USGS

Axial Seamount

Juan de Fuca Ridge

2015.06.01
M 5.9

2015.06.01
M 5.5

2015.06.01
M 5.8

Juan de Fuca plate

Blanco fracture zone

North America plate

Cascadia subduction zone

Pacific plate

Gorda Rise

Gorda plate

Mendocino fault

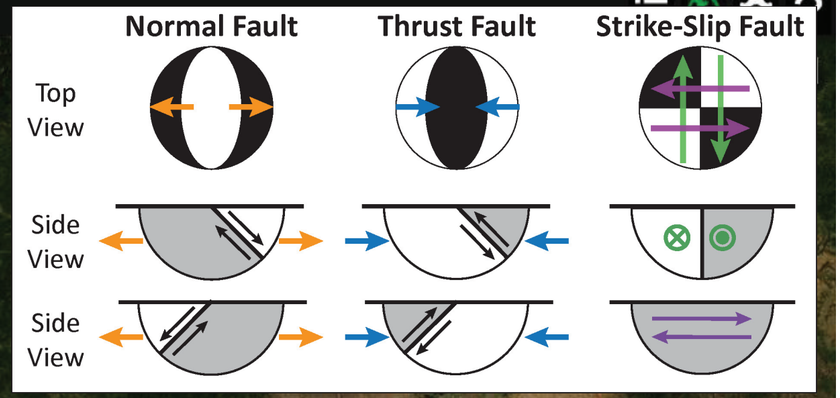
San Andreas fault

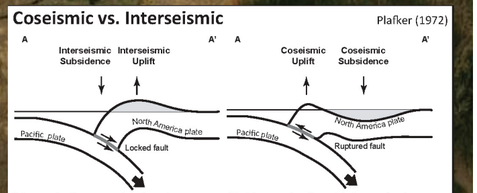
Pacific plate

100 km

Earthquake Age
Hour Day Week Older

50 km
50 mi





Schematic diagrams showing the pattern of (A) inter-seismic and (B) co-seismic deformation associated witha subduction zone earthquake during an earthquake deformation cycle. Adapted from Plafker (1972) to reflect the spatial pattern of tectonic deformation during the earthquake cycle in Alaska, March 27, 1964.

Cascadia subduction zone

Chaytor et al. (2004)
Nelson et al. (2004)

Plate configuration for the Cascadia subduction zone (CSZ). The Juan de Fuca and Gorda plates are subducting northeastwardly oblique beneath the North America plate at ~36 mm/yr in the Humboldt Bay region. Paleoseismic core sites (marine and terrestrial) are plotted as circles.