

**HARM J.A. VAN AVENDONK**

Jackson School of Geosciences  
 University of Texas at Austin , Institute for Geophysics  
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**EDUCATION**

1993: B.Sc. Geophysics, Utrecht University, Utrecht, The Netherlands.  
 1998: Ph.D. Earth Sciences, University of California, San Diego.

**EMPLOYMENT**

1993 - 1998: Graduate student, Scripps Institution of Oceanography, University of California, San Diego. Graduate advisors: John Orcutt and Alistair Harding.  
 1998–2002: Postdoctoral research fellow, Department of Geology and Geophysics, University of Wyoming. Postdoctoral supervisor: W. Steven Holbrook.  
 2002-2008: Research Associate, University of Texas at Austin, Institute for Geophysics  
 2008-present: Research Scientist, University of Texas at Austin, Institute for Geophysics

**RESEARCH INTERESTS**

- Structural evolution of rifted margins
- Mass and heat transfer in oceanic subduction zones
- Mountain building processes in continental collision
- Seafloor spreading at mid-ocean ridges
- Seismic inversion techniques

**FIELD EXPERIENCE**

1994 (June): A marine tilt/passive seismic experiment at the Juan de Fuca Ridge on board the R/V Wecoma. Principal investigator Steven Constable.  
 1994 (Nov.-Dec.): A seismic refraction study of the Australian-Antarctic Discordance Zone on board the R/V Roger Melville. Principal investigator John Orcutt.  
 1996: (Mar.-May): An investigation of the Austral Islands using multichannel seismics, bathymetry mapping and dredging, on board the R/V Maurice Ewing. Principal investigator Marcia McNutt.  
 1997 (Sept.-Oct.): A 3-D seismic refraction and reflection experiment on the northern East Pacific Rise (ARAD) on board the R/V Maurice Ewing. Principal investigator Graham Kent.  
 2000 (Jul.-Aug.): A seismic refraction and reflection study of the Newfoundland basin (SCREECH) on board the R/V Maurice Ewing. Principal investigators Brian Tucholke and Steven Holbrook.  
 2000 (Sept.-Oct.): A 3-D seismic reflection study at the Blake Ridge on board the R/V Maurice Ewing. Principal investigator Steven Holbrook.  
 2001 (May-June): Recovery of 16 broadband instruments in northwest Wyoming. Principal investigator Kenneth Dueker.  
 2004 (June-July): Fieldwork in preparation of explosion seismic refraction study in Costa Rica. Principal investigator Steven Holbrook.  
 2005 January-February 2005 and July 2005: Land explosion refraction study of the Cordillera Central and Cordillera Guanacaste, Costa Rica. Lead-PI Steven Holbrook.

- 2005 (Oct.): Scouting for land seismic refraction study TAIGER. Lead PI Francis Wu.  
 2006 (July-Aug.): Co-chief scientist during marine geophysical survey of the Chukchi Borderlands and Mendeleev Ridge on board USCGC Healy. Principal investigator Lawrence Lawver.  
 2008 (Jan-Mar): Co-chief scientist during first R/V Marcus Langseth seismic reflection and OBS refraction cruise in Caribbean Sea. Deployment of land seismometers in Costa Rica.  
 2008 (Sep): Land seismic deployment of refteks for STEEP project, southern Alaska.  
 2009 (May-Jul): OBS deployments and recovery for TAIGER geophysical study.  
 2010 (Sep-Dec): Chief scientist, OBS seismic refraction study in the Gulf of Mexico on board the M/V Iron Cat.

### **TEACHING EXPERIENCE**

- 1992-1993: Teaching assistant in undergraduate mathematics and physics courses.  
 2000 (Spring): Quantitative Seismology, University of Wyoming.  
 2006 (Spring): Co-teaching of marine tectonics course, JSG, University of Texas.  
 2007 (Spring): Co-teaching of marine tectonics course, JSG, University of Texas.  
 2008 (Spring): Co-teaching of marine tectonics course, JSG, University of Texas.  
 2009 (Spring): Co-teaching of Tectonics I course, JSG, University of Texas.  
 2010 (Spring): Co-teaching Global Geophysics course, JSG, University of Texas  
 2011 (Spring): Co-teaching Physics of the Earth, JSG, University of Texas

### **COMMUNITY SERVICE OUTSIDE UT AUSTIN**

- 2006 (Spring): NSF-MGS Panel member.  
 2006 (Fall): NSF-MGS Panel member.  
 2007: Guest Editor AGU Books.  
 Reviewer of numerous manuscripts for publication in the Journal of Geophysical Research, Geophysical Journal International, G-Cubed, Tectonophysics, Geophysics, Marine Geophysical Researches, and Geophysical Research Letters.  
 2010: Co-convener NSF GeoPRISMS SCD workshop (Jan. 2011, Austin TX).  
 Fall 2011 – Spring 2012: GeoPRISMS Distinguished Lecturer.  
 2011 (Fall): NSF MARGINS Panel member.

### **SERVICE IN THE JACKSON SCHOOL OF GEOSCIENCES**

- 2002-2005: UTIG Library Committee  
 2003-2006: UTIG Seminar Committee  
 2010-present: UTIG Fellowship Committee  
 2003-2011: UTIG OBS Committee (Chair)  
 2008: UTIG Seismology hire Committee (Chair)  
 2009-2010: UTIG ad hoc Technical Support Committee  
 2005-2006: JSG Equipment Committee  
 2009-2011: JSG Equipment Committee (Chair)  
 2007-2009: JSG Hires in Crust, Mantle and Core Dynamics Committee.

### **STUDENTS and POSTDOCS**

- Undergraduate student: Christopher Collins, 2004-2005.  
 Graduate students: Sanjay Sood (MSc) 2004-2007; Drew Eddy (PhD) 2010-present; Mark Duncan (MSc) 2011-present.  
 Current graduate student committees: W. Ryan Lester (PhD, UT Austin), Max Garnier (MSc, Univ. Wyoming), Dan Eakin (PhD, UT Austin).

Past graduate student committees: Chaoshun Hu (PhD 2008, UT Austin), Lindsay Worthington (PhD 2010, UT Austin).

Postdocs: Matthew Hornbach, 2005-2006; Peggy Vermeesch, 2006-2008.

### **MEMBERSHIPS PROFESSIONAL ORGANIZATIONS**

AGU and SEG.

### **FUNDING**

2004: NSF-OPP, Integrated geophysical and geologic investigation of the crustal structure of western Canada Basin, Chukchi Borderland and Mendeleev Ridge, Arctic Ocean.

2004: NSF-OCE, Seismic measurements of magma flux, arc composition, and lower-plate serpentinization in the Central American subduction factory.

2004: NSF-EAR, Integrated Investigation of the Geodynamics of the Taiwan Orogeny [TAIGER].

2004: NSF-EAR, ST. Elias Erosion/tectonics Project (STEEP).

2004-2005: NigeriaSpan: Seismic reflection and refraction study of the Gulf of Guinea.

2007: NSF-ARC, Supplement: Integrated geophysical and geological investigation of the crustal structure of western Canada Basin, Chukchi Borderland and Mendeleev Ridge, Arctic Ocean.

2009: Seismic refraction study of the northern Gulf of Mexico (industry funding).

2010: NSF-EAR1010642: TAIGER's Tale: Tectonics of Subduction to Collision.

2010: NSF-EAR1009986: St. Elias Erosion and Tectonics Project.

### **INVITED SEMINARS**

November 2011: University of Memphis, Memphis, TN. Extension of continental crust at the eastern Grand Banks, Newfoundland (GeoPRISMS DLP technical lecture).

November 2011: Pink Palace Planetary Museum, Memphis, TN. The life cycle of rifted margins (GeoPRISMS DLP public lecture).

September 2011: University of Texas, Arlington, TX. A seismic refraction study of the Cocos plate offshore Nicaragua and Costa Rica

October 2010: University of Wyoming, Laramie, WY. A seismic refraction study of the Cocos plate offshore Nicaragua and Costa Rica.

October 2010: UTIG, Austin, TX. A seismic refraction study of the Cocos plate offshore Nicaragua and Costa Rica.

October 2009: Bureau of Economic Geology, University of Texas, Austin, TX. Extension of continental crust at the eastern Grand Banks, Newfoundland.

September 2009: NSF MARGINS Subduction Factory TEI key note address: Seismic detection of fluids in the Central America arc system.

September 2009: Rice University, Houston, TX. Seismic detection of fluids in the Central America arc system.

- May 2009: On board vessel YY2, National Taiwan Ocean University. High-frequency seismic reflections from the slab-interface between the Cocos plate and the mantle wedge beneath Costa Rica.
- January 2009: Baylor University, Waco TX. Extension of continental crust at the eastern Grand Banks, Newfoundland.
- January 2009: University of Texas at Dallas. High-frequency seismic reflections from the slab-interface between the Cocos plate and the mantle wedge beneath Costa Rica .
- October 2008: Lamont-Doherty Earth Observatory, New York. Extension of continental crust at the eastern Grand Banks, Newfoundland.
- October 2008: Lamont-Doherty Earth Observatory, New York. High-frequency seismic reflections from the slab-interface between the Cocos plate and the mantle wedge beneath Costa Rica.
- September 2008: UTIG, Austin, Texas. High-frequency seismic reflections from the slab-interface between the Cocos plate and the mantle wedge beneath Costa Rica .
- May 2008: ExxonMobil, Houston. Extension of continental crust at the eastern Grand Banks, Newfoundland.
- May 2008: Caltech, Pasadena. High-frequency seismic reflections from the slab-interface between the Cocos plate and the mantle wedge beneath Costa Rica .
- April 2006: University of Trieste, Italy. Structure and Composition of the Central Aleutian Arc from a Sparse Wide-Angle Seismic Data Set.
- November 2005: Department of Geological Sciences, UT Austin. Seismic velocity structure of the rifted margin of the eastern Grand Banks of Newfoundland
- September 2004: Department of Geological Sciences, UT Austin. Structure and composition of the Central Aleutian Arc from a sparse wide-Angle Seismic Data Set
- May 2004: Lamont-Doherty Earth Observatory, New York. Structure and composition of the Central Aleutian Arc from a Sparse Wide-Angle Seismic Data Set
- November 2003: UTIG. Constraints on the crustal structure of the Aleutian island arc from wide-angle seismic data: Inference and assessment using an SVD approach.
- October 2001: UTIG. A crustal mass balance for the Southern Alps, South Island, New Zealand.
- January 2001: IPG Paris, France. A crustal mass balance for the Southern Alps, South Island, New Zealand
- March 2000: Woods Hole Oceanographic Institution. A crustal mass balance for the Southern Alps, South Island, New Zealand
- January 2000: Otago University, New Zealand. Seismic velocity and wide-angle reflectivity structure of the Australian-Pacific plate boundary, South Island, New Zealand.
- January 2000: Victoria University, New Zealand. Seismic velocity and wide-angle reflectivity structure of the Australian-Pacific plate boundary, South Island, New Zealand.
- March 1999: University of Wyoming. Seismic velocity and reflectivity structure of South Island, New Zealand
- June 1999: Utrecht University, The Netherlands. Seismic velocity and reflectivity structure of South Island, New Zealand.

January 1997: Utrecht University, The Netherlands. Contrast in thermal structure across the Clipperton transform, East Pacific Rise.

## PEER-REVIEWED PUBLICATIONS

### *In preparation:*

Garnier-Villarreal, M., W.S. Holbrook, D. Lizarralde, H.J.A. Van Avendonk, and P. Denyer, 2011, Crustal characterization of the southwestern Nicaragua Rise, *in preparation for G-Cubed*.

Eddy, D.R., H.J.A. Van Avendonk, and D.J. Shillington, 2011, Compressional and shear wave velocity structure of the eastern Grand Banks, Newfoundland, and implications for continental rifting at ultra-slow, magma-poor margins, *in preparation for GJI*.

E.D. Everson, W.S. Holbrook, D. Lizarralde, H.J.A. Van Avendonk, and P. Denyer, Seismic imaging of the Middle American Trench offshore Costa Rica: Impact of bending-related faulting on upper mantle serpentinization, *in preparation for G-Cubed*.

W.R. Lester, L.L. Lavier, Kirk McIntosh, H. J. A. Van Avendonk, F. Wu, Active extension in Taiwan's pre-collision zone: A new model of plate-bending in continental crust, *in preparation for Geology*.

### *In press:*

L.L. Worthington, H. J.A. Van Avendonk, S.P.S. Gulick, G.L. Christeson, T.L. Pavlis, 2011, *submitted*, Crustal structure of the Yakutat Terrane: New constraints for understanding the evolution of subduction and collision in southern Alaska, *J. Geophys. Res.*, *in press*.

### *Published:*

Van Avendonk, H. J. A., W. S. Holbrook, D. Lizarralde, and P. Denyer, 2011, Structure and serpentinization of the subducting Cocos plate offshore Nicaragua and Costa Rica *Geochem. Geophys. Geosyst.*, *12*, Q06009, doi:10.1029/2011GC003592.

Christeson, G.L., S.P.S. Gulick, H.J.A. Van Avendonk, L. Worthington, R. Reece, T.L. Pavlis, 2010, The Yakutat Block: Dramatic change in crustal thickness across the Transition Fault, Alaska, *Geology*, *38*, 895-898, doi:10.1130/G31170.1.

Van Avendonk, H.J.A., W.S. Holbrook, D. Lizarralde, M.M. Mora, S. Harder, A.D. Bullock, G.E. Alvarado, C.J. Ramírez, 2010, Seismic evidence for fluids in fault zones on top of the subducting Cocos plate, Costa Rica, *Geophys. J. Int.*, *181*, 997-1016.

Van Avendonk, H.J.A., L.L. Lavier, D.J. Shillington, G. Manatschal, 2009, Extension of continental crust at the eastern Grand Banks, Newfoundland, *Tectonophysics*, *468*, 131-148, doi:10.1016/j.tecto.2008.05.030.

Hornbach, M.J., D.M. Saffer, W.S. Holbrook, H.J.A. Van Avendonk, A.R. Gorman, 2008, 3D seismic imaging of the Blake Ridge methane hydrate province: evidence for large concentrated zones of gas hydrate and morphologically-driven advection, *J. Geophys. Res.*, *113*, B07101, doi:10.1029/2007JB005392.

Fuis, G.S., M.D. Kohler, M. Scherwath, U. ten Brink, H.J.A. Van Avendonk, and J.M. Murphy, 2007, A comparison between the transpressional plate boundaries of the South Island, New Zealand, and Southern California, USA: The Alpine and San Andreas Fault Systems, *in A Continental Plate Boundary: Tectonics at South Island, New Zealand*, AGU Geophysical Monograph 175, edited by D. Okaya, T. Stern, F. Davey, Washington, DC, 47-74.

- Davey, F.J., D. Eberhart-Phillips, M. Kohler, S. Bannister, G. Caldwell, S. Henrys, M. Scherwath, T. Stern and H. Van Avendonk, 2007, 3-D structure of the Southern Alps orogen, South Island, New Zealand, 2007, in *A Continental Plate Boundary: Tectonics at South Island, New Zealand*, AGU Geophysical Monograph 175, edited by D. Okaya, T. Stern, F. Davey, Washington, DC, 309-330.
- Van Avendonk, H.J.A., W.S. Holbrook, G.T. Nunes, D.J. Shillington, B.E. Tucholke, K.E. Loudon, H.C. Larsen, J.R. Hopper, 2006, Seismic velocity structure of the rifted margin of the eastern Grand Banks of Newfoundland, Canada, *J. Geophys. Res.*, 111, B11404, doi:10.1029/2005JB004156.
- Shillington, D.J., W.S. Holbrook, H.J.A. Van Avendonk, B.E. Tucholke, J.R. Hopper, K.E. Loudon, H.C. Larsen, and G.T. Nunes, 2006, Evidence for asymmetric nonvolcanic rifting and slow incipient oceanic spreading from seismic reflection data on the Newfoundland margin, *J. Geophys. Res.*, 111, B09402, doi:10.1029/2005JB003981.
- Van Avendonk, H.J.A., Slowness-weighted diffraction stack for migrating wide-angle seismic data in laterally varying media, 2004, *Geophysics*, 69, 1046-1052.
- Van Avendonk, H.J.A., W.S. Holbrook, D. Okaya, J. Austin, F. Davey, and T. Stern, 2004, Continental crust under compression: A seismic refraction study of SIGHT Transect I, South Island, New Zealand, *J. Geophys. Res.*, 109, doi:10.1029/2003JB002790.
- Van Avendonk, H.J.A., D.J. Shillington, W.S. Holbrook, and M.J. Hornbach, 2004, Inferring crustal structure in the Aleutian arc from a sparse wide-angle seismic data set, *Geochem. Geophys. Geosyst.*, 5, doi:10.1029/2003GC000664.
- Shillington, D.J., H.J.A. Van Avendonk, W.S. Holbrook, P.B. Kelemen, M.J. Hornbach, 2004, Composition and structure of the central Aleutian island arc from arc-parallel wide-angle seismic data, *Geochem. Geophys. Geosyst.*, 5, Q10006, doi:10.1029/2004GC000715.
- Shillington, D.J., W.S. Holbrook, J.R. Hopper, B.E. Tucholke, K.E. Loudon, H.C. Larsen, H.J.A. Van Avendonk, S. Deemer, 2004, J. Hall, Data Report: Marine geophysical data on the Newfoundland nonvolcanic rifted margin around SCREECH transect 2, ODP Init. Rep., 210, 1-36 [CD-ROM].
- Bazin, S. A.J. Harding, G.M. Kent, J.A. Orcutt, S.C. Singh, C.H. Tong, J.W. Pye, P.J. Barton, M.C. Sinha, R.S. White, R.W. Hobbs, H.J.A. Van Avendonk, 2003, A three-dimensional study of a low velocity region beneath the 9°03'N overlapping spreading center, *Geophys. Res. Lett.*, 30, 1039, doi:10.1029/2002GL015137.
- Okaya, D., T. Stern, W.S. Holbrook, H. Van Avendonk, F. Davey, and S. Henrys, 2003, Imaging a plate boundary using double-sided onshore-offshore seismic profiling, *Leading Edge*, 22, 256-260.
- Van Avendonk, H.J.A., Harding, A.J., Orcutt, J. A., McClain, J.S., 2001, Contrast in crustal structure across the Clipperton transform fault from travel time tomography, *J. Geophys. Res.*, 106, 10, 961-10, 981, doi:10.1029/2000JB900459.
- Bazin, S., Harding, A.J., Kent, G.M., Orcutt, J.A., Tong, C. H., Pye, J.W., Singh, S.C., Barton, P.J., Sinha, M.C., White, R.S., Hobbs, R.W., Van Avendonk, H.J.A., 2001, Three-dimensional shallow crustal emplacement at the 9°03'N overlapping spreading center on the East Pacific Rise: Correlations between magnetization and tomographic images, *J. Geophys. Res.*, 106, 16, 101-16, 118.
- Van Avendonk, H.J.A., A.J. Harding, J.A. Orcutt, and W.S. Holbrook, 2001, Hybrid shortest path and ray bending method for traveltimes and raypath calculations, *Geophysics*, 66, 648-

653.

- Van Avendonk, H.J.A., Harding, A.J., Orcutt, J.A. McClain, J.S., 1998, A two-dimensional tomographic study of the Clipperton transform fault, *J. Geophys. Res.*, 103, 17,885.
- Bazin, S., H.J.A. Van Avendonk, A.J. Harding, J.A. Orcutt, J.P. Canales, and MELT group, 1998, Crustal structure of the flanks of the East Pacific Rise: Implications for overlapping spreading centers, *Geophys. Res. Lett.*, 25, 2213-2216.
- Van Avendonk, H., and R. Snieder, 1994, A new mechanism for shape induced seismic anisotropy, *Wave Motion*, 20, 89-98.

**MEETING ABSTRACTS (LAST 5 YEARS). UT graduate students are underlined**

- Tan, E., L. Lavier, H. Van Avendonk, 2011, Friction and stress coupling on the subduction interfaces, Fall AGU Meeting, San Francisco, CA.
- Eddy, D.R., H. Van Avendonk, D.J. Shillington, 2011, Compressional and shear wave velocity structure of the eastern Grand Banks, Newfoundland, and implications for continental rifting, Fall AGU Meeting, San Francisco, CA.
- Van Avendonk, H., L.L. Worthington, G.L. Christeson, S.P. Gulick, T.L. Pavlis, 2011, Seismic structure of sediments and basement of the Yakutat Terrane offshore southern Alaska from a combined OBS and MCS tomography inversion, Fall AGU Meeting, San Francisco, CA.
- Christeson, G.L., H.J. Van Avendonk; S.P. Gulick, G.L. Pavlis; R.A. Hansen, 2011, Moho depth of the Yakutat Terrane, Southern Alaska, Fall AGU Meeting, San Francisco, CA.
- Reece, R., S.P. Gulick, G.L. Christeson, G.A. Barth, H. Van Avendonk, 2011, Effects of the Yakutat terrane collision with North America on the neighboring Pacific plate, Fall AGU Meeting, San Francisco, CA.
- Gulick, S.P. G.L. Christeson, I.O. Norton, T.L. Pavlis, R. Reece, H. Van Avendonk, L.L. Worthington, 2011, Transition Fault and the Yakutat-Pacific-North American triple junction, Fall AGU Meeting, San Francisco, CA.
- McIntosh, K.D., H.J. Van Avendonk, L.L. Lavier, W.R. Lester, D.H. Eakin, 2011, Tomographic models of southern Taiwan demonstrate likely evolution of the arc-continent collision, Fall AGU Meeting, San Francisco, CA.
- Eakin, D.H., K.D. McIntosh, H.J. Van Avendonk, 2011, Results of trench perpendicular wide angle seismic transects across the Manila subduction zone offshore southern Taiwan, Fall AGU Meeting, San Francisco, CA.
- Chen, H.W., K.D. McIntosh, H.J. Van Avendonk, P.L. Stoffa, W.R. Lester, 2011, Crustal structure of active margin at offshore Central Taiwan, Fall AGU Meeting, San Francisco, CA.
- Everson, E.D., W.S. Holbrook, D. Lizarralde, H. Van Avendonk, P. Denyer, 2011, Seismic structure of the Costa Rican volcanic arc and Caribbean large igneous province from active-source onshore-offshore seismic data, Fall AGU Meeting, San Francisco, CA.
- Prieto, M.I., H. Van Avendonk, P. Mann, S. Holbrook, D. Lizarralde, P. Denyer, 2011, Crustal Structure, Sequence stratigraphy and petroleum potential of the Western Colombian Basin adjacent to Costa Rica and Nicaragua, April AAPG Meeting Houston TX.

- Lester, W., K.D. McIntosh, Van Avendonk, H.J., 2010, Crustal-scale Structure of the Eurasian Continental Margin in the Northern South China Sea, Offshore Taiwan from Seismic Reflection and Wide-angle OBS Data, Fall AGU Meeting, San Francisco, CA.
- Eversen, E.D., W.S. Holbrook, D. Lizarralde, H.J. Van Avendonk, P. Denyer, 2010, Seismic imaging of the Middle American Trench offshore Costa Rica: Impact of bending-related faulting on upper mantle serpentinization, Fall AGU Meeting, San Francisco, CA.
- Eakin, D.H., K.D. McIntosh, H.J. Van Avendonk, 2010, Investigation of the crustal structure of the Manilla subduction zone offshore southern Taiwan using multi-channel seismic reflection and wide-angle refraction data, Fall AGU Meeting, San Francisco, CA.
- McIntosh, K.D., H.J. Van Avendonk, H.J., F.T. Wu, D.A. Okaya, C. Wang, 2010, Results from an onshore/offshore seismic transect of southern Taiwan, Fall AGU Meeting, San Francisco.
- Worthington, L.L., H.J. Van Avendonk, S.P. Gulick, G.L. Christeson, T.L. Pavlis, 2010, Crustal Structure of the Yakutat Microplate: New Constraints for Understanding the Evolution of Subduction and Collision in southern Alaska, Fall AGU Meeting, San Francisco, CA.
- Gulick, S.P., T.L. Pavlis, R.L. Bruhn, G.L. Christeson, J.T. Freymueller, R.A. Hansen, P.O. Koons, G.L. Pavlis, S. Roeske, R. Reece, H.J. Van Avendonk, L.L. Worthington, 2010, Flat-slab subduction, whole crustal faulting, and geohazards in Alaska: Targets for Earthscope, Fall AGU Meeting, San Francisco, CA.
- Lizarralde, D., W.S. Holbrook, H.J. Van Avendonk, M.M. Mora, G.E. Alvarado, S. Harder, 2010, Crustal structure along the active Costa Rican volcanic arc, Fall AGU Meeting, San Francisco, CA.
- Hayes, J.L., W.S. Holbrook, D. Lizarralde, H.J. Van Avendonk, A.D. Bullock, M.M. Mora, S.H. Harder, G.E. Alvarado, 2010, Crustal structure across the Central American Volcanic Arc in Costa Rica from TICO-CAVA seismic refraction data, Fall AGU Meeting, San Francisco, CA.
- Van Avendonk, H.J., W. Lester; K.D. McIntosh; C. Lee; T.K. Wang; F.T. Wu; C. Liu, 2009, Seismic velocity structure of the Eurasian margin of the southern Taiwan Strait, Fall AGU Meeting, San Francisco, CA.
- Klingelhoefer, F., S. Lallemand, C. Lee, P. Schnürle, C. Liu, K.D. McIntosh, H.J. Van Avendonk, F. T. Wu, Y. Font, T. Theunissen, 2009, First results from OBS modelling of the ACTS wide-angle seismic profile offshore Taiwan, Fall AGU Meeting, San Francisco, CA.
- Eakin, D.H., K.D. McIntosh, H.J. Van Avendonk, S. Hsu, C. Liu, 2009, New insights into accretionary prism development and deformation in the pre-arc-continent-collision transition zone offshore Taiwan, Fall AGU Meeting, San Francisco, CA.
- Logan, E.S., L.L. Lavier, F.T. Wu, D.A. Okaya, K.D. McIntosh, H. Kuo-Chen, H.J. Van Avendonk, 2009, Numerical models of subduction to arc-continent collision: The case of Taiwan, Fall AGU Meeting, San Francisco.
- Worthington, L.L., G.L. Christeson, H.J. Van Avendonk, S. P. Gulick 2009, Crustal structure of the Yakutat Microplate: New parameters for understanding the evolution of the Chugach-St. Elias Orogeny, Fall AGU Meeting, San Francisco, CA.
- McIntosh, K.D., H.J. Van Avendonk, C. Liu, S. Hsu, C. Lee, T.K. Wang, F.T. Wu, 2009, Overview and early highlights of the TAIGER project marine, active-source seismic program (Invited), Fall AGU Meeting, San Francisco, CA.

- Lee, C. T. Wang, H. J. Van Avendonk, Y. Huang, J. Lin, S. Lallemand, F. Klingelhoefer, 2009, Marine TAIGER OBS Experiment and its future prospects, Fall AGU Meeting, San Francisco, CA.
- Van Avendonk, H.J.A., P.M. Vermeesch, and L.A. Lawver, 2009, Seismic structure and tectonics of Mendeleev Ridge And Chukchi Borderlands, Arctic Ocean, Penrose Conference, Banff, Canada.
- Christeson, G.L., Van Avendonk, H., Gulick, S.P.S., Worthington, L., and Pavlis, T., 2008, Crustal structure of the Yakutat Block: constraints from STEEP wide-angle seismic data, Fall GSA meeting, Portland, OR.
- Shillington, D.J., H.J. Van Avendonk, M.D. Behn, and P.B. Kelemen, 2008, What can seismic velocity structure tell us about the composition of island arc lower crust? An example from the central Aleutians, Fall AGU Meeting, San Francisco, CA.
- Van Avendonk, H.J.A. W.S. Holbrook, D. Lizarralde, P. Denyer, G. Alvarado, 2008, Baseline for estimates of mantle serpentinization in the subducting Cocos plate offshore Costa Rica and Nicaragua from OBS wide-angle seismic data, Fall AGU Meeting, San Francisco, CA.
- Christeson, G.L., H. Van Avendonk, and S.P.S. Gulick, 2008, Crustal structure of the Yakutat Microplate: Constraints from STEEP wide-angle seismic data, Fall AGU Meeting, San Francisco, CA.
- Worthington, L., S. Gulick, G. Christeson, H. Van Avendonk, R. Reece, R. Elmore, T. Pavlis, 2008, Crustal Structure and Deformation of the Yakutat Microplate: New insights from STEEP Marine Seismic Reflection Data, Fall AGU Meeting, San Francisco, CA.
- Bullock, A.D., W.S. Holbrook, H.J. Van Avendonk, M.M. Mora, S. Harder, G. Alvarado, 2007, Results From the TICO-CAVA Land Seismic Refraction Survey, Fall AGU Meeting, San Francisco, CA.
- Vermeesch, P.M., H.J. Van Avendonk, L.A. Lawver, 2007, Upper-crustal velocity structure along 150 km of the Mendeleev Ridge from tomographic inversion of long-offset refraction data collected during HLY060239, Fall AGU Meeting, San Francisco, CA.
- Van Avendonk, H.J.A., W.S. Holbrook, D. Lizarralde, M.M. Mora, S. Harder, A.D. Bullock, G. Alvarado, 2007, High-frequency seismic reflections from the slab-interface between the Cocos plate and the mantle wedge beneath Costa Rica, Fall AGU Meeting, San Francisco, CA.
- Lawver, L.A., H. Van Avendonk, M. Davis, M. Hornbach, P. Vermeesch, R.L. Phillips, P. Henkart, M. Henkart, 2007, An integrated geophysical and geological study of the western Canada Basin, September ICAM Meeting, Tromsø, Norway.
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