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PUBLICATIONS

2020

None at this time.

2019

Arnoux, G.M., D.R. Toomey, E.E.E. Hooft, W.S.D. Wilcock, 2019, Seismic imaging and physical properties of the Endeavour segment: Evidence that skew between mantle and crustal magmatic systems governs spreading center processes, *Geochem. Geophys. Geosyst.*, doi: 10.1029/2018GC007978.

Kim, E., D.R. Toomey, E.E.E. Hooft, W.S.D. Wilcock, R.T. Weekly, S-M. Lee, YH. Kim, 2019, Upper crustal V_p/V_s ratios at the Endeavour segment, Juan de Fuca Ridge, from joint inversion of P and S travel times: Implications for hydrothermal circulation, *Geochem. Geophys. Geosyst.*, doi: 10.1029/2018GC007921.

Kuna, V. M., J. L. Nabelek, and J. Braunmiller (2019). Mode of slip and crust-mantle interaction at oceanic transform faults, *Nature Geoscience*, doi: 10.1038/s41561-018-0287-1.

Heath, B.A., E. E. E. Hooft, D.R. Toomey, C.B. Papazachos, P. Nomikou, M. Paulatto, J.V. Morgan, M.R. Warner, 2019. Tectonism and its relation to magmatism around Santorini volcano from upper crustal P -wave velocity, *Journal of Geophysical Research*, *JGRB53679*, doi: 10.1029/2019JB017699.

Hooft, E. E. E., B.A. Heath, D.R. Toomey, M. Paulatto, C.B. Papazachos, P. Nomikou, J.V. Morgan, M.R. Warner, 2019. Seismic imaging of Santorini: Subsurface constraints on caldera

collapse and present-day magma recharge. *Earth and Planetary Science Letters*, 514, 48–61, doi:10.1016/j.epsl.2019.02.033.

Isse, T., H. Kawakatsu, K. Yoshizawa, A. Takeo, H. Shiobara, H. Sugioka, A. Ito, D. Suetsugu, and D. Raymond, 2019. Surface wave tomography for the Pacific Ocean incorporating seafloor seismic observations and plate thermal evolution, *Earth and Planetary Science Letters*, 116-130, doi: 10.1016/j.epsl.2018.12.033.

McVey, B.G., E.E.E. Hooft, B.A. Heath, D.R. Toomey, M. Paulatto, J.V. Morgan, P. Nomikou, C.B. Papazachos, 2019, Magma accumulation beneath Santorini volcano from P-wave tomography, *accepted in Geology*.

Yang X., H. Gao, S. Rathnayaka, C. Li (2019). A Comprehensive Quality Analysis of Empirical Green's Functions at Ocean-Bottom Seismometers in Cascadia, *Seismological Research Letters*, doi: 10.1785/0220180273.

2018

Accardo, N. J., D. J. Shillington, J. B. Gaherty, C. A. Scholz, A. A. Nyblade, P. R. N. Chindandali, G. Kamihanda, T. McCartney, D. Wood, R. Wambura Ferdinand. (2018). Constraints on Rift Basin Structure and Border Fault Growth in the Northern Malawi Rift from 3-D Seismic Refraction Imaging. *Journal of Geophysical Research: Solid Earth*, 123, doi: 10.1029/2018JB016504.

Bodmer, M., D.R. Toomey, E.E.E. Hooft, B. Schmandt, 2018, Buoyant Asthenosphere Beneath Cascadia Influences Megathrust Segmentation, *Geophys. Res. Lett.*, doi: 10.1029/2018GL078700.

Cai, C., D. A. Wiens, W. Shen, M. Eimer (2018). Water input into the Mariana subduction zone estimated from ocean-bottom seismic data, *Nature*, 563, 389-392, doi: 10.1038/s41586-018-0655-4.

Gomberg, J. (2018). Cascadia Onshore-Offshore Site-Response, Submarine Sediment Mobilization, and Earthquake Recurrence. *Journal of Geophysical Research: Solid Earth*, 123, doi: 10.1002/2017JB014985.

Heidarzadeh, M. and Gusman, A. R. (2018). Application of dense offshore tsunami observations from Ocean Bottom Pressure Gauges (OBPGs) for tsunami research and early warnings, in Durrani, T. S. (ed.) *Geological Disaster Monitoring Based on Sensor Networks*, Springer Natural Hazards, 1-16, doi: 10.1007/978-981-13-0992-2_2.

Horning, G., R. A. Sohn, J. P. Canales, and R. A. Dunn (2018). Local Seismicity of the Rainbow massif on the Mid-Atlantic Ridge. *Journal of Geophysical Research: Solid Earth*, 123, doi: 10.1002/2017JB015288.

Janiszewski, H. A. (2018). New insights on the structure of the Cascadia Subduction Zone from amphibious seismic data, Ph.D. Dissertation, Columbia University.

Kim, E., D. R. Toomey, E. E. E. Hooft, W. S. D. Wilcock, R. T. Weekly, S.-M. Lee, Y. H. Kim (2018). Upper crustal V_p/V_s ratios at the Endeavour segment, Juan de Fuca Ridge, from joint inversion of P and S travel times: Implications for hydrothermal circulation, G-cubed, doi: 10.1029/2018GC007921.

Ruan, Y., D. W. Forsyth, S. W. Bell (2018). Shear attenuation beneath the Juan de Fuca plate: Implications for mantle flow and dehydration. *Earth and Planetary Science Letters*, 496, 189–197, doi: 10.1016/j.epsl.2018.05.035.

Russell, J. B., J. B. Gaherty, P.-Y. P. Lin, D. Lizarralde, J. A. Collins, G. Hirth, and R. L. Evans (2018). High-resolution constraints on Pacific upper mantle petrofabric inferred from surface-wave anisotropy, *J. Geophys. Res. Solid Earth*, 123, doi: 10.1029/2018JB016598.

Sheehan, A. F., A. R. Gusman, K. Satake (2018). Improving Forecast Accuracy with Tsunami Data Assimilation: The 2009 Dusky Sound New Zealand Tsunami, doi: 10.1029/2018JB016575.

Stone, I., J. E. Vidale, S. Han, and E. Roland (2018). Catalog of Offshore Seismicity in Cascadia: Insights Into the Regional Distribution of Microseismicity and its Relation to Subduction Processes, *Journal of Geophysical Research: Solid Earth*, 123, 641–652, doi: 10.1002/2017JB014966.

Wei, S. S., and D. A. Wiens (2018). P-wave attenuation structure of the Lau back-arc basin and implications for mantle wedge processes, *Earth and Planetary Science Letters*, 502, 187-199, doi: 10.1016/j.epsl.2018.09.005.

Zietlow, D. W., A. F. Sheehan, M. V. Bernardino (2018). Teleseismic S-wave tomography of South Island, New Zealand upper mantle, *Geosphere*, 14, 1343-1364, doi: 10.1130/GES01591.1.

2017

Accardo, N. J., J. B. Gaherty, D. J. Shillington, C. J. Ebinger, A. A. Nyblade, G. J. Mbogoni, P. R. N. Chindandali, R. W. Ferdinand, G. D. Mulibo, G. Kamihanda, D. Keir, C. Scholz, K. Selway, J. P. O'Donnell, G. Tepp, R. Gallacher, K. Mtelela, J. Salima, and A. Mruma (2017). Surface wave imaging of the weakly extended Malawi Rift from ambient-noise and teleseismic Rayleigh waves from onshore and lake-bottom seismometers, *Geophys. J. Int.*, doi: 10.1093/gji/ggx133.

Agius, M. R., C. A. Rychert, N. Harmon, G. Laske (2017). Mapping the mantle transition zone beneath Hawaii from P_s receiver functions: Evidence for a hot plume and cold mantle downwellings, *Earth Planet. Sci. Lett.*, doi: 10.1016/j.epsl.2017.06.033.

An, C., C. Cai, Y. Zheng, L. Meng, and P. Liu (2017). Theoretical solution and applications of ocean-bottom pressure induced by seismic seafloor motion, *Geophys. Res. Lett.*, doi: 10.1002/2017GL075137.

Arnoux, G.M., D.R. Toomey, E.E.E. Hooft, W.S.D. Wilcock, J. Morgan, M. Warner, and B. P. VanderBeek (2017). Seismic evidence that black smoker heat flux is influenced by localized magma replenishment and associated increases in crustal permeability, *Geophys. Res. Lett.*, 44, doi:10.1002/2016GL071990.

Byrnes, J. S., D. R. Toomey, E. E. E. Hooft, J. Nábělek, and J. Braunmiller (2017). Mantle dynamics beneath the discrete and diffuse plate boundaries of the Juan de Fuca plate: Results from Cascadia Initiative body wave tomography, *G-Cubed*, doi: 10.1002/2017GC006980.

Byrnes, J. S. (2017). *Mantle Flow and Melting Beneath Young Oceanic Lithosphere: Seismic Studies of the Galápagos Archipelago and the Juan de Fuca Plate*, PhD Dissertation, University of Oregon.

Canales, J. P., R. A. Dunn, R. Arai, and R. A. Sohn (2017). Seismic imaging of magma sills beneath an ultramafic-hosted hydrothermal system, *Geology*, doi: 10.1130/G38795.

Canales, J. P., S. M. Carbotte, M. R. Nedimović, and H. Carton (2017). Dry Juan de Fuca slab revealed by quantification of water entering Cascadia subduction zone, *Nature Geoscience*, doi: 10.1038/ngeo3050.

Cattania, C., J. J. McGuire, and J. A. Collins (2017). Dynamic triggering and earthquake swarms on East Pacific Rise transform faults, *Geophysical Research Letters*, doi: 10.1002/2016GL070857.

Doran, A. K., and G. Laske (2017). Ocean-Bottom Seismometer Instrument Orientations via Automated Rayleigh-Wave Arrival-Angle Measurements, *Bull. Seismol. Soc. Am.*, doi: 10.1785/0120160165.

Dunn, R. A., R. Arai, D. E. Eason, J. Pablo Canales, and R. A. Sohn (2017). Three-Dimensional Seismic Structure of the Mid-Atlantic Ridge: An Investigation of Tectonic, Magmatic, and Hydrothermal Processes in the Rainbow Area, *J. Geophys. Res.*, doi: 10.1002/2017JB015051.

Eilon, Z. C., and G. A. Abers (2017). High seismic attenuation at a mid-ocean ridge reveals the distribution of deep melt, *Science Advances*, doi: 10.1126/sciadv.1602829.

Gong, J., and J. J. McGuire (2017). Interactions between strike-slip earthquakes and the subduction interface near the Mendocino Triple Junction, *Earth Planet. Sci. Lett.*, 414-422, doi: 10.1016/j.epsl.2017.11.022.

Hankins, J. R. (2017). *A study of the vertical component of ocean floor vibrations in two geographical chokepoints*, Masters Thesis, Naval Postgraduate School.

- Horning, G. (2017). Geophysical and geochemical constraints on the evolution of oceanic lithosphere from formation to subduction, PhD Dissertation, Massachusetts Institute of Technology.
- Janiszewski, H. A. (2017). New Insights on the Structure of the Cascadia Subduction Zone from Amphibious Seismic Data, PhD Dissertation, Columbia University.
- Johnson, H. P., J. S. Gombert, S. L. Hautala, and M. S. Salmi (2017). Sediment Gravity Flows Triggered by Remotely-generated Earthquake Waves, *J. Geophys. Res.*, doi: 10.1002/2016JB013689.
- Kawakatsu, H. and H. Utada (2017). Seismic and Electrical Signatures of the Lithosphere–Asthenosphere System of the Normal Oceanic Mantle, *Annu. Rev. Earth Planet. Sci.*, doi: 10.1146/annurev-earth-063016-020319.
- Lim H., Y. Kim, T.-R. A. Song, and X. Shen (2017). Measurement of seismometer orientation using the tangential P-wave receiver function based on harmonic decomposition, *Geophys. J. Int.*, 1747–1765, doi: 10.1093/gji/ggx515.
- Lynner, C., and M. Bodmer (2017). Mantle flow along the eastern North American margin inferred from shear wave splitting, *Geology*, doi: 10.1130/G38980.1.
- Mousavi, S. M. and C. A. Langston (2017). Automatic noise-removal/signal-removal based on general cross-validation thresholding in synchrosqueezed domain and its application on earthquake data, *Geophysics*, doi: 10.1190/geo2016-0433.1.
- Neale, J. F. W. (2017) An investigation into ocean wave sources of ambient seismic noise, PhD Dissertation, University of Southampton.
- Rathnayaka, S. and H. Gao (2017). Crustal-Scale Seismic Structure From Trench to Forearc in the Cascadia Subduction Zone, *J. Geophys. Res.*, doi: 10.1002/2017JB014299.
- Salmi, M. S., H. P. Johnson, R. N. Harris (2017). Thermal environment of the Southern Washington region of the Cascadia subduction zone, *J. Geophys. Res.*, doi: 10.1002/2016JB013839.
- Shi, J., M. D. Kohler, J. N. Sutton, and J.-P. Ampuero (2017). Mapping coherent, time-varying wavefronts from the 2011 Tohoku tsunami into enhanced, time-dependent warning messages, 16th World Conference on Earthquake Engineering.
- Sohn, R., R. Harris, C. Linder, K. Luttrell, D. Lovalvo, L. Morgan, W. Seyfried, and P. Shanks (2017). Exploring the restless floor of Yellowstone Lake, *Eos*, 98, doi: 10.1029/2017EO087035.
- Tian, Y. and M. H. Ritzwoller (2017). Improving ambient noise cross-correlations in the noisy ocean bottom environment of the Juan de Fuca plate, *Geophys. J. Int.*, doi: 10.1093/gji/ggx281.

Tian, Y. (2017). Ambient Noise Tomography and Microseism Directionalities across the Juan de Fuca Plate, PhD Dissertation, University of Colorado at Boulder.

VanderBeek, B. P. and D. R. Toomey. (2017). Shallow mantle anisotropy beneath the Juan de Fuca plate. *Geophysical Research Letters*, 44, doi: 10.1002/2017GL074769.

Wang, Y., K. Satake, T. Maeda, and A. R. Gusman (2017). Green's Function-based Tsunami, Data Assimilation (GFTDA): A fast data assimilation approach toward tsunami early warning, *Geophys. Res. Lett.*, doi: 10.1002/2017GL075307.

Wei, S. S., D. A. Wiens, P. E. van Keken, and C. Cai (2017). Slab temperature controls on the Tonga double seismic zone and slab mantle dehydration, *Science Adv.*, doi: 10.1126/sciadv.1601755.

Weirathmueller M. J., K. M. Stafford, W. S. D. Wilcock, R. S. Hilmo, R. P. Dziak, and A. M. Tréhu (2017). Spatial and temporal trends in fin whale vocalizations recorded in the NE Pacific Ocean between 2003-2013, *PLoS ONE*, doi: 10.1371/journal.pone.0186127.

Weirathmueller, M. J., W. S. D. Wilcock, and R. S. Hilmo (2017). Estimating range to a vocalizing fin whale using the timing and amplitude of multipath arrivals, *J. Acoustical Soc. of Am.*, doi: 10.1121/1.5005494.

Weirathmueller, M. J. (2017). Characteristics of fin whale vocalizations recorded on instruments in the northeast Pacific Ocean, PhD Dissertation, University of Washington.

Yeck, W. L., A. F. Sheehan, J. C. Stachnik, and F.-C. Lin (2017). Offshore Rayleigh group velocity observations of the South Island, New Zealand, from ambient noise data, *Geophys. J. Int.*, doi: 10.1093/gji/ggx054.

2016

Abers, G. A., Z. Eilon, J. B. Gaherty, G. Jin, YH. Kim, M. Obrebski, and C. Dieck (2016). Southeast Papuan crustal tectonics: Imaging extension and buoyancy of an active rift, *Journal of Geophysical Research*, 121, 951-971, doi: 10.1002/2015JB012621.

Audet, P. (2016). Receiver functions using OBS data: Promises and limitations from numerical modelling and examples from the Cascadia Initiative, *Geophysical Journal International*, doi: 10.1093/gji/ggw111.

Ball, J. S., A. F. Sheehan, J. C. Stachnik, F.-C. Lin, W. L. Yeck, and J. A. Collins (2016). Lithospheric shear velocity structure of South Island, New Zealand from amphibious Rayleigh wave tomography, *Journal of Geophysical Research: Solid Earth*, doi: 10.1002/2015JB012726.

Berger, J., G. Laske, J. Babcock, and J. Orcutt (2016). An ocean bottom seismic observatory with near real-time telemetry, *Earth and Space Science*, 3, doi:10.1002/2015EA000137.

- Bowden, D. C., M. D. Kohler, V. C. Tsai, and D. S. Weeraratne (2016). Offshore Southern California Lithospheric Velocity Structure from Noise Cross Correlation Functions, *Journal of Geophysical Research: Solid Earth*, 121, doi:10.1002/2016JB012919.
- Chakravorty, A. (2016). Small-scale factors influence mantle flow under the seafloor, *Earth Magazine*, 16.
- Chen, X., and J. J. McGuire (2016). Measuring earthquake source parameters in the Mendocino triple junction region using a dense OBS array: Implications for fault strength variations, *Earth and Planetary Science Letters*, 453, 276-287, doi: 10.1016/j.epsl.2016.08.022.
- Chen, Z., P. Gerstoft, and P. D. Bromirski (2016). Microseism source direction from noise cross-correlation, *Geophysical Journal International*, 205, 810-818, doi: 10.1093/gji/ggw055.
- Flores, C. H., U. S. ten Brink, J. J. McGuire, and J. A. Collins (2016), Observations of seismicity and ground motion in the northeast U.S. Atlantic Margin from ocean-bottom seismometer data, *Seismol. Res. Lett.*, 87, doi: 10.1785/0220160079.
- Gardner, A. T., and J. A. Collins (2016). A second look at chip scale atomic clocks for long term precision timing: four years in the field, *IEEE Oceans*.
- Gusman, A. R., A. F. Sheehan, K. Satake, M. Heidarzadeh, I. E. Mulia, and T. Maeda (2016), Tsunami data assimilation of Cascadia seafloor pressure gauge records from the 2012 Haida Gwaii earthquake. *Geophys. Res. Lett.*, 42, doi: 10.1002/2016GL068368.
- Harris, R., L. Wallace, S. Webb, Y. Ito, K. Mochizuki, H. Ichihara, S. Henrys, A. Tréhu, S. Schwartz, A. Sheehan, D. Saffer, and R. Lauer (2016). Investigations of shallow slow slip offshore of New Zealand, *Eos*, 97, doi:10.1029/2016EO048945.
- Hawley, W. B., R. M. Allen, and M. A. Richards (2016). Tomography reveals buoyant asthenosphere accumulating beneath the Juan de Fuca plate, *Science*, 353, 1406-1408.
- Horning, G., J. P. Canales, S. M. Carbotte, S. Han, H. Carton, and M. R. Nedimović (2016), A 2-D Tomographic Model of the Juan de Fuca Plate from Accretion at Axial Seamount to Subduction at the Cascadia Margin from an Active Source OBS survey, *J. Geophys. Res.*, 121, doi:10.1002/2016JB013228.
- Johnson, C. W., and R. Bürgmann (2016). Delayed dynamic triggering: Local seismicity leading up to three remote $M \geq 6$ aftershocks of the 11 April 2012 M8.6 Indian Ocean earthquake, *Journal of Geophysical Research: Solid Earth*, 121, 134-151, doi: 10.1002/2015JB012243.
- Lin, P.-Y. P., J. B. Gaherty, G. Jin, J. A. Collins, D. Lizarralde, R. L. Evans, and G. Hirth (2016), High-resolution seismic constraints on flow dynamics in the oceanic asthenosphere, *Nature*, doi: 10.1038/nature18012.

Morgan, J., M. Warner, G. Arnoux, E. Hooft, D. Toomey, B. VanderBeek, and W. Wilcock (2016). Next-generation seismic experiments—II: wide-angle, multi-azimuth, 3-D, full-waveform inversion of sparse field data, *Geophysical Journal International*, 204, 1342-1363, doi: 10.1093/gji/ggv513.

Peureux, C., and F. Arduin (2016). Ocean bottom pressure records from the Cascadia array and short surface gravity waves, *Journal of Geophysical Research: Oceans*, doi: 10.1002/2015JC011580.

Sahakian, V., A. Kell, A. Harding, N. Driscoll, and G. Kent (2016). Geophysical evidence for a San Andreas subparallel transtensional fault along the northeastern shore of the Salton Sea, *BSSA*, 106, doi: 10.1785/0120150350.

Sapkota, B. (2016). Source parameterization of earthquakes along Juan de Fuca transform boundaries, Master's Thesis, Oregon State University.

Shillington, D.J., J. B. Gaherty, C. J. Ebinger, C. A. Scholz, K. Selway, A. A. Nyblade, P. A. Bedrosian, C. Class, S. L. Nooner, M. E. Pritchard, J. Elliott, P. R. N. Chindandali, G. Mbogoni, R. Wambura Ferdinand, N. Boniface, S. Many, G. Kamihanda, E. Saria, G. Mulibo, J. Salima, A. Mruma, L. Kalindekafe, N. J. Accardo, D. Ntambila, M. Kachingwe, G. T. Mesko, T. McCartney, M. Maquay, J. P. O'Donnell, G. Tepp, K. Mtelela, P. Trinhammer, D. Wood, E. Aaron, M. Gibaud, M. Rapa, C. Pfeifer, F. Mphepo, D. Gondwe, G. Arroyo, C. Eddy, B. Kamoga, M. Moshi (2016). Acquisition of a Unique Onshore/Offshore Geophysical and Geochemical Dataset in the Northern Malawi (Nyasa) Rift, *Seismo. Res. Lett.* DOI: 10.1785/0220160112.

Soule, D., W. S. D. Wilcock, D. R. Toomey, E. E. E. Hooft, and R. T. Weekly (2016), Near-axis crustal structure and thickness of the Endeavour Segment, Juan de Fuca Ridge, *Geophys. Res. Lett.*, 43, 5688-5695, doi: 10.1002/2016GL068182.

Stanley, S. (2016). Streamlining rapid tsunami forecasting, *Eos*, 97, doi:10.1029/2016EO052675.

Tréhu, A. M. (2016). Measuring slow slip offshore, *Science*, 352, 654-655, doi: 10.1126/science.aaf6534.

VanderBeek, B. P., D. R. Toomey, E. E. E. Hooft, and W. S. D. Wilcock (2016). Segmentation of mid-ocean ridges attributed to oblique mantle divergence, *Nature Geoscience*, 636-642, doi: 10.1038/ngeo2745.

Wallace, L. M., S. C. Webb, Y. Ito, K. Mochizuki, R. Hino, S. Henrys, S. Y. Schwartz, A. F. Sheehan (2016). Slow slip near the trench at the Hikurangi subduction zone, New Zealand, *Science*, 352, 701-704, doi: 10.1126/science.aaf2349.

Wang, K., and A. M. Tréhu (2016). Invited review paper: Some outstanding issues in the study of great megathrust earthquakes—The Cascadia example, *Journal of Geodynamics*, doi: 10.1016/j.jog.2016.03.010.

Wei, S. S., Y. Zha, W. Shen, D. A. Wiens, J. A. Conder, and S. C. Webb (2016). Upper mantle structure of the Tonga-Lau-Fiji region from Rayleigh wave tomography, *Geochem. Geophys. Geosyst.*, 4705-4724, doi: 10.1002/2016GC006656.

Wendel, J. (2016). Undersea data tie slow fault slip to tsunami-causing quakes, *Eos*, 97, doi:10.1029/2016EO051993.

Zietlow, D. W., P. H. Molnar, and A. F. Sheehan (2016). Teleseismic P-wave tomography of South Island, New Zealand upper mantle: Evidence of subduction of Pacific lithosphere since 45 Ma. *J. Geophys. Res. Solid Earth*, 120, doi: 10.1002/2015JB012624.

2015

Barklage, M., D. A. Wiens, J. A. Conder, S. Pozgay, H. Shiobara, and H. Sugioka, P and S velocity tomography of the Mariana subduction system from a combined land-sea seismic deployment, *Geochem. Geophys. Geosyst.*, 16, 681–704, doi:10.1002/2014GC005627, 2015.

Bécel, A., D. J. Shillington, M. R. Nedimović, S. C. Webb, and H. Kuehn, Origin of dipping structures in fast-spreading oceanic lower crust offshore Alaska imaged by multichannel seismic data, *Earth Planet. Sci. Lett.*, 424, 26-37, doi: 10.1016/j.epsl.2015.05.016, 2015.

Bell, S. W., Y. Ruan, and D. W. Forsyth, Shear velocity structure of abyssal plain sediments in Cascadia, *Seismol. Res. Lett.*, doi:10.1785/0220150101, 2015.

Bell, S. W., D. W. Forsyth, and Y. Ruan, Removing noise from the vertical component records of ocean-bottom seismometers: Results from year one of the Cascadia Initiative, *Bull. Seis. Soc. Am.*, 105, doi: 10.1785/0120140054, 2015.

Bodmer, M., D. R. Toomey, E. E. Hooft, J. Nábelek, and J. Braunmiller, Seismic anisotropy beneath the Juan de Fuca plate system: Evidence for heterogeneous mantle flow, *Geology*, 43, doi: 10.1130/G37181.1, 2015.

Brodie, D. C., and R. A. Dunn, Low frequency baleen whale calls detected on ocean-bottom seismometers in the Lau basin, southwest Pacific Ocean, *The Journal of the Acoustical Society of America*, 137, 53-62, doi: 10.1121/1.4904556, 2015.

Cheng, C., Allen, R. M., Porritt, R. W. and Ballmer, M. D., Seismic Constraints on a Double-Layered Asymmetric Whole-Mantle Plume Beneath Hawai'i, in *Hawaiian Volcanoes: From Source to Surface* (eds R. Carey, V. Cayol, M. Poland and D. Weis), John Wiley & Sons, Inc, Hoboken, NJ. doi: 10.1002/9781118872079.ch2, 2015.

- Dunn, R., Tracking stress and hydrothermal activity along the Eastern Lau Spreading Center using seismic anisotropy, *Earth Planet. Sci. Lett.*, 410, 105-116, 2015.
- Eakin, D. H., K. D. McIntosh, H. J. A. Van Avendonk, and L. Lavier, New geophysical constraints on a failed subduction initiation: The structure and potential evolution of the Gagua Ridge and Huatung Basin, *Geochem. Geophys. Geosyst.*, 16, 380-400, doi: 10.1002/2014GC005548, 2015.
- Gao, H., and Y. Shen, A preliminary full-wave ambient-noise tomography model spanning from the Juan de Fuca and Gorda spreading centers to the Cascadia volcanic arc, *Seismol. Res. Lett.*, doi:10.1785/0220150103, 2015.
- Gao, H., and Susan Schwartz, Preface to the focus section on Cascadia Initiative preliminary results, *Seismol. Res. Lett.*, doi:10.1785/0220150160, 2015.
- Janiszewski, H. A., and G. A. Abers, Imaging the plate interface in the Cascadia sesimogenic zone: New constraints from offshore receiver functions, *Seismol. Res. Lett.*, doi:10.1785/0220150104, 2015.
- Karalliyadda, S. C., M. K. Savage, A. Sheehan, J. Collins, D. Zietlow, and A. Shelley, S-wave splitting in the offshore South Island, New Zealand: Insights into plate-boundary deformation, *Geochem. Geophys. Geosyst.*, 16, doi:10.1002/2015GC005882, 2015.
- Lin, F.-C., M. D. Kohler, P. Lynett, A. Ayca, and D. S. Weeraratne, March 11, 2011 Tohoku tsunami wavefront mapping across offshore southern California *J. Geophys. Res.*, 120, 3350-3362, doi: 10.1002/2014JB011524, 2015.
- Martin-Short, R., R. M. Allen, I. D. Bastow, E. Totten, and M. A. Richards, Mantle flow geometry from ridge to trench beneath the Gorda-Juan de Fuca plate system, *Nat. Geosci.*, 8, doi: 10.1038/ngeo2569, 2015.
- Masy, J., F. Niu, A. Levander, and M. Schmitz, Lithospheric expression of cenozoic subduction, mesozoic rifting and the Precambrian Shield in Venezuela, *Earth Planet. Sci. Lett.*, 410, 12-24, doi: 10.1016/j.epsl.2014.08.041, 2015.
- Menke, W., Y. Zha, S. C. Webb, and D. K. Blackman, Seismic Anisotropy Indicates Ridge-parallel Asthenospheric Flow Beneath the Eastern Lau Spreading Center, in press. *J. Geophys. Res.*, doi: 10.1002/2014JB011154, 2015.
- Morton, E. A., and S. L. Bilek, Preliminary event detection of earthquakes using the Cascadia Initiative data, *Seismol. Res. Lett.*, doi:10.1785/0220150098, 2015.
- Neale, J., N. Harmon, and M. Srokosz, Source regions and reflection of infragravity waves offshore of the USA's Pacific Northwest, *J. Geophys. Res.: Oceans*, doi: 10.1002/2015JC010891, 2015.

Reeves, Z., V. Lekic, N. Schmerr, M. Kohler, and D. Weeraratne, Lithospheric structure across the California Continental Borderland from receiver functions, *Geochem. Geophys. Geosyst.*, doi:10.1002/2014GC005617, 2015.

Sheehan A. F., A. R. Gusman, M. Heidarzadeh, and K. Satake, Array observations of the 2012 Haida Gwaii tsunami using Cascadia Initiative absolute and differential seafloor pressure gauges, *Seismol. Res. Lett.*, doi: 10.1785/0220150108, 2015.

Sumy, D. F., J. A. Lodewyk, R. L. Woodward, and B. Evers, Ocean-bottom seismograph performance during the Cascadia Initiative, *Seismol. Res. Lett.*, doi:10.1785/0220150110, 2015.

Thomas, C., and G. Laske, D^o observations in the Pacific from PLUME ocean bottom seismometer recordings, *Geophys. Res. Int.*, doi: 10.1093/gji/ggu441, 2015.

Tian, Y., and M. H. Ritzwoller, Directionality of ambient noise on the Juan de Fuca plate: implications for source locations of the primary and secondary microseisms, *Geophysical Journal International* 201, 429-443, doi: 10.1093/gji/ggv024, 2015.

Tréhu, A. M., J. Braunmiller, and E. Davis, Seismicity of the central Cascadia continental margin near 44.5° N: A decadal view, *Seismol. Res. Lett.*, 83, 819-829, doi: 10.1785/0220140207, 2015.

Wei, S. S., D. A. Wiens, Y. Zha, T. Plank, S. C. Webb, D. K. Blackman, R. A. Dunn, and J. A. Conder, Seismic Evidence of Effects of Water on Melt Transport in the Lau Back-arc Mantle, *Nature*, doi: 10.1038/nature14113, 2015.

2014

Arai, R and R. A. Dunn, Seismological study of Lau back arc crust: mantle water, magmatic differentiation, and a compositionally zoned basin, *Earth Planet. Sci. Lett.*, 390, 314-317, 2014.

Ball, J. S., A. F. Sheehan, J. C. Stachnik, F.-C. Lin, and J. A. Collins, A joint Monte Carlo analysis of seafloor compliance, Rayleigh wave dispersion and receiver functions at ocean bottom seismic stations offshore New Zealand, *Geochem. Geophys. Geosyst.*, 15, 5051–5068, doi:10.1002/2014GC005412, 2014.

Booth, C. M., D. W. Forsyth, and D. S. Weeraratne, Upper mantle Q structure beneath old seafloor in the western Pacific, *J. Geophys. Res.*, 119, 3448–3461, doi: 10.1002/2013JB010589, 2014.

Collins, J. A., and P.H. Molnar, Pn anisotropy beneath the South Island of New Zealand and implications for distributed deformation in continental lithosphere, *J. Geophys. Res.*, 119, 7745-7767, doi:10.1002/2014JB011233, 2014.

Eakin, D., K. McIntosh, H. van Avendonk, L. Lavier, R. Lester, C.-S. Liu, and C.-S. Lee, 2014, Crustal-scale seismic profiles across the Manila subduction zone: the transition from intra-

oceanic subduction to incipient collision, *J. Geophys. Res.*, 119, doi: 10.1002/2013JB010395, 2014.

Froment, B., J. J. McGuire, P. Gouedard, E. C. Roland, H. Zhang, J. A. Collins, and R. D. van der Hilst, Imaging along-strike variations in mechanical properties of the Gofar transform fault, East Pacific Rise, *J. Geophys. Res.*, 119, DOI:10.1002/2014JB011270, 2014.

Godin, O. A., N. A. Zabotin, A. F. Sheehan, and J.A. Collins, Interferometry of infragravity waves off New Zealand, *J. Geophys. Res.*, 119, doi:10.1002/2013JC009395, 2014.

Gouédard, P., T. Seher, J.J. McGuire, J.A. Collins, and R.D. van der Hilst, Correction of Ocean-Bottom Seismometer Instrumental Clock Errors Using Ambient Seismic Noise, *Bulletin of the Seismological Society of America*, 104(3), doi:10.1785/0120130157, 2014.

Lester, W. R., H. van Avendonk, K. McIntosh, L. Lavier, C.-S. Liu, T.-K. Wang, and F. Wu, Rifting and magmatism in the northeastern South China Sea from wide-angle tomography and seismic reflection imaging, *J. Geophys. Res.*, 119, doi:10.1002/2013JB010639, 2014.

Pontbriand, C. W., and R. A. Sohn, Microearthquake evidence for reaction-driven cracking within the Trans-Atlantic Geotraverse active hydrothermal reposit, *J. Geophys. Res.*, 119.2 822-839, doi:10.1002/2013JB010110, 2014.

Ruan, Y., D. W. Forsyth, and S. W. Bell, Marine sediment shear velocity structure from the ratio of displacement to pressure of Rayleigh waves at seafloor, *J. Geophys. Res.*, 119.8, 6357-371, 2014.

Shintaku, N., D.W. Forsyth, C.J. Rau, and D.S. Weeraratne, Pn anisotropy in Mesozoic western Pacific lithosphere, *J. Geophys. Res.*, 119, 3050–3063, doi:10.1002/2013JB010534, 2014.

Stephen, R.A., I. A. Udovydchenkov, P. F. Worcester, E. Aaron, S. T. Bolmer, S. Carey, S. P. McPeak, S. A. Swift, and M. A. Dzieciuch, Ocean bottom seismometer augmentation in the North Pacific (OBSANP) - Cruise Report. WHOI Technical Report, Woods Hole Oceanographic Institution, Woods Hole, MA, 2014.

Takeo, A., D. W. Forsyth, D. S. Weeraratne, and K. Nishida, Estimation of azimuthal anisotropy in the NW Pacific from seismic ambient noise in seafloor records, *Geophys. J. Int.*, 199, 11-22, doi: 10.1093/gji/ggu240, 2014.

Toomey, D. R., R. M. Allen, A. H. Barclay, S. W. Bell, P. D. Bromirski, R. L. Carlson, X. Chen, J. A. Collins, R. P. Dziak, B. Evers, D. W. Forsyth, P. Gerstoft, E. E. E. Hooft, D. Livelybrooks, J. A. Lodewyk, D. S. Luther, J. J. McGuire, S. Y. Schwartz, M. Tolstoy, A. M. Tréhu, M. Weirathmueller, and W. S. D. Wilcock, The Cascadia Initiative: A sea change in seismological studies of subduction zones, *Oceanography* 27(2): 138–150, <http://dx.doi.org/10.5670/oceanog.2014.49>, 2014.

Van Avendonk, H. J. A., H. Kuo-Chen, K. D. McIntosh, L. L. Lavier, D. A. Okaya, F. T. Wu, C. Y. Wang, C. S. Lee, and C. S. Liu, Deep crustal structure of an arc-continent collision: Constraints from seismic traveltimes in central Taiwan and the Philippine Sea, *J. Geophys. Res.*, 119, 8397–8416, doi:10.1002/2014JB011327, 2014.

Weekly, R. T., W. S. D. Wilcock, D. R. Toomey, E. E. E. Hooft and E. Kim, Upper crustal seismic structure of the Endeavour Segment, Juan de Fuca Ridge from travel time tomography: Implications for oceanic crustal accretion, *Geochem. Geophys. Geosyst.*, 15, doi:10.1002/2013GC005159, 2014.

Wofson-Schwehr, M., M. S. Boettcher, J. J. McGuire, and J. A. Collins, The Relationship Between Seismicity and Fault Structure on the Discovery Transform Fault, East Pacific Rise, G-cubed, doi:10.1002/2014GC005445, 2014.

Zha, Y., S. C. Webb, S. S. Wei, D. A. Wiens, D. K. Blackman, W. Menke, R. A. Dunn, and J. A. Conder, Seismological imaging of ridgearc interaction beneath the Eastern Lau Spreading Center from OBS ambient noise tomography, *Earth Planet. Sci. Lett.*, 408(0), 194-206, doi:10.1016/j.epsl.2014.10.019, 2014.

Zietlow, D. W., A. F. Sheehan, P. H. Molnar, M. K. Savage, G. Hirth, J. A. Collins, and B. H. Hager, Upper mantle seismic anisotropy at a strike slip boundary: South Island, New Zealand, *J. Geophys. Res.*, 119, doi:10.1002/2013JB010676, 2014.

2013

Boese, C.M., T. A. Stern, J. Townend, S. Bourguignon, A. Sheehan, and E. G. C. Smith, Sub-crustal earthquakes within the Australia-Pacific plate boundary zone beneath the Southern Alps, New Zealand, *Earth Planet. Sci. Lett.*, 376, 212-219, doi:10.1016/j.epsl.2013.06.030, 2013.

Dunn, R. A., F. Martinez, J. A. Conder, Crustal construction and magma chamber properties along the Eastern Lau Spreading Center, *Earth Planet. Sci. Lett.*, 371-372, 112-124, 2013.

Godin, O. A., N. A. Zobotin, A. F. Sheehan, Z. Yang, and J. A. Collins, Power spectra of infragravity waves in a deep ocean, *Geophys. Res. Lett.*, 40,10, 2159-2165, doi:10.1002/grl.50418, 2013.

Lester, R., K. McIntosh, H. van Avendonk, L. Lavier, C.-S. Liu, and T.-K. Wang, Crustal accretion in the Manila trench accretionary wedge at the transition from subduction to mountain-building in Taiwan, *Earth Planet. Sci. Lett.* 375 (2013), 430-440, <http://dx.doi.org/10.1016/j.epsl.2013.06.007>, 2013.

McIntosh, K., H. van Avendonk, L. Lavier, R. Lester, D. Eakin, F. Wu, C.-S. Liu, and C.-S. Lee, 2013, Inversion of a hyper-extended rifted margin in the southern Central Range of Taiwan, *Geology* 41, 871-874, doi:10.1130/G34402, 2013.

Rose, E. J., Fuis, G. S., Stock, J. M., Hole, J. A., Kell, A. M., Kent, G., Driscoll, N. W., Crum, S., Goldman, M., Reusch, A. M., Han, L., Sickler, R. R., Catchings, R. D., Rymer, M. J., Criley, C. J., Scheirer, D. S., Skinner, S. M., Slayday-Criley, C. J., Murphy, J. M., Jensen, E. G., McClearn, R., Ferguson, A. J., Butcher, L. A., Gardner, M. A., Emmons, I., Loughran, C. L., Svitek, J. R., Bastien, P. C., Cotton, J. A., Croker, D. S., Harding, A. J., Babcock, J. M., Harder, S. H., and C. M. Rosa, Borehole-explosion and air-gun data acquired in the 2011 Salton Seismic Imaging Project (SSIP), southern California—Description of the survey: U.S. Geological Survey Open-File Report 2013–1172, 84 p., <http://dx.doi.org/10.3133/ofr20131172>, 2013.

Rychert, C. A., G. Laske, N. Harmon, and P. M. Shearer, Seismic imaging of melt in a displaced Hawaiian plume, *Nat. Geosci.* 6.8: 657-60, doi: 10.1038/NGEO1878, 2013.

Sager, W. W., J. Zhang, J. Korenaga, T. Sano, A. A. P. Koppers, M. Widdowson, and J. J. Mahoney, An immense shield volcano within the Shatsky Rise oceanic plateau, northwest Pacific Ocean, *Nat. Geosci.*, 6, 976-981, 2013.

Stephen, R. A., Bolmer, S. T., Udovydchenkov, I. A., Worcester, P. F., Dzieciuch, M. A., Andrew, R. K., Mercer, J. A., Colosi, J. A., and B. M. Howe, Deep seafloor arrivals in long range ocean acoustic propagation. *J. acoust. Soc. Am.*, 134, 3307-3317, 2013.

Tian, Y., W. Shen, and M. H. Ritzwoller, Crustal and uppermost mantle shear velocity structure adjacent to the Juan De Fuca Ridge from ambient seismic noise, *Geochem., Geophys., Geosyst.* 14.8, 3221-233, 2013.

Wang, Y., D. W. Forsyth, C. J. Rau, N. Carriero, B. Schmandt, J. Gaherty, and B. Savage, Fossil slabs attached to unsubducted fragments of the Farallon plate, *Proceedings National Academy of Science*, 110, doi:10.1073/pnas.1214880110, 2013.

Wech, A. G., A. F. Sheehan, C. M. Boese, J. Townend, and T. A. Stern, Tectonic tremor recorded at ocean bottom seismometers, *Seismol. Res. Lett.*, 84(5), doi:10.1785/0220120184, 2013.

Weekly R. W., W. Wilcock, E. Hooft, D. Toomey, P. McGill, D. Stakes, Termination of a decadal-scale ridge-spreading event observed using a seafloor seismic network on the Endeavour Segment, Juan de Fuca Ridge, *Geochem. Geophys. Geosyst.*, 2013.

Worcester, P. F., Dzieciuch, M. A., Mercer, J. A., Andrew, R. K., Dushaw, B. D., Baggeroer, A. B., Heaney, K. D., D'Spain, G. L., Colosi, J. A., Stephen, R. A., Kemp, J. N., Howe, B. M., Van Uffelen, L. J. and Wage, K. E., The North Pacific Acoustic Laboratory deep-water acoustic propagation experiments in the Philippine Sea, *J. acoust. Soc. Am.*, 134, 3359-3375, 2013.

Worcester, P. F., and R. A. Stephen, Ocean bottom seismometer augmentation in the North Pacific (OBSANP): Cruise quick-look report, Scripps Institution of Oceanography. La Jolla, CA, 2013.

Zha, Y., S. C. Webb, and W. Menke, Determining the orientations of ocean bottom seismometers using ambient noise correlation, *Geophys. Res. Lett.*, 40, 3585–3590, doi:10.1002/grl.50698, 2013.

2012

Bostock, M. G. and A. M. Trehu, Wave-field decomposition of ocean bottom seismograms, *Bull. Seismol. Soc. Am.* 102(4): 1681-1692, 2012.

Collins, J. A., J. J. McGuire, D. K. Smith, Seismicity of the Atlantis Massif detachment fault, 30 N at the Mid-Atlantic Ridge, *Geochem. Geophys. Geosys.*, doi:10.1029/2012GC004210, 2012.

Collins, J. A., C. J. Wolfe, and G. Laske, Shear wave splitting at the Hawaiian hot spot from the PLUME land and ocean bottom seismometer deployments, *Geochem. Geophys. Geosys.*, 13, doi:10.1029/2011GC003881, 2012.

Gardner, A. T., and J. A. Collins, Advancements in high-performance timing for long term underwater experiments: a comparison of chip scale atomic clocks to traditional microprocessor-compensated crystal oscillators, *IEEE Oceans*, 2012.

Klingelhoefer, F., T. Berthet, S. Lallemand, P. Schnurle, C.-S. Lee, C.-S. Liu, K. McIntosh, and T. Theunissen, P-wave velocity structure of the southern Ryukyu margin east of Taiwan: Results from the ACTS wide-angle seismic experiment, *Tectonophysics*, doi:10.1016/j.tecto.2011.10.010, 2012.

Korenaga, J., and W. W. Sager, Seismic tomography of Shatsky Rise by adaptive importance sampling, *J. Geophys. Res.*, 117, B08102, doi:10.1029/2012JB009248, 2012.

Kuo-Chen, H., F. T. Wu, and S. W. Roecker, Three-dimensional P velocity structures of the lithosphere beneath Taiwan from the analysis of TAIGER and related seismic data sets, *J. Geophys. Res.*, 117, B06306, doi:10.1029/2011JB009108, 2012.

Lester, R., L. Lavier, K. McIntosh, H. van Avendonk, and F. Wu, Active extension in Taiwan's precollision zone: A new model of plate bending in continental crust, *Geology*, doi:10.1130/G33142.1, 2012.

Lester, R. and K. McIntosh, Multiple attenuation in crustal-scale imaging: examples from the TAIGER marine reflection data set, *Mar. Geophys. Res.*, DOI 10.1007/s11001-012-9149-1, 2012.

McGuire, J. J., J. A. Collins, P. Gouedard, E. Roland, D. Lizarralde, M. S. Boettcher, M. D. Behn, and R. D. van der Hilst, Variations in earthquake rupture properties along the Gofar transform fault, East Pacific Rise, *Nat. Geosci.*, 5(5), 336-341, DOI:10.1038/NGEO1454, 2012.

McIntosh, K., C.-S. Liu, and C.-S. Lee, 2012, Introduction to the TAIGER special issue of Marine Geophysical Research, *Marine Geophys. Res.* 33, 285-287, 2012.

Roland, E., D. Lizarralde, J. J. McGuire, and J. A. Collins, Seismic velocity constraints on the material properties that control earthquake behavior at the Quebrada-Discovery-Gofar transform faults, East Pacific Rise, *J. Geophys. Res.*, 117, B11102, doi:10.1029/2012JB009422, 2012.

Stachnik, J. C., A. F. Sheehan, D. W. Zietlow, X. Yang, J. A. Collins, and A. Ferris, Determination of New Zealand ocean bottom seismometer orientation via Rayleigh-wave polarization, *Seismol. Res. Lett.* 83(4): 704-713, 2012.

Stephen, R. A., Bolmer, S. T., Udovydchenkov, I. A., Dzieciuch, M. A., Worcester, P. F., Andrew, R. K., Mercer, J. A., Colosi, J. A., and Howe, B. M., Analysis of deep seafloor arrivals observed on NPAL04, WHOI Technical Report WHOI-2012-09, Woods Hole Oceanographic Institution, Woods Hole, MA, 2012.

Theunissen, T., S. Lallemand, Y. Font, S. Gautier, C. Lee, W. Liang, F. Wu, and T. Berthet, Crustal deformation at the southernmost part of the Ryukyu subduction (East Taiwan) as revealed by new marine seismic experiments, *Tectonophysics* 578(0): 10, 2012.

Trehu, A. M., R. J. Blakely, and M. C. Williams, Subducted Seamounts and Recent Earthquakes beneath the Central Cascadia Forearc, *Geology*, 40.2, 103-06, 2012.

Yang, Z., A. F. Sheehan, J. A. Collins, and G. Laske, The character of seafloor ambient noise recorded offshore New Zealand: Results from the MOANA ocean bottom seismic experiment, *Geochem. Geophys. Geosyst.*, 13, Q10011, doi:10.1029/2012GC004201, 2012.

Zhao, M., J. P. Canales, and R. A. Sohn (2012). Three-dimensional seismic structure of a Mid-Atlantic Ridge segment characterized by active detachment faulting (Trans-Atlantic Geotraverse, 25°55'N-26°20'N), *Geochem. Geophys. Geosyst.*, doi:10.1029/2012GC004454.

2011

Anchietta, M. C., C. J. Wolfe, G. L. Pavlis, F. L. Vernon, J. A. Eakins, S. C. Solomon, G. Laske, and J. A. Collins. "Seismicity around the Hawaiian Islands Recorded by the PLUME Seismometer Networks: Insight into Faulting near Maui, Molokai, and Oahu." *Bulletin of the Seismological Society of America* 101.4: 1742-758, doi:10.1785/0120100271, 2011.

Collins, J., P. Molnar, and A. Sheehan, Multibeam bathymetric surveys of submarine volcanoes and mega-pockmarks on the Chatham Rise, New Zealand, *New Zealand Journal of Geology and Geophysics*, 54:3, 329-339, doi: 10.1080/00288306.2011.589860, 2011.

Conder, J. A., and D. A. Wiens, Shallow seismicity and tectonics of the central and northern Lau Basin, *Earth Planet. Sci. Lett.*, 304, 538-546, 2011.

Dunn, RA and F Martinez, Contrasting crustal production and rapid mantle transitions beneath back-arc ridges, *Nature*, 469, 198-202, doi: 10.1038/nature09690, 2011.

Emry, E. L., D. A. Wiens, H. Shiobara, and H. Sugioka, Seismogenic characteristics of the Northern Mariana shallow thrust zone from local array data, *Geochem. Geophys. Geosystems*, 12, Q12008, doi:10.1029/2011GC003853, 2011.

Harmon, N., D. W. Forsyth, D. S. Weeraratne, Y. Yang, D. S. Scheirer, and S. C. Webb, Mantle heterogeneity and off axis volcanism on young Pacific lithosphere, *Earth Planet. Sci. Lett.*, 311, 306-315, 2011.

Laske, Gabi, A. Markee, J.A. Orcutt, C.Wolfe, J.A. Collins, S.C. Solomon, R.S. Detrick, D. Bercovici, and E.H. Hauri. "Asymmetric Shallow Mantle Structure beneath the Hawaiian Swell-evidence from Rayleigh Waves Recorded by the PLUME Network." *Geophysical Journal International* 187.3,1725-742, doi:10.1111/j.1365-246X.2011.05238.x, 2011.

Stephen, R.A., Kemp, J., McPeak, S.P., Bolmer, S.T., Carey, S., Aaron, E., Campbell, R., Moskovitz, B., Calderwood, J., Cohen, B., Worcester, P.F. and Dzieciuch, M.A., 2011. Ocean Bottom Seismometer Augmentation of the Philippine Sea Experiment - OBSAPS - Cruise Report. WHOI Technical Report WHOI-2011-04, Woods Hole Oceanographic Institution, Woods Hole, MA.

Wolfe, Cecily J., S.C. Solomon, G. Laske, J.A. Collins, R.S. Detrick, J.A. Orcutt, D. Bercovici, and E.H. Hauri. "Mantle P-wave Velocity Structure beneath the Hawaiian Hotspot." *Earth and Planetary Science Letters* 303.3-4: 267-80, doi:10.1016/j.epsl.2011.01.004, 2011.

Yao, H., P. Gouedard, J. McGuire, J. Collins, R. van der Hilst, Structure of young East Pacific Rise lithosphere from ambient noise correlation analysis of fundamental- and higher-mode Rayleigh waves, *Comptes Rendus Geoscience*, 343, 571-583, 2011.

2010

Baran, J. M., S. M. Carbotte, J. R. Cochran, and M. Nedimovic, Upper crustal seismic structure along the Southeast Indian Ridge: Evolution from 0 to 550 ka and variation with axial topography, *Geochem. Geophys. Geosyst.*, 11, Q02001, doi:10.1029/2009GC002629, 2010

Bezada, M. J., A. Levander, and B. Schmandt, Subduction in the southern Caribbean: Images from finite-frequency P wave tomography, *J. Geophys. Res.*, 115, B12333, doi: 10.1029/2010JB007682, 2010.

Bezada, M. J., M. B. Magnani, C. A. Zelt, M. Schmitz, and A. Levander, The Caribbean–South American plate boundary at 65°W: Results from wide-angle seismic data, *J. Geophys. Res.*, 115, B08402, doi: 10.1029/2009JB007070, 2010.

Blackman, D.K. and J.A. Collins, Lower Crustal Variability and the Crust/Mantle Transition at the Atlantis Massif Oceanic Core Complex, *Geophys. Res. Lett.* 37, L24303, doi:10.1029/2010GL045165, 2010.

Leahy, Garrett M., John A. Collins, Cecily J. Wolfe, Gabi Laske, and Sean C. Solomon. "Underplating of the Hawaiian Swell: Evidence from Teleseismic Receiver Functions." *Geophysical Journal International* 183.1, 313-29, doi:10.1111/j.1365-246X.2010.04720.x, 2010.

Pyle, M. L., D. A. Wiens, D. Weeraratne, P. J. Shore, H. Shiobara, and H. Sugioka, Shear velocity structure of the Mariana mantle wedge from Rayleigh wave phase velocities, *J. Geophys. Res.*, 115. B11304, doi:10.1029/2009JB006976, 2010

2009

Baran, J. M., J. R. Cochran, R. C. Holmes, M. Tolstoy, and S. M. Carbotte, Constraints on the mantle temperature gradient along the Southeast Indian Ridge from crustal structure and isostasy: Implications for the transition from an axial high to an axial valley, *Geophys. J. Int.*, 179, 144-153, 2009.

Ben, T.Z., W. S.D. Wilcock, A. H. Barclay, D. Zandomeneghi, J. M. Ibáñez, and J. Almendros. "The P-wave Velocity Structure of Deception Island, Antarctica, from Two-dimensional Seismic Tomography." *Journal of Volcanology and Geothermal Research* 180.1, 2009.

Collins, J.A., D.K. Blackman, A. Harris, and R.L. Carlson, Seismic and drilling constraints on velocity structure and reflectivity near IODP Hole U1309D on the central dome of Atlantis Massif, Mid-Atlantic Ridge 30°N, *G3* 10, doi:10.1029/2008GC002121, 2009.

Durant, D. T. and D. R. Toomey, Evidence and implications of a crustal magmatism on the flanks of the East Pacific Rise, *Earth and Planet. Sci. Lett.*, 287, 130-136, 2009.

Harmon, N., D.W. Forsyth, D.S. Weeraratne. Thickening of young Pacific lithosphere from high-resolution Rayleigh wave tomography: A test of the conductive cooling model, *Earth Planet. Sci. Lett.*, 278, 96-106, 2009.

Laske, Gabi, J.A. Collins, C.J. Wolfe, S.C. Solomon, R.S. Detrick, J.A. Orcutt, D. Bercovici, and E.H. Hauri. "Probing the Hawaiian Hot Spot With New Broadband Ocean Bottom Instruments." *Eos, Transactions American Geophysical Union* 90.41, 362, doi:10.1029/2009EO410002, 2011.

Magnani, M. B., C. A. Zelt, A. Levander, and M. Schmitz, Crustal structure of the South America-Caribbean plate boundary at 67°W from controlled-source seismic data, *J. Geophys. Res.*, 114, B02312, doi: 10.1029/2008JB005817, 2009.

Niu, F., T. Bravo, G. Pavlis, F. Vernon, H. Rendon, M. Bezada, and A. Levander. "Receiver Function Study of the Crustal Structure of the Southeastern Caribbean Plate Boundary and Venezuela." *Journal of Geophysical Research* 112.B11, doi:10.1029/2006JB004802, 2009.

Pozgay, S. H., D. A. Wiens, J. A. Conder, H. Shiobara, H. Sugioka, Seismic attenuation tomography of the Mariana Subduction System: Implications for thermal structure, volatile distribution, and slow-spreading dynamics, *Geochem. Geophys. Geosystems*, 10, Q04X05, doi:10.1029/2008GC002313, 2009.

Wolfe, C. J., S. C. Solomon, G. Laske, J. A. Collins, R. S. Detrick, J. A. Orcutt, D. Bercovici, and E. H. Hauri. "Mantle Shear-Wave Velocity Structure Beneath the Hawaiian Hot Spot." *Science* 326.5958,1388-390,doi: 10.1126/science.1180165, 2009.

Zandomeneghi, D., A. Barclay, J. Almendros, J. M. Ibañez Godoy, W. S. D. Wilcock, and T. Ben-Zvi. "Crustal Structure of Deception Island Volcano Fromwave Seismic Tomography: Tectonic and Volcanic Implications." *Journal of Geophysical Research* 114.B6, doi:10.1029/2008JB006119, 2009.

2008

Christeson, G. L., P. Mann, A. Escalona, and T. J. Aitken, Crustal structure of the Caribbean-northeastern South America arc-continent collision zone, *J. Geophys. Res.*, 113, B08104, doi: 10.1029/2007JB005373, 2008.

Clark, S. A., A. Levander, M. B. Magnani, and C. A. Zelt, Negligible convergence and lithospheric tearing along the Caribbean–South American plate boundary at 64°W, *Tectonics*, 27, TC6013, doi: 10.1029/2008TC002328, 2008.

Clark, S. A., M. Sobiesiak, C. A. Zelt, M. B. Magnani, M. S. Miller, M. J. Bezada, and A. Levander, Identification and tectonic implications of a tear in the South American plate at the southern end of the Lesser Antilles, *Geochem. Geophys. Geosyst.*, 9, Q11004, doi: 10.1029/2008GC002084, 2008.

Clark, S. A., C. A. Zelt, M. B. Magnani, and A. Levander, Characterizing the Caribbean-South American plate boundary at 64°W using wide-angle seismic data, *J. Geophys. Res.*, 113, B07401, doi: 10.1029/2007JB005329, 2008.

Heeszel, D. S., D. A. Wiens, P. J. Shore, H. Shiobara, and H. Sugioka, Earthquake evidence for along-arc extension in the Mariana Islands, *Geochem. Geophys. Geosystems*, 9, Q12X03, doi:10.1029/2008GC002186, 2008.

Holmes, R. C., M. Tolstoy, J. R. Cochran, and J. S. Floyd, Crustal thickness variations along the Southeast Indian Ridge (100°-116°E) from 2-D body wave tomography, *Geochem. Geophys. Geosyst.*, 9(12), Q12020, doi:10.1029/2008GC002152, 2008.

Páramo, P., W. S. Holbrook, H. E. Brown, D. Lizarralde, J. Fletcher, P. Umhoefer, G. Kent, A. Harding, A. Gonzalez, and G. Axen, Seismic structure of the southern Gulf of California from Los Cabos block to the East Pacific Rise, *J. Geophys. Res.*, 113, doi:10.1029/2007JB005113, 2008.

Stephen, R.A., Bolmer, S.T., Udovydchenkov, I., Worcester, P.F., Dzieciuch, M.A., Van Uffelen, L., Mercer, J.A., Andrew, R.K., Buck, L.J., Colosi, J.A., and Howe, B.M., 2008. NPAL04 OBS data analysis Part 1: Kinematics of deep seafloor arrivals, WHOI Technical Report, Woods Hole Oceanographic Institution, Woods Hole, MA. WHOI-2008-03, 94 pages.

Toomey, D.R. and E. E. E. Hoofft, Mantle upwelling, magmatic differentiation, and the meaning of axial depth at fast-spreading ridges, *Geology*, 36, doi:10.1130/G24834A.1, 679-682, 2008.

Wiens, D. A., J. A. Conder, and U. Faul, The seismic structure and dynamics of the mantle wedge, *Ann. Rev. Earth Planet. Sci.*, 36, 421-455, 2008.

2007

Canales, J. P., R. A. Sohn, and B. deMartin (2007). Crustal structure of the Trans-Atlantic Geotraverse (TAG) segment (Mid-Atlantic Ridge, 26° 10'N): Implications for the nature of hydrothermal circulation and detachment faulting at slow spreading ridges, *Geochem. Geophys. Geosyst.*, doi:10.1029/2007GC001629.

Conder, J. A., and D. A. Wiens, Rapid mantle flow beneath the Tonga volcanic arc, *Earth Planet. Sci. Lett.*, 264, 299-307, 2007.

deMartin, B.J., R.A. Sohn, J.P. Canales, and S.E. Humphris, Kinematics and geometry of active detachment faulting beneath the Trans-Atlantic Geotraverse (TAG) hydrothermal field on the Mid-Atlantic Ridge, *Geology* 35:711-714, 2007.

Harmon, N., D.W. Forsyth, and S. Webb, Using ambient seismic noise to determine short-period phase velocities and shallow shear velocities in young oceanic lithosphere, *Bulletin of the Seismological Society of America* 97:2009-2023, 2007.

Harmon, N., D.W. Forsyth, R. Lamm, and S.C. Webb, P and S wave delays beneath intraplate volcanic ridges and gravity lineations near the East Pacific Rise, *Journal of Geophysical Research* 112; B03309, 2007.

Holmes, R. C., S. C. Webb, and D. W. Forsyth, Crustal structure beneath the gravity lineations in the Gravity Lineations, Intraplate Melting, Petrologic and Seismic Expedition (GLIMPSE) study area from seismic refraction data, *J. Geophys. Res.*, 112, B07316, doi:10.1029/2006JB004685, 2007.

Lizarralde, D., G. J. Axen, H. E. Brown, J. M. Fletcher, A. González-Fernández, A. J. Harding, W. S. Holbrook, G. M. Kent, P. Paramo, F. Sutherland, and P. J. Umhoefer, Variation in styles of rifting in the Gulf of California, *Nature*, 448, doi:10.1038/nature06035, 2007.

Pozgay, S. H., D. A. Wiens, J. A. Conder, H. Shiobara, and H. Sugioka, Complex mantle flow in the Mariana subduction system: Evidence from shear wave splitting, *Geophys. J. Int.*, doi:10.1111/j.1365-246x.2007.03433.x, 2007.

Tibi, R., D. A. Wiens, H. Shiobara, H. Sugioka, and X. Yuan, Double seismic discontinuities at the base of the mantle transition zone near the Mariana slab, *Geophys. Res. Lett.*, 34, L16316, doi:10.1029/2007GL030527, 2007.

Toomey, D. R., D. Joussetin, R. A. Dunn, W. S. D. Wilcock and R. S. Detrick, Skew of mantle upwelling beneath the East Pacific Rise Governs Segmentation, *Nature*, 444, doi:10.1038/nature05679, 409-414, 2007.

Weeraratne, D.S., D.W. Forsyth, Y. Yang, S.C. Webb, Rayleigh wave tomography of the oceanic mantle beneath intraplate seamount chains in the South Pacific, *J. Geophys. Res.*, B06303, doi:10.1029/2006JB004403, 2007.

Yang, Y., D.W. Forsyth, and D.S. Weeraratne, Seismic attenuation near the East Pacific Rise and the origin of the low-velocity zone, *Earth Planet. Sci. Lett.*, 258, 260-268, 2007.

2006

Conder, J. A., and D. A. Wiens, Seismic structure beneath the Tonga arc and Lau back-arc basin determined from joint Vp. Vp/Vs tomography, *Geochem., Geophys. Geosyst*, 7 Q03018, doi:10.1029/2005GC001113, 2006.

Forsyth, D.W., N. Harmon, D.S. Scheirer, and R.A. Duncan, Distribution of recent volcanism and the morphology of seamounts and ridges in the GLIMPSE study area; implications for the lithospheric cracking hypothesis for the origin of intraplate, non-hot spot volcanic chains, *Journal of Geophysical Research* 111(2006); B11407.

Harmon, N., D.W. Forsyth, and D.S. Scheirer, Analysis of gravity and topography in the GLIMPSE study region; isostatic compensation and uplift of the Sojourn and Hotu Matua Ridge systems, *Journal of Geophysical Research* 111(2006); B11406.

Tibi, R., D. A. Wiens, H. Shiobara, and P. J. Shore, Depths of the 660-km discontinuity near the Mariana slab from a regional array of ocean bottom seismographs, *Geophys. Res. Lett.*, 33, L02313, doi:10.1029/2005GL024523, 2006.

Tolstoy, M., J.P. Cowen, E.T. Baker, D.J. Fornari, K.H. Rubin, T.M. Shank, F. Waldhauser, D.R. Bohnenstiehl, D.W. Forsyth, R.C. Holmes, B. Love, M.R. Perfit, R.T. Weekly, S.A. Soule, and B. Glazer, A sea-floor spreading event captured by seismometers, *Science* 314(2006) 1920-1922.

2005

Baran, J. M., J. R. Cochran, S. M. Carbotte, and M. Nedimovic, Variations in upper crustal structure due to a mantle temperature gradient along the Southeast Indian Ridge, *Geochem. Geophys. Geosyst.*, 6, Q11002, doi:1029/12005GC000943, 2005.

2004

Gaherty, J.B., D. Lizarralde, J.A. Collins, G. Hirth, and S. Kim, Mantle deformation during slow sea-floor spreading constrained by observations of seismic anisotropy in the western Atlantic, *Earth and Planetary Science Letters* 228(2004) 255-265.

Lizarralde, D., J.B. Gaherty, J.A. Collins, G. Hirth, and S.D. Kim, Spreading-rate dependence of melt extraction at mid-ocean ridges from mantle seismic refraction data, *Nature (London)* 432(2004) 744-747.

2003

Collins, J.A., D. Lizarralde, J.B. Gaherty, G. Hirth, and S. Kim, Mid-ocean ridge mantle processes constrained by the FAIM seismic refraction experiment, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.

Crawford, W. C., J. A. Hildebrand, L. M. Dorman, S. C. Webb, and D. A. Wiens, Tonga Ridge and Lau Basin crustal structure from seismic refraction data, *J. Geophys. Res.*, 108(B4), 2195, doi:10.1029/2001JB001435, 2003.

Forsyth, D.W., I.M. Gravity Lineations, Petrologic and Seismic Expedition Experiment Science Team, International, Origin of cross-grain gravity lineations and intraplate volcanic ridges; constraints and ideas from the GLIMPSE experiment, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.

Harmon, N., D.W. Forsyth, and D.S. Scheirer, Analysis of gravity in the GLIMPSE study region; evidence for deeper mantle processes in the formation of the Sojourn and Hotu Matua ridge systems, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.

Holmes, R.C., S.C. Webb, and D.W. Forsyth, Crustal structure beneath the gravity lineations in the South Pacific from seismic refraction data, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.

Kim, S.D., D. Lizarralde, J.B. Gaherty, J.A. Collins, and G.J. Hirth, Oceanic crustal structure north of the Kane fracture zone from 87-147 Ma, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.

Lamm, R.A., N. Harmon, D.W. Forsyth, and S.C. Webb, P and S wave delay times and SkS splitting results from the GLIMPSE experiment: comparison with gravity anomalies and Recent volcanism, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.

Llenos, A.L., D.W. Forsyth, and S.C. Webb, Microearthquakes near Matua Seamount, GLIMPSE study area, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.

Maurice, S. D., D. A. Wiens, L. M. Dorman, and E. Vera, Seismicity and tectonics of the South Shetland Islands and Bransfield Strait from a regional broadband seismograph deployment, *J Geophys. Res.*, 108., B10, doi:10.1029/2003JB002416, 2003.

Scheirer, D., D.W. Forsyth, N. Harmon, and R.A. Duncan, Distribution of Recent volcanism and morphology of volcanic features in the GLIMPSE study area west of the East Pacific Rise, AGU 2003 fall meeting., San Francisco, U.S. 2003.

Weeraratne, D.S., D.W. Forsyth, and S.C. Webb, Rayleigh wave tomography study of the oceanic upper mantle beneath intraplate volcanic chains west of the East Pacific Rise, AGU 2003 fall meeting., American Geophysical Union. San Francisco, U.S. 2003.