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Mapping
Institute of Geological Sciences
Wrocław University

Synsedimentary seismotectonic features (?) in Triassic and Cretaceous sediments within the Intrasudetic Shear Zone (ISZ) - regional implications



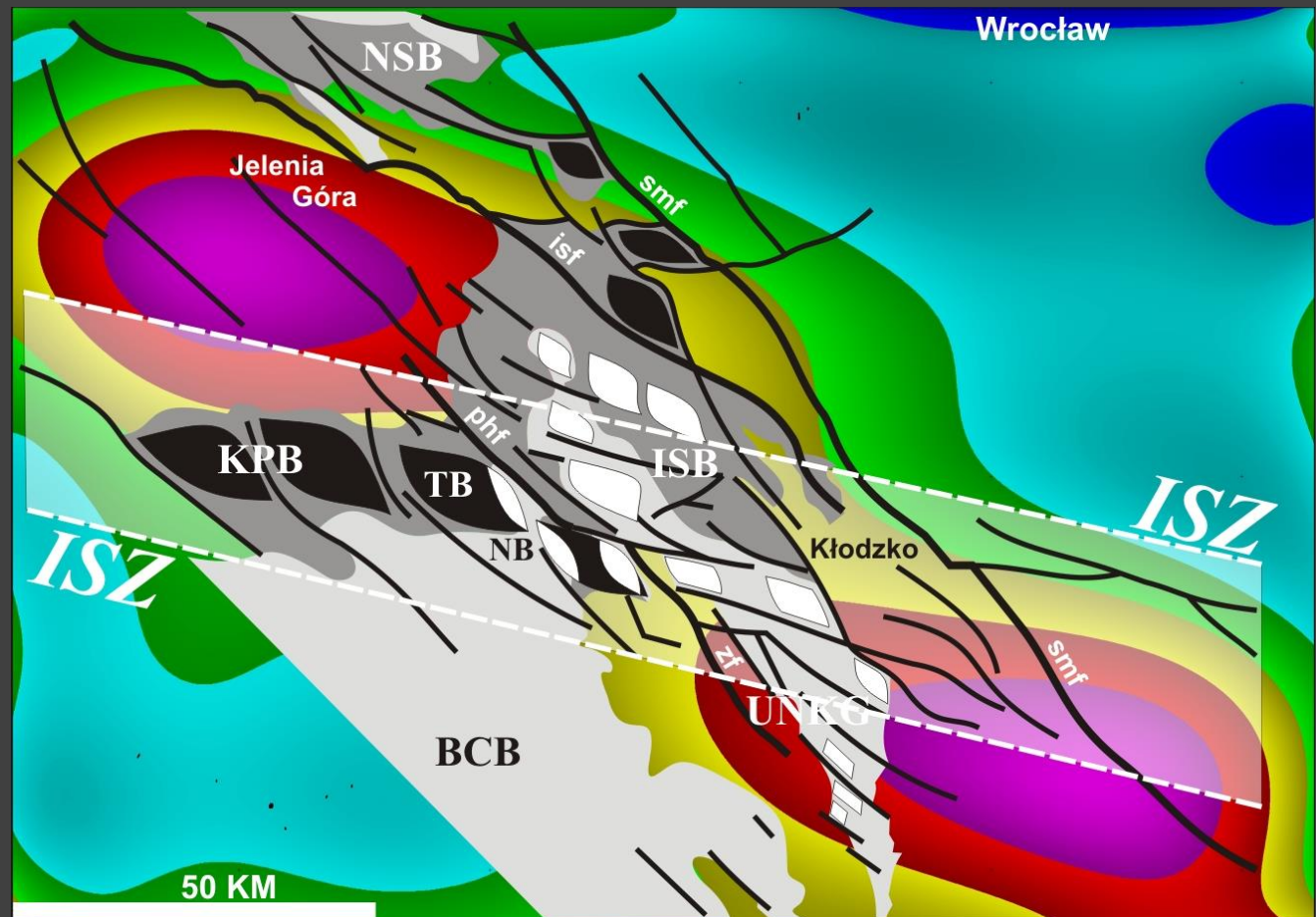


śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

NEOTECTONIC ASPECT OF THE INTRASUDETIC SHEAR ZONE

Jurand WOJEWODA

Acta Geodyn. Geomater., Vol. 4, No. 4 (148), 31-41, 2007



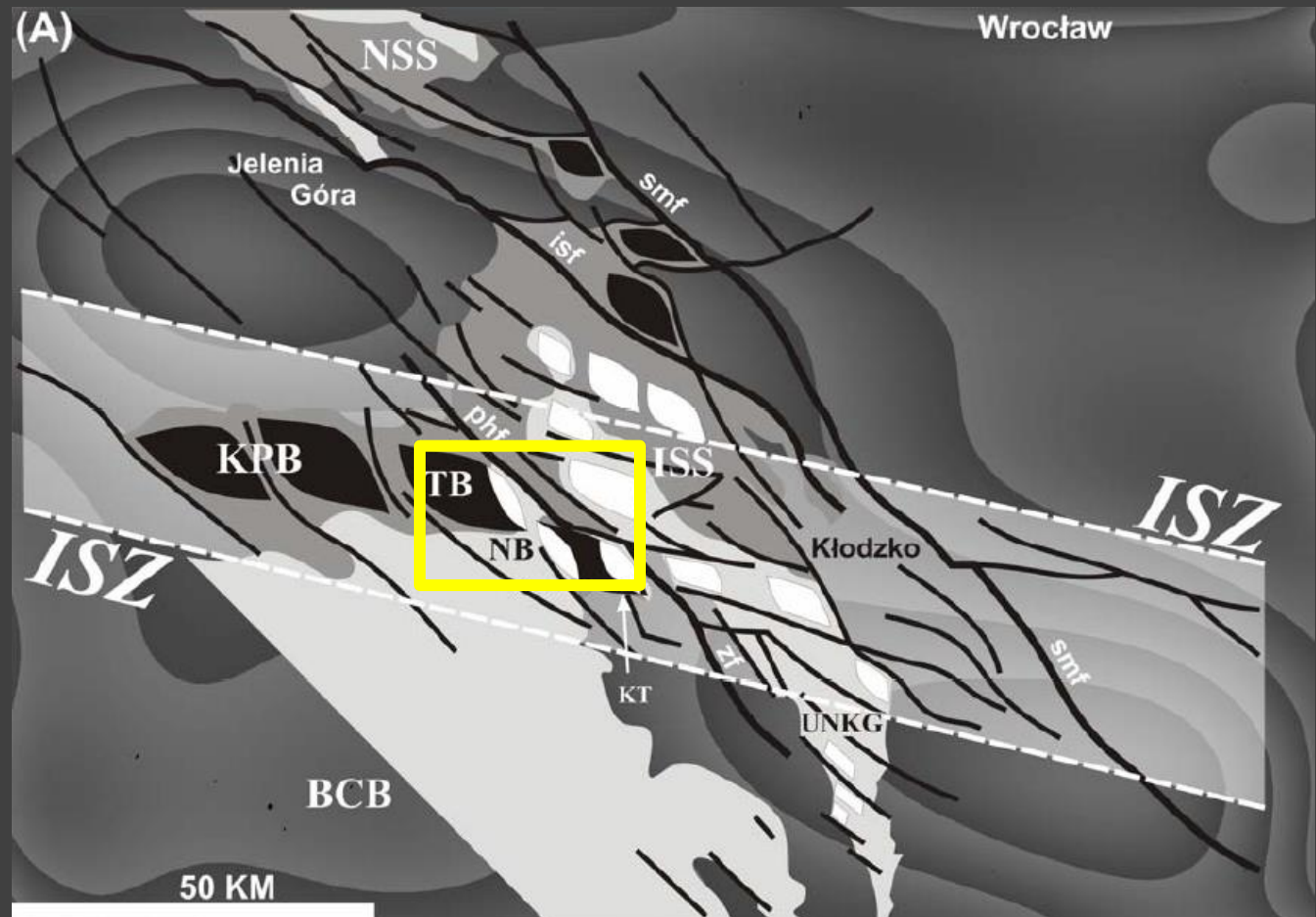


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NEOTECTONIC ASPECT OF THE INTRASUDETIC SHEAR ZONE

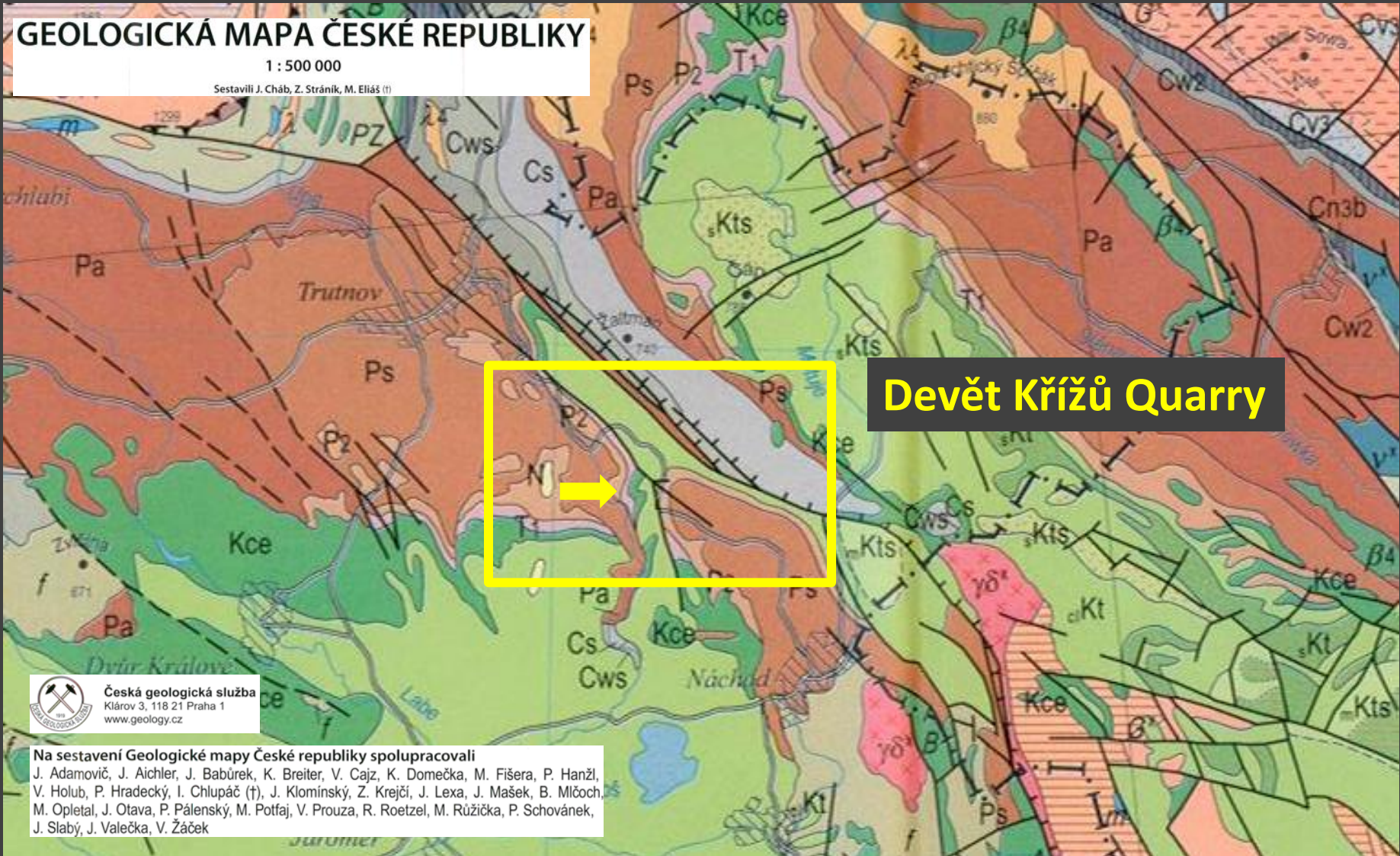
Jurand WOJEWODA

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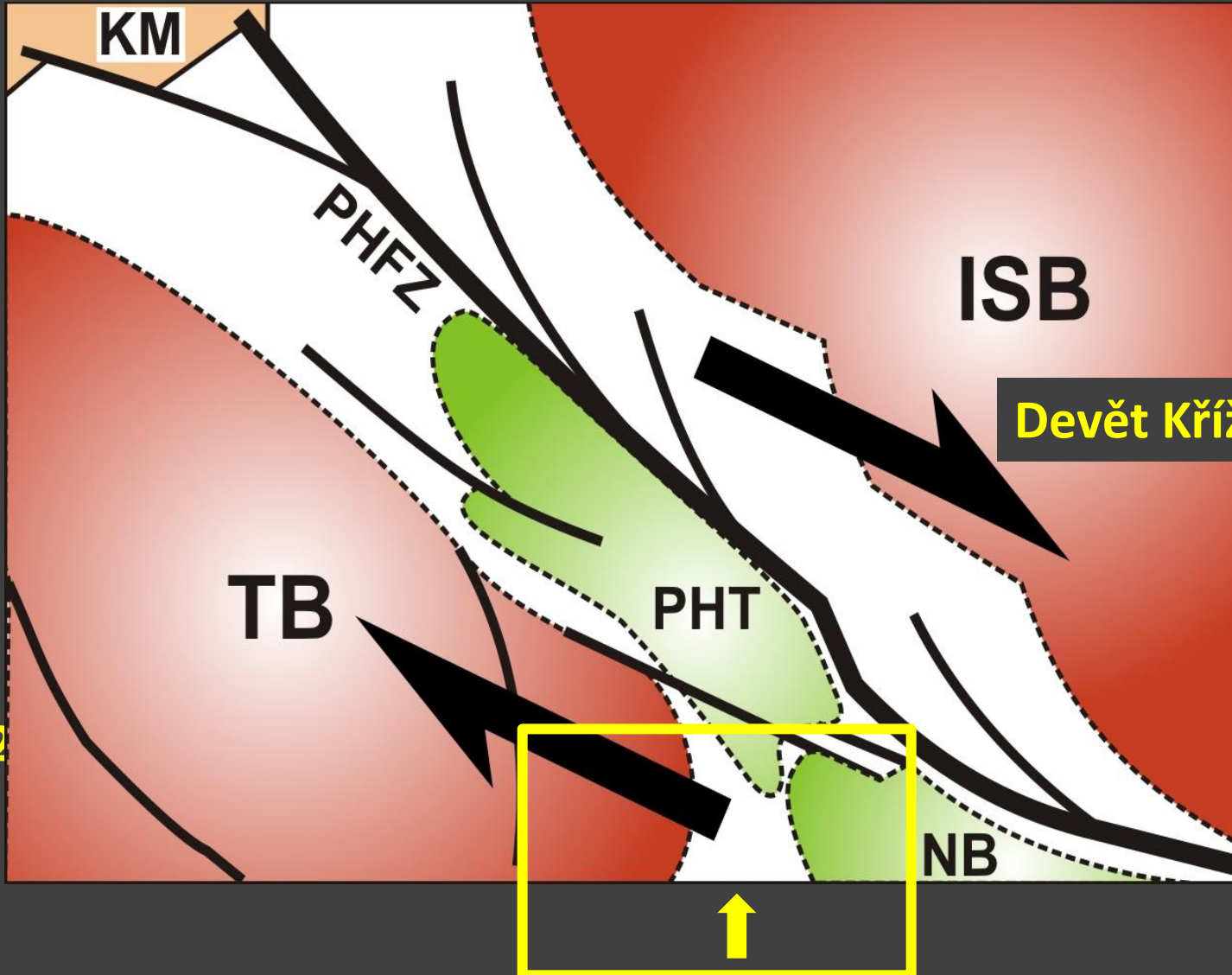


šródsudecka strefa šcinania Intrasudetic Shear Zone (ISZ)





śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)



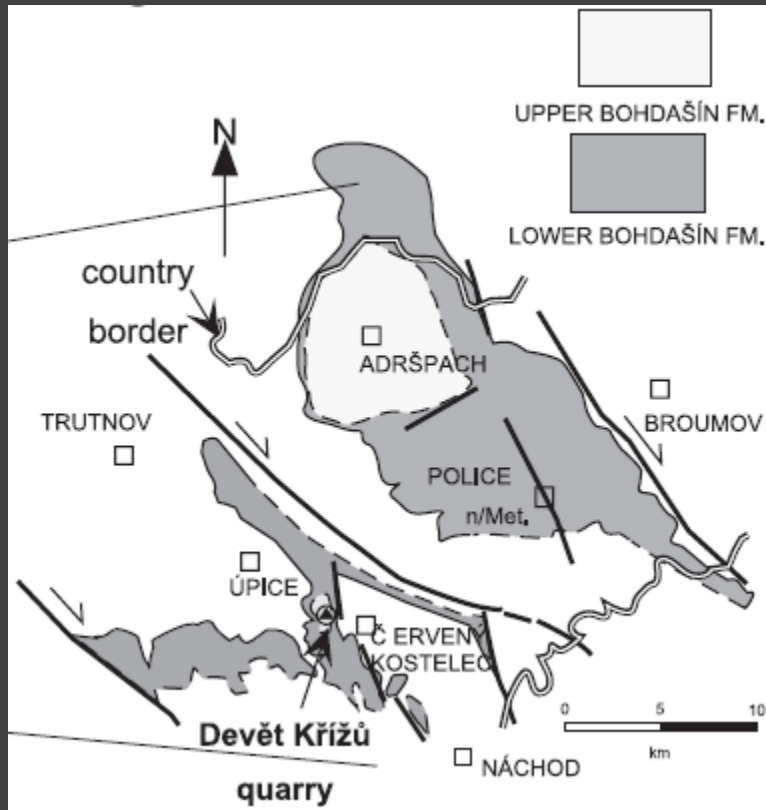
- KM – Karkonosze Massiff
- ISB – Intrasudetic Synclinorium
- TB – Trutnov Basin
- PHT – Hronov Trough
- NB – Nachod Basin
- PHFZ - Poříčí-Hronov Fault Zone

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Sedimentary Geology 167 (2004) 17–39

**Sedimentary
Geology**

www.elsevier.com/locate/sedgeo

A drying-upward aeolian system of the Bohdašín Formation (Early Triassic), Sudetes of NE Czech Republic: record of seasonality and long-term palaeoclimate change

David Uličný

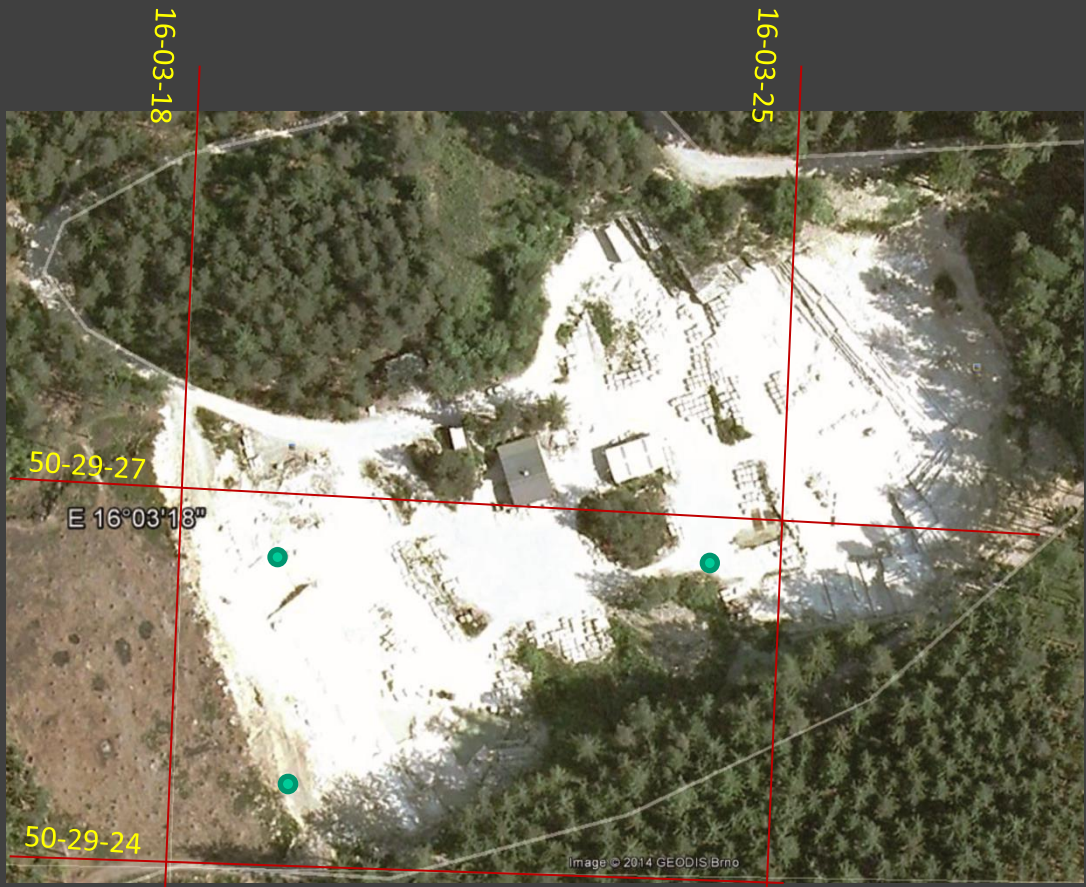
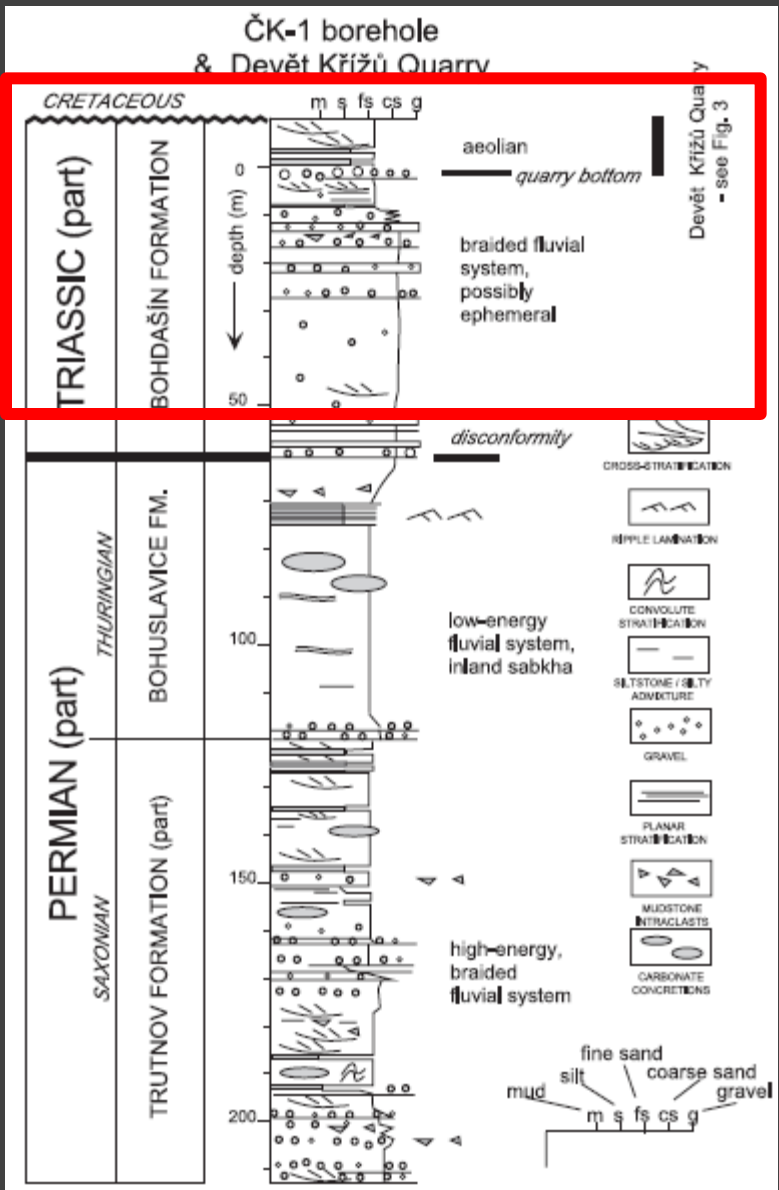
Institute of Geophysics, Academy of Sciences of the Czech Republic Boční II/1401, 141 31 Prague 4, Czech Republic

Uličný (2004)



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

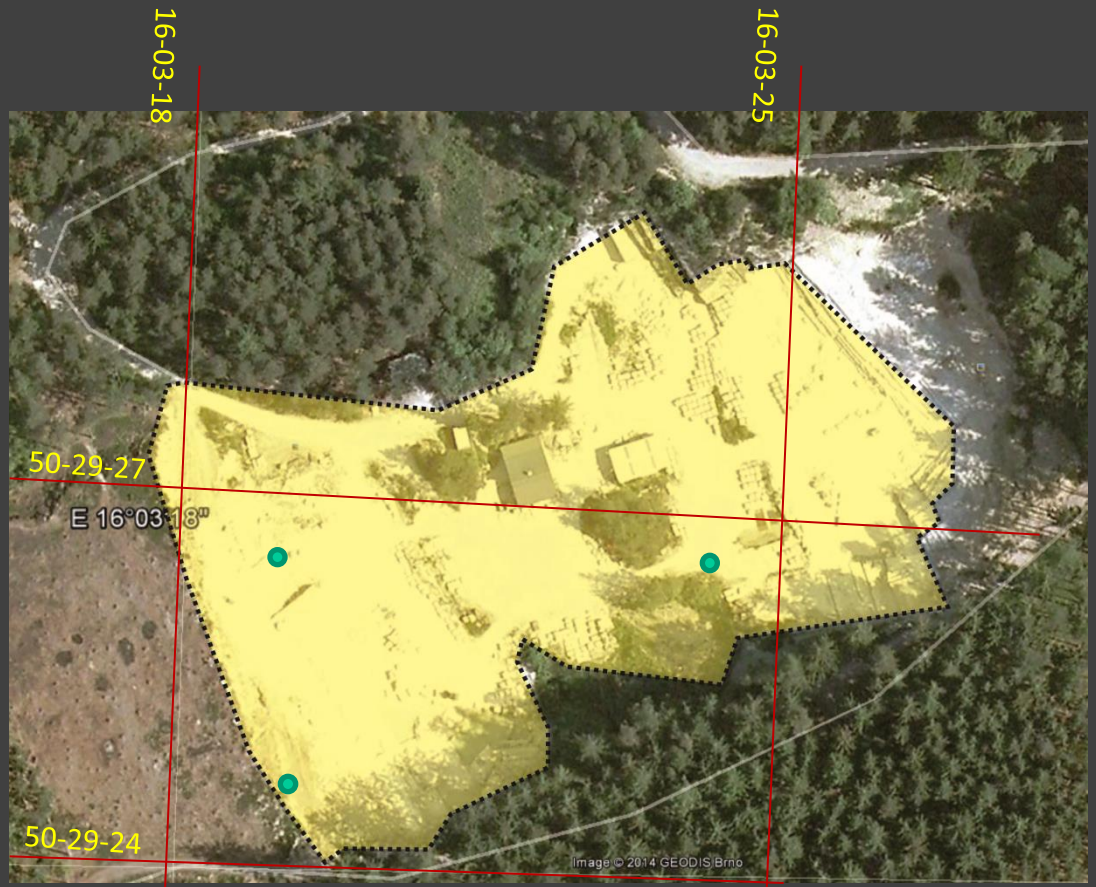
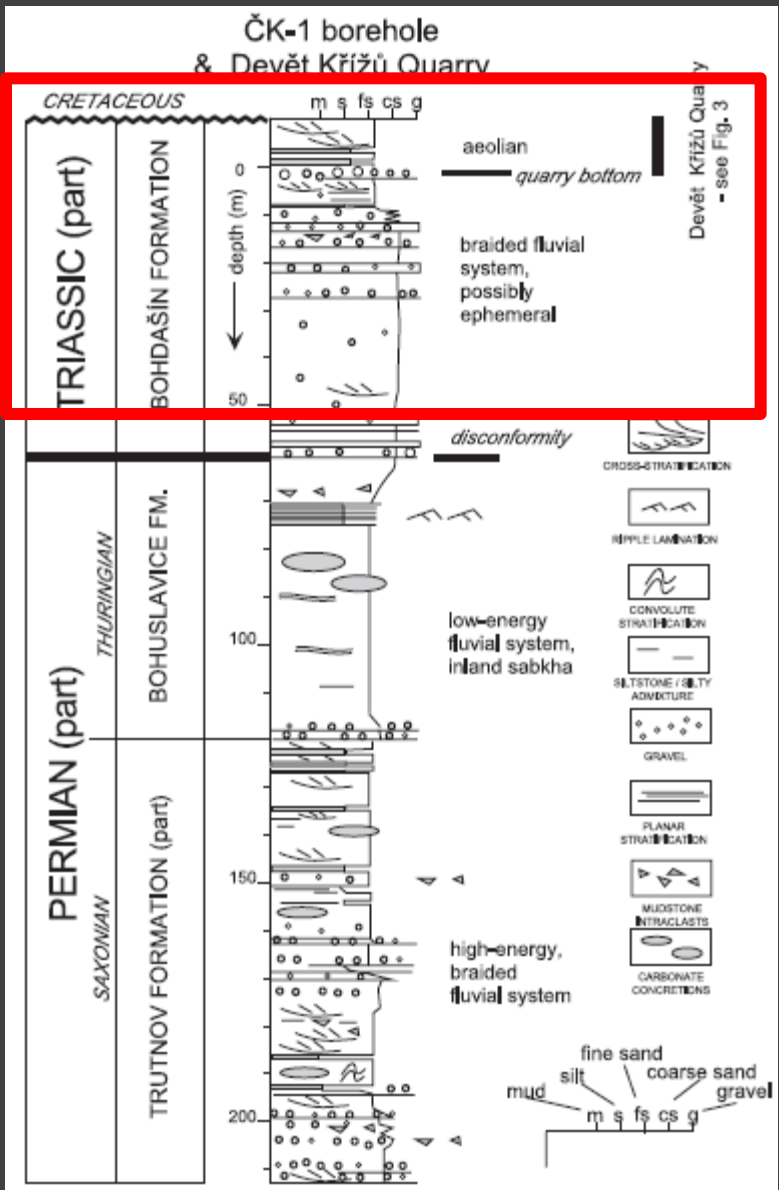
Devět Křížů Quarry





śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

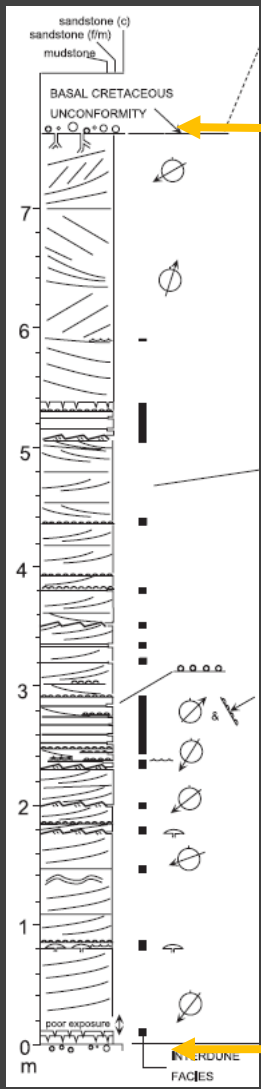
Devět Křížů Quarry



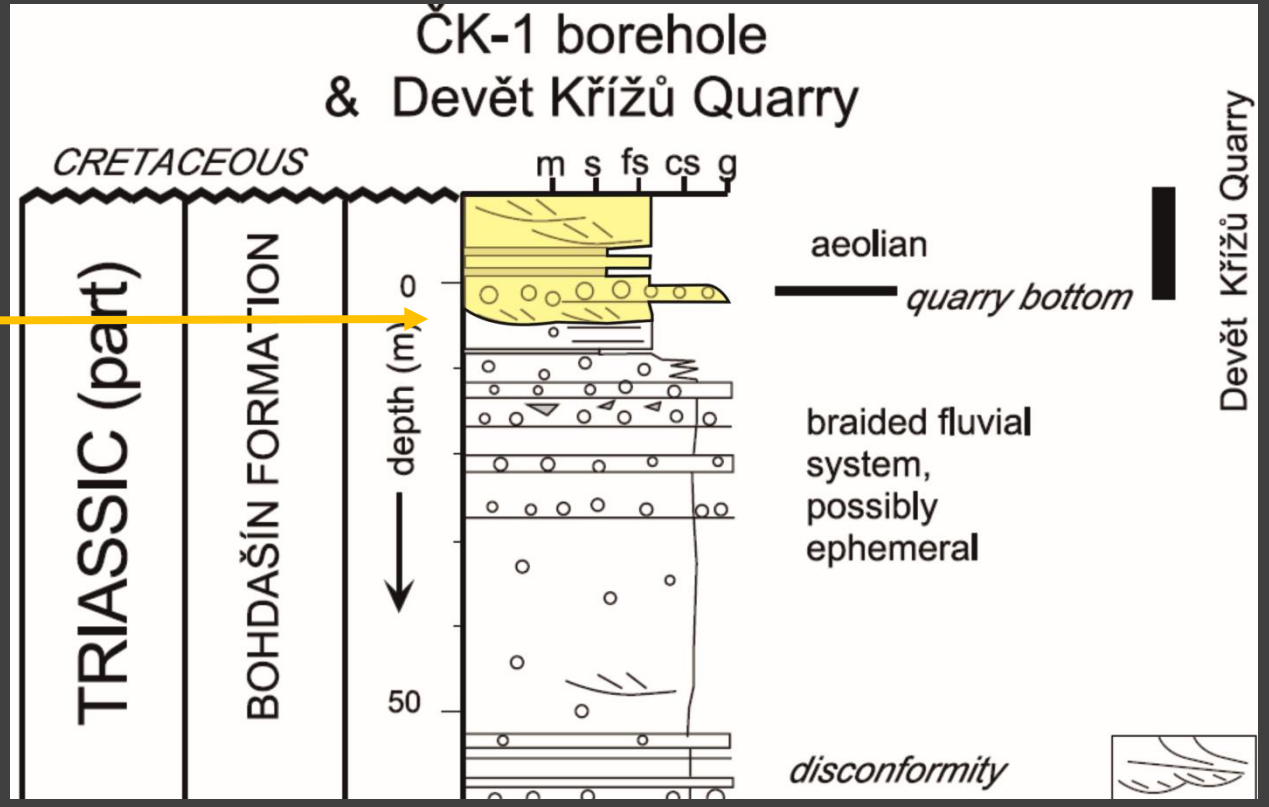


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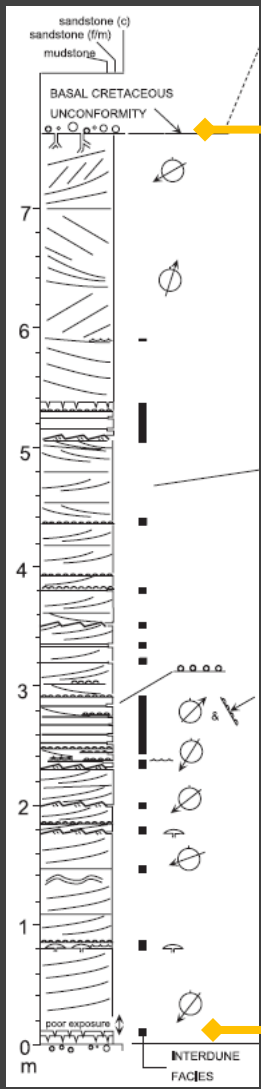
~ 8 m





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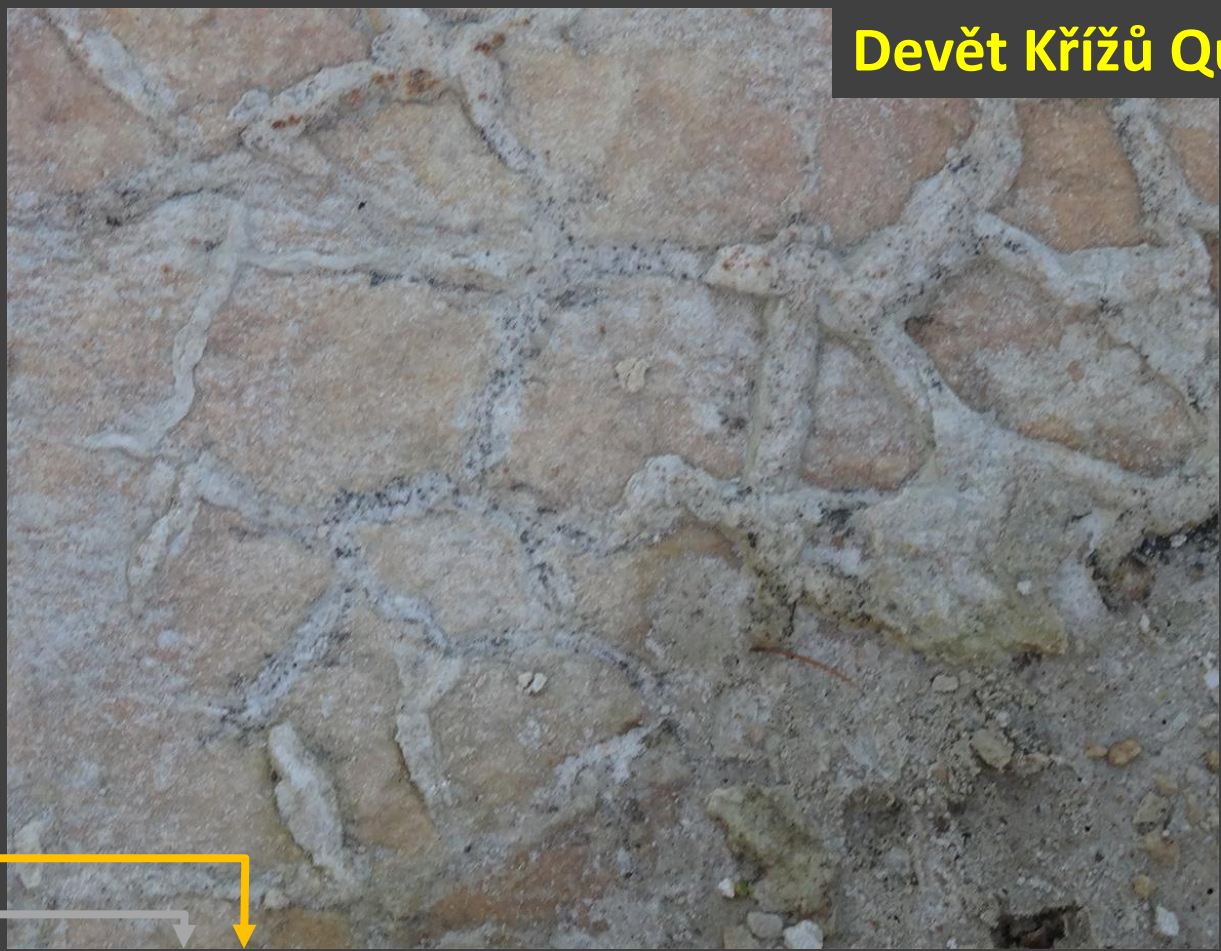
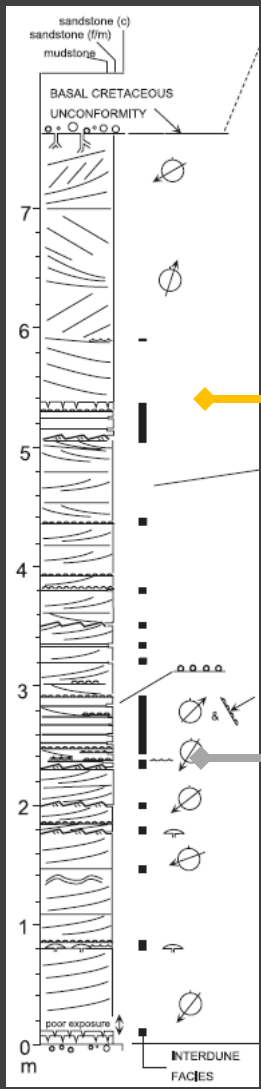
gravel lags

CROSS-BEDDING	CONTORTED BEDDING	DESSICATION CRACKS	SAND VOLCANOES	ADHESION STRUCTURES	MUD DRAPE; GRANULE LAG	WAVE RIPPLES (draped)	CURRENT RIPPLES (draped)	CROSS-BED DIP AZIMUTH	PALAEOWIND BASED ON ADHESION (LEFT) AND WIND RIPPLES



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

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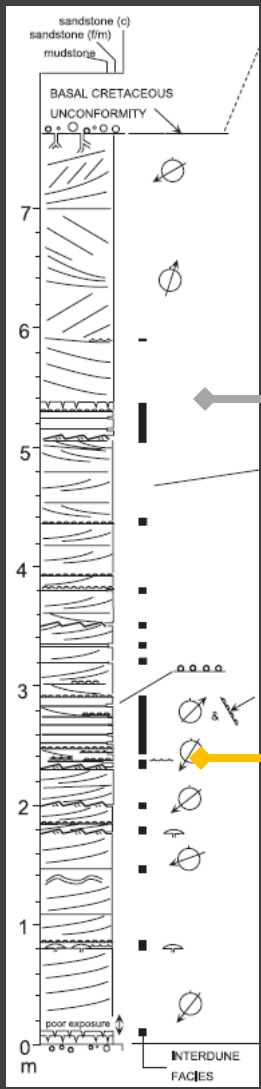
desiccation cracks

CROSS-BEDDING	CONTORTED BEDDING	DESICCATION CRACKS	SAND VOLCANOES	ADHESION STRUCTURES	MUD DRAPE; GRANULE LAG	WAVE RIPPLES (draped)	CURRENT RIPPLES (draped)	CROSS-BED DIP AZIMUTH	PALAEOWIND BASED ON ADHESION (LEFT) AND WIND RIPPLES













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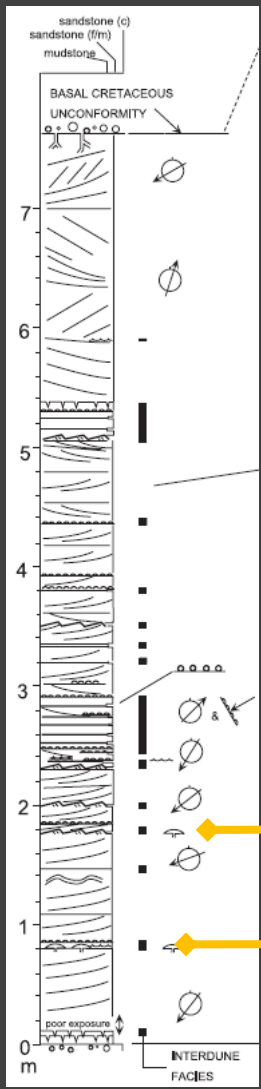
desiccation cracks

									
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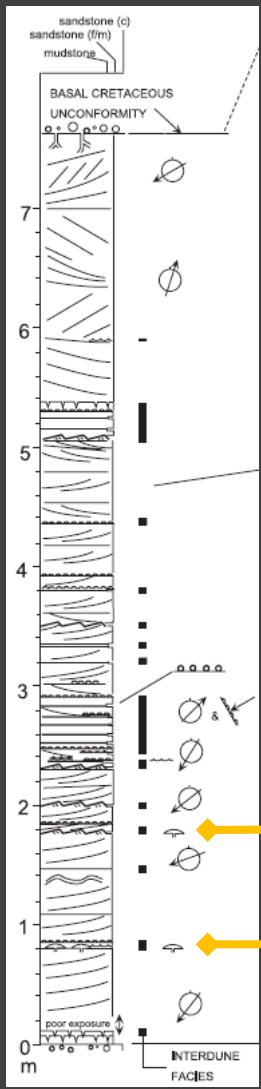
**circular sand blow
(volcano)**

CROSS-BEDDING	CONTORTED BEDDING	DESSICATION CRACKS	SAND VOLCANOES	ADHESION STRUCTURES	MUD DRAPE; GRANULE LAG	WAVE RIPPLES (draped)	CURRENT RIPPLES (draped)	CROSS-BED DIP AZIMUTH	PALAEOWIND BASED ON ADHESION (LEFT) AND WIND RIPPLES



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

Devět Křížů Quarry



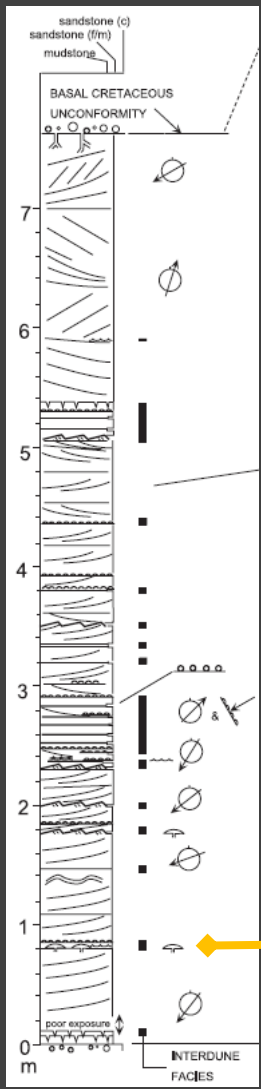
circular sand blows (volcanoes)

CROSS-BEDDING	CONTORTED BEDDING	DESICCATION CRACKS	SAND VOLCANOES	ADHESION STRUCTURES	MUD DRAPE; GRANULE LAG	WAVE RIPPLES (draped)	CURRENT RIPPLES (draped)	CROSS-BED DIP AZIMUTH	PALAEOWIND BASED ON ADHESION (LEFT) AND WIND RIPPLES



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

Devět Křížů Quarry

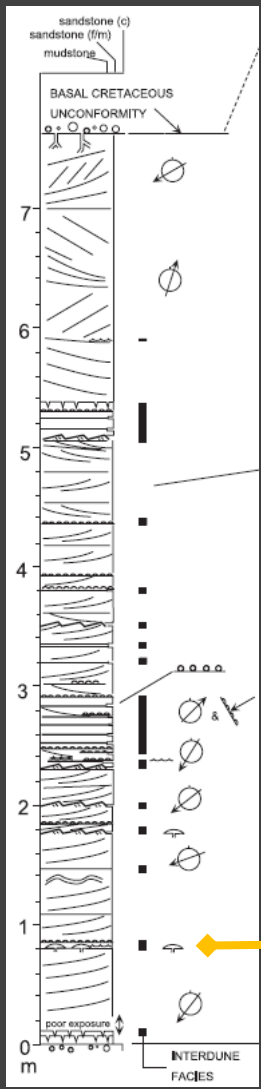


linear sand blows



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

Devět Křížů Quarry



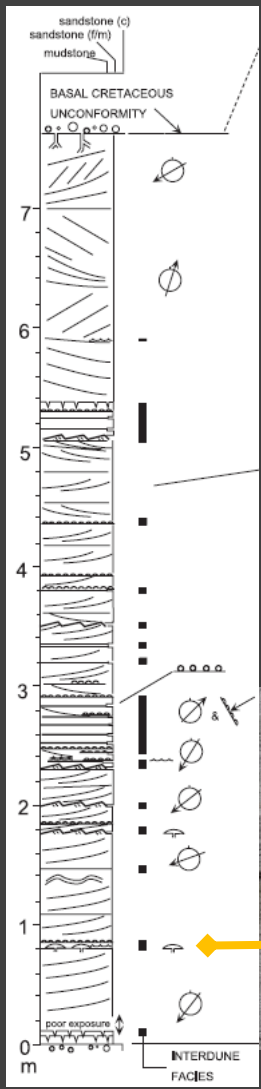
linear sand blow zones & flow folds





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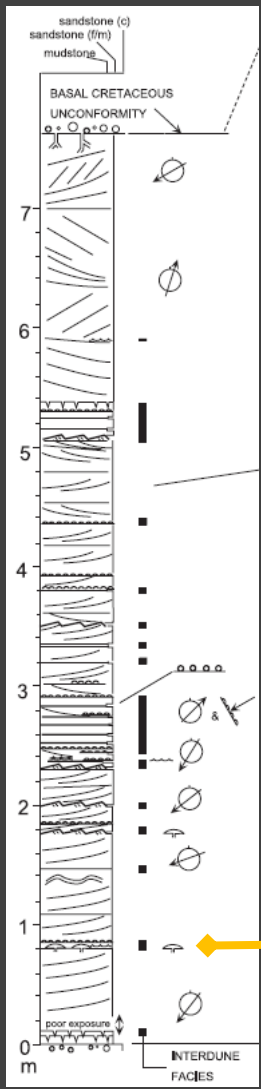
linear sand blows



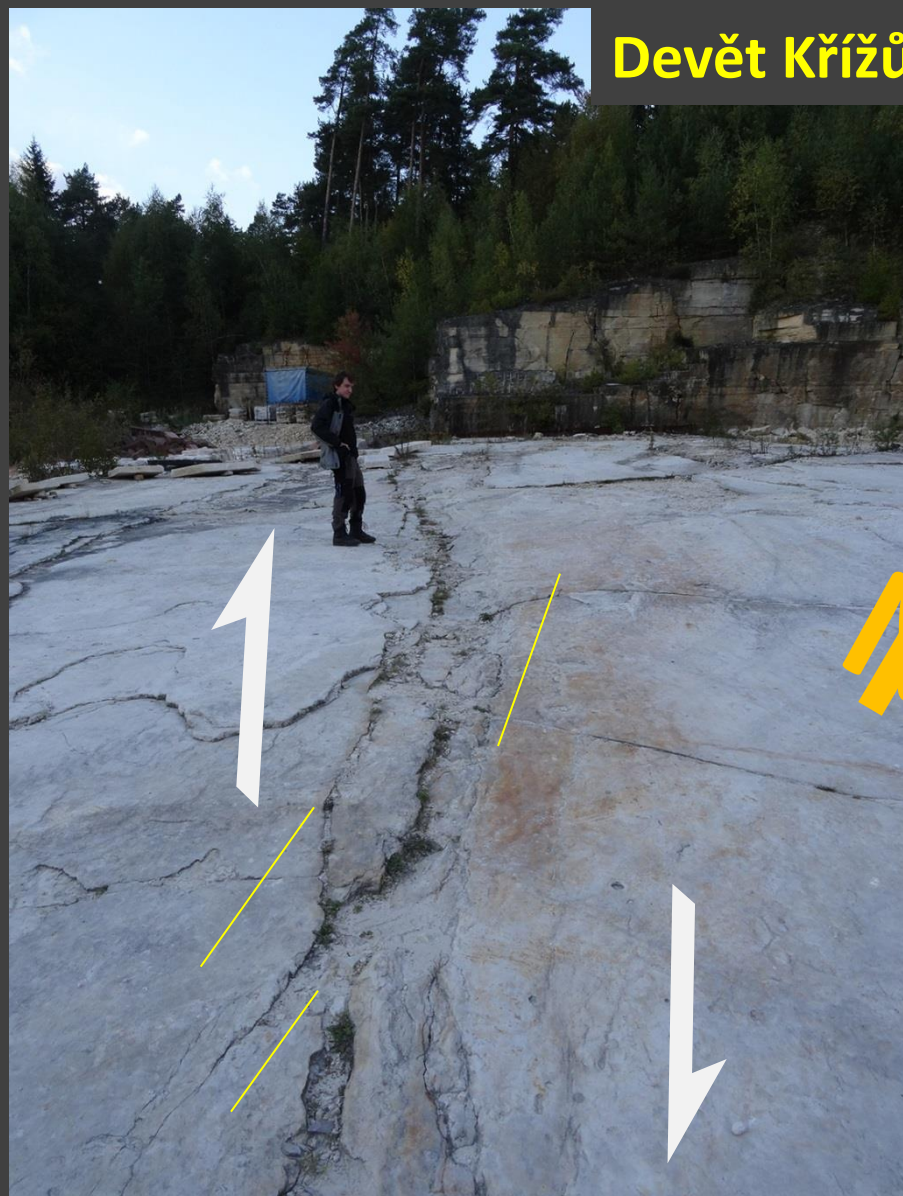


śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

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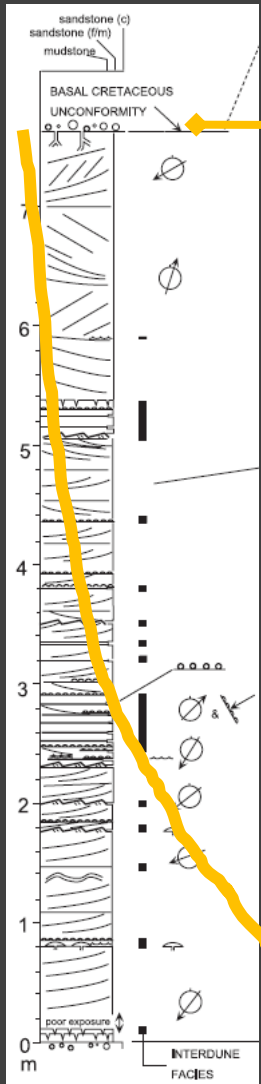
linear sand blows





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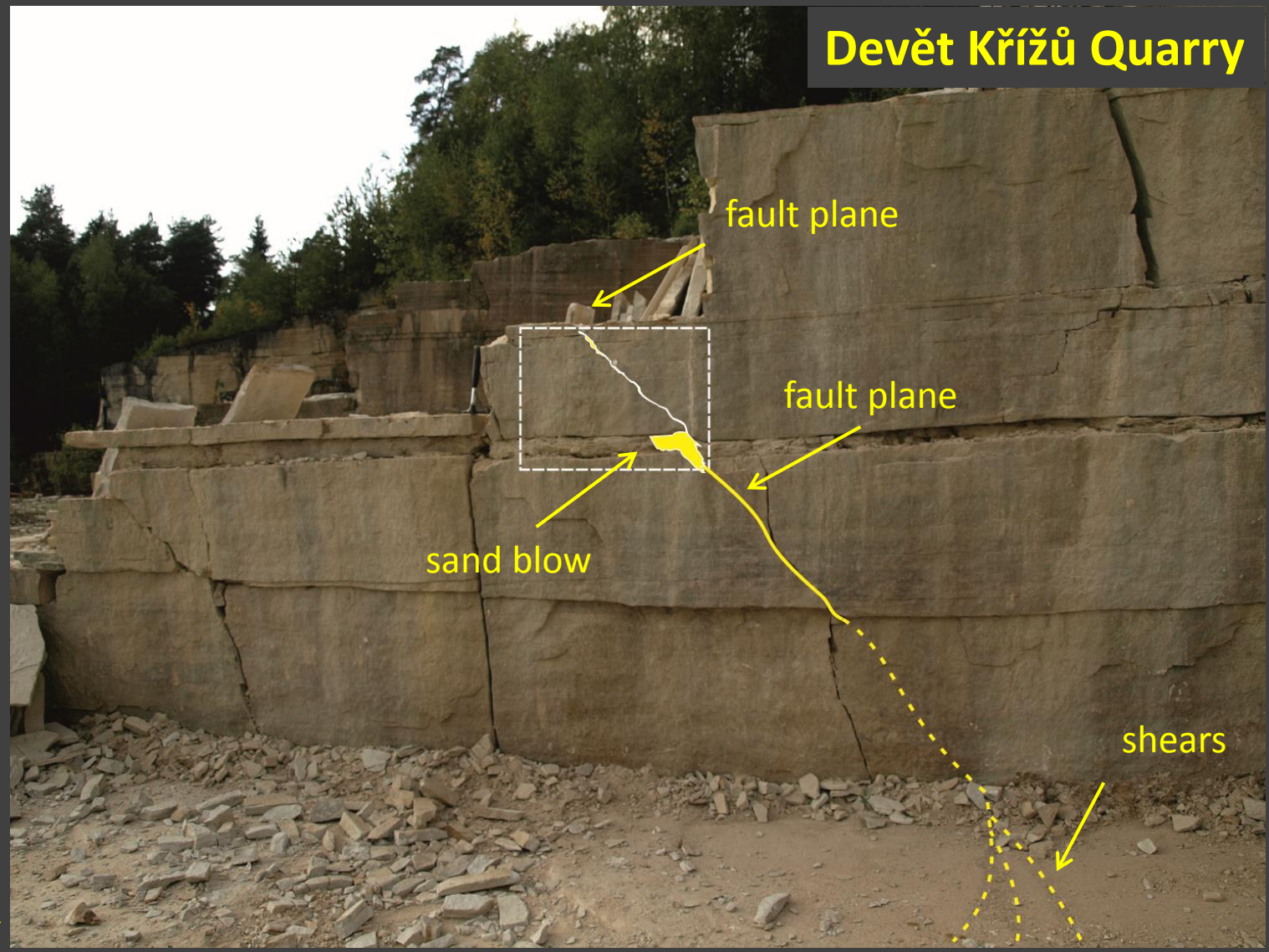
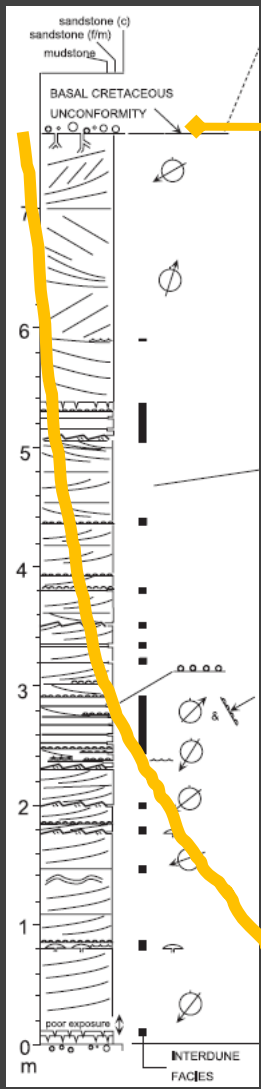


listric faults, shears and sand injection structures



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

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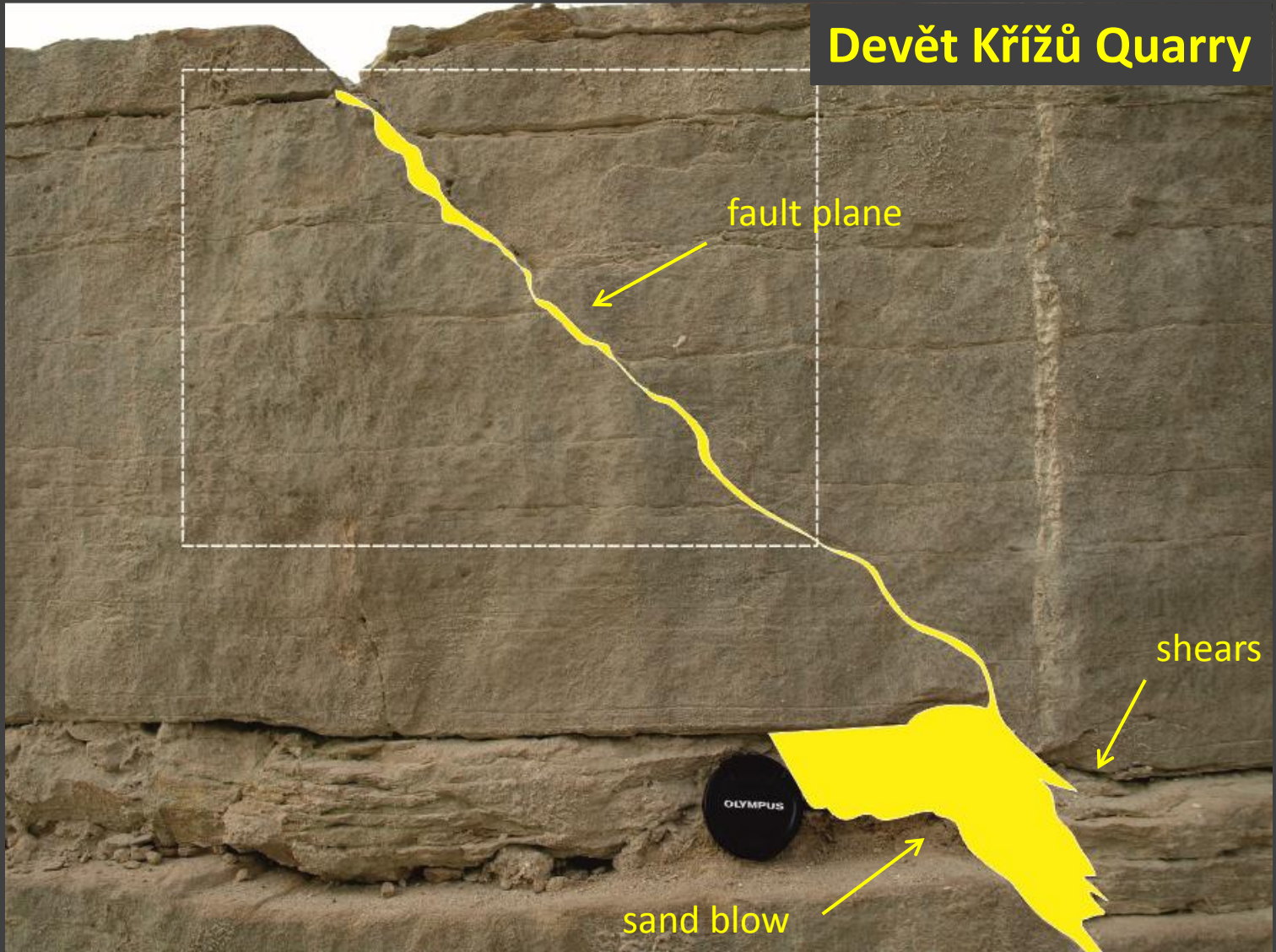
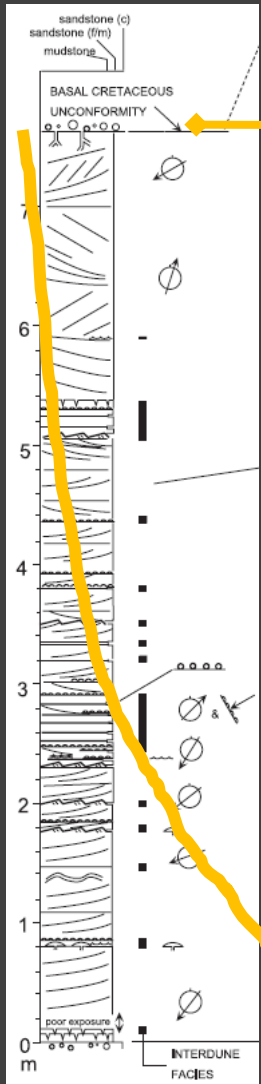


listric faults, shears and sand injection structures



śródsudecka strefa ścinania
Intrasudetic Shear Zone (ISZ)

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fault plane

shears

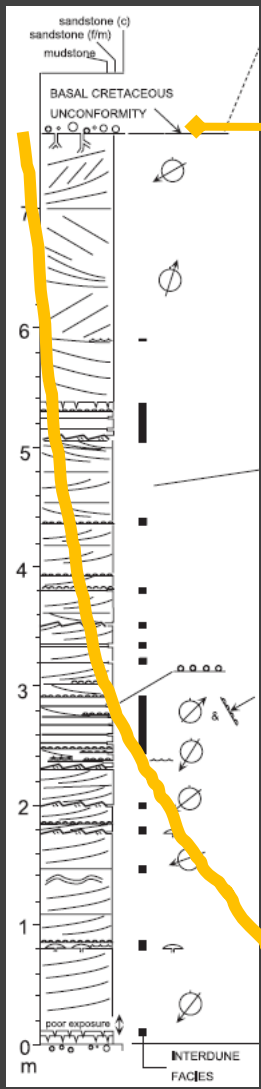
sand blow

listric faults, shears and sand injection structures



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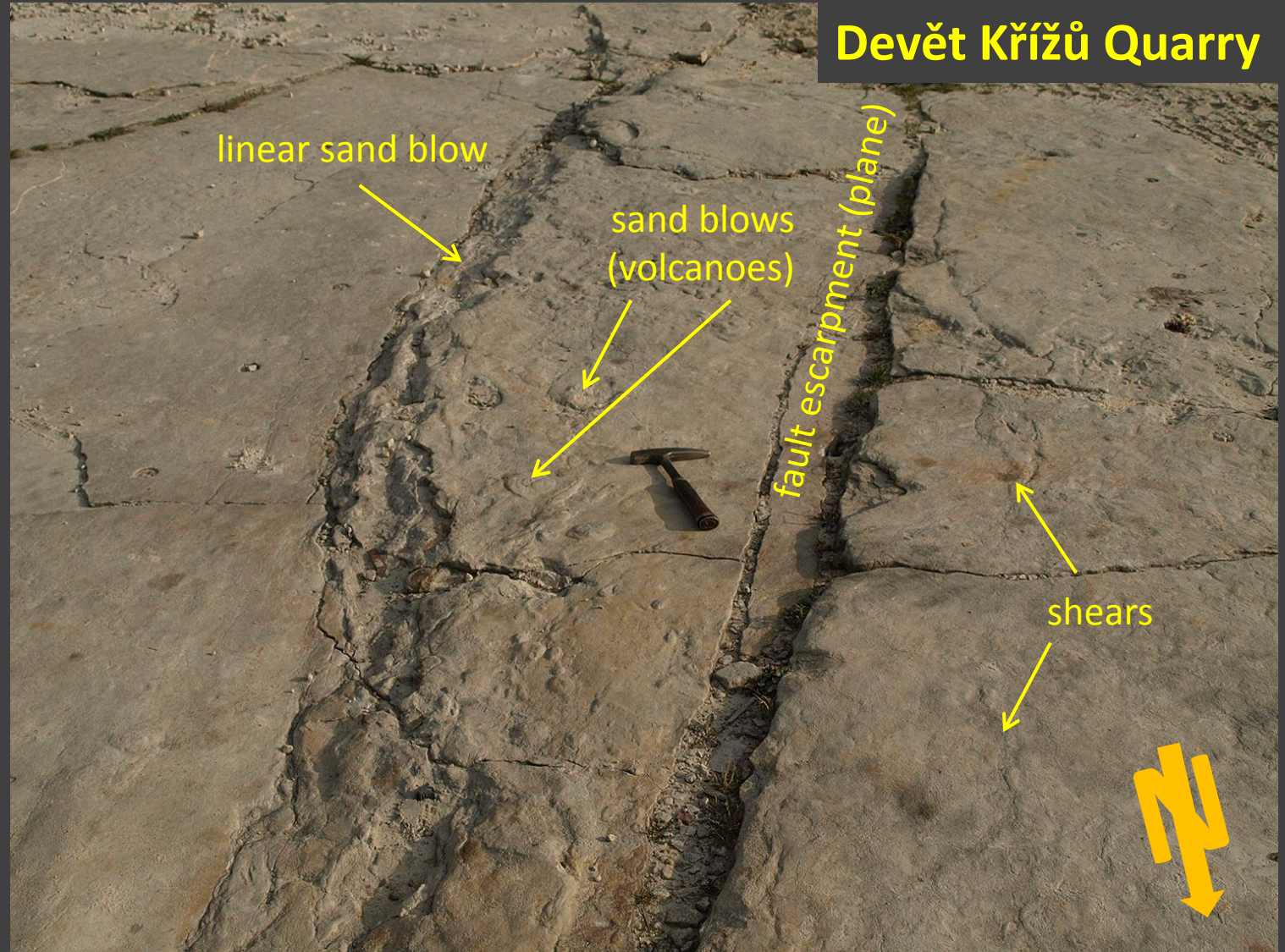
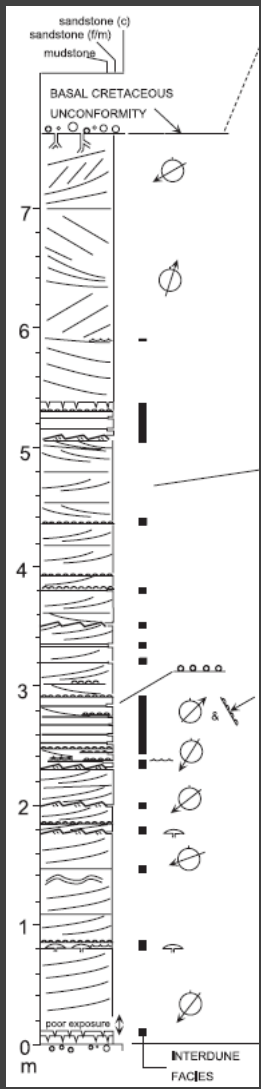


listric faults, shears and sand injection structures



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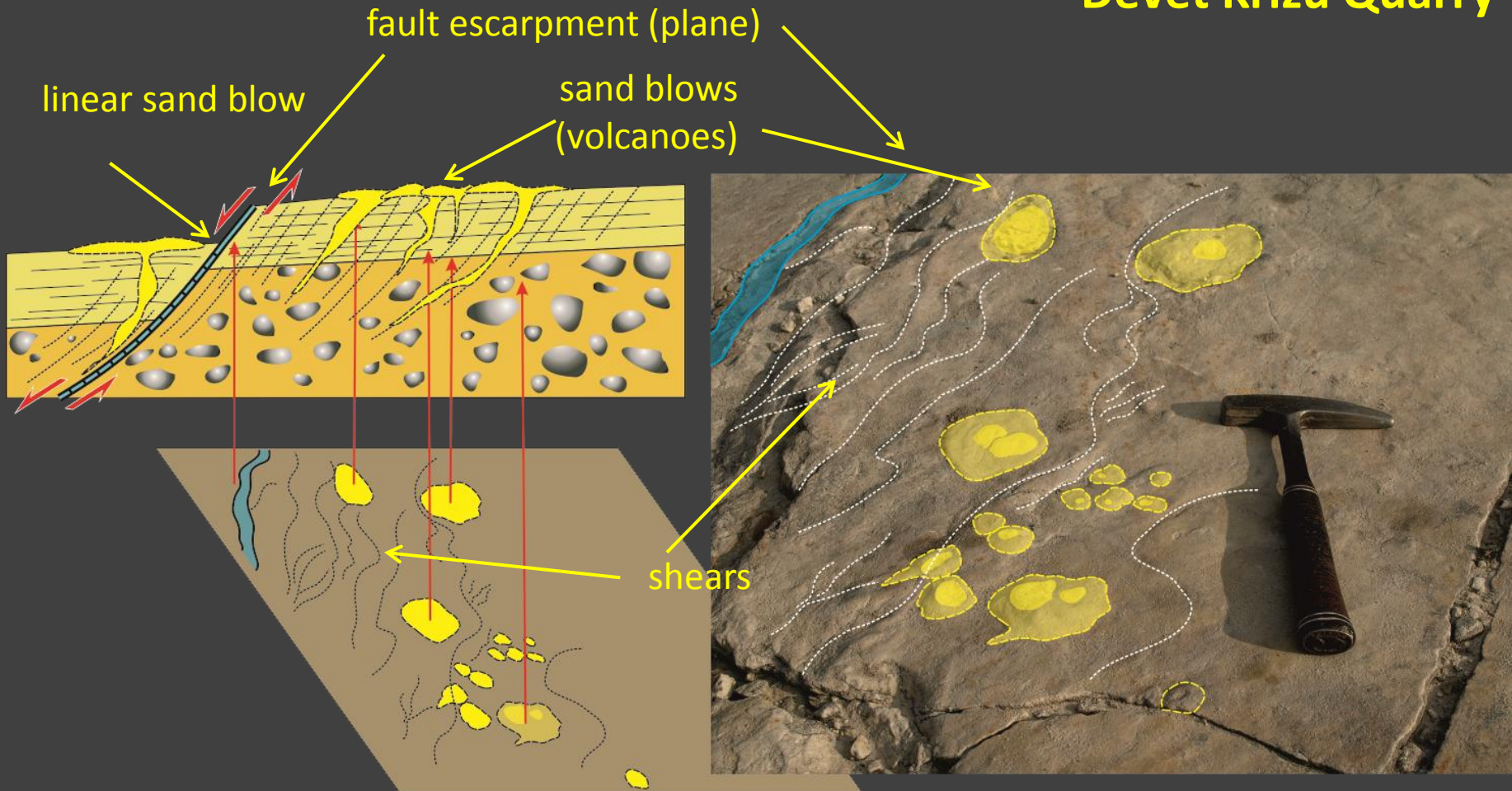


Spatial relation - listric faults, shears and sand injection structures



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

Devět Křížů Quarry

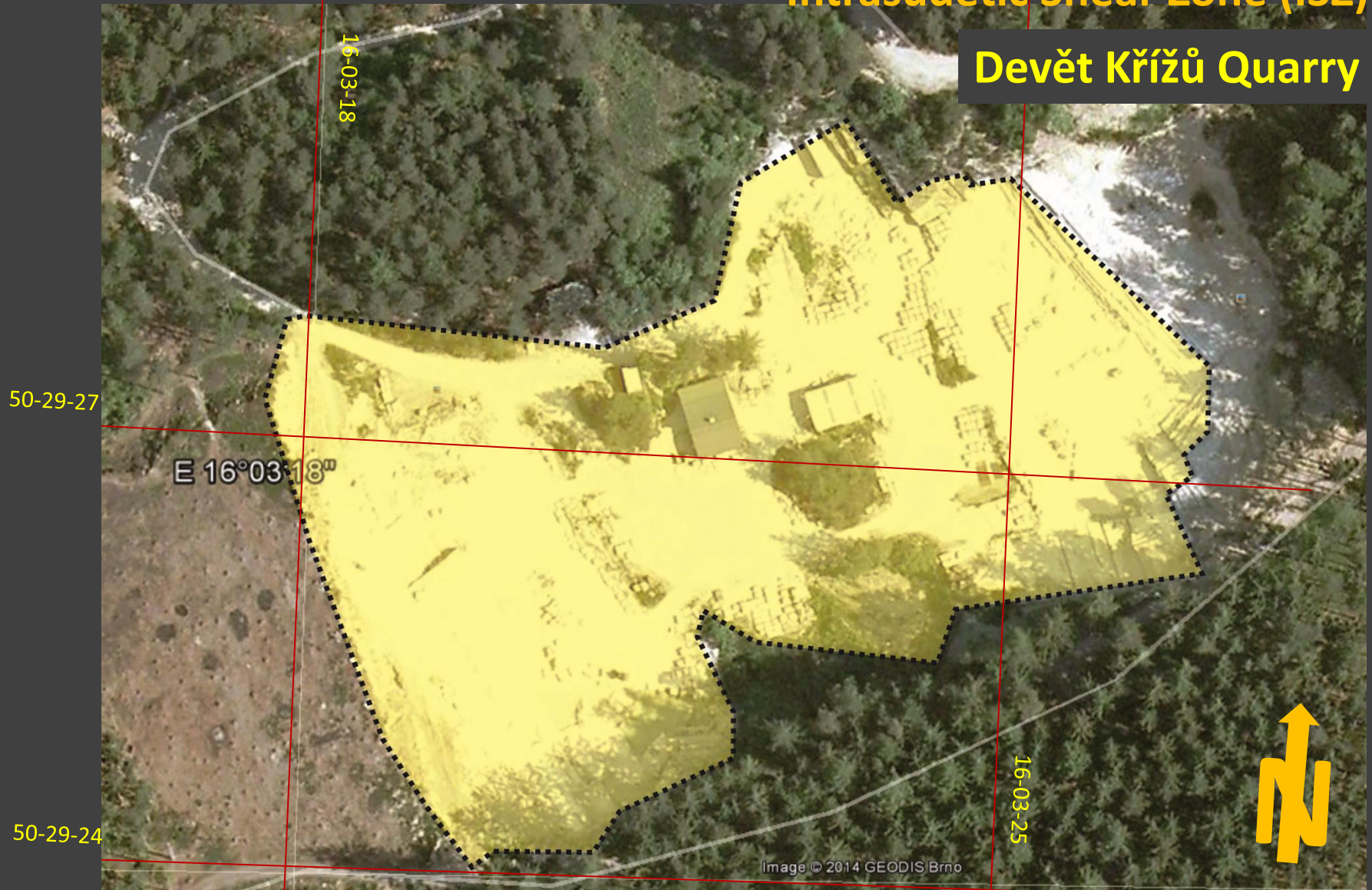


Spatial relation - listric faults, shears and sand injection structures



śródsudecka strefa ścinania
Intrasudetic Shear Zone (ISZ)

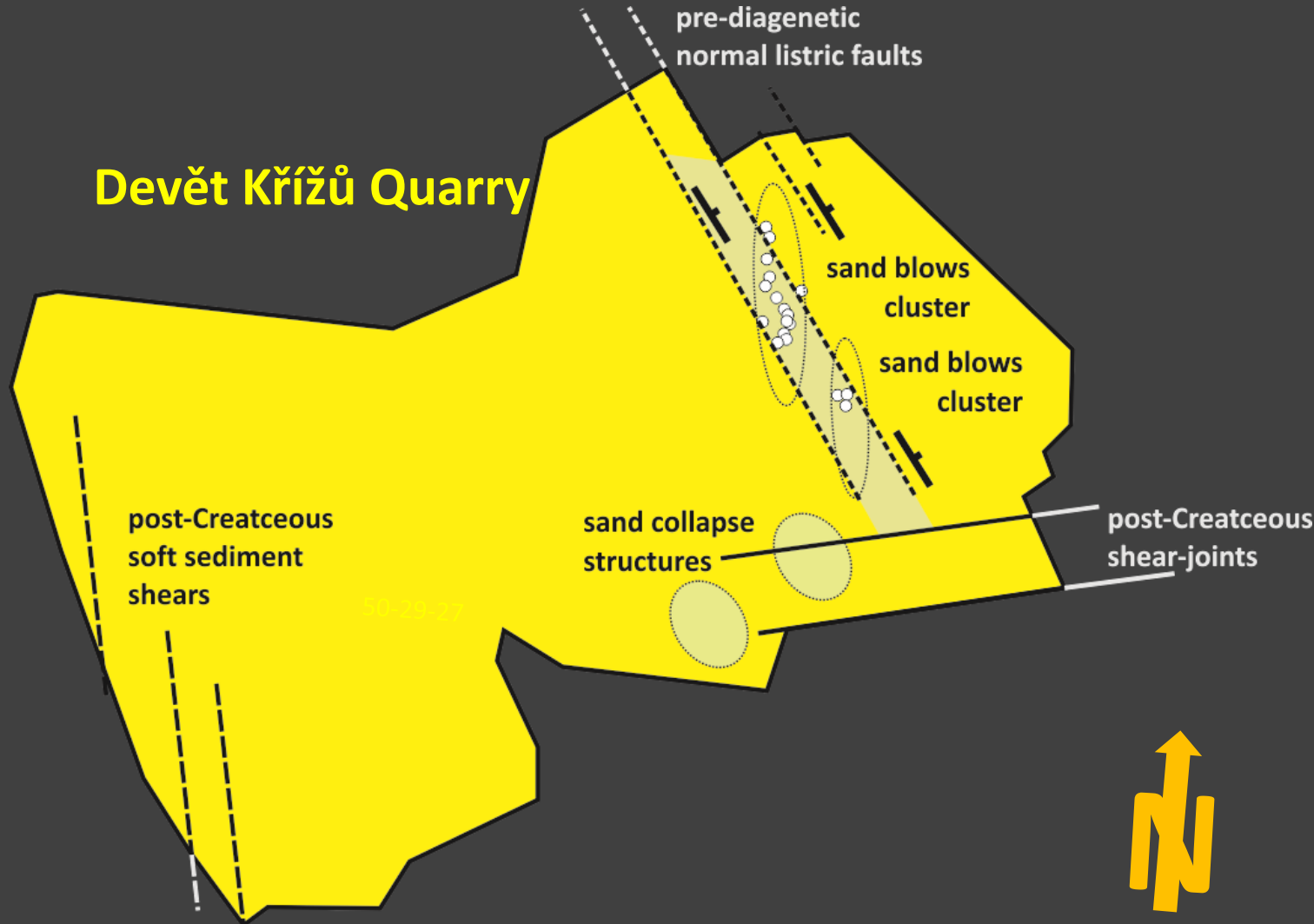
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Spatial relation - listric faults, shears and sand injection structures



śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

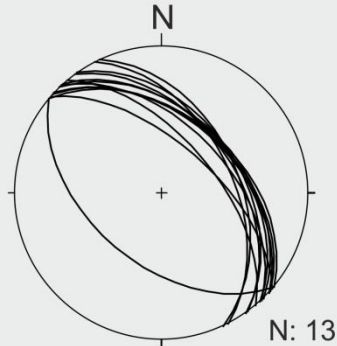


Spatial relation - listric faults, shears and sand injection structures



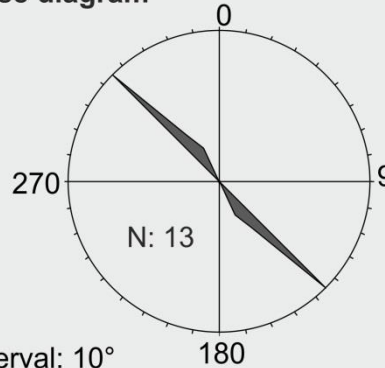
śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

pre-diagenetic normal listric faults



N: 13

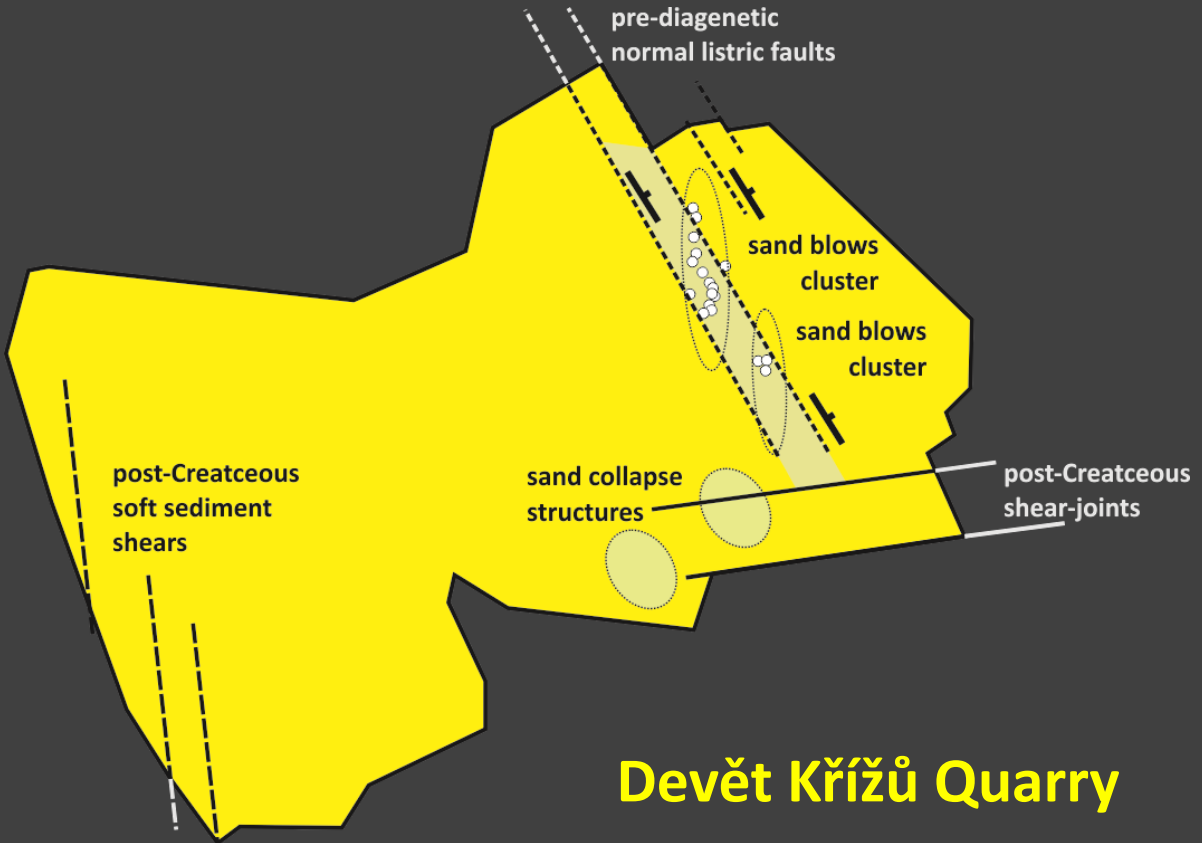
rose diagram



dip angle of the fault planes

Interval: 5°
max = 61.54%

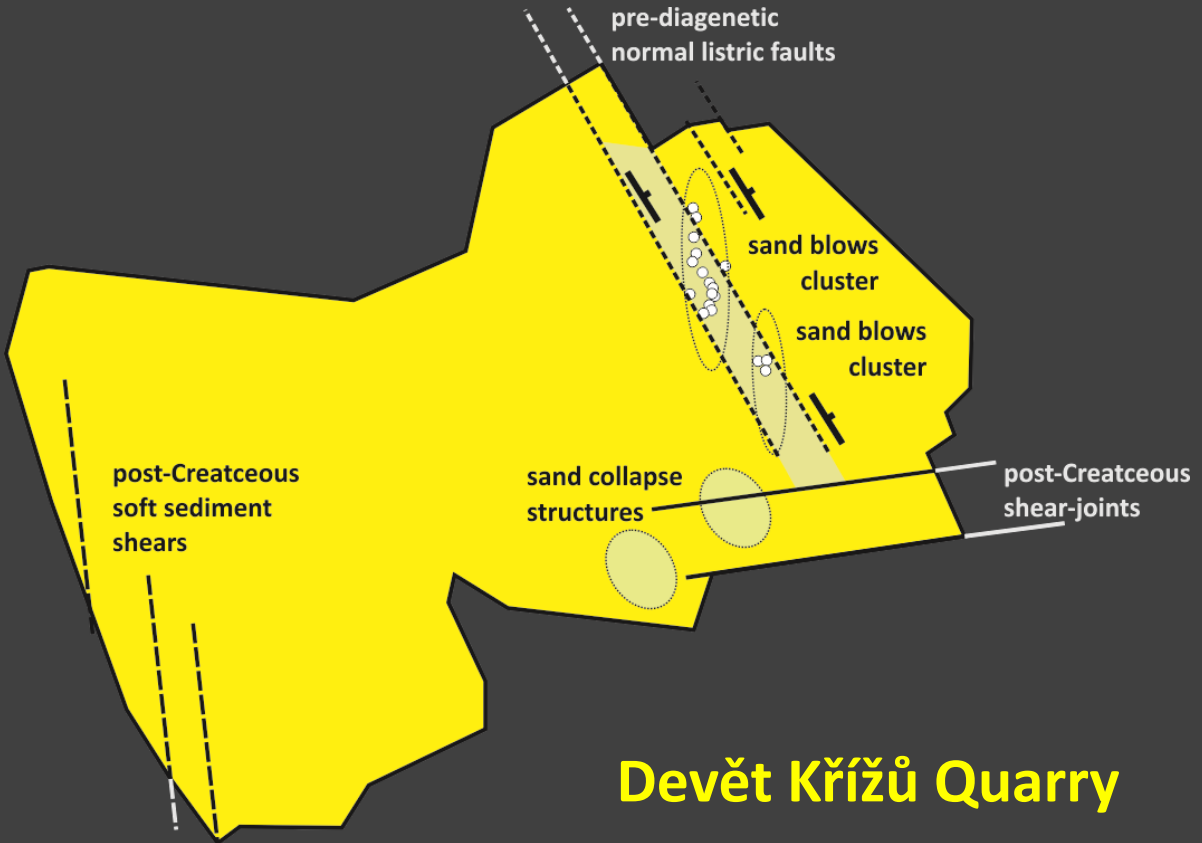
Interval: 10°
max = 61.54%



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śródsudecka strefa ścinania Intrasudetic Shear Zone (ISZ)

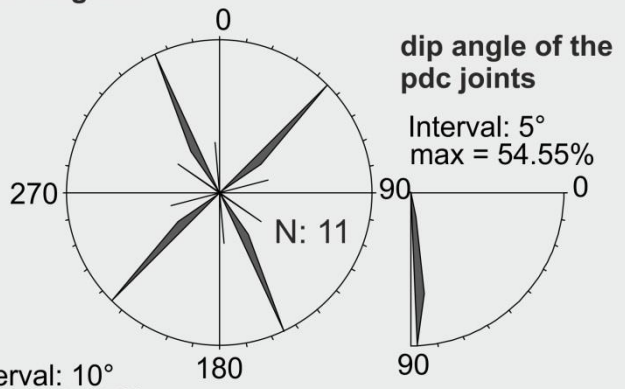


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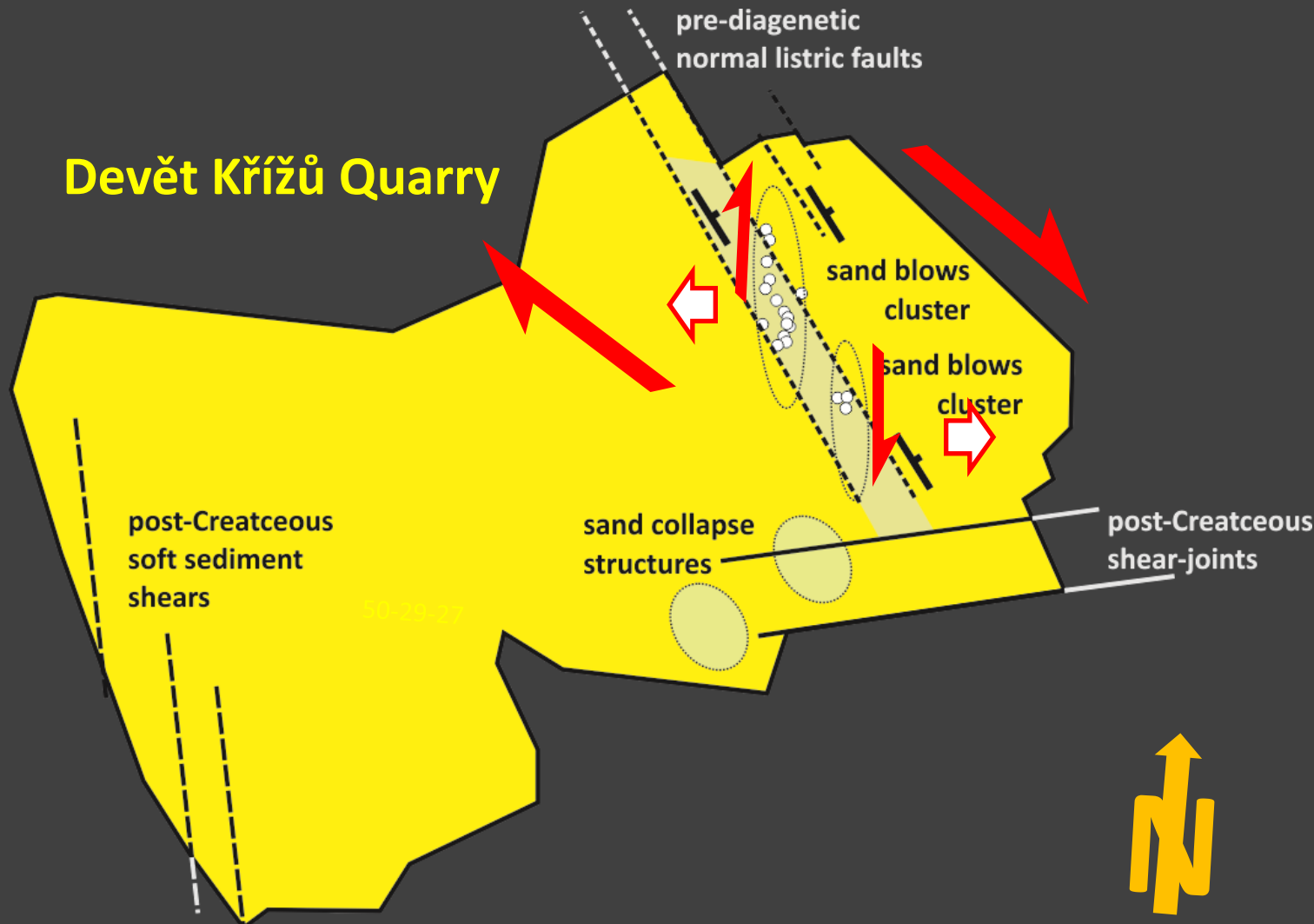
post-diagenetic joints

rose diagram





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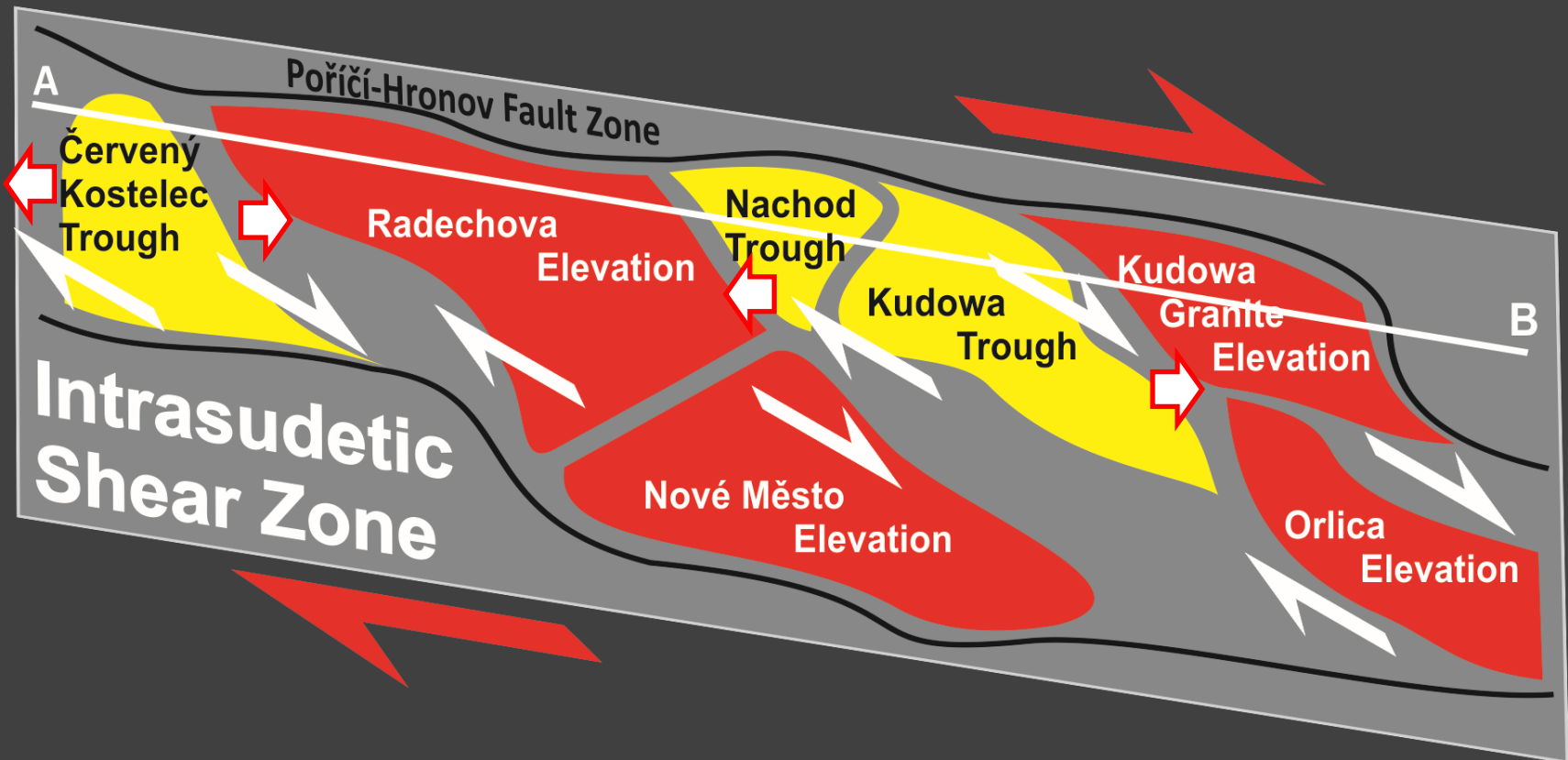
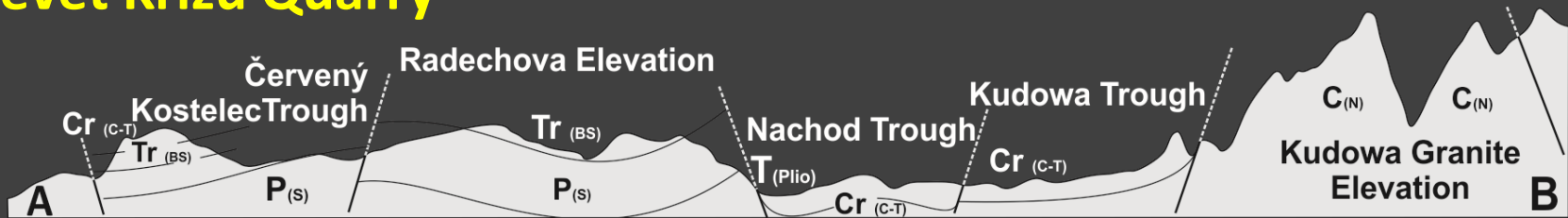


Presumable scheme of the syndepositional (Triassic) kinematics



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Presumable scheme of a dominant kinematics within the ISZ



WNIOSKI CONCLUSIONS

1. Area of the Intrasudetic Shear Zone reflects high seismic activity throughout early Triassic and late Cretaceous (till now???)

2. Presumable kinematic scheme appears to be very stable during long time evolution the Intrasudetic Shear Zone (till now???)

Thank you very much for attention!