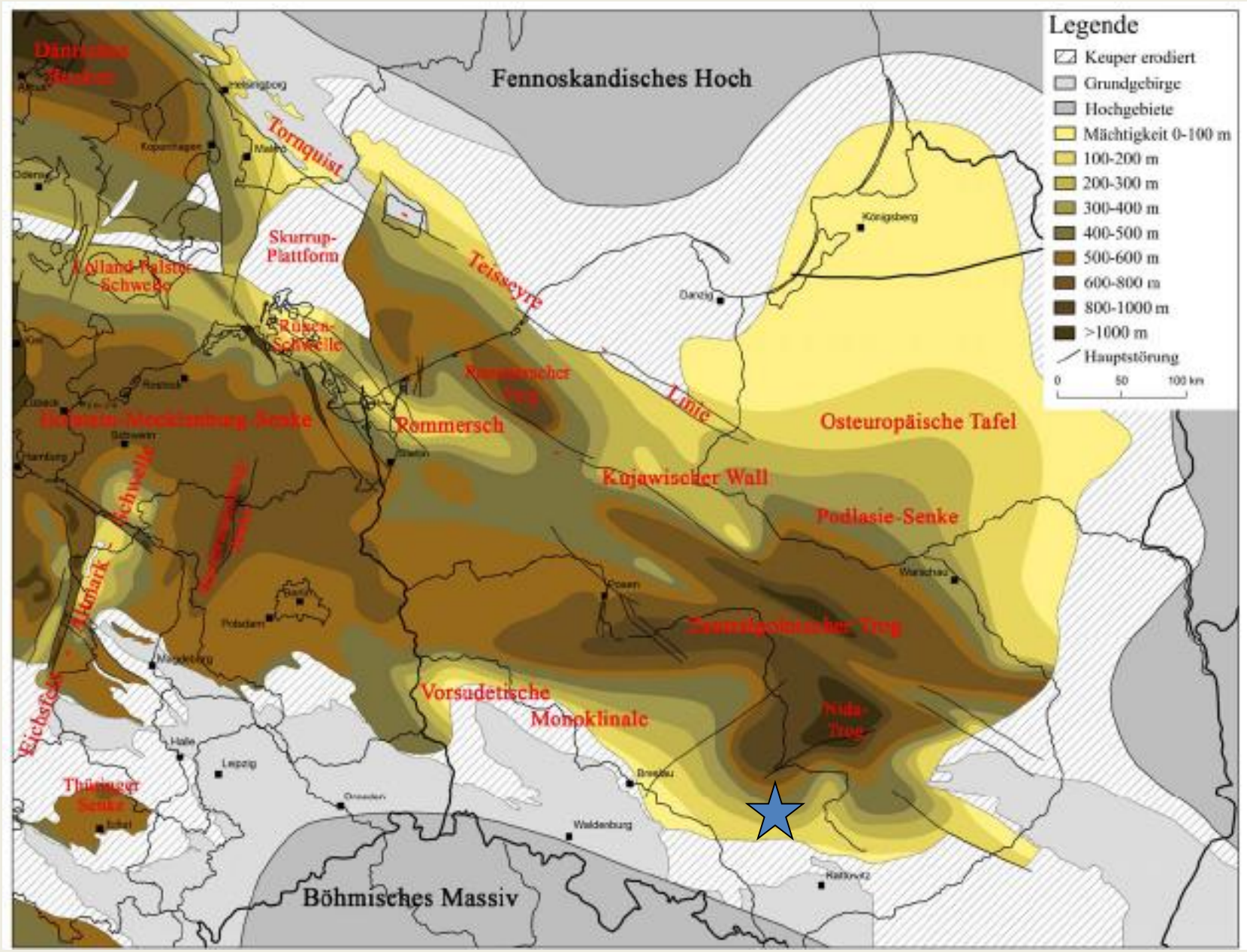
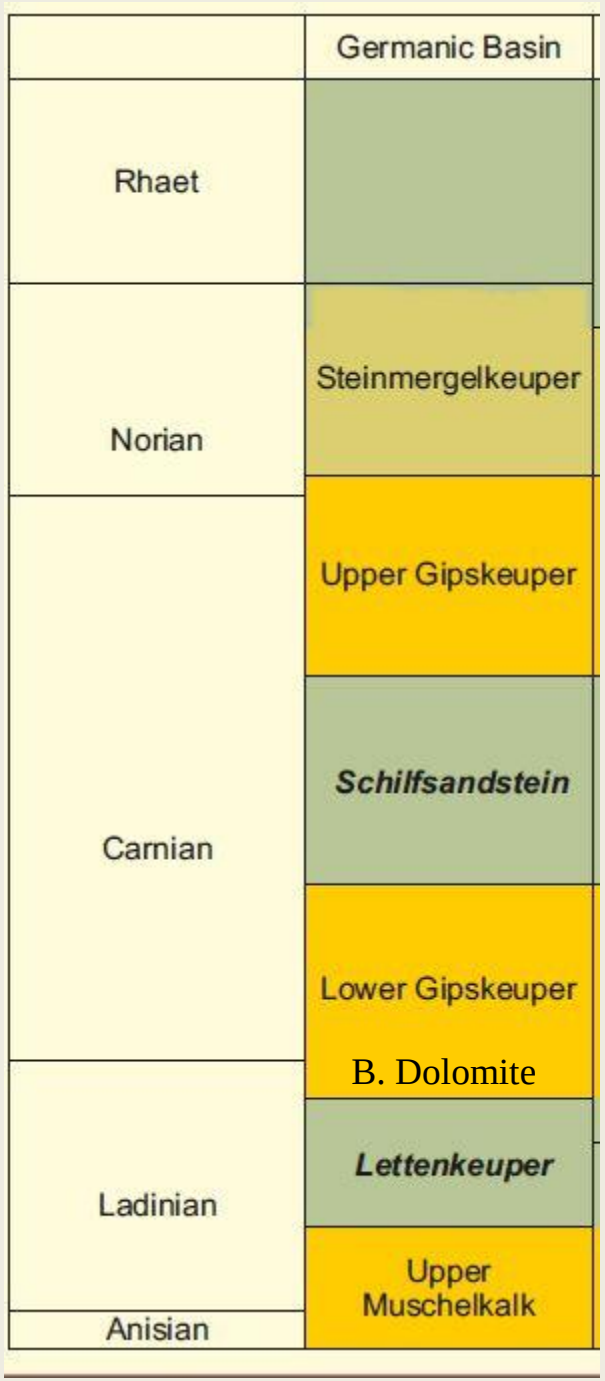
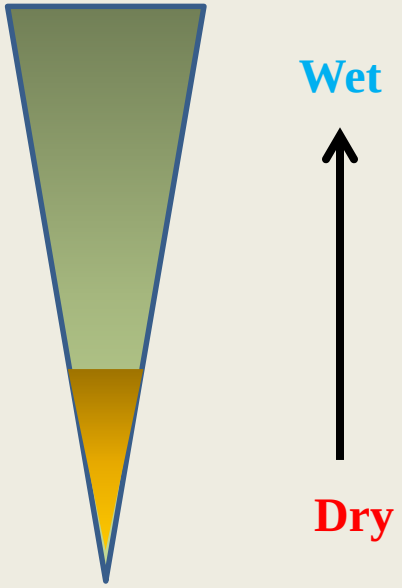
KLIMATOSTRATYGRAFICZNE I PONADREGIONALNE ASPEKTY SUKCESJI KAJPRU GÓRNEGO ŚLĄSKA ORAZ ICH IMPLIKACJE LITOSTRATYGRAFICZNE

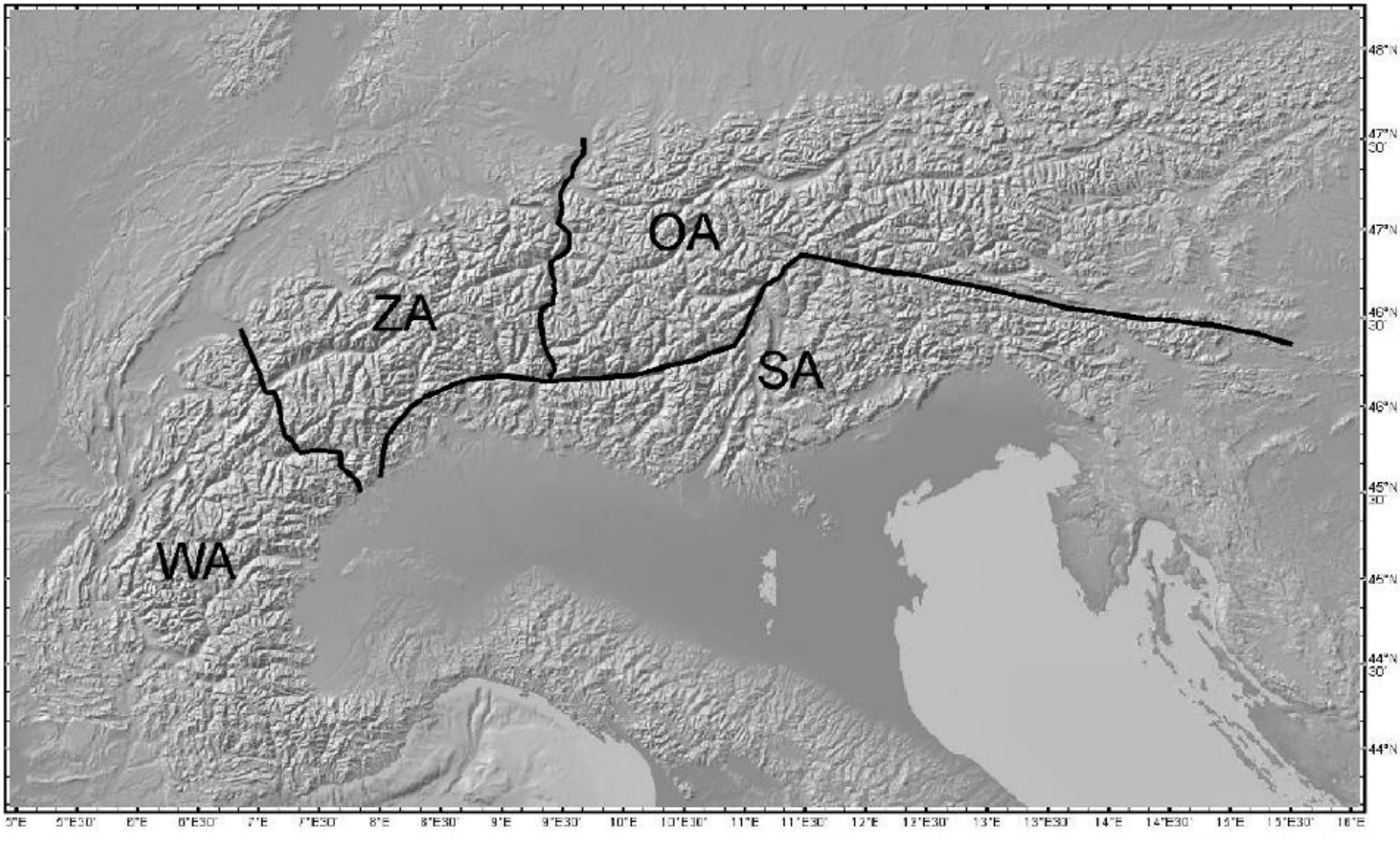
Joachim Szulc

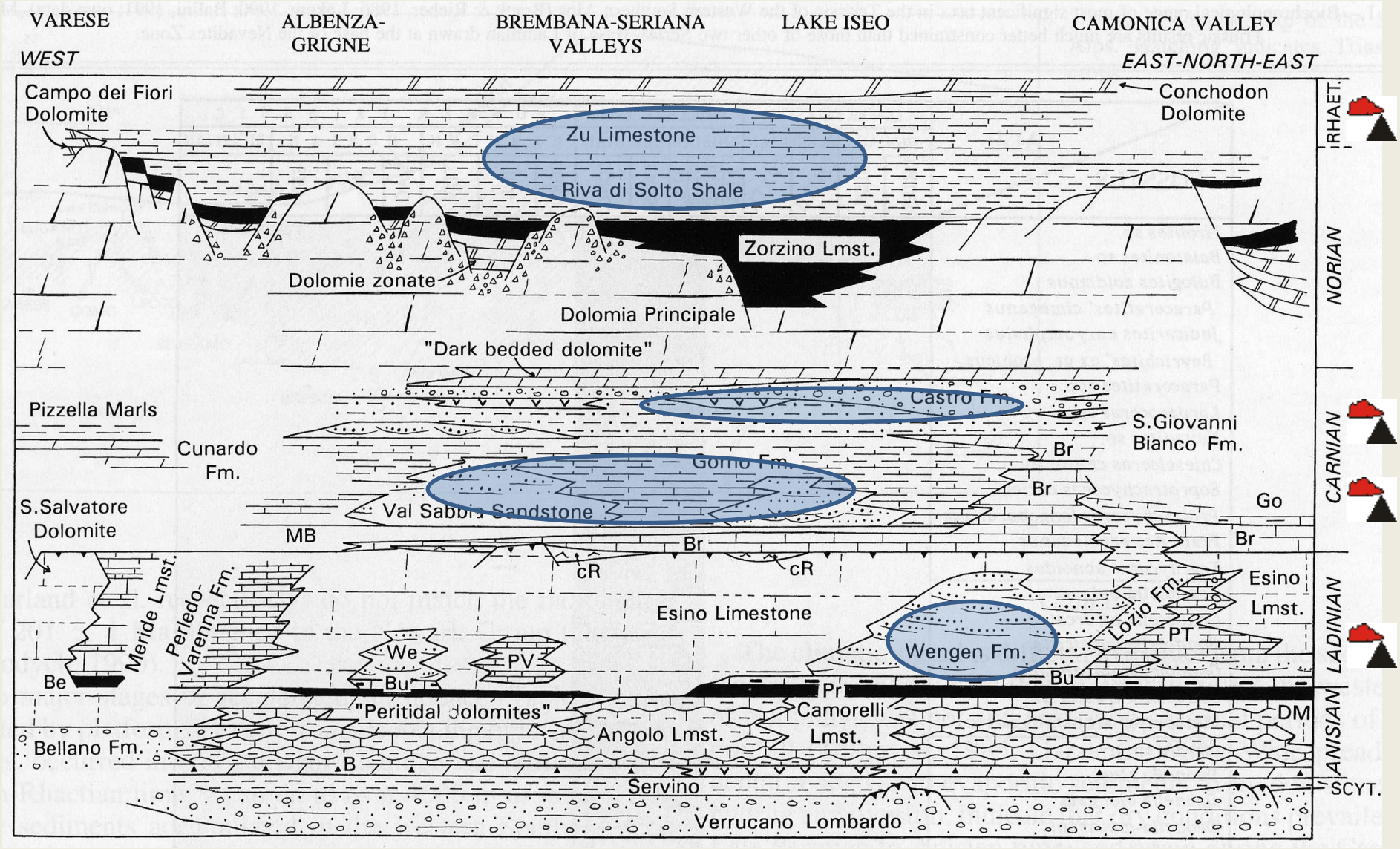


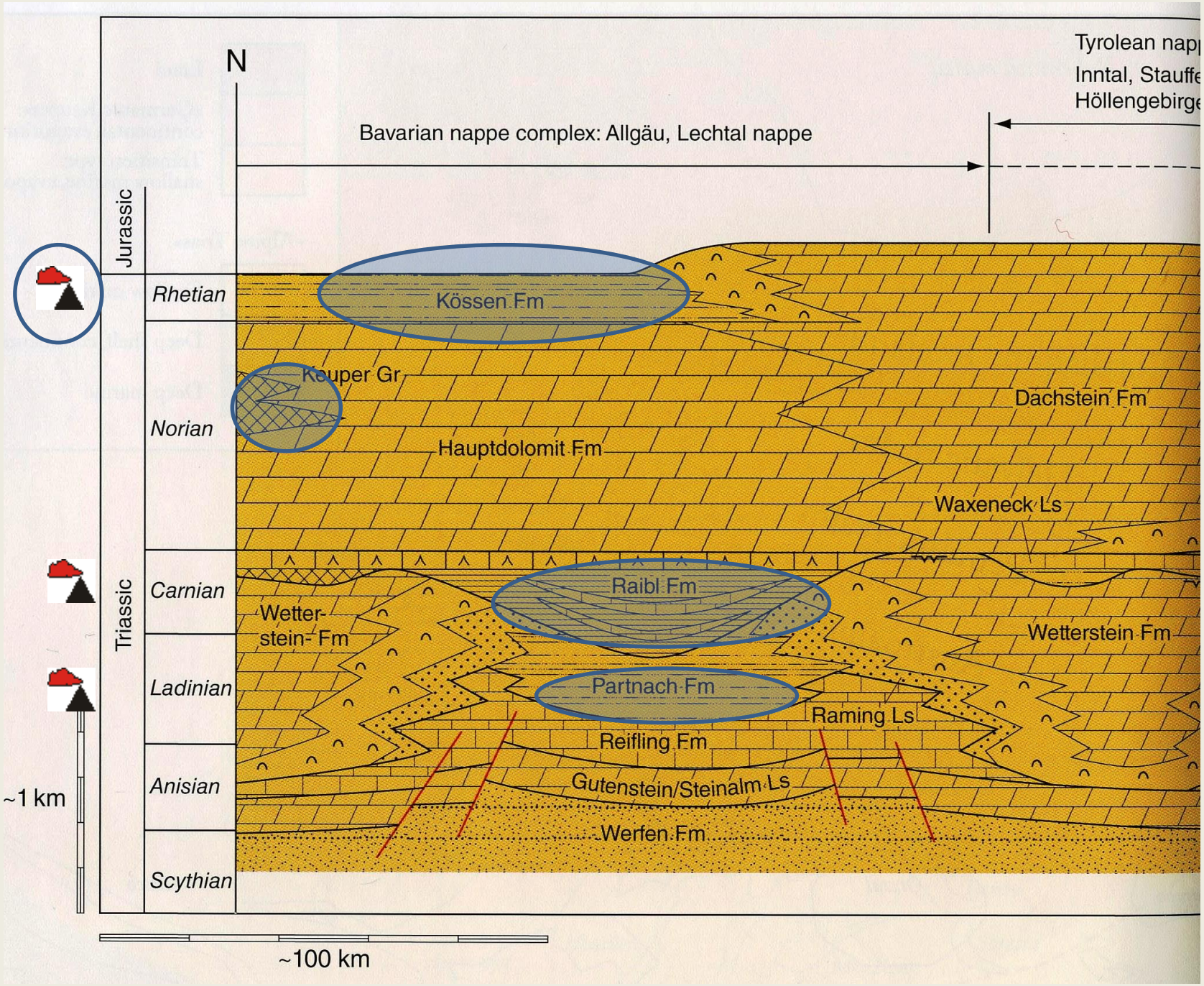
From: Franz, 2008

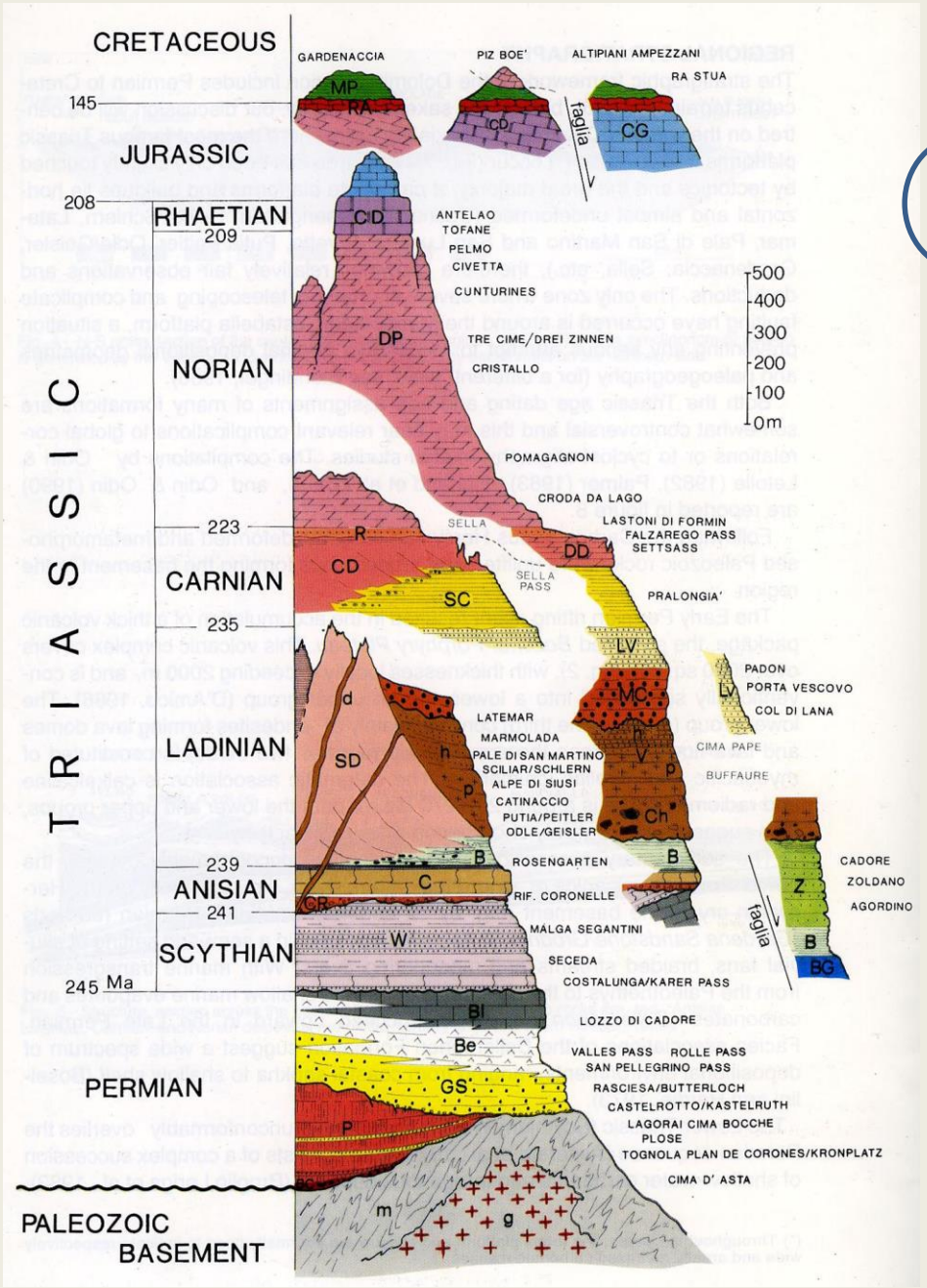

Germanic Basin
Rhaet
Norian
Steinmergelkeuper
Upper Gipskeuper
Carnian
Schilfsandstein
Lower Gipskeuper
B. Dolomite
Ladinian
Lettenkeuper
Upper Muschelkalk
Anisian

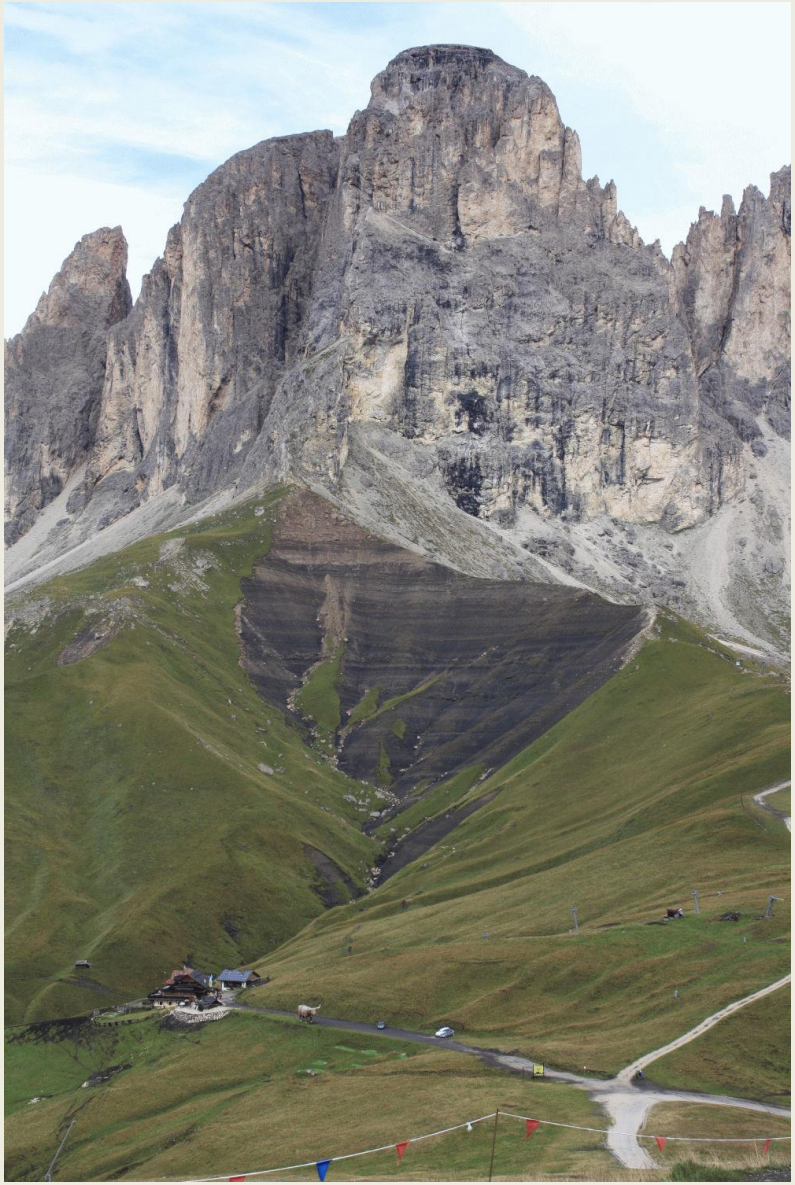

Wet
Dry

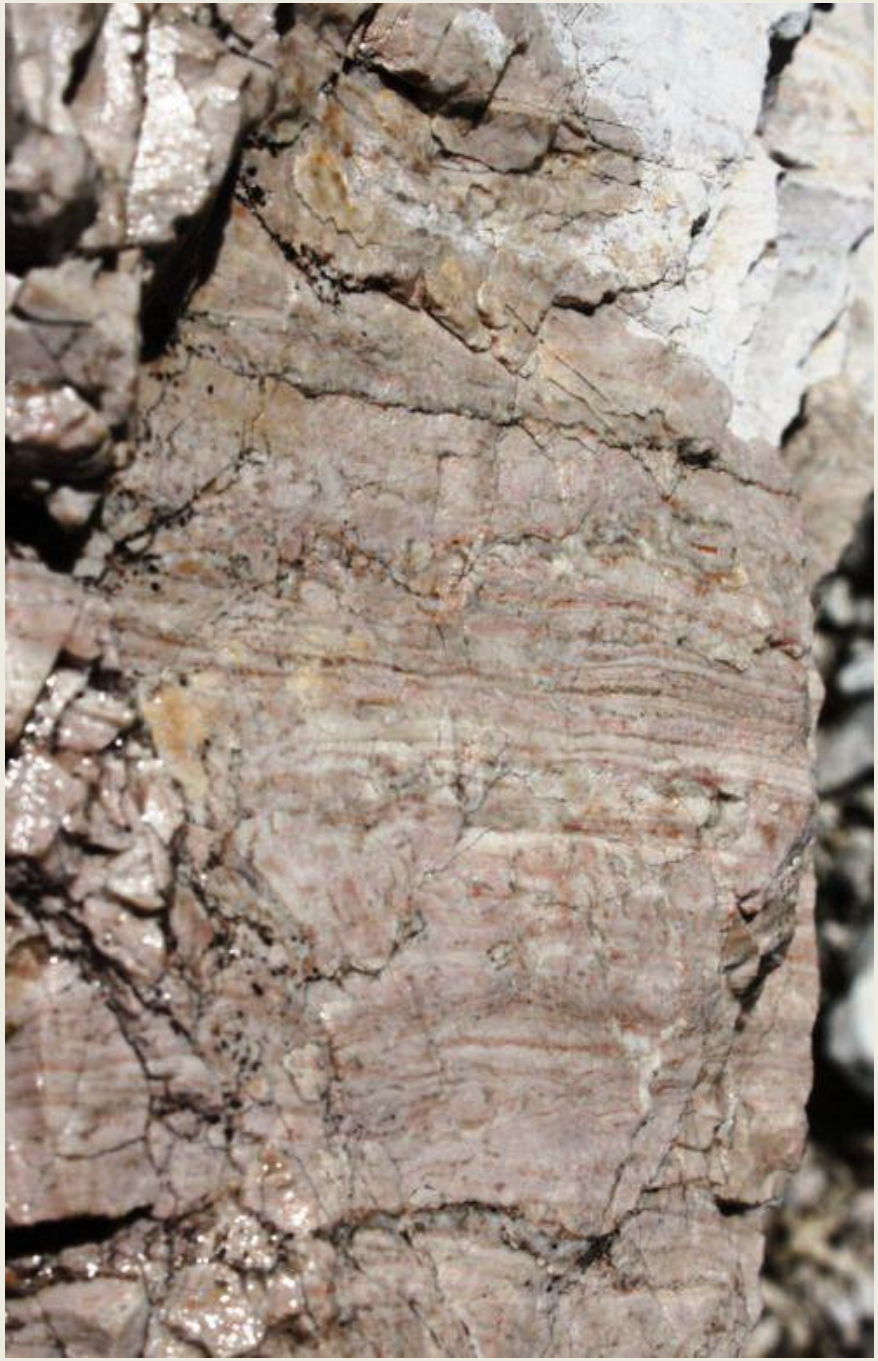

OA
ZA
SA
WA
46°N
47°N 30'
47°N
46°N 30'
46°N
45°N 30'
45°N
44°N 30'
44°N
5°E
5°E30'
6°E
6°E30'
7°E
7°E30'
8°E
8°E30'
9°E
9°E30'
10°E
10°E30'
11°E
11°E30'
12°E
12°E30'
13°E
13°E30'
14°E
14°E30'
15°E
15°E30'
16°E

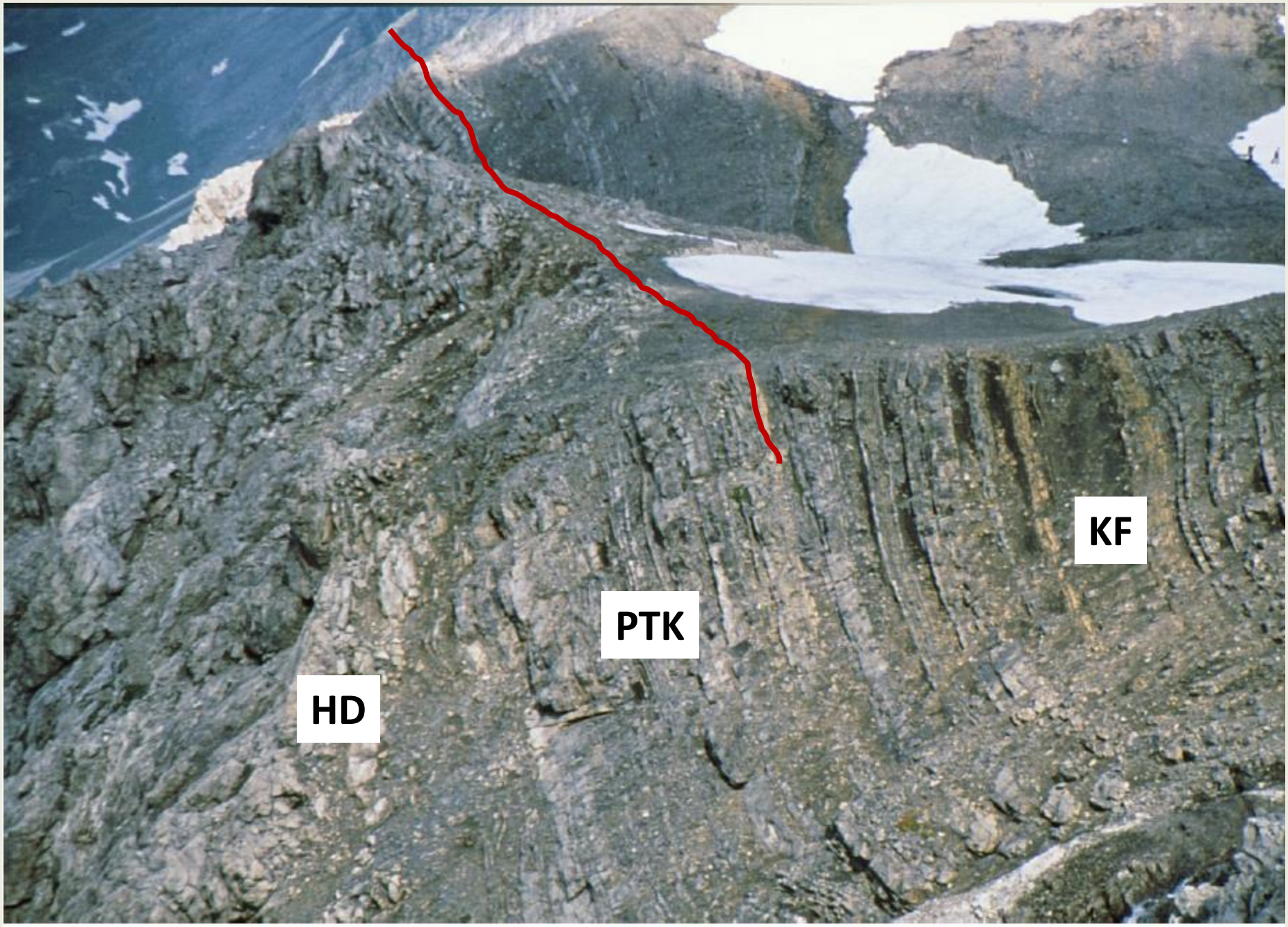

VARESE
ALBENZA-GRIGNE
BREMBANA-SERIANA VALLEYS
LAKE ISEO
CAMONICA VALLEY
WEST
EAST-NORTH-EAST
Campo dei Fiori Dolomite
Conchodon Dolomite
Zu Limestone
Riva di Solto Shale
Zorzino Lmst.
Dolomie zonate
Dolomia Principale
"Dark bedded dolomite"
Pizzella Marls
Castro Fm.
S.Giovanni Bianco Fm.
Cunardo Fm.
Gorno Fm.
Val Sabbia Sandstone
S.Salvatore Dolomite
MB
Br
cR
Go
Esino Limestone
Esino Lmst.
Meride Lmst.
Perledo-Varenna Fm.
Lozio Fm.
PT
We
PV
Wengen Fm.
Be
Bu
Pr
"Peritidal dolomites"
Camorelli Lmst.
DM
Angolo Lmst.
Bellano Fm.
B
Servino
Verrucano Lombardo
RHAET.
NORIAN
CARNIAN
LADINIAN
ANISIAN
SCYT.


N
Tyrolean napp
Inntal, Stauffe
Höllengebirge
Bavarian nappe complex: Allgäu, Lechtal nappe
Jurassic
Triassic
Rhetian
Norian
Carnian
Ladinian
Anisian
Scythian
Kössen Fm
Keuper Gr
Hauptdolomit Fm
Dachstein Fm
Waxeneck Ls
Raibl Fm
Wetter-
stein- Fm
Wetterstein Fm
Partnach Fm
Raming Ls
Reifling Fm
Gutenstein/Steinalm Ls
Werfen Fm
~1 km
~100 km


CRETACEOUS
145
JURASSIC
208
RHAETIAN
209
NORIAN
223
CARNIAN
235
LADINIAN
239
ANISIAN
241
SCYTHIAN
245 Ma
PERMIAN
PALEOZOIC BASEMENT
TRIASSIC
GARDENACCIA
PIZ BOE'
ALTIPIANI AMPEZZANI
RA STUA
MP
RA
CD
CG
faglia
CID
ANTELAO
TOFANE
PELMO
CIVETTA
CUNTURINES
DP
TRE CIME/DREI ZINNEN
CRISTALLO
500
400
300
200
100
0m
POMAGAGNON
CRODA DA LAGO
SELLA
LASTONI DI FORMIN
FALZAREGO PASS
SETTSASS
R
CD
DD
SELLA PASS
SC
PRALONGIA'
LV
MC
Lv
PADON
PORTA VESCOVO
COL DI LANA
d
SD
h
p
LATEMAR
MARMOLADA
PALE DI SAN MARTINO
SCILIAR/SCHLERN
ALPE DI SIUSI
CATINACCIO
PUTIA/PEITLER
ODLE/GEISLER
V
CIMA PAPE
BUFFAURE
Ch
B
ROSENGARTEN
C
CR
RIF. CORONELLE
Z
CADORE
ZOLDANO
AGORDINO
MALGA SEGANTINI
W
SECEDA
COSTALUNGA/KARER PASS
BG
BI
LOZZO DI CADORE
Be
VALLES PASS
ROLLE PASS
SAN PELLEGRINO PASS
GS
RASCIESA/BUTTERLOCH
CASTELROTTO/KASTELRUTH
P
LAGORAI CIMA BOCCHE
PLOSE
TOGNOLA PLAN DE CORONES/KRONPLATZ
CIMA D' ASTA
m
g






KF
PTK
HD

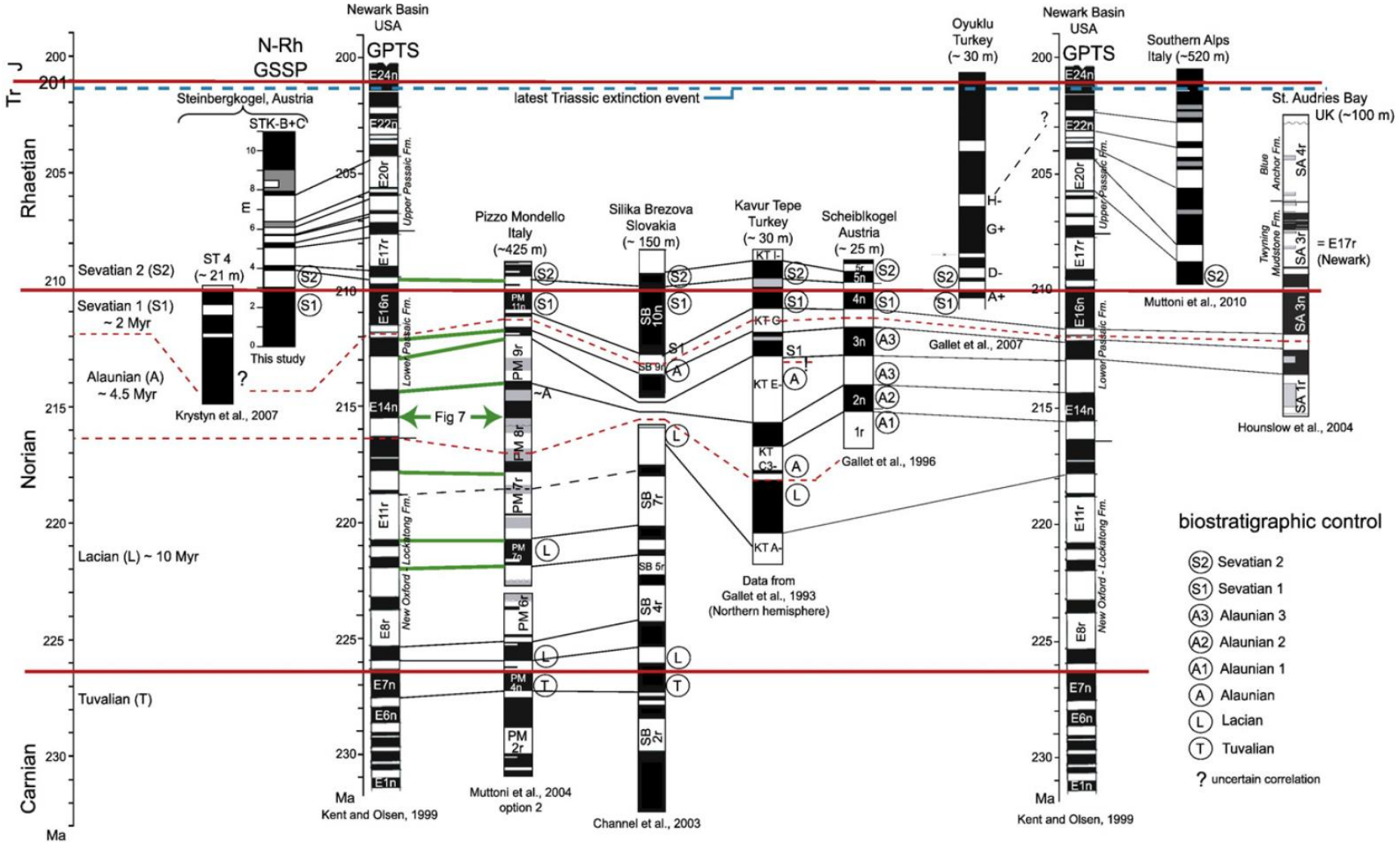
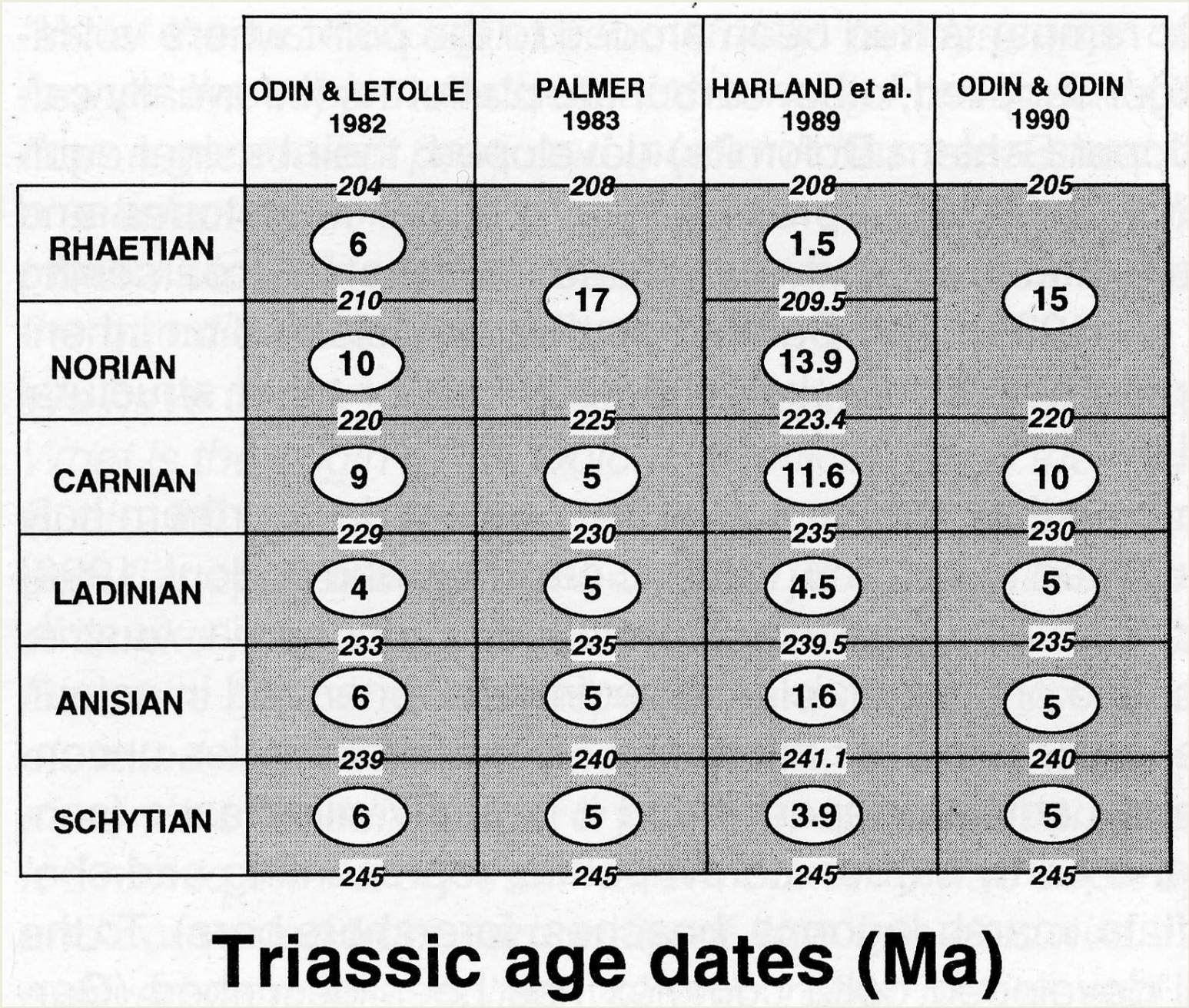
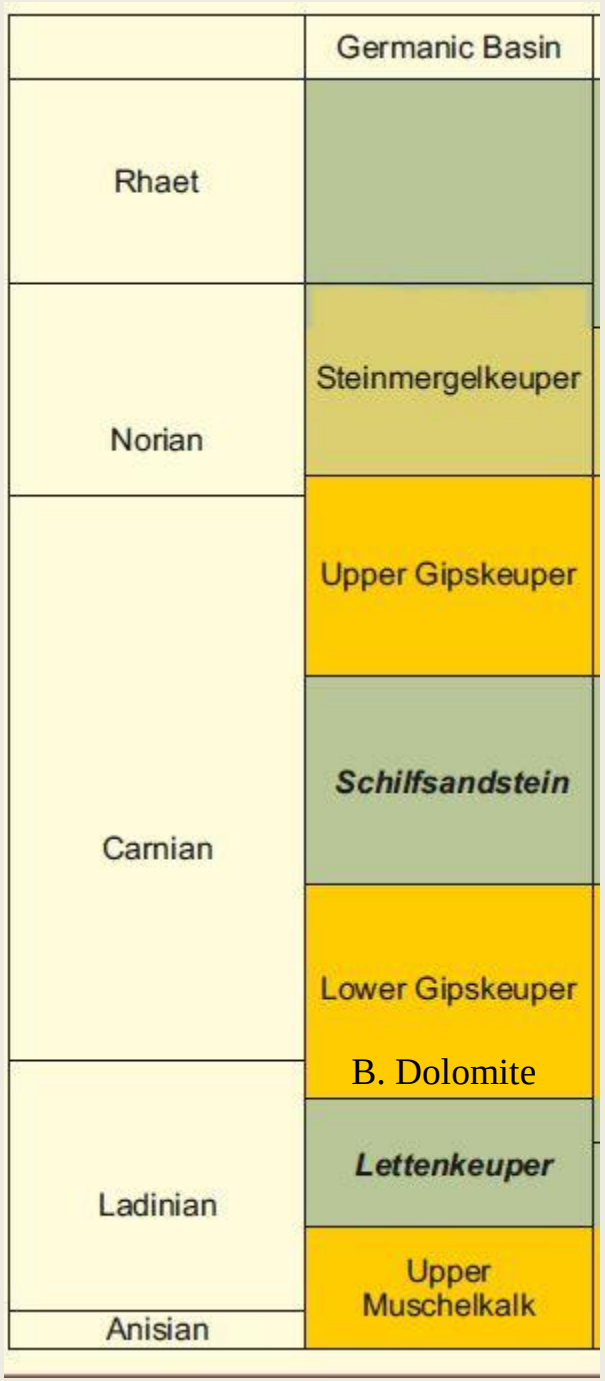


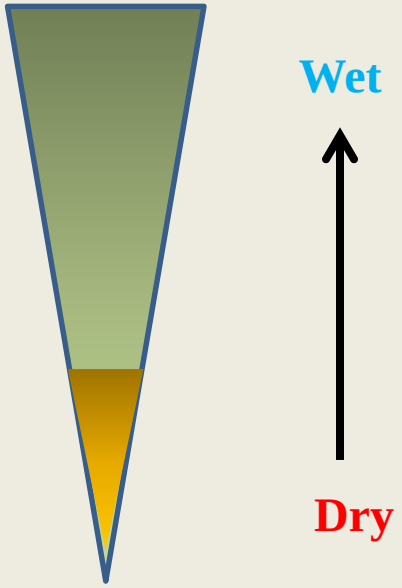
Fig. 6. Late Triassic magnetobiostratigraphic correlations. References are given in the figure. Note that we scale the Newark GPTS to the most recent CAMP date by Schoene et al. (2006) and use 201 Ma instead of previously used 202 Ma (Kent and Olsen, 1999) and 200 Ma (Channell et al., 2003).

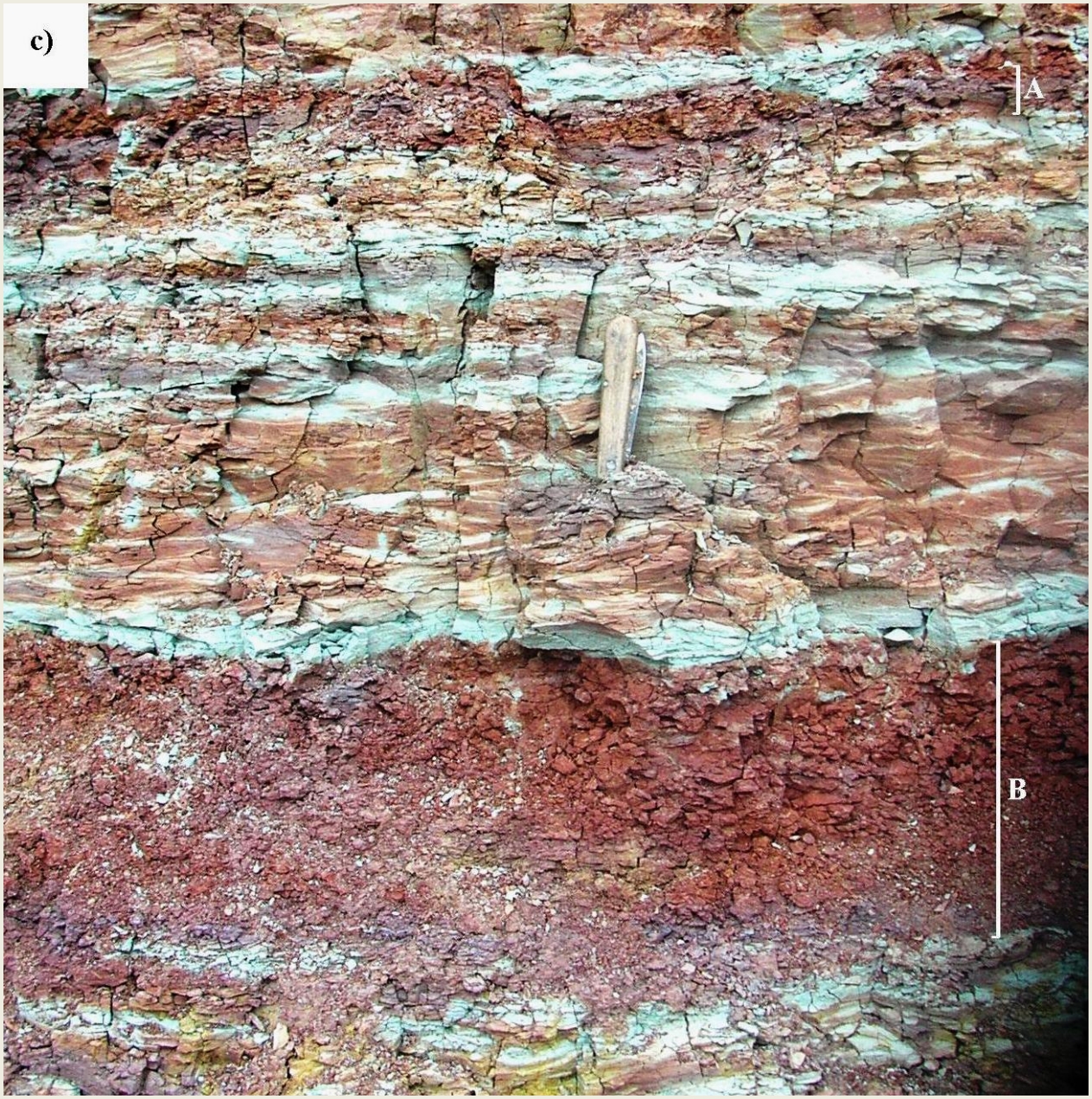
From Huesing et al. 2010

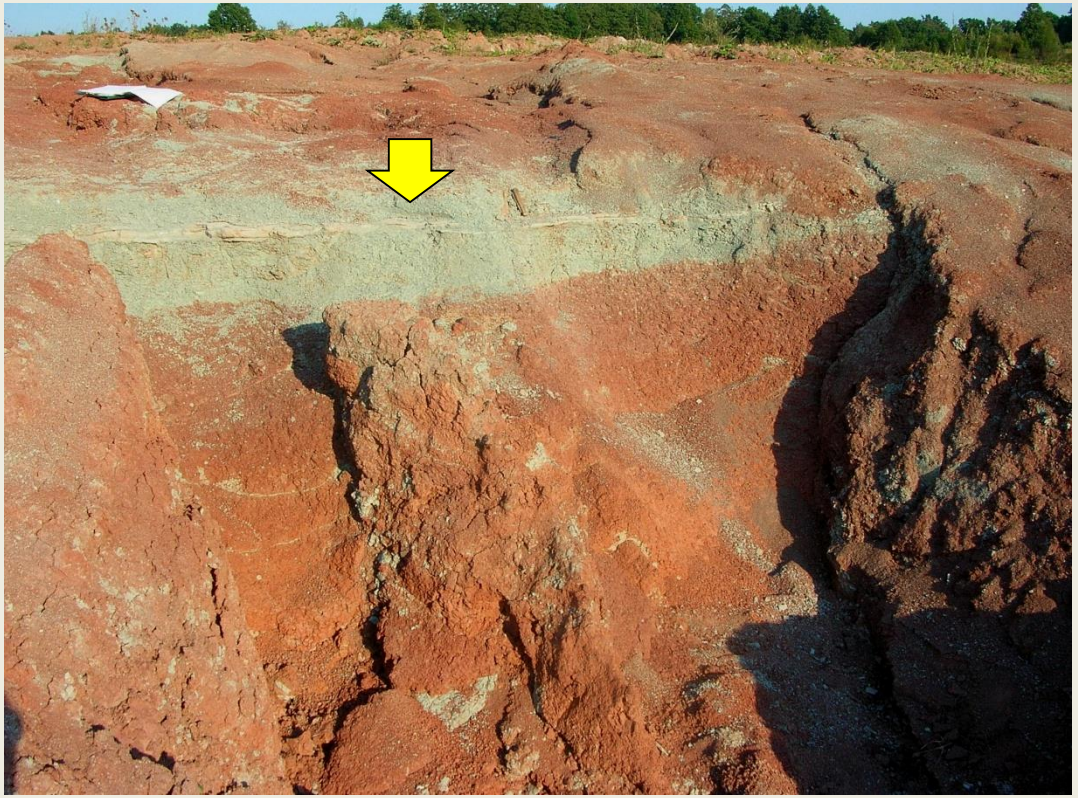


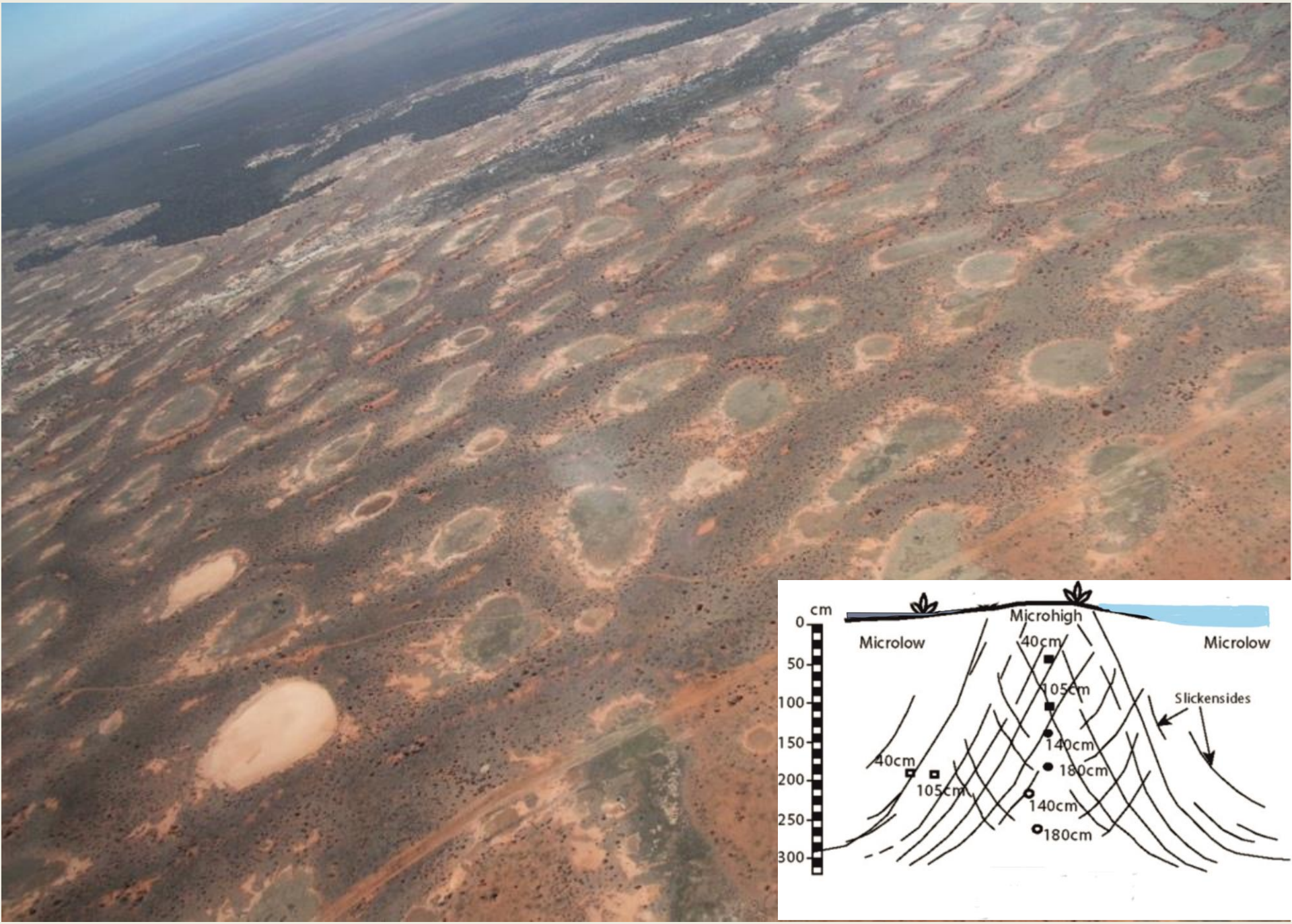
Triassic age dates (Ma)

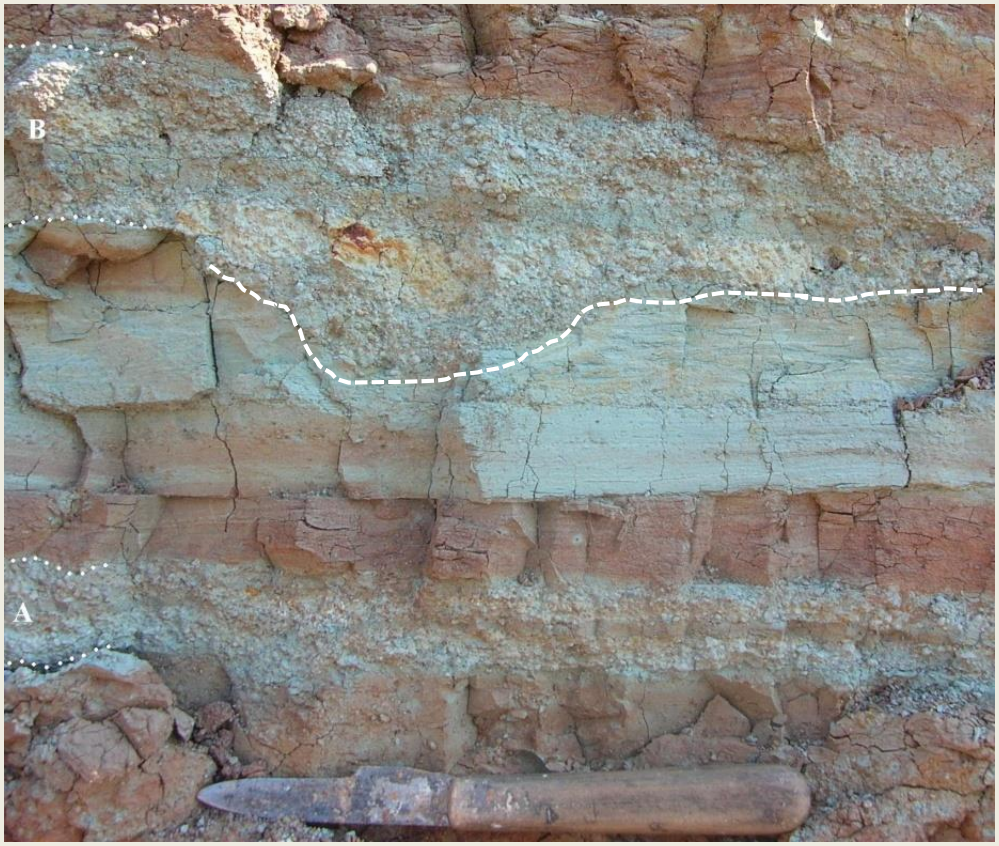

Germanic Basin
Rhaet
Norian
Steinmergelkeuper
Upper Gipskeuper
Carnian
Schilfsandstein
Lower Gipskeuper
B. Dolomite
Ladinian
Lettenkeuper
Upper Muschelkalk
Anisian


Wet
Dry


c)
A
B

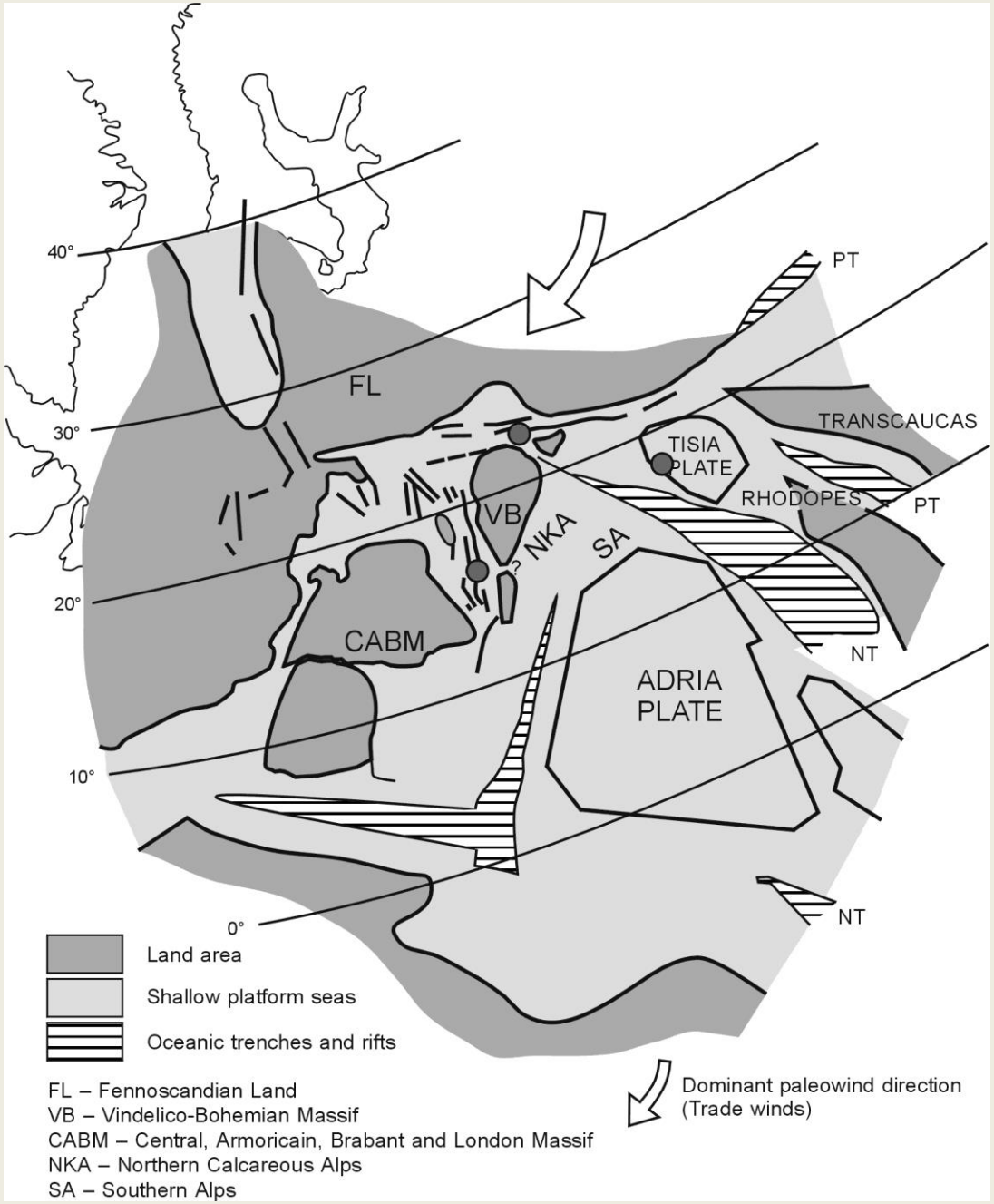



cm
0
50
100
150
200
250
300
Microlow
Microhigh
Microlow
40cm
105cm
140cm
180cm
Slickensides
40cm
105cm
140cm
180cm

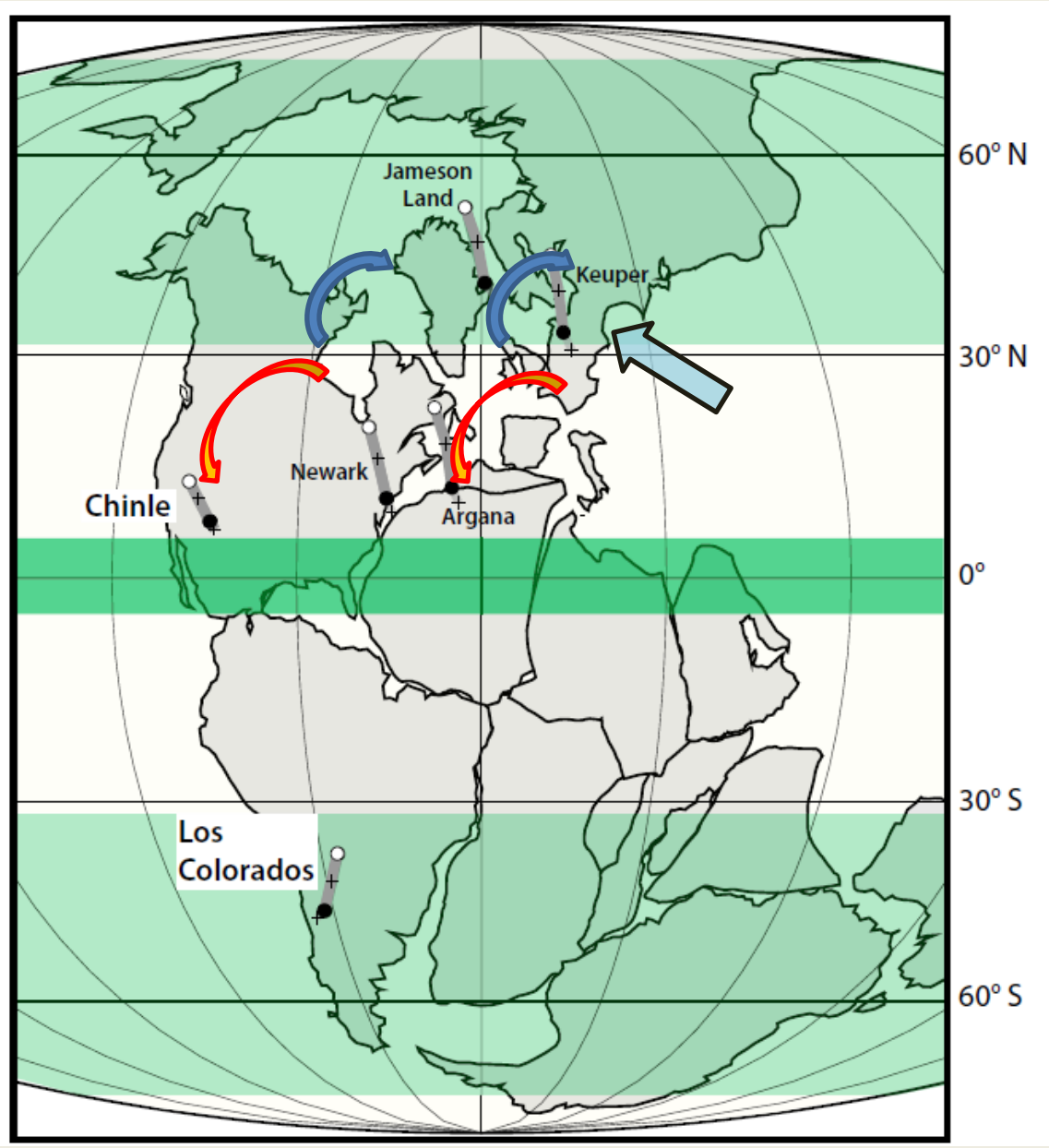

B
A


b)

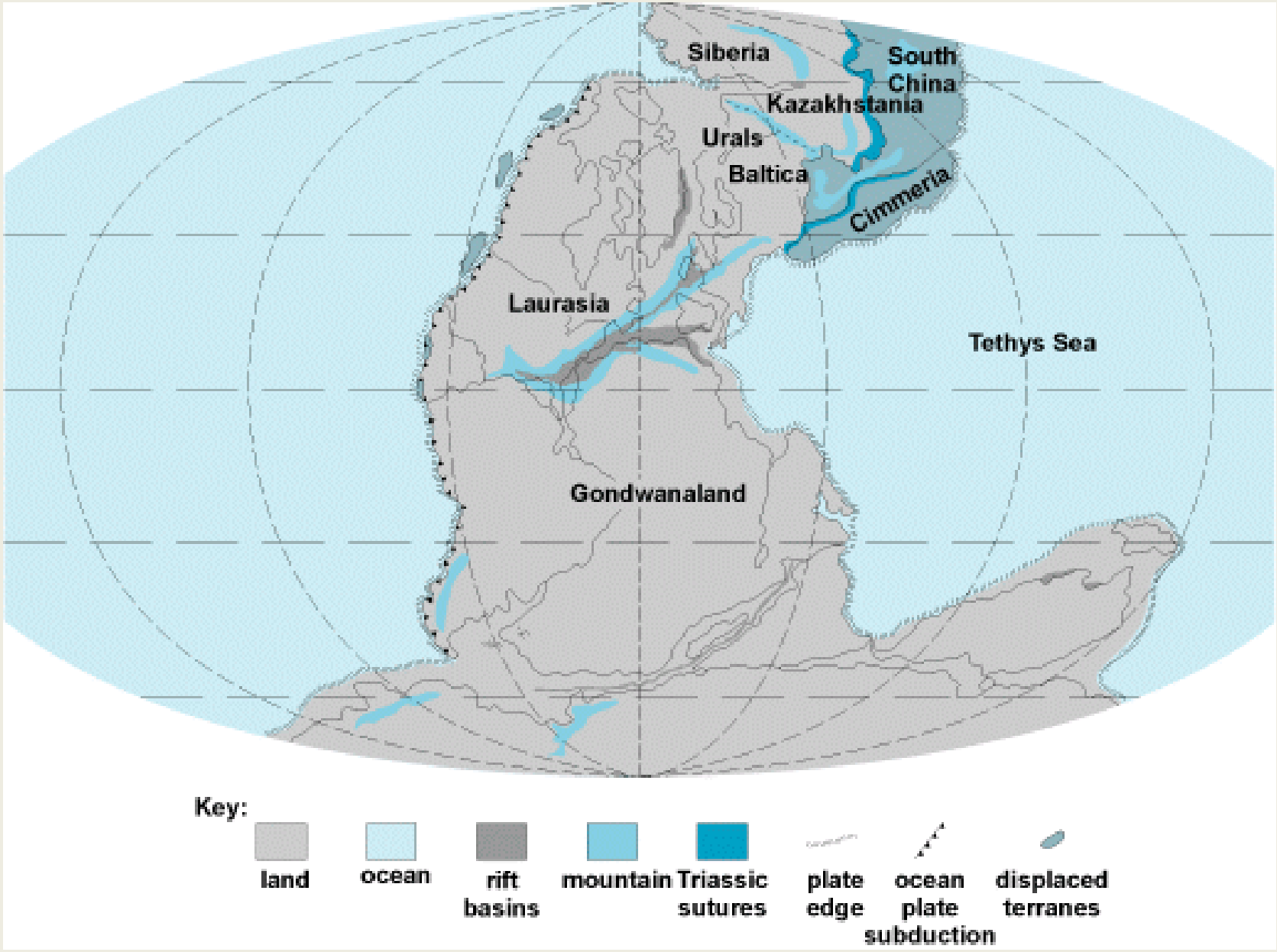

3 cm

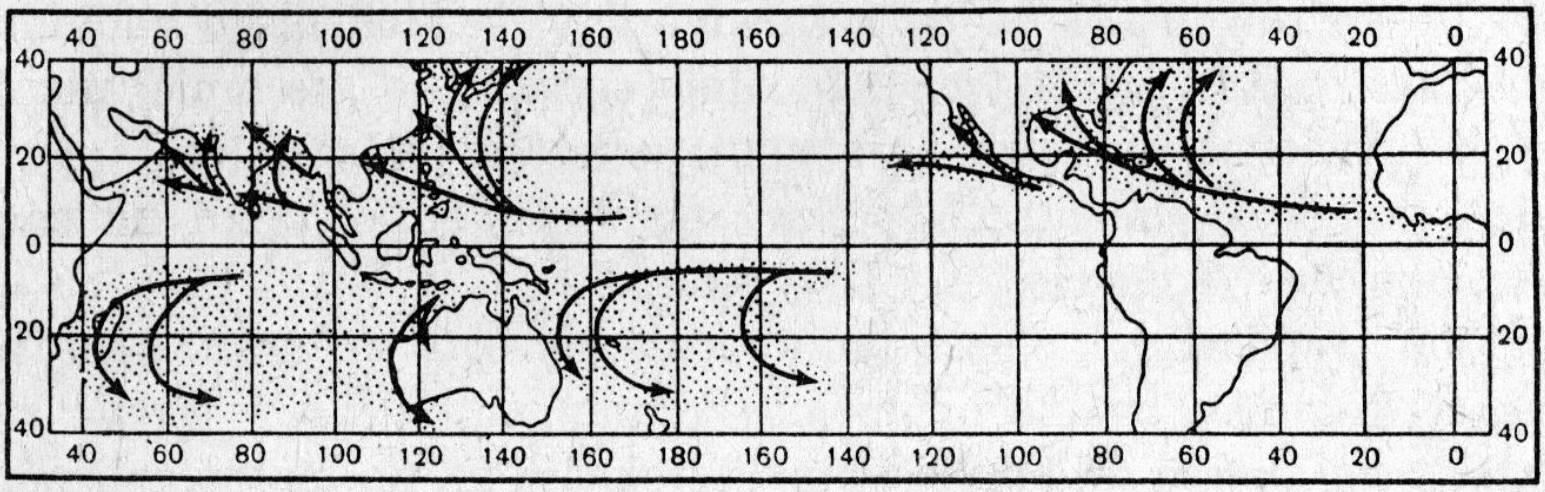


From Szulc, 2000

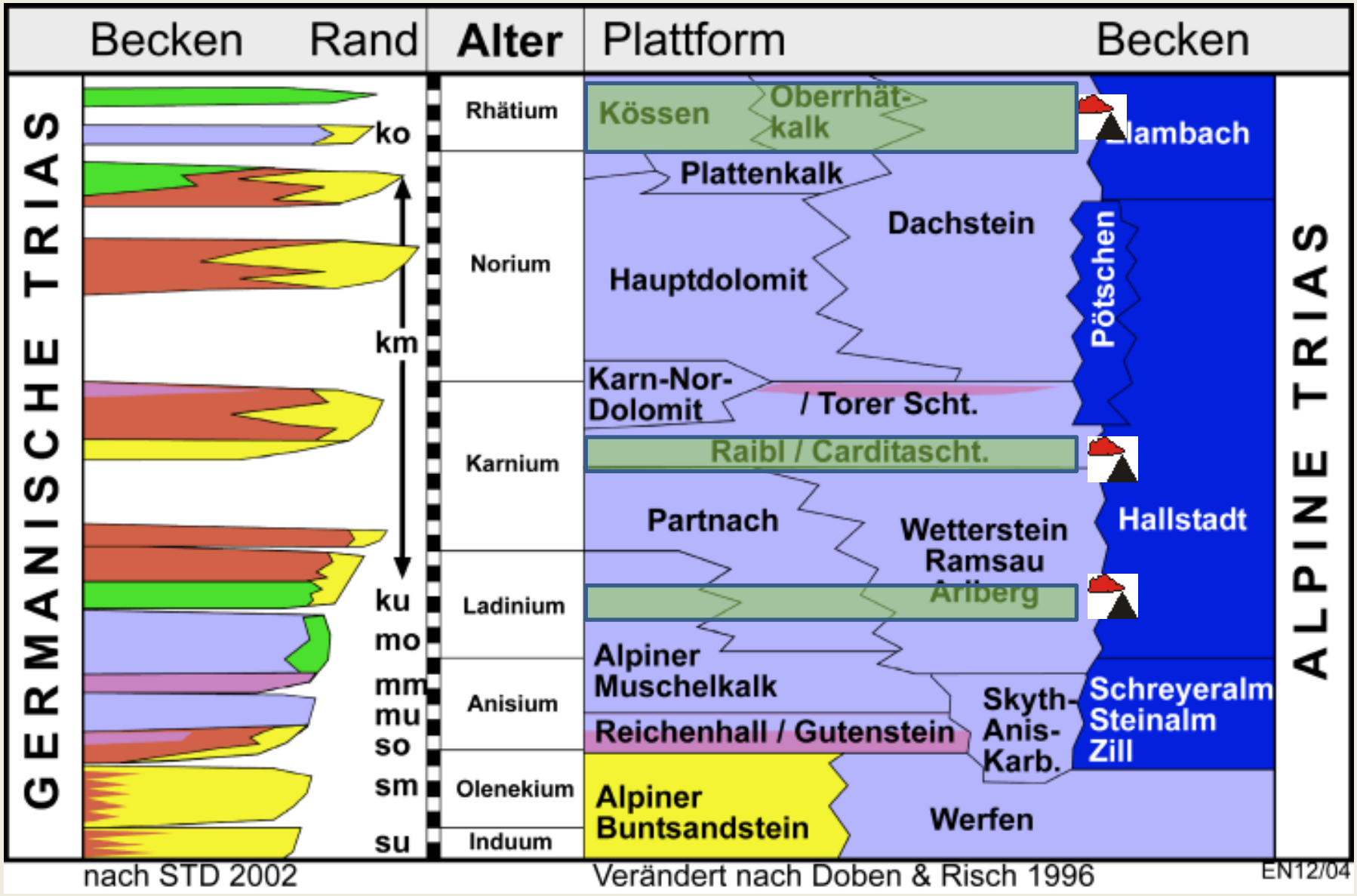


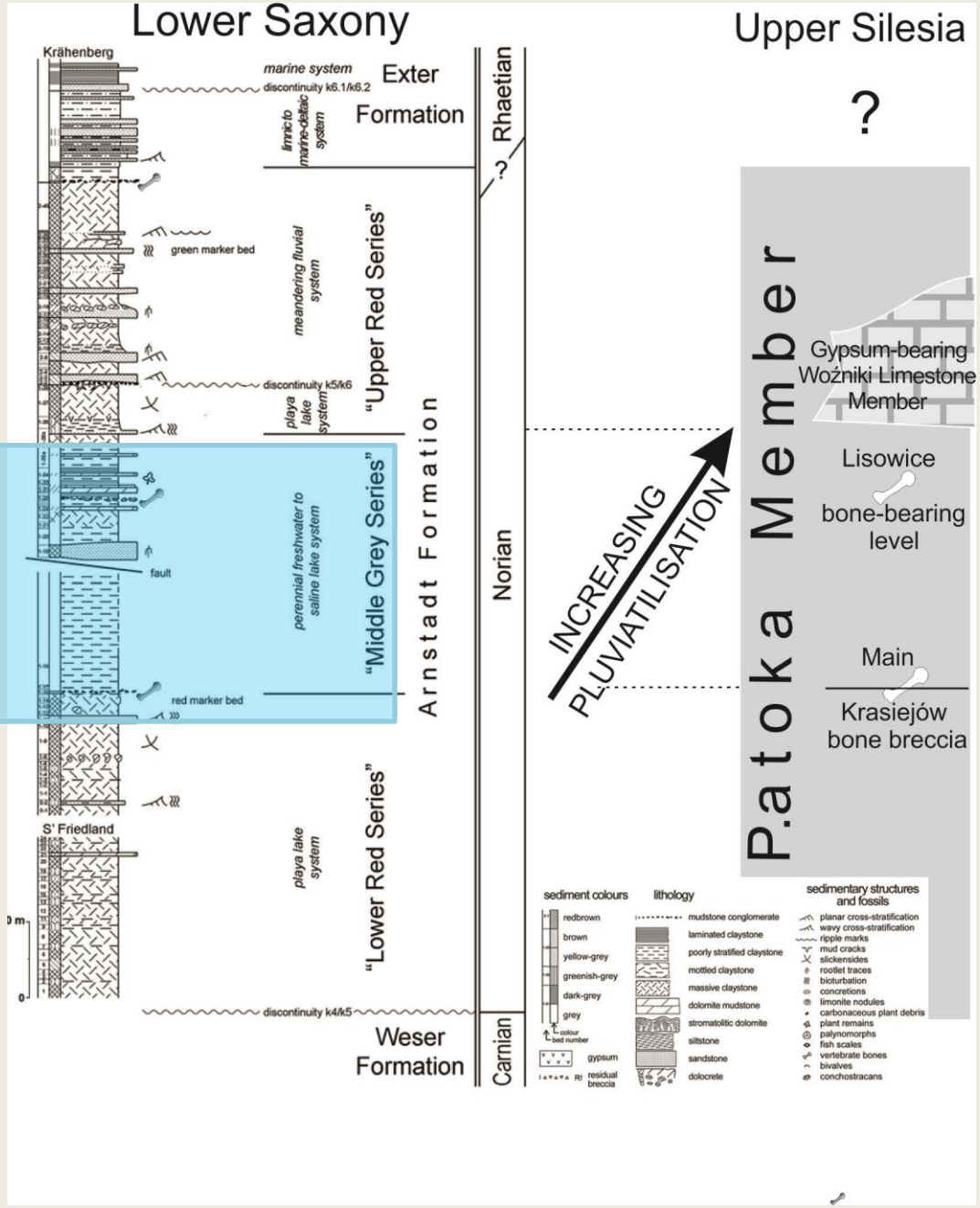
From Kent et al., 2014


Siberia
South China
Kazakhstania
Urals
Baltica
Cimmeria
Laurasia
Tethys Sea
Gondwanaland
Key:
land
ocean
rift basins
mountain
Triassic sutures
plate edge
ocean plate subduction
displaced terranes

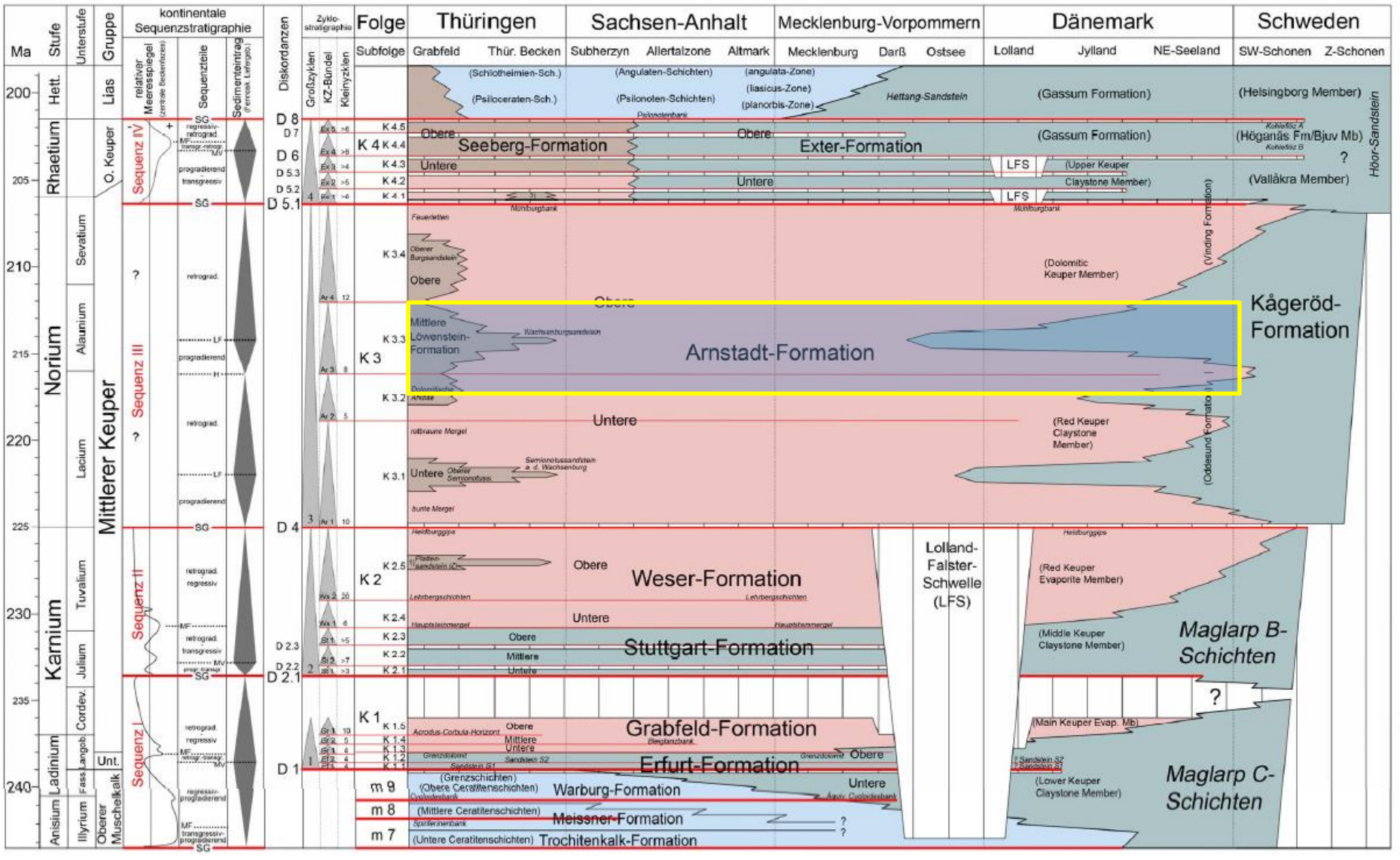


Rys. 138. Główne tory przemieszczania się oraz rejony występowania cyklonów tropikalnych

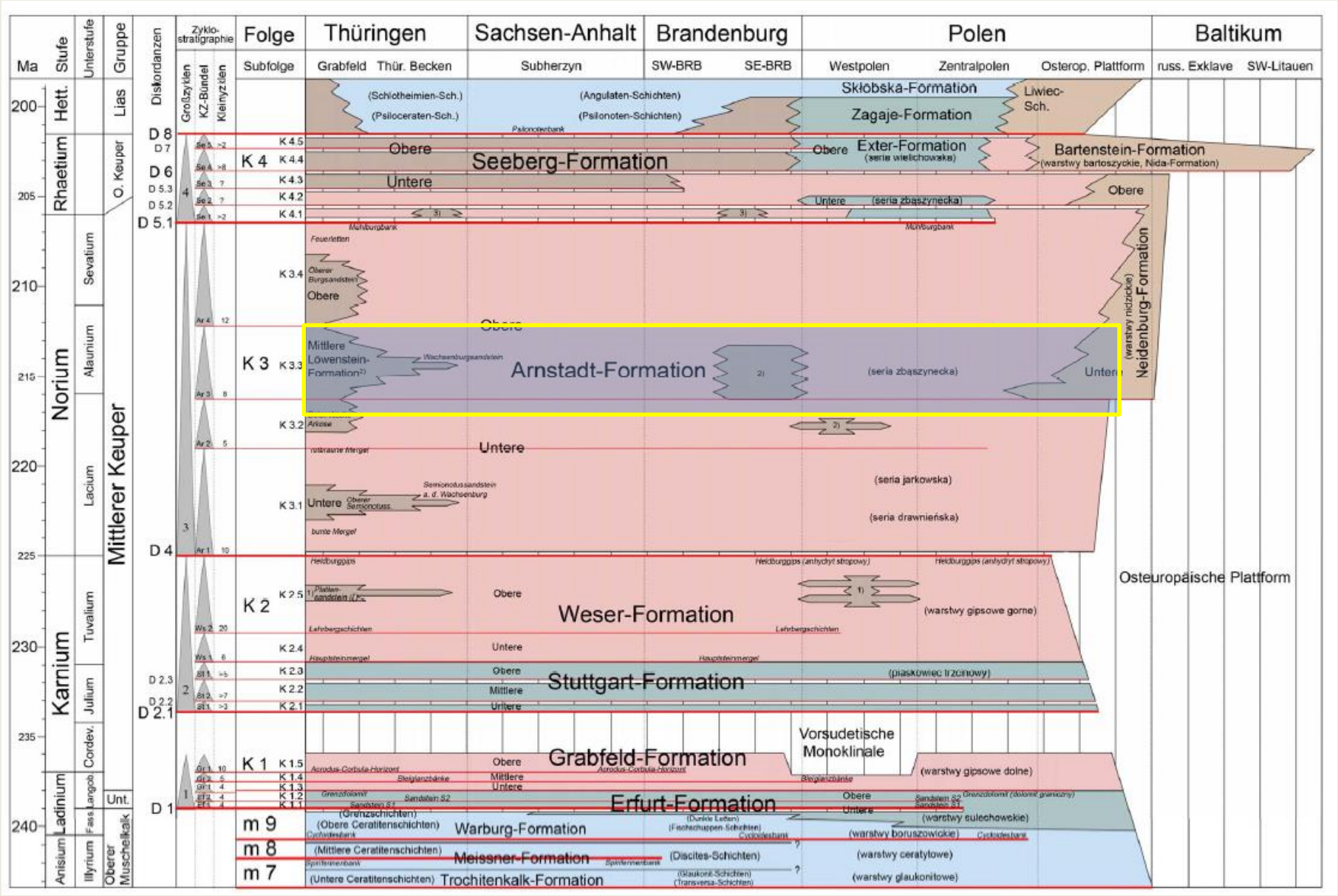

Becken
Rand
Alter
Plattform
Becken
GERMANISCHE TRIAS
ALPINE TRIAS
ko
km
ku
mo
mm
mu
so
sm
su
Rhätium
Norium
Karnium
Ladinium
Anisium
Olenekium
Induum
Kössen
Oberrhät-kalk
Plattenkalk
Dachstein
Hauptdolomit
Pötschen
Karn-Nor-Dolomit
/ Torer Scht.
Raibl / Carditascht.
Partnach
Wetterstein
Ramsau
Arlberg
Hallstadt
Alpiner Muschelkalk
Skyth-Anis-Karb.
Schreyeralm
Steinalm
Zill
Reichenhall / Gutenstein
Alpiner Buntsandstein
Werfen
nach STD 2002
Verändert nach Doben & Risch 1996
EN12/04



From: Arp, 2010



From: Franz, 2008



From: Franz, 2008

Pozorne "redbeds" w profilu odsłonięcia w Lipiu Śląskim