

EGU General Assembly 2011
Programme Group Programme
GMPV – Geochemistry, Mineralogy, Petrology & Volcanology

Monday, 04 April	2
GD4.2/TS5.7.....	2
GMPV1.....	4
GMPV16.....	8
GMPV17.....	9
GMPV21/GD2.15.....	10
GMPV25.....	12
IG4/GMPV37.....	13
GD5.1/GMPV41/SM4.5/TS6.9.....	15
GD1.1/BG8.3/GMPV44/TS1.3.....	16
NH2.3/AS4.29/GMPV47.....	17
NH2.8/GMPV57.....	19
Tuesday, 05 April	22
GMPV2/IG20.....	23
GMPV6.....	25
GMPV11.....	26
GMPV22/TS1.5.....	28
GMPV23/TS3.2.....	29
TS6.3/GD5.5/GMPV34/SM4.4.....	30
NH2.1/GMPV36.....	33
Wednesday, 06 April	42
GMPV12/NH2.4.....	42
G3.1/GD2.6/GMPV29.....	44
EMRP11/GMPV30/NH10.5/TS2.8.....	46
TS5.1/GD4.4/GMPV35/SM2.9.....	47
IG5/BG1.11/CL4.13/GMPV40/SSP4.5.....	49
SM4.2/GD2.11/GMPV49/TS10.6.....	52
GM4.2/GMPV52/HS12.2/SSS2.15.....	53
SC7/GMPV58.....	54
Thursday, 07 April	55
GD5.3/TS6.11.....	55
GD6.2/GMPV50/SM4.3.....	56
GI-11.....	56
GMPV4.....	57
GMPV5.....	59
GMPV10/G3.11/NH2.7/TS1.8.....	61
GD7.1/EMR12/GMPV18/SM4.6.....	64
TS4.1/G3.4/GMPV27/SM2.10.....	64
PS10.0/GMPV28.....	66
TS6.2/GD5.9/GMPV46/SM1.6.....	68
TS6.7/GD3.6/GMPV51.....	70
GD6.1/GMPV55/SM1.12/TS4.6.....	72
SSP1.7/GMPV56.....	73
TS3.1.....	73
Friday, 08 April	77
GMPV8.....	79
ERE5.1/GMPV32/HS12.1/SSS2.9.....	82
IG6/GMPV38.....	84
ERE3.2/GD1.3/GMPV53.....	86

Monday, 04 April

GD4.2/TS5.7 – Evolution of the North and South Atlantic, adjacent continents, and passive continental margins in general (co-listed) – Posters

Conveners: Ulrich Anton Glasmacher, Peter Japsen, Dominique Chardon | Co-Conveners: Anicet Beauvais, Johan M. Bonow, Hans-Peter Bunge, Peter R. Cobbold, Ana Franco-Magalhaes, François Guillocheau, Peter C. Hackspacher, Per Terje Osmundsen, Martyn Stoker, Magdalena Scheck-Wenderoth, Robert B. Trumbull, Nicky White

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A18 EGU2011-1461
Victor Sacek and Jean Braun
A flexural explanation for passive margin escarpment migration
- A19 EGU2011-3350
Delphine Rouby, Francois Deschamps, Jean Braun, and Olivier Dauteuil
Vertical movement of transform passive margins: interactions in 3D between surface transfer, flexural isostasy and thermal subsidence
- A20 EGU2011-6842
Peter Japsen, Johan M. Bonow, Paul F. Green, James A. Chalmers, and Troels F. Nielsen
East Greenland: A classic example of an elevated, passive continental margin shaped long after rifting and breakup
- A21 EGU2011-9193
Johan M. Bonow, Peter Japsen, and Paul F. Green
Elevated peneplains truncating Palaeogene basalts as evidence of post-rift erosion and uplift in East Greenland
- A22 EGU2011-13298
Sergei Medvedev, **Ebbe Hartz**, and Alban Souche
Influence of ice sheet, the Iceland hotspot, glacial erosion, and sediment transport on Greenland's passive margins
- A23 EGU2011-10545
Nina Doerr, Frank Lisker, Peter D. Clift, Andrew Carter, Andreas Schlegel, Karsten Schubert, David Gee, Alexander Tebenkov, Malte Jochmann, and Cornelia Spiegel
Erosion history of Svalbard: evidence from low-temperature thermochronology, vitrinite reflectance and clay mineralogy
- A24 EGU2011-9143
Per Terje Osmundsen, Thomas Redfield, and Jörg Ebbing
Extensional faulting, crustal taper and the long-term topography of the Scandinavian passive margin
- A25 EGU2011-11839
Peter Japsen, Paul F. Green, Johan M. Bonow, Erik S. Rasmussen, James A. Chalmers, and Tomas Kjennerud
Episodic uplift and exhumation along North Atlantic passive margins
- A26 EGU2011-9418
Anne-Claire Chaboureau, Cécile Robin, François Guillocheau, Sébastien Rohais, Daniel Aslanian, and Maryline Moulin
Palaeogeography of the Central segment during the South Atlantic opening
- A27 EGU2011-1920
Naomi Ussami, Carlos A. M. Chaves, Leila S. Marques, and Márcia Ernesto
The origin of the Rio Grande Rise-Walvis Ridge (South Atlantic) revisited integrating paleogeographic reconstruction, elemental and isotope geochemistry and flexural modeling
- A28 EGU2011-12158
Boris Belyatsky, Anton Antonov, Robert Krymsky, Elena Lepekhina, Natalia Migdisova, and Nadezhda Sushchevskaya
Isotope-geochemical features of tholeiites from the Spiess Ridge (South Atlantic)
- A29 EGU2011-12869
Natasha Stanton, Cosme Neto, and Mauro Cesar Gerales
Gravity and magnetic anomalies on the Trindade Island and Vitoria-Trindade Chain: implications for the lithospheric thinning and tectonic evolution of the Brazilian Plattform
- A30 EGU2011-3546
Bernd Schreckenberger, Dieter Franke, Hannes Koopmann, Michael Schnabel, and Kai Berglar
Rift-to-drift transition at the South African volcanic margin and comparison with conjugated structures off Argentina
- A31 EGU2011-6509
Daniel Koehn, Cees Passchier, and Ulrich Glasmacher
Tectonic evolution of the South Atlantic passive continental margin based on onshore structural data.

- A32 EGU2011-6810
Hartwig Frimmel, Miguel Basei, Claudio Gaucher, and Hans-Peter Bunge
Pre-rift lithospheric anisotropies in the Gondwana crust on either side of the South Atlantic
- A33 EGU2011-6855
Lorenzo Colli, Andreas Fichtner, and Hans-Peter Bunge
Full waveform tomography of the South Atlantic upper mantle
- A34 EGU2011-11768
Anne-Claire Chaboureau, Yannick Donnadieu, Cécile Robin, François Guillocheau, and Sébastien Rohais
Impact of the South Atlantic opening on global and regional climate during Aptian and Albian times
- A35 EGU2011-4012
Damien Delvaux, Etienne Kadima, Ralf Litke, Viktoria Sachse, Ulrich Glasmacher, Friederik Bauer, and Stanislas Sebagenzi
Late Cretaceous subsidence and tectonic inversion in the Congo Basin from paleostress, organic matter maturation and thermochronometric studies of archived core and outcrop samples
- A36 EGU2011-4172
François Guillocheau, Bastien Linol, Marteen de Wit, François Mvondo, Dominique Chardon, and Luc Tack
Palaeosurfaces, incision and long wavelength deformation of the Congo Cuvette during Cenozoic times
- A37 EGU2011-3881
Nathan Downey, Mike Gurnis, and **Jean-Philippe Avouac**
Subsidence history and geodynamic evolution of the cratonic Congo basin
- A38 EGU2011-2240
Friederike U. Bauer, Jens Baumgaertner, Ulrich A. Glasmacher, Uwe Ring, Markus Karl, Andreas Schumann, and Betty Nagudi
Long-term landscape evolution of the Rwenzori Mts (Albertine Rift, Uganda) traced by thermal modelling
- A39 EGU2011-5659
Cecile Robin, Francois Guillocheau, Samuel Jeanne, Florent Porcher, and Gerome Calves
Cenozoic siliciclastic fluxes evolution around Africa
- A40 EGU2011-4308
Jean-Louis Grimaud, Dominique Chardon, Beauvais Anicet, and Christophoul Frédéric
Cenozoic drainage evolution of West Africa: Spatial and temporal constraints from the lateritic record
- A41 EGU2011-7227
Anicet Beauvais and Dominique Chardon
Evolving topography and denudation frame of West Africa over the Cenozoic
- A42 EGU2011-5583
Yuriy P. Maystrenko, Magdalena Scheck-Wenderoth, Alexander Hartwig, Zahie Anka, Antony B. Watts, and Katja K. Hirsch
3D structural model of the West African continental margin
- A43 EGU2011-7607
Volker Leinweber, Wilfried Jokat, and Frauke Klingelhoefer
Results of recent investigations of the conjugate margins in the Africa-Antarctica Corridor
- A44 EGU2011-4511
Carmen Gaina, Cinthia Labails, and Colin Reeves
The Early opening of the Indian Ocean: An African Perspective
- A45 EGU2011-213
Sylvain Rougier, Yves Missenard, Hermann Zeyen, Jocelyn Barbarand, and Cécile Gautheron
Meso-Cenozoic vertical movements of the Tuareg Shield, Algerian Sahara
- A46 EGU2011-5289
Nicolas Flament, Michael Gurnis, and Dietmar Müller
The influence of mantle convection on the evolution of South American topography during the Miocene
- A47 EGU2011-4153
Luis Gustavo Ferreira Viegas and Carlos José Archanjo
Syntectonic magma emplacement and crustal flow at different levels in the middle crust: the case of the Patos-Seridó shear zone system (Borborema Province, NE Brazil)
- A48 EGU2011-14207
Peter Japsen, Paul F. Green, Peter R. Cobbold, Lucy G. Sant'Anna, and Johan M. Bonow
Cenozoic burial and exhumation of the interior highlands of Brazil: Palaeo-thermal evidence from the Eocene Fonseca Formation, Minas Gerais
- A49 EGU2011-335
Jaqueline de Souza Silva, Ulrich Anton Glasmacher, Peter Christian Hackspacher, Danny Stoeckli, Markus Karl, and Manuel Sehr
The Poços de Caldas alkaline massif, a key to understand thermal, exhumation, rock and surface uplift history at the "passive

- A50 EGU2011-13835
Peter C. Hackspacher, Marli C. Siqueira-Ribeiro, Matheus Cuglieri, Ana O.B. Franco-Magalhaes, and Bento Conceição
 Is the Eocene-Miocene stretching a regional or local Phenomon on both sides of the South Atlantic Margins? - Low Temperature Thermochronology in SE Brasil and Angola
- A51 EGU2011-272
 Markus Karl, **Ulrich A. Glasmacher**, Peter C. Hackspacher, and Ana O. B. Franco-Magalhaes
 The South Atlantic passive continental margin evolution in Brazil and Southern Africa derived from published AFT ages
- A52 EGU2011-11328
Claudio Riccomini and Carlos Tomba
 Stress fields and emplacement of dike swarms during Early Cretaceous rifting in Southern Brazil
- A53 EGU2011-336
Sebastian Kollenz, Ulrich A. Glasmacher, Ricardo Pereyra, and Eduardo A. Rosello
 Thermal history, exhumation, uplift, and long-term landscape evolution of the South Atlantic passive continental margin in eastern Argentina
- A54 EGU2011-493
Vinicius Tieppo Meira, Mario da Costa Campos Neto, Pablo Diego González, Miguel Ángel Stipp Basei, and Ricardo Varela
 Structural evolution of Sierra de Umango, Western Sierras Pampeanas, Northwestern Argentina: the polyphase tectonic history of the proto-Andean margin of Gondwana
- A55 EGU2011-4775
Flora Boekhout, Richard Spikings, Thierry Sempere, Alexey Ulianov, and Urs Schaltegger
 New geochronological constraints on the Late Paleozoic to Jurassic of coastal southern Peru
- A56 EGU2011-4668
Sophie Demouy, Michel De Saint-Blanquat, Thierry Sempéré, Mathieu Benoit, Sonia Rouse, and Jean-Louis Paquette
 Late Cretaceous rapid arc growth in the Arequipa area of southern Peru : the birth of the Andes?
- A57 EGU2011-2650
Ryan Cochrane, Richard Spikings, Wilfried Winkler, Alexey Ulianov, and Massimo Chiaradia
 Triassic to Early Cretaceous tectonic evolution of Ecuador: insights from U-Pb LA-ICP-MS geochronology, geochemistry and provenance studies
- A58 EGU2011-7138
Richard Spikings and Diego Villagomez
 Rock uplift and exhumation of continental crust in response to the collision of heterogeneous oceanic crust, examples from the northern, central and southern Andes
- A59 EGU2011-2601
Roelant van der Lelij, Richard Spikings, Alexey Ulianov, and Massimo Chiaradia
 From the Rheic Ocean to the Proto-Caribbean Sea in Venezuela: 300 Million Years of Magmatism in the Northern Andes

GMPV1 – Magma generation and differentiation: Field, analytical, experimental and numerical investigation of magmatic and volcanic systems – Orals

Convener: Valentin Troll | Co-Conveners: Ralf Gertisser, Carmela Freda

Room: 20

Chairperson: C. Freda, V.R. Troll

- 08:30–08:45 EGU2011-9492
Kiyemet Deniz and Yusuf Kagan Kadioglu
 Nature of Potassium rich alkaline rocks in Central Anatolia: Buzlukdagi Syenitoids (Kirsehir-Turkey)
- 08:45–09:00 EGU2011-6888
Teresa Ubide, Enrique Arranz, Marceliano Lago, Carlos Galé, Patricia Larrea, and Pablo Tierz
 Magma differentiation and recharge processes: evidence from clinopyroxene compositions (Catalonian Coastal Ranges, northeast Spain)
- 09:00–09:15 EGU2011-10363
Pier Paolo Giacomoni, Massimo Coltorti, and Carmelo Ferlito
 Plagioclase as a record of the magma ascent dynamics during 2001-2006 eruptions at Mt. Etna (Italy)
- 09:15–09:30 EGU2011-9850
Elliot Hildner and Andreas Klügel
 Geobarometric data of the magma plumbing system of Fogo volcano, Cape Verde Archipelago
- 09:30–09:45 EGU2011-2031
Silvio Mollo, Keith Putirka, Gianluca Iezzi, Pierdomenico Del Gaudio, and Piergiorgio Scarlato
 Interpreting plagioclase-melt (dis)equilibrium due to cooling dynamics: implications for thermometry, barometry and hygrometry

- 09:45–10:00 EGU2011-13328
Éva Jankovics, Szabolcs Harangi, and Theodoros Ntaflou
 Open-system evolution of the Fűzes-tó alkaline basaltic magma: results from integrated textural and chemical analysis of minerals (western Pannonian Basin, Hungary)

COFFEE BREAK

Chairperson: C. Freda, V.R. Troll

- 10:30–11:00 EGU2011-12232
Nicholas T. Arndt
 Magma dynamics in the Siberian LIP
- 11:00–11:15 EGU2011-7082
Matteo Masotta, Carmela Freda, and Mario Gaeta
 Experimental constraints on the origin of aphyric phonolitic magmas
- 11:15–11:30 EGU2011-12285
Balázs Kiss, Szabolcs Harangi, and Theodoros Ntaflou
 The origin of dacite of the Ciomadul (Csomád) volcano (SE Carpathians)
- 11:30–11:45 EGU2011-1381
Rais Latypov and Sofya Chistyakova
 New insights into petrogenesis of basaltic magma conduits from chemical zonation of small dolerite dykes
- 11:45–12:00 EGU2011-6359
Philippe Yamato, Romain Tartèse, Thibault Duret, and Dave A. May
 Numerical modelling of magma transport in dykes

LUNCH BREAK

Chairperson: C. Freda, V.R. Troll

- 13:30–13:45 EGU2011-3992
Soraya Heuss Assbichler, Esmail Elahpour, Alexander Rocholl, and Ilenia Arienzo
 New information about petrogenetical characteristics of volcanic rocks in northeast region of Birjand - east of Iran
- 13:45–14:00 EGU2011-1940
Nicole Schroth and Bramley J Murton
 Evidence of mantle heterogeneity underneath slow-spreading ridges? Case-study at 45°N mid-Atlantic ridge
- 14:00–14:15 EGU2011-8466
Anne-Sophie Tabaud, Philippe Rossi, Etienne Skrzypek, Hubert Whitechurch, and Karel Schulmann
 The mafic-felsic blended Variscan Mg-K magmatism in the Vosges massif (France) as the result of mantle-crust interaction in a superhot orogen
- 14:15–14:30 EGU2011-1661
Pierre Bouilhol, Max W. Schmidt, and Jean-Pierre Burg
 Transfer and evolution of arc magma within lower crustal conduits
- 14:30–14:45 EGU2011-4911
Fiona Meade, Valentin Troll, Robert Ellam, Laura Font, Carmela Freda, Jane Chadwick, and Nicola Stephen
 Temporal constraints on crustal contamination: whole-rock and crystal-scale evidence from the Carlingford Igneous Centre, Ireland
- 14:45–15:00 EGU2011-6936
Sebastian Wiesmaier, Valentin R. Troll, Juan Carlos Carracedo, Rob Ellam, Ilya Bindeman, John A. Wolff, and Frances M. Deegan
 Bimodality of Lavas in the Post-Icod-Collapse succession in Tenerife - A crustal melting origin for the Teide-Pico Viejo phonolites?

Chairperson: C. Freda, V.R. Troll

- 15:30–16:00 EGU2011-9037
Luigi Dallai, Raffaello Cioni, Chiara Boschi, and Claudia D'Oriano
 Carbonate-derived CO₂ purging magma at depth: constraints from the O-isotope geochemistry of Somma-Vesuvius mafic products

- 16:00–16:15 EGU2011-10372
Ester Jolis, Troll Valentin, Chris Harris, Camela Freda, Giovanni Orsi, Claus Siebe, and Mario Gaeta
 Stable isotopes in skarn xenoliths: constraining magma-carbonate interaction at Vesuvius, Italy
- 16:15–16:30 EGU2011-10186
Margaret Hartley, Thor Thordarson, and Godfrey Fitton and EIMF
 Oxygen isotopes in melt inclusions and groundmass glasses from the Askja volcanic system, north Iceland
- 16:30–16:45 EGU2011-7437
Steffi Burchardt, Valentin R. Troll, Harro Schmeling, and Hemin Koyi
 The mysterious fate of stoped blocks in magma chambers - a story of disintegration, assimilation, sinking, and floating
- 16:45–17:00 EGU2011-3627
Yuriy Litvin
 Mantle origin of diamond-parent carbonatite magma: experimental approaches

GMPV1 – Magma generation and differentiation: Field, analytical, experimental and numerical investigation of magmatic and volcanic systems – Posters

Convener: Valentin Troll | Co-Conveners: Ralf Gertisser, Carmela Freda

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: C. Freda, V.R. Troll

- XY253 EGU2011-788
Anne Schöpa and Catherine Annen
 Generation of large magma reservoirs in the upper crust and their ability to differentiate
- XY254 EGU2011-360
Cem Yücel, Mehmet Arslan, Emel Abdio?lu, ?rfan Temizel, and Gilles Ruffet
 Volcanic facieses and mineral chemistry of Tertiary alkaline volcanic rocks in the eastern Pontides, NE Turkey
- XY255 EGU2011-470
Abdolreza Jafarian
 Geochemical Signatures of Bazman Volcano: Evidence from Makran Subduction Zone, Southeast Iran
- XY256 EGU2011-657
 Mark Allen, **Monireh Kheirkhah**, and Mohamad Emami
 Late Cenozoic, syn-collision magmatism from the Turkish-Iranian plateau, Hamadan region, Iran
- XY257 EGU2011-2027
Mehmet Arslan, Cem Yücel, ?rfan Temizel, and Emel Abdio?lu
 Adakitic- and lamproitic- like (?) source signatures in the Tertiary alkaline volcanics of Trabzon (NE Turkey) area: implications for petrogenesis and mantle source characteristics
- XY258 EGU2011-2028
 Gianluca Iezzi, **Silvio Mollo**, Guglielmo Torresi, Guido Ventura, Andrea Cavallo, and Piergiorgio Scarlato
 Experimental solidification of an andesitic melt by cooling
- XY259 EGU2011-2146
Vartan Simmonds, Ali Asghar Calagari, and Mohsen Moayyed
 Petrology and petrogenesis of Kighal-Barmolk Porphyry Stock (North of Varzeghan, East Azarbaijan Province, NW Iran)
- XY260 EGU2011-2496
?rfan Temizel and Mehmet Arslan
 Petrochemical and Sr-Nd isotopic evidences of assimilation-fractional crystallization and magma mixing in Eocene aged collisional volcanics in the Ulubey (Ordu) area, NE Turkey
- XY261 EGU2011-2990
Zekiye Karac?k and ?.Can Genç
 Volcano-stratigraphy of the extension-related silicic volcanism in the Çubukludag graben, western Turkey: implications for generation of the phretomagmatic eruptions triggered by dome emplacement
- XY262 EGU2011-3465
Manon Hardiagon, Valentin Troll, Hans Annersten, Benjamin van Wyk de Vries, Dougal Jerram, Abigail Barker, and Estelle Piquet
 Explosive interaction between the crust and magma in the Beaunit tuff ring, Chaîne des Puys, France
- XY263 EGU2011-3724
Haraldur Páll Gunnlaugsson, Lars Peter Salmonsén, and Christian Tegner
 Mössbauer Spectroscopy of Samples from the Skaergaard Intrusion
- XY264 EGU2011-3938
Teh-ching Liu, Ming-yu Hsu, and Chin-pao Cheng
 An experimental petrological study of a picrite of Fushing, Taoyen County, Taiwan

- XY265 EGU2011-4031
Karoly Hidas, Carlos J. Garrido, Guillermo Booth-Rea, Fernando Gervilla, Jean-Louis Bodinier, Andrea Tommasi, and Claudio Marchesi
 Magma migration and channeling during melting of the subcontinental lithospheric mantle: layered dunite-harzburgite-Iherzolite bodies below the recrystallization front of the Ronda peridotite massif, southern Spain
- XY266 EGU2011-4251
 Orhan Karsli, ?brahim Uysal, **Murat Ketenci**, Abdurrahman Dokuz, Raif Kandemir, and Jan Wijbrans
 Adakite-like granitoid porphyries, Eastern Turkey: potential parental melts and geodynamic implications
- XY267 EGU2011-4425
Sevcan Kürüm
 SEM-EDX Imaging K-feldspar megacrystals: Subvolcanic syenitic rocks, Keban-Elazig, Eastern Turkey
- XY268 EGU2011-5418
Vera Egorova and Rais Latypov
 Marginal Reversal of the Imandra Layered Intrusion, Russia: Insights into Processes Operating During the Initial Stage of Magma Chamber Evolution
- XY269 EGU2011-5422
Yu-Chin Lin, Sun-Lin Chung, Arkadi Karakhanyan, Ruben Jrbashyan, Gevorg Navasardyan, Ghazar Galoyan, Han-Yi Chiu, I-Jhen Lin, Chiu-Hung Chu, and Hao-Yang Lee
 Geochemical and Sr-Nd Isotopic Constraints on the Petrogenesis of Pre- to Post-collisional Volcanic Rocks in Armenia
- XY270 EGU2011-6701
Antonio Castro, Joan Martí, Iñaki Moreno-Ventas, and Adelina Geyer
 Magma mingling caused by explosive fragmentation during magma chamber replenishment
- XY271 EGU2011-6767
 Antonio Castro, Rocio Pedreira, and **Sandra Carrasquilla**
 New experimental constraints on the origin of rapakivi texture in granitoids
- XY272 EGU2011-6830
Sergey Kostrovitsky
 Alkalic and carbonate components of kimberlites, - their origin
- XY273 EGU2011-6867
Patricia Larrea, Marceliano Lago, Zilda França, Elisabeth Widom, Carlos Galé, Teresa Ubide, Victor Hugo Forjaz, Oscar Pueyo, Enrique Arranz, and Pablo Tierz
 Magma chamber recharge in Corvo volcanic island (Açores, Portugal)
- XY274 EGU2011-6870
Sandra Carrasquilla, Antonio Castro, Yamirka Rojas-Agramonte, and Antonio García-Casco
 Melting relations of tholeiitic and calc-alkaline amphibolites from the Mabujina Complex, Caribbean Cretaceous paleoarc
- XY275 EGU2011-6913
Sheng-Rong Song and Yu-Ming Lai
 Magma evolutions in the northern Luzon Arc
- XY276 EGU2011-7177
Antonio Castro and Laura Judith Bellos
 Inequivocal cotectic evolution in calc-alkaline tonalite-granodiorite batholiths, Velasco Cambro-Ordovician batholith, Famatina belt, Argentina
- XY277 EGU2011-7719
Valentin Troll
 Volatile Release from Crustal-Xenolith during Subvolcanic Magma Transport
- XY278 EGU2011-8296
Shasa Labanieh, Gilles Chazot, Joel Etoubleau, Aurelien Beaumais, Yves Fouquet, and Christophe Hemond
 Chemical composition of oceanic basalts near Futuna Island, SW Pacific
- XY279 EGU2011-10114
Pier Paolo Giacomoni, Carmelo Ferlito, Giuseppe Alesci, Massimo Coltorti, Carmelo Monaco, Marco Viccaro, and Renato Cristofolini
 The bilateral 2002/03 eruptive event at Mt. Etna: a link between NE and S Rift Systems
- XY280 EGU2011-10464
Carmela Freda, Mario Gaeta, Fabrizio Marra, Tommaso Di Rocco, Fernando Gozzi, Ilenia Arienzo, Biagio Giaccio, Piergiorgio Scarlato, and Jacopo Taddeucci
 The newly discovered, youngest lava flow of the Roman Province (Central Italy): volcanological, geochronological, and petrological data
- XY281 EGU2011-13359
Marco Viccaro, Eugenio Nicotra, Ian L. Millar, and Renato Cristofolini
 Mantle components and characteristics of the metasomatizing agent in the Mt. Etna magma source: insights from the Hf isotope composition of lavas

- XY282 EGU2011-6467
Tommaso Di Rocco, Silvio Mollo, Mario Gaeta, Carmela Freda, and Luigi Dallai
 Petrology of skarn and cumulate rocks: a record of magma-carbonate interaction phenomena
- XY283 EGU2011-11989
Frances M. Deegan, Valentin R. Troll, Abigail K. Barker, Jane P. Chadwick, Chris Harris, Audray Delcamp, and Juan Carlos Carracedo
 Crustal versus source processes on the North East volcanic rift zone of Tenerife, Canary Islands

GMPV16 – Volcanology and archaeology: understanding the impact of volcanic eruptions on human settlements and activity throughout history and prehistory – Posters

Convener: Sandro de Vita | Co-Conveners: Claude Albore Livadie, Mauro Antonio Di Vito, Elena Zanella

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Mauro A. Di Vito

- XY284 EGU2011-665
Emma Gatti, Adam Durant, Philip Gibbard, and Clive Oppenheimer
 Hydrological response to the Toba eruption as recorded in the Quaternary sediments of the Son river, Madhya Pradesh, India: implications for landscape evolution and Middle-Palaeolithic human settlements
- XY285 EGU2011-994
Ciprian Stremtan, Hasan Ashkanani, and Robert Tykot
 Establishing a Sourcing Database for pXRF, XRD, ICP-MS and Petrographic Analyses of Failaka Island (Kuwait) Ceramics in the Bronze Age
- XY286 EGU2011-1954
Elena Zanella, Enzo Ferrara, Laura Bagnasco, Annunziata Ollà, and Roberto Lanza
 Magnetite grain-size and sourcing of archaeological obsidians
- XY287 EGU2011-2162
Sebastian Vogel and Michael Märker
 Modeling the spatial distribution of AD 79 pumice and surge deposits of Somma-Vesuvius within the Sarno River plain (Campania, Italy)
- XY288 EGU2011-4600
Emma Johnston, Jeremy Phillips, and Costanza Bonadonna
 Reconstructing the tephra dispersal pattern from the Bronze Age eruption of Santorini using an advection-diffusion model
- XY289 EGU2011-4678
Jutta Geisweid and Holger Schaaff
 Volcanic origin and emplacement of the East Eifel tuff and its distribution as a building material since Roman times
- XY290 EGU2011-6585
 Roberto Sulpizio, Giacomo Eramo, Angela Gargallo, **Elena Zanella**, Luca Nodari, Umberto Russo, Mauro Antonio Di Vito, and Jim Bishop
 Estimation of deposition temperature of the Pomici di Avellino (Somma-Vesuvius, 3.8 ka BP) products at Afragola village (Naples, Early Bronze Age): understanding the anomalies of TRM carried by potsherds embedded in the PDC deposits
- XY291 EGU2011-6676
Heather Sangster, David Chester, Angus Duncan, and Neil Macdonald
 Human adjustments to the 1906 eruption of Vesuvius, Italy
- XY292 EGU2011-6896
Mauro Antonio Di Vito, Nicola Castaldo, Sandro de Vita, Elena Zanella, Giuseppe Vecchio, Roberto Lanza, and Tema Evdokia
 Human colonization and volcanic activity in the Eastern Campania Plain (Italy) between Early Bronze Age and 79 AD.
- XY293 EGU2011-7513
Mauro Antonio Di Vito, Giuliana Boenzi, Daniela Gianpaola, Marina Di Marco, Massimo D'Antonio, Marco Giglio, Silvana Iodice², Giovanna Ronga, Tiziana Matarazzo, Angela Mormone, and Monica Piochi
 Volcanic activity and human settlements from 8,000 years ago until the 16th century AD in the western part of the city of Naples (Italy)
- XY294 EGU2011-9877
Sandro de Vita, Mauro Antonio Di Vito, and Costanza Gialanella
 The 5th century BC "Ischia Porto Tephra
- XY295 EGU2011-13978
Guido Giordano
 Volcanoes and Human History: the Lake Albano Maar in Roman History and Mythology

- XY296 EGU2011-13999
Claude Albore Livadie, Mauro Antonio Di Vito, Jim Bishop, and Sandro de Vita
 The Plinian 'Pomici di Avellino' eruption of Vesuvius (Italy) and its impact on late Early Bronze Age settlements

GMPV17 – Alteration, very-low grade metamorphism and late fluid and porosity evolution of volcanic rocks – Posters

Convener: Hans-Joachim Massonne | Co-Conveners: Leo A. Hartmann

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: L.A. Hartmann

- XY297 EGU2011-387
Juan Cruz Martínez, Jorge A. Dristas, and Hans-J. Massonne
 Hydrothermal fluid flow evidenced by mineral alteration assemblages and chemistry of metamorphic rocks, sediments and volcanics on top of the southernmost Río de la Plata craton, eastern Argentina
- XY298 EGU2011-605
Emel Abdio?lu, Mehmet Arslan, and Cem Yücel
 Mineralogy and Chemistry of Zeolite Minerals in Tertiary Alkaline Volcanics around Trabzon Area, NE Turkey
- XY299 EGU2011-1719
olivier vidal, armelle baldeyrou, bertrand fritz, daniel beaufort, and bruno lanson
 Experimental study of the mineral evolution and associated mass transport under thermal gradient. Application to the thermal stability of low-temperature phyllosilicates
- XY300 EGU2011-3049
Hans-Joachim Massonne
 Alteration of a subvolcanic rock from the Rhenish Massif - complete or partial equilibration at very-low grade metamorphism?
- XY301 EGU2011-3236
Leonardo Manara Rosenstengel and Léo Afraneo Hartmann
 Low-temperature alteration of basalts leading to world-class deposits of amethyst geodes in the Ametista do Sul mining district, southernmost Brazil
- XY302 EGU2011-3249
Juliana Silva and Léo Afraneo Hartmann
 Discovery and description of gossans above amethyst deposits in altered volcanic rocks of the Paraná province, South America
- XY303 EGU2011-3253
Sandro Duarte, Léo Hartmann, Juliana Pertille, and Karine Arena
 Alteration, very-low grade metamorphism and geochemical modification of basaltic rocks in the Quaraí amethyst district, Paraná volcanic province, Brazil
- XY304 EGU2011-3783
 Marcus V. D. Remus, Léo A. Hartmann, and **João A. Toniolo**
 Low-temperature, hydrothermal base and precious metal deposits hosted by volcanic-sedimentary sequences of the Camaquã basin, southernmost Brazil
- XY305 EGU2011-3883
Viter Pinto and Léo Hartmann
 Epigenetic hydrothermal origin for the copper mineralization in the Vista Alegre district, Paraná volcanic province, southernmost Brazil
- XY306 EGU2011-4245
Leo A. Hartmann and Hans-Joachim Massonne
 Silicate to silica alteration in basalts and rhyodacites of the Paraná volcanic province and formation of giant amethyst geodes
- XY307 EGU2011-4375
Farhad Ahmadnejad and Batoul taghipour
 Geology and petrographic studies of the hydrothermal altered rocks in the Qolqoleh gold deposit, Kurdistan province, Iran
- XY308 EGU2011-8810
Joacir Thadeu Nascimento Medeiros, Leo Afraneo Hartmann, and Larissa Teixeira Petruzzellis
 Cavity opening and amethyst geode formation in altered basaltic rocks of the Paraná province, South America, evaluated with the finite element method
- XY309 EGU2011-8866
Arne Willner, Hans-Joachim Massonne, Sandra M. Barr, and Chris E. White
 Very-low- to low-grade metamorphism of mafic and felsic volcanic rocks in Avalonia of SE Cape Breton Island (Nova Scotia; Canada) as a result of collision

- XY310 EGU2011-9283
Polona Kralj and Peter Kralj
 Hydrothermal zeolites and related authigenic minerals in the Upper Oligocene to Lower Miocene Smrekovec Volcanic Complex
- XY311 EGU2011-11815
Caetano Juliani, Carlos Marcello Dias Fernandes, Lena Virgínia Soares Monteiro, Bruno Lager, and Carlos Mario Echeverri-Misas
 Very low-grade metamorphism and very well preserved epithermal mineralization in the Paleoproterozoic Uatumã LIP, southern Amazonian craton, Brazil

GMPV21/GD2.15 – Rock forming minerals: properties, information and constraints on petrological processes and numerical models (sponsored by EMU) (co-organized) – Orals

Convener: Roberta Oberti | Co-Conveners: James Connolly, Matthias Konrad-Schmolke, Elena Sokolova, Christian Chopin, Fernando Gervilla

Room: 31

Chairperson: Roberta Oberti

- 13:30–14:00 EGU2011-10703
Fabrizio Nestola
 A new approach to the study of mineral inclusions in diamond
- 14:00–14:15 EGU2011-8242
Frank Hawthorne
 Mechanistic controls on variations in chemical composition of amphiboles as a function of T and P
- 14:15–14:30 EGU2011-3388
Ross Angel, Lindsay Sochalski-Kolbus, Nancy Ross, Mario Tribaudino, and Fabrizio Nestola
 Towards a structure-based model for the thermodynamic properties of feldspars
- 14:30–15:00 EGU2011-8205
Darrell Henry and Barbara Dutrow
 Tourmaline as a petrogenetic indicator mineral: where are we in 2011?
 Chairperson: Matthias Konrad-Schmolke
- 15:30–15:45 EGU2011-3077
Richard White
 Thermodynamic modelling of metamorphism: promises, pitfalls and future directions
- 15:45–16:00 EGU2011-8438
Charles A. Geiger and Edgar Dachs
 Garnet: Current State of Knowledge & Future Research Directions
- 16:00–16:15 EGU2011-5103
Eleanor Green, Tim Holland, Roger Powell, and Richard White
 Progress in the development of an activity-composition model for silicate melt in THERMOCALC
- 16:15–16:30 EGU2011-11043
Patrick O'Brien
 Pseudosections, pseudo P-T paths and pseudo petrology: the difficulty of defining the reactive system when solving disequilibrium problems with an equilibrium method
- 16:30–16:45 EGU2011-5920
Lucie Tajčmanová, Rainer Abart, Gregor Neusser, and Dieter Rhede
 Growth mechanisms for decompression plagioclase rims around metastable kyanite from high-pressure felsic granulites (Bohemian Massif): A thermodynamic approach
- 16:45–17:00 EGU2011-10761
Taras Gerya and James Connolly
 Coupled petrological-thermomechanical modelling of lithospheric processes: methodology and examples

GMPV21/GD2.15 – Rock forming minerals: properties, information and constraints on petrological processes and numerical models (sponsored by EMU) (co-organized) – Posters

Convener: Roberta Oberti | Co-Conveners: James Connolly, Matthias Konrad-Schmolke, Elena Sokolova, Christian Chopin, Fernando Gervilla

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: E. Sokolova M. Konrad-Schmolke

- XY312 EGU2011-3969
Amir Ali Tabbakh Shabani
 Composition of Lens Form Ca-Al silicates in Biotite from Granitic Rocks of the Canadian Appalachians

- XY313 EGU2011-3975
Amir Ali Tabbakh Shabani
An Investigation on the Composition of Chlorite Replacing Biotite from the Canadian Appalachian granites
- XY314 EGU2011-6188
Norikatsu Akizawa, Shoji Arai, and Akihiro Tamura
Chromite and uvarovite in rodingites from the lowermost crust section of the Oman ophiolite: Possibility of Cr mobility in hydrothermal conditions
- XY315 EGU2011-6977
Annamaria Fornelli, Antonio Langone, Francesca Micheletti, Annarita Pascazio, and Giuseppe Piccarreta
Dating high-grade south European Variscan evolution: constraints from trace element chemistries of garnet, zircon and orthopyroxene on U-Pb zircon ages.
- XY316 EGU2011-12014
Guy Hovis, **Daniel Harlov**, Matthias Gottschalk, and Georg Schettler
Unit-cell data and XRD compositional indicators for fluorapatite-chlorapatite crystalline solutions
- XY317 EGU2011-12591
Azzurra Zucchini, Paola Comodi, Mauro Prencipe, Francesco Frondini, Catherine McCammon, and Tonci Balic Zunic
Cation disordering in dolomite: theoretical and experimental approach.
- XY318 EGU2011-8243
Clémentine Meiller, Teddy Parra, Eric Kohler, Gilles Wallez, and Fernanda De Mesquita Veloso
Clay molar volume variations during dehydration as a function of chemical composition, water activity and humidity
- XY319 EGU2011-11183
Roberta Oberti, Michele Zema, Massimo Boiocchi, Serena Tarantino, and Mark D Welch
HT-induced processes in monoclinic and orthorhombic amphiboles and their effects on thermodynamic models
- XY320 EGU2011-1660
Fabrizio Nestola, Daria Pasqual, Joseph R. Smyth, Davide Novella, Luciano Secco, Murli H. Manghani, Alberto Dal Negro, and Serena Tarantino
Elasticity data along the forsterite - fayalite solid solution
- XY321 EGU2011-3226
El Atrassi Fatima, Brunet Fabrice, Bouybaouene Mohamed, Chopin Christian, Chazot Gilles, and Boudouma Omar
Melting textures and microdiamonds preserved in graphite pseudomorphs from the Beni Bousera peridotite massif, Morocco
- XY322 EGU2011-1891
José Julián Esteban, Julia Cuevas, José María Tubía, Néstor Vegas, and Francisco Velasco
Birbirite occurrence in the Ronda peridotites (Betic Cordilleras, southern Spain)
- XY323 EGU2011-3461
Tom Andersen, Paul Carr, and Muriel Erambert
Siderite and zirconian pyroxene in the Mt Gibraltar microsyenite, New South Wales, Australia: Late magmatic mineralogy reflecting uncommon crystallization conditions and magma composition.
- XY324 EGU2011-10950
Maria Teresa Cristi Sansone and **Giovanna Rizzo**
Pumpellyite veins in the metadolerite of the Frido Unit (southern Appennines, Italy)
- XY325 EGU2011-6422
Marc Ulrich, Manuel Muñoz, Stéphane Guillot, Catherine Chauvel, Dominique Cluzel, and Christian Picard
Alteration of the New Caledonia ophiolite: Mineralogical and geochemical investigations
- XY326 EGU2011-9173
Fernando Gervilla, Isabel Fanlo, Thomas N. Kerestedjian, Ricardo Castroviejo, Jose Maria Gonzalez-Jimenez, Jose Alberto Padron, and José Feliciano Rodrigues
Alteration Mechanism of Chromite in Podiform Chromitites from two Metamorphosed Ophiolitic Complexes: Golyamo Kamenyane (Bulgaria) and Tapo (Peru)
- XY327 EGU2011-14043
Mark Welch, Fernando Camara, Roberta Oberti, Giacomo D. Gatta, and Nicola Rotiroti
Quantifying the stabilities of biopyriboles in Nature
- XY328 EGU2011-12189
Giovanna Agrosi, Eugenio Scandale, and Gioacchino Tempesta
Growth Marks of titanian-andradite crystals from Colli Albani (Italy)
- XY329 EGU2011-5992
Marie-Lola Pascal
Quartz solubility in H₂O-CO₂ fluids as function of H₂O density
- XY330 EGU2011-451
Florentina Cornelia Enea, Jeanette Taylor, Craig D Storey, and Horst R. Marschall
Rutile geochemistry and its potential use as a petrogenetic tool

- XY331 EGU2011-3748
Christiane Wagner and Marie-Lola Pascal
Multi-stage melt-rock interactions in peridotite xenoliths inferred from micro textural and chemical evidences.
- XY332 EGU2011-477
Charlotte Redler, Tim E. Johnson, and Richard W. White
Phase equilibria constraints on the pressure and temperature evolution of metapelites in the Ivrea Zone
- XY333 EGU2011-476
Barbara E. Kunz, Tim E. Johnson, and Richard W. White
A mid-crustal metamorphic field gradient in Val Strona di Omegna, Ivrea Zone, Italy: constraints from metabasic rocks
- XY334 EGU2011-13367
Tommaso Giovanardi, **Alberto Zanetti**, Maurizio Mazzucchelli, Tomoaki Morishita, Massimo Tiepolo, and Riccardo Vannucci
Magmatic sapphirine from gabbroic veins cutting the Finero mantle sequence (Southern Alps): Petrology, geochemistry and geodynamic context
- XY335 EGU2011-118
Hisako Shimizu, Toshiaki Tsunogae, and Mw Santosh
The stability of sapphirine in magnetite-bearing high oxygen fugacity granulites: a case study of the Madurai Block (Southern India) and the Inner Mongolia Suture Zone (North China)
- XY336 EGU2011-2041
Kam Kuen Wu and Guochun Zhao
Metamorphism of the Northern Liaoning Domain: Implications for the Tectonic Evolution of the Archean Basement Rocks of the Eastern Block, North China Craton
- XY337 EGU2011-686
Axel Zirkler, Tim E. Johnson, Richard W. White, and Thomas Zack
Modelling P-T conditions in the Cnoc an t'Sidhean supracrustal rocks of the Lewisian complex near Stoer, NW Scotland.
- XY338 EGU2011-690
Tobias Eberlei, Richard White, Tim Johnson, Kurt Stüwe, and Cornelia Roffeis
High-precision geobarometry across the Plattengneiss shear zone in the Koralpe, Eastern Alps, Austria
- XY339 EGU2011-4463
Pritam Nasipuri, Holger Stunitz, Jeřábek Petr, Erling J. Krogh Ravn, and Florian Füsseis
Mineral chemistry, geothermobarometry and P-T-X modelling of shear zone in gabbroic rock
- XY340 EGU2011-3948
Kazuhiro Ozawa, Jean-Louis Bodinier, Carlos Garrido, and Hiroko Nagahara
P-T-d history of Pyrenean peridotite massifs decoded by Al and Ca distribution in orthopyroxene megacrysts: synchronous operation of deformation and P-T change
- XY341 EGU2011-1326
Elizaveta Tumarkina, James A.D. Connolly, Yuri Podladchikov, and Santanu Misra
The effect of shear deformation on reaction kinetics: A coupled thermodynamical and mechanical model
- XY342 EGU2011-11886
olivier vidal, benoit dubacq, vincent deandrade, pierre lanari, and manuel munoz
local equilibrium and P-T-deformation-relative age mapping at the thin section scale
- XY343 EGU2011-12661
Hans Vrijmoed and Brad Hacker
Determining PT paths from garnet zoning using a brute-force computational method
- XY344 EGU2011-10294
Matthias Konrad-Schmolke, Patrick O'Brien, and Thomas Zack
Constraining the effect of fluid-rock interaction on amount and composition of subduction zone fluids using thermodynamic and trace element models
- XY345 EGU2011-10136
Michael Pöhle, Matthias Konrad-Schmolke, and Sandro Jahn
Two-dimensional thermodynamic and trace element models of subduction zones
- XY346 EGU2011-7539
Stephan Klemme
Calculated phase relations of depleted mantle lithosphere

GMPV25 – Progress in crystal growth and dissolution (co-sponsored by EMU) – Posters

Convener: Encarnación Ruiz-Agudo | Co-Conveners: Christine Putnis, Pedro Alvarez-Lloret, Rosa M. Espinoza-Marzal, Carlos Rodriguez-Navarro, Andrew Putnis

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Encarnacion Ruiz-Agudo

- XY347 EGU2011-274
Rosa M. Espinoza-Marzal and Manfred Heuberger
Study of crystal growth with a Surface Forces Apparatus
- XY348 EGU2011-378
Denis Gebauer
Pre-nucleation Clusters
- XY349 EGU2011-737
Maria Garcia Rios, Francesco G. Offeddu, Maria Gabriela Dávila, Jordi Cama, and Josep M. Soler
Experimental study of calcite dissolution and gypsum precipitation in acid brines
- XY350 EGU2011-882
Leo Pel
The crystallization of Na₂SO₄ as studied by a combination of time lapse microscopy and NMR
- XY351 EGU2011-1094
Noushine Shahidzadeh-Bonn and Julie Desarnaud
Dissolution and deliquescence/crystallization cycles: Importance of the kinetics of crystallization
- XY352 EGU2011-2079
Lurdes Fernández-Díaz, Manuel Prieto, Ángeles Fernández-González, and Nuria Sánchez-Pastor
On the development of solvent mediated transformations in the CaCO₃-H₂O system: The role of tetrahedral anions
- XY353 EGU2011-8060
Krzysztof Kudlacz, Encarnacion Ruiz-Agudo, and Carlos Rodriguez-Navarro
CARBONATION OF PORTLANDITE (Ca(OH)₂) - A PSEUDOMORPHIC, DISSOLUTION/PRECIPITATION REPLACEMENT REACTION
- XY354 EGU2011-8179
Melanie Denecker, Beatriz Menéndez, Ronan Hébert, and Ann Bourgès
Salt damage generated on limestone as a function of environmental conditions
- XY355 EGU2011-8279
Christine Putnis, Encarnacion Ruiz-Agudo, and Andrew Putnis
The role of the boundary fluid-mineral interface in the control of crystal growth
- XY356 EGU2011-9323
Encarnación Ruiz-Agudo, Christine V. Putnis, Lijun Wang, and Andrew Putnis
Ion-specific effects on spiral growth of calcite
- XY357 EGU2011-10163
Pedro Alvarez-Lloret, Alejandro B Rodríguez-Navarro, Giuseppe Falini, Simona Fermani, and Miguel Ortega-Huertas
Crystallographic relationship during hydrothermal conversion of calcitic sea urchin spine into apatite
- XY358 EGU2011-12019
Mara Schiro, Encarnación Ruiz-Agudo, and Carlos Rodriguez-Navarro
Enhanced Weathering of Stone by Salts: a Chemical Process
- XY359 EGU2011-12298
Giovanni Quarta, Angela Calia, Donato Colangiuli, and Mariateresa Lettieri
Salt action and damage in the Basilica of Santa Croce in Lecce (Southern Italy).

IG4/GMPV37 – Isotopic analytical methods, experimental approach, and 40Ar/39Ar dating in geosciences (co-organized) – Orals

Convener: Olivier Rouxel | Co-Conveners: Emmanuel Ponzevera, Fred Jourdan, Chrystèle Verati, Sylvain Gallet

Room: 41

Chairperson: Fred Jourdan / Olivier Rouxel

- 15:30–15:45 EGU2011-2349
Fei Wang
40Ar/39Ar thermochronology on North China craton: respond to the lithospheric thinning ?
- 15:45–16:00 EGU2011-7524
Clare J. Warren, Felix Hanke, and Simon P. Kelley
Re-evaluating the closure temperature concept in metamorphic rocks: when does 40Ar/39Ar dating constrain exhumation?
- 16:00–16:15 EGU2011-11841
Dan N. Barfod, Darren F. Mark, and Ross C. Dymock
Laser step-heating system for dating of young volcanic rocks by the 40Ar-39Ar method
- 16:15–16:30 EGU2011-6890
Bleuenn Gueguen, Olivier Rouxel, Emmanuel Ponzevera, Jeffry Sorensen, Brandy Toner, Andrey Bekker, and Yves Fouquet
Nickel isotope variations in natural systems and implications for their use as a geochemical tracer

- 16:30–16:45 EGU2011-7124
Stefan Weyer, Carolina Montoya Pino, Janine Noordmann, Greg Brennecke, Gwyn Gordon, Jens Fiebig, Bas van de Schootbrugge, Laura Wasylenki, and Ariel Anbar
 Application of multiple isotope proxies to reconstruct the paleoredox evolution of the oceans and oceanic basins
- 16:45–17:00 EGU2011-13630
Laure Sangely, Jane Poths, Olivier Bildstein, Firmino Fernandes, Axel Schwanhaeusser, and Takahiko Kitao
 Uranium isotopic analysis in micrometer-size particles using multi-collector Secondary Ion Mass Spectrometry (SIMS)

IG4/GMPV37 – Isotopic analytical methods, experimental approach, and $^{40}\text{Ar}/^{39}\text{Ar}$ dating in geosciences (co-organized) – Posters

Convener: Olivier Rouxel | Co-Conveners: Emmanuel Ponzevera, Fred Jourdan, Chrystèle Verati, Sylvain Gallet

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Emmanuel Ponzevera / Christele Verati

- A484 EGU2011-9006
Mauro Cesar Geraldés, Carlos Eduardo Miranda Mota, Fred Jourdan, Marcelo Santos Salomão, Natasha Stanton, and Cosme Neto
 $^{40}\text{Ar}/^{39}\text{Ar}$ age (64 Ma) of magnetic pole inversion recorded in the Morro de São João alkaline intrusion, Rio de Janeiro, Brazil
- A485 EGU2011-4254
Marnie Forster, Gordon Lister, Lloyd White, and Talat Ahmad
 Analysis of an apparent age spectrum from a pebble within the Indus Formation: a record of exhumation and inversion at the margin of a Himalayan metamorphic core complex
- A486 EGU2011-10216
Jan Wijbrans, Huaning Qiu, Rongguo Hu, and Fraukje Brouwer
 $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology by stepwise crushing
- A487 EGU2011-12926
Simon P. Kelley, Ethan F. Baxter, and Patricia L. Clay
 What are the implications of two diffusive pathways for natural argon in K-feldspar ?
- A488 EGU2011-2849
Fred Jourdan and Uwe Reimold
 The problem of ^{37}Ar & ^{39}Ar recoil redistribution in dating Ca-rich groundmass-like samples
- A489 EGU2011-13233
Rongguo Hu, Jan Wijbrans, Fraukje Brouwer, and Huaning Qiu
 Thermal history of Yukahe and Xitieshan UHP belts, North Qaidam, western China.
- A490 EGU2011-3564
Chieh-Yu Wu and Ching-Hua Lo
 Evolution of excess argon during shearing event: a case study in the Day Nui Con Voi Metamorphic Complex, Vietnam
- A491 EGU2011-576
Ho-Sun Lee, Young-Sun Song, and Kye-Hun Park
 Zircon U-Pb geochronology of Triassic granite gneiss from the central Yeongnam massif, South Korea and its tectonic implications.
- A492 EGU2011-2431
Klaus Jochum, Ulrike Weis, Brigitte Stoll, Dmitry Kuzmin, Dorrit Jacob, Andreas Stracke, Karin Birbaum, Daniel Frick, Detlef Günther, and Jacinta Enzweiler
 New reference values for NIST SRM 610-617 glasses following ISO guidelines
- A493 EGU2011-4587
Ségolène Saulnier, Claire Rollion-Bard, Nathalie Vigier, and Marc Chaussidon
 Mg isotope fractionation during calcite precipitation: an experimental study.
- A494 EGU2011-5419
Denis Scholz, Joachim Krause, Klaus Peter Jochum, Yvonne Kocot, Jan Tolzmann, and Meinrat Andreae
 Determination of U-isotope composition of silicate and carbonate reference materials for in-situ LA-ICPMS analysis by high precision MC-ICPMS
- A495 EGU2011-7533
Qichao Yang, Klaus Jochum, Brigitte Stoll, Ulrike Weis, Dmitry Kuzmin, Michael Wiedenbeck, and Heike Traub
 BAM-S005 Type A and B: New silicate reference glasses for microanalysis
- A496 EGU2011-12576
Thomas Meisel and Chris W. Dale
 Hydrofluoric acid is essential for accurate Re-Os isotopic analysis

- A497 EGU2011-13282
Anat Bernstein, Orfan Shouakar-Stash, Karin Ebert, Christine Laskov, Daniel Hunkeler, Simon Jeannotat, Kaori Sakaguchi-Söder, Stefan Cretnik, Ramon Aravena, and **Martin Elsner**
Compound-Specific Chlorine Isotope Analysis: A Method Comparison Study
- A498 EGU2011-13977
Olivier Rouxel, Raphaëlle Escoube, Huawen Qi, Stefan Lalonde, and Emmanuel Ponzevera
Germanium isotopic variations in seafloor hydrothermal systems and sedimentary rocks

GD5.1/GMPV41/SM4.5/TS6.9 – Subduction zone dynamics from the surface to the lower mantle (co-organized) – Orals

Convener: Susanne Buitter | Co-Conveners: Francesca Funiciello, Jeroen van Hunen, Marina Manea, Yildirim Dilek, Vlad Constantin Manea, Yujiro Ogawa

Room: 30

Chairperson: n.n.

- 08:30–08:45 EGU2011-6189
Jeroen van Hunen
Did flat subduction occur in the early Earth?
- 08:45–09:00 EGU2011-7050
Vlad Constantin Manea, Marta Perez-Gussinye, and Marina Manea
Overriding plate thickness, trench dynamics and flat-slab subduction
- 09:00–09:15 EGU2011-5413
Steven Skinner and Robert Clayton
Flat Slabs in Time and Space
- 09:15–09:30 EGU2011-5149
Luca Ferrari and Maria Teresa Orozco Esquivel
Evolution of Flat Subduction in the Central Trans-Mexican Volcanic Belt
- 09:30–09:45 EGU2011-9703
Tomoaki Morishita, Kenichiro Tani, and Yildirim Dilek
Melt composition variations in subduction initiation magmatism: constraints from the peridotites of the Izu-Bonin-Mariana forearc and the Eastern Mirdita ophiolite (Albania)
- 09:45–10:00 EGU2011-2919
Daniela Hunziker, Jean-Pierre Burg, Pierre Bouilhol, Sergej Sergeev, and Jafar Omrani
Trace element and SHRIMP data from the Remeshk-Mokhtaramabad and Fannuj-Maskutan ophiolites: Evidence for Late Jurassic subduction in N-Makran, SE Iran

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-8687
Diane Arcay, Serge Lallemand, and Arnauld Heuret
Dynamics of subduction interplate: Influence of lithosphere-asthenosphere interaction in the vicinity of the volcanic arc and possible relations to the interface seismogenic behavior
- 10:45–11:00 EGU2011-1673
Alexey Shulgin, Heidrun Kopp, Dirk Klaeschen, Frederik Tilmann, Ernst Flueh, Dieter Franke, and Yusuf Djajadihardja
Subduction offshore Northern Sumatra: crustal structure and earthquake ruptures segmentation.
- 11:00–11:15 EGU2011-6609
Teodoro Cassola
Mechanics of formation and evolution of Forearc basins
- 11:15–11:30 EGU2011-8231
Joya Tetreault and Susanne Buitter
Sinkers and floaters: Modern analogues of allochthonous accreted terranes
- 11:30–11:45 EGU2011-11929
Daniele Regis, Martin Engi, Daniela Rubatto, James Darling, and Michele Zucali
Constraints on scales and rates of tectonic mobility within continental collision zones: Case study from the Sesia Zone (Western Alps, NW-Italy)
- 11:45–12:00 EGU2011-1340
Michiel Gademan, Jaap Verbaas, Herman van Roermund, and Matthijs Hogerwerf
Evidence for a Finnmarkian (~500Ma) continental collision/subduction zone in the Central Belt of the Svea Nappe Complex, northern Jämtland-southern Västerbotten, Sweden; Constraints from chemical EMP monazite ages and orogenic mantle wedge garnet peridotite

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-7727
Muriel Gerbault
 Lithospheric scale rheological properties associated to the normal and flat slab domains along the Chilean Andes, insight from numerical models
- 13:45–14:00 EGU2011-13039
Jeffrey Ryan and Ivan Savov
 Globally Consistent Recognition of Slab-Derived Components in Volcanic Arcs, with Distinctions Based on Subduction-Zone Thermal Structures
- 14:00–14:15 EGU2011-1806
Stéphane Rondenay, Laurent Montési, and Geoffrey Abers
 A model for the formation of volcanic gaps by slab advance
- 14:15–14:30 EGU2011-7587
Alik Ismail-Zadeh, Satoru Honda, Igor Tsepelev, and Alex Korotkii
 Inverse retrospective thermo-mechanical modeling of lithosphere subduction
- 14:30–14:45 EGU2011-2774
Benjamin Guillaume, Monica Moroni, Francesca Funiello, Claudio Faccenna, and Joseph Martinod
 Subduction-induced mantle flow and dynamic uplift around the Patagonian slab window: insights from laboratory models
- 14:45–15:00 EGU2011-5007
Claudio Faccenna, Thorsten W. Becker, Serge Lallemand, Yves Lagabriele, Francesca Funiello, and Claudia Piromallo
 Subduction-triggered magmatic pulses: A new class of plumes?

Chairperson: n.n.

- 15:30–15:45 EGU2011-4720
Stefan Markus Schmalholz
 A simple analytical solution for slab detachment
- 15:45–16:00 EGU2011-2744
Zhonghai Li and Neil Ribe
 Scaling Laws for Free Subduction From 3D Boundary-Element Numerical Simulations
- 16:00–16:15 EGU2011-12447
Javier Quinteros and Stephan V. Sobolev
 Viscosity in transition zone and shallow lower mantle - Insight from numerical models of subduction
- 16:15–16:30 EGU2011-6769
Hana Cizkova and Arie van den Berg
 Subducted material at the bottom of the mantle
- 16:30–16:45 EGU2011-3113
Bernhard Steinberger, Trond H. Torsvik, and Thorsten Becker
 Subduction to the lower mantle: A comparison between geodynamic and tomographic models
- 16:45–17:00 EGU2011-8435
Patrizio Petricca and Eugenio Carminati
 State of stress in slabs as a function of large-scale plate kinematics: an approach with 2D and 3D numerical models

GD1.1/BG8.3/GMPV44/TS1.3 – Early Earth: from deep dynamics to surface life (co-organized) – Orals

Convener: Jeroen van Hunen | Co-Conveners: Emmanuelle J. Javaux, Nicolas Flament, Nicholas T. Arndt

Room: 3

Chairperson: n.n.

- 08:30–08:45 EGU2011-13451
David Fernandez-Remolar
 Long term preservation of biological molecules under acidic conditions supports their persistence in the old acidic sediments of Mars
- 08:45–09:00 EGU2011-5347
Elizabeth Chacon B., Ricardo Rodriguez-Ramirez, Augusto Rodriguez, and Carlos Gonzalez Leon
 Biosedimentary Signatures: revisiting the Huepac chert from the Tarahumara Formation
- 09:00–09:15 EGU2011-10214
Emmanuelle J. Javaux
 Macroevolution in early eukaryotes

- 09:15–09:30 EGU2011-13411
Woodward Fischer
 Si isotope ratios in ancient marine chert provide a test of hypotheses for the origin of Precambrian iron formation
- 09:30–10:00 EGU2011-3929
Martin Brasier, Richard Matthewman, Sean McMahon, and David Wacey
 Pumice as a remarkable substrate for the origin of life

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Orals

Convener: Thorvaldur Thordarson | Co-Conveners: Susan Loughlin, Sigrun Hreinsdottir, Halldór Björnsson, Séverine Moune

Room: 4

Chairperson: n.n.

- 13:30–13:45 EGU2011-12542
Magnus T Gudmundsson, Armann Hoskuldsson, Gudrun Larsen, Thor Thordarson, Bjorn Oddsson, Thordis Hognadóttir, Ingibjörg Jonsdóttir, Halldor Bjornsson, Nina G Petersen, and Eyjolfur Magnússon
 Eyjafjallajökull April-June 2010: An explosive-mixed eruption of unusually long duration
- 13:45–14:00 EGU2011-12221
Sigurlaug Hjaltadóttir, Kristin S Vogfjörð, and Ragnar Slunga
 A Seismological Image of the Eyjafjallajökull Plumbing System during 2009-2010
- 14:00–14:15 EGU2011-11656
Rikke Pedersen, Freysteinn Sigmundsson, Andrew J. Hooper, Sigrún Hreinsdóttir, Thóra Árnadóttir, Matthew J. Roberts, Páll Einarsson, Erik Sturkell, and Kurt L. Feigl
 Imaging the magmatic plumbing system at Eyjafjallajökull volcano, Iceland, through 18 years of surface deformation observations
- 14:15–14:30 EGU2011-12589
Olgeir Sigmarsson
 The dynamic magma mixing during the 2010 eruption of Eyjafjallajökull, Iceland.
- 14:30–14:45 EGU2011-9855
Jakob Klove Keiding and Olgeir Sigmarsson
 Geothermobarometry of the 2010 Eyjafjallajökull eruption
- 14:45–15:00 EGU2011-4184
Séverine Moune, Olgeir Sigmarsson, Pierre Schiano, Thorvaldur Thordarson, and Chris Hayward
 Volatile characterisations of Eyjafjallajökull volcano (Iceland): from the magmatic source at depth to the surface
- 15:00–15:15 EGU2011-11242
Michael Burton, Giuseppe Salerno, Alessandro La Spina, Andri Stefansson, and Hanna H. Kaasalainen
 Measurements of volcanic gas emissions during the first phase of eruptive activity of Eyjafjallajökull, April 2010

Chairperson: n.n.

- 15:30–15:45 EGU2011-14165
Ármann Höskuldsson and the Eyjafjallajökull eruption Team
 Eruption dynamics of the 2010 summit eruption at the Eyjafjallajökull volcano (Iceland): Magma fragmentation, tephra stratigraphy and transport
- 15:45–16:00 EGU2011-7983
Gudrun Nina Petersen, Þórður Arason, and Halldór Björnsson
 Observed interaction of the Eyjafjallajökull eruption plume and the ambient atmosphere
- 16:00–16:15 EGU2011-3476
Costanza Bonadonna, Genco Riccardo, Gouhier Mathieu, Pistolesi Marco, Alfano Fabrizio, Cioni Raffaello, Hoskuldsson Armann, and Ripepe Maurizio
 Tephra sedimentation during the 2010 Eyjafjallajökull eruption (Iceland) from deposit, radar and satellite observations
- 16:15–16:30 EGU2011-11112
 Julie Calkins, Claire Natrass, Ellie Harris, Marie Detienne, Nicola Myers, Leon van den Berg, and **Pierre Delmelle**
 Environmental impacts of ash deposition following the 2010 eruption of Eyjafjallajökull volcano, Iceland
- 16:30–16:45 EGU2011-2598
Claire Horwell, Peter Baxter, Sarah Hillman, and David Damby
 Respiratory health hazard assessment of ash from the 2010 eruption of Eyjafjallajökull volcano, Iceland.

16:45–17:00 EGU2011-13041

Andy Russell, Rob Duller, Andy Large, Anne-Sophie Mériaux, Matthew Roberts, Stuart Dunning, Qiuhua Liang, Jonathan Carrivick, Fiona Tweed, and Málfríður Ómarsdóttir
The sedimentary impact of jökulhlaups of contrasting rheology generated by the April 2010, Eyjafjallajökull eruption

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Posters

Convener: Thorvaldur Thordarson | Co-Conveners: Susan Loughlin, Sigrun Hreinsdóttir, Halldór Björnsson, Séverine Moune

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY378 EGU2011-12212

Thorvaldur Thordarson, Ármann Höskuldsson, Olgeir Sigmarsson, Magnús Guðmundsson, Eyjólfur Magnússon, and Freysteinn Sigmundsson

The 20 March to 12 April basaltic Fimmvörðuháls flank eruption at Eyjafjallajökull volcano, Iceland: course of events

XY379 EGU2011-10618

Armann Hoskuldsson, Thor Thordarson, Olgeir Sigmarsson, Magnús T Guðmundsson, Guðrún Larsen, Björn Oddsson, Eyjólfur Magnússon, and Þórdís Högnadóttir

The Fimmvörðuháls flank eruption 2010 Iceland, complex emplacement of basaltic lava flow onto ice and snow.

XY380 EGU2011-6792

Antonio Castro, Rocío Pedreira, and Joan Andújar

Phase equilibria and fractionation of 2010 Eyjafjallajökull flank basaltic eruption

XY381 EGU2011-3713

Haraldur Páll Gunnlaugsson, Kristine Albers Olsen, Sigurdur Steinthorsson, and Per Nørnberg

Mössbauer Spectroscopy and Electron Microscope Imaging of Samples from the 2010 Flank Eruption at Eyjafjallajökull

XY382 EGU2011-12147

Thorvaldur Thordarson, **Chris Hayward**, Séverine Moune, Margaret Hartley, Olgeir Sigmarsson, Ármann Höskuldsson, Magnús T. Guðmundsson, and Freysteinn Sigmundsson

The 20 March - 12 April 2010 Fimmvörðuháls eruption, Eyjafjallajökull volcano, Iceland: Volatile contents and magma degassing.

XY383 EGU2011-1371

Andreas Stohl and the Inversion Team

Time- and height-resolved fine ash emissions from the Eyjafjallajökull eruption

XY384 EGU2011-11612

Nicola Pergola, Gianluca Arcomano, Carolina Filizzola, Teodosio Lacava, Francesco Marchese, and **Valerio Tramutoli**

Satellite monitoring of Eyjafjallajökull (Iceland) volcano by means of Robust Satellite Techniques (RST)

XY385 EGU2011-3128

Patrick Chazette, **Marc Bocquet**, Philippe Royer, Victor Winiarek, Jean-Christophe Raut, Philippe Labazuy, Mathieu Gouhier, Melody Lardier, and Jean-Pierre Cariou

Lidar and modelling to study the Eyjafjallajökull ash concentrations

XY386 EGU2011-5484

Piet Stammes, Marc Allaart, Arnoud Apituley, Dave Donovan, Marijn de Haij, Wouter Knap, Deborah Stein Zweers, Gijs Tilstra, Olaf Tuinder, and Daan Voegelezang

Characterization of the Eyjafjallajökull volcanic ash cloud over the Netherlands from remote sensing observations

XY387 EGU2011-4255

Ina Mattis, Albert Ansmann, Matthias Tesche, Annett Skupin, Patric Seifert, Dietrich Althausen, Holger Baars, Anja Hiebsch, Jörg Schmidt, and Ulla Wandinger

Temporal development of the Eyjafjallajökull volcanic plume observed over Leipzig by Raman lidar and AERONET sun photometer

XY388 EGU2011-10359

Franco Marengo, Kate Turnbull, Ben Johnson, Jim Haywood, Stuart Newman, Alan Vance, James Dorsey, and Martin Gallagher

Airborne observations of volcanic ash in May 2010 from the FAAM research aircraft, using remote sensing and in-situ probes

XY389 EGU2011-8223

Fei Gao, Samo Stani?, Klemen Bergant, Tanja Bolte, Franco Coren, Tingyao He, Andrej Hrabar, Ana Mladenovi?, Janja Turši?, and Darko Veberič

Measurement Campaign of Icelandic Volcanic Ash During its Arrival to Slovenia in April 2010

- XY390 EGU2011-3496
Christian Rolf, Martina Krämer, and Cornelius Schiller
Ash particles and ice clouds during the Eyjafjalla eruption: Lidar observations and model simulations
- XY391 EGU2011-11698
Alan Vance, Franco Marenco, Sean Milton, Kate Turnbull, Mike Bush, and Andy Bushell
Stratosphere-Troposphere Exchange Involving the Eyjafjallajökull Volcanic Plume
- XY392 EGU2011-6512
Roland von Glasow, Alan Vance, Andrew J. S. McGonigle, Alessandro Aiuppa, Jeffrey L. Stith, and Kate Turnbull
Strong ozone loss in atmospheric plume of Eyjafjallajökull
- XY393 EGU2011-11178
Stefano Corradini, Luca Merucci, Alessandro Piscini, and Simona Scollo
SO₂ and ash simultaneous retrievals on 2010 Eyjafjallajökull eruption by using IR multispectral measurements. Insights into explosive volcanic processes.
- XY394 EGU2011-2115
Robin Campion, Lieven Clarisse, and Alain Bernard
Measuring SO₂ emissions of Eyjafjallajökull with the infrared images of ASTER satellite.
- XY395 EGU2011-7838
Klaus-Peter Heue and the CARIBIC Volcano Team
SO₂ and BrO observation in the plume of the Eyjafjallajökull volcano 2010: CARIBIC and GOME-2 retrievals

NH2.8/GMPV57 – Merapi volcano Central Java, Indonesia: dome collapses and centennial 2010 eruption (co-organized) – Orals

Convener: Philippe Jousset | Co-Conveners: Surono Surono, Marie Boichu, David J. Schneider, Maria Fabrizia Buongiorno

Room: 4

Chairperson: Surono and Philippe Jousset

- 08:30–08:45 EGU2011-4082
Birger-G. Luehr, Ivan Koulakov, Wolfgang Rabbel, Jochen Zschau, Antonius Ratdomopurbo, Kirbani Sri Brotopuspito, Pak Fauzi, and David P. Sahara
Fluid ascent and magma storage beneath Gunung Merapi
- 08:45–09:00 EGU2011-13522
Patrick Allard, Nicole Métrich, and Jean-Christophe Sabroux
Volatile and magma supply to standard eruptive activity at Merapi volcano, Indonesia.
- 09:00–09:15 EGU2011-5150
Supriyati Andreastuti, Fidel Costa, John Pallister, Sri Sumarti, Sri Subandini, Anjar Heriwaseso, and Yulianto Kurniadi
Petrology and pre-eruptive conditions of the 2010 Merapi magma
- 09:15–09:30 EGU2011-13937
Akhmad Solikhin, Hendra Gunawan, Suroro Surono, and Philippe Jousset
Volcanic tremor analysis during Merapi 2010 explosion sequences
- 09:30–09:45 EGU2011-9618
Fred Prata, Marie Boichu, Simon Carn, Lieven Clarisse, Elizabeth Ebert, Andrew Prata, and Andrew Tupper
Satellite and ground-based measurements of volcanic emissions during the Merapi 2010 eruption crisis
- 09:45–10:00 EGU2011-4721
Malte Westerhaus, Andreas Schenk, and Bernhard Heck
Quantification of dome growing and mass accumulation by double differential SAR-interferometry - a TanDEM-X application for volcano monitoring

COFFEE BREAK

Chairperson: Fabrizia Buongiorno and Marie Boichu

- 10:30–11:00 EGU2011-1182
Surono Surono, Akhmad Solikhin, Agus Budi Santoso, and Subandriyo Subandriyo
Merapi Crisis 2010: Declaring alert levels based on deformation and seismic data
- 11:00–11:15 EGU2011-3809
David Schneider, John Pallister, Julia Griswold, and Rick Wessels
The 2010 eruption of Merapi Volcano, Indonesia: Use of satellite remote sensing to support crisis response activities

- 11:15–11:30 EGU2011-4353
Christopher Davies and **Andrew Tupper**
Darwin VAAC Response to the 2010 Merapi Eruption
- 11:30–11:45 EGU2011-4400
Franck Lavigne, Edouard de Bézizal, Noer Cholik, Nurnaning Aisyah, Adrien Picquout, and Estuning Tyas Wulan Mei
Lahar hazards and risks following the 2010 eruption of Merapi volcano, Indonesia
- 11:45–12:00 EGU2011-9837
Atyanto Dharoko, Suratman Worosuprojo, Kirbani Sri Brotospito, Sudaryono Sastrosasmito, and **Langgeng Wahyu Santosa**
2010 Merapi Volcano Eruption: A Study of the Role of Geomorphology for Spatial Planning

NH2.8/GMPV57 – Merapi volcano Central Java, Indonesia: dome collapses and centennial 2010 eruption (co-organized) – Posters

Convener: Philippe Jousset | Co-Conveners: Surono Surono, Marie Boichu, David J. Schneider, Maria Fabrizia Buongiorno
Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Surono, Fabrizia Buongiorno, Marie Boichu, Dave Schneider and Philippe Jousset

- XY396 EGU2011-10907
Christoph Sens-Schönfelder and Ulrich Wegler
Passive seismological monitoring at Merapi volcano
- XY397 EGU2011-13699
Antonius Ratdomopurbo
The 2006 Eruption of Mt. Merapi: Seismic, Deformation and Dome Observation
- XY398 EGU2011-7741
Philippe Jousset and Agus Budi Santoso
Very-Long Period seismicity associated with magma intrusion of Merapi 2010 eruption
- XY399 EGU2011-1146
Agus Budi Santoso, Febri Sadono, Purwoto Purwoto, Sapari Dwiyo, and Philippe Jousset
Seismicity associated with the 2010 eruption of Merapi volcano, Central Java, Indonesia
- XY400 EGU2011-12973
Marie Boichu, Hanik Humadai, Yulianto Kurniadi, Fred Prata, Simon Carn, Lieven Clarisse, Philippe Jousset, and Clive Oppenheimer
Comparative evolution of degassing, eruptive activity and seismicity during the 2010 eruption of Merapi
- XY401 EGU2011-10314
Valentin Troll, David R. Hilton, Jane P. Chadwick, Ester M. Jolis, Martin Zimmer, Lara S. Blythe, and Frances M. Deegan
Crustal CO₂ liberation at Merapi volcano, Indonesia: an earthquake trigger?
- XY402 EGU2011-3611
Christian Bignami, Salvatore Stramondo, and Urs Wegmuller
Synthetic Aperture Radar Monitoring of Merapi Volcano 2010 eruption
- XY403 EGU2011-10530
Andre Cahyadi Kalia, Hendrik Zwenzner, André Twele, and Sandro Martinis
TerraSAR-X based image analysis for supporting disaster and crisis-management with respect to the 2010 volcanic eruption at Mt. Merapi (Java - Indonesia)
- XY404 EGU2011-10830
Gwendolyn Läufer, Sabine Rödelsperger, and Carl Gerstenecker
Continuous deformation monitoring of Merapi using optical and microwave tools
- XY405 EGU2011-13702
François Beauducel and **Made Agung Nandaka**
Pre and co-eruptive deformation field at Merapi volcano from kinematic GPS surveys in the summit area
- XY406 EGU2011-2748
Karim Kelfoun
A two-fluid model for block-and-ash flows and ash-cloud surge for the 1994 eruption of Merapi volcano (Indonesia).
- XY407 EGU2011-4312
Sylvain Charbonnier, Ralf Gertisser, Jörg Keller, Xavier Quidelleur, Chuck Connor, and Tim Dixon
Re-assessment of the geological evolution and associated hazards of Merapi Volcano
- XY408 EGU2011-8075
Goneri Le Cozannet and the Le Cozannet G. Team
Setting up a volcanic hazard and risk knowledge database: risk and hazard mapping, WebGIS mapping and scenario building within the MIAVITA project

- XY409 EGU2011-8671
Pierre Thierry, **Philippe Jousset**, Surono Surono and the MIAVITA's Team
Merapi volcano 2010 crisis: a case study for implementing the FP7 MIAVITA European project
- XY410 EGU2011-10269
Antonio Spanu, Sara Barsotti, Augusto Neri, Luca Nannipieri, and M. Fabrizia Buongiorno
A procedure to forecast volcanic ash dispersal: Application to the 2010 Mt. Merapi's eruption
- XY411 EGU2011-2552
Claire Horwell, David Damby, and Peter Baxter
A mineralogical and toxicological assessment of the health hazard of ash from the 2010 Merapi eruption
- XY412 EGU2011-13464
Mary-Ann del Marmol, Chris. G. Newhall, John Fournelle, and Bruce D. Marsh
Revisiting petrology and geochemistry of Merapi volcano, Central Java, Indonesia.
- XY413 EGU2011-14210
Anastassia Y. Borisova, Caroline Martel, Indyo Pratomo, Jean-Paul Toutain, Sophie Gouy, Jean-Philippe Métaixian, and Surono Surono
First Petrologic and Geochemical Data on the 2010 Merapi Eruption (Indonesia)
- XY414 EGU2011-10518
Katie Preece, Jenni Barclay, Ralf Gertisser, and Richard Herd
Petrological evidence of magma storage, ascent and extrusion at Merapi volcano, Java, Indonesia

Tuesday, 05 April

GD4.2/TS5.7 – Evolution of the North and South Atlantic, adjacent continents, and passive continental margins in general (co-listed) – Orals

Conveners: Ulrich Anton Glasmacher, Peter Japsen, Dominique Chardon | Co-Conveners: Anicet Beauvais, Johan M. Bonow, Hans-Peter Bunge, Peter R. Cobbold, Ana Franco-Magalhaes, François Guillocheau, Peter C. Hackspacher, Per Terje Osmundsen, Martyn Stoker, Magdalena Scheck-Wenderoth, Robert B. Trumbull, Nicky White

Room: 30

Chairperson: n.n.

- 08:30–08:45 EGU2011-6951
Nicky White
Spatial and Temporal Variation of Dynamic Topography on Earth
- 08:45–09:00 EGU2011-5828
James Chalmers
Flow of material under compression in the weak layers of continental crust can cause post-rift uplift of passive continental margins
- 09:00–09:15 EGU2011-7581
Sascha Brune, Anton A. Popov, and Stephan V. Sobolev
Three-dimensional numerical experiments on oblique rifting
- 09:15–09:30 EGU2011-6001
Eline Le Breton, Peter R. Cobbold, Pierrick Roperch, and Olivier Dauteuil
Ridge-plume interaction and differential spreading along the northern North Atlantic ridge and resulting Cenozoic compressional deformation of the NE Atlantic margin
- 09:30–09:45 EGU2011-3312
Tim Redfield and Per Terje Osmundsen
Mesozoic crustal architecture defines Scandinavia's present-day geomorphology
- 09:45–10:00 EGU2011-14109
Paul F. Green, Ian R. Duddy, Peter Japsen, Johan Bonow, and James Chalmers
Episodic thermal and burial/exhumation histories along passive margins revealed by AFTA demand an explanation

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-4169
François Guillocheau, Dominique Chardon, Dominique Frizon de Lamotte, Cécile Robin, Delphine Rouby, and Olivier Dauteuil
Palaeogeographic and tectonic evolution of Africa during Cenozoic times
- 10:45–11:00 EGU2011-1500
Jean Braun, Robert Moucha, François Guillocheau, and Andrew Bush
Coupled mantle, erosion and climate models to explain recent geological events in the African continent.
- 11:00–11:15 EGU2011-4915
Katherine Dobson, Roderick Brown, Rhona MacDonald, Kerry Gallagher, and Finlay Stuart
Constraining the Cenozoic evolution of South Africa using (U-Th)/He thermochronology: the influence of dynamic topography at a passive margin
- 11:15–11:30 EGU2011-760
Miriam Wiegand, Robert B. Trumbull, and Reinhard O. Greiling
Dyke emplacement at the incipient Namibian margin - Structural and anisotropy of magnetic susceptibility (AMS) studies in a dyke swarm
- 11:30–11:45 EGU2011-2644
Michel Seranne, Christopher Lacan, Olivier Bruguier, Pierre Giresse, Zahie Anka, and Mathieu Moussavou
Coupled sedimentary evolution of the Congo Basin and equatorial west-African Margin : a Cainozoic record of tectonic and climate forcings
- 11:45–12:00 EGU2011-2237
Friederike U. Bauer, Matthias Starz, Ulrich A. Glasmacher, René W. Grobe, Meni Malikwisha, Vikandy S. Mambo, and Bin V. Mutete
Thermal and erosional evolution of the Albertine Rift in East Africa, evidence from the western rift shoulder (DRC)

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-59
Eduardo Rossello
 The pre-Mesozoic basement in the Atlantic rifted margin segment off Buenos Aires province (Argentina) and Uruguay: influences on the geometries and HC potential
- 13:45–14:00 EGU2011-2917
Julia Autin, Magdalena Scheck-Wenderoth, Markus J. Loegering, Zahie Anka, Eduardo Vallejo, Jorge F. Rodriguez, Denis Marchal, Fabian Dominguez, Christian Reichert, and Rolando di Primio
 Colorado Basin Structure and Rifting, Argentine passive margin
- 14:00–14:15 EGU2011-8646
Katharina Becker, Dieter Franke, Michael Schnabel, Bernd Schreckenberger, and Charlotte M. Krawczyk
 The stratigraphy and crustal structure of the rift shear transition off Argentina
- 14:15–14:30 EGU2011-1315
Gabriele Uenzelmann-Neben, Jens Gruetzner, and Dieter Franke
 Detailed seismic analysis of the Terraces sector in the southern Argentine Basin: implications for bottom water flow changes during the Neogene
- 14:30–14:45 EGU2011-160
Ana Olivia Franco-Magalhaes, Ulrich Anton Glasmacher, Peter Christian Hackspacher, Iata Anderson De Souza, and Antonio Roberto Saad
 Onshore fracture zones and their extension offshore in the South Atlantic: insights from geophysical anomalies and low-temperature thermochronology
- 14:45–15:00 EGU2011-3495
Nathan Cogné, Peter R. Cobbold, Claudio Riccomini, and Kerry Gallagher
 Evidence for post-rift reactivation in SE Brazil

GMPV2/IG20 – Magmas, Melts, and Magma Mixing: from lab to nature (including 2010 Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Orals

Convener: Kevin Klimm | Co-Conveners: Cristina De Campos, Max Wilke, Diego Perugini

Room: 20

Chairperson: Kevin Klimm

- 08:30–08:45 EGU2011-6543
Corrado Cimarelli, Antonio Costa, Sebastian Mueller, and Heidy M. Mader
 Rheology of magmas with bimodal crystal size and shape distributions: insights from analogue experiments
- 08:45–09:00 EGU2011-3220
Mattia Pistone, Luca Caricchi, Peter Ulmer, Eric Reusser, Federica Marone, and Luigi Burlini
 Rheology of Three-Phase Magmas
- 09:00–09:15 EGU2011-3899
 Rob English, Rhodri Williams, Tom Dobbie, David Heyes, and **Nick Petford**
 New experimental approaches on the rheology of magma slurries
- 09:15–09:30 EGU2011-1669
Bettina Scheu, Fabian Serr, and Donald B. Dingwell
 Phreatic and Hydrothermal Explosions - a Lab Approach
- 09:30–09:45 EGU2011-5427
Kelly Russell, Jim Nicholls, and Daniele Giordano
 A Model for the Calorimetric Glass Transition Temperature: Applications to Natural Systems
- 09:45–10:00 EGU2011-12490
Roman Botcharnikov, Robert Linnen, Francois Holtz, and Max Wilke
 Contrasting effects of S and Cl on the gold enrichment of magmas

COFFEE BREAK

Chairperson: Max Wilke

- 10:30–11:00 EGU2011-1404
Wim Malfait, Xianyu Xue, Rene Verel, Paola Ardia, and Carmen Sanchez-Valle
 The speciation of hydrous aluminosilicate glasses and melts: a view from NMR, infrared and Raman spectroscopy.
- 11:00–12:00 EGU2011-52
Mark S. Ghiorso
 Thermodynamic modeling of phase equilibria in magmatic systems: Progress and future directions (2010 Robert Wilhelm Bunsen Medal Lecture)

LUNCH BREAK

Chairperson: Cristina de Campos

- 13:30–13:45 EGU2011-2348
Marlina Elburg, Ingrid Smet, Elieen De Pelsmaeker, and Tom Andersen
 Contrasting forms of magma mixing on Methana and Santorini, Aegean Arc, Greece
- 13:45–14:15 EGU2011-7155
Diego Perugini, Cristina De Campos, Werner Ertel-Ingrisch, Donald Bruce Dingwell, and Giampiero Poli
 Unraveling the Complexity of Magma Mixing Processes and its Petrologic Implications: an Experimental and Numerical Approach
- 14:15–14:30 EGU2011-12629
Slaby Ewa, ?migielski Micha?, ?migielski Tomasz, Domonik Andrzej, Simon Klaus, and Kronz Andreas
 Crystal geochemical heterogeneities produced by mixing processes - probabilistic model of accordance between distributions of different elements
- 14:30–14:45 EGU2011-1789
Christophe Hemond, Myriam Janin, Bramley Murton, Evelyn Fűri, David Hilton, and Jerôme Dymont
 Central Indian ridge versus Reunion hotspot : Past and present interactions
- 14:45–15:00 EGU2011-12560
Joachim Krause, Valbone Memeti, and Scott R. Paterson
 10 Ma of recycling and mixing of magmas from batholith to single mineral scales in the Tuolumne batholith, Sierra Nevada, USA

GMPV2/IG20 – Magmas, Melts, and Magma Mixing: from lab to nature (including 2010 Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Posters

Convener: Kevin Klimm | Co-Conveners: Cristina De Campos, Max Wilke, Diego Perugini

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Diego Perugini

- XY392 EGU2011-1013
Vahid Ahadnejad and Ayyob Moradi
 Mixing/mingling as the main evolutionary processes of Malayer plutonic rocks, Sanandaj-Sirjan zone, west Iran.
- XY393 EGU2011-2898
Diego Perugini, Maurizio Petrelli, and Diego Perugini
 Transition to chaos and implications for time-scales of magma hybridization during mixing processes in magma chamber
- XY394 EGU2011-3933
Néstor Vegas, Javier Rodríguez, José Julián Esteban, Martin Feely, José María Tubía, and Julia Cuevas
 The sphene-centred ocellar texture: a powerful tool for understanding mingling processes.
- XY395 EGU2011-6511
Daniele Morgavi, Diego Perugini, Cristina De Campos, Yan Lavallée, Lisa Morgan, and Donald Bruce Dingwell
 The role of magma mixing between rhyolitic and basaltic magmas in the Bruneau-Jarbridge eruptive center, Snake River Plain (USA): an experimental study
- XY396 EGU2011-9117
Pavel Pokatashkin and Andrey Karakin
 Modeling of compaction in volcanic cameras
- XY397 EGU2011-9610
Sergey Kostrovitsky, Maya Kopylova, Kostya Egorov, Fuyuan Wu, Jing Sun, Dmitriy Yakovlev, and Tanya Kalashnikova
 The origin of so-called "exceptionally fresh" kimberlite of the Udachnaya-East pipe

- XY398 EGU2011-11080
Daniel Weidendorfer, Hannes B. Mattsson, and Peter Ulmer
 Magma mixing and hybridization processes in partially crystallized magma chambers: the Austurhorn intrusion (SE Iceland)
- XY399 EGU2011-11533
Cristina P. De Campos, Diego Perugini, Maurizio Petrelli, Stephan Kolzenburg, Alexander Dorfman, and Donald B. Dingwell
 Mixing Experiments with Natural Shoshonitic and Trachytic Melts: A comparative Study Under Contrasting Rheological and Fluid Dynamic Conditions
- XY400 EGU2011-11732
Cristina P. De Campos, Anders Wikström, Sebastian Lenz, Robert Heintz, Jennifer von-Maltzahn, Constantin Prins, Shiva Mohajer-Ashjaee, Stefanie Buggele, Bettina Muschallik, and Elisabeth Wagner
 Granites and Associated Basic Rocks in the Stavsjö Area, Sweden: a Historical Magma Mixing Province Revisited
- XY401 EGU2011-12617
Yusuf Kagan Kadioglu and Kiyomet Deniz
 A new approach in the interpretation of nature of Migmatitization and their Sources: Western Anatolia Turkey
- XY402 EGU2011-13284
 Marisa Giuffrida, **Marco Viccaro**, and Eugenio Nicotra
 Magma ascent, storage and recharge at Avachinsky volcano (Kamchatka, Russia): the 1991 effusive eruption
- XY403 EGU2011-12192
Rosanne Heistek, Yan Lavallée, Cristina De Campos, Kai-Uwe Hess, Klaus Heide, and Donald B. Dingwell
 Large-scale obsidian emplacement at Obsidian Cliff, Yellowstone (USA)
- XY404 EGU2011-7752
Jackie Kendrick, Elisabetta Mariani, Yan Lavallée, and Donald Dingwell
 Rheology and microstructure of experimentally deformed andesites from Volcan de Colima, Mexico: an EBSD study
- XY405 EGU2011-11346
Marcin Dabrowski
 Effective non-linear viscosity of a crystal-bearing melt
- XY406 EGU2011-6726
Volker Haigis and Sandro Jahn
 Trace element partitioning between silicate melts: thermodynamics from atomistic simulation
- XY407 EGU2011-1853
Sigurdur Jakobsson
 Controlling oxygen fugacity in piston cylinders
- XY408 EGU2011-9530
Jonathan Hanson, Fabian Goldstein, Yan Lavallée, Ulrich Kueppers, Jonathan M. Castro, and Donald B. Dingwell
 Experimental insight into the Explosive-Effusive eruption transition at Tungurahua volcano, Ecuador

GMPV6 – Fluids in the continental crust and in volcanic and hydrothermal systems – Orals

Convener: Orlando Vaselli | Co-Conveners: Tobias Fischer, Yuri Taran, Manuela Borchert, Stephan Klemme, Jean Cauzid

Room: 20

Chairperson: Manuela Borchert

- 15:30–15:45 EGU2011-11906
Linda Lerchbaumer and Andreas Audétat
 Preferential partitioning of copper into the vapor phase: fact or a natural artifact?
- 15:45–16:00 EGU2011-1761
Anke Watenphul and Christian Schmidt
 Ammonium in crustal and subduction zone fluids
- 16:00–16:15 EGU2011-3538
Julien Dubrail, Max Wilke, Christian Schmidt, Karen Appel, Sakura Pascarelli, Kristina Kvashnina, and Craig Manning
 High-field strength elements complexing in aqueous fluids at subduction zone P-T conditions
- 16:15–16:30 EGU2011-8885
Yuri Taran and Mikhail Zelenski
 Geochemistry of volcanic and hydrothermal gases of Mutnovsky volcano, Kamchatka: Evidence for mantle, slab and atmosphere contributions to fluids of a typical arc volcano
- 16:30–16:45 EGU2011-5658
Franco Tassi, Jens Fiebig, Matteo Nocentini, and Orlando Vaselli
 Origins of methane in volcanic and hydrothermal gas discharges as inferred from the chemical and isotopic signature of n-alkanes

16:45–17:00 EGU2011-180

Halim Mutlu, Nilgün Güleş, David R. Hilton, Harun Aydın, and Saemundur A. Halldórsson
Spatial variations in gas and stable isotope compositions of eastern Anatolian thermal fluids

GMPV6 – Fluids in the continental crust and in volcanic and hydrothermal systems – Posters

Convener: Orlando Vaselli | Co-Conveners: Tobias Fischer, Yuri Taran, Manuela Borchert, Stephan Klemme, Jean Cauzid

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Orlando Vaselli

XY409 EGU2011-1718

Manuela Borchert, Max Wilke, Christian Schmidt, and Jean Cauzid

Partitioning of Ba, La, and Y between haplogranitic melts and aqueous fluids: in-situ vs. ex-situ analysis

XY410 EGU2011-5338

Tom Raimondo and **Chris Clark**

Fluid-rock interaction in intracontinental shear zones: geochemical and tectonic responses

XY411 EGU2011-9543

Agnes Mazot, Orlando Vaselli, and **Barbara Nisi**Estimation of CO₂ flux from Lakes Monticchio, Mt Vulture, Southern Italy

XY412 EGU2011-5467

Huei-Wun Zou, Tsanyao Frank Yang, Shuichang Zhang, Pei-Ling Wang, Tefang Faith Lan, Hsiao-Fen Lee, and Hsin-Yi Wen

Sulfur isotopic compositions of fumarolic samples from TVG hydrothermal area in northern Taiwan

XY413 EGU2011-13134

Rossella Di Napoli and the Ischia Team

The Ischia Island hydrothermal system: an integrated multidisciplinary (geochemical, geophysical and geological) study

XY414 EGU2011-13569

Ruth Esther Villanueva Estrada, Rosa María Prol Ledesma, Dayan Rodríguez, Jazmín Rentería, Ezequiel Tobón, Viridiana Vázquez, and Alejandro Estradas

Trace elements in pore water of Wagner and Consag basins, Northern Part of Gulf of California, México.

XY415 EGU2011-317

Seyedeh Zahra Afshooni, Dariush Esmaeily, and Hooshang Asadi Haroni

Mass changes during hydrothermal alteration/mineralization in Kahang exploration area (north eastern of Isfahan, central of Iran)

XY416 EGU2011-962

David M. Tratt, David K. Lynch, Kerry N. Buckland, Stephen J. Young, Jeffrey L. Hall, and Mark L. Polak
Remotely-Sensed Ammonia Emission from Fumarolic Vents Associated with a Geothermally Active Fault in the Salton Sea Geothermal Field, California

XY417 EGU2011-7909

Xiaoyan Li and Kurt Bucher

Low-temperature Fluids and Reaction Veins in Nepheline Syenite from the Seiland Igneous Province, Northern Norway

XY418 EGU2011-8581

elisa morichon, daniel beaufort, thierry allard, and jean-pierre milesi

Alteration systems in the Shea Creek deposit (Athabasca Basin, Canada): contribution of radiation-induced defects in clay minerals for tracing past uranium migrations

XY419 EGU2011-8640

Freddy Uri, Daniel Beaufort, and Jean Luc Lescuyer

Alteration systems in the Shea Creek deposit (Athabasca, Canada): Vertical variability of clay alteration

XY420 EGU2011-9729

Anett Weisheit, **Paul Bons**, and Marlina Elburg

Preliminary results of a structural and geochemical analysis of a hydrothermal breccia system, Mount Painter Inlier, South Australia

XY421 EGU2011-11661

Orlando Vaselli, Franco Tassi, Daniele Tardani, Erik Fernandez, and Eliecer Duarte

The evolution of the Poàs magmatic/hydrothermal system in the last decade.

GMPV11 – New methods and concepts in volcanic geomorphology – Orals

Convener: Dávid Karátson | Co-Conveners: Balázs Székely, Massimiliano Favalli, Simone Tarquini

Room: 31

Chairperson: Dávid Karátson

- 13:30–13:45 EGU2011-2468
Gerhard Wörner, David Karátson, and Tamás Telbisz
 Erosion rates and erosion patterns of Neogene to Quaternary stratovolcanoes controlled by age and climate in the Altiplano plateau (Central Andes): an SRTM DEM based analysis
- 13:45–14:00 EGU2011-902
Pablo Grosse, Leonardo Euillades, Pablo Euillades, and Benjamin van Wyk de Vries
 DEM-based automatic characterization of volcano edifice morphometry
- 14:00–14:15 EGU2011-5638
Matthieu Kervyn, Pablo Grosse, and Benjamin van Wyk de Vries
 Quantitative analysis of the variability of volcanic shields' morphometry
- 14:15–14:30 EGU2011-13187
 Davide D'Amato, Luigia DiNicola, **Finlay Stuart**, Bruno Pace, and Francesco Visini
 Constraining the slip rate of active faults on Mt. Etna using cosmogenic He exposure dating of basalts
- 14:30–14:45 EGU2011-8444
Simone Tarquini, Massimiliano Favalli, and Alessandro Fornaciai
 Vertical tomomorphometric analysis of Etnean lava flows
- 14:45–15:00 EGU2011-9735
Dávid Karátson, Massimiliano Favalli, Simone Tarquini, Alessandro Fornaciai, and Gerhard Wörner
 The regular shape of stratovolcanoes with implications to eruptive characteristics: a DEM-based approach

GMPV11 – New methods and concepts in volcanic geomorphology – Posters

Convener: Dávid Karátson | Co-Conveners: Balázs Székely, Massimiliano Favalli, Simone Tarquini

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Simone Tarquini

- XY423 EGU2011-13895
 Mattia de' Michieli Vitturi, Ramon Arrowsmith, Alessandro Fornaciai, Massimiliano Favalli, and **Simone Tarquini**
 Erosional modification of cinder cones explored using non-linear diffusion with spatially variable diffusivity and applied to the 2002-2003 scoria cone complex (C2002) at Mount Etna, Italy
- XY424 EGU2011-13841
Dávid Karátson, Em?ke Fodor, Balázs Székely, and Szabolcs Harangi
 A DEM-analysis of the youngest (30 ka) volcano in the Carpathians: Ciomadul (Csomád), East Carpathians
- XY425 EGU2011-13408
Jorge Yepes, Martín Rodríguez-Peces, and Rodrigo Del Potro
 Geomorphologic evidences of an extensional NW-SE fault zone in the central sector of Gran Canaria (Canary Islands, Spain)
- XY426 EGU2011-1617
Melanie Brandmeier
 Remote sensing of Carhuarazo volcanic complex. Using ASTER imagery in Southern Peru to detect alteration zones and volcanic structures - a combined approach of image processing in ENVI and ArcGIS/ArcScene
- XY427 EGU2011-12556
Balázs Székely, Dávid Karátson, Melanie Brandmeier, Gerhard Wörner, Peter Dorninger, and Clemens Nothegger
 Erosional patterns of ancient ignimbrite paleosurface in the Central Andes
- XY428 EGU2011-12695
Em?ke Fodor, Dávid Karátson, and Tamás Telbisz
 Morphometric analysis of scoria cones in the Persani (Persányi) Mountains, East Carpathians
- XY429 EGU2011-7254
 Wouter van Gorp, **Arnaud Temme**, Jantiene Baartman, Jeroen Schoorl, and Tom Veldkamp
 A Landscape Evolution Model to study volcanic landscape evolution
- XY430 EGU2011-7776
Alessandro Fornaciai, Dávid Karátson, Massimiliano Favalli, and Simone Tarquini
 Scoria cones occurring in various volcanological settings: a DEM-based geomorphometric analysis
- XY431 EGU2011-12595
Tiffany Salvany, Pierre Lahitte, Pierre Nativel, and Pierre-Yves Gillot
 Morphological evolution throughout the last 1.4 Myr of Piton des Neiges volcano (Réunion Island, Indian Ocean): competition between volcanic construction and erosion.
- XY432 EGU2011-13272
Aurelie Germa-Charbonnier, Pierre Lahitte, and Xavier Quidelleur
 DEM-based palaeotopography reconstructions and evolution through time of the recent volcanoes in Martinique Island (Mount Conil and Mount Pelée).

- XY433 EGU2011-11761
Massimiliano Favalli, Simone Tarquini, and Alessandro Fornaciai
 Morphology-due uncertainties in gravity-driven mass movements on the Earth surface
- XY434 EGU2011-7910
Pierre Lahitte, Agnes Samper, and Xavier Quidelleur
 Geomorphological evolution through time of southern Basse-Terre volcanoes inferred from DEM-based reconstructions as estimations to the construction rates and magma production

GMPV22/TS1.5 – Geology of the North-Atlantic Craton (co-organized) – Orals

Convener: Nynke Keulen | Co-Conveners: Thomas F. Kokfelt, Jochen Kolb

Room: 31

Chairperson: Keulen, Kokfelt, Kolb

- 08:30–08:45 EGU2011-11428
Llewellyn Pilbeam
 The composition of Kimberlite from the Majuagaa dyke southern West Greenland a quantitative textural and chemical study.
- 08:45–09:00 EGU2011-13670
Tomas Næraa, Minik Rosing, Anders Scherstén, Elis Hoffmann, Thomas F. Kokfelt, and Tony Kemp
 Eo- to Mesoarchaeon crust formation in the Nuuk region, southern West Greenland. Constrains from combined U/Pb, Hf and O isotopes in zircon
- 09:00–09:15 EGU2011-2183
Hugh Rollinson
 LILE-depletion in the Archaean lower continental crust: the Lewisian granulites revisited
- 09:15–09:30 EGU2011-3170
Kristoffer Szilas, Vincent J. van Hinsberg, Alexander F.M. Kisters, Thomas F. Kokfelt, Anders Scherstén, and Brian F. Windley
 Remnants of Mesoarchaeon oceanic crust in the Tartoq Group, North Atlantic Craton, SW Greenland
- 09:30–09:45 EGU2011-10078
John C. Schumacher, Nynke Keulen, Charlotte Stamper, Gemma Sherwood, and Vincent van Hinsberg
 Metamorphism in southern West Greenland and South-West Greenland
- 09:45–10:00 EGU2011-10042
 Nicolas Benjamin Stoltz, **Annika Dziggel**, and Jochen Kolb
 Formation of garnet coronas during high-P retrogression in mafic granulites of the Mesoarchaeon Tasiusarsuaq terrane, southern West Greenland.

GMPV22/TS1.5 – Geology of the North-Atlantic Craton (co-organized) – Posters

Convener: Nynke Keulen | Co-Conveners: Thomas F. Kokfelt, Jochen Kolb

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Kolb, Kokfelt, Keulen

- XY435 EGU2011-10661
 Martin B. Klausen, **Thomas F. Kokfelt**, Nynke Keulen, Alfons Berger, and John C. Schumacher
 Tholeiitic 'komatiite'-basalt and calc-alkaline andesite-dacite succession in the Archaean Kvanefjord Area (South-West Greenland): A composite oceanic and volcanic arc suite?
- XY436 EGU2011-13662
Thomas Kokfelt, Anders Scherstén, and Tomas Næraa
 New geochronological evidence for a c. 3.1-3.2 Ga old cratonic core in the Fiskensæset area, South-West Greenland
- XY437 EGU2011-14038
Thomas Kokfelt, Nynke Keulen, Tomas Næraa, Anders Scherstén, and Tjerk Heijboer
 New zircon U/Pb age data from the Archaean craton, South-West and southern West Greenland (61°30'N - 64°00'N)
- XY438 EGU2011-7335
Timothy Johnson
 Evidence for partial melting in the central region of the Lewisian complex, Scotland
- XY439 EGU2011-7403
 Alfons Berger, **Thomas F. Kokfelt**, and Martin B. Klausen
 Geochemistry and petrology of border zones between mafic/ultramafic bodies and surrounding TTG gneisses (SW Greenland)

- XY440 EGU2011-10089
Martin Koppelberg, **Annika Dziggel**, Jochen Kolb, Denis Martin Schlatter, and Robert Flock
Alteration systematics and petrology of gold-bearing quartz veins on the island Qilangaarsuit, southern West Greenland.
- XY441 EGU2011-8427
Jochen Kolb, Denis M. Schlatter, Annika Dziggel, and Alexander F.M. Kisters
Orogenic gold mineralisation in the Archean North Atlantic craton, southern West and South West Greenland
- XY442 EGU2011-7359
Denis Martin Schlatter, Jochen Kolb, and Sara Edith Hoffritz
Characterization of host rocks and hydrothermal alteration of the Nuuluk gold occurrences in the Sermiligaarsuk Fjord area, South West Greenland
- XY443 EGU2011-10026
Vincent van Hinsberg, Alex Kisters, and Kristoffer Szilas
Constraining the geotectonic setting for the Archean Tartoq Group (SW Greenland) from its metamorphic and structural history
- XY444 EGU2011-12125
Kristoffer Szilas, Adam A. Garde, Anders Scherstén, Jeroen A.M. van Gool, and Claus Østergaard
Mesoarchaean premetamorphic hydrothermal alteration of tholeiitic basalt resulting in aluminous lithologies, Storø supracrustal belt, Nuuk region, southern West Greenland
- XY445 EGU2011-11114
Kristoffer Szilas, Anders Scherstén, J. Elis Hoffmann, Thomas F. Kokfelt, Vincent J. van Hinsberg, Brian F. Windley, and Carsten Münker
Linking the Ravns Storø and Bjørnesund supracrustal belts (SW Greenland) using Lu-Hf and Sm-Nd isotopic data and whole-rock geochemistry
- XY446 EGU2011-8525
Nynke Keulen, John C. Schumacher, Vincent J. van Hinsberg, Kristoffer Szilas, Brian F. Windley, Thomas F. Kokfelt, Denis M. Schlatter, and Anders Scherstén
The Bjørnesund anorthosite-greenstone belt - a link between the Fiskenæsset complex and the Ravns Storø metavolcanic belt, southern West Greenland
- XY447 EGU2011-8660
Nynke Keulen, Thomas F. Kokfelt, Alfons Berger, and John C. Schumacher
Archean tectonics in the Paamiut region, South-West Greenland
- XY448 EGU2011-14021
Bo M. Stensgaard, Jochen Kolb, Troels F.D. Nielsen, and Kristine Thrane
The Archean craton and Palaeoproterozoic mobile belt in South-East Greenland: an overview of our current understanding
- XY449 EGU2011-12336
Nynke Keulen, Thomas F. Kokfelt and the Homogenisation* Team
A 1:100 000 web-accessible geological map of southern West and South-West Greenland (61°30' - 64°N)
- XY450 EGU2011-13675
Emma F. Rehnström (compiler)
64 V.2 Syd. Kapisillit: A new geological 1:100 000 map sheet in the Nuuk area, SW Greenland

GMPV23/TS3.2 – Nanoscale Processes in Geological Materials (co-sponsored by EMU) (co-organized) – Orals

Convener: Wilhelm Heinrich | Co-Conveners: Rainer Abart

Room: 31

Chairperson: Rainer Abart

- 10:30–10:45 EGU2011-6790
Katharina Marquardt (née Hartmann)
Bicrystals to study grain boundary diffusion: special vs. random grain boundaries
- 10:45–11:00 EGU2011-4143
Natalia Khisina and Richard Wirth
Oriented chromite-diopside symplectites in lunar olivine
- 11:00–11:15 EGU2011-6632
Friedrich Lucassen, Gerhard Franz, Rolf L. Romer, Richard Wirth, Matthias Weise, and Andreas Hertwig
The rutile-titanite reaction: (I) 3D-View of a reaction front for a dissolution-precipitation reaction
- 11:15–11:30 EGU2011-3101
Bastian Joachim, Emmanuel Gardés, Rainer Abart, and Wilhelm Heinrich
The effect of water on the internal organization of bimineralic diopside-merwinite reaction rims
- 11:30–11:45 EGU2011-10728
Ralf Milke, Kornelia Kolzer, and Gregor Neusser
The effect of small amounts of water on reaction kinetics between silicates in experiments (and rocks)

- 11:45–12:00 EGU2011-12380
Henrik Hemmen, Lars Ramstad Alme, Jon Fossum, and **Yves Méheust**
Diffusion of water in the mesoporosity of a dry clay: an experimental study using space and time resolved X-ray diffraction

GMPV23/TS3.2 – Nanoscale Processes in Geological Materials (co-sponsored by EMU) (co-organized) – Posters

Convener: Wilhelm Heinrich | Co-Conveners: Rainer Abart

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Wilhelm Heinrich

- XY451 EGU2011-569
Irina Sidorova, Sergey Ushakov, and Helena Sidorova
Process of conductivity in rocks
- XY452 EGU2011-3912
Nicole Wawrzenitz, Alexander Krohe, and Rolf L. Rohmer
Isotopic dating of deformation histories of metamorphic rocks: The impact of dissolution precipitation creep
- XY453 EGU2011-4500
Pritam Nasipuri, Holger Stunitz, Erling J Krogh Ravna, and Luca Menegon
Orthopyroxene-amphibole bi-phase corona from the Arnøya metagabbro, Norway: an example of open system disequilibrium microstructure
- XY454 EGU2011-5978
Lucie Tajčmanová, Rainer Abart, Richard Wirth, and Dieter Rhede
Intracrystal microtextures in alkali feldspars from fluid deficient felsic granulites: A chemical and TEM study
- XY455 EGU2011-6491
allen lin and Chien-Yen Chen
Synthesis of hydroxyapatite nanoparticles by hydrothermal method
- XY456 EGU2011-6530
Pin-Yun Lin and Chien-Yen Chen
Foam fractionation synthesis of anatase and its Photocatalytic and bactericidal activity
- XY457 EGU2011-6720
Friedrich Lucassen, Gerhard Franz, Rolf L. Romer, Richard Wirth, Matthias Weise, and Andreas Hertwig
The rutile-titanite reaction: (II) Material transport along mineral interfaces and dissolution patterns on rutile
- XY458 EGU2011-6860
Håkon Storheim, Marcin Dabrowski, and Anders Malthe-Sørensen
Numerical modeling of coupled diffusion/advection-, reaction- and deformation- processes
- XY459 EGU2011-8257
Nicholas Norberg, Gregor Neusser, Daniel Harlov, and Rainer Abart
Fine-scale dissolution-reprecipitation during deuteric coarsening of cryptoperthites to patch perthites - an experimental study
- XY460 EGU2011-12305
Gerlinde Habler, Martin Thöni, Michel Bestmann, Bernhard Grasemann, and Rainer Abart
The behavior of ultra-fine grained mineral inclusions in meta-pegmatite garnet during host deformation
- XY461 EGU2011-12789
Rainer Abart, Elena Petrishcheva, and Bastian Joachim
Thermodynamic model for microstructure evolution during reaction rim growth
- XY462 EGU2011-14033
Gregor Neusser, **Rainer Abart**, Richard Wirth, and Nicholas Norberg
Experimental exsolution of alkali feldspar

TS6.3/GD5.5/GMPV34/SM4.4 – The subduction interface: cross-disciplinary views from Geodynamics-Geochemistry-Seismology (co-organized) – Orals

Convener: Philippe Agard | Co-Conveners: Aral Okay, Bradley Hacker, Taras Gerya, José Alberto Padrón-Navarta, Frederik Tilmann, Nina Kukowski, Marco Scambelluri, VICENTE LOPEZ SANCHEZ-VIZCAINO

Room: 26

Chairperson: Philippe Agard, Marco Scambelluri

- 10:30–10:45 EGU2011-2133
Cristina Malatesta, Taras Gerya, Marco Scambelluri, Laura Federico, Laura Crispini, and Giovanni Capponi
Serpentinite channel and the role of serpentinite buoyancy for exhumation of HP rocks. Constraints from the HP-Voltri metaophiolites (Western Alps, Italy)

- 10:45–11:00 EGU2011-1457
Stephane Guillot, Fabien Deschamps, Marguerite Godard, Muriel Andréani, Kéiko Hattori, Stéphane Schwartz, and Romain Lafay
 Serpentinites act as sponges for fluid-mobile elements from abyssal to subduction zone environments
- 11:00–11:15 EGU2011-3324
Torgeir B. Andersen, Håkon O. Austrheim, Natalie Deseta, and Lewis D. Ashwal
 Is dehydration embrittlement at all important for generating intermediate to deep earthquakes in subduction zones?
- 11:15–11:30 EGU2011-9576
Junichi Nakajima and Akira Hasegawa
 Seismological constraints on dual plate subduction beneath Kanto, Japan: Role of hydrated oceanic crust and serpentinized mantle in seismicity
- 11:30–11:45 EGU2011-12132
Manel Prada, Valentí Sallarès, Adrià Meléndez, César R. Ranero, Ingo Grevemeyer, and Kirk McIntosh
 Combined seismic and gravity modeling reveal trench-parallel variations in the degree of mantle serpentinization of the incoming Cocos plate, offshore Nicaragua
- 11:45–12:00 EGU2011-11052
Nicolas Brantut, Alexandre Schubnel, Emmanuel David, Robert W Zimmerman, and Yves Gueguen
 Dehydration reactions and Vp/Vs ratio anomalies: Insights from experiments on gypsum

LUNCH BREAK

Chairperson: Bradley Hacker, Frederik Tilmann

- 13:30–13:45 EGU2011-9033
Andrew Rathbun and Chris Marone
 The Spectrum of Fault Slip Rates, From Creep to Stick Slip in Laboratory Friction Experiments
- 13:45–14:00 EGU2011-4543
 Toshiya Kanamatsu, **Pierre Henry**, Kyaw Moe and the IODP Expedition 333 Scientists Team
 Drilling inputs to the Nankai Subduction Zone: heat flow, diagenesis and basement alteration.
- 14:00–14:15 EGU2011-9999
Yann Rolland, Marc Hassig, and Marc Sosson
 What is the lithological nature of subduction channels? Insights from fossil Caucasus subduction zones
- 14:15–14:30 EGU2011-9016
Samuel Angiboust, Philippe Agard, Ryan Langdon, Dave Waters, and Christian Chopin
 Exhumation of large volumes of oceanic lithosphere during subduction: Examples from the Western Alps
- 14:30–14:45 EGU2011-12835
José Alberto Padrón-Navarta, Vicente López Sánchez-Vizcaíno, Carlos J. Garrido, and María Teresa Gómez-Pugnaire
 Metamorphic record of high-pressure dehydration of antigorite serpentinite to chlorite harzburgite in a paleo-subduction setting
- 14:45–15:00 EGU2011-3555
Idael Francisco Blanco-Quintero, Taras V. Gerya, Antonio Garcia-Casco, and Antonio Castro
 Partially molten blocks from eastern Cuba serpentinite mélanges: first report of aborted thermal-chemical plumes
- Chairperson: Nina Kukowski, Taras Gerya
- 15:30–15:45 EGU2011-5181
Donna Whitney, Christian Teyssier, Nicholas Seaton, and Erkan Toraman
 High-pressure petrofabrics near the subduction interface: Sivrihisar, Turkey
- 15:45–16:00 EGU2011-4715
Peter E. van Keken, Bradley R. Hacker, Ellen M. Syracuse, and Geoffrey A. Abers
 H₂O and CO₂ devolatilization in subduction zones: implications for the global water and carbon cycles
- 16:00–16:15 EGU2011-5531
Stephen Miller and Yuri Podladchikov
 The influence of trapped high pressure fluids on the earthquake cycle
- 16:15–16:30 EGU2011-1104
Bruno Reynard, Kenji Mibe, and Bertrand Van de Moortèle
 Electrical conductivity of the serpentinised mantle and fluid flow in subduction zones
- 16:30–16:45 EGU2011-6302
Mohammad Raeesi and Kuvvet Atakan
 Inter-plate coupling and two likely future great earthquakes along the South America subduction zone

16:45–17:00 EGU2011-13824

Mireille Laigle, Anne Bécel, Marinos Charalampakis, Philippe Charvis, Jordi Diaz, Ernst Flueh, Mikael Evain, Josep Gallart, Audrey Galvé and the SISMANILLES Team

Approach to submerged fore-arc subductions in the Lesser Antilles and Hellenic arcs: integrated marine MCS, refraction, and OBS seismic activity and noise recording.

TS6.3/GD5.5/GMPV34/SM4.4 – The subduction interface: cross-disciplinary views from Geodynamics-Geochemistry-Seismology (co-organized) – Posters

Convener: Philippe Agard | Co-Conveners: Aral Okay, Bradley Hacker, Taras Gerya, José Alberto Padrón-Navarta, Frederik Tilmann, Nina Kukowski, Marco Scambelluri, VICENTE LOPEZ SANCHEZ-VIZCAINO

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Aral Okay, José Alberto Padrón-Navarta

XL304 EGU2011-1687

Shuijiong Wang, Shuguang Li, Shichao An, and Zhenhui Hou

Exhumation history of the North Dabie UHP terrain, central China and REE behavior during retrograde metamorphism: Evidence from three episodic growths of metamorphic zircon and REE zoning of garnet in granulite

XL305 EGU2011-2271

Marco Scambelluri, Elisabetta Rampone, Thomas Pettke, and Eric Reusser

Trace element geochemistry of garnet peridotites and chlorite harzburgites from Cima di Gagnone (Central Alps, Switzerland)

XL306 EGU2011-2296

Alexander Simakin and Tamara Salova

COS as an agent of sulfurization of the subduction related magmas.

XL307 EGU2011-13878

Claudio Marchesi, Carlos J. Garrido, José Alberto Padrón-Navarta, María Teresa Gómez-Pugnaire, and Vicente López Sánchez-Vizcaíno

Transfer of lithophile and siderophile elements during high-pressure dehydration of antigorite in subduction settings: new insights from the Cerro del Almiréz (Betic cordillera, S. Spain)

XL308 EGU2011-2908

Daniela Hunziker, Eric Reusser, Daniel Grolimund, Elisabeth Müller Gubler, Jean-Pierre Burg, Mark Caddick, and Jafar Omrani

The influence of ferric/ferrous iron ratios in bulk and mineral chemistry on calculation of metamorphic conditions: Application to the N-Makran blueschists, SE Iran

XL309 EGU2011-5138

Alexis Plunder, Philippe Agard, Benoit Dubacq, and Christian Chopin

Towards continuous P-T paths? Multicalibration approach and application to subduction dynamics (Schistes Lustrés complex, France)

XL310 EGU2011-5321

Yuanyuan Xiao, Shaun Lavis, Yaoling Niu, Julian A. Pearce, Huaikun Li, Huichu Wang, and Jon Davidson

Geochemical consequences of subduction-zone metamorphism: Evidence from ultrahigh pressure metamorphic rocks, Western Tianshan, China

XL311 EGU2011-5350

Satoko Ishimaru, Shoji Arai, and Tomoyuki Mizukami

Methane inclusions in olivine in titanoclinohumite-bearing meta-dunite from the Sanbagawa high-P metamorphic belt, Japan

XL312 EGU2011-6601

Julia de Sigoyer, Camille François, Alain Cocherie, Manuel Pubellier, Vivien Bailly, and Jean-Claude Rigenbach

Very young and fast exhumation, between 8 and 5 Ma, for the high pressure metasediments of Lengguru prism, W-Papua

XL313 EGU2011-12186

Anne Verlaquet, Bruno Goffé, Fabrice Brunet, Christophe Poinssot, Olivier Vidal, Nathaniel Findling, and Denis Menut

Metamorphic veining and mass transfer in a chemically-closed system: a case study in Alpine metabauxites (Western Vanoise)

XL314 EGU2011-10379

Sebastian Weber and Kurt Bucher

Two types of eclogite from the Zermatt-Saas unit (Swiss Alps)

XL315 EGU2011-10447

Diana Dymkova, Taras Gerya, and Yuri Podladtchikov

2D Numerical modelling of fluid and melt transport above slabs with finite differences and marker-in-cell techniques

- XL316 EGU2011-11872
Franz Neubauer and Johann Genser
Structure and mode of exhumation of subduction channels in continent-continent and island arc-continent collisional orogens
- XL317 EGU2011-12929
José Alberto Padrón-Navarta, Andréa Tommasi, Carlos J. Garrido, Vicente López Sánchez-Vizcaíno, and María Teresa Gómez-Pugnaire
Plastic deformation and development of antigorite crystal preferred orientation in serpentinite
- XL318 EGU2011-13473
Tommaso Giovanardi, Alberto Zanetti, Maurizio Mazzucchelli, Massimo Tiepolo, and Riccardo Vannucci
Insights into the geodynamic evolution of the Finero mafic-ultramafic sequence (Southern Alps)
- XL319 EGU2011-1245
Bruno Reynard, **Lucile Bezacier**, Jay Bass, Junichi Nakajima, and Hitoshi Kawakatsu
Where is serpentinite in subduction? ... And where it is not.
- XL320 EGU2011-9304
Sven Wortelkamp, Stephan Klemme, Timm John, and Jasper Berndt
Trace Element Mobility in Subduction Zone Fluids. An Experimental Study.
- XL321 EGU2011-2710
Marco Scambelluri and Sonia Tonarini
The boron isotope composition of high-pressure subducted serpentinites: constraints on tectonic setting and implications for arc magmatism
- XL322 EGU2011-4722
Kurt Bucher
Subduction zone hydration
- XL323 EGU2011-5275
Hiroshi Sato, Susumu Abe, Takaya Iwasaki, Eiji Kurashimo, David Okaya, Taku Kawanaka, and Naoshi Hirata
Characterization of the upper surface of the Philippine Sea plate beneath Kanto, central Japan, revealed by seismic reflection profiling
- XL324 EGU2011-8072
Awan Gunawan, Frederik Tilmann, Dietrich Lange, Rachel Collings, Andreas Rietbrock, Danny Natawidjaja, and Sri Widiyantoro
Moho Depth Estimation beneath Sumatera and Mentawai Islands Using Receiver Functions Recorded with a Temporary Array
- XL325 EGU2011-9122
Dietrich Lange, Rachel Collings, Frederik Tilmann, Andreas Rietbrock, Danny Natawidjaja, Jeremy Pesicek, Bambang Suwargadi, and Tim Henstock
The Structure of the West Sumatran Subduction Zone Revealed by Local Earthquake Travel Time Tomography
- XL326 EGU2011-12432
Adrià Meléndez, Manel Prada, Valentí Sallarès, César Ranero, Kirk McIntosh, and Ingo Grevemeyer
1992 Nicaragua tsunamigenic slow earthquake: Geophysical constraints from seismic modelling
- XL327 EGU2011-5497
Peng Han, Katsumi Hattori, Hisashi Ishikawa, Takuya Hirano, Yuki Ishiguro, and Chie Yoshino
ULF electromagnetic phenomena possibly related to the 2002 and the 2007 slow slip events in Boso Peninsula, Japan
- XL328 EGU2011-10014
Mathilde Radiguet, Erwan Pathier, Guillaume Bacques, Michel Campillo, Nathalie Cotte, Fabrice Cotton, Vladimir Kostoglodov, Mathilde Vergnolle, and Andrea Walpersdorf
Coupling and kinematic properties of slow slip events in the Guerrero Gap, Mexico.
- XL329 EGU2011-10001
Ylona van Dinther, Taras V. Gerya, Luis A. Dalguer, P. Martin Mai, and Gabriele Morra
The long-term seismic cycle in geodynamic, numerical simulations of a subduction zone
- XL330 EGU2011-8094
Katharina Vogt, Taras Gerya, and Antonio Castro
Numerical modeling of crustal growth at active continental margins
- XL331 EGU2011-6581
ganzhorn anne-céline, labrousse loic, and prouteau gaelle
Rheological impact of partial melting on the subducting continental crust
- XL332 EGU2011-8615
Diane Arcay, Marie-Pierre Doin, Emmanuel Tric, and Romain Bousquet
Thermal structure of arc lithosphere in subduction zones: Plate thinning by small-scale convection enhanced in a wet mantle wedge

Lecture) (co-organized) – Orals

Convener: Antonio Costa | Co-Conveners: Costanza Bonadonna, Raphaël Paris, James Goff, Alexander Belousov, Matthew Watson, Arnau Folch

Room: 4

Chairperson: A. Belousov

- 10:30–11:30 EGU2011-1116
Raphaël Paris
 Volcanic tsunamis: sedimentary signature and implications for hazard evaluation (Plinius Medal Lecture)
- 11:30–11:45 EGU2011-43
Efim Pelinovsky
 Equivalent source of tsunamis from underwater explosions (review)
- 11:45–12:00 EGU2011-85
 James Goff, Catherine Chague-Goff, and **Dale Dominey-Howes**
 Tracking the extent of the Kuwae tsunami

LUNCH BREAK

Chairperson: A. Costa, J. Goff

- 13:30–13:45 EGU2011-1090
Thomas Giachetti, Raphaël Paris, Karim Kelfoun, and Francisco José Pérez-Torrado
 Numerical modelling of the tsunami triggered by the Güïmar debris avalanche, Tenerife (Canary Islands): comparison with field-based data
- 13:45–14:00 EGU2011-13516
James Hunt and Russell Wynn
 Resolving the landslide mechanism and tsunamigenic potential of catastrophic volcanic island flank collapses: Canary and Madeira Archipelagos
- 14:00–14:15 EGU2011-10503
Alessandro Bonaccorso, Alessandro Bonforte, Sonia Calvari, Ciro Del Negro, Giuseppe Di Grazia, Gaetana Ganci, Marco Neri, Anna Vicari, and Enzo Boschi
 The initial phases of the 2008-2009 Mt. Etna eruption: a multi-disciplinary approach for hazard assessment
- 14:15–14:30 EGU2011-10040
Augusto Neri and the Speed project Team
 Probabilistic hazard mapping of the pyroclastic density current hazard from sub-Plinian eruptions at Vesuvius (Italy) using novel methodologies to account for the main sources of uncertainty
- 14:30–14:45 EGU2011-2750
Michael Pavolonis
 Using Infrared Satellite Measurements to Identify and Track Volcanic Ash Clouds that Exceed Aircraft Exposure Thresholds: Capabilities and Limitations
- 14:45–15:00 EGU2011-3600
Gelsomina Pappalardo and the EARLINET Team
 4D distribution of the 2010 Eyjafjallajökull ash plume over Europe observed by the European Lidar network EARLINET
- Chairperson: A. Folch, C. Bonadonna
- 15:30–15:45 EGU2011-4347
Andrew Tupper
 Challenges to an improved International Airways Volcano Watch in the moist tropics
- 15:45–16:00 EGU2011-10619
Nina Iren Kristiansen, Andreas Stohl, Fred Prata, Sabine Eckhardt, Helen Webster, Matthew Hort, Dave Thomson, Stephan Henne, and Petra Seibert
 The 2010 Eyjafjallajökull eruption: Estimations of volcanic ash release and transport modelling using different models
- 16:00–16:15 EGU2011-11595
Claire Witham and Helen Webster
 Modelling concentrations of volcanic ash encountered by aircraft in past eruptions
- 16:15–16:30 EGU2011-13676
Marianne Guffanti, Andrew Tupper, Larry Mastin, Herbert Puempel, and Raul Romero
 The Role of International Science in Aviation-Risk Management Following the 2010 Eruption of Eyjafjallajökull, Iceland

- 16:30–16:45 EGU2011-12113
Matthew Hort, Benjamin Devenish, Helen Webster, and David Thomson
 Validation of the UK Met Office (London VAAC) dispersion model (NAME) for the Eyjafjallajökull eruption
- 16:45–17:00 EGU2011-6899
Andrew Bell, John Greenhough, Christopher Kilburn, Michael Heap, and Ian Main
 Forecasting volcanic eruptions using Voight's relation

NH2.1/GMPV36 – Understanding and quantifying hazards related to volcanic activity (including Plinius Medal Lecture) (co-organized) – Posters

Convener: Antonio Costa | Co-Conveners: Costanza Bonadonna, Raphaël Paris, James Goff, Alexander Belousov, Matthew Watson, Arnau Folch

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. Costa, M. Watson

- XY488 EGU2011-7205
Patrick Wassmer, Christopher Gomez, Raphael Paris, Jean Roger, and Franck Lavigne
 Anisotropy of Magnetic Susceptibility, a promising technique for tsunami deposits deciphering
- XY489 EGU2011-13667
Raphael Paris, Nelly Mazzoni, Patrick Wassmer, Franck Lavigne, Budianto Ontowirjo, Alexander Belousov, and Marina Belousova
 Sedimentary signature of the Krakatau 1883 tsunamis
- XY490 EGU2011-1995
José Madeira, João Mata, Mário Moreira, and Dirk L. Hoffmann
 Deposits of a major Pleistocene tsunami in the Island of Maio (Cape Verde)
- XY491 EGU2011-1091
Thomas Giachetti, Raphaël Paris, Karim Kelfoun, and Budianto Ontowirjo
 Tsunami hazard related to a flank collapse of Anak Krakatau volcano, Sunda Strait, Indonesia
- XY492 EGU2011-2759
Karim Kelfoun, Thomas Giachetti, Philippe Labazuy, and Raphaël Paris
 Landslide-generated tsunamis at Réunion Island and their possible sedimentary record in Mauritius Island
- XY493 EGU2011-2292
José Madeira, Mercedes Ferrer Gijón, Luis I Gonzalez de Vallejo, César Andrade, Maria da Conceição Freitas, Alejandro Lomoschitz, and Dirk L. Hoffmann
 Agaete revisited: new data on the Gran Canaria tsunamiites
- XY494 EGU2011-11665
Marina Belousova and Alexander Belousov
 Tsunamigenic volcanic landslides of Kurile-Kamchatka arc
- XY495 EGU2011-6739
Tatyana Novikova, Gerassimos A. Papadopoulos, and Floyd McCoy
 Volcanic Tsunamis in the Mediterranean Sea: A Review
- XY496 EGU2011-3448
 Arnau Folch, **Soledad Osores**, Gloria Pujol, Estela Collini, and Martina Suaya
 Evaluation of the FALL3D model using WRF-ARW fields for the 2008 Chaitén eruption
- XY497 EGU2011-1659
 Roberto Sulpizio and **Arnau Folch**
 Far-range Volcanic Ash Hazard from Somma-Vesuvius. Consequences for Civil Aviation over the Central Mediterranean Area
- XY498 EGU2011-12984
Kuniaki Miyamoto, Yutaka Gonda, Shintaro Yamashita, and Haruka Matsuyoshi
 Hazard estimation of the possible pyroclastic flow disasters using numerical simulation related to the 2010 activity at Merapi Volcano, Indonesia
- XY499 EGU2011-6375
Michael Cooke, Peter Francis, and Roger Saunders
 Retrieval of microphysical properties of a volcanic plume using the multispectral satellite instrument SEVIRI: Application to the Eyjafjallajökull eruption in April and May 2010.
- XY500 EGU2011-8628
Robert Constantinescu, Jean - Claude Thouret, and Laura Sandri
 Volcanic hazard assessment for El Misti volcano (South Peru) based on the BET_VH (Bayesian Event Tree for Volcanic Hazard) software (work in process)
- XY501 EGU2011-9952
 Rosanna Bonasia, Lucia Capra, Antonio Costa, and **Giovanni Macedonio**
 Numerical simulation of the tephra fallout deposit of the 1913 Colima eruption, México: implications for hazard assessment

- XY502 EGU2011-10196
Matteo Picchiani, Marco Chini, **Stefano Corradini**, Luca Merucci, Pasquale Sellitto, Fabio Del Frate, Salvatore Stramondo, and Alessandro Piscini
Detection and retrieval of volcanic ash from IR spectral data by means of Neural Networks approach
- XY503 EGU2011-10657
Alessandro Piscini, Stefano Corradini, Francesco Marchese, Luca Merucci, Nicola Pergola, and Valerio Tramutoli
Volcanic ash cloud detected by AVHRR sensor: comparison between two different methodologies for daytime and nighttime measurements
- XY504 EGU2011-7502
Amy Collinson and Jurgen Neuberg
A New Model for Gas Transport and Storage in a Permeable Volcanic Edifice
- XY505 EGU2011-4952
Arnau Folch, Sara Basart, and **Antonio Costa**
Modelling and forecasting the Eyjafjallajökull volcanic ash cloud using the FALL3D ash dispersion model
- XY506 EGU2011-4904
Changwook Lee, Zhong Lu, and Hyungsup Jung
Time Series Surface Deformation Analysis in the Segum Volcano for Verifying the Refined SBAS Technique
- XY507 EGU2011-1536
Hélène Monnard, **Irene Manzella**, Costanza Bonadonna, and Jeremy C. Phillips
Convective Instabilities in Volcanic Plumes
- XY508 EGU2011-784
Rose Burden, Jeremy Phillips, and Thea Hincks
Determining Volcanic Plume Height
- XY509 EGU2011-12244
Michael Fromm, Douglas Westphal, James Campbell, René Servranckx, and Pat Kablick
Ash and dust together in the UTLS: April 2010 Eyjafjallajökull volcano eruptions and Taklimakan Desert dust storms
- XY510 EGU2011-5004
José Manuel Marrero, Alicia García, Ángeles Llinares, Ramón Ortiz, and José A. Rodríguez-Losada
New hazard scenarios for Teide Pico-Viejo volcano complex and potential casualty risks.
- XY511 EGU2011-9419
David Winker, Zhaoyan Liu, Ali Omar, and Jason Tackett
Detection and characterization of ash plumes from Eyjafjallajökull with satellite lidar
- XY512 EGU2011-10515
Leif Vogel, Bo Galle, Christoph Kern, Hugo Delgado Granados, Ulrich Platt and the Fiel-Volcan Team
Early in-flight detection of SO₂ via Differential Optical Absorption Spectroscopy: A feasible aviation safety measure to prevent potential encounters with volcanic plumes
- XY513 EGU2011-2342
Olga Girina, Alexander Manevich, Sergey Ushakov, Anton Nuzhdaev, Dmitry Melnikov, Olga Konovalova, and Yury Demyanchuk
Explosive Eruptions of Kamchatkan Volcanoes in 2010
- XY514 EGU2011-1428
Mohammed Rashad Moufti
Assessing Volcanic Hazard of a Quaternary Lava Field in the Kingdom of Saudi Arabia
- XY515 EGU2011-3426
Costanza Bonadonna, Folch Arnau, Loughlin Susan, and Puempel Herbert
Future developments in modelling and monitoring of volcanic ash clouds: outcomes from the first IAVCEI-WMO workshop on Ash Dispersal Forecast and Civil Aviation (Geneva, Switzerland, 18-20 October 2010)

GD5.1/GMPV41/SM4.5/TS6.9 – Subduction zone dynamics from the surface to the lower mantle (co-organized) – Posters

Convener: Susanne Buitert | Co-Conveners: Francesca Funicello, Jeroen van Hunen, Marina Manea, Yildirim Dilek, Vlad Constantin Manea, Yujiro Ogawa

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- A48 EGU2011-12798
Petros Koutsovitis, Andreas Magganas, Konstantinos Soukis, and Stylianos Lozios
Petrological and structural observations on mylonitized intermediate and felsic rocks within the ophiolitic formation of Vrinena - East Othris, Greece.

- A49 EGU2011-5395
Yildirim Dilek and Harald Furnes
Magmatic Imprint of Subduction Initiation in the Phanerozoic Ophiolite Record
- A50 EGU2011-1024
Tola A. Merza
Distribution of PGE and PGM in Chromitite Rocks of the Mawat Ophiolite Complex, Kurdistan Region, NE Iraq
- A51 EGU2011-33
Alexander Rodnikov, Natalia Sergeyeva, and Ludmila Zabarinskaya
Ancient subduction zone in East Sakhalin (Sea of Okhotsk Region)
- A52 EGU2011-13238
Ender Sarifakioglu, Mustafa Sevin, and Yildirim Dilek
Geochemical and geological evidence for progressive evolution of subduction initiation magmatism in the Neotethyan ophiolites along the Izmir-Ankara-Erzincan suture zone, Turkey
- A53 EGU2011-3100
Yujiro Ogawa, Naoto Hirano, Ryota Mori, and Toshiaki Tsunogae
History and records from Mineoka ophiolitic mélangé belt for the idea of initiation and development of Izu-Bonin arc in Western Pacific
- A54 EGU2011-5396
Shoji Arai and Ahmed H. Ahmed
Origins of ophiolitic chromitites: magmatic accumulation and deep recycling
- A55 EGU2011-4565
Timothy Kusky, Songbai Peng, and Lu Wang
1.0 Ga Ophiolite on North Margin of the Yangtze Craton Clarifies South China's Amalgamation with Rodinia
- A56 EGU2011-4639
Lu Wang, Timothy M. Kusky, Keqing Zong, Liang Guo, and Shibao Xiang
Partial Melting of Deeply-Subducted Eclogite: Field and Petrographic Evidence from the Sulu UHP orogen, China
- A57 EGU2011-706
Quanshu Yan and Xuefa Shi
Petrological evidence for the existence of the late Mesozoic subduction zone in the South China Sea (SCS): I-type granites from the Nansha micro-block
- A58 EGU2011-6546
Massimiliano Melchiorre, Massimo Coltorti, Michel Gregoire, and Mathieu Benoit
Petrology of suprasubductive mantle xenoliths from Estancia Sol De Mayo (Central Patagonia, Argentina)
- A59 EGU2011-2330
Heidrun Kopp, Wolfgang Weinzierl, Mireille Laigle, Ernst R. Flueh, Alfred Hirn, Dirk Klaeschen, Cord Papenberg, Trail Team, and Thales Team
Composition and deep structure of island arc crust in the central Lesser Antilles: Insights for the formation of continental crust.
- A60 EGU2011-3314
Chrystele Verati, Michel Corsini, and Jean-Marc Lardeaux
Discovery of Lower Cretaceous syn-metamorphic thrust tectonics in French Lesser Antilles (La Désirade Island, Guadeloupe): Implications for Caribbean geodynamics
- A61 EGU2011-5872
Nur Demir, Heidrun Kopp, Ernst R. Flueh, Dirk Klaeschen, Wolfgang Weinzierl, Alfred Hirn, Mireille Laigle, and Thales Working Group
The Sedimentary Sequences of the Lesser Antilles Arc South of Guadeloupe From Wide-Angle and Reflection Seismic Data
- A62 EGU2011-8112
Mikael Evain, Audrey Galve, Philippe Charvis, Mireille Laigle, Mario Ruiz, Heidrun Kopp, Wolfgang Weinzierl, Alfred Hirn, Ernst Flueh, and Thales Scientific Party
Structure of the Lesser Antilles subduction zone from wide-angle seismic tomography
- A63 EGU2011-4788
Shane McGary, **Stéphane Rondenay**, Rob Evans, Geoffrey Abers, Philip Wannamaker, and Chin-Wu Chen
A joint geophysical investigation of the Cascadia subduction zone in central Washington using data from dense arrays of passive seismic and magnetotelluric stations
- A64 EGU2011-6881
Irene Bianchi, Nicola Piana Agostinetti, Alessandro Amato, and Claudio Chiarabba
Fluid migration in continental subduction: new insights on Northern Apennines (Italy) from Receiver Function
- A65 EGU2011-786
Thaís Hyppolito and Caetano Juliani
Atoll garnet textures in eclogitic rocks of the Diego de Almagro Island, Chilean Patagonia: Genesis and tectono-metamorphic implications

- A66 EGU2011-7110
Carlos Marcello Dias Fernandes, Caetano Juliani, Lena Virgínia Soares Monteiro, Bruno Lagler, and Carlos Mario Echeverri Misas
Possible arc migration and metallogenetic zoning in the South portion of the Amazonian craton, North of Brazil
- A67 EGU2011-11200
Yvonne Dzierma, Thorwart Martin, **Mora Cindy**, Rabbel Wolfgang, Siegmund Claudia, Lieser Kathrin, Comte Diana, Bataille Klaus, Iglesia Paula, and Prezzi Claudia
Seismological and volcanological investigations of the Villarrica-Valdivia region, South-Central Chile
- A68 EGU2011-7070
Vlad Constantin Manea and Marina Manea
Flat-slab dehydration, non-volcanic tremors and roll-back in Central Mexico
- A69 EGU2011-6995
Marina Manea and Vlad Constantin Manea
Curie Point depth estimates and correlation with flat-slab subduction in Mexico
- A70 EGU2011-1309
Yiseul Lee, Bumsuk Lee, Heonhak Lim, Cheol Hoon Mo, Youngho Yoon, Gwang Hoon Lee, Young-Seog Kim, and Hai Soo Yoo
The back-arc closure of the Ulleung Basin, East Sea (Japan Sea) and tectonic implications
- Hall A | Display Time 08:00–19:30**
Author in Attendance: 17:30–19:00
Chairperson: n.n.
- A71 EGU2011-4129
Emile Okal, Dominique Reymond, and Sutatcha Hongsresawat
Focal mechanisms of large historical earthquakes in the Bonin-Mariana subduction zone
- A72 EGU2011-12400
Natalie Deseta, Lewis Ashwal, and Torgeir Andersen
Geochemistry of blueschist facies mafic and ultramafic pseudotachylytes
- A73 EGU2011-10190
Alexandre Schubnel, Nadège Hilairet, Julien Gasc, Eva Hérupré, Fabrice Brunet, and Yanbin Wang
Seismicity triggered by the olivine-spinel transition: New insights from combined XRD and acoustic emission monitoring during deformation experiments in Mg₂GeO₄
- A74 EGU2011-4338
Vinnie L. Yu and Wen-che Yu
Deep-focus repeating earthquakes in the Tonga-Fiji-Kermadec subduction zone
- A75 EGU2011-9042
Robert Myhill, Dan McKenzie, and Keith Priestley
Earthquake distributions and their relationship with structural, chemical and thermobaric heterogeneities in subducting slabs
- A76 EGU2011-10679
Yvonne Font, Monica Segovia, Jean-Mathieux Nocquet, and Mohamed Chlieh
Seismicity distribution and interseismic coupling on the Ecuadorian Seismogenic Zone
- A77 EGU2011-8963
Jeanette Di Leo, James Wookey, James Hammond, and J.-Michael Kendall
Shear-Wave Splitting beneath Northern Sulawesi and the southernmost Philippines - The Sangihe Subduction Zone
- A78 EGU2011-3730
Arnauld Heuret, Debora Presti, Francesca Funiciello, Claudia Piromallo, and Serge Lallemand
Unraveling the behavior of subduction zones interplate seismicity using a global statistical approach
- A79 EGU2011-3192
Tao Li and Andrea Hampel
Preliminary results from numerical subduction zone models investigating the slip behaviour of the plate interface during changes in surface loads
- A80 EGU2011-2776
Giampiero Iaffaldano, Erika Di Giuseppe, Fabio Corbi, Francesca Funiciello, Claudio Faccenna, and Hans-Peter Bunge
Variable mechanical coupling along the Andes and implications for trench curvature, shortening, and topography
- A81 EGU2011-5714
Laurent Husson, Benjamin Guillaume, Francesca Funiciello, Claudio Faccenna, and Leigh Royden
Unravelling topography around subduction zones from laboratory models
- A82 EGU2011-2771
Robert Bialas, **Francesca Funiciello**, and Claudio Faccenna
Subduction and exhumation of continental crust: insights from laboratory models

- A83 EGU2011-5165
David Boutelier, Matthias Rosenau, Thomas Ziegenhagen, Franck Neumann, Onno Oncken, and **Alexander Cruden**
Subduction orogeny along a seaward-concave plate boundary in the Central Andes: insights from 2D numerical and 3D thermo-mechanical laboratory experiments
- A84 EGU2011-1030
Andrew Bottrill, Jeroen van Hunen, and Mark Allen
Can surface topography at continental collision zones be used to detect slab break off?
- A85 EGU2011-7654
Susanne Buiter and Susan Ellis
The role of the initiation phase in numerical subduction models
- A86 EGU2011-4047
Valentina Magni, Jeroen van Hunen, Francesca Funicello, and Claudio Faccenna
3D numerical models of trench migration for lateral heterogeneous subducting palte
- A87 EGU2011-4454
Guizhi Zhu, Taras Gerya, Boris Kaus, and Paul Tackley
Three-Dimensional Plume Patterns Rising from Subducting Slabs
- A88 EGU2011-6298
Jeroen van Hunen, Claudio Faccenna, and Mark Allen
Slab break-off and applications to Tethys subduction
- A89 EGU2011-6334
Thibault Duretz and Stefan M. Schmalholz
Thermo-mechanical and analytical models of slab detachment: calibration of an effective slab flow law
- A90 EGU2011-9127
Laura Hebert and **Laurent Montesi**
Implications of deep transport of slab-adjacent hydrated material at subduction zones
- A91 EGU2011-11106
Aurélien Beaumais, Gilles Chazot, Hervé Bertrand, Laure Dosso, Bleuenn Gueguen, and Claude Robin
Crustal contamination and mantle source variations in an intra-oceanic arc: geochemistry of the Lopevi volcano lavas, Vanuatu, SW Pacific.

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Orals

Convener: Thorvaldur Thordarson | Co-Conveners: susan loughlin, Sigrun Hreinsdottir, Halldór Björnsson, Séverine Moune

Room: 4

Chairperson: n.n.

- 08:30–08:45 EGU2011-8790
Helen Dacre and Alan Grant
The prediction and observation of volcanic ash clouds during the Eyjafjallajökull eruption
- 08:45–09:00 EGU2011-1319
Cordelia Maerker, **Lars Klüser**, Thilo Erbertseder, Julian Meyer-Arneke, Dmytro Martynenko, and Thomas Holzer-Popp
Infrared observation of volcanic ash and estimation of ash emission profiles of the 2010 Eyjafjöll eruption
- 09:00–09:15 EGU2011-13253
Andreas Vogel, Konradin Weber, Christian Fischer, Günther van Haren, Tobias Pohl, Bernhard Grobety, and Mario Meier
Airborne in-situ measurements of the Eyjafjallajökull ash plume with a small aircraft and optical particle spectrometers over north-western Germany - comparison between the aircraft measurements and the VAAC-model calculations
- 09:15–09:30 EGU2011-2420
Nicolas Bukowiecki and the The Swiss Eyja In-Situ Observation Team
Ground-based and airborne in-situ measurements of the Eyjafjallajökull volcanic aerosol plume in Switzerland in April and May 2010
- 09:30–09:45 EGU2011-6252
Matthias Tesche, Albert Ansmann, Patric Seifert, Ina Mattis, Silke Groß, Volker Freudenthaler, Arnaud Apituley, Keith Wilson, Ilya Serikov, and Holger Linné
Separation of volcanic ash and sulfate aerosol based on lidar-photometer observations in central Europe after the eruption of the Eyjafjallajökull volcano
- 09:45–10:00 EGU2011-4957
Patric Seifert, Silke Groß, Albert Ansmann, Volker Freudenthaler, Anja Hiebsch, Jörg Schmidt, Franziska Schnell, Matthias Tesche, Bernd Heinold, and Matthias Wiegner
Ice formation in ash-influenced clouds after the Eyjafjallajökull eruption in April 2010

10:00–10:15 EGU2011-11538

Julien Vergoz, Robin S. Matoza, Alexis Le Pichon, Pierre Gaillard, Lars Ceranna, David N. Green, Láslo G. Evers, Emanuele Marchetti, Maurizio Ripepe, and Paola Campus
 Telesonic infrasound from Eyjafjallajökull, Iceland: a unique opportunity to understand infrasonic network detection capability of volcanic eruptions

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Posters

Convener: Thorvaldur Thordarson | Co-Conveners: Susan Loughlin, Sigrun Hreinsdottir, Halldór Björnsson, Séverine Moune

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY516 EGU2011-10353

Sigrún Hreinsdóttir, Thóra Árnadóttir, Freysteinn Sigmundsson, Andrew Hooper, Matthew Roberts, Halldór Geirsson, and Benedikt Ófeigsson

Surface Deformation Prior to and During the 2010 Eyjafjallajökull Eruptions from Spatial and Temporal Variations in GPS Time Series

XY517 EGU2011-13017

Joana Martins, Andrew Hooper, Karsten Spaans, Freysteinn Sigmundsson, and Kurt Feigl

InSAR Time Series analysis of the Eyjafjallajökull eruptions using TerraSAR-X data

XY518 EGU2011-8413

Jon Tarasewicz, Bryndis Brandsdottir, **Robert White**, Martin Hensch, and Bergthora Thorbjarnardottir

Tracking the seismicity preceding and during the March 2010 Fimmvörðuháls fissure eruption and April 2010 summit eruption of Eyjafjallajökull, Iceland

XY519 EGU2011-13109

Freysteinn Sigmundsson, Kristin Vogfjörð, Sigurlaug Hjaltadóttir, Bryndis Brandsdottir, Jon Tarasewicz, Bob White, Martin Hensch, Jakob K. Keiding, Olgeir Sigmarsson, and Andy Hooper

Volcano anatomy: Comparing geodetic, seismic, and geochemical constraints on inner structure and magma transport at Eyjafjallajökull volcano

XY520 EGU2011-3686

Haraldur Páll Gunnlaugsson, Sigurdur Steinthorsson, Niels Oskarsson, Morten Bo Madsen, Per Nørnberg, and Jon Merrison

Mössbauer Spectroscopy of Samples from the 2010 Eyjafjallajökull Summit Eruption

XY521 EGU2011-12046

Thorvaldur Thordarson, Chris Hayward, Margaret Hartley, Olgeir Sigmarsson, Ármann Höskuldsson Höskuldsson, and Guðrún Larsen

The 14 April - 22 May 2010 summit eruption at Eyjafjallajökull volcano, Iceland: Volatile contents and magma degassing

XY522 EGU2011-12040

Patrick Allard, Mike Burton, Niels Oskarsson, Agnès Michel, and Margherita Polacci

Magmatic gas composition and fluxes during the 2010 Eyjafjallajökull explosive eruption: implications for degassing magma volumes and volatile sources

XY523 EGU2011-7978

Pórður Arason, Halldór Björnsson, and Guðrún Nína Petersen

Plume-top altitudes during the Eyjafjallajökull 2010 eruption

XY524 EGU2011-13167

Ingibjörg Jónsdóttir, Guðrún Larsen, **Thor Thordarson**, Ármann Höskuldsson, Friðrik Höskuldsson, and Ashley Gerard Davies

Tephra dispersal monitoring by satellite images

XY525 EGU2011-9091

John Stevenson, Jennie Gilbert, Ármann Höskuldsson, Antoni Milodowski, Susan Loughlin, and Thorvaldur Thordarson

Morphology of proximal and distal ash grains from the 2010 Eyjafjallajökull summit eruption.

XY526 EGU2011-13213

Chr. Bender Koch, Thomas Bjerring Kristensen, and Merete Bilde

SEM analysis of tephra collected in rain in Copenhagen during the 2010 eruption of Eyjafjallajökull

XY527 EGU2011-5886

Ulrich Schumann, Robert Baumann, Andreas Minikin, Oliver Reitebuch, Thomas Sailer, Hans Schlager, Christian Voigt, and Bernadett Weinzierl

The volcanic ash plume near the Eyjafjallajökull in April/May 2010

XY528 EGU2011-3522

Bergrun Oladottir, Gudrun Larsen, and Olgeir Sigmarsson

The neighbours of the Eyjafjallajökull volcano: Katla, Grímsvötn and Bárðarbunga

- XY529 EGU2011-6221
Gudrun Sverrisdottir and the Lahar Team
May 19th rain triggered lahar originating in the Eyjafjallajökull 2010 volcanic ash. Observation, mapping and granulometric study.
- XY530 EGU2011-8563
Stuart Dunning, Andy Large, Andy Russell, Anne-Sophie Meriaux, Robert Duller, and Matthew Roberts
The use of repeat Terrestrial Laser Scanning to quantify jokulhlaup induced change caused by the 2010 Eyjafjallajökull eruption, Iceland
- XY531 EGU2011-13142
Andy Russell, Andy Large, Anne-Sophie Mériaux, Stuart Dunning, Matthew Roberts, Rob Duller, Qihua Liang, Jonathan Carrivick, Fiona Tweed, and Málfríður Ómarsdóttir
Impacts and dynamics of volcanically-generated jökulhlaups, Eyjafjallajökull, Iceland
- XY532 EGU2011-4161
Robert Duller, Nicholas Warner, Chris McGonigle, and Andrew Russell
Landscape response and development following the catastrophic 1918 jökulhlaup, southern Iceland
- XY533 EGU2011-10941
Martin Kirkbride and Andrew Dugmore
Impacts of the Ey2010 tephra fall on Icelandic ice caps: interactions between substrate and glacier surface topography.
- XY534 EGU2011-11546
Throstur Thorsteinsson, Thorsteinn Johannsson, and Gudrun Petursdottir
High levels of particulate matter due to ash plume and ash re-suspension following the Eyjafjallajökull eruption

Wednesday, 06 April

GMPV12/NH2.4 – Measuring and modelling of volcano eruption dynamics (including 2011 Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Orals

Convener: Tim Druitt | Co-Conveners: Olgeir Sigmarsson, Donald B. Dingwell, Augusto Neri, Ulrich Kueppers, Fred Witham

Room: 20

Chairperson: F. Witham

- 08:30–08:45 EGU2011-2782
Hiroshi Shinohara
Volcanic degassing by conduit magma convection: Links and gaps to magmatic volatiles
- 08:45–09:00 EGU2011-4022
Frances Beckett, Mike Burton, Heidi Mader, Jeremy Phillips, Margherita Polacci, Alison Rust, and Fred Witham
Exchange flow experiments and implications for degassing processes at basaltic volcanoes
- 09:00–09:15 EGU2011-12680
Fred Witham, Jeremy Phillips, and Heidi Mader
Modelling Volcanic Melt Inclusions and Gas Compositions and Periodicities from Fluid Mechanical and Petrological Experiments
- 09:15–09:30 EGU2011-12727
Zachary Atlas, Jeffrey Ryan, and Jacqueline Dixon
Multi-stage degassing and volatile flux at Masaya Volcano, Nicaragua
- 09:30–09:45 EGU2011-5904
Elisabetta Del Bello, Edward W. Llewellyn, Jacopo Taddeucci, Piergiorgio Scarlato, and Steve J. Lane
Magma drainage around rising gas slugs and burst overpressure in Strombolian eruptions
- 09:45–10:00 EGU2011-8309
Mark Thomas and Jurgen Neuberg
Explaining multiple active seismic sources in ascending magma

COFFEE BREAK

Chairperson: T. Druitt

- 10:30–11:30 EGU2011-14176
Michael Manga and Josef Dufek
Interactions between small scale processes and large scale dynamics in pyroclastic density currents (Robert Wilhelm Bunsen Medal Lecture)
- 11:30–11:45 EGU2011-9651
Alexander Belousov, Marina Belousova, Herman Patia, and Richard Hoblitt
Deposits and dynamics of the 1951 pyroclastic density current of Mount Lamington, Papua New Guinea
- 11:45–12:00 EGU2011-2035
Bruno Cagnoli and Giovanni Paolo Romano
Mobility of Pyroclastic Flows

LUNCH BREAK

Chairperson: A. Neri

- 13:30–13:45 EGU2011-11353
Chuck Connor, Koji Kiyosugi, Laura Connor, Sarah Kruse, Kaz Mannen, and Leah Courtland
Correcting Bias in Tephra Fallout Hazard Estimates Using Numerical Simulations
- 13:45–14:00 EGU2011-13388
Freysteinn Sigmundsson, Magnús Tumi Gudmundsson, Thor Thordarson, Sigrún Hreinsdóttir, Sigurlaug Hjaltadóttir, Kristín Vogfjörð, Olgeir Sigmarsson, Þóra Árnadóttir, Andy Hooper, and Þórður Arason
Pulsating activity during the 2010 summit eruption of Eyjafjallajökull: Correlation of eruptive style, plume height, deformation, seismicity, earthquake tremor and chemical evolution of eruptive products
- 14:00–14:15 EGU2011-12403
Claudia Spinetti, Sara Barsotti, M. Fabrizia Buongiorno, Luca Nannipieri, and Augusto Neri
Simulating and observing Icelandic ash cloud movements toward Italy

- 14:15–14:30 EGU2011-3069
Matthew Scase, Peter Holland, and Jeremy Phillips
Modelling unsteady volcanic eruption columns and vulcanian eruption columns
- 14:30–14:45 EGU2011-5050
Fidel Costa
How to integrate petrology and magma process time scales with geophysical and geochemical volcano monitoring data?
- 14:45–15:00 EGU2011-12622
Olgeir Sigmarsson and **Michel Condomines**
Time scales of magma mingling during the 2010 eruption of Eyjafjallajökull, Iceland
- Chairperson: U. Kueppers
- 15:30–15:45 EGU2011-13980
Bruce F Houghton, Lauren A Swavely, Don A Swanson, and Rebecca J Carey
Volcanic ash from Halema'uma'u Kilauea in 2008: sensitive indicators of near surface process
- 15:45–16:00 EGU2011-5990
Jacopo Taddeucci, Piergiorgio Scarlato, Cristian Montanaro, Corrado Cimarelli, Elisabetta Del Bello, Carmela Freda, Daniele Andronico, Magnus Tumi Gudmundsson, and Donald Bruce Dingwell
Aggregation control on ash sedimentation from the Eyjafjallajökull volcanic cloud: insights from field and laboratory high-speed imaging
- 16:00–16:15 EGU2011-12157
Kai-Uwe Hess, Ulrich Kueppers, Corrado Cimarelli, Donald Bruce Dingwell, David S Rickerby, and Paul Madden
Volcanic Ash versus Turbine Ingestion Test Sands: Thermal Stability Experiments
- 16:15–16:30 EGU2011-9376
Orkun Ersoy, Erdal ?en, Gökhan At?c?, Erkan Aydar, ?lkan Tatar, and H.Hamdi Çelik
Changing morphology of accretionary lapilli further from the source (Zelve eruption, Cappadocia-Central Anatolia, Turkey)
- 16:30–16:45 EGU2011-13395
Thorvaldur Thordarson, Tanya Jude-Eton, Björn Oddsson, and Magnús Guðmundsson
Whole deposit grain size for the tephra of the 2004 Grímsvötn eruption, Iceland.
- 16:45–17:00 EGU2011-3634
David Jessop, Karim Kelfoun, Philippe Labazuy, Olivier Roche, and Anne Mangeney
LiDAR derived morphology of the 1993 Lascaz pyroclastic flow deposits: implications for flow dynamics and rheology

GMPV12/NH2.4 – Measuring and modelling of volcano eruption dynamics (including 2011 Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Posters

Convener: Tim Druitt | Co-Conveners: Olgeir Sigmarsson, Donald B. Dingwell, Augusto Neri, Ulrich Kueppers, Fred Witham
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: T. Druitt

- A156 EGU2011-2783
Hiroshi Shinohara and Hiroyuki Tanaka
Conduit magma convection of a rhyolitic magma: Constraints from cosmic-ray muon radiography of Satsuma-Iwojima, Japan
- A157 EGU2011-3964
Nadezhda Ivanova and Melnik Oleg
Magmatic convection in a volcano conduit.
- A158 EGU2011-13315
Jeremy Phillips and Julius Baghdadi
Permeability Development in Volcanic Conduits during Persistent Degassing
- A159 EGU2011-13428
Jeremy Phillips and Fred Witham
Magma Evolution due to Degassing and Circulation in Persistently-Active Volcanic Systems
- A160 EGU2011-4253
Benoit Cordonnier, Michael Manga, and Boris Kauss
Dissection of crystal bearing melts rheology
- A161 EGU2011-4268
Alejandra Arciniega-Ceballos, Miguel Alatorre-Ibarguengoitia, Bettina Scheu, Donald B Dingwell, and Hugo Delgado-Granados
Source parameters of eruptions generated by rapid decompression of volcanic rocks

- A162 EGU2011-6225
Jacopo Taddeucci, Piergiorgio Scarlato, Miguel Alatorre-Ibargüengoitia and the GVS Team
How much? How deep? How often? Parameterizing explosive gas release during Strombolian activity
- A163 EGU2011-6985
Elisabetta Del Bello, Jacopo Taddeucci, Piergiorgio Scarlato, Daniele Andronico, Corrado Cimarelli, and Carmela Freda
High speed imaging of geysers as an analogue to Strombolian eruptions
- A164 EGU2011-10296
Rosanna Smith, Bettina Scheu, Yan Lavallee, Philip Benson, Sandra Karl, and Donald Dingwell
Laboratory Studies of Volcanic Explosion Earthquakes
- A165 EGU2011-8574
Andrea Rizzo, Mauro Martelli, Alberto Renzulli, Filippo Ridolfi, and Alberto Rosciglione
Noble gases signature of mantle beneath Stromboli (Aeolian Islands, Italy), as inferred from fluid inclusions investigation in mafic phenocrysts from HP-LP products and from ultramafic xenoliths
- A166 EGU2011-8586
Antonio Paonita, Antonio Caracausi, Mauro Martelli, and Andrea Rizzo
Complex degassing processes at Mt Etna as inferred by the geochemistry of peripheral and crateric gas discharges
- A167 EGU2011-9028
Fred Witham, Jonathan Blundy, Priscille Lesne, Simon Kohn, Jacqueline Dixon, Sergey Churakov, Roman Botcharnikov, and Harald Behrens
SolEx: A Model for COHSCI Fluid Solubilities and Exsolved Gases in Basalts
- A168 EGU2011-10220
Pietro Armienti, Cristina Perinelli, and Keith D. Putirka
An empirical hygrometer for trachybasaltic melts: applications to the kinetics of magma ascent at Mt. Etna.
- A169 EGU2011-9085
Muriel Gerbault and Frederic Cappa
Internal overpressure and bedrock fluid-pore pressure conditions for failure around an inflating magmatic chamber: insight from hydromechanical elasto-plastic models
- A170 EGU2011-1973
Guilhem Amin Douillet, Ulrich Kueppers, Daniel Alejandro Pacheco, Ève Tsang Hin Sun, Jean Letort, Tullio Ricci, and Donald Bruce Dingwell
Comparison of pyroclastic dune bedforms from Tungurahua, Laacher See, Ubehebe, and Stromboli volcanoes.
- A171 EGU2011-7705
Daniele Andronico, Piergiorgio Scarlato, Corrado Cimarelli, Elisabetta Del Bello, Carmela Freda, **Valeria Misiti**, and Jacopo Taddeucci
Textural and compositional features of ash erupted between 18 and 22 May 2010 from Eyjafjallajökull
- A172 EGU2011-661
Emma Gatti, Hema Achyuthan, Adam J. Durant, Vishwas S. Kale, Saidin Mokhtar, and Clive Oppenheimer
Insights into the Toba Super-Eruption using SEM Analysis of Ash Deposits.
- A173 EGU2011-9440
Orkun Ersoy, Erdal ?en, Erkan Aydar, H.Evren Çubukçu, ?nan Ulusoy, Asl?han Ançel, Murat Çiftlikli, and Gökhan ?en
Eruption and emplacement dynamics of a cinder cone named Karniyarik Tepe in Cappadocia region (Turkey).
- A174 EGU2011-9785
Pierre Delmelle, Paul Ayris, Sam Shutkever, and Don Dingwell
SO₂ and HCl scavenging by ash at high temperature in volcanic eruption plumes: insights from laboratory experiments
- A175 EGU2011-12230
Fabien Albino, Virginie Pinel, H  l  ne Massol, and Marielle Collombet
Conditions for detection of ground deformation induced by conduit flow
- A176 EGU2011-11999
Ulrich Kueppers, Bernhard Auer, Corrado Cimarelli, Teresa Scolamacchia, and Donald Bruce Dingwell
Experimentally constraining the boundary conditions for volcanic ash aggregation
- A177 EGU2011-6365
Tim Druitt, Etienne Deloule, Fidel Costa, Mike Dungan, and Bruno Scaillet
Reservoir growth through mixing of different silicic magma batches prior to the Minoan eruption of Santorini

G3.1/GD2.6/GMPV29 – Glacial Isostatic Adjustment on regional scales: Modeling and observations (co-organized) –

Orals

Convener: Volker Klemann | Co-Conveners: Markku Poutanen, Bert Vermeersen, Thomas James

Room: 17

Chairperson: Markku Poutanen; Volker Klemann

- 13:30–13:45 EGU2011-4262
Patrick Wu, Holger Steffen, and Hansheng Wang
 Accuracy and sensitivity of GIA data in the study of the role of thermal effect on seismic anomalies in the mantle
- 13:45–14:00 EGU2011-10906
Paolo Stocchi, Roderik van de Wal, Bert L.L.A. Vermeersen, and Wouter van der Wal
 A Late Pleistocene ice-sheet model for Scandinavia: combining surface geological evidences and non-linear plastic and viscoplastic ice rheologies
- 14:00–14:15 EGU2011-9995
Wouter Van der Wal, Paolo Stocchi, Auke Barnhoorn, Patrick Wu, Martyn Drury, and Bert Vermeersen
 GIA model with non-linear 3D Earth rheology and viscoplastic ice model for Scandinavia
- 14:15–14:30 EGU2011-12359
 Rosemarie Drummond and **W. Richard Peltier**
 Glacial isostatic Adjustment in Fennoscandia and GRACE
- 14:30–14:45 EGU2011-9111
Peter Schmidt, Björn Lund, Thóra Árnadóttir, and Harro Schmeling
 Putting global warming to use in accessing the 3D viscosity structure of the uppermost mantle beneath Iceland
- 14:45–15:00 EGU2011-9062
Pippa Whitehouse, Mike Bentley, Anne Le Brocq, Glenn Milne, Matt King, and Ian Thomas
 A new Glacial Isostatic Adjustment model for Antarctica

G3.1/GD2.6/GMPV29 – Glacial Isostatic Adjustment on regional scales: Modeling and observations (co-organized) –

Posters

Convener: Volker Klemann | Co-Conveners: Markku Poutanen, Bert Vermeersen, Thomas James

Halls XY | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Volker Klemann; Markku Poutanen

- XY273 EGU2011-505
Holger Steffen, Patrick Wu, and Hansheng Wang
 Optimal locations for absolute gravity measurements and sensitivity of GRACE observations for constraining glacial isostatic adjustment on the northern hemisphere
- XY274 EGU2011-4801
Volker Klemann, Jan M. Hagedoorn, and Zdenek Martinec
 Refinement of palaeotopography in modelling of glacial isostatic adjustment
- XY275 EGU2011-13877
Volker Klemann, Sven Schulte, Thomas S. James, Arthur S. Dyke, Robert Kung, Doris Dransch, and Detlef Wolf
 Towards an online database for relative sea-level indicators: storage and visualization
- XY276 EGU2011-12587
Jaakko Mäkinen, Marcin Sekowski, Jan Krynski, Jyri Näränen, Arttu Raja-Halli, Hannu Ruotsalainen, and Heikki Virtanen
 Gravity change in Finland 1962-2010 from the comparison of legacy relative measurements with new measurements made with the outdoor absolute gravimeter A10
- XY277 EGU2011-4971
Willy Fjeldskaar and Aleksey Amantov
 A possible tectonic component in the Fennoscandian post-glacial uplift
- XY278 EGU2011-7036
Ove Christian Dahl Omang and Halfdan Pascal Kierulf
 Changes in present day ice melting observed by GPS and Superconducting Gravimeter at Svalbard, Norway
- XY279 EGU2011-5761
Valentina R. Barletta and Riccardo E.M. Riva
 High resolution Post Glacial Rebound over the European Alps
- XY280 EGU2011-6714
Christof Völksen and Christian Gerlach
 A Testbed for Monitoring Crustal Deformation and Gravity Changes Caused by Alpine Glaciers
- XY281 EGU2011-9294
Gabriella Ruggieri, Louise Sophie Sorensen, and Giorgio Spada
 Recent uplift of Greenland from ICESat observations and GIA modelling
- XY282 EGU2011-13162
Anneleen Oyen and Andy Hooper
 The challenges of studying uplift rates in polar regions by means of InSAR

XY283 EGU2011-12220

Ian Thomas, Matt King, and Eugene Domack

A new GPS derived data set of uplift rates in the Antarctic Peninsula

EMRP11/GMPV30/NH10.5/TS2.8 – Rock Physics and Natural Hazards (co-organized) – Orals

Convener: Sergio Vinciguerra | Co-Conveners: Philip Benson, Daniel Faulkner, Giulio Di Toro

Room: 42

Chairperson: S. Vinciguerra; P. Benson

10:30–10:45 EGU2011-1907

Patrick Baud, Wei Zhu, Sergio Vinciguerra, and Teng-fong Wong

Brittle faulting and inelastic compaction in Alban Hills tuff: microstructural observations and micromechanical modeling

10:45–11:00 EGU2011-4812

Michael Heap, Andreas Laumann, Kai-Uwe Hess, Yan Lavallée, Patrick Baud, Philip Meredith, and Donald Dingwell

Chemical, physical and mechanical properties of tuffs from Campi Flegrei (Italy)

11:00–11:15 EGU2011-6510

Sergio Vinciguerra, Silvio Mollo, Paola Tuccimei, Michael Heap, Michele Soligo, Mauro Castelluccio, Piergiorgio Scarlato, and Donald Dingwell

Radon and thoron emission from high and low porosity rocks under increasing deformation: An experimental study

11:15–11:30 EGU2011-9526

William Hancock and Dion Weatherley

On the influence of Particle Shape in fault gouge simulations using the Discrete Element Method

11:30–11:45 EGU2011-9638

Tadashi Takano, Ken-ichiro Maki, Eriko Soma, Katsumi Hattori, and Takashi Maeda

Fundamentals of Microwave Detection in Association with Rock Fracture and Experimental Data for Various Rocks

11:45–12:00 EGU2011-13191

Thomas Mitchell, Michael Heap, Yan Lavallee, Takehiro Hirose, Donald Dingwell, Sergio Vinciguerra, Jörg Renner, and Andrea Cavallo

Frictional Melt Generated from Similar & Dissimilar Volcanic and Sedimentary Rocks.

EMRP11/GMPV30/NH10.5/TS2.8 – Rock Physics and Natural Hazards (co-organized) – Posters

Convener: Sergio Vinciguerra | Co-Conveners: Philip Benson, Daniel Faulkner, Giulio Di Toro

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: D. Faulkner; G. Di Toro

A32 EGU2011-4285

Philip Benson, Michael Heap, Yan Lavallee, Patrick Selvadurai, Asher Flaws, Kai Hess, Burkhard Schillinger, and Donald Dingwell

Fracturing of volcanic edifices and dyking during magma ascent

A33 EGU2011-4825

Linda Petrakova, Michael Heap, Yan Lavallée, Patrick Baud, and Donald Dingwell

Investigating the stability of the volcanic edifice at Volcán de Colima, Mexico

A34 EGU2011-6749

Andrew Bell, Ian Main, Michael Heap, Patrick Baud, and Philip Meredith

Application of a mean-field model for brittle creep strain rates under finite loading conditions

A35 EGU2011-7145

Pierre Gavrilenko and Chandrani Singh

Modelling the hydromechanical response in the neighbourhood of Koyna reservoir (India): Results of the initial filling period

A36 EGU2011-7203

Sergio Vinciguerra, Michael Heap, Silvio Mollo, Yan Lavallée, Kai Hess, Donald Dingwell, Gianluca Iezzi, and Patrick Baud

Volcanic edifice weakening via thermal reactions

A37 EGU2011-10139

Olivier Lengliné, Jean Schmittbuhl, Jean Elkhoury, Jean-Paul Ampuero, Renaud Toussaint, and Knut Jorgen Maloy

Interplay of seismic and aseismic deformation during brittle creep crack propagation

- A38 EGU2011-10209
Elizabeth Gaunt, Peter Sammonds, Rosanna Smith, Philip Meredith, and Christopher Kilburn
Volcanic dome stability; Permeability and fluid pressurisation of the Mount St Helens 2004-2008 lava dome complex
- A39 EGU2011-10450
Gianluca Gola, Vincenzo Pasquale, Paolo Chiozzi, and Massimo Verdoya
Appropriate mixing models to estimate thermal properties of clastic and chemical/biochemical rocks
- A40 EGU2011-14195
Charlotte Feneis, Bettina Scheu, Yan Lavallee, and Donald B. Dingwell
Effect of water saturation on the fragmentation threshold and tensile strength of rocks in volcanic environments
- A41 EGU2011-7831
Jean Sulem, Ioannis Stefanou, and Emmanuil Veveakis
Strain localization during rapid shearing of a saturated rock layer: Preferred instability wave length and shear band thickness

TS5.1/GD4.4/GMPV35/SM2.9 – Continental rifting & mid-ocean ridges : the role and mechanisms of tectonics, mantle dynamics, sedimentation and magmatism (co-organized) – Orals

Convener: Gwenn Peron-Pinvidic | Co-Conveners: Sylvie Leroy, Cecile Robin, Kay Achenbach, Richard Katz, Arjan Dijkstra
Room: 27

Chairperson: Gwenn Peron-Pinvidic and Sylvie Leroy

- 08:30–08:45 EGU2011-7509
Geoffroy Mohn, Gianreto Manatschal, Emmanuel Masini, Marco Beltrando, Othmar Müntener, and Nick Kuszniir
Unraveling crustal thinning processes at magma-poor rifted margins: Evidence from the Alpine Tethys margins
- 08:45–09:00 EGU2011-12172
Marta Perez-Gussinye and Cesar R. Ranero
A tectonic model for sequential faulting, crustal thinning, and the development of asymmetric rifted margins
- 09:00–09:15 EGU2011-5426
Gideon Rosenbaum, Klaus Regenauer-Lieb, Roberto Weinberg, Yaron Finzi, and Hans Mühlhaus
Continental rifts: complex dissipative patterns from simple boundary conditions
- 09:15–09:30 EGU2011-9147
Yuriy Elesin, Irina Artemieva, and **Hans Thybo**
Depth of continental rifts
- 09:30–09:45 EGU2011-9139
Christian Heine, Jasper Zouthout, Rosie Fletcher, Rob Hunsdale, and Eric J.-P. Blanc
Integrating lithospheric deformation and plate tectonic models: The evolution of South Atlantic conjugate margins revisited
- 09:45–10:00 EGU2011-3776
K. W. Helen Lau, Keith E. Loudon, Yue Wu, and Mladen Nedimovic
Asymmetrical crustal structure across the non-volcanic Nova Scotia-Morocco continental margin conjugates

COFFEE BREAK

Chairperson: Cecile Robin and Kay Achenbach

- 10:30–10:45 EGU2011-1427
Jennifer Totterdell, George Gibson, Andrew Stacey, Cameron Mitchell, Michael Morse, Goutam Nayak, and Nick Kuszniir
Structural architecture of Australia's 4000 km-long southern rifted continental margin
- 10:45–11:00 EGU2011-2299
Po Wan Wong, Manuel Pubellier, Nicolas Chamot-Rooke, Lung-sang Chan, Franke Dieter, Florian Meresse, Dimitri Savva, Marie Sarré, and Benoit Mouly
Reappraisal of Cenozoic crustal evolution of the northern margin of the South China Sea by Land-Sea correlation
- 11:00–11:15 EGU2011-11884
Natasha Stanton, Sergio Fontes, Jean-Marie Flexor, and Cosme Neto
The Tectonic Framework of Santos Basin: an approach from aeromagnetic data

- 11:15–11:30 EGU2011-4289
Taras Gerya
Development of transform faults at mid-ocean ridges: plate fragmentation vs. plate growth origin
- 11:30–11:45 EGU2011-8263
Laurent Montesi and Laura Hebert
Tectonic controls on magma extraction at mid-ocean ridges at the 100km scale
- 11:45–12:00 EGU2011-4611
Harro Schmeling, Gabriele Marquart, and Robert Orendt
Crustal thickness variations at plume - ridge interaction spreading centres: dynamic models of crust accretion with hydrothermal cooling

TS5.1/GD4.4/GMPV35/SM2.9 – Continental rifting & mid-ocean ridges : the role and mechanisms of tectonics, mantle dynamics, sedimentation and magmatism (co-organized) – Posters

Convener: Gwenn Peron-Pinvidic | Co-Conveners: Sylvie Leroy, Cecile Robin, Kay Achenbach, Richard Katz, Arjan Dijkstra

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Kay Achenbach and Gwenn Peron-Pinvidic

- XL248 EGU2011-9198
Ritske S. Huismans and Christopher Beaumont
Rifted Continental Margins: The Case for Depth-Dependent Extension
- XL249 EGU2011-5095
Charmaine Thomas
Passive margin formation through continental extension: Constraining numerical modelling with geophysical data, a case study from the Browse Basin, northwest Australia.
- XL250 EGU2011-6240
Dimitri Savva, Florian Meresse, Kenny Wong, Manuel Pubellier, Nicolas Chamot Rooke, Dieter Franke, Stephan Steuer, and Benoit Mouly
Stratigraphic correlation of Paleozoic to Neogene sediments from the South China margin to Reed Bank and Palawan.
- XL251 EGU2011-9235
Louise Watremez, **Evguenii Burov**, Elia d'Acremont, Sylvie Leroy, and Benjamin Huet
Mantle densities and rupture criterion: thermo-mechanical modelling applied to the Eastern Gulf of Aden
- XL252 EGU2011-3643
Volkmarr Damm, Axel Ehrhardt, Tabea Altenbernd, Kai Berglar, Martin Block, Ingo Heyde, Michael Schnabel, and Bernd Schreckenberger
Structure and evolution of the West Greenland continental margin
- XL253 EGU2011-10415
Mohamed Mansour Abdelmalak, Laurent Geoffroy, and Charles Aubourg
From sedimentary basins to volcanic passive margins: a tectonic and thermal comparison between the Disko-Svartehuk and Vøring passive margins
- XL254 EGU2011-11623
Sönke Reiche, Ian Reid, and Hans Thybo
Crustal structure of the Greenland-Iceland Ridge inferred from wide-angle seismic data
- XL255 EGU2011-5938
Gwenn Peron-Pinvidic, Laurent Gernigon, and Carmen Gaina
Insights from the Jan Mayen system in the Norwegian-Greenland Sea: architecture of a microcontinent
- XL256 EGU2011-11606
Chris J. Cooper and Nick J. Kusznir
Density-depth Relationship of Serpentinised Mantle on the Iberian, Newfoundland and Nova Scotia Margins from Comparison of Seismic and Gravity Inversion Moho Depths
- XL257 EGU2011-1756
Emilie Sutra and Gianreto Manatschal
Where, when and how, does the continental crust thin in a hyper-extended rifted margin: insights from the Iberia margin.
- XL258 EGU2011-6902
Lope Ezquerro, Aránzazu Luzón, Carlos Liesa, and Jose Luis Simón
An approach to the allocyclical factors controlling the sedimentary fill in the northern sector of the Neogene Teruel half-graben (Spain).
- XL259 EGU2011-6991
Tomás Sanz, Marceliano Lago, Andrés Gil, Andrés Pocovi, **Teresa Ubide**, Carlos Galé, Patricia Larrea, and Pablo Tierz
Evidence of crust-doming in the Mesozoic rifting of the north-western Iberian Chain (Spain)

- XL260 EGU2011-12423
Emmanuel Masini, Manatschal Gianreto, Mohn Geoffroy, Tugend Julie, and Unternehr Patrick
The tectono-sedimentary record of hyper-extended rift basins: new observations from the Samedan basin (Central Alps) and Mauléon basin (Western Pyrenees)
- XL261 EGU2011-12054
Frédéric Mouthereau and Raphael Pik
Mesozoic exhumation in the Pyrenees revealed by double zircon U/Pb and (U-Th)/He dating
- XL262 EGU2011-2278
Lidia Rodríguez, Julia Cuevas, José Julián Esteban, José María Tubía, Sergey Sergeev, and Alexander Larionov
New age constraints on the Permian magmatism in the Sallent area (Axial Zone, central Pyrenees)
- XL263 EGU2011-8712
Julie Tugend, Emmanuel Masini, Gianreto Manatschal, and Isabelle Thinon
What is the tectono-sedimentary evolution of sag basins in hyper-extended rift-settings: the example of the Early Cretaceous Bay of Biscay-NW Pyrenean rift basins
- XL264 EGU2011-558
Sara Mana, Godwin F. Mollel, Michael J. Carr, Tanya Furman, and Carl C. Swisher III
Magmatic History and Rift Initiation in the North Tanzanian Divergence Zone, East African Rift System
- XL265 EGU2011-5818
Sarah Medynski, Raphaël Pik, Charlotte Vye, and Peter Burnard
Interplay between tectonics and magmatism during the last stages of continental breakup: the Dabbahu rift segment, Afar, Ethiopia.
- XL266 EGU2011-512
Nadezhda Priyatkina and Oleg Andrievskiy
Kimozero massive of diamondiferous rocks: formation of Early Proterozoic rift-related magmatism in Karelia, NW Russia
- XL267 EGU2011-929
Kay Achenbach, Michael Cheadle, Henry Dick, and Susan Swapp
Olivine LPO in Abyssal Peridotites: Does the Presence of Melt During Deformation Determine the Seismic Anisotropy of the Oceanic Lithosphere?
- XL268 EGU2011-4360
Tao Zhang, Jinyao Gao, Zhaocai Wu, Lihong Zhao, Chunguo Yang, Zhongyan Shen, and Zhiyuan Zhou
The spreading history and paleo-ridge segmentation of the northwestern sub-basin of the South China Sea
- XL269 EGU2011-8515
Anne Deschamps, Arnaud Agranier, Bérangère Mougel, and Jérôme Dymont
Axial morphology of the East-Pacific Rise crest in the vicinity of its intersection with the Mathematician hot-spot: results of the PARISUB'2010 cruise.
- XL270 EGU2011-12864
Julia Mahlke, Colin Devey, Kaj Hoernle, and Dieter Garbe-Schönberg
Geochemistry of volcanic rocks from the Woodlark Basin
- XL271 EGU2011-5367
Wen-Hao Liao, Ling-Yun Chiao, and Bou-jou Huang
Cold spots along mid-ocean ridges revealed by anomalously low subsidence rates
- XL272 EGU2011-13199
Anke Dannowski, Ingo Grevemeyer, and Cesar R. Ranero
Oceanic Core Complex die off and generation of enhanced mantle upwelling on the Mid-Atlantic Ridge - 22° N

IG5/BG1.11/CL4.13/GMPV40/SSP4.5 – Stable isotopes as tool in (paleo-)climate studies (co-organized) – Orals
Convener: Rolf Siegwolf | Co-Conveners: Martin Werner, Attila Demény, Mathieu Daéron, Erik Kerstel, Danny McCarroll, Alain Veron, Claude Hillaire-Marcel, Martin Frank

Room: 41

Chairperson: Attila Demeny & Martin Werner

- 08:30–08:45 EGU2011-672
Per-Olov Persson, Per S. Andersson, Don Porcelli, and Igor Semiletov
The influence of Lena River water inflow and shelf sediment-sea water exchange for the Nd isotopic composition in the Laptev Sea and Arctic Ocean.
- 08:45–09:00 EGU2011-2577
Claude Hillaire-Marcel, Christelle Not, Bassam Ghaleb, and Anne de Vernal
Setting chronostratigraphies in low sedimentation rate sequences from the Arctic Ocean: isotopic approaches with focus on U-series
- 09:00–09:15 EGU2011-3514
Claudia Teschner, **Martin Frank**, and Brian Alexander Haley
Plio-Pleistocene evolution of water mass exchange and erosional input in the Fram Strait

- 09:15–09:30 EGU2011-4654
Christine Hatté, Caroline Gauthier, Denis-Didier Rousseau, Pierre Antoine, Markus Fuchs, Slobodan Markovic, Olivier Moine, and Adriana Sima
 Geochemical evidence of a specific atmospheric circulation on Balkan during last glaciation
- 09:30–09:45 EGU2011-5742
Claudia Ehlert, Patricia Grasse, and Martin Frank
 Changes in silicate utilization and upwelling intensity off Peru since the LGM - insights from silicon isotopes
- 09:45–10:00 EGU2011-8042
Thomas Launois, Philippe Peylin, Valérie Daux, Valérie Masson-Delmotte, Thomas Eglin, Valentin Bellassen, and Camille Risi
 Interannual variations in tree-rings' width and isotopic signatures (^{18}O and ^{13}C) combined to optimize ORCHIDEE land surface model

COFFEE BREAK

Chairperson: Rolf Siegwolf & Mathieu Daeron

- 10:30–10:45 EGU2011-2564
Arthur Gessler, Brandes Elke, Offermann Christine, and Ferrio Juan Pedro
 The long way down - How tightly are carbon and oxygen isotope signals in the tree ring coupled to canopy physiological processes?
- 10:45–11:00 EGU2011-3086
Juan Pedro Ferrio, David Carulla, Jesús Julio Camarero, Mónica Aguilera, and Jordi Voltas
 Retrospective approach to dieback in *Pinus sylvestris* through the analysis of carbon and oxygen stable isotope composition in tree ring cellulose
- 11:00–11:15 EGU2011-8596
Dr. Dimitrios Sarris, Dr. Rolf Siegwolf, and Prof. Christian Körner
 Stable C and O isotope signals of drought in Mediterranean pines
- 11:15–11:30 EGU2011-2291
Shikma Zaarur, Hagit P. Affek, and Moti Stein
 Clumped isotopes thermometry in *Melanopsis* shells and its paleoclimate implications
- 11:30–11:45 EGU2011-4734
Anna-Lena Grauel, Thomas W. Schmid, Stefano M. Bernasconi, and Gert J. De Lange
 Calibration and application of clumped isotopes of *G. ruber* for high-resolution climate reconstructions of the last 2500 years from the Gulf of Taranto, Mediterranean Sea
- 11:45–12:00 EGU2011-663
Prasanna Kannan and Prosenjit Ghosh
 Revisiting calibration of CO_2 based Clumped isotope thermometry - equilibration approach.

IG5/BG1.11/CL4.13/GMPV40/SSP4.5 – Stable isotopes as tool in (paleo-)climate studies (co-organized) – Posters
 Convener: Rolf Siegwolf | Co-Conveners: Martin Werner, Attila Demény, Mathieu Daëron, Erik Kerstel, Danny McCarroll, Alain Veron, Claude Hillaire-Marcel, Martin Frank

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Erik Kerstel & Kerstyn Treydte

- A446 EGU2011-13555
Rolf Siegwolf
 Stable isotopes, the link between tree physiology tree ring width data as climate proxies
- A447 EGU2011-1313
Hans Oerter, Frank Wilhelms, Margarete Hansson, Per Holmlund, Susanne Ingvander, Torbjörn Karlin, and Shuji Fujita
 Stable isotope content and snow accumulation between 1957/58 and 2007/08 along the ice divide from Kohlen-Station towards Dome Fuji, East Antarctica
- A448 EGU2011-5169
Thejna Tharammal, André Paul, Ute Merkel, and David Noone
 Influence of LGM boundary conditions on the global water isotope distribution in an atmospheric general circulation model
- A449 EGU2011-5430
Attila Demény, Gabriella Schöll-Barna, Zoltán Siklósy, Gábor Serlegi, Pál Sümegi, and Mária Bondár
 A warming-cooling cycle between 3.8 and 3.2 ky BP: correlations of speleothem and bivalve compositions with ice core records

- A450 EGU2011-5856
David Morris and Stephen Macko
Estimation of marine, sea ice and terrestrial contributions to the Western Arctic carbon cycle using Bayesian mixing models and GC-IRMS
- A451 EGU2011-6354
Andres Diez-Herrero, Juan Antonio Ballesteros, Jose Maria Bodoque, and Virginia Ruiz-Villanueva
Can tree-ring isotopes be used for improving the flood frequency analysis?
- A452 EGU2011-6400
Joseph Erbland, Joël Savarino, Samuel Morin, and Markus M. Frey
Empirical sensitivity of $\delta^{15}\text{N}$ in nitrate to current snow accumulation rates in Antarctica : implications for the interpretation of the deep Vostok ice core
- A453 EGU2011-6928
Grzegorz Skrzypek, Zbynek Engel, Tomas Chuman, and Ludek Sefrna
Stable carbon isotope composition of Distichia peat: calibration of a new paleotemperature proxy for high altitudes in the Andes
- A454 EGU2011-7398
Mathieu Daëron, Franck Bassinot, Eva Moreno, Benjamin Passey, Gülay Isgüder, Hélène Rebaubier, and Dominique Blamart
Clumped-isotope studies of foraminifer records: inter-species differences, analytical bias and precision limits
- A455 EGU2011-8353
Christian Horn, Anton Eisenhauer, and Dirk Nürnberg
Employing $\delta^{44}\text{Ca}$ ratios in foraminifera to simultaneously track sea surface regional temperatures (SST) and salinities (SSS) variations across Termination I
- A456 EGU2011-8934
Rein Vaikmäe
The ice-core stable isotope records from small Arctic ice caps as proxies of climatic and environmental changes
- A457 EGU2011-9809
Matthias Saurer, Anne Kress, Olga Sidorova, and **Rolf Siegwolf**
On the precipitation signal in stable isotope ratios of tree-rings
- A458 EGU2011-11690
Bastian Ullrich, **Kerstin Treydte**, Sonia Simard, Sonja Boda, Matthias Saurer, Rolf Siegwolf, Patrick Fonti, and Arthur Gessler
Oxygen isotope pathway from the soil to the tree-ring at alpine sites in Switzerland
- A459 EGU2011-12240
Tamás Mikes, Ilaria Mazzini, Andreas Mulch, Marianna Kováčová, Peter Joniak, Natalia Hudáková, and **Bora Rojay**
Paleoenvironmental significance of the Serravallian-Tortonian TuÅŸlu section, Çankiri Basin, Central Anatolia
- A460 EGU2011-13544
Arnoud Boom and Tina Godfrey
Isotope records from Neotropical trees and stem rosettes
- A461 EGU2011-13897
Ashish Sarkar
8.2 Ka climatic cooling event deciphered from equatorial Arabian Sea
- A462 EGU2011-2003
Christelle Not and Claude Hillaire-Marcel
Marine evidence from Lomonosov Ridge for an Arctic trigger event of the Younger Dryas
- A463 EGU2011-2709
Peter Hülse and Samuel J. Bentley
A ^{210}Pb sediment budget and granulometric proxy record of discharge variations for a sub-Arctic deltaic system: the Great Whale River in Hudson Bay, Canada
- A464 EGU2011-2954
Nathalie Fagel, Jonathan Gueibe, Nadine Mattielli, Christelle Not, and Claude Hillaire-Marcel
Sedimentary provenances over glacial/interglacial stages in central Arctic constrained by mineralogy and radiogenic tracers
- A465 EGU2011-3321
Chunming Shi, Valérie Daux, Valérie Masson-Delmotte, Camille Risi, Jing Gao, Xiaochun Wang, and Qi-Bin Zhang
Climatic interpretation of tree ring stable isotopes in the southeast Tibetan Plateau: links with regional cloud cover
- A466 EGU2011-3415
Valérie Daux, Jean-Louis Edouard, Valérie Masson-Delmotte, Georg Hoffmann, and Olivier Mestre
Can climate variations be inferred from tree-ring parameters and stable isotopes from Larix decidua: budmoth outbreaks, juvenile effects and divergence problem.
- A467 EGU2011-4999
Francois Paquay and Greg Ravizza
Variations in the osmium isotopes record during the Azolla phase (IODP Expedition 302)

- A468 EGU2011-9047
Mikhail Vasiliev, Keita Yamada, and Naohiro Yoshida
Evaluation of clumped-isotopes of land snail's shells as a paleo-environmental indicator
- A469 EGU2011-9435
Lisa Wingate, Raphaël Dulhoste, Didier Bert, Barbara Köstner, Thomas Grünwald, Johannes Franke, and Jérôme Ogée
Intra-annual variations in the density and stable isotope composition of Norway spruce tree rings at the Tharandt FLUXNET site
- A470 EGU2011-12646
Robert Sherrell, Hélène Planquette, Marie Séguret, Sharon Stammerjohn, and Per Andersson
Continental sources of Fe and Nd isotopes to the Antarctic shelf systems of the Amundsen Sea and Western Antarctic Peninsula
- A471 EGU2011-13030
Gerald Dickens, Francesca Sangiorgi, Kristen St John, Catherine Stickley, Martin Jakobsson, Apy Sluijs, Henk Brinkhuis, and Jan Backman
Re-Os Isotope Data Highlights Existing Problems With Interpretations of the Middle Lithological Units in Cores from the Central Arctic Ocean
- A472 EGU2011-13339
Zou Zou Kuzyk, Charles Gobeil, Miguel Goni, and Robie Macdonald
Distributions and Inventories of Pb-210 and Cs-137 in Sediments along the North American Arctic Margin
- A473 EGU2011-1782
Lilia Sanchez-Vargas, Alberto Sanchez, Sergio Aguiñiga Garcia, and Eduardo Balart
Stable oxygen isotopes in Benthic Foraminifera Recent of the Northeast Pacific

SM4.2/GD2.11/GMPV49/TS10.6 – Thermal, chemical, and rheological boundary layers: How do they relate to each other? (co-organized) – Orals

Convener: Irina Artemieva | Co-Conveners: Nicholas T. Arndt, Lev Vinnik

Room: 26

Chairperson: Lev Vinnik, Irina Artemieva, Nick Arndt

- 10:30–10:45 EGU2011-5876
Evgueni Burov, Anthony Watts, and Thomas Francois
Mechanical thickness of the lithosphere and its relation to its seismic, rheological and thermal structure
- 10:45–11:00 EGU2011-12700
Frederik J. Simons, Sofia C. Olhede, and Dong V. Wang
Mechanical Thickness of the Continents Worldwide: A Re-Analysis
- 11:00–11:15 EGU2011-12784
Joanne Adam and Sergei Lebedev
Layering of seismic anisotropy and deformation beneath South Africa from the upper crust to the asthenosphere
- 11:15–11:30 EGU2011-11064
Lev Vinnik, Sergei Oreshin, Sergei Kiselev, Shyam Rai, Kudumu Suryaprakasam, and Alexandr Treussov
The Indian shield from the upper crust to the lower mantle: boundary layers and the fast drift
- 11:30–11:45 EGU2011-8723
Alan Levander and Meghan S. Miller
Evolutionary Aspects of Lithosphere Discontinuity Structure in the Western U.S.
- 11:45–12:00 EGU2011-13208
Stephan Sobolev and Alexander Sobolev
How to destroy thick cratonic lithosphere?

SM4.2/GD2.11/GMPV49/TS10.6 – Thermal, chemical, and rheological boundary layers: How do they relate to each other? (co-organized) – Posters

Convener: Irina Artemieva | Co-Conveners: Nicholas T. Arndt, Lev Vinnik

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY713 EGU2011-610
Hatice Yeziz, Nurdan Sayin, and Zeynep Ozbey
Thermal Structure of Continental Crust in Central Anatolia
- XY714 EGU2011-1676
Irina Artemieva
Boundary layers in the continental upper mantle constrained by geophysical data

GM4.2/GMPV52/HS12.2/SSS2.15 – Erosion and Terrestrial Carbon Cycling (co-organized) – Orals

Convener: Nikolaus J. Kuhn | Co-Conveners: Martin Evans, Timothy Quine, Kristof Van Oost

Room: 21

Chairperson: Niklaus Kuhn

- 10:30–11:00 EGU2011-9652
Asmeret Asefaw Berhe, Margaret S. Torn, Jennifer W. Harden, Sarah D. Burton, Markus Kleber, and John Harte
Stabilization Mechanisms of Soil Organic Matter in Eroding Watersheds: Implications for Erosion induced Terrestrial Carbon Sequestration
- 11:00–11:15 EGU2011-2037
Jianhui Zhang, Shijun Ni, and Zhengan Su
Dual roles of tillage erosion in lateral SOC movement in the landscape
- 11:15–11:30 EGU2011-10747
Xiang Wang, Erik Cammeraat, Zhengang Wang, Gerard Govers, and Karsten Kalbitz
Stability of organic matter in soils of the Belgium Loess Belt upon erosion and deposition
- 11:30–11:45 EGU2011-12061
Shailaja Vinjili, Ruth Robinson, and Richard Bates
Investigating Peatland Hydrology and Stratigraphy using Geophysical techniques
- 11:45–12:00 EGU2011-644
Elisabet Nadeu, Asmeret A. Berhe, Joris de Vente, and Carolina Boix-Fayos
Soil organic carbon replacement and deposition in a highly eroding Mediterranean catchment

GM4.2/GMPV52/HS12.2/SSS2.15 – Erosion and Terrestrial Carbon Cycling (co-organized) – Posters

Convener: Nikolaus J. Kuhn | Co-Conveners: Martin Evans, Timothy Quine, Kristof Van Oost

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Martin Evans

- A129 EGU2011-3181
Martin Evans, **Fred Worrall**, and Gareth Clay
Interpreting carbon loss from surface recession in peatland gully systems
- A130 EGU2011-9660
Asmeret Asefaw Berhe, Jennifer W. Harden, Margaret S. Torn, and John Harte
Lateral distribution of soil nitrogen in a naturally eroding zero-order watershed
- A131 EGU2011-7079
Sebastian Dötterl, **Kristof Van Oost**, and Johan Six
Soil organic carbon pool composition in eroding landscapes and the link to topography
- A132 EGU2011-9546
Claire Goulsbra, Martin Evans, and Tim Allott
Oxidation of POC in floodplain environments, evidence from eroding blanket peatlands
- A133 EGU2011-11478
Laura Quijano-Gaudes, **Leticia Gaspar**, and Ana Navas
Soil organic carbon fractions in uncultivated and tilled profiles of mountain Mediterranean agroecosystems.
- A134 EGU2011-13426
Yaxian Hu and Wolfgang Fister
Soil organic carbon erosion from two silty loam soils - a laboratory rainfall experiment
- A135 EGU2011-13456
Wolfgang Fister and Johannes B. Ries
Wind erosion of soil organic carbon from arable land in Aragón, Spain
- A136 EGU2011-13834
Richard Jones, Phillip Owens, and **Katrina Caley**
Paleolimnological records of Holocene carbon cycling: a late-glacial - Holocene record from Boswell Lake, British Columbia
- A137 EGU2011-13836
Elisabeth Armstrong
Crusting and interrill C erosion: event characteristic and sediment C enrichment on silts and loams
- A138 EGU2011-13837
Holly Croft and **Karen Anderson**
New approaches of monitoring spatio-temporal soil organic carbon dynamics in agricultural systems
- A139 EGU2011-13840
Nikolaus J. Kuhn
A full emission balance for soil organic matter erosion

- A140 EGU2011-13925
Martin Evans, Fred Worrall, Steve Daniels, and Richard Pawson
Particulate carbon loss from eroding and restored peatlands at the plot and catchment scale
- A141 EGU2011-13928
Wolfgang Schwanghart and Thomas Jarmer
Spatial patterns of topsoil organic carbon in semi-arid areas - examples from SE Spain and Israel
- A142 EGU2011-13930
Erik Cammeraat, Michiel Moerland, and Joachim Hill
Spatial distribution of soil erosion and soil organic carbon in a semi-arid environment derived from hyperspectral images
- A143 EGU2011-13972
Kristof van Oost, Peter Fiener, Gerard Govers, and Zhi Wang
A spatially explicit and multi-class model to simulate sediment and SOC redistribution

SC7/GMPV58 – Short Course on Technologies for Remediation of Recalcitrant Compounds: ISCO, ISCR and Bioremediation (co-organized) – Orals

Convener: Lorenzo Sacchetti | Co-Conveners: Anna Grabowska

Room: 25

Chairperson: n.n.

08:30–10:00

Chairperson: n.n.

10:30–12:00

Thursday, 07 April

GD5.3/TS6.11 – Tectonics of the Dinarides, Hellenides and Rhodopes (co-listed) – Orals

Convener: Thorsten Nagel | Co-Conveners: Nikolaus Froitzheim, Jan Pleuger

Room: 35

Chairperson: Thorsten Nagel and Nikolaus Froitzheim

- 13:30–13:45 EGU2011-1527
Alastair Robertson, Branislav Trivi?, and Nevenka ?eri?
New data from the Vardar suture zone in the Republic of Macedonia (FYROM) used to test alternative models of Jurassic ophiolite emplacement and Neotethyan evolution in the Balkan region
- 13:45–14:00 EGU2011-10992
Martina Busetti, Fabrizio Zgur, Valentina Volpi, Lorenzo Petronio, Franco Petteinati, Riccardo Ramella, Roberto Romeo, and Lorenzo Sormani
The Dinaric fault system in the Gulf of Trieste (Northern Adriatic)
- 14:00–14:15 EGU2011-12443
Lea Lajmiš, Jure Žalohar, Asta Gregori?, and Marko Vrabec
Kinematic and paleostress evolution of NW-SE trending »Dinaric« faults in Slovenia - A case for Neogene orogen-perpendicular extension in the External Dinarides
- 14:15–14:30 EGU2011-9426
Benjamin Huet, Loïc Labrousse, Patrick Monié, Laetitia Le Pourhiet, Laurent Jolivet, and Evgunii Burov
Exhumation rates in the Metamorphic Core Complexes of the Cyclades (Aegean domain)
- 14:30–14:45 EGU2011-301
Gabriele Casale, Darrel Cowan, Richard Bennett, and Goran Buble
Field Evidence of Slab Break-off in the Internal Dinarides: An Emerging Picture of Dinaric Post Tethyan-Closure Tectonics.
- 14:45–15:00 EGU2011-5510
Melody Philippon, Jean Pierre Brun, and Frédéric Gueydan
Tectonic history of the Cycladic Blueschist Unit, from subduction to Aegean extension.

GD5.3/TS6.11 – Tectonics of the Dinarides, Hellenides and Rhodopes (co-listed) – Posters

Convener: Thorsten Nagel | Co-Conveners: Nikolaus Froitzheim, Jan Pleuger

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Nikolaus Froitzheim and Jan Pleuger

- A60 EGU2011-127
Silke Schmidt, Thorsten J. Nagel, Nikolaus Froitzheim, and Marian Janák
The age of UHP metamorphism and the exhumation path of microdiamond-bearing rocks (SW Rhodopes, Greece)
- A61 EGU2011-8244
Filippo Luca Schenker, Evangelos Moulas, Mark James Caddick, Taras Gerya, and Jean-Pierre Burg
HT thermal history of the intermediate-pressure metamorphism of Naxos (Greece): insights from modelling intra-crystalline diffusion of major elements in garnet
- A62 EGU2011-9202
Milorad Antic, Alexandre Kounov, Branislav Trivic, Irena Peytcheva, Albrecht von Quadt, Ianko Gerdjikov, Todor Serafimovski, and Goran Tasev
Preliminary structural and geochemical data from the Serbo-Macedonian massif (south Serbia, southwest Bulgaria and Macedonia)
- A63 EGU2011-10132
Maria Kirchenbaur, Jan Pleuger, Thorsten J. Nagel, Nikolaus Froitzheim, Silke Jahn-Awe, and Carsten Münker
Lu-Hf garnet geochronology reveals two high-pressure metamorphic events in the Bulgarian Rhodopes
- A64 EGU2011-11357
Silke Jahn-Awe, Jan Pleuger, Dirk Frey, Neven Georgiev, **Thorsten Nagel**, and Nikolaus Froitzheim
Time constraints for low-angle shear zones in the Rhodope Mountains (Bulgaria)
- A65 EGU2011-12511
Jan Pleuger, Neven Georgiev, Silke Jahn-Awe, and Nikolaus Froitzheim
Kinematics of Palaeogene low-angle extensional faults along the eastern border of the Central Rhodopes (Bulgaria)
- A66 EGU2011-13021
Marko Vrabec, Oskar Sterle, John Weber, and Bojan Stopar
Adria microplate motion and active deformation in the surrounding Dinaric -Alpine transition from GPS data

- A67 EGU2011-13122
Thorsten Nagel, Nikolaus Froitzheim, Jan Pleuger, Maria Kirchenbaur, Silke Jahn-Awe, Neven Georgiev, and Marian Janak
 Architecture of the Rhodope Mountains
- A68 EGU2011-14015
Marian Janák, Nikolaus Froitzheim, Neven Georgiev, Thorsten Nagel, and Stoyan Sarov
 P-T evolution of kyanite eclogite from the Pirin Mountains (SW Bulgaria): implications for the Rhodope UHP Metamorphic Complex

GD6.2/GMPV50/SM4.3 – Whole mantle and transition zone structure, dynamics and evolution: multidisciplinary perspectives (co-listed) – Orals

Convener: Paul Tackley | Co-Conveners: Sergio Speziale, Lapo Boschi, Andreas Stracke, Huw Davies, FUMIKO TAJIMA, Heiner Igel, Hitoshi Kawakatsu, Fenglin Niu

Room: 22

Chairperson: Paul Tackley and Fumiko Tajima

- 13:30–13:45 EGU2011-3744
Iaria Mosca, Laura Cobden, Carolina Lithgow-Bertelloni, Arwen Deuss, Jeroen Ritsema, Lars Stixrude, and Jeannot Trampert
 Thermo-chemical structures in the lower mantle from body wave, surface wave and normal-mode data
- 13:45–14:00 EGU2011-9081
Ulrich Hansen and Sabine Dude
 Dynamical mechanisms behind Reservoir formation
- 14:00–14:15 EGU2011-5444
Andreas Stracke, Jon E. Snow, Eric Hellebrand, Anette von der Handt, Bernard Bourdon, Karin Birbaum, and Detlef Günther
 Extreme mantle depletion identified by Hf isotope ratios in abyssal peridotites
- 14:15–14:30 EGU2011-8731
 Frédéric Deschamps, **Paul Tackley**, and Edouard Kaminski
 Deep mantle primitive reservoirs as a partial source of Ocean Island Basalt
- 14:30–14:45 EGU2011-13626
Finlay Stuart
 Helium isotope evolution of the Iceland plume
- 14:45–15:00 EGU2011-8312
Cai Durbin, M. Hosein Shahnas, William R. Peltier, and John H. Woodhouse
 Mantle Convection Models Constrained by Seismic Tomography
- Chairperson: Fumiko Tajima and Paul Tackley
- 15:30–15:45 EGU2011-4592
Tobias Rolf and Paul Tackley
 Stability of Archaean cratons and their influence on the global strength of the lithosphere
- 15:45–16:00 EGU2011-3652
J. Huw Davies and Martin Wolstencroft
 What role have phase changes played in mantle evolution?
- 16:00–16:15 EGU2011-12012
David A. Thompson, George Helffrich, Ian D. Bastow, and J.-Michael Kendall
 Limits on lateral thermal and chemical gradients under the Canadian Shield
- 16:15–16:30 EGU2011-13310
Michael Kendall, Andy Nowacki, James Wookey, and Asher Pemberton
 Transition zone anisotropy near regions of subduction
- 16:30–16:45 EGU2011-6157
Luciana Bonatto, Martin Schimmel, Josep Gallart, and José Morales
 Mapping the Upper Mantle Transition Zone beneath the Iberian Peninsula and North Africa
- 16:45–17:00 EGU2011-6825
Simon Stähler, Karin Sigloch, Fumiko Tajima, and Heiner Igel
 Sampling the mantle transition zone beneath North America with regional P-waves from the USArray

GI-11 – Geophysical tomography with high-energy particles: recent developments and applications (co-listed) – Orals

Convener: Dominique Gibert | Co-Conveners: Daniele Carbone, Nolwenn Lesparre, Dr. Jacques Marteau, Hiroyuki Tanaka

Room: 42

Chairperson: Dominique Gibert, Daniele Carbone

- 13:30–13:45 EGU2011-2932
Hiroyuki Tanaka, Tomohisa Uchida, and Manobu Tanaka
 Newly Developed Multi-Layered Muon Detection System for the Next Generation of Muon Radiography
- 13:45–14:00 EGU2011-4106
Ryuichi Nishiyama, Akimichi Taketa, and Hiroyuki Tanaka
 The development of infra-free and portable muon counting system with Hamamatsu MPPC
- 14:00–14:15 EGU2011-3191
Daigo Shoji, Kei Kurita, and Hiroyuki Tanaka
 Application of Neutrino Interaction to Icy Satellite Research
- 14:15–14:30 EGU2011-9169
Daniele Carbone, Dominique Gibert, Nolwenn Lesparre, Jacques Marteau, Michael Diamant, Galichet Emmanuelle, Zuccarello Luciano, and Rapisarda Salvatore
 The feasibility of geophysical imaging using cosmic-ray muons. An application to Etna volcano (Italy).
- 14:30–14:45 EGU2011-4515
Nolwenn Lesparre, Dominique Gibert, Jacques Marteau, Bruno Carlus, and Christophe Nussbaum
 Analysis of muon tomography data sets: study of the geological layers above the Mont Terri underground rock laboratory
- 14:45–15:00 EGU2011-4764
Fabio Ambrosino and the MuRay Collaboration Team
 The MU-RAY project: volcanoes radiography with cosmic-ray muons

GI-11 – Geophysical tomography with high-energy particles: recent developments and applications (co-listed) –

Posters

Convener: Dominique Gibert | Co-Conveners: Daniele Carbone, Nolwenn Lesparre, Dr. Jacques Marteau, Hiroyuki Tanaka

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Nolwenn Lesparre, Jacques Marteau, Hiroyuki Tanaka

- A103 EGU2011-5955
Seigo Miyamoto, Nicola D'Ambrosio, Giovanni De Lellis, Mitsuhiro Nakamura, Toshiyuki Nakano, Pasquale Noli, Hiroshi Shimizu, Paolo Strolin, Hiromichi Taketa, and Hiroyuki K. M. Tanaka
 The plan imaging the lava dome structure with cosmic-ray muon at Unzen, Japan
- A104 EGU2011-8977
Akitaka Ariga, Tomoko Ariga, Saverio Braccini, Antonio Ereditato, Francesca Giacoppo, Jiro Kawada, Igor Kreslo, Ciro Pistillo, and Paola Scamporrì
 R&D on nuclear emulsion detectors for muon radiography of large objects
- A105 EGU2011-13758
Akimichi Taketa and Hiroyuki Tanaka
 New radiography method for small scale structure using soft component of air shower
- A106 EGU2011-6494
 Pierre Salin, **Stéphane Gaffet**, Ioannis Giomataris, Denis Calvet, Frédéric Druillole, Rui de Oliveira, and Olivier Pizzirusso
 A telescope for rock mass density imaging based on muon TPC* with Micromegas-bulk detector
- A107 EGU2011-3584
Felix Fehr and the TOMUVOL Team
 Towards Tomographic Imaging of the Puy de Dôme with GRPCs
- A108 EGU2011-3983
Dominique Gibert, Nolwenn Lesparre, Jacques Marteau, Florence Nicollin, Bruno Kergosien, Pascal Rolland, and Olivier Coutant
 Muon tomography and Volcanic Risks in the Lesser Antilles: the Example of the Soufrière of Guadeloupe
- A109 EGU2011-5957
Dr. Jacques Marteau, Bruno Carlus, Dr. Yves Déclais, Pr. Dominique Gibert, Bruno Kergosien, Nolwenn Lesparre, and Florence Nicollin
 Design and Operation of a Field Telescope for Cosmic Ray Geophysical Tomography

GMPV4 – Signals from subsurface mass transport beneath volcanoes – Orals

Convener: Gilberto Saccorotti | Co-Conveners: Eleonora Rivalta, Gareth O'Brien, Roberto Scarpa

Room: 20

Chairperson: n.n.

- 08:30–08:45 EGU2011-10854
Bo Galle and the NOVAC Team
 NOVAC - Network for Observation of Volcanic and Atmospheric Change, an early warning network for volcanic gas emission

- 08:45–09:00 EGU2011-8382
Torsten Dahm, Tomas Fischer, and Toni Kraft
Using arrival time difference to estimate Poisson ratio variations in the source region of earthquake swarms
- 09:00–09:15 EGU2011-12427
Chris Bean, Louis De Barros, Ivan Lokmer, Gareth O'Brien, and Shane Murphy
Long Period events: An unreliable indicator of conduit processes?
- 09:15–09:30 EGU2011-12402
Ivan Lokmer, Gareth O'Brien, Louis De Barros, and Christopher Bean
Mapping of alternative long-period sources into moment-tensor solutions
- 09:30–09:45 EGU2011-13575
Kristin Vogfjörð, Sigurlaug Hjaltadóttir, and Ragnar Slunga
Seismic Activity and Magma Movements at Icelandic Volcanoes
- 09:45–10:00 EGU2011-12833
Martin Hensch, Bryndis Brandsdóttir, Thora Arnadóttir, Sigrun Hreinsdóttir, Jon Tarasewicz, and Bergthora Thorbjarnardóttir
Intrusive activity beneath Eyjafjallajökull heralding the 2010 flank and summit eruptions: An analysis of earthquake and geodetic data

GMPV4 – Signals from subsurface mass transport beneath volcanoes – Posters

Convener: Gilberto Saccorotti | Co-Conveners: Eleonora Rivalta, Gareth O'Brien, Roberto Scarpa

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A160 EGU2011-13046
Mauro Palo and **Paola Cusano**
Wavefield analysis of the background seismic signal recorded at Volcàn de Colima, Mexico
- A161 EGU2011-16
Raul Arámbula-Mendoza, Denis Legrand, Philippe Lesage, Carlos Valdes-Gonzalez, Nick Varley, and **Gabriel Reyes-Davila**
Existence and non existence of correlations between different broad band seismic signals of vulcanian explosions of the 2005 Volcan de Colima, Mexico
- A162 EGU2011-5174
Haruhisa Nakamichi, Hiroshi Aoyama, Takeshi Nishimura, Hiroshi Yakiwara, Yusaku Ohta, and Masato Iguchi
Array Analyses of Tremor and Explosion Earthquakes Recorded at Suwanosejima Volcano, Southwest Japan
- A163 EGU2011-6557
Luciano Zuccarello, Gilberto Saccorotti, Jean-Philippe Métaxian, Christopher J. Bean, and Domenico Patanè
Array analysis of volcanic tremor during the 2008 Etna eruption.
- A164 EGU2011-6515
Marco Aliotta, Andrea Cannata, Carmelo Cassisi, Giuseppe Di Grazia, Placido Montalto, Luciano Zuccarello, and **Domenico Patanè**
Recent developments of seismo-volcanic monitoring systems for magma dynamics investigation and eruptive precursors characterization at Mt. Etna.
- A165 EGU2011-6663
Luciano Zuccarello, Daniele Carbone, Andrea Cannata, Giuseppe Di Grazia, Placido Montalto, and Domenico Patanè
Localization of volcanic tremor at Stromboli volcano, using seismic amplitude distribution.
- A166 EGU2011-8844
Megan Zecevic, Louis De Barros, Gareth S. O'Brien, Christopher J. Bean, and Florent Brenguier
Analysis of Source Characteristics of LP events at Piton de la Fournaise, La Réunion
- A167 EGU2011-8859
Thomas Eyre, Gareth S. O'Brien, Francesca Martini, Christopher J. Bean, Mauricio M. Mora, Javier F. Pacheco, and Gerardo J. Soto
Investigating seismic source mechanism at Turrialba volcano, Costa Rica
- A168 EGU2011-12326
Gilberto Saccorotti, Micol Todesco, Antonio Pio Rinaldi, and Chiara Montagna
Modelling Seismological Observables Associated With The Dynamics of Hydrothermal Systems
- A169 EGU2011-12850
Kristin Jonsdóttir, Chris Bean, Kristin Vogfjörð, and Maurizio Ripepe
The source of volcanic tremor investigated during the Eyjafjallajökull eruption 2010
- A170 EGU2011-12949
Janire Prudencio, Edoardo Del Pezzo, Araceli García-Yeguas, and Jesús Ibáñez
Intrinsic and scattering attenuation image of Teide volcanic complex from an active seismic experiment

- A171 EGU2011-13941
Francesco Obrizzo, Ida Aquino, Giuseppe Brandi, Andrea D'Alessandro, Carlo Del Gaudio, Prospero De Martino, Mario Dolce, Ciro Ricco, Vincenzo Sepe, Claudio Serio, and Umberto Tammara
Ischia island: strain field by GPS and Levelling data.
- A172 EGU2011-8791
Filippo Greco, Gilda Currenti, Rosalba Napoli, Antonio Pistorio, and Ciro Del Negro
Continuous microgravity variations accompanying the onsets of the last flank eruptions at Etna volcano (Italy)
- A173 EGU2011-4821
Daniele Carbone and Michael P. Poland
First analysis of data from two continuously recording gravimeters at Kilauea Volcano, Hawai'i
- A174 EGU2011-4088
Enrique Cabral-Cano, Alejandra Arciniega-Ceballos, Jose Manuel Alvarez-Nieves, Francisco Rodriguez-Valenzuela, Luis Salazar Tlaczani, Hugo Delgado-Granados, and Gabriel Reyes-Dávila
Broadband seismic and geodesic deployment in Volcan de Fuego, Colima, in central Mexico
- A175 EGU2011-6327
Mario Mattia, Flavio Cannavò, Alessandro Aiuppa, and Ripepe Maurizio
I2: Detecting the unrest of an active volcano through High Rate GPS data
- A176 EGU2011-12794
Takashi Maeda and **Tadashi Takano**
Further analysis of the 2008 Chaiten eruption toward early warning method for volcanic activity using microwave radiometer
- A177 EGU2011-8650
Alessandro Bonaccorso, Andrea Cannata, Rosa Anna Corsaro, Giuseppe Di Grazia, Salvatore Gambino, Filippo Greco, Lucia Miraglia, and Antonio Pistorio
Multi-disciplinary investigation on a lava fountain preceding a flank eruption: the 10 May 2008 Etna case
- A178 EGU2011-2160
Sonia Calvari, Letizia Spampinato, Alessandro Bonaccorso, Clive Oppenheimer, Eleonora Rivalta, and Enzo Boschi
Lava effusion — A slow fuse for paroxysms at Stromboli volcano?
- A179 EGU2011-14127
Antonius Ratdomopurbo, C. Widiwidjajanti, A. Baguet, C.M. Lyou, and Chris Newhall
Worldwide Database of Volcanic Unrest (WOVOdat): Progress of 2010

GMPV5 – Monitoring and observations of active volcanoes using in-situ and remote sensing techniques – Posters

Convener: Michael Burton | Co-Conveners: Thomas Staudacher, Jurgen Neuberg, Hugo Delgado Granados, Alessandro Bonaccorso

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: GMPV5 Conveners

- A180 EGU2011-6683
Thomas Staudacher, Andrea Di Muro, Valérie Ferrazzini, Florent Brenguier, Patrice Boissier, Philippe Kowalski, Philippe Catherine, Frédéric Lauret, and François Beauducel
The Piton de la Fournaise, a closely-monitored volcano
- A181 EGU2011-1639
Francisco Núñez-Cornú and Carlos Suárez-Plascencia
A Study of the Seismic Aspects of the 2003 - 2005 Vulcanian Explosions at Colima Volcano, Western Mexico.
- A182 EGU2011-2711
Lucia Zaccarelli, Dima Droznin, Nikolai Shapiro, Sergei Senyukov, Evgenii Gordeev, and Victor Chebrov
Monitoring the activity of Kliuchevskoi volcano through seismic noise cross-correlations
- A183 EGU2011-8321
Sandra Karl, Juergen Neuberg, and Thomas Roome
Rethinking moment tensor inversion methods to retrieve the source mechanisms of low-frequency seismic events
- A184 EGU2011-1486
Beatriz Gómez-Izquierdo, Hazel Rymer, José Miguel Azañón, and Guillermo Alvarado
New structure detected at Poás Volcano (Costa Rica) after the Cinchona Earthquake (January 2009)
- A185 EGU2011-2033
Mariangela Sciotto, Andrea Cannata, Stefano Gresta, Eugenio Privitera, and Laura Spina
The role of North East Crater in the 13 May 2008 eruption at Mt. Etna by means of seismo-infrasonic events
- A186 EGU2011-821
Amy Dabrowa, David Green, Jeremy Phillips, and Alison Rust
Remote monitoring of volcanic eruptions using the International Monitoring System infrasound network

- A187 EGU2011-2096
Andrea Cannata, Mariangela Sciotto, Letizia Spampinato, and Laura Spina
Investigation of explosive activity along an eruptive fissure by infrasound: 2008 Mt. Etna eruption
- A188 EGU2011-8476
Laura Spina, Andrea Cannata, Eugenio Privitera, Sylvie Vergnolle, Carmelo Ferlito, Stefano Gresta, Placido Montalto, and Mariangela Sciotto
Inside the shallow Mt. Etna plumbing system from analysis of infrasonic signals (August 2007-December 2009)
- A189 EGU2011-12095
Amy Dabrowa, Jeremy Phillips, Alison Rust, and David Green
Infrasound Generated by Strombolian Eruptions - Insights from Laboratory Experiments
- A190 EGU2011-9760
Alessandro Bonaccorso, **Alessandro Bonforte**, Gilda Currenti, Ciro Del Negro, and Filippo Greco
Magma storage, eruptive activity and flank instability: inferences from ground deformation and gravity changes during the 1993-2000 recharging of Mt. Etna volcano
- A191 EGU2011-7888
Karen Pascal, Jurgen Neuberg, and Eleonora Rivalta
Checking the validity of superimposing analytical deformation models
- A192 EGU2011-3971
Vaso Saltogianni and Stathis C. Stiros
Modeling the Mogi source of a small-scale inflation episode of the Santorini volcano (Aegean Sea) using EDM data and a numerical-topological approach
- A193 EGU2011-11594
Fabio Sansivero, Giuseppe Vilardo, Giovanni Chiodini, and Vincenzo Augusti
Thermal IR monitoring of active volcanic areas: instruments and methodologies used at Campi Flegrei Caldera (Italy) in the period 2004-2010 and new technological implementations to plan in near future.
- A194 EGU2011-2163
Sonia Calvari, Ralf Buettner, Antonio Cristaldi, Piero Dellino, Flora Giudicepietro, Massimo Orazi, Rosario Peluso, Letizia Spampinato, Bernd Zimanowski, and Enzo Boschi
The 7 September 2008 major explosion at Stromboli volcano: Characterisation of the event and quantification of the ejecta from a multi-parametric analysis
- A195 EGU2011-5142
Jonathan Procter, Gert Lube, Shane Cronin, and Jean-Claude Thouret
Tracing sediment pulses in lahars using multiparameter recording stations and serialised geophones.
- A196 EGU2011-5940
Jacopo Taddeucci, Corrado Cimarelli, Marie-Noëlle Guilbaud, Miguel Alatorre-Ibargüengoitia, and Hugo Delgado-Granados
A reappraisal of the explosive activity of Xitle volcano, Mexico City.
- A197 EGU2011-10917
Vladimir Conde, Bo Galle, Angelica Muñoz, and Hugo Delgado
A Rapid Deployment System for volcano gas monitoring
- A198 EGU2011-11874
Matthias Fickel and Hugo Delgado Granados
Measurement of SO₂ and BrO in the plumes of Mexican volcanoes
- A199 EGU2011-12948
Hendrik Fischer, Arne Krueger, Peter Rusch, Roland Harig, Roberto Basaldud, and Michel Grutter
Scanning UV Gas Imaging System (SUGIS) applied to study the SO₂ Emission from Popocatepetl volcano
- A200 EGU2011-5927
Peter Lübcke, Nicole Bobrowski, Sebastian Illing, Christoph Kern, Leif Vogel, Johannes Zielcke, and Ulrich Platt
Observing the plume of Popocatepetl and Colima with a novel SO₂-Camera
- A201 EGU2011-1656
Paolo Papale
Early Warning Systems at active volcanoes: trends and challenges
- A202 EGU2011-11670
Luca Merucci, Michael Burton, Stefano Corradini, and Patrick Allard
Ground- and space-based observations of volcanic degassing during the 2010 Eyjafjalla eruption.
- A203 EGU2011-7387
Selami Yilmaz, Nicole Bobrowski, Harald Flentje, Udo Frieß, Christoph Hörmann, Christoph Kern, Holger Sihler, Leif Vogel, Thomas Wagner, and Ulrich Platt
Observation of the volcanic plume of Eyjafjallajökull over continental Europe by Multi-Axis Differential Optical Absorption Spectroscopy (MAX-DOAS)
- A204 EGU2011-10341
Letizia Spampinato, Clive Oppenheimer, Andrea Cannata, Placido Montalto, Giuseppe Giovanni Salerno, and Sonia Calvari
Superimposed degassing cycles at active basaltic volcanoes

- A205 EGU2011-10804
Nicole Bobrowski, Giovanni Bruno Giuffrida, Dario Tedesco, Matthiew Yalire, Santiago Arrellano, Charles Balagizi, and Bo Galle
 Gas emission measurements of the active lava lake of Nyiragongo, DR Congo
- A206 EGU2011-9018
Jose Barrancos Martinez, Christian Fischer, J. Ignacio Roselló, Nemesio Pérez, Konradin Weber, and Millán Millán
 TDL, UV-DOAS, COSPEC and miniDOAS measurements of the degassing from the summit crater of Teide volcano, Tenerife, Canary Islands
- A207 EGU2011-10753
Patrik Norman, Bo Galle, Hugo Delgado Granados, Mike Burton, and Silvana Hidalgo
 Using meso-scale meteorological modeling to reduce errors in gas flux measurements from volcanoes

GMPV10/G3.11/NH2.7/TS1.8 – Volcano deformation, dynamics, and deep structure (co-organized) – Orals
 Convener: Valerio Acocella | Co-Conveners: Agust Gudmundsson, Giuseppe Puglisi, Sigurjon Jonsson, Thomas R. Walter
Room: 20

Chairperson: Acocella/Gudmundsson

- 10:30–10:45 EGU2011-9272
Robert (Bob) White, Hilary Martens, Janet Key, Heidi Soosalu, and Steinunn Jakobsdottir
 Dyke Propagation and Deformation under the Icelandic Rift Zone Tracked by Seismicity.
- 10:45–11:00 EGU2011-10053
Margaret Hartley and Thor Thordarson
 Formation of Öskjuvatn caldera at Askja, north Iceland: evolution of caldera collapse and implications for the lateral flow hypothesis
- 11:00–11:15 EGU2011-13562
Freysteinn Sigmundsson, Olgeir Sigmarsson, Andy Hooper, Sigrún Hreinsdóttir, Sigurlaug Hjaltadóttir, Kristín Vogfjörð, Þóra Árnadóttir, Rikke Pedersen, Páll Einarsson, Kurt Feigl and the Eyjafjallajökull volcano anatomy Team
 The 2010 inflation and deflation sources of Eyjafjallajökull: Magma flow, geochemical characteristics and evidence for intrusion triggering of the explosive summit eruption
- 11:15–11:30 EGU2011-12804
Andrew Hooper, Freysteinn Sigmundsson, Sigrún Hreinsdóttir, Thóra Árnadóttir, David Bekaert, Rikke Pedersen, Matthew Roberts, Páll Einarsson, Benedikt Ófeigsson, Kurt Feigl and the Eyjafjallajökull Geodetic Team
 The 2010 inflation and deflation sources of Eyjafjallajökull: Modelling of geodetic data from InSAR and GPS
- 11:30–11:45 EGU2011-9347
Carolina Pagli, Tim Wright, Hua Wang, Eric Calais, Laura Bennati Rassion, Cynthia Ebinger, Manahloh Belachew, and Elias Lewi
 Geodynamics of Afar: 3D crustal velocities and strain rates from multiple InSAR tracks and GPS
- 11:45–12:00 EGU2011-12013
Eleonora Rivalta, Marco Beleggia, and Torsten Dahm
 The changing shape of dykes during propagation explains the pattern of induced seismicity

LUNCH BREAK

Chairperson: Walter/Acocella

- 13:30–13:45 EGU2011-9800
Agust Gudmundsson, Nahid Mohajeri, and Zoe Barnett
 Power-law size distributions in volcanotectonics
- 13:45–14:00 EGU2011-430
Joel Ruch, Valerio Acocella, Fabrizio Storti, Marco Neri, Susi Pepe, Giuseppe Solaro, and Eugenio Sansosti
 Detachment depth revealed by rollover deformation: an integrated approach at Mount Etna.
- 14:00–14:15 EGU2011-11476
Alessandro Bonforte, Francesco Guglielmino, and Giuseppe Puglisi
 Dynamics preceding and accompanying the 2008-2009 Eruption of Mt. Etna (Italy) imaged by integrated GPS and DInSAR data

- 14:15–14:30 EGU2011-12004
Danila Scandura, Alessandro Bonaccorso, Gilda Currenti, and Ciro Del Negro
 FEM-based inversion of DInSAR data to infer coseismic slip distribution along Pernicana Fault System at Mt Etna
- 14:30–14:45 EGU2011-2871
Nobuo Geshi, Joel Ruch, and Valerio Acocella
 Relationships between caldera size and eruptive volume of magma
- 14:45–15:00 EGU2011-11641
Eoghan Holohan, Thomas Walter, John Walsh, Benjamin van Wyk de Vries, Martin Schöpfer, and Valentin Troll
 Origin and Significance of Oblique-slip Faulting during Caldera Collapse
- Chairperson: Jonsson/Puglisi
- 15:30–15:45 EGU2011-9301
Guillermo Caravantes González, Jeffrey Zurek, Hazel Rymer, Corinne Locke, John Cassidy, and Glyn Williams-Jones
 Structural and geophysical study of Masaya Caldera
- 15:45–16:00 EGU2011-8670
Christelle Wauthier, Valérie Cayol, François Kervyn, and Nicolas d'Oreye
 Nyiragongo Volcano 2002 Eruption Constrained by Multibeam InSAR Data
- 16:00–16:15 EGU2011-11962
Mariarosaria Manzo, Pietro Tizzani, Giuseppe Solaro, Eugenio Sansosti, Paolo Berardino, Andrea Manconi, Antonio Pepe, Susi Pepe, and Riccardo Lanari
 Twenty years of ground deformation monitoring at Campi Flegrei caldera (Southern Italy) via advanced space-based remote sensing techniques
- 16:15–16:30 EGU2011-9561
 Michael Lisowski, **Maurizio Battaglia**, and Michael Poland
 Analysis of GPS-measured deformation before, during, and after the 2004-2008 dome-building eruption of Mount St. Helens, Washington
- 16:30–16:45 EGU2011-11916
Francesco Casu
 Present scenario and new perspectives for Differential SAR Interferometry in volcanic areas
- 16:45–17:00 EGU2011-4399
Jose Fernandez and Antonio G. Camacho
 Modelling geodetic changes at volcanic areas by extended sources. Model and application examples.

GMPV10/G3.11/NH2.7/TS1.8 – Volcano deformation, dynamics, and deep structure (co-organized) – Posters
 Convener: Valerio Acocella | Co-Conveners: Agust Gudmundsson, Giuseppe Puglisi, Sigurjon Jonsson, Thomas R. Walter
Hall A | Display Time 08:00–19:30
 Author in Attendance: 17:30–19:00
 Chairperson: Gudmundsson/Jonsson/Puglisi/Walter

- A208 EGU2011-10760
Maïke Schubert, Thomas Driesner, Taras Gerya, and Peter Ulmer
 Basaltic magma as trigger for felsic intrusions
- A209 EGU2011-1102
Gabriele Uenzelmann-Neben, Daniela N. Schmidt, Frank Niessen, and Ruediger Stein
 Glacial rebound causes intraplate volcanism off South Greenland
- A210 EGU2011-2638
Vadim Milyukov and Andrey Myasnikov
 Monitoring the state of the magmatic structures of Elbrus volcano based on observation of lithospheric deformations
- A211 EGU2011-2714
 Virgílio Mendes, **José Madeira**, António Trota, António Brum da Silveira, Joaquim Pagarete, and Pedro Elósegui
 GPS surveying in S. Jorge, Azores, reveal volcanic unrest?
- A212 EGU2011-2915
Marco Neri, Joel Ruch, Bornas Ma. Antonia Vidamo, Martinez-Villegas Mylene, Bariso Ericson, and Bignami Christian
 Volcano-tectonic evolution of Mt. Kanlaon, Negros Island, Philippines
- A213 EGU2011-5509
Ingrid Fjeldskaar Løtveit, Agust Gudmundsson, and Willy Fjeldskaar
 Mechanical and thermal effects of sill emplacement in layered rocks

- A214 EGU2011-5676
Joel Ruch, Adriano Nobile, Valerio Acocella, and Nobuo Geshi
Volcano collapse and pit crater formation using analogue models: an application to Myiakejima, Japan.
- A215 EGU2011-3211
Valerio Acocella, Giuseppe Solaro, Susi Pepe, Joel Ruch, Marco Neri, and Eugenio Sansosti
Anatomy of an unstable volcano from InSAR: multiple processes affecting flank instability at Mt. Etna, 1994-2008
- A216 EGU2011-6478
Amalia Bonanno, Vincenzo Vinciprova, Giuseppe Puglisi, and Giuseppe Nunnari
FE Modeling of the instable eastern flank of Mt. Etna volcano during the inter-eruptive period 2003 - 2004
- A217 EGU2011-6590
Francesco Guglielmino, Alessandro Bonforte, Giuseppe Puglisi, Christian Bignami, Salvatore Stramondo, Francesco Obrizzo, Urs Wegmüller, and Pierre Briole
The April 3, 2010 earthquake along the Pernicana fault (Mt. Etna - Italy): analysis of satellite and in situ ground deformation data integrated by the SISTEM approach
- A218 EGU2011-14059
Marco Aliotta, Andrea Cannata, Daniele Carbone, Giuseppe Di Grazia, Salvatore Gambino, Francesco Guglielmino, Placido Montalto, Domenico Patanè, and **Giuseppe Puglisi**
Geophysical effects of the lava fountain episodes at Mt. Etna: insights on the shallow plumbing system
- A219 EGU2011-11255
Giorgio De Guidi, **Salvatore Scudero**, and Stefano Gresta
Relationship between surface and deep structure at Mt. Etna volcano (Sicily)
- A220 EGU2011-11349
Christina Plattner, Falk Amelung, Scott Baker, Rob Govers, and Mike Poland
Modeling flank motion at Kilauea volcano (Hawai'i): Insights in the dynamic interaction between tectonic and magmatic driving forces for volcano deformation
- A221 EGU2011-7597
Fabien Albino, Virginie Pinel, and Freysteinn Sigmundsson
Influence of surface load variations on shallow magma storage zones: Application to Icelandic subglacial volcanoes
- A222 EGU2011-11504
Andreas Fichtner and Hrvoje Tkalčić
Insights into the kinematics of a volcanic caldera drop: Probabilistic finite-source inversion of the 1996 Bardarbunga, Iceland, earthquake
- A223 EGU2011-2088
Thomas R. Walter
Web-cam Strain Measurement at Mount St. Helens from 2004-2008
- A224 EGU2011-3205
Thomas Dewez, Clément Hibert, Anne Mangeney, Philippe Kowalski, Philippe Catherine, and Gilles Grandjean
Ground-based stereo-photogrammetric monitoring of the active crater of Piton de la Fournaise, La Réunion Island
- A225 EGU2011-553
Adriano Nobile, Joel Ruch, Valerio Acocella, Sven Borgstrom, Valeria Siniscalchi, Eugenio Sansosti, Andrea Manconi, and Yosuke Aoki
Deformation on Aso Caldera (SW Japan) detected through DInSAR
- A226 EGU2011-6439
Antonio Troiano, Maria Giulia Di Giuseppe, Zaccaria Petrillo, Claudia Troise, and **Giuseppe De Natale**
Ground deformation at calderas driven by fluid injection: modelling unrest episodes at Campi Flegrei (Italy)
- A227 EGU2011-426
Sébastien Leibbrandt, Pierre-Yves Gillot, and Anthony Hildenbrand
Emplacement of large volcanoclastic breccia volumes in relationship with the evolution of a central caldera: volcanic history of the Cantal massif (France)
- A228 EGU2011-7956
Muriel Gerbault
Conditions for shear and tensile failure around an inflating circular magmatic chamber: internal overpressure and shear band geometries obtained from analytical and numerical elasto-plastic models
- A229 EGU2011-8541
Rodrigo del Potro, Joachim Gottsmann, Antonio Camacho, and Mayel Sunagua
Deep structure beneath Uturuncu volcano in the central Andes: Insights from new density anomaly models
- A230 EGU2011-9772
Ricardo Ramalho, George Helffrich, Michael Cosca, Derek Vance, Dirk Hoffmann, and Daniela N. Schmidt
Ocean Island Uplift, the Cape Verde Example
- A231 EGU2011-11713
Manoochehr Shirzaei, Thomas R. Walter, Hamid. R. Nankali, and Eoghan. P. Holohan
Gravity-driven deformation of Damavand volcano detected through InSAR time series

- A232 EGU2011-11425
Pietro Tizzani, Andrea Manconi, Giovanni Zeni, Antonio Pepe, Mariarosaria Manzo, Antonio Camacho, José Fenández, Paolo Berardino, Francesco Casu, and Riccardo Lanari
 A unitary physical model for the long- and short-term deformation field revealed at Tenerife volcanic island

GD7.1/EMR12/GMPV18/SM4.6 – Structure, Composition and Dynamics of the Deep Earth (co-organized) – Posters

Convener: Jon Mound | Co-Conveners: Arwen Deuss, Michael Ammann, Hauke Marquardt

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jon Mound and Hauke Marquardt

- A69 EGU2011-692
Stefanie Hempel, Christine Thomas, and Razvan Caracas
 The lowermost mantle beneath Bering Sea - P wave study and inversion for mineralogy of D
- A70 EGU2011-9238
Dmitry Krasnoshchekov and Vladimir Ovtchinnikov
 PKiKP/PcP amplitude ratios interpreted in terms of core-mantle boundary reflecting properties
- A71 EGU2011-12930
Daniele Antonangeli, Julien Siebert, Chantel M. Aracne, Daniel L. Farber, Alexey Bosak, Moritz Hoesch, Michael Krisch, Frederick J. Ryerson, Guillaume Fiquet, and James Badro
 Spin Crossover in Ferroperricite at High Pressure: A Seismologically Transparent Transition?
- A72 EGU2011-12508
Hauke Marquardt, Arianna Gleason, Katharina Marquardt, Sergio Speziale, Lowell Miyagi, Gregor Neusser, Hans-Rudolf Wenk, and Raymond Jeanloz
 Elastic Properties of Nano-crystalline MgO Powder to High Pressures by Brillouin Light Scattering
- A73 EGU2011-2925
Junkee Rhie, Tae-Gyu Yee, and Seongryong Kim
 The velocity structure of the core constrained by joint analysis of differential travel times and differential ray parameters of PKP(BC)-PKP(DF)
- A74 EGU2011-6715
Jon Mound
 Inter-Annual Torsional Oscillations and Angular Momentum Exchange
- A75 EGU2011-8847
Luis Silva
 Core flow estimates and inner-core growth patterns
- A76 EGU2011-11517
Tobias Trümper, Martin Breuer, and Ulrich Hansen
 Numerical simulations of thermo-chemically driven convection and geodynamos
- A77 EGU2011-12565
Julien Roch, Eric Clévéde, Geneviève Roult, Jean Paul Montagner, and Philippe Lognonné
 Deep structure of the Earth : from the lower mantle to the inner core

TS4.1/G3.4/GMPV27/SM2.10 – Crustal faulting and deformation processes observed by interferometric synthetic aperture radar (InSAR) (co-organized) – Posters

Convener: Manoochehr Shirzaei | Co-Conveners: Thomas R. Walter, Riccardo Lanari

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Shirzaei/Walter/Lanari

- XL311 EGU2011-5976
Simone Atzori, Roberto Devoti, and Stefano Salvi
 A new algorithm to correct DInSAR maps with GPS data
- XL312 EGU2011-3554
Sergey Samsonov, Kristy Tiampo, Pablo Gonzalez, Jose Fernandez, and Nicolas d'Oreye
 Processing methodology for calculation of ground deformation rates along Hayward fault, northern California, from RADARSAT-2 synthetic aperture radar images acquired during 2008-2011
- XL313 EGU2011-9070
Zahra Mousavi, Erwan Pathier, Andrea Walpersdorf, Isabelle Manighetti, Mathilde Vergnolle, Farokh Tavakoli, and Hamidreza Nankali
 Investigation of interseismic deformation of active faults in eastern Iran: contribution of Spaceborn radar Interferometry

- XL314 EGU2011-6982
Giuseppe Pezzo, Cristiano Tolomei, Simone Atzori, Yassaman Farbod, Esmaeil Shabaniyan, Stefano Salvi, Olivier Bellier, and Claudio Faccenna
 Interseismic strain accumulation on the Western Doruneh fault, Northern Iran, by multitemporal SBAS - DInSAR technique
- XL315 EGU2011-282
Asli Dogru, Haluk Ozener, Bulent Turgut, and Asli Sabuncu
 Investigation of Crustal Deformation in Eastern Turkey Using InSAR
- XL316 EGU2011-2242
Hannes Bathke and Thomas R. Walter
 Volcano and earthquake deformation at Ararat and Tendurek, Eastern Turkey, shown by InSAR time series
- XL317 EGU2011-11243
 Eugenio Sansosti, Giovanni Zeni, Antonio Pepe, Giuseppe Solaro, Nicolas d'Oreye, Christelle Wauthier, Francois Kervyn, Sergey Samsonov, José Fernández, and **Pietro Tizzani**
 Analysis of tectonic and magmatic activity at Virunga volcanic Province (Congo) revealed by SBAS-DInSAR analysis
- XL318 EGU2011-13711
Xiaoying Cong, Michael Eineder, Stefan Gernhardt, and Richard Bamler
 Detection of the Volcanic Deformation with Multi-Stack Persistent Scatterer Interferometry using TerraSAR-X Data
- XL319 EGU2011-3568
Sergey Samsonov, John Beavan, Pablo Gonzalez, Kristy Tiampo, and Jose Fernandez
 Ground deformation in the Taupo Volcanic Zone, New Zealand, observed by ALOS PALSAR interferometry
- XL320 EGU2011-5177
Jiun-Yee Yen and Chung-Pai Chang
 Preliminary investigation of surface deformation in the mountainous and vegetated regions of central Taiwan using Persistent Scatterer SAR Interferometry
- XL321 EGU2011-5602
Kuan-Chuan Lin, Jyr-Ching Hu, Johann Champenois, Tzay-Chyn Shin, Benoit Deffontaines, and Erwan Pathier
 Modeling the Crustal deformation from Continuous GPS, leveling and PS-InSAR in eastern Taiwan
- XL322 EGU2011-8106
Johann Champenois, Bénédicte Fruneau, Erwan Pathier, Kuan-Chuan Lin, and Jyr-Ching Hu
 Monitoring of the Longitudinal Valley Fault (Eastern Taiwan) using PS-InSAR method with ALOS data
- XL323 EGU2011-5824
Chih-Heng Lu, Chung-Pai Chang, Jiun-Yee Yen, Yi-An Chen, and Wei-Chia Hung
 Monitoring seasonal and long-term surface displacement of Choushui River Fluvial Plan in the central Taiwan Using PSI and DInSAR
- XL324 EGU2011-3663
Yang Liu, Caijun Xu, Zhenhong Li, and Yangmao Wen
 Interseismic Slip Rate of the Garze-Yushu Fault Belt in the Tibetan Plateau from C-band InSAR observations between 2003 and 2010
- XL325 EGU2011-7017
Yousuke Miyagi and Taku Ozawa
 Two Solomon Islands Earthquakes in 2007 (M8.1), 2010 (M7.1), and Seismic Gap along the Subduction Zone, Revealed by ALOS/PALSAR
- XL326 EGU2011-7497
Pablo Euillades, Leonardo Euillades, María Laura Velez, Sebastián Balbarani, and Alberto Caselli
 Long-Term Crustal Deformation Monitoring in South America by DinSAR Techniques: a Study of Feasibility
- XL327 EGU2011-9300
Henriette Sudhaus, Frank Krüger, and Thomas R. Walter
 Source model resolution of the 2010 Haiti earthquake - What can we learn by combining geodetic, seismologic and geologic data?
- XL328 EGU2011-9597
Tomonori Deguchi, Yoshihiro Kinugasa, and Katsumi Kurita
 Monitoring of Land Deformation around Active Fault in the Metro Manila, the Philippines
- XL329 EGU2011-12955
Manuela Bonano, Fabiana Calò, Francesco Casu, Riccardo Lanari, Michele Manunta, Mariarosaria Manzo, and Antonio Pepe
 A two-scale analysis of surface deformation affecting the L'Aquila (Italy) area performed through the advanced SBAS-DInSAR technique
- XL330 EGU2011-13260
 John Beavan, **Sergey Samsonov**, and Mahdi Motagh
 PRELIMINARY SOURCE MODEL FOR Mw 7.1 DARFIELD, NEW ZEALAND, EARTHQUAKE FROM GPS AND INTERFEROMETRIC SATELLITE RADAR OBSERVATIONS

- XL331 EGU2011-3037
Zhenhong Li, William Hammond, Geoffrey Blewitt, Corné Kreemer, and Hans-Peter Plag
 InSAR and GPS time series analysis: Crustal deformation of the Southern Walker Lane, western Great Basin, United States
- XL332 EGU2011-13750
Kanika Goel, Nico Adam, and Christian Minet
 Ground deformation monitoring of Gardanne coal mine (France) exploiting eleven years of ERS-SAR data
- XL333 EGU2011-7954
Alberto Refice, Fabio Bovenga, Guido Pasquariello, Domenico Denora, Maria Dolores Fidelibus, and Giuseppe Spilotro
 Bulging of the salt dome of Lesina Marina (Gargano, Southern Italy) revealed by DInSAR techniques
- XL334 EGU2011-9257
Andreas Schenk and Malte Westerhaus
 Integration of displacement observations from InSAR and leveling to obtain horizontal displacements associated with surface uplift in the City of Staufen (Germany)

PS10.0/GMPV28 – Volcanism and Tectonics in the Solar System (co-organized) – Orals

Convener: Thomas Platz | Co-Conveners: Matteo Massironi, Graziella Caprarelli, Paul K. Byrne, Pascal Allemand, Harald Hiesinger

Room: 32

Chairperson: Thomas Platz, Matteo Massironi

- 10:30–10:45 EGU2011-1570
Ronald Greeley
 Terrestrial analogs to planetary basaltic volcanism
- 10:45–11:00 EGU2011-4197
Krishan Khurana, Xianzhe Jia, Margaret Kivelson, Francis Nimmo, Gerald Schubert, and Christopher Russell
 Evidence of a global magma ocean in Io's interior
- 11:00–11:15 EGU2011-658
Paul Byrne, Eoghan Holohan, Matthieu Kervyn, Benjamin van Wyk de Vries, John Murray, and Valentin Troll
 A Spreading-Sagging Continuum for the Structure of Large Volcanoes on the Terrestrial Planets
- 11:15–11:30 EGU2011-11521
Rikke Pedersen
 Remote sensing observations of active volcanic and tectonic processes in Iceland
- 11:30–11:45 EGU2011-814
Riccardo Pozzobon, Andrea Bistacchi, and Matteo Massironi
 Association of cone sheets and radial dykes on Ascraeus Mons (Mars): structural analysis and modelling
- 11:45–12:00 EGU2011-8785
Amanda L. Nahm, Richard A. Schultz, and David A. Kring
 Forward mechanical modeling of the Rupes Recta normal fault in eastern Mare Nubium, the Moon
- 12:00–12:15 **Poster Introductions & Discussion**

PS10.0/GMPV28 – Volcanism and Tectonics in the Solar System (co-organized) – Posters

Convener: Thomas Platz | Co-Conveners: Matteo Massironi, Graziella Caprarelli, Paul K. Byrne, Pascal Allemand, Harald Hiesinger

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Matteo Massironi, Paul Byrne

- Z114 EGU2011-14136
Paul K. Byrne, Benjamin van Wyk de Vries, Eoghan P. Holohan, John B. Murray, and Valentin R. Troll
 The Influence of Lithospheric Flexure Upon the Structure of Olympus Mons
- Z116 EGU2011-7772
Klaus Gwinner, James W. Head, and Lionel Wilson
 Types, morphology, and significance of vent structures on the summit and flanks of Pavonis Mons, Mars
- Z117 EGU2011-12975
Thomas Platz, Ernst Hauber, Oryaelle Chevrel, Laetitia Le Deit, Frank Trauthan, Frank Preusker, Ralf Jaumann, and Gerhard Neukum
 Preliminary results on lava flow morphology and vent structures: an example from the Western Volcanic Zone, Iceland

- Z118 EGU2011-12860
Ernst Hauber, **Thomas Platz**, Laetitia Le Deit, Oryaelle Chevrel, Bernd Hoffmann, Lena Kuhlmann, Frank Trauthan, Frank Preusker, and Ralf Jaumann
Mapping of Postglacial Icelandic Lava Flows as Analogues for Mars
- Z119 EGU2011-13166
Thomas Platz and Greg Michael
Eruption history of the Elysium Volcanic Centre, Mars
- Z120 EGU2011-8545
Anne Deschamps, Pascal Allemand, and Christophe Delacourt
Comparative study of volcanic landforms on Mars and on the East Pacific Rise using high-resolution AUV and HiRISE data
- Z121 EGU2011-6316
Anezina Solomonidou, Georgios Bampasidis, Athena Coustenis, Konstantinos Kyriakopoulos, Karen Seymour, Mathieu Hirtzig, Emmanuel Bratsolis, and Xenophon Moussas
Morphotectonic and cryovolcanic structures on Titan and Enceladus with resemblance to terrestrial morphologies
- Z122 EGU2011-165
Munkhtsetseg Oidov and **Hirokazu Fujimaki**
Magmatism in Tsagaandelger, Eastern Mongolian Volcanic belt: Petrological and Isotopic Constraints on Mesozoic Geodynamic Setting
- Z123 EGU2011-3480
Glaciale Tiu, Benjamin van Wyk de Vries, and Alfredo Mahar Francisco Lagmay
Volcanic morphology, volcano alignment and basement structure in the Limagne Fault and Chaîne des Puys: perspectives for remote sensing in the solar system
- Z124 EGU2011-2451
Clinton Conrad, Todd Bianco, Eugene Smith, and Paul Wessel
Patterns of intraplate volcanism on Earth controlled by asthenospheric shear

GD1.1/BG8.3/GMPV44/TS1.3 – Early Earth: from deep dynamics to surface life (co-organized) – Posters

Convener: Jeroen van Hunen | Co-Conveners: Emmanuelle J. Javaux, Nicolas Flament, Nicholas T. Arndt

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Nico Flament and Jeroen van Hunen

- A40 EGU2011-2489
Kevin Lepot, Léo Deremiens, Zorigto Namsaraev, Philippe Compère, Emmanuelle Gérard, Elie Verleyen, Ines Tavernier, Dominic A. Hodgson, Annick Wilmotte, and Emmanuelle Javaux
Organo-mineral imprints in fossil cyanobacterial mats of an Antarctic lake
- A41 EGU2011-11401
Hendrik Kienert and Georg Feulner
The Faint Young Sun Paradox: Coupled 3D Simulations of the Archean Climate
- A42 EGU2011-11721
Yoram Teitler, Guillaume Le Hir, and Frédéric Fluteau
Constraints on atmospheric pCO₂ during the Great Oxygenation Event inferred from 3-D climate modeling and relevance regarding paleosol studies
- A43 EGU2011-9380
Jun Yang and Wm Peltier
Initiation of modern Soft Snowball and Hard Snowball in CCSM3
- A44 EGU2011-10630
Evgenii Sharkov, Marina Astafieva, Marya Bogina, and Alexei Rozanov
Evolution of geological processes on terrestrial planets and their impact on the environment
- A45 EGU2011-2045
Eason Hong and Wei-Ting Kao
A key element to unravel the formation of continental crust
- A46 EGU2011-11341
Christophe Robin, Nicholas Arndt, Catherine Chauvel, Gary Byerly, Alexander Sobolev, and **Allan Wilson**
Polybaric critical melting with high melt retention explains the compositions of Barberton komatiites
- A47 EGU2011-714
Yulia Deines
Geochemical features of Palaeoproterozoic organosiliceous deposits (maksovites) of Russian Fennoscandia
- A48 EGU2011-4048
Svetlana Lobach-Zhuchenko, Elena Bibikova, **Victor Balagansky**, Anastasiya Yurchenko, Sergey Sergeev, and Sergey Skublov
SIMS SHRIMP-II U-Pb zircon data for an Archaean igneous complex (3.5-2.9 Ga) and its Palaeoproterozoic reworking in the Orekhov-Pavlograd compressional zone, Ukrainian Shield

TS6.2/GD5.9/GMPV46/SM1.6 – Geodynamics of the Westernmost Mediterranean and Northwest Africa (co-organized)

– Orals

Convener: Carlos J. Garrido | Co-Conveners: Bodinier Jean-Louis, Manel Fernandez, Laurent Jolivet, Guillermo Booth-Rea, Philippe Vernant

Room: 28

Chairperson: Carlos J. Garrido & Manel Fernández

- 10:30–10:45 EGU2011-13586
Christian Gorini, François Bache, Ferran Estrada, Belén Alonso, Abdellah Ammar, Daniel Aslanian, Damien Do Couto, Antonio Tadeu Dos Reis, Mohammed Elabbassi, Gemma Ercilla, Marga Garcia, Julien Gargani, Pol Guennoc, Laurent Jolivet, Gwenael Jouannic, Agnes Maillard, Ludovic Mocochain, Speranta-Maria Popescu, Marina Rabineau, Jean Loup Rubino, and Jean-Pierre Suc
 Messinian Events In The Mediterranean: A review from the offshore basins
- 10:45–11:00 EGU2011-5693
Jordi Díaz Cusí, Josep Gallart, and Topolberia Seismic Working Group
 Seismic anisotropy pattern beneath Iberia and Northern Morocco: first results from the second Topolberia-IberArray deployment
- 11:00–11:15 EGU2011-3274
Valentí Sallarès, Audrey Gailler, Marc-André Gutscher, Rafael Bartolomé, Jordi Díaz, Eulàlia Gràcia, and David Graindorge
 Seismic evidence for the presence of Jurassic oceanic crust in the Gulf of Cádiz (SW Iberia)
- 11:15–11:30 EGU2011-13558
Juan Carlos Afonso, Javier Fullea, Manel Fernández, Jaume Vergés, and Hermann Zeyen
 The lithosphere-sublithospheric upper mantle system beneath the Atlantic-Mediterranean Transition Region: advances and limitations from recent multidisciplinary approaches
- 11:30–11:45 EGU2011-4924
 David Pesquer, **Ingo Grevemeyer**, Cesar Ranero, and Josep Gallart
 Slab rollback and continental break-up in a convergent setting - seismic structure of passive continental margins in the Western Mediterranean
- 11:45–12:00 EGU2011-4034
Jacques Précigout, Frédéric Gueydan, Carlos J. Garrido, and Guillermo Booth-Rea
 Deformation and Exhumation of the sub-Continental Mantle: Insight from the Ronda Peridotite (Spain)

TS6.2/GD5.9/GMPV46/SM1.6 – Geodynamics of the Westernmost Mediterranean and Northwest Africa (co-organized)

– Posters

Convener: Carlos J. Garrido | Co-Conveners: Bodinier Jean-Louis, Manel Fernandez, Laurent Jolivet, Guillermo Booth-Rea, Philippe Vernant

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: G. Booth-Rea, L. Jolivet, J.-L. Bodinier & P. Vernant

- XL348 EGU2011-8401
Damien Do Couto, Jean-Pierre Suc, Noémie Le Bret, Charles Gumiaux, Laurent Jolivet, Christian Gorini, Georges Clauzon, Gwénaél Jouannic, and Ferran Estrada
 Impacts of the Messinian Salinity Crisis on the Spanish margin of the Alboran Sea, Western Mediterranean
- XL349 EGU2011-481
Youssef Timoulali
 Geodynamic evolution in the West Alboran Sea: New evidence
- XL350 EGU2011-9927
Manel Fernández, Ivone Jiménez-Munt, Jaume Vergés, Daniel Garcia-Castellanos, Javier Fullea, Marta Pérez-Gussinyé, and Juan Carlos Afonso
 Decoupled crust-mantle accommodation of Africa-Eurasia convergence in the NW-Moroccan margin
- XL351 EGU2011-6461
Stephen Monna, Giovanni B. Cimini, Caterina Montuori, Wolfram H. Geissler, Luis M. Matias, and Paolo Favali
 Upper mantle structure of the SW Iberian Margin and Alboran Sea: new insights from 3D teleseismic tomography integrating OBS and land stations data
- XL352 EGU2011-8902
Meghan S. Miller, Amir Allam, Lisa A. Alpert, and Thorsten W. Becker
 Mantle structure and dynamics beneath the Western Mediterranean constrained by seismic anisotropy and global flow models

- XL353 EGU2011-1231
Edoardo Del Pezzo, Jose Morales, Jesus Ibanez, Daniel Stich, and Francesca Bianco
 Attenuation for P and S waves in the upper mantle beneath Iberian peninsula in the frequency range 0.2 - 8 Hz from Broad-Band recordings of the (600 km) deep \hat{A} earthquake of April 11, 2010.
- XL354 EGU2011-11270
Süleyman Dündar, Rainer Kind, Xiaohui Yuan, Fatih Bulut, Xueqing Li, Forough Sodoudi, Ben Heit, Prakash Kumar, Winfried Hanka, and Flor de Lis Mancilla
 Lessons learned from receiver function analysis: Variation of the seismic discontinuities along the Alboran Sea region
- XL355 EGU2011-4930
Ingo Grevemeyer, Antonio Villasenor, and Wiebke Leuchters
 Seismotectonics of the Alboran domain, Western Mediterranean - active shallow tectonics and deep-seated shadows of the past
- XL356 EGU2011-13745
Jean Roger, Alain Rabaute, Nuno Simão, and Nicolas Chamot-Rooke
 High energy seismic ruptures offshore the Iberian Peninsula: state of the art
- XL357 EGU2011-8111
 Angélique Leprêtre, **David Graindorge**, Frauke Klingelhoeffer, Philippe Schnurle, Rabah Bracène, Abdelkarim Yellès, and Jacques Déverchère
 How atypical is the Algerian passive margin? First results from structures imaged by seismic data off Tipaza, central Algerian margin
- XL358 EGU2011-11185
Daniel Garcia-Castellanos and Antonio Villaseñor
 Tectonic uplift at the Gibraltar Arc and the Mediterranean salt pan. Towards a mechanistic model for the Messinian Salinity Crisis
- XL359 EGU2011-13075
Achraf Koulali Idrissi, Driss Ouazar, Abdelilah Tahayt, Robert.W King, Philippe Vernant, Robert Reilinger, Simon McClusky, Taoufiq Mourabit, J.Martín Davila, and Nabil Amraoui
 New GPS constraints on deformation along the Africa-Iberia plate boundary
- XL360 EGU2011-8005
Anna Echeverria, Giorgi Khazaradze, Jorge Garate, Eva Asensio, Eulàlia Masana, and Emma Suriñach
 Present-day GPS crustal deformation rates in the Eastern Betics (SE Spain)
- XL361 EGU2011-4290
Ana Ruiz-Constán, Jesús Galindo-Zaldívar, and Antonio Pedrera
 Stress distribution in a continental collision: the northwestern Betic Cordillera transect
- XL362 EGU2011-4829
 Antonio Pedrera, **A. Ruiz-Constán**, **J. Galindo-Zaldívar**, A. Chalouan, C. Sanz de Galdeano, C. Marín-Lechado, P. Ruano, M. Benmakhlouf, M. Akil, A.C. López-Garrido, A. Chabli, and M. Ahmamou, L. González-Castillo
 Pliocene to Present-day stress field along the western Gibraltar orogenic arc and geodynamics implications
- XL363 EGU2011-12712
Alejandra Staller, Belén Benito, José Jesús Martínez-Díaz, Jorge Gárate, and Laura Wallace
 Kinematic model of crustal deformation in the Ibero-Maghreb region: Insights from geodetic, geophysical and geologic data.
- XL364 EGU2011-3822
Guillermo Booth-Rea, Lahcen Asebriy, Antonio Jabaloy, Ali Azdimoussa, Mercedes Vázquez-Vílchez, and José Miguel Martínez-Martínez
 What is the fate of STEP faults? The disappearing Nekor fault in the Eastern Rif, Morocco
- XL365 EGU2011-4040
Antonio Jabaloy Sánchez, Ali Azdimoussa, Guillermo Booth-Rea, Lahcen Asebriy, Mercedes Vázquez Vílchez, and José Miguel Martínez-Martínez
 Extensional detachments in the external Rif: a mode of upper-crustal extension during oblique collision (Temsamane units, eastern Rif, Morocco)
- XL366 EGU2011-13741
 Mercedes Vázquez, **Antonio Jabaloy**, Luis Barbero, and Finlay M. Stuart
 Differential exhumation of the Nevado-Filábride Complex (Betic Cordillera, Southern Spain): evidence from apatite (U-Th)/He thermochronology and apatite fission tracks
- XL367 EGU2011-13984
 María Teresa Gómez-Pugnaire, Daniela Rubatto, Juan Manuel Fernández-Soler, Antonio Jabaloy, **Vicente López Sánchez-Vizcaino**, Francisco González-Lodeiro, Jesús Galindo-Zaldívar, and José Alberto Padrón-Navarta
 U-Pb zircon geochronology of gneisses of the Betic Cordillera, Spain: Evidences of recycled Variscan crust during the Alpine orogeny

- XL368 EGU2011-2991
Carlos J. Garrido, Frédéric Gueydan, Guillermo Booth-Rea, Jacques Precigout, Karoly Hidas, José Alberto Padrón-Navarta, and Claudio Marchesi
 Garnet Lherzolite and Garnet-spinel mylonite in the Ronda Peridotite: Vestiges of Oligocene Back-arc mantle lithospheric extension in the Western Mediterranean
- XL369 EGU2011-4027
Karoly Hidas, Guillermo Booth-Rea, Carlos J. Garrido, and José Miguel Martínez-Martínez
 Folding and shearing of the lithospheric mantle prior to Ronda peridotite intracrustal emplacement
- XL370 EGU2011-8141
Erwin Frets, Carlos Garrido, Andrea Tommasi, Jean-Louis Bodinier, Isma Amri, and Kamal Targuisti
 Structural Petrology of the Beni Bousera Peridotite (Betic-Rif Belt, N Morocco)
- XL371 EGU2011-4894
Zoltan Konk, Carlos J. Garrido, Andrea Tommasi, Karoly Hidas, Claudio Marchesi, and Csaba Szabo
 Deformation Record of Upper Mantle Peridotite Xenoliths from SE Iberian Volcanic Province (Spain)
- XL372 EGU2011-3987
Claudio Marchesi, Carlos J. Garrido, Delphine Bosch, Jean-Louis Bodinier, Karoly Hidas, José A. Padrón-Navarta, and Fernando Gervilla
 A Late Oligocene supra-subduction setting for the Westernmost Mediterranean revealed by andesite-derived mantle pyroxenite in the Ronda peridotite (S Spain)
- XL373 EGU2011-12655
 Elisabetta Rampone, Reinoud L.M. Vissers, and **Alberto Zanetti**
 Evidence for silica-saturated melts in the Tallante mantle xenoliths (SE Spain): Inferences on their origin and geodynamic significance
- XL374 EGU2011-9295
 Antonio Álvarez-Valero, **Leo Kriegsman**, Youssef Driouch, Mohamed Dahire, Ali Moukadiri, Ahmed Ntarmouchant, Stéphanie Duchene, and Jean-Luc Severac
 Xenoliths as constraints on crustal architecture and melting levels in southern Spain and northern Morocco

TS6.7/GD3.6/GMPV51 – Tectonic Evolution of the Gondwana Collision and the North African Tethyan Margin (co-organized) – Orals

Convener: Tamer Abu-Alam | Co-Conveners: Badr Ghorbal, Aberra Mogessie, Harald Fritz, Daniel Stockli, Mohamed Ghoneim

Room: 28

Chairperson: n.n.

- 13:30–13:45 EGU2011-9483
Joachim Jacobs, Kosuke Ueda, Robert J. Thomas, Ilka Kleinhanns, Bernhard Bingen, and Ane Engvik
 Indentor-escape, delamination and orogenic collapse of the ca. 600-500 Ma East African/Antarctic Orogen in Mozambique and Dronning Maud Land (East Antarctica)
- 13:45–14:00 EGU2011-203
Michael Brown, Barry Reno, Philip Piccoli, and Rudolph Trouw
 The early assembly of Gondwanan elements in South America: the P-T-time evolution of high-grade nappes in the Southern Brasília Belt, Brazil
- 14:00–14:15 EGU2011-2167
Harald Fritz, Christoph Hauzenberger, and Veronika Tenczer
 Tectonic styles of Neoproterozoic - early Phanerozoic East African orogens
- 14:15–14:30 EGU2011-11322
Badr Ghorbal, Daniel F. Stockli, and Paul A.M. Andriessen
 Time-temperature constraints on vertical movement along a Moroccan pericratonic transect (NW Africa) from zircon (U-Th)/He dating
- 14:30–14:45 EGU2011-86
Toshiaki Tsunogae, Hisako Shimizu, and Mw Santosh
 High-pressure and ultrahigh-temperature metamorphism along the Gondwana suture zone in Southern India
- 14:45–15:00 EGU2011-14011
Michael Brown
 Does the formation of Gondwana coincide with a change in global geodynamics?

TS6.7/GD3.6/GMPV51 – Tectonic Evolution of the Gondwana Collision and the North African Tethyan Margin (co-organized) – Posters

Convener: Tamer Abu-Alam | Co-Conveners: Badr Ghorbal, Aberra Mogessie, Harald Fritz, Daniel Stockli, Mohamed Ghoneim

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Badr Ghorbal and Harald Fritz

- XL375 EGU2011-10307
Tamer Abu-Alam, Kurt Stüwe, and Khalid Kadi
Pan-African exhumation mechanisms
- XL376 EGU2011-12238
Zakaria Hamimi, Mohamed El-Shafei, Ghazi Kattu, and Mohamed Matsah
Transpressional regime in southern Arabian Shield: insights from Wadi Yiba area, Saudi Arabia
- XL377 EGU2011-10364
Mohamed Hamdy, El-Metwaly Lebda, and **Tamer Abu-Alam**
Thermodynamic constraints on metamorphism of ultramafic rocks from different tectonic settings at Gebel Arais and Gebel Malo Grim, Eastern Desert, Egypt
- XL378 EGU2011-5454
Chris Clark, Ian Fitzsimons, and David Healy
What drives and sustains high geothermal gradient metamorphism during Gondwana amalgamation?
- XL379 EGU2011-6864
Francesca Meneghini, Alex Kisters, Ake Fagereng, and Ian Buick
A late Neoproterozoic ridge-trench encounter: evidence from the Khomas accretionary complex, Damara Belt, Central Namibia
- XL380 EGU2011-893
Manuel Sehr, Ulrich A. Glasmacher, Daniel Stockli, Oliver Kluth, Jürgen Schober, Hadou Jabour, and Salim Lahsini
Thermal and exhumation history of the southwestern Anti-Atlas, Morocco
- XL381 EGU2011-4477
Or Bialik, Dorit Korngreen, and **Chaim Benjamini**
Paleoenvironments of Late Triassic evaporites determined from coupled microfacies - stable isotopes characterization, Mohilla Fm of the Levant margin
- XL382 EGU2011-10027
Lydia Jagger and Ken McClay
Tectono-stratigraphic evolution of the southeast Mediterranean margin, offshore Egypt and Libya
- XL383 EGU2011-11473
Leanne Cowie and Nick J. Kusznir
Crustal Thickness for North Africa and the Mediterranean from Gravity Anomaly Inversion
- XL384 EGU2011-1138
Mohamed Ghoneim, Metwaly Lebda, and Abdelaal Abdelkarim
On the Plutonities of the Subduction Regime south Sinai: Discrimination and Modeling
- XL385 EGU2011-1554
Or Bialik, Antonina Kantorovitch, Aaron Meilijson, Dorit Korngreen, and Chaim Benjamini
Tectonic- and eustatic- control on multi-scale sedimentary cycles in the Ladinian-Carnian carbonate-evaporite succession, southern Levant margin
- XL386 EGU2011-3434
Julien Feneyrol, Patrick Monié, Gaston Giuliani, Daniel Ohnenstetter, and Elias Malisa
Panafrican ³⁹Ar/⁴⁰Ar ages (520-505 Ma) of the tsavorite deposits in the Lelatema Fold Belt (northeastern Tanzania)
- XL387 EGU2011-3489
Daniel Ohnenstetter, Julien Feneyrol, Gaston Giuliani, Claire Rollion-Bard, Jean-Louis Robert, and Elias Malisa
First occurrence of tainiolite in the Namalulu tsavorite deposit (Tanzania): evidence of evaporite-bearing sediments from continental platform in the Neoproterozoic Metamorphic Mozambique Belt
- XL388 EGU2011-4025
Damien Delvaux and Louis Kipata
Late Panafrican thrust reactivations of the Ubende belt in Western Tanzania: a distant effect of the Lufilian Arc collisional orogeny
- XL389 EGU2011-4348
Mohammad Hossein Zarrinkoub, Sun lin Chung, Mohammad Mahdi Khatib, Seyed Saeid Mohammadi, and H y Chiu
Aluminous A-type granite of Takhte Baz area (NW of Birjand, East of Iran) and its tectonic significance
- XL390 EGU2011-5480
Saeid Tavakoli, Dominique Frizon de Lamotte, Jean-Christophe Wrobel-Daveau, and Jean-Claude Ringenbach
Pre-Permian extensional deformation and uplift in the central High Zagros (Iran): What is the geodynamic significance of the so-called "Hercynian unconformity" in the Arabian plate?

- XL391 EGU2011-6044
Camille Raulin, Dominique Frizon de Lamotte, Samir Bouaziz, Sami Khomsi, Nicolas Mouchot, Geoffrey Ruiz, and François Guillocheau
 Evidence of late Triassic-early Jurassic block tilting along E-W faults in southern Tunisia
- XL392 EGU2011-12982
 Arild Andresen, **Anders Lundmark**, Lars Augland, Tom Andersen, and Gamal Boghdady
 Constraining the Neoproterozoic East African orogen in the Eastern Desert, Egypt: combining U-Pb ID-TIMS ages, in situ LA-ICPMS Hf data and field observations
- XL393 EGU2011-13885
Mahmoud Shreif, Mohamed Ghoneim, Mohamed Heikal, and Bothina El-Dousky
 Petrogenesis of Granites, Sharm El-Sheikh Area, South Sinai, Egypt: Petrological Constrains and Tectonic Evolution

GD6.1/GMPV55/SM1.12/TS4.6 – Whole mantle dynamics: Linking surface and deep processes (co-organized) – Orals

Convener: Trond Torsvik | Co-Conveners: Rob Van der Voo, Clinton Conrad, Mike Gurnis

Room: 22

Chairperson: T.H. Torsvik and C. Gaina

- 08:30–08:45 EGU2011-4392
Allen McNamara and Edward Garnero
 Long Lived Compositional Reservoirs: Their Evolution in a Cooling Earth and Hypothesis Tests for their Existence
- 08:45–09:00 EGU2011-4850
Reidar G. Trønnes
 Composition, mineral physics and origin of thermochemical piles in the D" zone
- 09:00–09:15 EGU2011-12247
Marcus Beuchert, Harro Schmeling, and Meysam Shahraki
 Influence of Large Low Shear Velocity Provinces in the lower mantle on the geoid
- 09:15–09:30 EGU2011-2591
Rob Van der Voo and Trond H Torsvik
 Linking surface and deep processes in the Paleozoic
- 09:30–09:45 EGU2011-958
John Crowley and Richard O'Connell
 An analytic model for thermal convection with plates and the implications for plate-mantle coupling and the thermal evolution of the Earth
- 09:45–10:00 EGU2011-2381
Stephanie C. Werner and Kevin Burke
 Distribution of volcanism, topographic and geoid highs on terrestrial bodies: A comparison

COFFEE BREAK

Chairperson: R. Van der Voo and A. McNamara

- 10:30–10:45 EGU2011-3216
Bernhard Steinberger and Trond H. Torsvik
 A geodynamic model of plumes from the margins of Large Low Shear Velocity Provinces
- 10:45–11:00 EGU2011-3676
Peter Webb, Huw Davies, and Rhodri Davies
 Identifying the origin of seismic anomalies using 300Myr plate motion history in mantle circulation models
- 11:00–11:15 EGU2011-3849
Julian Lowman, Scott King, and Sean Trim
 The influence of plate boundary motion on mantle planform and heat flux in viscously stratified convection models
- 11:15–11:30 EGU2011-2438
Clinton Conrad, Bernhard Steinberger, and Trond Torsvik
 Past Mantle Dynamics Revealed by Net Characteristics of Surface Plate Motions
- 11:30–11:45 EGU2011-5704
Laurent Husson, Clinton P. Conrad, and Claudio Faccenna
 On the consistency between Andean dynamics and mantle flow in the South Atlantic
- 11:45–12:00 EGU2011-4492
Carmen Gaina, Trond H. Torsvik, Steven Cande, Marcel Croon, and Pavel V. Dubrovine
 Global Plate Circuits at Paleocene-Eocene time

SSP1.7/GMPV56 – LIPs: teleconnections between geological processes and mass extinctions (co-organized) –

Posters

Convener: Darren Gröcke | Co-Conveners: Henrik Svensen, Paul Wignall, Benjamin Black

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Paul Wignall, Benjamin Black

- A477 EGU2011-1605
Benjamin Black, Linda Elkins-Tanton, Benjamin Weiss, Roman Veselovskiy, Anton Latyshev, and Vladimir Pavlov
 Emplacement Temperatures of Voluminous Siberian Traps Volcaniclastic Deposits
- A478 EGU2011-12812
Henrik Svensen, Sverre Planke, Alexander G. Polozov, Dougal A. Jerram, and Seth Burgess
 The Siberian Traps during the onset of flood volcanism: Volcanic facies and the distribution of tuffs in the north-western part of the province

TS3.1 – Deformation and strain localization from micro- to lithospheric scales: patterns, processes, microstructures and the role of fluids in nature and experiment (co-listed) – Orals

Convener: Florian Fuisseis | Co-Conveners: Luca Menegon, Sergio Llana-Funez, Claudia Trepmann, Sandy Cruden, Ulrich Riller, Christoph Schrank

Room: 27

Chairperson: n.n.

- 10:30–10:45 EGU2011-522
Phil Skemer
 Microstructural evolution of peridotite during high temperature deformation
- 10:45–11:00 EGU2011-12141
Albert Griera, Mark W. Jessell, Ricardo Lebensohn, Lynn Evans, and Paul D. Bons
 Lattice Preferred Orientation (LPO) evolution in dynamically recrystallizing olivine polycrystals: a numerical approach
- 11:00–11:15 EGU2011-6571
Rolf Bruijn, David Mainprice, Philip Benson, and Luigi Burlini
 Fabric development during high temperature and pressure compaction of hot-pressed Rochester Shale
- 11:15–11:30 EGU2011-1773
Hugues Raimbourg, Toshihiro Kogure, and Tsuyoshi Toyoshima
 Crystal folding and recrystallization in naturally deformed orthopyroxene: insights from TEM imaging of subgrain/grain boundary development
- 11:30–11:45 EGU2011-2611
Mathieu Bourcier, Alexandre Dimanov, Eva Héripré, Michel Bornert, Wolfgang Ludwig, and Jean Raphanel
 Viscoplastic behavior of synthetic salt : In-situ SEM full field measurement, a micromechanical approach.
- 11:45–12:00 EGU2011-8305
Laurent Montesi
 Fabric development as the key to forming ductile shear zones and enabling plate tectonics

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-13759
Andrew Putnis, Håkon Austrheim, Christine V. Putnis, and Janneke Brouwer
 Mineral-fluid interaction and possible mechanisms of reaction-induced weakening
- 13:45–14:00 EGU2011-4922
Holger Stunitz, Luca Menegon, Pritam Nasipuri, Petr Jerabek, Florian Fuisseis, Erling Ravna, Kåre Kullerud, and Steffen Bergh
 Strength evolution of the lower crust - examples from Northern Norway
- 14:00–14:15 EGU2011-1092
Santanu Misra and Jean-Pierre Burg
 Large strain rheology of syn-tectonic melting and crystallizing metapelites
- 14:15–14:30 EGU2011-4096
Rüdiger Kilian, Renée Heilbronner, and Holger Stunitz
 Deformation of dry quartz in shear zones

- 14:30–14:45 EGU2011-1943
Guillaume Desbois, Janos L. Urai, Peter A. Kukla, Uwe Wollenberg, Fabián Pérez-Willard, Zsolt Radí, and Sandor Riholm
 Distribution of brine in grain boundaries during static recrystallization in wet, synthetic halite: insight from Broad Ion Beam sectioning and SEM observation at cryogenic temperature
- 14:45–15:00 EGU2011-6133
Antoine Quilichini, Luc Siebenaller, Christian Teyssier, and Torsten Vennemann
 Plumbing system at the brittle-ductile transition of a shear zone - insights from the Bitterroot detachment, MT, USA
- Chairperson: Ulrich Riller, Florian Fusseis
- 15:30–15:45 EGU2011-5814
Aude Gébelin, Andreas Mulch, Christian Teyssier, Matthew Heizler, Torsten Vennemann, and Nicholas C.A. Seaton
 Quartz recrystallization and fluid flow during exhuming footwall rocks of the Northern Snake Range detachment, Nevada
- 15:45–16:00 EGU2011-4315
Alison Ord and Bruce Hobbs
 Localised Folding and Axial Plane Structures
- 16:00–16:15 EGU2011-5478
Christoph Schrank, Florian Fusseis, Ali Karrech, and Klaus Regenauer-Lieb
 Thermal elasticity promotes failure in the brittle-ductile crust
- 16:15–16:30 EGU2011-8979
Bernhard Grasemann, Cornelius Tschegg, and Marcin Dabrowski
 How boudinage triggers the localization of low-angle normal faults
- 16:30–16:45 EGU2011-5013
Iris Lenauer and Ulrich Riller
 Strain localization in mafic rocks: evidence from the Sudbury Igneous Complex, Canada
- 16:45–17:00 EGU2011-1499
Jean Braun, Frédéric Herman, and Geoffrey Batt
 Is there strain softening in the Earth's crust?

TS3.1 – Deformation and strain localization from micro- to lithospheric scales: patterns, processes, microstructures and the role of fluids in nature and experiment (co-listed) – Posters

Convener: Florian Fusseis | Co-Conveners: Luca Menegon, Sergio Llana-Funez, Claudia Trepmann, Sandy Cruden, Ulrich Riller, Christoph Schrank

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Sandy Cruden

- XL279 EGU2011-836
 Marco Antonio López-Sánchez, Alberto Marcos, Francisco José Martínez, and **Sergio Llana-Funez**
 Strain gradient recorded in the Penedo Gordo granite during extensional movement of crustal-scale Vivero Fault (NW Spain)
- XL280 EGU2011-924
Ayca Yurdakul and Bradford Hager
 Delineation of Deformation Using Finite Element Modeling: A Case From Western Turkey
- XL281 EGU2011-1093
Santanu Misra and Jean-Pierre Burg
 Evolution of kink-band microstructures and rheology during torsion deformation of muscovite
- XL282 EGU2011-1702
Ulrich Riller, Alexander Cruden, David Boutelier, and Christoph Schrank
 Origin of sinuous deformation patterns in hot, wide orogens
- XL283 EGU2011-1705
Ulrich Riller, David Boutelier, Christoph Schrank, and Alexander Cruden
 Role of kilometer-scale weak circular heterogeneities on upper crustal deformation patterns: evidence from scaled analogue modeling and the Sudbury Basin, Canada
- XL284 EGU2011-1731
Maartje Houben, Guillaume Desbois, and Janos Urai
 A comparative study of fabrics and porosity in shaly and sandy facies of Opalinus Clay by BIB-SEM methods
- XL285 EGU2011-2301
Alexander Simakin
 Different ways to portrait anisotropic mantle rheology.

- XL286 EGU2011-2317
Luca Menegon, Holger Stünitz, Pritam Nasipuri, Livia Nardini, and Renee Heilbronner
Strain localization in lower crustal shear zones due to granular flow of syndeformational reaction products
- XL287 EGU2011-2722
Johanna Nevitt, David Pollard, and Peter Lovely
Evolution of fault geometry and ductile fabrics under brittle-ductile conditions: an example from the Mount Abbot Quadrangle, Sierra Nevada, CA
- XL288 EGU2011-5028
Philippe Agard, Romain Augier, and Patrick Monié
Shear band formation and strain localization on a regional scale: evidence from anisotropic rocks below a major detachment (Betic Cordilleras, Spain)
- XL289 EGU2011-6269
Pinar Ozfirat, Mark James Caddick, and Alan Bruce Thompson
The influence of textural inheritance and general kinetics in the development of porphyroblasts during metamorphism
- XL290 EGU2011-6309
Marianne Negrini, Holger Stünitz, and Luca Menegon
Experimental deformation, partial melting, and compositional changes in perthitic K-feldspar at high pressure and temperature
- XL291 EGU2011-6518
Rolf Bruijn, Bjarne Almqvist, Philip Benson, and Ann Hirt
Magnetic susceptibility in experimentally compacted Rochester Shale powder
- XL292 EGU2011-7408
Chiara Prete, Richard Spiess, and Annalisa Tunesi
Reaction softening of the deeper crust: an example from Baja California (Mexico)
- XL293 EGU2011-7441
Wentian Liang, Guowei Zhang, Yong Bai, and Kurt Stüwe
Emplacement mechanism of Mishuling Pluton: Implications for the Late Indosinian Tectonic Evolution of Qinling Orogen
- XL294 EGU2011-8110
Nicolas Brantut, Emmanuel David, Eva Heripre, Alexandre Schubnel, and Robert W Zimmerman
Elastic wave velocity and acoustic emission monitoring during Gypsum dehydration under triaxial stress conditions
- XL295 EGU2011-8961
Bernhard Grasmann and Marcin Dabrowski
Pinch and swell boudins during high-strain simple shear
- XL296 EGU2011-9213
Sabrina Diebold, Hans De Bresser, William B. Durham, and Laura Stern
Flow of pure water ice: Grain growth and deformation
- XL297 EGU2011-9396
Alexander Cruden, John Grocott, and Carlos Arevalo
Interplay between slab dynamics and upper plate structure for localizing magmatism in continental arcs
- XL298 EGU2011-9430
Renee Heilbronner, Anja Thust, and Holger Stunitz
Mapping water and misorientations in experimentally deformed quartz
- XL299 EGU2011-9487
Jacek Szczepanski, Marcin Dabrowski, Olav Gundersen, and Robert Anczkiewicz
A fabric study of the Jegowa date-quartzite (quartz metaconglomerate)
- XL300 EGU2011-9686
Marcel Thielmann and Boris J. P. Kaus
Shear heating and subduction initiation
- XL301 EGU2011-9972
Julia Bial and **Claudia Trepmann**
From brittle and crystal-plastic deformation to dissolution-precipitation creep - the microfabric development in HP-metamorphic serpentized mantle peridotites
- XL302 EGU2011-10763
Giorgio Pennacchioni, Eleonora Zucchi, Silvia Favaro, Bernd Leiss, and Jens Walter
Development of crystallographic preferred orientation in natural quartz veins during post-magmatic cooling and deformation of granitoid plutons: comparison between Adamello (Avio intrusion; Southern Alps, Italy) and Sierra Nevada (Lake Edison intrusion; C
- XL303 EGU2011-10886
Vaneeda Allken, Ritske Huismans, and **Cedric Thieulot**
Three-dimensional numerical modelling of crustal extension
- XL304 EGU2011-11095
Marcin Dabrowski and Bernhard Grasmann
Numerical modelling of domino boudinage under high simple shear strain

- XL305 EGU2011-11887
Joyce Schmatz and Janos L. Urai
The interaction of migrating grain boundaries and fluid inclusions in naturally deformed quartz
- XL306 EGU2011-12281
Laurent Ciancaleoni
Late Oligocene and Neogene kinematics of convergence at plate boundaries in the Eastern Central Alps : insights from shear zone patterns in metagranites from the European and Adriatic plates in the vicinity of the Insubric Line
- XL307 EGU2011-12771
Katharina Methner, Andreas Mulch, Aude G ebelin, Christian Teyssier, Micheal Wells, and Mike Cosca
Eocene extension and meteoric fluid flow in quartzite mylonite of the Raft River metamorphic core complex (USA)
- XL308 EGU2011-13153
Flora Andres-Araujo, **Angel Rodr guez-Santana**, Anaqua Gonzalez, Claudio Moreno, Francisco J. P rez-Torrado, Francisco Santana, and Tim A. Minshull
Sensitivity analysis of a model of lithospheric flexure: A case study of the flexure effect of Tenerife island on Gran Canaria island in the last 4 ma.
- XL309 EGU2011-13351
Jens Walter, Bernd Leiss, Giorgio Pennacchioni, and Christian Randau
Quantitative Neutron and X-ray texture analysis of Quartz mylonites - a comparative study
- XL310 EGU2011-13403
Jens Walter, Andreas Houben, Werner Schweika, Michael Stipp, Klaus Ullemeyer, Helmut Klein, Bernd Leiss, Bent T. Hansen, and Werner F. Kuhs
POWTEX Diffractometer at FRM II - New Perspectives in Geoscientific Neutron Diffraction

Friday, 08 April

GD6.2/GMPV50/SM4.3 – Whole mantle and transition zone structure, dynamics and evolution: multidisciplinary perspectives (co-listed) – Posters

Convener: Paul Tackley | Co-Conveners: Sergio Speziale, Lapo Boschi, Andreas Stracke, Huw Davies, FUMIKO TAJIMA, Heiner Igel, Hitoshi Kawakatsu, Fenglin Niu

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- A38 EGU2011-11809
Jesus Casal Berbel and **Christine Thomas**
New insights into the D" layer beneath the central Pacific
- A39 EGU2011-8593
Paul Tackley
The 3-D dynamics of compositionally-stratified slabs entering a "slab graveyard"
- A40 EGU2011-8635
Paul Tackley and Takashi Nakagawa
Effects of low-viscosity post-perovskite on thermo-chemical mantle convection in a 3-D spherical shell
- A41 EGU2011-12434
Frédéric Deschamps, **Paul Tackley**, Yang Li, and Takashi Nakagawa
The nature and dynamics of deep mantle thermo-chemical reservoirs
- A42 EGU2011-10795
Hein van Heck and **Paul Tackley**
The limited effect of toroidal flow on mixing efficiency in 3-D spherical mantle convection.
- A43 EGU2011-3989
Claudia Stein and Ulrich Hansen
Evolution in plate-mode mantle convection: Implications for plumes and thermochemical piles
- A44 EGU2011-9941
Tiffany Barry and J. Huw Davies
A look at what happened to Tethyan mantle during closure of Neo-Tethys
- A45 EGU2011-3012
Philip Heron and **Julian Lowman**
Modelling the thermal evolution of the mantle post-supercontinent formation: insulation effects and timescales
- A46 EGU2011-1643
Shoichi Yoshioka and Aya Naganoda
Numerical simulations on fall of stagnant slabs into the lower mantle
- A47 EGU2011-1787
Fumiko Tajima and Eiji Ohtani
Seismic observation and numerical modeling for the mantle transition zone with stagnant slabs
- A48 EGU2011-2412
Hitoshi Kawakatsu and Shoichi Yoshioka
Direct imaging of the metastable olivine wedge for a deep dry cold slab beneath southwest Japan
- A49 EGU2011-785
Stephan Lessing, Christine Thomas, and Sebastian Rost
Seismic investigation of upper mantle discontinuities under the Indian-Asian collision zone with PP precursors
- A50 EGU2011-411
Mélanie Drilleau, Eric Beucler, Antoine Mocquet, and Olivier Verhoeven
Bayesian approach to infer temperature and mineralogical composition of the transition zone from seismic waveforms
- A51 EGU2011-9077
Fenglin Niu and Xinling Wang
Imaging the mantle transition zone beneath eastern and central China with CEArray receiver functions
- A52 EGU2011-8864
Alessandra Correale, **Mauro Martelli**, Antonio Paonita, Andrea Rizzo, Lorenzo Brusca, and Vittorio Scribano
Metasomatism and degassing processes in the Hyblean heterogeneous mantle, as inferred from noble gas investigation of ultramafic xenoliths
- A53 EGU2011-2490
Christoph Hauzenberger and Juergen Konzett
Melt triggered deformation of the upper mantle: examples from xenoliths from Kimberley, South Africa and the Letseng-la-Terae kimberlite, Lesotho (UNESCO IGCP 557)

- A54 EGU2011-6747
Igor Ashchepkov, Theodoros Ntaflos, Dmitri Ionov, Lyudmila Pokhilenko, Nikolai Vladykin, Sergey Kuligin, Sergey Mityukhin, and Stanislav Palesky
 Mantle structure and composition beneath Udachnaya pipe reconstructed by mantle xenoliths from the brown breccia
- A55 EGU2011-6595
Barbara Faccini, Massimiliano Melchiorre, Massimo Coltorti, and Costanza Bonadiman
 Nature and evolution of Northern Victoria Land subcontinental lithospheric mantle (Antarctica)
- A56 EGU2011-10429
Igor Ashchepkov, Hilary Downes, Nikolai Vladykin, Roger Mitchell, Stanislav Palesky, and Elena Nigmatulina
 Mantle sequences beneath Colorado from xenocrysts from Sloan and Kelsey lake kimberlites.

GMPV5 – Monitoring and observations of active volcanoes using in-situ and remote sensing techniques – Orals

Convener: Michael Burton | Co-Conveners: Thomas Staudacher, Jurgen Neuberg, Hugo Delgado Granados, Alessandro Bonaccorso

Room: 20

Chairperson: Alessandro Bonaccorso

- 08:30–08:45 EGU2011-5549
Christoph Hörmann, Holger Sihler, Nicole Bobrowski, Christoph Kern, Marloes Penning de Vries, Leif Vogel, Ulrich Platt, and Thomas Wagner
 Coincident observations of SO₂ and BrO from volcanic eruptions by the GOME-2 instrument
- 08:45–09:00 EGU2011-2432
Nicolas Theys, Hugues Brenot, Jeroen van Gent, Michel van Roozendaal, Ronald van der A, Lieven Clarisse, Daniel Hurtmans, Yasmine Ngadi, Pierre Coheur, and Cathy Clerbaux
 A multi-sensor alert system for volcanic emissions using satellite SO₂ and ash measurements
- 09:00–09:15 EGU2011-8083
Corentin Caudron, Devy Syahbana, Thierry Camelbeeck, and Alain Bernard
 Multi-disciplinary continuous monitoring of Kawah Ijen volcano, East Java, Indonesia
- 09:15–09:30 EGU2011-9255
Jurgen Neuberg
 The role of seismology in volcanic forecasting
- 09:30–09:45 EGU2011-12124
Adolfo Inza, Jérôme Igor Mars, Jean-Philippe Métaxian, Gareth Shane O'Brien, and Orlando Macedo
 Three-component seismic array location of LP and explosions
- 09:45–10:00 EGU2011-2855
Takao Ohminato, Takayuki Kaneko, Takao Koyama, Atsushi Watanabe, Atsushi Yasuda, Minoru Takeo, Yoshiaki Honda, and Masato Iguchi
 Volcano Observations Using an Unmanned Autonomous Helicopter : seismic observations near the active summit vents of Sakurajima volcano, Japan

COFFEE BREAK

Chairperson: Jurgen Neuberg

- 10:30–10:45 EGU2011-8324
Michele Pantaleo, Thomas R. Walter, Markus Ramatschi, Junping Chen, Gerd Gendt, and Maorong Ge
 Nisyros volcano monitoring through ground based InSAR, GPS, seismology and thermal sensing
- 10:45–11:00 EGU2011-7852
Kristina Meier, Matthias Hort, Ekkehart Tessmer, and Joachim Wassermann
 An integrated geophysical approach: Field and modelling studies for a better understanding of infrasound signals at Yasur volcano, Vanuatu
- 11:00–11:15 EGU2011-12328
Riccardo Lanari, Pietro Tizzani, Giovanni Zeni, Antonio Pepe, Francesco Casu, and Michele Manunta
 The 1992-2010 Yellowstone Caldera surface deformation evolution investigated through Advanced Spaceborne Radar Interferometry
- 11:15–11:30 EGU2011-4990
Miguel Alatorre-Ibarguengoitia, Hugo Delgado-Granados, Donald Dingwell, and Lucio Cárdenas-González
 Hazard assessment of volcanic ballistics: Integrating field observations, theory and fragmentation experiments

- 11:30–11:45 EGU2011-6610
Thomas Staudacher, Andrea Di Muro, Valerie Ferrazzini, Florent Brenguier, Patrice Boissier, Philippe Kowalski, Philippe Caterine, Frédéric Lauret, and Hervé Douris
 The 2010 eruptive cycle at Piton de la Fournaise volcano
- 11:45–12:00 EGU2011-13182
Patrick Allard, Alessandro La Spina, Giancarlo Tamburello, Alessandro Aiuppa, Andrea Di Muro, and Thomas Staudacher
 First measurements of magmatic gas composition and fluxes during an eruption (October 2010) of Piton de la Fournaise hot spot volcano, La Reunion island

LUNCH BREAK

Chairperson: Hugo Delgado Granados

- 13:30–13:45 EGU2011-5432
Olga Girina, Alexander Manevich, Anton Nuzhdaev, Olga Konovalova, Sergey Ushakov, and Dmitry Melnikov
 Monitoring of 2010-2011 Kizimen Volcano Eruption and Prediction of Danger for Aviation
- 13:45–14:00 EGU2011-8958
Fabio Madonna, Aldo Amodeo, Giuseppe D'Amico, Lucia Mona, and Gelsomina Pappalardo
 Observation of aerosol layers using co-located multiwavelength Raman lidar and microwave radar at CIAO during Eyjafjallajökull 2010 eruption
- 14:00–14:15 EGU2011-8556
Nicole Bobrowski and Giovanni Bruno Giuffrida
 Can bromine/sulphur ratios be used to forecast volcanic eruptions? An example study at Mt Etna.
- 14:15–14:30 EGU2011-12892
Hugo Delgado Granados, Ramón Espinasa-Pereña, Sergio R. Rodríguez, Wendy V. Morales-Barrera, Mariana P. Jácome Paz, and José M. Álvarez Nieves
 Use of soil CO₂ flux for the recognition of the most active zones in the Xalapa Monogenetic Volcanic Field
- 14:30–14:45 EGU2011-8168
Corentin Caudron and Alain Bernard
 Hydroacoustic quantifications of CO₂ bubbles in volcanic lakes
- 14:45–15:00 EGU2011-12010
Robin Champion, Gaia Pinardi, Pierre-François Coheur, Giuseppe Salerno, Michael Burton, Hugo Delgado-Granados, Maria Martinez-Cruz, Simon Carn, and Alain Bernard
 Comparing and integrating SO₂ measurements from ground and space.

GMPV8 – Pollution and Geochemistry – Orals

Convener: Brunella Raco | Co-Conveners: Elissavet Dotsika, Luigi Marini

Room: 20

Chairperson: Elissavet Dotsika

- 15:30–15:45 EGU2011-2251
Stefanie H. Boltersdorf
 Assessing the quality and quantity of N deposition by total N content and the stable isotope signatures in lichen tissue
- 15:45–16:00 EGU2011-8055
Gabriele Curci, Paolo Tuccella, Giovanni Cinque, and Guido Visconti
 Impact of a renewable biomass energy power plant in urban landscape with complex terrain in Central Italy: modelling assessment and suggestions for monitoring site
- 16:00–16:15 EGU2011-1360
Franco Tassi, Caterina Liccioli, and Orlando Vaselli
 VOC composition in air: multi-component sources in a polluted sub-urban area of Florence (Italy).
- 16:15–16:30 EGU2011-11564
Caroline Gauchotte, Laura McGregor, Phil Richards, Stephanie Kerr, Helen Gray, Paddy Daly, Russel Thomas, and Robert M. Kalin
 Ultra-Resolution Chemical Fingerprinting of Dense Non-Aqueous Phase Liquids from Former Manufactured Gas Plants Sites.
- 16:30–16:45 EGU2011-11677
Mine Terzi, Beyhan Pekey, and Halim Aytakin Ergül
 PCB Concentrations in Bottom Sediment Samples From Izmit Bay

- 16:45–17:00 EGU2011-7569
 Zygmunt Strzyszc and **Marzena Rachwa?**
 Formation of technogenic magnetic anomalies in forest soils depending on an amount of industrial dust deposition and the time factor

GMPV8 – Pollution and Geochemistry – Posters

Convener: Brunella Raco | Co-Conveners: Elissavet Dotsika, Luigi Marini

Hall A | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Brunella Raco

- A154 EGU2011-12435
Marina Cabral Pinto, Eduardo A. Ferreira da Silva, Maria MG V Silva, Paulo Melo-Gonçalves, Maria M. Inácio, and Amélia P. Reis
 Maps of multi-elemental enrichment indices in soils and stream sediments from Santiago Island, Cape Verde
- A155 EGU2011-1072
Ibrahim Mohialdeen
 Inorganic Geochemistry of the Upper Jurassic Chia-Gara Formation, a potential source rock in Iraqi Kurdistan Region
- A156 EGU2011-2723
 Pablo Vazquez-Roig, Cristina Blasco, **Vicente Andreu**, and Yolanda Picó
 Emerging contamination in coastal marsh waters of the eastern Spain
- A157 EGU2011-3151
Nicolae Calin, Aurora-Maruta Iancu, Maria Angela Anason, Delia-Georgeta Dumitras, Stefan Marincea, and Constantina Porumbescu
 Geochemistry of phosphogypsum from Turnu Magurele, Romania
- A158 EGU2011-3752
Siou-Ying Tai and Hsueh-yu Lu
 The study of water-rock interaction in Choshui River watershed, Taiwan.
- A159 EGU2011-3903
Anne Schucknecht and Jörg Matschullat
 Geochemical soil baseline values in north-eastern Brazil - vital requirement for pollution studies
- A160 EGU2011-6796
Jeong-Won Lim, Eunhee Lee, Hee Sun Moon, and Kang-Kun Lee
 Characterizing saltwater contamination of subsurface water around the underground storage cavern with hydrochemical analysis
- A161 EGU2011-7080
Ian Fielding
 Ensuring risk-based remedial activities are sustainable: A case study at a former petroleum products terminal in Madeira
- A162 EGU2011-8398
Nicola Hardy, Rebecca Bartlett, and Ian Fielding
 Biodegradation of light-end aliphatic hydrocarbons: Suitable rates for gasoline-type releases
- A163 EGU2011-9461
Ioannis Hatzianestis
 Marine organic geochemistry of the Eastern Mediterranean: Polycyclic aromatic hydrocarbons in Aegean and Ionian Sea surface sediments
- A164 EGU2011-10827
Chun-Mei Hsu and Chien-Yen Chen
 Antibiotic Sorption Using the Clay from Wushanding Mud Volcano, Taiwan
- A165 EGU2011-11283
Luminita Marmureanu, Camelia Talianu, Jeni Vasilescu, and Livio Belegante
 Investigation of local sulfur dioxide pollution from a thermal power plant using lidar and point monitors measurements
- A166 EGU2011-12539
Marina Cabral Pinto, Maria M.G.V. Silva, Eduardo A. Ferreira da Silva, Pedro A. Dinis, and Fernando Rocha
 Geochemistry and mineralogy of stream sediments of Santiago island, Cape Verde
- A167 EGU2011-887
Maite Lacarra, Marie-Noelle Houssais, Christophe Herbaut, Emmanuelle Sultan, and Abdou Aziz Mbengue
 Formation of dense shelf water on the east Antarctic continental shelf off Adelie Land during 2008-2010
- A168 EGU2011-10470
Aykan Karademir, Bircan Telli, Seda Aslan Kilavuz, and Halim Aytekin Ergul
 Assessment of the PCDD/F pollution in the bottom sediments in Izmit Bay, Turkey

- A169 EGU2011-11938
Halim Aytakin Ergul, Aykan Karademir, and Sayhan Topcuo?lu
 Heavy Metal Concentrations in Bottom Sediment Samples from Izmit Bay
- A170 EGU2011-13141
Juan A. Romero Guadarrama, Alberto Sanchez, Ana J. Marmolejo Rodriguez, Carles Canet, Martha Sanchez Martinez, and Victor R. Magallanes Ordoñez
 Geochemistry and mineralogy in sediments influenced by the gold mining district El Triunfo, Mexico
- A171 EGU2011-403
 Vladimir Masloboev, Dmitry Makarov, Dmitry Nesterov, Svetlana Mazukhina, and **Sergey Muravyov**
 Artificial geochemical barriers for directed formation of technogenic deposits and environment protection

GD7.1/EMR12/GMPV18/SM4.6 – Structure, Composition and Dynamics of the Deep Earth (co-organized) – Orals

Convener: Jon Mound | Co-Conveners: Arwen Deuss, Michael Ammann, Hauke Marquardt

Room: 22

Chairperson: Jon Mound and Hauke Marquardt

- 13:30–13:45 EGU2011-3592
Renaud Deguen, Thierry Alboussière, Philippe Cardin, and Mickael Melzani
 Convection, melting and the structure of the inner core and lowermost outer core
- 13:45–14:00 EGU2011-11177
Chris Finlay
 A geomagnetic perspective on core structure and dynamics
- 14:00–14:15 EGU2011-2631
Seiki Asari and Vincent Lesur
 Radial vorticity constraint in the core flow modeling
- 14:15–14:30 EGU2011-3068
Pavel Hejda and Alexander P. Anufriev
 Compressibility effects in the Earth's core convection
- 14:30–14:45 EGU2011-7944
Phil Livermore and Rainer Hollerbach
 An excitation mechanism for torsional oscillations on the tangent cylinder
- 14:45–15:00 EGU2011-7159
Alexandre Fournier, Julien Aubert, and Erwan Thébaud
 A proposal for the selection of numerical dynamo models for data assimilation practice

Chairperson: Hauke Marquardt and Jon Mound

- 15:30–15:45 EGU2011-11437
George Helffrich and Satoshi Kaneshima
 Outer core compositional stratification
- 15:45–16:00 EGU2011-5442
Dmitry Krasnoshchekov, Vladimir Ovtchinnikov, and Petr Kaazik
 Observational evidence for cylindrical anomaly of seismic velocity in the Earth's outer core
- 16:00–16:15 EGU2011-1480
Andrew Walker, Andrew Nowacki, Alessandro Forte, James Wookey, and J-Michael Kendall
 Can seismic anisotropy in D" be used to constrain flow patterns in the lowermost mantle?
- 16:15–16:30 EGU2011-5066
Nico De Koker
 Thermal Conductivity of the Lowermost Mantle
- 16:30–16:45 EGU2011-5380
 Gabriele Morra, **Dave Yuen**, and Fabio Cammarano
 Necking of Plume Conduits and Severing of Plumeheads due to Non-Monotonic Plume Structure and Density Structure
- 16:45–17:00 EGU2011-11666
 Nicola Tosi and **David Yuen**
 Branching of plumes at 660 km discontinuity and bounds on lateral viscosity contrast in the lower mantle

TS4.1/G3.4/GMPV27/SM2.10 – Crustal faulting and deformation processes observed by interferometric synthetic aperture radar (InSAR) (co-organized) – Orals

Convener: Manoochehr Shirzaei | Co-Conveners: Thomas R. Walter, Riccardo Lanari

Room: 27

Chairperson: Shirzaei/Lanari

- 08:30–08:45 EGU2011-8777
Sara Del Conte, Andrea Tamburini, Alfio Fumagalli, and Fabrizio Novali
 Active fault analysis and tectonic setting assessment with SqueeSAR
- 08:45–09:00 EGU2011-3997
Eugenio Sansosti
 Deformation time series via space-borne radar interferometry: a second generation tool for Earth's surface displacement analysis
- 09:00–09:15 EGU2011-4582
Yukitoshi Fukahata, Luis Rivera, and Tim Wright
 Estimation of correlation length of InSAR data error based on ABIC: Importance of modeling error in seismic source inversion
- 09:15–09:30 EGU2011-9704
Sigurjon Jonsson and Zhong Lu
 Estimating Tensile Rock Strength from InSAR Observations
- 09:30–09:45 EGU2011-4071
Simone Atzori and Andrea Antonioli
 Optimizing the model resolution in the inversion of geodetic data
- 09:45–10:00 EGU2011-4405
 Pablo J. Gonzalez, **Jose Fernandez**, and Kristy F. Tiampo
 Multiple geodetic data combination to obtain 3D displacement fields: the 1999 Hector Mine earthquake case.

COFFEE BREAK

Chairperson: Lanari/Walter

- 10:30–10:45 EGU2011-12489
 Francesco Casu, Andrea Manconi, **Mariarosaria Manzo**, Antonio Pepe, Giuseppe Solaro, and Riccardo Lanari
 Selected case studies in advanced DInSAR analysis of seismogenic areas
- 10:45–11:00 EGU2011-2353
Semih Ergintav, Ziyadin Cakir, Ugur Dogan, and Mustafa Bas
 Monitoring Surface Deformation in Istanbul and Western Termination of the 1999 Izmit Earthquake Rupture (Turkey) Using PSInSAR and GPS Measurements
- 11:00–11:15 EGU2011-12410
Marcello de Michele, Daniel Raucoules, Paulino Feitio, Pierre Briole, and Joao Fonseca
 The Machaze (Mw 7, 2006, Mozambique) Earthquake: co- and post-seismic surface displacement characterisation using multiband InSAR.
- 11:15–11:30 EGU2011-11613
Manoochehr Shirzaei, Thomas R. Walter, James Foster, and Benjamin Brooks
 Aseismic block movement of southern flank of Kilauea revealed by wavelet analysis of InSAR and GPS time series
- 11:30–11:45 EGU2011-10938
Panagiotis Elias, Pierre Briole, and Olga Sykioti
 Synergy of SAR acquisitions for ground deformation monitoring by means of PSI, SBAS and DInSAR. Case study of western rift of Corinth, Greece
- 11:45–12:00 EGU2011-6553
Miguel Caro Cuenca and Ramon Hanssen
 On the origin of the recent surface deformation observed in the Roer Valley Rift System, the southern Netherlands, after spaceborne radar time series analysis

ERE5.1/GMPV32/HS12.1/SSS2.9 – Coupled reactive transport: Codes, applications and trends (co-organized) – Orals

Convener: Georg Kosakowski | Co-Conveners: Josep M. Soler, Peter Alt-Epping

Room: 3

Chairperson: Peter Alt-Epping

- 15:30–15:45 EGU2011-716
Maria Gabriela Davila Ordoñez, Maria Garcia Rios, Josep M. Soler, and Jordi Cama
 Modeling the dissolution of calcite coupled to gypsum precipitation in acid brines
- 15:45–16:00 EGU2011-2202
 Yaniv Edery, Harvey Scher, and **Brian Berkowitz**
 Modeling Dissolution and Precipitation Dynamics During Dedolomitization

- 16:00–16:15 EGU2011-4128
Jennifer Palguta, Colin F. Williams, Steven E. Ingebritsen, Stephen H. Hickman, and Eric Sonnenthal
 An approach for modeling geothermal reservoir behavior using the reactive transport simulator TOUGHREACT
- 16:15–16:30 EGU2011-11479
Caroline de Dieuleveult, Vincent Lagneau, and Juan Hidalgo
 Development of an isotopic fractionation and filiation module in the reactive transport code HYTEC
- 16:30–16:45 EGU2011-721
Andrey Afanasyev
 Simulation of multiphase flows of binary mixtures under sub- and supercritical conditions
- 16:45–17:00 EGU2011-12020
Marco De Lucia, Susanne Stadler, Matthias Rateitzak, and Michael Kühn
 Evaluating uncertainties in geochemical modelling for CO₂ storage: multivariate sensitivity analysis of database entries

ERE5.1/GMPV32/HS12.1/SSS2.9 – Coupled reactive transport: Codes, applications and trends (co-organized) – Posters

Convener: Georg Kosakowski | Co-Conveners: Josep M. Soler, Peter Alt-Epping

Hall XL | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- XL179 EGU2011-11527
Blaise Delmotte, Carole Delenne, Vincent Guinot, and Elena Gomez
 Calibration and sensitivity analysis of a one-dimensional model of pollutant transport and degradation in maturation ponds.
- XL180 EGU2011-12919
Thomas Gimmi, Olivier X. Leupin, Jost Eikenberg, Martin A. Glaus, Luc R. Van Loon, H. Niklaus Waber, Josep M. Soler, Acacia Naves, Javier Samper, Sarah Dewonck and the rest of the DR Team
 Results and modelling of the 4-year diffusion and retention (DR) experiment in Opalinus Clay in the Mont Terri URL
- XL181 EGU2011-4004
Josep M. Soler, Marja Vuorio, and Aimo Hautojärvi
 Reactive transport modeling of the interaction between water and a cementitious grout in a fracture
- XL182 EGU2011-10034
Alexandre Boisson, Luc Aquilina, and Olivier Bour
 Influence of flow velocity on denitrification in a pore-scale lab experiment
- XL183 EGU2011-2044
Georg Kosakowski and Urs Berner
 Influence of a concrete liner on the evolution of the near field of a HLW repository
- XL184 EGU2011-10789
Peter Alt-Epping and Larryn W. Diamond
 Implications of rock composition, brine composition and pressure/temperature conditions for CO₂ mineral trapping in deep saline aquifers
- XL185 EGU2011-10010
Christoph Egbers and Nicoleta Scurtu
 Challenges in the Numerical Modelling of the CO₂-Transport in Pipelines
- XL186 EGU2011-5581
Haibing Shao, Christina M. Haberer, Peter Grathwohl, and Olaf Kolditz
 Modeling the oxygen mass transfer across the capillary fringe using a multiphase reactive transport code - numerical model construction and comparison with experimental data
- XL187 EGU2011-13903
Mingliang Xie, Olaf Kolditz, and Helge Moog
 A geochemical model for highly saline solutions
- XL189 EGU2011-7457
Dedong Li, Christof Beyer, and Sebastian Bauer
 Simulation of fluid-mineral kinetic reactions during CO₂ storage using ChemApp and SUPCRT92 coupled to OpenGeoSys
- XL190 EGU2011-7625
Luis Manuel de Vries, Albert Nardi, Luit Jan Slooten, and Jesus Carrera
 Random Walk Particle Tracking for reactive transport modelling

- XL191 EGU2011-11295
Sarah Jane Fowler, **Ferdinand Hingerl**, Thomas Driesner, Georg Kosakowski, Dmitrii Kulik, and Thomas Wagner
Reactive transport simulation by combining a multiphase-capable transport code for unstructured meshes with Gibbs energy minimization and multi-electrolyte solution models
- XL192 EGU2011-13635
Hamidreza M. Nick, Pierre Regnier, Martin Thullner, Stephan Matthai, and Florian Centler
A reactive transport model for complex geological media
- XL193 EGU2011-14156
Rajandrea Sethi and Tiziana Tosco
E-MNM1D: A model for the simulation of shear thinning suspensions of zerovalent iron micro and nanoparticles in porous media
- XL194 EGU2011-2696
Minh Tan Vu and Pierre M Adler
Deposition and/or dissolution in Porous Media
- XL195 EGU2011-3229
Mohamed Hayek, Georg Kosakowski, and Sergey Churakov
Analytical solutions for diffusive transport with heterogeneous reactions and porosity changes
- XL196 EGU2011-6773
alain dimier and elodie jeandel
A phreeqC-Elmer coupling algorithm for T-H-M-C modeling applications

IG6/GMPV38 – Forensic and Archaeological Provenancing with Light and Heavy Isoscapes (co-organized) – Orals

Convener: Jurian Hoogewerff | Co-Conveners: Wolfram Meier-Augenstein

Room: 41

Chairperson: J Hoogewerff & W Meier-Augenstein

- 08:30–08:45 EGU2011-7775
Knut Endre Sjøstad, Siri Simonsen, and Tom Andersen
Analysis of forensic glass samples and isotope ratio determination
- 08:45–09:00 EGU2011-11876
Anne-France Maurer, Corina Knipper, Stephen J.G. Galer, Michael Brauns, Daniel Peters, and Bernd R. Schöne
Mapping Bio-available Strontium Isotopic Compositions in Past Migrations: A Comparison of Modern and Archaeological Sampling Materials
- 09:00–09:15 EGU2011-4058
Jurian Hoogewerff, Aaron Clayton, Henriette Ueckermann, Robert Posey, Hilary Bathgate, Clemens Reimann, and Wolfram Meier-Augenstein
Hydrogen, Oxygen and Strontium isoscapes for provenancing in Europe
- 09:15–09:30 EGU2011-3168
Robert Posey, Henriette Ueckerman, Jurian Hoogewerff, Khudooma Al Na'imi, and Tal Simmons
Development and validation of a spatial prediction 'Isoscape' model for the forensic geographical provenancing of human remains in the Middle East.
- 09:30–09:45 EGU2011-13137
Christine Lehn, Susanne Rummel, Christian Dekant, Stefan Hölzl, and Andreas Rossmann
Geographical Origin Determination of Unidentified Corpses by Stable Isotope Techniques - Isotope Ratios of H, C, N and S in Different Body Tissues
- 09:45–10:00 EGU2011-1450
Wolfram Meier-Augenstein, Jurate Landwehr, and Helen Kemp
A New Approach to Calculating the Non-exchangeable 2H Isotopic Composition of Hair and the Procedural Fractionation Factor by Treating the Molar Exchange Fraction as a Process Related Variable.

IG6/GMPV38 – Forensic and Archaeological Provenancing with Light and Heavy Isoscapes (co-organized) – Posters

Convener: Jurian Hoogewerff | Co-Conveners: Wolfram Meier-Augenstein

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: W Meier-Augenstein & J Hoogewerff

- A397 EGU2011-70
Anastasia Holobinko, Wolfram Meier-Augenstein, Helen Kemp, Tracy Prowse, and Henry Schwarcz
2H Stable Isotope Analysis of Human Tooth Dentine: A Pilot Study
- A398 EGU2011-1452
Wolfram Meier-Augenstein, Helen F Kemp, and Susie Fawley
Detection of Counterfeit Scotch Whisky by 2H and 18O Stable Isotope Analysis to Determine Provenance.

- A399 EGU2011-13695
Wolfram Meier-Augenstein, Helen F Kemp, Ian Brewster, and Geoff Ronayne
Stable Isotope Profiles from a Lock of Hair Provide Information of Illegal People Trafficking Route used by a Vietnamese Organised Crime Group
- A400 EGU2011-13804
Steve Mudge, Paul de Leo, Wolfram Meier-Augenstein, and Charles Eadsforth
Forensic identification of the anthropogenic contribution of fatty alcohols to the environment by stable isotope analysis
- A401 EGU2011-10943
Stephanie J. Pietsch and Thomas Tütken
Wild cats forensics: Multi-isotope fingerprinting as a tool to trace the geographic origin of North American felids
- A402 EGU2011-6592
Hilary Bathgate, Andrew Lovett, Jonathan Clarke, Henriette Ueckermann, and Jurian Hoogewerff
The use of $^{87}\text{Sr}/^{86}\text{Sr}$ ratios, Trace Elements and Biological Profiling for Forensic Provenancing of Soils
- A403 EGU2011-13776
Catherine Hoggett, Henriette Ueckermann, Hilary Bathgate, Robert Posey, and Jurian Hoogewerff
Strontium Isotopes and Trace Elements in Horse Hair; Feasibility for Provenancing
- A404 EGU2011-361
Yvette Eley, Nikolai Pedentchouk, Jurian Hoogewerff, Lorna Dawson, and Alexandra Guedes
Molecular and isotopic composition of organic compounds from higher plants: a useful tool for forensic provenancing?
- A405 EGU2011-3419
Wolfram Kloppmann, Philippe Bromblet, Lise Leroux, Anthony Cooper, Noel Worley, and Catherine Guerrot
Origin of European alabaster artworks assessed through isotope fingerprinting (S, O, Sr).
- A406 EGU2011-8677
Mike Seed and Robin Sutka
Benefits of Purge and Trap Technology for Multielemental Stable Isotopic Analysis
- A407 EGU2011-10706
Hilmar Foerstel and Markus Boner
Examples of the application of stable isotopes of light elements for provenancing
- A408 EGU2011-13689
Mirjam Scheeres, Maya Hauschild, Martin Schönfelder, Christopher F.E. Pare, Wolfgang Siebel, and Kurt W. Alt
Isotopic evidence for local and non-local individuals buried at the Iron Age cemetery M?nsingen-Rain, Switzerland

GD1.1/BG8.3/GMPV44/TS1.3 – Early Earth: from deep dynamics to surface life (co-organized) – Orals

Convener: Jeroen van Hunen | Co-Conveners: Emmanuelle J. Javaux, Nicolas Flament, Nicholas T. Arndt

Room: 22

Chairperson: n.n.

- 08:30–08:45 EGU2011-1488
Evgenii Sharkov
Origin and development of the Earth's core: Evidence from the Earth's tectonomagmatic evolution and paleomagnetic data
- 08:45–09:00 EGU2011-3571
Alexandra Moeller and Uli Hansen
Influence of rotation on iron particles in an early magma ocean
- 09:00–09:15 EGU2011-8663
Renaud Deguen and Peter Olson
Fragmentation, mixing, and chemical equilibration in a magma ocean - Insights from fluid dynamics experiments
- 09:15–09:30 EGU2011-12662
John A. Tarduno, Rory D. Cottrell, and Martin J. Van Kranendonk
Observational constraints on the onset and strength of the early Earth's magnetic field
- 09:30–09:45 EGU2011-4449
Sergei Pisarevsky
Paleogeography of the Early Earth and Paleomagnetic Data
- 09:45–10:00 EGU2011-13081
Natalia Lubnina and Alexander Slabunov
Neoproterozoic Supercontinent Kenorland: paleomagnetic and geologic evidence

COFFEE BREAK

Chairperson: n.n.

- 10:30–11:00 EGU2011-2180
Hugh Rollinson
 Are plumes an appropriate mechanism for Archaean continent creation ?
- 11:00–11:15 EGU2011-6223
Jeroen van Hunen and Jean-Francois Moyen
 Short-term episodicity of Archaean subduction?
- 11:15–11:30 EGU2011-7916
Jaana Halla
 Sanukitoid granitoids as indicators of accretionary tectonics from the late Mesoproterozoic to the Archean-Proterozoic boundary
- 11:30–11:45 EGU2011-5387
Nicholas T. Arndt, Janne Blichert-Toft, Martin Guitreau, and Francis Albarède
 Formation of the Continental Crust
- 11:45–12:00 EGU2011-5281
Nicolas Flament, Patrice Rey, Nicolas Coltice, Gilles Dromart, and Nicolas Olivier
 Subaqueous Archean continental flood basalts were emplaced on hot continental crust

ERE3.2/GD1.3/GMPV53 – Mineral systems: from geological, geochemical and geophysical data to metallogenic systems simulation (co-organized) – Orals

Convener: Christopher Juhlin | Co-Conveners: Gilles Bellefleur, Klaus Gessner, Mark Jessel, Robert P. Moritz, Peter Sorjonen-Ward, Olivier Vanderhaeghe, Pär Weihed

Room: 3

Chairperson: Chris Juhlin, Gilles Bellefleur

- 08:30–08:45 EGU2011-71
Alireza Malehmir and Gilles Bellefleur
 Reflection seismic studies of mineral deposits and their host-rock structures: two case studies from Sweden and Canada
- 08:45–09:00 EGU2011-4578
Kreshimir N. Malitch and Rais M. Latypov
 New insights on the origin of ultramafic-mafic intrusions and associated PGE-Cu-Ni sulphide deposits of the Talnakh ore junction (Noril'sk province, Russia): geophysical and geochronological evidence
- 09:00–09:15 EGU2011-4854
Ernst Schetselaar, Don White, Doreen Ames, Eric de Kemp, Eric Grunsky, Sally Pehrsson, Christine Devine, Michal Malinowski, Jennie Byron, and Harold Gibson
 A Framework for 3D Multiparameter Mapping of VMS Ore Systems illustrated with a Case Study from the Flin Flon Mining District, Trans-Hudson Orogen, Canada
- 09:15–09:30 EGU2011-2197
Michal Malinowski, Don White, and Ernst Schetselaar
 3-D seismic modelling in the Flin Flon mining camp, Canada
- 09:30–09:45 EGU2011-8521
Colin Farquharson, Peter Lelièvre, and Charles Hurich
 Unified geophysical and geological 3-D Earth models
- 09:45–10:00 EGU2011-9869
Pietari Skyttä, Tobias Hermansson, Jenny Andersson, and Pär Weihed
 Age constraints on mineralization and deformation processes in the Palaeoproterozoic Skellefte District, Sweden

COFFEE BREAK

Chairperson: Olivier Vanderhaeghe, Peter Sorjonen-Ward

- 10:30–10:45 EGU2011-10123
Justine Jaguin, Marc Poujol, Denis Gapais, Philippe Boulvais, and Jean-François Moyen
 DEFORMATION/MINERALIZATION (Sb) COUPLING WITHIN THE MURCHISON GREENSTONE BELT, SOUTH AFRICA

- 10:45–11:00 EGU2011-2422
Romain Tartèse, Philippe Boulvais, Marc Poujol, and Eric Gloaguen
 The late Carboniferous Variscan evolution of the Armorican Massif (France): magmatism, hydrothermalism and metallogenic consequences
- 11:00–11:15 EGU2011-4319
Alison Ord, Bruce Hobbs, and Dan Lester
 The Development of Redox-pH-fronts in Hydrothermal Systems
- 11:15–11:30 EGU2011-4101
Olivier Vanderhaeghe, Fabre Cécile, Moyen Jean-François, André-Mayer Anne-Sylvie, Barbey Pierre, and Cuney Michel
 Cratons radioactivity, crustal growth, paleogeotherms and metallogenic provinces
- 11:30–11:45 EGU2011-7616
John Grocott, Armelle Kloppenburg, and David Hutchinson
 Quantitative Structural Modelling to Determine a Valid Kinematic Framework for the Cu-Au-Mo Porphyry Mineralisation System at Bingham Canyon, Utah, USA
- 11:45–12:00 EGU2011-2966
Mark Lindsay, Stéphane Perrouy, Mark Jessell, Laurent Aillères, Eric deKemp, and Peter Betts
 Model space exploration of the Ashanti Greenstone Belt, southwestern Ghana

ERE3.2/GD1.3/GMPV53 – Mineral systems: from geological, geochemical and geophysical data to metallogenic systems simulation (co-organized) – Posters

Convener: Christopher Juhlin | Co-Conveners: Gilles Bellefleur, Klaus Gessner, Mark Jessel, Robert P. Moritz, Peter Sorjonen-Ward, Olivier Vanderhaeghe, Pär Weihed

Hall XL | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Pär Weihed, Olivier Vanderhaeghe, Chris Juhlin

- XL138 EGU2011-35
Alexander Rodnikov, Natalia Sergeyeva, and Ludmila Zabarinskaya
 Geodynamic and Metallogeny in the Pacific Mobil Belt
- XL139 EGU2011-223
Mahdieh Dehghannejad, Tobias Bauer, Alireza Malehmir, Christopher Juhlin, Rodney Allen, and Pär Weihed
 Reflection seismic imaging to construct a 3D/4D geological model of the Skellefte Ore District, northern Sweden
- XL140 EGU2011-689
María de los Ángeles García Juanatey, Peter Hedin, Juliane Hübert, Ari Tryggvason, and Christopher Juhlin
 MT and seismic reflection data in northwestern Skellefte Ore District, northern Sweden.
- XL141 EGU2011-5999
Changryol Kim and Ho-Sung Yoon
 Integrated Geophysical Investigations of the Uranium Deposit in the Okcheon Metamorphic Belt in Korea
- XL142 EGU2011-6130
Jeongsul Son, Jungho Kim, and Samgyu Park
 Complex resistivity survey for mineral exploration using L1 norm inversion
- XL143 EGU2011-6544
Samgyu Park, Jeong-Sul Son, Seong-Jun Cho, Jung-Ho Kim, and Changryol Kim
 Application of Electrical Resistivity Survey for Detecting the Skarn Ore Body
- XL144 EGU2011-7934
 Inna Yu. Badanina and **Kreshimir N. Malitch**
 Origin of platinum-group mineral (PGM) nuggets from the Bor-Uryakh massif (Maimecha-Kotui Province, Russia): evidence from mineral composition
- XL145 EGU2011-9436
Anikina Elena and Gamyarin Gennady N.
 Features of formation of silver-polymetallic deposits of Kolyma-Verkhoyansk fold belt (Russia)
- XL146 EGU2011-9573
Klaus Gessner, Vanessa Markwitz, and Alok Porwal
 Structural controls on hydrothermal mineralization in the Menderes Massif, western Turkey
- XL147 EGU2011-11785
Elena Amplieva, Viktor Ivanov, Viktor Beltenev, and Irina Dobretsova
 Semenov submarine hydrothermal massive sulfide cluster (13°31'N, Mid-Atlantic Ridge)
- XL148 EGU2011-13150
Lena V. S. Monteiro, Carolina P. N. Moreto, André L. S. Pestilho, Caetano Juliani, Roberto P. Xavier, and Anthony E. Fallick
 Evolution of iron oxide-copper-gold deposits from the Southern Copper Belt, Carajás Mineral Province, Brazil

- XL149 EGU2011-13595
Luis Alva-Valdivia
The Peña Colorada iron oxide-ores, México: Petrological characterization
- XL150 EGU2011-2755
Gilles Bellefleur, Eric de Kemp, Jean Goutier, and Michel Allard
Seismic Imaging of the Geological Framework and Structures Related to Volcanogenic Massive Sulfide Deposits in the Archean Rouyn-Noranda District, Québec, Canada
- XL151 EGU2011-7534
Pietari Skyttä, Tobias Bauer, Saman Tavakoli, Pär Weihed, Rodney Allen, Mahdiah Dehghannejad, Maria García Juanatey, and Juliane Hübner
Multiscale 3/4D-modelling of mineral belts - examples from the Skellefte Mining District, Sweden
- XL152 EGU2011-11434
Eevaliisa Laine, Jouni Luukas, Aimo Ruotsalainen, Ilkka Suppala, Jukka Kousa, and Raimo Lahtinen
3D modeling of the bedrock surrounding the Lampinsaari and Kuuhkamo Zn-Cu deposits in the Vihanti area, Finland
- XL153 EGU2011-1183
Tola Mirza
Genesis of white acidic intrusion in Mawat Ophiolite Complex, Kurdistan Region, NE Iraq
- XL154 EGU2011-5355
Weronika Gorczyk, Bruce Hobbs, Guizhi Zhu, Klaus Gessner, and Alison Ord
INTRA-CRATONIC Lithosphere HETEROGENEITIES, FAULTING and Rayleigh-Taylor Instabilities - insight from 3D numerical modelling
- XL155 EGU2011-29
mohamadali rajabzadeh and **soqra rasti**
Mineralization study on Iron deposits from Dehbid area, Fars province, South Iran: Geochemical and mineralogical data
- XL156 EGU2011-236
susan ebrahimi
Geology, mineralogy and fluid characteristics of the Masjed Daghi epithermal gold deposit, NW Iran
- XL157 EGU2011-318
Seyedeh Zahra Afshooni, Dariush Esmaeily, and Hooshang Asadi Haroni
The study of mineralogy in Kahang exploration area (NE Isfahan)
- XL158 EGU2011-1222
Dicle Bal Akkoca and Sevcin Kürüm
Regional Variations in Clay Mineralogy and Geochemistry of Mn-Rich Marine Clays from Maden-Hazar Basin in the Neotethys, (Eastern Turkey)
- XL159 EGU2011-4100
Julie Machault, Luc Barbanson, Thierry Augé, Laurent Bailly, and Alexandre Felicio
Traceability of concentrate: characterization of microfacies and consideration of mineral processing
- XL160 EGU2011-3799
Benoit Rivard, Derek Rogge, Jilu Feng, Brian Grant, and Jamie Pardie
Hyperspectral sensing in support of mineral exploration in the arctic: example from the Cape Smith Nickel belt, Canada
- XL161 EGU2011-5412
Arnaud Pecher, Nicholas Arndt, Arthur Bauville, Clément Ganino, Mei-fu Zhou, Iacopo Marziano Giada, Gaillard Fabrice, and Charlotte Arthurion
Pumping Iron from a Metamorphic Aureole into an Steeply Inclined Dyke-like Intrusion; a New Model for the Formation of the Panzhihua Fe-Ti-V Deposit
- XL162 EGU2011-11958
Nicola Mondillo, Maria Boni, and Giuseppina Balassone
Supergene Zn-dolomite: an old-new actor on the nonsulphide ore scene

GD6.1/GMPV55/SM1.12/TS4.6 – Whole mantle dynamics: Linking surface and deep processes (co-organized) –

Posters

Convener: Trond Torsvik | Co-Conveners: Rob Van der Voo, Clinton Conrad, Mike Gurnis

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: C. Conrad

- A24 EGU2011-2828
Masaki Yoshida
Future supercontinent assembled in the northern hemisphere: Insight from a numerical model of mantle convection

- A25 EGU2011-3795
Gillian Foulger
Upper mantle mechanisms for the formation of melting anomalies
- A26 EGU2011-4358
Andrew N. Grushinsky
Modeling of some transitional processes in Earth's mantle
- A27 EGU2011-5476
Xavier Robert
An integrated model for the post-Laramide evolution of the Grand Canyon and the Colorado Plateau
- A28 EGU2011-6893
Blanka Nita, Magdala Tesauero, Sierd Cloetingh, Mikhail Kaban, and Edward Perchuc
Regional mantle structure below the European continent resulting from complex lithospheric geodynamic processes
- A29 EGU2011-8397
Romain Beucher, Roderick Brown, Cristina Persano, Finlay Stuart, and Kerry Gallagher
New insights into the age of the first-order topography of southern Africa from apatite (U-Th)/He and fission track dating of a deep borehole sequence through the Kaapvaal craton
- A30 EGU2011-8588
Flora Bajolet, Javier Galeano Prieto, Ana-María Negredo, Francesca Funicello, Monica Moroni, and Claudio Faccenna
Continental delamination: Insights from laboratory models
- A31 EGU2011-8748
Manuel Combes, Cécile Grigné, Laurent Husson, Sébastien Le Yaouanq, Marc Parenthoën, Chantal Tisseau, and Jacques Tisseau
MACMA : Multiagent simulation of mantle convection with evolutive plate boundaries and continents.
- A32 EGU2011-10369
Giancarlo Scalera
Comparing the Andean volcano-seismic events to secular PM and TPW
- A33 EGU2011-10897
Juan-Luis Valera, Ana M. Negredo Moreno, and Ivone Jiménez-Munt
Deep and near-surface consequences of root removal by asymmetric continental delamination: comparison from different initial scenarios
- A34 EGU2011-11075
Fabio Crameri, Paul Tackley, Irena Meilick, Taras Gerya, Boris Kaus, and Tobias Keller
One-sided subduction in self-consistent models of global mantle convection: the importance of a free surface and a weak crustal layer
- A35 EGU2011-11838
Laurent Husson, Stephane Pochat, Antoine Bezos, and Jean Van den Driessche
Dynamic topography, endoreism, and the 87Sr/86Sr curve
- A36 EGU2011-12912
István Kovács, Beatrix Udvardi, Károly Hidas, Lászlóné Kutassy, Pál Lendvai, György Falus, and Csaba Szabó
Re-evaluating the concentration of water in olivines from the shallow upper mantle with a uniform FTIR protocol and a unique international spectral database: PULI
- A37 EGU2011-13444
Nick J. Kusznir and Trond H. Torsvik
A Lithospheric Attractor of Mantle Plume Volcanism in the NW Indian Ocean

SSP1.7/GMPV56 – LIPs: teleconnections between geological processes and mass extinctions (co-organized) – Orals

Convener: Darren Gröcke | Co-Conveners: Henrik Svensen, Paul Wignall, Benjamin Black

Room: 41

Chairperson: Henrik Svensen

- 13:30–13:45 EGU2011-12083
Kirsten Fristad, Henrik Svensen, Sverre Planke, and Alexander Polozov
Siberian Trap Pipe Eruptions as Agents of Environmental Deterioration
- 13:45–14:00 EGU2011-11842
Elke Hermann, Peter A. Hochuli, Hugo Bucher, Thomas Brühwiler, David Ware, Michael Hautmann, Nicolas Goudemand, and Ghazala Roohi
End-Permian and mid-Early Triassic terrestrial ecosystem turnovers - a comparison
- 14:00–14:15 EGU2011-5056
Stephan Sobolev, Alexander Sobolev, Dmitri Kuzmin, Nadezhda Krivolutskaya, Alexey Petrunin, Nick Arndt, Viktor Radko, and Yuri Vasiliev
Origin of Siberian Traps and their relation to the Permo-Triassic mass extinction

- 14:15–14:30 EGU2011-1037
Annette E. Götz, Maria Barbacka, János Haas, József Pálffy, Katrin Ruckwied, and Ákos Török
Timing of palaeoenvironmental and climatic change at the Triassic/Jurassic boundary on land and in the sea
- 14:30–14:45 EGU2011-2479
Thierry Adatte and Gerta Keller
Main Deccan traps pulse close to the Cretaceous-Tertiary Boundary: increasing Multiproxy evidence
- 14:45–15:00 EGU2011-11144
David Ray
The Silurian a record of oceanic, atmospheric and biotic change

