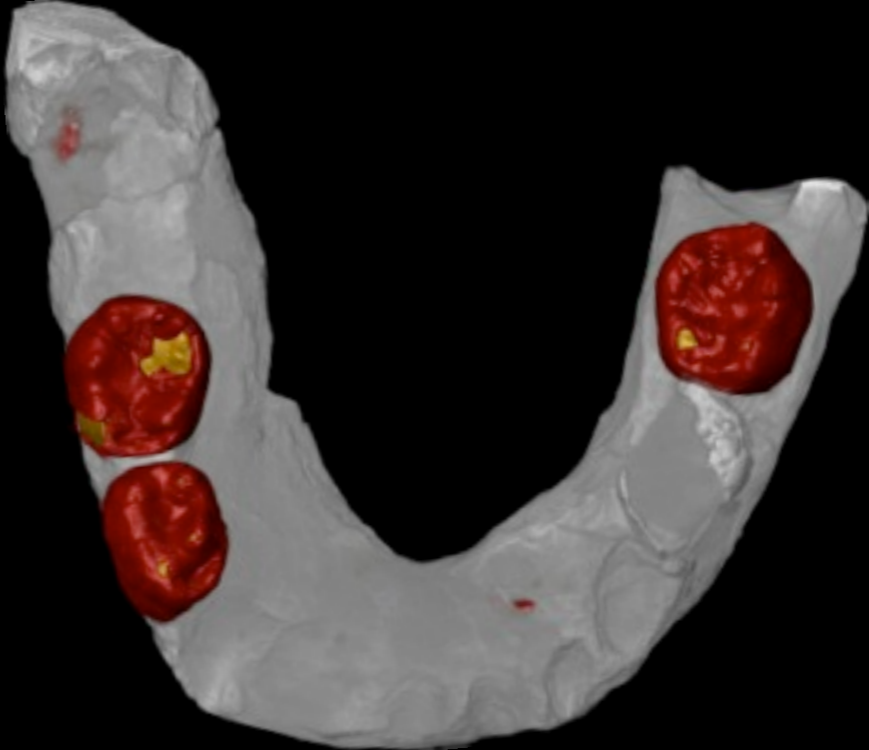
Rockshelter II Molare (Scario), Campania

Middle Paleolithic



Ronchitelli A. et al. 2005

Italian Neanderthal child ~ 100 thousand years



1 cm

The Divje babe flute, Mousterian, about 50000 years old, Slovenia



In collaboration with National
Museum of Slovenia, Ljubljana

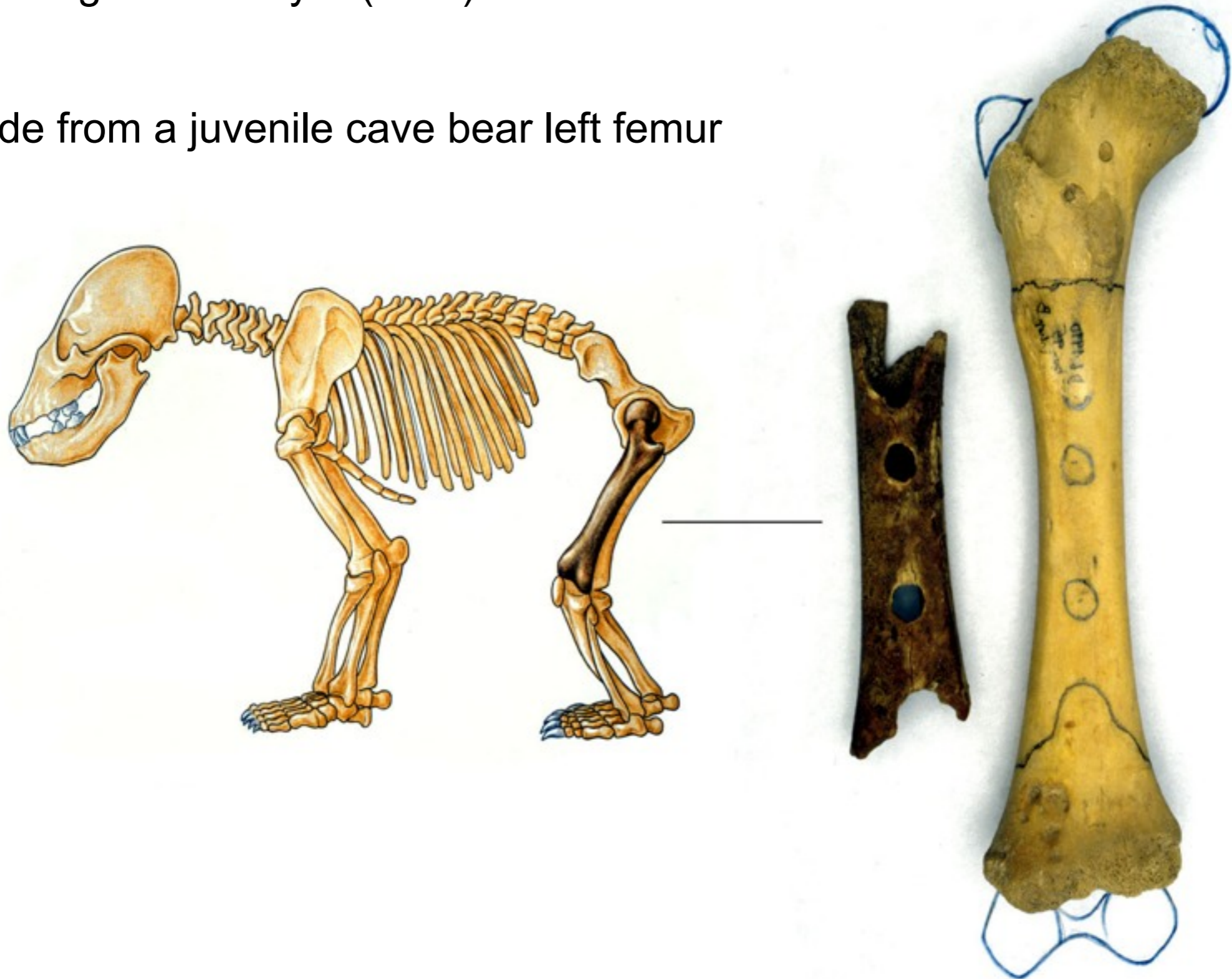
Divje babe cave



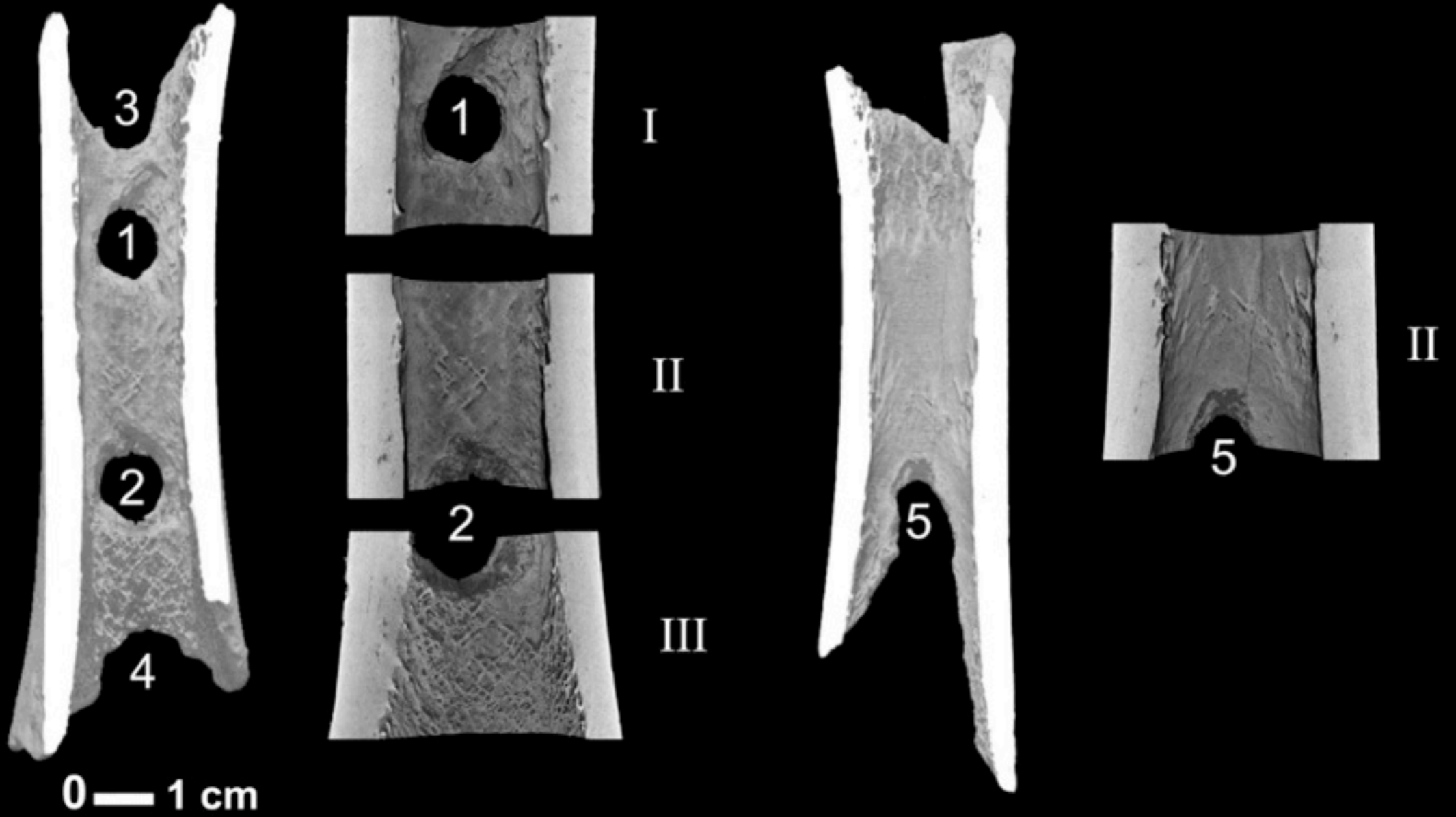
The flute was discovered in 1995 between two hearths cemented into a solid breccia.

Radiometric age of the layer (ESR): 50.000 - 60.000 years BP

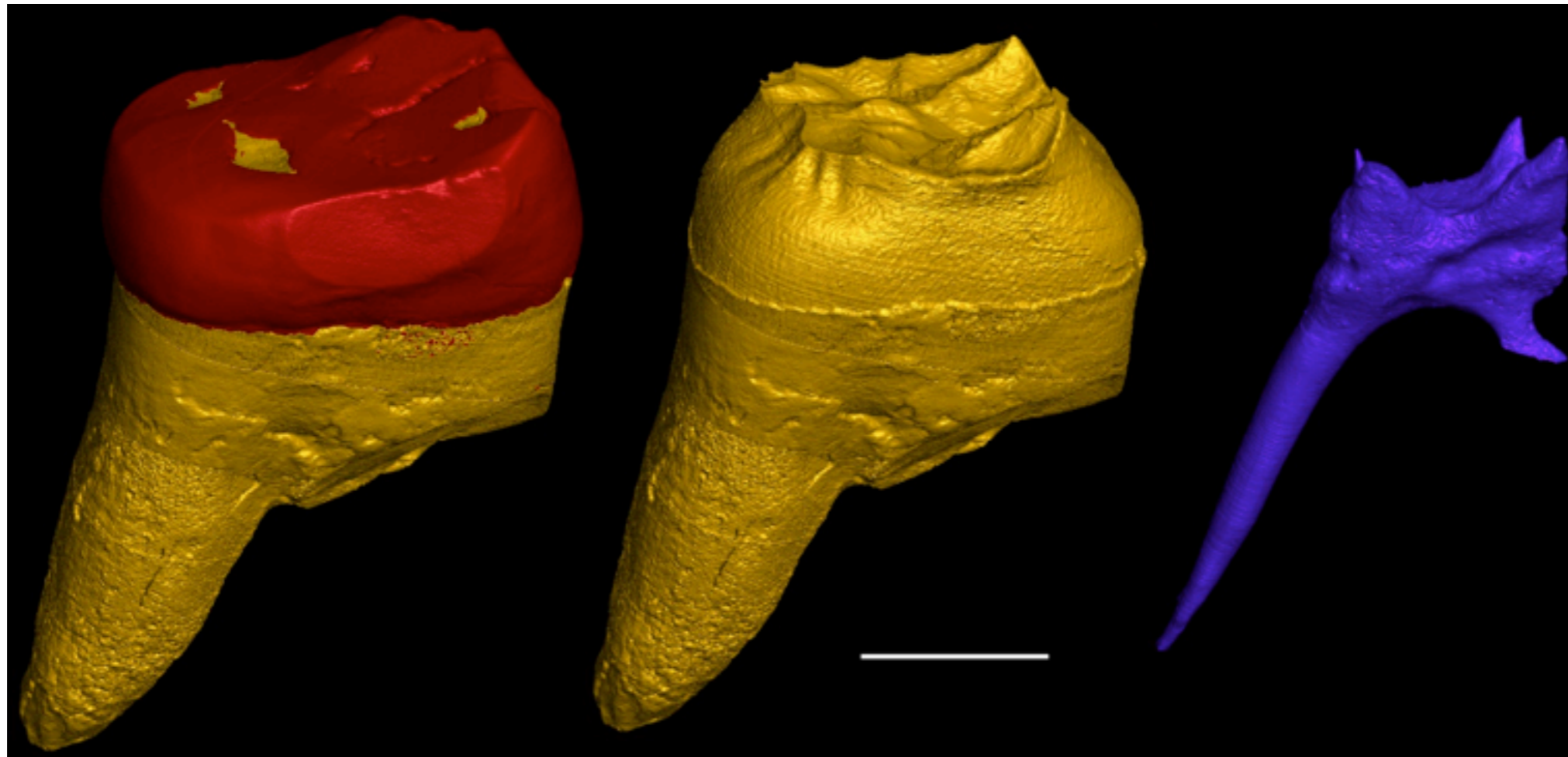
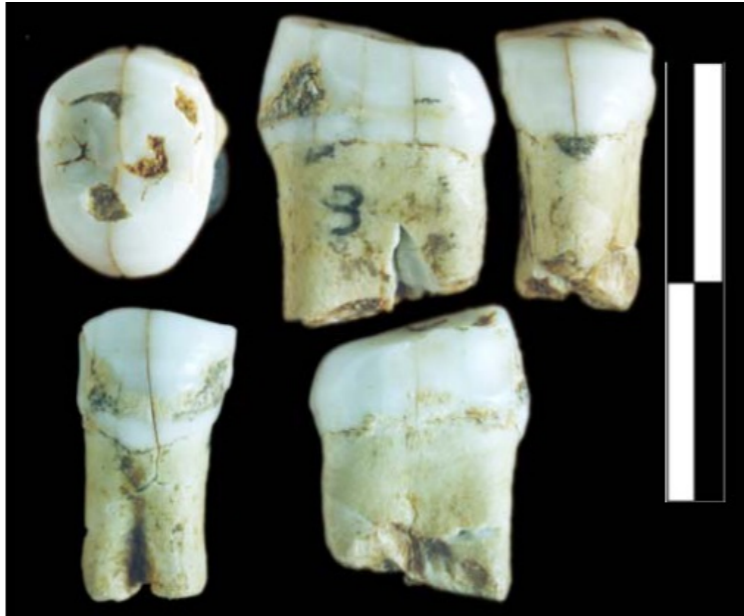
It was made from a juvenile cave bear left femur



A

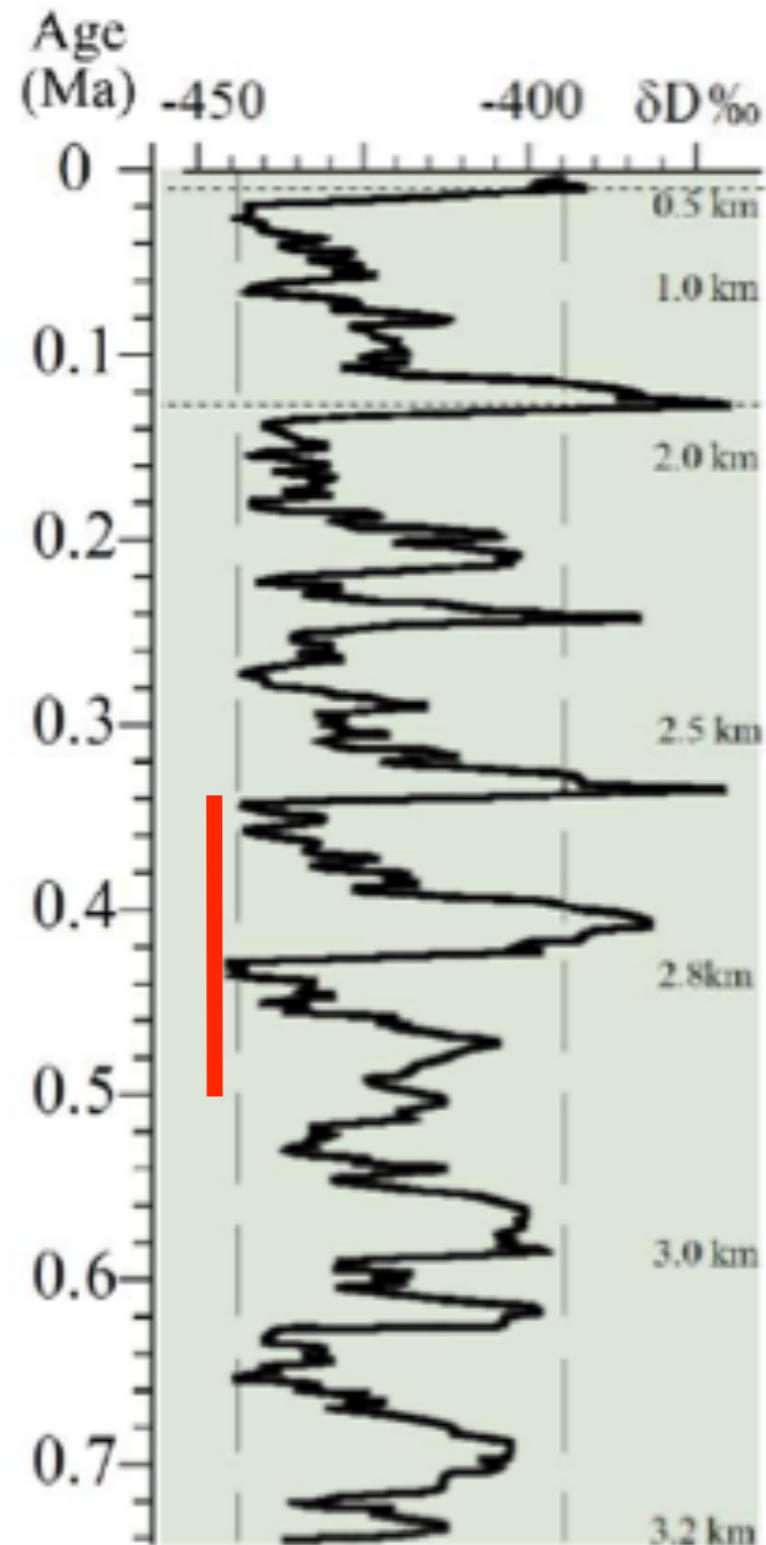


L'uomo di Visogliano



Paleoclima

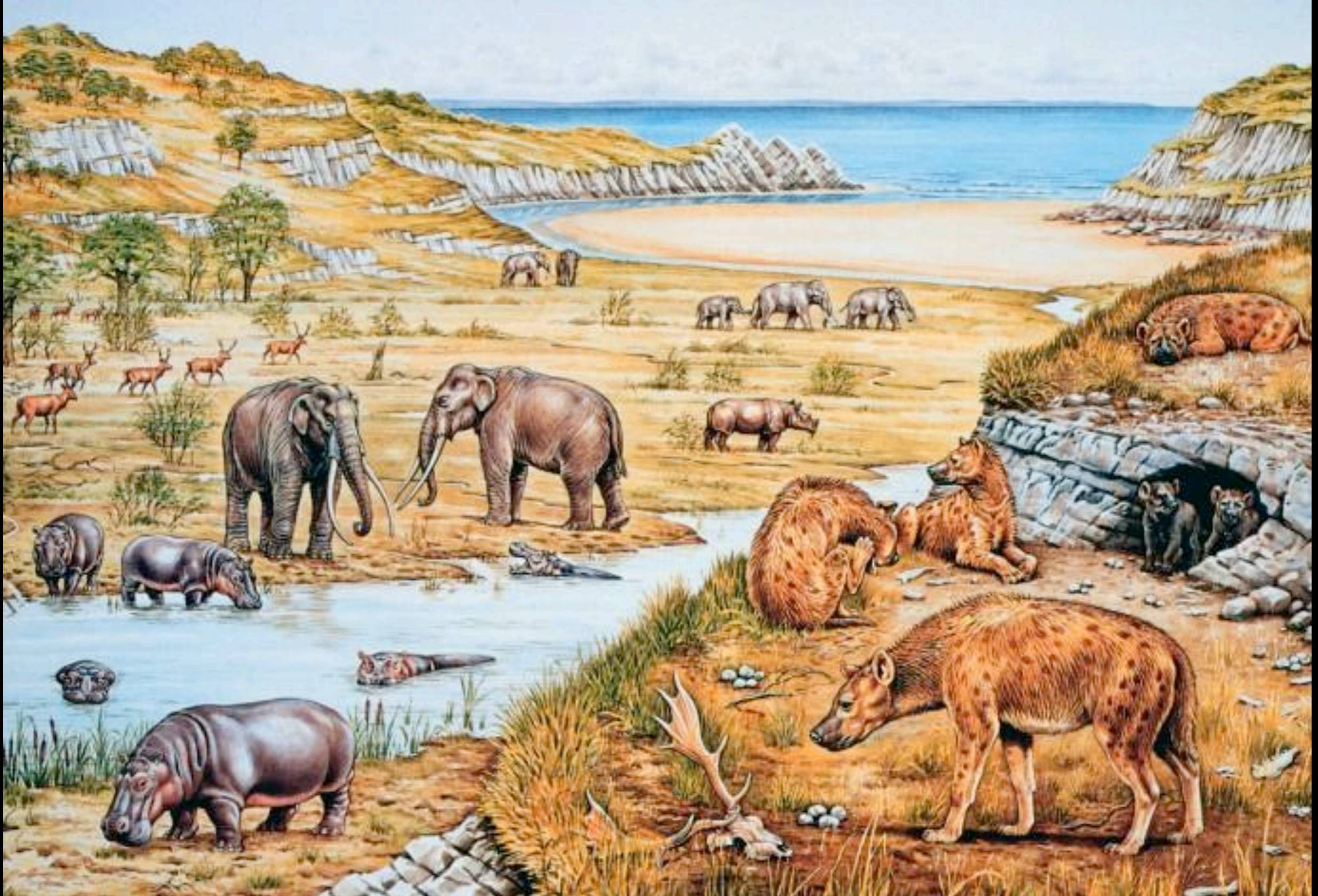
EPICA – Barbara Stenni 2007



H heidelbergensis
Visogliano

Carso 400 mila anni fa

Carso 400 mila anni fa



Carso 350 mila anni fa



stephanorhinus hundsheimensis



A caccia sul Carso



C. Tuniz G. Manzi D. Caramelli

La scienza delle nostre origini



 *Editori Laterza*