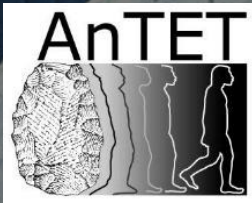


BIACHE-SAINT-VAAST (PAS-DE-CALAIS) : UN EXEMPLE REPRÉSENTATIF ET ATYPIQUE DES GISEMENTS SAALIEN DU NORD DE LA FRANCE

David Hérisson¹ & Patrick Auguste²



1. CNRS-UMR7041 ArScAn,
Equipe AnTET, Université
Paris Nanterre, France

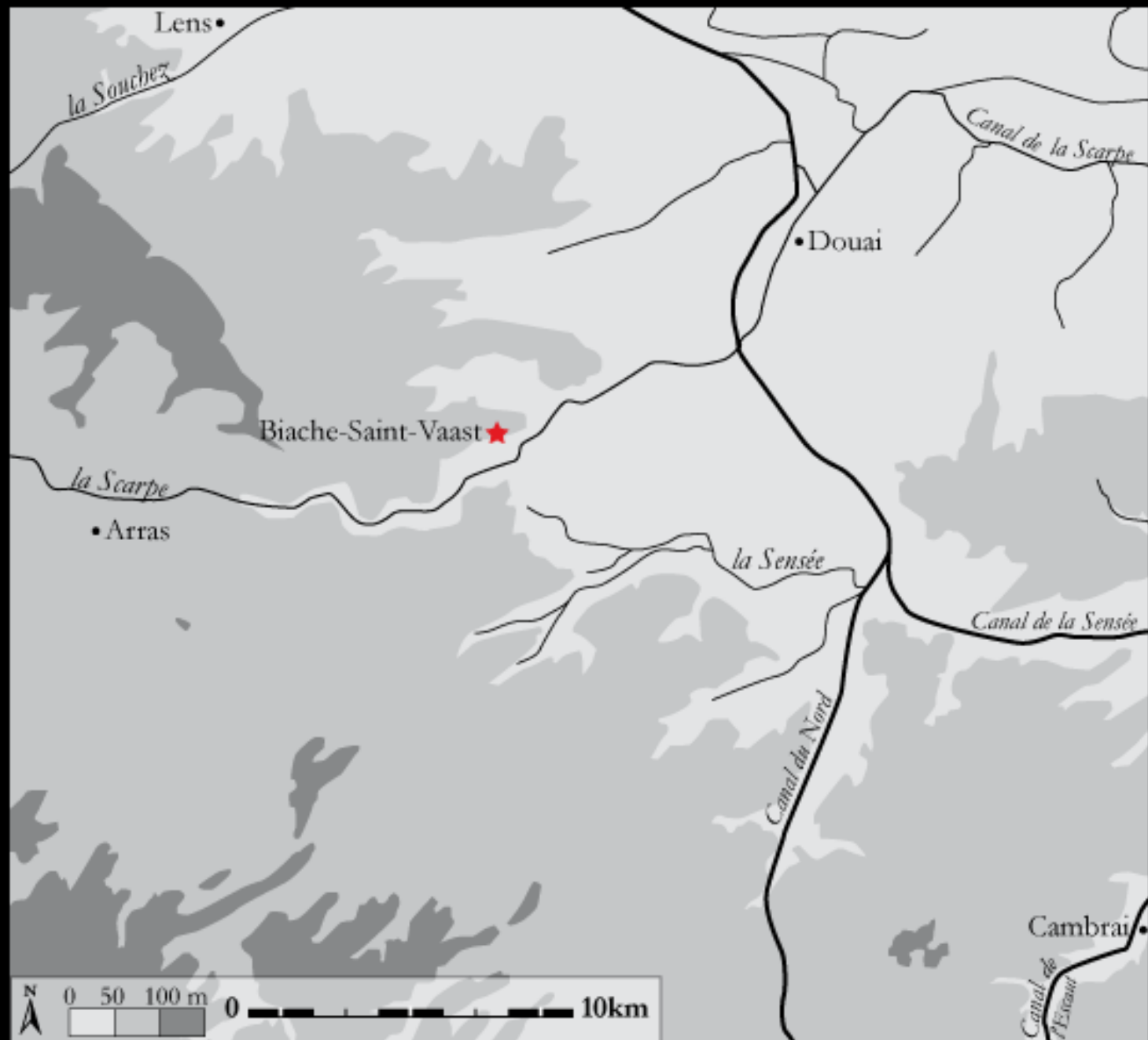
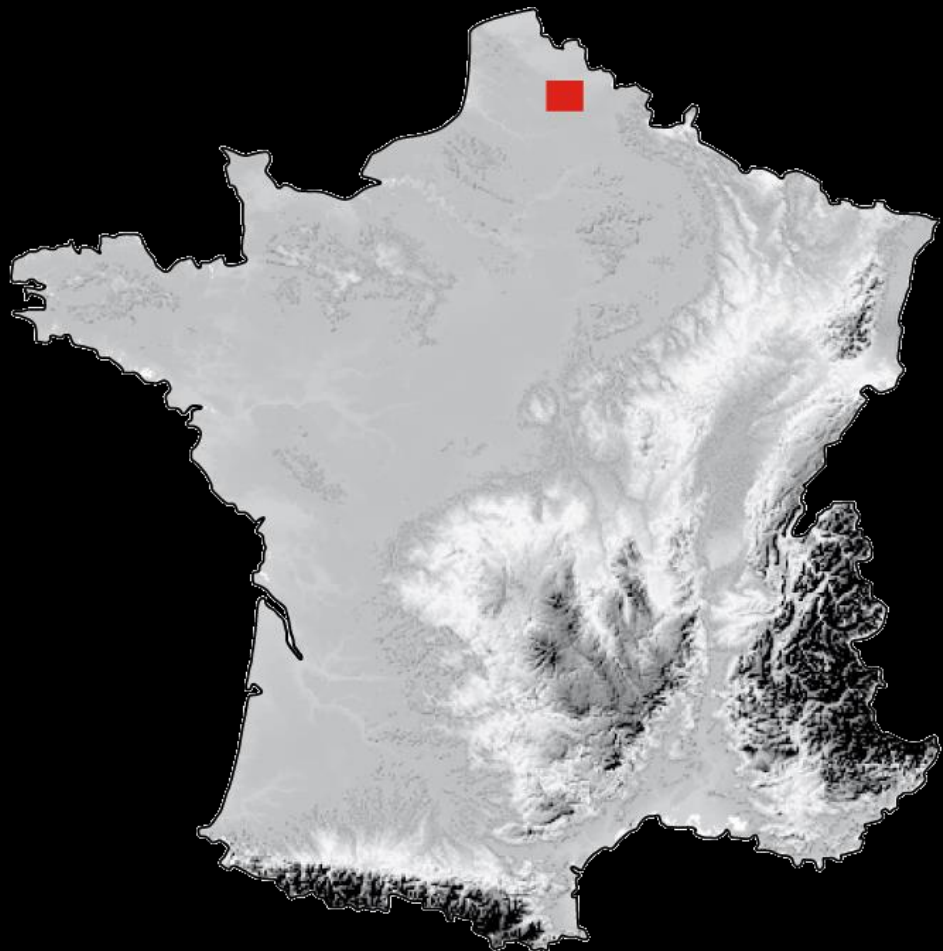


2. CNRS-UMR 8198 Evo, Eco, Paleo,
Université de Lille 1, France

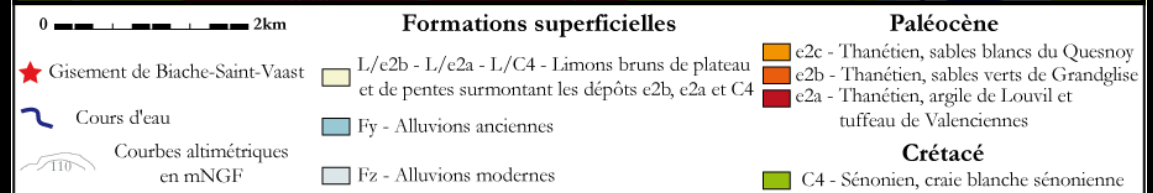
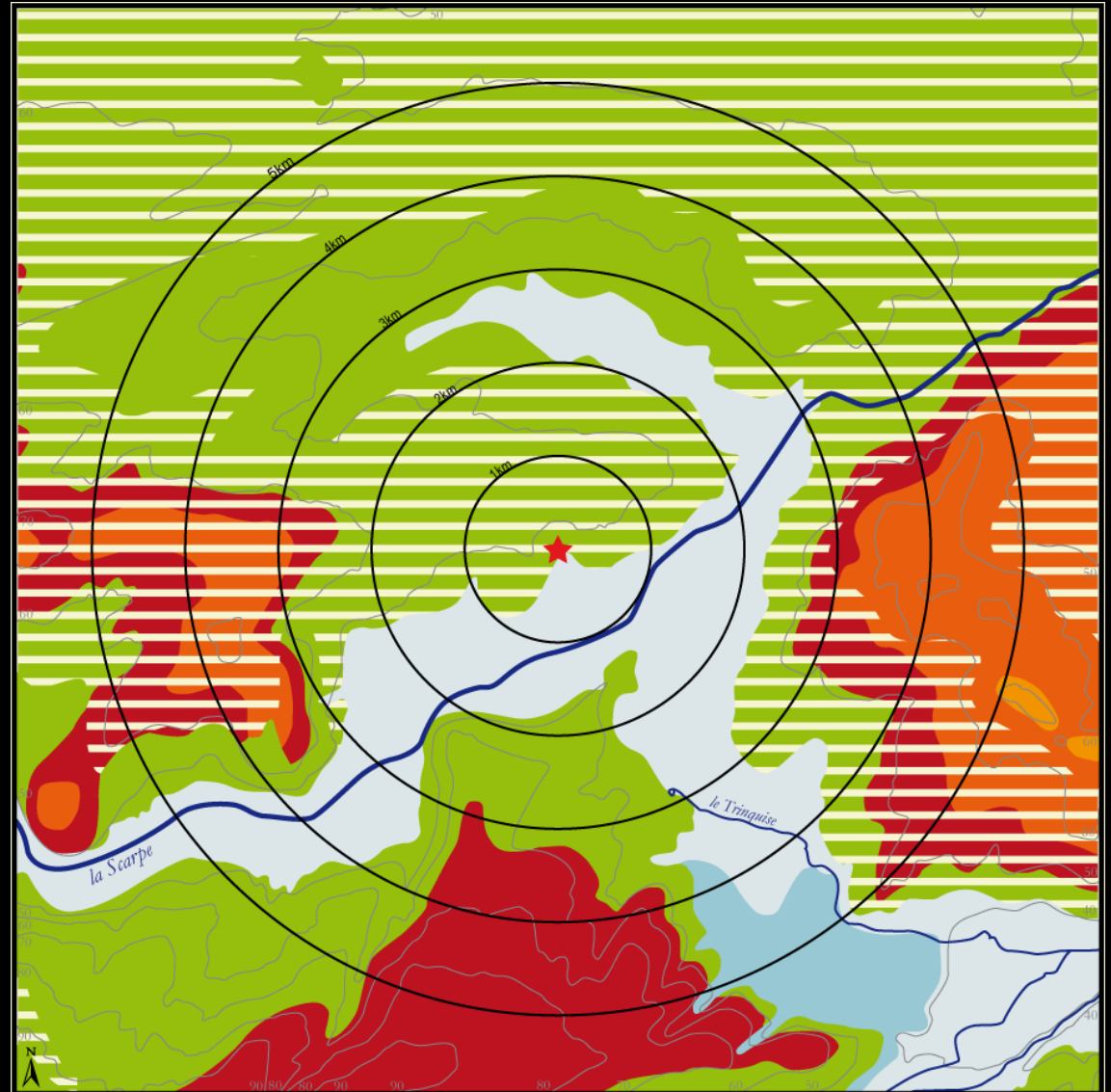
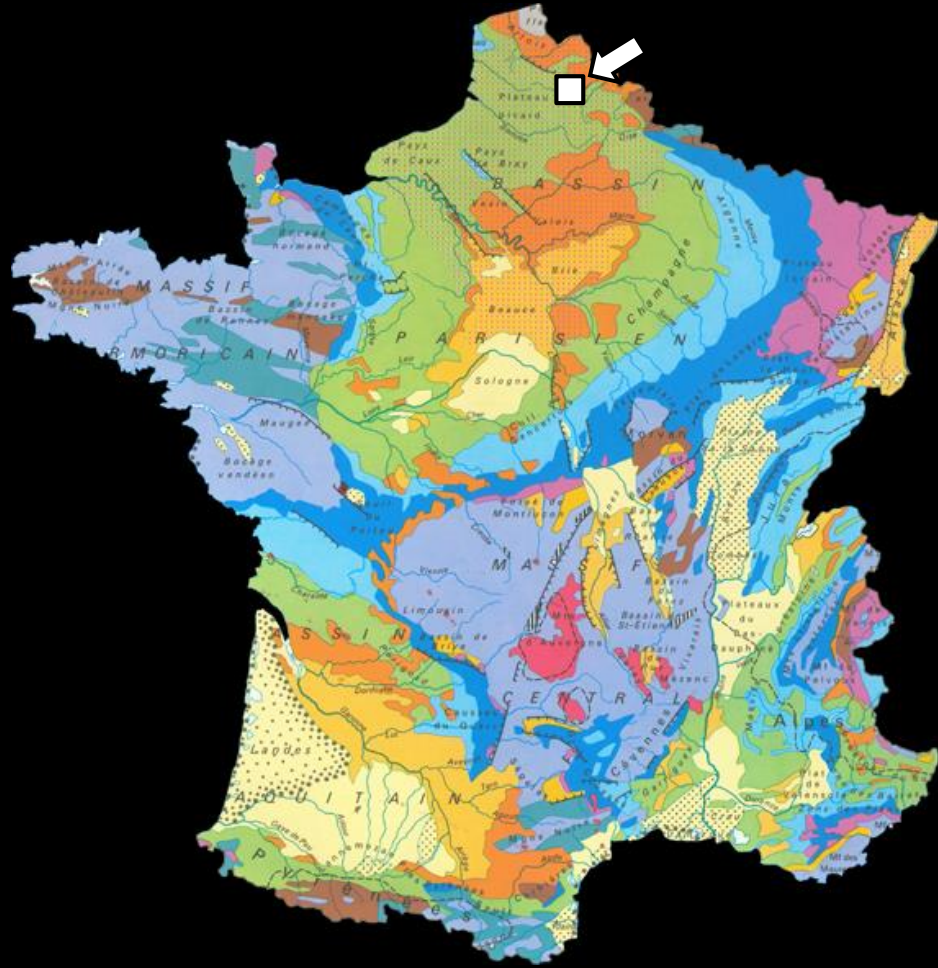


Colloque international de Montmaurin – 1-4 avril 2019
Autour du stade isotopique 7

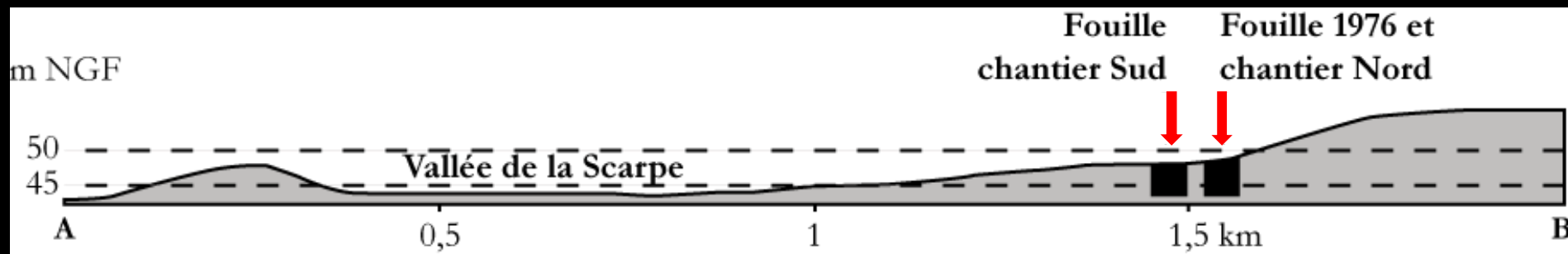
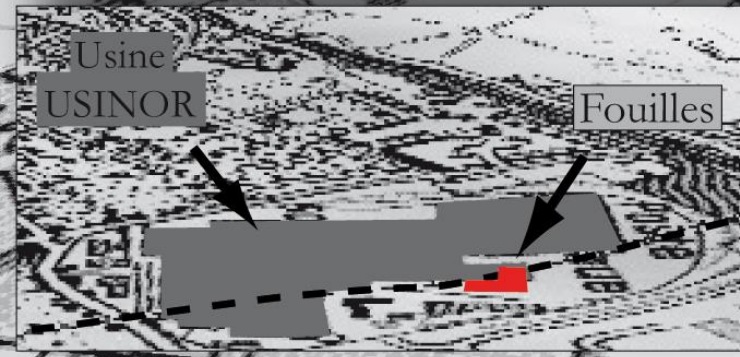
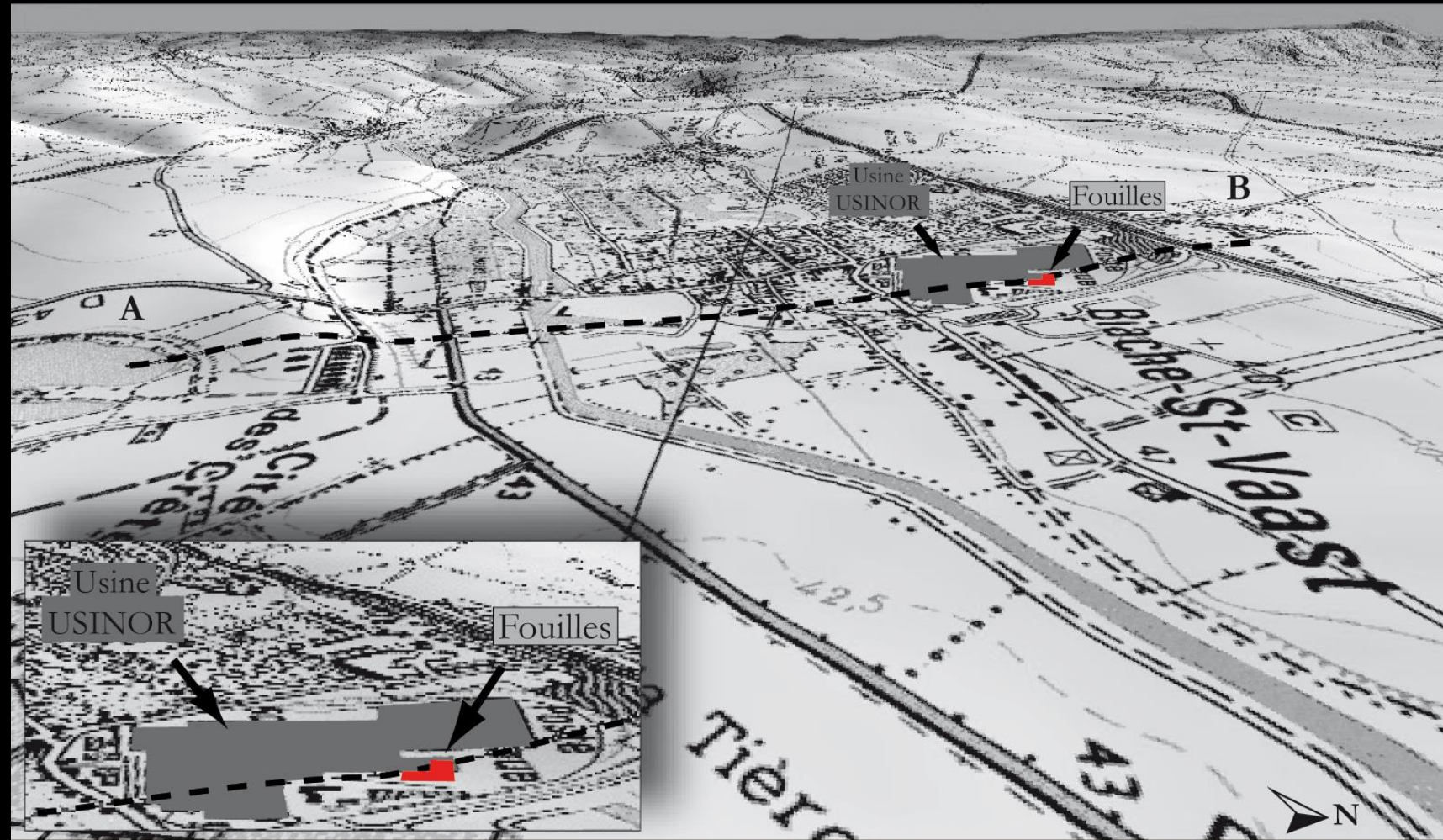
Geographical and geolocial location of Biache-Saint-Vaast



Geographical and geolocial location of Biache-Saint-Vaast



Topographical location of Biache-Saint-Vaast



Circumstances of the discovery and of the excavation campaigns



Total $\approx 1100 \text{ m}^2$

Rescue excavation
1976

IIbase : 340 m^2

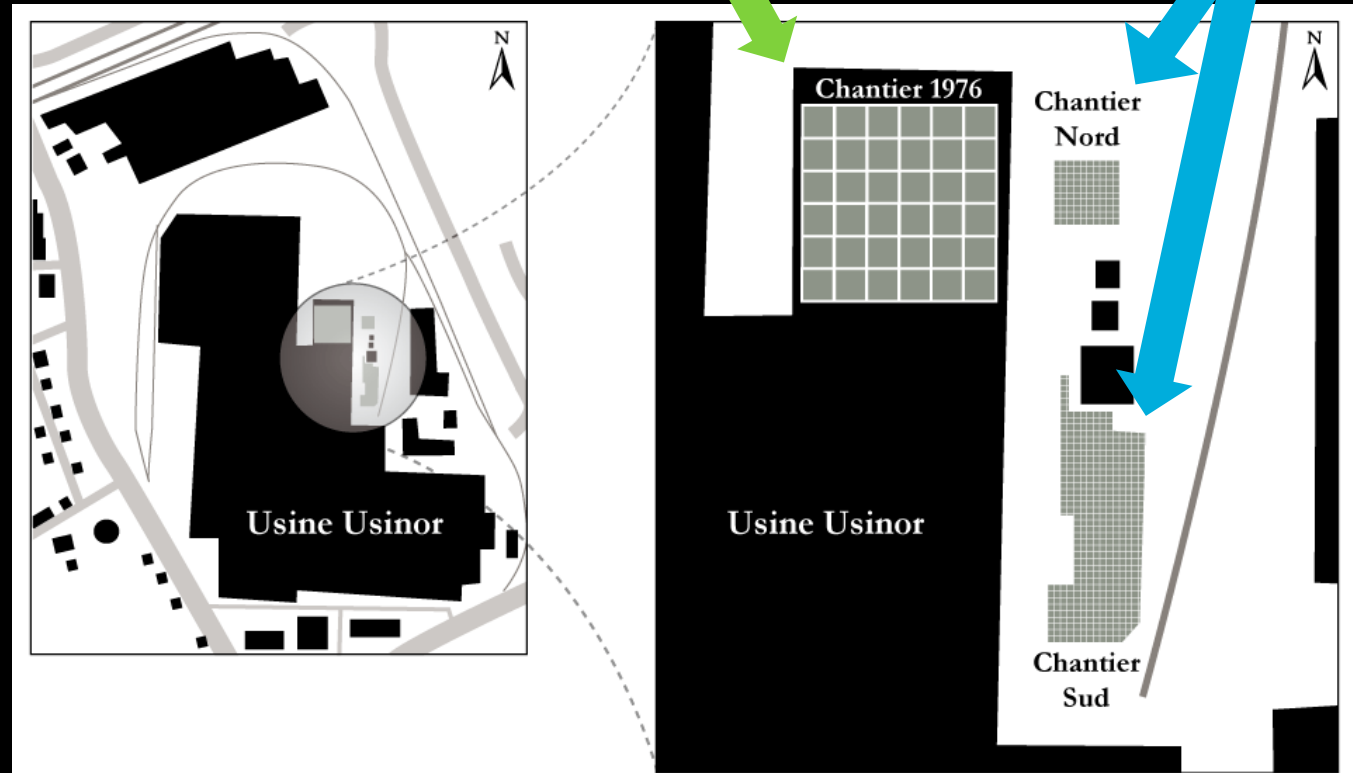
IIA : 150 m^2

Programmed excavation
1977 - 1982

D : 120 m^2 / D1 : 115 m^2

Do : 107 m^2 / E : 114 m^2

H : 45 m^2



Circumstances of the discovery and of the excavation campaigns



BSV 1

Hélène Rougier



BSV 2

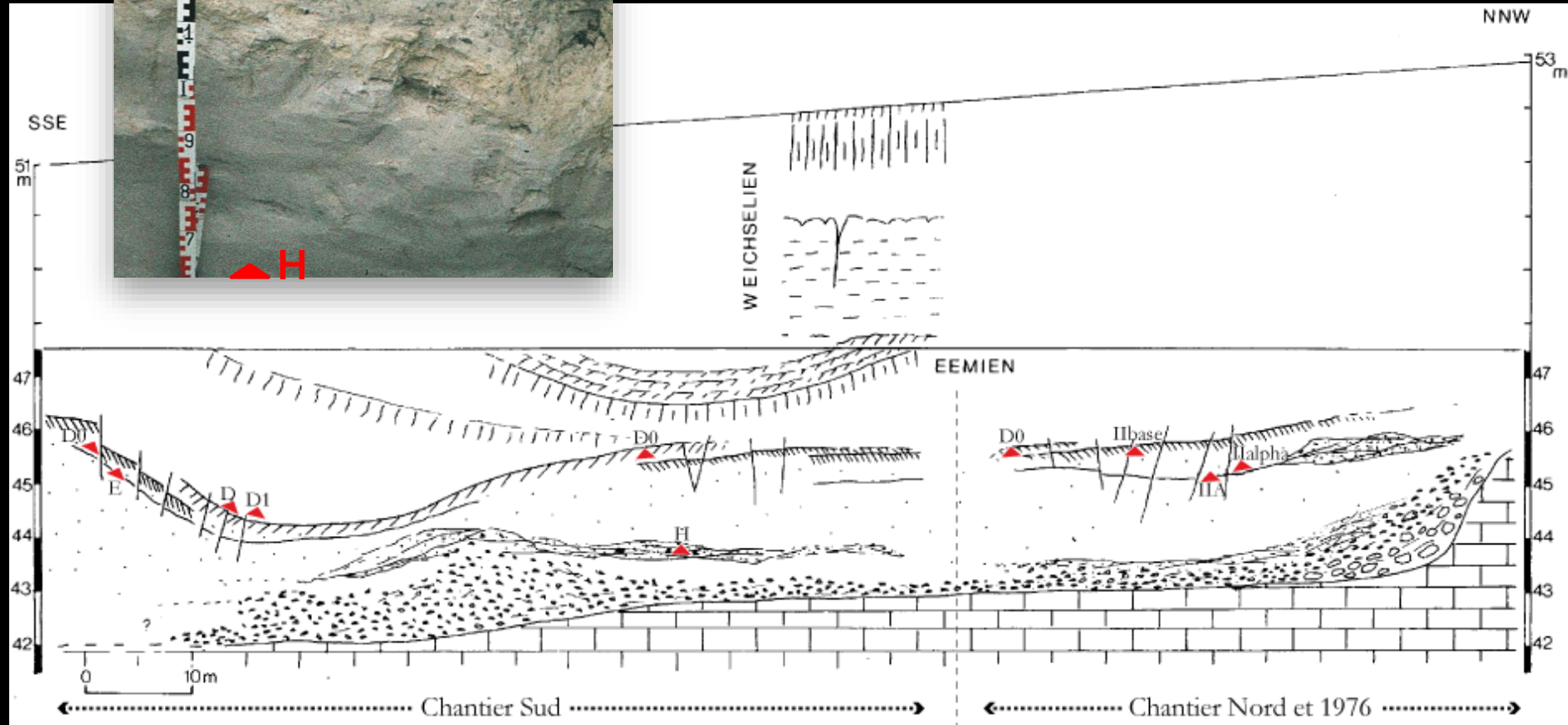
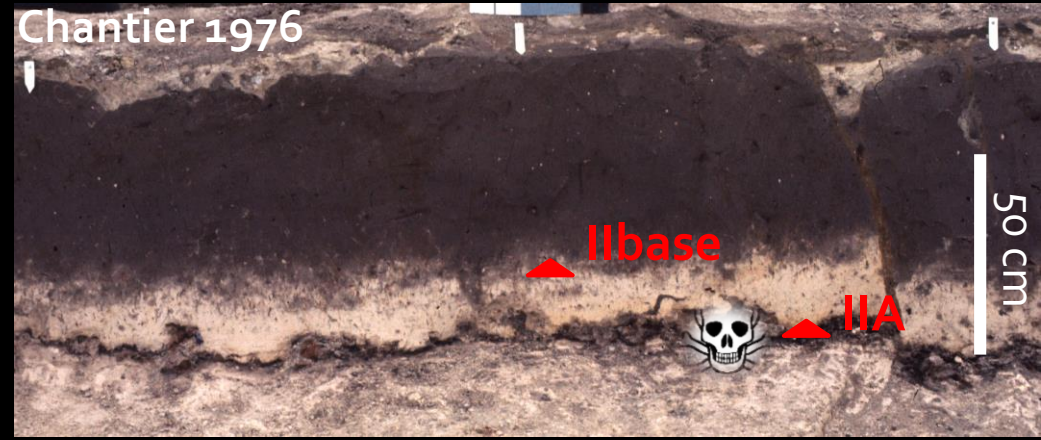
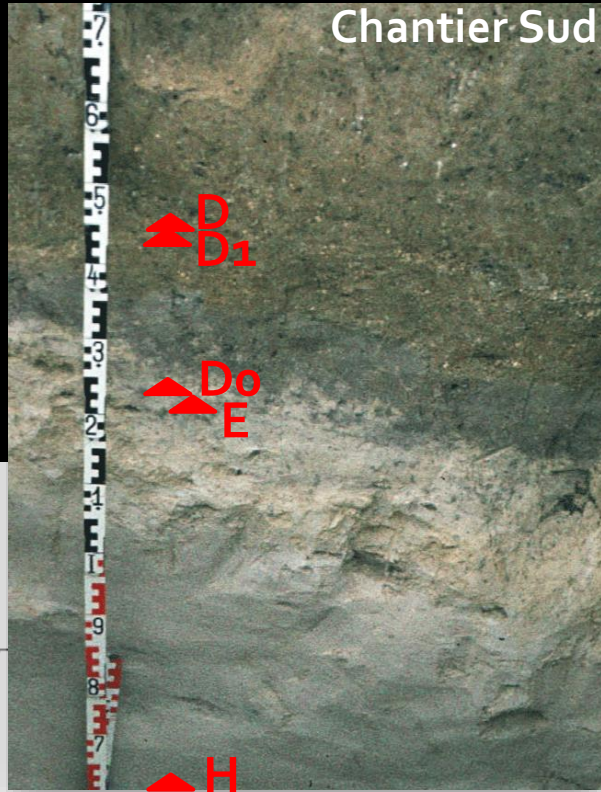
Pierre Guipert



Circumstances of the discovery and of the excavation campaigns



Stratigraphic position of the archaeological layers



Chronostratigraphic of the archaeological layers

Unités litho.	Stratigra.	Niveaux archéo.	Stades	Grands mammifères		Lithostratigraphie	Micromorphologie		Palynologie		Malacologie		Rongeurs
				paysage	climat		paysa.	climat	paysage	climat	paysage	climat	
5		D	7.1	plus ouvert	continen. plus sec	dégradation amélioration		légère améliora.	forêt claire	tempéré	découvert	froid modéré	steppe continent.
4		D1	7.2				dispa. végét.	froid humide	steppe arborée	froid		froid	
b		D0	7.3	plus découvert	continen-talisation	dégradation climat	forêt	continen. plus net	forêt clair.	conti. temp.fr.	découvert	+ froid + froid	forêt tempérée
3 a		IIb		mosaïque optimum	tempéré humide continental	interglaciaire		boréal et continental	forêt clair. optimum	réchauf. progres.	forêt clair. optimum	tempéré	forêt et espaces découverts
		IIα		mosaïque				développe. forêt		découvert			
b		En											
		F											
		G											
		H											
		I		découvert herbeux									
2													
a													

STADE	STRATI.	ZONE	PRESENCE POTENTIELLE DES TAXONS IDENTIFIES
2			
3	Weichs.	26	
4			
5	Eemien	25	
6			
7	Saalien	24	<i>C. lupus</i> , <i>V. vulp. pes</i> , <i>F. silvestris</i> , <i>P. spelaea</i> , <i>U. arctos</i> , <i>U. deningeri</i> , <i>S. scrofa</i> , <i>C. elaphus</i> , <i>M. giganteus</i> , <i>C. capreolus</i> , <i>C. primigenius</i> , <i>E. mosbachensis</i> , <i>E. hydruntinus</i> , <i>D. hemiteochus</i> , <i>D. mercki</i> , <i>C. antiquitatis</i> , <i>P. antiquus</i>
8			
9	Holste.	23	
10	Elster.		
11			

Position des niveaux archéologiques de Biache-Saint-Vaast

Enregistrements océaniques

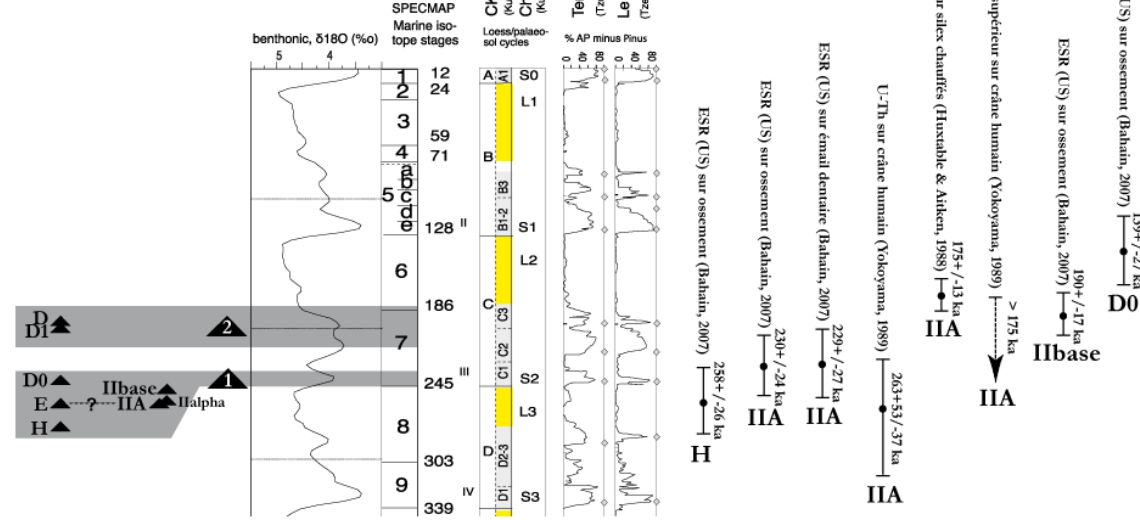
Enregistrements continentaux

Datations radiométriques

Chantier Sud 1976

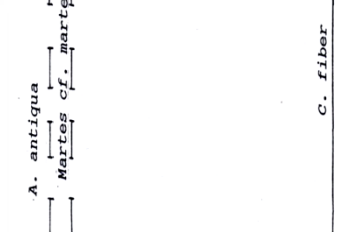
Chantier 1976

ODP-677 record (Shackleton et al., 1990)



...?... Lien de contemporanéité supposée par corrélation stratigraphique entre les deux chantiers

▲ Première phase d'occupations humaines
▲ Deuxième phase d'occupations humaines



Biache-Saint-Vaast: a very rich site

Layers D1, D

End MIS 7.1/beginning 6

Lithic artefacts

D : N = 506

D1 : N = 3 183

Faunal remains

D : N = 277 dont 105 déterminés

D1 : N = 434 dont 85 déterminés

Anthropological remains

D : N = 0

D1 : N = 0

Layers H, IIA, IIbase, E, D0

MIS 7.3

Lithic artefacts

D0 : N = 1 407

E : N = 7 483

IIbase : N = 4 826

IIA : N = 47 150

H : N = 1 117

Faunal remains

D0 : N = 539 dont 118 déterminés

E : N = 1 447 dont 222 déterminés

IIbase : N = 3 710 dont 501 déterminés

IIA : N = 189 760 dont 19 420 déterminés

H : N = 313 dont 112 déterminés

Anthropological remains

D0 : N = 0

E : N = 0

IIbase : N = 0

IIA : N = 2

H : N = 0

65 672 lithic
artefacts

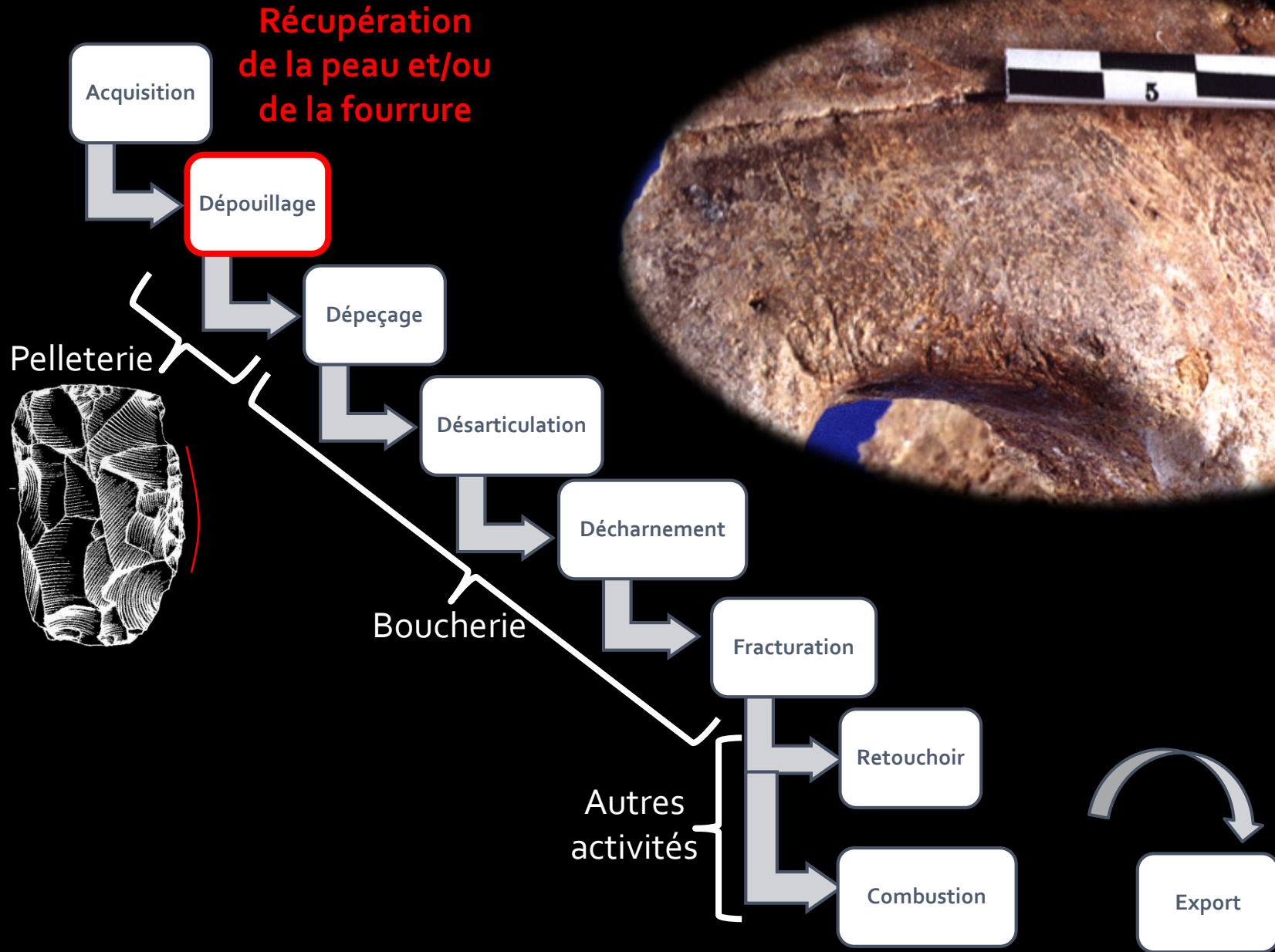
196 480 faunal remains
dont 20 563 déterminés

2 skulls of
Neanderthal

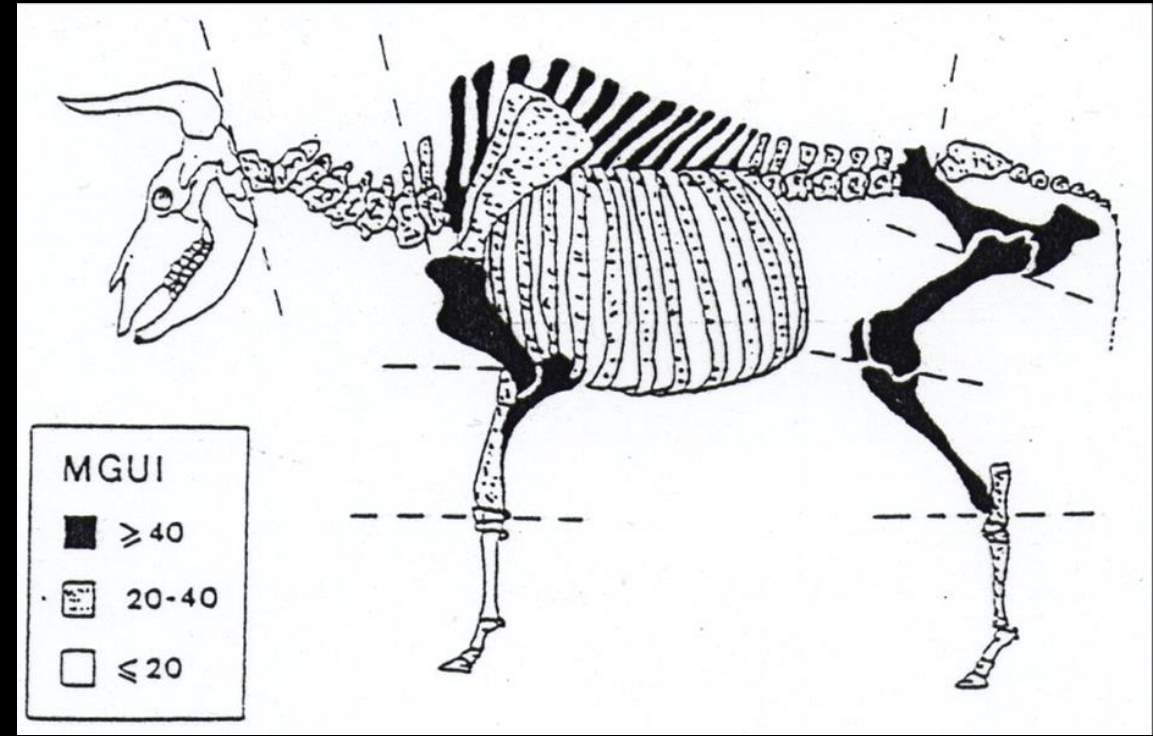
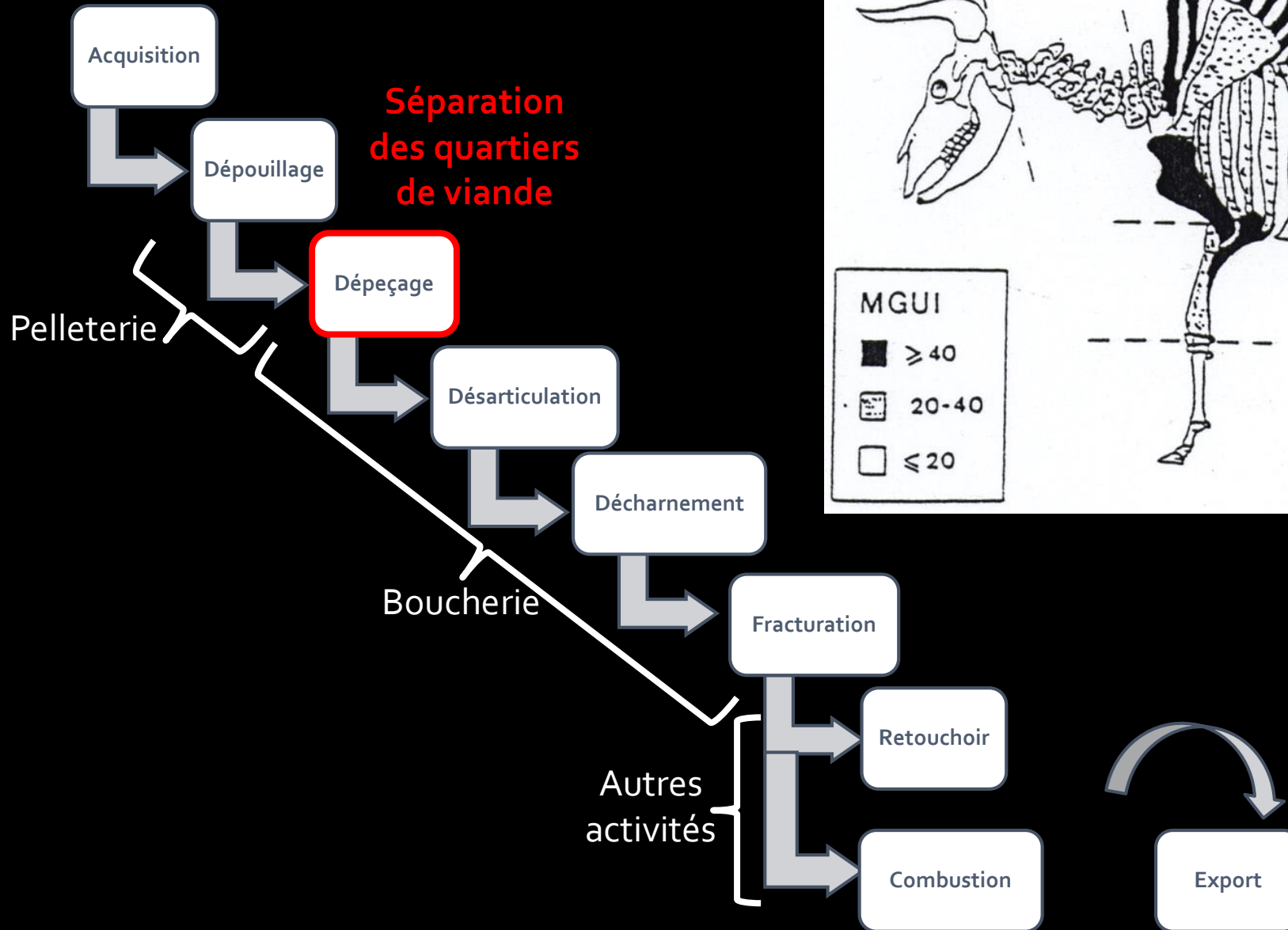
7 archaeological layers

≈ 60 000 years

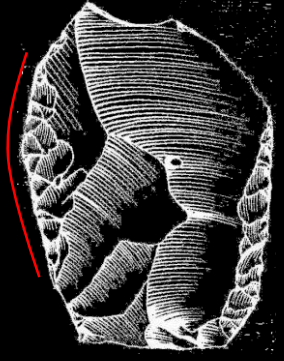
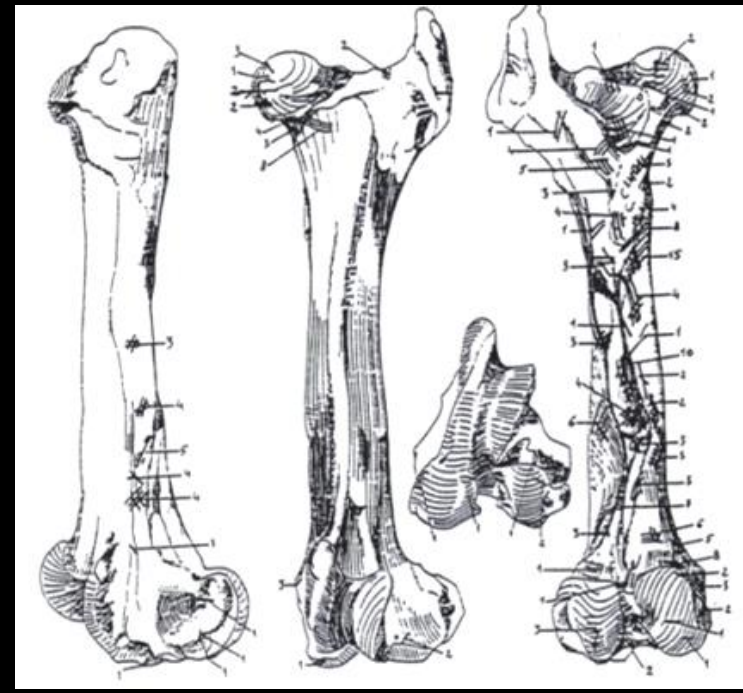
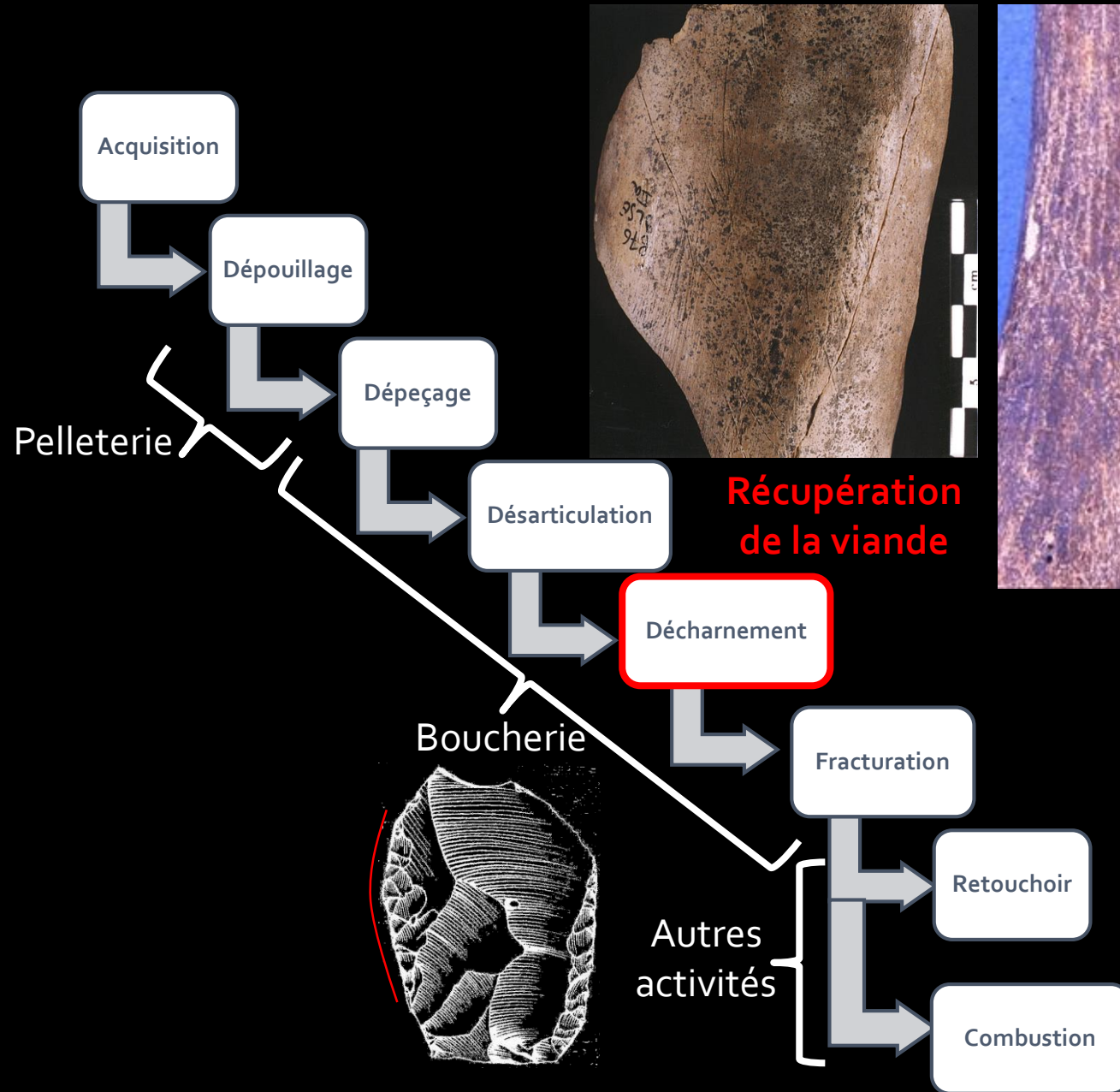
Links Neanderthal-fauna at Biache-Saint-Vaast



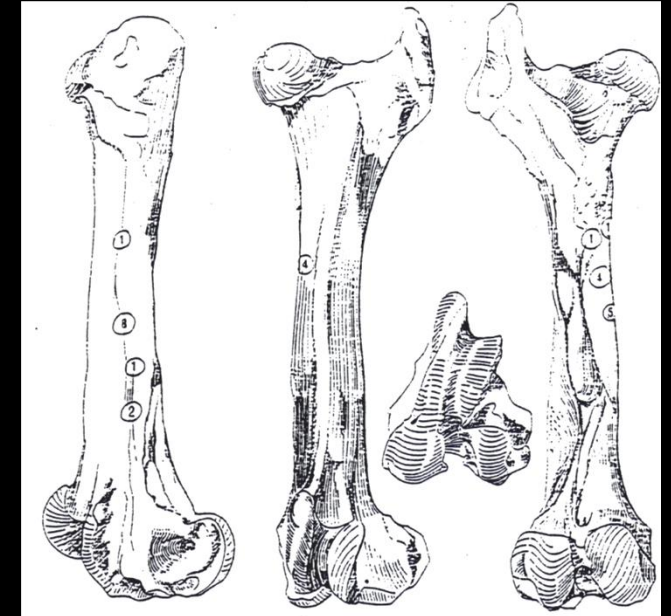
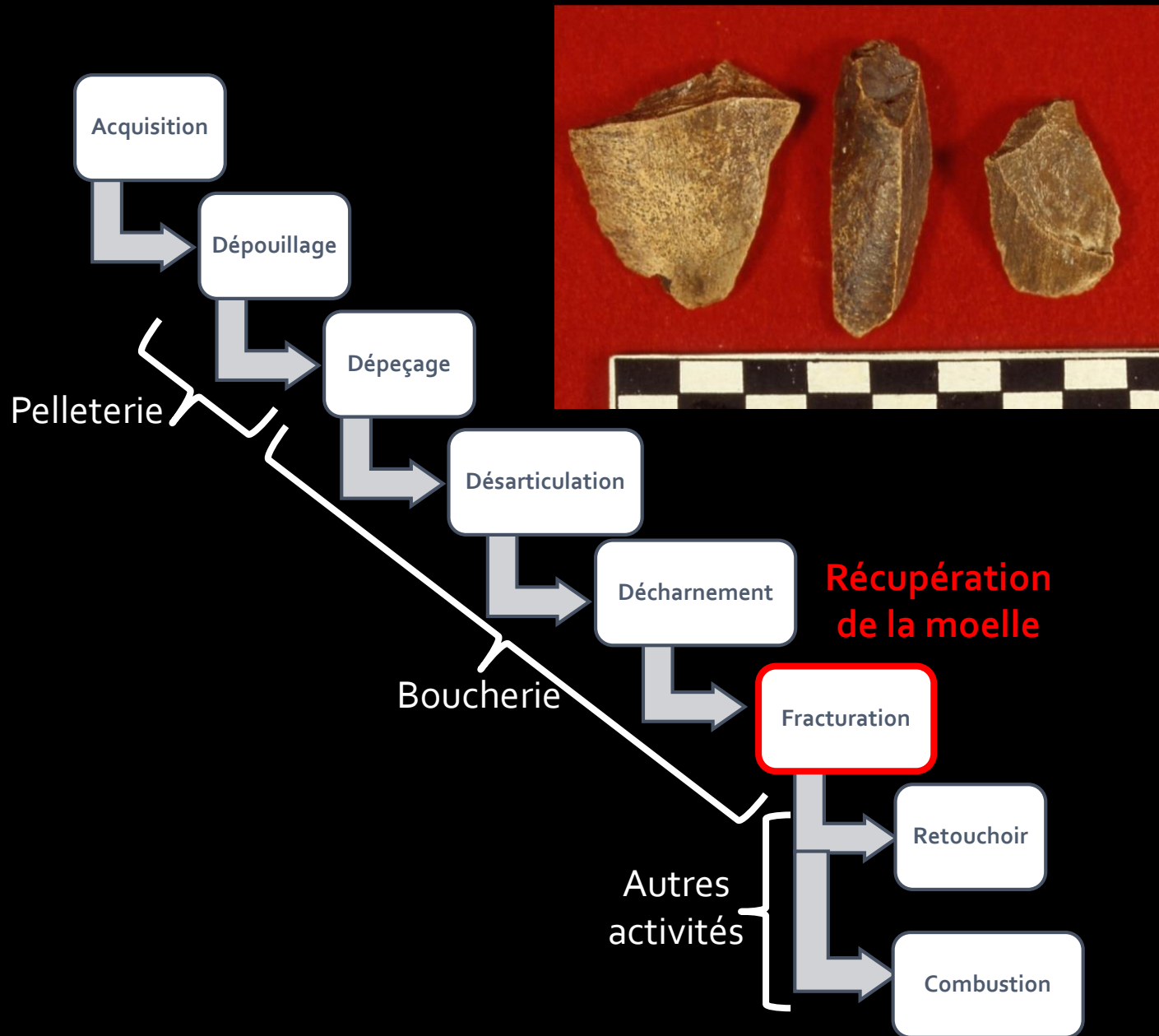
Links Neanderthal-fauna at Biache-Saint-Vaast



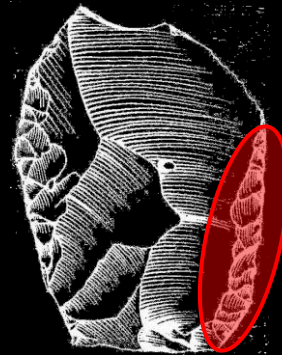
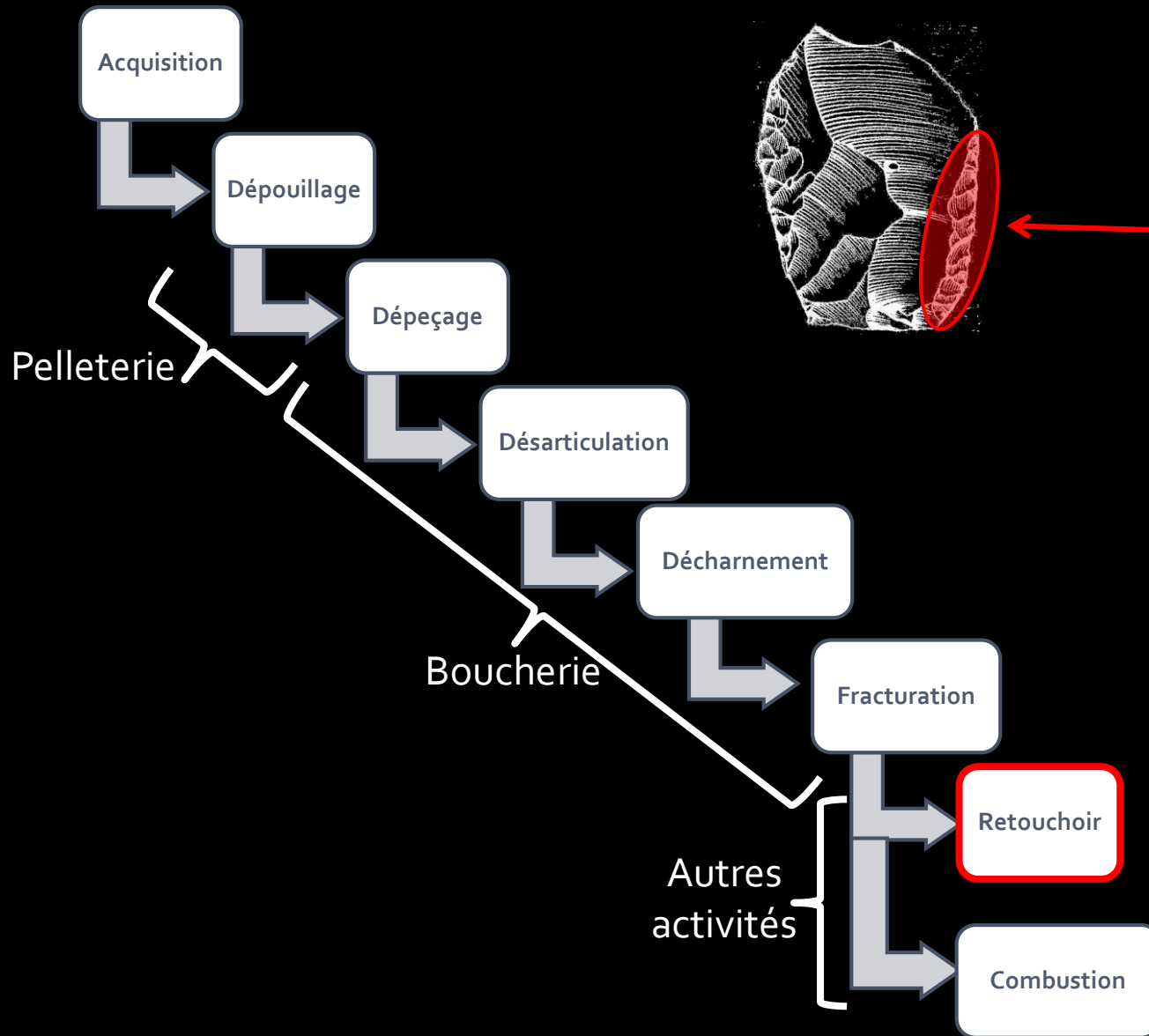
Links Neanderthal-fauna at Biache-Saint-Vaast



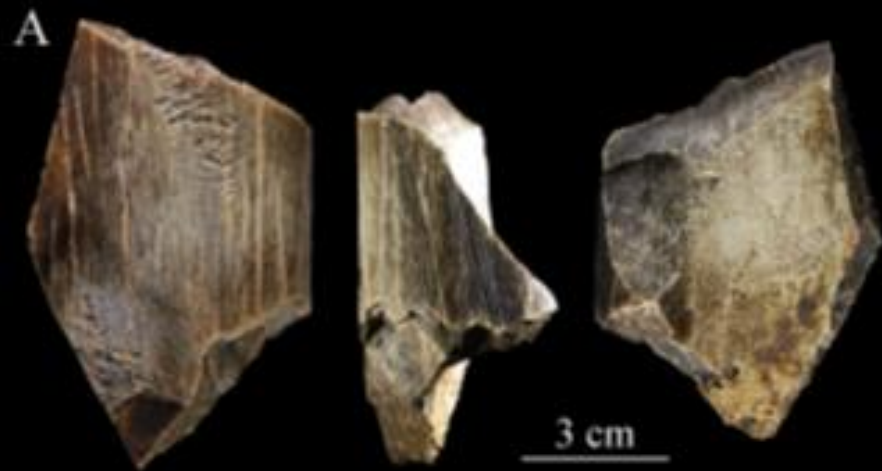
Links Neanderthal-fauna at Biache-Saint-Vaast



Links Neanderthal-fauna at Biache-Saint-Vaast



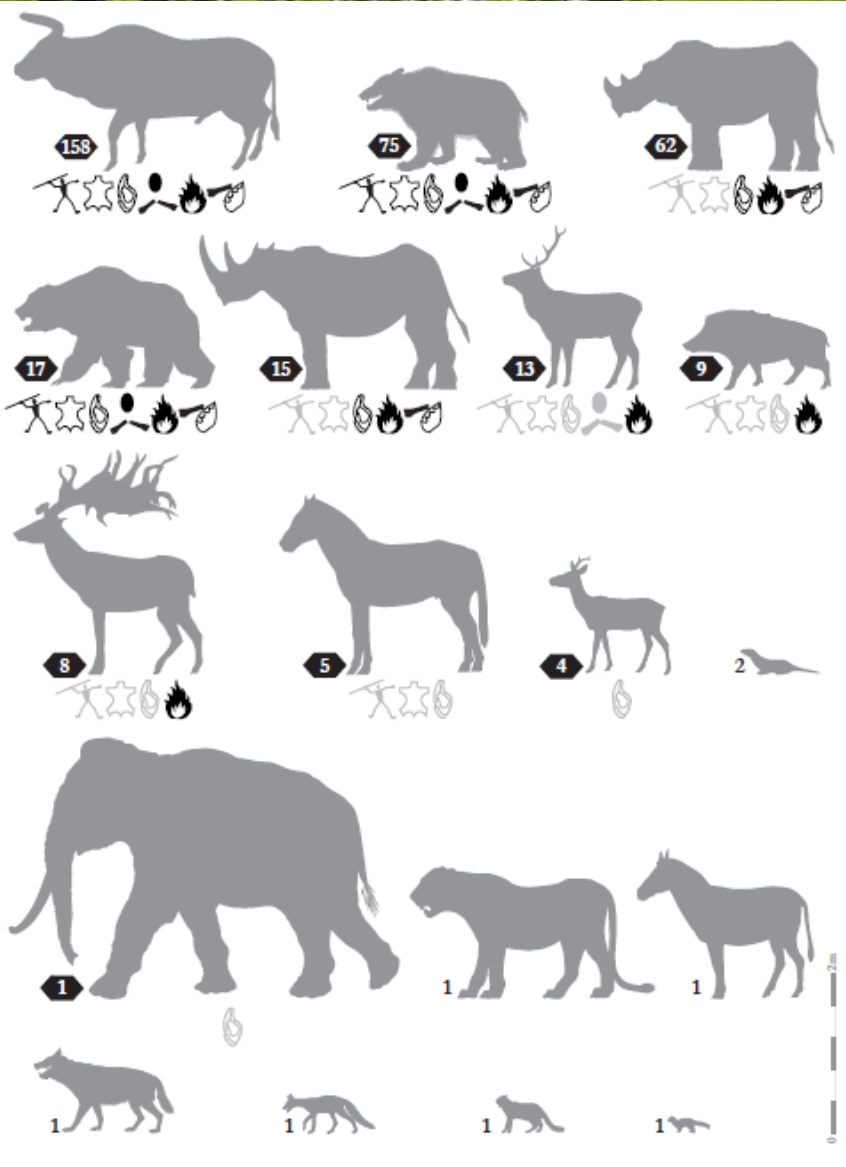
Links Neanderthal-fauna at Biache-Saint-Vaast



Layer IIA – MIS 7.3

18 species – 463 individuals
spring and autumn

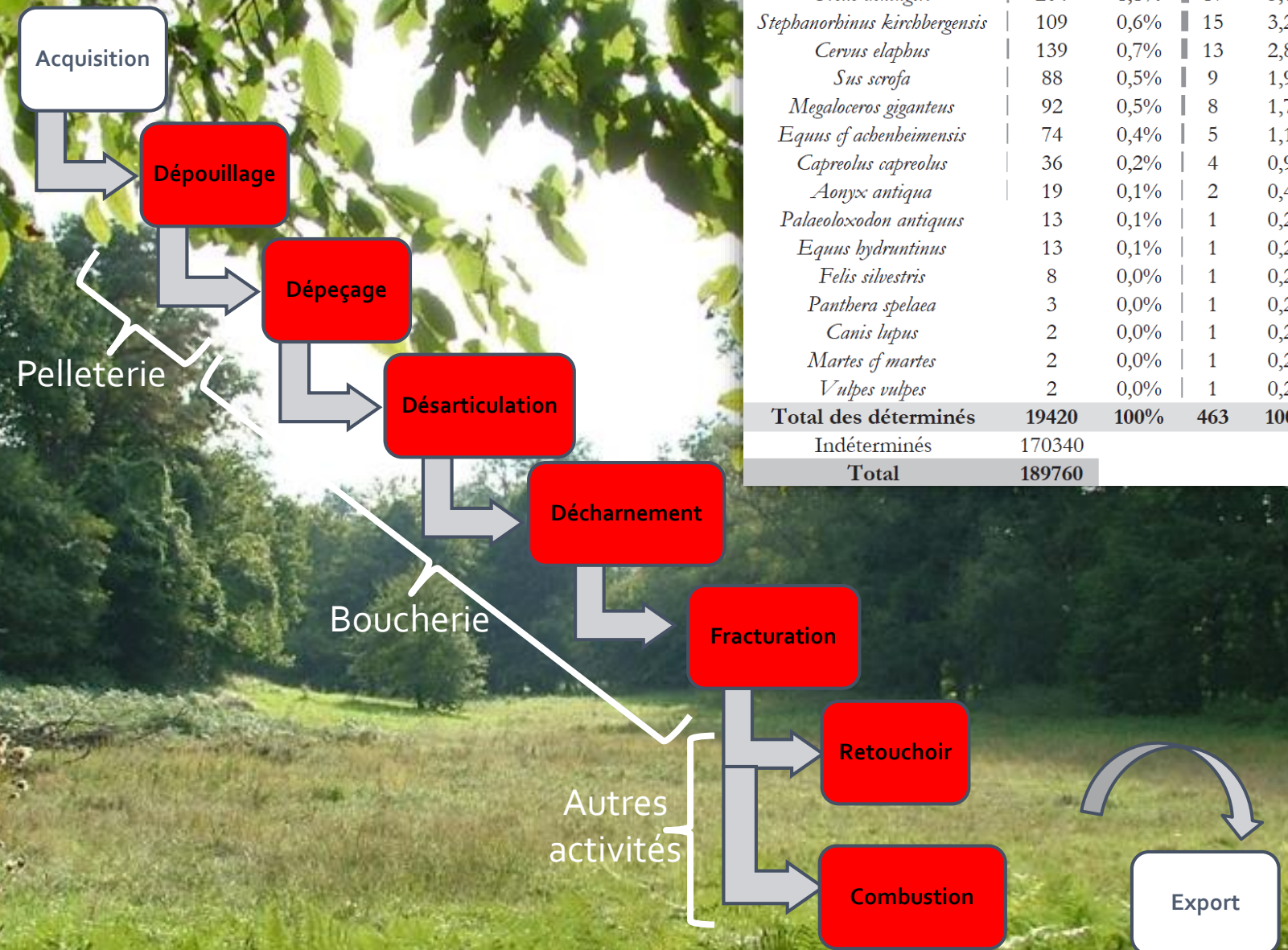
Espèces	NR	% NR	NMI	% NMI
<i>Bos primigenius</i>	9188	47,3%	158	34,1%
<i>Ursus arctos</i>	2158	11,1%	75	16,2%
<i>Stephanorhinus hemitoechus</i>	1019	5,2%	62	13,4%
<i>Ursus sp.</i>	4450	22,9%	55	11,9%
<i>Stephanorhinus sp.</i>	1801	9,3%	33	7,1%
<i>Ursus deningeri</i>	204	1,1%	17	3,7%
<i>Stephanorhinus kirchbergensis</i>	109	0,6%	15	3,2%
<i>Cervus elaphus</i>	139	0,7%	13	2,8%
<i>Sus scrofa</i>	88	0,5%	9	1,9%
<i>Megaloceros giganteus</i>	92	0,5%	8	1,7%
<i>Equus cf acbenheimensis</i>	74	0,4%	5	1,1%
<i>Capreolus capreolus</i>	36	0,2%	4	0,9%
<i>Aonyx antiqua</i>	19	0,1%	2	0,4%
<i>Palaeoloxodon antiquus</i>	13	0,1%	1	0,2%
<i>Equus hydruntinus</i>	13	0,1%	1	0,2%
<i>Felis silvestris</i>	8	0,0%	1	0,2%
<i>Panthera spelaea</i>	3	0,0%	1	0,2%
<i>Canis lupus</i>	2	0,0%	1	0,2%
<i>Martes cf martes</i>	2	0,0%	1	0,2%
<i>Vulpes vulpes</i>	2	0,0%	1	0,2%
Total des déterminés	19420	100%	463	100%
Indéterminés	170340			
Total	189760			



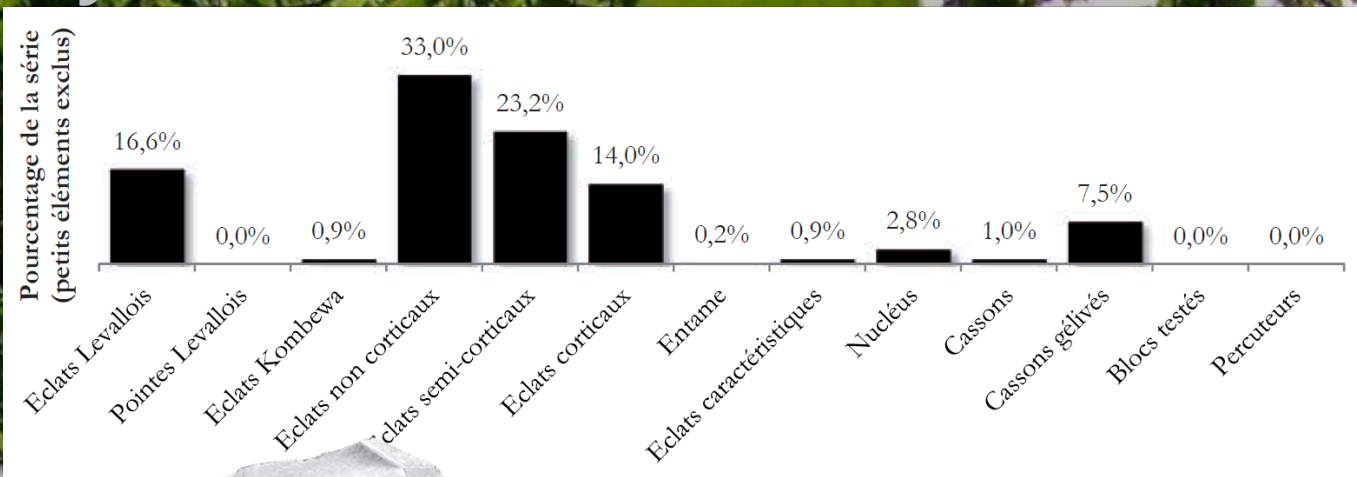
1 Espèce présentant des traces d'intervention anthropique (chiffre = NMI de l'espèce)

Chasse
 Pelleterie
 Boucherie
 Fracturation des os longs
 Combustion
 Retouchoir

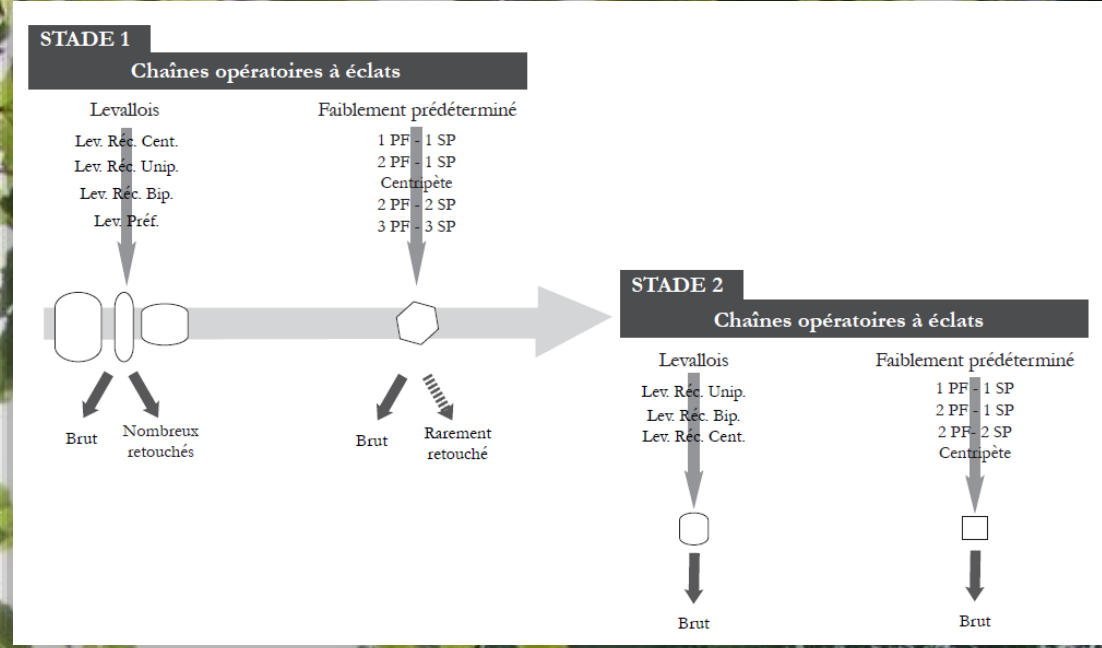
En noir : activités attestées ; en gris : activités supposées et à confirmer



Layer IIA – MIS 7.3



Total = 47 150 lithic artefacts



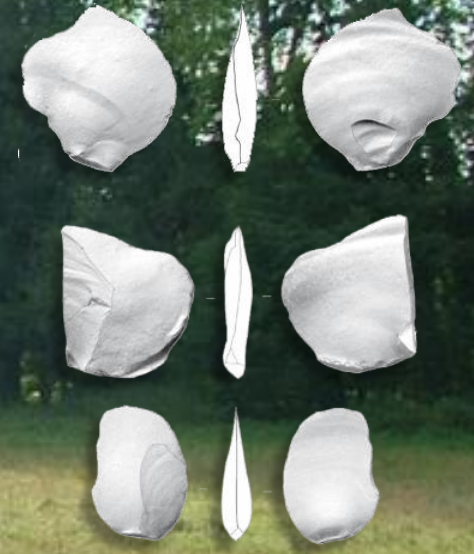
Levallois preferential



Levallois recurrent bipolar



Levallois recurrent unipolar



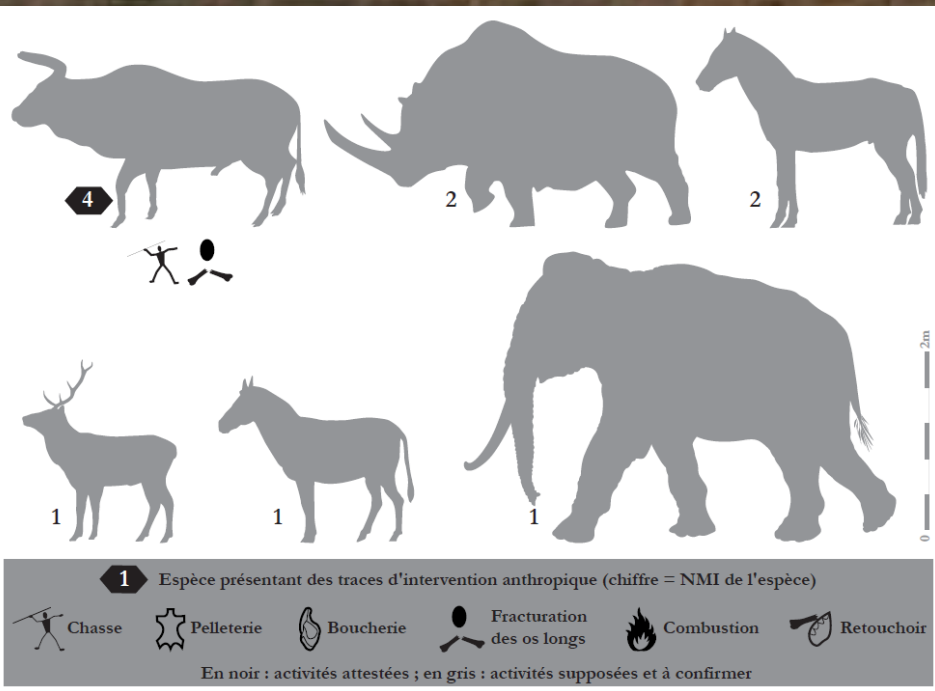
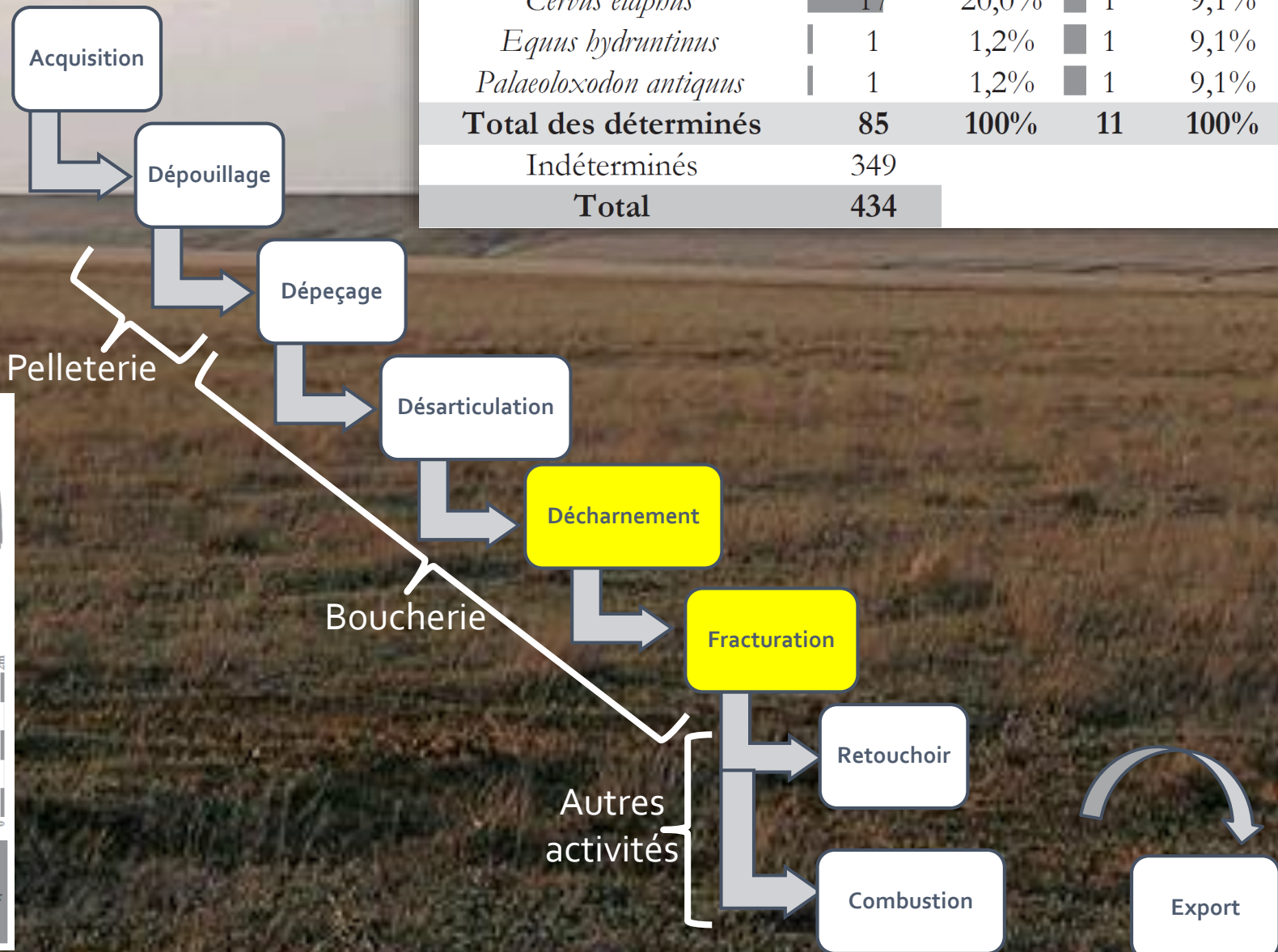
Ramification

Layer D1 – end MIS 7.1/beginning 6

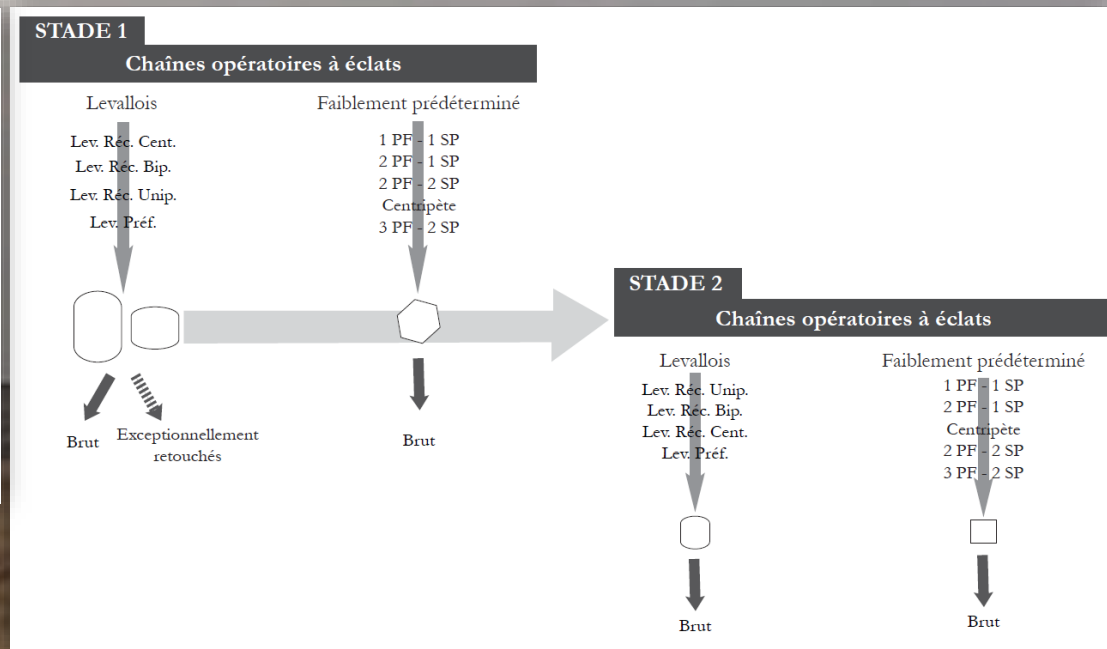
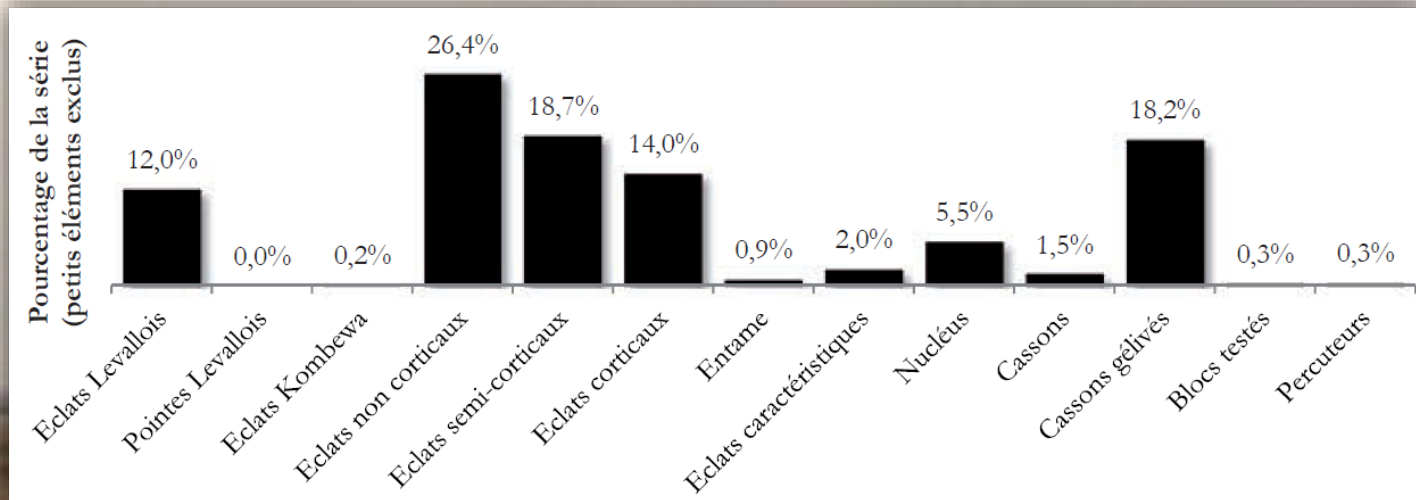
6 species – 11 individuals

No seasonal evidence

Espèces	NR	% NR	NMI	% NMI
<i>Bos primigenius</i>	29	34,1%	4	36,4%
<i>Coelodonta antiquitatis</i>	22	25,9%	2	18,2%
<i>Equus cf achenheimensis</i>	15	17,6%	2	18,2%
<i>Cervus elaphus</i>	17	20,0%	1	9,1%
<i>Equus hydruntinus</i>	1	1,2%	1	9,1%
<i>Palaeoloxodon antiquus</i>	1	1,2%	1	9,1%
Total des déterminés	85	100%	11	100%
Indéterminés	349			
Total	434			



Layer D1 – end MIS 7.1/beginning 6



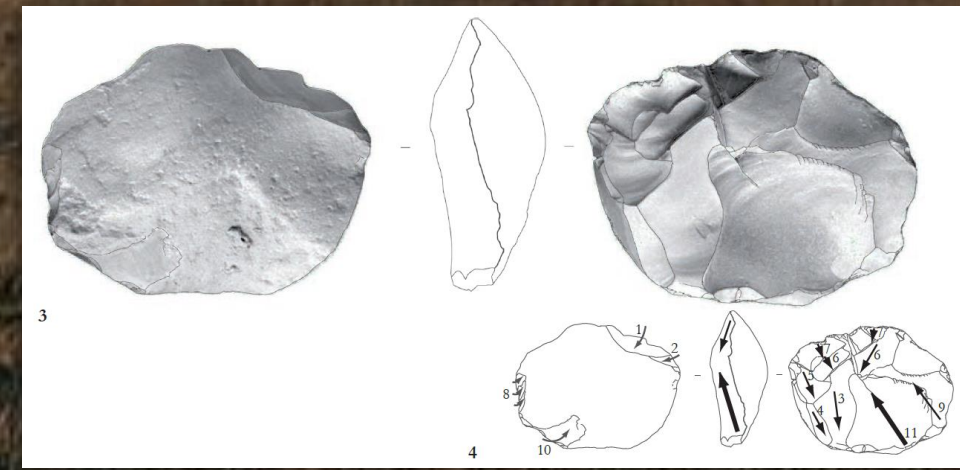
Total = 3 183 lithic artefacts



Levallois preferential

Levallois recurrent unipolar

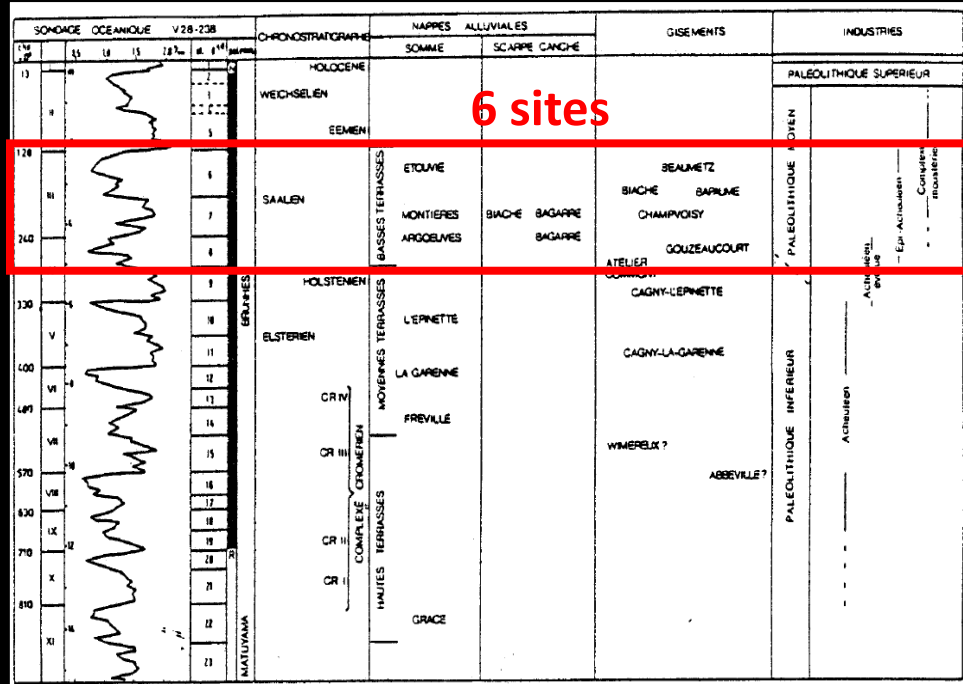
Levallois recurrent centripetal



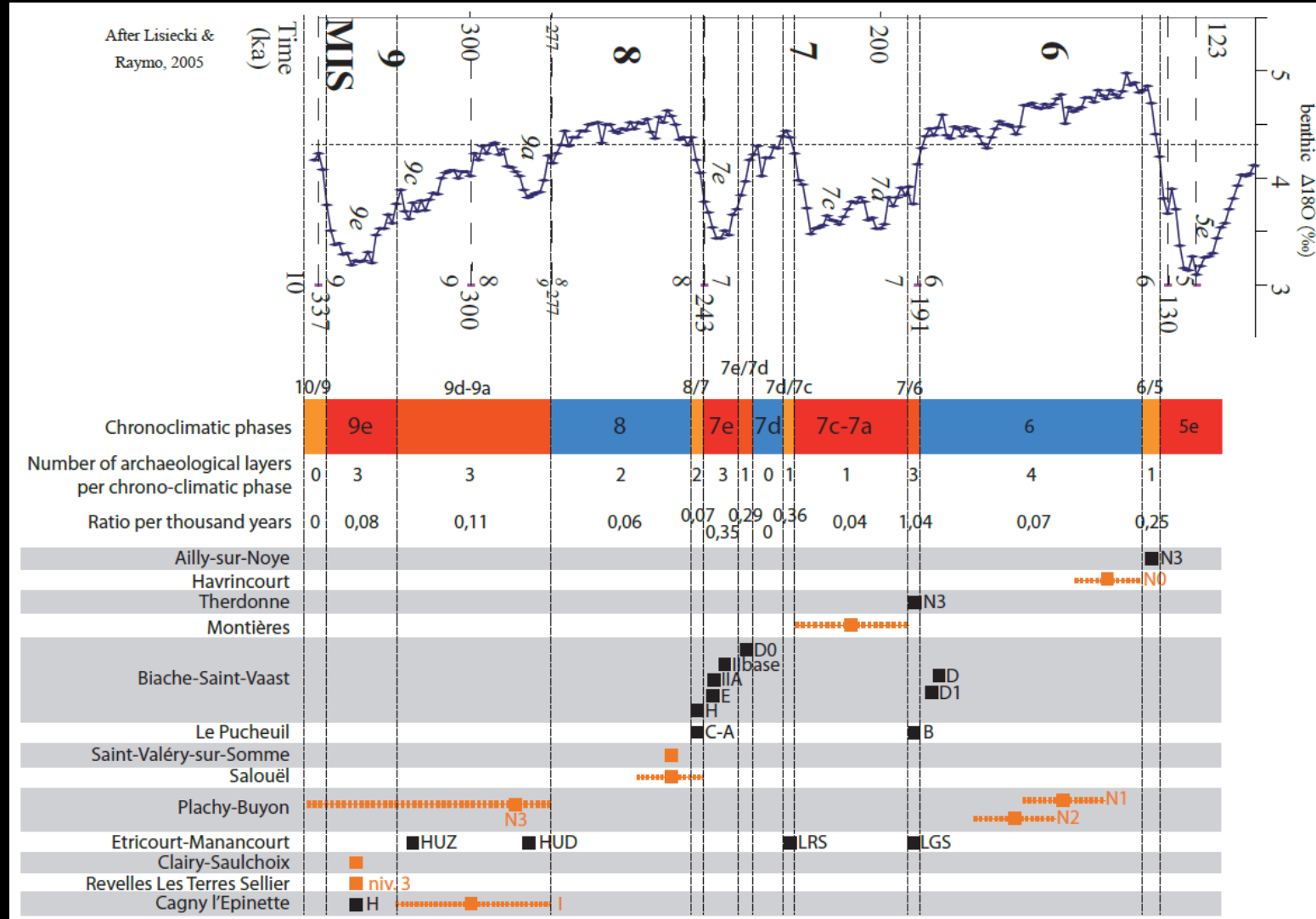
Ramification



Flash back: state of research 1984-1987 vs 2019

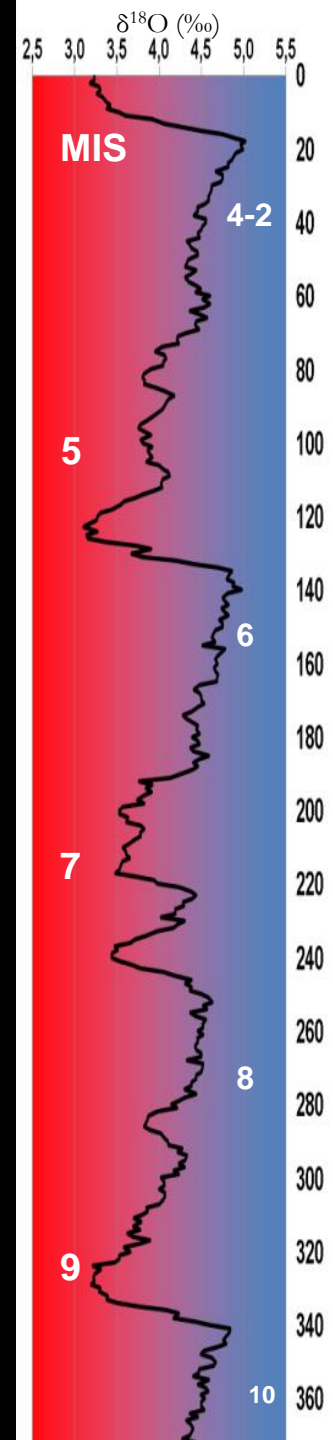


13 sites



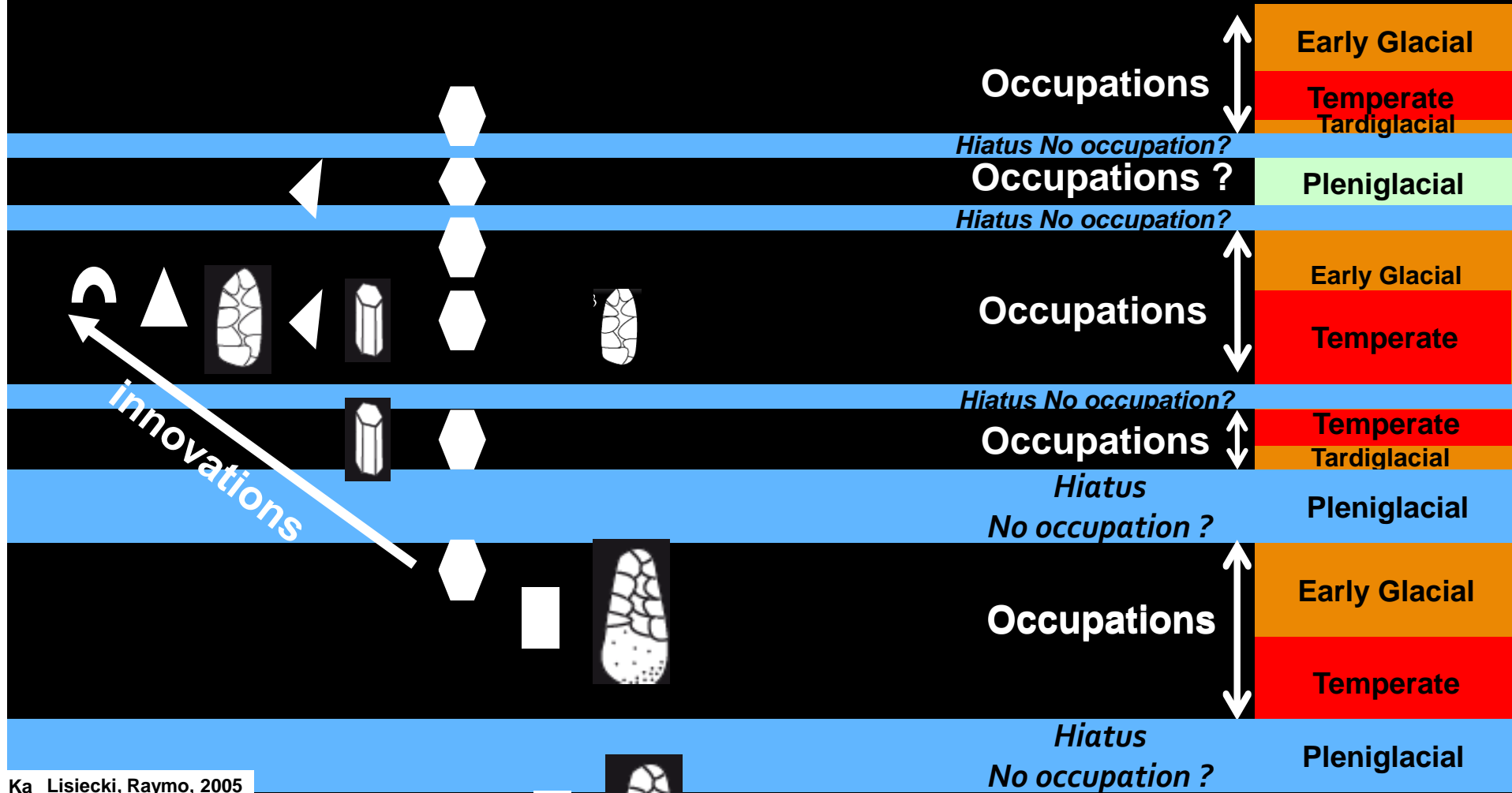
A. Tuffreau, 1987
after P. Haesaerts,
1984.

The onset of the Middle Palaeolithic in Northern France



**Technical radiation
from ~280 ka**

**Discontinuous settlement
during the Saalian (~400-130 ka)**



Ka Lisiecki, Raymo, 2005

M. J. Aitken, P. Auguste, J.J. Bahain, S. Begries, E. Boëda, J.P. Bouchet, H. Burie, J. Chaline, J.-P. Colbeaux, N. Cunat, H. Dibble, R. Geeraerts, G. Guipert, V. Hérisson, J. Hus, J. Huxtable, E. Juvigné, E. Leblanc, G. Leroy, M. Liouville, S. Louquet-Lefevre, J.-L. Marcy, A.V. Muxaut, S. Occhiotti, P. Pichet, J.F. Piningre, J.J. Puissegur, H. Rougier, D.D. Rousseau, N. Sévère, J. Sommé, A. Tuffreau, N. Ameloot-Van der Heijden, B. Vandermeersch, B. Van-Vlet-Lanoë, Y. Yokoyama

Merci de votre attention



[@david_herisson](https://twitter.com/david_herisson)



<https://antet.hypotheses.org/>