

# Tuesday, August 15

## Awards Ceremony

**Tuesday August 15 2017. 8:30 AM - 10:30 AM OCC Oregon Ballroom 201-203**

	Don Dingwell, Roberto Sulpizio	Awards Ceremony
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## MT21A: I.2 Relating magmatic-tectonic processes and volcano flank stability I

**Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room A107-109**

Abstract Number	Time	Authors	Title
MT21A-1	11:00 AM - 11:15 AM	Michael Poland, Aline Peltier, Alessandro Bonforte, Giuseppe Puglisi	A framework for understanding persistent volcanic flank instability based on Kilauea, Piton de la Fournaise, and Etna
MT21A-2	11:15 AM - 11:30 AM	Katrina Jacobs, Nico Fournier, Charles Williams, Martha Savage, Colin Wilson	Signatures of Regional Tectonics in Local Volcano Responses in the Taupo Volcanic Zone, New Zealand
MT21A-3	11:30 AM - 11:45 AM	Yasuhide Tajima, Toshiaki Hasenaka, Masayuki Torii	Effects of 2016 Kumamoto earthquakes on the Aso volcanic edifice
MT21A-4	11:45 AM - 12:00 PM	Federico Lucchi, Lorella Francalanci, Gianfilippo De Astis, Claudio Antonio Tranne, Eleonora Braschi, Martijn Klaver	Recurrent collapse-driven blast eruptions during the mafic Holocene activity of Stromboli volcano, Italy
MT21A-5	12:00 PM - 12:15 PM	Anthony Hildenbrand, Fernando Ornelas Marques, Aurore Sibrant, Ana Costa, Christian Hübscher, Benedikt Weiß	Tectonic control on volcano growth and large landslides near the Azores Triple Junction
MT21A-6	12:15 PM - 12:30 PM	Maria A. Benito-Saz, Michelle M. Parks, Freysteinn Sigmundsson, Andrew Hooper, Laura García-Cañada, María Charco, Carmen López	El Hierro Island: an example of volcano island growth by deep magmatic intrusions
MT21A-7	12:30 PM - 12:45 PM	Joshua Jones, D. Sarah Stamps, Christelle Wauthier, Elifuraha Saria, Kang Hyeun Ji	Investigating volcano-tectonic stress interactions in a youthful continental rift
	12:45 PM - 1:00 PM		TBA

## ME21A: II.7 Architecture of magmatic plumbing systems IV

**Tuesday August 15, 2017. 11:00 AM - 1:00 PM Ballroom 201-203**

Abstract Number	Time	Authors	Title
ME21A-1 (invited)	11:00 AM - 11:15 AM	Valerie Cayol, Aurelien Augier, Sébastien Court, Jean-Luc Froger, Sarah Menassian	Improved Cluster of Volume Strain Method Applied to Volcano Deformation
ME21A-2	11:15 AM - 11:30 AM	Paul Segall, Sigrún Hreinsdóttir	Pressurization and Stressing of Magma Chambers with Viscoelastic Aureoles: Application to Grímsvötn volcano, Iceland
ME21A-3	11:30 AM - 11:45 AM	Abigail Barker, Eric Andin, Valentin Troll, Börje Dahmen, Steffi Burchardt, Michael Krumbholz, E Albers	Explaining Hekla's short eruption onset from the mineral record
ME21A-4	11:45 AM - 12:00 PM	Balázs Kiss, Szabolcs Harangi, Christoph Hauenberger, Theodoros Ntaflos, Paul R. D. Mason	Petrological mapping of Volcanic Plumbing Systems using amphiboles in mixed intermediate magmas: a case study from the Ciomadul Volcano (E-Carpathians)
ME21A-5	12:00 PM - 12:15 PM	Szabolcs Harangi, Réka Lukács, Balázs Kiss, Axel K. Schmitt, Olivier Bachmann, Kata Mészáros, Ioan Seghedi, Christoph Hauenberger, Paul R.D. Mason	Petrologic constraints for a warm magma storage prior to the latest eruption of the Ciomadul volcano, eastern-central Europe
ME21A-6	12:15 PM - 12:30 PM	Paul Lundgren, Sergey Samsonov, Pietro Miliollo, Jacqueline Salzer, Julia Kubanek, Cristian Lopez, Milton Ordóñez	Deep source model and dome growth analysis for Nevado del Ruiz Volcano, Colombia
ME21A-7	12:30 PM - 12:45 PM	Zack Spica, Mathieu Perton, Denis Legrand	Architecture of the Colima volcano magmatic plumbing system
ME21A-8	12:45 PM - 1:00 PM	Timothy Druitt, Maxime Mercier, Taya Flaherty, Etienne Deloule, Juan Andujar, Anita Cadoux, Fidel Costa, Bruno Scaillet	Plumbing system architecture and magma ascent timescales at Santorini caldera

## ME21B: II.9 Continental large igneous provinces: understanding processes of magma formation, storage, evolution, and eruption I

**Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room B110-112**

Abstract Number	Time	Authors	Title
ME21B-1	11:00 AM - 11:15 AM	Dylan Colon, Ilya Bindeman, Taras Gerya	Crustal rheological controls on melt distribution in continental hotspot volcanoes: modeling Yellowstone magma chambers

ME21B-2	11:15 AM - 11:30 AM	Juliana Troch, Ben Ellis, Chris Harris, Peter Ulmer, Olivier Bachmann, Anne-Sophie Bouvier, Lukas Baumgartner	The role of melting during the generation of low-δ18O rhyolites in the Yellowstone province
ME21B-3	11:30 AM - 11:45 AM	Martin Streck, William McIntosh, Mark Ferns	Columbia River Rhyolites: age-distribution patterns and their implications for arrival, location, and dispersion of flood basalt magmas in the crust
ME21B-4	11:45 AM - 12:00 PM	Seth Burgess, Jonathan Hagstrum, Michael Sawlan, Jorge Vazquez, Matthew Cobble, Terrence Blackburn	Constraining the rate and duration of Columbia River flood basalt magmatism using coupled SHRIMP-RG and CA-ID-TIMS U-Pb zircon geochronology
ME21B-5	12:00 PM - 12:15 PM	Michael Sawlan	Discrimination of magmatic and alteration signatures in Columbia River flood basalts provides new insights into their chemostratigraphy and petrogenesis
ME21B-6	12:15 PM - 12:30 PM	Nicole E. Moore, Anita L. Grunder, Wendy A. Bohrson, Richard W. Carlson	Source and Magma Processes During the Onset of Columbia River Basalt Volcanism, the Steens Basalt, SE Oregon
ME21B-7 (invited)	12:30 PM - 1:00 PM	Eugene Humphreys, Jonathan Perry-Houts, Matthew Morrissey, Nicholas Wogan	The Columbia River flood basalts: Initiated from below, driven from above

**PE21A: III.6 Linking monitoring data with volcanic processes IV**

Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room B117-119

Abstract Number	Time	Authors	Title
PE21A-1	11:00 AM - 11:15 AM	David Fee, Keehoon Kim, Arthur Key, Robin Matoza, Alexandra Iezzi, Allison Austin, Richard Johnson, Geoff Kilgour, Bruce Christenson, Eslina Garaebiti, Ben Kennedy, Rebecca Fitzgerald, Nick Key	High-resolution explosion localization and characterization at Yasur Volcano, Vanuatu using the Time Reversal Mirror algorithm
PE21A-2	11:15 AM - 11:30 AM	Alexandra Iezzi, David Fee, Robin Key, Arthur Jolly, Keehoon Kim, Bruce Christenson, Richard Johnson, Geoff Kilgour, Allison Austin, Eslina Garaebiti, Ben Kennedy, Rebecca Fitzgerald, Nicholas Key	3-D acoustic waveform simulation and inversion at Yasur Volcano, Vanuatu
PE21A-3 (invited)	11:30 AM - 11:45 AM	Kyle Anderson, Takehiro Koyaguchi, Tomofumi Kozono	What can we learn by inverting monitoring data from explosive eruptions? Insights from a fast, physics-based eruption model
PE21A-4	11:45 AM - 12:00 PM	Joshua Jones, Wendy McCausland, Javier Pacheco, Randall White	Identifying coupled explosion events with a hybrid matched-polarization filter
PE21A-5	12:00 PM - 12:15 PM	Jacob Anderson, Jeffrey Johnson	Nonlinear infrasound models and explosive gas flux
PE21A-6	12:15 PM - 12:30 PM	Hélène Le Mével, Patricia Gregg, Kurt Feigl	Characterizing magma pulses feeding Long Valley caldera using thermo-poroelastic models of magma injection into a magmatic mush
PE21A-7	12:30 PM - 12:45 PM	Mike Cassidy, Jonathan Castro, Christoph Helo, Susanna Ebmeier, Sebastian Watt	Combining experimental petrology with InSAR deformation constraints on the magmatic system prior to eruptions at Kelud volcano, Indonesia
PE21A-8	12:45 PM - 1:00 PM	Cristian Santacoloma, Rosa Alpala, Oscar Cadena	FRACTAL DIMENSION CORRELATION (D2) AND GENERAL HURST EXPONENT (H) CALCULATIONS APPLIED TO NEVADO DEL HUILA VOLCANO SEISMIC ACTIVITY DURING 2007 – 2010

**VO21A: IV.1 Remote sensing of volcanic gases from space-based, airborne and ground-based platforms I**

Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room A106

Abstract Number	Time	Authors	Title
VO21A-1 (invited)	11:00 AM - 11:15 AM	Helen Thomas, Ailsa Naismith, Robyn Brailey, Gustavo Chigna, Kerstin Stebel, Fred Prata, Matt Watson	Multi-spectral infrared cameras for long-term observations of degassing and volcanic activity: a case-study from Volcán de Fuego, Guatemala
VO21A-2	11:15 AM - 11:30 AM	Thomas Wilkes, Tom Pering, Andrew McGonigle, Jon Willmott	The application of low-cost imaging sensors to the remote sensing of volcanogenic sulphur dioxide
VO21A-3	11:30 AM - 11:45 AM	Agnes Mazot, Bruce Christenson, Brad Scott	Mini-DOAS data processing for SO <sub>2</sub> emission measurements and monitoring volcanic degassing on White Island (Whakaari), New Zealand
VO21A-4	11:45 AM - 12:00 PM	Christoph Kern, Pablo Masias, Fredy Apaza, Kevin Reath, Ulrich Platt	High water vapor emissions detected at Sabancaya Volcano prior to its 2016 eruption by differential optical absorption spectroscopy
VO21A-5 (invited)	12:00 PM - 12:15 PM	Vincent Realmuto, Florian Schwandner, Tamar Elias, Keith Horton, Steven Businger, Lacey Holland	The HypSIRI Preparatory Airborne Science Campaign to Kilauea Volcano: Combining Multi-Sensor Remote Sensing with In-Situ Sampling and Dispersion Modeling to Study Sulfur Dioxide Emissions
VO21A-6	12:15 PM - 12:30 PM	Isabelle A Taylor, James Preston, Elisa Carboni, Tamsin A Mather, Roy G Grainger, Nicolas Theys, Silvana Hidalgo, Brendan McCormick Kilbride	Using the Infrared Atmospheric Sounding Interferometer to detect volcanic emissions of sulphur dioxide
VO21A-7	12:30 PM - 12:45 PM	Simon Carn, Vitali Fioletov, Chris McLinden, Can Li, Nickolay Krotkov	A decade of global volcanic SO <sub>2</sub> emissions measured from space
VO21A-8	12:45 PM - 1:00 PM	Florian M. Schwandner, Michael R Gunson, Charles E Podolske, Simon A Carn, Annmarie Elderling, Thomas Krings, David S Schimel, Hai M Nguyen, David Crisp, Christopher W O'Dell, Gregory B Osterman, Laura T Iraci, James R Podolske, Kristal R Verhulst	Space-Borne Detection of Volcanic Carbon Dioxide

**VH21A: V.6 Volcanic ash and gas: Generation, transport and impacts on infrastructure, aviation, and climate IV****Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room B114-115**

Abstract Number	Time	Authors	Title
VH21A-1	11:00 AM - 11:15 AM	Benoit Taisne, Anna Perttu, Patrick Whelley, Wei Ming Chong	Ash in the air! From morphological study to weather variability, which region is the most likely to impact your next trip?
VH21A-2	11:15 AM - 11:30 AM	Andrew Prata, Helen Dacre, Keith Shine, Emma Irvine	Volcanic ash dosage calculator: A proof-of-concept tool to support aviation stakeholders during ash events
VH21A-3	11:30 AM - 11:45 AM	Jiandong Xu, Hongmei Yu	Probabilistic Assessment of Tephra Fallout Hazard for the Nuclear Power Plants (NPPS) of China – A Case of Taishan NPP
VH21A-4	11:45 AM - 12:00 PM	Alan Robock, Joanna Slawinska	Volcanic Eruptions as the Cause of the Little Ice Age
VH21A-5	12:00 PM - 12:15 PM	Brian Zambri, Alan Robock, Anja Schmidt, Michael Mills	Modeling Climate Impacts of the 1783-1784 Laki Eruption in Iceland
VH21A-6	12:15 PM - 12:30 PM	Lauren Marshall, Anja Schmidt, Matthew Tsigaridis, Ken Carslaw, Graham Mann, Michael Mills, Jean-Francois Lamarque, Fiona Tummon, Simone Tilmes, Sandip Dhomse, Davide Zanchettin, Myriam Khodri, Claudia Timmreck, Michael Sigl, William Ball, Slimane Bekki, Allegra LeGrande, Ulrike Niemeier, Virginie Poulain, Alan Robock, Eugene Rozanov, Andrea Stenke, Kostas Tsigaridis	Multi-model comparison of the volcanic sulfate deposition from the 1815 Mt. Tambora eruption
VH21A-7 (invited)	12:30 PM - 12:45 PM	Myriam Khodri, Takeshi Izumo, Jérôme Vialard, Serge Janicot, Christophe Cassou, Matthieu Lengaigne, Juliette Mignot, Guillaume Gastineau, Eric Guilyardi, Alan Robock, Michael J. McPhaden	El Niño–Southern Oscillation Response to tropical stratospheric volcanism
VH21A-8	12:45 PM - 1:00 PM	Anja Schmidt, Michael Mills, Steven Ghan, Jonathan Gregory, Richard Allan, Timothy Andrews, Andrew Conley, Piers Forster, Andrew Gettelman, Susan Solomon, Brian Toon	Current and near-future volcanic forcing of global climate change

**ER21A: VI.3 Application of geological mapping and field surveys to different exploitation contexts (geothermal and ore deposits) I****Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room B116**

Abstract Number	Time	Authors	Title
ER21A-1	11:00 AM - 11:15 AM	Pete Stelling, Lisa Shevenell, Nick Hinz, Mark Coolbaugh	Volcanic characteristics and surface features as indicators of geothermal potential on active subduction zone volcanoes
ER21A-2	11:15 AM - 11:30 AM	Gianluca Groppelli, Gerardo Carrasco, Pablo Davila-Harris, Roberto de Franco, Gianluca Norini, Claudia Pellicoli, Claudia Principe, Roberto Sulpizio	New geological, structural and volcanological data of the Los Humeros Volcanic Complex: implications for reconstruction of the 3D model volcanic structure and geothermal exploration
ER21A-3	11:30 AM - 11:45 AM	Jaime Cavazos, Gerardo Carrasco	Vertical and lateral lithofacies variations of a caldera-related ignimbrite and their implications in an active geothermal system: The case of Los Humeros geothermal field, Mexico
ER21A-4	11:45 AM - 12:00 PM	Gerardo J. Aguirre-Díaz, Aída López-Hernández, Eduardo González-Partida	The graben-type caldera of Tulancingo-Acoculco complex, central-eastern México: New caldera boundaries and their implications for geothermal exploration
ER21A-5	12:00 PM - 12:15 PM	Denis Ramón Avellán López, José Luis Macías Vázquez, GIOVANNI SOSA CEBALLOS, PAUL LAYER, JOAN MARTÍ	GEOLOGY OF THE ACOCULCO CALDERA COMPLEX AT THE EASTERN SECTOR OF THE TRANS-MEXICAN VOLCANIC BELT, MÉXICO
ER21A-6	12:15 PM - 12:30 PM	Nicholas Hinz, Mark Coolbaugh, Pete Stelling, Lisa Shevenell	Structural-Tectonic Characteristics as indicators of geothermal potential on active subduction zone volcanoes
ER21A-7	12:30 PM - 12:45 PM	Thomas Garden, Darren Gravley, Isabelle Chambefort, Chad Deering, Ben Kennedy	Calderas and their volcano-tectonic controls on hydrothermal fluid flow: A case study from Lake City caldera, Colorado, U.S.A.
ER21A-8	12:45 PM - 1:00 PM	Nino Popkhadze, Robert Moritz, Sergo Kekelia	LateCretaceous phreatomagmatic volcanism and distribution of ore deposits in the Bolnisi district:constraints from the Madneuli polymetallic deposit, Lesser Caucasus, Georgia

**VS21A: VII.2 Volcanic geoheritage I****Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room B113**

Abstract Number	Time	Authors	Title
VS21A-1	11:00 AM - 11:15 AM	Karoly Nemeth, Jonathan Procter	Pedagogical and indigenous aspects of geoeducation with special reference to the volcanic geoheritage of monogenetic volcanoes

VS21A-2	11:15 AM - 11:30 AM	Benjamin van Wyk de Vries	Geological Environments and the place of volcanoes in global geoheritage
VS21A-3	11:30 AM - 11:45 AM	Marta Lucia Calvache V., Ivan Dario Nova V., Carlos Alonso Escobar P., Jorge Contreras, Gloria Patricia Cortes J.	The Omaira Sanchez Park in Armero-Guayabal town, Colombia, an opportunity for reconciliation with the territory
VS21A-4	11:45 AM - 12:00 PM	William I Rose, Erika Vye	Keweenaw Geoheritage: How to develop a Global Geopark in the US?
VS21A-5	12:00 PM - 12:15 PM	Cecile Olive-Garcia	The new Chaîne des Puys – Limagne fault résumé: explaining complex geological environments to UNESCO and the international community
VS21A-6	12:15 PM - 12:30 PM	Joan Martí, Ármann Höskuldsson	Why should Vatnajökull National Park, Iceland, become a UNESCO natural heritage site?
VS21A-7	12:30 PM - 12:45 PM	Benjamin van Wyk de Vries	Monogenetic volcanism and geoheritage: the case for a broad recognition at World Heritage
VS21A-8	12:45 PM - 1:00 PM	William I Rose	Keweenaw Geoheritage: How to develop a Global Geopark in the US?

**FT21A: VIII.4 Visualization tools and image processing in volcanology II****Tuesday August 15, 2017. 11:00 AM - 1:00 PM Room A105**

Abstract Number	Time	Authors	Title
FT21A-1 (invited)	11:00 AM - 11:30 AM	Matthew Patrick, Tim Orr	Long-term operational imaging of eruptive activity at Kilauea Volcano
FT21A-2	11:30 AM - 11:45 AM	Alex J.C. Miller, Jeffrey Bruce Johnson, Jacob Anderson, Matthew R. Von Lintig	Constraining plume velocity and pulsed emissions from two months of continuous video data at Volcán Villarrica, Chile
FT21A-3	11:45 AM - 12:00 PM	Michael Barber, Nick Deardorff	Characterization of volcanic terrains using lidar return amplitudes and other data: a statistical approach
FT21A-4 (invited)	12:00 PM - 12:30 PM	Håvard Svanes Bertelsen, Frank Guldstrand, Olivier Galland, Luc Girod, Rikke F. Johannessen, Fanny Bjugger, Steffi Burchardt, Karen Mair	Application of open-source photogrammetric software MicMac for geodetic monitoring in laboratory models
FT21A-5	12:30 PM - 12:45 PM	Roberto Guardo, Ariel Uzal, Andres Colubri, Carola Dreidemie	Integrating spatial earthquake distribution and 3D modelling analysis in a customizable GIS for a new perspective in volcano preliminary imaging: the case study of Mt. Etna
FT21A-6	12:45 PM - 1:00 PM	Nicolas Turner, Bruce Houghton, Ryan Perroy, Jacopo Taddeucci, Marina Bisson	Volcanic hazard monitoring with a small unmanned aerial system: structure-from-motion based studies of lava flows and explosive volcanism

**Keynote Talk Tuesday August 15, 2017 1:30 - 2:15 OCC Oregon Ballroom 201-203**

1:30-2:15 Jim O'Connor	Columbia River versus the Cascade Range volcanic arc—The Columbia River Gorge, Cataclysms, and Cultures
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**MT22A: I.3 How good are volcanoes at sampling magmatic systems in space and time? I****Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room A106**

Abstract Number	Time	Authors	Title
MT22A-1 (invited)	2:30 PM - 2:45 PM	Kathryn Watts, David John, Joseph Colgan, Christopher Henry	Probing the volcanic-plutonic connection in the deeply dissected Caetano caldera in the Nevada Great Basin, U.S.A.: Source of the late Eocene Caetano Tuff
MT22A-2	2:45 PM - 3:00 PM	Michał Camejo, Jon Blundy, Elena Melekhova, Richard Robertson, Thomas Christopher	Petrology of plutonic and volcanic rocks from Bequia, Lesser Antilles arc
MT22A-3	3:00 PM - 3:15 PM	Elisabeth Bertolett, Darren Gravley, Rachel Beane, Guil Gualda, David Prior, Elizabeth Teeter, Chad Deering	Compaction and fractionation revealed in a suite of plutonic lithics: a structural, textural and compositional study of the Akaroa Volcanic Complex, New Zealand
MT22A-4	3:15 PM - 3:30 PM	Brennan van Alderwerelt	Diverse minor volcanism across the central Andean arc
MT22A-5	3:30 PM - 3:45 PM	Guillaume Girard	Complex crystal populations in lava flows erupted in the early stages after caldera collapse at Yellowstone: implications for magma chamber composition and dynamics
MT22A-6	3:45 PM - 4:00 PM	Calvin Miller, Michelle Foley, Lily Claiborne, Guilherme Gualda, Ayla Pamukcu	PRE-Eruption MELT COMPOSITIONS REHEATED BY TEMPERATURE-SENSITIVE ZIRCON-MELT KDS: DIATRYSITY IN THE PEACH SPRING TUFF MAGMA CHAMBER, SW USA
MT22A-7	4:00 PM - 4:15 PM	Sara Di Salvo, Riccardo Avanzinelli, Roberto Isaia, Lorella Francalanci	Unravelling plumbing system dynamics generating explosive eruptions through in situ isotopic micro-analyses: insights into the Campanian Ignimbrite activity (Campi Flegrei, Italy)
MT22A-8 (invited)	4:15 PM - 4:30 PM	Wim Degruyter, Christian Huber, Olivier Bachmann, Kari Cooper, Adam Kent, Francesca Forni, Andrea Parmigiani	Insights into the eruptive history of volcanoes from a lumped-parameter magma reservoir model

**ME22A: II.1 Viscous lava flows and domes: multi-disciplinary studies of emplacement mechanisms I**  
**Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room B116**

Abstract Number	Time	Authors	Title
ME22A-1	2:30 PM - 2:45 PM	Nick Varley, Sam Thiele	Gentle dome growth to catastrophic collapse: variations in effusive activity at Volcán de Colima
ME22A-2	2:45 PM - 3:00 PM	Philipp Ruprecht, Einat Lev, Alexander S. Lloyd	A tale of two flows -- A field study at Quizapu Volcano, Chile
ME22A-3	3:00 PM - 3:15 PM	Setsuya Nakada, Ahkmad Zaennudin, Mitsuhiro Yoshimoto, Fukashi Maeno, Yuki Suzuki, Natsumi Hokanishi, Hisashi Sasaki, Masato Iguchi	Growth process of the lava dome/flow complex during 2013--2016 at Sinabung Volcano, Indonesia
ME22A-4	3:15 PM - 3:30 PM	Fumihiko Ikegami, Rebecca Carey, Jocelyn McPhie	Topographical and structural controls on the Havre 2012 submarine rhyolitic lavas
ME22A-5	3:30 PM - 3:45 PM	Paul A. Wallace, Jackie E. Kendrick, Sarah H. De Angelis, James D. Ashworth, Rebecca Coats, Takahiro Miwa, Elisabetta Mariani, Yan Lavallée	Late-stage magmatic heating and deformation during the 1994 spine extrusion at Unzen volcano, Japan
ME22A-6	3:45 PM - 4:00 PM	Nathan Magnall, Mike R James, Hugh Tuffen, Charlotte Vye-Brown	The formation and classification of breakouts in the 2011-2012 rhyolitic lava flow at Cordón Caulle, Chile
ME22A-7 (invited)	4:00 PM - 4:15 PM	Jonathan Castro, Yves Feisel, Hugh Tuffen, C. Ian Schipper	Dynamics of obsidian flows inferred from surface folds on Cordón Caulle (Chile) rhyolites
ME22A-8	4:15 PM - 4:30 PM	Jonathan Fink, Steven Anderson	Unanswered questions about silicic lava flows fed from dikes

**ME22B: II.7 Architecture of magmatic plumbing systems V**  
**Tuesday August 15, 2017. 2:30 PM - 4:30 PM Ballroom 201-203**

Abstract Number	Time	Authors	Title
ME22B-1	2:30 PM - 2:45 PM	Helena Albert, Fidel Costa, Jason Herrin, Andrea Di Muro, Nicole Metrich	Timescales of the 2007 caldera-forming eruption of Piton de la Fournaise (La Réunion Island) recorded in olivine crystals and their melt inclusions
ME22B-2	2:45 PM - 3:00 PM	Jamie Farrell, Robert Smith	The Yellowstone crustal magmatic system: Our current understanding and what's next
ME22B-3	3:00 PM - 3:15 PM	Brett Walker, Michael Garcia, Tim Orr	PETROLOGIC INSIGHTS INTO RIFT-ZONE MAGMATIC INTERACTIONS UNDER KILAUEA'S NAPAU CRATER (1963-2011)
ME22B-4	3:15 PM - 3:30 PM	Kathrin Laeger, Daniela Andronico, Maurizio Petrelli, Jacopo Taddeucci, Valeria Misiti, Piergiorgio Scarlato, Corrado Cimarelli, Elisabetta Del Bello	Constraining the magma dynamics during the Eyjafjallajökull 2010 eruption by high-resolution geochemical mapping
ME22B-5	3:30 PM - 3:45 PM	Line Probst, Luca Caricchi, Martin Gander, Laura Pioli, Enikö Bali, Glen Wallace, Tom Sheldrake	Genetic profiling of crystals from the Bardarbunga-Holuhraun eruption
ME22B-6	3:45 PM - 4:00 PM	Adam Kent, Kari Cooper	Can zircon crystallization really record the thermal history of magmas?
ME22B-7	4:00 PM - 4:15 PM	Holli Frey, Matthew Manon, Katherine Swager	Accessory minerals and magma chamber storage conditions: constraints from zircon chronology and apatite chemistry in tephra deposits from Dominica, Lesser Antilles
ME22B-8	4:15 PM - 4:30 PM	Vincent Salters, Justin Mandeville, Peter Larson, Thomas Sisson, Michael Clyne	What do the magmas of Indian Heaven and Mounts St. Helens, Cascades Arc, have in common?

**ME22C: II.9 Continental large igneous provinces: understanding processes of magma formation, storage, evolution, and eruption processes II**  
**Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room B110-112**

Abstract Number	Time	Authors	Title
ME22C-1	2:30 PM - 2:45 PM	Tyrone Rooney	Flood Basalts and Pulsed Magmatism in East Africa
ME22C-2	2:45 PM - 3:00 PM	Marie-Claude Williamson, Gordon N. Oakey	Comparative geochemical and geophysical studies of volcanic rocks from the High Arctic Large Igneous Province (HALIP) and the Alpha Ridge, Arctic Ocean
ME22C-3	3:00 PM - 3:15 PM	Georg Zellmer, Jun-Ichi Kimura, Qing Chang, Gregory Shellnutt, May Sas, Phil Shane	Sr and Pb isotopic compositions of variably altered feldspars in the 1.14 Ga Great Abitibi Dyke: implications for isotopic studies and dating of giant radiating dyke swarms and ancient plutonic rocks
ME22C-4 (invited)	3:15 PM - 3:45 PM	Jussi S. Heinonen, Arto V. Luttinen, Teal R. Riley, Sanni Turunen	Sublithospheric mantle sources of the Karoo LIP
ME22C-5	3:45 PM - 4:00 PM	Courtney Sprain, Paul Renne, Isabel Fendley, Loyc Vanderkluyse, Kanchan Pande, Steve Self, Mark Richards	Timing, Tempo, and Transitions in the Deccan Volcanic Sequence
ME22C-6	4:00 PM - 4:15 PM	Loïc Vanderkluyse, Erika Rader, Hetu Sheth, Stephen Self, Amanda Clarke, Danielle Moyer	Variability of lava flow morphologies in the Deccan Traps large igneous province (India)
ME22C-7	4:15 PM - 4:30 PM	Anne Jay, Matthew Balme	A new 3D map of the Main Deccan Province constraining the current and original volumes of the geochemically defined formations

**PE22A: III.6 Linking monitoring data with volcanic processes V**  
**Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room B117-119**

Abstract Number	Time	Authors	Title
PE22A-1	2:30 PM - 2:45 PM	Oliver Lamb, Paul Wallace, Silvio De Angelis, Yan Lavallée, Anthony Lamur, Adrian Hornby, Felix von Aulock, Jackie Kendrick, Gustavo Chigna, Armando Pineda, Alejandro Diaz Moreno, Andreas Rietbrock	Geophysical and geochemical observations of explosion dynamics at Santiaguito, Guatemala
PE22A-2	2:45 PM - 3:00 PM	Barbara Tripoli, Benoit Cordonnier, Daniele Giordano, Peter Ulmer	Hidden magma reservoirs under active volcanoes
PE22A-3	3:00 PM - 3:15 PM	Dannie Hidayat, Cahya Patria, I Gede Suantika, Warseno Warseno, Hendra Gunawan, Benoit Taisne, Dini Nurfiani, Chiou Ting Tan	Precursory long-period events and tilt signals to the explosion events at Marapi Volcano, West Sumatra, Indonesia
PE22A-4 (invited)	3:15 PM - 3:30 PM	Juliet Biggs, Yelebe Birhanu, Atalay Yirgu, Kathy Cashman, Marie Edmonds, Karen Fontijn, Joachim Gottsmann, Tim Greenfield, Juliane Huebert, William Hutchison, Fiona Iddon, Derek Keir, Michael Kendall, Elias Lewi, Ryan Lloyd, Tamsin Mather, Keri McNamara, David Pyle, Kathy Whaler, Fiona Whitaker, Matthew Wilks, Shimeles Wodermichel, Gezahegn Yirgu	Rift Volcanism: Integrating Geological And Geophysical Constraints On Restless Volcanic Systems
PE22A-5	3:30 PM - 3:45 PM	Rebecca O. Salvage, Javier F. Pacheco	Seismicity associated with the ongoing (2014 to present) eruption of Volcan Turrialba, Costa Rica
PE22A-6	3:45 PM - 4:00 PM	Társilo Girona, Corentin Caudron, Christian Huber	Source of volcanic tremor at openly-degassing volcanoes
PE22A-7	4:00 PM - 4:15 PM	Susanna Ebmeier	Testing the independence of volcanic signals: application of Independent Component Analysis to volcanic deformation
PE22A-8	4:15 PM - 4:30 PM	Manuel Berrocoso Dominguez, Alberto Fernandez-Ros, Gonçalo Prates, Belen Rosado Moscoso, Amos De Gil Martinez, Luis Miguel Peci Sanchez, Raul Paez Jimenez	The 1990-2017 Deception volcano's geodynamic mechanism from GNSS data (Antarctic Peninsula)

**VO22A: IV.3 The role of volatiles and degassing in magmatic and eruptive processes I****Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room B114-115**

Abstract Number	Time	Authors	Title
VO22A-1	2:30 PM - 2:45 PM	Kurt Roggensack, Gordon Moore	New and Improved H <sub>2</sub> O-CO <sub>2</sub> Solubility Models: Comparing Basalt and Basaltic Andesite Solubility Relationships
VO22A-2	2:45 PM - 3:00 PM	Chelsea Allison, Kurt Roggensack, Amanda Clarke	Thermodynamic modeling of H <sub>2</sub> O-CO <sub>2</sub> solubility experiments in alkali-rich mafic magmas at mid-crustal pressures
VO22A-3	3:00 PM - 3:15 PM	Maxim Gavrilenko, Michael Krawczynski, Philipp Ruprecht, Wenlu Li	Are melt inclusions a robust tool for understanding H <sub>2</sub> O content of deep hydrous arc magmas?
VO22A-4	3:15 PM - 3:30 PM	Li Zhang, Huaimei Ni	A general model of water diffusivity in calc-alkaline silicate melts and glasses
VO22A-5	3:30 PM - 3:45 PM	Madeleine Humphreys, Richard Brooker, Jenny Riker, Victoria Smith, Cees-Jan de Hoog, Michael Stock	Apatite as a tool to investigate the changing pre-eruptive volatile compositions of magmas
VO22A-6	3:45 PM - 4:00 PM	Weiran Li, Fidel Costa, Jason S Herrin, Kazuhide Nagashima	Contrasting eruption styles of Merapi volcano but similar magma pre-eruptive volatile compositions (CO <sub>2</sub> , H <sub>2</sub> O, S, Cl, F) and contents
VO22A-7	4:00 PM - 4:15 PM	Tushar Mittal, Mark Richards	Volatile degassing from magma chambers as a control on the size and frequency of volcanic eruptions
VO22A-8	4:15 PM - 4:30 PM	Ery Hughes, John Blundy, Roman Botcharnikov, Richard Brooker, Pierre Cartigny, EIMF -, Geoff Kilgour, Heidy Mader	Quantifying the initial volatile contents of basaltic magmas using stable isotope fractionation

**VH22A: V.3 Modelling volcanic hazards I****Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room A105**

Abstract Number	Time	Authors	Title
VH22A-1 (invited)	2:30 PM - 2:45 PM	Mattia de' Michieli Vitturi, Tomaso Esposti Ongaro, Kae Tsunematsu	Phreatic explosions and ballistic ejecta: a new numerical model and its application to the 2014 Mt. Ontake eruption
VH22A-2 (invited)	2:45 PM - 3:00 PM	Costanza Bonadonna, Sebastien Biass, Jean Luc Falcone, Federico Di Traglia, Marco Pistolesi, Mauro Rosi, Pierino Lestuzzi, Sam Isgett, Bruce Houghton	Ballistic hazard assessment: so far, so good?
VH22A-3	3:00 PM - 3:15 PM	Laura Sandri, Karen Strehlow, Jo Gottsmann, Alison Rust, Geoff Kilgour, Roberto Tonini	On the occurrence of phreatic eruptions at Ruapehu: statistics and probabilistic hazard forecast for ballistics
VH22A-4	3:15 PM - 3:30 PM	Ting Wang, Jianchang Zhuang, Koji Kiyosugi	Replenishing eruption records for robust hazard estimation
VH22A-5	3:30 PM - 3:45 PM	James Cowlyn, Josef Dufek, Julian McAdams, Ben Kennedy	What happens when pyroclastic density currents travel over ice? Insights into transport processes and hazards at glaciated volcanoes
VH22A-6	3:45 PM - 4:00 PM	Tomaso Esposti Ongaro, Mattia de' Michieli Vitturi, Giacomo Lari, Alvaro Aravena Ponce, Augusto Neri	A new depth-averaged flow model for pyroclastic avalanches dynamics and hazard
VH22A-7	4:00 PM - 4:15 PM	Stuart Mead, Jonathan Procter	Comparing predictions of run-up and superelevation of the 2012 Upper Te Maari debris flow with analytical and numerical models
VH22A-8	4:15 PM - 4:30 PM	Richard Iverson, David George	Modeling the massive 2010 debris avalanche/lahar at Mount Meager, Canada: seamless simulation from initiation to deposition

**ER22A: VI.1 Volcano-hydrothermal system dynamics: Hazards, resources, and extremophiles I****Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room A107-109**

Abstract Number	Time	Authors	Title
ER22A-1 (invited)	2:30 PM - 2:45 PM	Giovanni Chiodini	Modelling the effects on the hydrothermal system of Campi Flegrei of magma degassing approaching the critical pressure
ER22A-2	2:45 PM - 3:00 PM	John Eichelberger, Paolo Papale, Yan Lavallee	KMT – Krafla Magma Testbed, an international infrastructure for game-change research
ER22A-3	3:00 PM - 3:15 PM	Tiziana Vanorio	Cementing Roman Concrete to a Caldera: A Physicochemical Process Impacting Rock Strength and Fracture Toughness
ER22A-4	3:15 PM - 3:30 PM	Ryo Tanaka, Takeshi Hashimoto, Nobuo Matsushima, Tsuneo Ishido	Numerical investigation of temporal changes in magnetic total field and ground deformation associated with volcanic hydrothermal systems
ER22A-5	3:30 PM - 3:45 PM	Andri Stefánsson, David R. Hilton, Árný E. Sveinbjörnsdóttir, Peter Torsøander, Jan Heinemeier, Jaime D. Barnes, Shuhei Ono, Sæmundur A. Halldórsson, Jens Fiebig	SOURCES AND REACTIONS OF VOLATILES IN ICELANDIC THERMAL FLUID
ER22A-6 (invited)	3:45 PM - 4:00 PM	Asnawir Nasution	Recognized Active volcanic and Geothermal Gasses, Case Study of the Anak Ranakah Volcano and the Ulumbu Geothermal Area, West Flores, Indonesia
ER22A-7	4:00 PM - 4:15 PM	Christelle Wauthier, Benoît Smets, Andy Hooper, François Kervyn, Nicolas d'Oreye	Steady-rate and long-term ground deformation associated with dry gas vents in the Lake Kivu area
ER22A-8	4:15 PM - 4:30 PM	Franco Tassi, Mariano Agusto, Clara Lamberti, Alberto Caselli, Giovannella Pecoraino, Chiara Caponi, Juliania Szentiványi, Stefania Venturi, Jimena Presa	The 2012-2016 eruptive cycle at Copahue volcano (Argentina): hints from the temporal evolution of the chemical and isotopic features of hydrothermal-type gas discharges

**FT22A: VIII.3 Volcano databases: new developments and applications II****Tuesday August 15, 2017. 2:30 PM - 4:30 PM Room B113**

Abstract Number	Time	Authors	Title
FT22A-1 (invited)	2:30 PM - 2:45 PM	Shinji Takarada, Joel Bandibas, G-EVER Promotion Team	Asia-Pacific region earthquake and volcanic hazards mapping project and G-EHTR volcanic hazard assessment support system
FT22A-2	2:45 PM - 3:00 PM	Bergrun Oladottir, Evgenia Ilyinskaya, Gudrun Larsen, Magnus Tumi Gudmundsson, Kristin Vogfjord, Emmanuel Pagneux, Bjorn Oddsson, Sara Barsotti	Catalogue of Icelandic Volcanoes (CIV)
FT22A-3	3:00 PM - 3:15 PM	Edward Venzke, Benjamin Andrews	Expanded content and availability of the Volcanoes of the World database
FT22A-4	3:15 PM - 3:30 PM	Christina Widijayanti, Fidel Costa, Nang Thin Zar Win, Erickson Fajiculay, Christopher G. Newhall, Antonius Ratdomopurbo, WOVO Observatories	WOVODat As A Localhost Solution For Archiving, Retrieving, And Visualizing Volcano Monitoring Data
FT22A-5	3:30 PM - 3:45 PM	Andrei Kurbatov, Nelia Dunbar, Nels Iverson, Mark Royer, Martin Martin	Antarctic tephra database AntT, lessons learned
FT22A-6	3:45 PM - 4:00 PM	Sue Mahony, Steve Sparks, Laura Wallace, Samantha Engwell, Ellie Scourse, Nick Barnard, Jessica Kandlbauer, Sarah Brown	Increased rates of large-magnitude explosive eruptions through the late Neogene and Quaternary in Japan, shown from ocean drilling core records
FT22A-7	4:00 PM - 4:15 PM	Falk Amelung, Alfredo Terrero, Bhuvan Varugu, Patricia Mothes, Yunjun Zhang, Dario Solano, Yosuke Aoki	InSAR monitoring of volcanoes in Ecuador, Japan, Hawaii and Mexico
FT22A-8 (invited)	4:15 PM - 4:30 PM	Cheryl Cameron, Katherine Mulliken, Scott Crass, Kristi Wallace, Janet Schaefer	Geologic Database of Information on Volcanoes in Alaska (GeoDIVA): integrating diverse datasets supports research and Observatory operations

**MT23A: I.2 Relating magmatic-tectonic processes and volcano flank stability II Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
MT23A-001	4:30 PM - 6:30 PM	Jonathan Procter, Georg Zellmer, Grace Marcroft, Takeshi Kuritani, Braden Walsh, Anke Zernack	Magmatic response to volcano collapse; an example from Mt Taranaki, New Zealand
MT23A-002	4:30 PM - 6:30 PM	Stanley Mordinsky, Marlene Villeneuve, Ben Kennedy, Darren Gravley, Michael Heap, Graham Leonard, Jamie Farquharson, Thierry Reuschle	Shallow Intrusions and Their Effects on Permeability, Strength, and Jointing in Volcanic Strata
MT23A-003	4:30 PM - 6:30 PM	Martha Gabriela Gómez-Vasconcelos, Pilar Villamor, Shane Cronin, Alan Palmer, Jon Procter, Bob Stewart	Spatio-temporal associations between dike intrusions and fault ruptures in the Tongariro Volcanic Centre, New Zealand: insights from the geological record and static stress analysis
MT23A-004	4:30 PM - 6:30 PM	Patrick Whalen, Frank Ettensohn	THE OLIGOCENE WEST ELK BRECCIA: EVIDENCE FOR MASSIVE VOLCANIC DEBRIS AVALANCHES IN THE EASTERN GUNNISON RIFT VALLEY, WEST-CENTRAL COLORADO, U.S.A.
MT23A-005	4:30 PM - 6:30 PM	Ivan Suñe Puchol, Gerardo de Jesus Aguirre Diaz, Pablo Davila Harris, Dario Pedrazzi, Eduardo Gutierrez, Walter Hernandez, Daniel Miggins, Antonio Costa	THE VOLUMINOUS 1.5 Ma OLOCUILTA IGNIMBRITE: A PRE-COLAPSE FISSURE SUPERERUPTION OF ILOPANGO CALDERA, EL SALVADOR

MT23A-006	4:30 PM - 6:30 PM	Armann Höskuldsson, Thor Thordarson	Debris avalanche and fluctuation in geothermal output a sign for unrest at Askja volcano Iceland
MT23A-007	4:30 PM - 6:30 PM	Marine Tridon	Inversion of Coeval Shear and Normal Stress of Piton de la Fournaise Flank Displacement
MT23A-008	4:30 PM - 6:30 PM	Emily Montgomery-Brown, Mario Mattia, Valentina Bruno, Danila Scandura	A comparison of slow slip events at Kīlauea and Mt. Etna
MT23A-009	4:30 PM - 6:30 PM	Sarah Moore, Christelle Wauthier, Yo Fukushima, Michael Poland	Deformation sources in Kīlauea's East Rift Zone During 1993-1997 revealed through InSAR modeling
MT23A-010	4:30 PM - 6:30 PM	Rui M.S. Fernandes, Stéphanie Dumont, José Madeira, João Mata, Machiel Bos, Fernando Carrilho, Graça Silveira, Ricardo S. Ramalho, Carla Candeias	A Multidisciplinary approach for studying an active volcano: the example of Fogo volcano (Cape Verde)
MT23A-011	4:30 PM - 6:30 PM	Katharine Solada, Shanaka de Silva, Adonara Mucek, Indyro Pratomo, Jade Bowers, Rendi Jamil, Sinung Baskoro	Rates of resurgent uplift of Samosir Island in Toba Caldera, Indonesia constrained by lake sediment chronology
MT23A-012	4:30 PM - 6:30 PM	Chad Dodge, Rachel Teasdale, Jennifer Wenner	Groundmass Crystallinities of Proximal and Distal Lavas of the Poison Lake Chain in the Lassen Region of the Southern Cascades
MT23A-013	4:30 PM - 6:30 PM	Sam Thiele, Alexander Cruden, Steven Micklenthwaite, Jozua van Otterloo	House of Cards: The role of load-bearing dyke networks in volcanic edifice instabilities
MT23A-014	4:30 PM - 6:30 PM	Valerie Cayol, Marine Tridon, Jean-Luc Froger, Aurelien Augier	Inversion of Coeval Shear and Normal Stress of Piton de la Fournaise Flank Displacement

**MT23B: I.3 How good are volcanoes at sampling magmatic systems in space and time? II Posters**

Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A

Abstract Number	Time	Authors	Title
MT23B-015	4:30 PM - 6:30 PM	Réka Lukács, Szabolcs Harangi, Marcel Guillong, Olivier Bachmann, László Fodor, Yannick Buret, István Dunkl, Jakub Sliwinski	Early to Mid-Miocene syn-extensional massive silicic volcanism in the Pannonian basin (East-Central Europe): Zircon perspective age and isotopic constrains
MT23B-016	4:30 PM - 6:30 PM	W. Kirk Schleiffarth, Mary Reid, Michael Cosca	The Central Anatolia Volcanic Province: Spatio-temporal constraints on an evolving tectonic and magmatic province
MT23B-017	4:30 PM - 6:30 PM	Javier Reyes, Luis E. Lara, Diego Morata	Contrasting patterns of magmatic ascent and storage for shield and rejuvenated intraplate volcanism in Juan Fernández Ridge (Nazca plate), SE Pacific
MT23B-018	4:30 PM - 6:30 PM	Ren Thompson, Kenzie Turner, Michael Cosca, Ben Drenth, Leah Morgan, V.J.S. Grauch	Eruptive history of the Taos Plateau volcanic field and links to extensional tectonism of the northern Rio Grande rift, USA
MT23B-019	4:30 PM - 6:30 PM	Gregor Weber, Luca Caricchi, Thomas Sheldrake	The variability of magma compositions sampled by volcanoes: Linking statistical geochemistry and thermal modelling
MT23B-020	4:30 PM - 6:30 PM	Francesca Forni, Wim Degruyter, Olivier Bachmann, Gianfilippo De Astis, Silvio Mollo	Long-term magmatic evolution at the Campi Flegrei caldera (Southern Italy)
MT23B-021	4:30 PM - 6:30 PM	Gareth Fabbro, Chris O. McKee, Mikhail Sindang, Caroline Bouvet de Maisonneuve	Variation in the magmatic plumbing system of Rabaul (Papua New Guinea) across space and time
MT23B-022	4:30 PM - 6:30 PM	Erik Klemetti, Michael Clyne, Adam Kent, Frank Tepley	Magmatic storage conditions over the past 825,000 years at the Lassen Volcanic Center revealed in zircon model ages, compositions and melt inclusions
MT23B-023 (invited)	4:30 PM - 6:30 PM	Max Jensen, Luca Caricchi, Jon Blundy, George Cooper, Othmar Müntener	The temporal evolution of an arc volcano through zircon petro-chronology of intrusive and volcanic products
MT23B-024	4:30 PM - 6:30 PM	Jade Bowers, Shanaka de Silva, Adonara Mucek, Indyro Pratamo, Armen Putra	Understanding resurgence and restlessness at calderas: insights from climatic vs post-climatic eruptive compositions with particular reference to Toba, Sumatra
MT23B-025	4:30 PM - 6:30 PM	Ayla Pamukcu, Blair Schoene, Chad Deering	Compositional heterogeneity in the Lake City magmatic system (CO, USA) revealed by zircon U-Pb TIMS-TEA
MT23B-026	4:30 PM - 6:30 PM	Jordan Lubbers, Chad Deering, Olivier Bachmann, Marcel Guillong	Rhyolite and Trachyte Formation at Lake City Caldera: Evidence from Quantitative Textural and Geochemical Analyses
MT23B-027	4:30 PM - 6:30 PM	Heather Winslow, Philipp Ruprecht	Petrochemical constraints for primitive magmas in the Southern Andean Volcanic Zone from Volcán Manantial Pelado's eruptive history
MT23B-028	4:30 PM - 6:30 PM	Joseph Colgan, David John, Christopher Henry, Kathryn Watts	Implications of field relationships, geochronology, and zircon geochemistry for the emplacement of upper crustal plutons and their relationship to large silicic calderas, western Nevada, USA
MT23B-029	4:30 PM - 6:30 PM	Shannon Rentz, Gary Michelfelder, Emily Salings, Max Hoffman	Incremental development of the magma reservoir beneath the Mogollon-Datil Volcanic Field, New Mexico: Insights from U-Pb geochronology and trace element geochemistry of zircon
MT23B-030	4:30 PM - 6:30 PM	Ashley Steiner, John Wolff	The chemical composition of pumice vs whole-rock ignimbrite samples: does it matter? A detailed portable XRF study of the Bandelier Tuff

**MT23C: I.4 Arc evolution: space, time, morphology, and longevity of volcanic arcs I Posters**

Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A

Abstract Number	Time	Authors	Title
MT23C-032	4:30 PM - 6:30 PM	Kirsten F. Hodge, A. Mark Jellinek	Mixing magmas: A mechanical recipe for Earth's continental crust
MT23C-033	4:30 PM - 6:30 PM	Rachel Hampton	The Middlesex Fells Volcanic Complex: A Revised Tectonic Model based on Geochronology, Geochemistry, and Field Data
MT23C-034	4:30 PM - 6:30 PM	Olga Bergal-Kuvikas, Caroline Bouvet de la Maisonneuve	Geodynamic setting of volcanoes in Southeast Asia: Comparing slab and crust parameters with magmatic productivities

MT23C-035	4:30 PM - 6:30 PM	Chungwan Lim, Insung Lee	Eruption histories and genesis of Baekdusan volcanoes
MT23C-036	4:30 PM - 6:30 PM	Hironao Shinjoe, Yuji Orihashi, Tomoaki Sumii	Boron and other trace element constraints on the slab-derived component of high-Mg andesite; implications for short-lived forearc magmatism in Miocene SW Japan
MT23C-037	4:30 PM - 6:30 PM	Seiko Yamasaki, Hideo Hoshizumi, Daniel P. Miggins, Anthony A.P. Koppers, Shanaka de Silva, Akitkazu Matsumoto	Reconstruction of the Growth History of Kuju Volcanic Complex, Southwest Japan: Estimation of Magma Discharge Rates by Unspiked K-Ar and 40Ar/39Ar Dating
MT23C-038	4:30 PM - 6:30 PM	Aleksei Rogozin	Giant Pliocene-Pleistocene explosive eruptions within the Karymsinsky-Zhivovskiy area (South Kamchatka): episodicity and stages of volcanism
MT23C-039	4:30 PM - 6:30 PM	Mathilde Bablon, Xavier Quidelleur, Pablo Samaniego, Jean-Luc Le Pennec, Pierre Lahitte, Céline Liorzou, Jorge Eduardo Bustillos, Silvana Hidalgo	Eruptive chronology of Tungurahua volcano (Ecuador) revisited from new K-Ar ages and geomorphological reconstructions
MT23C-040	4:30 PM - 6:30 PM	Russell Evarts, Richard Conrey, William Leeman, Martin Streck	Insights Into Magmatic Diversity in the Columbia Cascades Transect (CCT)
MT23C-041	4:30 PM - 6:30 PM	Jiaming Yang, Maxwell Rudolph, Leif Karlstrom	Melting in the Mantle Wedge: Quantifying the effects of crustal thickening and viscous decoupling on melt production with application to the Cascadia subduction zone
MT23C-042	4:30 PM - 6:30 PM	Kellie Wall, Anita Grunder	New age and compositional constraints on the evolution of Goat Rocks Volcano, WA
MT23C-043	4:30 PM - 6:30 PM	Joseph Biasi, Claire Bucholz, Paul Asimow	Death of a Subduction Zone: Alkaline Volcanism on the Antarctic Peninsula
MT23B-027	4:30 PM - 6:30 PM	Heather Winslow, Philipp Ruprecht	Petrochemical constraints for primitive magmas in the Southern Andean Volcanic Zone from Volcán Manantial Pelado's eruptive history
MT23B-028	4:30 PM - 6:30 PM	Joseph Colgan, David John, Christopher Henry, Kathryn Watts	Implications of field relationships, geochronology, and zircon geochemistry for the emplacement of upper crustal plutons and their relationship to large silicic calderas, western Nevada, USA
MT23B-029	4:30 PM - 6:30 PM	Shannon Rentz, Gary Michelfelder, Emily Salings, Max Hoffman	Incremental development of the magma reservoir beneath the Mogollon-Datil Volcanic Field, New Mexico: Insights from U-Pb geochronology and trace element geochemistry of zircon
MT23B-030	4:30 PM - 6:30 PM	Ashley Steiner, John Wolff	The chemical composition of pumice vs whole-rock ignimbrite samples: does it matter? A detailed portable XRF study of the Bandelier Tuff
MT23B-031	4:30 PM - 6:30 PM	Cansu Culha	Processes controlling crystal exchange between different magmas

**ME23A: II.1 Viscous lava flows and domes: multi-disciplinary studies of emplacement mechanisms II Posters**

Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A

Abstract Number	Time	Authors	Title
ME23A-044	4:30 PM - 6:30 PM	Claire Harnett, Mark Thomas, Matthew Purvance, William Murphy, Jurgen Neuberg	Why do lava domes fall down? New insights from numerical modelling
ME23A-045	4:30 PM - 6:30 PM	Ivan Utkin	Exploring the features of meshless methods in application to lava flow modeling
ME23A-046	4:30 PM - 6:30 PM	David Hyman, Marcus Bursik	Transient Lava Dome Pressurization and Degassing at Volcán Popocatépetl, Mexico: Numerical Analysis and Degassing Flux Calculations from Thermal Infrared Images
ME23A-047	4:30 PM - 6:30 PM	Camila Vera, Angelo Castruccio, Yarko Niño, Aldo Tamburrino, Olivier Roche	Analogue modeling of cooling viscous lava flows: using a new thermo-rheological material
ME23A-048	4:30 PM - 6:30 PM	Keiji Wada, Kyohei Sano	Emplacement mechanism of obsidian-rhyolite magma: observation of whole internal section of the Shirataki obsidian lava, northern Hokkaido, Japan
ME23A-049	4:30 PM - 6:30 PM	Eiichi Sato, Kyohei Sano, Masami Izuho, Andrei V. Grebennikov, Keiji Wada	Internal structure and magma ascent process of obsidian lavas in the south of Kamchatka Peninsula, Russia
ME23A-050	4:30 PM - 6:30 PM	Kyohei Sano, Eiichi Sato, Keiji Wada	Oxidation state and outgassing process of obsidian lava inferred from microRaman spectroscopy
ME23A-051	4:30 PM - 6:30 PM	Biao Cai, Rebecca Coats, Lavallée Yan, Jackie Kendrick, Felix Von-Aulock, Nolwenn Le gall, Paul Wallace, Robert Atwood	4D Synchrotron Imaging of Viscous Flow of Crystal-bearing Magma Melts
ME23A-052	4:30 PM - 6:30 PM	James Thompson, Michael Ramsey	Identifying silicic lava surface textures and flow relationships using multispectral thermal infrared data
ME23A-053	4:30 PM - 6:30 PM	Christine Simurda, Michael Ramsey, Stephen Scheidt, David Crown	Surface Roughness and Block Size Distribution on Silicic Lava Flows
ME23A-054	4:30 PM - 6:30 PM	Amy Chadderton, Hugh Tuffen, Peter Sammonds, Philip Meredith, Rosanna Smith	The influence of temperature on permeability evolution in Volcán Chaitén rhyolite: An experimental approach
ME23A-055	4:30 PM - 6:30 PM	Lyndsay Moore, Réal Daigneault, Dominique Genna, Claude Pilote, Claude Bernier, John Stix	Facies architecture, hydrothermal alteration and precious metal mineralization at submarine felsic volcanic complexes: insights from the felsic centres of the Abitibi greenstone belt, Quebec, Canada
ME23A-056	4:30 PM - 6:30 PM	Emanuele Giacalone, James D.L. White, J. Michael Palin, Marco Brenna	An unusually coarse basaltic lava with extremely coarse segregation structures, Swinburn, Waipiatia Volcanic Field, Otago, New Zealand
ME23A-057	4:30 PM - 6:30 PM	Oryaëlle Chevel, Nanci Reyes Guzman, Claus Siebe, Marie-Noëlle Guilbaud	Emplacement characteristics of thick andesitic lava flows: Case of the western part of the Zacapu basin in the Michoacán-Guanajuato Volcanic Field, Mexico
ME23A-058	4:30 PM - 6:30 PM	Scott Rowland, John Sinton	KA'ĀPAHU, A THICK BENMOREITE FLOW SEQUENCE ON EAST MOLOKĀ'I VOLCANO, HAWAII
MT23B-030	4:30 PM - 6:30 PM	Ashley Steiner, John Wolff	The chemical composition of pumice vs whole-rock ignimbrite samples: does it matter? A detailed portable XRF study of the Bandelier Tuff
MT23B-031	4:30 PM - 6:30 PM	Cansu Culha	Processes controlling crystal exchange between different magmas

**ME23B: II.2 Basaltic eruption styles and transitions in intensity: from driving processes to impacts I Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
ME23B-059	4:30 PM - 6:30 PM	Anna Barth, Megan Newcombe, Elizabeth Ferriss, Erik Hauri, Terry Plank	Control of magma ascent rate on the explosivity of basaltic eruptions
ME23B-060	4:30 PM - 6:30 PM	Simon Thivet, Lucia Gurioli, Andrea Di Muro, Guillaume Boudoire, Andrew Harris	Eruption of a stratified basaltic sill: insights from the June 2014 and July 2015 eruptions of Piton de La Fournaise
ME23B-061	4:30 PM - 6:30 PM	Aaron Marshall, Brittany Brand	When good volcanoes go bad - The causes and consequences of mafic explosive volcanism, Llaima volcano, Chile
ME23B-062	4:30 PM - 6:30 PM	Piergiorgio Scarlato, Elisabetta Del Bello, Laura Spina, Damien Gaudin, Jacopo Taddeucci, Tullio Ricci	Exploring the variability of Strombolian explosions at Batu Tara volcano (Indonesia) using infrasound and high speed imagery

**ME23C: II.9 Continental large igneous provinces: understanding processes of magma formation, storage, evolution, and eruption processes III Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
ME23C-063	4:30 PM - 6:30 PM	Jussi S. Heinonen, Tobias Fusswinkel	High Ni and low Mn/Fe in olivine phenocrysts from peridotite-derived magmas from the Karoo LIP
ME23C-064	4:30 PM - 6:30 PM	Ingrid Ukstins, Shangguan Shimai, Wei Tian	Volcanic stratigraphy and near-vent deposits of the Tarim flood basalts, NW China
ME23C-065	4:30 PM - 6:30 PM	Nicholas Barber, Anne Jay, Loïc Vanderkluysen	Using Geographic Information Systems to Refine Estimates of Deccan Lava Flow Volumes (India)
ME23C-066	4:30 PM - 6:30 PM	Stephen Self, Anne Jay, Loïc Vanderkluysen	Physical characteristics of Deccan basalt lavas in the Central Western Ghats, India
ME23C-067	4:30 PM - 6:30 PM	Tamsin Mather, Lawrence Percival, Micha Ruhl, Stephen Hesselo, Hugh Jenkyns, Jessica Whiteside	Pulsed volcanism during the end-Triassic mass extinction: new evidence from mercury archives
ME23C-068	4:30 PM - 6:30 PM	Karin Orth, Christopher Phillips, Julie Hollis, Michael Wingate	The remnant Paleoproterozoic Hart-Carson LIP of north Western Australia
ME23C-069	4:30 PM - 6:30 PM	Jennifer Thines, Ingrid Ukstins Peate, David Peate	Using mineral chemistry from Afro-Arabian flood volcanics to quantify formation mechanisms of large volume silicic pyroclastic eruptions
ME23C-070	4:30 PM - 6:30 PM	Sylvana Bendaña, Wendy Bohrson, Megan Graubard, Nicole Moore, Anita Grunder	Quantification of Mantle vs. Crustal Contributions to the Steens Flood Basalt Magmatic System
ME23C-071	4:30 PM - 6:30 PM	Mikkel Louis, Conner Toth, Wendy Bohrson, Nicole Moore, Sylvana Bendaña, Megan Graubard, Anita Grunder	Phase Equilibria Constraints on the Magma Storage System with the Steens Basalt
ME23C-072	4:30 PM - 6:30 PM	Conner Toth, Mikkel Louis, Wendy Bohrson, Sylvana Bendaña, Nicole Moore, Anita Grunder	Open-System Origin of Giant Plagioclase in the Steens Basalt, SE Oregon, USA: Assimilation of Plagioclase Mush or Entrainment of Plagioclase Antecrysts?
ME23C-073	4:30 PM - 6:30 PM	Matthew Morriss, Leif Karlstrom, Morgan Nasholds, Kendra Murray	Constraints on the structural and thermal conditions of Columbia River Basalt feeder dikes from a comprehensive regional dataset
ME23C-074	4:30 PM - 6:30 PM	Bart Martin	Small Volume Wanapum Basalt (Columbia River Basalt Group) Flows in SE Washington and NE Oregon: Integrating Fieldwork with Geochemistry to Constrain Flow Emplacement and Petrogenesis
ME23C-075	4:30 PM - 6:30 PM	Brian Webb, Martin Streck, Mark Ferns, William McIntosh	Flow units of the Littlefield Rhyolite, eastern Oregon, constraining age and storage sites of Grande Ronde Basalt magmas
ME23C-076	4:30 PM - 6:30 PM	Emily Cahoon, Martin Streck	Reevaluating distribution area and composition of the Picture Gorge Basalt CRBG, eastern Oregon
ME23C-077	4:30 PM - 6:30 PM	Adam Large, Martin Streck, William McIntosh	Rhyolite volcanism at the northern and western periphery of the Columbia River province rhyolite flare-up: The Buchanan and Dooley Mountain volcanic complex, eastern Oregon
ME23C-078	4:30 PM - 6:30 PM	Julia Neukampf, Ben Ellis, Tomas Magna, Olivier Bachmann	Lithium abundance and isotopic variations between phases in a rhyolite (the Mesa Falls Tuff, Yellowstone)
ME23C-079	4:30 PM - 6:30 PM	Christopher D. Henry, Stephen B. Castor, William A. Starkel, Ben S. Ellis, John A. Wolff, Joseph A. Laravie, William C. McIntosh, Matthew T. Heizler	The McDermitt caldera, northern Nevada and southeastern Oregon, USA: Diverse 16 Ma, silicic magmatism during initiation of the Yellowstone Hotspot
ME23C-080	4:30 PM - 6:30 PM	Pablo Davila-Harris, Graham D.M. Andrews, Sarah R. Brown, Nick Moreno, Linda Anderson, Brenda Pack	Stratigraphic architecture of a voluminous succession of rhyolitic ignimbrites from the central Sierra Madre Occidental (SMO) Silicic Large Igneous Province, Mexico
ME23C-081	4:30 PM - 6:30 PM	Daisuke Sekine, Takeshi Hasegawa	Eruption history and magma processes of pyroclastic deposits around Kamafusayama, southern Fukushima, Japan
ME23C-082	4:30 PM - 6:30 PM	Marine Foucher, Eric Engel, Katie Bristol, Aleksey Smirnov	Evolution of large lava flows in rift setting: Paleomagnetic and rock magnetic insights into the Greenstone flow

**PE23A: III.2 Geophysical multi-parameters techniques for monitoring active volcanoes I Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
PE23A-083	4:30 PM - 6:30 PM	Silvana Hidalgo, Jean Battaglia, Santiago Arellano, Daniel Sierra, René Parra, Pablo Samaniego, Peter Kelly, Benjamin Bernard	The Cotopaxi 2015 eruptive phase: insights from gas and glass
PE23A-084	4:30 PM - 6:30 PM	Koji Kato, Jun'ichi Miyamura, Yoshihiro Masuda, Yoshihiro Ueda, Takahiro Yanada	Volcano monitoring and evaluating system in Japan Meteorological Agency (JMA)

PE23A-085	4:30 PM - 6:30 PM	Masaki Nakahashi, Satoshi Hareyama	Enhancement of volcanic monitoring and observation system of JMA near the crater
PE23A-086	4:30 PM - 6:30 PM	Minoru Takeo, Takao Ohminato, Mie Ichihara, Masanao Shinohara, Kiyoshi Baba, Atsushi Watanabe, Hiroko Sugioka, Yozo Hamano	Geophysical observations at a new volcanic island Nishinoshima, Ogasawara, Japan
PE23A-087	4:30 PM - 6:30 PM	Jorge Armando Alpala, Rosa Liliana Alpala, Maurizio Battaglia	Monitoring remote volcanoes: the 2010 - 2012 unrest at Sotará volcano (Colombia)
PE23A-088	4:30 PM - 6:30 PM	Braden Walsh, Arthur Jolly, Jonathan Procter	Geophysical analysis of the 27 April 2016 Whakaari/White Island, New Zealand eruption: Insights into eruption dynamics and vent characteristics
PE23A-089	4:30 PM - 6:30 PM	Amberlee Darold, Benjamin Pauk, Weston Thelen, Rebecca Kramer	Geophysical Monitoring of Oregon and Washington Cascade Volcanoes
PE23A-090	4:30 PM - 6:30 PM	Salvatore Alparone, Alessandro Bonforte, Salvatore Gambino, Francesco Guglielmino, Francesco Obrizzo, Rosanna Velardita	Interaction between tectonic and volcanic dynamics at volcano island revealed by multiparametric monitoring data
PE23A-091	4:30 PM - 6:30 PM	Roberta Adamo, Milton Ivan Ordóñez, Cristian Mauricio Lopez, Maurizio Battaglia	2010 – 2016 geodetic monitoring of Nevado del Ruiz, Colombia
PE23A-092	4:30 PM - 6:30 PM	Micah Angelí Sayco, Maurizio Battaglia, Alain Bernard, Ma. Antonia Bornas, Edgardo Villacorte, Renato Solidum	Insights on Recent Ground Deformation of Taal Volcano based on continuous GPS Measurements
PE23A-093	4:30 PM - 6:30 PM	Milton Iván Ordóñez Villota, Cristian Mauricio López, Maurizio Battaglia	Ground Deformation at Nevado Del Ruiz (Caldas, Colombia) and its Correlation with the Present Episode of Volcanic Unrest
PE23A-094	4:30 PM - 6:30 PM	Kaori Morita, Takeshi Matsushima, Kazunari YOKOO, Rintaro MIYAMACHI, Yoshiko TEGURI, Shiori FUJITA, Manami NAKAMOTO, Hiroshi SHIMIZU, Hitoshi MORI, Masayuki MURASE, Takahiro OHKURA, Hiroyuki INOUE, Akihiko YOKOO	Vertical ground deformation of Ioyama, Kirishima volcanoes measured by precise leveling survey (during June. 2015 - Feb. 2017)
PE23A-095	4:30 PM - 6:30 PM	Luca D'Auria, Susi Pepe, José Barrancos Martínez, Raffaele Castaldo, Claudio De Luca, Pedro A. Hernández Pérez, Gladys Melián Rodríguez, Germán Padilla Hernández, Eleazar Padrón González, Nemesio M. Peréz Rodríguez, Pietro Tizzani	Novel insight into the 2004 seismo-volcanic unrest at Tenerife through finite-element modelling of ground deformation
PE23A-096	4:30 PM - 6:30 PM	Lourdes Narváez Medina, Darío Fernando Arcos, Maurizio Battaglia	Twenty years (1990–2010) of geodetic monitoring of Galeras volcano (Colombia) from continuous tilt measurements
PE23A-097	4:30 PM - 6:30 PM	José Barrancos, Germán Padilla Hernández, Luca D'Auria, Rubén García Hernández, Nemesio M. Peréz Rodríguez, Fiona Anne Burns, Pedro A. Hernández Pérez, Aarón Pérez Martín	A new seismic monitoring system for Canary Islands
PE23A-098	4:30 PM - 6:30 PM	Shujiro Nakatsujii, Hiroshi Aoyama	An application of the ASL method to seismic activity at Tokachi-dake
PE23A-099	4:30 PM - 6:30 PM	Diana Núñez, Francisco J Núñez-Cornú, Adán Gómez, Juan Manuel Sandoval, Juan I Pinzón, Elizabeth Trejo-Gómez, Carlos Suárez-Plascencia	Comparison of past and recent seismicity in the Ceboruco Volcano, western Mexico
PE23A-100	4:30 PM - 6:30 PM	Adrien Oth, Julien Barrière, Nicolas Bakundukize, Georges Mavonga, Josue Subira, Niche Mashagiro, Benjamin Kafudu, Silvanos Fiama, Gilles Celli, Jean de Dieu Bigirande, Alain Joseph Ntenga, Laurent Habonimana, Charles Bakundukize, François Kervyn	KivuSNet: A broadband seismic network for the Lake Kivu & Virunga Volcanic Region, Democratic Republic of the Congo
PE23A-101	4:30 PM - 6:30 PM	Chiou Ting Tan, Benoit Taisne, Jurgen Neuberg	Magma On The Move! Monitoring Magma Migration Using Synthetic Seismic Amplitude Ratio Analysis
PE23A-102	4:30 PM - 6:30 PM	Janire Prudencio, Michael Manga	Subsurface structure of Long Valley caldera imaged with seismic scattering and intrinsic attenuation
PE23A-103	4:30 PM - 6:30 PM	Richard Sanderson, Robin Matoza, David Fee, Matt Haney, John Lyons	Remote explosive volcanic eruption detection, location, and characterization using the EarthScope Transportable Array in Alaska
PE23A-105	4:30 PM - 6:30 PM	Ima Itikarai	Challenges of routing monitored volcano parameters to a central facility for effective volcano monitoring
PE23A-106	4:30 PM - 6:30 PM	Jessica Johnson	Changes in scattered seismic energy associated with eruptions at Mt Ruapehu detected using repeating earthquakes
PE23A-107	4:30 PM - 6:30 PM	Jacques Grangeon, Philippe Lesage	A new, robust, low-cost and well-calibrated infrasound sensor for volcano monitoring
PE23A-109	4:30 PM - 6:30 PM	Stephen Hernandez	Material changes at Guagua Pichincha, Ecuador gleaned from coda wave interferometry
PE23A-110	4:30 PM - 6:30 PM	Philip Benson, Marco Fazio	Generation mechanisms of fluid-driven seismic signals related to volcano-tectonics: a laboratory approach
PE23A-111	4:30 PM - 6:30 PM	Kazuya Yamakawa, Mie Ichihara	Characterization and modeling of sound generated by a bubble vibrating on liquid surface
PE23A-112	4:30 PM - 6:30 PM	Brent Delbridge, Tushar Mittal	Dispersion relations for multi-physics wave propagation
PE23A-113	4:30 PM - 6:30 PM	Maki HATA, Nobuo MATSUSHIMA, Shinichi TAKAKURA, Mitsuru UTSUGI, Takeshi HASHIMOTO	3-D electrical resistivity model beneath Aso caldera in the Southwest Japan Arc for clarifying magmatism in the crust
PE23A-114	4:30 PM - 6:30 PM	Kimiko Taguchi, Hiroyuki Kumagai, Yuta Maeda, Roberto Torres	Resonator size and fluid properties of long-period events inferred from an analytical formula for crack resonance frequencies
PE23A-115	4:30 PM - 6:30 PM	Kaori Tsukamoto, Koki Aizawa, Wataru Kanda, Makoto Uyeshima, Kaori Seki, Takahiro Kishita, Mitsuru Utsugi, Takao Koyama	Shallow resistivity structure and its relation to hypocenters and deformation sources: Iwo-yama Volcano, Kirishima Volcanic Complex, Japan
PE23A-116	4:30 PM - 6:30 PM	Colin Rowell, Steven McNutt, David Fee, Mark Jellinek	Ground-coupled airwave based site-assessment for detection of volcanic explosions at regional seismic stations in Alaska

PE23A-117	4:30 PM - 6:30 PM	Rebecca Kramer, Andrew Lockhart, Aaron Rinehart, Christopher Lockett, Amberlee Darold	Keep the data flowing: an improved, integrated station design and implementation for Mount Rainier lahar detection and warning
PE23A-118	4:30 PM - 6:30 PM	Andrew Lockhart, Tom Sharp, Chris Lockett, Rebecca Kramer, Ben Pauk, Kate Allstadt, Seth Moran, Amberlee Darold	The automated Puyallup and Carbon River (Mount Rainier) lahar detection system: current upgrades and possible future directions of an 18 year-old system

**PE23B: III.8 Progress in understanding submarine volcanism I Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
PE23B-119	4:30 PM - 6:30 PM	William Chadwick, Susan Merle, Carl Kaiser, Edward Baker, Sharon Walker, Joseph Resing, David Butterfield, Tamara Baumberger, Melissa Anderson, Patrick Shore, Doug Wiens, Kenneth Rubin	A recent volcanic eruption discovered on the central Mariana back-arc spreading center
PE23B-120	4:30 PM - 6:30 PM	Fukashi Maeno, Shun Nakano, Mitsuhiro Yoshimoto, Takao Ohminato, Atsushi Watanabe, Atsushi Yasuda, Takayuki Kaneko, Setsuya Nakada	Emplacement of lava flows in the sea and creation of a new volcanic island at Nishinoshima, Ogasawara, Japan, revealed from first landing and survey
PE23B-121	4:30 PM - 6:30 PM	Patricia Gregg, Daniel Fornari, Michael Trim, Dorsey Wanless, Valentina Romano, Dennis Geist, Steven Shirey, William Ridley, Matthew Smith, Craig Lundstrom, Yan Zhan, Emma McCully, Charelle Trim, Haley Cabaniss, John Albright, Bridgit Boulahanis, Yen Joe Tan	Emplacement of the 8° 20'N Seamount Chain: Preliminary results from the 2016 OASIS Expedition
PE23B-122	4:30 PM - 6:30 PM	Daniel Fornari, Patricia Gregg, Michael Perfit, Emma McCully, Megan Lubetkin, OASIS Science Team	High resolution mapping using the submersible Alvin and Sentry AUV at the 8° 20'N Seamounts: Morphostructural analysis and volcanic history
PE23B-123	4:30 PM - 6:30 PM	Gabrielle Tepp, Matthew Haney, John Lyons, William Chadwick, Susan Merle, Robert Dziak, Delwayne Bohnenstiehl	Hydroacoustic and Seismic Observations of the 2014 Submarine Eruption at Ahiy Seamount, Mariana Arc
PE23B-124	4:30 PM - 6:30 PM	Ales Spicak, Jiri Vanek	Magma migration beneath submarine volcanic arcs revealed by earthquake swarm analysis
PE23B-125	4:30 PM - 6:30 PM	Akimichi Takagi, Nagaoka Yutaka, Keiichi Fukui, Shinobu Ando, Kazuhiro Kimura, Hiroaki Tsuchiyama	Monitoring of the 2013–2015 Nishinoshima Eruption, Japan
PE23B-126	4:30 PM - 6:30 PM	Richard Hey, Árman Höskuldsson, Fernando Martínez	Shallow and deep submarine volcanoes at the Vestmannaeyjar archipelago and southern end of the Reykjanes Ridge
PE23B-127	4:30 PM - 6:30 PM	Rebecca Carey, Sharon Allen, Jocelyn McPhie	Vesiculation in deep submarine silicic dome-forming magmas: Sumisu Dome Complex, Izu-Bonin Arc, Japan
PE23B-128	4:30 PM - 6:30 PM	Ryan Cahalan, Josef Dufek	What controls pumice raft development? Numerical modeling of pumice transport during subaqueous eruptions

**VO23A: IV.1 Remote sensing of volcanic gases from space-based, airborne and ground-based platforms II Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
VO23A-129	4:30 PM - 6:30 PM	Manuel Queisser	A new portable remote sensor for 2000 m range for airborne and ground-based measurement of CO <sub>2</sub> flux
VO23A-130	4:30 PM - 6:30 PM	Nickolay Krotkov, Simon Carn, Bradford Fisher, Steven Taylor, Can Li, Pawan Bhartia, Fred Prata, Eric Hughes	First observations of volcanic eruption clouds from L1 orbit by DSCOVR/EPIC
VO23A-131	4:30 PM - 6:30 PM	Jean-François Smekens, Mathieu Gouhier	Investigating Degassing Processes with a Ground-based Hyperspectral TIR Imager: A Case Study at Stromboli Volcano
VO23A-132	4:30 PM - 6:30 PM	Andrea Gabrieli, John N Porter, Robert Wright, Paul G. Lucey	Validation Studies of the Accuracy of Various SO <sub>2</sub> Gas Retrievals in the Thermal InfraRed (8-14 μm)
VO23A-133	4:30 PM - 6:30 PM	Muhammad Aufaristama, Armann Hoskuldsson, Ingibjorg Jonsdottir, Thorvaldur Thordarson	A New Insight of Thermal Eruption Index (TEI) for Detecting and Deriving Thermal Properties of Active Lava Using Infrared Satellite during 2014-2015 Eruption at Holuhraun, Iceland
VO23A-134	4:30 PM - 6:30 PM	Matthew Varnam, Mike Burton, Giuseppe Salerno	Continuous volcanic monitoring using the SO <sub>2</sub> camera
VO23A-135	4:30 PM - 6:30 PM	Danielle Moyer, Christine Sealing, Simon Carn, Michael Burton, Loïc Vanderklusen	Measuring H <sub>2</sub> O and CO <sub>2</sub> Emissions in the Mud Volcano region using Open Path FTIR (Yellowstone National Park)
VO23A-136	4:30 PM - 6:30 PM	Michael Ramsey, Matthew Watson	A new orbital concept for measuring passive volcanic degassing and small plumes
VO23A-137	4:30 PM - 6:30 PM	Elisa Carboni, Roy Grainger, Tamsin Mather, Anja Schmidt, Iolanda Lalongo	Satellite-derived sulfur dioxide (SO <sub>2</sub> ) emissions from the 2014-2015 Holuhraun eruption (Iceland)

**VO23B: IV.2 Sulfides in volcanic systems: implications for sulfur and trace metal budgets of eruptions Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
VO23B-138	4:30 PM - 6:30 PM	Tatsuhiko Kawamoto, Jun-Ichi Kimura, Qing Chang, Masako Yoshikawa, Mitsuru Okuno, Tetsuo Kobayashi	An oxidizing agent of the mantle wedge: sulfate in saline fluid inclusions in harzburgite xenoliths from Pinatubo
VO23B-139	4:30 PM - 6:30 PM	Dante Canil	Diffusivities of volatile trace metals (Au, As, Bi, Cd, Cu, Tl, Pb, Mo, Re, Sn, Sb) in melts over a range of oxygen fugacity with applications to their degassing behaviour

VO23B-140	4:30 PM - 6:30 PM	Severine Moune, Olgeir Sigmarsson, Pierre-Jean Gauthier, Evgenia Ilyinskaya	Fractional magma degassing at Holuhraun, Bárdarbunga volcanic system, Iceland
VO23B-141	4:30 PM - 6:30 PM	Margaret Hartley, Emma Liu, Marie Edmonds, Fabio Arzilli, Margherita Polacci, Samantha Bell, Nolwenn Le Gall, Evgenia Ilyinskaya, Mike Burton, Michael Drakopoulos, Nghia Vo	The role of sulfides in controlling volcanic SO <sub>2</sub> emissions from Icelandic eruptions: a textural approach
VO23B-142	4:30 PM - 6:30 PM	Pavel Plechov, Nikolay Nekrylov, Vesta Davydova	The source of Sulfur for porphyry-type ore deposits
VO23B-143	4:30 PM - 6:30 PM	Elisabet Head, Antonio Lanzirotti, Matthew Newville, Steve Sutton	Vanadium, Sulfur, and Iron Valences in Melt Inclusions as a Window into Magmatic Processes at Nyamuragira Volcano, Africa

**VO23C: IV.3 The role of volatiles and degassing in magmatic and eruptive processes II Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
VO23C-144	4:30 PM - 6:30 PM	Julie Oppenheimer, Katharine V. Cashman, Alison Rust, Katherine J. Dobson, Charles Bacon, Amanda Lindoo, Donald B. Dingwell	A comparison of gas-driven liquid segregation in analogue experiments and andesitic enclave textures
VO23C-145	4:30 PM - 6:30 PM	Chad Pritchard, Reed Lewis, Paul O'Sullivan	Bubble transport and vapor phase LREE enrichment of mafic enclaves
VO23C-146	4:30 PM - 6:30 PM	Tom Pering, Andrew McGonigle, Thomas Wilkes	Linking gas flow fluid dynamics with basaltic volcanic eruption style
VO23C-147	4:30 PM - 6:30 PM	Richard Herd, Marie Edmonds, Julia Woitischek, Bruce Houghton, Andrew Woods	Understanding the geochemical evolution of gas bubbles and slugs in outgassing basaltic conduits
VO23C-148	4:30 PM - 6:30 PM	Thomas Giachetti, James Gardner, Helge Gonnermann, Sahand Hajimirza	Coalescence of gas bubbles and percolation threshold in rhyolitic melt: insights from decompression experiments
VO23C-149	4:30 PM - 6:30 PM	Sahand Hajimirza, Helge Gonnermann, James Gardner, Thomas Giachetti	Predicting homogeneous bubble nucleation rate
VO23C-150	4:30 PM - 6:30 PM	Genevieve Robert, Madeline Bruno, Olin Carty, Rebecca Smith, Paige Guevarra, Alan Whittington	The viscosity of low-SiO <sub>2</sub> mixed Na-K aluminosilicate melts, with and without fluorine
VO23C-151	4:30 PM - 6:30 PM	John Hamilton, Kayla Iacovino, Tobias Fischer, Armando Saballos	Application of a Thermodynamic Model Resolving Volatile Concentration Differences Between Melt Inclusions and Surface Degassing
VO23C-152	4:30 PM - 6:30 PM	Jason. P. Coumans, Edward. W. Llewellyn, Madeleine. C. S. Humphreys, Marcus Nowak, Richard. A. Brooker, Simon. A. Matthias, Iona. M. McIntosh	A new robust numerical water diffusion model with applications to rhyolitic volcanism
VO23C-153	4:30 PM - 6:30 PM	Madison Ball, James Watkins, Leif Karlstrom	Vapor-melt equilibration rates in silicic magmas
VO23C-154	4:30 PM - 6:30 PM	Fabian Wadsworth, Jeremie Vasseur, Ed Llewellyn, Jim Gardner, Danilo Di Genova, Felix von Aulock, Kai-Uwe Hess, Donald Dingwell	Water disequilibrium during welding of rhyolitic volcanic ash
VO23C-155	4:30 PM - 6:30 PM	Jacqueline Owen, Thomas Shea, Hugh Tuffen	The role of magma degassing during the explosive subglacial basaltic eruption of Katla (Iceland) in 1918
VO23C-156	4:30 PM - 6:30 PM	Catherine Gallagher, Thorvaldur Thordarson, Bruce Houghton, Maria Janebo, Zoë Decker, Kevin Burton	Shallow conduit processes during the 2014–15 Holuhraun and 1783–84 AD Laki flood basalt eruptions, Iceland
VO23C-157	4:30 PM - 6:30 PM	Deborah Bergfeld, Kurt Spicer, William Evans	Evidence for intrusion of undegassed magma during the 2004–08 eruption of Mount St Helens, USA; subtle signals from the hydrothermal system
VO23C-158	4:30 PM - 6:30 PM	Laura Clor, Peter Kelly, Steven Ingebritsen, William Evans, Deborah Bergfeld, Christoph Kern, Michael Doukas, Aaron Rinehart	Gas emissions monitoring at Mount Hood volcano, Oregon, USA
VO23C-159	4:30 PM - 6:30 PM	Angelica Rodriguez, Rachel Teasdale	Monitoring hydrothermal water temperature and composition at the Lassen Volcanic Center, Southern Cascades
VO23C-160	4:30 PM - 6:30 PM	Kerry Reid, Hazel Rymer, Stephen Blake, Glyn Williams Jones, John Murray	A detailed anatomy of the current degassing cycle at Masaya volcano, Nicaragua
VO23C-161	4:30 PM - 6:30 PM	Fiona D'Arcy, Étienne Boucher, Maarten De Moor, Jean-François Helie, John Stix	Isotopes in tree rings as a proxy of volcanic degassing: A geochemical study of the gas plume at Turrialba volcano, Costa Rica
VO23C-162	4:30 PM - 6:30 PM	Marcela Pizarro, Claudia Cannatelli, Diego Morata	CO <sub>2</sub> budget constraints of Lastarria volcano, Central Volcanic Zone, northern Chile
VO23C-163	4:30 PM - 6:30 PM	Giancarlo Tamburello, Séverine Moune, Patrick Allard, Swetha Venugopal, Vincent Robert, Marina Rosas-Carabajal, Thierry Kitou, Francois Beauducel, Jean-Christophe Komorowski	Spatio-temporal relationships between fumarolic degassing, hydrothermal fluid circulation and lava dome deformation at La Soufrière volcano, Guadeloupe (Lesser Antilles)
VO23C-164	4:30 PM - 6:30 PM	Giancarlo Tamburello, Vincent Robert, Jean-Christophe Komorowski, Thierry Kitou, Patrick Allard, Arnaud Lemarchand, Celine Dessert, Anne Le Friant	Real-time gas monitoring of a fumarolic field: application at La Soufrière of Guadeloupe (Lesser Antilles)
VO23C-165	4:30 PM - 6:30 PM	Germán D. Padilla, Eleazar Padrón, Pedro A. Hernández, Roberto Quevedo, Nemesio M. Pérez, José Barrancos, Gladys V. Melián, María Asensio-Ramos	Soil 222Rn and CO <sub>2</sub> efflux continuous measurements for the geochemical monitoring of the oceanic active volcano island of Gran Canaria, Canary Islands
VO23C-166	4:30 PM - 6:30 PM	Kristen Rahilly, Tobias Fischer, Tehnuka Ilanko, Louis Scuder, Laura Crossey	Spatial distribution of diffuse carbon dioxide degassing at Valles caldera, New Mexico with comparison to other geothermal systems
VO23C-167	4:30 PM - 6:30 PM	Rebecca Lynch, Dante Canil	Condensation behaviour of volatile trace metals in laboratory benchtop fumarole experiments

VO23C-168	4:30 PM - 6:30 PM	Gladys V. Melián, María Asensio-Ramos, Cecilia Amonte, Mar Alonso, Marta García-Merino, Fátima Rodríguez, Eleazar Padrón, José Barrancos, Pedro A. Hernández	Diffuse H <sub>2</sub> degassing emission to monitor changes of volcanic activity
VO23C-169	4:30 PM - 6:30 PM	Joshua Blackstock, Matthew Covington, Joseph Myre, Phillip Hays	Direct dissolved CO <sub>2</sub> measurement in low-temperature waters using a low-cost measuring and data logging platform for a diverse range of hydrogeologic settings
VO23C-170	4:30 PM - 6:30 PM	Iona McIntosh, Alexander Nichols, Kenichiro Tani, Ed Llewellyn	Accurately measuring H <sub>2</sub> O in volcanic glasses: application of a new FTIR spectroscopy method
VO23C-171	4:30 PM - 6:30 PM	Stefania Sicola, Danilo Di Genova, Claudia Romano, Alessandro Vona, Sara Fanara, Kai-Uwe Hess, Donald B. Dingwell, Patrizia Landi	Raman spectra of hydrous volcanic glasses: effects of chemical composition on water content estimation
VO23C-172	4:30 PM - 6:30 PM	Carlos A. Angeles De La Torre, Julie Roberge, Gilles Levresse, Celestine N. Mercer, Kevin G. Pedroza-Aldana	Comparing melt inclusions preparation methods in crystals from Popocatepetl Volcano
VO23C-173	4:30 PM - 6:30 PM	Erin Hoxsie, Thomas Giachetti, James Watkins, James Gardner	Evidence for CO <sub>2</sub> fluxing from CO <sub>2</sub> -H <sub>2</sub> O anticorrelations in obsidian pyroclasts
VO23C-174	4:30 PM - 6:30 PM	Libby Anthony	Fluorine behavior in trachyte-phonolite rocks, Suswa volcano, Central Kenya Peralkaline Province (CKPP), East African Rift
VO23C-175	4:30 PM - 6:30 PM	Masataka Kawaguchi, Toshiaki Hasenaka, Atsushi Yasuda, Natsumi Hokanishi, Yasushi Mori	High-sulfur basalt hosted in olivine as an indicator of magma supply beneath Aso, central Kyushu, Japan
VO23C-176	4:30 PM - 6:30 PM	Syegi Kunrat, Martin Streck, Heather Wright	Soputan volcano, Indonesia: petrological systematics of volatiles and magmas and their bearing on explosive eruptions of a basalt volcano
VO23C-177	4:30 PM - 6:30 PM	Maria Carmencita Arpa, Bruce Christenson, Georg Zellmer, Ian Schipper, Jonathan Procter, Robert Stewart	Volatile Content of Tongariro Volcanic Complex Magmas
VO23C-178	4:30 PM - 6:30 PM	Simone Cogliati, Sarah Sherlock, Alison Halton, Kerry Reid, Tiffany Barry, Mike Branney, Simon Kelley	Noble gases: a tool to track the degassing of active volcanic systems
VO23C-179	4:30 PM - 6:30 PM	Keiko Sato, Yoshinori Takebe, Seiko Yamasaki, Hidenori Kumagai, Naoyoshi Iwata, Masao Ban	The noble gas isotope anomaly in the newest-stage products of Zao volcano, NE Japan
VO23C-180	4:30 PM - 6:30 PM	Klaus Mayer, Cristian Montanaro, Roberto Isaia, Marceau Gresse, Bettina Scheu, Tim Yilmaz, Jean Vandemeulebrouck, Tullio Ricci	On the role of the subsoil on surficial degassing processes at Solfatara crater, Campi Flegrei caldera

**VH23A: V.2 Volcano geomorphology and sedimentology: topography, processes, and deposits I Posters**

Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A

Abstract Number	Time	Authors	Title
VH23A-181	4:30 PM - 6:30 PM	Lee Siebert, James W. Vallance	LARGE-VOLUME EDIFICE FAILURES IN THE CASCADE RANGE OF SOUTHERN BRITISH COLUMBIA TO NORTHERN CALIFORNIA
VH23A-182	4:30 PM - 6:30 PM	Daniel Sierra, Francisco Vásconez, Marco Almeida, Daniel Andrade, Patricia Mothes	Characterization of lahar deposits corresponding to Cotopaxi Volcano's historical eruptions along the eastern drainage (Ecuador)
VH23A-183	4:30 PM - 6:30 PM	Kyoko Kataoka, Yoshitaka Nagahashi, Atsushi Urabe	Traceable cohesive lahar deposits in volcanic fan, delta, and lake floor environments, Adatara volcano, northeast Japan
VH23A-185	4:30 PM - 6:30 PM	Engielle Mae Paguican, Matthieu Kervyn	Quantitative analogue modelling of volcano landscape evolution in response to tectonics and erosion
VH23A-186	4:30 PM - 6:30 PM	Kristin Sweeney, Jon Major	Quantifying the role of initial conditions in drainage network configuration, Mount St. Helens, WA
VH23A-187	4:30 PM - 6:30 PM	Adam Mosbrucker, Jon Major, Kurt Spicer	As decades roll by, Mount St. Helens' sediment keeps on truckin'
VH23A-188	4:30 PM - 6:30 PM	Olga K. Vilmundardóttir, Friðþór S. Sigurmundsson, Gro B.M. Pedersen, Fadi Kizel, Nicola Falco, Joaquín M.C. Belart, Guðrún Gísladóttir, Jón A. Benediktsson	Examining primary succession for the past 850 yrs on the lava-chronosequence of Hekla volcano in south Iceland
VH23A-189	4:30 PM - 6:30 PM	Danielle Molisee, Sylvain Charbonnier, Aurelie Germa, John Bell	Cinder Cone Age Estimation Based on Cone Morphology Using Two-Dimensional Nonlinear Diffusive Numerical Modeling, Buffalo Valley Volcanic Field, Nevada, USA
VH23A-190	4:30 PM - 6:30 PM	Szabolcs Kózik, Karoly Nemeth, Jonathan Procter, Mark Bebbington	Hazard implications of silicic small-volume volcanism within the Taupo Volcanic Zone, New Zealand: spatial, temporal, volumetric and eruptive style distribution of the eruptive vents
VH23A-191	4:30 PM - 6:30 PM	Eliecer Duarte	Summit Geomorphological Changes Due to Ash and Pyroclasts Emplacement Near the Active Crater of Turrialba Volcano: Costa Rica
VH23A-192	4:30 PM - 6:30 PM	Inga Tarasenko, Pierre Delmelle, Charles Bielders, Alicia Guevara	Crusting of volcanic tephra deposits: an experimental study
VH23A-193	4:30 PM - 6:30 PM	Kimberly Genareau, William Back, Carol Stewart, Shane Cronin	Chemical Impacts of Remobilized Volcanic Deposits on Water Quality: The Role of Mineralogy

**VH23B: V.3 Modelling volcanic hazards II Posters**

Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A

Abstract Number	Time	Authors	Title
VH23B-194	4:30 PM - 6:30 PM	JooYong Lee, HyunA Son, SungSu Lee	Complementation of Lagrangian particle diffusion model for analysis of volcanic ash dispersion
VH23B-195	4:30 PM - 6:30 PM	Leah Courtland, Carlos Laverde	Quantifying Differences in Methodologies for Forecasting Tephra Fallout

VH23B-196	4:30 PM - 6:30 PM	Hisashi Sasaki, Shino Naruke, Tatsuro Chiba, Hiroyuki Yamada	Investigation and analysis of damage caused by lapilli fall during the eruption of Aso Volcano, Japan on October 8, 2016
VH23B-197	4:30 PM - 6:30 PM	Kae Tsunematsu, Rebecca Fitzgerald, Ben Kennedy, Christopher Gomez, Jean-Luc Falcone, Bastien Chopard	Open Source 3D Multiparticle Ballistic Simulator "Ballista"
VH23B-198	4:30 PM - 6:30 PM	Aprilia Nurmawati, Konstantinos I. Konstantinou	Modeling of volcanic ballistic projectiles during hydrothermal and vulcanian eruptions at Tatan Volcano Group, northern Taiwan
VH23B-199	4:30 PM - 6:30 PM	Natalia Deligne, Gill Jolly, Tony Taig, Nico Fournier	Quantifying life-safety risk at active volcanoes: a decision support tool for volcano observatories
VH23B-200	4:30 PM - 6:30 PM	Koji Kiyosugi	Frequency of volcanic eruptions and long-term magma discharge rate in sub-regions in Japan
VH23B-201	4:30 PM - 6:30 PM	Young Sunwoo, Doyoon Kim, Yoo Jung Kim, Jae Eun Park, Hyerim Park	3-Dimensional Chemical Transport Model Application for Risk Assessment of Potential Volcanic Disaster around Korean Peninsula
VH23B-202	4:30 PM - 6:30 PM	Melanie Kelman	Modeling potential lahar inundation zones at Mount Garibaldi and Mount Cayley in southwest British Columbia's Garibaldi Volcanic Belt
VH23B-203	4:30 PM - 6:30 PM	Antoine Dille, Sam Poppe, Sophie Mossoux, Hamidi Soulé, Matthieu Kervyn	Small scale lahars at Karthala volcano: comparing probabilistic Q-LavHA and LAHARZ simulations
VH23B-204	4:30 PM - 6:30 PM	Mario Angarita, Jillian Pearse, Scott Henderson	Deformation processes in the region Galeras volcano using InSAR Images
VH23B-205	4:30 PM - 6:30 PM	Lauren Schaefer, Ben Kennedy, Marlene Villenueve, Stefan Cook, Harry Keys, Graham Leonard, Art Jolly	Geotechnical characterization and numerical modeling of crater rim stability at Mt. Ruapehu, New Zealand
VH23B-206	4:30 PM - 6:30 PM	Sung-Hyo Yun, Cheol-Woo Chang	Pyroclastic Density Current Simulation using TITAN2D for Jeju Volcanic Island, Korea
VH23B-207	4:30 PM - 6:30 PM	Karim Kelfoun, Valentin Gueugneau	A two-fluid depth-averaged model for block-and-ash flows and ash-cloud surges
VH23B-208	4:30 PM - 6:30 PM	Victoria Miller, Matthew Garthwaite, Rikki Weber, Jonathan Griffin, Grant Cox	Volcanic-tsunami hazard assessment – A case study from Heard Island and McDonald Islands, Australia
VH23B-209	4:30 PM - 6:30 PM	Raphael Paris, Martina Ulvrova, Karim Kelfoun, Olivier Roche	The challenge of volcanic tsunami modelling
VH23B-210	4:30 PM - 6:30 PM	Póra Andrésardóttir, Armann Höskuldsson, Joan Martí Molist, Ingibjörg Jónsdóttir, Thor Thordarson	Evaluating volcanic hazard at the Reykjanes Peninsula, Iceland. Use of Vetools software bundle for geological data analyses and hazard predictions

**ER23A: VI.1 Volcano-hydrothermal system dynamics: Hazards, resources, and extremophiles II Posters****Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
ER23A-211	4:30 PM - 6:30 PM	Lara Smale, Christopher Kilburn, Stephen Edwards	A Crustal Damage Model for Coupling the Magmatic and Hydrothermal System and the Control on Ground Movements at Campi Flegrei Caldera, Italy
ER23A-212	4:30 PM - 6:30 PM	Max Rudolph, Rob Sohn	A model for internal oscillations in geysers, with application to Old Faithful (Yellowstone, USA)
ER23A-213	4:30 PM - 6:30 PM	Rossella Di Napoli, Alessandro Aiuppa, Stefano Valenza, Giovanni Chiodini, Attilio Sulli, Valerio Acocella, Giuseppe Ciraolo, Mauro Antonio Di Vito, Francesco Interbartolo, Marco Milazzo, Carmelo Nasello, Gabriele Turco, Mariano Valenza	A NOHTL METHOD FOR QUANTIFYING THE CO <sub>2</sub> OUTPUT FROM SUBMARINE VOLCANO-HYDROTHERMAL SYSTEMS
ER23A-214	4:30 PM - 6:30 PM	Patrick Hayman, Ray Cas, Rick Squire, David Doutch, Ian Campbell, Mimi Chen	Archean 'Dolerites': stratigraphic architecture, emplacement origins and association with orogenic gold
ER23A-215	4:30 PM - 6:30 PM	Cyndi Kelly	Back-Projection Imaging of extended diffuse pre-, co-, and post-eruptive seismic sources at El Jefe Geyser, El Tatio Geyser Field, Chile
ER23A-216	4:30 PM - 6:30 PM	Noah Randolph-Flagg, Stephen Breen, Andres Hernandez, Michael Manga, Steve Self	Erosional columns in the Bishop Tuff as relicts of boiling in a cooling tuff
ER23A-217	4:30 PM - 6:30 PM	Jennifer Lewicki, Peter Kelly, Deborah Bergfeld, Jacob Lowenstein	Gas and heat emissions at Norris Geyser Basin, Yellowstone National Park, USA based on a combined eddy covariance and Multi-GAS approach
ER23A-218	4:30 PM - 6:30 PM	Katharine Maussen, Edgardo U. Villacorte, Raymond Patrick R. Maximo, Ma. Antonia V. Bornas, Alain Bernard	Geochemical evidence for magmatic intrusions at Taal Volcano, Philippines
ER23A-219	4:30 PM - 6:30 PM	Hyunwoo Lee, Tobias Fischer, Maarten de Moor, Zachary Sharp, Naoto Takahata, Yuji Sano	Geochemistry of volatiles in springs at the Costa Rican subduction zone
ER23A-220	4:30 PM - 6:30 PM	Cristian Montanaro, Shane Cronin, Bettina Scheu, Ben Kennedy, Bradley Scott, Donald B. Dingwell	Host rock influence on the energy partitioning and crater morphology of steam-driven eruptions
ER23A-221	4:30 PM - 6:30 PM	Xavier Bolós, Gerardo Cifuentes, José Luis Macías, Giovanni Sosa-Ceballos, Felipe García, Víctor Gámez, Mariela Albor, Mónica Juárez	Hydrothermal system of Cerritos Colorados geothermal field (La Primavera caldera, Guadalajara, Mexico) inferred from an electrical resistivity tomography survey
ER23A-222	4:30 PM - 6:30 PM	Raymond Patrick Maximo, Alain Bernard, Katharine Maussen, Ryan Rebadulla, Ericson Bariso, Deborah Fernandez	Insights into the magmatic-hydrothermal activity using major and trace elements and isotopic values of thermal spring waters from active volcanoes in the Philippines
ER23A-223	4:30 PM - 6:30 PM	Carolina Munoz-Saez, Michael Manga, Shaul Hurwitz, Maxwell Rudolph, Atsuko Namiki, Seth Saltiel	What have we learned about geyser dynamics from El Tatio, Chile?
ER23A-224	4:30 PM - 6:30 PM	Claire Bouligand, Svetlana Byrdina, Marceau Gresse, André Revil, Jean Vandemeulebrouck, Shaul Hurwitz	Joint interpretation of magnetic and electric resistivity surveys in Yellowstone and Campi Flegrei vapor-dominated hydrothermal systems
ER23A-225	4:30 PM - 6:30 PM	Barbara I. Kleine, Andri Stefánsson, Saemundur A. Halldórsson, Martin J. Whitehouse, Kristján Jónasson	Origin of quartz in the Icelandic crust evident from δ <sub>30</sub> Si and δ <sub>18</sub> O isotope
ER23A-226	4:30 PM - 6:30 PM	Ryunosuke Kazahaya, Hiroshi Shinohara, Toshiya MORI, Masato IGUCHI, Akihiko YOKOO	Pre-eruptive inflation caused by gas accumulation: Insight from detailed gas flux variation at Sakurajima volcano, Japan

ER23A-227	4:30 PM - 6:30 PM	Jóhann Gunnarsson-Robin, Andri Stefánsson, Shuhei Ono, Sæmundur Ari Halldórsson, Martin Whitehouse	Sulfur chemistry and isotopes in geothermal fluids and crustal minerals in Iceland
ER23A-228	4:30 PM - 6:30 PM	Eduardo Cartaya, Lee Florea, Andreas Pfletsch	Systematic Investigations of the Summit Fumarole Caves of Mount Rainier, Washington State, U.S.A.
ER23A-229	4:30 PM - 6:30 PM	Shaul Hurwitz, Jacob B. Lowenstern, James J. Thordesen, Jeffrey T. Cullen, Jaime D. Barnes, Emma G. McConvile, Mark E. Szymanski	The source and fate of the halogens fluorine, chlorine, and bromine in the Yellowstone Plateau Volcanic Field hydrothermal system
ER23A-230	4:30 PM - 6:30 PM	Isabelle Chambefort, Colin J.N. Wilson, Julie V. Rowland	New (Zealand) perspectives on continental arc geothermal systems
ER23A-231	4:30 PM - 6:30 PM	Michael Rowe, Yuli Heled, Isabelle Chambefort, Colin Wilson	Vapour phase alteration and cooling of compound ignimbrite sheets: the silica story
ER23A-232	4:30 PM - 6:30 PM	Takumi Imura, Tsukasa Ohba, Mitsuhiro Nakagawa	Volcanic fluids-rock interaction inferred from characteristics of altered minerals in volcanic products at Tokachidake volcano, central Hokkaido, Japan

**ER23B: VI.2 New approaches to understanding magma and volatile evolution, sub-volcanic intrusions and porphyry ore mineralization II Posters**  
**Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
ER23B-233	4:30 PM - 6:30 PM	Jacob Lowenstern, Vincent Van Hinsberg, Kim Berlo, Heather Wright, Kayla Iacovino, Moritz Liesegang, Ilya Bindeman	Opal in pumice from the 1817 phreatomagmatic event at Kawah Ijen, Java (Indonesia): its origins and implications
ER23B-234	4:30 PM - 6:30 PM	Reza Firmansyah Hasibuan, Tsukasa Ohba, Mirzam Abdurrachman, Takashi Hoshide	MAGMAS CHARACTERISTICS OF RAJABASA VOLCANIC COMPLEX INFERRED BY PETROLOGICAL APPROACH
ER23B-235	4:30 PM - 6:30 PM	Peter Larson, Jerry Fairley, Nick McMillan, Cary Lindsey, Brady Lubenow	A Comparison of Heat Transfer Modes from a Thermal Discharge Area in the Yellowstone Caldera
ER23B-236	4:30 PM - 6:30 PM	Yannick Buret, Joern-Frederik Wotzlaw, Stan Roozen, Marcel Guillong, Albrecht von Quadt, Christoph Heinrich	Volatiles at the plutonic - volcanic connection: An example of an explosive eruption terminating porphyry copper ore formation

**ER23C: VI.3 Application of geological mapping and field surveys to different exploitation contexts (geothermal and ore deposits) II Posters**  
**Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
ER23C-237	4:30 PM - 6:30 PM	Jeffrey Zurek, Glyn Williams-Jones, Isabelle Lépine	Geologically-constrained geophysical inversions of the Renard kimberlite pipes, northern Québec, Canada
ER23C-238	4:30 PM - 6:30 PM	Kate Maurohooho, Shaun L. L. Barker	Mapping lithology and hydrothermal alteration in geothermal systems: traditional versus portable techniques
ER23C-239	4:30 PM - 6:30 PM	Ellen Lamont, Andrew Meigs, Philip Wannamaker	Stress-state, slip-tendency, and magmatism along faults within the Cascadian arc-backarc region of central Oregon
ER23C-240	4:30 PM - 6:30 PM	Fátima Rodríguez, Gladys V. Melián, Egbert Jolie, Anna Jentsch, Andrew Rae, Agnes Mazot, Mark Harvey, Eleazar Padrón, Pedro A. Hernández	Surface geochemical mapping for geothermal exploration research at the Taupo Volcanic Zone, New Zealand
ER23C-241	4:30 PM - 6:30 PM	Richard Brown, Brian Bell, David Reynolds, Sam Clark, Jonny Dietz, Clayton Grove, Richard Hobbs, Dougal Jerram, Niall Mark, Simon Passey, Bansri Raithatha, Heather Rawcliffe, Peter Reynolds, Oliver Sanford, Nick Schofield, Richard Walker, Sapphire Wanmer, Timothy Watton, Kirstie Wright	Unravelling the Impacts of Volcanic and Intrusive Igneous Rocks on Hydrocarbon Systems in Sedimentary Basins: examples from the North Atlantic

**VS23A: VII.2 Volcanic geoheritage II Posters**

**Tuesday August 15, 2017. 4:30 PM - 6:30 PM Exhibit Hall A**

Abstract Number	Time	Authors	Title
VS23A-242	4:30 PM - 6:30 PM	Daniele Andronico, Gilda Currenti, Sergio Longo, Lorenzo Brusca, Sergio Calabrese, Tommaso Caltabiano, Antonino Cristaldi, Walter D'Alessandro, Cinzia Federico, Ferruccio Ferrari, Filippo Greco, Alessandro La Spina, Manfredi Longo, Lucia Messina, Rosalba Napoli, Danilo Reitano, Giuseppe Salerno, Antonino Sicali	SEW – Save the Etna World
VS23A-243	4:30 PM - 6:30 PM	Chelsea Leven, Lindsay Ellingson, Benjamin van Wyk de Vries, William Rose	Supporting global geoheritage through international collaboration for a potential Ometepe Geopark in Nicaragua
VS23A-244	4:30 PM - 6:30 PM	Avtandil Okrostsvaridze, Nino Popkhadze, Sun-Lin Chung	Zircons U-Pb dating of Mtvari canyon volcanic flow (Georgia) and destructive processes of Vardzia cave city hewn into this flow