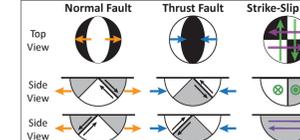


Earthquake Report: 2019.11.30

M 4.5 Cape Blanco (& USGS Seismicity 1919-2019 M ≥ 4.0)



| SHAKING | Not felt | Weak | Light | Moderate | Strong | Very strong | Severe | Violent | Extreme |
|-----------|----------|------|-------|------------|--------|-------------|----------------|---------|------------|
| DAMAGE | None | None | None | Very light | Light | Moderate | Moderate/heavy | Heavy | Very heavy |
| PGA(%g) | <0.05 | 0.3 | 2.76 | 6.2 | 11.5 | 21.5 | 40.1 | 74.7 | >139 |
| PGV(cm/s) | <0.02 | 0.13 | 1.41 | 4.65 | 9.64 | 20 | 41.4 | 85.8 | >178 |
| INTENSITY | 1 | 2-3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |

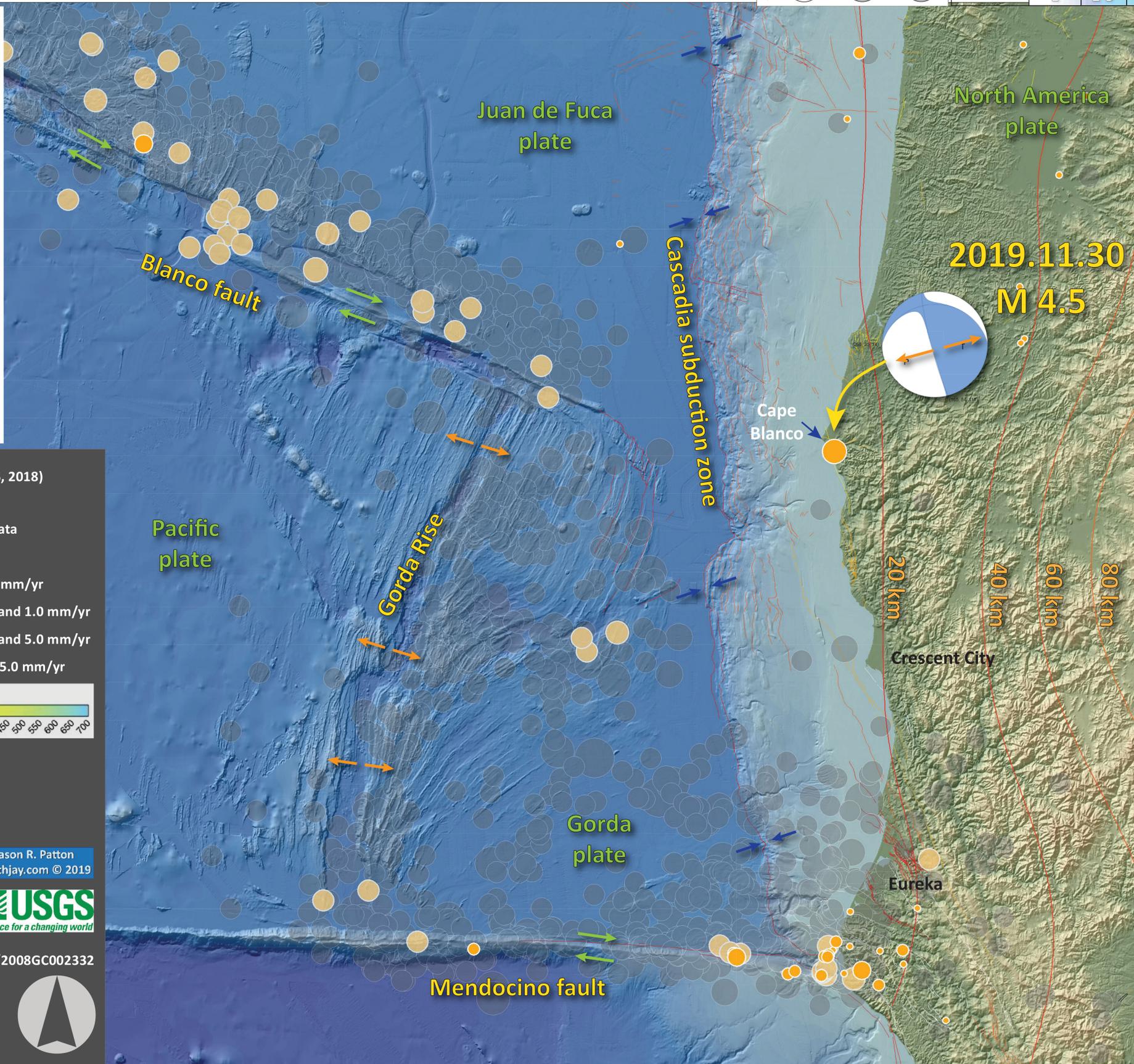
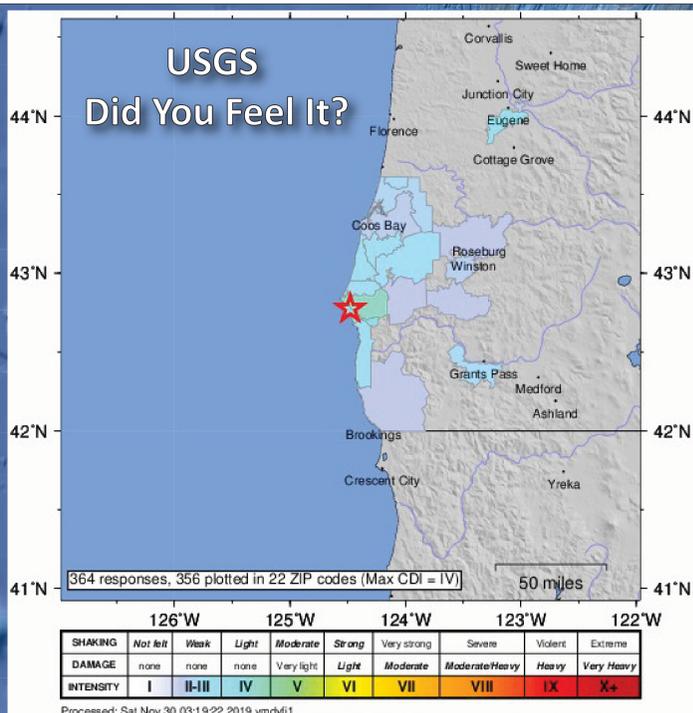
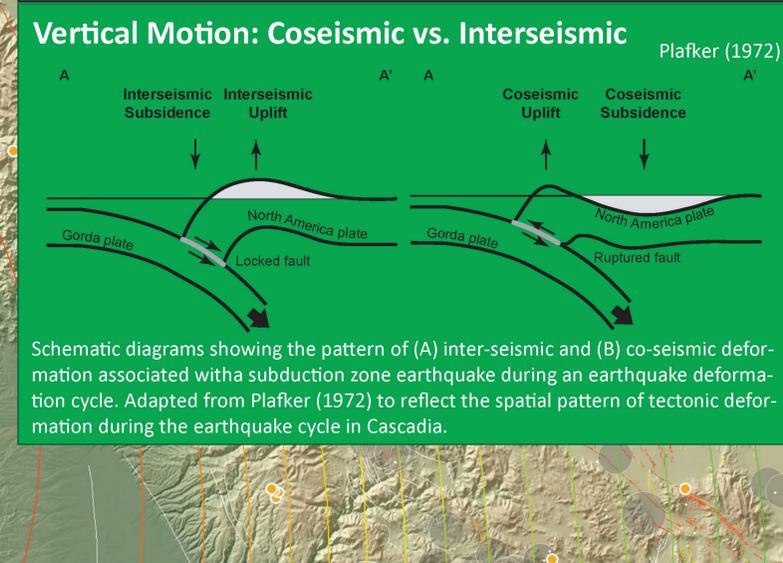


Plate configuration for the Cascadia subduction zone (CSZ). The Juan de Fuca and Gorda plates are subducting northeastwardly oblique beneath the North America plate at ~36 mm/yr in the Humboldt Bay region. Paleoseismic core sites (marine and terrestrial) are plotted as circles.



USGS Seismicity (30 day)

1919-2019 USGS Seismicity (magnitude)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 3.0
- 3.1 - 4.0
- 4.1 - 4.5

USGS Seismicity (1 year)

2018-2019 USGS Seismicity (magnitude)

- 4.0 - 5.0
- 5.1 - 6.0
- 6.1 - 6.3

1919-2019 USGS Seismicity (magnitude)

- 4.0 - 5.0
- 5.1 - 6.0
- 6.1 - 7.0
- 7.1 - 7.4

Quaternary Fault (USGS, 2018)

Slip Rate

- Insufficient data
- Unspecified
- Less than 0.2 mm/yr
- Between 0.2 and 1.0 mm/yr
- Between 1.0 and 5.0 mm/yr
- Greater than 5.0 mm/yr

Depth to Slab (km)

0 50 100 150 200 250 300 350 400 450 500 550 600 700

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USGS
science for a changing world

Elevation:
GMRT Ryan et al., 2009 DOI: 10.1029/2008GC002332

0 25 50 100 Miles

0 37.5 75 150 Kilometers