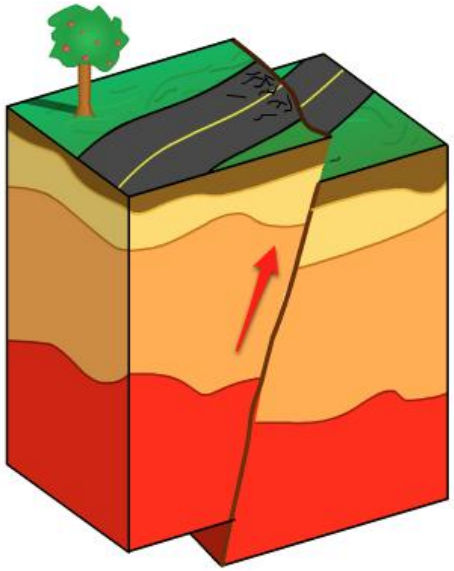
Geologic Faults

Overview of Fault Types

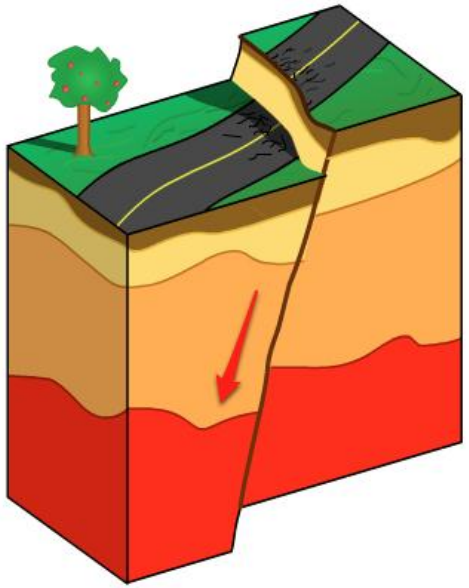
Faults are fractures of the Earth's crust on which there is appreciable movement. Rupture and displacement along faults produce earthquakes. The displacement along faults may shorten and thicken the crust (thrust faults), thin and extend the crust (normal faults), or allow opposing fault blocks to slide past one another (strike-slip on continents, transform within the ocean).

Thrust faults



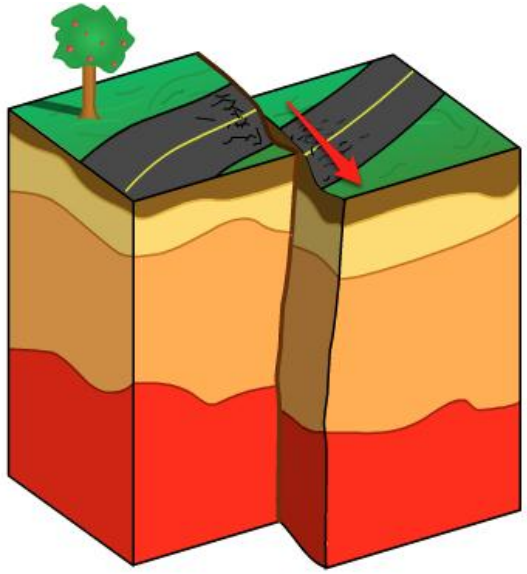
Prevalent along convergent boundaries, ***thrust faults*** accommodate contraction and produce mountains. Buried thrust faults can cause surface uplift and folding.

Normal faults



Normal faults are most prevalent along divergent boundaries and are associated with crustal extension at rifts and passive margins.

Strike-slip faults



Dominant along transform plate boundaries, ***strike-slip faults*** allow for sliding and displacement of adjacent landscapes.