

Cascadia subduction zone

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

PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	very light	light	moderate	moderate to heavy	heavy	very heavy
PGA (% g)	<0.17	0.17-1.4	1.4-3.9	3.9-9.2	9.2-18	18-34	34-65	65-124	>124
PGV (cm/s)	<0.1	0.1-1.1	1.1-3.4	3.34-8.1	8.1-16	16-31	31-60	60-118	>116
MMI	I	II-III	IV	V	VI	VII	VIII	IX	X+

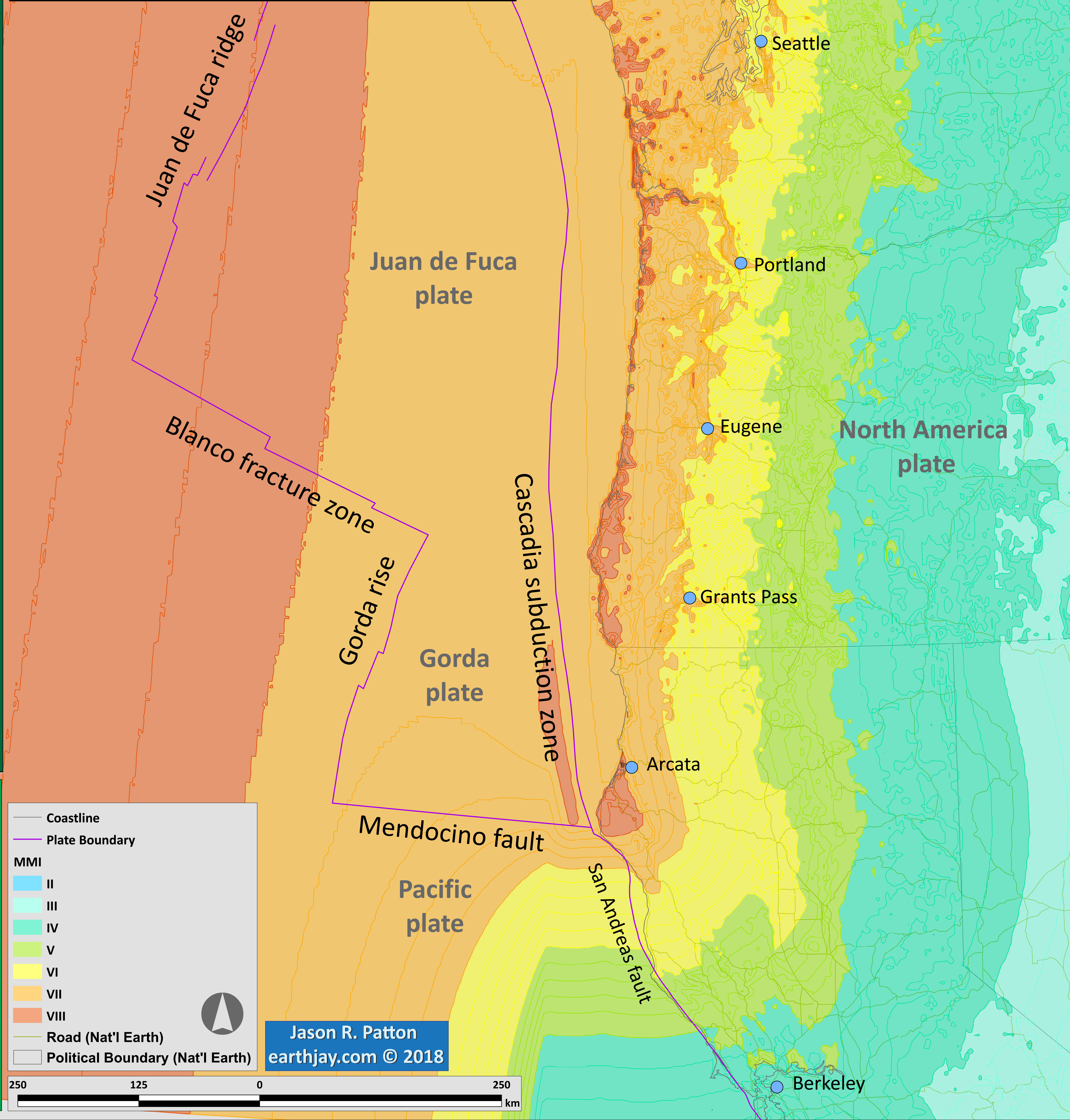
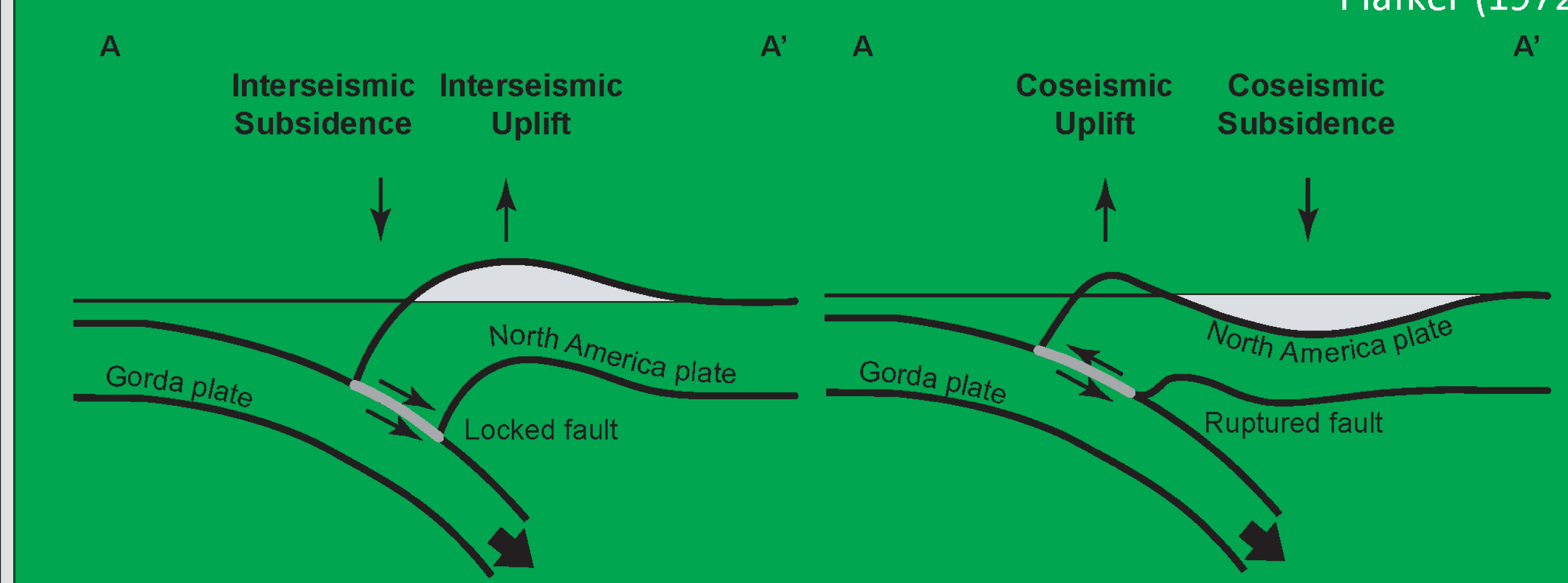


Plate configuration for the Cascadia subduction zone (CSZ). The Juan de Fuca and Gorda plates are subducting northeastwardly oblique beneath the North America plate at ~36 mm/yr in the Humboldt Bay region. Paleoseismic core sites (marine and terrestrial) are plotted as circles.

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.



Jason R. Patton
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