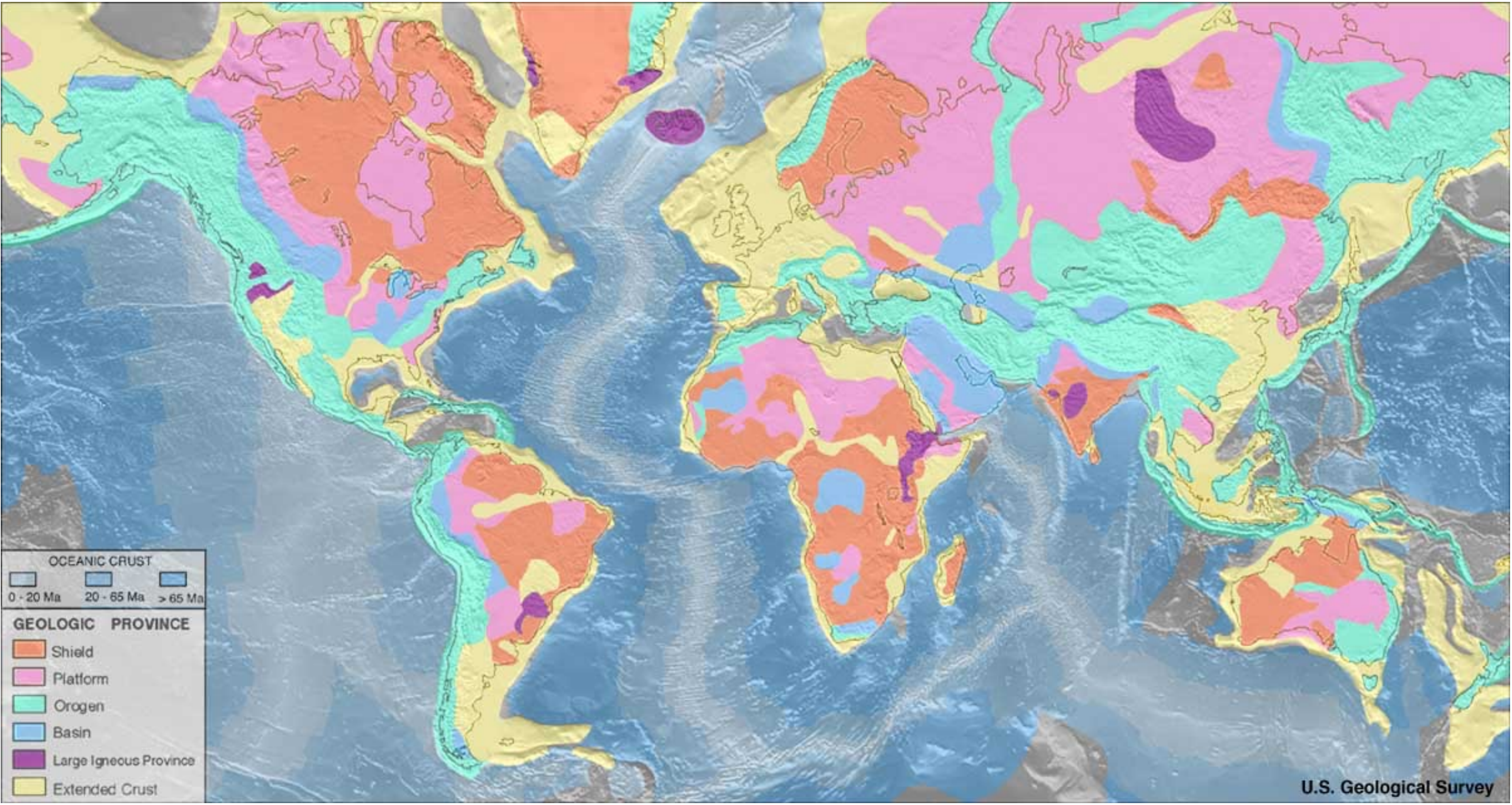


How do basins form?

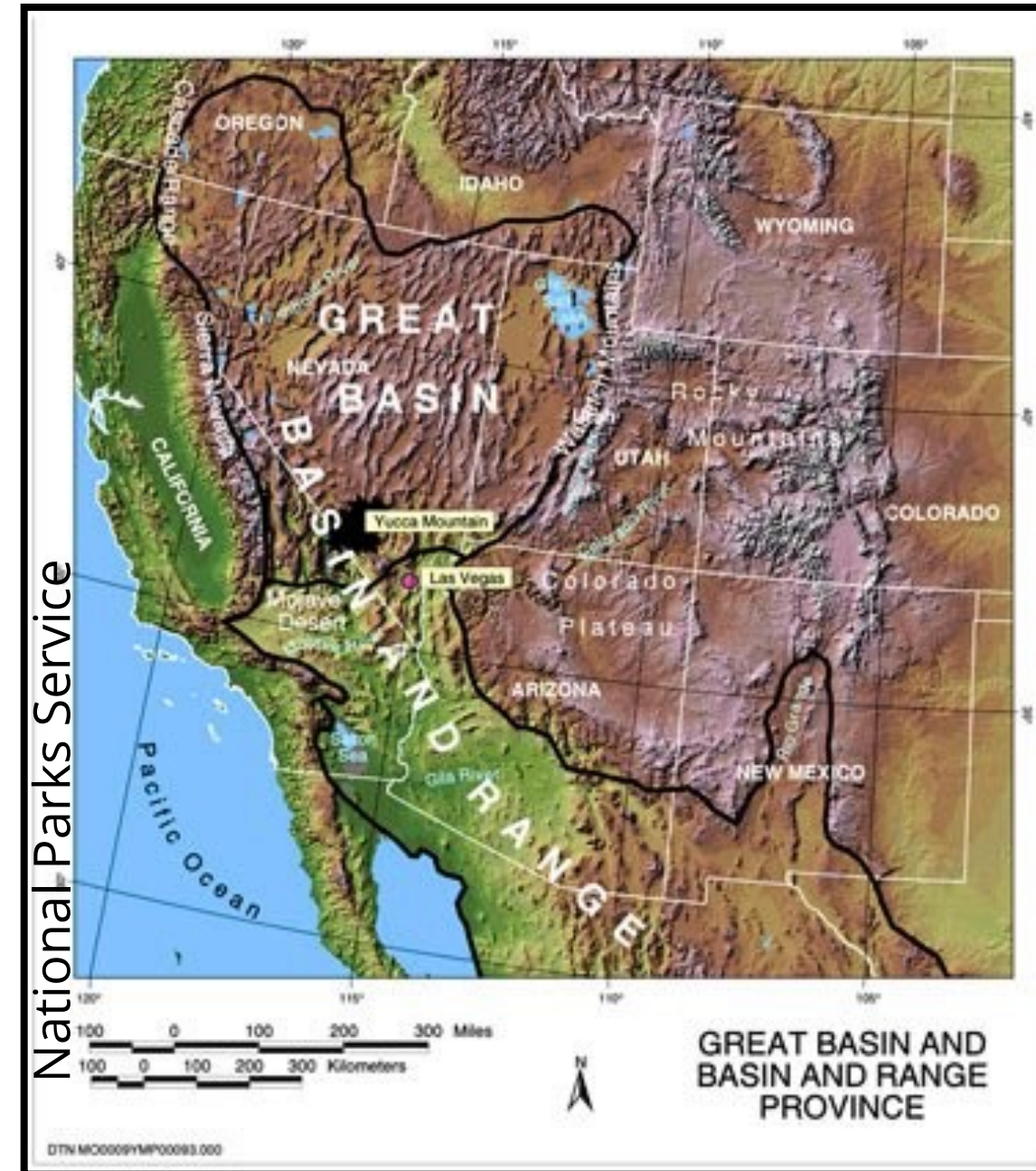
School of Geosciences



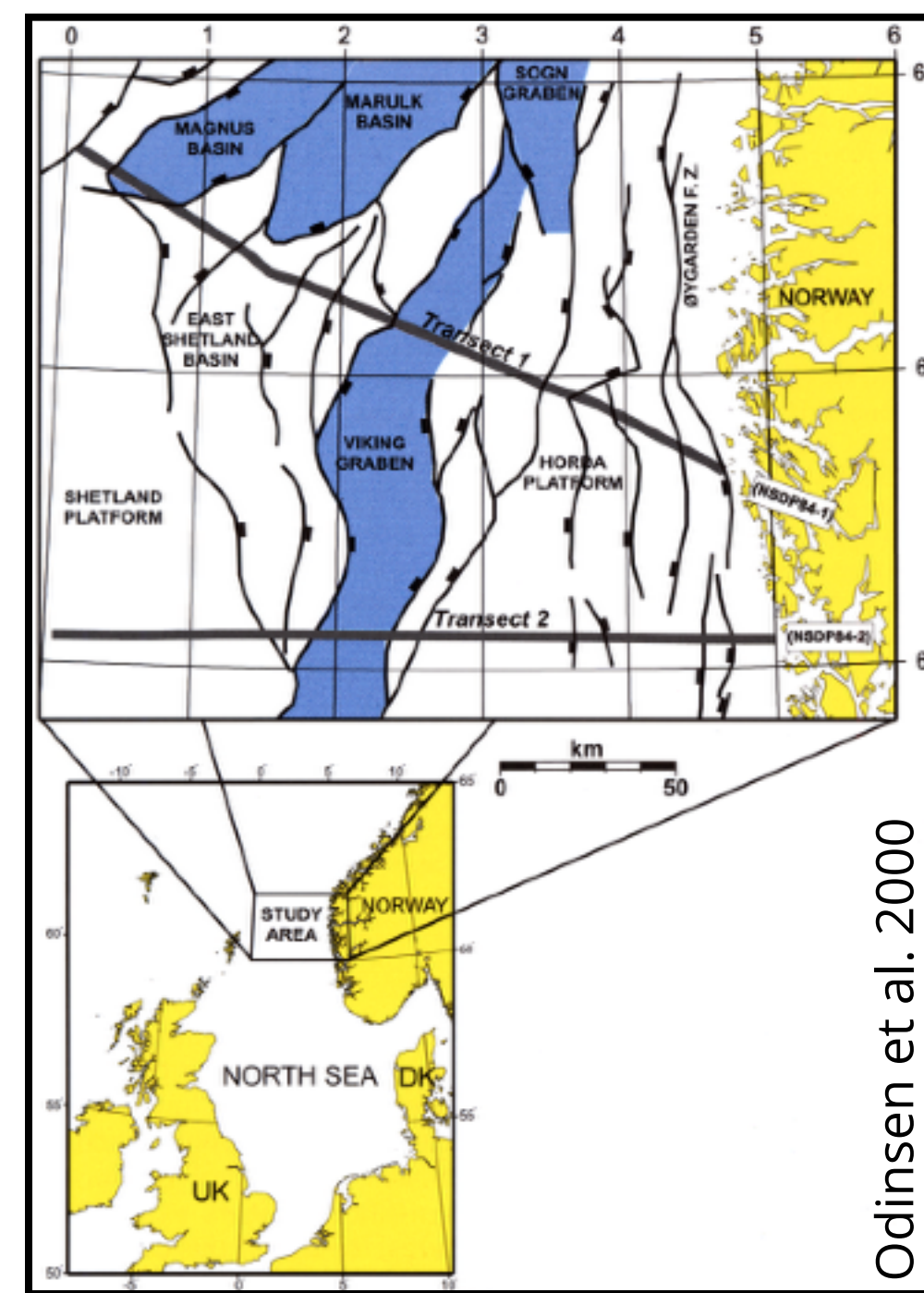
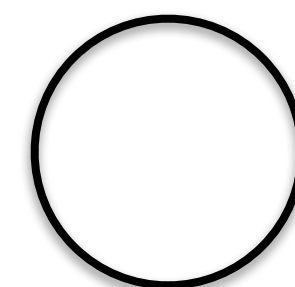
**lithospheric
stretching**

**lithospheric compression/
shortening and flexure**

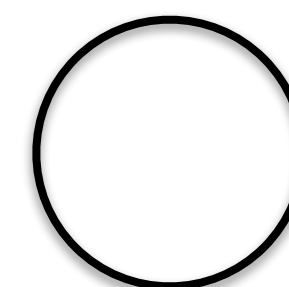
**strike-slip
deformation**



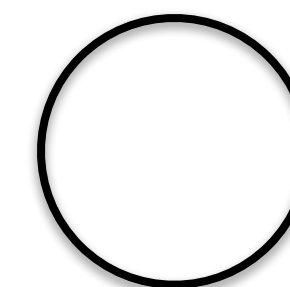
Basin & Range Province



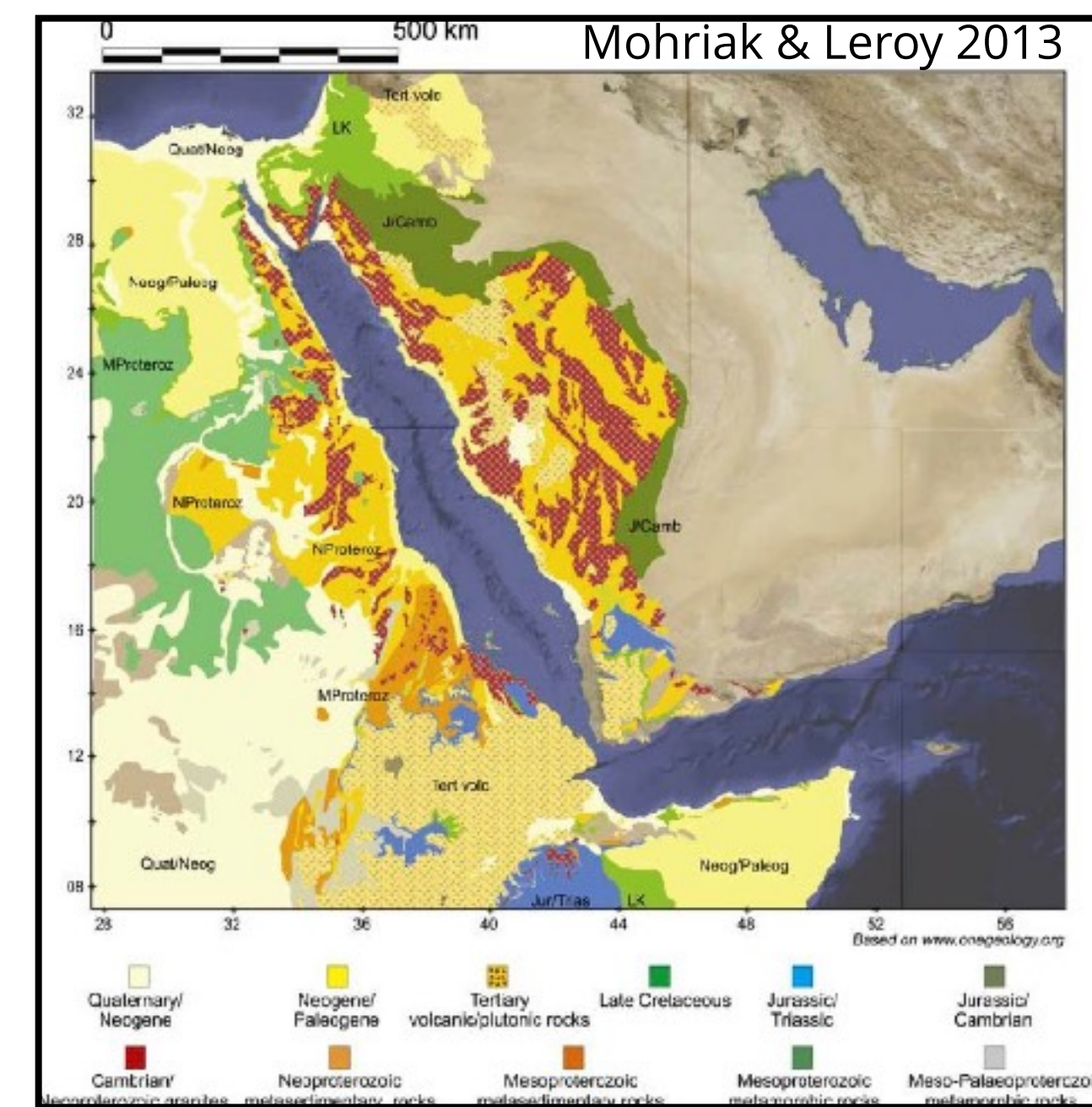
Odinsen et al. 2000



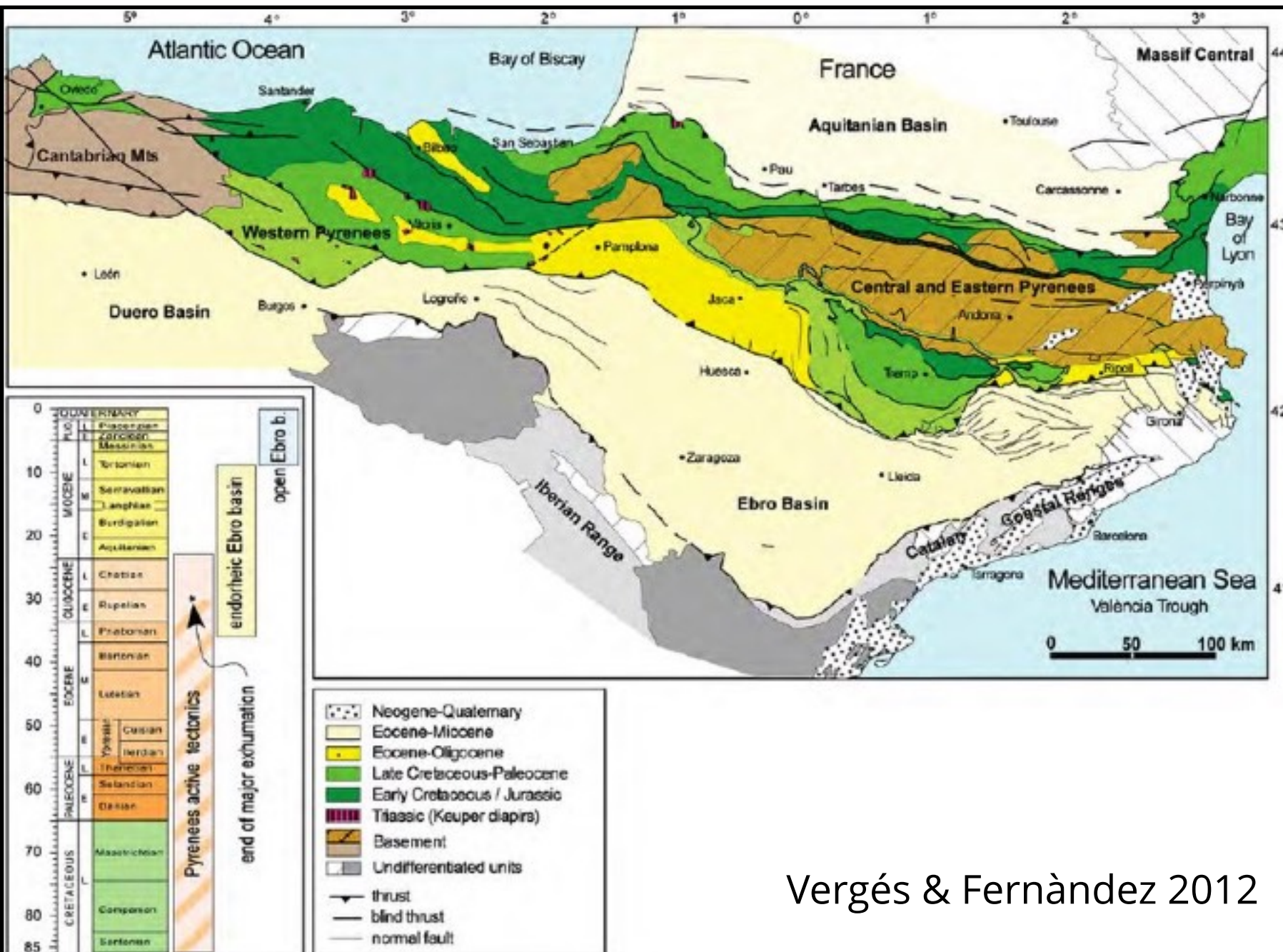
North Sea



Red Sea

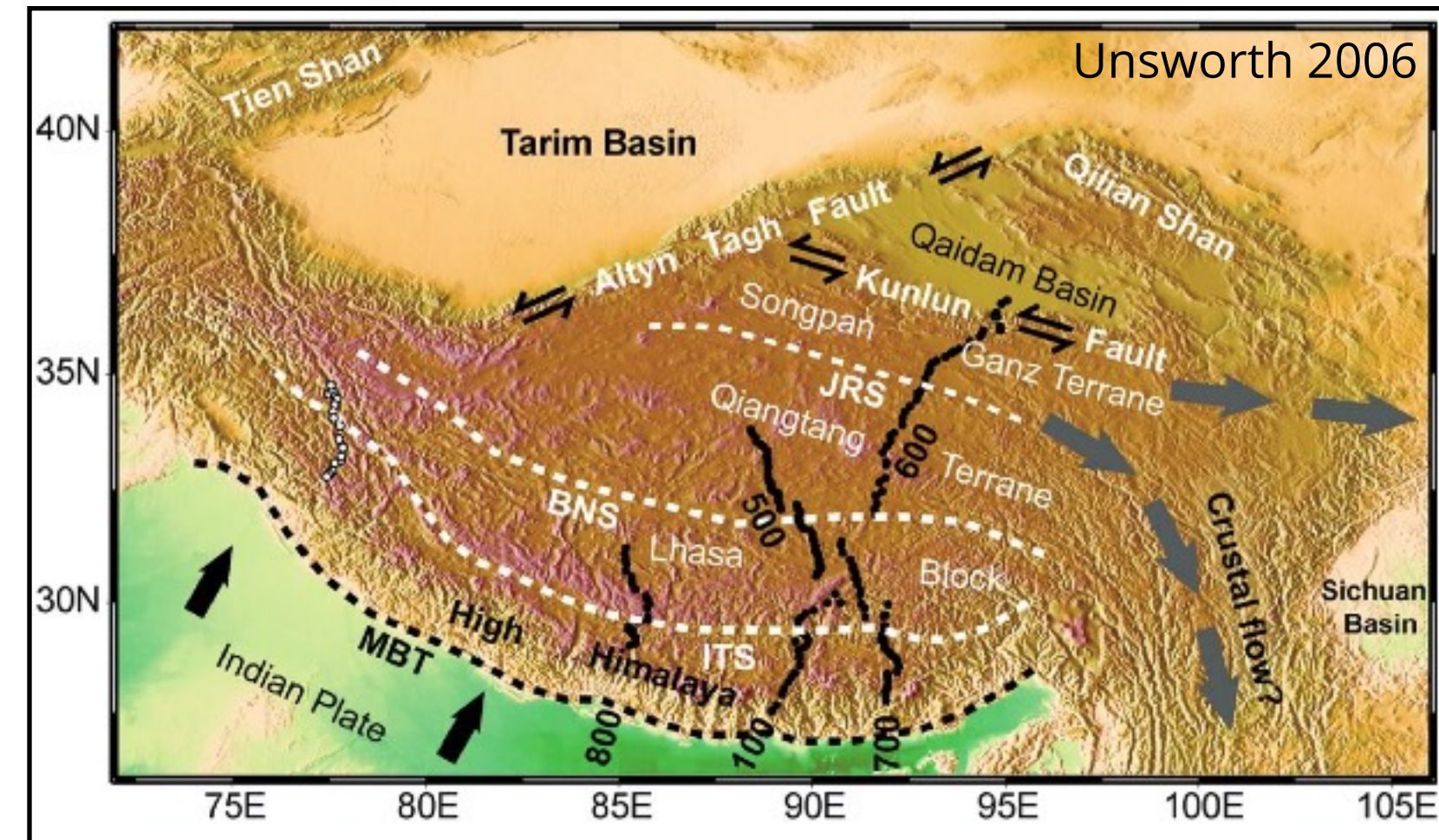


Pyrenees



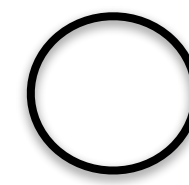
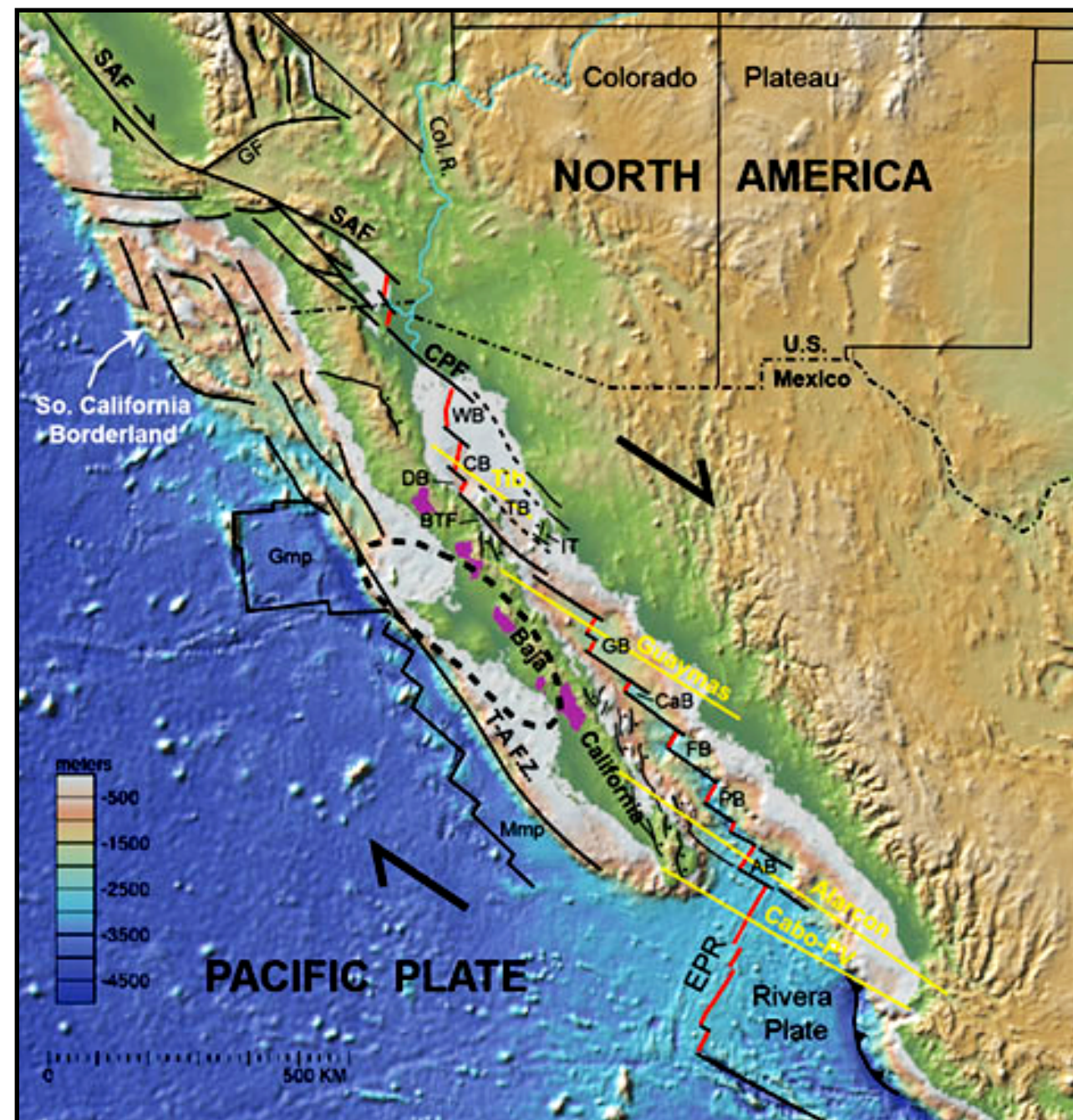
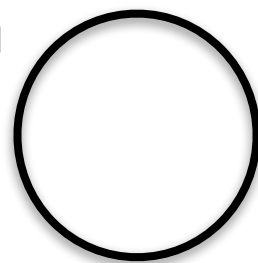
Vergés & Fernàndez 2012

Tibet

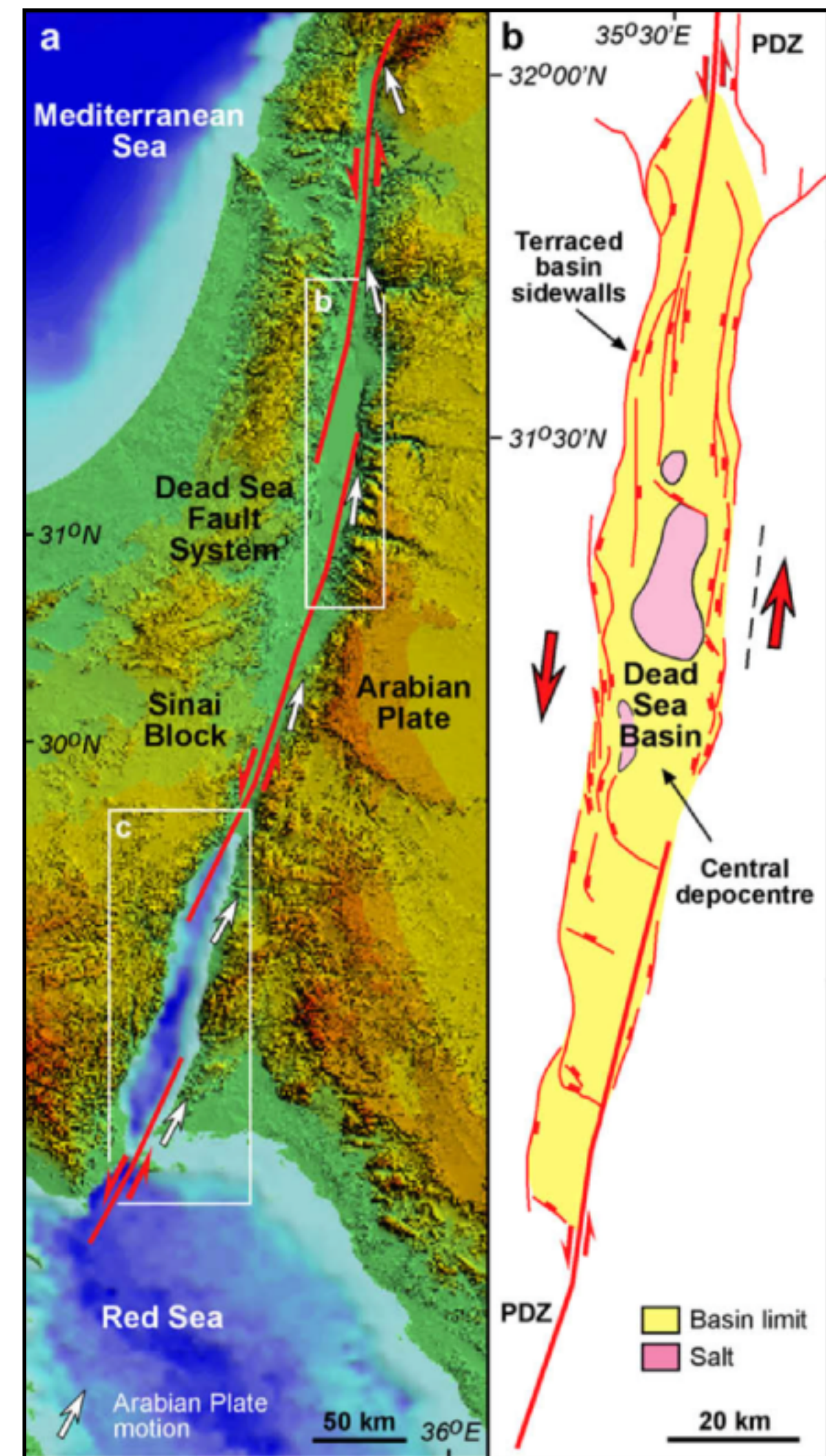


Unsworth 2006

Gulf of California

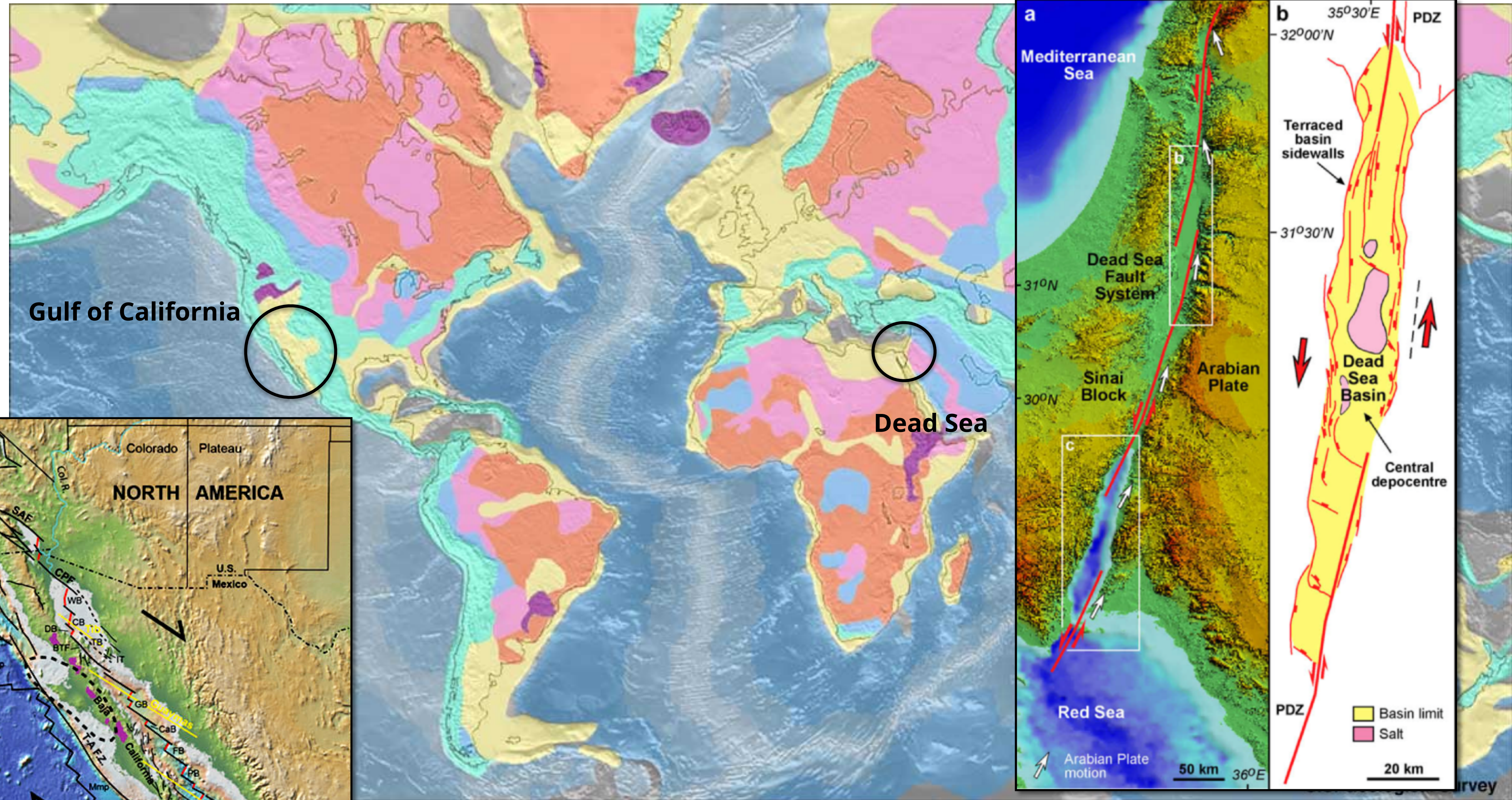


Dead Sea



How do basins form?

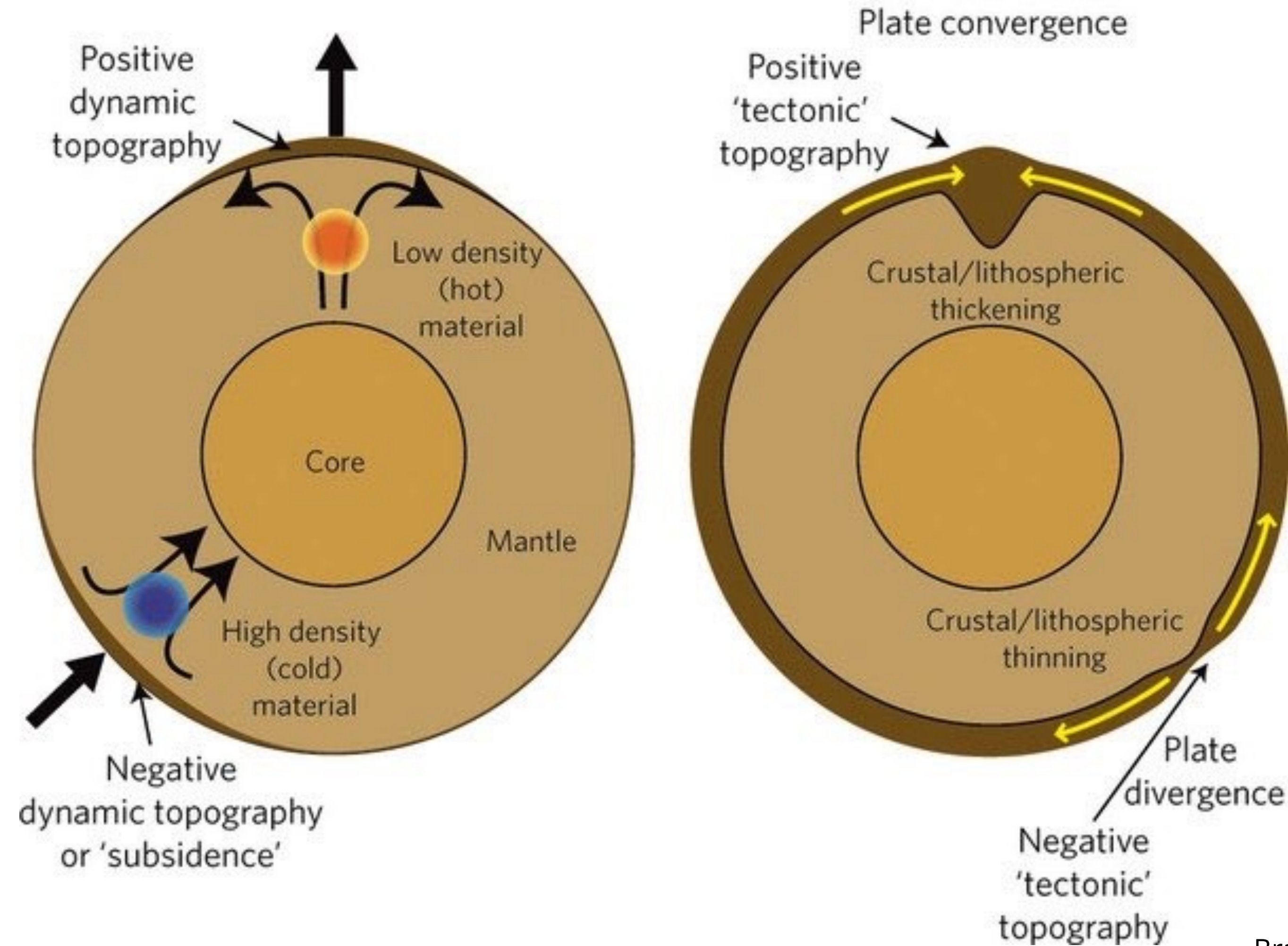
Hurwitz et al. 2002



lithospheric compression/
shortening and flexure

strike-slip
deformation

How do basins form?



Braun [2010]

**Mantle-driven
tectonics**

Significant portion of Earth's topography results from the viscous stresses created by flow within the underlying mantle