

# **LOVORI, CIMETOVCI I AVOKADO NA OBRONCIMA MEDVEDNICE**

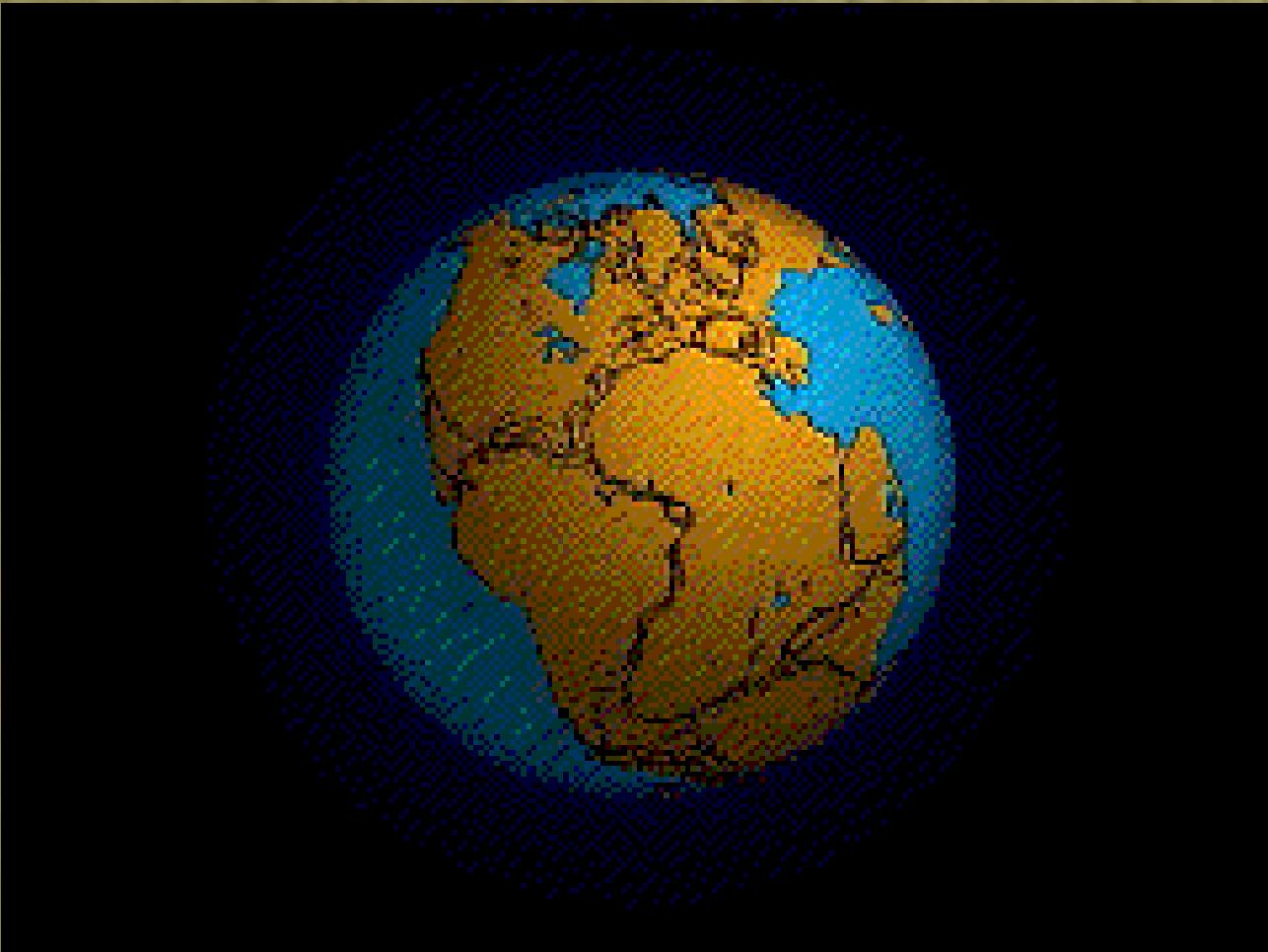
**KOPNENA VEGETACIJA I KLIMA KROZ GEOLOŠKU PROŠLOST**

Jasenka Sremac, PMF

2.skup OkruGeo  
19.-20.travnja 2012.



# POVIJEST ZEMLJE – 4,5 MILIJARDI GODINA PROMJENA



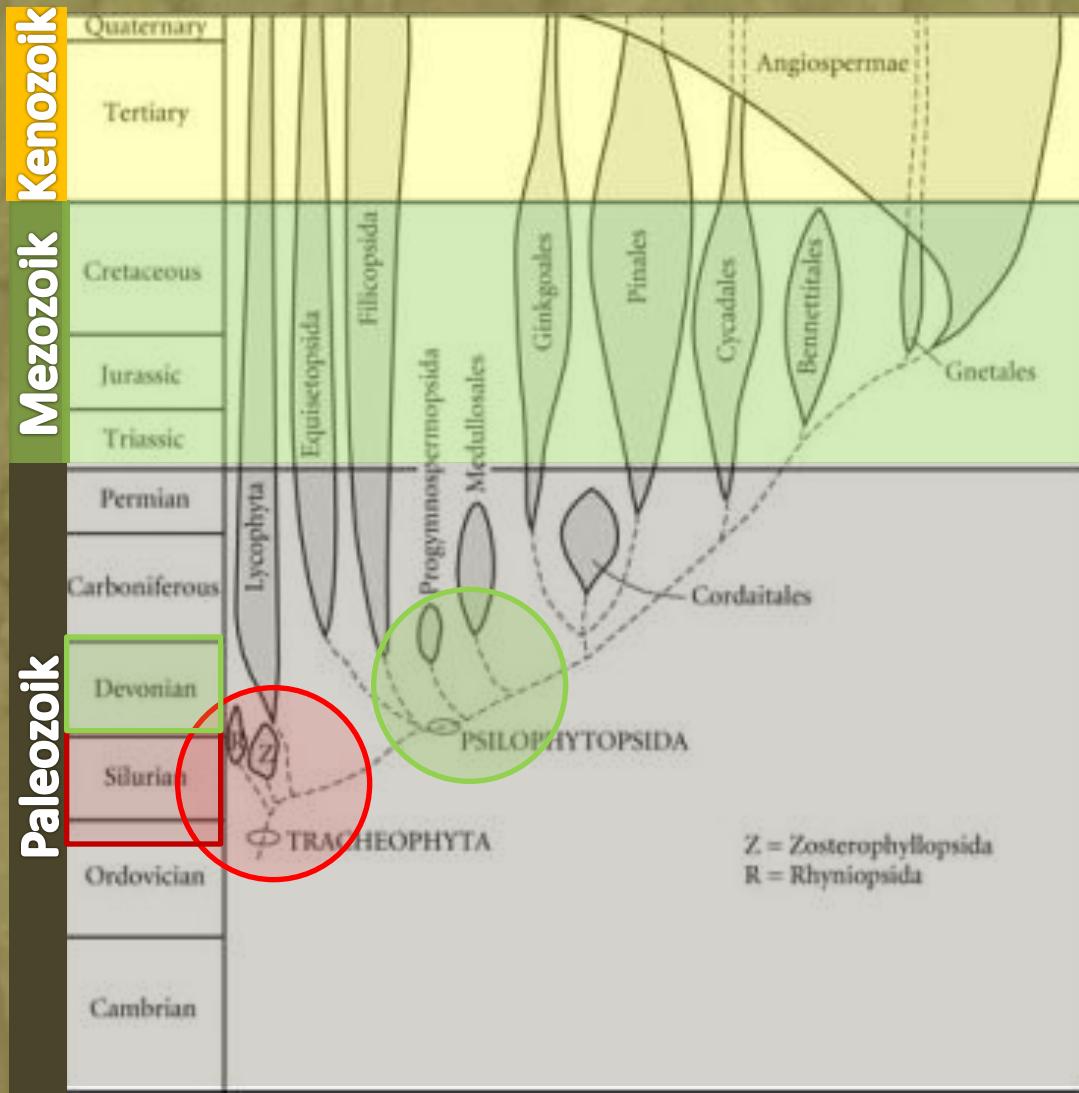
# POJAVA KOPNENOG BILJA

65 mil.g.

250 mil.g.

400 mil.g.

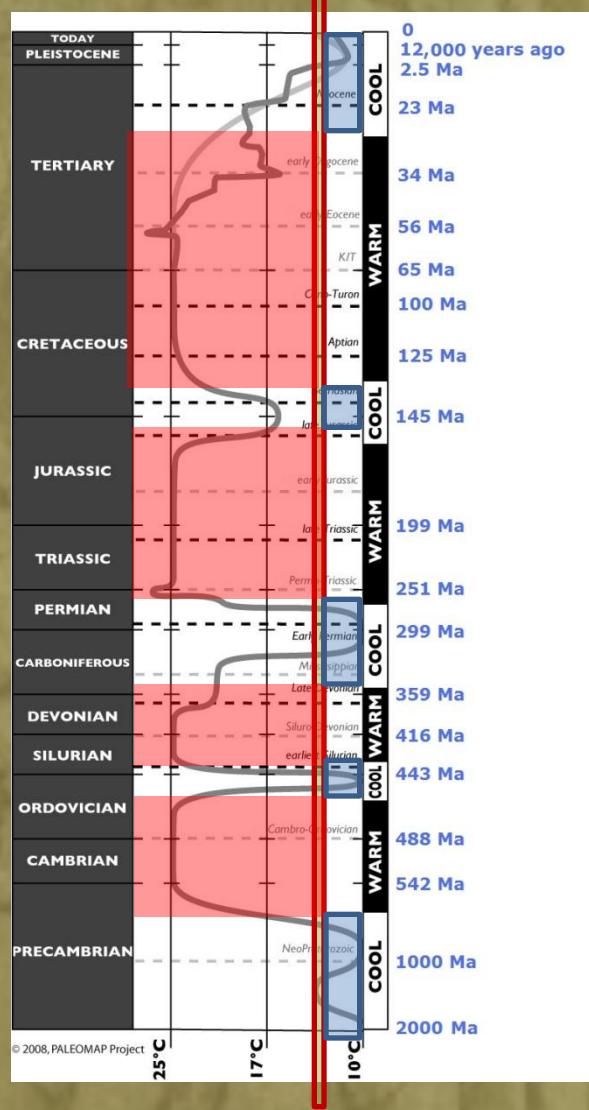
570 mil.g.



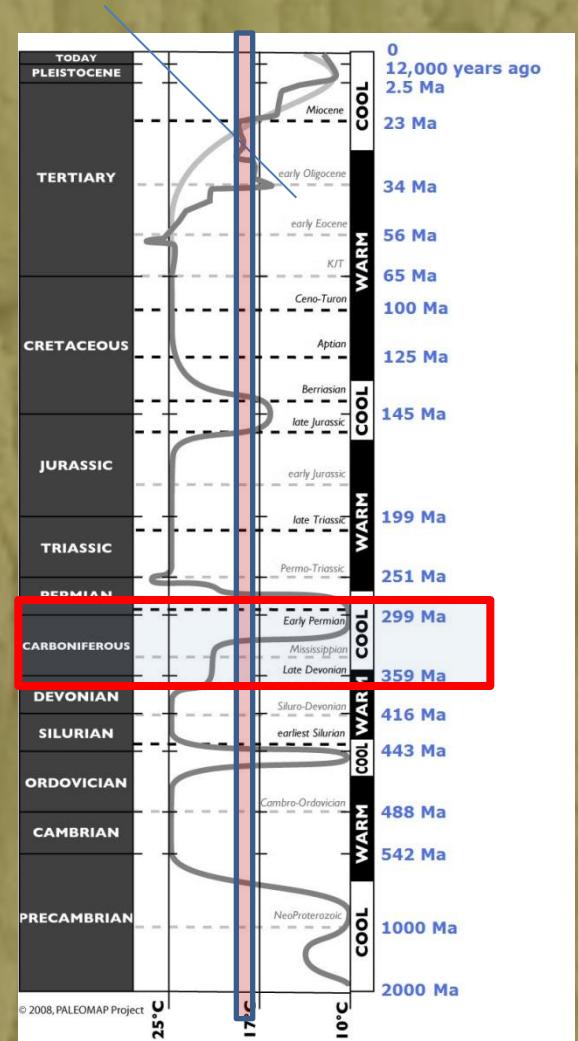
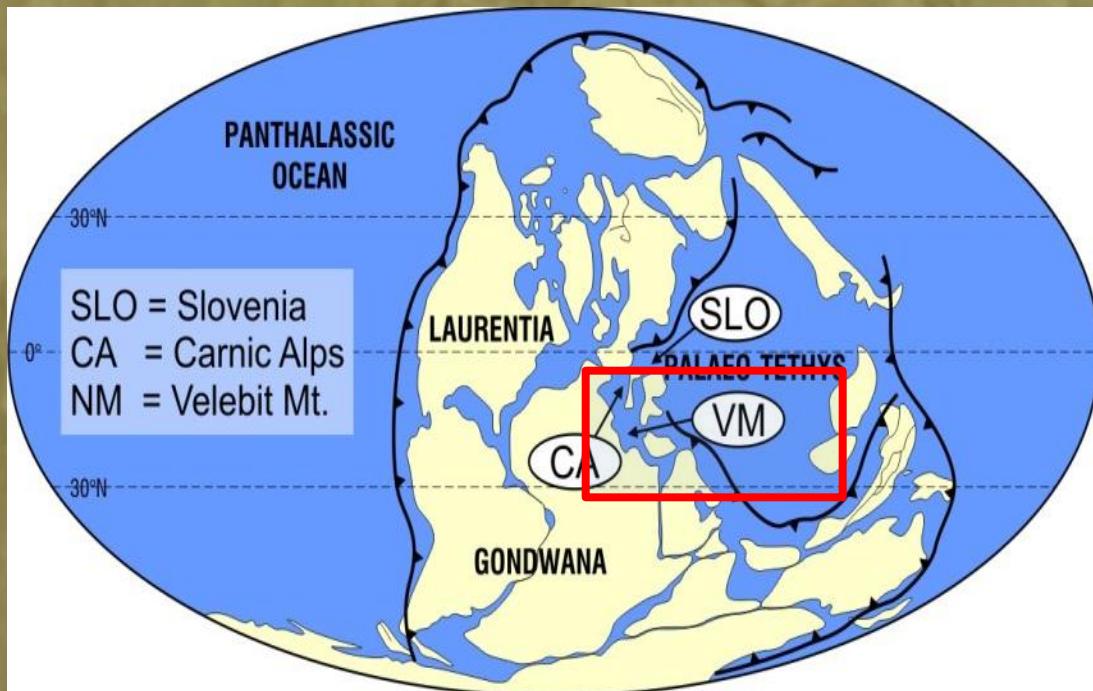
# FOSILIZACIJA BILJA



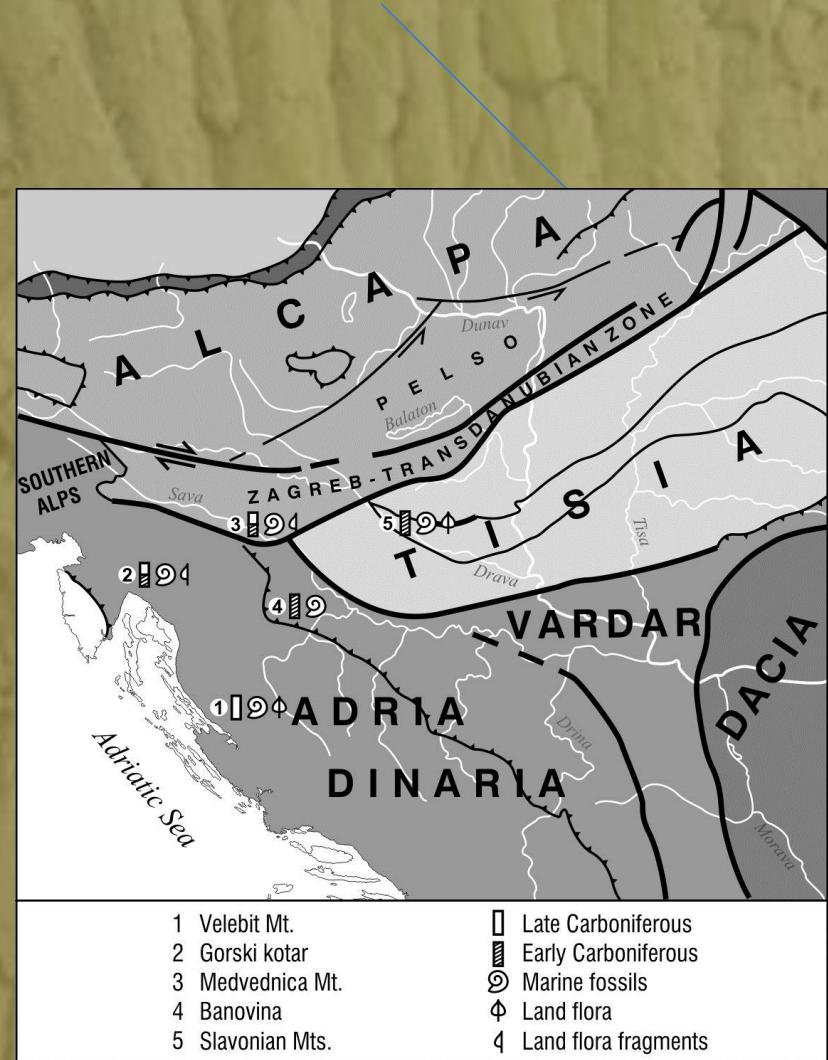
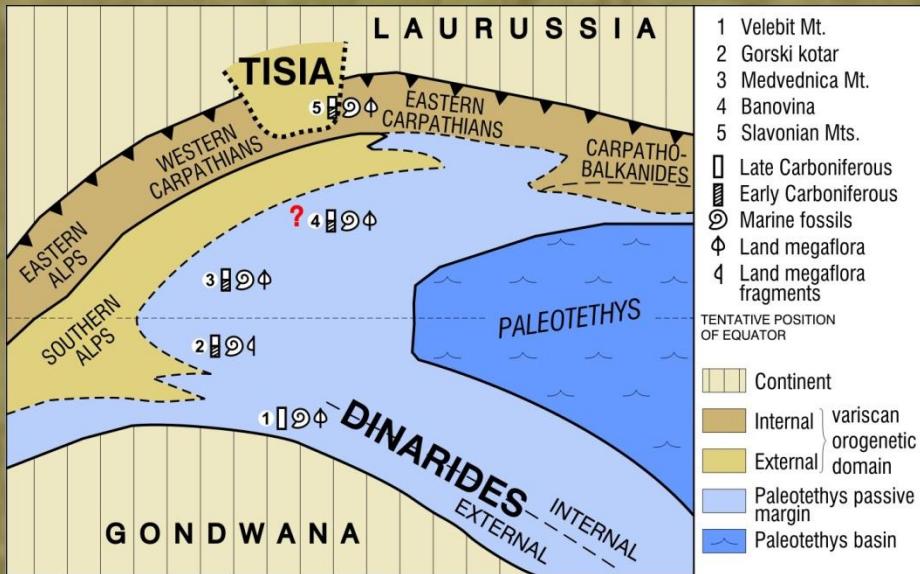
# PROMJENE KLIME TIJEKOM GEOLOŠKE PROŠLOSTI



# KARBON (359-299 milijuna godina)



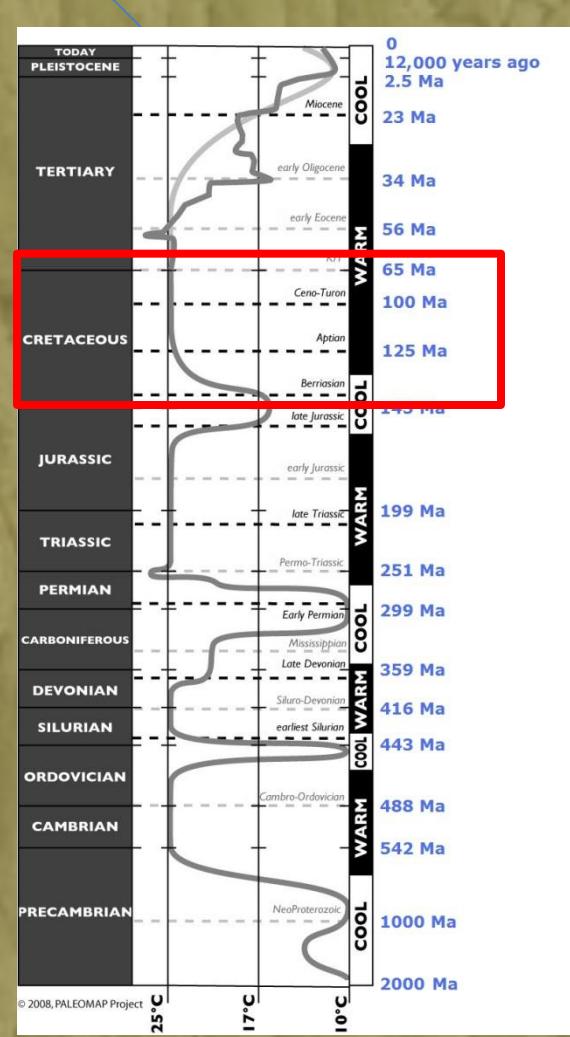
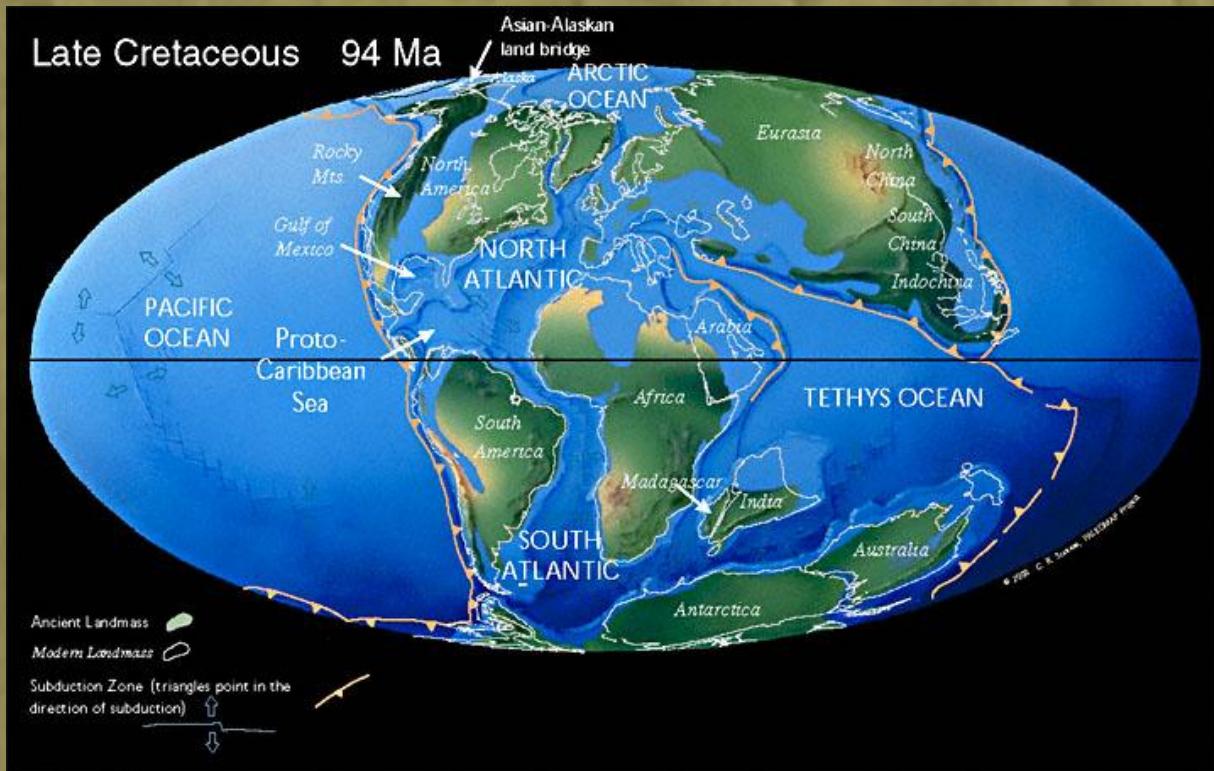
# HRVATSKA PODRUČJA U KARBONU (prije 300 milijuna godina)



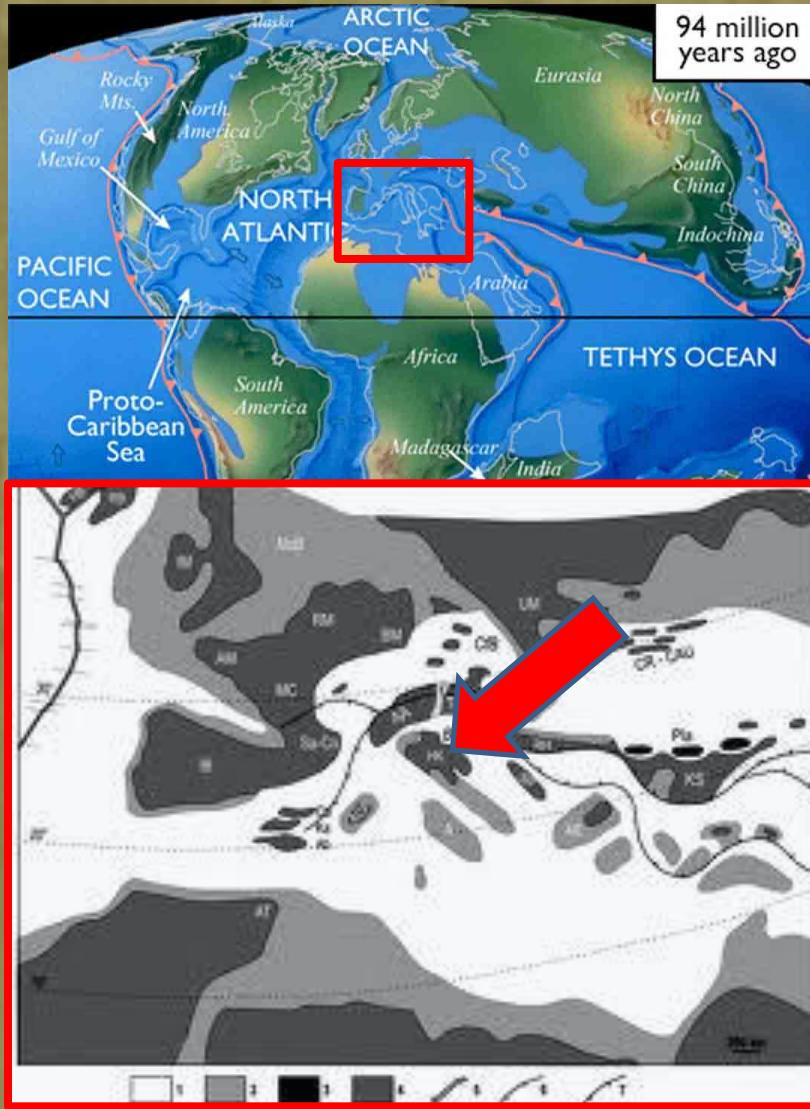
# KARBONSKI TERESTRIČKI OKOLIŠI



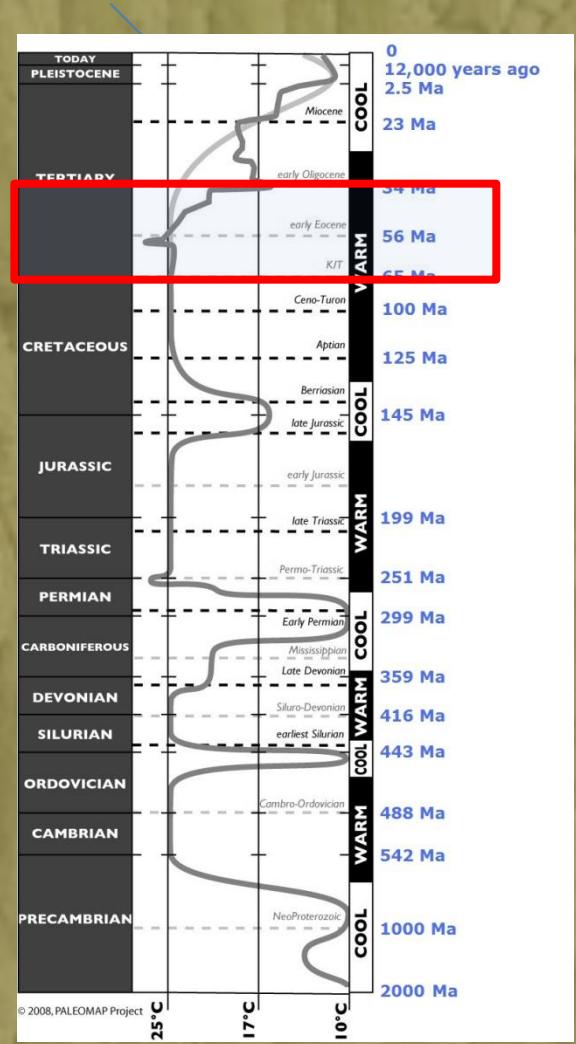
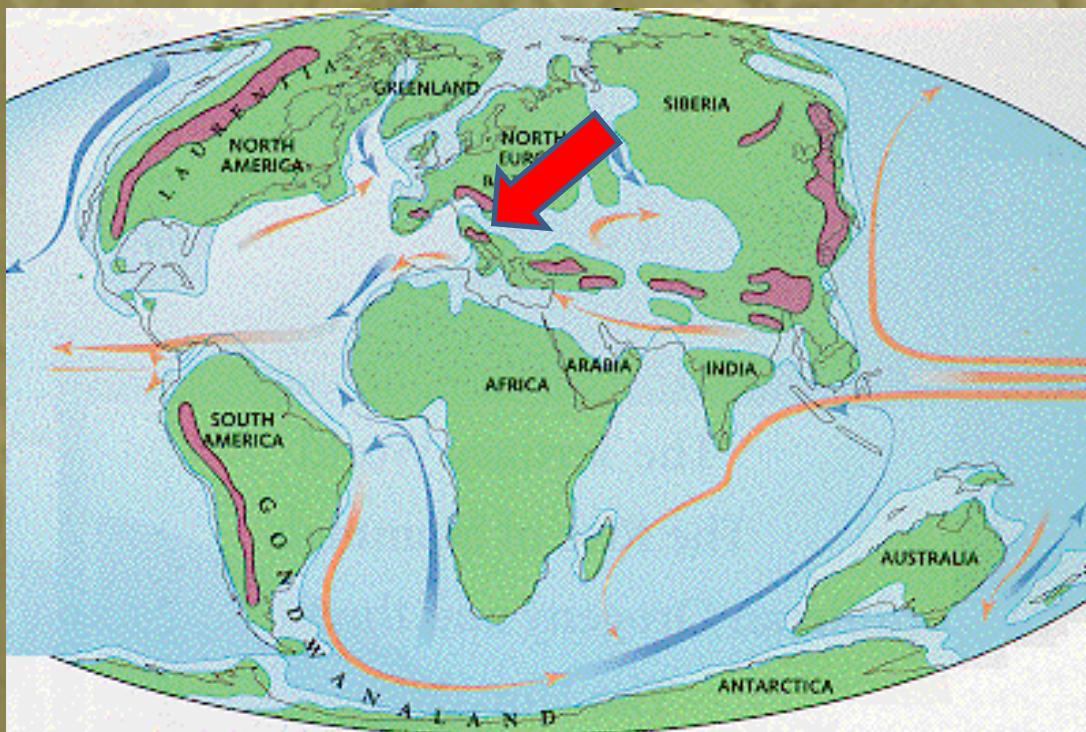
# KREDA (145-65 milijuna godina)



# KREDNI TERESTRIČKI OKOLIŠI



# PALEOGEN (65-23 milijuna godina)

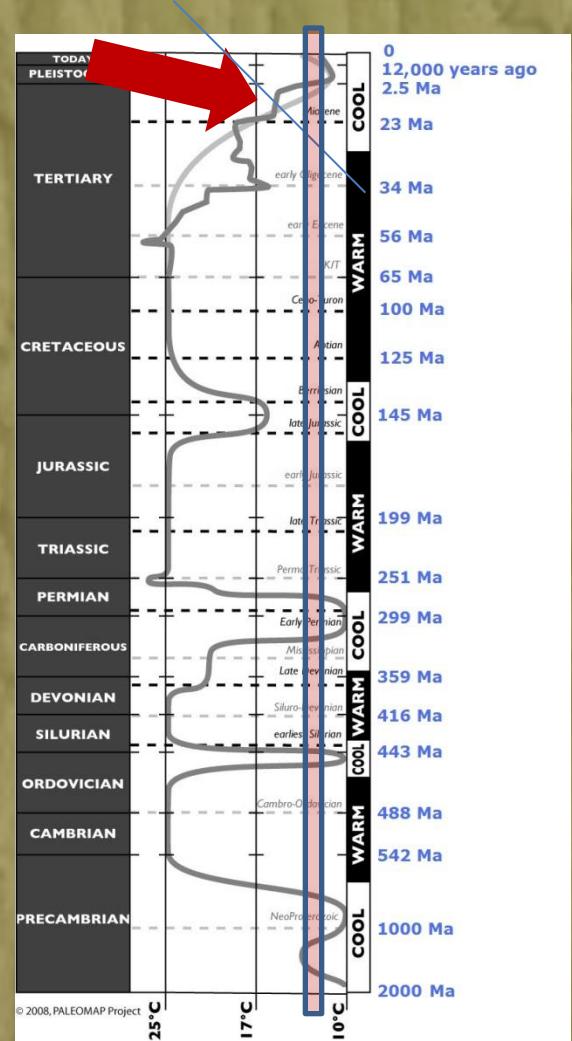
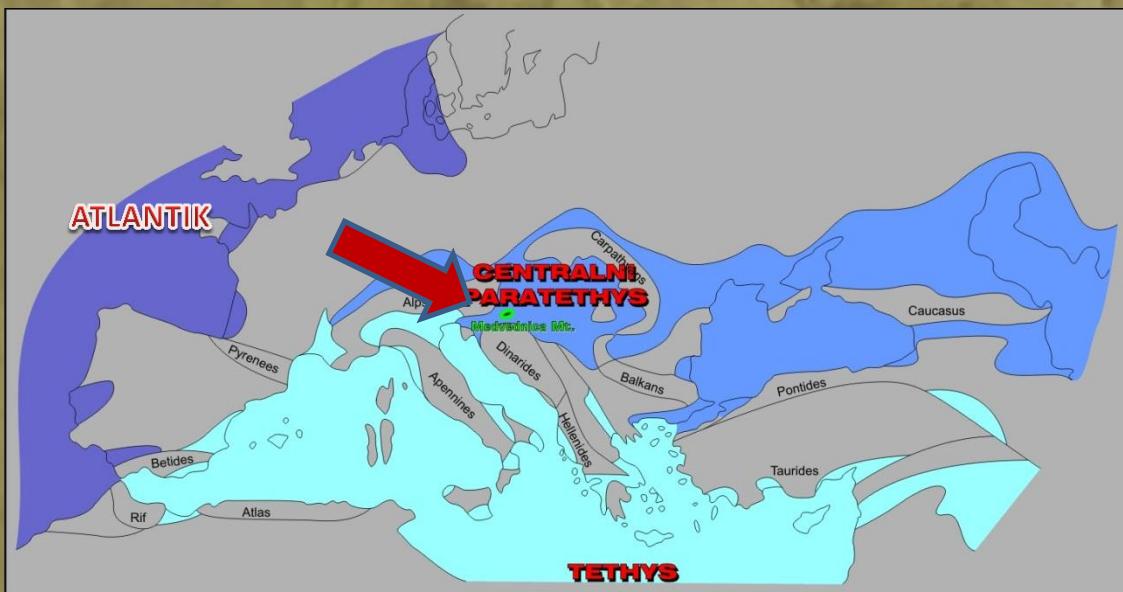


# PALEOGENSKI TERESTRIČKI OKOLIŠI



SCIENCEphotOLIBRARY

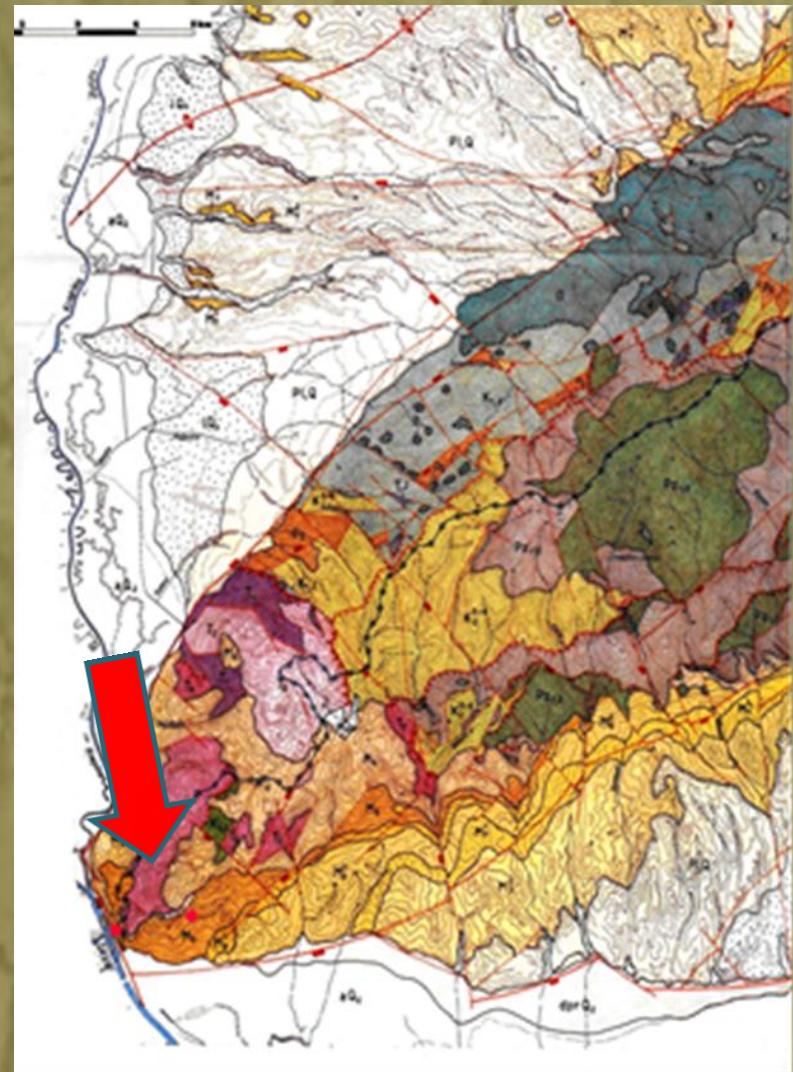
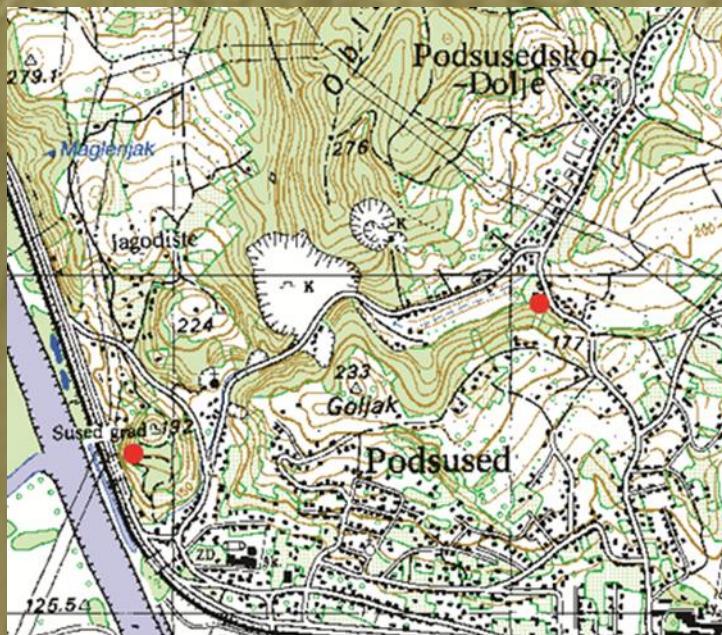
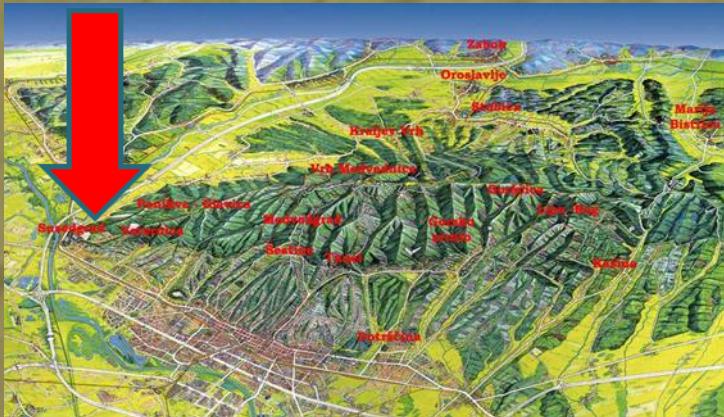
# MIOCEN (23-5,3 milijuna godina)



# MEDVEDNICA U MIOCENU



# NALAZIŠTE MIOCENSKE FOSILNE FLORE KOD PODSUSEDADA (starost oko 12 milijuna godina)

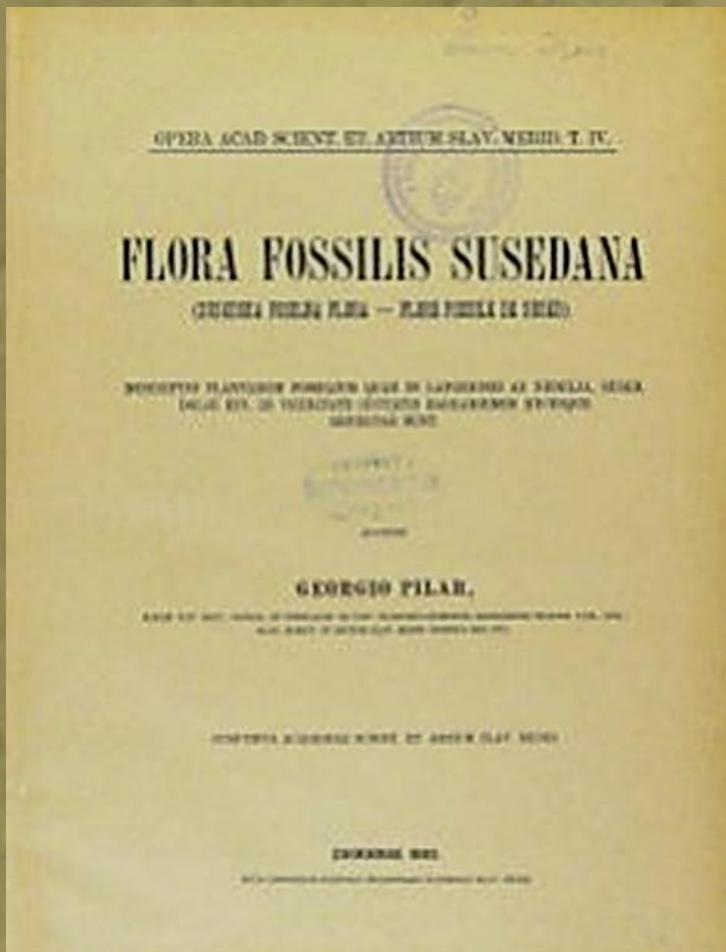


# SUSEDGRAD NEKAD (19. stoljeće) I DANAS

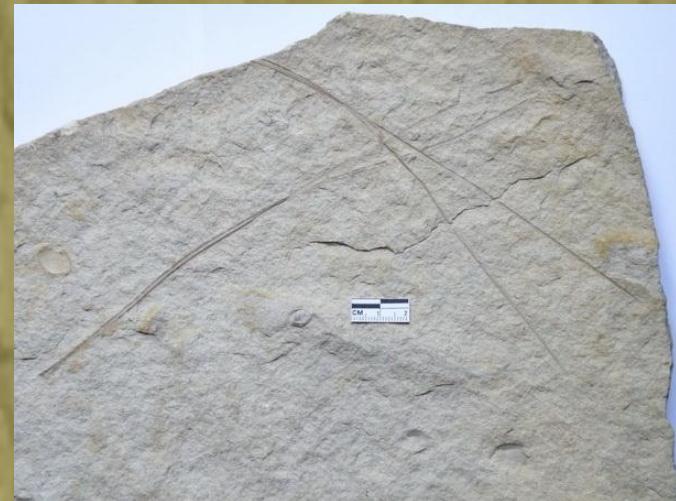


# FLORA FOSSILIS SUSEDANA

## Gjuro Pilar, 1883



# MIOCENSKA FLORA IZ ZBIRKE PMF-a



# PILAROVI CRTEŽI FOSILNE KOPNENE MAKROFLORE



# PILAROVI REZULTATI

- Lokaliteti: Sused, Dolje, Sv. Nedelja.
- 10 godina prikupljanja fosilne makroflore.
- Ukupno odredio 232 vrste vodenog i kopnenog bilja.
- Označio ih prema učestalosti.
- Pokušao usporediti s recentnima (58 novih).
- Rad sadrži 15 tabli s 213 crteža (140 je crtao sam Pilar).

# ISTRAŽIVANJE FOSILNE PELUDI

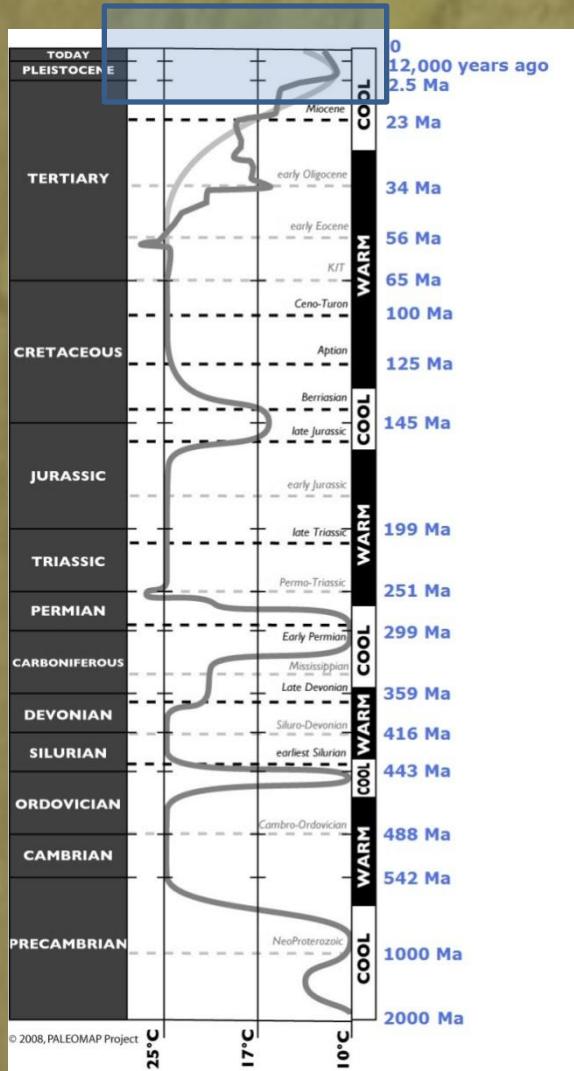
## Dražen Brajković – disertacija, 2011



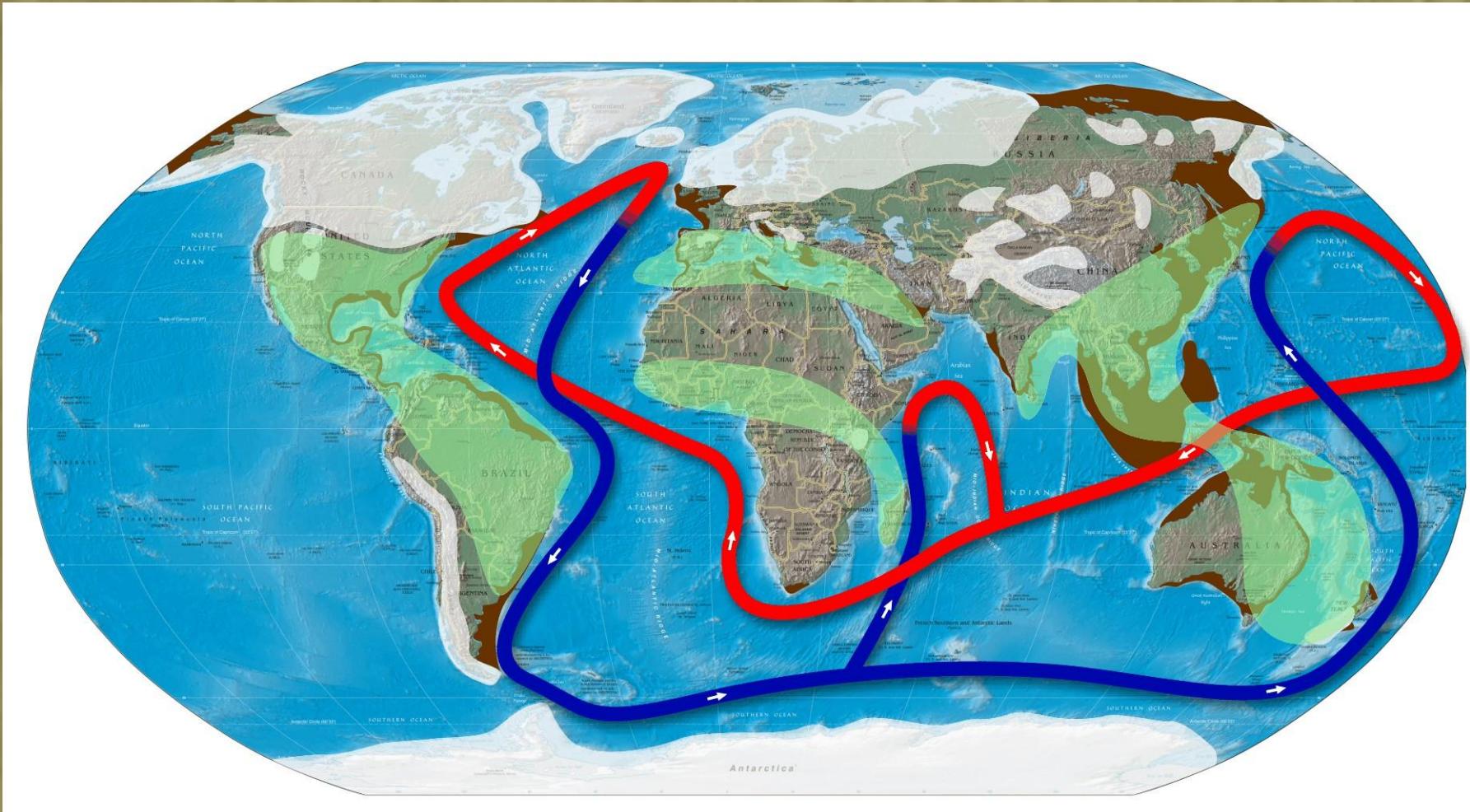
# REZULTATI ISTRAŽIVANJA PELUDI I SPORA

- Određene su 94 formvirste spora i peluda, među kojima i neke nove.
- Pelud potječe iz tri florne zajednice: (1) mezofilne miješane šume četinjača i listopadnog drveća, (2) močvarne šume i (3) šume poplavnih ravnica.
- Klima je bila suptropska.

# POSTMIOCENSKO ZAHLADNJENJE I OLEDBA



# PODRUČJA ZAHVAĆENA PLEISTOCENSKOM OLEDBOM (BIJELO) I DANAŠNJI AREALI MIOCENSKIH SVOJTI NAĐENIH NA MEDVEDNICI (ZELENO)



# POPIS GLAVNE KORIŠTENE LITERATURE

- BRAJKOVIĆ, D. (2011): Palinotaksonomska analiza fosilne flore okolice Podsuseda. - *Disertacija. Sveuč. u Zagrebu, PMF*, 137 str.
- MILNE, R.I. (2006): Northern Hemisphere Plant Disjunctions: A Window on Tertiary Land Bridges and Climate Change. - *Annals of Botany* 98, 465-472.
- MUTKE, J. & BARTHLOTT, W. (2005): Patterns of vascular plant diversity at continental to global scales. - *Biol. Skr.* 55, 521-531.
- PILAR, GJ. (1883): Flora fossilis Susedana. - *Djela JAZU*, Zagreb.
- SREMAC, J. (in press): Influence of terrestrial sedimentation in Pennsylvanian rocks of Croatia. – *Geologia Croatica*.
- <http://plants.usda.gov/java/>
- [www.scotese.com](http://www.scotese.com)

HVALA NA PAŽNJI!

## KONTAKT :

- Web-adresa: <http://geol.pmf.hr/~jsremac/>
- Adresa el. pošte: jsremac@geol.pmf.hr

