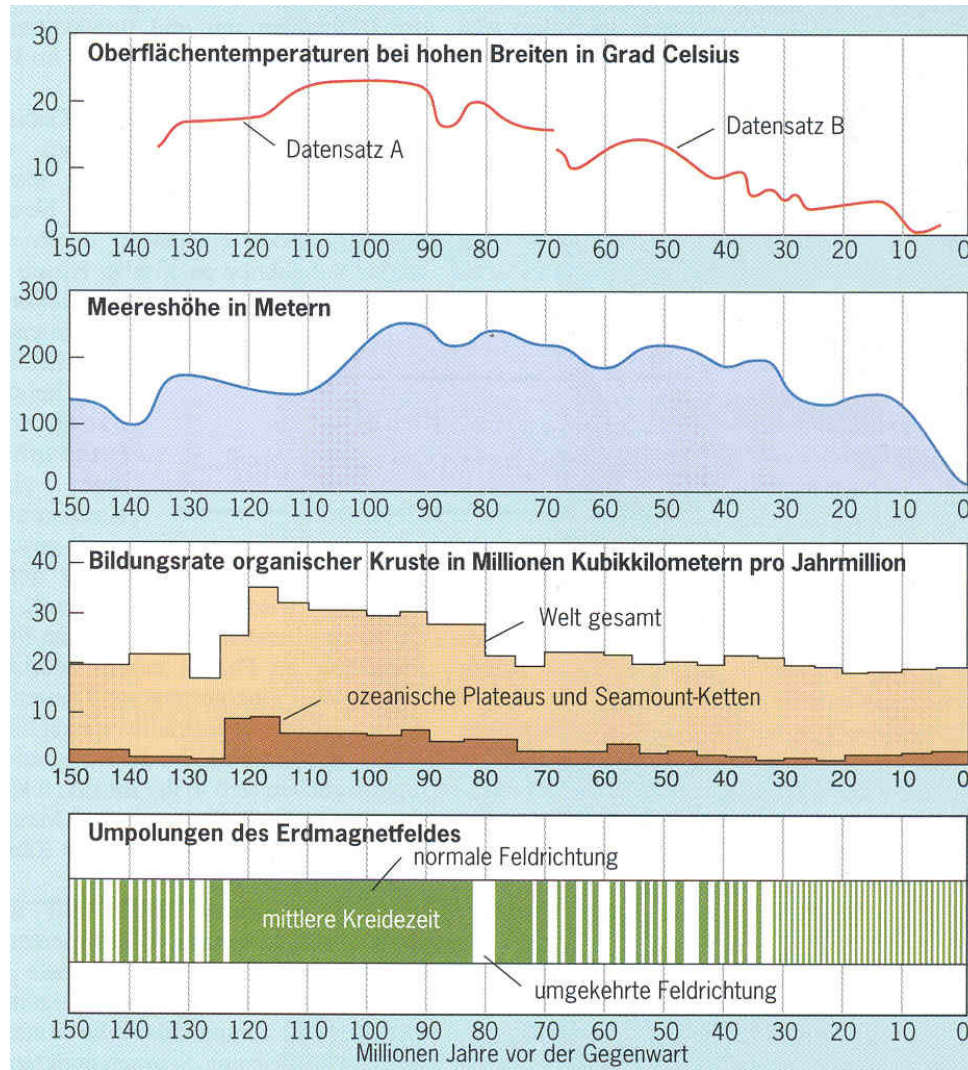
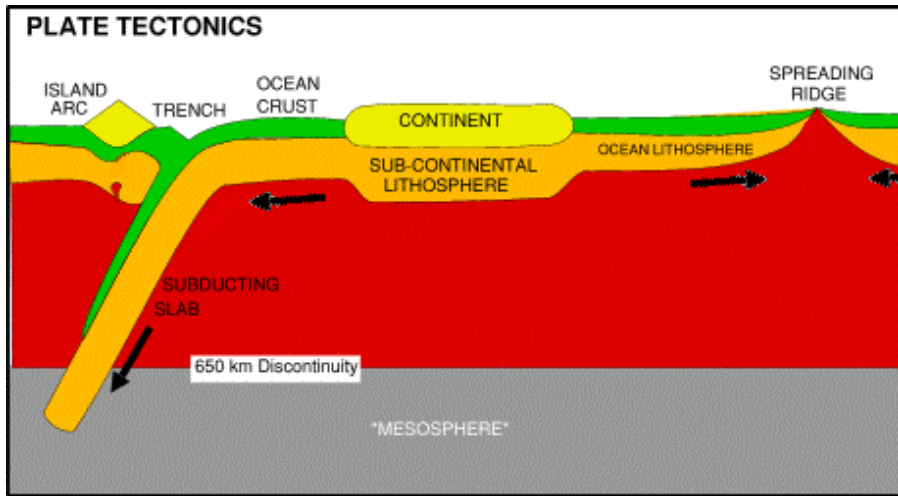


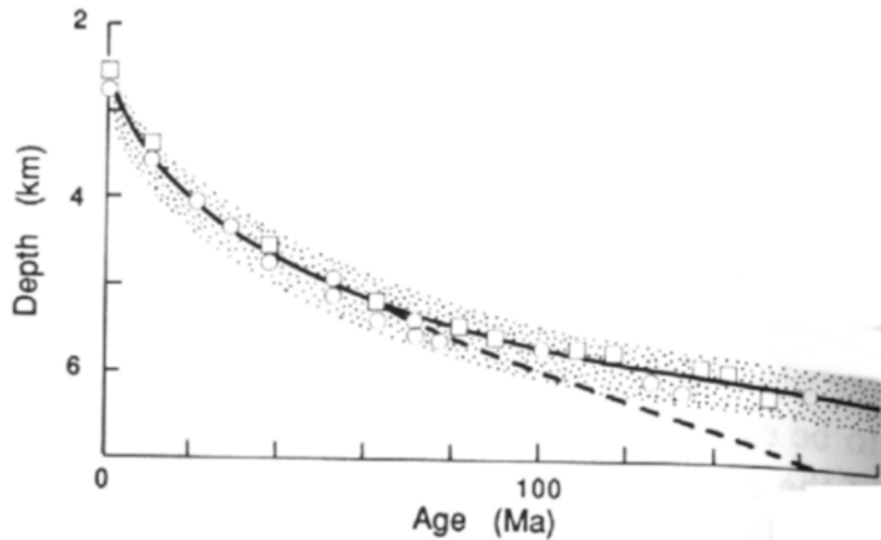
The Earth's magnetic polarity



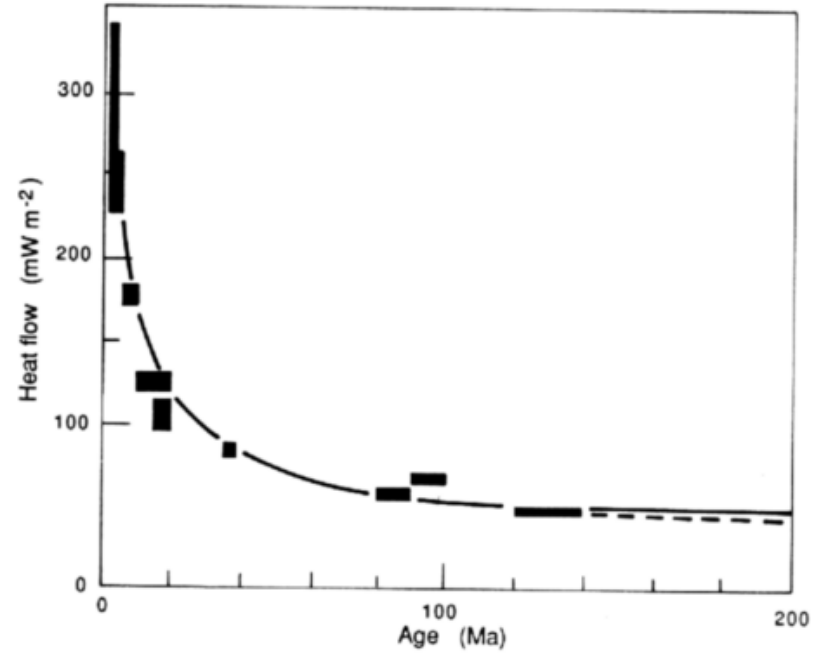
R.L. Larson (2001)



...and it becomes heavier
and sinks into the mantle



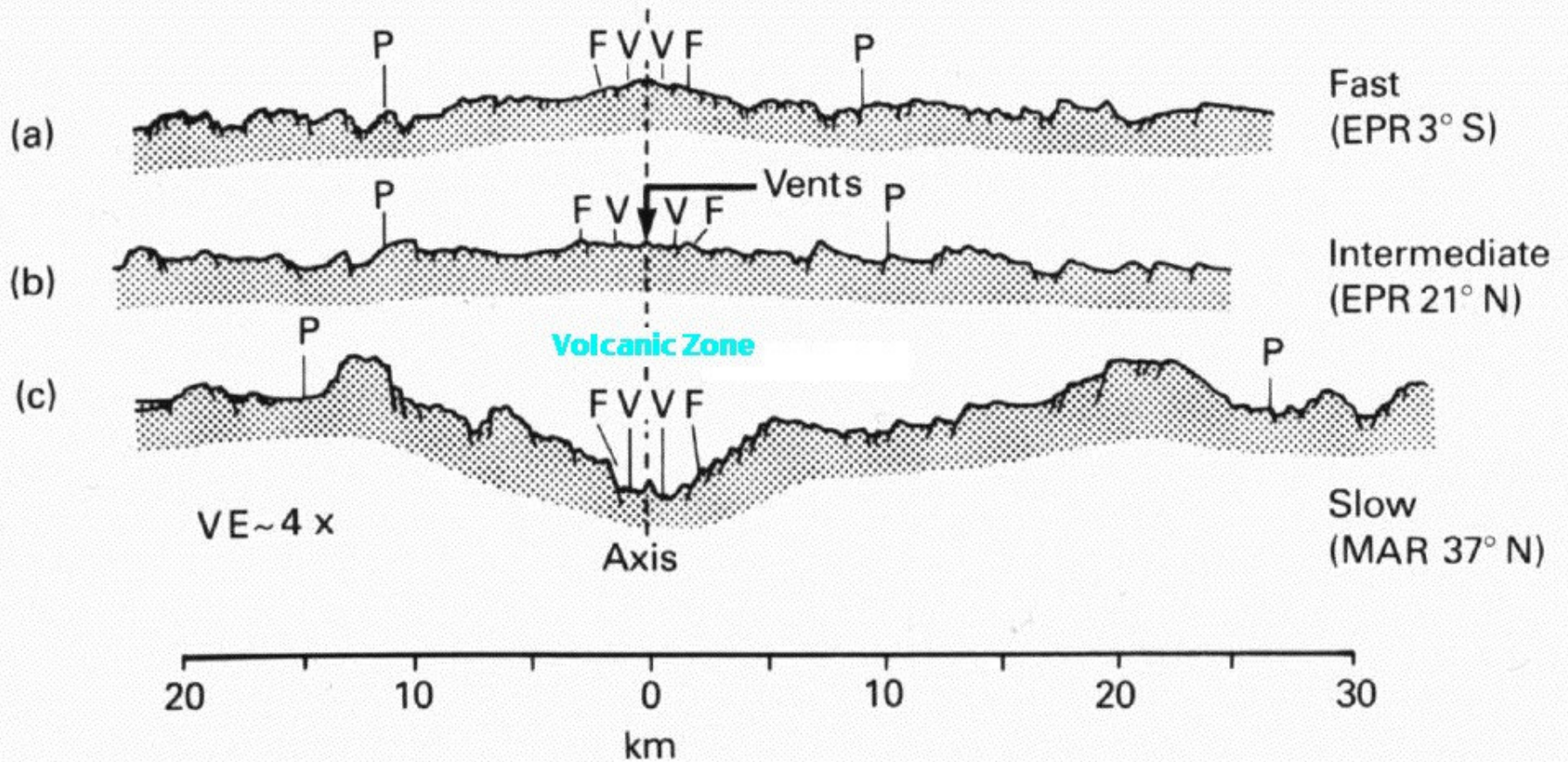
The ocean floor cools with age...



$$\text{Drop (m)} = K \times \sqrt{\text{age (Ma)}}$$

$$K = 320$$

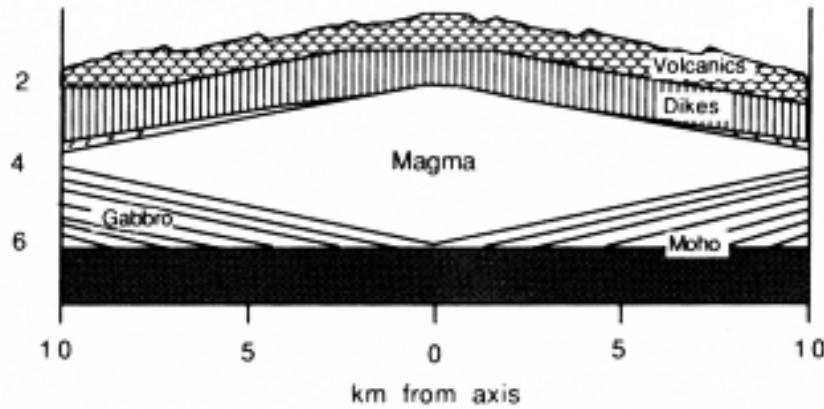
Ridge morphology



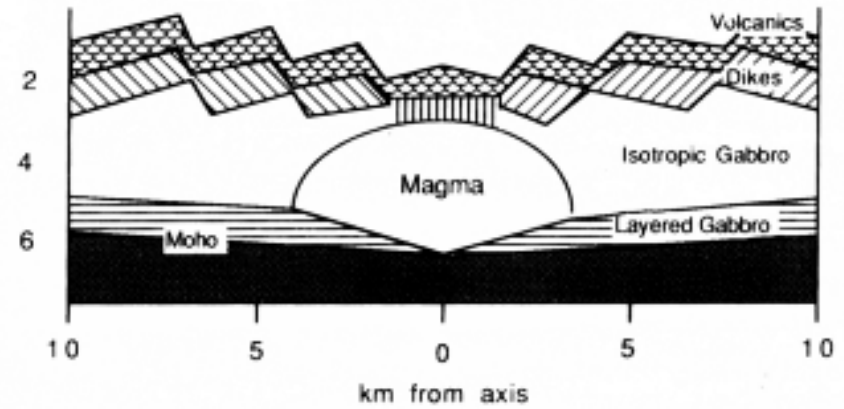
Magma chamber models

Fast-spreading ridges

old models

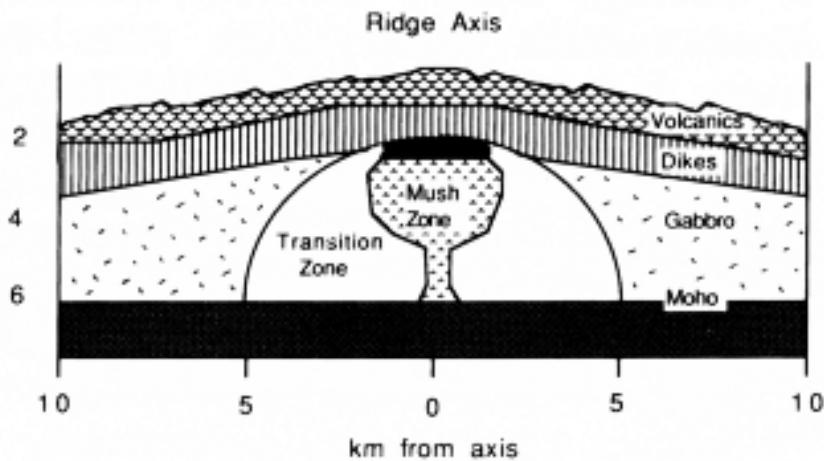


Slow-spreading ridges

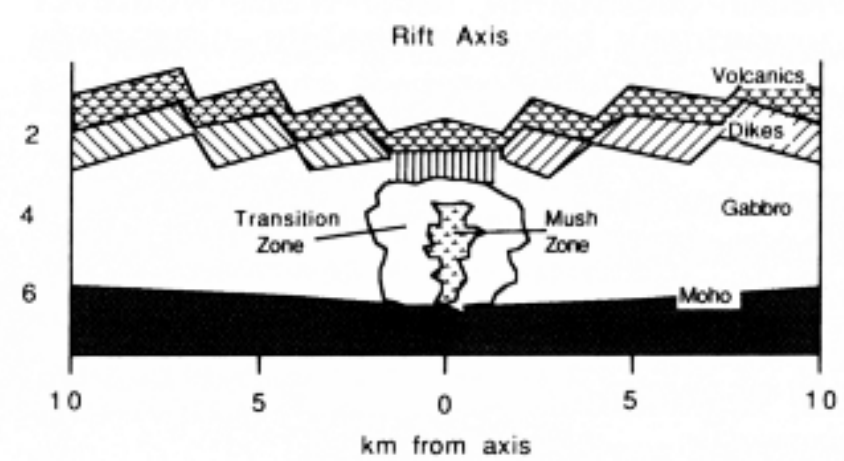


Fast-spreading ridges

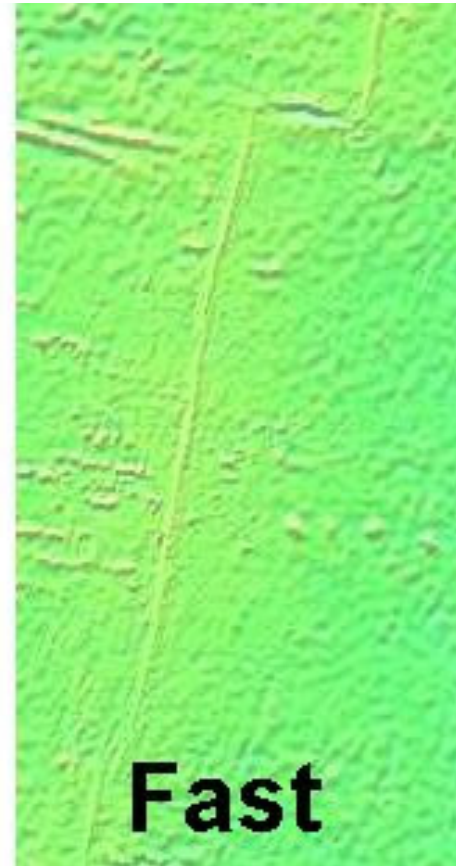
new models



Slow-spreading ridges

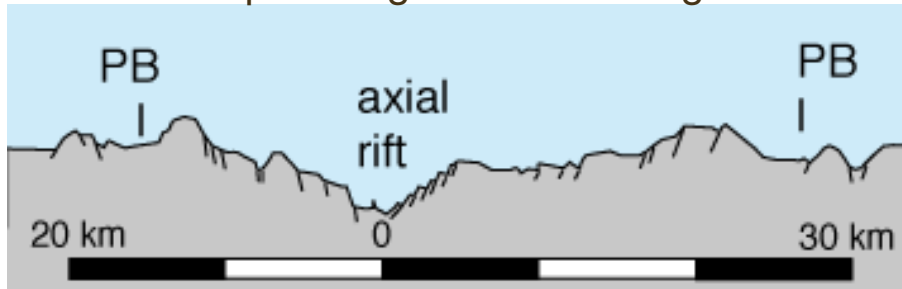


Seafloor morphology

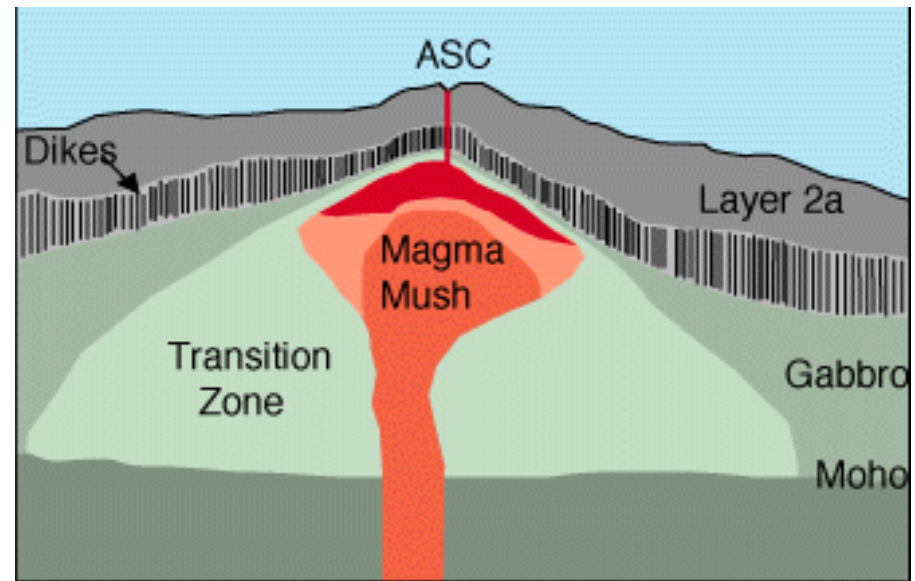
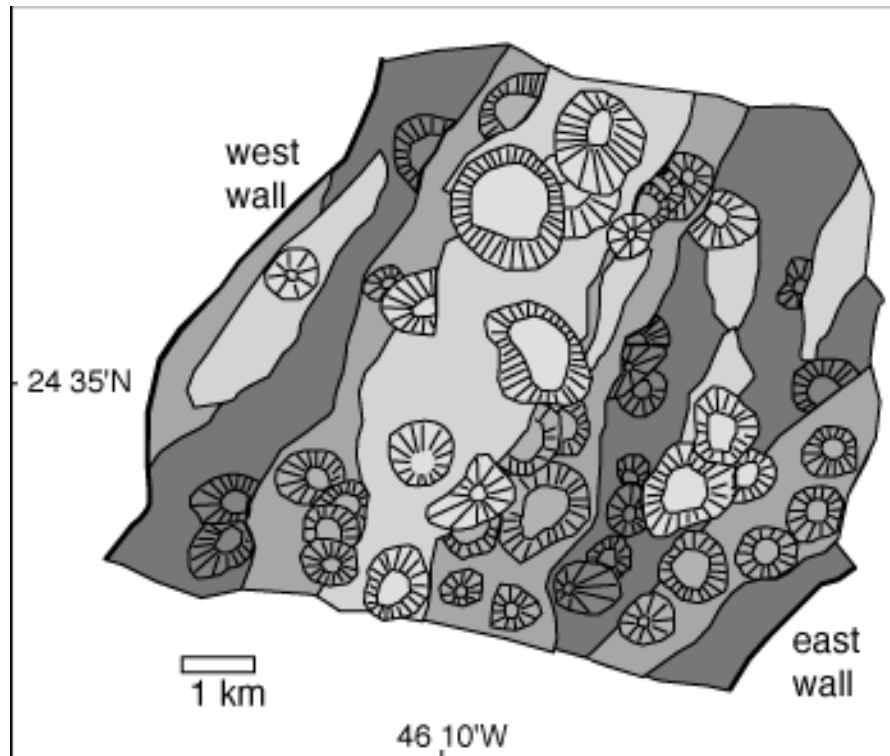
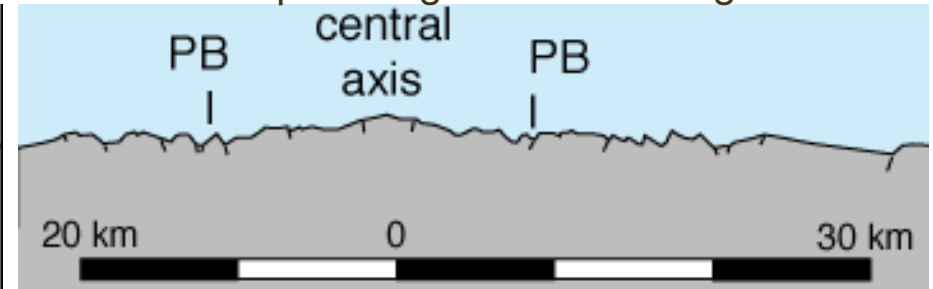


Magma chamber models

Slow-spreading mid-ocean ridge

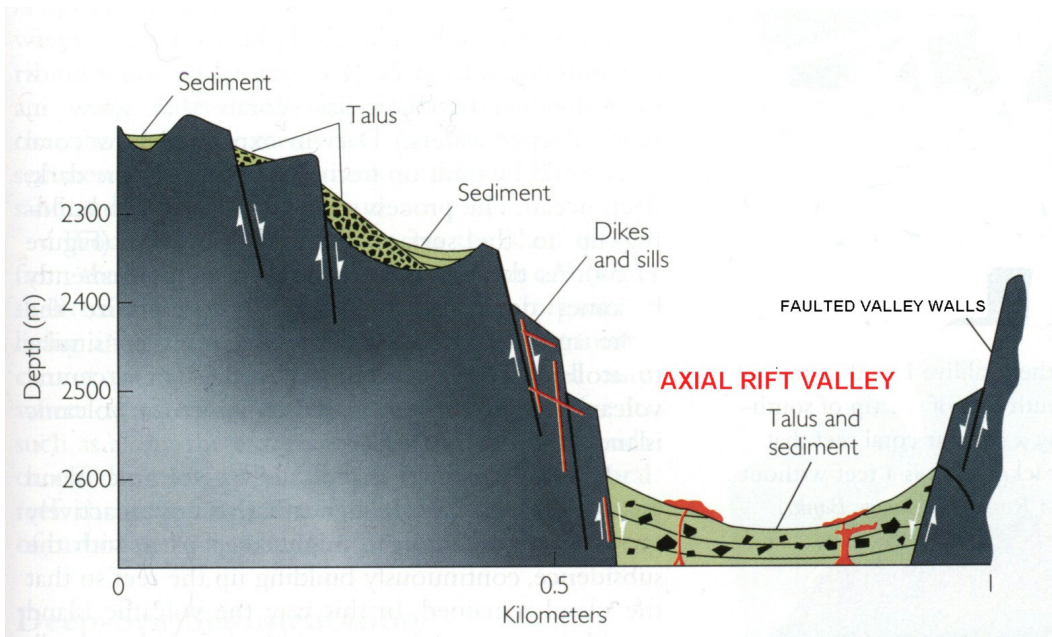
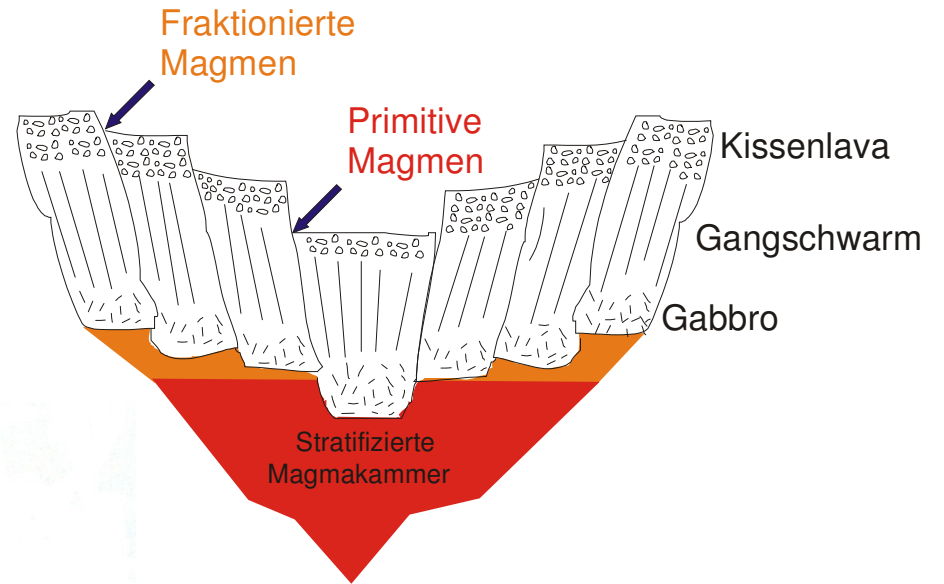


Fast-spreading mid-ocean ridge



Sinton and Detrick (1992), modified by Perfit and others (1994)

Sections through the Mid-Atlantic Ridge



Transform faults

