

2011 EarthScope National Meeting – Program

Session 1: Reconstructing the evolution of a continent

Co-chairs: John Hole, Ben van der Pluijm

Keynote talks (25 minutes each):

- **Brandon Schmandt**, Eugene Humphreys, Haiying Gao, Anna Kelbert, Naser Meqbel, Gary Egbert: *The Evolution of the Pacific Northwest convergent margin, initiation of the Yellowstone hotspot track, and inherited influences on present-day deformation and volcanism*
- **Eric Erslev**, Karen Aydinian, Anne Sheehan, William Yeck, Zhaohui Yang, Colin O'Rourke, Joshua Stachnik, Kate Miller, Lindsay Worthington, Megan Anderson, Christine Siddoway, Steve Harder: *The EarthScope Bighorn Project: The Power of Integrated Geoscience*
- **Lucy Flesch**, Corne Kreemer, Hersh Gilbert: *The Colorado Plateau: Integration of geophysical observations through dynamic modeling*

Contributed presentations (10 minutes each):

- **Terry Plank**, Esteban Gazel, Claire Bendersky, Don Forsyth, Christina Rau, Erik Hauri, Cin-Ty Lee: *Extending a continent: magmatism and dynamics of the lithosphere across the Basin and Range, US*
- **Ken Dueker**, Rick Aster, Steve Hansen, Zhu Zhang, Josh Stachnik, Jon McCarthy, Brandon Schmandt, Karl Karlstrom and the CREST group: *Seismic imaging beneath the Colorado Rockies from the CREST project*
- **Tony Lowry**, Marta Perez-Gussinye: *Crustal quartz plays a surprising role in controlling Cordilleran deformation*
- **Carrie Rockett**, Jay Pulliam, Stephen Grand: *Seismic tomographic imaging of an upper mantle anomaly beneath the Rio Grande Rift.*

Session 2: Processes at active plate boundaries

Co-chairs: Rowena Lohman, Mike Jackson, Jeff Freymueller

Keynote talks (25 minutes each):

- **Jessica Hawthorne**, Allan Rubin: *Diurnal and sub-diurnal variations in slow slip in Cascadia: comparison of PBO borehole strain observations with tidal loading and tremor*
- **Chris Marone**, Brett Carpenter, Demian Saffer: *Major tectonic faults that are weak tend to creep*

Contributed presentations (10 minutes each):

- **Andrew Freed**, Greg Hirth, Mark Behn: *Using short-term postseismic displacements to infer the long-term tectonic environment of the upper mantle at an active plate boundary*
- **William Hammond**, Geoffrey Blewitt, Zhenhong Li, Hans-Peter Plag, Corne Kreemer: *EarthScope Plate Boundary Observatory reveals uplift of the Sierra Nevada*
- **David Chadwell**: *Potential contribution of seafloor geodesy offshore Cascadia to science goals of the PBO*
- Robert Granat, **Andrea Donnellan**: *GPS time series analysis of southern California associated with the 2010 M7.2 El Mayor/Cucapah earthquake*
- **Margarete Jadamec**, Magali Billen, Sarah Roeske: *Flat slab subduction, continental faults, and surface uplift: 3D numerical models of south-central Alaska*

Session 3: Exploration and unexpected discoveries

Co-chairs: Howard Zebker, Jay Pulliam, Peter Cervelli, Michael Hedlin

Keynote talks (25 minutes each):

- **Michael Hedlin**, Catherine de Groot-Hedlin, Kris Walker, Bob Woodward: *Studying the atmosphere and atmospheric phenomena using the USArray Transportable Array*
- **Peter Cervelli**: *The most valuable instrument: how GPS guided research and monitoring before, during, and after the 2006 eruption of Augustine volcano*

Contributed presentations (10 minutes each):

- **Kristine Larson**, Eric Small, John Braun, Felipe Nievinski, Clara Chew, Ethan Gutmann, Valery Zavorotny: *PBO H₂O: Plate Boundary Observatory studies of the water cycle*
- **Noel Bartlow**, Shin'ichi Miyazaki, Andrew Bradley, Paul Segall: *Space-time relationship of slip and tremor during the 2009 Cascadia slow slip event*
- **Daoyuan Sun**, Don Helmberger, Jennifer Jackson: *High density pancakes sitting on the mantle-core boundary*
- **Jon Tytell**, Frank Vernon, Jennifer Eatkins, Bob Busby, Bob Woodward: *Viability of the USArray TA network as a platform for severe weather now-casting and weather research*
- **Anna Kelbert**, Gary Egbert, Catherine de Groot-Hedlin: *Crust and upper mantle electrical conductivity beneath the Yellowstone Hotspot Track*

Session 4: EarthScope's Broader Impacts

Co-chairs: Steve Whitmeyer, Bob Lillie

Keynote talks (25 minutes each):

- **Bob Butler**, Frank Granshaw, Roger Groom, Chris Hedeem, Jenda Johnson, Bonnie Magura, Beth Pratt-Sitaula, Denise Thompson, Jill Whitman: *Featuring EarthScope science for K-12 teachers and students in the Pacific Northwest*
- **Yehuda Bock**, Brendan Crowell, Diego Melgar: *The use of real-time GPS and accelerometer data for earthquake early warning and rapid response*

Contributed presentations (15 minutes each):

- **Sally McGill**, Robert deGroot, Rick Bennett, Joshua Spinler: *Collaborative education and research in crustal deformation studies*
- **Matt Fouch**, John D. West, Kevin C Eagar: *Educating through scientific discovery: using EarthScope as a tool for public outreach and student inreach*
- **Perle Dorr**, Robert Busby, Katrin Hafner, John Taber, Robert Woodward: *Telling the EarthScope story: engaging colleges, universities and the public in USArray*
- **Robert Nelson**, David Malone: *Illinois EarthScope: A new view of integrated Earth sciences*

Session 5: Key targets for the future

Co-chairs: Jay Pulliam, Ben van der Pluijm

Contributed presentations (15 minutes each):

- **Suzan van der Lee**, Seth Stein, Donna Jurdy, Emily Wolin, Trevor Bollmann, Jessica Lodewyk, Miguel Merino, Douglas Wiens, Michael Wysesession, Patrick Shore, Ghassan Al-Eqabi, Shawn

Wei, Heather Relyea, Franklin Koch, Grace Barcheck, Rachel Gesserman, Justin Revenaugh, Brian Bagley, Tao Wang, Andrew Frederiksen, Taras Zaporozan, Fiona Darbyshire: *SPREE: Where is the ocean between Minnesota and Wisconsin?*

- **Seth Stein**, Eric Calais, Mian Liu: *New Madrid and Beyond: What EarthScope can teach us about ancient structures, modern deformation, and the relation between them*
- **Steve Marshak**, Gary Pavlis, Michael Hamburger, Hersh Gilbert, Timothy Larson: *Structure and dynamics of the central North American craton: an EarthScope swath from the Ozark Plateau, across the Illinois Basin, to the Grenville Front*
- **Chuck Langston**, Heather DeShon, Stephen Horton, Christine Powell, Robert Herrmann, Charles Ammon, William Thomas: *Scientific problems and lithospheric targets for the northern Mississippi embayment*
- **Donna Shillington**, Daniel Lizarralde, James Gaherty, Harm Van Avendonk, M. Beatrice Magnani, Vadim Levin: *Opportunities for EarthScope science in the eastern US: rifting, magmatism, and sutures*
- **Frank Pazzaglia**: *Tectonics and topography on a passive margin*
- **Jeff Freymueller**, Julie Elliott: *Distributed continental deformation across northwest North America*

EarthScope Cafes:

- Seismology: Anne Sheehan
- Strain: Ray Weldon
- Geochronology: TBD
- Magnetotellurics: Phil Wannamaker

Special events:

- Earthscope National Meeting Icebreaker, hosted by the UT Jackson School of Geosciences, 5:30-7:30 pm Tuesday May 17, Texas Student Activities Center Ballroom, hors d'oeuvres, beer and wine provided
- Coffee break and conversation with NSF about funding and process for early career scientists: Wednesday, 10:45 – 11:30
- Off-site BBQ: Wednesday evening.
- Breakfast with ExxonMobil for students and post-docs: Thursday, 7-8 am
- Moving EarthScope forward: 4 discussion groups Thursday, 8-10 pm, in preparation for Plenary Session 6
- Judging of student presentations: throughout the meeting, culminating in awards just prior to Plenary Session 6.

Submitted abstracts:

Note: Most of the submitted abstracts will be presented as posters. Only the first author is listed here. A complete, searchable database of abstracts will be available on the EarthScope web site prior to the meeting. Abstracts will also be available as a single downloadable PDF file, with abstracts grouped by session. At the meeting, abstracts will be grouped by session, assigned to a numbered poster board, an index map will be provided to facilitate navigation. In addition to poster sessions that correspond to each plenary session, there are poster sessions dedicated to SAFOD, Facilities and Instrumentation, and Other. Poster boards are 4' x 8'. Posters should go up during the Wednesday morning coffee break and must be removed by 11 am on Friday. If you submitted a poster and do not find it listed here, please contact the EarthScope National Office at earthscope@coas.oregonstate.edu.

<u>Last Name</u>	<u>First Name</u>	<u>Title</u>
Aagaard	Brad	PyLith: A finite-element code for modeling quasi-static and dynamic crustal deformation
Anderson	Brian	GPS monitoring of the San Bernardino Mountains and Inland Empire for slip rate modeling of Southern California plate boundary faults
Anderson	Megan	Anisotropy within the Bighorn Mountains region, northern Wyoming: Attempts to define cratonic mantle structure
Austin	Ken	The EarthScope Plate Boundary Observatory (PBO) high-rate real-time Cascadia network
Barbour	Andrew	Explaining co-seismic strains on PBO borehole strainmeters
Bartlow	Noel	Space-time relationship of slip and tremor during the 2009 Cascadia slow slip event
Bemis	Sean	Quaternary geologic constraints on Denali Fault strain-partitioning and implications for interior Alaska tectonics
Benowitz	Jeff	University of Alaska Geochronology Facility: Ongoing collaborations on the rock record of Neogene deformation in southern Alaska
Berglund	Henry	Support of EarthScope GPS campaigns at the UNAVCO facility
Blewitt	Geoff	A constantly growing, up-to-date, on-line, homogeneous set of GPS time series for global and regional geodetic studies
Bock	Yehuda	The use of real-time GPS and accelerometer data for earthquake early warning and rapid response
Bock	Yehuda	Imaging earthquakes and plate tectonic motion from Japan to western North America: GPS total displacement waveforms from M9.0 Tohoku-oki earthquake, GEONET coseismic results, and PBO time series and velocities
Bollmann	Trevor	Teleseismic S-wave delay times in the Mid-Continent and the Superior Province Rifting Earthscope Experiment (SPREE)
Bormann	Jayne	Using EarthScope and MAGNET GPS to determine the slip rate on the Honey Lake Fault, northern Walker Lane, California
Boyarko	Devin	Episodic tremor and slip along the entire Cascadia subduction zone
Braudy	Nicole	The western Idaho Shear Zone, West Mountains, Idaho: Characterizing deformation through a seismic transect
Brownlee	Sarah	Seismic anisotropy in forearcs from antigorite crystal preferred orientations (CPOs)

Buehler	Janine	Uppermost mantle velocity structure obtained from USArray regional phase data
Busby	Bob	Status of the USArray Transportable Array
Butler	Robert	Featuring EarthScope science for K-12 teachers and students in the Pacific Northwest
Bywater	Jamie	2010 San Bernardino Mountains GPS campaign
Carpenter	Brett	Mechanical behavior of the active San Andreas Fault: Insights from laboratory experiments on intact core
Cervelli	Peter	The most valuable instrument: how GPS guided research and monitoring before, during, and after the 2006 eruption of Augustine volcano
Chadwell	David	Potential contribution of seafloor geodesy offshore Cascadia to science goals of the PBO
Chamberlin	Molly	Brittle fracture studies in post-Permian strata of the western flank and crystalline core of the Bighorn Arch, Wyoming: An undergraduate research component of the NSF EarthScope Bighorn Project
Chang	Wu-Lung	Postseismic deformation of the large 1959 Hebgen Lake, MT, and 1983 Borah Peak, ID, earthquakes, with implications for lithospheric rheology
Chen	Chen	Mapping lithospheric structure using depth phase precursors recorded by EarthScope's USArray
Chen	Chin-Wu	Crustal and upper mantle structure beneath the High Lava Plains from scattered-wavefield migration and receiver functions
Chu	Risheng	Initiation of the great Mw=9.0 Tohoku-Oki earthquake and location of aftershocks
Colella	Harmony	Diverse slip propagation speeds and directions in simulations of slow slip events
Cox	Catherine	Integrated 2-D models of crustal structure in the High Lava Plains region of Eastern Oregon
Creager	Ken	Slow-slip initiation and stress transfer inferred from Cascadia tremor swarms
Cronin	Vincent	EarthScope resources and the multi-disciplinary search for seismogenic faults
Del Pardo	Cecilia	Investigating 3D strain patterns due to thermal intrusions: Death Valley Fault Zone, Death Valley, CA.
Donnellan	Andrea	GPS time series analysis of Southern California associated with the 2010 M7.2 El Mayor/Cucapah earthquake
Dorr	Perle	Telling the EarthScope Story: Engaging Colleges, Universities and the Public in USArray
Dorr	Perle	Transportable Array Outreach Activities: Engaging Students and the Public
Dueker	Ken	Seismic imaging beneath the Colorado Rockies from the CREST project
Eakins	Jennifer	Operations at the EarthScope USArray Array Network Facility (ANF)
Elliott	Julie	The mobile margin of far North America: GPS constraints on active deformation in Alaska and the role of the Yakutat Block

Enders	Max	The Plate Boundary Observatory Alaska region – Operation and maintenance, lessons learned during the first two years
Erslev	Eric	The EarthScope Bighorn Project: The power of integrated geoscience
Finzel	Emily	Kinematics and dynamics of the northern North American Cordillera: deformation related to plate convergence, gravitational potential energy, and basal tractions
Flesch	Lucy	The Colorado Plateau: Integration of geophysical observations through dynamic modeling
Foster	Anna	Observations of arrival angles on the USArray
Fouch	Matthew	Educating through scientific discovery: using EarthScope as a tool for public outreach and student inreach
Fouch	Matthew	Three-Dimensional geophysical structure of the Snake River Plain / Yellowstone Hotspot system: Is a deep mantle plume required?
Freed	Andrew	Using short-term postseismic displacements to infer the long-term tectonic environment of the upper mantle at an active plate boundary
Freymuller	Jeff	Distributed continental deformation across northwest North America
Fu	Yuanyuan	Shear wave structure and radial anisotropy of the crust beneath the Rio Grande Rift
Fulton	Patrick	Could coseismic compaction inhibit faults from continued failure?
Gao	Haiying	Initial full-wave tomography of the Cascadia subduction zone
Gaschnig	Rich	Origin of the southern half of the Idaho batholith and its role as a window into the deep crust: Providing the temporal component of IDOR
Ghosh	Abhijit	High-resolution tremor imaging in Cascadia using multiple seismic arrays
Ghosh	Attreyee	Understanding the deformation of the North American continent
Goldfarb	Jay	Step discontinuity detection in GPS time series
Grapenthin	Ronnie	Capturing a seismic wave field: Animation of kinematic GPS data recorded during the 2011 Tohoku-oki Earthquake, Japan
Greene	Fernando	Surface deformation in Central Nevada Seismic Belt observed by satellite radar interferometry
Gurrola	Harold	Processing innovations necessary to maximize resolution of models of the northern Gulf Coast plain using broadband data from the "GUMBO" seismic study
Hamburger	Michael	Seismicity and active crustal deformation in the Wabash Valley seismic zone: A postseismic effect of the 1811-1812 New Madrid Earthquakes?
Hammond	Bill	EarthScope Plate Boundary Observatory reveals uplift of the Sierra Nevada
Han	Liang	The Salton Seismic Imaging Project (SSIP): Active rifting in the Salton Trough, California
Hawthorne	Jessica	Diurnal and sub-diurnal variations in slow slip in Cascadia: comparison of PBO borehole strain observations with tidal loading and tremor
Hedlin	Michael	Studying the atmosphere and atmospheric phenomena using the USArray Transportable Array
Heron	Bretani	Comminution and mineralization of subsidiary faults in the damage zone of the San Andreas Fault at SAFOD

Hodgkinson	Kathleen	An unexpected discovery: PBO tsunami measurements
Hodgkinson	Kathleen	PBO borehole strainmeter data products and data quality metrics
Holt	William	Using GPS derived shear strain rates to constrain fault slip rate locking depth and residual off-fault strain rates
Holtkamp	Stephen	Earthquake swarms occur at the edges of great earthquake rupture
Houser	Christine	The importance of USArray data for understanding the nature of the mantle transition zone
Hussein	Musa	The role of fluids in promoting seismicity in active spreading centers of the Salton Trough, California
Hutko	Alex	Data products in development at the IRIS DMC
Jadamec	Margarete	Flat slab subduction, continental faults, and surface uplift: 3D numerical models of south-central Alaska
Janiszewski	Helen	Use of synthetic receiver functions to interpret their behavior when encountering several boundaries
Jiang	Yan	Slow slip events in Costa Rica detected by continuous GPS observations, 2003-2010
Johanson	Ingrid	Did a slow earthquake follow the Jan 12-13 2011 earthquake series on the San Andreas fault at San Juan Bautista?
Joseph	Kristiann	The lithosphere structure across the Yellowstone hotspot and the Wyoming craton from S receiver functions
Karel	Patrick	Seismic analysis of the Tonga subduction zone and implications on the thermo-petrologic evolution of deep subduction
Kelbert	Anna	Crust and upper mantle electrical conductivity beneath the Yellowstone Hotspot Track
Keller	Randy	The Meers Fault: A prominent Holocene scarp in southern Oklahoma with a history of repeated movement
King	Daniel	A phenomenological description of stress-driven melt segregation for application to experimental data and geodynamic models: Steady-state viscosity with partitioned deformation
Kiser	Eric	Back-projection results for the March 11, 2011 Tohoku, Japan earthquake
Kitajima	Hiroko	Frictional behavior of the CDZ gouge at seismic slip rates
Klaus	Amanda	Space-time variations in Cascadia tremor amplitude
Koper	Keith	Rupture imaging of recent giant earthquakes using P-waves recorded across USArray: How array geometry and frequency band affect resolution
Kreemer	Corne	New GPS network to measure the motion and deformation of the Colorado Plateau
Kreemer	Corne	High-resolution strain rate models for the American Southwest and Alaska
Langston	Charles	Scientific problems and lithospheric targets for the northern Mississippi Embayment
Larson	Kristine	PBO H2O: Plate Boundary Observatory studies of the water cycle
Levander	Alan	Continuing Colorado Plateau uplift by delamination-style convective lithospheric downwelling
Li	Yong	High-resolution characterization of fault damage and healing at SAFOD viewed by fault-zone trapped waves
Lin	Fan-Chi	Surface wave tomography with USArray: incorporating amplitude measurements to estimate elastic and anelastic structures

Lin	Pei-ying	Discovery using ducttape excessively (DUDE), with EarthScope data
Liu	Kaijian	A new asthenospheric upwelling model in the California slab window near the Mendocino Triple Junction region
Liu	Lijun	Subduction dynamics of western US since Oligocene
Lloyd	Andrew	Upper mantle structure beneath the Gamburtsev subglacial mountains & East Antarctica from body-wave tomography
Lou	Xiaoting	North American mantle velocity structures from joint inversion of body and surface waves
Lowry	Tony	Crustal quartz plays a surprising role in controlling Cordilleran deformation
Luttrell	Karen	A lower bound on crustal driving stress in megathrust regions from topography and gravity
Magnani	Maria Beatrice	Earthscope in the Central US: Unraveling the lithospheric evolution of the southern margin of Laurentia and its long-term effect on intraplate seismicity
Mahan	Kevin	Crustal xenoliths from central Montana: heterogeneity and incremental assembly of high seismic velocity (7.x) lower crust in cratonic North America
Marshak	Stephen	Structure and dynamics of the central North American craton: An EarthScope swath from the Ozark Plateau, across the Illinois Basin, to the Grenville Front
Marshall	Ben	Receiver function transect across Tibet, Tarim, and Tien Shan
McCaffrey	Rob	Update of the Pacific Northwest GPS-derived velocity field
McGary	Shane	A joint interpretation of the Cascadia subduction zone using data from dense arrays of passive seismic and magnetotelluric stations
McGill	Sally	Collaborative education and research in crustal deformation studies
McGuire	Matthew	Geophysical characterization of transtensional fault systems in the Eastern California Shear Zone-Walker Lane Belt
McMullen	Melissa	Coupling, detaching and sinking: How stages of Farallon subduction influenced topography of the 410-km discontinuity beneath North America
McQuillan	Patrick	EarthScope content module for Active Earth Display
Meqbel	Naser	Regional conductivity structures of the northwestern segment of the North American Plate derived from 3-D inversion of USArray magnetotelluric data
Merino	Miguel	Modern active and passive rifting analogs for the Mid-Continent Rift
Miller	Meghan	Imaging the evolution of lithospheric structure in the Western U.S. from receiver functions
Mittempergher	Silvia	Evidence of transient increases of fluid pressure in SAFOD phase III cores
Moore	Diane	Serpentinite within the Creeping Bartlett Springs Fault, Northern California: An analogue for the San Andreas Fault near SAFOD?
Moore	Diane	Textural and mineralogical comparison of fault gouge from the two actively creeping strands at SAFOD
Morrow	Carolyn	Preliminary measurements of permeability, electrical resistivity and frictional strength of SAFOD fault gouge and damage zone rocks
Murray-Moraleda	Jessica	An interseismic Global Positioning System velocity field for the central California coast region and preliminary deformation models

Nadin	Elisabeth	Crustal strain across a deeply exhumed continental fault
Nelson	Robert	Illinois EarthScope: a new view of integrated Earth sciences
Neuhauser	Doug	Accessing EarthScope and complementary data sets at the Northern California Earthquake Data Center
Nievinski	Felipe	GPS interferometric reflectometry (GPS-IR): Forward and inverse modeling results
Nikulin	Alex	Anomalous upper mantle structure of Central Kamchatka indicated by results of beam-averaged receiver function migration
Niu	Fenglin	Large contrasts in crustal structure and composition between the Ordos plateau and the NE Tibetan plateau from receiver function analysis
Pavlis	Gary	Toward an understanding of the geometry of the Farallon plate in North America: Synthesis of three-dimensional imaging results from the Transportable Array
Payne	Suzette	Kinematics of the Snake River Plain and adjacent Basin and Range regions from GPS
Pazzaglia	Frank	Tectonics and topography on a passive margin
Plag	Hans-Peter	Real-time PBO for tsunami early warning along the Pacific coast of North America
Plank	Terry	Extending a continent: Magmatism and dynamics of the lithosphere across the Basin and Range, US
Porritt	Robert	Investigation of Cascadia segmentation with ambient noise tomography
Rockett	Carrie	Seismic tomographic imaging of an upper mantle anomaly beneath the Rio Grande Rift
Roeloffs	Evelyn	Improved removal of long-term and seasonal trends from PBO borehole strainmeter data
Rooney	Tyrone	Lithospheric modification beneath the Mid-Continent Rift system: Geochemistry as a temporal probe
Ruiz	Ricardo	Using continuous GPS data to learn about earthquakes
Sauber-Rosenber	Jeanne	Remote sensing of seismotectonic processes in glaciated southern Alaska with multi-beam Lidar and L-band interferometric synthetic aperture radar data
Sauter	Allan	Characterization of NCPA Infrasound Sensors
Schmandt	Brandon	Teleseismic tomography beneath the Colorado Rocky Mountains and mantle support for high topography
Schmandt	Brandon	Evolution of the Pacific Northwest convergent margin, initiation of the Yellowstone hotspot track, and inherited influences on present-day deformation and volcanism
Schmerr	Nick	Using EarthScope to detect upper mantle transition zone heterogeneity
Schultz	Adam	Electrical conductivity structure in the NW Continental US from the US Array MT Program
Schutt	Derek	Compositional variations in the mantle, and their velocity and density effects
Scuderi	Marco	Characterizing the evolution of permeability across the brittle-ductile transition in porous sedimentary rocks
Shao	Guangfu	Back-projection study with a dipping fault plane

Shelly	David	Variations in tremor activity and implications for lower crustal deformation along the central San Andreas Fault, California
Shen	Weisen	Joint inversion of surface wave dispersion and receiver functions based on Earthscope/Transportable Array data
Shillington	Donna	Opportunities for Earthscope science in the eastern US: Rifting, magmatism and sutures
Sickler	Robert	The Salton Seismic Imaging Project: Investigating earthquake hazards in the Salton Trough, Southern California
Sit	Stefany	Quantifying tectonic tremor in southern Mexico and its lack of correlation with slow slip
Smith-Konter	Bridget	3D volume visualization of stress accumulation rates of the San Andreas Fault system
Solis	Teira	Investigating stress drop variations of major San Andreas Fault earthquakes over the last 1000 years
Solomon	Melinda	Testing models of complex anisotropy using teleseismic SKS data from broadband station RSSD in NW South Dakota
Speckien	Mark	Orogeny, deformation, rifting, and sediment burial on the Texas Gulf Coast: An EarthScope target
Spinler	Joshua	Coseismic displacements and deep aseismic slip associated with the April 4, 2010, Mw7.2 El Mayor-Cucapah earthquake, northern Baja California, Mexico
Stein	Seth	New Madrid and Beyond: what Earthscope can teach us about ancient structures, modern deformation, and the relation between them
Stock	Joann	The Salton Seismic Imaging Project (SSIP): Rift processes in the Salton Trough
Sun	Daoyuan	High density pancakes sitting on the mantle-core boundary
Sweet	Justin	Low-frequency earthquakes in Cascadia: Results from Array of Arrays
Swift	Mark	Evidence for prehistoric earthquakes along the San Jacinto Fault in Trench 7 at the Mystic Lake Paleoseismic Site, southern California
Taira	Taka'aki	Identifying undetected early aftershocks and non-volcanic tremors associated with the 12 August 1998 Mw 5.1 San Juan Bautista earthquake and slow slip event
Tape	Carl	Toward a multiscale seismic velocity model for Alaska
Thornton	Garrett	Investigating geologic and geodetic vertical motion discrepancies of the Southern San Andreas Fault System
Tikoff	Basil	The western Idaho shear zone and collision of the Insular Terrane: Tectonic interpretations of ongoing results of the IDOR project
Tong	Xiaopeng	High resolution interseismic crustal velocity model of the San Andreas Fault System from GPS, InSAR, and a dislocation model
Trehu	Anne	Subducted seamounts and recent earthquake activity beneath the central Cascadia forearc
Tytell	Jon	Viability of the USArray TA network as a platform for severe weather now-casting and weather research
van der Lee	Suzan	Seismic experiment to unravel details of stable Midcontinent Rift System

van der Pluijm	Ben	Broadband array studies of an intracratonic basin in Michigan (BASIN): An Earthscope proposal to examine the origin of intracratonic basins
Velasco	Aaron	Global search for remote triggering seismicity caused by the 2001 M9.0 Tohoku Japan earthquake
Vidale	John	Tiny intraplate earthquakes triggered by nearby episodic tremor and slip in Cascadia
Walls	Chris	A year in the life of the EarthScope Plate Boundary Observatory southwest region
Walter	Jake	A shallow, offshore tremor and slow slip event at the Nicoya Peninsula, Costa Rica
Weertman	Bruce	Web services at the IRIS Data Management Center
Wei	Shengji	Teleseismic full Green's function finite fault inversion and its application to the 2011 Tohoku Oki earthquake
West	John	Case studies in seismic data processing using EMERALD
West	Michael	No evidence for slow slip microearthquakes prior to 2002 Denali fault earthquake
Williams	Charles	3D modeling of deformation and stress changes due to the 2011 Christchurch, New Zealand, Mw 6.3 earthquake
Williams	Mark	Broadband signal-to-noise near the coast - comparing onshore and offshore seismic stations
Wilson	Clark	The NEES@UTexas low frequency vibrator 'liquidator': A unique tool for active source seismic studies with US Array
Winester	Daniel	U.S.A. national surface rock density map - interim report
Wolin	Emily	Investigating the role of deglaciation in passive margin seismicity
Worthington	Lindsay	Crustal structure of the Bighorn Mountains, northern Wyoming: Results from the active-source component of the Bighorn Arch Seismic Experiment (BASE)
Xia	Yu	Thickened crust observed beneath the eastern edge of the Rio Grande Rift
Yang	Zhaohui	Imaging basin structures with teleseismic P reverberation virtual sources
Yeck	William	Bighorn Arch Seismic Experiment (BASE) Flexible Array preliminary passive seismic analysis
Yuan	Huaiyu	Depth dependent azimuthal anisotropy in the western US upper mantle
Zhan	Zhongwen	Explore lowermost mantle structure with reflected and diffracted waves recorded by USArray
Zhang	Yang	GPS postseismic surface displacements of Mw 7.2 El Mayor - Cucapah earthquake, Mexico, 2010
Zhao	Chunpeng	Fine-scale structure of the bottommost mantle beneath Cocos plate
Zhu	Lupei	Crustal thickness variation in eastern North America and its implications on evolution of North American continent