

2016 AGU Fall Meeting OBSIP Related Talks, Posters, and Town Halls

MONDAY

Poster (8:00-12:20): [S11D-2484: OBSIP: Advancing Capabilities and Expanding the Ocean Bottom Seismology Community*](#)

Authors: B. Evers, K. Aderhold

Poster (8:00-12:20): [DI11A-2324: High seismic attenuation at a mid-ocean ridge reveals the distribution of deep melt*](#)

Authors: Z. Eilon, G. A. Abers

Poster (8:00-12:20): [DI11A-2327: Attenuation in the Upper Mantle Beneath the Juan de Fuca Plate Using Rayleigh Wave Tomography*](#)

Authors: D. W. Forsyth, Y. Ruan, S. W. Bell

Town Hall (12:30-1:30, MW 2003): [TH13E: International Ocean Bottom Seismometer Experiments and Data*](#)

Authors: B. Evers, K. Aderhold

Talk (17:00-17:15, MS 307): [S14A-05: Constraints on radial anisotropy in the central Pacific upper mantle from the NoMelt OBS array*](#)

Authors: J. B. Russell, J. B. Gaherty, P. P. Lin, M. Zebker

Poster (13:40-18:00): [T13B-2699: The Presence and Characterization of Antarctic Bottom Water Located Between the Mid-Atlantic Ridge and the Rio Grande Rise*](#)

Authors: R. H. Miller, R. Reece, J. Estep, G. L. Christeson, T. M. Acquisto

Poster (13:40-18:00): [OS13C-1831: Sediment Gravity Flows Triggered by Remotely Generated Earthquake Waves on the Cascadia Margin*](#)

Authors: M. Salmi, H. P. Johnson, J. S. Gomber, S. L. Hautala

Poster (13:40-18:00): [T13B-2702: Variations in Crustal Structure and Thickness for South Atlantic Oceanic Crust*](#)

Authors: G. L. Christeson, R. Reece, R. L. Carlson

Poster (13:40-18:00): [T13B-2703: Layer 2A in 70 Ma Old Oceanic Crust: Velocity Analysis in the Western South Atlantic Ocean*](#)

Authors: D. A. Kardell, G. L. Christeson, R. Reece, R. L. Carlson, A. F. Arnulf

Poster (13:40-18:00): [S13A-2517: Variations in Earthquake Source Complexity and Stress Drop in Rupture Patches and Rupture Barriers on Gofar Transform Fault, East Pacific Rise*](#)

Authors: P. A. Moyer, M. S. Boettcher, J. J. McGuire

Poster (13:40-18:00): [T13B-2720: Joint Inversion for VP/VS Structure of the Upper Oceanic Crust beneath the Endeavour Segment of the Juan de Fuca Ridge*](#)

Authors: E. Kim, D. R. Toomey, E. E. E. Hooft, W. S. D. Wilcock, R. T. Weekly, S.-M. Lee, Y. Kim

TUESDAY

Talk (9:00-9:15, MS 307): [S21C-05: Constraints on Flow Dynamics within the Oceanic Asthenosphere from a High-Resolution Analysis of Seismic Anisotropy in the Central Pacific*](#)

Authors: P. P. Lin, J. B. Gaherty, G. Jin, J. A. Collins, D. Lizarralde, R. L. Evans, G. Hirth

Talk (10:50-11:05, MS306): [T22C-03: Seismic reflection imaging of the Juan de Fuca plate from ridge to trench: new constraints on the distribution of faulting and evolution of the crust prior to subduction \(Invited\)*](#)

Authors: S. Han, S. M Carbotte, J. P. Canales, M. R. Nedimovic, H. D. Carton, J. C. Gibson

Talk (11:05-11:20, MS306): [T22C-04: Constraining the velocity structure of the Juan de Fuca plate from ridge to trench with a 2D tomographic study of wide angle OBS data*](#)

Authors: B. Boulahanis, J. P. Canales, S. M. Carbotte, H. D. Carton, S. Han, M. R. Nedimovic

Talk (12:05-12:20, MS 306): [T22C-08: The Evolution of Slow-Intermediate Oceanic Crust in the South Atlantic: A Continuous Seismic Reflection Transect*](#)

Authors: R. Reece, G. L. Christeson, R. L. Carlson, J. D. Estep

Poster (13:40-18:00): [I23B-2619: The PROTEUS Experiment: Active Source Seismic Imaging of the Crustal Magma Plumbing Structure of the Santorini Arc Volcano*](#)

Authors: E. E. E. Hooft, J. V. Morgan, P. Nomikou, D. R. Toomey, C. V. Papazachos, M. Warner, B. Heath, M.-E. Christopoulou, D. Lampridou, D. Kementzetidou, The PROTEUS Shipboard and Island-based Scientific Teams

Poster (13:40-18:00): [DI23B-2620: Insights into Along Strike Variability in the Lau Back Spreading Center and Tonga Arc from Bodywave Tomography*](#)

Authors: A. N. Adams, D. Wiens, M. Barklage, J. A. Conder, S. S. Wei, C. Cai

Poster (13:40-18:00): [DI23B-2606: Incoming Plate Seismicity of the Northern Mariana Trench Recorded by Ocean Bottom Seismographs and Implications for Slab Hydration*](#)

Authors: M. O. Eimer, D. Wiens, D. Lizarralde, H. Jasperson

WEDNESDAY

Talk (9:00-9:15, MS 310): [T31H-05: Earthquake Cycles on Mid-Ocean Ridge Transform Faults and the Inferred Role of Fluid-Filled Fractures \(Invited\)*](#)

Authors: M. S. Boettcher, P. A. Moyer, J. J. McGuire, M. Wolfson-Schwehr

Talk (9:30-9:45, MS 310): [T31H-07: Mantle-crust interaction at the Blanco Ridge segment of the Blanco Transform Fault Zone: Results from the Blanco Transform Fault OBS Experiment*](#)

Authors: V. M. Kuna, J. Nabelek, J. Braunmiller

Talk (12:05-12:20, MS 310): [T32A-08: 3-D seismic imaging of lithospheric fault-block structures, core complexes, alteration fronts, and hydrothermal systems along the Mid-Atlantic Ridge, Rainbow area*](#)

Authors: R. A. Dunn, R. Arai, D. E. Eason, J. P. Canales, R. A. Sohn

Poster (8:00-12:20): [T31D-2932: Travel Time Tomographic Imaging of Shallow Fore-arc Basin Structure at the Cascadia Subduction Zone Offshore Washington and Oregon](#)

Authors: R. Azarm, H. D. Carton, S. M Carbotte, S. Han, J. P. Canales, M. R. Nedimovic

Poster (8:00-12:20): [T31D-2927: Focal Mechanism Solutions from the HOBITSS Ocean Bottom Seismometer Experiment, Hikurangi Subduction Zone, New Zealand*](#)

Authors: E. Chon, A. F. Sheehan, J. Yarce, J. S. Nakai, S. Y. Schwartz, K. Mochizuki

Poster (8:00-12:20): [T31D-2944: Shoreline-Crossing Shear-Velocity Structure of the Juan de Fuca Plate and Cascadia Subduction Zone from Surface Waves and Receiver Functions*](#)

Authors: H. Janiszewski, J. B. Gaherty, G. A. Abers, H. Gao

Poster (8:00-12:20): [T31C-2905: Finite Source Modeling of the January 2015 Mendocino Transform Earthquake using the Cascadia Initiative dataset*](#)

Authors: J. Gong, J. J. McGuire

Poster (8:00-12:20): [T31C-2915: Focal mechanism and stress inversion in the Mendocino Triple Junction from OBS data*](#)

Authors: D. Li, J. J. McGuire, Y. Liu

Poster (8:00-12:20): [T31F-2986: Subduction, Extension, and a Mantle Plume in the Pacific Northwest*](#)

Authors: W. B. Hawley, R. M. Allen, M. A. Richards

Talk (13:40-13:55, MS 305): [S33F-01: Seismic imaging all along the Alaska subduction megathrust \(Invited\)*](#)

Authors: D. J. Shillington, J. Li, A. Becel, M. R. Nedimovic, H. Kuehn, G. A. Abers, K. M. Keranen, S. C. Webb, D. M Saffer

Talk (17:15-17:30, MS 303): [DI44A-06: Constraints on Mantle Serpentization near the Mariana Trench from Earthquake and Ambient Noise Rayleigh Waves*](#)

Authors: C. Cai, D. Wiens, D. Lizarralde

Poster (13:40-18:00): [S33A-2820: Offshore seismicity at Hikurangi Margin from Hikurangi Ocean Bottom Investigation of Tremor and Slow Slip \(HOBITSS\), New Zealand*](#)

Authors: J. Yarce, A. F. Sheehan, J. S. Nakai, E. K. Todd, S. Y Schwartz, K. Mochizuki

Poster (13:40-18:00): [T33A-3005: Segment-scale variations in seafloor volcanic and tectonic processes in the Rainbow region, Mid-Atlantic Ridge \(36° N\)*](#)

Authors: D. E. Eason, R. A. Dunn, R. Arai, J. P. Canales, R. A. Sohn

Poster (13:40-18:00): [T33C-3045: Regional Moment Tensor Analysis Using OBS and Land Data for Blanco Transform Fault Zone and Gorda Plate Earthquakes*](#)

Authors: B. Sapkota, J. Nabelek, J. Braunmiller

Poster (13:40-18:00): [T33A-2998: Detachment Fault Behavior Revealed by Micro-Seismicity at 13°N, Mid-Atlantic Ridge*](#)

Authors: R. E. Parnell-Turner, R. A. Sohn, C. J. MacLeod, C. Peirce, T. J. Reston, R. C. Searle

THURSDAY

Talk (8:15-8:30, MS 103): [T41G-02: Sediment consolidation at the Cascadia margin deformation front and its impact on megathrust slip behavior*](#)

Authors: S. Han, S. M. Carbotte, N. L. Bangs, D. M. Saffer, J. C. Gibson

Talk (9:30-9:45, MS 303): [DI41D-07: Imaging lithospheric seismic discontinuities beneath Cascadia using S-to-P receiver functions*](#)

Authors: C. Rychert, N. Harmon, S. Tharimena

Talk (10:35-10:50, MS 103): [T42C-02: Cascadia Seismicity Related to Seamount Subduction as detected by the Cascadia Initiative Amphibious Data*](#)

Authors: E. Morton, S. L. Bilek, C. A. Rowe

Poster (8:00-12:20): [DI41B-2635: Imaging the mantle transition zone beneath Hawaii from seismic Ps receiver functions*](#)

Authors: M. R. Agius, C. Rychert, N. Harmon, G. Laske

Talk (13:55-14:10, MS 305): [S43D-02: Detailed inversion of a shallow slow slip event at the Hikurangi subduction zone, New Zealand, using numerical Green's functions and absolute pressure gauge data*](#)

Authors: C. A. Williams, L. M. Wallace, S. C. Webb, Y. Ito, K. Mochizuki, R. Hino, S. A. Henrys

Talk (14:10-14:25, MS 305): [S43D-03: Seismicity and tectonic tremor accompany the 2014 Gisborne Slow Slip Event: Insights from the Hikurangi Ocean Bottom Investigation of Tremor and Slow Slip \(HOBITSS\) Experiment, New Zealand*](#)

Authors: E. K. Todd, S. Y. Schwartz, A. F. Sheehan, K. Mochizuki

Talk (16:45-17:00, MS 304): [T44C-04: Geometry and Kinematics of Active Faults in the northern Malawi Rift, Africa*](#)

Authors: K. Peterson, P. R. N Chindandali, S. J. Oliva, C. J. Ebinger, D. J. Shillington, T. McCartney, S. A. Scholz

Poster (13:40-18:00): [NH43A-1806: Ocean bottom seismometer pressure gauge observations of the 15 July 2009 Mw 7.8 Dusky Sound, New Zealand tsunami and simulations*](#)

Authors: M. Heidarzadeh, T. Takagawa, K. Satake, A. R. Gusman, S. Watada, A. F. Sheehan

Poster (13:40-18:00): [T43B-3049: Analysis of Pn Anisotropy Beneath the Juan de Fuca Plate*](#)

Authors: B. P. VanderBeek, D. R. Toomey

FRIDAY

Talk (9:45-10:00, MS 305): [S51C-07: Remote Detection of Cryoacoustic Signals Using Noise Interferometry of Seafloor Pressure Data*](#)

Authors: J. S. Ball, A. F. Sheehan, T. A. Scambos

Poster (8:00-12:20): [T51G-3000: Relationship Between Magmatism and Extension Along the Eastern North American Margin \(ENAM\) From Onshore-Offshore Active Source ENAM Community Seismic Experiment Refraction Data](#)

Authors: T. Luckie, L. L. Worthington, M. B. Magnani

Poster (8:00-12:20): [T51G-2998: Evolution of the Upper Lithosphere in the ENAM Area from 3-D Wide-Angle Seismic Data](#)*

Authors: B. Shuck, H. J. Van Avendonk

Poster (8:00-12:20): [T51C-2939: 3D Variations in Sediment Architecture in the Central Basin of Lake Malawi from the SEGMeNT Active-Source Experiment](#)*

Authors: A. Eatmon, N. J. Accardo, D. J. Shillington, E. A. Onyango, C. A. Scholz, T. McCartney, C. J. Ebinger, J. B. Gaherty, A. Nyblade, P. R. N. Chindangali, G. Kamihanda, R. Ferdinand, J. Salima, A. H. Mruma

Poster (8:00-12:20): [T51C-2937: Upper mantle P- and S-wave velocity structure beneath northern Lake Malawi \(Nyasa\) and the Rungwe Volcanic Province, East Africa](#)*

Authors: A. N. Grijalva, M. Kachingwe, A. Nyblade, D. J. Shillington, J. B. Gaherty, C. J. Ebinger, N. J. Accardo, J. P. O'Donnell, G. J. Mbogoni, G. D. Mulibo, R. Ferdinand, P. R. N. Chindangali, F. Mphepo

Poster (8:00-12:20): [T51C-2938: Constraints on the 3D Sediment and Crustal Architecture of the Weakly Extended Malawi Rift from the Onshore/Offshore Wide-Angle Refraction Experiment](#)*

Authors: N. J. Accardo, D. J. Shillington, C. A. Scholz, T. McCartney, C. J. Ebinger, J. B. Gaherty, A. Nyblade, A. Eatmon, P. R. N. Chindangali, G. Kamihanda, R. Ferdinand, J. Salima, A. H. Mruma

Poster (8:00-12:20): [T51C-2941: Constraints on Faulting and Basin Architecture in the North Basin of Lake Malawi from Active-Source Seismic Data](#)*

Authors: E. A. Onyango, D. J. Shillington, N. J. Accardo, C. A. Scholz, C. J. Ebinger, J. B. Gaherty, T. McCartney, A. Nyblade, P. R. N. Chingandali, G. Kamihanda, R. Ferdinand, J. Salima, A. H. Mruma

Poster (8:00-12:20): [DI51A-2659: Comparison of Oceanic and Continental Lithosphere, Asthenosphere, and the LAB Through Shear Velocity Inversion of Rayleigh Wave Data from the ALBACORE Amphibious Array in Southern California](#)*

Authors: K. Amodeo, S. Rathnayaka, D. S. Weeraratne, M. D. Kohler

Poster (8:00-12:20): [DI51A-2658: Structure of the Lithosphere-Asthenosphere Boundary Onshore and Offshore the California Continental Margin from Three-Dimensional Seismic Anisotropy](#)*

Authors: C. D. Gomez, L. Escobar, S. Rathnayaka, D. S. Weeraratne, M. D. Kohler

Poster (13:40-18:00): [S53A-2813: A Review of Detected Interplate Seismicity in Cascadia](#)*

Authors: I. Stone, J. E. Vidale

Talk (13:55-14:10, MS 305): [S53C-02: A Baseline for Temporal Monitoring of Azimuthal Anisotropy of the Hikurangi Megathrust in a Region of Shallow Slow Slip](#)*

Authors: B. Fry, S. Lebedev, K. Mochizuki, S. Henrys, A. F. Sheehan, S. Y. Schwartz, S. C. Webb, L. M. Wallace

Poster (13:40-18:00): [V53C-3129: Upper Crustal Structure of Santorini Volcano from Seismic Tomography using the PROTEUS dataset](#)*

Authors: B. Heath, E. E. E. Hooft, J. V. Morgan, D. R. Toomey, P. Nomikou, C. V. Papazachos, M. Warner