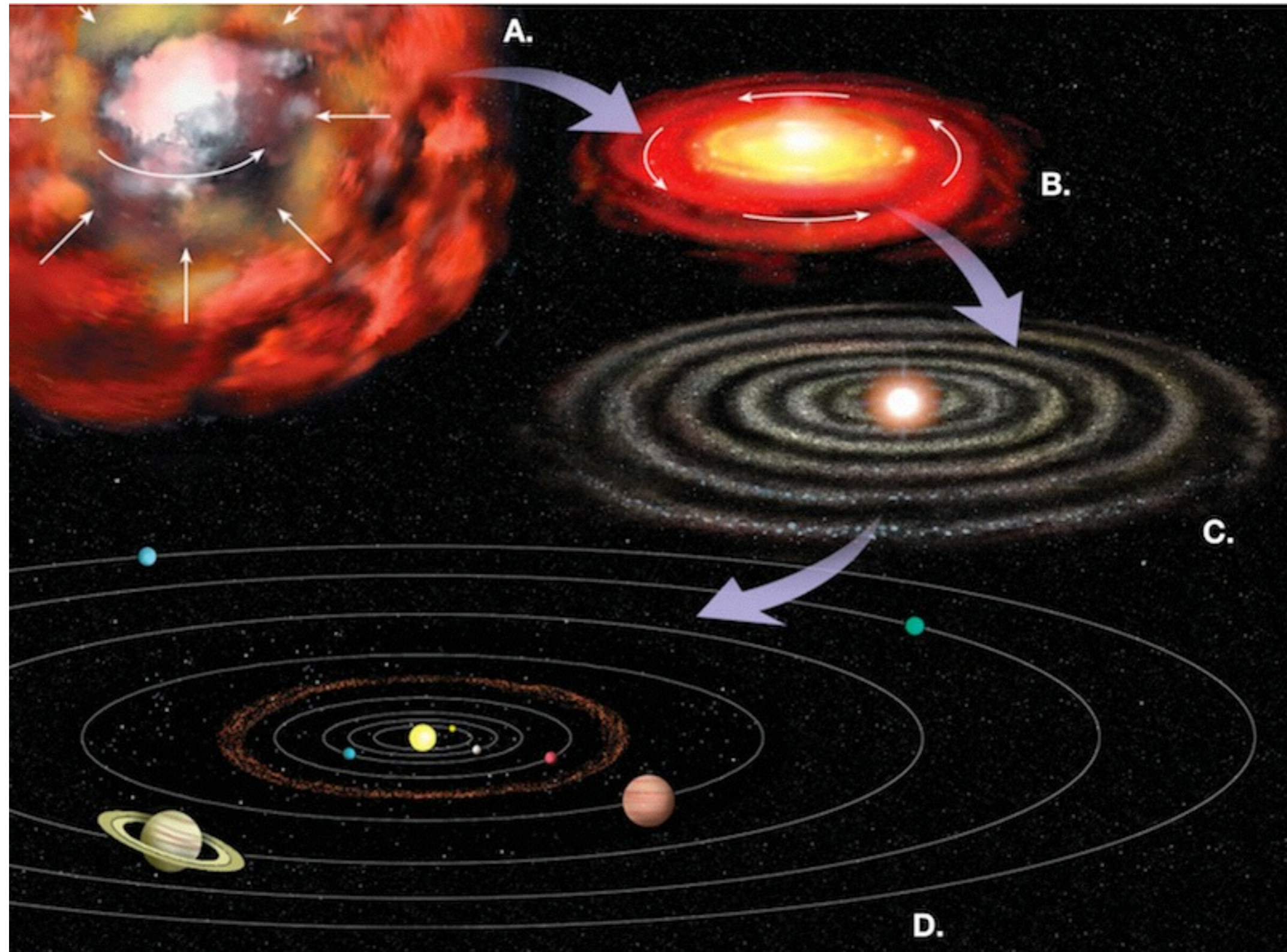
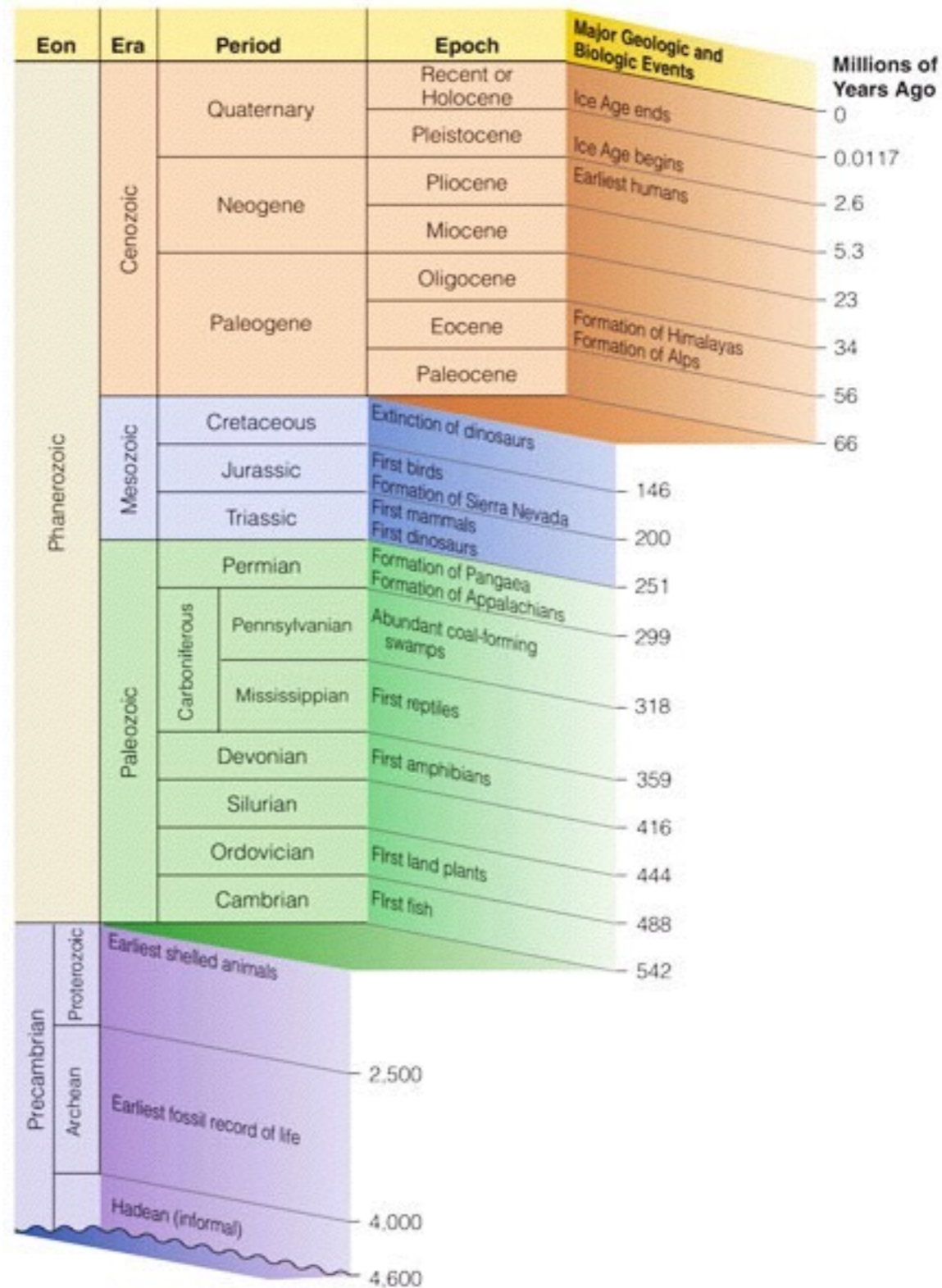


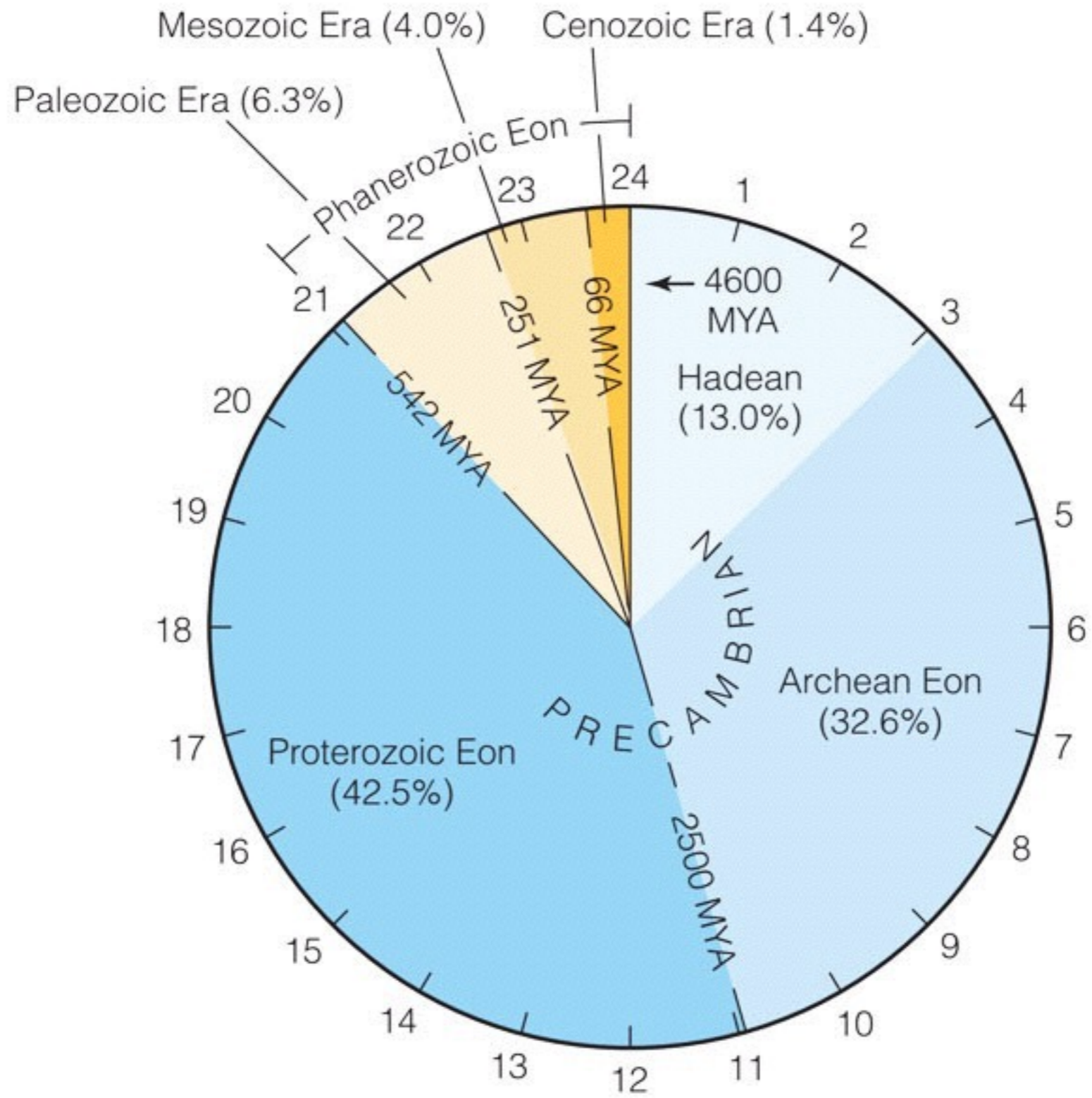
Solar Nebula Hypothesis



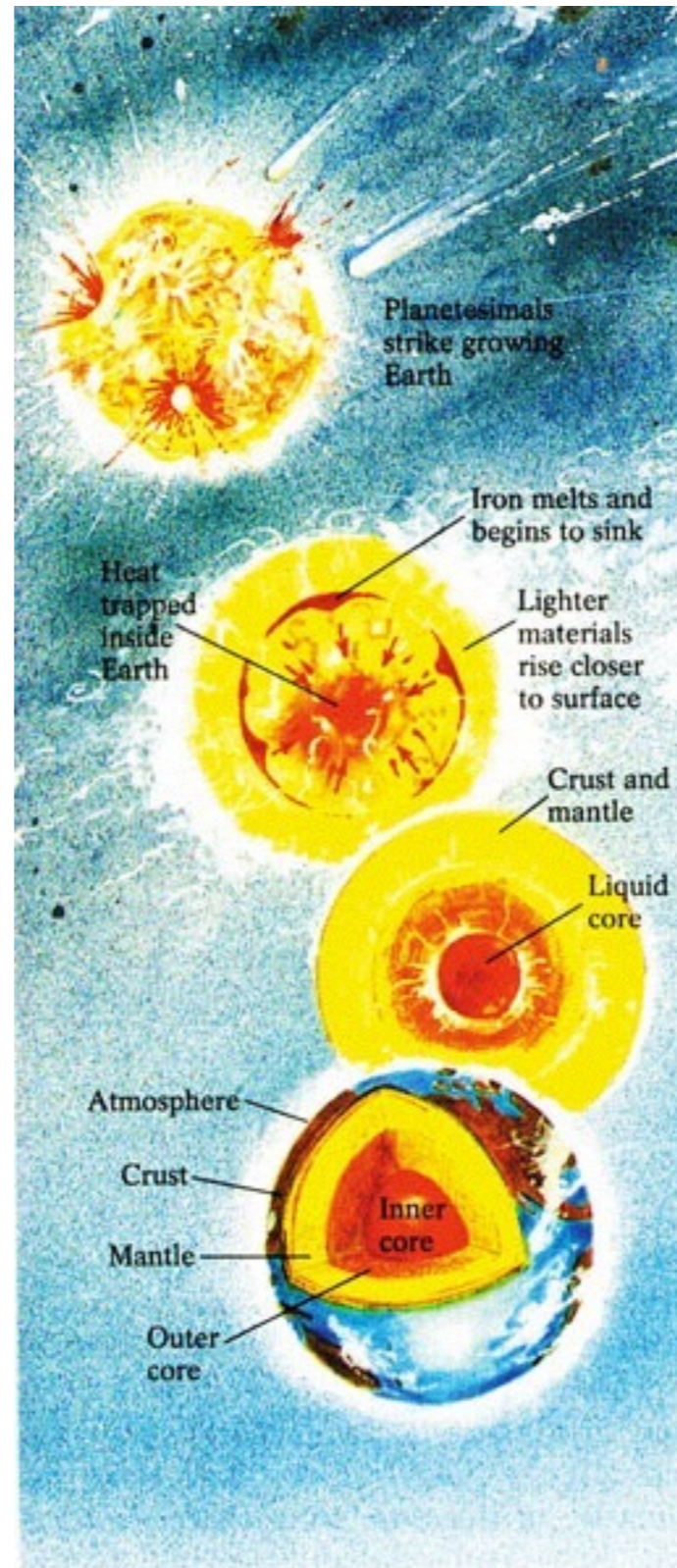
The Geologic Time Scale



The Geologic "Clock"



The Hadean Eon - Accretion, Melting and Differentiation



The Mars-size (Theia) Impactor Theory



Our Moon



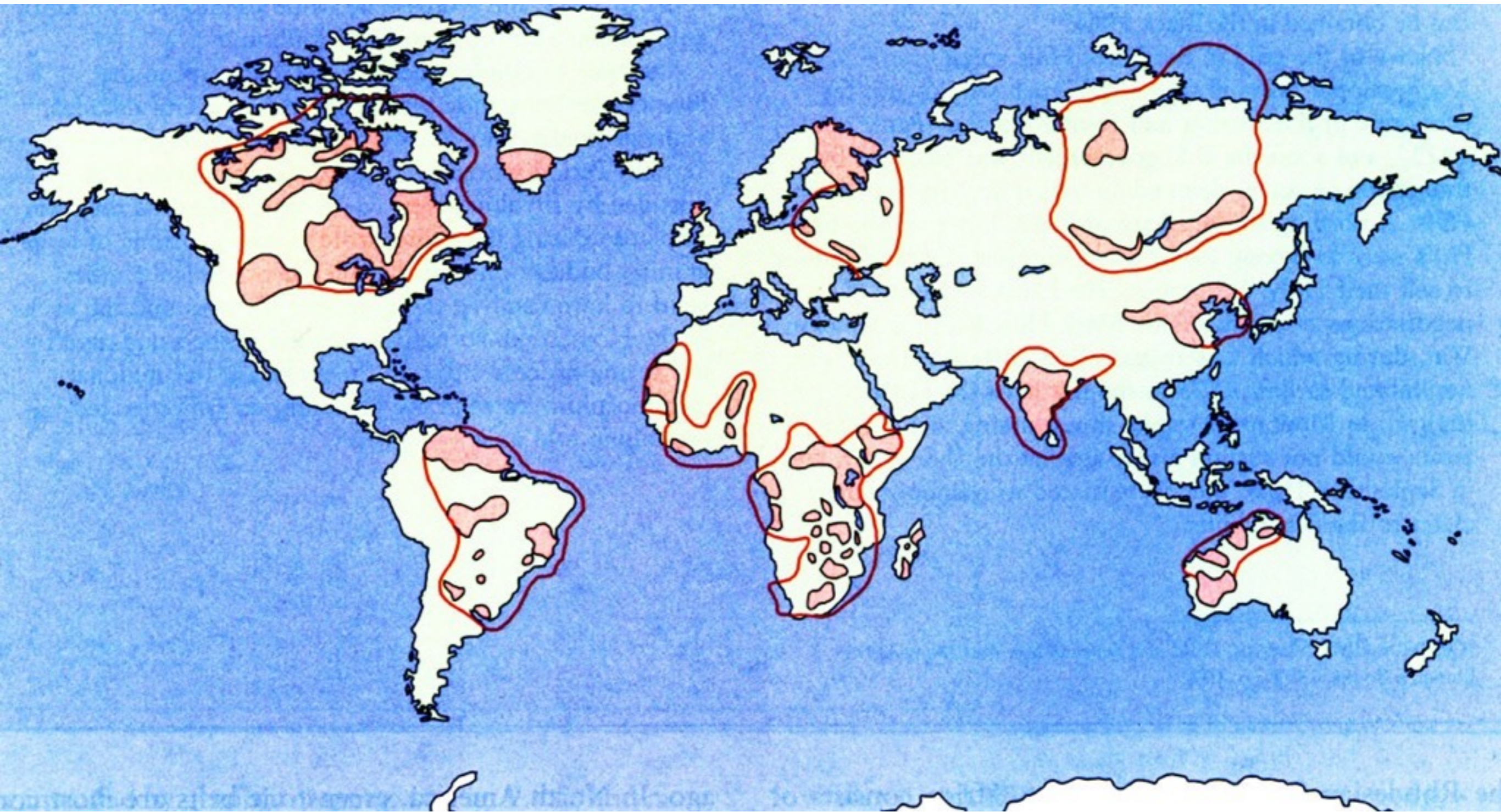
Hadean “Outgassing” to form Atmosphere and Oceans



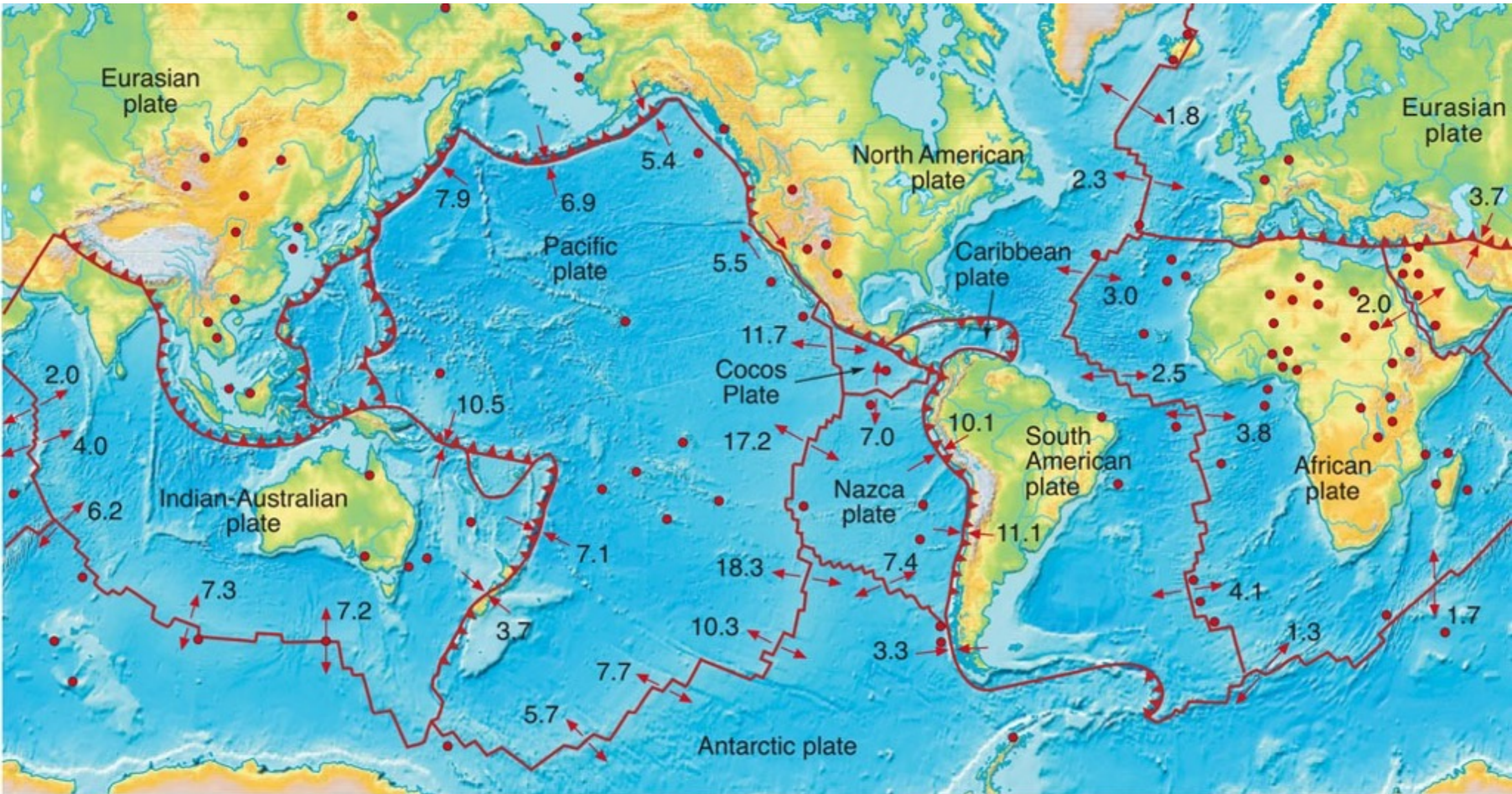
Late-Heavy Bombardment - the Moon



Archean Eon - the time of crust-building

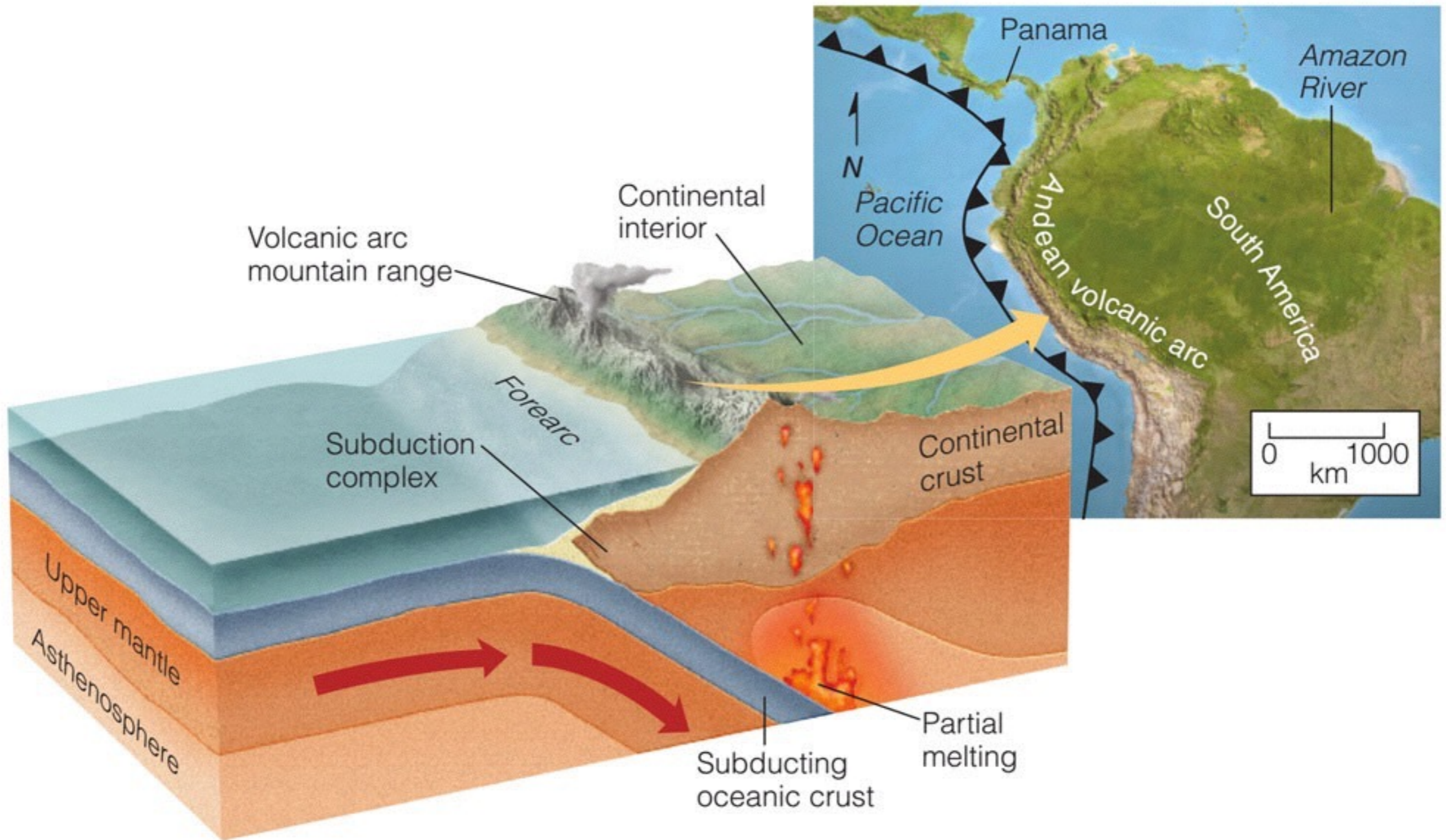


Modern Plate Tectonics

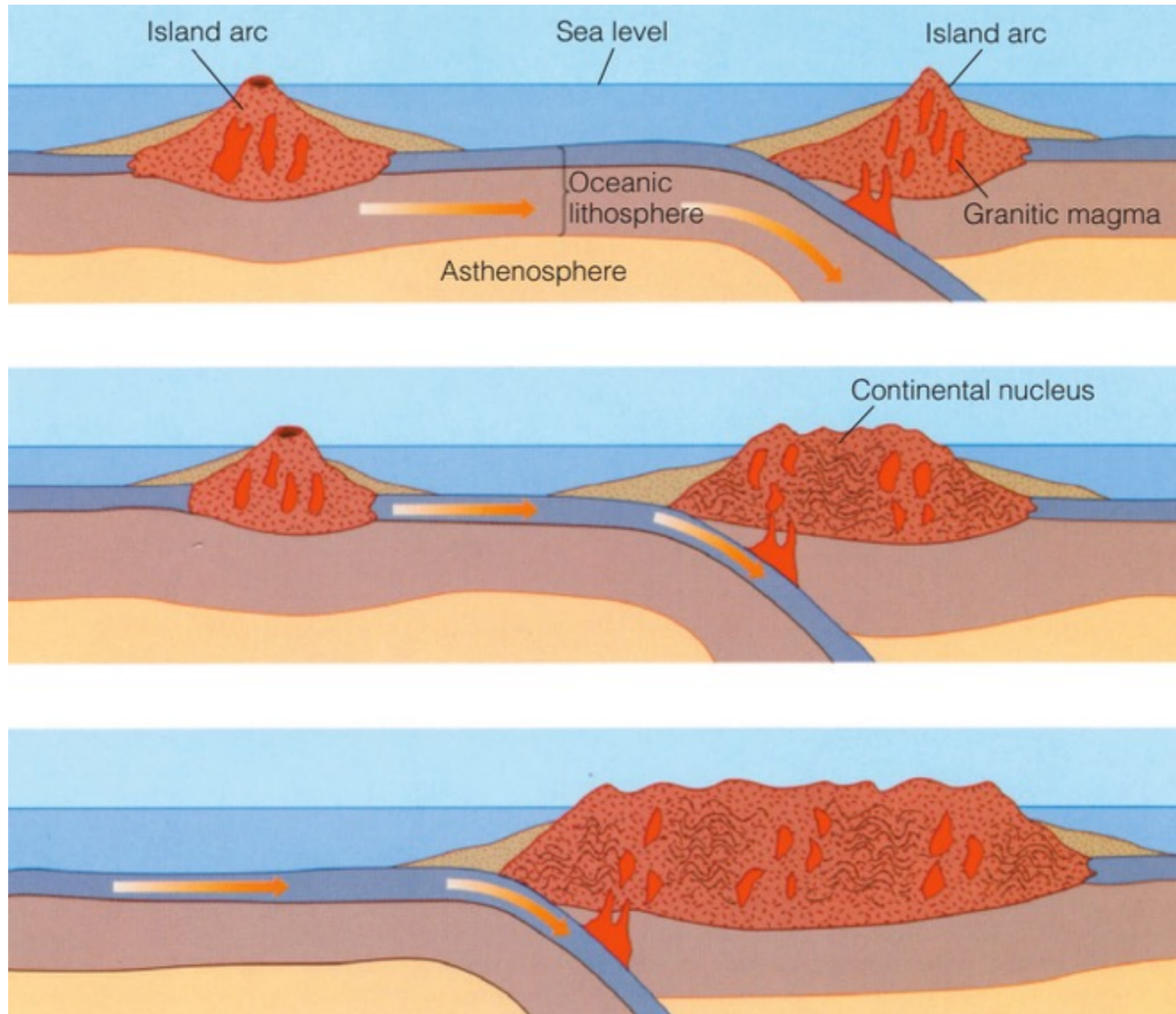


—●— Ridge axis
—▲— Subduction zone
● Hot spot
→ Direction of movement

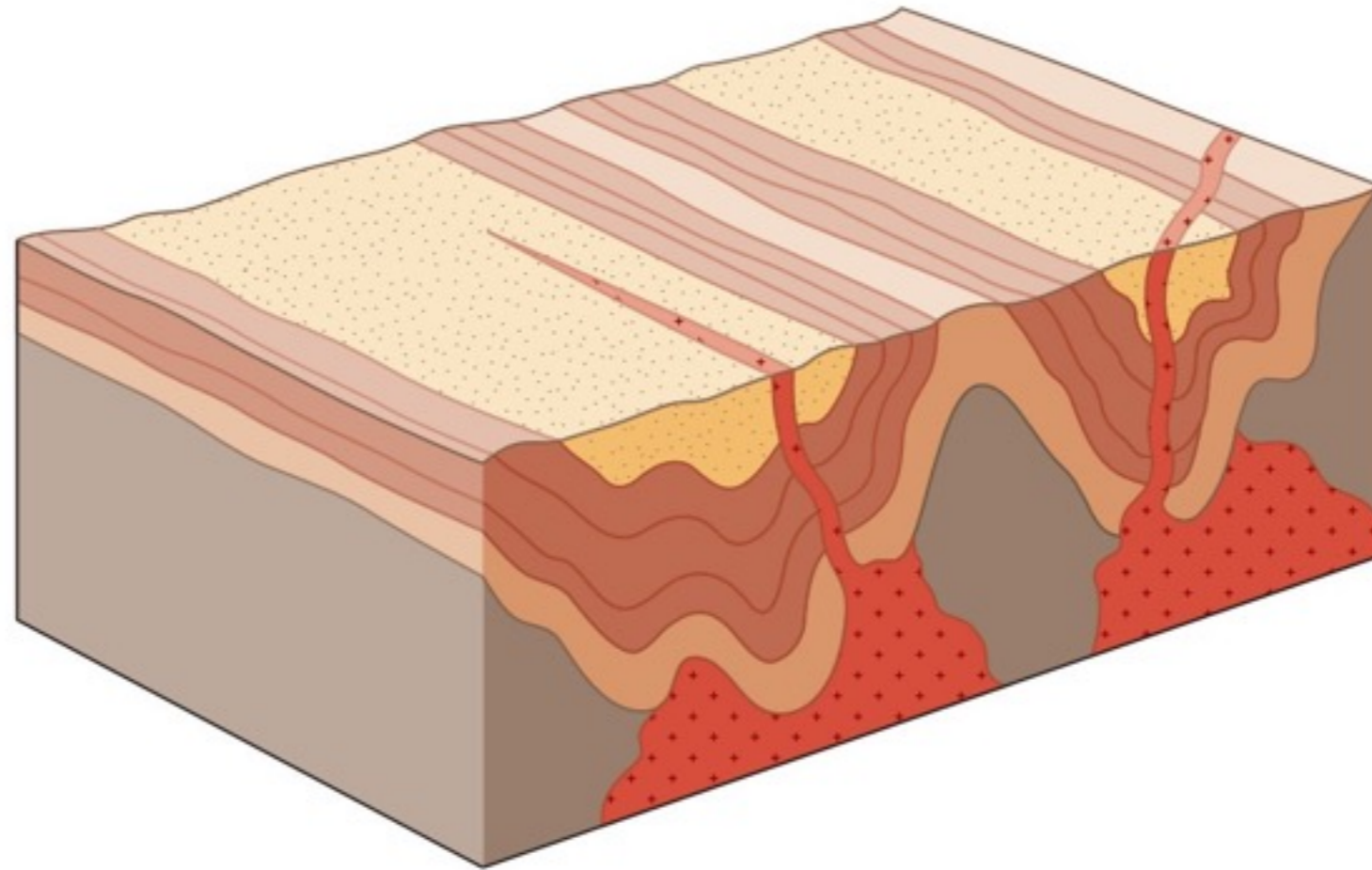
Modern Subduction Zone



Ancient Subduction



Archean Greenstone Belts



- Greenstone belt succession ↑
- Granitic intrusives
 - Upper sedimentary unit: sandstones and shales most common
 - Middle volcanic unit: mainly basalt
 - Lower volcanic unit: mainly peridotite and basalt

Komatiite - an olivine lava with spinifex texture



Hawaiian Pillow Lavas



Metasedimentary Greenstones



Acasta Gneiss from Canadian Shield - 4 Ga

