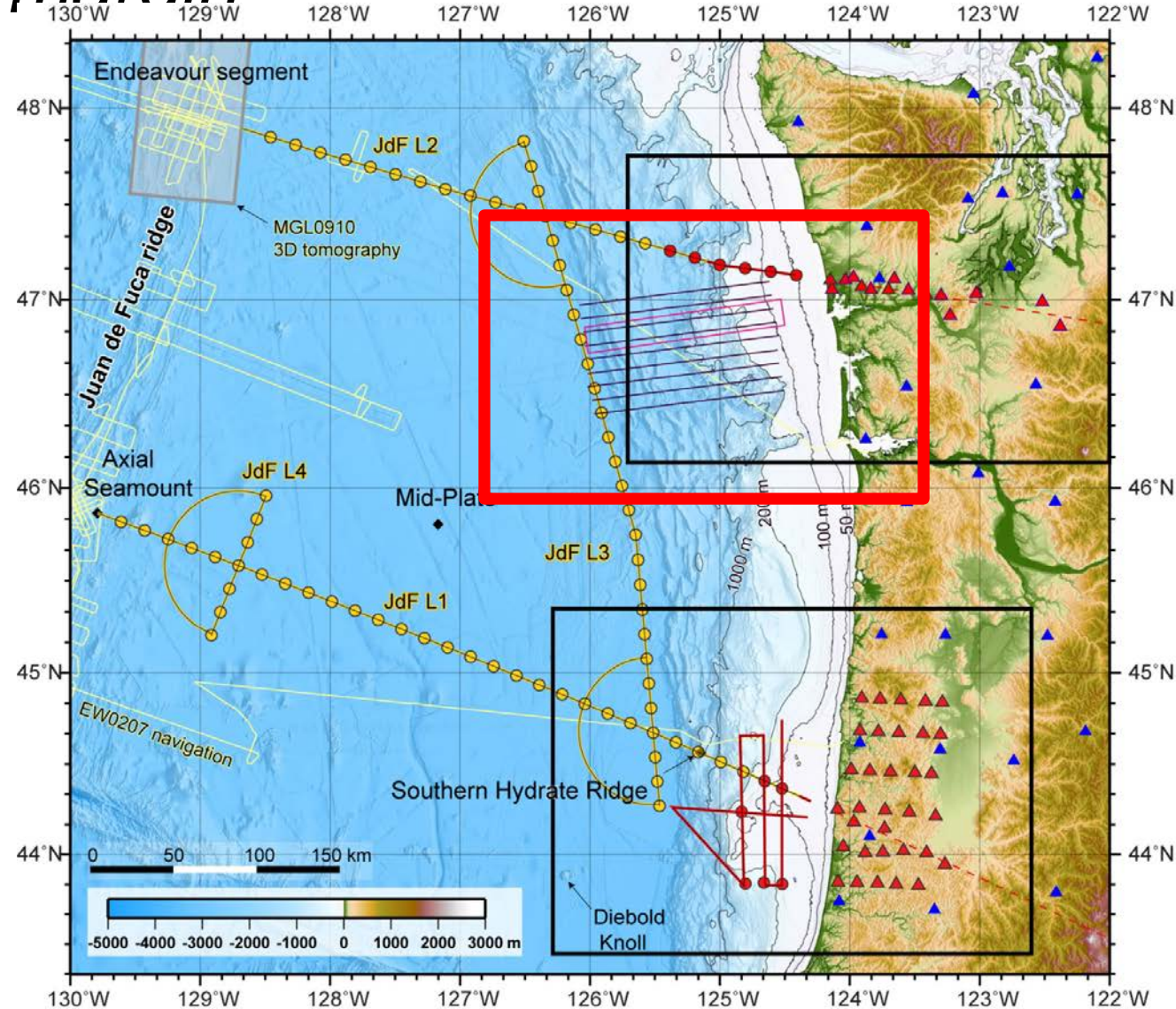
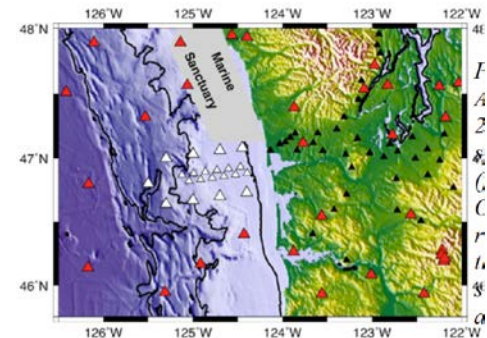


Open-access R/V Langseth cruise: *Reflection imaging of the central Cascadia margin*

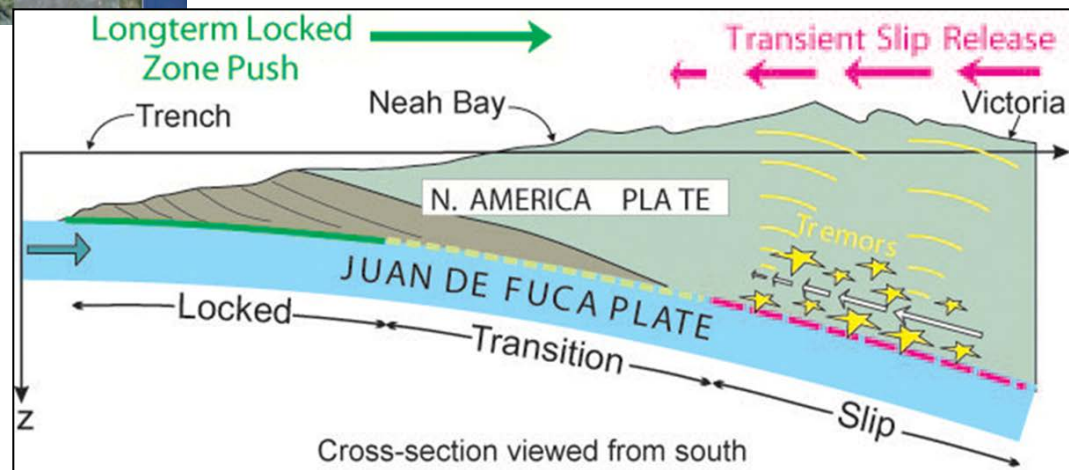
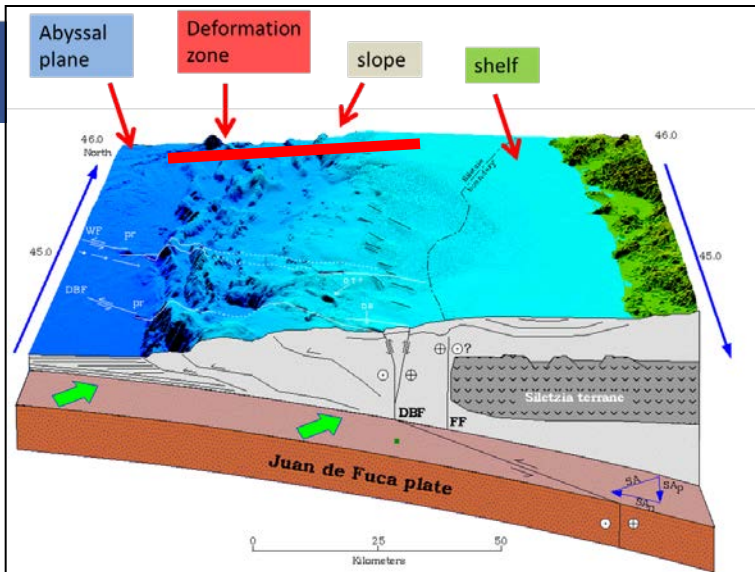
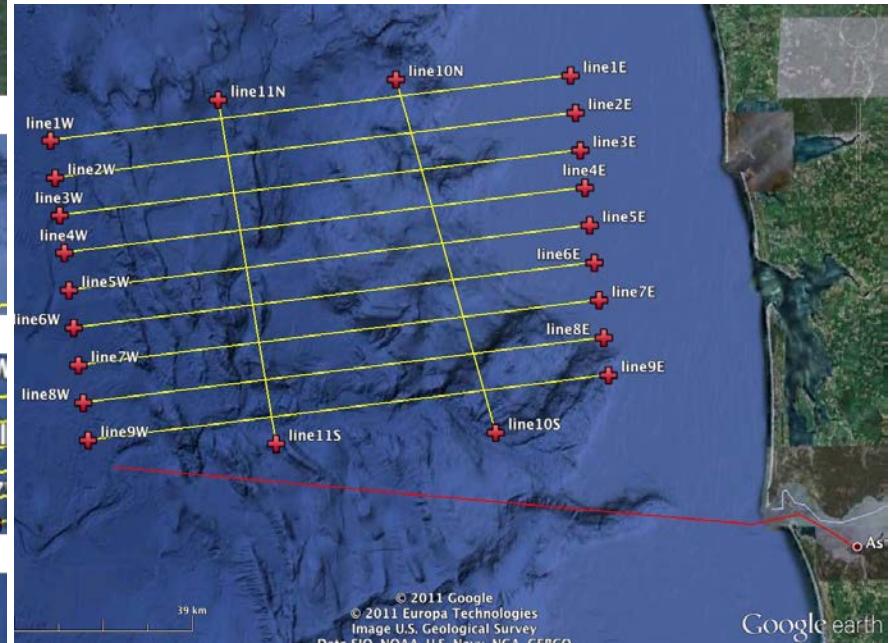
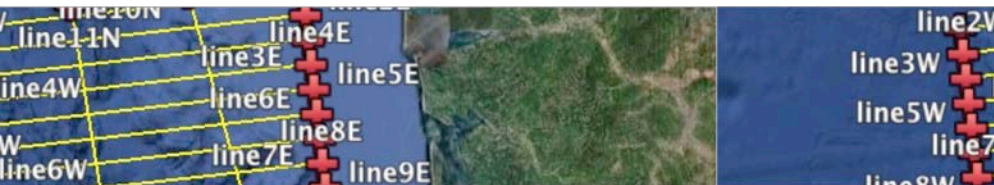


PIs/Facilitators:
Steve Holbrook, UWyo
Graham Kent, UNR
Anne Trehu, OSU
Paul Johnson, UWa
Katie Keranen, OU

plus
16 cruise participants:
scientists
post-docs
students



Seismic imaging: Deformation front to shelf



Unique: Data publicly available without restriction; provides cruise and acquisition experience for early-career scientists

- Region (central Cascadia margin) of strong community interest
- PIs will rapidly process the 2D seismic lines, and make available in processed and raw form
- 55 applications, 16 berths available/offered (most accepted) – build community of Langseth users
- Lectures/experience in multi-channel seismic processing and interpretation

Cruise participant:



Cascadia Open-Access 2D Cruise

We announce an opportunity for students and early-career scientists to sail on the R/V Marcus G. Langseth in July 2012 on a 10-day cruise on the Cascadia continental margin off Grays Harbor, Washington. We will collect approximately 1000 km of 2D seismic reflection data, with the goal of improving knowledge of subduction processes and

Science goals:

- Location & reflection character of the megathrust interface
- Strain partitioning in the accretionary prism
- Pore fluid pressure; fluid budgets; dewatering of forearc sediments
- Geological controls on methane hydrates; methane venting systems

Acquisition details:

- Nine ~110-km-long lines, spaced ~8 km apart, two cross-lines
- 40-gun array, towed at 10-m depth
- Single, 8-km-long streamer
- Optimized for imaging 'deep' structure
- 6.25 m CMP spacing

