

## Subduction Cycles & Deformation Implementation Workshop - Posters

Authors	Poster Title
Olivier Bachmann, J. Vidale, H. Houston, S. Malone, K. Creager, T. Sisson, M.. Clyne, S. Moran, R. Denlinger, J. Pallister, G. Abers, and A. Levander	Illuminating the architecture of crustal magmatic systems in the Cascade region
Dan Barker, Laura Wallace, Rebecca Bell, Stuart Henrys, and the Hikurangi margin working group	Drilling at the northern Hikurangi subduction margin, New Zealand, the key to unlock the secrets of slow slip events
Sarah Barrett and Charles J. Ammon	Analysis of Repeating Events and Implications for Fault Zone Behavior beneath the Aceh Basin, Northern Sumatra
Anna Bellesiles, Douglas Christensen, G. Abers, R. Hansen, G. Pavlis, and X. Song	A Decade of Shear-Wave Splitting Observations in Alaska
Rick Blakely, Brian Sherrod, Craig Weaver, and Ray Wells	Trans-arc tectonics across the Washington Cascades
Justin R. Brown, G. Beroza, S. Ide, S. Schwartz, H. Kao, S. Prejean, M. Brudzinski	Global Observations of Low Frequency Earthquakes within Tectonic Tremor
Cassandra M Browne, N.W., Hayman, K. Milliken, R. Reed, and Expedition 319 Scientific Party	Particle size distribution in micro-shear bands from NanTroSEIZE drilling of the Nankai accretionary prism, Japan
Katherine Cashman, A. Rust, H. Wright, and I. Belien	Physical mechanisms of gas escape from magmatic systems
David Chadwell	Seafloor deformation offshore central Oregon
Micheal Clyne	Geologic map of Lassen Volcanic National Park and vicinity, northern California
Harmony V. Colella, James H. Dieterich, and Keith B. Richards-Dinger	Simulations of slow slip events: Interactions with a zone of continuous creep
Michele Cooke	Can work minimization predict the growth of faults within accretionary wedges?
Stephen Crabtree and Rebecca Lange	An evaluation of the effect of degassing on the oxidation state of arc magmas
Claire Currie and Christopher Beaumont	Farallon Plate Subduction: Slab dynamics, volatiles and kimberlites
Karen E. Daniels, Nicholas W. Hayman, L. Ducloue, and K.L. Foco	Granular controls on periodicity of stick-slip events: kinematics and force-chains in an experimental fault
Heather DeShon, Melissa Moore-Driskell, Wolfgang Rabbel, Ivonne Arroyo, Yvonne Dzierma, Martin Thorwart, and Nilay Dinc	P-wave velocity modeling using amphibious networks along the Middle America subduction zone
Henry Dick and John Shervais	The Josephine Peridotite of SW Oregon and Northern California - an Opportunity to Map and Sample in the Mantle Wedge
John H. Dilles, Isabelle Chambefort, John Valley, Noriko Kita, Reinhard Kozdon, and Robert Rye	What is the Source of Sulfur in Arc Magmas? Ion Probe Sulfur Isotopic Data on Anhydrite from Yanacocha & Pinatubo
Diane Doser, Niti Mankhemthong, Annette Veilleux and Alejandro de la Pena	Integrated Interpretation of Potential Fields and Seismicity Data to Constrain Subduction Processes in South-Central Alaska
Besim Dragovic, Leah Mehl, Ethan Baxter, and Jane Selverstone	Constraining the rate and duration of garnet growth and dehydration during subduction, Sifnos, Greece

<b>Authors</b>	<b>Poster Title</b>
Rob Evans	An Overview of MT Work at Margins Settings
Maureen Feineman, Dana Drew, and Patricia Sruoga	Evidence for a deep crustal hot zone beneath the Diamante Caldera-Maipo volcanic complex, Southern Volcanic Zone
Lujia Feng, A.V. Newman*, J. M. Protti, V. M. Gonzalez, T. H. Dixon, Y. Luo, and Y. Jiang	Geodetic and Seismically observed locking along the shallow megathrust along Nicoya Costa Rica
Justin Filiberto, Rajdeep Dasgupta, and Allan H. Treiman	Comparing the effects of Cl and F on liquidus depression of basalt
Chris Goldfinger, Ann E. Morey, Jason R. Patton, C. Hans Nelson, Joel E. Johnson and Morgan Erhardt	Paleoseismic evidence for Seismic Segmentation of the Cascadia Megathrust: Sediment Supply, Mechanical Boundaries, and a Pinchout of the Coupled Interface
Sean Gulick, STEEP group (Christeson, van Avendonk, Worthington, Reece) and Sumatra group (Bangs, Austin, McNeill, Henstock)	Unusually thick subducting sequences and associated deformation patterns and geohazards: Insights from Sumatra and Southeast Alaska
Sean Gulick and STEEP group	Current Projects in the Gulf of Alaska
Mchael Gurnis, K. Marsaglia, R. Sutherland, J. Stock, R. Clayton, H. van Avendonk, and S. Gulick	The New Zealand region: A key natural laboratory for studying subduction initiation
Paul S. Hall, Lauren B. Cooper and Terry Plank	Mantle flow, melting, and the evolution of the sub-arc mantle in the Lau Basin – Tonga Arc system
Nicholas W. Hayman, K. Burmeister, K. Kawamura, R. Anma, and Y. Yamada	Oblique deformation in the Tenryu Canyon region of the Nankai accretionary prism
Laura B. Hebert and Laurent G.J. Montesi	Dynamic implications for deep slab dehydration and transport of hydrated material at subduction zones
Heidi Houston and Brent Delbridge	Space-Time Evolution of Six Large Cascadian ETS: Initiation, Propagation, and Rapid Tremor Reversals
Margarete Jadamec, Magali Billen, and Louis Moresi	Role of plate boundary geometry and rheology in 3D mantle flow and lithospheric deformation
Adam Kent, Jim Gill, D. Tollstrup, Jun-Ichi Kimura, M. Rowe and D. Ruscitto	Mantle melting and slab sources in the Izu Back Arc: Insights from melt inclusions
Stephen Kirby, Emile Okal, David Scholl, Rick Blakely, Ray Wells, and Katie Keranen	Global classification of subduction of subduction zones based on potential for giant subduction earthquakes based on multiple criteria
Hiroko Kitajima, Frederick Chester, and Demian Saffer	Effect of stress state on the evolution of mechanical, hydraulic, and acoustic properties of sediments recovered from Nankai subduction zone
Heidrun Kopp, Y. Djajadihardja, E. R. Flueh, D. Klaeschen, C. Mueller, L. Planert, C. Reichert, A. Shulgin, and A. Wittwer	Seismic rupture and tsunami hazard of the Java margin in relation to plate interface geometry
Rebecca Lange and Eric Hetland	The thermal evolution of the lower arc crust during basalt emplacement: the importance of melt advection in maintaining a relatively cool steady-state geotherm

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Luc L. Lavier, Liz Logan and Richard A. Bennett	A 2D model for slow slip events generated by fluid filled fracture at the subduction interface
Changyeol Lee and Scott King	Dynamic Buckling of Subducting Slabs Reconciles Geological Observations
Mary Leech	Exhumed subduction margins: an important record of deformation and metamorphic processes
Jeff Marshall, S. Morrish, A. Butcher, B. Ritzinger, K. Wellington, E. LaFromboise, M. Protti, T. Gardner, and J. Spotila	Morphotectonic segmentation along the Nicoya Peninsula seismic gap, Costa Rica
Fernando Martinez and Robert J. Stern	Diffuse Rifting in the Southern Mariana Margin: An Active Analog for the Infant Arc
Aron J. Meltzner, Kerry Sieh, H. Chiang, C. Shen, D. Natawidjaja, B. Suwargadi, B. Philibosian, and R. Briggs	Persistent rupture segmentation along the Sunda megathrust off Sumatra
Kevin J. Miller and Laurent G. J. Montesi	A phenomenological model of fabric development for use in large scale mantle flow models
Jean Rains and Kathleen M. Marsaglia	A Sedimentary record in the El Paso Mountains of Permian Subduction Initiation Along a Continental Margin
Jason R. Patton Chris Goldfinger Yusuf Djadjadjihardja and Udrekh Hanifa	Sumatra-Andaman subduction zone: submarine and terrestrial paleoseismic record preliminary comparison
Sarah Penniston-Dorland, G. Bebout, P. von Strandmann, T. Elliott, and S. Sorensen	Lithium and highly siderophile elements as a tracer of fluid and metasomatic processes in subduction zone melanges
Sarah.C. Penniston-Dorland and others	Metamorphic Processes: A thematic approach
Maxim Portnyagin, Kaj Hoernle, Peter Kelemen, Jeff Vervoort, and Ken Sims	Extent and Significance of Seafloor Volcanism in the Western Aleutians Gene Yodzinski - University of South Carolina
John A. Power and S.D. Stihler	Deep Long-Period (DLP) seismic events beneath Aleutian arc volcanoes and temporal link to upper crustal magmatic processes
Cesar Ranero	Subduction initiation at the Africa - Europe plate boundary?
Rob Reilinger, B. Hager, L. Royden, C. Burchfiel, and R. Van der Hilst	Africa-Arabia-Eurasia plate interactions and implications for the dynamics of Mediterranean subduction
Joseph A Resing, M. Lilley, E. Baker, J. Lupton, R. Embley, N Buck, S.Walker, E. Olson, and R. Dziak	Hydrothermal Activity and its Chemical Characteristics in the NE Lau Basin
Mark Reagan	The Subduction Initiation Sequence Preserved in the Mariana Forearc
Micheal C. Rowe, A.J.R. Kent, R.L. Nielsen, S. Shaw, and W.P. Leeman	Correlating Trace- and Volatile Elements, Sulfur Speciation, and fO <sub>2</sub> in the Cascades Volcanic Arc
H. Ryan, R. Blakely, Stephen Kirby, David Scholl, R. von Huene, and R. Wells	USGS multi-hazard demonstration project tsunami scenario: Selecting a scientifically defensible Aleutian megathrust earthquake source

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Susan Y. Schwartz, J.I. Walter, T.H. Dixon, K. Outerbridge, J.M. Protti, and V. Gonzalez	Slow Slip and Tremor in the Northern Costa Rica Seismogenic Zone
Steven Shaw, Susan Debari, Paul Wallace, and Thomas Sisson	Volatile contents in olivine-hosted melt inclusions from primitive magmas in the Northern Cascade arc
Brian Sherrod and Harvey Kelsey	Incorporating LiDAR and paleoecology into estimates of coseismic uplift
Donna Shillington, Mladen Nedimovic, and Spahr Webb	Using marine seismic reflection data to characterize the megathrust: Upcoming Langseth cruise off Alaska planned for summer 2011
Suzanne M. Straub, A. Gomez-Tuena, F.M. Stuart, G.F. Zellmer, R. Espinasa-Perena, Y. Cai, and Y. Iizuka	Formation of hybrid arc andesites beneath thick continental crust
E. Sumner, M. Siti, L. McNeill, P. Talling, R. Wynn, T. Henstock, Y. Djajadihardja, and H. Permana	Testing the validity of using turbidites as an earthquake proxy on the Sumatran margin
R. Sutherland, S. Henrys, K. Mochizuki, H. Sato, T. Iwasaki, T.A. Stern, M.K. Savage, J. Townend, D.H. Barker, A. Seward, M. Henderson, and D. Bassett, R.E. Bell	SAHKE experiment reveals seismic reflection character of the source region of deep slow slip events, Hikurangi subduction zone, New Zealand
Yoshihiko Tamura, O. Ishizuka, R. Stern, H. Shukuno, H. Kawabata, R. Embley, Y. Tatsumi, A. Nunokawa, S. Bloomer	Two Primary Basal Magma Types from Northwest Rota-1 Volcano, Mariana Arc
Eh Tan, Luc Lavier, and Harm van Avendonk	A thermo-mechanical model of Costa Rica subduction zone
Anne Trehu, Williams and others	Impact of crustal structure and composition on interplate and intraplate deformation in Cascadia
Ikuko Wada, M. D. Behn, and J. He	Grain Size in the mantle wedge and its implications for subduction zone dynamics
Laura Wallace, John Beavan, Stephen Bannister, and Rebecca Bell	Diverse slow slip behavior at the Hikurangi subduction margin, New Zealand
Douglas A. Wiens, Sara Pozgay, Mitchell Barklage, and Moira Pyle	The seismic velocity and attenuation structure of the Mariana Subduction Zone: constraints on geodynamic processes and volatile cycles of an intraoceanic arc system
Heather M. Wright C.R. Bacon J.A. Vazquez and T.W. Sisson	Silicic magma accumulation beneath Mount Mazama, Oregon, 71 ka to 24 ka constrained by SHRIMP measurements of dissolved volatile concentrations in melt inclusions