



Università
degli Studi
di Ferrara

Marco Peresani

Cronologie e culture del Paleolitico

Lezione 13II – The Uluzzian



La migration Dessin de Benoit Clarys

Map 1 - LAST GLACIAL MAXIMUM

(22 ± 2 ka cal BP)

average air temperature of about 4.5°C lower than today



Synthetic Legend

(see Explanatory Notes for other symbols)



Radiometrically or stratigraphically dated control sites

- Voterebrates
- Archaeology
- Ostracods
- Diatoms
- Active faults
- Active volcanoes
- Loess
- Stratigraphy

Sea-surface temperature (°C)

- Computed from planktic foraminifers
- Inferred isotherms

Glaciers and water bodies

- Glaciers
- Lakes
- Inferred rivers

Non glaciated mountain and bed-rock areas

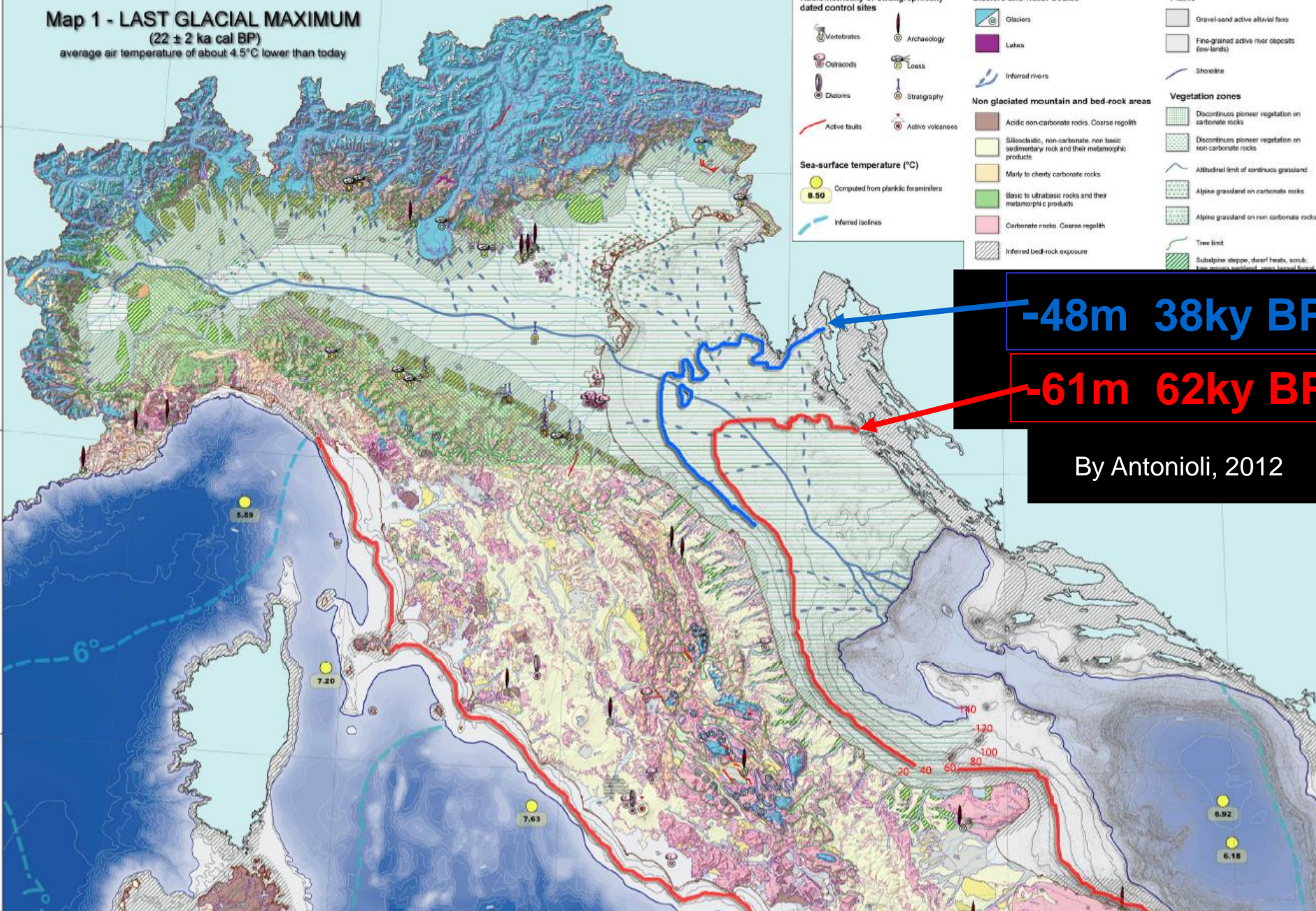
- Acidic non-carbonate rocks. Coarse regolith
- Siliceolite, non-carbonate, non basic sedimentary rock and their metamorphic products
- Marly to cherty carbonate rocks
- Basic to ultrabasic rocks and their metamorphic products
- Carbonate rocks. Coarse regolith
- Inferred bed-rock exposure

Plains

- Gravel-sand active alluvial fans
- Fine-grained active river deposits (low lands)
- Shoreline

Vegetation zones

- Discontinuous pioneer vegetation on carbonate rocks
- Discontinuous pioneer vegetation on non carbonate rocks
- Altitudinal limit of continuous grassland
- Alpine grassland on carbonate rocks
- Alpine grassland on non carbonate rocks
- Tree limit
- Subalpine steppes, dwarf heaths, scrub, low continuous residual areas beyond forest



-48m 38ky BP

-61m 62ky BP

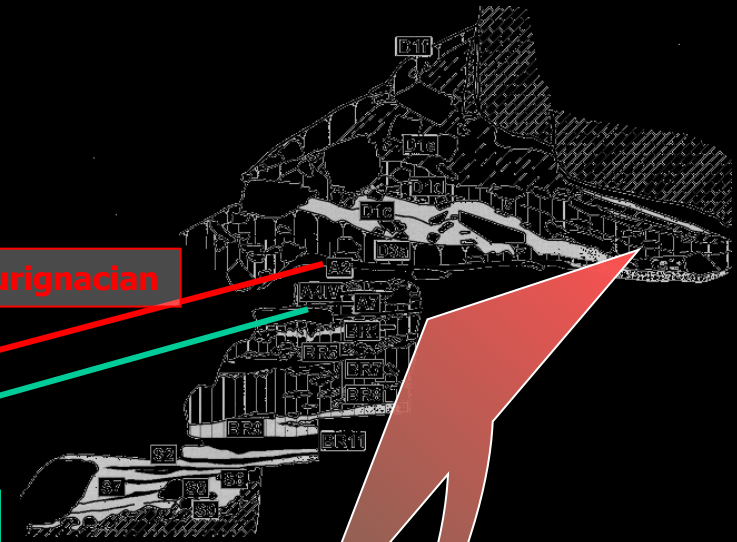
By Antonioli, 2012

Fumane Cave



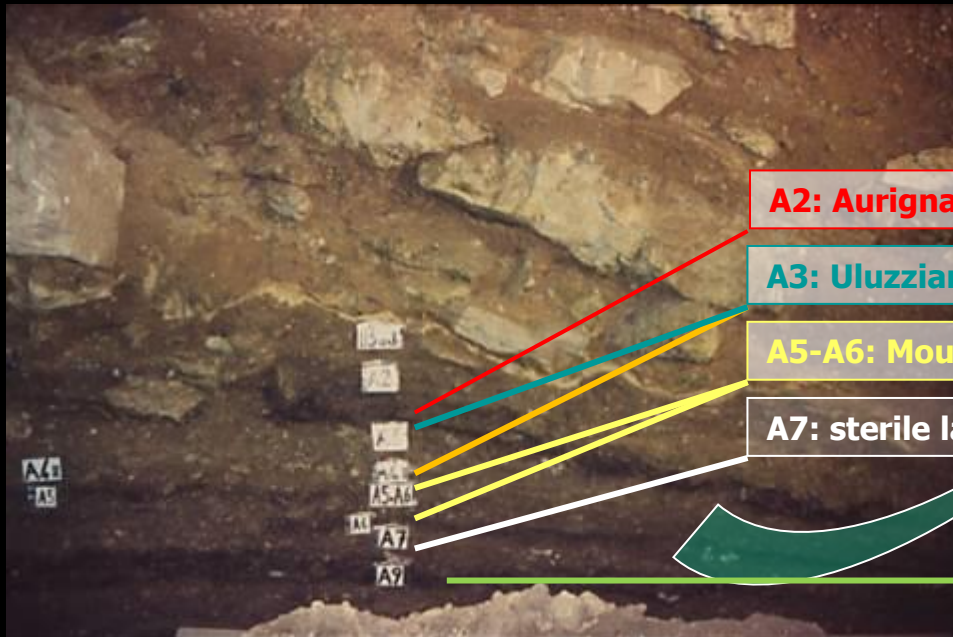


Section in tunnel A



A2: Aurignacian

A6: Final Mousterian



Sagittal section in the cave-mouth (removed in 1996)

A2: Aurignacian

A3: Uluzzian; A4: Mousterian

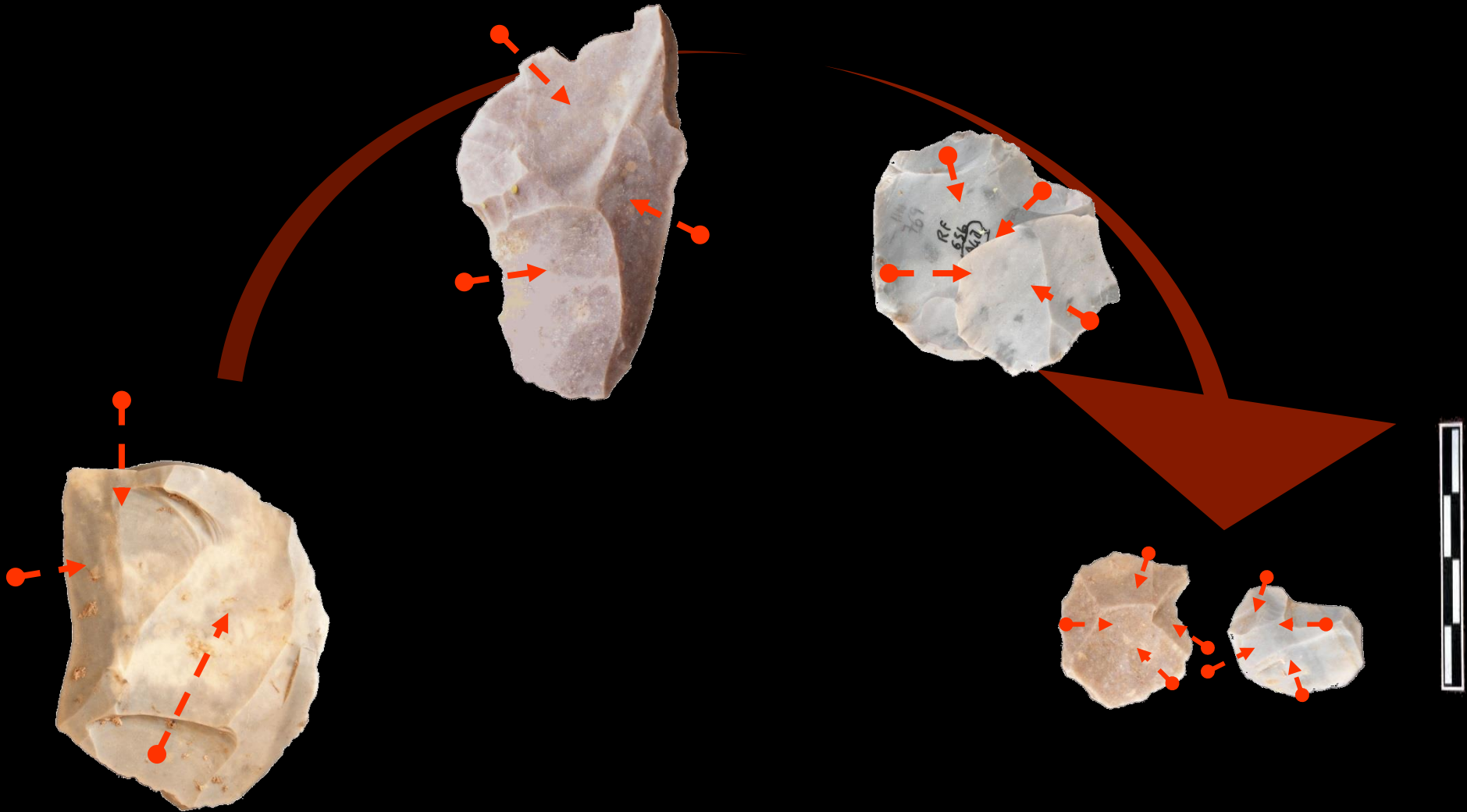
A5-A6: Mousterian

A7: sterile layer

A9: Mousterian
47,6 Cal BP (min. age)

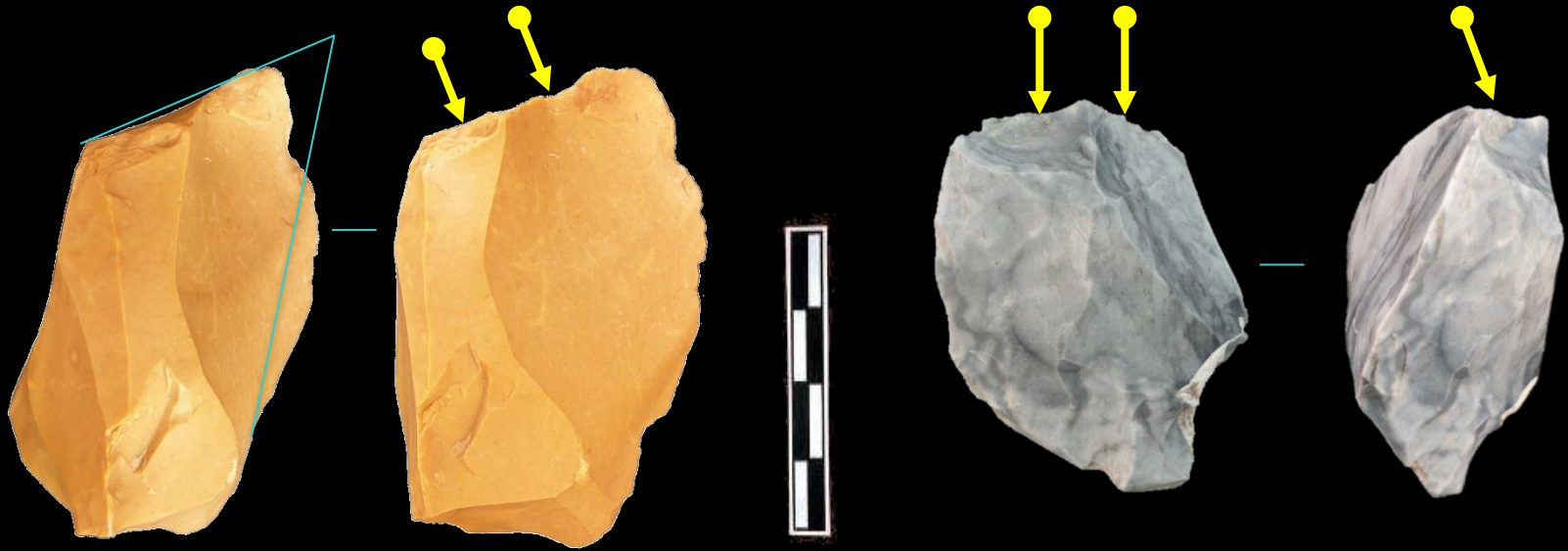
Layer A4: Mousterian

Levallois centripete reduction sequence



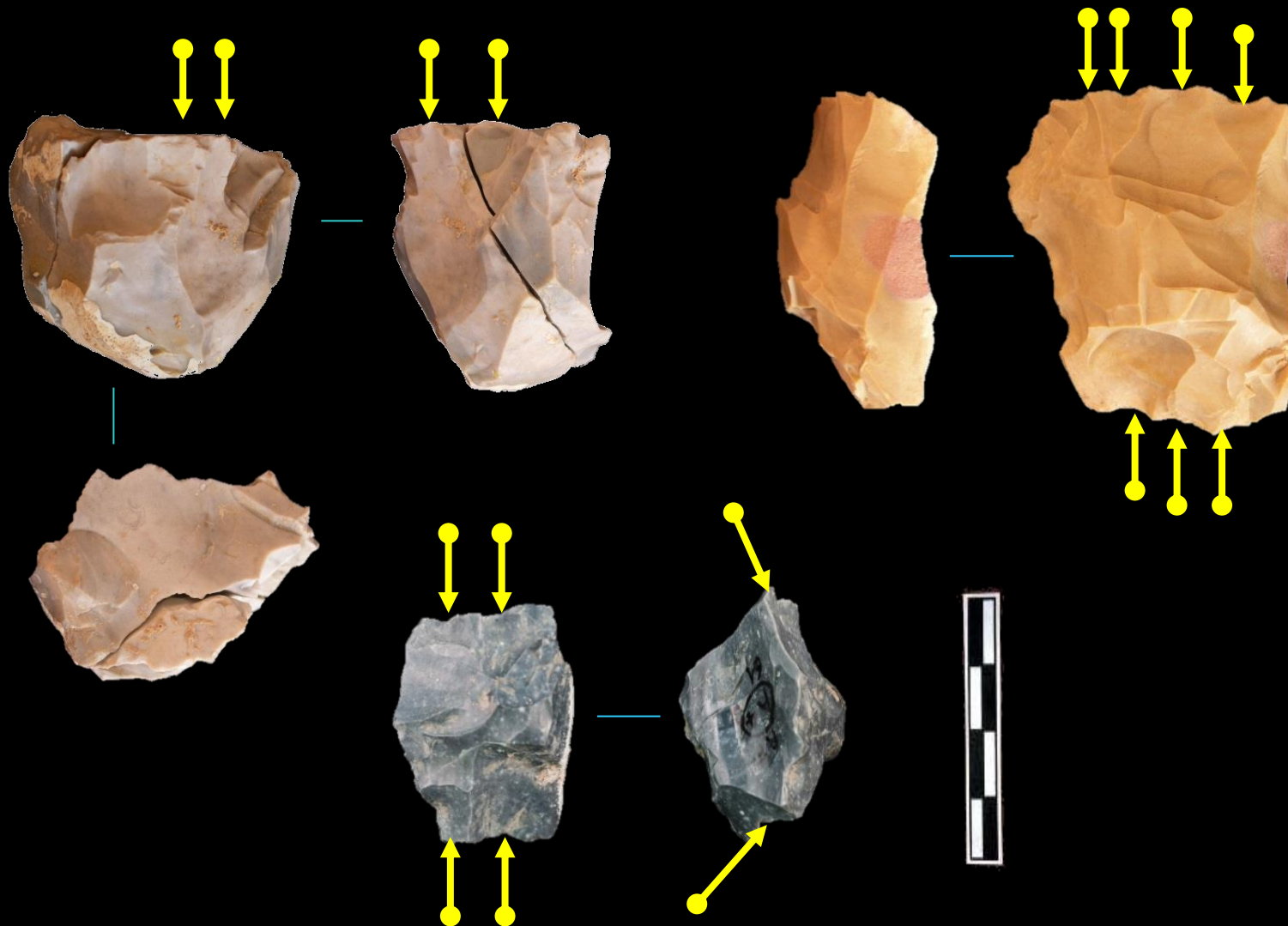
Layer A4: Mousterian

Blade cores



Layer A4: Mousterian

Uni/bipolar bladelet/flake-bladelet cores



Layer A4: Mousterian

Scrapers and splintered pieces



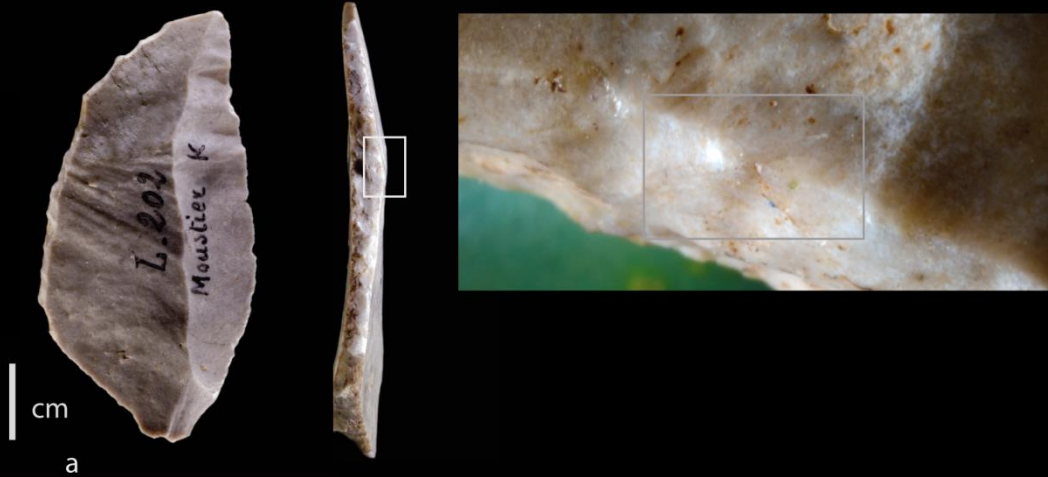
Layer A4: Mousterian

Backed knives



A revision of Le Moustier layers K and I based on new excavations and a reanalysis of previously excavated material

Par Brad GRAVINA



Examples of backed pieces from Peyrony's layer K.

(a) Levallois blank with butt removed by bipolar retouch



(b) Levallois blank with butt removed by bipolar backing

Fumane Uluzzian in layer A3



A2

A3

A4

A5

A6



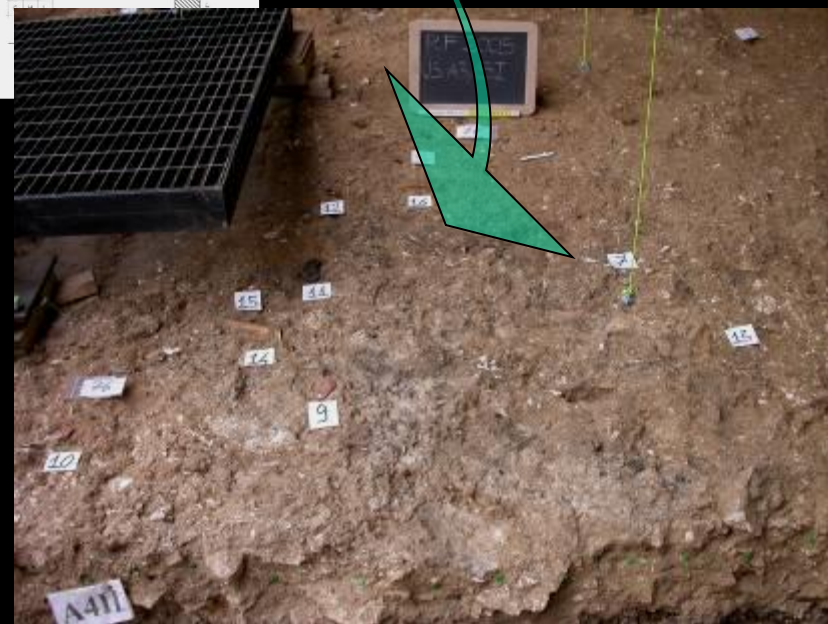
Layer A3



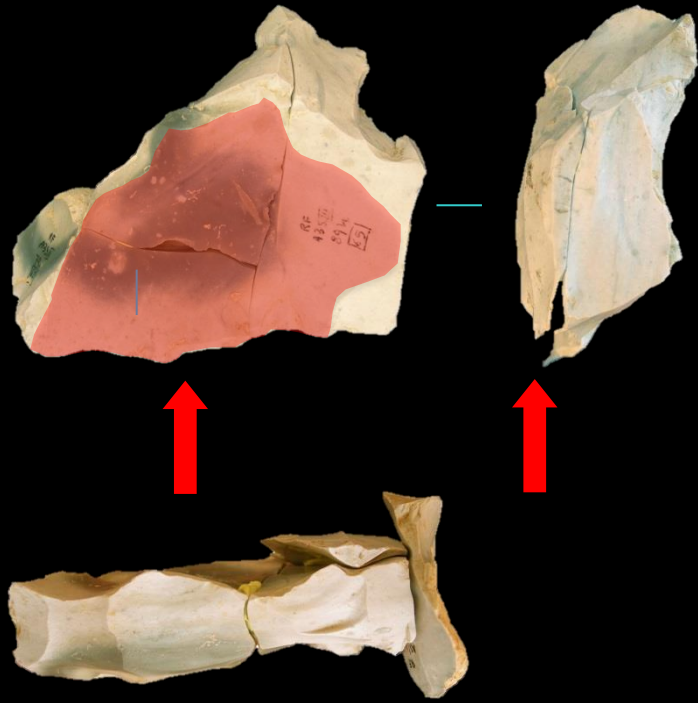
Flaking products, bones and charcoals: structure A3.SIV



Uluzzian Structure A3.SIV cut by the Aurignacian combustion structure A2.S18



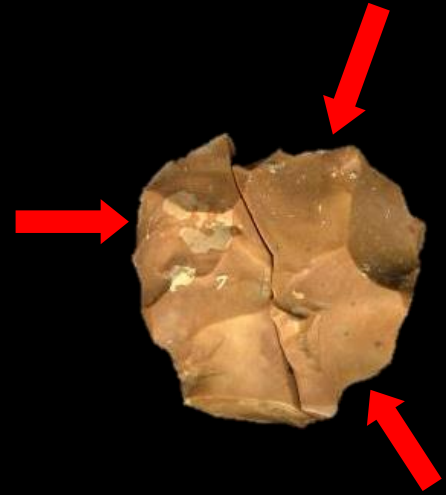
Flake making in layer A3



Single large flake core



Unipolar core

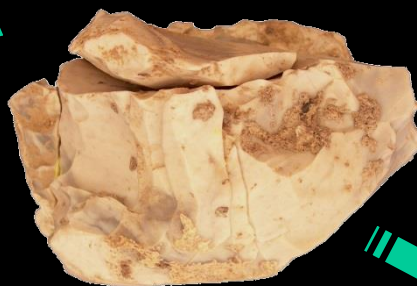


Centripete core

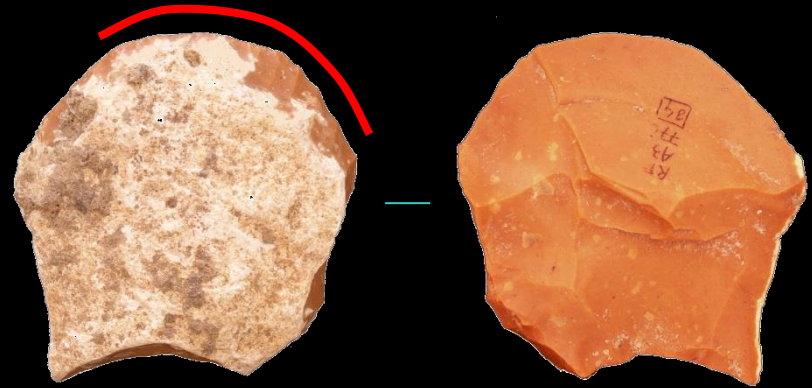
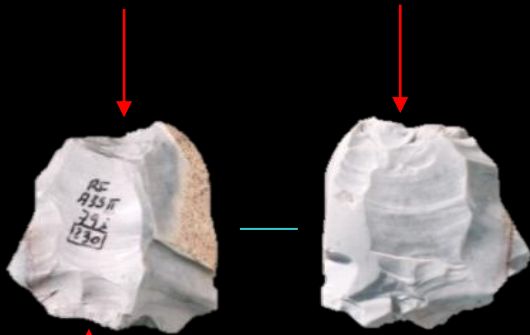


Layer A3

Structure A3.SIV: production of bladelets



Splintered pieces

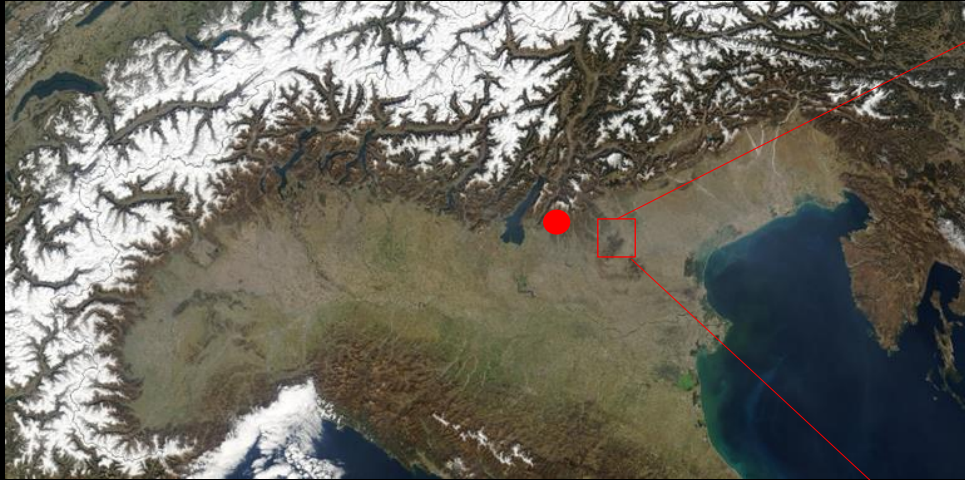


End-scraper with ventral thinning

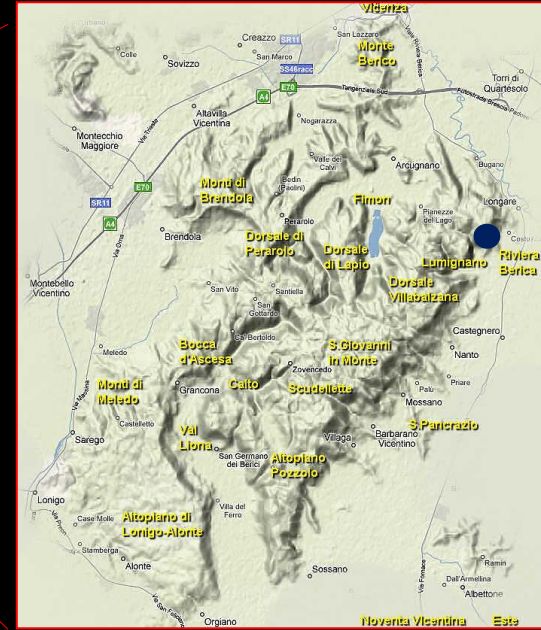


Backed knives

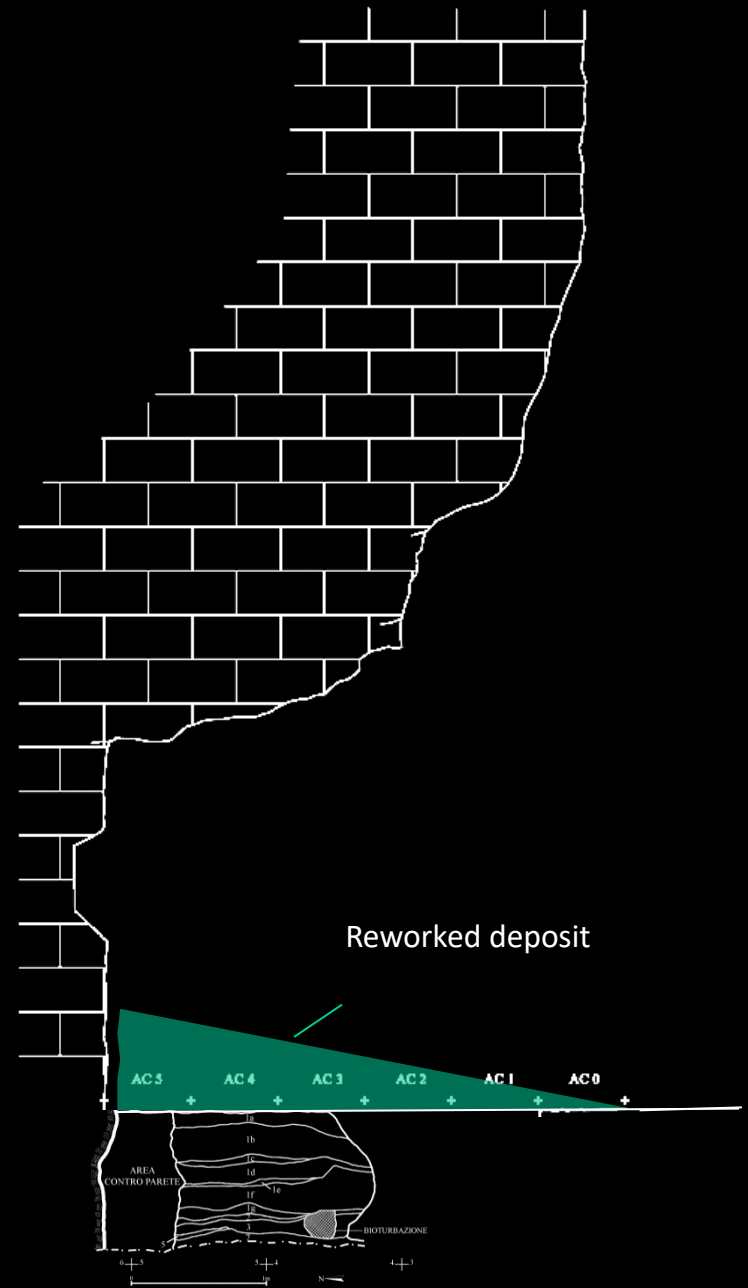


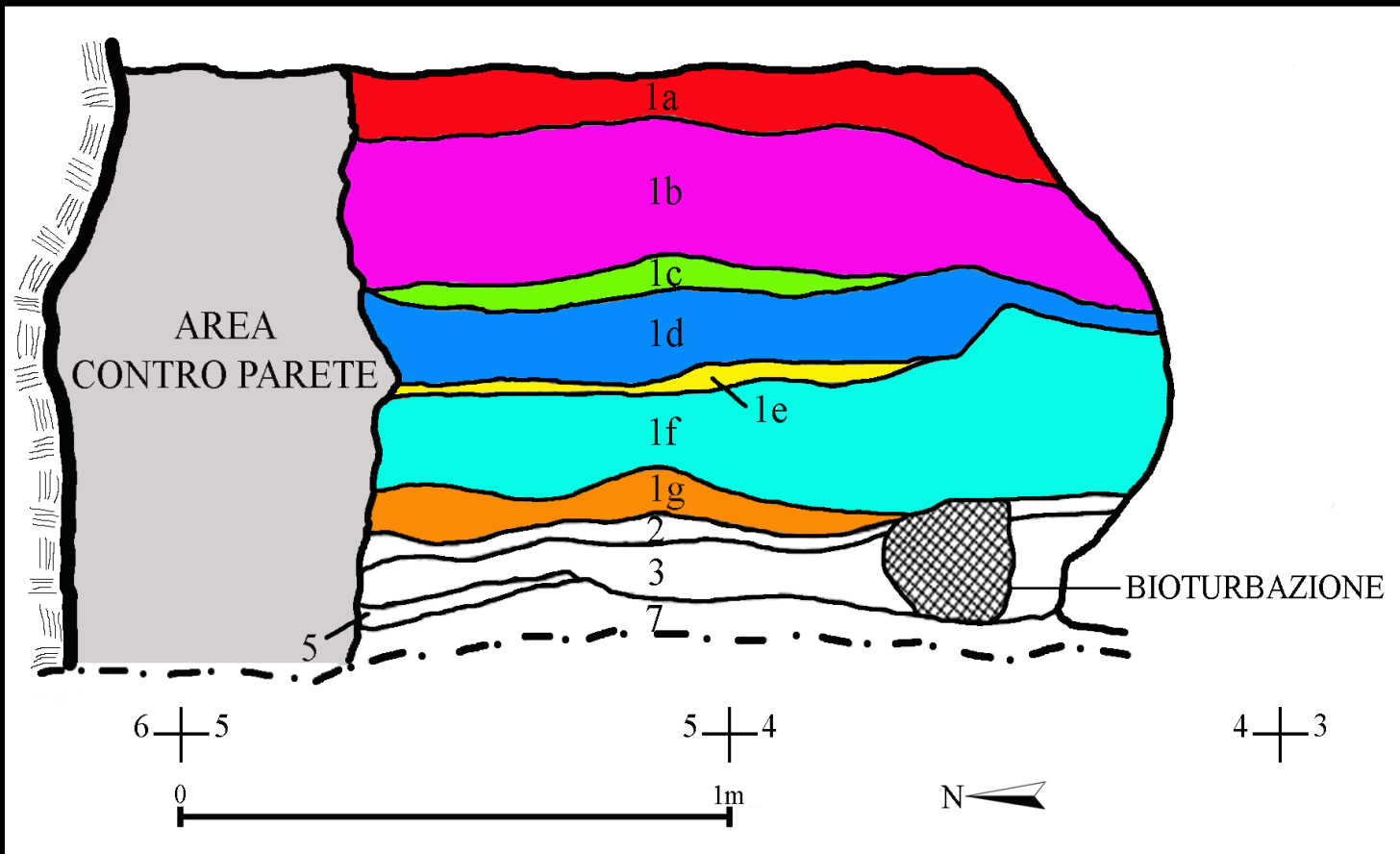


Fumane and Riparo Broion



Riparo Broion



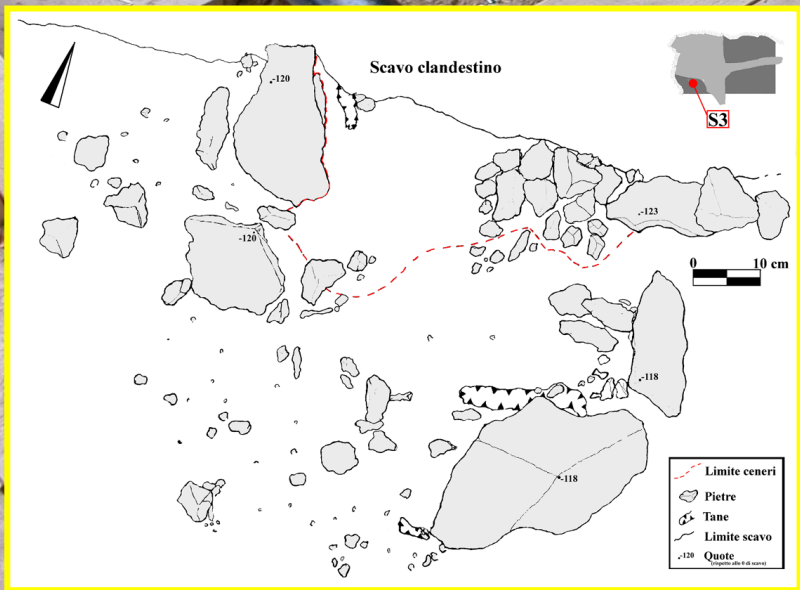


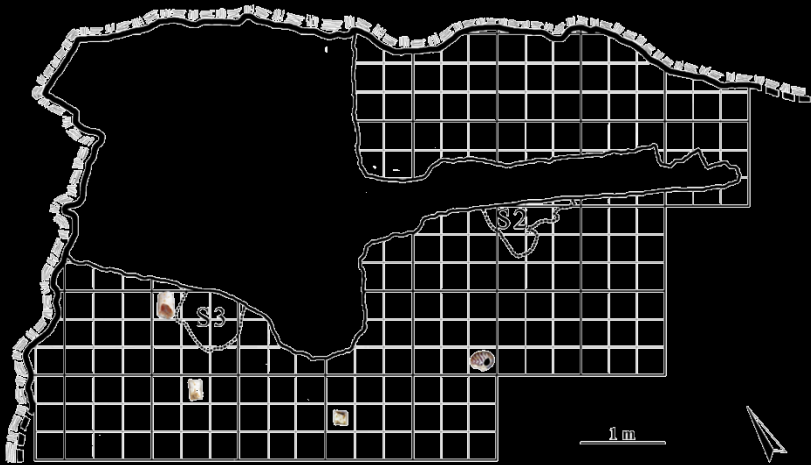
Early Epigrav.
(1a, 1b)

Gravettian
(1c, 1d, 1e)

Uluzzian
(1f, 1g)

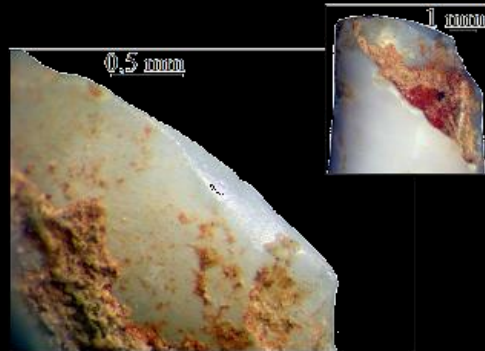
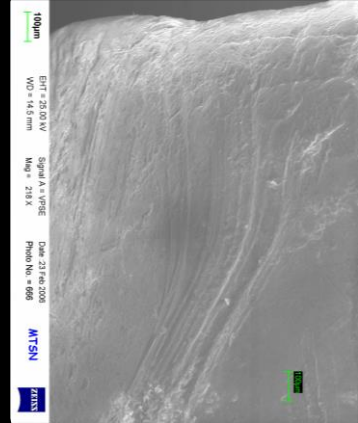
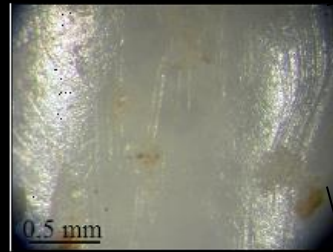
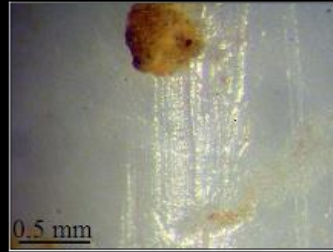
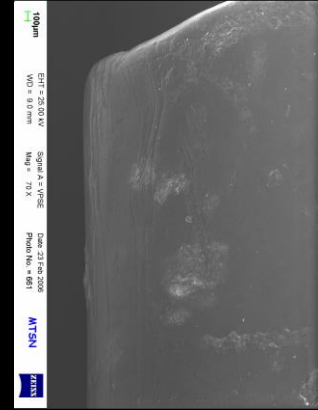
Mousterian
(7, 9, 11, 13, 15)






Dentalium inaequicostatum

Theodorus cf. dentabile



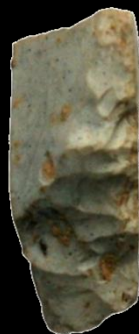
Lithics 1f – 1g

	1g	1f ÷ 1g	1f	TOT	%
Splintered pieces	216	8	11	235	19.1
Flakes from SP	563	29	41	633	51.5
Baldelets from SP	134	12	7	153	12.4
Flakes	59	6	4	67	5.5
Bladelets	43	1	1	45	3.7
Backed pieces	38	8	8	54	4.4
Other tools	12	2	3	17	1.4
Flake and bladelet cores	22	1	2	25	2.0
	1087	67	77	1229	100.0

Convex and straight backed knives



1 cm



Splintered pieces



Complete and splintered retouched tools



Side scraper

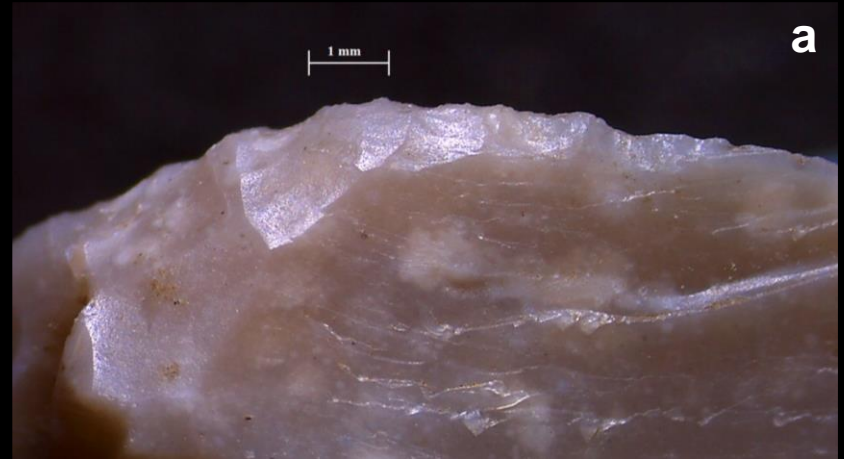
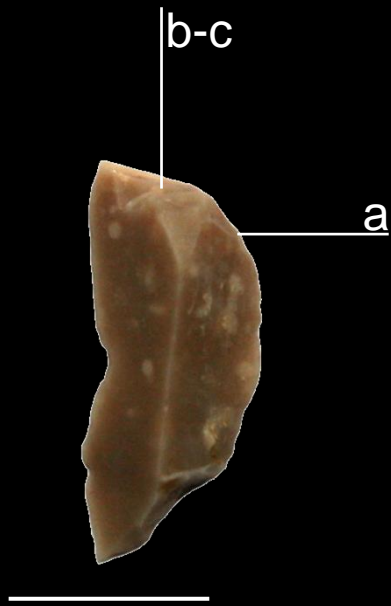
End-scrapers



Splintered backed knives



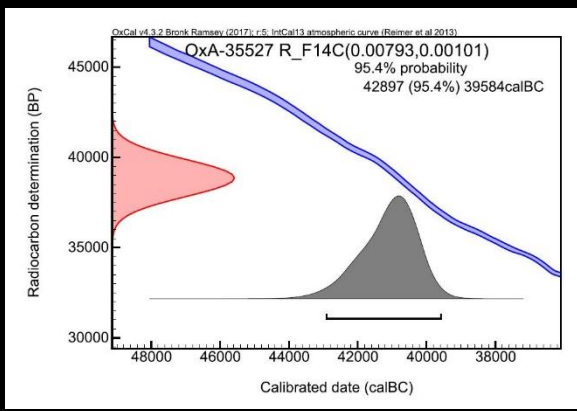
Crescent



Previous ABA dates

Material	Lab. code	Context	Hearth	14C Age
Burnt bone	UtC-11791	1g	S2	25980±190
Charcoal	UtC-11790	1g	S2	32100±400
Charcoal	UtC-12509	1g	S3	31700±400
Charcoal	UtC-11792	1g		30480±300

Anthr.-mod. bone OxA-35527 1g 38900±1000



Site/sample ID	OxA-code	¹⁴ C age	±	Context	Material	Genus/species	Cal yr BP (95.4%)	
							From	To
Fumane Cave/RF44	21736	39,100	1000	A3/69a/53	Bone	Large mammal	44990	42030
Fumane Cave/RF49	X-2295-52	41,300	1300	A3/78-79/R818	Bone	Large mammal	48140	43030
Fumane Cave/RF28	21733	41,000	1300	A4II/86g/R367	Bone	Large mammal	47740	42800
Fumane Cave/RF29	21734	42,000	1400	A4II/100d+g/R1120	Bone	Large mammal	49100	43610
Fumane Cave/RF30	21735	42,000	1700	A4/struct. II/744	Bone	Mammal	49490	43430

