Cascadia Basin Ridge to Trench
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- How does the JdF plate evolve from ridge to trench and is there significant hydration of the lower crust and upper mantle prior to subduction at this warm young plate?

- How does the structure of the downgoing plate vary along the trench across distinct structural regimes of the Cascadia subduction zone?
The Experiment

• Complete plate transects from JdF Ridge to the trench.
• ~ 400 km long transect parallel to deformation front.
• Fan shoots for study of mantle anisotropy, 2 MCS lines at Axial
• Seismic Oceanography and OBS/Land station add-ons

- Coincident long streamer MCS (8 km) and wide-angle OBS (85 stations)
- Wash&OR Land stations
- Crustal structure, crustal and upper mantle seismic velocities, fault distribution across plate and at deformation front

- R/V Langseth MGL1211
  June 13-July 8
- R/V Oceanus OC1206A
  June 7-July 13
AGU Presentations
T11 Before and After Subduction
Monday am T11A-2523 Han et al,
Monday 1:40pm: T13H-01 Carbotte et al,
OS51- Friday 8 am: OS51D-1904. Biescas
et al