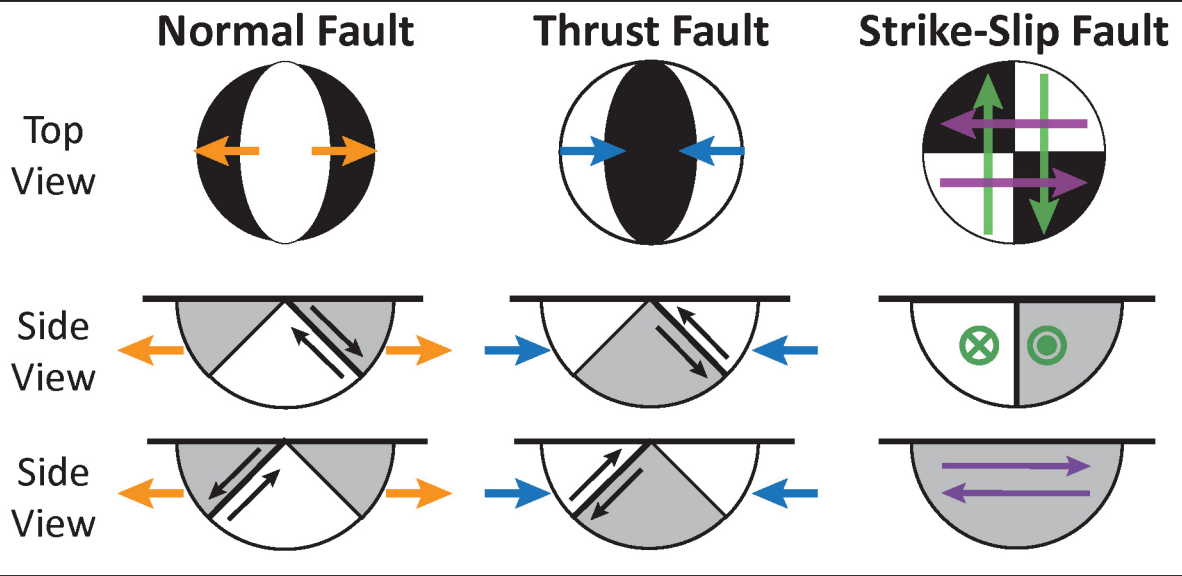
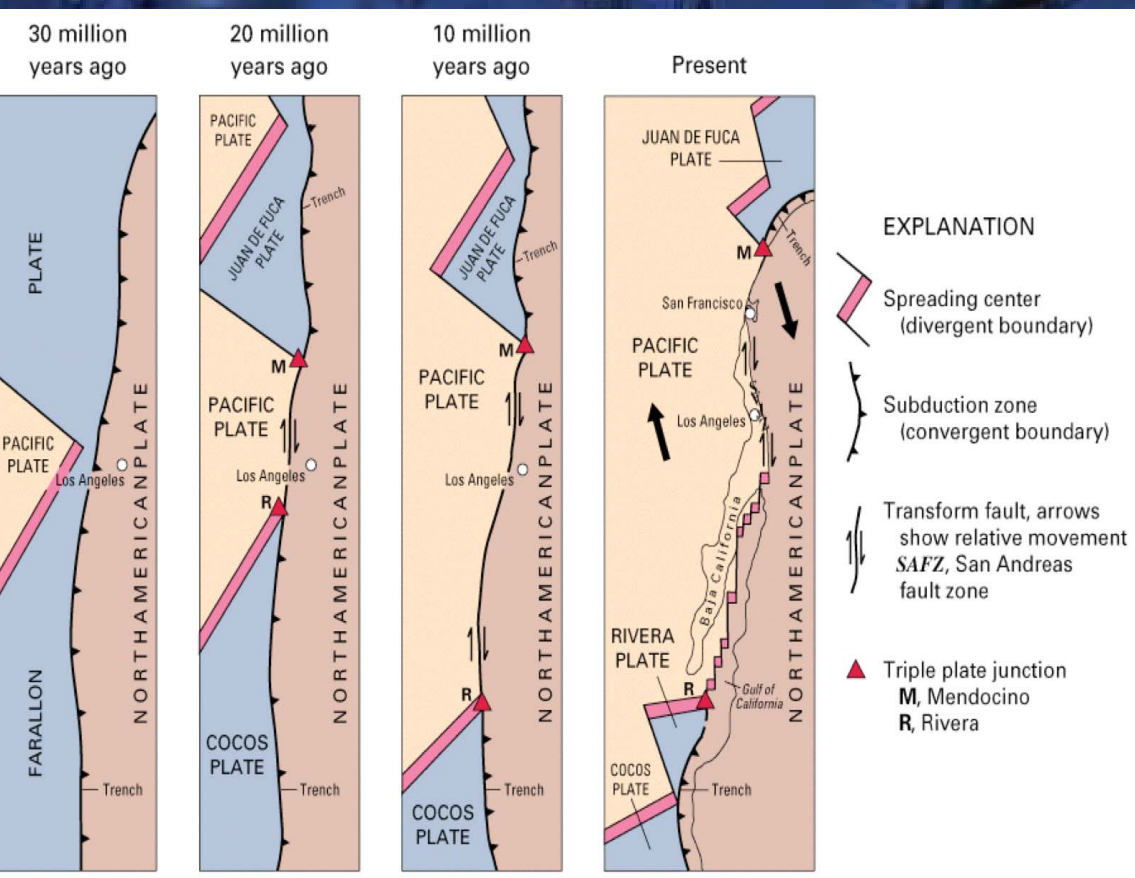
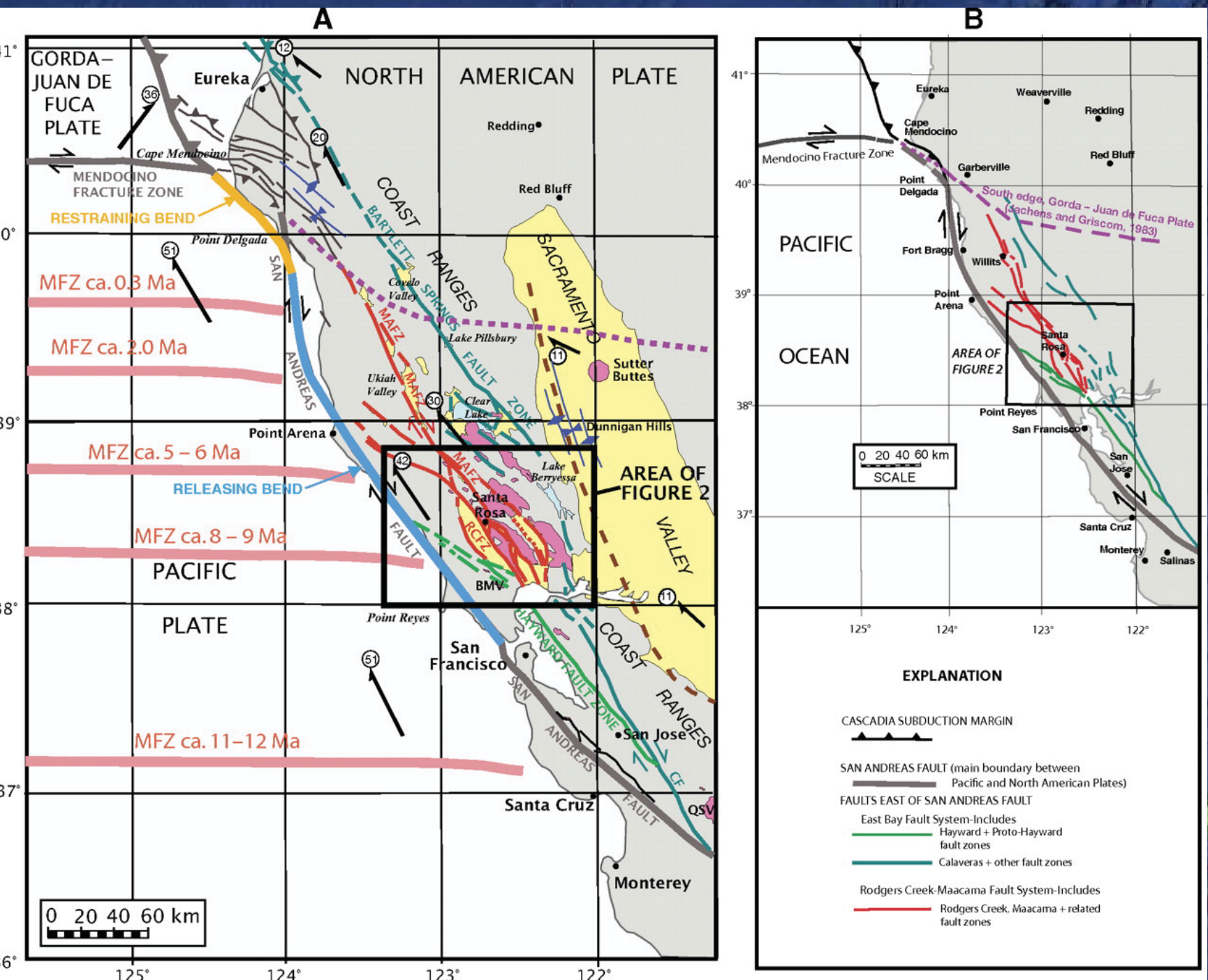


Earthquake Report: 2016.12.05 M 4.3 Petrolia



McLaughlin et al., 2012



USGS

Google earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat

Data LDEO-Columbia, NSF, NOAA

Jason R. Patton
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Cascadia subduction zone

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

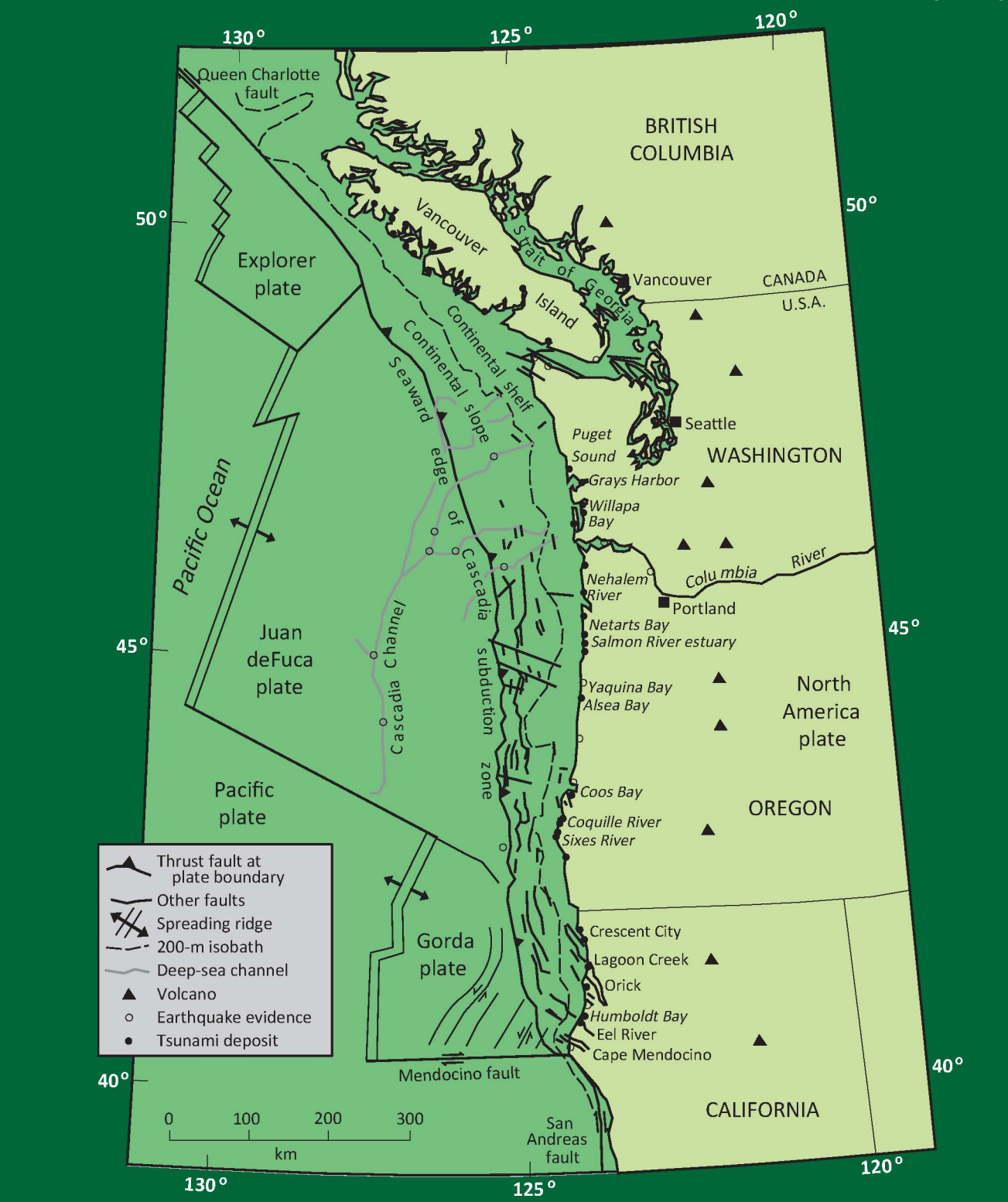
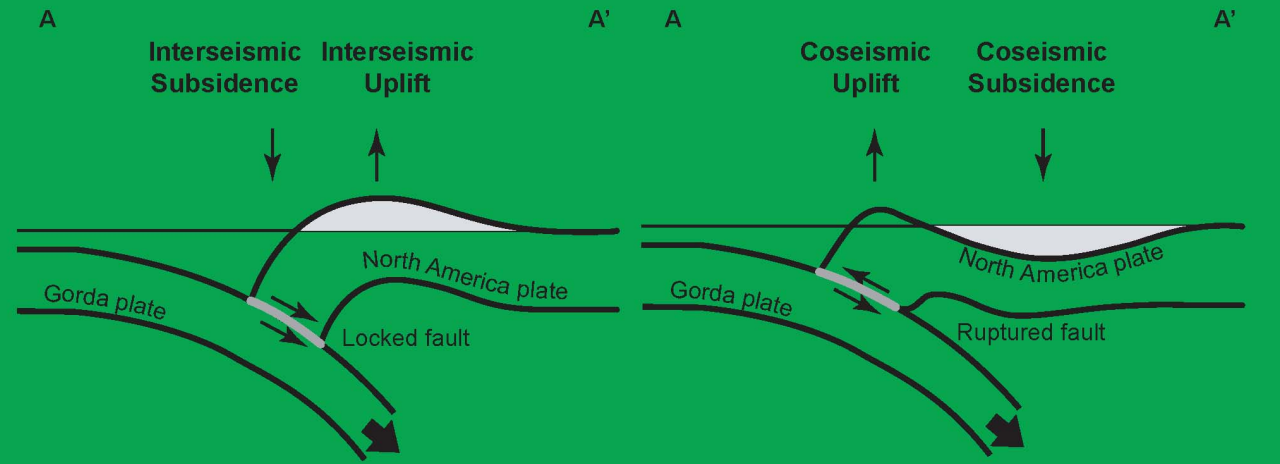


Plate configuration for the Cascadia subduction zone (CSZ). The Juan de Fuca and Gorda plates are subducting northeastwardly oblique beneath the North America plate at ~36 mm/yr in the Humboldt Bay region. Paleoseismic core sites (marine and terrestrial) are plotted as circles.

Vertical Motion: Coseismic vs. Interseismic

Plafker (1972)



Schematic diagrams showing the pattern of (A) inter-seismic and (B) co-seismic deformation associated with a 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 Cascadia.

INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+
Shaking	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
Damage	None	None	None	Very slight	Light	Moderate	Moderate/heavy	Heavy	Very heavy
Peak Acc	<0.17	0.17-1.4	1.4-3.9	3.9-9.2	9.2-18	18-34	34-65	65-124	>124
Peak Vel	<0.1	0.1-1.1	1.1-3.4	3.4-8.1	8.1-16	16-31	31-60	60-116	>116

Peak Acc = Peak ground acceleration (g), Peak Vel = Peak ground velocity (cm/s)

USGS

N

100 mi