

MONDAY, DECEMBER 05, 2011

OS11C. Doing Fieldwork on the Deep Seafloor I

8:00 AM - 10:00 AM; Room 3022

- 8:30 AM - 8:45 AM

OS11C-03. Volcanic construction of submarine Kermadec arc volcanoes from near-bottom sidescan sonar data collected by the Sentry AUV (Invited)

Samuel A. Soule; Cornel E. de Ronde; Matthew I. Leybourne; Fabio Caratori Tontini; Carl L. Kaiser; Gregory J. Kurras; James C. Kinsey; Dana R. Yoerger

- 9:45 AM - 10:00 AM

OS11C-08. Off-axis exploration of the Mid Cayman Rise – the view from the beach and from the RV Okeanos Explorer.

Christopher R. German; Cameron McIntyre; Paul Tyler; Kelley Elliott; Stephen R. Hammond

PP11C. Dynamics of Tropical Climate Change Across Glacial-Interglacial Cycles I

8:00 AM - 10:00 AM; Room 2005

- 8:15 AM – 8:30 AM

PP11C-02. The deglacial hydrologic variability of the IndoPacific Warm Pool inferred from $\delta^{18}\text{O}$ of seawater reconstructions (Invited)

Fern T. Gibbons; Delia Oppo; Mahyar Mohtadi; Yair Rosenthal; Braddock K. Linsley

V11H. Mineralogical Signals as Keys to Understanding Petrological Processes I (Video On-Demand)

8:00 AM – 10:00 AM; Rooms 2022-2024

- 8:15 AM - 8:30 AM

V11H-02. Diffusive Re-equilibration of Volatiles and Oxygen Fugacity in Olivine-Hosted Melt Inclusions: Experiments and Numerical Models

Claire E. Bucholz; Glenn A. Gaetani; Mark D. Behn

C13C. Water at the Ice Bed Interface: Movement, Storage, and Signatures II

1:40 PM - 3:40 PM; Room 3011

- 1:40 PM - 1:55 PM

C13C-01. Modes of supraglacial lake drainage and dynamic ice sheet response

Sarah B. Das; Mark D. Behn; Ian R. Joughin

V13F. Magmatic Processes in the Lower Oceanic Crust I

1:40 PM - 3:40 PM; Room 2018

- 3:10 PM - 3:25 PM

V13F-07. Evidence for accretion in the lower crust at fast- and intermediate-spreading ridges based on olivine-hosted melt inclusions

V. Dorsey Wanless; Alison M. Shaw

TUESDAY, DECEMBER 06, 2011

OS21B. Integrated Study of Oceanic Spreading Centers: From Mid-Ocean Ridges to Back-Arc Basins II

8:00 AM - 10:00 AM; Room 3007

- 8:00 AM - 8:15 AM

OS21B-01. Hydrothermal impacts on ocean biogeochemistry: lessons from EPR 9N and visions for the future. (Invited)

Christopher R. German

C22A. Land Ice-Ocean Interactions in Greenland and Antarctica I

10:20 AM - 12:20 PM; Room 3009

- 11:35 AM - 11:50 AM

C22A-06. Pathways, characteristics and variability of the warm Atlantic Water flowing under the 79 North Glacier of the Northeast Greenland Ice Stream

Fiammetta Straneo; Sutherland David ; Gordon S. Hamilton

OS22A. Integrated Study of Oceanic Spreading Centers: From Mid-Ocean Ridges to Back-Arc Basins III

10:20 AM - 12:20 PM; Room 3007

- 11:50 AM - 12:05 PM

OS22A-07. Discovery of Nascent Vents and Recent Colonization Associated with(Re)activated Hydrothermal Vent Fields by the GALREX 2011 Expedition on the Galápagos Rift

Timothy M. Shank; James F. Holden; Santiago Herrera; Cat Munro; Taylor Muric; Jennifer Lin; Lucy Stuart

S22B. The Static Versus Dynamic Earthquake Triggering Debate: What's New and What's Next? III

10:20 AM - 12:20 PM; Room 2009

- 10:35 AM - 10:50 AM

S22B-02. Using the 2011 M=9.0 Tohoku earthquake to test the Coulomb stress triggering hypothesis and to calculate faults brought closer to failure

Jian Lin; Shinji Toda; Ross S. Stein

OS23B. Integrated Study of Oceanic Spreading Centers: From Mid-Ocean Ridges to Back-Arc Basins IV

1:40 PM - 3:40 PM; Room 3007

- 3:10 PM - 3:25 PM

OS23B-07. High-Resolution Studies of Oceanic Spreading Center Volcanic and Hydrothermal Features and Processes – New Insights from Ridge 2000 Program Experiments (Invited)

Daniel J. Fornari

PP23E. Linking Intermediate Water Circulation to Abrupt Climate Change II

1:40 PM - 2:40 PM; Room 2007

- 1:55 PM - 2:10 PM

PP23E-02. Intermediate Water Radiocarbon Anomalies During the Last Deglaciation (Invited)

Sean P. Bryan; Scott J. Lehman; Thomas M. Marchitto; Ulysses S. Ninnemann

• 2:25 PM - 2:40 PM

PP23E-04. Deglacial Variations in Antarctic Intermediate Water: A View from the Tropical Western North Atlantic

Delia Oppo; William B. Curry

WEDNESDAY, DECEMBER 07, 2011

B32C. From Land to Sea: Using Riverine Organic Matter as an Integrated Signal of Basin-Scale Processes, Climate, and Land-Use Change II

10:20 AM - 12:20 PM; Room 2006

• 11:05 AM - 11:20 AM

B32C-04. Protracted Storage of Biospheric Carbon In The Ganges-Brahmaputra Basin

Valier Galy; Timothy I. Eglinton

T32B. Recent Advances and Concepts in Plate Tectonics and Seafloor Spreading Processes II

10:20 AM - 12:20 PM; Room 2012

• 11:05 AM - 11:20 AM

T32B-04. Pioneering Research on Accretionary Processes – Jean Francheteau’s Contributions to Understanding Mid-Ocean Ridges and Seafloor Volcanic Processes (Invited)

Daniel J. Fornari; Robert D. Ballard

IN33E. Semantic, Linked Data, and Drupal-Based Solutions for Science II

1:40 PM - 3:40 PM; Room 102

• 1:40 PM - 1:55 PM

IN33E-01. Facilitating Next Generation Science Collaboration: Respecting and Mediating Vocabularies with Semantics in Ecosystems Assessments. (Invited)

Peter A. Fox; Andrew R. Maffei

PP33D. From the Critical Zone to the Oceans: Connecting Litho-, Bio-, and Hydrosphere With Geochemical Proxies II

1:40 PM - 3:40 PM; Room 2005

- 1:40 PM - 1:55 PM

PP33D-01. Uranium-series isotopes from rivers to ocean (Invited)

Laura F. Robinson; William G. Thompson; John Swartz

ED34A. Impacts of Over a Decade of CAREER Awards I

4:00 PM - 6:00 PM; Room 301

- 4:30 PM - 4:45 PM

ED34A-03. Swashzone Fellowships: a 6-month research experience

Britt Raubenheimer

DI34B. Understanding the Electrical Conductivity of Earth's Mantle: Insights from Imaging, Experiments, and Joint Interpretation II

5:00 PM - 6:00 PM; Room 3024

- 5:30 PM - 5:45 PM

DI34B-03. Electromagnetic Constraints on the Structure of the Oceanic Upper-Mantle: Consistencies and Inconsistencies with Other Observations (Invited)

Robert L. Evans; Daniel Lizarralde; John A. Collins; James Elsenbeck; Emily Tursack; Greg Hirth; James B. Gaherty; Anne Pommier; Kiyoshi Baba; Tetsuo Matsuno

THURSDAY, DECEMBER 08, 2011

NG41B. Lagrangian Coherent Structures and Other Dynamical System Techniques in Geophysical Flows I

8:00 AM - 9:10 AM; Room 304

- 8:00 AM - 8:15 AM

NG41B-01. Dynamical Systems Analysis of Fully 3D Ocean Features (Invited)

Lawrence J. Pratt

OS41B. Dynamics of the Equatorial Ocean I

8:00 AM - 10:00 AM; Room 3024

- 9:15 AM - 9:30 AM

OS41B-06. New observations of Yanai waves and equatorial inertia-gravity waves in the Pacific Ocean

John T. Farrar; Ted Durland

OS42A. Coupled Ocean Atmosphere Land Processes in Tropical Eastern Oceans I

10:20 AM - 12:20 PM; Room 3024

- 10:40 AM - 11:00 AM

OS42A-02. Observations of eddies and the upper-ocean heat budget in the VOCALS region (Invited)

James Holte; Fiammetta Straneo; J. Tom Farrar; Robert A. Weller

OS42B. Ocean Acidification: Past Events, Present Conditions, and Future Impacts III

10:20 AM - 12:20 PM; Room 3007

- 10:50 AM - 11:05 AM

OS42B-03. The Marine Inorganic Carbon System along the Gulf of Mexico and Atlantic Coast of the United States: Shelf-ocean exchange and Ocean Acidification Status

Zhaohui Aleck Wang; Richard H. Wanninkhof; Wei-Jun Cai; Robert H. Byrne; Xinping Hu; Tsung-Hung Peng; Wei-Jen Huang

OS43D. Coastal Response to Sea Level Changes II

1:40 PM - 3:40 PM; Room 3005

- 1:55 PM - 2:10 PM

OS43D-02. Cascadia tidal marshes archive repeated episodes of coseismic subsidence from late Holocene great megathrust earthquakes

Andrea D. Hawkes; Simon E. Engelhart; Benjamin P. Horton; Alan R. Nelson; Robert C. Witter; Kelin Wang; Pei-Ling Wang; Christopher H. Vane; Yuki Sawai

- 2:10 PM - 2:25 PM

OS43D-03. North Atlantic Tropical Cyclone Activity over the last 2000 years: Patterns, Consequences and Potential Climatic Forcing

Jeffrey P. Donnelly; Philip Lane; Andrea Hawkes; Peter J. van Hengstum; Pradeep N. Ranasinghe; Michael Toomey; Dana MacDonald

- 2:40 PM - 2:55 PM

OS43D-05. Characteristic Timescales of Shoreface Response to Sea-Level Rise

Andrew D. Ashton; Alejandra Ortiz; Philip Lane; Jeffrey P. Donnelly

OS43E. Ocean Acidification: Past Events, Present Conditions, and Future Impacts IV

1:40 PM - 3:40 PM; Room 3007

- 1:55 PM - 2:10 PM

OS43E-02. Coral Calcification Across a Natural Gradient in Ocean Acidification

Anne L. Cohen; Russell E. Brainard; Charles Young; Kathryn E. Shamberger; Daniel C. McCorkle; Richard A. Feely; Elizabeth Mcleod; Neal Cantin; Kathryn Rose; George P. Lohmann

T43K. The Origin of Intraplate Volcanism: Hotspots, Nonhotspots, and Large Igneous Provinces I

1:40 PM - 3:40 PM; Room 3024

- 3:10 PM - 3:25 PM

T43K-07. Multiple expressions of plume-ridge interaction at the Galapagos: Volcanic lineaments and ridge jumps

Eric L. Mittelstaedt; Samuel A. Soule; Karen S. Harpp; Daniel J. Fornari

U44B. Geoengineering Research Policy II (Video On-Demand)

4:00 PM - 6:00 PM; Room 104

- 5:15 PM - 5:30 PM

U44B-05. Understanding and assessing the feasibility of ocean iron fertilization to reduce atmospheric carbon dioxide

Ken O Buesseler; Richard S. Lampitt; Hein J. de Baar; Stephane Blain; Fei Chai; Kenneth H. Coale; Minhan Dai; David M. Karl; Margaret Leinen; Maeve C. Lohan; Lewis Rothstein; Thomas W. Trull; Dan Whaley; Donald J. Wuebbles; Meng Zhou

OS44A. Betaplane Dynamics: Jets, Eddies, Waves, and Plumes II

4:00 PM - 6:00 PM; Room 3005

- 5:36 PM - 5:48 PM

OS44A-07. A mechanism for the formation of non-zonal striations in the thermocline

Ru Chen; Glenn Flierl; Carl I. Wunsch

FRIDAY, DECEMBER 09, 2011

U51D. Physical and Chemical State of Subducting Slabs and the Slab-Mantle Interface: Forearc, Subarc, and Beyond I (Video On-Demand)

8:00 AM - 10:00 AM; Room 103

- 9:00 AM - 9:15 AM

U51D-05. Slab-derived fluid flux in subduction zones: Effects of localized hydration in the incoming plate and rehydration during subduction (Invited)

Ikuko Wada; Mark D. Behn; Alison M. Shaw

PP53A. Reconstruction and Modeling of Global Climate Evolution of the Last 21,000 Years II

1:40 PM - 3:40 PM; Room 2003

- 3:25 PM - 3:40 PM

PP53A-08. The Deglaciation and the Holocene over the Laurentian fan: a diatom report

Isabelle M. Gil; Lloyd D. Keigwin; Fatima F. Abrantes

V53F. Role of Fluids in Subduction Processes II

1:40 PM - 3:40 PM; Room 2020

- 3:25 PM - 3:40 PM

V53F-08. A sulfur isotope perspective of fluid transport across subduction zones

Nobumichi Shimizu; Charles W. Mandeville

V54B. Role of Fluids in Subduction Processes III

4:00 PM - 6:00 PM; Room 2020

- 4:30 PM - 4:45 PM

V54B-03. A joint geophysical investigation of the Cascadia subduction system in central Washington using dense arrays of passive seismic and magnetotelluric station data (Invited)

R S. McGary; Stephane Rondenay; Robert L. Evans; Geoffrey A. Abers; Philip E. Wannamaker