GNSS-A Update & Future Options

Current Network

- 7 sites operated by Ocean Networks Canada
- 9 operated by the Community Experiment
 - 2 unoccupied sites
- 3 operated by the USGS

Expansion Options

• SZ4D may place up to 9 sites in Cascadia

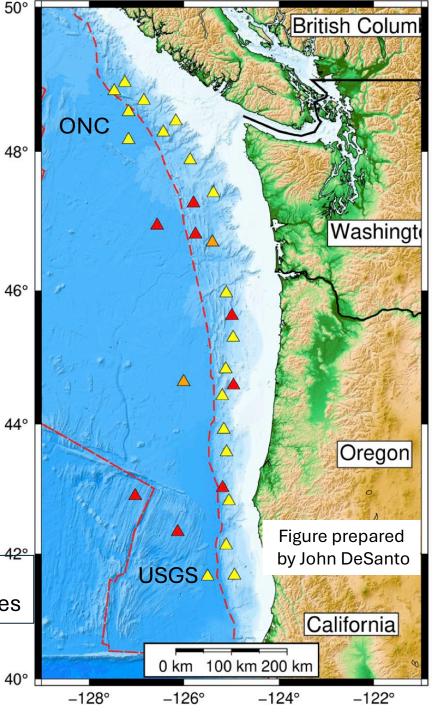
Possible Prioritization for Placement

- Densify along-strike
- Add a couple sites on the oceanic plate
- Consider spar-buoys on the shelf
- Leverage seafloor cables

△ Operational Sites

▲ Possible Future Sites

Funding for the US instrument pool: NSF Director, Polar, OCE, GEO Funding for the community experiment ops: NSF-MGG



GNSS-A Update & Future

Science Targets (where seafloor geodesy can help)

- Offshore inteseismic locking
- Offshore Transient deformation (seafloor pressure)
- Internal deformation of the accretionary prism
- Activity on splay faults
- Subducted seamounts
- Deformation of incoming oceanic plate

Other considerations

 Need for complimentary instrumentation and other observations (e.g. structural, seismicity)

△ Operational Sites

▲ Possible Future Sites



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