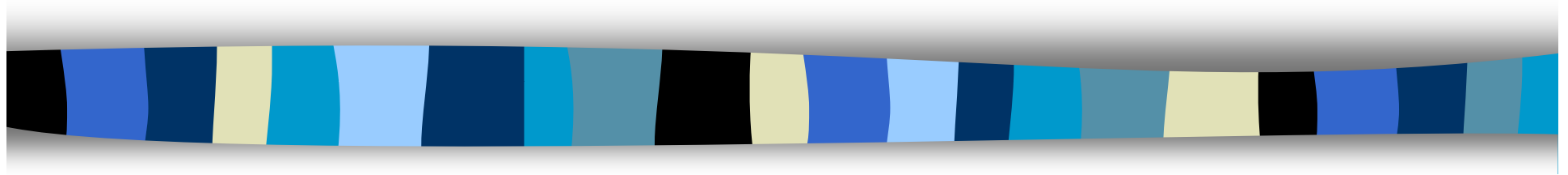


subsidenční analýza (Subsidence history)

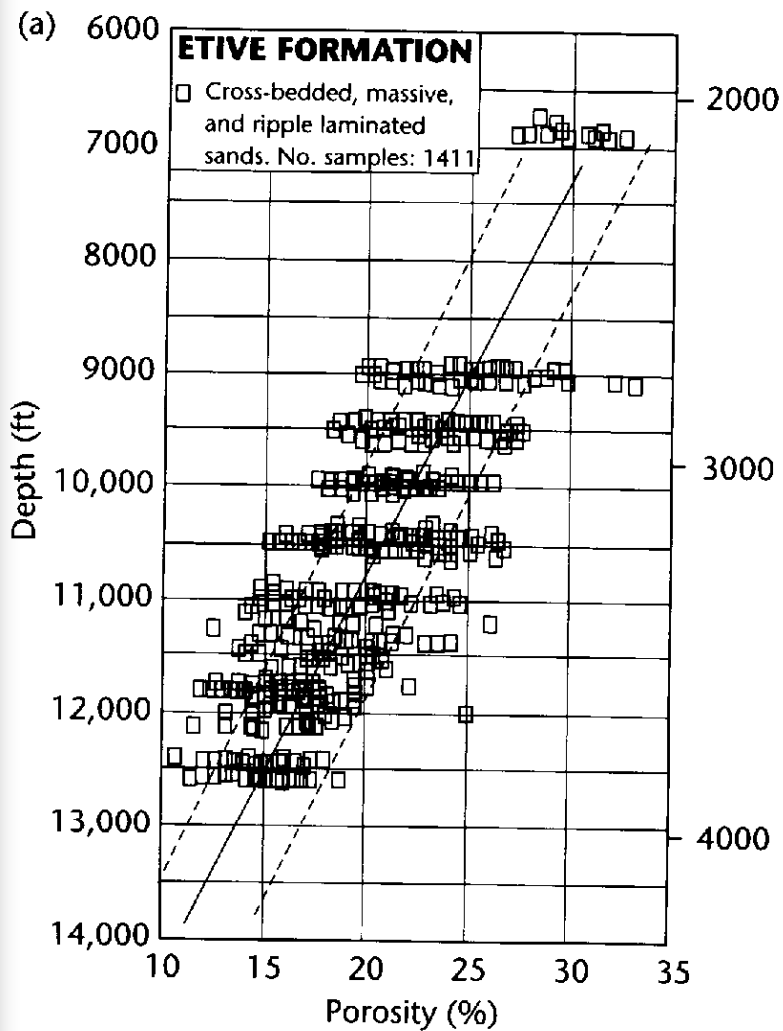


Geologie sedimentárních pánví (Geology of sedimentary Basins)

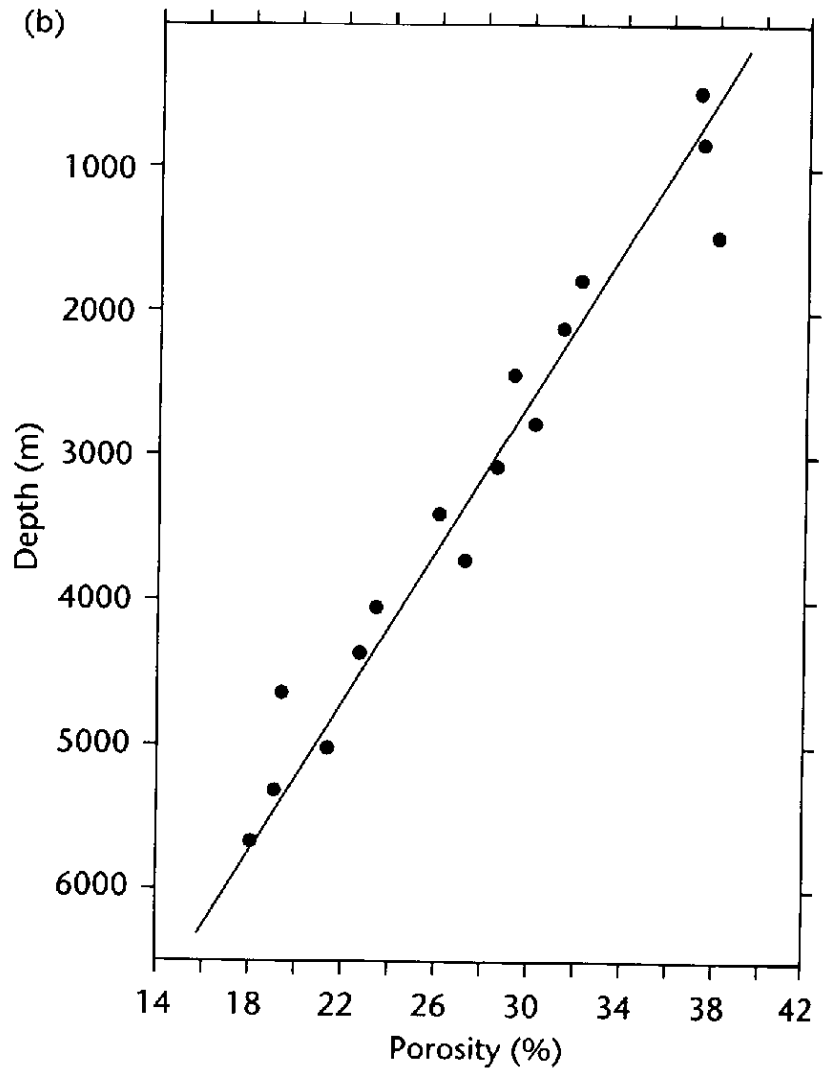
LS (Summer term)

K.Martínek

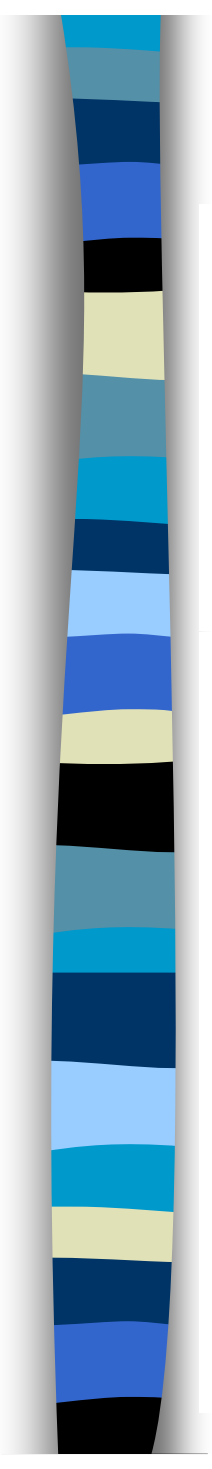
lineární redukce porozity s hloubkou



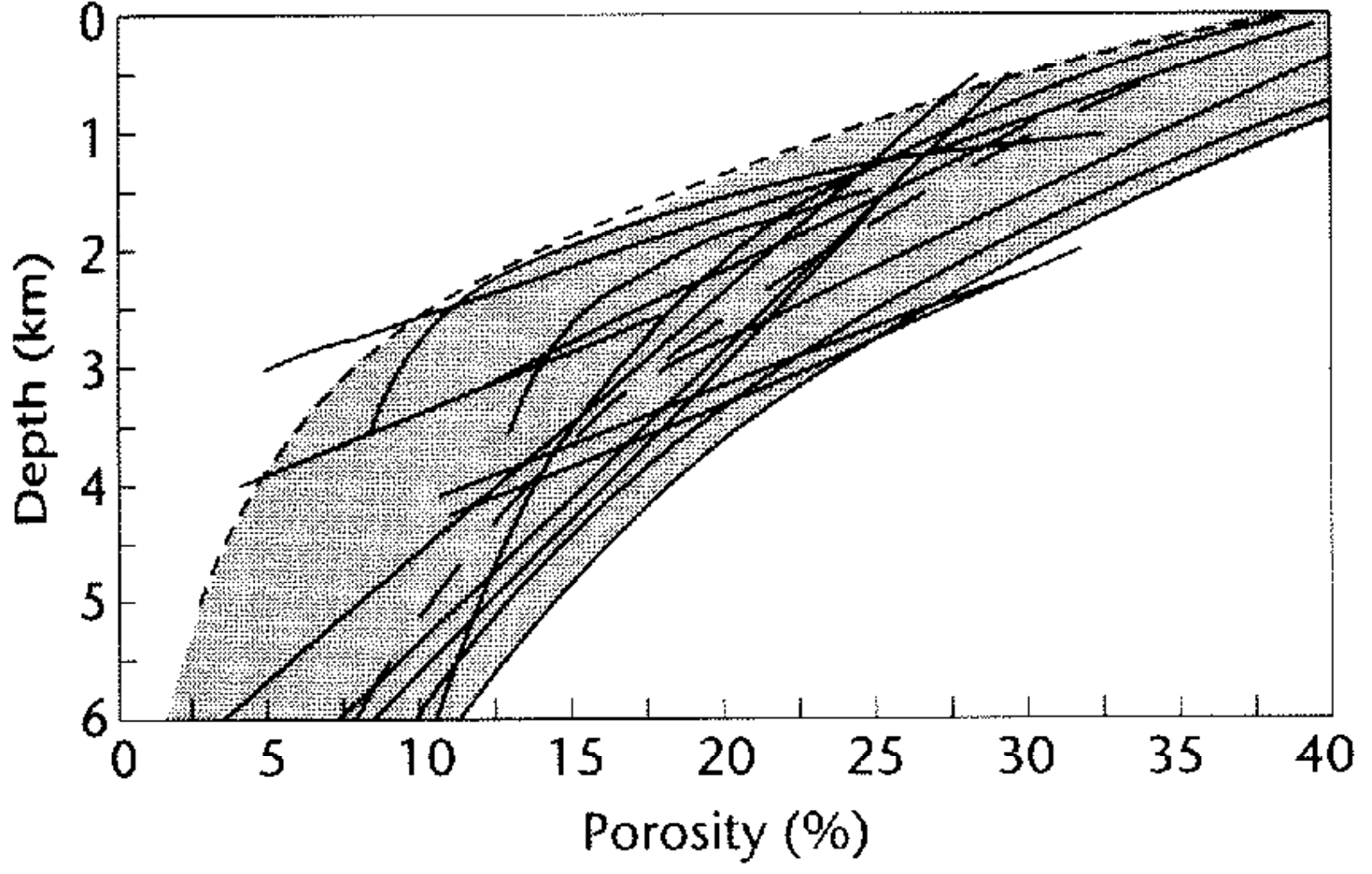
jura, Severní moře



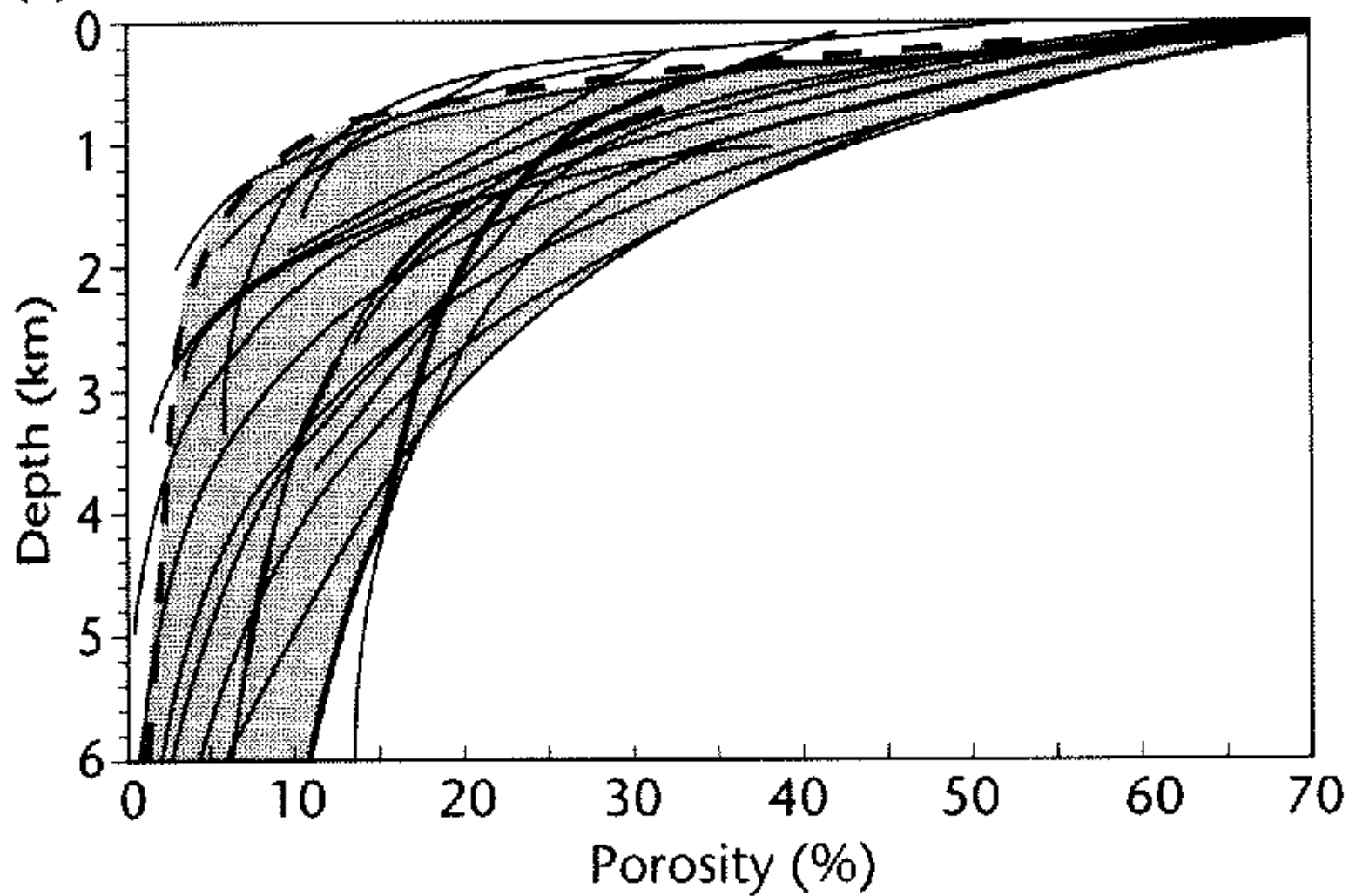
tercierní písky, Louisiana
17 000 vzorků

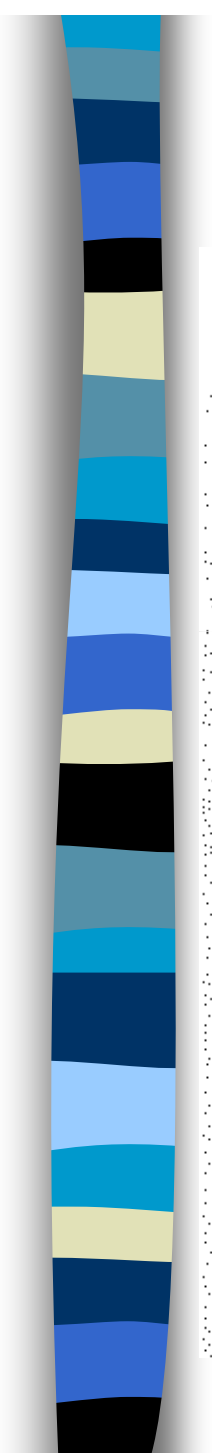


(a) **SANDSTONE**

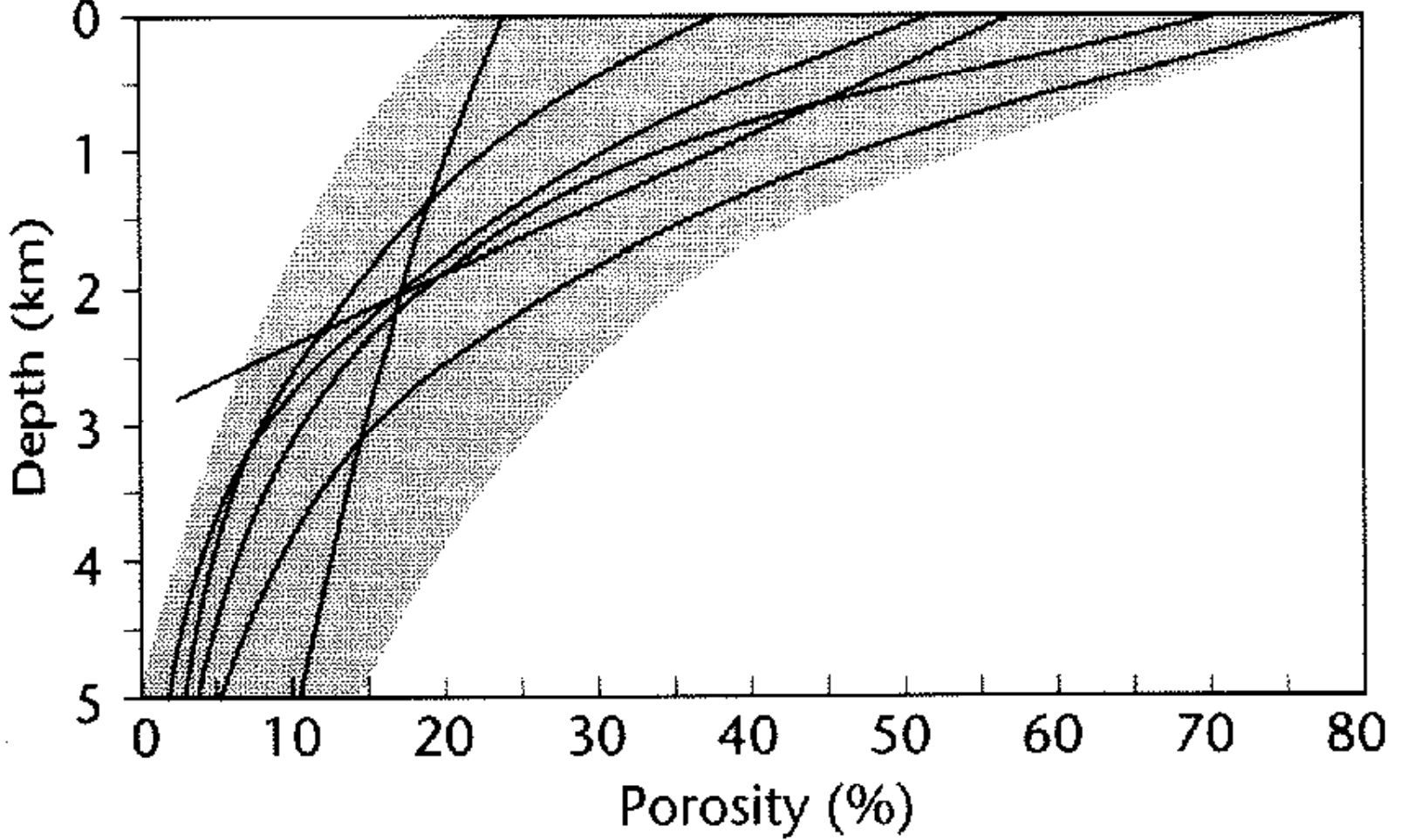


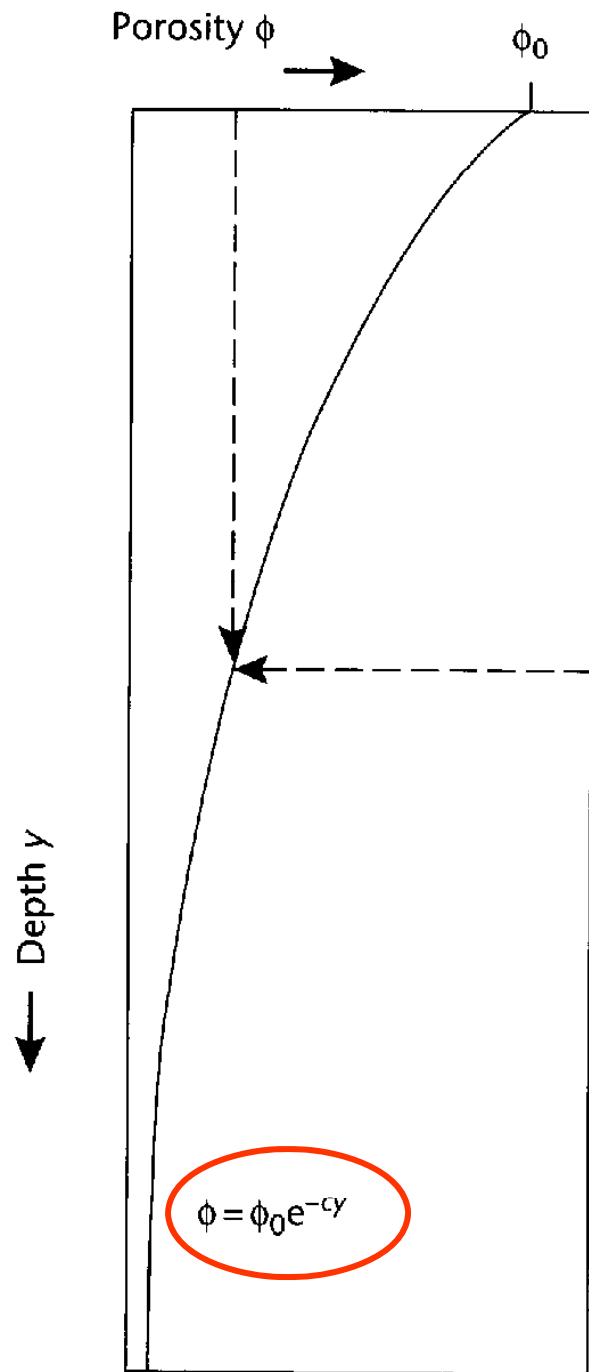
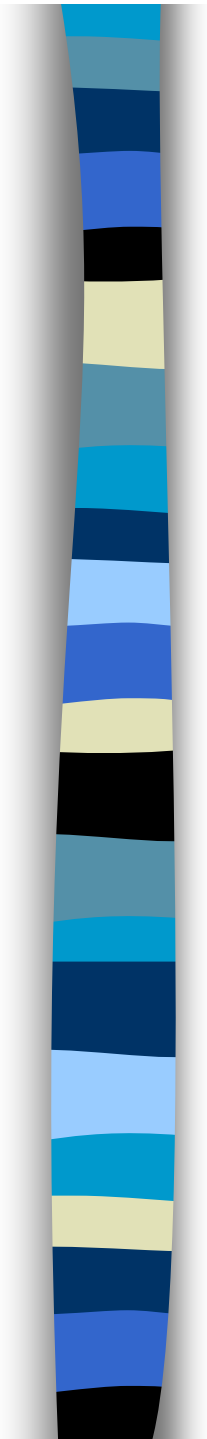
(b) **SHALE**





(c) **CARBONATE**





$$\Phi = \Phi_0 e^{-cy}$$

$$\Phi_{(y=1/c)} = \Phi_0 e^{-1} = \frac{1}{e} \Phi_0$$

Φ – porozita v hloubce y

Φ_0 – iniciální porozita (na povrchu)

C – kompakční koeficient

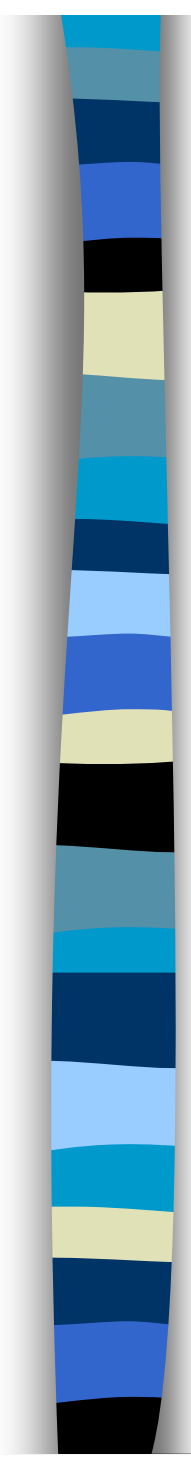


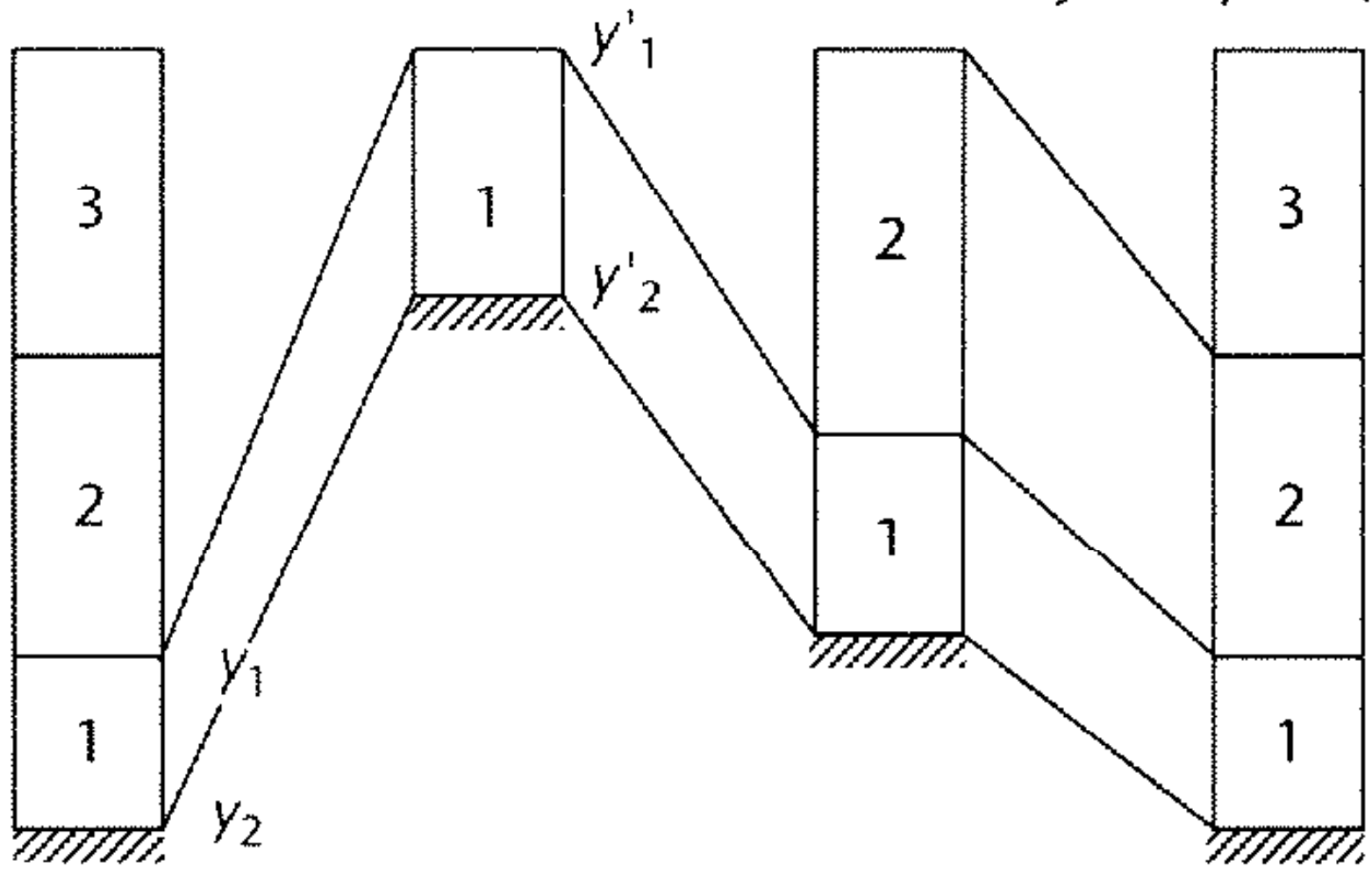
Table 9.1 Exponents used by Sclater and Christie (1980) for different lithologies in the subsurface of the North Sea.

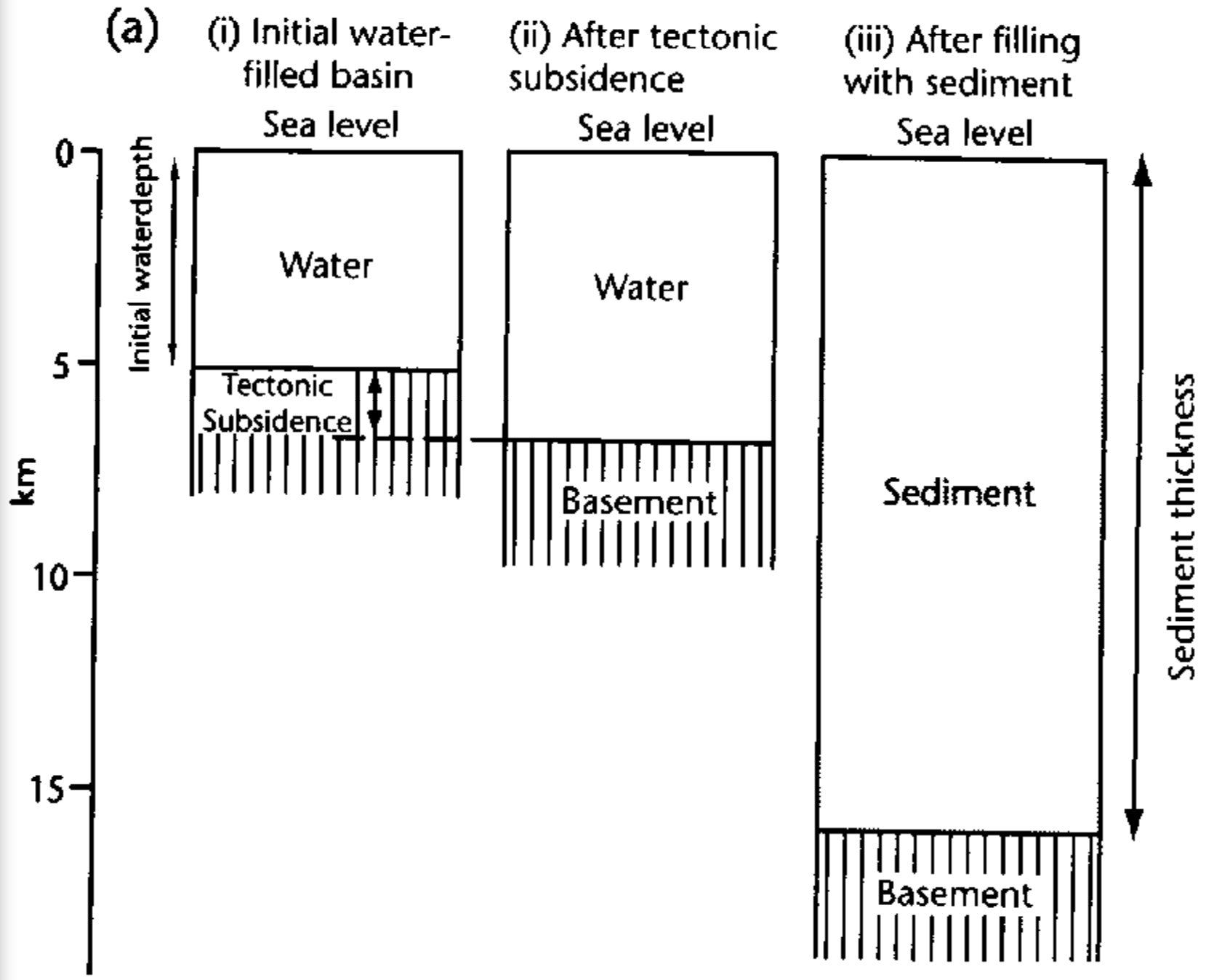
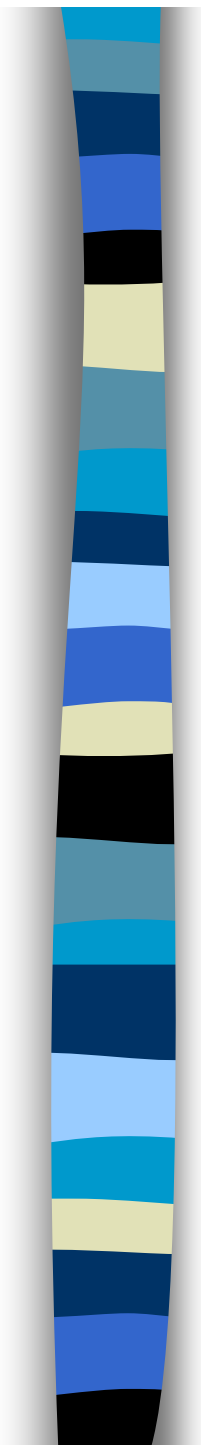
Lithology	Surface porosity ϕ_0	Porosity–depth coefficient c (km^{-1})	Sediment grain density ρ_{sg} (kg m^{-3})
Shale	0.63	0.51	2720
Sandstone	0.49	0.27	2650
Chalk	0.70	0.71	2710
Shaly sandstone	0.56	0.39	2680

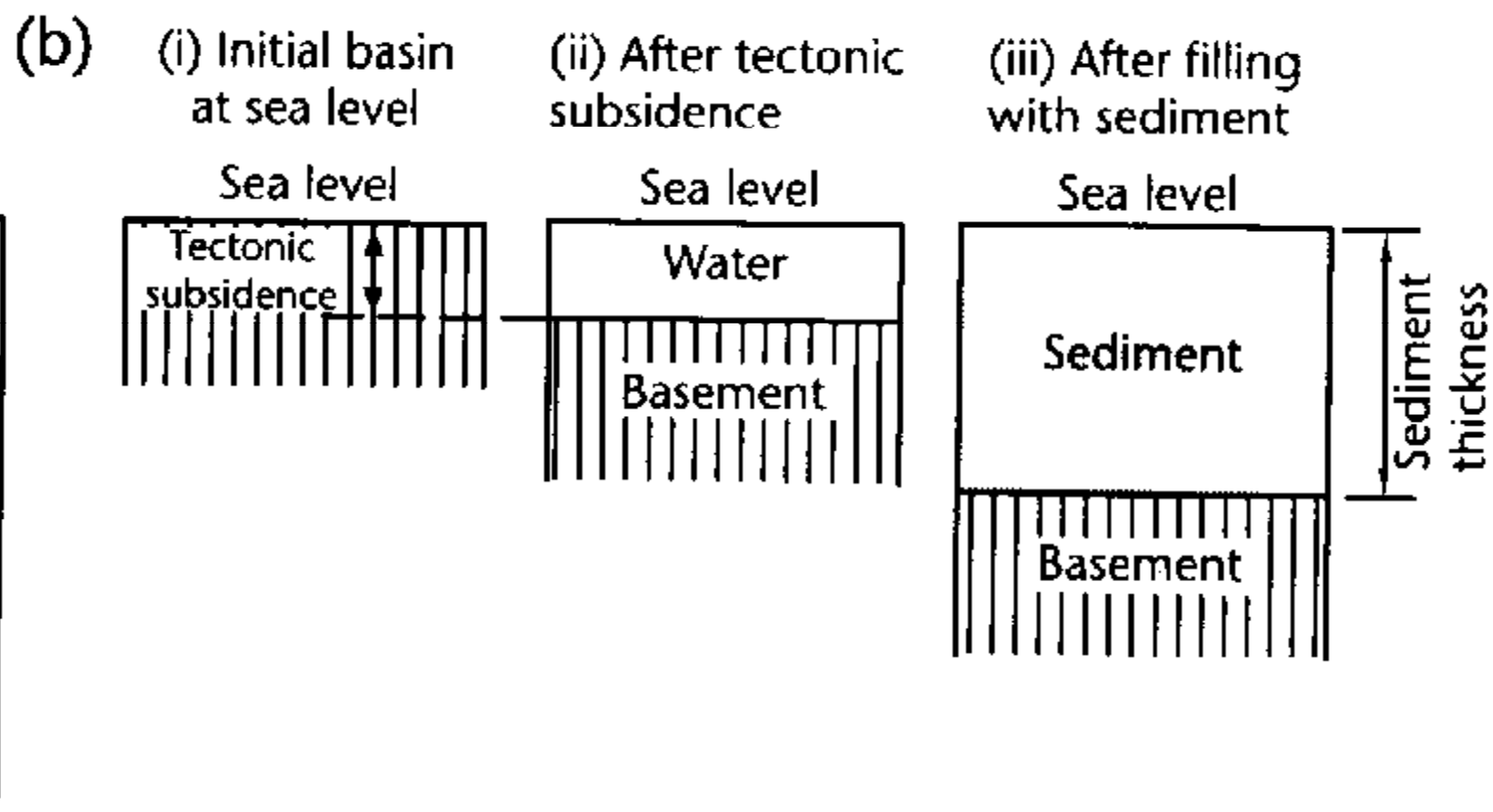
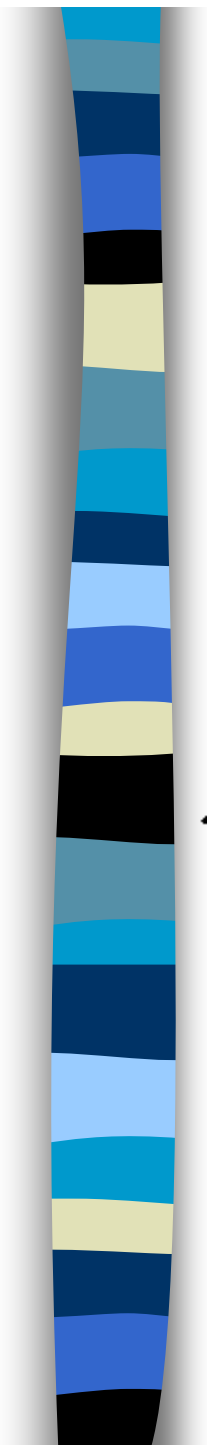
Remove (2) and (3)
Decompact (1)

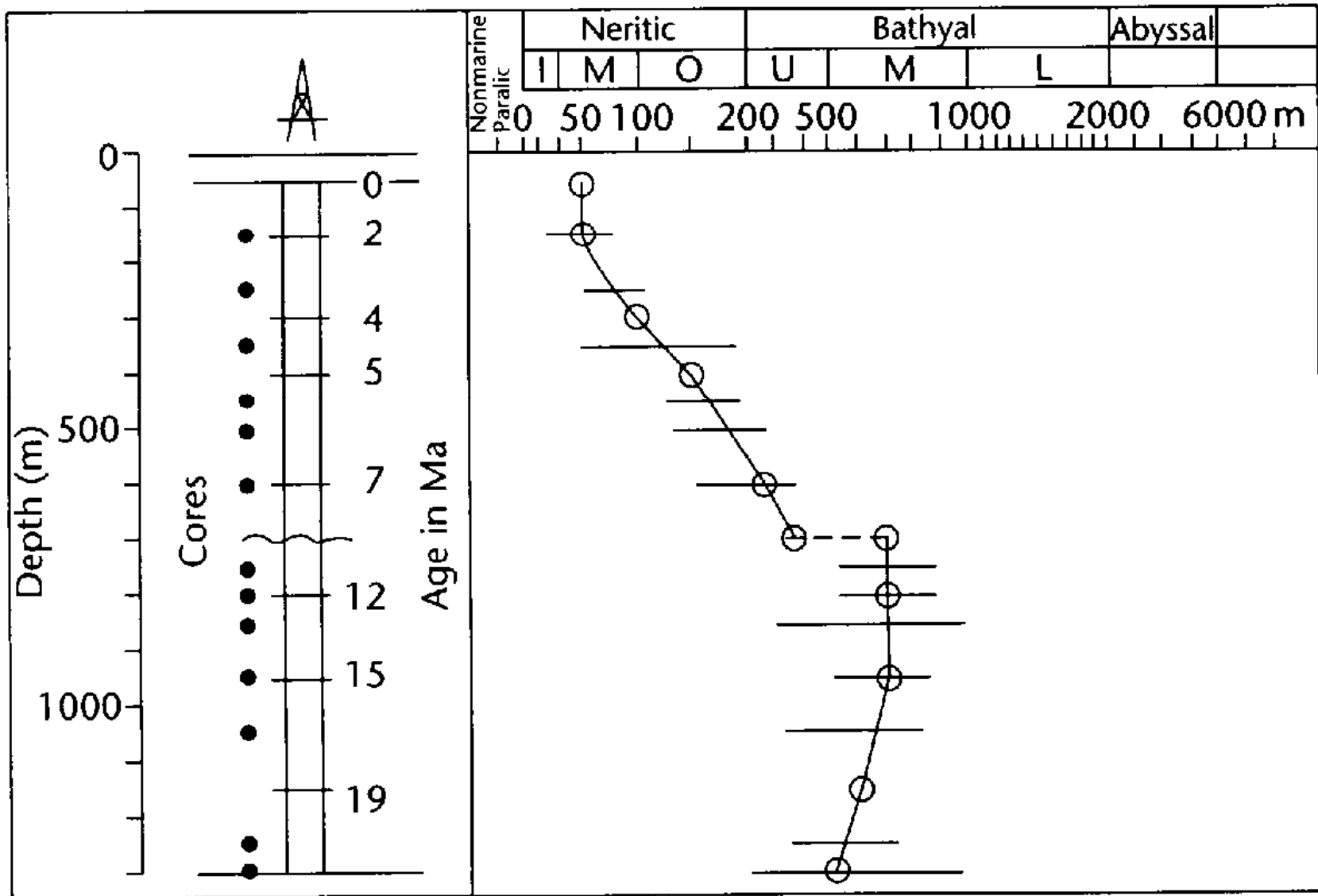
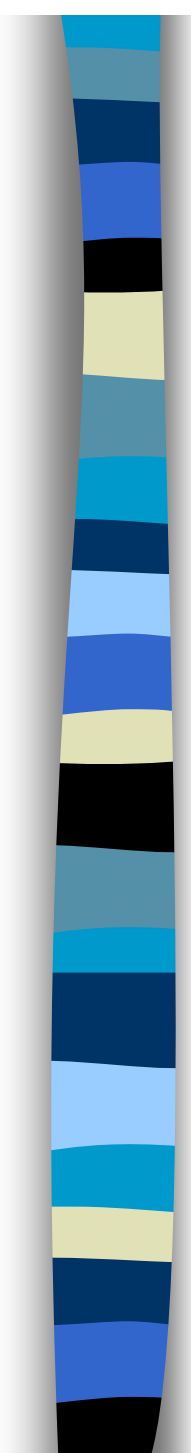
Add (2)
Partially
compact (1)

Add (2)
Partially
compact (2)
Fully compact (1)

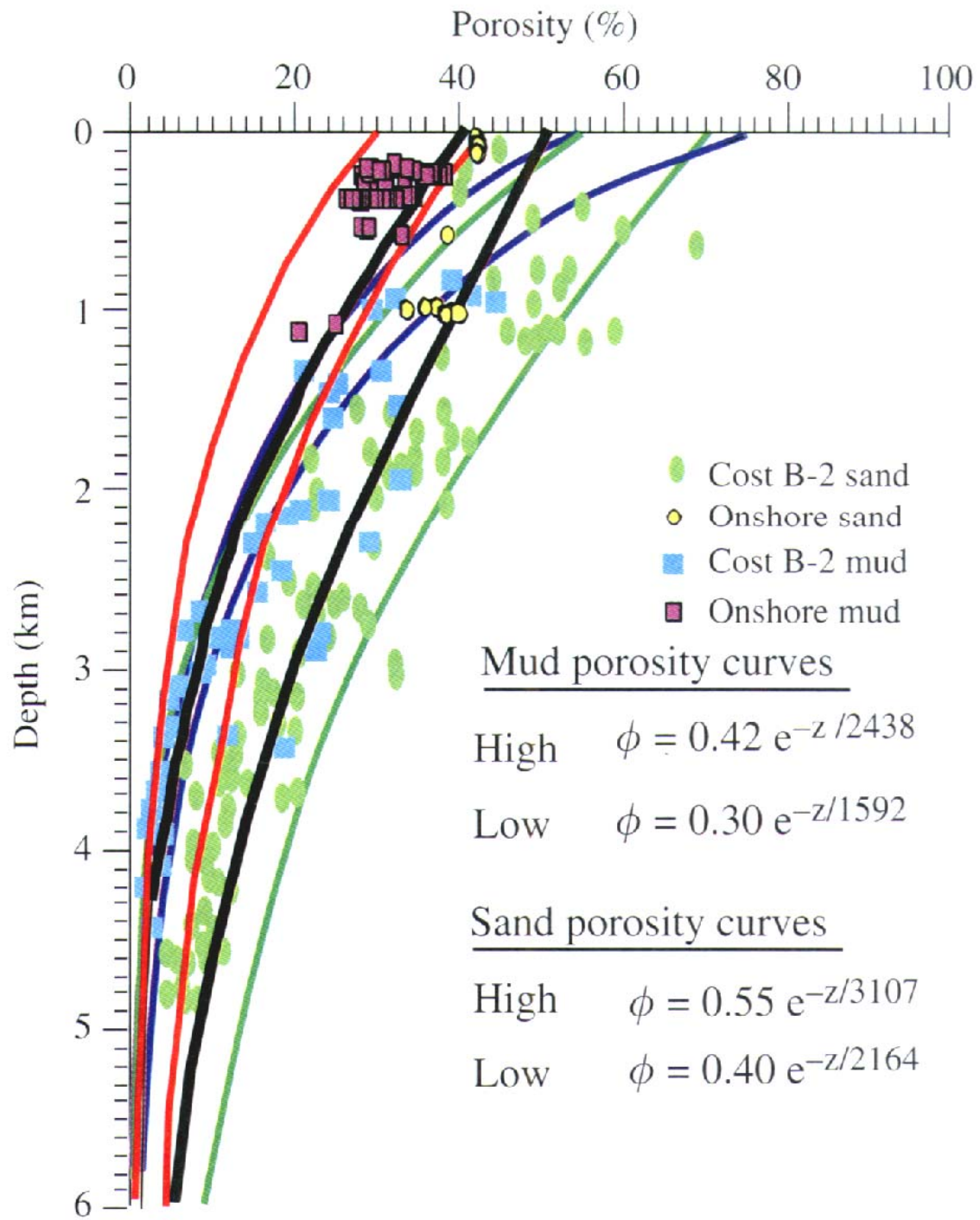
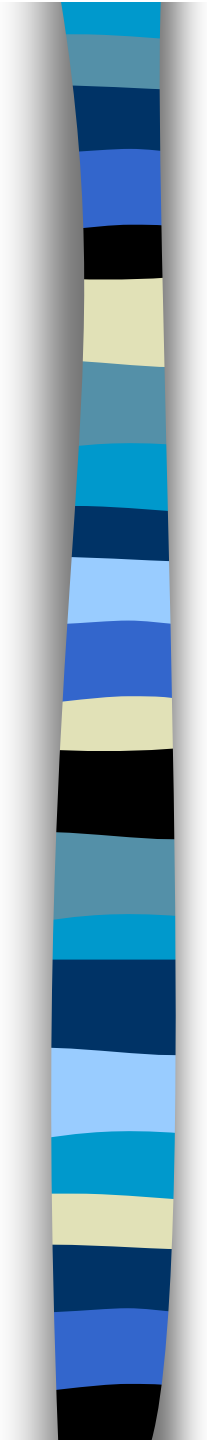


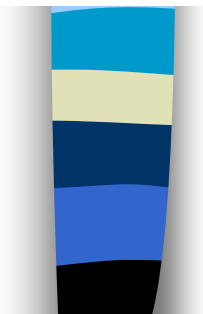
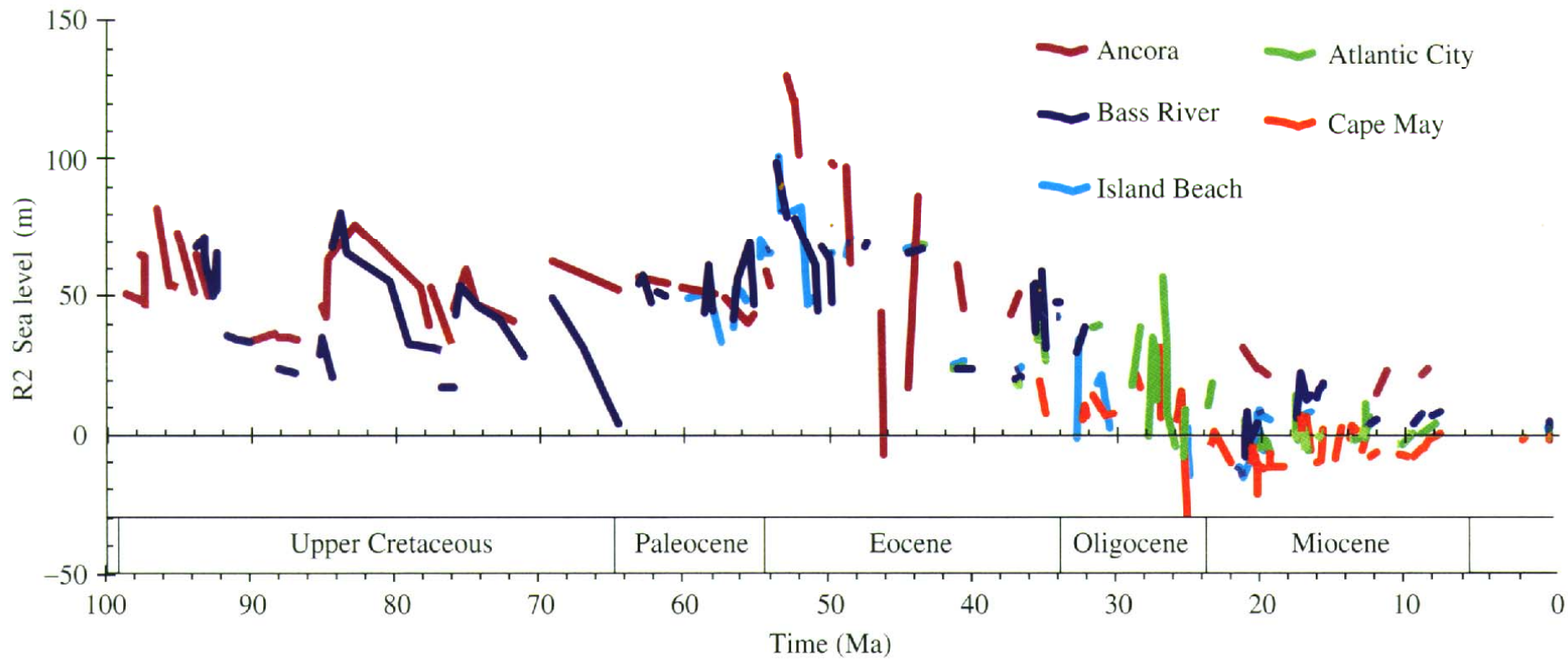
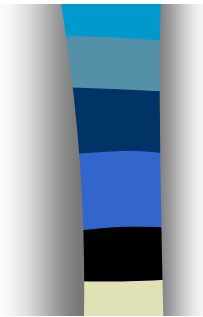


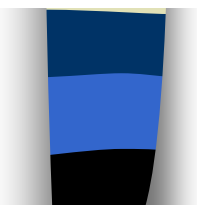
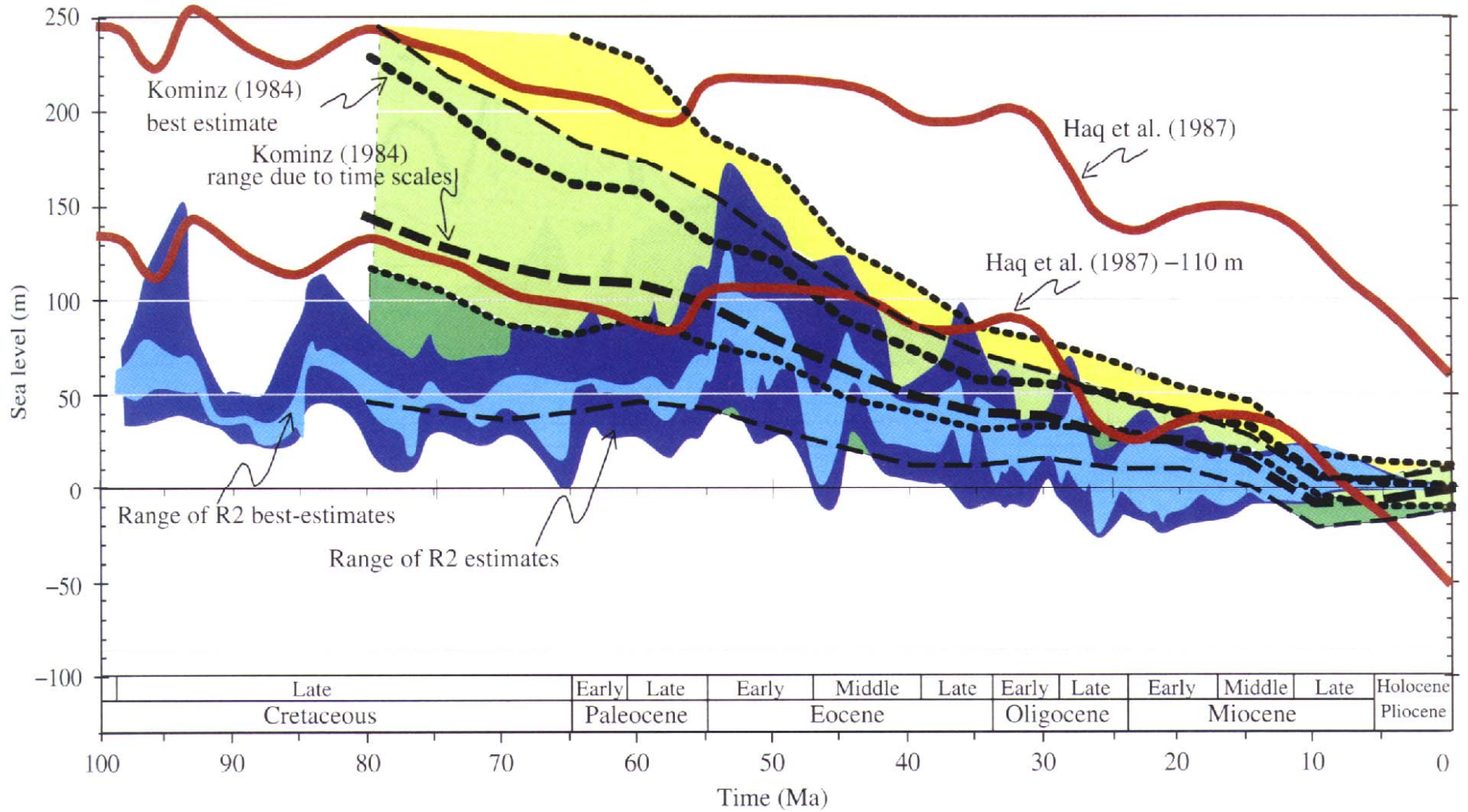
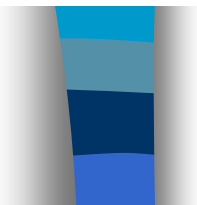


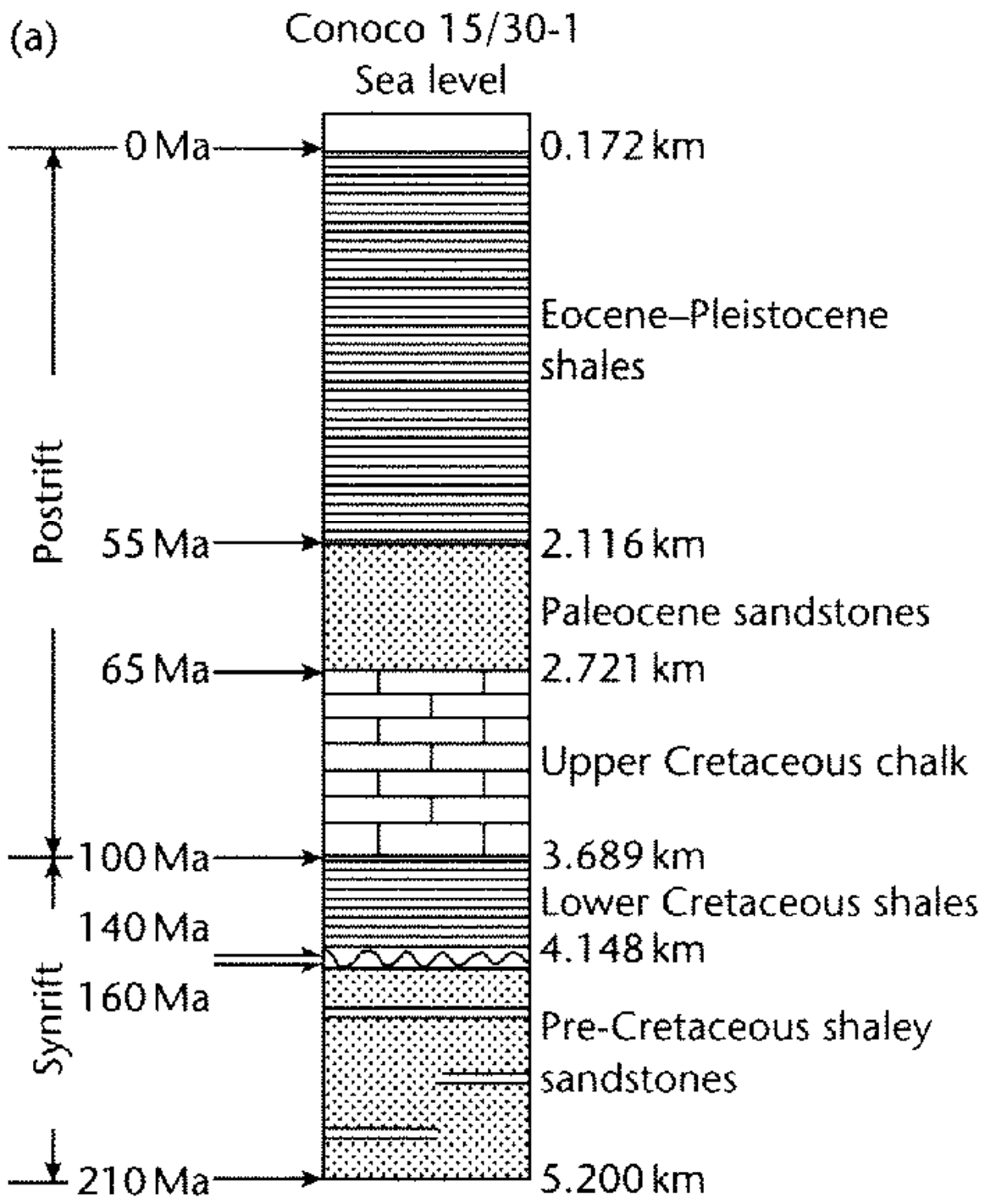
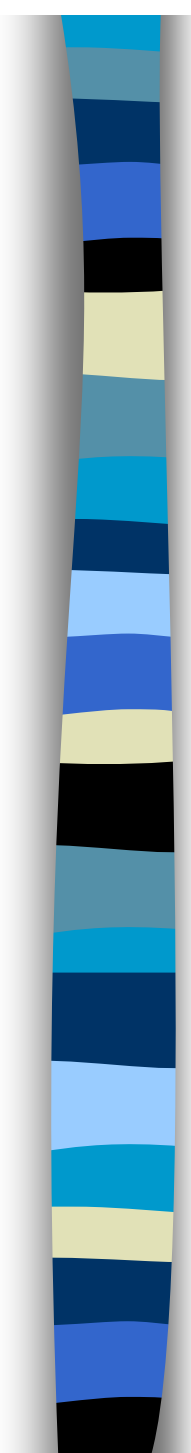


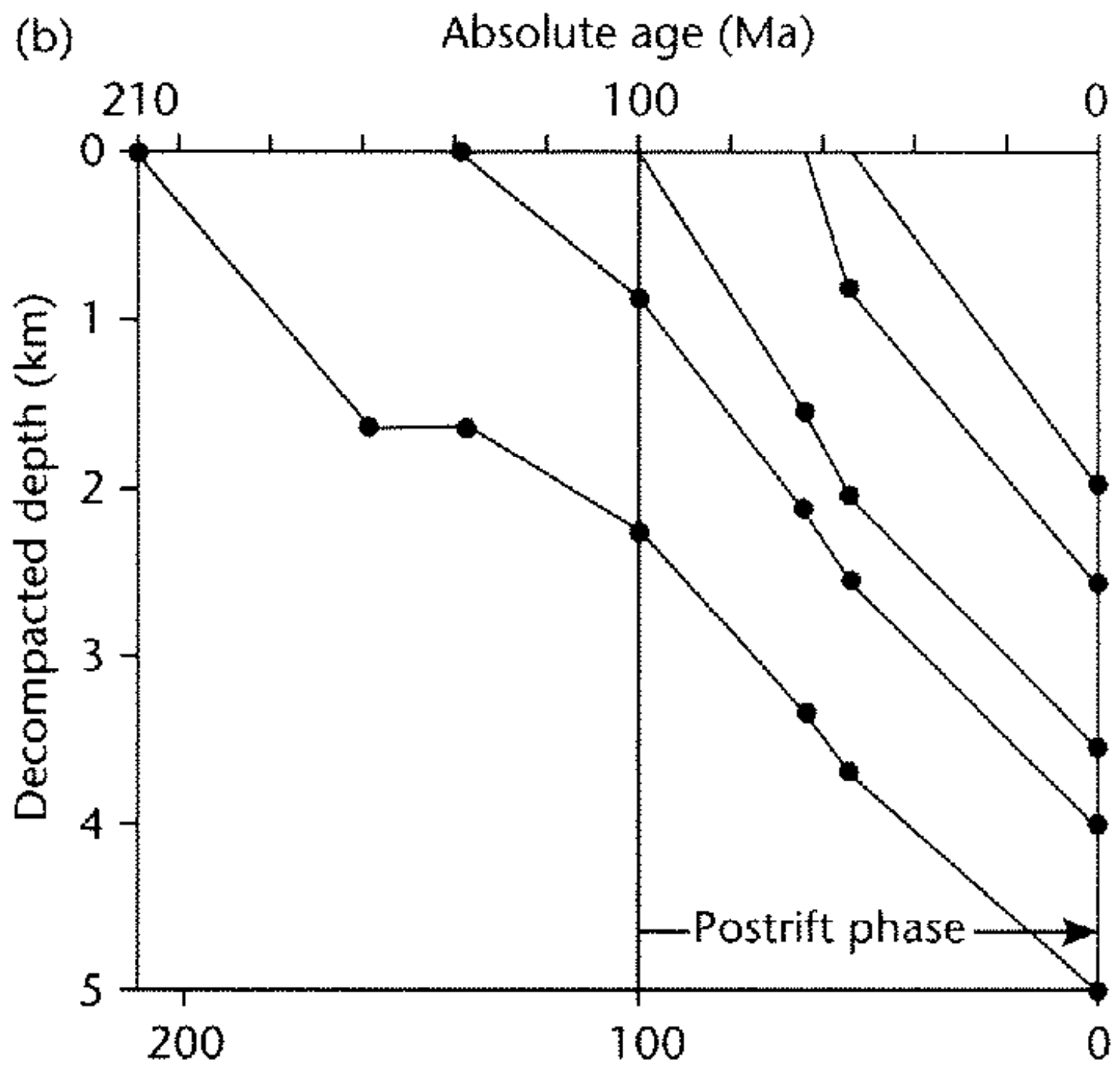
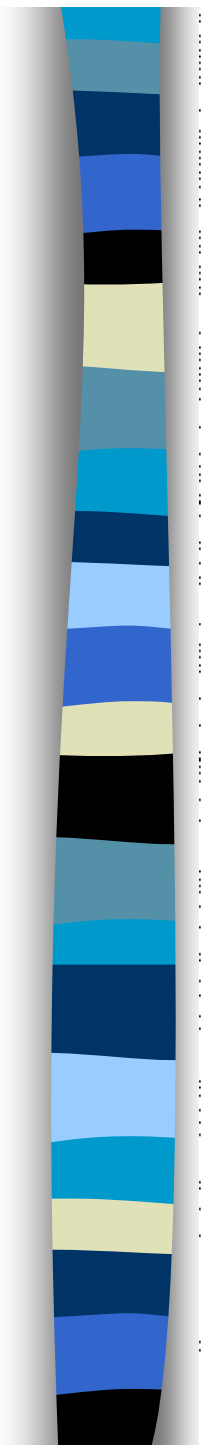
paleobatymetrie podle mikropaleontologických dat



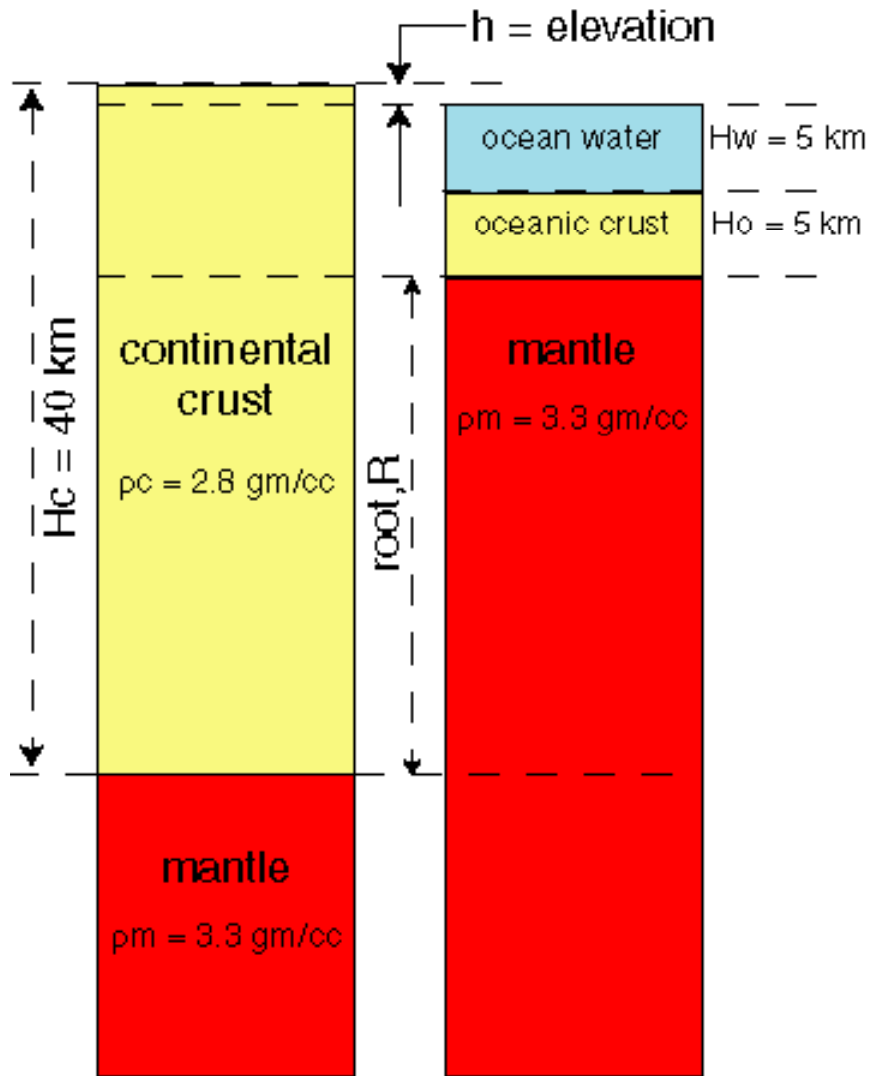






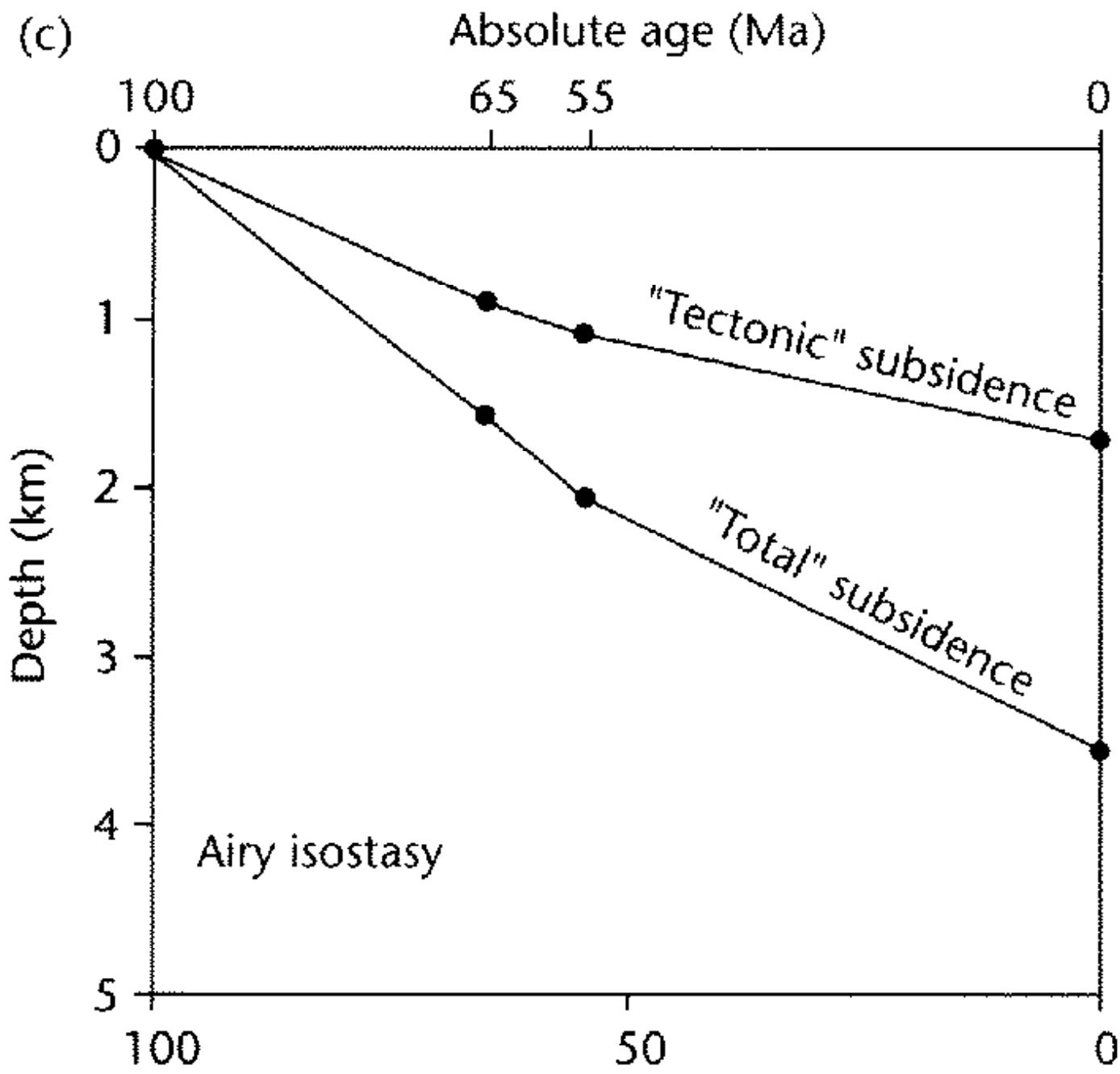
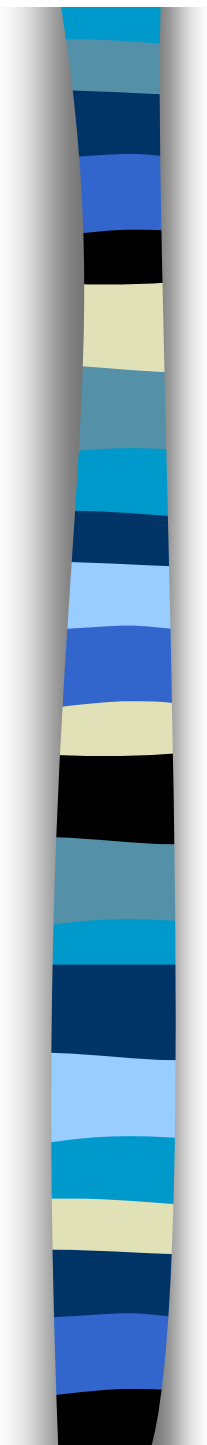


Airyho isostatický model

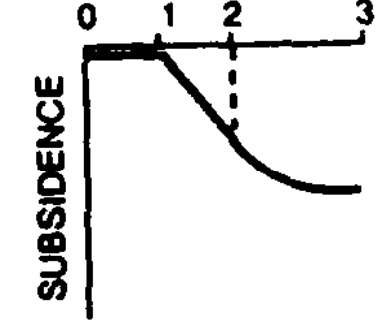
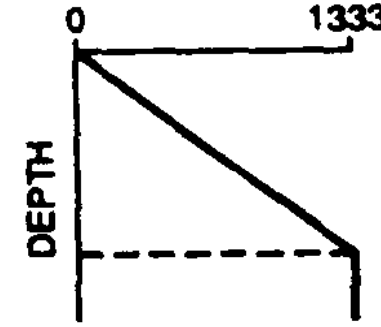
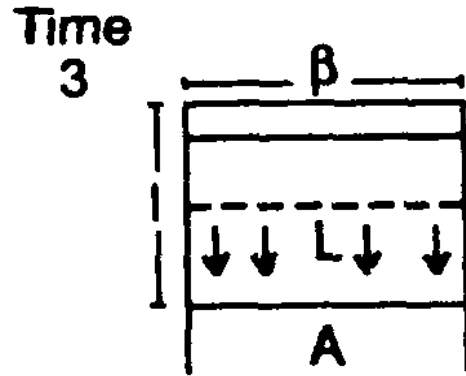
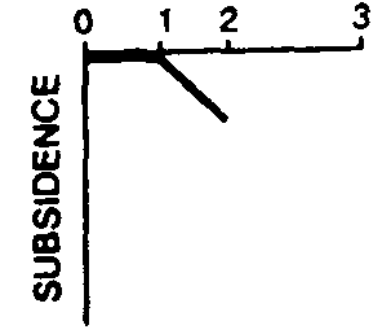
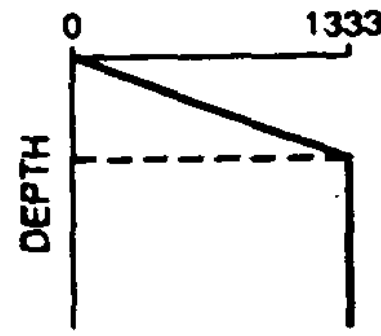
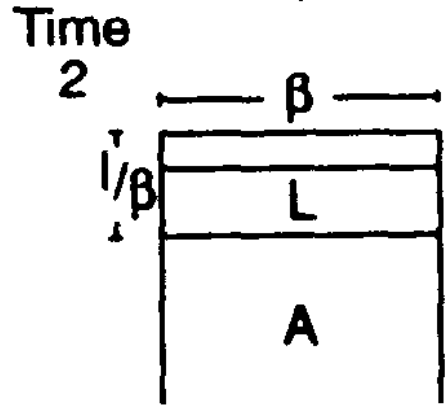
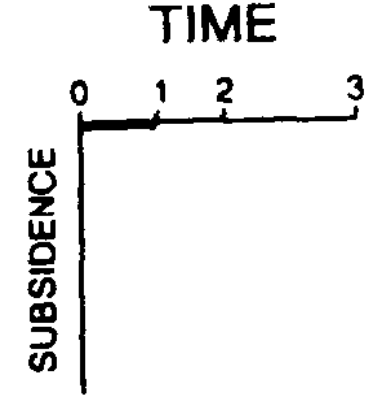
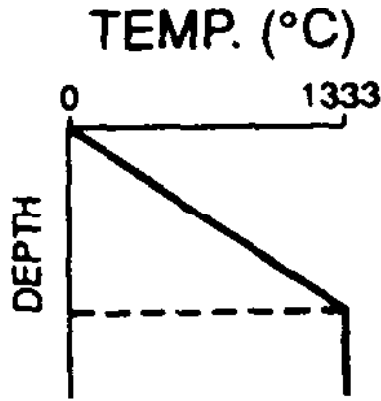
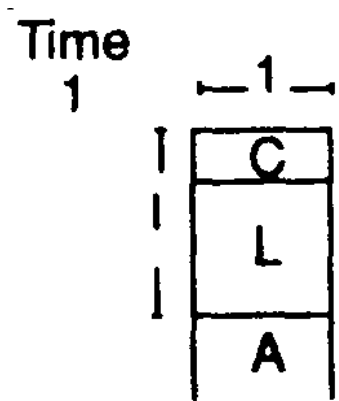


$$\rho_c H_c = \rho_m R + \rho_c H_o + \rho_w H_w$$

$$H_c = H_w + H_o + R$$



McKenzieho model



TECTONIC SUBSIDENCE WESTERN CANADA BASIN

předpolní p.

