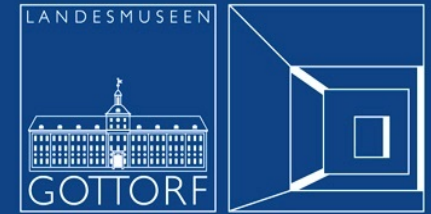


XXVIIIe congrès préhistorique de France
Amiens, France
4th June 2016

Zentrum für
Baltische und
Skandinavische
Archäologie

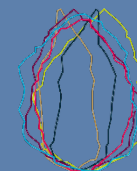
Centre for
Baltic and
Scandinavian
Archaeology

The Late Palaeolithic and Early Mesolithic in (north)eastern Germany



Stiftung
Schleswig-Holsteinische Landesmuseen
Schloss Gottorf

Daniel Groß
Birgit Gehlen
Elisabeth Noack
Clemens Pasda



Monrepos

Archäologisches Forschungszentrum und Museum
für menschliche Verhaltensevolution

Three geographical types characterize Eastern-Germany



Lowlands

Middle Range Mountains

Alpine Uplands

after: Franke 2015, Fig. 1



ZBSA

The area of focus is located in the north eastern part

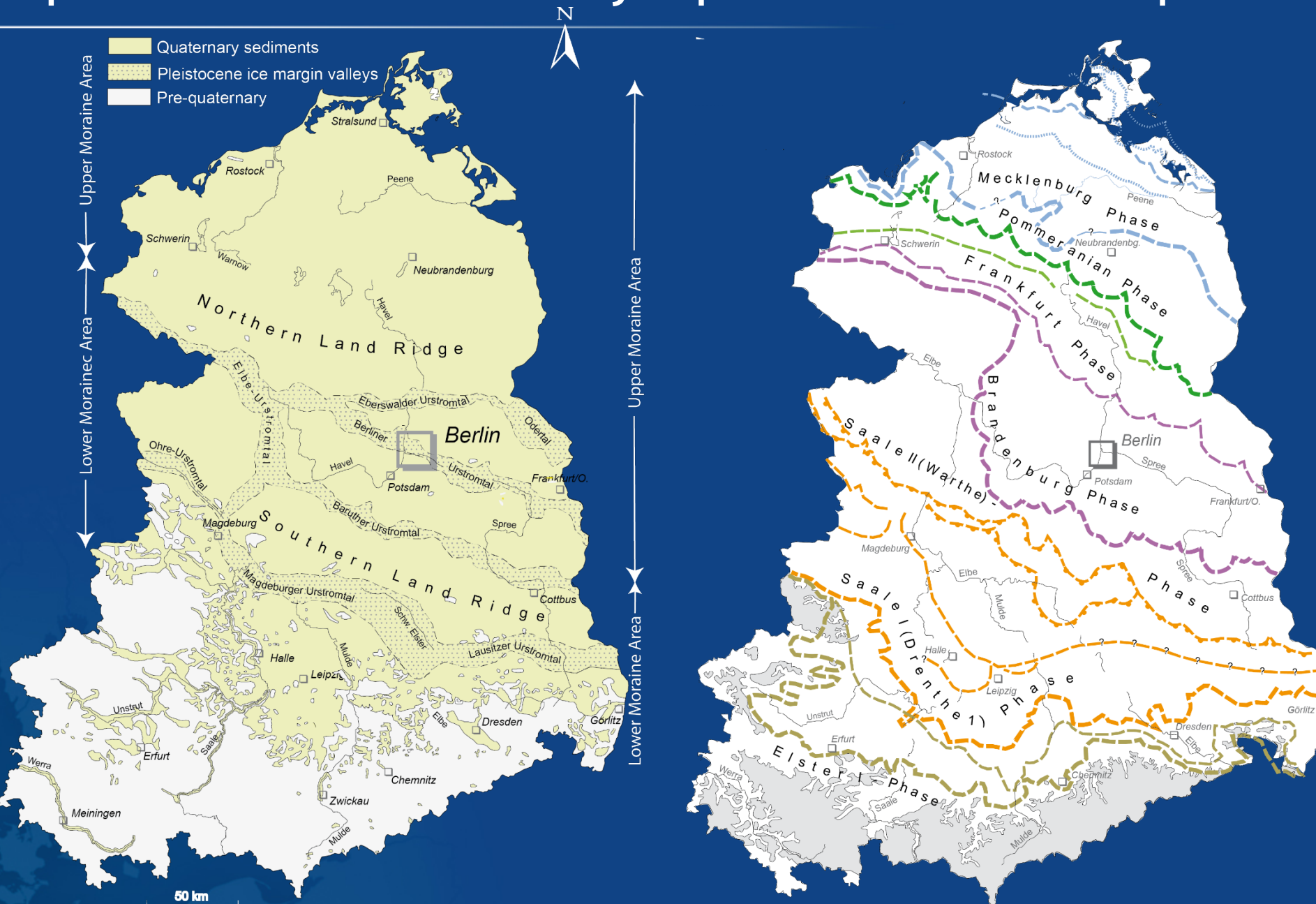


after: Franke 2015, Fig. 1



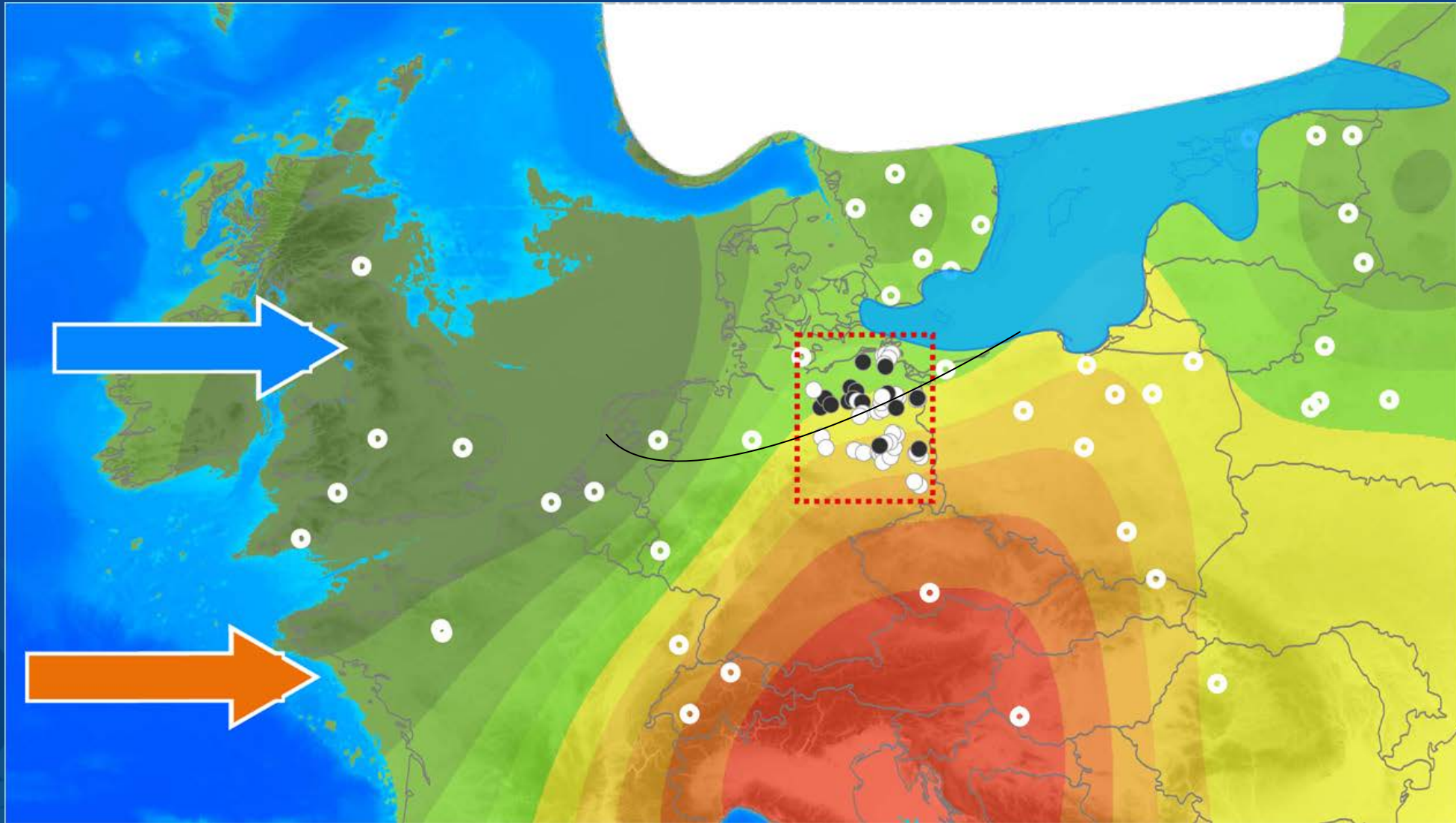
ZBSA

Glacial processes formed a major part of the landscape



after: Franke 2015, Fig. 24 & 24.1

Presence of pine during Younger Dryas



Fauna which is adapted to forests expand

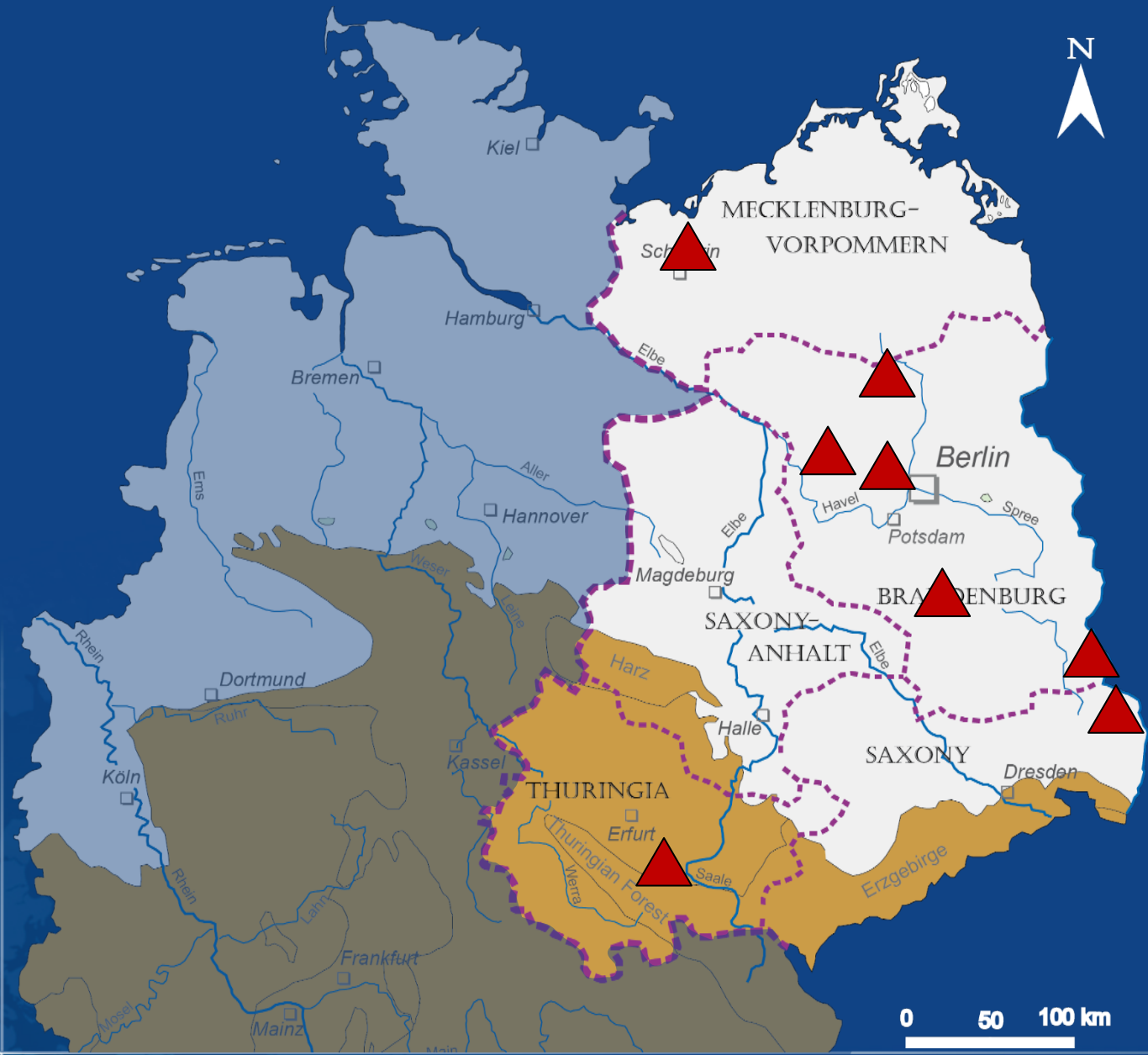


after Grimm 2009; artensterben.de; canadaiguaschools.org; duden.de; rivernet.org; zoovienna.at



ZBSA

Most sites we present are from the Lowland area



Hohen Viecheln

Burow

Friesack
Wustermark

Golßen
Kleinlieskow
Reichwalde

Abri Fuchskirche

after: Franke 2015, Fig. 1



The landscape was formed by glaciers



Hohen Viecheln

Friesack
Wustermark

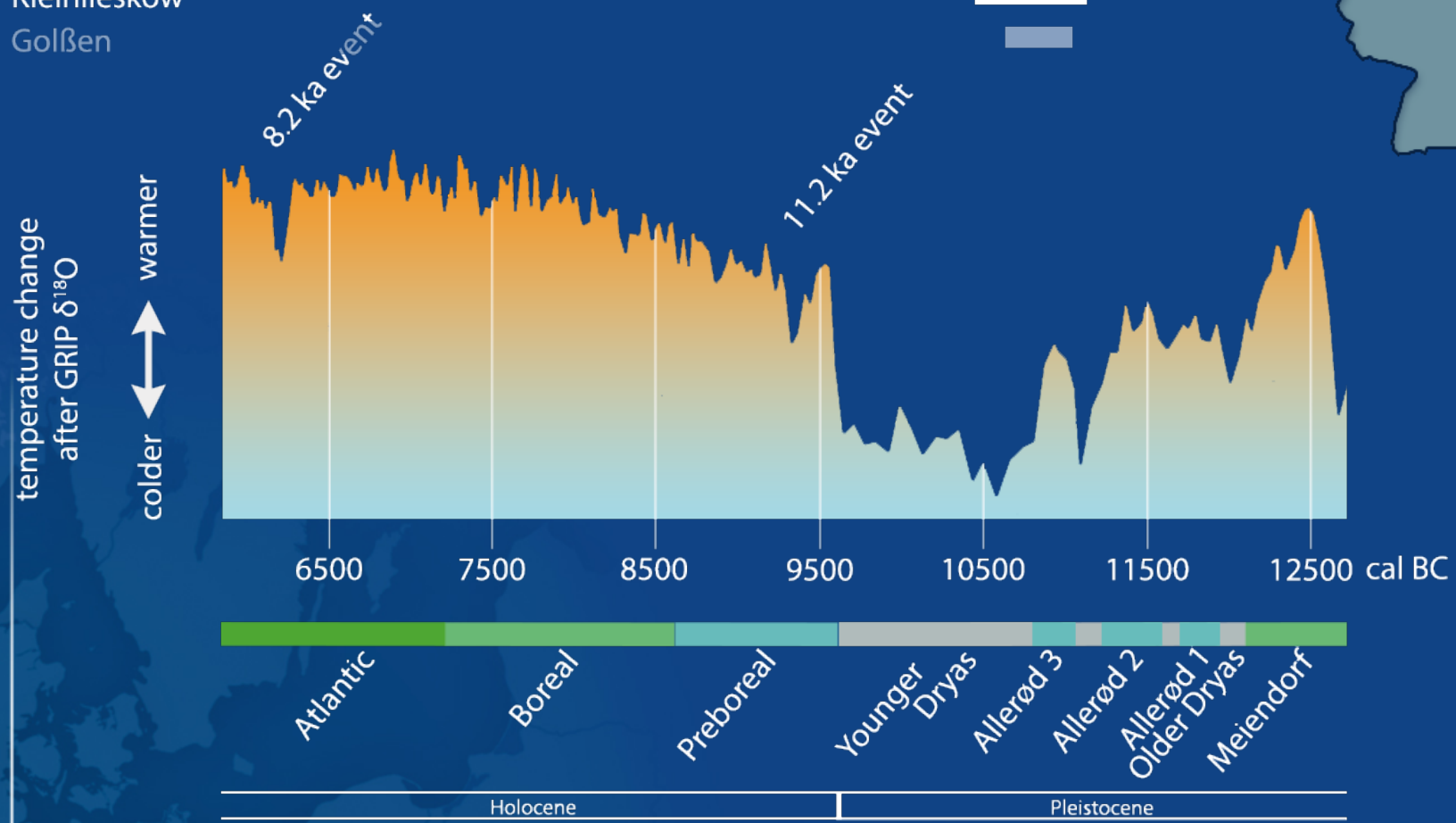
Golßen
Kleinlieskow
Reichwalde

Abri Fuchskirche

after: Franke 2015, Fig. 24

Four sites will be presented in more detail

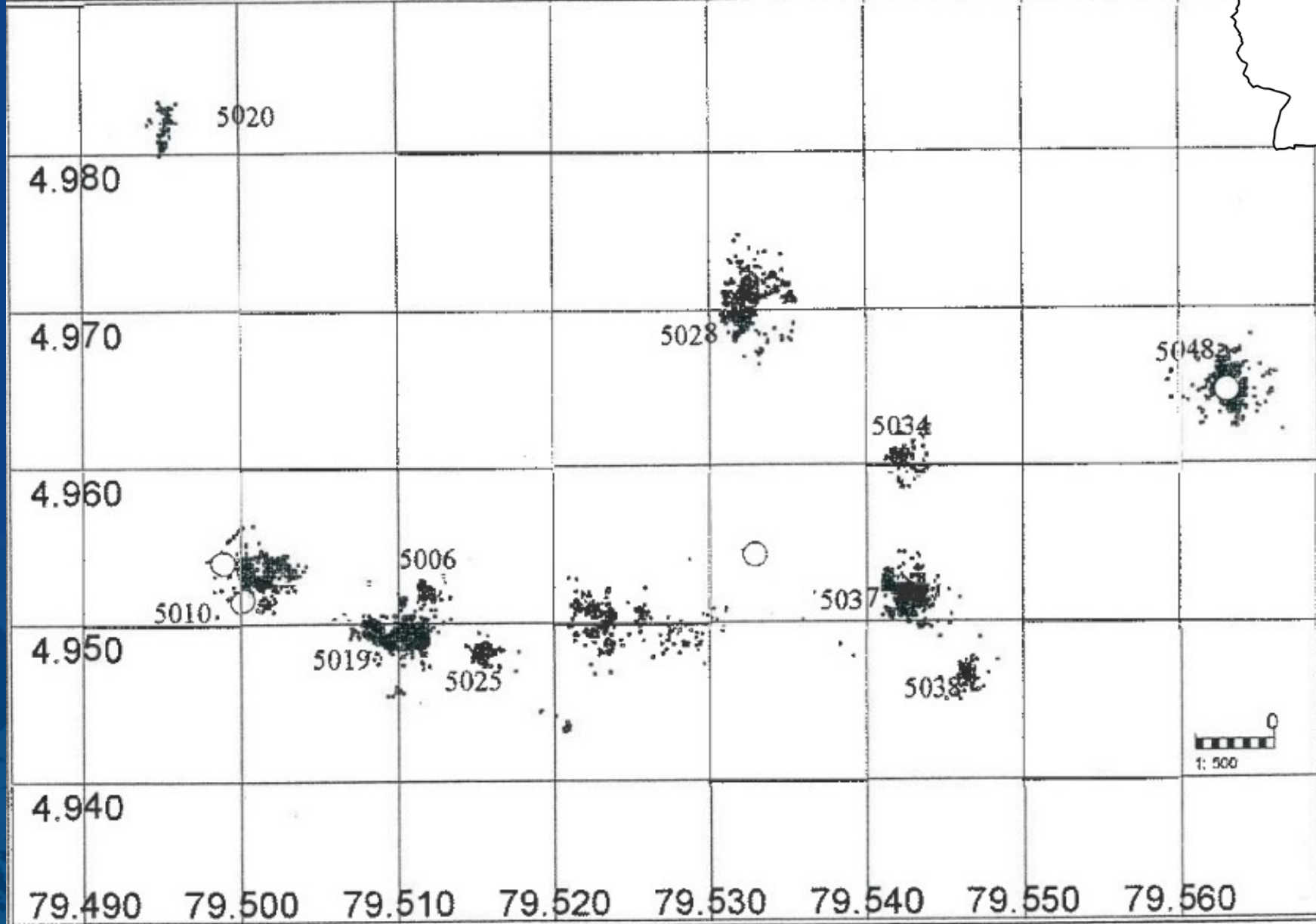
- Friesack
- Abri Fuchskirche
- Hohen Viecheln
- Reichwalde
- Wustermark 22
- Burow
- Kleinlieskow
- Golßen



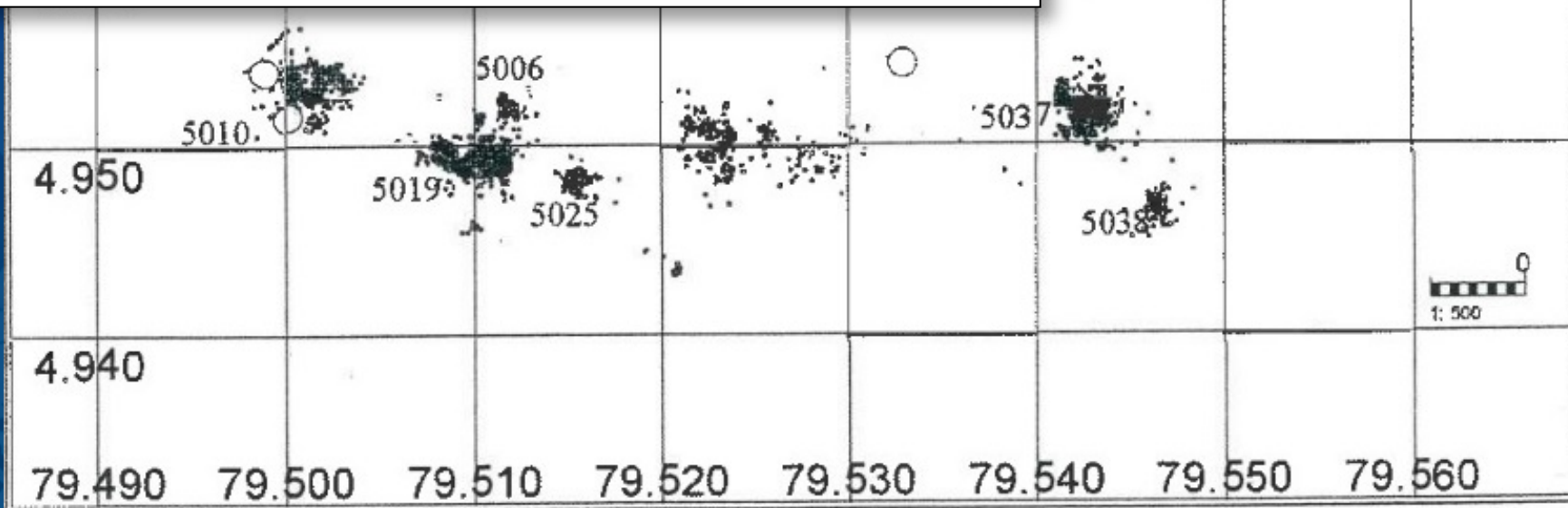
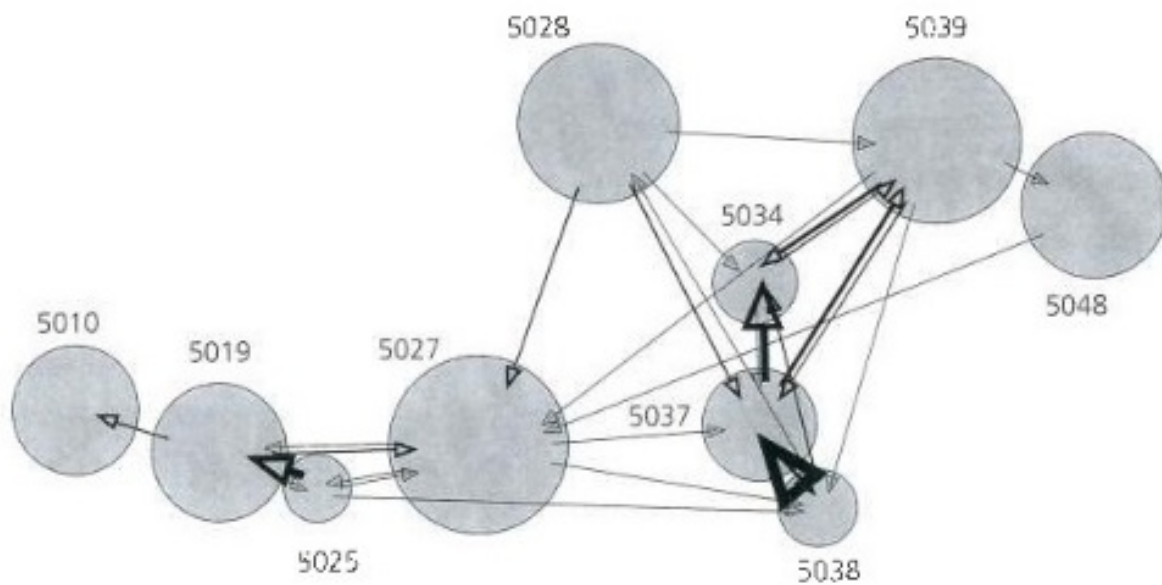
climate after: Hoek & Bos 2007; chronozones after: Terberger et al. 2009



Reichwalde

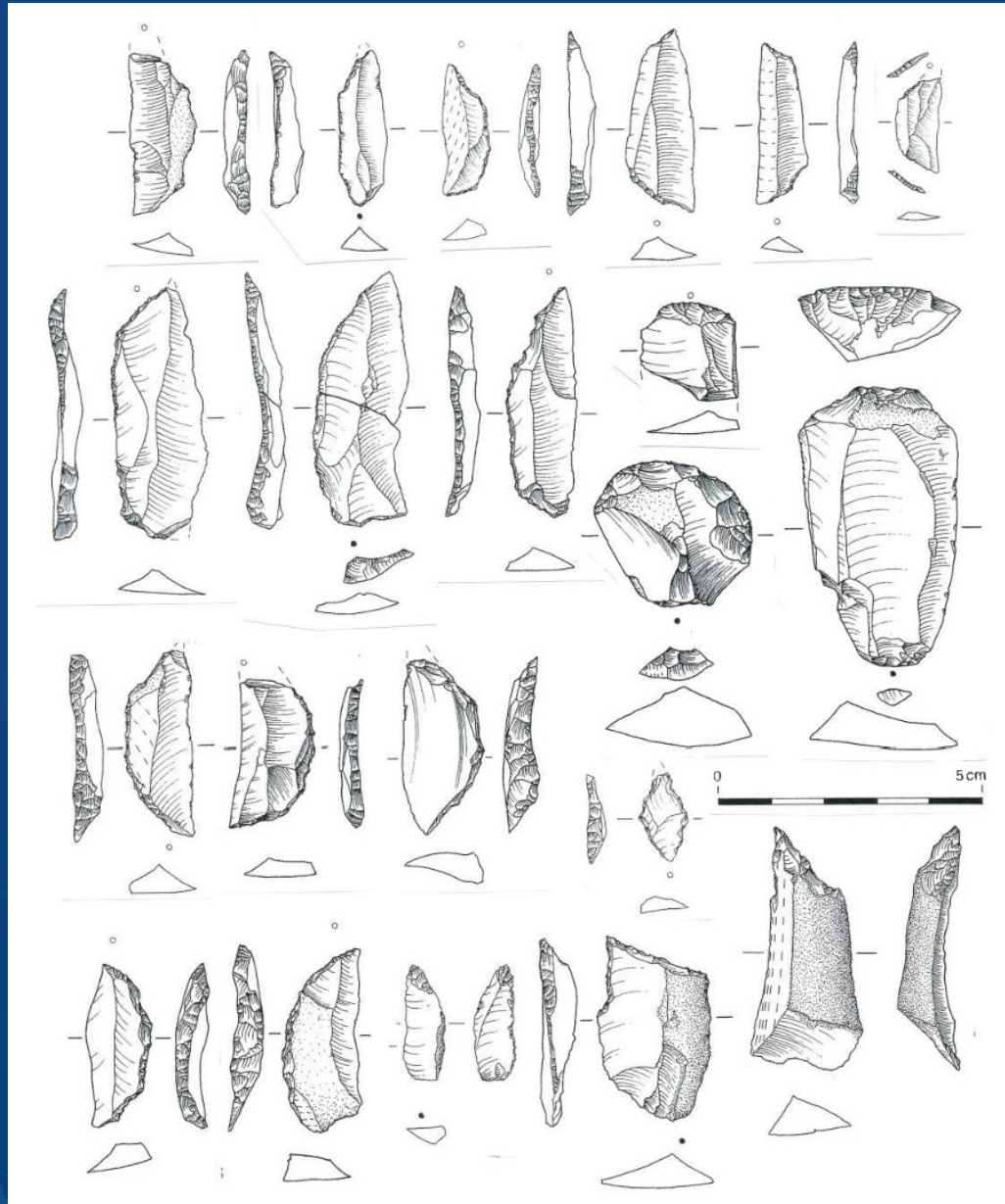


Reichwalde

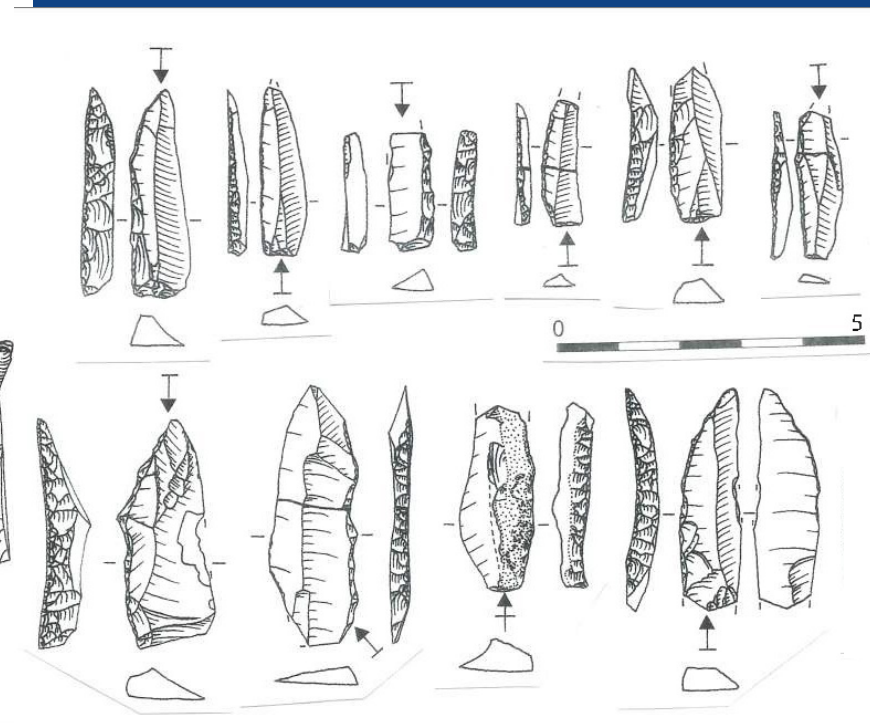
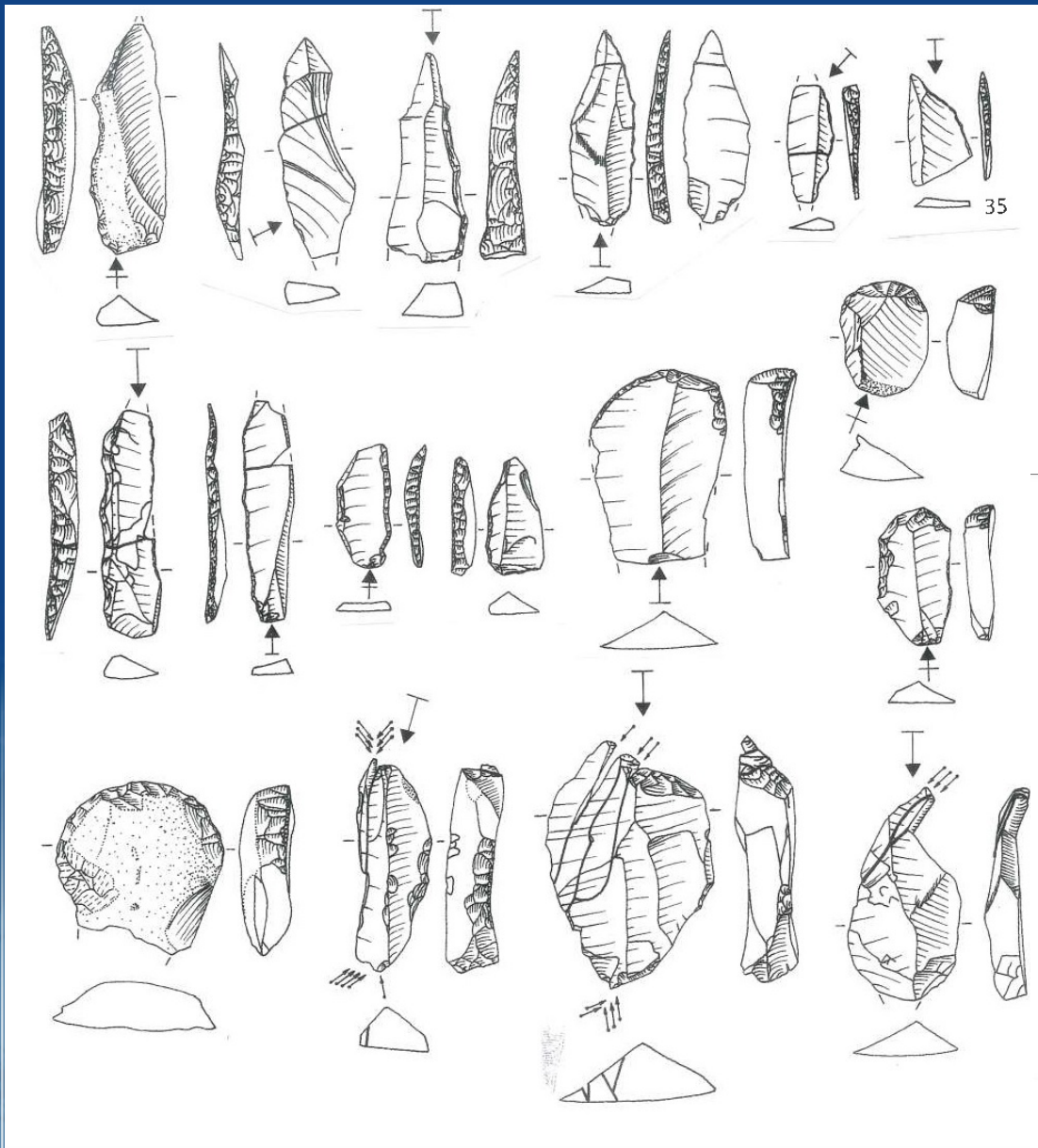


ZBSA

Reichwalde

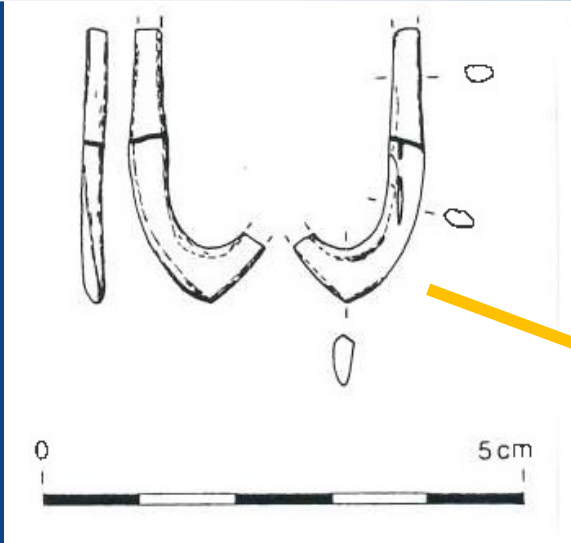


Kleinlieskow 120



ZBSA

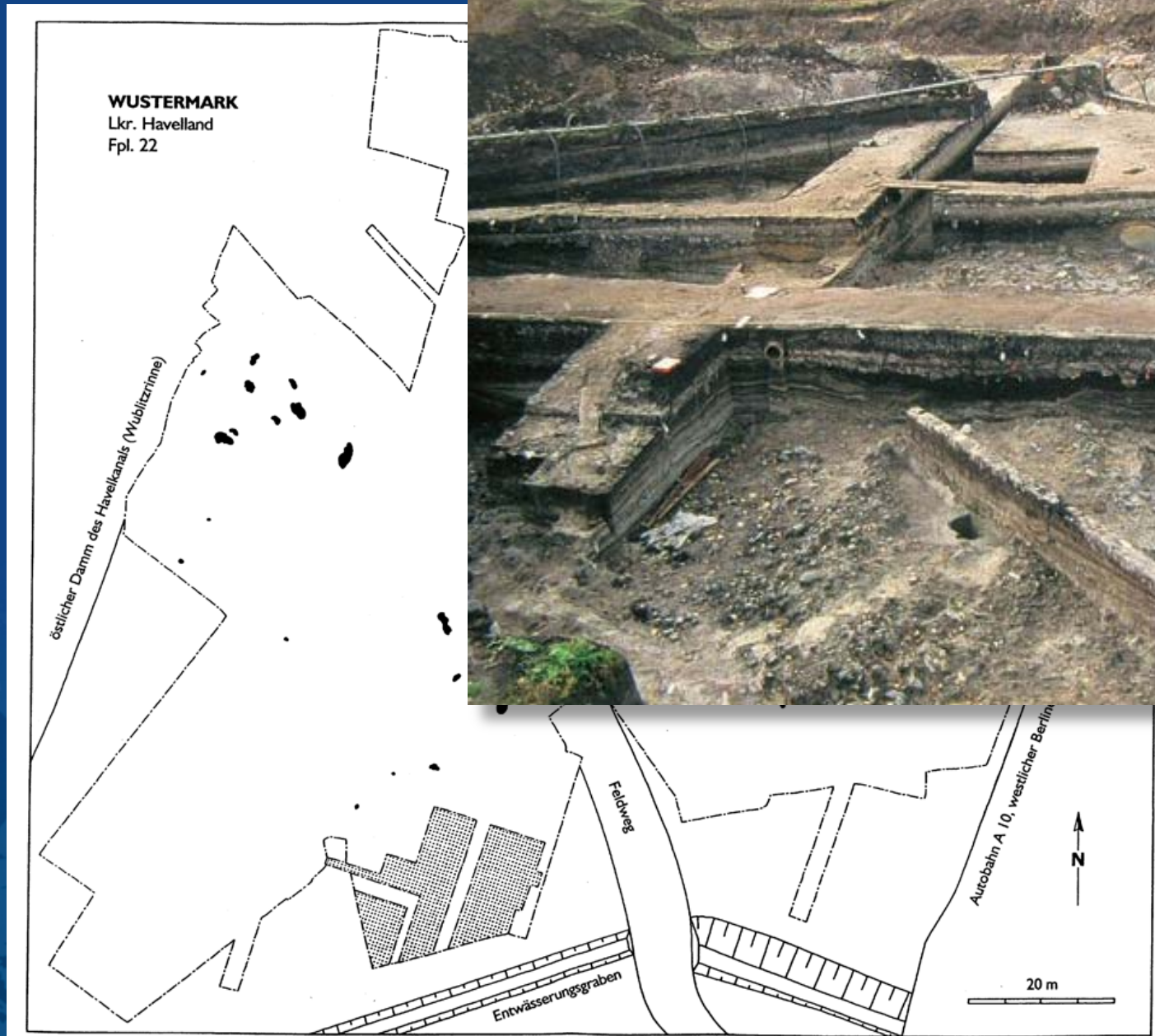
Kleinlieskow 120



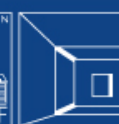
Wustermark 22



Wustermark 22

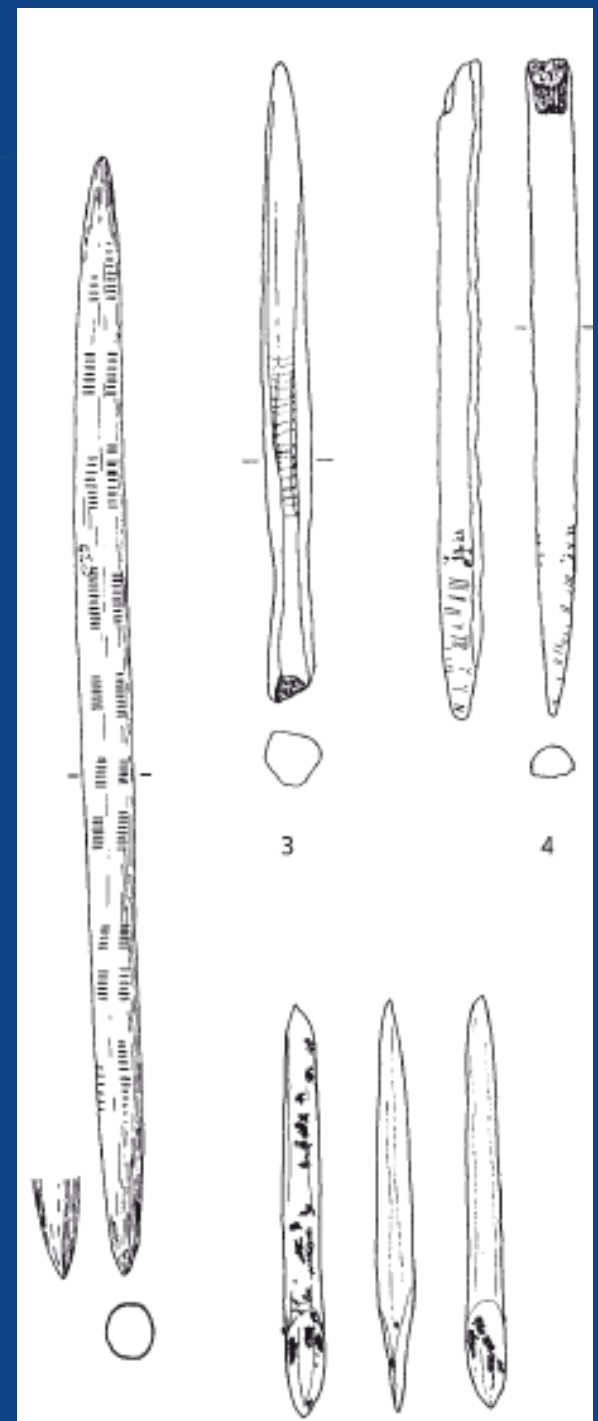
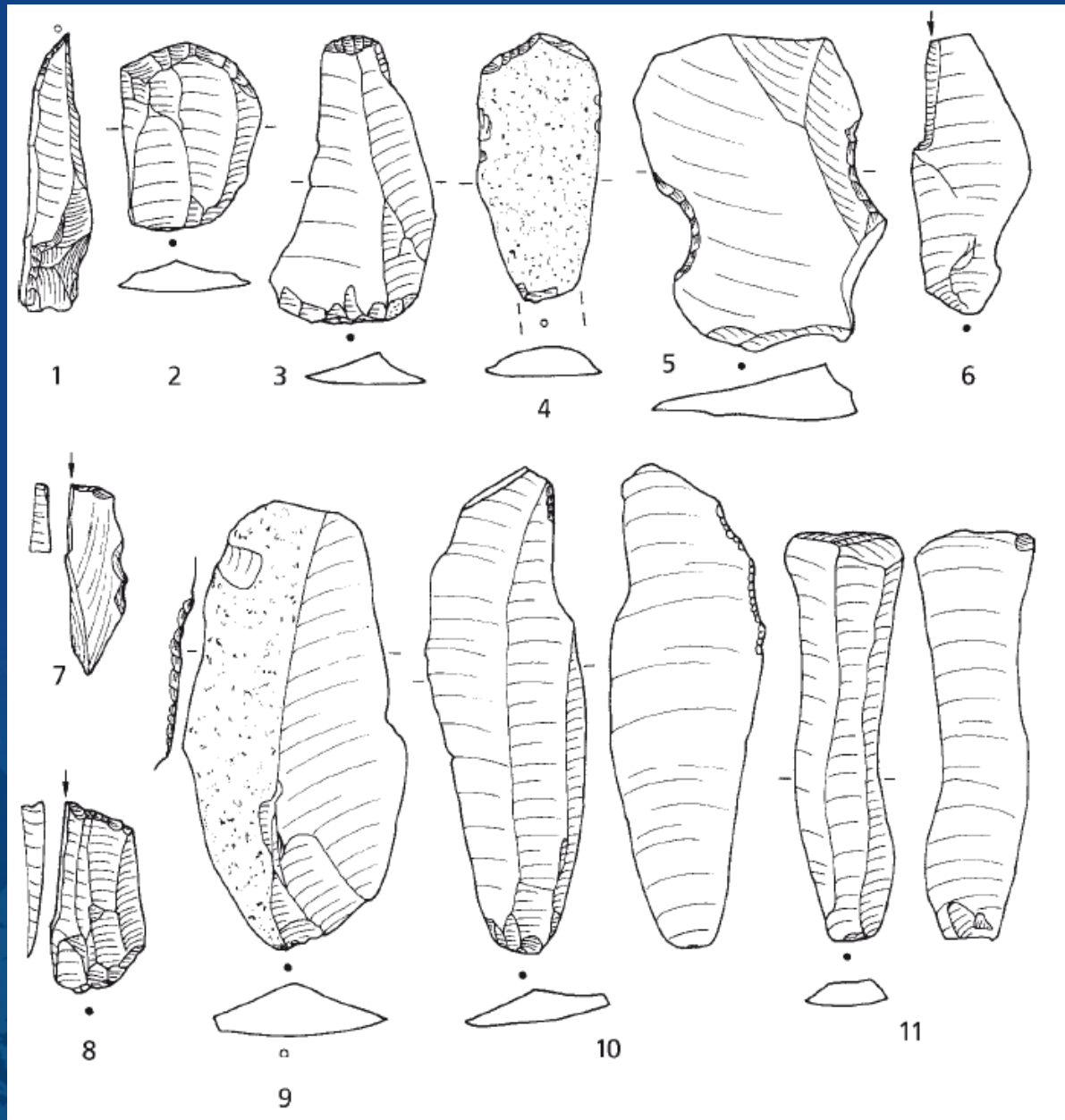


Gramsch & Beran 2010

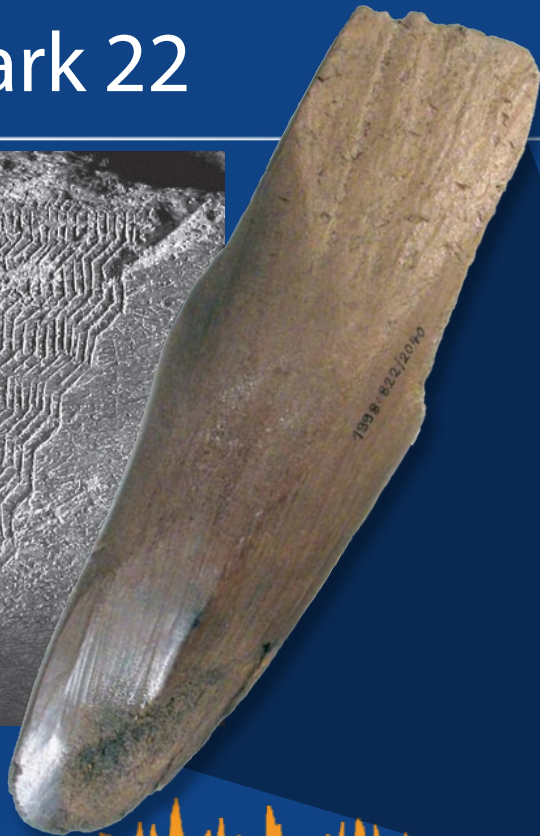


ZBSA

Wustermark 22

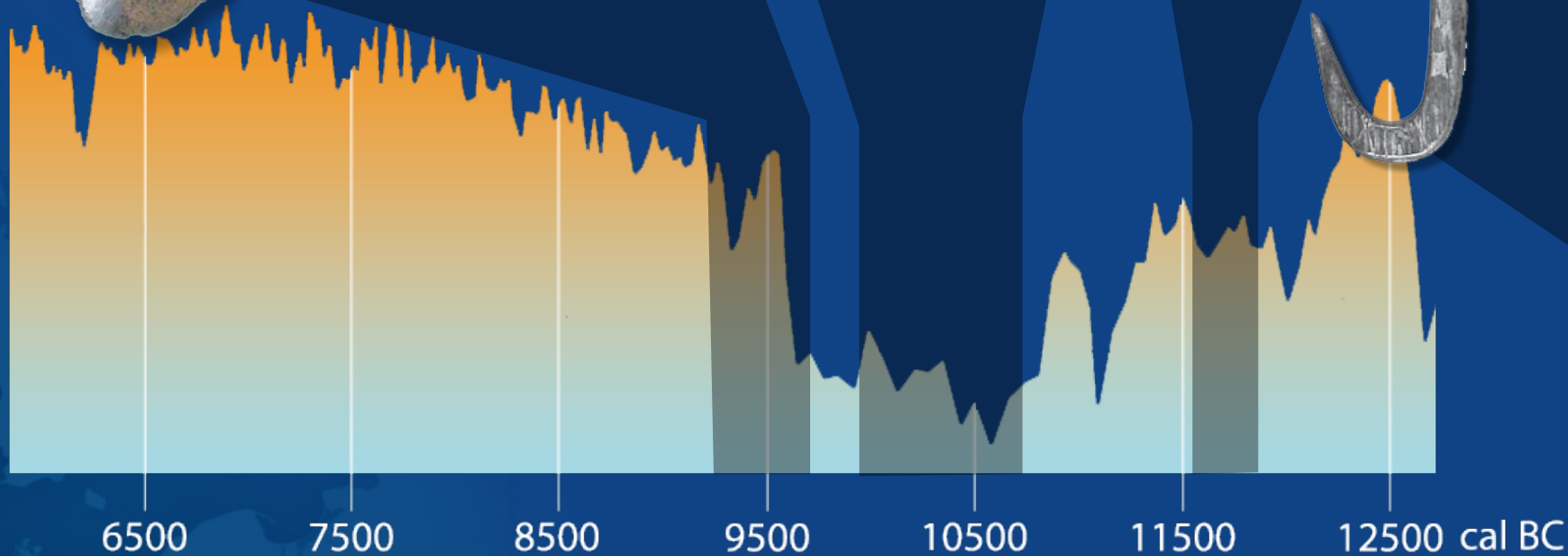


Wustermark 22

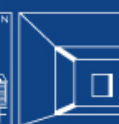


temperature change
after GRIP $\delta^{18}\text{O}$

warmer
↑
↓
colder

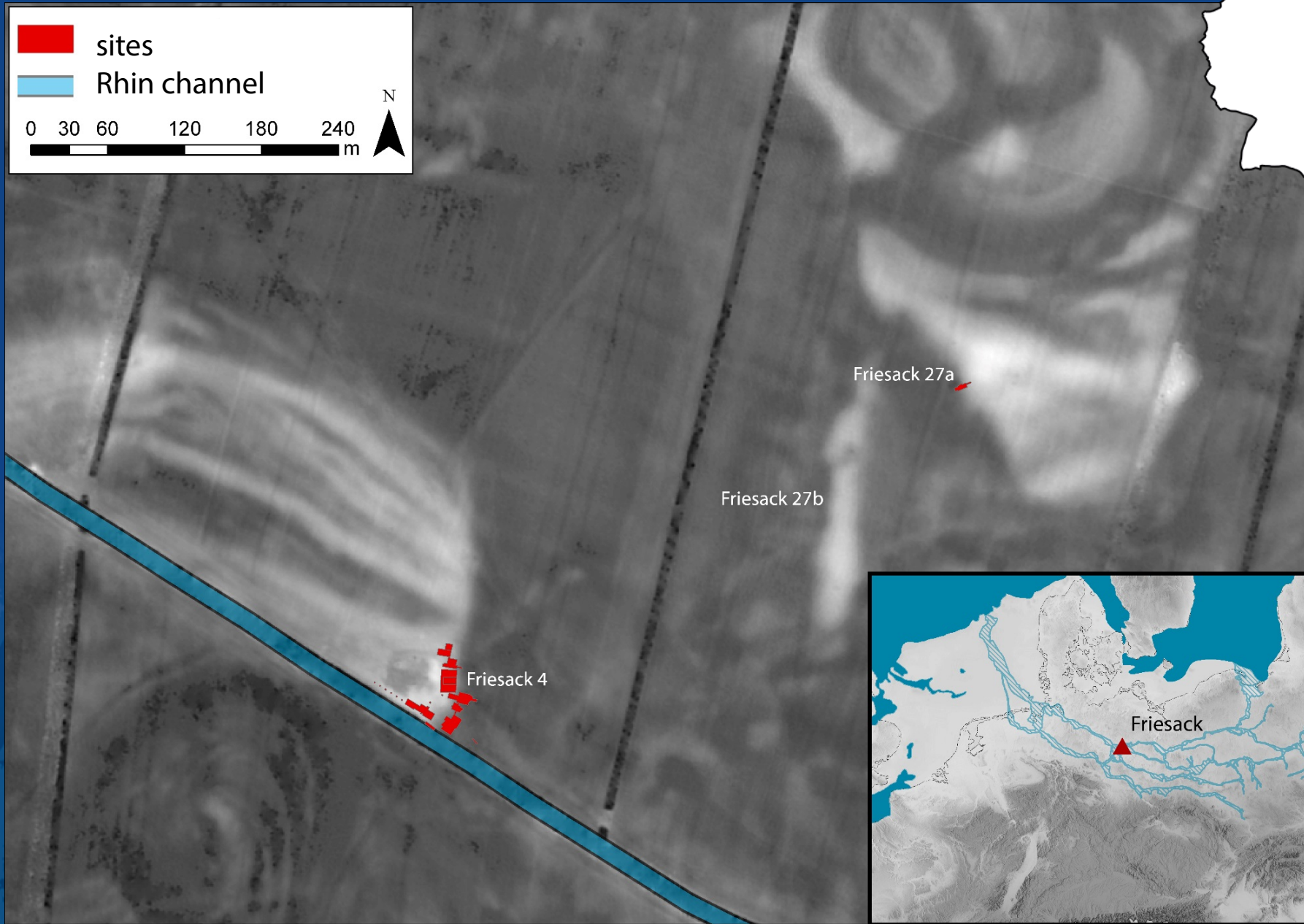


Gramsch & Beran 2010



ZBSA

Friesack

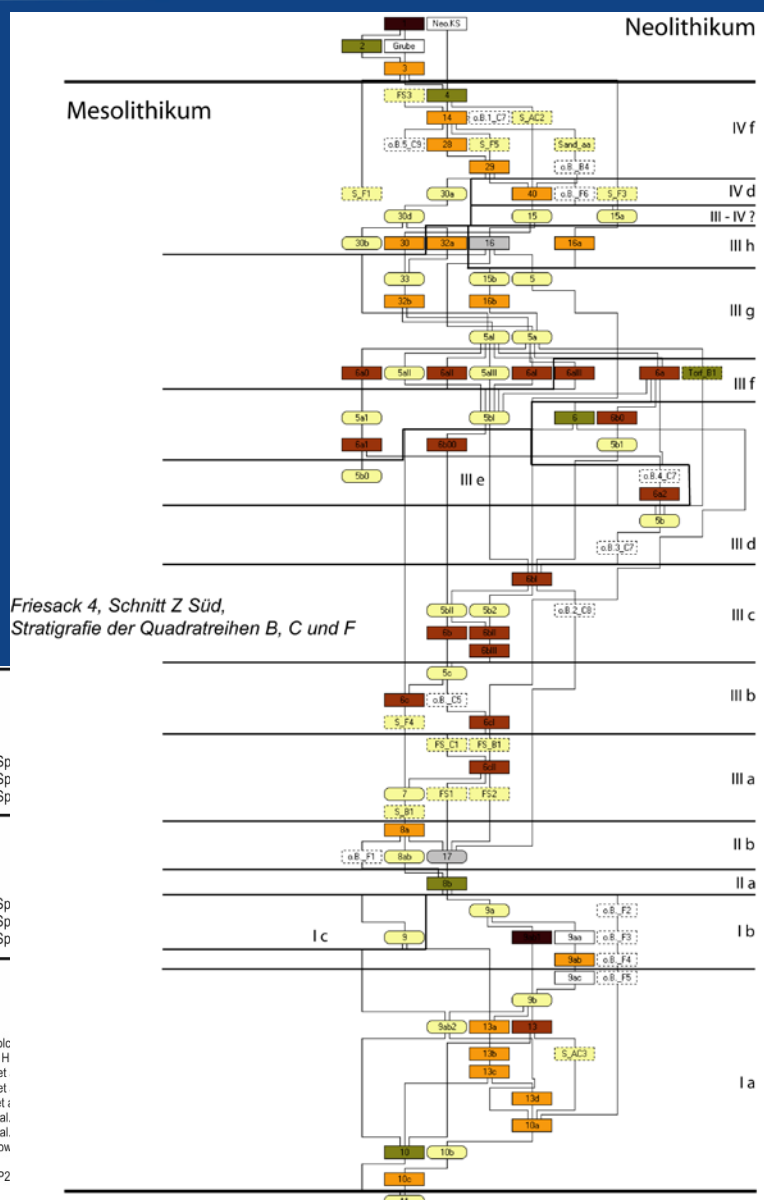


geodata: © GeoBasis-DE/LGB (2013); small map: after Grimm 2009

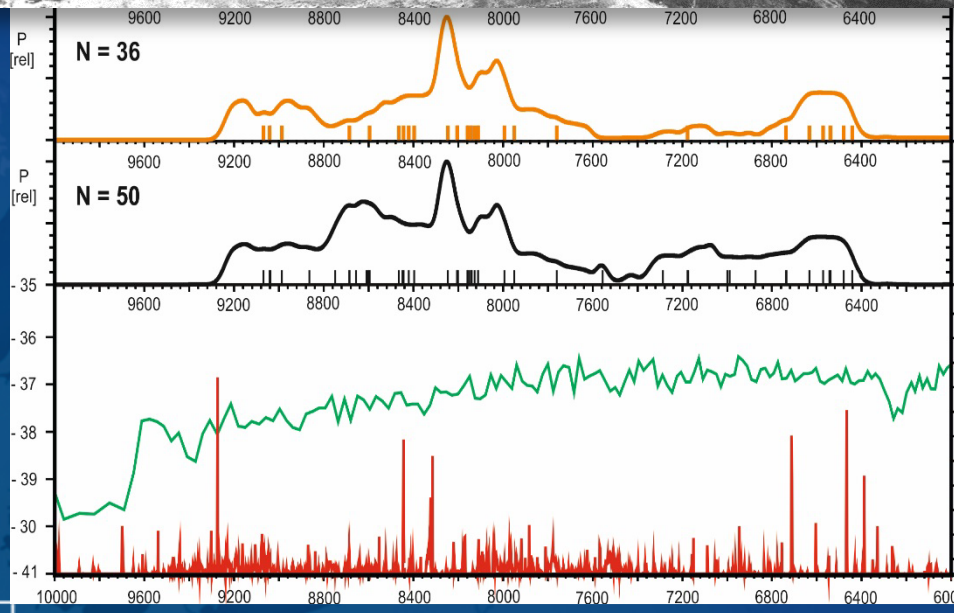


ZBSA

Friesack



Friesack 4, Schnitt Z Süd, Stratigrafie der Quadrateihen B, C und F



Friesack 4 trench Z
 95% Peak 9190 calBC - 6400 calBC Sp
 68% Peak 8860 calBC - 6690 calBC Sp
 50% Peak 8530 calBC - 7740 calBC Sp

Friesack 4, Summary trenches Z, D, C 23 pits
 95% Peak 9170 calBC - 6440 calBC Sp
 68% Peak 8760 calBC - 6880 calBC Sp
 50% Peak 8620 calBC - 7250 calBC Sp

d 180 measurements
 core: GISP 2 Hulu age model
 tuned to Hulu truncated at 75 ka
 Zielinski et al. 1993
 Stuiver et al. 1993
 Meese et al. 1994
 Sowers et al. 1993

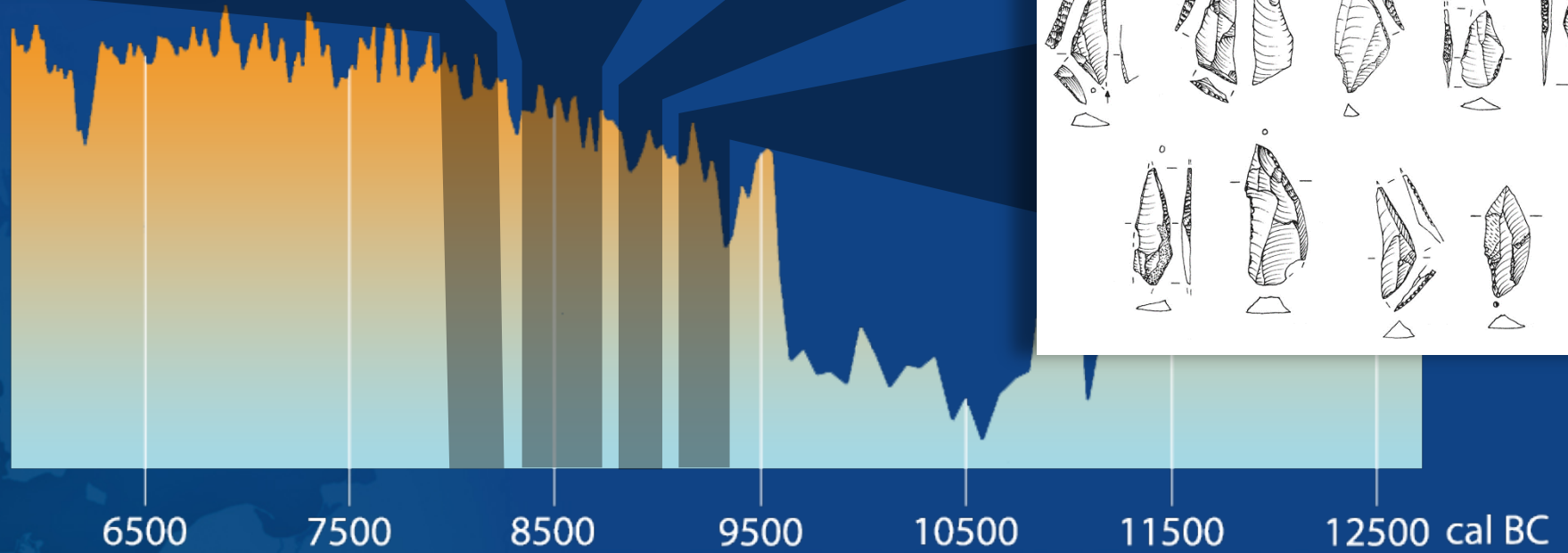
file >GISP2.180<

GISP2 Volc scaled to H
 Zielinski et al.
 Zielinski et Hempel et
 Meese et al.
 Palais et al.
 Palais et al. meese/Sow

file >GISP2

temperature change
after GRIP $\delta^{18}O$

warmer
↕
colder



Gehlen 2009



ZBSA

Friesack

Chronozone	simple point	Duvensee type	Pritzerbe type	n
Middle Preboreal	16%	57%	-	92
Late Preboreal	11%	33%	28%	80
Early Boreal	16%	5%	44%	112
Late Boreal/Early Atlantic	63%	4%	4%	107

ratio of bone point
types from Friesack 4

exemplified by finds
from Hohen Viecheln

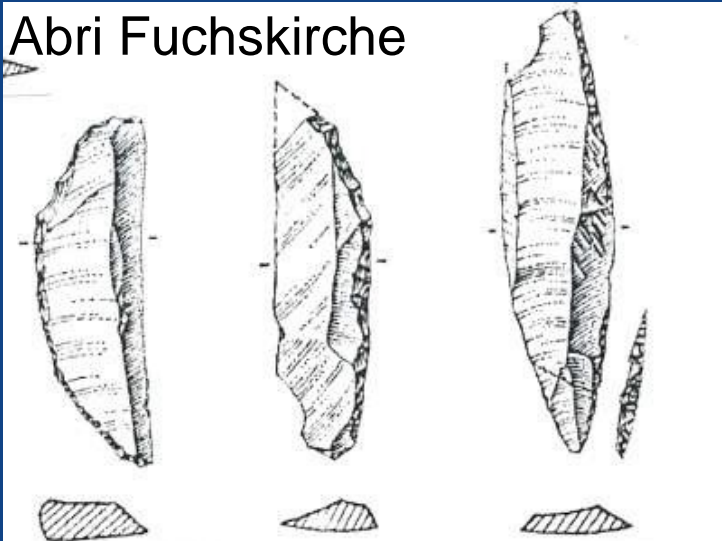
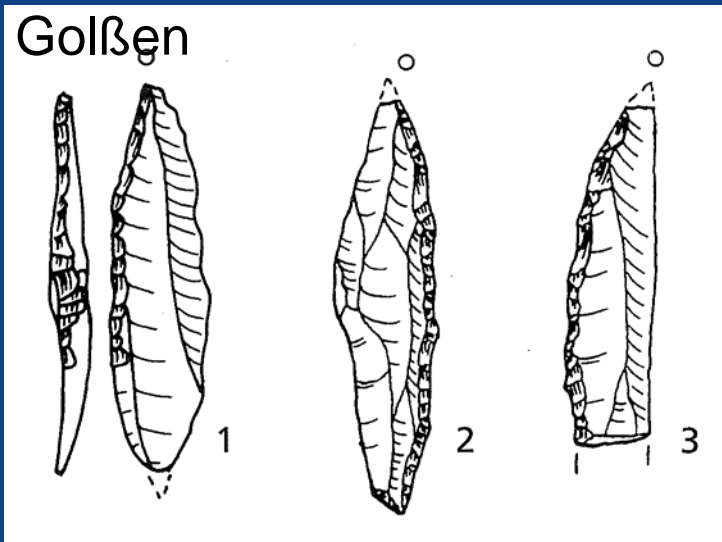
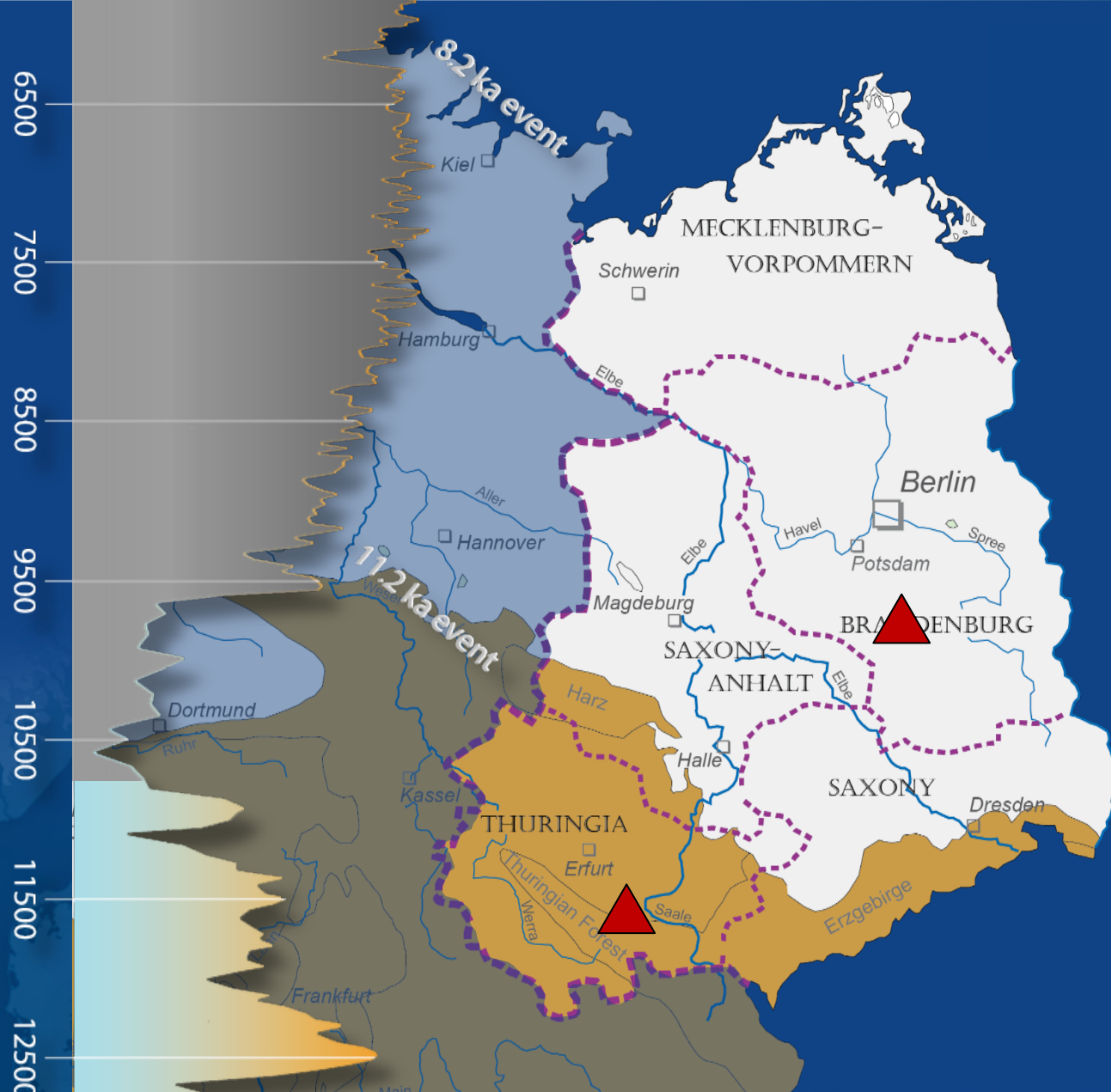


numbers: Gramsch 2011; photos: D. Groß



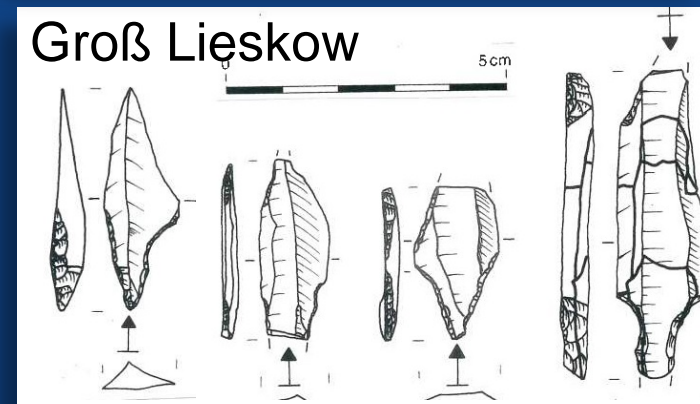
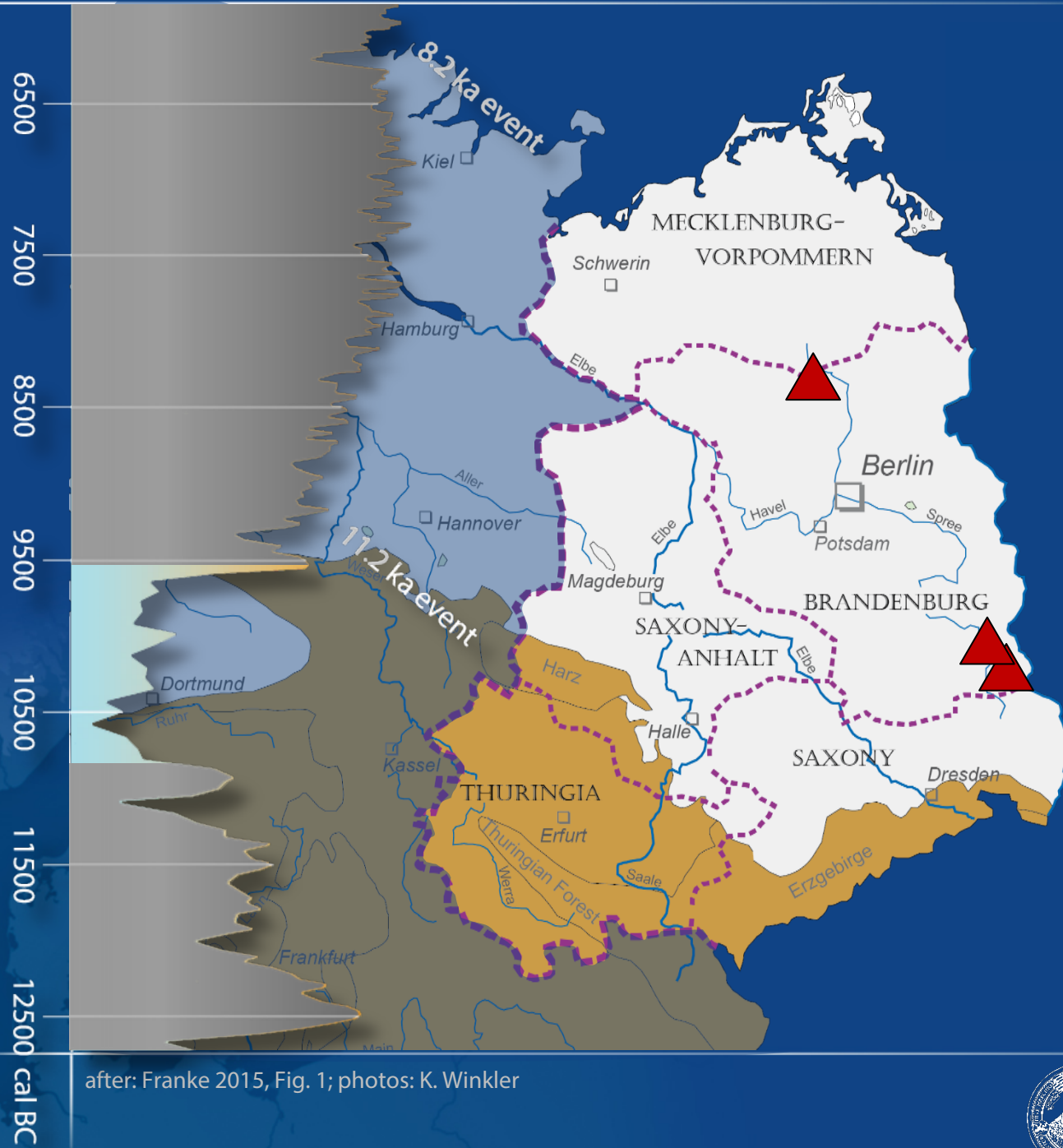
ZBSA

During the Allerød backed industries/FMG are common



after: Franke 2015, Fig. 1; Winkler 2010

Tanged points are typical for the Younger Dryas

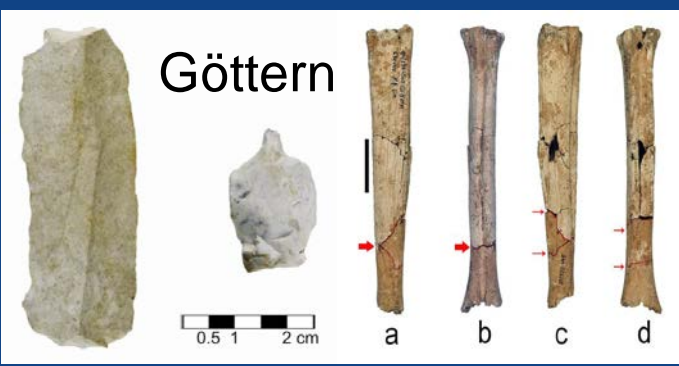
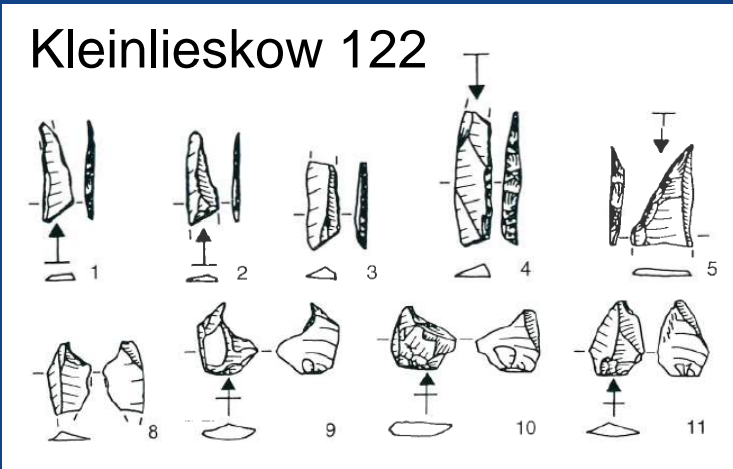
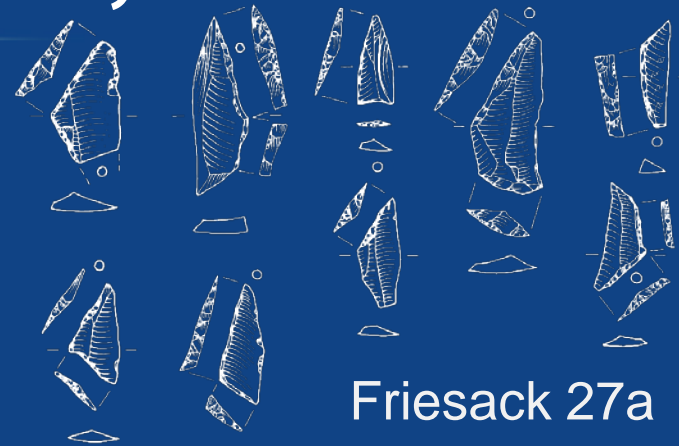
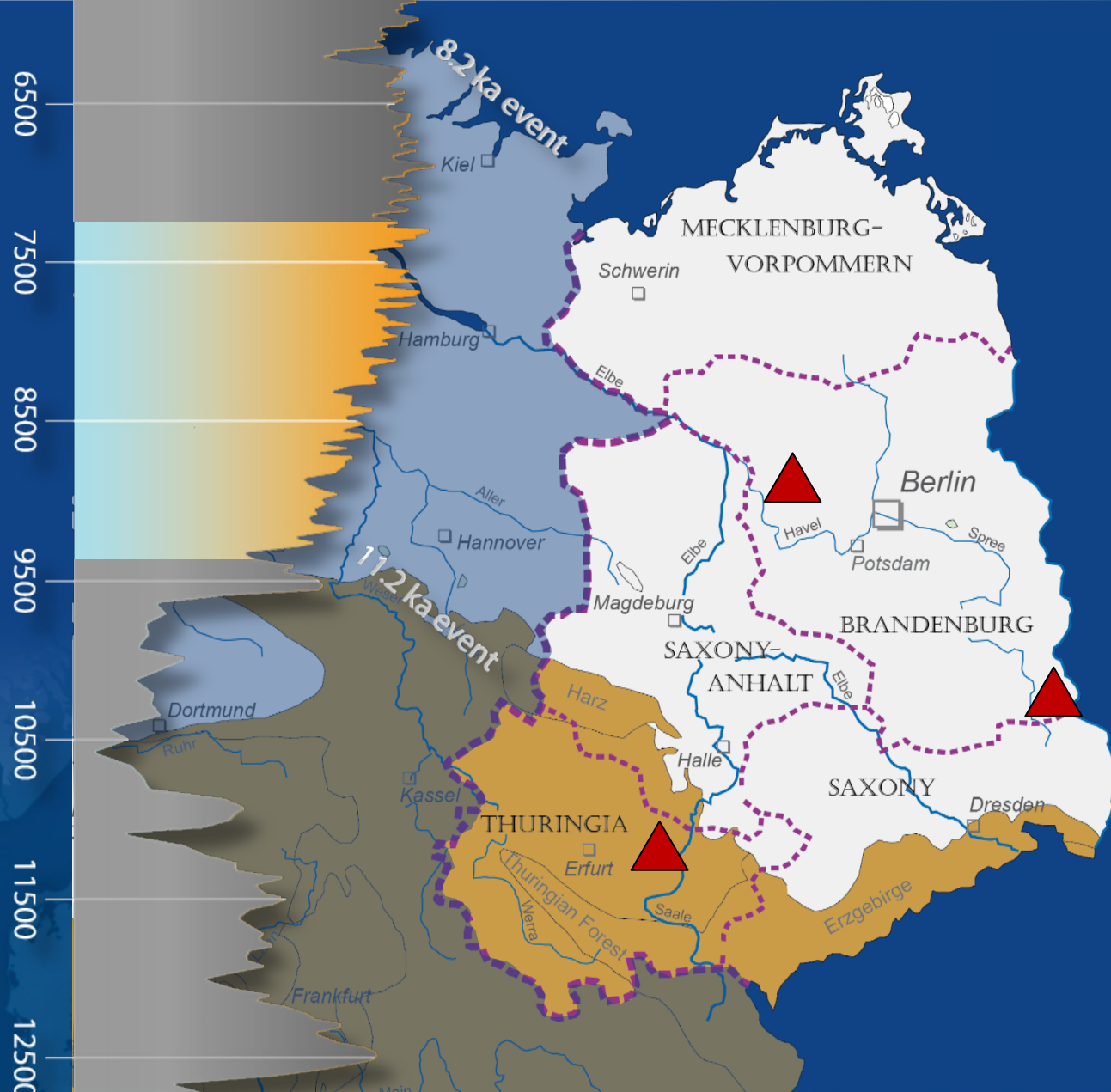


after: Franke 2015, Fig. 1; photos: K. Winkler



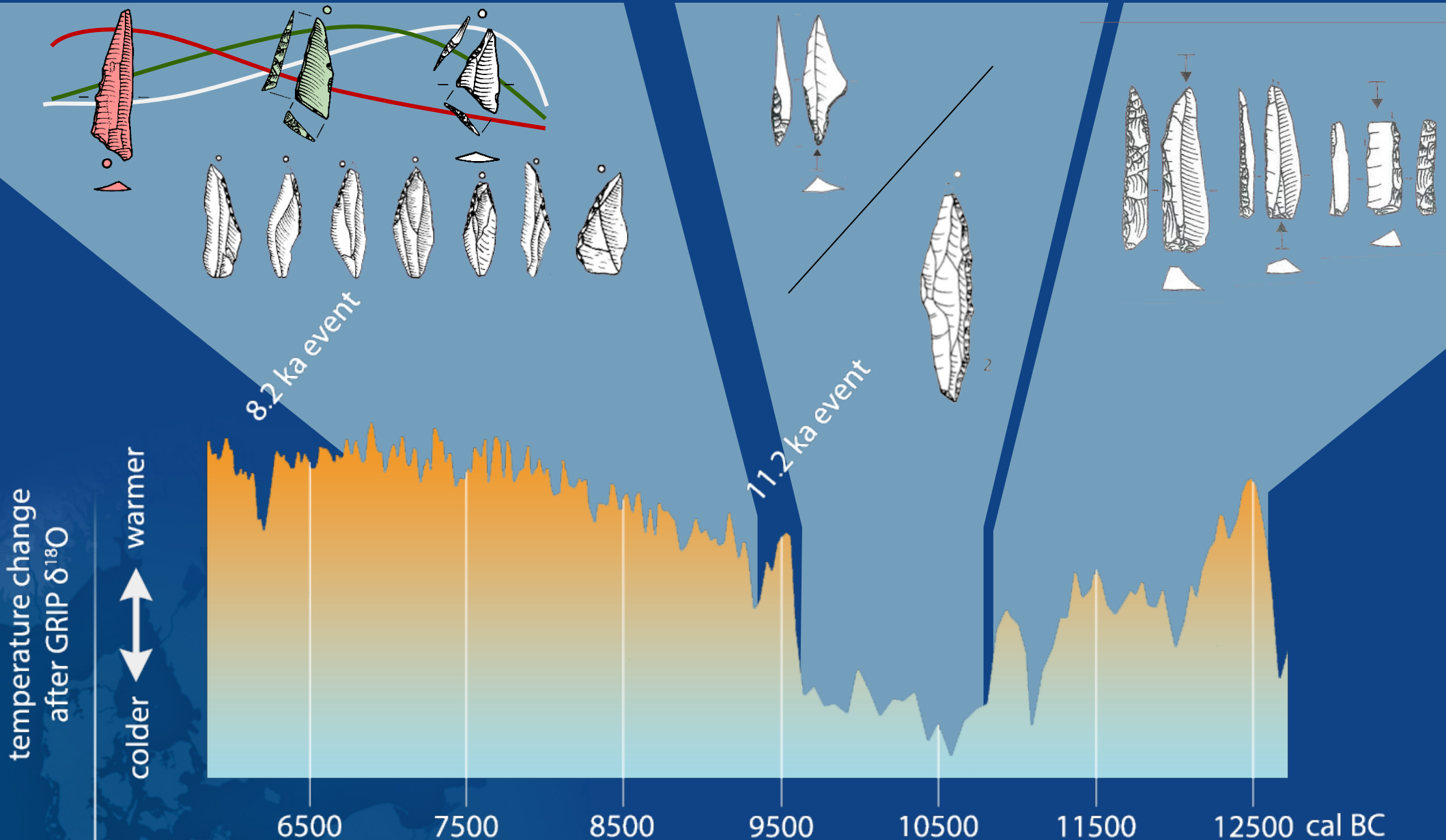
ZBSA

Microliths are typical projectiles in the Early Holocene



after: Franke 2015, Fig. 1; drawing: E. Freigang; Volker et al. 2011

The projectiles change significantly around 9600 BC



temperature change after GRIP $\delta^{18}O$

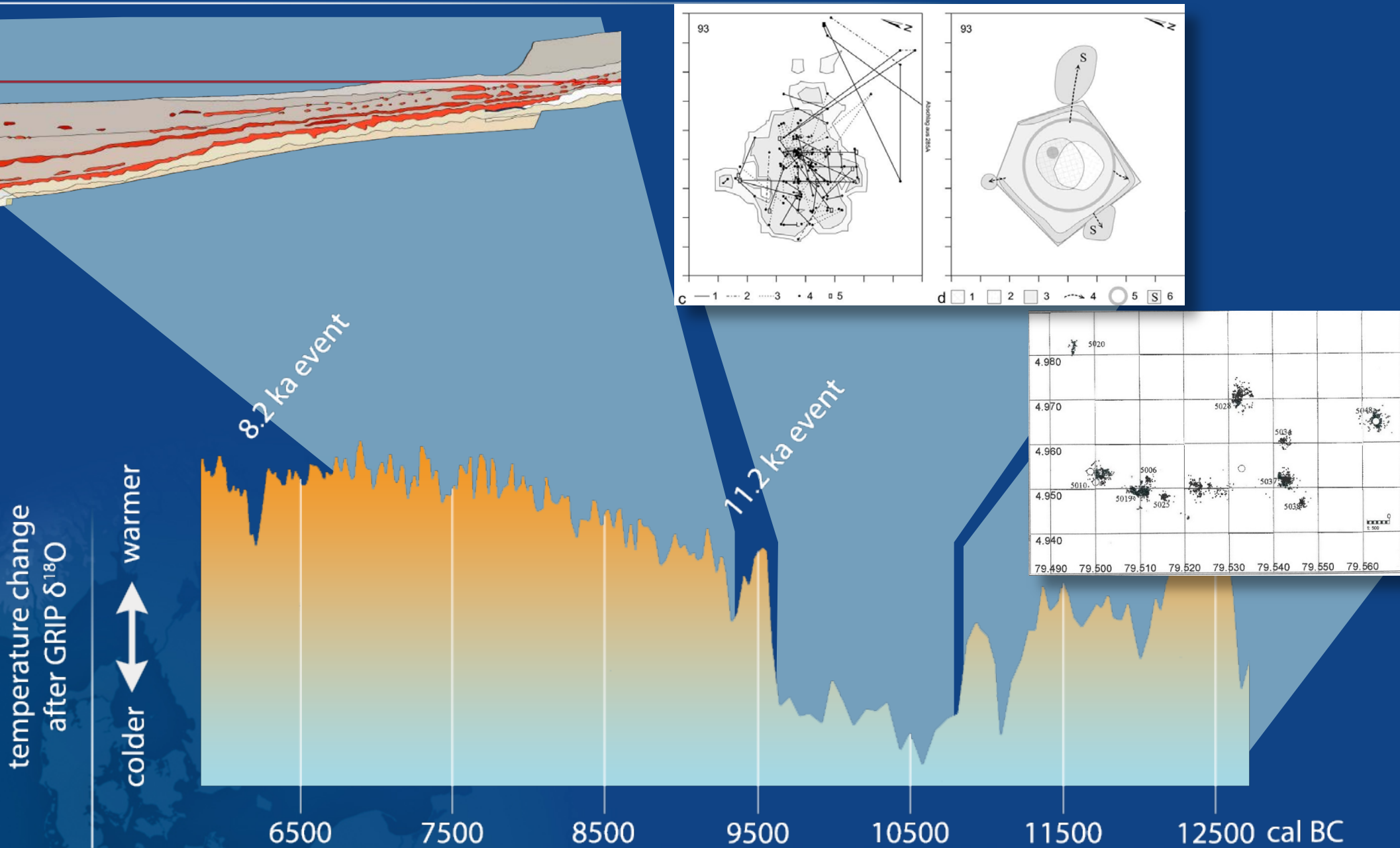
warmer
colder

8.2 ka event

11.2 ka event

6500 7500 8500 9500 10500 11500 12500 cal BC

The archaeological sites provide different opportunities

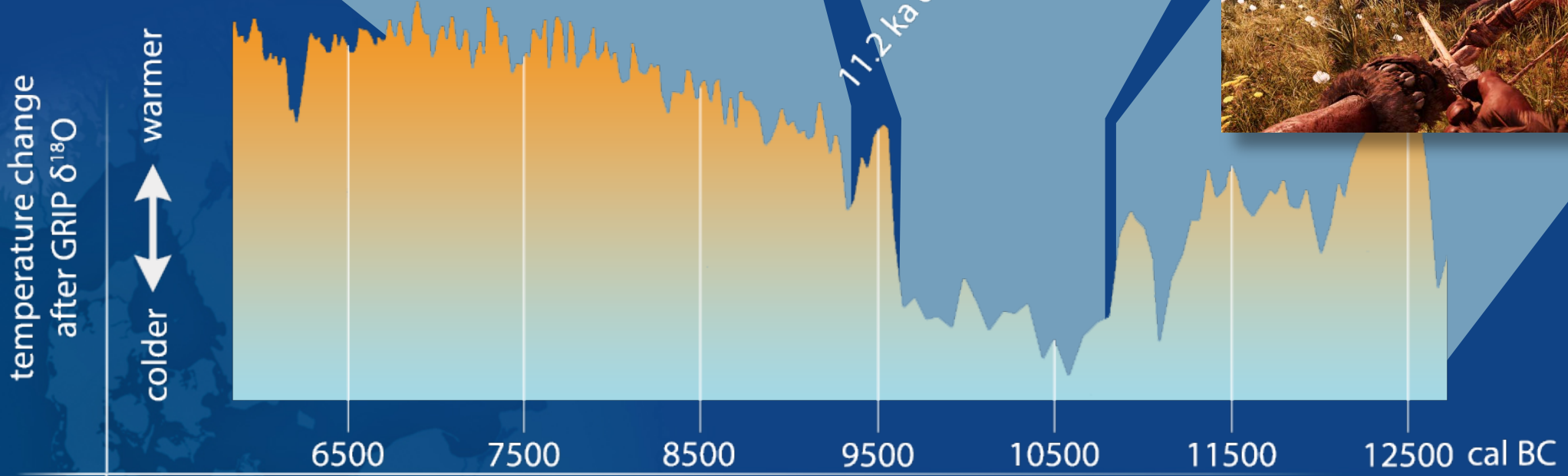


Gelhausen et al. 2015



ZBSA

Are there changes in mobility and land use?



after: Bokelmann et al. 1985; wauwil.ch; basic-tutorials.de