

# Shima Abadi

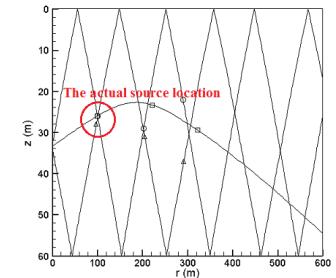
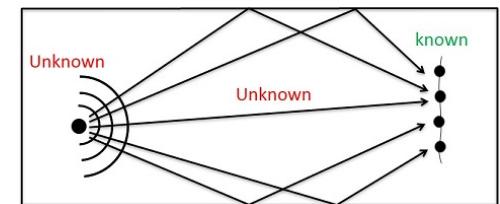
Lamont-Doherty Earth Observatory/Columbia University



# Background

**PhD: Mechanical Engineering (Underwater Acoustics),  
University of Michigan, 2013**

- Underwater Sound Source Signal Reconstruction
- Underwater Sound Source Localization
- Whale Localization (Bowhead Whale, Arctic Ocean)





## **Postdoctoral Research Scientist, Sept. 2013-Present**

Improving Marine Mammal Monitoring Survey on *Langseth* using  
MCS data

- Visual Monitoring Survey
- Acoustic Monitoring Survey (PAM)
- Acoustic Monitoring Survey (Streamer)

# Greyson Adams

Humbolt State University



# Greyson Adams

Oceanography Student at Humboldt State University  
(graduating Spring 2015)

Coastal Native (Humboldt County)  
Outdoors enthusiast  
Oceanic and Atmospheric systems



# Research Experience/ Interests

\*Pacific Coast Ocean

Observing System Research

Marine Chemistry

Biogeochemical  
cycles

Physical

Oceanography

Atmospheric

processes

Marine Seismology

Marine Geology

Assistant

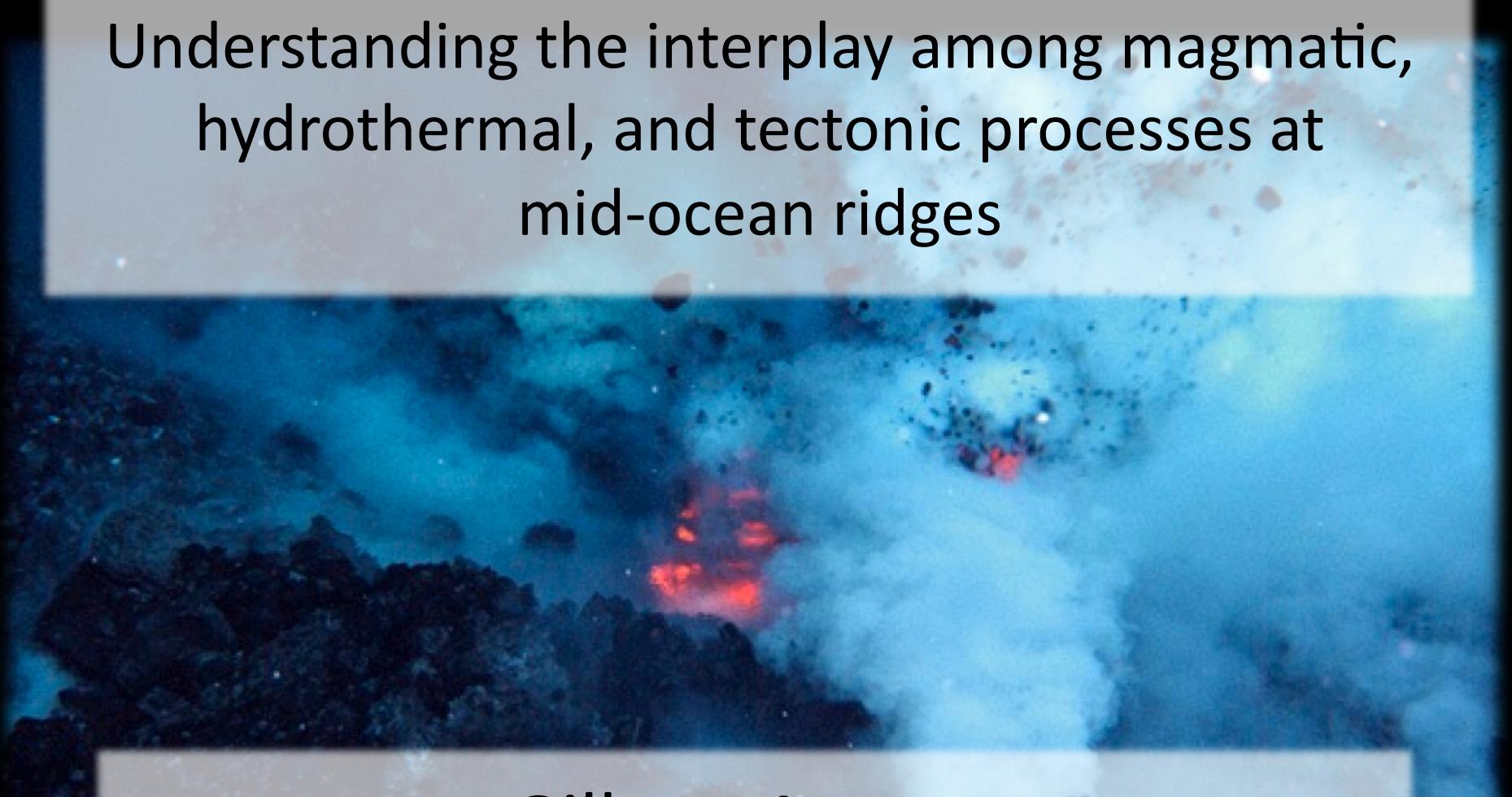
Telonicher  
Marine  
Laboratory

# Gillean Arnoux

University of Oregon



# Understanding the interplay among magmatic, hydrothermal, and tectonic processes at mid-ocean ridges

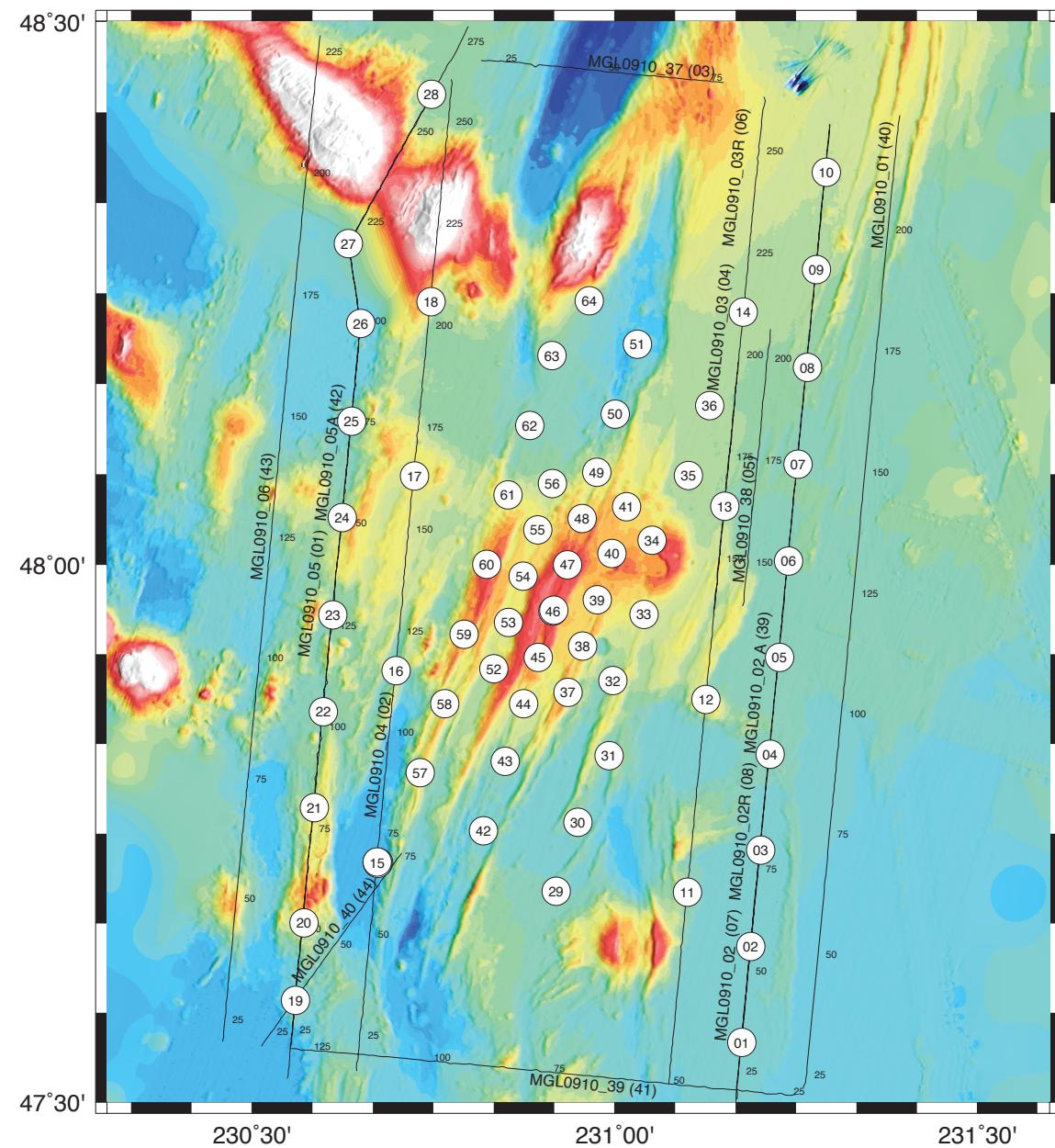


Gillean Arnoux

Geological Sciences, University of Oregon, Eugene, USA,

# Anisotropic 3D full-waveform inversion (FWI)

- Collaboration between UO and Imperial College
- Application of 3-D FWI to an academic OBS data set (ETOMO experiment)
- Starting models for P-wave velocity and anisotropy are from travel time tomography (Weekly et al., 2014)
- Inversions include data from 19 OBS and 1673 shots within a 20 x 27 km region
- Inversions recover low-velocity anomalies that are in concert with those resolved using multi-channel seismic reflection methods (Van Ark et al., 2007)
- ***Wednesday morning, poster V31B-4751***



# Tanya Blacic

Montclair State University



## Tanya Blacic

Assistant Professor

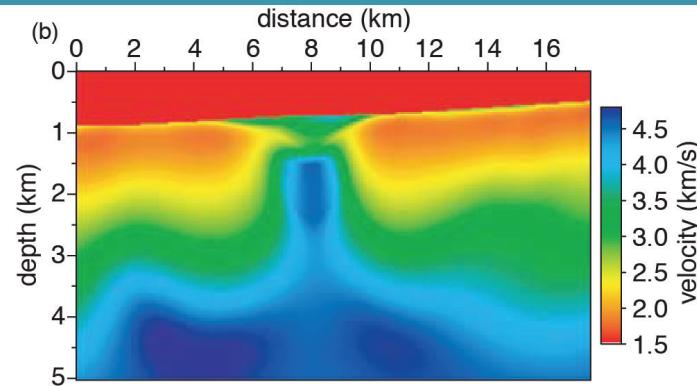
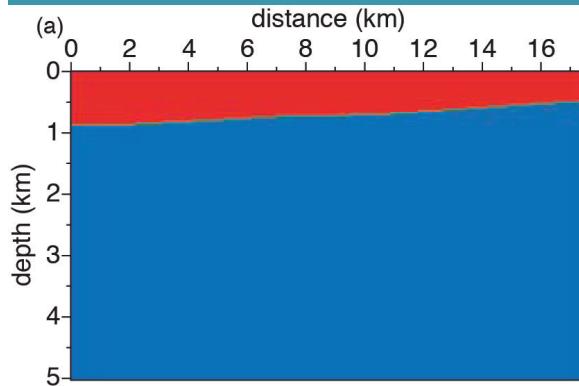
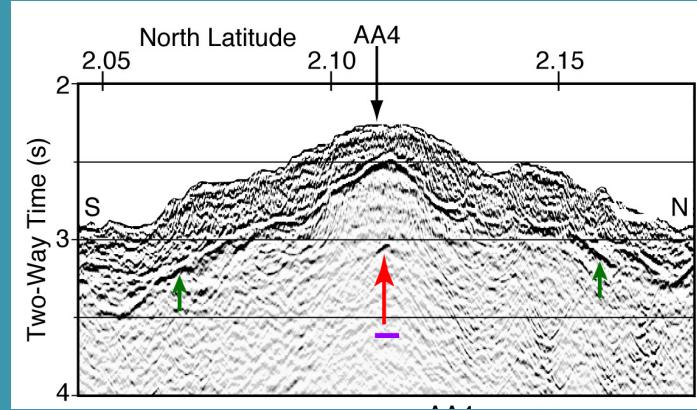
Earth and Environmental Studies

Montclair State University, New Jersey

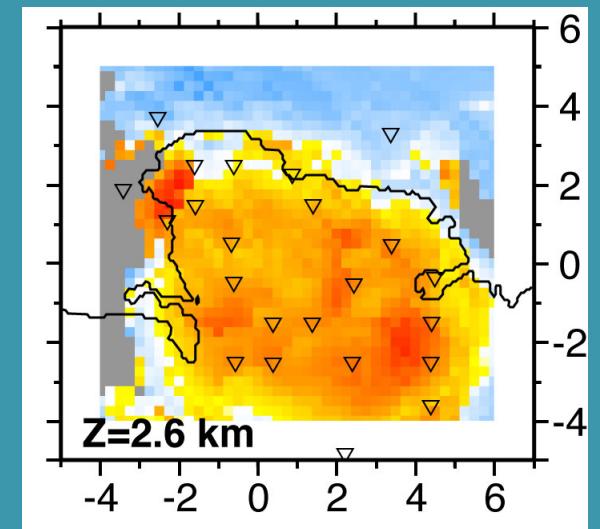
Galapagos  
Spreading  
Center  


### Research Interests:

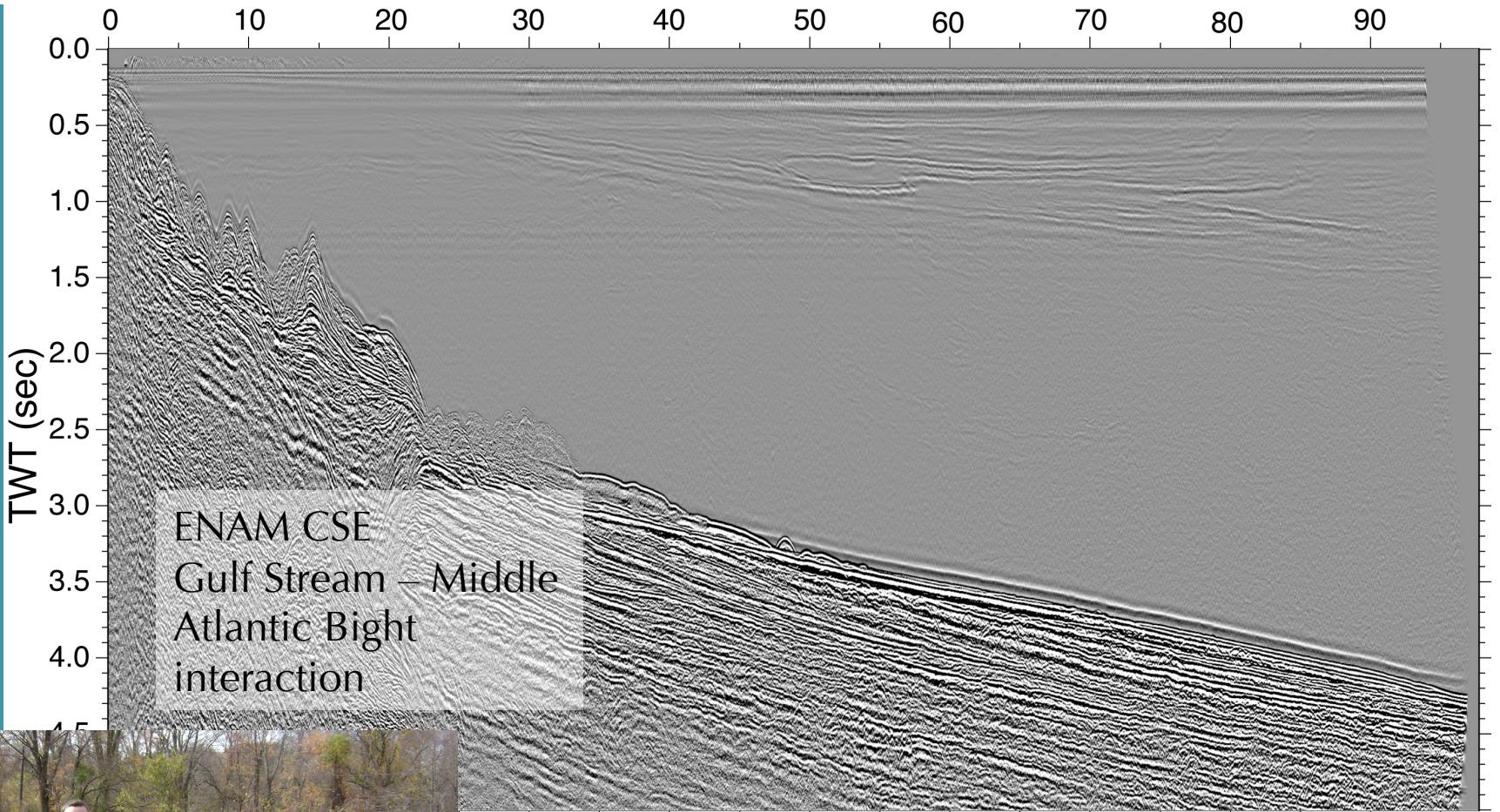
- ◆ Seismic imaging – Laplace domain inversion, converted phases migration
- ◆ Seismic oceanography – fronts, eddies, ocean-seafloor interaction
- ◆ Shallow geophysics – groundwater, environmental investigations, archeology
- ◆ Crustal accretion processes and volcanic systems



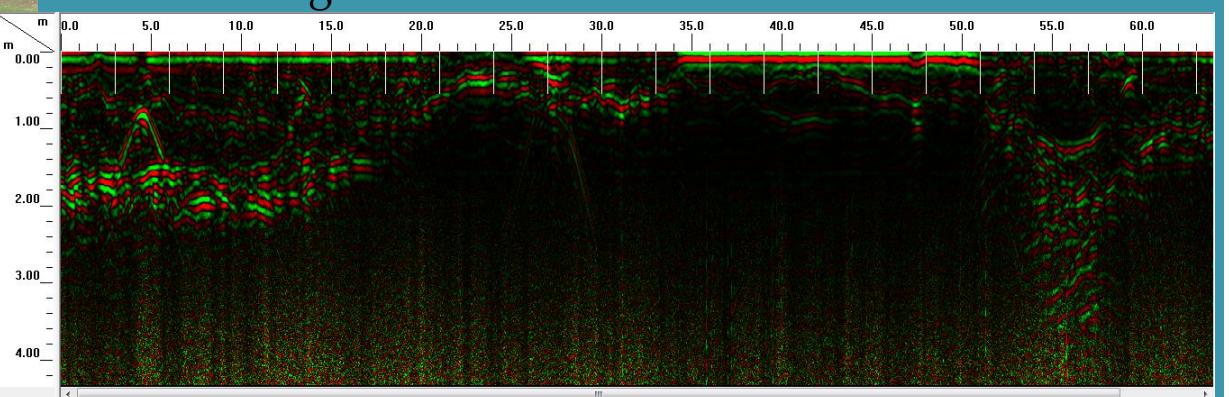
↑Laplace domain seismic inversion – application to seismic oceanography data for smooth background sound speed (collaboration with Changsoo Shin at Seoul National University)



Converted phases migration ↑ partway between tomography and full waveform inversion (Campi Flegrei Caldera)



← Collecting GPR data

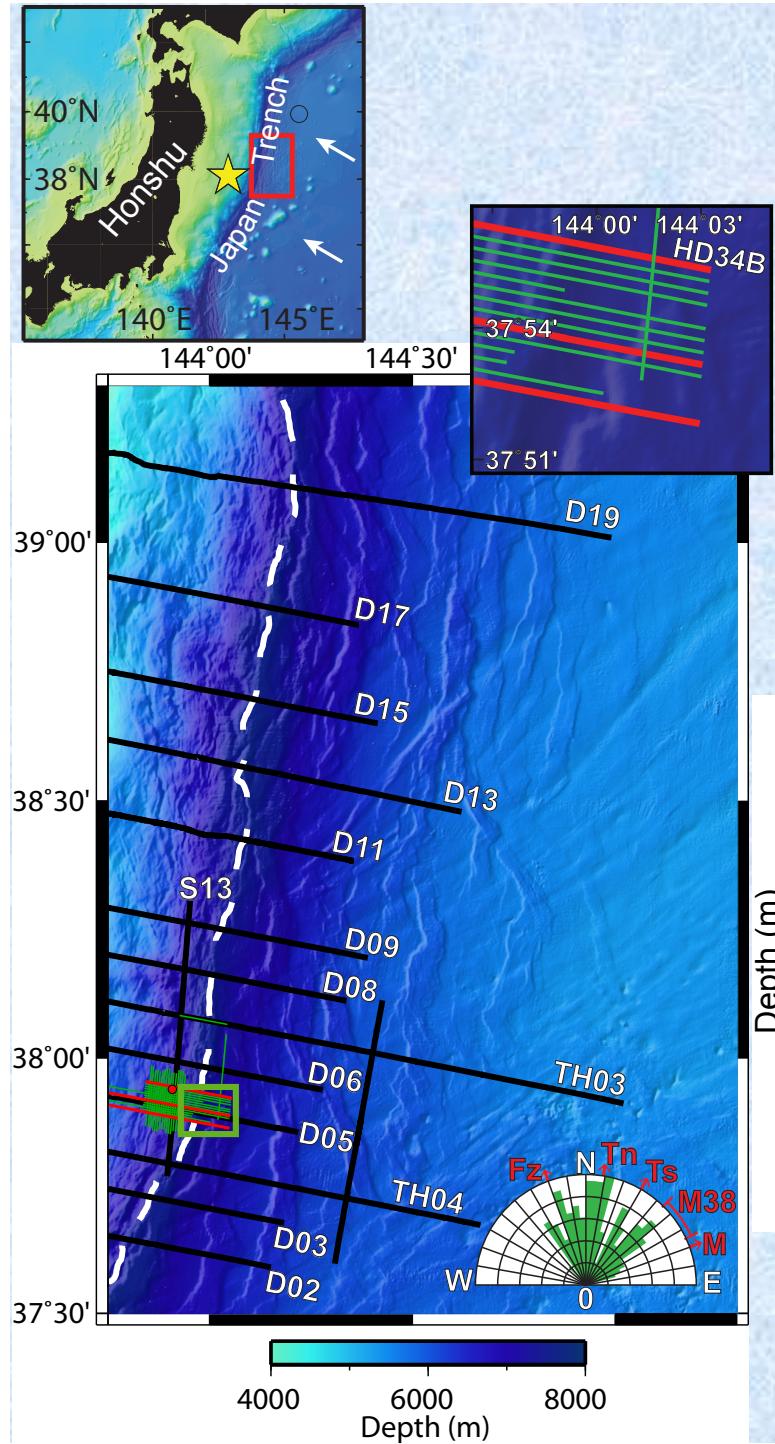


# Brian Boston

University of Hawaii



Brian Boston  
University of Hawaii

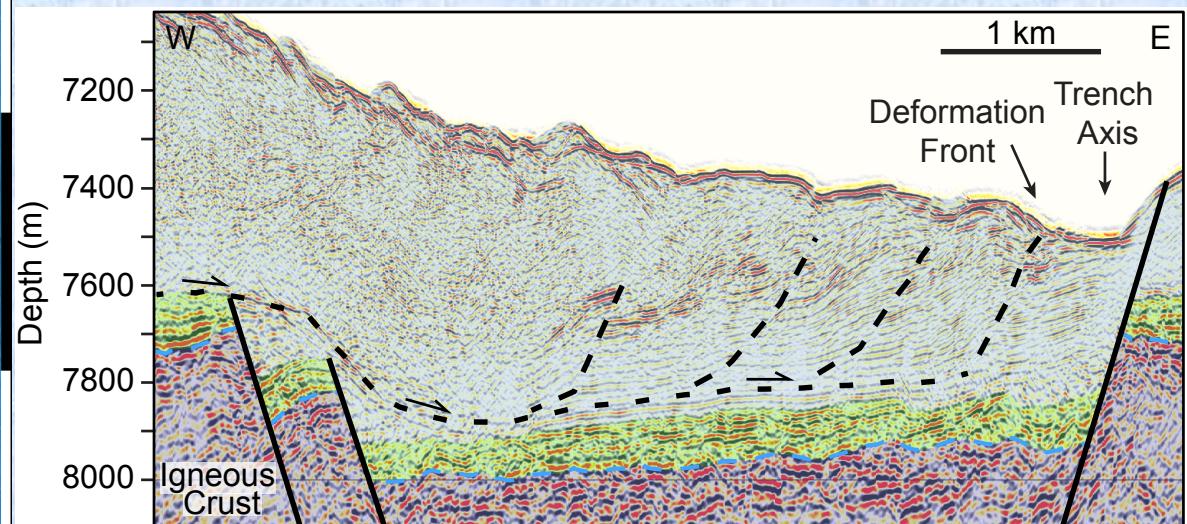


## Japan Trench

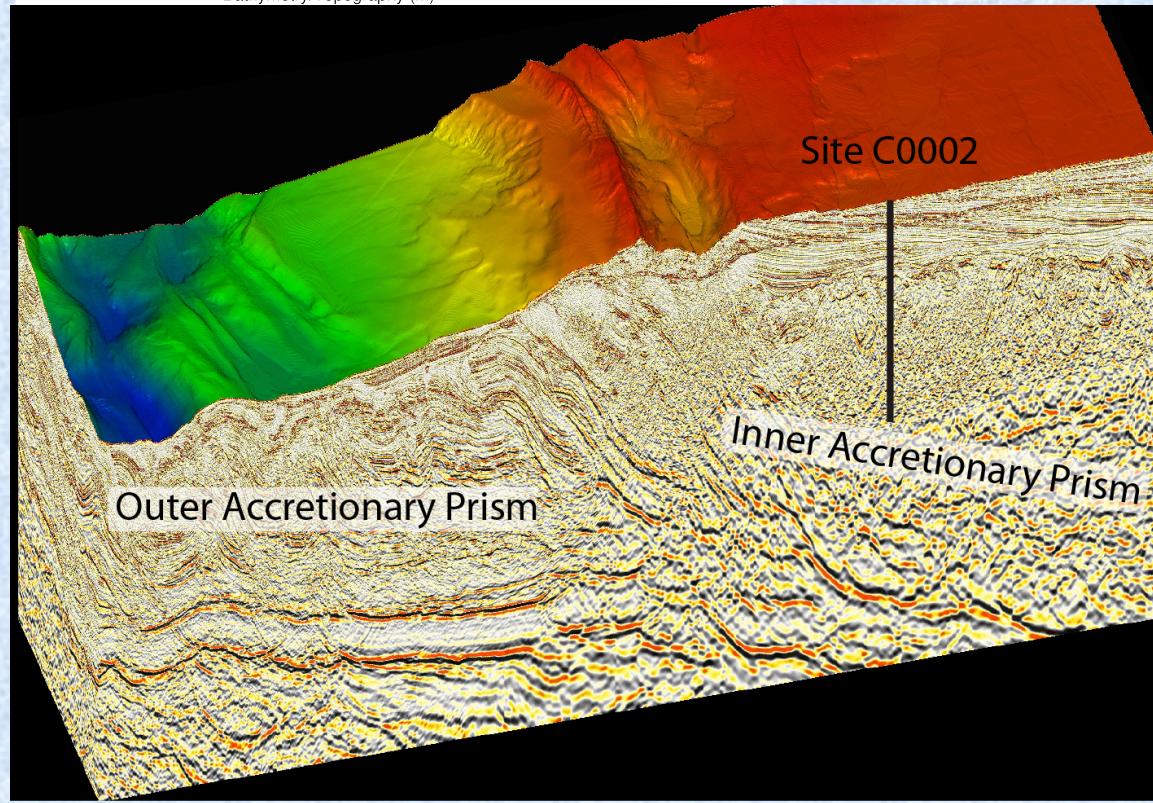
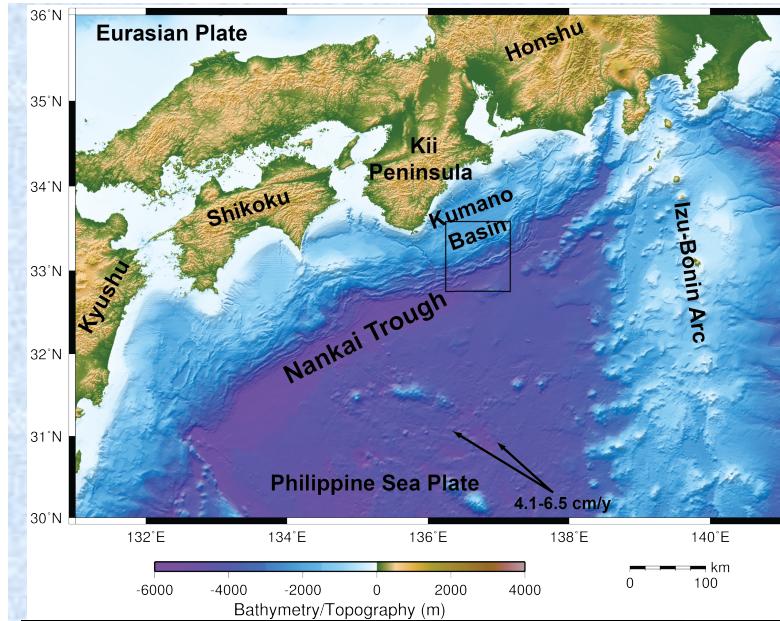
Regional Lines, PoSDM  
14 dip lines, 2 strike lines

Both collected by JAMSTEC in 2011

High-Res Lines, PSDM  
19 dip lines, 16 strike lines



Boston et al., 2014

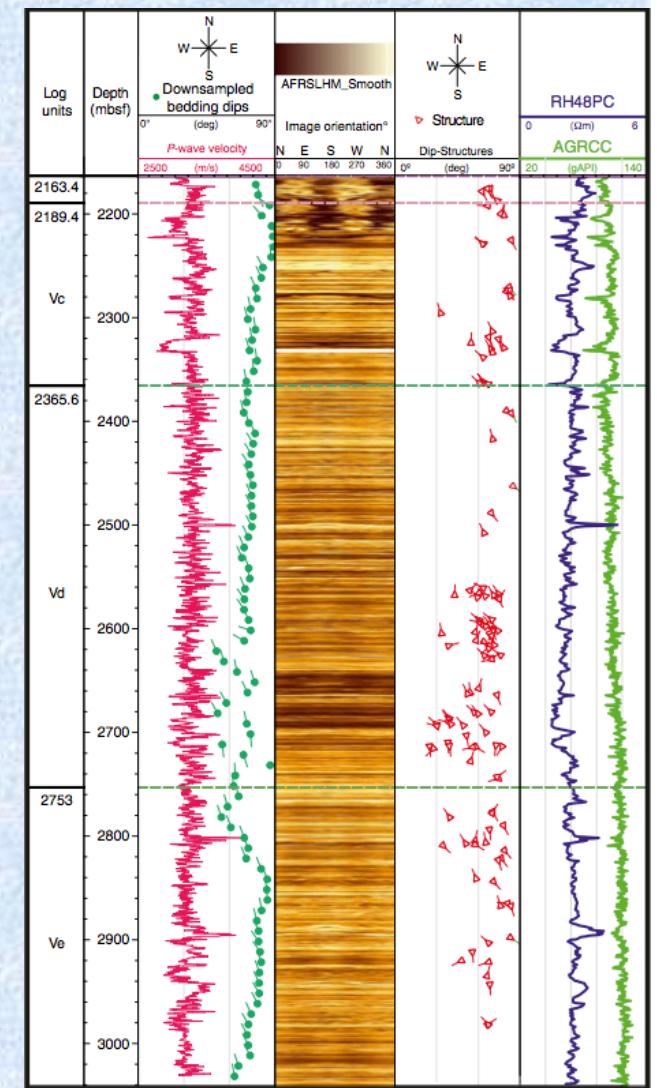


## Nankai Trough Kumano 3D seismic volume

IODP Exp. 348

Inner Prism dynamics

Brian Boston  
University of Hawaii



AGU Talk T24B-08, Tuesday

# Alysia Cox

Arizona State University



# Coevolution of Earth's Chemistry and Life

Dr. Alycia Cox  
(Applying for  
Assistant Professor  
Positions)

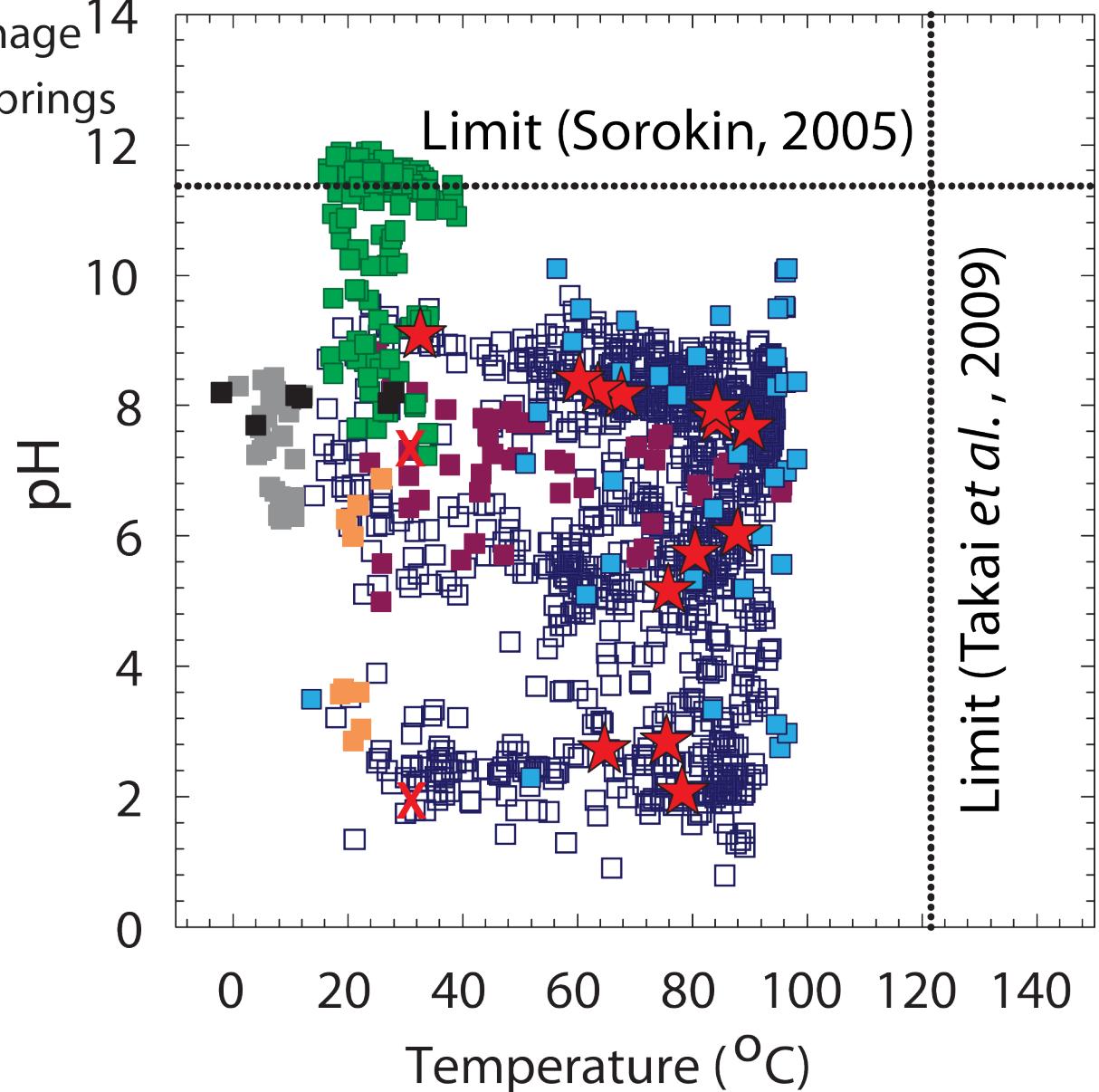


Rock  
Water  
Chemistry  
Life



# Some environments I've investigated, so far

- Ocean (Millero, 2002)
- Patagonia, AZ Mine Drainage<sup>14</sup>
- Swiss Alpine Lakes and Springs
- Great Basin Hot Springs
- Icelandic Hot Springs
- Oman Alkaline Springs
- Yellowstone Hot Springs
- ★ Proteins Extracted



# James Gibson

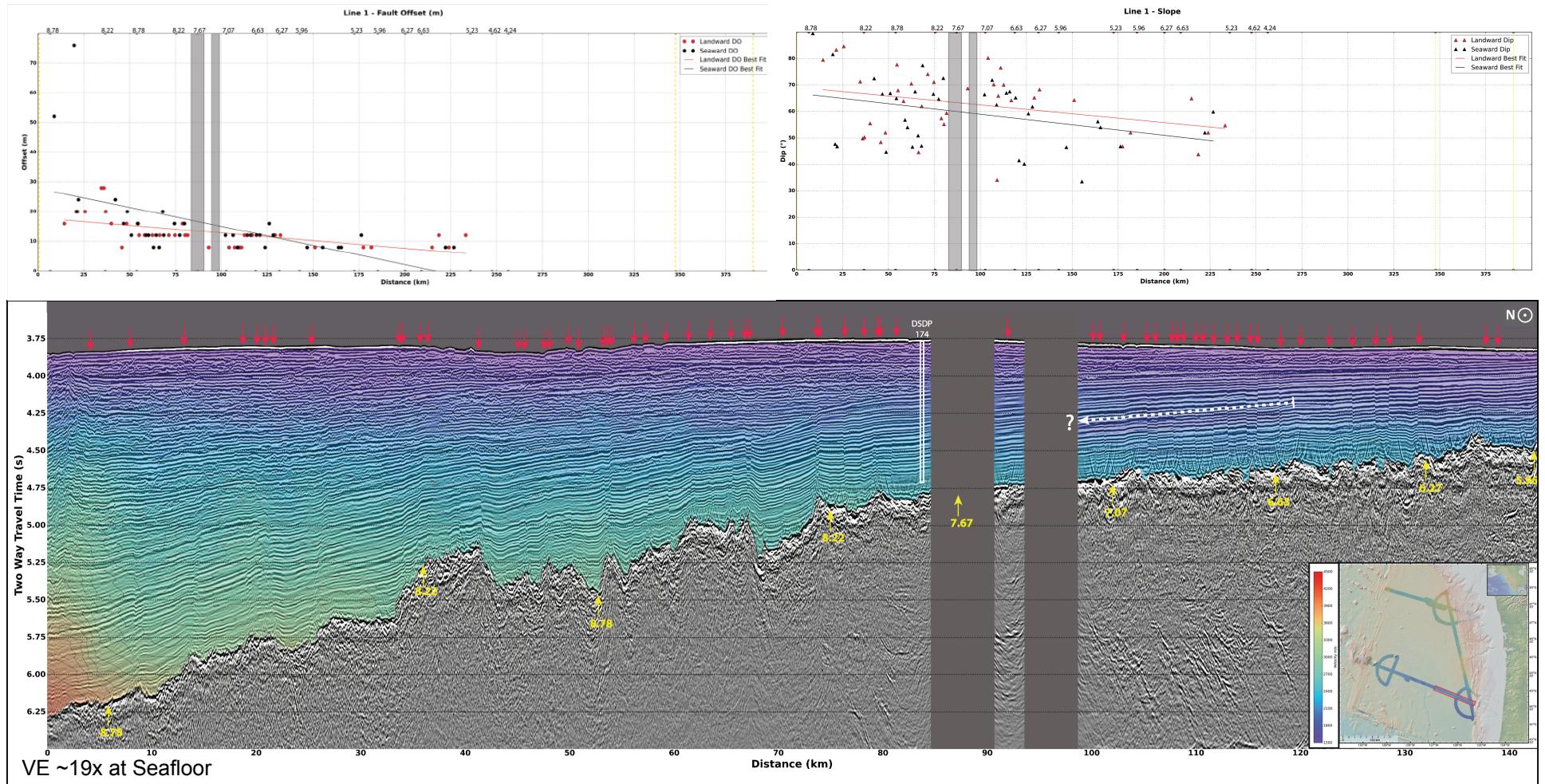
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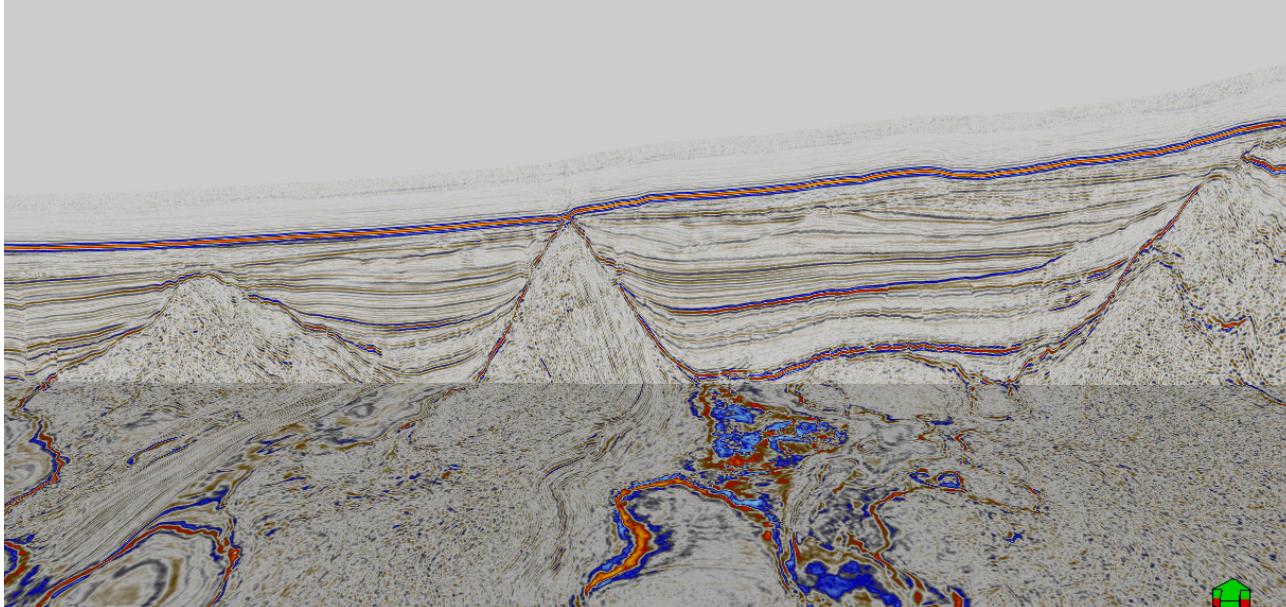


James Gibson  
Graduate Student  
Marine Geology & Geophysics  
Lamont-Doherty Earth Observatory

MGL1211  
06-07 2012

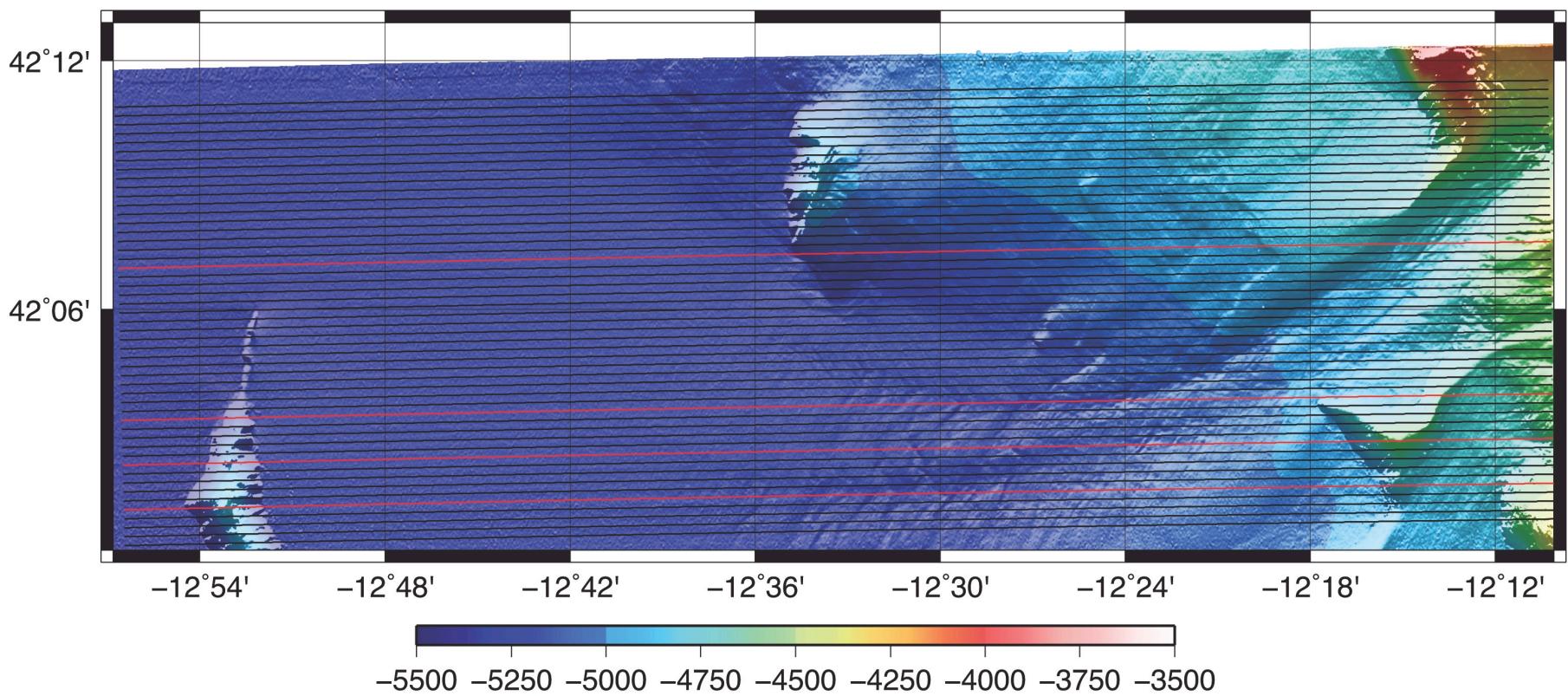
Cascadia Ridge to Trench Survey





**MGL1307**  
**06-08 2013**

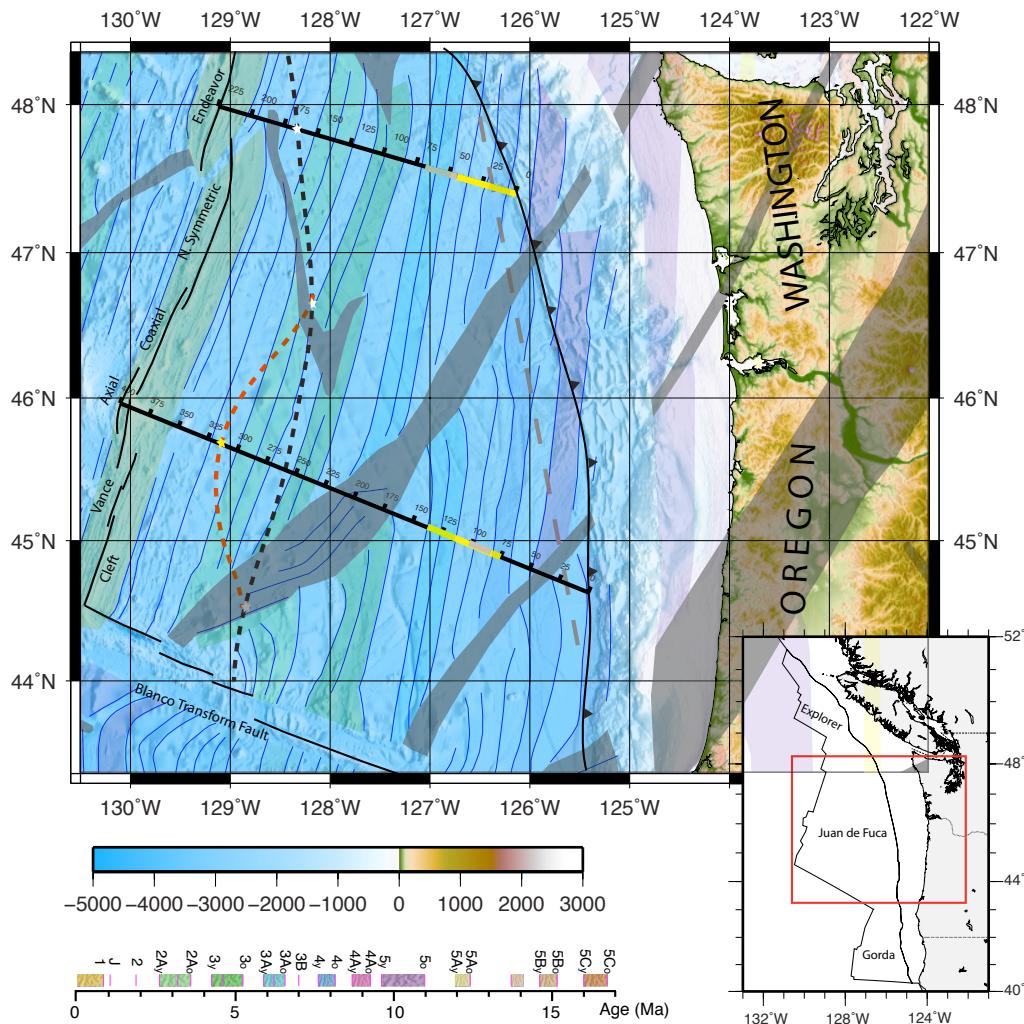
Galicia3D



# Shuoshuo Han

Lamont-Doherty Earth Observatory/Columbia University





Shuoshuo Han  
Lamont-Doherty Earth Observatory  
  
Current research:  
Juan de Fuca Ridge to Trench Project

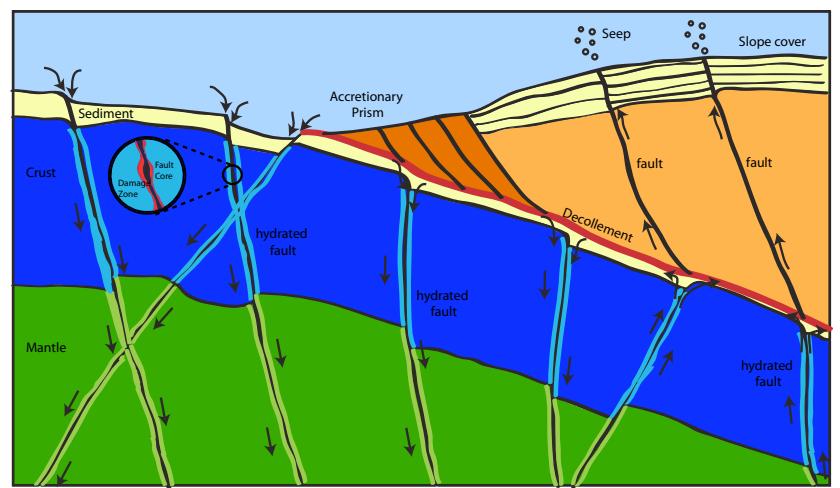
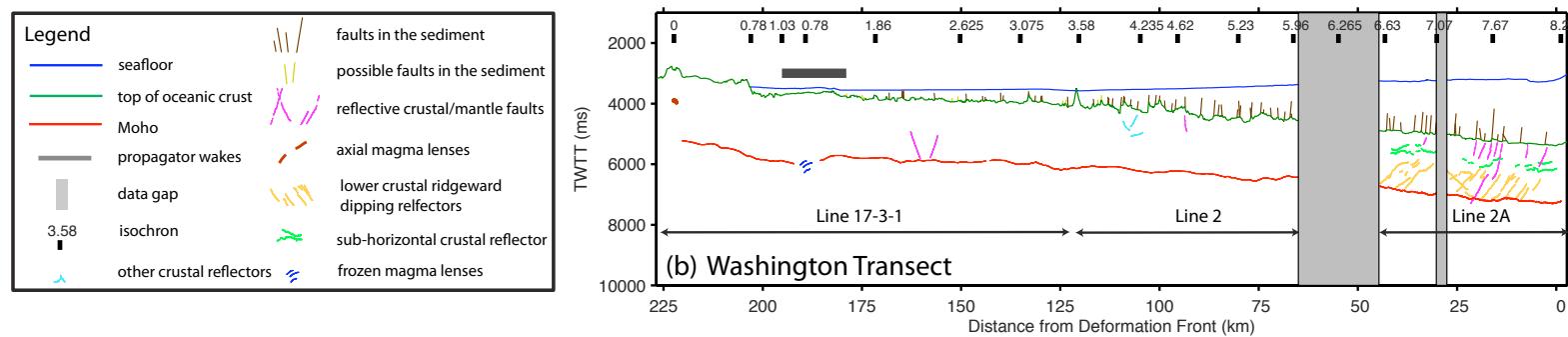
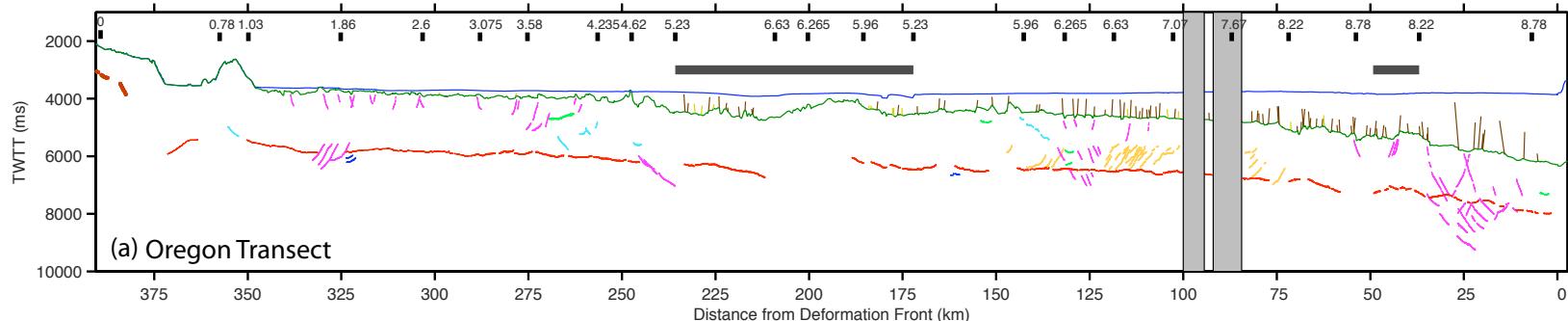
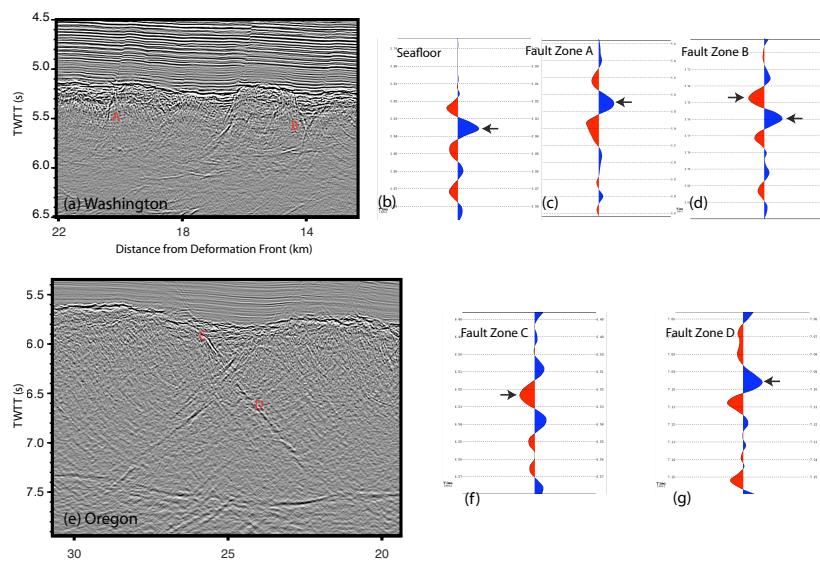


Figure 1



Two Cross-plate transects



**Friday morning: T51B-4617 Seismic reflection imaging of subduction bending-related faults at Cascadia**

Figure 2

# Jiyao Li

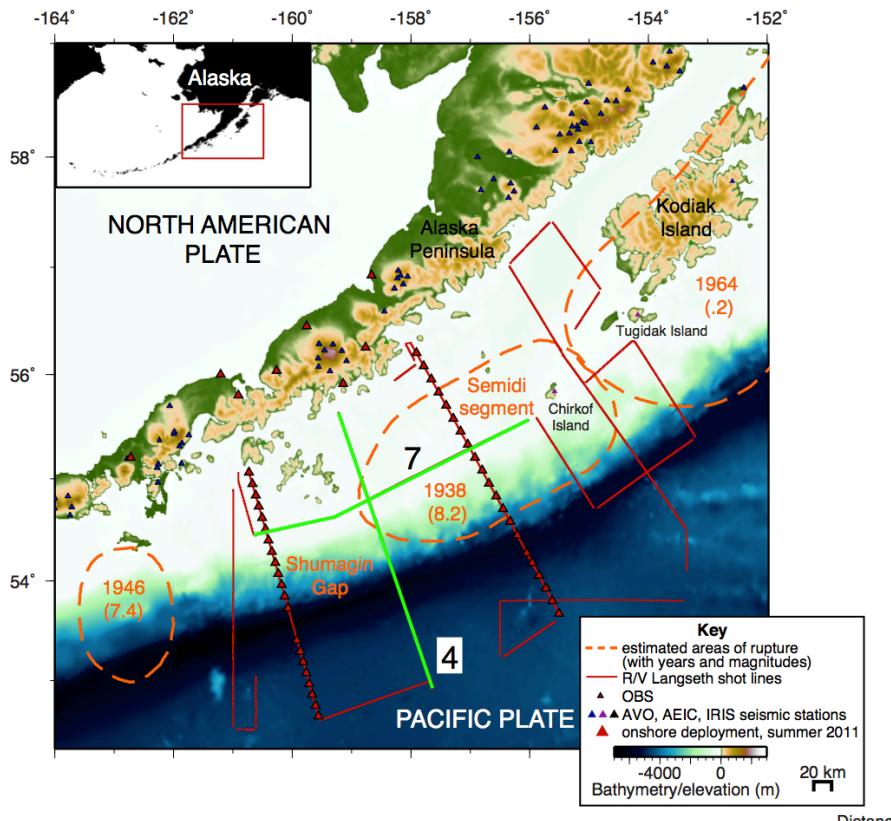
Lamont-Doherty Earth Observatory/Columbia University



Jiyao Li  
work with Donna Shillington

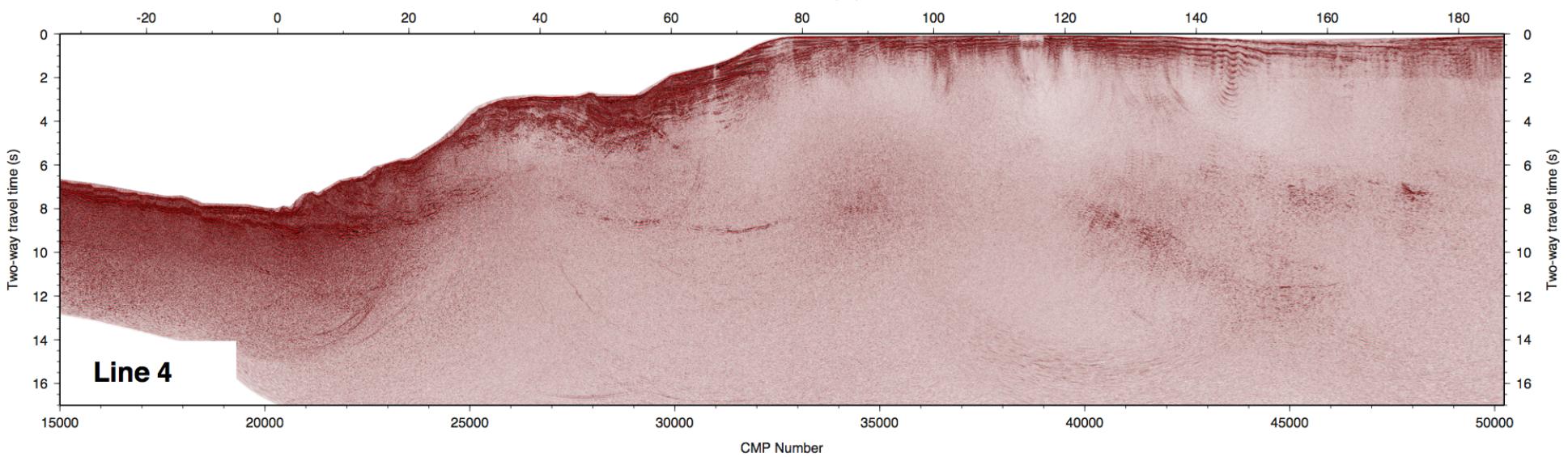
**T11A-4537** Downdip variations of seismic reflection signature and implications for structure/seismogenic behavior in the Alaska subduction zone

***Section: Active Tectonics and Magmatism of Alaska, the Aleutians, and Northwest Canada Posters (Monday Morning)***



## Alaska Langseth Experiment to Understand the megaThrust

- 38-day cruise on the R/V Langseth (July-August 2011)
- 3700 km of MCS profiles
- 2 wide-angle seismic profiles each with 21 OBS



# Yen Jo Tan

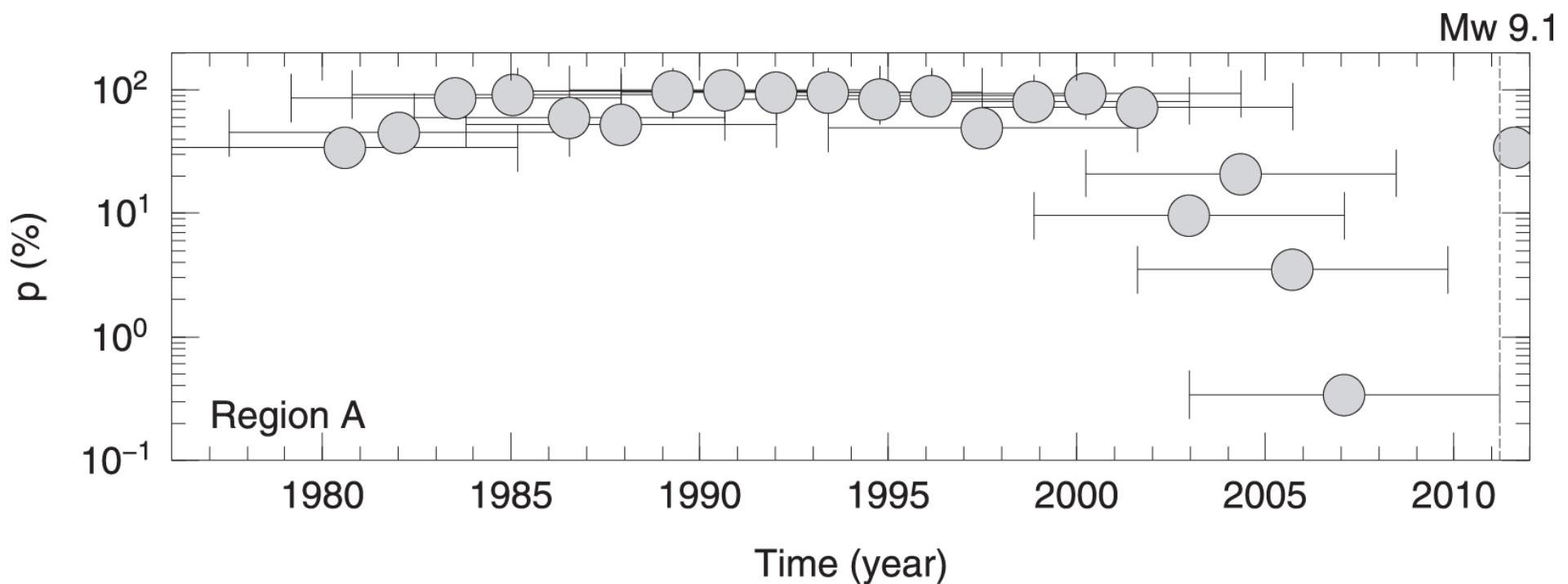
Lamont-Doherty Earth Observatory/Columbia University

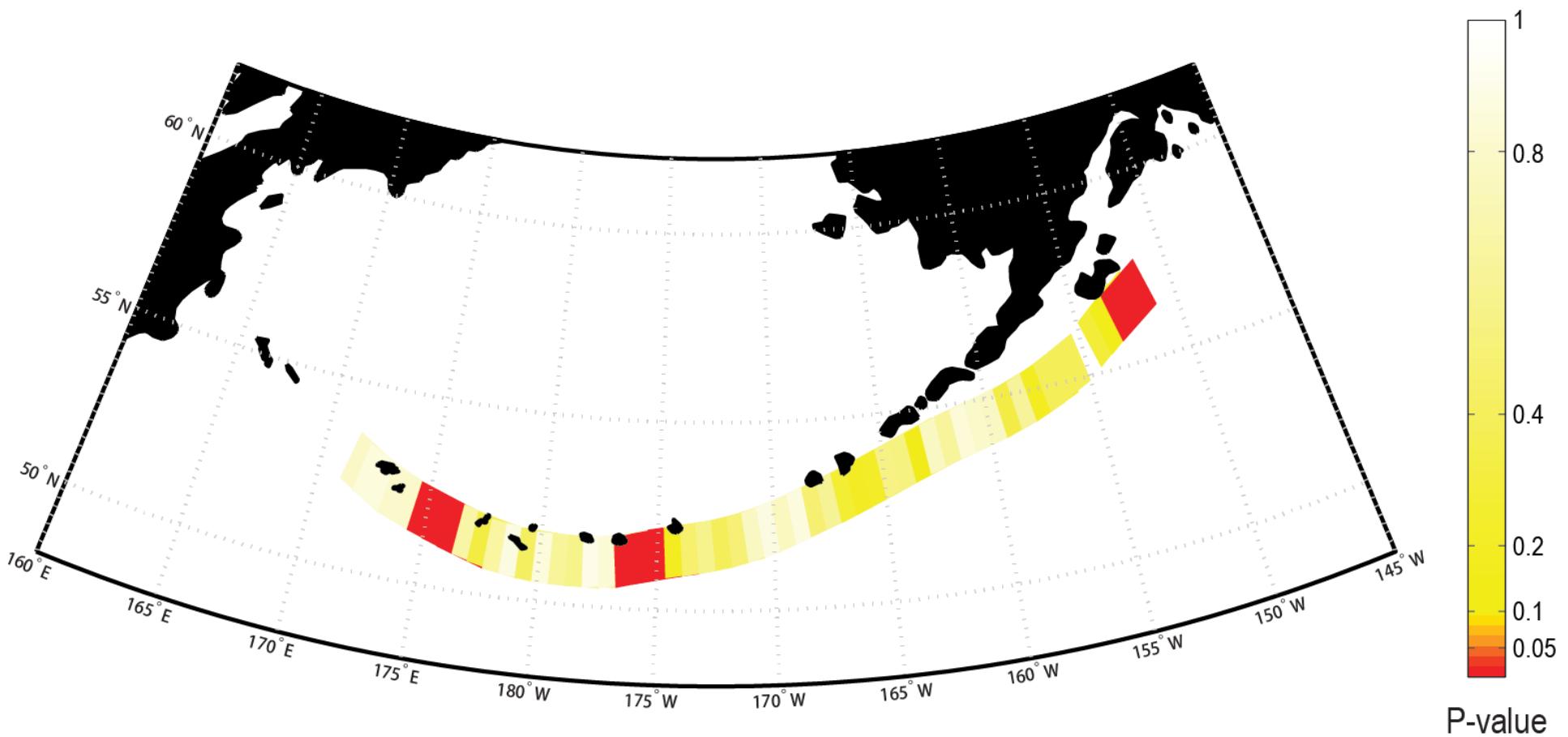


**Yen Joe Tan**  
Columbia University

T11A: Active Tectonics and Magmatism of Alaska, the Aleutians,  
and Northwest Canada Posters

**Temporal variation of p-value prior to the Tohoku-Aki earthquake**





# Amy Wagner

Cal State University, Sacramento

