

EGU General Assembly 2012
Programme Group Programme
GMPV – Geochemistry, Mineralogy, Petrology & Volcanology

Monday, 23 April	2
GMPV2.1/GD2.7/SM4.2/TS1.4.....	2
GMPV3.1.....	4
GMPV4.2/TS4.9.....	4
GMPV4.6.....	8
GMPV5.1.....	10
GMPV5.4.....	10
GD2.2/GMPV6.5/SM3.7/TS3.8.....	12
GD2.3/GMPV6.8/SM3.6/TS9.8.....	13
GD2.5/GMPV6.12/SM4.3/TS10.9.....	14
GD4.1/GMPV6.16.....	15
IG4.....	15
TS5.1/GD4.3.....	17
Tuesday, 24 April	20
GMPV1.2/GD5.3/TS6.6.....	20
GMPV2.5.....	20
GMPV4.7.....	21
GMPV5.2.....	26
GMPV5.5/TS3.5.....	29
TS6.3/GD5.2/GMPV6.1.....	30
EMRP2.6/GMPV6.10/NH4.1/SM5.5/TS2.9.....	32
GD3.6/GMPV6.11/SM4.1/TS1.3.....	34
TS9.5/G3.5/GD8.6/GM3.6/GMPV6.20/SM3.5.....	36
EMRP2.2/GMPV6.21/SM5.6/TS3.3.....	39
Wednesday, 25 April	40
BG2.8.....	40
GMPV1.3/GD6.2.....	41
GMPV3.5.....	42
GMPV4.1.....	43
GMPV4.10/GM2.7.....	47
GMPV5.6.....	49
GMPV5.7/TS3.6.....	50
GD8.2/GMPV6.6/TS9.7.....	52
GD6.1/GMPV6.13/SM4.5.....	54
TS3.1/EMRP2.9/GD2.8.....	56
Thursday, 26 April	59
GMPV1.1/GD2.6.....	59
GMPV1.4/ERE3.5.....	60
IG9/GMPV2.2/PS9.2.....	61
IG1/GMPV2.3/HS2.22/SSP5.1/SSS13.5/TS1.8.....	63
GMPV4.3.....	64
GMPV4.4.....	68
GD5.1/GMPV6.2/SM2.2/TS6.5.....	68
ERE5.3/GMPV6.7/HS8.2.8/SSS5.22.....	69
SM5.7/GMPV6.14/NH2.3.....	72
TS10.2/GD3.10/GMPV6.19/SM2.10.....	73
TS1.1.....	75
Friday, 27 April	78
GMPV3.4/TS3.4.....	81
TS1.2/GMPV4.14/PS2.10.....	83
TS6.2/GD5.4.....	87

Monday, 23 April

GMPV2.1/GD2.7/SM4.2/TS1.4 – Geochemical, petrological and physical discontinuities in the lithospheric mantle: supporting evidence and hypotheses for their origin (co-organized) – Orals

Convener: I. Ashchepkov | Co-Conveners: C. Szabo, J. van Hunen

Room: 27

Chairperson: n.n.

- 08:30–08:45 EGU2012-1727
G. M. Yaxley, A. J. Berry, A. B. Woodland, V. S. Kamenetsky, D. Paterson, M. D. de Jonge, and D. L. Howard
Application of Fe K-edge XANES determinations of Fe³⁺/totalFe in garnet to peridotite xenoliths from the Udachnaya Kimberlite
- 08:45–09:00 EGU2012-4669
A. Woodland
Ferric iron budget of Kaapvaal cratonic mantle peridotite
- 09:00–09:15 EGU2012-12791
R. Meyer and L.T. Elkins-Tanton
Experimental petrology constrains on melting conditions of high-potassium melts under the Central Sierra Nevada, California, USA
- 09:15–09:30 EGU2012-12120
Zs. Pintér, I. Kovács, J. Mihály, Cs. Németh, and Cs. Szabó
An FTIR study on nominally anhydrous minerals in mantle xenoliths with diverse textures from the central Carpathian-Pannonian region (Bakony-Balaton Highland Volcanic Field, Hungary)
- 09:30–09:45 EGU2012-3986
E Vasyukova
Geochemical data of Early Mesozoic lamprophyres and associated syenites (SE Altay-NW Mongolia)
- 09:45–10:00 EGU2012-4509
E. Artyushkov
The Moho discontinuity in superdeep sedimentary basins as a top of the layer of deeply metamorphosed mafic rocks in the lower crust

GMPV2.1/GD2.7/SM4.2/TS1.4 – Geochemical, petrological and physical discontinuities in the lithospheric mantle: supporting evidence and hypotheses for their origin (co-organized) – Posters

Convener: I. Ashchepkov | Co-Conveners: C. Szabo, J. van Hunen

Hall XL | Display Time 08:00–19:30

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- XL284 EGU2012-1166
I.V. Ashchepkov, **S.S. Kuligin**, V.P. Afanasiev, N.V. Vladykin, S.I. Kostrovitsky, M.I. Lelyukh, M.A. Vavilov, E.N. Nigmatulina, and S.V. Palesky
Deep seated inclusions in kimberlites from Kharamai field and some kimberlite fields of Priabarbarie.
- XL285 EGU2012-1195
I.V. Ashchepkov, **K.N. Egorov**, M.A. Vavilov, E.I. Nikolenko, V.P. Afanaseiv, E.N. Nigmatulina EN, and S.V. Palesky
Cr-Pyropes and other mantle diamond-associated minerals from placers on Tumanshet river (Birysa basin).
- XL286 EGU2012-1205
I.V. Ashchepkov, S.S. Kuligin, N.V. Vladykin, A.P. Smelov, V.P. Afanasiev, T. Ntaflos, M.I. Lelyukh, S.I. Kostrovitsky, N.S. Tychkov, A.M. Agashev, Yu.I. Ovchinnikov, E.N. Nigmatulina, and O.S. Khmelnikova
Lithospheric mantle transects through the fields of kimberlitic magmatism in Siberian Craton.
- XL287 EGU2012-1686
I. Ashchepkov, T. Ntaflos, A. Logvinova, A. Smelov, N. Vladykin, S. Kostrovitsky, S. Lelyukh, V. Afanasiev, S. Kuligin, V. Minin, H. Downes, O. Khmelnikova, E. Nigmatulina, N. Tychkov, M. Skvortsova, and A. Rotman
Variations of the Fe# of garnet, olivine and other peridotite minerals in the mantle columns beneath the Yakutian kimberlites.
- XL288 EGU2012-2978
I. Ashchepkov, **Yu Stegnitsky**, V. Minin, A. Tolstov, N. Vladykin, A. Rotman, S. Palesky, A. Agashev, O. Khmelnikova, and M. Skvortsova
Structure and evolution of the mantle column beneath the Nakyn kimberlite field.
- XL289 EGU2012-3552
V Prikhodko, I. Ashchepkov, T. Ntaflos, A. Barkar, S. Vysotsky, S. Esin, V. Kutolin, and A. Prussevich
Composition and structure of mantle lithosphere in the Russian Far East according to xenoliths study.

- XL290 EGU2012-1682
I. Ashchepkov
Single grain estimations of oxygen fugacity in subcratonic mantle lithosphere using compositions of Ilmenite, Chromite, Garnet and Pyroxenes.
- XL291 EGU2012-5667
J. Globig and H. Sommer
Phase relationships of a lherzolite from the Roberts Victor Mine, South Africa: A study of chemical and physical parameters in the Kaapvaal Craton.
- XL292 EGU2012-1211
I.V. Ashchepkov, N.V. Vladykin, S.S. Kuligin, A.P. Smelov, T. Ntaflos, S.I. Kostrovitsky, M.I. Lelyukh, A.Ya. Rotman, V.P. Afanasiev, N.S. Tychkov, E.V. Malygina, Yu.I. Ovchinnikov, S.V. Palessky, I.V. Nikolaeva, O.S. Khmelnikova, and E.N. Nigmatulina
Variations of the SCLM structures and geochemical features of the peridotites in different mantle terranes beneath Siberian craton.
- XL293 EGU2012-12991
S. Fishwick, H.A. Pedersen, D.B. Snyder, and J. Fullea
Highlighting seismic velocity variations in cratonic lithosphere from the consistent analysis of surface wave dispersion.
- XL294 EGU2012-3325
S. Sablukov, L. Sablukova, Yu. Stegnitskiy, and M. Karpenko
Origin of the mantle rocks with green garnets (isotope and trace element study of the mantle xenoliths from Newlands dyke, South Africa and Nyurbinskaya pipe, Yakutia)
- XL295 EGU2012-6764
S. Kostrovitsky, D. Yakovlev, and Z. Spetsius
Titanium in garnets as indicator of inhomogeneous composition of lithosphere mantle
- XL296 EGU2012-7917
X. Chen and L. Liu
Geochemistry Study of Cenozoic Wangtian'e Volcano in Northeast China
- XL297 EGU2012-8370
A.M. Agashev, D.A. Ionov, N.P. Pokhilenko, A.V. Golovin, E. A. Surgutanova, and I.S. Sharygin
Measured vs Calculated WR Geochemical Composition of Deformed Peridotite Xenoliths: Inferences About Metasomatism in Cratonic Mantle
- XL298 EGU2012-10633
A. Goncharov and D. Ionov
Redox state of cratonic and off-craton lithospheric mantle: new Mossbauer data from garnet and spinel peridotites
- XL299 EGU2012-13509
Y.A. Balashov and E.V. Martynov
Issues of oxygen excess in the crust and upper mantle lithosphere
- XL300 EGU2012-8297
I. Chuvashova, A. Mikolaichuk, and S. Rasskazov
Lithospheric low-volume volcanism in the Middle-Amur basin and Tien Shan: Inherited geochemical signatures of terrains originated in closed paleocean structures
- XL301 EGU2012-13597
N. Kudryashov and A. Mokrushin
Mesoarchean Gabbroanorthosite Magmatism of the Kola Region
- XL302 EGU2012-3691
N. Alymova
Picroilmenite xenoliths and xenocrysts in Yakutian kimberlites.
- XL303 EGU2012-7599
K. Kanayama, S. Umino, and O. Ishizuka
Eocene volcanism during the incipient stage of Izu-Ogasawara arc: Geology and petrology of the Mukojima Island Group, the Ogasawara Islands
- XL304 EGU2012-2556
S. Rasskazov and I. Chuvashova
Hard processing vs. episodic underplating of a terrain: isotopic signatures of mantle and crustal magmatic sources from the sub-continental lithosphere
- XL305 EGU2012-13948
L. Solovjeva, A. Goncharov, and T. Kalashnikova
The influence of Middle Paleozoic Yakutian plume on the geochemical modification of Siberian craton lithosphere
- XL306 EGU2012-8696
V. Babuska, J. Plomerova, and S.I. Karato
Continental growth by successive accretion of oceanic lithosphere: Evidence from tilted seismic anisotropy

XL307 EGU2012-10186

L.S. Doucet, D.A. Ionov, G.P. Brey, A.V. Golovin, and I.V. Ashchepkov
Origin of garnet peridotites in the lithospheric mantle beneath the Siberian craton

GMPV3.1 – Mineral growth and dissolution: Recent developments in the understanding of fluid-mineral processes (including Arne Richter Award for Outstanding Young Scientists Lecture) – Orals

Convener: E. Ruiz-Agudo | Co-Conveners: A. Putnis, C. V. Putnis

Room: 31

Chairperson: Christine V. Putnis

13:30–13:45 EGU2012-356

H.E. King and C.V. Putnis

Direct observations of the role of solution composition in magnesite dissolution

13:45–14:00 EGU2012-4308

J. Colombani, E.A. Pachon-Rodriguez, and A. Piednoir

Pressure solution observed with an atomic force microscope

14:00–14:30 EGU2012-12989

E. Ruiz-Agudo, C.V. Putnis, and A. Putnis

The effect of water structure and solute hydration on the kinetics of mineral growth and dissolution (Arne Richter Award for Outstanding Young Scientists)

14:30–14:45 EGU2012-1968

S. Veran-Tissoires, M. Marcoux, and M. Prat

On NaCl efflorescence formation and growth at the surface of a porous medium

Chairperson: Encarnacion Ruiz-Agudo

15:30–15:45 EGU2012-9884

M. Schiro, E. Ruiz-Agudo, F. Jroundi, M.T. Gonzalez-Muñoz, and C. Rodriguez-Navarro

Salt-enhanced chemical weathering of building materials and bacterial mineralization of calcium carbonate as a treatment

15:45–16:00 EGU2012-7210

K. Serafeimidis and G. Anagnostou

The role of the clay matrix on the swelling of anhydritic rocks

16:00–16:15 EGU2012-13889

E. Samson and J. Marchand

Reactive transport modeling of cementitious materials exposed to aggressive environment

16:15–16:30 EGU2012-9356

M. Pecelerowicz, **P. Szymczak**, A.J.C. Ladd, and V. Upadhyay

How do the fingers interact: upscaling the description of the emerging structures in fracture dissolution

16:30–16:45 EGU2012-11346

C. V. Putnis, E. Ruiz-Agudo, C. Rodriguez-Navarro, and A. Putnis

The mechanism of interface-coupled dissolution and precipitation during apparent non-stoichiometric mineral dissolution

16:45–17:00 EGU2012-11065

A. M. McCaig, J. R. Cann, F. Klein, and D. A. H. Teagle

Mineral Dissolution and Reaction permeability in ocean floor hydrothermal systems

17:00–17:15 EGU2012-4693

A. Beinlich and H. AustrheimCarbonation of mine shafts in serpentized peridotite - In situ sequestration of modern CO₂ at low temperature

17:15–17:30 EGU2012-9546

M. Kwaśniak-Kominek, M. Manecki, T. Bajda, and J. RakovanPseudomorphic replacement of single cerussite PbCO₃ crystals by hydroxylpyromorphite Pb₅(PO₄)₃OH in phosphate solutions

17:30–17:45 EGU2012-12313

B. Gongalskiy, N. Krivolutskaya, K. Murashov, S. Nistratov, and S. Gryazev

Fe-U-PGE-Au-Ag-Cu Deposits of the Udokan-Chiney Region (East Siberia, Russia)

GMPV4.2/TS4.9 – Volcanoes: Tectonics, Deformation, Geodesy (co-organized) – Orals

Convener: V. Acocella | Co-Conveners: A. Gudmundsson, T. R. Walter, G. Puglisi, S. Jonsson

Room: 27

Chairperson: acocella/walter

- 10:30–10:45 EGU2012-13683
J. Okada, F. Sigmundsson, B. Ofeigsson, R. Rodrigues, and T. Ferreira
 Interactions between regional tectonics and volcanic deformations in the Azores
- 10:45–11:00 EGU2012-9255
M. Lupi, F. Fuchs, B. Galvan, D. A. Basualto Alarcón, C. Farias, and S. A. Miller
 Response of the Nevados de Chillan and Peteroa volcanoes, Chile, to the 2010 M8.8 Maule earthquake.
- 11:00–11:15 EGU2012-169
C. Mora-Stock, M. Thorwart, T. Wunderlich, S. Bredemeyer, and W. Rabbel
 Volcano-seismic activity before and after the Maule 2010 Earthquake (Southern Chile): a comparison between Llaima and Villarrica volcanoes
- 11:15–11:30 EGU2012-5076
G. Wadge, A.C. Toombs, and L. Burt
 Stress field control of magma output and eruption dynamics inferred from the historical record and InSAR-measured deformation at Nyamuragira
- 11:30–11:45 EGU2012-1510
D. Keir, I. Bastow, and C. Pagli
 Along-rift variations in style of deformation at the Red Sea rift in Afar
- 11:45–12:00 EGU2012-6234
S. Ebmeier, J. Biggs, and T. A. Mather
 The apparent lack of deformation at Central American Volcanoes: systematic arc-scale InSAR measurement

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2012-11902
B. Taisne, C. Jaupart, and S. Tait
 New insights on dyke width and upward velocity
- 13:45–14:00 EGU2012-12597
I. Galindo, L. Becerril, and A. Gudmundsson
 The sub-volcanic system of El Hierro, Canary Islands
- 14:00–14:15 EGU2012-10243
T. Sagiya, J. Barrancos Martinez, D. Calvo, E. Padron, G. H. Hernandez, P. A. Hernández, N. Perez Rodriguez, and J. M. P. Suárez
 Crustal Deformation During the 2011 Volcanic Crisis of El Hierro, Canary Islands, Revealed by Continuous GPS Observation
- 14:15–14:30 EGU2012-6644
A. Nobile, C. Pagli, D. Keir, T. Wright, J. Ruch, and V. Acocella
 The 2004 dyke-fault interaction at Dallol, northern Afar (Ethiopia)
- 14:30–14:45 EGU2012-1101
M. Bagnardi and F. Amelung
 Variations of the state of stress and dike propagation at Fernandina volcano, Galápagos.
- 14:45–15:00 EGU2012-384
R. Grapenthin, J.T. Freymueller, S.S. Serovetnikov, and N. Titkov
 Geodetic observations at Bezymianny Volcano, Kamchatka: The eruptions from 2005-2010 and long-term, long-wavelength subsidence as seen by the PIRE GPS network

Chairperson: n.n.

- 15:30–15:45 EGU2012-7985
J. W. Neuberg and K. Pascal
 Quantifying the errors due to the superposition of analytical deformation sources
- 15:45–16:00 EGU2012-1300
H. Bathke, H. Sudhaus, M. Shirzaei, and T.R. Walter
 Caldera formation at Tendurek, East Turkey
- 16:00–16:15 EGU2012-2219
A.V. Newman, S.C. Stiros, F. Moschas, V. Saltogianni, L. Feng, G.T. Farmer, P. Psimoulis, and Y. Jiang
 Renewed Geodetic Unrest at Santorini Caldera, Greece
- 16:15–16:30 EGU2012-9380
J. Ruch, V. Acocella, N. Geshi, A. Nobile, and F. Corbi
 Kinematic analysis of vertical collapse on volcanoes using experimental models time series

- 16:30–16:45 EGU2012-3648
A. Amoruso and L. Crescentini
 The 1982-1984 unrest of the Campi Flegrei caldera (Italy): clues on the resolving power of the available geodetic data and the robust features of the deformation source
- 16:45–17:00 EGU2012-13167
P.I.R. Wilson, K.J.W. McCaffrey, J.P. Davidson, R.E. Holdsworth, P. Murphy, and I. Jarvis
 Accommodating structures and deformation associated with the emplacement of high level magmatic intrusions, Henry Mountains, Utah

GMPV4.2/TS4.9 – Volcanoes: Tectonics, Deformation, Geodesy (co-organized) – Posters

Convener: V. Acocella | Co-Conveners: A. Gudmundsson, T. R. Walter, G. Puglisi, S. Jonsson

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL308 EGU2012-11126
E. Geiss, J. Rohrmüller, J. Wassermann, M. Hackl, U. Kirscher, and V. Bachtadse
 Geophysical Investigations on a Suspected Quarternary Volcanic Structure in North Eastern Bavaria, Germany
- XL309 EGU2012-3046
L. Passarelli, E. Rivalta, F. Maccaferri, and Y Aoki
 On the physical links between the dynamics of the Izu Islands 2000 dike intrusions and the statistics of the induced seismicity
- XL310 EGU2012-11580
 O. Cocina, **A. Siniscalchi**, G. Barberi, G. Romano, S. Sicali, and S. Tripaldi
 Correlation between resistivity and seismicity at Etna volcano (Italy)
- XL311 EGU2012-4346
 R. Azzaro, **A. Bonforte**, S. Branca, and F. Guglielmino
 Geometry and kinematics of the fault systems controlling the unstable flank of Etna volcano (Sicily)
- XL312 EGU2012-11191
A. Bonforte, F. Guglielmino, and G. Puglisi
 Monitoring Mt. Etna volcano from "Envisat Extended Orbit"
- XL313 EGU2012-10771
 A. Bonforte, F. Guglielmino, and **G. Puglisi**
 3D temporal evolution and modeling of ground deformation recorded on Mt. Etna from the 2007 to 2008 through the SISTEM method
- XL314 EGU2012-2981
A. Cappello, G. Bilotta, M. Neri, V. Acocella, G. Gallo, and C. Del Negro
 Spatiotemporal probability of vent opening at Mt Etna volcano (Sicily, Italy)
- XL315 EGU2012-2289
M. Neri, S. Giammanco, E. Ferrera, G. Patanè, and V. Zanon
 Active faults on the eastern flank of Etna volcano (Italy) monitored through soil radon measurements
- XL316 EGU2012-11231
 A. Bonforte, **A. Carnazzo**, S. Gambino, F. Guglielmino, F. Obrizzo, and G. Puglisi
 A multidisciplinary approach to study an active fault crossing densely inhabited areas through ground deformation data: the Trecastagni fault at Mt. Etna (Italy)
- XL317 EGU2012-8938
E. Sansosti, S. Pepe, G. Solaro, F. Casu, P. Tizzani, V. Acocella, J. Ruch, A. Nobile, G. Puglisi, F. Guglielmino, and S. Zoffoli
 SAR4Volcanoes: an international ASI funded research project on volcano deformation through new generation SAR sensors
- XL318 EGU2012-365
Z. Barnett and A Gudmundsson
 Field data and numerical models on the emplacement of sill complexes
- XL319 EGU2012-13789
M. Shirzaei
 A satellite geodetic survey of spatiotemporal deformation of Iranian volcanos
- XL320 EGU2012-11049
C. Adam, N. Loureço, P. Madureira, M. Miranda, and M. Yoshida
 Mantle dynamics and volcanism emplacement in the Azores
- XL321 EGU2012-479
D. Tripanera, M. Salvatore, M. Porreca, J. Ruch, A. Pimentel, J. Pacheco, and V. Acocella
 Relationship between tectonics and magmatism on Faial island (Azores, Portugal)

- XL322 EGU2012-2356
J Biggs, **I Bastow**, D Keir, and W Hutchison
Volcano Deformation in the Main Ethiopian Rift
- XL323 EGU2012-5373
J. Arnos, FG. Montesinos, M. Benavent, and EJ. Vélez
The 2011 volcanic crisis at El Hierro (Canary Islands): monitoring ground deformation through tiltmeter and gravimetric observations
- XL324 EGU2012-4050
G. Prates, M. Berrocoso, A. Fernández-Ros, A. García, and R. Ortiz
Processes of Compression-Expansion and Subsidence-Uplift detected by the Spatial Inclinometer (IESHI) in the El Hierro Island eruption (October, 2011)
- XL325 EGU2012-4351
M. Berrocoso, A. Fernandez-Ros, G. Prates, M. Martin, R. Hurtado, J. Pereda, M.J. Garcia, L. Garcia-Cañada, R. Ortiz, and A. Garcia
Analysis of surface deformation during the eruptive process of El Hierro Island (Canary Islands, Spain): Detection, Evolution and Forecasting.
- XL326 EGU2012-1421
S. Barde-Cabusson, J. Gottsmann, J. Martí, X. Bolós, A. Camacho, A. Geyer, Ll. Planagumà, E. Ronchin, and A. Sánchez
Geophysical insights on the distribution of monogenetic volcanoes in the Garrotxa volcanic field
- XL327 EGU2012-2162
X. Bolós, **S. Barde-Cabusson**, D. Pedrazzi, J. Marti, A. Casas, M. Himi, R. Lovera, and A. Geyer
Investigation of the inner structure of La Crosa de Sant Dalmai maar (Catalan Volcanic Zone, Spain)
- XL328 EGU2012-2185
N Geshi, V Acocella, and J Ruch
Evolution of deep collapse caldera: from structural to gravitational process
- XL329 EGU2012-5334
S. Poppe, M. Kervyn, H. Soulé, V. Cnudde, T. De Kock, and P. Jacobs
Volcano-tectonic architecture of a Caldera Complex, Karthala volcano, Grande Comore: new field observations
- XL330 EGU2012-2744
V. Acocella, D.M. Palladino, R. Cioni, P. Russo, and S. Simeì
Caldera structure, amount of collapse and erupted volumes:
- XL331 EGU2012-11185
G. De Natale, A. Troiano, M.G. Di Giuseppe, S. Carlino, C. Troise, and R. Somma
Possible mechanisms for uplift and subsidence at collapse calderas
- XL332 EGU2012-12562
R. Scarpa, P. Capuano, U. Tammaro, and R. Bilham
Ground deformation at Campi Flegrei caldera using long water pipe tiltmeters and sea level gauges
- XL333 EGU2012-7904
M. Paulatto, A. B. Watts, C. Peirce, J. Hunter, D. Basset, W. Stratford, and L. M. Kalnins
Potential field and bathymetric constraints on volcanism and tectonics at the submarine Monowai cone and caldera (Kermadec arc)
- XL334 EGU2012-3657
A. Amoruso, **L. Crescentini**, and I. Sabbetta
Is the Campi Flegrei (Italy) deformation pattern constant with time? Comparing the 1982-1984 unrest, 1994-1999 subsidence, 2000-2001 and 2005-2007 miniuplifts.
- XL335 EGU2012-2091
T. R. Walter, D. Legrand, G.D. Granados, G. Reyes, and R. Arámbula
Volcano eruption monitoring by thermal image correlation: pixel offsets show episodic dome growth at Colima volcano
- XL336 EGU2012-2353
J. Gottsmann
The Great Tambora 2015 eruption: Could we see it coming?
- XL337 EGU2012-9888
M. Gerbault, F. Cappa, and R. Hassani
Effects of gravity and the state of pore-fluid pressure in the bedrock surrounding an idealised magma chamber, compared to the "Mogi" approach.
- XL338 EGU2012-9404
E. P. Holohan, H. Sudhaus, T. R. Walter, M. P. J. Schöpfer, and J. J. Walsh
Interpreting sub-surface deformation sources at volcanoes: Insights from DEM models
- XL339 EGU2012-2888
J. Hickey, **J. Gottsmann**, and R. del Potro
What's causing the world's largest deformation anomaly in southern Bolivia? Insights from Finite Element Analysis

- XL340 EGU2012-2218
P. Kalenda and L. Neumann
 The relationship between volcanic and seismic activity
- XL341 EGU2012-8102
J. Liu and X. Chen
 Volcanisms and Earthquakes Related to the Pacific Plate Subduction in Northeast Asia
- XL342 EGU2012-2548
X. Mao and J.H. Li
 The distribution and tectonic framework of Late Paleozoic volcanoes in the Junggar basin and its adjacent area, NW China

GMPV4.6 – Volcanic conduits and ash in nature, models, and experiments – Orals

Conveners: M. Polacci, U. Kueppers | Co-Conveners: J. Taddeucci, M. Ichihara, E. Llewellyn, Y. Lavallee, P. Delmelle

Room: 31

Chairperson: n.n.

- 08:30–08:45 EGU2012-944
F.W. von Aulock, B. Kennedy, C. Oze, F. Bégué, and T. Cox
 The Distribution of Water in a Degassing Magma and the Formation of Flow Bands
- 08:45–09:00 EGU2012-9462
I.M. McIntosh, E.W. Llewellyn, M.C.S. Humphreys, A. Burgisser, and C.I. Schipper
 (Mis)understanding bubble growth in magma: Evidence from preserved volatile concentrations in volcanic glass
- 09:00–09:15 EGU2012-1717
S. Okumura, M Nakamura, K Uesugi, and T Nakano
 Coupled effect of magma degassing and rheology on silicic volcanism
- 09:15–09:30 EGU2012-4598
C. Martel
 Deciphering between highly-explosive surges and block-and-ash flows from decompression experiments: example of Mt. Pelée (Martinique, F.W.I)
- 09:30–09:45 EGU2012-9132
J. Taddeucci, D.M. Pallidino, C. Camaldo, P. Scarlato, and M.A. Alatorre-Ibarguengoitia
 High-speed imaging of Strombolian eruptions reveals gas-pyroclast interactions in volcanic jets
- 09:45–10:00 EGU2012-11875
B. Taisne and F. Brenguier
 Complex dynamics of dyke propagation deduced from seismic monitoring and physical models

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-12083
B. Cordonnier, W. Degruyter, B. Friedlander, L. Kennedy, K. Russell, and M. Manga
 Volcanic Conduits: comparison of the driving parameters on degassed magmas.
- 10:45–11:00 EGU2012-13591
B. Scheu, U. Kueppers, S. Siegel, L. Auer, and D.B. Dingwell
 The effect of temperature on the fragmentation efficiency.
- 11:00–11:15 EGU2012-1775
G. Hoshyaripour, M. Hort, and B. Langmann
 Volcanic controls on ash iron solubility: thermodynamic modeling of gas-ash interaction in the hot core of volcanic plumes
- 11:15–11:30 EGU2012-7216
K. I. Lieke, T. B. Kristensen, C. B. Koch, U. S. Korsholm, J. H. Sørensen, and M. Bilde
 Particle analysis of volcanic ash with Electron Microscopy
- 11:30–11:45 EGU2012-5870
K. Aplin, T. Mather, D. Pyle, I. Piper, and P. Shrimpton
 Electrical and radioactive properties of ash samples from Eyafjallajökull and Grimsvötn
- 11:45–12:00 EGU2012-4987
 E Aydar, E Ecochard, A Çiner, and **E Fouache**
 Dry? or Wet? Magma-Water Interaction during Minoan-Thera Eruption of Santorini depicted from 3D morphological analysis of Ashes

GMPV4.6 – Volcanic conduits and ash in nature, models, and experiments – Posters

Conveners: M. Polacci, U. Kueppers | Co-Conveners: J. Taddeucci, M. Ichihara, E. Llewellyn, Y. Lavallee, P. Delmelle

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL343 EGU2012-4122
Z.M. Bai, Z.Z. Zhang, C.Y. Wang, and S.L. Klemperer
Seismic signature of crustal magma and fluid from deep seismic sounding data across Tengchong volcanic area
- XL344 EGU2012-1206
C. Cimarelli, B. Scheu, and D.B. Dingwell
Fragmentation mechanism transition of multiphase magma analogues.
- XL345 EGU2012-3205
C. Cimarelli, F. Di Traglia, A. Vona, and J. Taddeucci
Tephra architecture, pyroclast texture and magma rheology of mafic, ash-dominated eruptions: the Violent Strombolian phase of the Pleistocene Croscat (NE Spain) eruption.
- XL346 EGU2012-4105
A. Kurokawa, E. Di Giuseppe, A. Davaille, and K. Kurita
Role of Yield Stress in Magma Rheology
- XL347 EGU2012-947
F. Di Traglia, C. Del Ventisette, M. Rosi, F. Mugnai, E. Intrieri, S. Moretti, and N. Casagli
Understanding conduit dynamics and forecasting major strombolian explosions by ground-based radar interferometry
- XL348 EGU2012-13169
E. Del Bello, S. J. Lane, E. W. Llewellyn, J. Taddeucci, M. R. James, and P. Scarlato
Analogue modeling of slug-related geophysical signals in open vs. closed conduits: implications for Strombolian eruption dynamics.
- XL349 EGU2012-9179
J. Taddeucci, D.M. Palladino, D. Bernini, G. Sottili, D. Andronico, and A. Cristaldi
Constancy and variability of Strombolian eruptive activity: long-term analysis of infrared surveillance videos from Stromboli Volcano
- XL350 EGU2012-9252
J. Taddeucci, N. Lautze, D. Andronico, L. D'Auria, A. Niemeijer, B. Houghton, and P. Scarlato
Insights into explosion dynamics at Stromboli in 2009 from ash samples collected in real-time
- XL351 EGU2012-8467
M.E. Thomas and J.W. Neuberg
The sensitivity of conduit flow models to basic input parameters: there is no need for magma trolls!
- XL352 EGU2012-8619
A Costa, G Wadge, and O Melnik
A model for cyclic extrusion of a lava dome based on a stick-slip mechanism
- XL353 EGU2012-6693
U. Kueppers, M.A. Alatorre-Ibargüengoitia, M. Hort, S. Kremers, K. Meier, P.G. Scarlato, B. Scheu, J. Taddeucci, R. Wagner, F. Walk, and D.B. Dingwell
The volcano in a gravel pit: Volcano monitoring meets experimental volcanology
- XL354 EGU2012-2647
M. Polacci, C. Bouvet de Maissonneuve, D. Giordano, M. Piochi, W. Degruyter, O. Bachmann, and L. Mancini
Permeability of alkaline magmas: a study from Campi Flegrei, Italy
- XL355 EGU2012-6197
C. Helo, A. Flaws, K.-U. Hess, A. Franz, D.A. Clague, and D.B. Dingwell
Dynamics of bubble-bubble interaction in sheared low-viscosity magma imaged by X-ray computed micro-tomography
- XL356 EGU2012-8530
S. Wiesmaier, B. Scheu, K.-U. Hess, B. Schillinger, A. Flaws, and D. B. Dingwell
Crystallinity-vesicularity interrelation in silicic pyroclasts - Neutron and X-Ray Computed Tomography constraints on magma permeability
- XL357 EGU2012-5953
A. A. Proussevitch and D. L. Sahagian
The relation between pre-eruptive bubble size distribution and observed ash particle sizes
- XL358 EGU2012-9563
M. Oishi, N. Vinet, **N. Geshi**, and H. Shinohara
Variation of the grain compositions in the ash from the 2011 eruption of Shinmoedake, Kirishima volcano, Japan: insights into the conduit processes
- XL359 EGU2012-2129
M. A. Armienta, S. De la Cruz-Reyna, A. Soler, N. Cenicerros, O. Cruz, and A. Aguayo
Chemistry of ash-leachates: a reliable monitoring tool for volcanic activity

- XL360 EGU2012-9453
M. Klug, C. Tegner, H.-D. Zimmermann, J. A. Piotrowski, K. Stolz, and J. Knies
 First indication of Vedde-Ash deposits in the Trondheimsfjord area, mid-Norway
- XL361 EGU2012-11493
W. Seward and B. Edwards
 Testing hypotheses for the use of Icelandic volcanic ashes as low cost, natural fertilizers

GMPV5.1 – Magma generation and differentiation: Field, analytical, experimental and numerical investigation of magmatic and volcanic systems – Orals

Convener: V.R. Troll | Co-Conveners: R. Gertisser, C. Freda

Room: 18

Chairperson: Troll, Freda

- 15:30–15:45 EGU2012-11606
C. Tegner, C. E. Leshner, M. B. Holness, J. K. Jakobsen, L. P. Salmonsén, M. C. S. Humphreys, and P. Thy
 Mechanisms of differentiation in the Skaergaard magma chamber
- 15:45–16:00 EGU2012-2214
B. Abily and G. Ceuleneer
 The dunitic mantle/crust transition zone in the Oman Ophiolite: Residue of melt-rock interaction, cumulates from high-MgO melts, or both?
- 16:00–16:15 EGU2012-13674
P.P. Simões, H.C.B Martins, and G. Dias
 Contributions of Fe-K subalkaline granites for the geodynamic evolution of the Iberian Massif (Northern Portugal)
- 16:15–16:30 EGU2012-2070
A. Simakin
 Convective melting in a magma chamber: theory and numerical experiment.
- 16:30–16:45 EGU2012-6760
R. Mundil, S.W. Denyszyn, J.G. Shellnutt, A.B. Jost, J.L. Payne, P.R. Renne, B. He, Y. Zhong, and Y. Xu
 Timing of Emeishan magmatic activity and implications for the end-Middle Permian biotic crisis
- 16:45–17:00 EGU2012-7785
C. Ganino, N.T. Arndt, F. Tornos, and C. Chauvel
 Variable climate impact of metamorphic degassing of dolostone, limestone and shale in the contact aureoles in LIPs

GMPV5.4 – Evolution of the lithospheric mantle: a petrological and geochemical perspective from the non-cratonic mantle xenoliths and orogenic peridotites – Orals

Convener: Th. Ntaflos | Co-Conveners: Bonadiman, M. Grégoire

Room: 2

Chairperson: n.n.

- 10:30–10:45 EGU2012-4015
S. Arai, S. Ishimaru, and T. Mizukami
 Hydrocarbon micro-inclusions in olivine in high-P titanoclinohumite-bearing dunites: hydrocarbon activity in a subduction zone and Ti mobility
- 10:45–11:00 EGU2012-14246
T. Giovanardi, A. Zanetti, M. Mazzucchelli, M. Tiepolo, R. Vannucci, and T. Morishita
 Evidence for the development of a convergent setting in the Southern Alps domain during the early Mesozoic: insights from the Finero Complex (Ivrea-Verbano Zone)
- 11:00–11:15 EGU2012-9172
M. Python, G. Ceuleneer, A. Tamura, and S. Arai
 Nature and distribution of ultramafic layers in the mantle section of the Oman ophiolite: implications for early magma genesis below a spreading centre
- 11:15–11:30 EGU2012-11465
J. Puziewicz, M. Matusiak-Ma?ek, T. Ntaflos, and M. Grégoire
 Cenozoic pre-volcanic metasomatism in lithospheric mantle beneath SW Poland
- 11:30–11:45 EGU2012-9204
M. Coltorti, C. Bonadiman, S. Arai, B. Faccini, and S. Ishimaru
 Textural and chemical relationships between amphibole and peridotitic phases in Ichinomegata mantle xenoliths

11:45–12:00 EGU2012-7793

Th. Ntaflos, M. Bizimis, C. Tschegg, and J. Kosler

Recrystallized, non-equilibrated and metasomatized lithospheric mantle beneath Balaton, Pannonian Basin

GMPV5.4 – Evolution of the lithospheric mantle: a petrological and geochemical perspective from the non-cratonic mantle xenoliths and orogenic peridotites – Posters

Convener: Th. Ntaflos | Co-Conveners: Bonadiman, M. Grégoire

Hall XL | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: n.n.

XL362 EGU2012-2234

S. Ishimaru, S. Arai, A. Tamura, V. M. Okrugin, V. Shcherbakov, and P. Plechov

Toward a general view of mantle peridotite beneath the volcanic front: petrology of peridotite xenoliths from Bezymyanny volcano (central Kamchatka)

XL363 EGU2012-3547

F. El Atrassi, G. Chazot, F. Brunet, M. Bouybaouene, and C. Chopin

Amphibole and phlogopite genesis in pyroxenites from the Beni Bousera peridotite massif (Rif, Morocco): Evidence for two different metasomatic episodes.

XL364 EGU2012-7304

I.Yu. Badanina and **K.N. Malitch**

Timing of metasomatism in a subcontinental mantle: evidence from zircon at Finero (Italy)

XL365 EGU2012-4763

L. Uenver-Thiele, A.B. Woodland, H. Downes, and R. Altherr

Oxidation state of the lithospheric mantle beneath the Massif Central, France

XL366 EGU2012-5858

B.D. Payot, S. Arai, R.A. Tamayo, Jr., and G.P. Yumul, Jr.

A chromian spinel-oversaturated melt for podiform chromitite formation: Evidence from well-preserved dunite clots in massive podiform chromitites in the Coto Block, Zambales Ophiolite Complex, Philippines

XL367 EGU2012-7953

M. Melchiorre, M. Coltorti, M. Gregoire, and M. Benoit

Petrology of suprasubductive mantle xenoliths from Estancia Sol De Mayo (Central Patagonia, Argentina)

XL368 EGU2012-7999

M. Melchiorre, M. Coltorti, M. Gregoire, and M. Benoit

Petrological features of suprasubduction mantle: evidence from northern, central and southern Patagonian mantle xenoliths

XL369 EGU2012-8270

M. Nowak, J. Puziewicz, M. Grégoire, and A. Muszyński

The modal mantle metasomatism in the NE part of the Cenozoic Central European Volcanic Province: the example of the Wołek basanite (SW Poland)

XL370 EGU2012-8810

A. Correale, M. Martelli, A. Paonita, A. Rizzo, and S. Rotolo

A two-component mantle extending from Hyblean Plateau to Mt Etna (Eastern Sicily) as inferred by an integrated approach with noble gases, trace elements and isotope geochemistry.

XL371 EGU2012-12448

I. DeFelipe, D. Pedreira, J.A. Pulgar, E. Iriarte, and M. Mendia

Petrography and C and O stable isotope composition of ophiolites in the Western Pyrenees/Eastern Cantabrian Mountains: geodynamic implications

XL372 EGU2012-12630

G. Galán and **V. Oliveras**

Geochemical and Sr-Nd isotopic characteristics of mantle xenoliths from NE Spain

XL373 EGU2012-12651

M. Matusiak-Matek, J. Puziewicz, T. Ntaflos, M. Grégoire, and A. Klügel

Complex structure of upper mantle beneath SW Poland - the Krzeniów xenoliths case.

XL374 EGU2012-13129

P. Koutsovitis and A. Magganas

Petrogenetic implications from ultramafic rocks and pyroxenites in ophiolitic occurrences of East Othris, Greece

XL375 EGU2012-14193

C. Tschegg and Th. Ntaflos

Peridotite xenoliths from the Chersky belt (Yakutia): Infiltrated carbonate-rich melts leaving no metasomatic record

- XL376 EGU2012-14194
F. Ait-Hamou, R. Laloui, M. Gregoire, W.L. Griffin, S.Y. O' Reilly, G. Ceuleneer, and H. Afafiz
 Petro-geochemical constraints for origin of pyroxenites xenoliths associated with mantle peridotites from Adrar N'ajjer caenozoic volcanics (NE Ahaggar, Algerian Sahara)
- XL377 EGU2012-14197
E.A. Bjerg, M.F. Gargiulo, and O. Kolosova-Satlbarger
 The heterogeneous nature of the Patagonia lithospheric mantle as evidenced by garnet- and spinel-peridotites
- XL378 EGU2012-14230
B. Faccini, C. Bonadiman, M. Coltorti, and R. Briggs
 Mantle xenoliths from South Auckland Volcanic Provinces (New Zealand)
- XL379 EGU2012-14297
I. Uysal, E. Yalcin Ersoy, Y. Dilek, E. Sarifakioglou, F. Aydin, and C.J. Ottley
 Mantle Peridotites from the Rehafiye-Erzincan Ophiolite, NE-Turkey: REE and mineral chemical modeling of partial melting and refertilization processes

GD2.2/GMPV6.5/SM3.7/TS3.8 – Crustal Dynamics vs Anisotropy (co-organized) – Orals

Convener: I. Bianchi | Co-Conveners: M. Miensoyust, B. Grasemann, Y. Gueguen, W Rabbel

Room: 30

Chairperson: n.n.

- 13:30–13:45 EGU2012-2542
N. Rawlinson, P. Arroucau, M. Young, M. Salmon, and B. L. N. Kennett
 Seismic anisotropy and heterogeneity in the crust beneath southeast Australia from ambient noise tomography
- 13:45–14:00 EGU2012-8759
J-M. Kendall, J. P. Verdon, D. Keir, and A. Baird
 Monitoring dyke injection and strain field evolution using shear-wave splitting.
- 14:00–14:15 EGU2012-5733
X.-q. Wang, A Schubnel, J Fortin, Y Gueguen, and H.-q. Ge
 Vp/Vs Ratio: Dispersion and Anisotropy Effects in Cracked Rocks
- 14:15–14:30 EGU2012-823
E. Izquierdo Llavall, A. Casas Sainz, and B. Oliva Urcia
 Magnetic fabrics in overthrust terranes: example from the Buntsandstein Facies in the southern edge of the Axial Zone (Nogueres unit, Central Pyrenees)
- 14:30–14:45 EGU2012-8009
A. Korja, T. Tiira, T. Hyvönen, T. Kilpeläinen, and T.M. Lammi
 Lateral spreading of the Svecofennian Orogen imaged by average lineations and residual velocity anisotropy
- 14:45–15:00 EGU2012-12830
D. Okaya, S. E. Johnson, S. S. Vel, W. J. Song, and N. I. Christensen
 The role of length scales in bridging the gap between rock CPO and seismic signals of crustal anisotropy

GD2.2/GMPV6.5/SM3.7/TS3.8 – Crustal Dynamics vs Anisotropy (co-organized) – Posters

Convener: I. Bianchi | Co-Conveners: M. Miensoyust, B. Grasemann, Y. Gueguen, W Rabbel

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL169 EGU2012-4842
I. M. Aleshin
 Seismic anisotropy derived from joint inversion of SKS and P-to-S converted phases
- XL170 EGU2012-4906
E. Duesterhoeft, R. Bousquet, H. Wichura, and R. Oberhänsli
 Metamorphic density changes as key process to form anorogenic plateaus
- XL171 EGU2012-13561
E. Mandolesi and A. G. Jones
 Magnetotelluric Inversion in a 2D Anisotropic Environment
- XL172 EGU2012-9091
A. Martí, O. Rosell, P. Queralt, J. Ledo, and A. Marcuello
 Identification of anisotropic geoelectric structures using dimensionality analysis of magnetotelluric data. Application to the Spanish Betic Chain
- XL173 EGU2012-6909
T.-Y. Huang, Y.-N. Chen, Y. Gung, W.-T. Liang, and L.-Y. Chiao
 3D isotropic/anisotropic crustal models of Taiwan using ambient seismic noises

- XL174 EGU2012-2970
T. Yudistira, **H. Paulssen**, and J. Trampert
Radial anisotropy in the crust beneath the Netherlands from ambient seismic noise
- XL175 EGU2012-5850
W Rabbel and C Eckhardt
Regional domains of crustal seismic anisotropy in the central European Variscides
- XL176 EGU2012-9679
I. Bianchi, G. Bokelmann, and K. Shiomi
Crustal Anisotropy across Northern Japan by Receiver Functions
- XL177 EGU2012-8549
D. Giannopoulos, E. Sokos, K. Konstantinou, A. Lois, and G-A Tselentis
Temporal variation of shear-wave splitting parameters related to Movri Mountain earthquake in northwest Peloponnese (Greece)
- XL178 EGU2012-8287
L. Cristiano, T. Meier, C. Weidle, and F. Krüger
Automated determination of P-wave polarization at the GRSN
- XL179 EGU2012-11162
G. Polat, **S. Lebedev**, P. W. Readman, B. M. O'Reilly, and F. Hauser
Anisotropic Rayleigh-wave tomography of Ireland's crust: Implications for crustal accretion and evolution within the Caledonian Orogen
- XL180 EGU2012-12661
W. J. Song, S. S. Vel, S. E. Johnson, and D. Okaya
Effect of fold structures on seismic anisotropy in continental crust
- XL181 EGU2012-13521
J. M. Walter, **M. Stipp**, K. Ullemeyer, H. Klein, B. Leiss, B.T. Hansen, and W.F. Kuhs
POWTEX Neutron Diffractometer at FRM II - New Perspectives for In-Situ Rock Deformation Analysis

GD2.3/GMPV6.8/SM3.6/TS9.8 – Heat flow and thermal regime of the lithosphere: Deep and surface processes (co-organized) – Orals

Convener: A. Vaughan | Co-Conveners: I.M. Artemieva, I. Rogozhina, I. T. Kukkonen, N. Kusznir

Room: 22

Chairperson: n.n.

- 08:30–08:45 EGU2012-14378
JH Davies and DR Davies
Revised Estimate of Earth's Surface Heat Flow: 47 +/- 2 TW
- 08:45–09:00 EGU2012-10762
T. A. Jordan, F. Ferraccioli, and R. C. Hindmarsh
Rifting, heat flux, and water availability beneath the catchment of Pine Island Glacier
- 09:00–09:15 EGU2012-7411
S. Umino and A. Okugawa
A New Geothermometer Using Crystal Size Variations of the Sheeted Dikes: Insight Into the Thermal Structure of The Upper Oeanic Crust
- 09:15–09:30 EGU2012-9338
F. Schütz and A. Förster
Surface heat flow of southern Israel based on new borehole data
- 09:30–09:45 EGU2012-6942
I. T. Kukkonen, V. Rath, L. Kivekäs, J. Šafanda, and V. ?ermak
Geothermal Studies of the Outokumpu Deep Drill Hole, Finland: Vertical variation in heat flow and palaeoclimatic implications
- 09:45–10:00 EGU2012-13626
M. Purucker
Heat flow inferred from satellite magnetic data over the Antarctic

GD2.3/GMPV6.8/SM3.6/TS9.8 – Heat flow and thermal regime of the lithosphere: Deep and surface processes (co-organized) – Posters

Convener: A. Vaughan | Co-Conveners: I.M. Artemieva, I. Rogozhina, I. T. Kukkonen, N. Kusznir

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL182 EGU2012-4499
M.T Tesauro, M.K Kaban, S.C Cloetingh, and W.M Mooney
A New thermal and compositional model of the North American lithosphere

- XL183 EGU2012-8095
A.P.M. Vaughan, N. Kuszniir, F. Ferraccioli, and T.A.R.M. Jordan
 Regional Heat-flow Prediction for Antarctica using Gravity Inversion Mapping of Crustal Thickness and Lithosphere Thinning
- XL184 EGU2012-7277
V. Spichak, O. Zakharova, and A. Goidina
 3D thermal structure of the Hengill geothermal area (Iceland) revealed from electromagnetic sounding data and temperature well logs
- XL185 EGU2012-9895
I. Rogozhina, J. M. Hagedoorn, Z. Martinec, K. Fleming, and M. Thomas
 Applicability and limitations of large-scale ice-sheet modeling for constraining subglacial geothermal heat flux
- XL186 EGU2012-13345
 R Klenner and **W Gosnold**
 Heat Flow and the Pleistocene Ice Margin
- XL187 EGU2012-9216
Y. Popov, R. Romushkevich, D. Gorobtsov, and D. Korobkov
 Vertical Variations In Heat Flow Inferred From Experiments In Deep Boreholes

GD2.5/GMPV6.12/SM4.3/TS10.9 – The tale of Laurasia cratons: new geophysical and geochemical evidence from Europe, Siberia, Greenland, and North America (co-organized) – Posters

Convener: I.M. Artemieva | Co-Conveners: S. V. Bogdanova, M. Kopylova

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: I.M. Artemieva, S.V. Bogdanova

- XL188 EGU2012-8627
J. Plomerova, L. Vecsey, V. Babuska, and LAPNET Working Group
 Domains of Archean mantle lithosphere deciphered by seismic anisotropy - inferences from the LAPNET array in northern Fennoscandia
- XL189 EGU2012-8566
H. Silvennoinen, E. Kozlovskaya, E. Kissling, G. Kosarev and the POLENET/LAPNET Working Group Team
 Compilation of Moho boundary map for northern Fennoscandian shield
- XL190 EGU2012-10695
I.M. Artemieva and H. Thybo
 Crustal structure of Europe, Greenland, and North Atlantic: Synthesis and analysis
- XL191 EGU2012-6452
 S. Reiche, **H. Thybo**, I. Reid, and A. Shulgin
 Crustal structure beneath Central-Eastern Greenland
- XL192 EGU2012-4624
M. Dec, M. Malinowski, B. Nita, and E. Perchuc
 An upper mantle model for a western rim of the East European Craton
- XL193 EGU2012-10102
I. Vejelyte, S. Bogdanova, K. Yi, and M. Cho
 New SHRIMP zircon age constraints on the evolution of crystalline basement in Eastern Lithuania (East European Craton)
- XL194 EGU2012-10738
G Skridlaite, S Bogdanova, L. Taran, and J. Wiszniewska
 The Palaeoproterozoic accretionary crustal growth: implications from new age data on the crystalline basement in Lithuania, NW Belarus and N Poland (the East European Craton)
- XL195 EGU2012-4143
 O.B. Gintov and **S.V. Mychak**
 The Ingul block of the Ukrainian Shield (the East European Craton): multiple stress changes during the Palaeoproterozoic tectonic evolution
- XL196 EGU2012-11762
S. V. Bogdanova, A.V. Postnikov, and E.V. Bibikova
 The Volga-Don orocline stitching Volgo-Sarmatia
- XL197 EGU2012-7895
D. Gladkochub, T. Donskaya, and A. Mazukabzov
 Crustal growth in southern Siberia: a Nd-isotope synthesis
- XL198 EGU2012-12162
Yu. Cherepanova and I.M. Artemieva
 Linking crustal heterogeneity to the tectonic history: the case study of the Siberian craton and West Siberian Basin based on new regional crustal model

- XL199 EGU2012-2693
N. Bushenkova, V. Chervov, and I. Koulakov
 Recent upper mantle structure beneath Siberia and surrounding areas according to a seismic tomography and numerical thermogravitational convection modeling data
- XL200 EGU2012-8870
M. Yousof, I. Artemieva, H. Thybo, and A. Frassetto
 The crust and mantle beneath the Siberian provinces: a preliminary model based on new receiver function analysis
- XL201 EGU2012-8901
F. Cammarano, I.M. Artemieva, and H. Thybo
 Effect of composition on the seismic structure of the Siberian lithosphere

GD4.1/GMPV6.16 – Mid-ocean ridge processes and their consequences: melting and melt extraction from a heterogeneous mantle (co-organized) – Orals

Convener: R. Katz | Co-Conveners: A. Stracke, C.J. Lissenberg, M. Godard

Room: 30

Chairperson: Andreas Stracke

- 15:30–15:45 EGU2012-124
H. J. B. Dick and H. Zhou
 Mantle Sources Beneath the SW Indian Ridge - Remelting the African Superplume
- 15:45–16:00 EGU2012-6494
V. Salters
 The effect of variable mantle composition on melt generation and extraction at mid-ocean ridges
- 16:00–16:15 EGU2012-7326
L. Dosso, C. Hamelin, B. Hanan, M. Thirlwall, and S. Silantiev
 Contrasting depleted mantle signatures along the northern mid-atlantic ridge (10-50°N)
- 16:15–16:45 EGU2012-2125
RF Katz and S Weatherley
 Coupled magma/mantle dynamics in a heterogeneous mantle beneath mid-ocean ridges
- 16:45–17:00 EGU2012-2116
O. Plümpner, A. Røyne, A. Malthe-Sørensen, H.E. King, and B. Jamtveit
 Reaction-induced fracturing during olivine serpentinization: A mechanistic investigation at the interface scale
- 17:00–17:15 EGU2012-11269
L. Ruepke, S. Theissen-Krah, K. Iyer, and JP Morgan
 Crustal accretion and hydrothermal convection patterns at fast-spreading ridges

IG4 – Isotopes and Isoscapes as Tool for Forensic Provenancing (co-listed) – Orals

Convener: Dr Meier-Augenstein | Co-Conveners: L. Dawson, J. Hoogewerff

Room: 42

Chairperson: Wolfram Meier-Augenstein

- 08:30–09:00 EGU2012-2150
L.I. Wassenaar, K.A. Hobson, and S. van Wilgenburg
 Application of Isoscapes to Global Wildlife Studies - A Decade of Progress and the Road Ahead
- 09:00–09:15 EGU2012-1246
J. Almirall
 Elemental Analysis and Comparison of Bulk Soil Using LA-ICP-MS and LIBS methods
- 09:15–09:30 EGU2012-1884
S. Ziegler, S. Merker, and D. Jacob
 Geographic variation of stable isotopes in African elephant ivory
- 09:30–09:45 EGU2012-4711
T. Tütken, R. Turck, and A. Zeeb-Lanz
 Provenance of butchered human individuals discovered in the exceptional Neolithic site of Herxheim, SW Germany: Evidence from phosphate oxygen isotope analysis of human teeth
- 09:45–10:00 EGU2012-6098
R. Frew, R. Emad Ehtesham, R. Van Hale, A. Hayman, and T. Baisden
 Effect of precipitation, geographical location and biosynthesis on New Zealand milk powder bulk and fatty acids D/H ratios

COFFEE BREAK

Chairperson: Jurian Hoogewerff

- 10:30–10:45 EGU2012-13589
G. Bowen, C. Bataille, C. Kennedy, T. Zhang, and J. West
 Integrating environmental isoscapes for spatiotemporal assignment
- 10:45–11:00 EGU2012-2489
M. Ruppenthal, Y. Oelmann, H. F. Del Valle, and W. Wilcke
 Nonexchangeable H isotope ratios of soil organic matter across different ecoregions in Argentina
- 11:00–11:15 EGU2012-12706
R. Panetta and G. Hsiao
 Matrix-bound water retains the regional signature in cheese
- 11:15–11:30 EGU2012-8369
T Meisel, D Bandoniène, D Zettl, M Maneiko, and M Horschneegg
 $^{87}\text{Sr}/^{88}\text{Sr}$ a useful tool for the identification of geographic origin of Styrian pumpkin seed oils?
- 11:30–11:45 EGU2012-7201
M. Willmes, C. Boel, R. Grün, R. Armstrong, A. Chancerel, B. Maureille, and P. Courtaud
 Isotopic reconstruction of ancient human migrations: A comprehensive Sr isotope reference database for France and the first case study at Tumulus de Sables, south-western France
- 11:45–12:00 EGU2012-1576
J. Hoogewerff
 Isoscapes for Provenancing; Forensic Requirements and Inference.

IG4 – Isotopes and Isoscapes as Tool for Forensic Provenancing (co-listed) – Posters

Convener: Dr Meier-Augenstein | Co-Conveners: L. Dawson, J. Hoogewerff

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Wolfram Meier-Augenstein

- A292 EGU2012-1473
W Meier-Augenstein, J Hoogewerff, H F Kemp, and D Frew
 The First Detailed ^2H and ^{18}O Isoscapes of Freshwater in Scotland
- A293 EGU2012-1239
H F Kemp, W Meier-Augenstein, M Collins, H Salouros, A Cunningham, and M Harrison
 Multivariate Stable Isotope Analysis to Determine Linkages between Benzocaine Seizures
- A294 EGU2012-1237
O Sutcliffe, N Nic Daeid, H F Kemp, and W Meier-Augenstein
 Rising to the Forensic Analytical Challenges Associated with the Global Increase in Seizures of Cathinone-derived "Legal Highs"
- A295 EGU2012-1354
S. Jayaram, N. Nic Daeid, W.J. Kerr, H.F. Kemp, and W. Meier-Augenstein
 Methylamphetamine synthesized from cold medication as precursor source via two different routes show significantly different stable isotope signatures
- A296 EGU2012-1238
N Nic Daeid, W Meier-Augenstein, and H F Kemp
 Determination of geographic provenance of cotton fibres using multi-isotope profiles and multivariate statistical analysis
- A297 EGU2012-1962
K.M. Rogers, L.I. Wassenaar, D.X. Soto, and J.A. Bartle
 A feather precipitation hydrogen isoscape for New Zealand
- A298 EGU2012-9117
J. McCullagh
 New methods for the compound specific analysis of underivatized amino acids
- A299 EGU2012-13201
N. Saad and J. Hoffnagle
 Implementation of a Novel Laser System for Simultaneous Measurement of $^{13}\text{C}/^{12}\text{C}$ and D/H to Food Provenance
- A300 EGU2012-12601
C. Bouman, J.B Schwieters, N.S. Lloyd, and A. Trinquier
 Multicollector ICPMS and TIMS as tools for isotopic fingerprinting
- A301 EGU2012-13046
A. HasözbeK, K. J. Mathew, G. Orłowicz, B. Srinivasan, and U. Narayanan
 Application of Uranium Isotope Dilution Mass Spectrometry in the preparation of New Certified Reference Materials

A302 EGU2012-10094

A. Sakaguchi, A. Kadokura, P. Steier, Y. Takahashi, K. Shizuma, and M. Yamamoto

Depth distributions of uranium-236 and cesium-137 in the Japan/East Sea; toward the potential use as a new oceanic circulation tracer

TS5.1/GD4.3 – Rifted margins and onshore analogues: mechanisms of deformation, sedimentation, and magmatism (co-listed) – Orals

Convener: G. Peron-Pinvidic | Co-Conveners: J. Autin, G.D. Karner, G. Manatschal, P. T. Osmundsen

Room: 12

Chairperson: J. Autin, P.T. Osmundsen

08:30–08:45 EGU2012-4355

D. Franke

Rifting and volcanism: Examples from volcanic rifted and magma-poor margins based on multichannel seismic data

08:45–09:00 EGU2012-1666

H. Schmeling and H Wallner

The role of melt induced lithospheric weakening on the dynamics of continental rifting

09:00–09:15 EGU2012-3886

G. Manatschal and G.D. Karner

Inter-relationship between the Tectonic and Magmatic Evolution of Hyper-extended Margins and Break-up

09:15–09:30 EGU2012-552

J.D. Eccles, R.S. White, and P.A.F. Christie

North Atlantic Margins: Case studies of Magmatic Continental Breakup

09:30–09:45 EGU2012-4862

S. Brune and C Heine

Numerical Models of Multi-Velocity Rift Evolution

09:45–10:00 EGU2012-8851

R. S. Huismans and C. Beaumont

Depth-dependent extension, two-stage breakup and depleted lithospheric counterflow at rifted margins

COFFEE BREAK

Chairperson: J. Autin, G. Manatschal

10:30–10:45 EGU2012-1564

T. Redfield and P.T. Osmundsen

Crustal thinning and tectonic geomorphology: redefining the passive margin

10:45–11:00 EGU2012-10008

E. Masini, G. Manatschal, G. Mohn, and J. Tugend

Tectono-sedimentary processes at hyper-extended rifted margins: the Alpine and Pyrenean analogues

11:00–11:15 EGU2012-2036

T.B. Andersen, F. Corfu, L. Labrousse, and P.T. Osmundsen

Evidence for hyper - extension in the Pre-Caledonian continental margin of Baltica

11:15–11:30 EGU2012-1756

L. Jolivet, C. Gorini, F. Bache, J. Smit, and S. Leroy

Continental Break-up and the dynamics of rifting in backarc basins : the Gulf of Lions margin

11:30–11:45 EGU2012-13065

C. R. Ranero, V. Sallarés, I. Grevemeyer, N. Zitellini, M. Guzman, M. Prada, S. Moeller, R. de Franco, and T h e MEDOC Cruise Party

Rifting of the Tyrrhenian Basin, a complex interaction among faulting , magmatism and mantle exhumation.

11:45–12:00 EGU2012-7638

D. Savva, F. Meresse, M. Pubellier, N. Chamot-Rooke, D. Franke, S. Steuer, F. Sapin, and J.L. Auxietre

Seismic evidence for hyper-stretched crust and mantle exhumation offshore Vietnam.

TS5.1/GD4.3 – Rifted margins and onshore analogues: mechanisms of deformation, sedimentation, and magmatism (co-listed) – Posters

Convener: G. Peron-Pinvidic | Co-Conveners: J. Autin, G.D. Karner, G. Manatschal, P. T. Osmundsen

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: J.Autin, G.Manatschal, P.T.Osmundsen

- A423 EGU2012-9058
N. Stanton, G. Manatschal, M. Maia, A. Viana, J. Tugend, and J. Autin
What are the Geophysical Fingerprints of hyper-extended Crustal Domains ?
- A424 EGU2012-9753
L. Jeannot, N. Kusznir, and G. Manatschal
How does the lithosphere deformation mode during continental breakup affect mantle exhumation and subsidence history?
- A425 EGU2012-628
D. Cukur, S. Horozal, G.H. Lee, D.C. Kim, and H.C. Han
The distribution and characteristics of the igneous complexes in the northern East China Sea shelf basin and their implications for hydrocarbon potential
- A426 EGU2012-2065
I.D. Bastow and D. Keir
The Protracted Development of the Continent-Ocean Transition in Afar
- A427 EGU2012-5381
G. Corti, M. Philippon, F. Sani, and D. Keir
Stress and slip partitioning during oblique rifting: comparison between data from the Main Ethiopian Rift and laboratory experiments
- A428 EGU2012-5512
G. Corti, F. Sani, S. Agostini, M. Philippon, D. Sokoutis, E. Willingshofer, and T. Abebe
Quaternary volcano-tectonic activity of the western rift margin in the Soddò region, southern Main Ethiopian Rift
- A429 EGU2012-6354
C. Baurion, C. Gorini, S. Leroy, F. Lucazeau, and S. Migeon
Evolution of post-rift sediment transport on a young rifted margin : Insights from the eastern part of the Gulf of Aden
- A430 EGU2012-9285
J. Robinet, P. Razin, J. Serra Kiel, A. Gallardo Garcia, C. Grelaud, J. Roger, S. Leroy, and M. Malaval
Oligo-Miocene syn-rift and Miocene post-rift sedimentary records: the tectono-stratigraphic development of the northern proximal margin of the Gulf of Aden
- A431 EGU2012-7219
J. Autin, N. Bellahsen, S. Leroy, M.-O. Beslier, E. d'Acremont, and L. Husson
Analogue models of oblique rifting in a pre-structured lithosphere
- A432 EGU2012-4311
G. Peron-Pinvidic and L. Gernigon
Spatial and temporal reconstruction of the Norwegian-Greenland Sea: insights from the Jan Mayen system
- A433 EGU2012-7974
M. Block, C. Reichert, K. Berglar, M. Schnabel, F. Klingelhoefer, and P. Schnurle
The ocean-continent transition along the NW Moroccan margin - A new insight
- A434 EGU2012-8937
A. Quiquerez, P. Allemand, S. Sarih, and J-P Garcia
Tectono-sedimentary history of the Early Liassic basins of the Central High Atlas (Morocco)
- A435 EGU2012-8987
A. M. Baracco, C.R. Ranero, N.G. Direen, and H. Stagg
Tectonic structure of the continent-ocean transition along two conjugate profiles from South Australian and East Antarctic magma-poor rifted margins.
- A436 EGU2012-9012
B. Petri, G. Mohn, G. Manatschal, J. Wijbrans, and K. Schulmann
Formation and exhumation of Permian granulites: case study from the polyphase Campo Unit (Central Alps)
- A437 EGU2012-5463
D. Roberts, S. Chand, and L. Rise
A concealed half-graben along the Trollfjorden-Komagelva Fault Zone in Varangerfjorden, N.Norway: a new element in the fault reactivation story
- A438 EGU2012-9831
C. Clerc, A. Chauvet, Y. Lagabrielle, J.-Y. Reynaud, P. Boulvais, R. Bousquet, A. Lahfid, A. Vauchez, and S. Mahé
From crustal thinning to mantle exhumation: what the Pyrenean breccia formations tell us.
- A439 EGU2012-7495
P. T. Osmundsen, A. Braathen, and H. Maher
The geology of Svalbard: structural, stratigraphic and geomorphic response to the formation of two passive margins

- A440 EGU2012-11017
V.H. Pinto, G. Manatschal, A. Viana, A.M. Karpoff, E. Masini, P. Szatmari, H. Penteadó, A. Svartman, and D. Lemarchand
Fluids in hyper-extended rifted margins: Examples from the paleomargins in the eastern Alps and west Pyrenees and present-day Iberia rifted continental margin.
- A441 EGU2012-3760
J. Tugend, G. Manatschal, N. J. Kuszniir, E. Masini, and I. Thinon
What is the crustal architecture of hyper-extended domains at rifted continental margins: The Bay of Biscay-Western Pyrenees example
- A442 EGU2012-5984
A. M. Baracco and C.R. Ranero
The continent-ocean transition of the south west Iberia margin imaged on re-processed multichannel seismic data
- A443 EGU2012-6416
C. Baurion, S. Zaragosi, C. Gorini, S. Leroy, F. Lucazeau, and S. Migeon
Turbidite system architecture and recent sedimentary processes along the Northern margin of the eastern Gulf of Aden
- A444 EGU2012-6724
T.-K. Hong, H. Choi, and Y. Lee
Paleo-rifted margin and its neo-seismotectonic evolution: a case study for the Korean Peninsula
- A445 EGU2012-10440
V. Sallarès, S. Martínez-Loriente, M. Prada, A. Gailler, M.-A. Gutscher, R. Bartolome, and E. Gracia
Thrusting between exhumed mantle blocks at the Goringe Bank (SW Iberian margin): Evidence from combined seismic and gravity modeling
- A446 EGU2012-13867
M. Nemcok, A. Henk, R. Allen, P.J. Sikora, and C. Stuart
Continental break-up along strike-slip fault zones; observations from Equatorial Atlantic.

Tuesday, 24 April

GMPV1.2/GD5.3/TS6.6 – Subduction processes: geochemical inputs and outputs (co-sponsored by the European Association of Geochemistry (EAG)) (including AGU Kuno lecture) (co-organized) – Orals

Convener: C. Chauvel | Co-Conveners: O. Jagoutz, K. Kelly

Room: 20

Chairperson: Jagoutz, Kelley

- 10:30–10:45 EGU2012-2401
T. Plank and J. Vervoort
Hot and Cold Slabs: Effects on Hf and Nd
- 10:45–11:00 EGU2012-7108
C. Chauvel, S. Labanieh, and M. Carpentier
What does the Lesser Antilles arc tell us about the fate of subducted slabs?
- 11:00–11:15 EGU2012-8798
C. J. Garrido, J.C. Alt, W.C. Sanks, A. Turchyn, J.A. Padrón-Navarta, V. López-Sánchez-Vizcaíno, M.T. Gómez-Pugnaire, and C. Marchesi
Tracing the Recycling of Water, Carbon, and Sulfur during Subduction Metamorphism of Seafloor Serpentinites:
- 11:15–11:30 EGU2012-7516
N. Malaspina, F. Langenhorst, and S. Poli
Slab-to-mantle "oxidation" transfer: insights from subduction peridotites metasomatised by C-bearing fluids
- 11:30–12:00 EGU2012-877
K. A. Kelley and E. Cottrell
The oxidation state of Fe in subduction zone basalts and implications for mantle oxygen fugacity

GMPV2.5 – Geochemistry-mineralogy-petrology-volcanology open session – Posters

Convener: N. T. Arndt

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL299 EGU2012-139
D. Bal Akkoca
Isotope Geochemistry of Neogene Lacustrine Sediments from South of Elazi Basin, Eastern Turkey
- XL300 EGU2012-2412
A. Garone, M. Battistel, M. Barbieri, and B. Parisse
Groundwater dynamic in a coastal aquifer using statistical analysis and geochemical modeling
- XL301 EGU2012-5305
C.M. Pu?ca?, B.P. Onac, H.S. Effenberger, and I. Povar?
Tamarugite from Diana Cave (SW Romania) -first true karst occurrence
- XL302 EGU2012-8771
D. Covaci, C. Costea, D. Dumitras, and **O.G. Dulu**
EPR, SEM and XRD investigation of ornamental limestone and marbles from some renowned Romanian quarries.
- XL303 EGU2012-1776
M. Garcia-Valles
Study of the viscosity behaviour of glasses obtained from urban wastewater treatment sludges from Egypt using hot stage microscopy
- XL304 EGU2012-5332
F. F. Hingerl, T. Wagner, D. A. Kulik, G. Kosakowski, and T. Driesner
Development of a new activity model for complex mixed-salt solutions from ambient to geothermal conditions
- XL305 EGU2012-4057
J.J. Esteban, J. Cuevas, J.M. Tubía, and J.I. Gil Ibarguchi
Yttrium geothermometry: an approach to determine the oldest garnet growth recrystallization conditions from micaschists (Yunquera Unit, Betic Cordilleras, southern Spain)
- XL306 EGU2012-2112
K. Martinek, T. Wagner, M. Wälle, and C.A. Heinrich
Changes in fluid composition in metamorphic veins along a cross section through the Central Alps, Switzerland

- XL307 EGU2012-4063
J.J. Esteban, J.M. Tubía, J. Cuevas, and J.I. Gil Ibarguchi
Application of the TITANIQ geothermometer to ultrabasic rocks
- XL308 EGU2012-4069
J.J. Esteban, J.M. Tubía, J. Cuevas, and J.I. Gil Ibarguchi
On the use of SEM techniques to determine clockwise or counterclockwise P-T paths: insights from metapelites (Yunquera Unit, Betic Cordilleras)
- XL309 EGU2012-4218
J. Hammerli, B. Rusk, C. Spandler, N.H.S. Oliver, and P. Emsbo
In-situ Cl/Br measurements in scapolite and fluid inclusions by LA-ICP-MS: A powerful tool to constrain fluid sources
- XL310 EGU2012-4799
S. König, A. Lugué, J.-P. Lorand, F. Wombacher, and M. Lissner
Selenium and Tellurium concentrations of ultradepleted peridotites determined by isotope dilution ICPMS: implications for Se-Te systematics of the Earth's mantle
- XL311 EGU2012-6264
E. L. Iatan and I. Berbelec
Preliminary fluid inclusions study in the Bucium Rodu-Frasin Neogene volcanic structure, Metaliferi Mountains, Romania
- XL312 EGU2012-9680
N. Borovkov
Pyroxenite xenoliths from the quaternary volcanoes of Spitsbergen. Evidence for magmatic evolution.
- XL313 EGU2012-7478
A. Unal, O. Kamaci, and S. Altunkaynak
Geochemistry and Sr-Nd-Pb Isotopic Characteristics of The Oligomiocene Volcanism in NW Turkey: Susurluk Volcanites

GMPV4.7 – Physics and dynamics of magma ascent, emplacement, eruption and deposition in volcanic systems –

Orals

Convener: O. Galland | Co-Conveners: J. Kavanagh, C. Annen, N. Le Corvec, S. Burchardt, G. Gisler, E. P. Holohan, M. Kervyn, G. A. Douillet, D. M. Doronzo

Room: 27

Chairperson: n.n.

- 08:30–08:45 EGU2012-4955
CP Montagna, A Longo, and **P Papale**
Dynamics of magma recharge, ascent and convection in magmatic reservoirs
- 08:45–09:00 EGU2012-10120
E.W. Llewellyn, S. Mueller, and H.M. Mader
Modelling the flow of crystal-bearing magma: why models that ignore crystal shape are wrong
- 09:00–09:15 EGU2012-2420
A. Delcamp, M.S Petronis, and B. van Wyk de Vries
Magma emplacement at Lemptégy volcano (Chaîne des Puys, France) based on field work, AMS and paleomagnetic data
- 09:15–09:30 EGU2012-10936
M. Krumbholz, C. Hieronymus, S. Burchardt, V. R. Troll, D. C. Tanner, and N. Friese
Dyke thicknesses follow a Weibull distribution controlled by host-rock strength and magmatic overpressure
- 09:30–09:45 EGU2012-8119
E. Hallot, O. Galland, P. R. Cobbold, and G. Delavaud
Vertical versus lateral flux of magma in dykes during crustal extension: new insights from simple laboratory experiments
- 09:45–10:15 EGU2012-1687
E. Rivalta, T. Dahm, L. Passarelli, and F. Maccaferri
A physical model for the pattern of seismicity induced by propagating dikes
- 10:15–10:30 EGU2012-6907
A. Cruden and A. Bungler
Growth histories and emplacement dynamics of laccoliths and large mafic sills: an evaluation of critical parameters

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-562
A. Germa, E. Cañon-Tapia, L. Connor, and N. Le Corvec
 Statistical analysis of eruptive vent distribution from post-subduction monogenetic fields in Baja California, Mexico
- 10:45–11:00 EGU2012-11021
S. Kremers, J.B. Hanson, Y. Lavallee, K.-U. Hess, M.O. Chevrel, J. Wassermann, and D.B. Dingwell
 Shallow magma-mingling-driven Strombolian eruptions at Mt. Yasur volcano, Vanuatu
- 11:00–11:15 EGU2012-7603
Ø. Thordén Haug, O. Galland, and G. Gisler
 Quantitative experimental modelling of fragmentation during explosive volcanism
- 11:15–11:45 EGU2012-4128
T. Esposti Ongaro, A.B. Clarke, B. Voight, A. Neri, and C. Widiwijayanti
 Topographic control on pyroclastic density currents: the example of Mount St. Helens 1980 blast
- 11:45–12:00 EGU2012-4818
M.J.B. Cartigny, D. Ventura, G. Postma, and J.H. Van den Berg
 Morphodynamics and sedimentary structures of bedforms under supercritical-flow conditions: new insights from flume experiments

GMPV4.7 – Physics and dynamics of magma ascent, emplacement, eruption and deposition in volcanic systems –

Posters

Convener: O. Galland | Co-Conveners: J. Kavanagh, C. Annen, N. Le Corvec, S. Burchardt, G. Gisler, E. P. Holohan, M. Kervyn, G. A. Douillet, D. M. Doronzo

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL314 EGU2012-5805
M.C. Scherrer, K.-U. Hess, K.T. Fehr, and D.B. Dingwell
 Oxidation-state dependence of rheology in peralkaline glasses of phonolitic composition
- XL315 EGU2012-3685
N. Petford, R. English, R. Williams, and N. Rogers
 High temperature steady shear and oscillatory rheometry of basaltic melt
- XL316 EGU2012-2471
L.J. de Biasi, M.O. Chevrel, J.B. Hanson, C. Cimarelli, Y. Lavallée, and D.B. Dingwell
 Transient rheology of crystallizing andesitic magmas
- XL317 EGU2012-14435
N. Gorokhova and O. Melnik
 Numerical simulation of plagioclase rim growth during magma ascent at Bezymianny volcano, Kamchatka
- XL318 EGU2012-11081
C. Agostini, F. Arzilli, and M.R. Carroll
 Crystallization kinetics of silicate melts
- XL319 EGU2012-6647
S. Roy, S.E. Johnson, Z. Jin, and P. Koons
 Fractal analysis and thermal-elastic modeling of a subvolcanic magmatic breccia
- XL320 EGU2012-10601
S. Burchardt, V. R. Troll, H. Schmeling, H. Koyi, L. S. Blythe, M. A. Longpré, and F. M. Deegan
 El Hierro's floating stones as messengers of crust-magma interaction at depth
- XL321 EGU2012-6215
A. M. Alvarez-Valero, F. Pla, and L. M. Kriegsman
 Silicic magma eruption: integrated study of crustal xenolith petrology and numerical modelling
- XL322 EGU2012-13410
D. Gürer, O. Galland, H.A. Leanza, C. Sassier, P.R. Cobbold, and E.A. Rossello
 The structure and evolution of magmatic complexes in fold-and-thrust belts - a case study of Cerro Negro, Neuquén Province, Argentina
- XL323 EGU2012-9311
E. P. Holohan, T. R. Walter, M. P. J. Schöpfer, J. J. Walsh, T. Orr, and M. Poland
 The 2011 collapse of Puu Oo pit crater, Hawaii: insights from digital image correlation and Discrete Element Method models
- XL324 EGU2012-3766
O. Galland
 Experimental modelling of ground deformation associated with shallow magma intrusions
- XL325 EGU2012-810
K. A. Daniels, T. Menand, and R. S. J. Sparks
 The propagation of magma-filled cracks in an extensional tectonic setting

- XL326 EGU2012-8982
M. Abdelmalak, **R. Mourgues**, and D. Bureau
Fracture mode analysis and related surface deformation during dyke intrusion: Results from 2D experimental modelling
- XL327 EGU2012-12671
N. Le Corvec, J.V. Rowland, and J.M. Lindsay
The Auckland Volcanic Field - a basaltic field showing random behavior?
- XL328 EGU2012-12970
N. Le Corvec, K.B. Sporli, J.V. Rowland, and J.M. Lindsay
What controls the distribution of volcanoes within monogenetic volcanic fields: Insights from spatial distribution and alignments of volcanic centers
- XL329 EGU2012-1609
J. Kavanagh, M. Pavier, T. Menand, and R.S.J. Sparks
Clarifying the role of rigidity contrasts and rock interface strength in sill formation processes
- XL330 EGU2012-10429
J. Scheibert and O. Galland
Analytical solution for 3D surface uplift above flat-lying magma intrusions: Implications for sill emplacement and geodesy
- XL331 EGU2012-5568
S. Carcano, L. Bonaventura, T. Esposti Ongaro, and A. Neri
Non-equilibrium and transient processes in under-expanded volcanic jets
- XL332 EGU2012-6125
J.F. Berghuijs, H.B. Mattsson, and S.A. Bosshard
Eruptive and depositional characteristics of the Loolmurwak and Eledoi maar volcanoes, Lake Natron - Engaruka monogenetic volcanic field, northern Tanzania
- XL333 EGU2012-5211
G.-J. Peeters, K. Fontijn, V. Cnudde, and G.G.J. Ernst
Magma ascent dynamics during highly explosive magmatic/phreatomagmatic eruptions of low-viscosity phonolitic magmas: Insights from textural studies on pumices from the 12.9 ka Laacher See eruption (Germany).
- XL334 EGU2012-9167
J. Rausch and H.-U. Schmincke
Origin of maar volcanoes: external water, internal volatiles, or both?
- XL335 EGU2012-5296
G. Gisler
Simulation of the Eruption of a Volatile-Rich Magma Column
- XL336 EGU2012-3477
O. Ersoy, G. Atici, E. Aydar, and ?. Tatar
A more advantageous and reliable alternative method than widely used anisotropy of magnetic susceptibility (AMS) for determination of vent locations of ignimbrites: High resolution x-ray tomography (micro-CT)
- XL337 EGU2012-10728
J. Kendrick, P.A. Ashwell, Y. Lavallée, B.M. Kennedy, K.U. Hess, J. Cole, and D.B. Dingwell
Experimental Compaction of Pumiceous Dome Lavas
- XL338 EGU2012-2249
M. Wantim, M. Kervyn, G.G.J Ernst, C.E. Suh, P. Jacobs, and M-A. del Marmol
Modelling the 1982 and 2000 channelised lava flows at Mt Cameroon Volcano using FLOWGO thermo-rheological model
- XL339 EGU2012-13632
G. Giordano, M. Porreca, C. Lesti, and R.A.F. Cas
Mobility of pyroclastic density currents
- XL340 EGU2012-6534
M. Porreca, C. Lesti, M. Mattei, G. Giordano, R.A.F. Cas, H. Wright, and J. Viramonte
Flow directions and interaction with topography of large volume caldera-forming ignimbrites: the case of Cerro Galán ignimbrite (Puna plateau, NW Argentina)
- XL341 EGU2012-135
D.M. Doronzo, G.A. Valentine, P. Dellino, and M.D. de Tullio
Effects of volcano profile on dilute pyroclastic density currents: Numerical simulations
- XL342 EGU2012-3201
B. Andrews and **M. Manga**
Laboratory studies of pyroclastic flows that interact with topography
- XL343 EGU2012-3050
G. A. Douillet, L. Seybold, K.R. Rasmussen, U. Kueppers, D. Lo Castro, and D.B. Dingwell
Comparison of the terminal fall velocity, surface roughness and erosion threshold for volcanic particles.
- XL344 EGU2012-2128
G. A. Douillet, K.R. Rasmussen, U. Kueppers, J. Merrison, and D.B. Dingwell
When do pyroclastic particles move? Wind tunnel experiments on saltation threshold and surface roughness.

- XL345 EGU2012-634
M. Mulas, R. Cioni, and F. Mundula
 Paleotopographic study of a rheomorphic rhyolitic welded ignimbrite: Monte Ulmus (Sardinia - Italy)
- XL346 EGU2012-638
 F. Mundula, R. Cioni, and **M. Mulas**
 Diapiric structures in welded ignimbrite
- XL347 EGU2012-11601
F. Cavalcanti Miranda and J. Sesterhenn
 Numerical Simulation of a Compressible Turbulent Boundary Layer with Suspended Particles applied to Pyroclastic Density Currents

GMPV5.1 – Magma generation and differentiation: Field, analytical, experimental and numerical investigation of magmatic and volcanic systems – Orals

Convener: V.R. Troll | Co-Conveners: R. Gertisser, C. Freda

Room: 31

Chairperson: Freda, Gertisser

- 13:30–13:45 EGU2012-5439
A. Klügel, T.H. Hansteen, and M.A. Longpré
 The 2011 El Hierro eruption confirms petrological models of magma transport at ocean islands
- 13:45–14:00 EGU2012-10624
C. J Manning, M. F Thirlwall, and D. Lowry
 Magma mixing as a mechanism for generating normal mantle ^{18}O in Icelandic off-rift zones.
- 14:00–14:15 EGU2012-2023
A.Y. Borisova, C. Martel, S. Gouy, I. Pratomo, S. Sumarti, J.-P. Toutain, I. N. Bindeman, L. Danyushevsky, J.-P. Metaxian, and S. Surono
 High explosive 2010 Merapi eruption: Evidence for shallow-level crustal assimilation and hybrid fluid
- 14:15–14:30 EGU2012-9291
E. M. Jolis, V. Troll, F. Deegan, L. Blythe, C. Harris, C. Freda, D. Hilton, J. Chadwick, and M. Van Helden
 Tracing crustal contamination along the Java segment of the Sunda Arc, Indonesia
- 14:30–14:45 EGU2012-4706
P. Armienti, C. Perinelli, and K. Putirka
 Deep-level magma dehydration and ascent rates at Mt. Etna (Sicily, Italy)
- 14:45–15:00 EGU2012-14001
 E.L. Tomlinson, **T. Thordarson**, C.S. Lane, V.C. Smith, C.J. Manning, W. Müller, and M.A. Menzies
 Petrogenesis of the Sólheimar Ignimbrite (Katla, Iceland): implications for tephrostratigraphy
- Chairperson: Gertisser, Troll
- 15:30–15:45 EGU2012-10034
R. Meyer and R. B. Pedersen
 Volcanism along the Jan Mayen Fracture Zone in space and time
- 15:45–16:00 EGU2012-11586
F.C. Meade, M. Masotta, V.R. Troll, C. Freda, and B. Dahrén
 In-situ geochemical characterization of experimentally generated partial melts: modelling crustal contamination precisely
- 16:00–16:15 EGU2012-11296
C. Tegner, C. Heilmann-Clausen, R. B. Larsen, and A. J. R. Kent
 East Greenland flood basalt volcanism: duration, volatile flux and correlation to the Paleocene-Eocene thermal maximum
- 16:15–16:30 EGU2012-5064
D. Morgavi, D. Perugini, C. De Campos, W. Ertl-Ingrisch, Y. Lavalée, and L. Morgan
 Interactions Between Rhyolitic and Basaltic Melts Unraveled by Chaotic Magma Mixing Experiments
- 16:30–16:45 EGU2012-4139
M. Laumonier, L. Arbaret, and B. Scaillet
 Rheology and textures of experimental 3-phase magma mixing
- 16:45–17:00 EGU2012-7049
A. A. De Benedetti, G. De Astis, V. Raffaele, A. Esposito, G. Giordano, S. Petersen, and T. Monecke
 Mingling processes at Panarea Volcano (Aeolian Islands, Italy): results from M73/2 cruise drilled cores

GMPV5.1 – Magma generation and differentiation: Field, analytical, experimental and numerical investigation of magmatic and volcanic systems – Posters

Convener: V.R. Troll | Co-Conveners: R. Gertisser, C. Freda

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Freda, Troll

- XL348 EGU2012-115
P. Larrea, M. Lago, Z. França, E. Widom, C. Galé, T. Ubide, E. Arranz, and P. Tierz
The influence of antecrysts on the whole-rock composition of lava flows and dykes from Corvo Island (Azores)
- XL349 EGU2012-154
A.R. Jafarian
Geochemistry of Gabbroic and Diabasic sills in the Central Alborz
- XL350 EGU2012-913
P. Yamato, R. Tartèse, T. Duretz, and D.A. May
Magma differentiation in dykes: from field evidence to numerical study
- XL351 EGU2012-1837
A. Allen, K. Saunders, G. Kilgour, C. Manning, and J. Blundy
Investigating basalt genesis, evolution and magmatic residence times in the Taupo Volcanic Zone, New Zealand.
- XL352 EGU2012-3430
J.F. Santos, M.H. Mendes, A.C. Gonçalves, and P. Moita
New geochemical and isotopic constraints on the genesis of the Oliveira Azeméis granitoid melts (Porto-Tomar Shear Zone, Iberian Variscan Chain, Central-Western Portugal)
- XL353 EGU2012-2867
N.D. Greber, T.F. Nägler, and T. Pettke
Mo-isotope composition of molybdenites: Implications for magmatic and hydrothermal isotope fractionation
- XL354 EGU2012-3907
V. Simonov and A. Mikolaichuk
Large Igneous Provinces of the Central Asia: data on geochronology, geochemistry and petrology of the Tien Shan and Junggar basaltic complexes
- XL355 EGU2012-4850
O. Andreeva and I. Andreeva
Formation conditions and magma composition of the trachytes from the Pektusan volcano (China and North Korea): evidence from melt inclusions
- XL356 EGU2012-4779
L. S. Blythe, V. Misiti, M. Masotta, J. Taddeucci, C. Freda, V. R. Troll, F. M. Deegan, and E. M. Jolis
Viscosity controlled magma-carbonate interaction: a comparison of Mt. Vesuvius (Italy) and Mt. Merapi (Indonesia).
- XL357 EGU2012-4471
P. Tierz, M. Lago, C. Galé, T. Ubide, E. Arranz, P. Larrea, and T. Sanz
Kaersutite megacrysts in the Permian mafic dikes of the Panticosa pluton (Pyrenees, Spain)
- XL358 EGU2012-4995
I. Andreeva
Evolution of the trachydacite and pantellerite magmas of the bimodal volcanic association of Dzarta-Khuduk (Central Mongolia): evidence from melt inclusions
- XL359 EGU2012-10678
S. E. Berg, V. R. Troll, M. S. Riishuus, S. Burchardt, and M. Krumbholz
Silicic Magma Genesis in Neogene Central Volcanoes in Northeast Iceland
- XL360 EGU2012-5173
M. Masotta, F. Radica, C. Freda, T. Paul, G. Moore, M. Gaeta, P. Scarlato, and V.R. Troll
Towards a very low-friction assembly for piston cylinder: can we go below 150 MPa?
- XL361 EGU2012-1012
N.S. Aryaeva and E.V. Koptev-Dvornikov
A model to predict the sulfur concentration at sulfide saturation (SCSS) in anhydrous mafic melts
- XL362 EGU2012-14000
R. Gertisser, H. Handley, K. Preece, M. Reagan, K. Berlo, J. Barclay, and R. Herd
The 2010 Eruption of Merapi Volcano, Java, Indonesia: Petrological Insights into Magma Dynamics and Eruptive Behaviour
- XL363 EGU2012-13581
E. Leocat, A. Peccerillo, and P.-Y. Gillot
The western Aeolian Islands volcanoes (Southern Tyrrhenian Sea, Italy) : the temporal and chemical evolution of a complex magmatic system
- XL364 EGU2012-13303
P. Koutsovitis, K. Soukis, and S. Lozios
Implications for the Upper Cycladic Unit: petrological, mineralogical and structural study of intrusive rocks from the Late-Cretaceous volcanic-arc in Anafi Island, Cyclades, Greece

- XL365 EGU2012-12904
S. Wiesmaier, V. R. Troll, J. C. Carracedo, R. M. Ellam, I. Bindeman, and J. A. Wolff
Bimodality of lavas in the Teide-Pico Viejo succession in Tenerife - The role of crustal melting in the origin of recent phonolites
- XL366 EGU2012-4709
C. Martel, **R. Champallier**, G. Prouteau, M. Pichavant, L. Arbaret, H. Balcone-Boissard, G. Boudon, P. Boivin, J. L. Bourdier, and B. Scaillet
Phase relations in trachytes: implication for magma storage conditions in the Chaîne des Puys (French Massif Central)
- XL367 EGU2012-8076
A. Kuzyura, **Y. Litvin**, P. Vasilisev, T. Jeffries, and F. Wall
Trace elements mineral-melt partitioning in diamond-forming peridotite-carbonatite system (experimental study at 8.5 GPa)
- XL368 EGU2012-6419
M.M. Bogina and V.L. Zlobin
Paleoproterozoic felsic magmatism of the Karelian Craton: petrogeochemistry, isotope geochemistry, and genesis
- XL369 EGU2012-7002
M.A. Longpré, **A. Klügel**, J. Stix, T.H. Hansteen, and V.R. Troll
A study of crystals and glasses from the 2011 submarine eruption at El Hierro, Canary Islands
- XL370 EGU2012-7678
O. Kamaci and S. Altunkaynak
Geothermometry and Geobarometry of Kepsut-Dursunbey Volcanites (NW Anatolia, Turkey): Implications for Magma Chamber Depth and Crystallization Conditions
- XL371 EGU2012-200
H. Mutlu and M. Demirbilek
Origin of post-collisional magmatism in the Tavsanlı Zone, central Turkey: Constraints from geochemistry, geochronology, Nd-Sr and oxygen isotopes
- XL372 EGU2012-2865
A. Domonik, E. S?aby, and M. ?migielski
Hurst exponent used as a tool to differentiate between magmatic and fluid-induced processes as reflected in crystal geochemistry
- XL373 EGU2012-4314
C. M. Petrone, L. Ferrari, M.A. Orozco, and M. Lopez Martinez
Petrogenesis and geodynamic significance of silicic volcanism in the western Trans-Mexican Volcanic Belt
- XL374 EGU2012-6230
B.A. Bazylev, G.V. Ledneva, A. Ishiwatari, and N.N. Kononkova
Sill-like bodies of high-pressure ultramafic cumulates in tectonic blocks of the Pekul'ney complex (central Chukotka): their composition and inner structure
- XL375 EGU2012-8394
D. Muir, **L. Caricchi**, R. Mendez, and J.M. Londoño
Petrological constraints on magma storage and transfer beneath Volcán Cerro Machín (Colombia): A volcano showing signs of unrest
- XL376 EGU2012-9289
S. Meletlidis, A. Di Roberto, I. Iribarren, M. Pompilio, A. Bertagnini, P.A. Torres, A. Felpeto, C. Lopez, and M.J. Blanco
Geological and petrological aspects of the ongoing submarine eruption at El Hierro Island (Canary Islands, Spain)
- XL377 EGU2012-3610
Y. Litvin
Ultrabasic-basic evolution of upper mantle magmas: petrogenetic links between diamond-bearing peridotites and eclogites (on evidence of physico-chemical experiments)

GMPV5.2 – How magma chambers work: recent advances in the study of granitic, alkaline and mafic-ultramafic plutonic complexes – Orals

Convener: R. Latypov | Co-Conveners: J. Vander Auwera, T. Andersen

Room: 31

Chairperson: Rais Latypov

- 08:30–08:45 EGU2012-272
R. G. Cawthorn
The top of the Bushveld Complex, South Africa

- 08:45–09:00 EGU2012-1742
A. Wilson
A Chill Sequence to the Bushveld Complex - Insight into the First Stages of Emplacement and the Parental Magmas to the World's Largest Layered Intrusion
- 09:00–09:15 EGU2012-6365
B. O'Driscoll
Signatures of magma chamber replenishment in cumulates of the Rum Layered Suite, NW Scotland
- 09:15–09:30 EGU2012-2340
M. B Holness
The thickness of crystal mushy layers on magma chamber floors
- 09:30–09:45 EGU2012-1692
M.D. Higgins, D. Morata, and M.-I. Varas
Development of layering during hydration reactions in the small La Cordadera gabbro intrusion, Central Chile.
- 09:45–10:00 EGU2012-3464
A. Toramaru and S. Yamauchi
Effect of permeable flow on cyclic layering in solidifying magma bodies: Insights from an analog experiment of diffusion-precipitation systems

COFFEE BREAK

Chairperson: Jacqueline Vander Auwera

- 10:30–10:45 EGU2012-1245
L.N. Kogarko
Igneous layering in the peralkaline intrusions, Kola Peninsula: leading role of gravitational differentiation
- 10:45–11:00 EGU2012-2276
T. Hoshide
Spinel inclusion in olivine and plagioclase crystals: a marker for primary crystals and a tracer for crystal migration in a differentiating magma reservoir
- 11:00–11:15 EGU2012-116
T. Ubide, E. Arranz, M. Lago, C. Galé, P. Larrea, and P. Tierz
Unravelling the influence of antecryst settling on the composition of a lamprophyre sill: results from geochemical modelling and principal component analysis
- 11:15–11:30 EGU2012-2737
R. Latypov and V. Egorova
Plagioclase compositions give evidence for in situ crystallization under horizontal flow conditions in mafic sills
- 11:30–11:45 EGU2012-7834
J Woodard, O. Eklund, and T Andersen
A long-lived mid-crustal magma chamber beneath a ring intrusion
- 11:45–12:00 EGU2012-6963
C. Siégel, **N.T. Arndt**, A.-L. Henriot, and S.J. Barnes
Fred's Flow (Canada) and Murphy Well (Australia): thick komatiitic lava flows with contrasting compositions, emplacement mechanisms and water contents

GMPV5.2 – How magma chambers work: recent advances in the study of granitic, alkaline and mafic-ultramafic plutonic complexes – Posters

Convener: R. Latypov | Co-Conveners: J. Vander Auwera, T. Andersen

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Tom Andersen

- XL378 EGU2012-981
S. Egorova
Magmatic mineral assemblages of eclogitized and not eclogitized Paleoproterozoic gabbro-norites from the Belomorian province, Eastern Fennoscandian shield
- XL379 EGU2012-1164
P. Pripachkin and **T. Rundkvist**
Rhythmic layering in the lower part of the West-Pana intrusion (Fedorov-Pana layered complex, Kola Peninsula).

- XL380 EGU2012-1244
I.D. Ryabchikov, L.N. Kogarko, and D.V. Kuzmin
Degassing and redox effects in the magma chamber of the Guli massif (Polar Siberia)
- XL381 EGU2012-1466
E. Sharkov
Thin magmatic layering as a result of magma flow under precrystallizing conditions in hot environment: Evidence from small mafic-ultramafic intrusion of the Anisimov Island, the White Sea, Russia
- XL382 EGU2012-3286
V. Simonov and V. Prikhod'ko
Genesis of platinum-bearing ultrabasic massifs in the plutonic chambers: evidence from melt inclusions
- XL383 EGU2012-2261
J. Vander Auwera, O. Bolle, J.-P. Liégeois, J. Schittekat, and B. Charlier
Construction and differentiation of the ferroan (A-type) Sveconorwegian (=Grenvillian) Kleivan intrusion
- XL384 EGU2012-8164
E. J. Hunt, A. A. Finch, and C. H. Donaldson
How do Kakortokites form? Additional evidence from the Ilimaussaq Complex, S. Greenland
- XL385 EGU2012-2020
M. Zintwana and A.H. Wilson
The Petrography and Geochemistry of the Marginal and Lower Zones, Eastern Bushveld Complex, South Africa
- XL386 EGU2012-3299
T.M. Owen-Smith, L.D. Ashwal, T.H. Torsvik, and C. Harris
Petrogenesis of the Doros Gabbroic Complex, Namibia: Multiple mingling magma mushes?
- XL387 EGU2012-2649
T. Kuritani, T. Yoshida, J. Kimura, Y. Hirahara, and T. Takahashi
Differentiation mechanism of frontal-arc basalt magmas
- XL388 EGU2012-4135
V. Kalugin and R. Latypov
Top-down fractional crystallization of a sulfide liquid during formation of largest ore-body from the Noril'sk-Talnakh PGE-Cu-Ni deposits, Russia
- XL389 EGU2012-2751
V. Egorova and R. Latypov
An origin of marginal reversal of the Fongen-Hyllingen layered intrusion by prolonged magma emplacement
- XL390 EGU2012-4144
S. Chistyakova and R. Latypov
Magma supercooling as a cause of mineral reverse trends in mafic dykes?
- XL391 EGU2012-2032
R. G. Cawthorn
Petrofabrics in the Bushveld Complex demonstrate existence of turbidity currents in magma chambers
- XL392 EGU2012-10974
M. Ek, K. J. Hogmalm, and S.-Å. Larson
Constraining Major Element Fractionation in an Alkali Gabbroic Sill using Mass Balance Modelling.
- XL393 EGU2012-13189
J. Leuthold, J. Blundy, and M. Holness
Infiltration metasomatism within the Rum layered intrusion (Scotland)
- XL394 EGU2012-9920
M. Yudovskaya, J. Kinnaird, A. Sobolev, D. Kuzmin, and A. Wilson
A mechanism of the Lower Zone emplacement: new data from the Platreef (northern limb of the Bushveld Complex)
- XL395 EGU2012-4941
T. Andersen, M. Elburg, and M. Erambert
Götzenite- and combeite-bearing mineral assemblages in peralkaline nephelinite at Nyiragongo, East African Rift: Recrystallization around a degassing alkaline magma chamber
- XL396 EGU2012-4592
A.E. Vernikovskaya, V.A. Vernikovskiy, N.Yu. Matushkin, O.P. Polyansky, Yu.M. Laevsky, and K.V. Voronin
Thermal history modeling of intrusions in the Tatarka-Ishimba suture zone at the Late Neoproterozoic evolution stage of the Yenisey Ridge orogen
- XL397 EGU2012-5003
A.E. Izokh, T.V. Svetlitskaya, N.D. Tolstykh, and N.T. Phuong
Crystallization conditions in the lherzolite-gabbro-norite Suoi Cun intrusion (Northeastern Vietnam)
- XL398 EGU2012-5049
R.A. Shelepaev, G.V. Polyakov, T.Q. Hung, T.T. Hoa, N.T. Phuong, A.E. Izokh, and B.A. Nien
Monzonitoids as indicator of intrachamber fractionation exemplified by Nui Chua complex (Northern Vietnam)
- XL399 EGU2012-5234
I.L. Nedosekova, B.V. Belyatsky, and V.V. Sharygin
The Il'meno-Vishnevogorsky miaskite-carbonatite complex: origin and sources (Urals, Russia)

- XL400 EGU2012-5387
A.V. Vishnevskiy, A.E. Izokh, V.M. Kalugin, and I.F. Gertner
 Syn-collision Hairhan layered intrusion, Lakes Zone, Western Mongolia
- XL401 EGU2012-8561
L.L. Petukhova, V.S. Prikhod'ko, V.A. Gur'yanov, and A.N. Perestoronin
 Some features of inner structure of ultramafite bodies from results of study of rock-forming minerals (Kun-Manie Paleoproterozoic Intrusive Complex)
- XL402 EGU2012-12251
O. Sigmarrsson, D. Laporte, J. Marti, B. Devouard, and N. Cluzel
 Mafic intrusion remobilising silicic magma under El Hierro, Canary Islands
- XL403 EGU2012-14190
F. Bea
 Physical constraints of the evolution of felsic magma chambers: implications for the evolution of granite magmas

GMPV5.5/TS3.5 – Batholith formation in space and time (co-organized) – Orals

Convener: S. Mettasch | Co-Conveners: N. Hurlimann, A. Skopelitis

Room: 20

Chairperson: Sylvia Mettasch, Alexandra Skopelitis, Niklaus Hurlimann

- 08:30–08:45 EGU2012-3696
N. Petford
 Batholith formation
- 08:45–09:00 EGU2012-5946
N. Coint, C.G. Barnes, A.S. Yoshinobu, M.A. Barnes, and K.R. Chamberlain
 Reconstruction of pluton assembly using trace elements in rock-forming minerals: a LA ICP-MS study of augite and hornblende in the Wooley Creek batholith, Klamath Mountains, California.
- 09:00–09:15 EGU2012-9775
C. Annen, J. Blundy, L. Caricchi, E. Melekhova, M. de Saint-Blanquat, A. Schöpa, R.S.J. Sparks, and A. Rust
 Recent ideas and controversies on granitoid melt generation and piecemeal assemblage of plutons and batholiths: How does the Adamello suite fit in?
- 09:15–09:30 EGU2012-352
A. Schöpa and C. Annen
 On the formation and lifetime of large silicic magma chambers in the shallow crust
- 09:30–09:45 EGU2012-6696
D. Waters
 Metamorphic and thermal evolution of large contact aureoles - lessons from the Bushveld Igneous Complex
- 09:45–10:00 EGU2012-6358
U. Schaltegger, B. Schoene, C. Broderick, A. Skopelitis, and M. Ovtcharova
 How can we construct timescales of pluton emplacement? The answer from high-precision U-Pb dating of the Adamello batholith

GMPV5.5/TS3.5 – Batholith formation in space and time (co-organized) – Posters

Convener: S. Mettasch | Co-Conveners: N. Hurlimann, A. Skopelitis

Hall XL | Display Time 08:00–19:30

Author in Attendance: 10:30–12:00

Chairperson: Sylvia Mettasch, Alexandra Skopelitis, Niklaus Hurlimann

- XL404 EGU2012-5105
R. Nandedkar, N. Hurlimann, P. Ulmer, and O. Müntener
 Granitic liquids derived by fractional crystallization: an experimental liquid line of descent from olivine-tholeiite to granite at 0.7 GPa
- XL405 EGU2012-2333
E. Melekhova, C. Annen, and J. Blundy
 Origin of modality of volcanism
- XL406 EGU2012-3398
N. Hurlimann, R. Nandedkar, O. Müntener, and P. Ulmer
 Rejuvenation of deeper magma reservoirs during differentiation: an example recorded in a post-plutonic dyke swarm S-Adamello (N-Italy)
- XL407 EGU2012-3378
M. Pistone, L. Caricchi, P. Ulmer, E. Reusser, N. Mancktelow, and L. Burlini
 Rheology of Volatile-rich Crystal Mush

- XL408 EGU2012-5420
T. Keller and B.J.P Kaus
The importance of visco-elasto-plastic rheology in numerical modeling of two-phase flow
- XL409 EGU2012-5564
N. Vegas, J.M. Tubía, F.D. Hongn, and A. Aranguren
Structure of the Early Cambrian Tastil batholith (Salta, Argentina)
- XL410 EGU2012-8129
A. Skopelitis, I. Bindeman, A. Ulianov, A. Gerdes, P. Brack, and U. Schaltegger
Are there tonalites and tonalites? Disentangling the processes and sources of tonalites from the Adamello Batholith (Italian Alps)
- XL411 EGU2012-8236
C. Broderick, U. Schaltegger, A. Gerdes, D. Frick, D. Guenther, and P. Brack
Magma evolution as seen through zircon geochemistry: an example from the Southern Adamello Batholith, N. Italy
- XL412 EGU2012-10368
V. Špillar and D. Dolejš
Sizes and spatial relationships of crystals in granitic plutons: Exploring the crystallization gaps, heterogeneous nucleation, and mechanical clustering of crystals
- XL413 EGU2012-12115
K.A. Tung, H.Y. Yang, D.Y. Liu, J.X. Zhang, H.J. Yang, Y.H. Shau, and J.Y. Tseng
The Neoproterozoic Granitoids from the Qilian Block, NW China
- XL414 EGU2012-1128
T. Simon-Labric, P. van der Beek, P. Reiners, and C. Teyssier
How to extract thermal structure and erosional denudation of batholiths from low-temperature thermochronology
- XL415 EGU2012-12810
S. Mettasch, L.P. Baumgartner, J.C. Vrijmoed, and Y. Podladchikov
Textural and numerical study of cordierite growth in the Adamello contact aureole, Italy

TS6.3/GD5.2/GMPV6.1 – What is the nature of the subduction interface? Cross-disciplinary views from Geodynamics-Geochemistry-Seismology (co-organized) – Orals

Convener: P. Agard | Co-Conveners: T. Gerya, O. Oncken, M. Scambelluri

Room: 20

Chairperson: O. Oncken, P. Agard

- 13:30–13:45 EGU2012-2976
M. Métois, A. Socquet, and C. Vigny
Interseismic coupling, segmentation and mechanical behavior of the Central Chile subduction zone.
- 13:45–14:00 EGU2012-12420
J. Bedford, M. Moreno, M. Keiding, O. Heidbach, O. Oncken, D. Lange, J.C. Baez, and The Maule GPS Team
Investigating the postseismic deformation of the 2010 Maule Chile megathrust; insights from kinematic inversions
- 14:00–14:15 EGU2012-10264
V. Sallarès, A. Meléndez, M. Prada, C. R. Ranero, K. McIntosh, and I. Grevemeyer
Overriding plate structure of the Nicaragua convergent margin: Constraints on the limits of the seismogenic zone and the 1992 tsunami earthquake
- 14:15–14:30 EGU2012-3442
W. Heise, T.G. Caldwell, G.J. Hill, S.L. Bennie, E. Wallin, and E.A. Bertrand
Magnetotelluric imaging of fluid processes at the Subduction Interface of the Hikurangi Margin, New Zealand
- 14:30–14:45 EGU2012-6801
I. Wada
Nature of the slab-mantle wedge interface: Clues from geophysical observations and thermal and petrologic modeling
- 14:45–15:00 EGU2012-5964
B. Reynard
The serpentinized plate interface: detection and controls on subduction zone deformation
- Chairperson: T. Gerya, M. Scambelluri
- 15:30–15:45 EGU2012-10187
W. Friederich, L. Lambrecht, B. Stöckhert, and C. Moos
Is a deep subduction channel detectable by seismic observations?

- 15:45–16:00 EGU2012-10884
A. García-Casco
 Dynamics of convergent plate boundaries: Insights from subduction-related serpentinite melanges from the northern edge of the Caribbean plate
- 16:00–16:15 EGU2012-10265
S. Sandmann, T.J. Nagel, D. Herwartz, and R.M. Kurzwaski
 Nappe scale coherent block exhumation from eclogite-facies conditions revealed by Lu-Hf garnet chronometry - the Adula Nappe (Central Alps)
- 16:15–16:30 EGU2012-9689
S. Wassmann and B. Stöckhert
 Rheology of the plate interface - the rock record
- 16:30–16:45 EGU2012-7750
C. J. Garrido, J. A. Padrón-Navarta, V. López-Sánchez-Vizcaíno, M.T. Gómez-Pugnaire, C. Marchesi, and A. Tommasi
 Dynamics of fluid expulsion during high-pressure devolatilization of serpentinite in subduction settings: field, petrological and textural constraints from the Almirez ultramafic massif.
- 16:45–17:00 EGU2012-9455
D. Dymkova, T. Gerya, and Y. Podladchikov
 2D numerical modelling of fluid percolation in the subduction zone

TS6.3/GD5.2/GMPV6.1 – What is the nature of the subduction interface? Cross-disciplinary views from Geodynamics-Geochemistry-Seismology (co-organized) – Posters

Convener: P. Agard | Co-Conveners: T. Gerya, O. Oncken, M. Scambelluri

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: O. Oncken, T. Gerya

- A467 EGU2012-4045
M. Scambelluri and S. Tonarini
 Serpentinites and Boron Isotope Evidence for Shallow Fluid Transfer Across Subduction Zones
- A468 EGU2012-8522
M. Scambelluri, E. Rampone, T. Pettke, and E. Reusser
 Garnet peridotites and chlorite harzburgites from Cima di Gagnone (Central Alps, Switzerland): remnants of dehydrated serpentinites from the slab-mantle interface
- A469 EGU2012-14293
 S. Angiboust, **P. Agard**, and T. Pettke
 Channelized Fluid Flow and Metasomatism in Subducted Oceanic Lithosphere recorded in an Eclogite-facies Shear Zone (Monviso Ophiolite, Italy)
- A470 EGU2012-12766
 J.A. Padrón-Navarta, M.T. Gómez-Pugnaire, V. López Sánchez-Vizcaíno, **C.J. Garrido**, and C. Marchesi
 The fate of metaclinopyroxenite during serpentinite subduction
- A471 EGU2012-4813
 S. Angiboust, **P. Agard**, P. Yamato, and H. Raimbourg
 Breaking the Crust: Intermediate-depth Subduction Earthquakes Recorded by Eclogite Breccias
- A472 EGU2012-6776
I. Song, H. Lee, and J. Kim
 Application of slip-line analysis to the mechanical model of active accretionary wedge
- A473 EGU2012-7907
M. Campione, N. Malaspina, A. Borghesi, and G. C. Capitani
 Frictional anisotropy of antigorite and its impact on thrust-fault mechanics at subduction zones
- A474 EGU2012-8185
M. Moreno, C. Haberland, O. Oncken, A. Rietbrock, and O. Heidbach
 Are seismic and aseismic slip patches influenced by the late-interseismic physical state of a megathrust? Results from the southern end of the 2010 Maule Chile earthquake
- A475 EGU2012-12754
D. Lange, M. Moreno, F. Tilmann, J. Bedford, E. Contreras Reyes, J.C. Baez, S. Barrientos and the Maule GPS Team
 The Relation Between Aftershock Seismicity of the 27 February 2010 Maule Earthquake to Postseismic Displacements from GPS
- A476 EGU2012-9957
 M. Palo and **P. Capuano**
 Polarization analysis of non-volcanic tremor at Guerrero subduction zone (Mexico)
- A477 EGU2012-11312
T. Sagiya and H. Okazaki
 Complementary distribution of Coseismic slip, Afterslip, and Slow Slip on the Nankai Trough Plate Boundary

- A478 EGU2012-11798
M. Keiding, O. Heidbach, M. Moreno, J. C. Baez, D. Melnick, and N. Kukowski
 Estimates of stress changes from the 2010 Maule, Chile earthquake: the influence on crustal faults and volcanos
- A479 EGU2012-12036
A. Krohe, S. Grigull, S. Wassmann, and B. Stöckhert
 Block-in-matrix structures of the Franciscan Subduction Complex: Do they reflect the properties of an active subduction channel?
- A480 EGU2012-12195
Y. Soda, T. Morishita, and H.-R. Wenk
 The deformation micro-structures and the relationships of crystal orientation between olivine and antigorite in serpentinized peridotite from Toba area, SW Japan
- A481 EGU2012-13486
A. Vitale Brovarone, J. Malavieille, M. Beltrando, O. Beyssac, G. Molli, D. Herwartz, D. Rubatto, P. Monié, C. Groppo, R. Compagnoni, J. Hermann, L. Martin, Y. Lagabrielle, and F. Meresse
 Structural heterogeneity in mountain belts: rift- vs. subduction-related control.
- A482 EGU2012-6027
S. W. Faryad, V. Kachlík, R. Jedlicka, and H. Klápová
 Variscan sutures and exhumation of high- to ultrahigh-pressure metamorphic rocks in the Bohemian Massif
- A483 EGU2012-6496
P. Agard, S. Angiboust, S. Guillot, and A. Garcia-Casco
 Long-term coupling along the subduction plate interface: insights from exhumed rocks and models
- A484 EGU2012-4826
 S. Angiboust, S. Wolf, **P. Agard**, E. Burov, and P. Yamato
 Effect of fluid release on intermediate depth subduction processes: Insights from fully-coupled numerical modelling
- A485 EGU2012-14296
 K Vogt and **T Gerya**
 Terrain accretion along the subduction interface: numerical modeling
- A486 EGU2012-14299
 B Baitsch-Ghirardello and **T Gerya**
 Fluid and melt weakening along subduction interface defines geodynamic regimes of intra-oceanic subduction

EMRP2.6/GMPV6.10/NH4.1/SM5.5/TS2.9 – Thermo-mechanical coupling and physical properties: implications to natural hazards (co-organized) – Orals

Convener: S. Vinciguerra | Co-Conveners: G. Di Toro, D. Faulkner, M. J. Heap, O. Lengliné

Room: 42

Chairperson: Vinciguerra

- 13:30–13:45 EGU2012-4392
R. Stefansson and M. Bonafede
 From a physical approach to earthquake prediction, towards long and short term warnings ahead of large earthquakes
- 13:45–14:00 EGU2012-314
B. Grzempa, V.L. Popov, J. Starcevic, and M. Popov
 Earthquake Dynamics in Laboratory Model and Simulation - Accelerated Creep as Precursor of Instabilities
- 14:00–14:15 EGU2012-582
A. Kushnir, L. Kennedy, S. Misra, and P. Benson
 Carbonates in thrust faults: High temperature investigations into deformation processes in calcite-dolomite systems
- 14:15–14:30 EGU2012-4495
A. Schubnel, N. Hilaret, F. Brunet, J. Gasc, P. Cordier, Y. Wang, and H.W. Green
 Seismicity triggered by the olivine-spinel transition: new insights from combined XRD and acoustic emission monitoring during deformation experiments in Mg₂GeO₄
- 14:30–14:45 EGU2012-5228
N. Brantut and J. Sulem
 Instabilities in strain-rate hardening, chemically-weakening rocks: revisiting the mechanism of "dehydration-embrittlement"
- 14:45–15:00 EGU2012-160
C. Scholz and J. Campos
 The Seismic Coupling of Subduction Zones Revisited

Chairperson: Heap

- 15:30–15:45 EGU2012-4176
F. Renard and M. Kobchenko
4D imaging of fluid escape in low permeability shales during heating
- 15:45–16:00 EGU2012-13208
B. Carpenter, H. Kitajima, and D. Saffer
Hydraulic and Acoustic Properties of Alpine Fault DFDP1a Core
- 16:00–16:15 EGU2012-3227
A. Ougier-Simonin and W. Zhu
The role of fluid pressure on slip instability
- 16:15–16:30 EGU2012-7348
S. Smith, G. Di Toro, E. Spagnuolo, S. Nielsen, M. Violay, R. Spiess, and A. Billi
Co-seismic frictional properties and microstructures of carbonate fault rocks in nature and experiment
- 16:30–16:45 EGU2012-12993
N. De Paola, I. Faoro, and R.E. Holdsworth
The evolution of the frictional properties of faults during the seismic cycle
- 16:45–17:00 EGU2012-6985
O. Ben-David and J. Fineberg
Slip stick and the rapid dynamics of static friction

EMRP2.6/GMPV6.10/NH4.1/SM5.5/TS2.9 – Thermo-mechanical coupling and physical properties: implications to natural hazards (co-organized) – Posters

Convener: S. Vinciguerra | Co-Conveners: G. Di Toro, D. Faulkner, M. J. Heap, O. Lengliné

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Lengliné

- A25 EGU2012-114
M.Sc. Fidiriková and D.Sc. Kubišár
Moisture impact on building rocks - the laboratory and in situ investigations
- A26 EGU2012-299
E. Ferre, J.W. Geissman, and M.S. Zechmeister
Coseismic paleomagnetic signal in fault pseudotachylytes?
- A27 EGU2012-514
M. Ikari, A. Niemeijer, C. Spiers, and A. Kopf
Unstable slip behavior in sediments from the Costa Rica convergent margin
- A28 EGU2012-900
A. Hassanzadegan, G. Bloecher, H. Milsch, and G. Zimmermann
The effect of temperature on mechanical and hydraulic properties of Flechtinger sandstone
- A29 EGU2012-1850
Y. Lavallée, **M. J. Heap**, A. Laumann, K.-U. Hess, P. G. Meredith, and D. B. Dingwell
How tough is tuff in the event of fire?
- A30 EGU2012-2831
I.G. Main, A.F. Bell, P.G. Meredith, N. Brantut, and M. Heap
Scaling of coupled dilatancy-diffusion processes in space and time
- A31 EGU2012-2900
E.H. Saenger, **M. Frehner**, C. Madonna, N. Tisato, M. Kuteynikova, N. Riahi, P. Sala, and B. Quintal
Combining laboratory and computational rock physics
- A32 EGU2012-3018
P. Tizzani, R. Castaldo, S. Pepe, and G. Solaro
3D Imaging of Brittle/Ductile transition of the crust beneath the resurgent calderas
- A33 EGU2012-3673
A. V. Smaglichenko and L. A. Sim
Seismic analyze of satellite image and tomographic model: an example of the Nagano fault zone
- A34 EGU2012-4397
A. Bizzarri, **P. Crupi**, S. de Lorenzo, and M. Loddo
Thermal effects on the time occurrence of earthquake failures: a deterministic approach.
- A35 EGU2012-4457
B. Derode, F. Cappa, and Y. Guglielmi
Different seismic signatures of fractures slip and their correlations with fluid pressures in in-situ rupture experiments
- A36 EGU2012-4847
N. Lesparre, A. Adler, F. Nicollin, D. Gibert, and C. Nussbaum
Monitoring the Excavation Damaged Zone in Opalinus clay by three dimensional reconstruction of the electrical resistivity in the Mont Terri gallery G-04

- A37 EGU2012-5304
J. Chen, X. Yang, and C. J. Spiers
Coseismic thermal-mechanical-chemical processes on the Wenchuan Earthquake fault: constraints from experiments and numerical modeling
- A38 EGU2012-5571
S. Loaiza, J. Fortin, M. Adelinet, Y. Guéguen, and S. Violette
Hydrodynamic properties of the basal aquifer of Santa Cruz Island using seismic refraction, Galapagos - Ecuador
- A39 EGU2012-5934
C. Boulton, M. Villeneuve, and C. Goodin
Acoustic emissions generated during uniaxial compressive strength tests on Lyttelton volcano rocks, Christchurch, New Zealand
- A40 EGU2012-7076
S.A.M. den Hartog, A.R. Niemeijer, and C.J. Spiers
Frictional properties of megathrust fault gouges under true in-situ subduction zone conditions
- A41 EGU2012-7150
O. Lengliné, J. Schmittbuhl, J. Elkhoury, J.-P. Ampuero, K. J. Maloy, A. Cochard, and R. Toussaint
Influence of temperature in interfacial crack propagation in a heterogeneous medium
- A42 EGU2012-8830
M. Moreira and N Wallenstein
Evolution of elastic properties and acoustic emission, during uniaxial loading of rocks, from the Fogo Volcano in the island of Sao Miguel, Azores; Preliminary results.
- A43 EGU2012-8882
R.J. Wall, C.R.J. Kilburn, and P.G. Meredith
Seismic Precursors to Eruptions at Volcanoes in Extensional Stress Fields
- A44 EGU2012-9327
M. Bourcier, A. Dimanov, E. Héripéré, M. Bornert, and J. Raphanel
Effects of microstructure and temperature on the plastic deformation mechanisms of synthetic halite : a micromechanical approach
- A45 EGU2012-10337
J. Scheibert, C. Guerra, D. Bonamy, and D. Dalmas
Understanding fast macroscale fracture from microcrack post mortem patterns
- A46 EGU2012-11127
M. Krumbholz, S. Burchardt, D. C. Tanner, and H. Koyi
On the scale-invariance of fractures and fracture patterns in the Transscandinavian Igneous Belt, Southeast Sweden
- A47 EGU2012-12527
J.M. Azañón, E. Puertas, **C. Ureña**, R. Gallego, and F. Romero-Gómez
Collapse in a rock massif induced by lateral confinement loss: the case of Montegolf (Málaga, Spain)
- A48 EGU2012-13592
M. J. Werner and A. M. Rubin
Numerical Simulations of Mechanical Erosion from below by Creep on Rate-State Faults
- A49 EGU2012-6336
M.-L. Bernard and M. Zamora
Seismic properties of volcanic rocks from Montagne Pelée (Martinique, Lesser Antilles) and their relations to transport properties

GD3.6/GMPV6.11/SM4.1/TS1.3 – The lithosphere-asthenosphere boundary (LAB) depth paradox (co-organized) – Orals

Convener: U. Achauer | Co-Conveners: J. Plomerova, M. Ballmer

Room: 30

Chairperson: Ballmer, Plomerova

- 13:30–14:00 EGU2012-1188
S. Karato and T. Ologboji
On the origin of the asthenosphere
- 14:00–14:15 EGU2012-6947
J. C. Afonso, J. Fullea, Y. Yang, A. G. Jones, W. L. Griffin, J.A.D. Connolly, S. Y. O'Reilly, and S. Lebedev
The compositional and thermal structure of the lithosphere from thermodynamically-constrained multi-observable probabilistic inversion
- 14:15–14:30 EGU2012-6735
R J M Farla, **I Jackson**, J D Fitz Gerald, U H Faul, and M E Zimmerman
Dislocation Damping and Anisotropic Seismic-wave Attenuation in the Earth's Upper Mantle

- 14:30–14:45 EGU2012-11738
M. D. Long
 Understanding the nature of the lithosphere, asthenosphere, and the boundary between them:
 Constraints from seismic anisotropy
- 14:45–15:00 EGU2012-7549
C A Rychert
 SS Precursor and Receiver Function Imaging of the Lithosphere Asthenosphere Boundary

GD3.6/GMPV6.11/SM4.1/TS1.3 – The lithosphere-asthenosphere boundary (LAB) depth paradox (co-organized) –

Posters

Convener: U. Achauer | Co-Conveners: J. Plomerova, M. Ballmer

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Achauer

- XL180 EGU2012-2063
F. Sodoudi, E. Kaestle, and R. Kind
 Imaging the Lithosphere-Asthenosphere Boundary beneath South Africa and Madagascar using S receiver functions
- XL181 EGU2012-3273
M. D. Ballmer, C. P. Conrad, and E. I. Smith
 Basaltic continental intraplate volcanism as sustained by shear-driven upwelling
- XL182 EGU2012-4994
N. Mohammadi, F. Sodoudi, and M.S Mirkamali
 Estimation of LAB depth in Zagros, Central Iran and Alborz zones using S receiver function method
- XL183 EGU2012-7832
 A. Souriau, L. Rivera, A. Maggi, and **J.-J. L  v  que**
 Attenuation in the Australian-Antarctic region from multiple ScS waves
- XL184 EGU2012-8860
L. Vecsey, J. Plomerova, V. Babuska, and PASSEQ working group
 Mantle lithosphere fabrics around the TESZ
- XL185 EGU2012-12358
A. Levander, K. Liu, R. Porritt, R. Allen, and Y. Yang
 The Seismic Structure of the Mantle Wedge under Cascade Volcanoes, Northwestern U.S.A.
- XL186 EGU2012-4996
R. Kind, P. Kumar, X. Yuan, J. Mechie, F. Sodoudi, and B. Heit
 The lithosphere-asthenosphere boundary observed with USArray receiver functions and comparison with other regions
- XL187 EGU2012-7381
G. Burgos, J.-P. Montagner, E. Beucler, J. Trampert, M. H. Ritzwoller, Y. Capdeville, and N. M. Shapiro
 Lithosphere/Asthenosphere Boundary depth inferred from global surface wave tomography
- XL188 EGU2012-8782
J. Plomerova, V. Babuska, L. Vecsey, and PASSEQ working group
 Lithosphere - asthenosphere boundary (LAB) around the Trans-European Suture Zone (TESZ)
- XL189 EGU2012-10191
J.R.R. Ritter, C. Seiberlich, and B. Wawerzinek
 The lithosphere-asthenosphere and crust-mantle boundaries in the region of the Upper Rhine Graben as seen by S-wave receiver functions
- XL190 EGU2012-10899
L. Fleitout, O Trubienko, J-D Garaud, and GEOTECDI team
 Far away motions associated with giant subduction earthquakes and the mechanical properties of the lithosphere-asthenosphere system

GD4.1/GMPV6.16 – Mid-ocean ridge processes and their consequences: melting and melt extraction from a heterogeneous mantle (co-organized) – Posters

Convener: R. Katz | Co-Conveners: A. Stracke, C.J. Lissenberg, M. Godard

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Marguerite Godard

- XL191 EGU2012-13633
S. Kanjilal
 1D and 2D Benchmark of Two phase flow In Geodynamics

- XL192 EGU2012-7371
M. Ulrich, C. Hémond, P. Nonnotte, and **KP. Jochum**
OIB/seamount recycling as an alternative process for E-MORB genesis
- XL193 EGU2012-9541
S.M. Weatherley and R.F. Katz
Predicted transit times of melt extraction at a mid-ocean ridge compared with observed U-series disequilibria
- XL194 EGU2012-1950
M. D. Ballmer, C. P. Conrad, N. Harmon, and E. I. Smith
Off-axis volcanism as fueled by shear-driven upwelling near the East Pacific Rise
- XL195 EGU2012-6005
L. Luquot, M. Andreani, M. Godard, P. Gouze, and B. Gibert
Serpentinization of sintered olivine during seawater percolation experiments
- XL196 EGU2012-12598
M. Andreani, B Menez, A Delacour, V Pasini, AL Auzende, and D Brunelli
Micro-scale investigation of carbonation process in partially serpentinized peridotites
- XL197 EGU2012-10978
S. Titarenko and A. M. McCaig
Modelling the Lost City Hydrothermal System
- XL198 EGU2012-5416
M. Munoz, O. Vidal, C. Marcaillou, S. Pascarelli, O. Mathon, and F. Farges
Fe K-edge XANES and pre-edge polarization dependence for the determination of the oxidation state of iron in antigorite and other phyllosilicates
- XL199 EGU2012-9641
C. Arcilla, W R Alexander, E Vargas, M Honrado, T Sato, K Fujii, M Yamakawa, J Argayosa, J Lazaro, C Pascua, and I G McKinley
Hyperalkaline Springs, Serpentinized Ultramafics, Bentonite Reaction, Exotic Life Forms and Natural Carbon Sequestration: Preliminary Studies from the Philippines
- XL200 EGU2012-5258
K.u.r.t. Bucher
The two endmember types of serpentinization

TS9.5/G3.5/GD8.6/GM3.6/GMPV6.20/SM3.5 – Crustal faulting and deformation processes observed by InSAR, GPS and modelling techniques (co-organized) – Orals

Convener: T. R. Walter | Co-Conveners: R. Malservisi, R. Lanari, T. Dixon, F. Zucca, M. Shirzaei

Room: 11

Chairperson: Walter / Shirzaei

- 10:30–10:45 EGU2012-10002
E. Sansosti
The impact of new generation SAR sensors in ground deformation studies
- 10:45–11:00 EGU2012-13821
R.F. Hanssen, **M. Caro Cuenca**, A. Hooper, P. Mahapatra, M. Arikan, and D. Bekaert
New trends in InSAR time series analysis for wide area deformation mapping
- 11:00–11:15 EGU2012-10784
E. Cetin, Z. Cakir, A.M. Akoglu, S. Ergintav, U. Dogan, H. Ozener, and M. Meghraoui
Persistent Scatterer InSAR time series analysis of the creeping section of the North Anatolian Fault at Ismetpasa
- 11:15–11:30 EGU2012-12569
K. Hodgkinson, D. Mencin, A. Borsa, O. Fox, C. Walls, and E. Van Boskirk
Recording Plate Boundary Deformation Processes Around The San Jacinto Fault, California
- 11:30–11:45 EGU2012-10391
G. Ducret, M. P. Doin, R. Grandin, A. Socquet, C. Vigny, M. Métois, and M. Béjar-Pizarro
Measurement of interseismic strain accumulation in the Southern Andes (25°-35°S) using Envisat SAR data
- 11:45–12:00 EGU2012-3234
R. Barzaghi, A. Borghi, and A. Kunzle
Statistical inference in comparing DInSAR and GPS data in fault areas

LUNCH BREAK

Chairperson: Zucca / Lanari

- 13:30–13:45 EGU2012-7144
S. Jónsson
Probing Mechanical Properties of Rock with InSAR
- 13:45–14:00 EGU2012-3919
J.-C. Lee, H. T. Chu, S. H. Chang, W. J. Huang, C. H. Mu, and H. Y. Chen
Frictional properties of a rapid creeping mega-thrust: a case study of the Chihshang Fault in eastern Taiwan
- 14:00–14:15 EGU2012-3125
R.A. Bennett, S. Ventkataramani, J.N. McElwaine, and J.M. Restrepo
Geodetic expressions of upper mantle dynamics?
- 14:15–14:30 EGU2012-10604
K.H. Spaans, F. Sigmundsson, S. Hreinsdóttir, and B.G. Ófeigsson
High resolution surface deformation measurements in Iceland's Northern Volcanic Zone: Unraveling multiple deformation sources using InSAR and GPS
- 14:30–14:45 EGU2012-2331
P. J. González, K. F. Tiampo, M. Palano, F. Cannavò, and J. Fernández
Concurrent tectonic and aquifer-compaction deformation around Lorca (SE, Spain)
- 14:45–15:00 EGU2012-9635
S. Rieger, N. Adam, and A.M. Friedrich
Quantification of crustal deformation based on analysis of Persistent Scatterer Interferometry of W-Crete
- Chairperson: Malservisi / Dixon
- 15:30–15:45 EGU2012-7409
S. Metzger, S. Jónsson, G. Danielsen, S. Hreinsdóttir, F. Jouanne, and T. Villemin
The accumulated seismic moment of the locked Húsavík-Flatey fault, North Iceland, derived from an interseismic model using GPS time-series 1997-2010
- 15:45–16:00 EGU2012-4404
P. Teatini, A. Lovison, C. Janna, and A. Ferretti
Three-dimensional seasonal deformations induced by underground gas storage. Monitoring by PSI and modeling by FE
- 16:00–16:15 EGU2012-5510
N. Gourmelen, A. Shepherd, D. Angus, Q. Fisher, D. Lesnic, and A. Gouldson
Quantifying the success of onshore carbon capture and storage from surface deformation measurement and geo-mechanical modeling
- 16:15–16:30 EGU2012-2946
R. Castaldo, P. Tizzani, A. Manconi, M. Manzo, S. Pepe, A. Pepe, and R. Lanari
3D time dependent thermo-fluid dynamic model of ground deformation at Campi Flegrei caldera
- 16:30–16:45 EGU2012-4654
V. Poncos, **F. Serban**, D. Teleaga, V. Ciocan, M. Sorin, D. Caranda, F. Zamfirescu, M. Andrei, S. Copaescu, M. Radu, and V. Raduca
Water induced geohazards measured with spaceborne interferometry techniques
- 16:45–17:00 EGU2012-9299
J. Ruch, J. Warren, F. Risacher, T.R. Walter, and R. Lanari
Salt lake deformation detected from space

TS9.5/G3.5/GD8.6/GM3.6/GMPV6.20/SM3.5 – Crustal faulting and deformation processes observed by InSAR, GPS and modelling techniques (co-organized) – Posters

Convener: T. R. Walter | Co-Conveners: R. Malservisi, R. Lanari, T. Dixon, F. Zucca, M. Shirzaei

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: T. R. Walter , M. Shirzaei , R. Malservisi, R. Lanari , T. Dixon , F. Zucca

- A501 EGU2012-1064
R. Eco, A.M.F. Lagmay, and M.G. Bato
Investigating ground deformation and subsidence in Northern Metro Manila, Philippines using Persistent Scatterer Interferometric Synthetic Aperture Radar (PSInSAR)
- A502 EGU2012-1395
S.-B. Yu, Y.-J. Hsu, T. Bacolcol, C.-C. Yang, Y.-C. Tsai, and R. Solidum
Present-day Crustal Deformation along the Philippine Fault in Luzon, Philippines
- A503 EGU2012-2176
E. Davis and S. Marsic
Use of Deformation Based Reservoir Monitoring for Early Warning Leak Detection
- A504 EGU2012-2463
S. Zerbini, C. Prati, G. Cappello, M. Errico, and F. Novali
Observing crustal deformation and atmospheric signals from COSMO-SKYMED and GPS data

- A505 EGU2012-2483
C. Tolomei, E. Trasatti, S. Atzori, J. Merryman, A. Antonioli, G. Pezzo, and S. Salvi
 The Mw 7.2 Van Earthquake (2011): co-seismic and post-seismic deformation imaged by DInSAR data, and source modeling
- A506 EGU2012-3479
Y.-J. Hsu, M. Simons, C.A. Williams, and E. Casarotti
 3-D FEM derived elastic Green's functions for the coseismic deformation of the 2005 Mw 8.7 Nias-Simeulue, Sumatra earthquake
- A507 EGU2012-3895
M. Ruppel, A. Roepert, and G Hoffmann
 Differential GPS measurements as a tool to quantify Late Cenozoic crustal deformation (Oman, Arabian Peninsula)
- A508 EGU2012-3992
Y.-A. Chen, C.-P. Chang, and J.-Y. Yen
 Interferometric SAR time series analysis for measuring the surface deformation caused by the 1999 Chi-Chi earthquake in Taiwan
- A509 EGU2012-4159
J.-Y. Yen, C.-P. Chang, and Y.-I. Wen
 Spatial and temporal variations of surface deformation along the Longitudinal Valley, eastern Taiwan, observed by Persistent SAR Interferometry using ERS, Envisat, and ALOS archives
- A510 EGU2012-4329
T. Yamasaki and G.A. Houseman
 The crustal viscosity gradient measured from post-seismic deformation: a case study of the 1997 Manyi (Tibet) earthquake
- A511 EGU2012-2209
W.-J. Huang and K. M. Johnson
 Strain accumulation across the Aksay segment of Altyn Tagh fault: Investigation of the influence of laterally varying lithospheric properties and a low-viscosity channel
- A512 EGU2012-5914
D.U. Sanli, K. Coban, V. Akarsu, and E. Arslan
 Effect of Span of GPS Campaigns on Estimated Static Positioning Velocities
- A513 EGU2012-5940
M. Moreno, D. Melnick, M. Rosenau, J. C. Baez, J. Klotz, O. Oncken, A. Tassara, J. Chen, K. Bataille, M. Bevis, A. Socquet, C. Vigny, B. Brooks, I. Ryder, B. Smalley, M. Bartsch, V. Grund, and H. Hase
 Tectonic control on the Mw 8.8 2010 Maule Chile earthquake
- A514 EGU2012-8444
C. Völksen and M. Hackl
 Crustal Deformation and Seismicity in Southern Bavaria revealed by GNSS observations
- A515 EGU2012-10099
P. Kourkoulis, T. Strozzi, and U. Wegmüller
 Ground-motion monitoring in the Venice Lagoon using combined DInSAR and Persistent Scatterer Interferometry
- A516 EGU2012-11035
 R. Barzaghi, **A. M. Marotta**, R. Splendore, and A. Borghi
 A new procedure to built a model covariance matrix: first results
- A517 EGU2012-11308
C. Bignami, M. Chini, C. Kyriakopoulos, and S. Stramondo
 Seismic swarm detection by satellite DInSAR technique in the south-west Peloponnese, Greece
- A518 EGU2012-11474
 A. Schenk and **M. Westerhaus**
 Upgrading InSAR observations by combination with leveling data to understand small scale deformation processes
- A519 EGU2012-13947
J. Ha, K.-D. Park, J. Won, and M.-B. Heo
 GPS-based Analysis of the Crustal Deformation of the Korean Peninsula due to the Tohoku-Oki Earthquake
- A520 EGU2012-12973
M. Mantovani and H.-G. Scherneck
 Observation of Crustal Deformation around the Pärvie Postglacial Fault, Lapland, Sweden, using InSAR techniques
- A521 EGU2012-12176
A. Gualandi, E. Serpelloni, L. Anderlini, and M.E. Belardinelli
 Space-time evolution of postseismic afterslip following the Mw 6.3, 2009 L'Aquila earthquake (central Italy) from principal component analysis inversion of GPS position time-series.

- A522 EGU2012-11428
C. Bignami, C. A. Brunori, M. Chini, C. Kyriakopoulos, D. Melini, M. Moro, M. Picchiani, M. Saroli, and S. Stramondo
DInSAR techniques for studying the October 23, 2011, Van earthquake (Turkey), and its relationship with neighboring structures
- A523 EGU2012-10733
K. Wiencke, T. R. Walter, M. Manzo, A. Manconi, G. Solaro, and R. Lanari
InSAR time series monitoring at Istanbul city shows faulting, landslides and soil compaction
- A524 EGU2012-12631
S. H. Jaramillo, G. Suárez, and P. López-Quiroz
Subsidence history of the city of Morelia, Mexico based on InSAR images processed as time series
- A525 EGU2012-1591
A. Caporali, F. Neubauer, G. Stangl, and D. Zuliani
Modeling surface velocities in the Southern and Eastern Alps by finite dislocations at crustal depths
- A526 EGU2012-4642
C.-C. Kang, C.-C. Chang, L.L Siame, and J.-C. Lee
Recent surface deformation and its geodynamic insights for the Ilan Plain: an extensional basin in northern Taiwan orogenic belt
- A527 EGU2012-5130
Y.-C. Chan, K.-J. Chang, R.-J. Chen, J.-C. Lee, Y.-C. Hsieh, and K.-S. Chen
Evidence for Active Normal Faulting in Northern Taiwan and its Seismogenic Implications
- A528 EGU2012-6802
G. Lin, W-L Chang, C-Y Chiu, and C-P Chang
Transition of Ground Uplift and Kinematic Model in Southwestern Taiwan from PSI and GPS Observations
- A529 EGU2012-9846
Z. Mousavi, E. Pathier, A. Walpersdorf, C. Lassere, F. Tavakli, and H. Nankali
InSAR Time Series Analysis of Interseismic Deformation in Eastern Iran
- A530 EGU2012-11011
Z. Çakir, S. Ergintav, H. Ozener, U. Dogan, A.M. Akoglu, M. Meghraoui, and R. Reilinger
Fault weakening and onset of aseismic creep on mature strike-slip faults
- A531 EGU2012-12517
S.M Razeghi, A.A Amiri Simkoei, and M.A Sharifi
Realistic Noise Assessment and Strain Analysis of Iranian Permanent GPS Stations

EMRP2.2/GMPV6.21/SM5.6/TS3.3 – A tribute to Luigi Burlini (co-organized) – Orals

Convener: A. Schubnel | Co-Conveners: S. Vinciguerra

Room: 42

Chairperson: Schubnel, Vinciguerra

- 08:30–08:45 EGU2012-8697
G. di Toro and **P. Meredith**
The physics of non-volcanic tremor: insights from laboratory-scale earthquakes
- 08:45–09:00 EGU2012-2696
A. Barnhoorn
Microstructural changes, steady-state deformation and strain localisation during large strain deformation of rocks
- 09:00–09:15 EGU2012-12538
R.H.C. Bruijn, C. Delle Piane, and W.S. de Raadt
Rheology of deformed Carrara marble: Insights from torsion experiments
- 09:15–09:30 EGU2012-11483
R. Pini and M. Mazzotti
CO₂ sequestration in deep coal seams: experimental characterization of the fundamental underlying mechanisms
- 09:30–09:45 EGU2012-7314
N. Tisato, C. Madonna, and E.H. Saenger
Measurements and mechanisms investigation of seismic wave attenuation for frequencies between 1 and 100 Hz
- 09:45–10:00 EGU2012-2920
Y. Gueguen
Attenuation and Dispersion in Earth's Materials

Wednesday, 25 April

BG2.8 – Remote Sensing and data assimilation in the Biogeosciences (co-sponsored by iLEAPS) (co-listed) – Orals

Convener: F. Veroustraete | Co-Conveners: A. Reissell, K. Scipal, J. Moreno, W. W. Verstraeten

Room: 24

Chairperson: Frank Veroustraete

- 15:30–15:45 EGU2012-583
D. Fu and B. Chen
 Predicting gross primary production with high spatio-temporal resolution remote sensing datasets at regional scale
- 15:45–16:00 EGU2012-12611
H. Croft, J.M. Chen, Y. Zhang, and A. Simic
 Modelling spatio-temporal variations in leaf chlorophyll content for broadleaf and needle forest canopies
- 16:00–16:15 EGU2012-11736
S. Natali, A. Collalti, A. Candini, A. Della Vecchia, and R. Valentini
 Assimilation of high resolution satellite imagery into the 3D-CMCC forest ecosystem model
- 16:15–16:30 EGU2012-138
S. Ullah, M. Schlerf, A.K. Skidmore, and C. Hecker
 Identifying plant species using MIR and TIR (2 - 14 μ m) emissivity spectra
- 16:30–16:45 EGU2012-5648
X. Shang, P. Chazette, K. Soudani, and E. Dufrêne
 Lidar sampling study over the Barbeau/Fontainebleau forest
- 16:45–17:00 EGU2012-12463
C.J. Kemper Pacheco, S. Fares, F. Loreto, and P. Ciccioli
 A model to assess the emission of individual isoprenoids emitted from Italian ecosystems

BG2.8 – Remote Sensing and data assimilation in the Biogeosciences (co-sponsored by iLEAPS) (co-listed) – Posters

Convener: F. Veroustraete | Co-Conveners: A. Reissell, K. Scipal, J. Moreno, W. W. Verstraeten

Poster Area BG | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Willem W. Verstraeten

- BG15 EGU2012-8856
J. Heiskanen, M. Rautiainen, P. Stenberg, E. Eigemeier, T. Majasalmi, M. Möttöus, and V.-H. Vesanto
 Narrowband vegetation indices in boreal forest LAI estimation: the effect of reflectance seasonality
- BG16 EGU2012-9588
A. Chahbi, M. Zribi, Z. Lili-Chabaane, B. Duchemin, M. Shabou, B. Mougnot, and G. Boulet
 Prediction of grain yield using optical remote sensing and a growth model: application on Merguellil catchment (Tunisia)
- BG17 EGU2012-10201
F. Baup, R. Fieuzal, C. Marais-Sicre, J. F. Dejoux, V. le Dantec, P. Mordelet, M. Claverie, V. Demarez, O. Hagolle, A. Lopes, P. Keravec, E. Ceschia, A. Mialon, and R. Kidd
 MCM'10: An Experiment for satellite Multispectral Crop Monitoring. From high to low resolution observations
- BG18 EGU2012-10669
G. Geppert and A. Loew
 Optimization of vegetation parameters through sequential assimilation of surface albedo observations
- BG19 EGU2012-13064
S. Karayusufolu, L. ?aylan, B. Çalda?, and E. Semizo?lu
 Assessment of Crop Growth Through Spectral Vegetation Indices
- BG20 EGU2012-13226
M. Otto, C. Höpfner, F. Maussion, and D. Scherer
 Vegetation dynamics and land-cover change along a precipitation gradient in the tropical semi-arid high Andes
- BG21 EGU2012-11880
S. Van Wittenberghe, L. Alonso, J. Verrelst, F. Veroustraete, R. Valcke, J. Moreno, and R. Samson
 Estimating fluorescence emission of city trees in Valencia: from leaf to canopy level
- BG22 EGU2012-14191
F. Veroustraete, W.W. Verstraeten, K. Hufkens, B. Grielen, F. Colson, and E. Prinsen
 Physical Modelling of Nikon Coolpix Camera RGB Responses for Application in non-Destructive Leaf Chlorophyll Imaging

- BG23 EGU2012-5392
G. Bigeard, B. Coudert, L. Jarlan, S. Er-Raki, and S. Khabba
Estimating evapotranspiration over agricultural landscapes with thermal infrared data: comparison of two approaches using Simple Energy Budget and SVAT modeling.
- BG24 EGU2012-9035
R. Fieuzal, F. Baup, and C. Marais-Sicre
Radar data sensitivity to crops using TerraSAR-X, Radarsat-2 and Alos satellite data
- BG25 EGU2012-812
Q.M. Ma, J. Li, Q. Liu, and Q.H. Liu
Study on Mixed-Pixel Clumping Index Calculation and Validation
- BG26 EGU2012-4915
J. Verrelst, J.P. Rivera, G. Leonenko, L. Alonso, and J. Moreno
Using the ARTMO toolbox for automated retrieval of biophysical parameters through radiative transfer model inversion: Optimizing LUT-based inversion
- BG27 EGU2012-1984
J. Van doninck, J. Peters, B. De Baets, E. Ducheyne, and N.E.C. Verhoest
Using remote sensing and machine learning for the spatial modelling of a bluetongue virus vector
- BG28 EGU2012-3011
J.M. Barrios, W.W. Verstraeten, J. Farifteh, P. Maes, J.M. Aerts, and P. Coppin
Incorporating NDVI in a gravity model setting to describe spatio-temporal patterns of Lyme borreliosis incidence
- BG29 EGU2012-3063
V. Kozma-Bognar, J. Berke, and G. Martin
Application possibilities of aerial and terrain data evaluation in particulate pollution effects

GMPV1.3/GD6.2 – Deep mantle mineralogy, geochemistry and geodynamics (co-sponsored by the European Mineralogical Union (EMU) and by the European Association of Geochemistry (EAG)) (including Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Orals

Convener: M. Walter | Co-Conveners: R. Tronnes

Room: 31

Chairperson: Michael Walter

- 08:30–08:45 EGU2012-9032
P. Tarits, S. Hautot, C. Grigne, M Maia, and K Baba
The three-dimensional electrical upper mantle beneath the EPR - 18 S
- 08:45–09:00 EGU2012-4980
F. Gaillard
Which geodynamic roles for volatile-rich low melt fractions in the Earth's mantle?
- 09:00–09:15 EGU2012-6952
C.C.M. Robin-Popieul, **N.T. Arndt**, C. Chauvel, G. Byerly, A.V. Sobolev, and A. Wilson
Extraction of magma from deep in the upper mantle: a model for the formation of Barberton komatiites
- 09:15–09:30 EGU2012-1189
K. Otsuka and **S. Karato**
Transcrystalline Migration of Metallic Melt in (Mg,Fe)O: Implications for the Core-Mantle Interaction
- 09:30–09:45 EGU2012-8571
R.G. Tronnes, D. Andrault, Z. Konopkova, W. Morgenroth, and H.-P. Liermann
Phase relations of aluminous silica to 120 GPa and lowermost mantle dynamics
- 09:45–10:00 EGU2012-12679
B.S.A. Schuberth, C. Zaroli, and G. Nolet
Synthetic seismograms for a synthetic Earth: long-period P- and S-wave traveltimes variations can be explained by temperature alone

COFFEE BREAK

Chairperson: Reidar Tronnes

- 10:30–10:45 EGU2012-8441
C. McCammon, L. Dubrovinsky, V. Potapkin, K. Glazyrin, A. Kantor, I. Kuppenko, C. Prescher, R. Sinmyo, G. Smirnov, A. Chumakov, and R. Rüffer
Iron spin transitions in the lower mantle
- 10:45–11:00 EGU2012-12893
R. Caracas
Spin transition in Fe-bearing perovskite

11:00–12:00 EGU2012-8431
W. McDonough
 Geoneutrinos and heat production in the Earth: constraints and implications (Robert Wilhelm Bunsen Medal Lecture)

GMPV1.3/GD6.2 – Deep mantle mineralogy, geochemistry and geodynamics (co-sponsored by the European Mineralogical Union (EMU) and by the European Association of Geochemistry (EAG)) (including Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Posters

Convener: M. Walter | Co-Conveners: R. Tronnes

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michael Walter

- XL186 EGU2012-531
A.V. Spivak, L.S. Dubrovinsky, and Yu.A. Litvin
 ORIGIN OF ULTRA-DEEP DIAMONDS: CHEMICAL INTERACTION OF Ca-CARBONATE AND THE EARTH'S LOWER MANTLE MINERALS
- XL187 EGU2012-613
Dr Butvina
 Destruction of the peridotite-eclogite liquidus barrier during mantle magma differentiation (experiment at 7.0 GPa).
- XL188 EGU2012-2201
S. Ono
 Garnet-Perovskite transformation in CaGeO₃
- XL189 EGU2012-10316
S. A. Hunt, A. M. Walker, and D. P. Dobson
 Thermal diffusivity of oriented serpentinite at elevated pressures and temperatures by X-radiography
- XL190 EGU2012-10869
D. Sifre and F. Gaillard
 Electrical Conductivity Measurements on Hydrous Carbonate Melts at Mantle Pressure
- XL191 EGU2012-732
N. Solopova, A. Spivak, I. Kuppenko, Yu. Litvin, and L. Dubrovinsky
 High-pressure 13C-diamond-forming reaction of decomposition of Na₂13CO₃ melt at 20 - 60 GPa
- XL192 EGU2012-9623
F.M. Stuart, N. Rogers, I. Parkinson, and M. Davies
 Constraints on the source of mantle plumes from the geochemistry of the first picrites erupted Ethiopian flood basalt province
- XL193 EGU2012-11850
M. D. Long and X. He
 Constraints on seismic anisotropy at the base of the mantle from combined S, ScS, SKS, and SKKS splitting analysis

GMPV3.5 – Application of Raman spectroscopy in the Earth sciences: Recent advances – Orals

Conveners: O. Beyssac, L. Nasdala | Co-Conveners: T. Váczi

Room: 31

Chairperson: Beyssac O, Nasdala L, Vaczi T

- 15:30–16:00 EGU2012-6348
V. Deckert
 Tip-enhanced Raman Scattering - a Tool for Nanoscale Analysis
- 16:00–16:15 EGU2012-608
S. Isaenko and T. Shumilova
 Thermostimulated Raman spectrum dynamics of lonsdaleite
- 16:15–16:30 EGU2012-9445
C. Weikusat and S. Kipfstuhl
 Raman spectroscopy on ice cores from Greenland and Antarctica
- 16:30–16:45 EGU2012-6847
M.A. Wells and E.R. Ramanaidou
 Raman Spectroscopic Characterisation of Australian Banded Iron Formation and Iron Ore
- 16:45–17:00 EGU2012-8140
M.A. van Zuilen, N. Rividi, B. Ménez, and P. Philippot
 The Raman spectrum of Ca-Mg-Fe carbonates; Applications in geobiology

GMPV3.5 – Application of Raman spectroscopy in the Earth sciences: Recent advances – Posters

Conveners: O. Beyssac, L. Nasdala | Co-Conveners: T. Váczi

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL194 EGU2012-211
S. Andò and E. Garzanti
Raman spectroscopy in provenance studies
- XL195 EGU2012-675
N. K. Lünsdorf, I. Dunkl, B. C. Schmidt, G. Rantitsch, and H. v. Eynatten
Cautionary notes on the comparability of geothermometric data gained by Raman spectroscopy of carbonaceous material
- XL196 EGU2012-4354
R. Trittschack, B. Grobéty, and M. Koch-Müller
The lizardite phase transformation followed by in situ high-temperature Raman and FTIR spectroscopy
- XL197 EGU2012-5259
A. Scharf, M.A. Ziemann, and M.R. Handy
Peak-Temperature (T_p) estimates with Raman micro-spectroscopy on carbonaceous material (RSCM) as a tool for distinguishing tectometamorphic regimes in the Tauern Window (Eastern Alps, Austria)
- XL198 EGU2012-5976
R. Sparkes, N. Hovius, A. Galy, R.V. Kumar, and O. Beyssac
Automated processing of Raman spectra from organic carbon to investigate sedimentary processes
- XL199 EGU2012-7971
O. Beyssac
Raman spectroscopy of graphitic carbons in the Earth Sciences: review and novel applications
- XL200 EGU2012-9388
K. Pedroza, P. Lazor, V.R. Troll, S. Burchardt, F.M. Deegan, S.E. Berg, and E.M. Jolis
Resolving the origin of the floating 2011 El Hierro volcanic products: A Raman approach
- XL201 EGU2012-9902
U. Haefeker, R. Kaindl, and P. Tropper
Comprehensive structural and chemical (CO_2 , Fe/Fe Mg, H_2O) investigations of Mg-Fe cordierite with micro Raman spectroscopy
- XL202 EGU2012-10084
T. Váczi and L. Nasdala
Structural recovery in zircon under an electron beam
- XL203 EGU2012-10676
G. Spiekermann, M. Steele-MacInnis, P.M. Kowalski, C. Schmidt, and **S. Jahn**
Vibrational properties of silica species in MgO-SiO₂ glasses from ab initio molecular dynamics
- XL204 EGU2012-11138
C. Lenz, C. Petautschnig, S. Akhmadaliev, D. Hanf, D. Talla, and L. Nasdala
Combined Raman and photoluminescence spectroscopic investigation of He-irradiation effects in monazite

GMPV4.1 – Volcano monitoring with instrument networks: novel techniques, observations and interpretations – Orals

Convener: G. Saccorotti | Co-Conveners: A. Bonaccorso, J. W. Neuberg, M. Burton, T. Staudacher

Room: 18

Chairperson: n.n.

- 08:30–08:45 EGU2012-9597
P. Arason, H. Bjornsson, **G. N. Petersen**, M. J. Roberts, and M. Collins
Eruptive flow rate resonance during the Grímsvötn 2011 volcanic eruption in Iceland
- 08:45–09:00 EGU2012-1992
M. Coltelli, **D. Patanè**, A. Aiuppa, M. Aliotta, M. Aloisi, B. Behncke, A. Cannata, F. Cannavò, G. Di Grazia, S. Gambino, S. Gurrieri, M. Mattia, P. Montalto, M. Prestifilippo, G. Puglisi, G. Salerno, and D. Scandura
Insight into eruptive cyclic behavior of Mount Etna during 2011: geophysical and geochemical constraints
- 09:00–09:15 EGU2012-7821
L. Zuccarello, D. Carbone, D. Patanè, G. Saccorotti, M. Coltelli, G. Di Grazia, A. Messina, M. Prestifilippo, S. Rapisarda, S. Scollo, and G. Spata
Array analysis of volcanic tremor during the July-August 2011 lava fountain activities occurred on Etna Volcano.
- 09:15–09:30 EGU2012-12059
C. López, M. J. Blanco and the IGN Volcanic Team
The 2011 submarine volcanic eruption of El Hierro Island (Canary Islands, Spain)

- 09:30–09:45 EGU2012-11986
M. J. Blanco, C. López and the IGN Volcanic Team
 Monitoring the unrest of El Hierro Island before the onset of 2011 submarine volcanic eruption.
- 09:45–10:00 EGU2012-3352
Th. Staudacher, P. Boissier, P. Kowalski, A. Peltier, A. Di Muro, and F. Brenguier
 Long term GPS recordings at Piton de la Fournaise volcano, La Réunion Island

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-6856
M. Ichihara, M. Takeo, and A. Yokoo
 Monitoring volcanic activities using correlation patterns between infrasound and ground motion
- 10:45–11:00 EGU2012-13368
K. Jonsdottir, C. Bean, K. Vogfjord, and M. Ripepe
 The Eyjafjallajökull 2010 eruptions: Correlation study of volcanic tremor and infrasound
- 11:00–11:15 EGU2012-11149
M. Ripepe, G. Olivieri, and E. Marchetti
 Infrasound of lava fountains at Etna (Italy): implications for early warning eruption onset
- 11:15–11:30 EGU2012-10468
M. Zecevic, L. DeBarros, C.J. Bean, G.S. O'Brien, and F. Brenguier
 Investigating the Source Characteristics of a Family of Long Period Events Recorded on Piton de la Fournaise, La Réunion, Using Moment Tensor Inversion
- 11:30–11:45 EGU2012-7902
L. Cauchie, G. Saccorotti, C. Bean, and L. de Barros
 Detailed analysis of amplitude and recurrence times of LP activity at Mt. Etna Volcano, Italy.
- 11:45–12:00 EGU2012-12337
J. Vasseur, S. Kremers, J. Wassermann, and D.B. Dingwell
 Determination of source parameters of explosive events at Mt. Yasur volcano, Vanuatu, using time reversal and moment tensor inversion techniques

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2012-2089
T. R. Walter
 Low Cost Volcano Deformation Monitoring: Optical Strain Measurement and Application to explosive Volcanoes
- 13:45–14:00 EGU2012-8575
T. Ohminato, T. Kaneko, T. Koyama, A. Watanabe, M. Takeo, M. Iguchi, and Y. Honda
 Volcano Observations Using an Unmanned Autonomous Helicopter : seismic and GPS observations near the active summit area of Sakurajima and Kirishima volcano, Japan
- 14:00–14:15 EGU2012-13361
D. Mencin, K. Luttrell, H. Heasler, O. Francis, K. Hodgkinson, and A. Borsa
 Seiches in Lake Yellowstone: a tool to probe the Yellowstone caldera.
- 14:15–14:30 EGU2012-9882
C. Freda, J. Taddeucci, P. Scarlato, S. Rao, C. Salvaterra, M. Gaeta, and D.M. Palladino
 The FAMoUS toolbox goes to Yasur: field test of a FASt, MULTiparametric Set-up for real-time observation of explosive eruptions
- 14:30–14:45 EGU2012-8492
F. Sansivero, G. Vilardo, S. Borgstrom, P. De Martino, V. Siniscalchi, C. Minet, and K. Goel
 Comparison between temperatures pattern from thermal IR time series analysis and deformational pattern from InSAR and GPS data at Campi Flegrei caldera (Naples, Italy)
- 14:45–15:00 EGU2012-7788
D. Carbone and M. P. Poland
 Continuous gravity monitoring tracks dynamic processes beneath Kilauea Volcano, Hawaii

Chairperson: n.n.

- 15:30–15:45 EGU2012-9082
J. W. Neuberg, M. Thomas, K. Pascal, and S. Karl
 On the mutual relationship between conceptual models and datasets in geophysical monitoring of volcanic systems
- 15:45–16:00 EGU2012-7701
A. F. Bell, M. Naylor, and I.G. Main
 Limits to the predictability of volcanic eruptions based on accelerating rates of seismicity
- 16:00–16:15 EGU2012-4453
 A Longo, **P Papale**, G Saccorotti, CP Montagna, and A Cassioli
 Magma convection and mixing dynamics as a source of Ultra-Long-Period oscillations
- 16:15–16:30 EGU2012-12596
C. Kern, C. A. Werner, M. P. Doukas, T. Elias, P. J. Kelly, and A. J. Sutton
 Imaging volcanic SO₂ plumes with UV cameras
- 16:30–16:45 EGU2012-13076
T. Lopez, D. Fee, and F. Prata
 Characterization of volcanic activity using observations of infrasound, volcanic emissions, and thermal imagery at Karymsky Volcano, Kamchatka, Russia
- 16:45–17:00 EGU2012-8988
 B. Galle, **S. Arellano**, P. Norman, V. Conde and the NOVAC Team
 Inventory of gas flux measurements from volcanoes of the global Network for Observation of Volcanic and Atmospheric Change (NOVAC)

GMPV4.1 – Volcano monitoring with instrument networks: novel techniques, observations and interpretations – Posters

Convener: G. Saccorotti | Co-Conveners: A. Bonaccorso, J. W. Neuberg, M. Burton, T. Staudacher

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL205 EGU2012-8617
L. Merucci and S. Corradini
 Volcanic SO₂ flux time series from MSG-SEVIRI satellite measurements.
- XL206 EGU2012-8811
P. A. Hernández, S. Calvari, D. Calvo, A. Marquez, E. Padron, N. Pérez, G. Melian, G. Padilla, J. Barrancos, S. Dionis, F. Rodríguez, D. Nolasco, and I. Hernández
 The 2011 El Hierro submarine eruption: estimation of erupted lava flow volume on the basis of helicopter thermal surveys
- XL207 EGU2012-9210
K. Stebel, F. Prata, F. Dauge, A. Durant, and A. Amigo
 Optical characterization of UV multispectral imaging cameras for SO₂ plume measurements
- XL208 EGU2012-5718
J. van Gent, R. Spurr, N. Theys, C. Lerot, H. Brenot, and M. Van Roozendaal
 SO₂ plume height retrieval from direct fitting of GOME-2 backscattered radiance measurements
- XL209 EGU2012-10915
S. Corradini, S. Pugnaghi, R. Campion, B. Arvani, L. Guerrieri, and L. Merucci
 Satellite SO₂ retrievals from ash rich volcanic plumes: Comparison between different correction procedures
- XL210 EGU2012-13609
L. Olivares, P. Tommasi, P. Madonia, and R. Moretti
 Stability of unsaturated pyroclastic deposits at La Fossa flank (Vulcano Island, Italy): Do soil suction variations establish a link with crater degassing ?
- XL211 EGU2012-9454
P.A. Torres, S. Meletlidis, N. Luengo-Oroz, D. Moure, C. Rodero, V. Villasante-Marcos, R. Abella, C. López, and M.J. Blanco
 Geochemical monitoring network at El Hierro (Canary Islands) before and during 2011 submarine eruption
- XL212 EGU2012-1799
A. Garcia, M. Berrocoso, J.M. Marrero, and R. Ortiz
 Improvement forecasting of volcanic activity by applying a Kalman filter to the SSEM signal. The case of the El Hierro Island eruption (October 2011)
- XL213 EGU2012-1807
R. Ortiz, M. Berrocoso, S. de la Cruz-Reyna, J.M. Marrero, and A. Garcia
 Seismic evidence of a second submarine eruption in the north of El Hierro Island
- XL214 EGU2012-10054
J. Arnoso, E.J. Vélez, V. Soler, FG. Montesinos, and M. Benavent
 The Lanzarote Geodynamic Laboratory: new capabilities for monitoring of volcanic activity at Canary Islands

- XL215 EGU2012-10112
S. Dionis, G. Melián, E. Padrón, G. Padilla, D. Nolasco, F. Rodríguez, I. Hernández, M^a D. Peraza, J. Barrancos, P. Hernández, D. Calvo, and N. Pérez
 Physico-chemical changes of the ground waters related to the 2011 El Hierro magmatic reactivation
- XL216 EGU2012-5048
 S. Falsaperla, B. Behncke, S. Giammanco, **M. Neri**, H. Langer, E. Pecora, and G. Salerno
 Aborted eruptions at Mt. Etna (Italy) in spring 2007 unveiled by an integrated study of gas emission and volcanic tremor
- XL217 EGU2012-5534
L. Spina, D. Lo Castro, M. Sciotto, and D. Andronico
 Investigation of 2010 ash emission episodes at Mt Etna by combining volcanological and seismo-acoustic analyses
- XL218 EGU2012-5658
 M. Sciotto, C. Rowe, A. Cannata, S. Gresta, E. Privitera, and **L. Spina**
 Application of subspace detector technique on acoustic signals recorded during eruptive activity: Mt. Etna lava fountains case of study
- XL219 EGU2012-7473
A. Bonforte, C. Federico, S. Giammanco, F. Guglielmino, M. Liuzzo, and M. Neri
 Soil gases and SAR data reveal hidden faults on the sliding flank of Mt. Etna (Italy)
- XL220 EGU2012-7572
G. Barberi, M. D'Agostino, A. Mostaccio, D. Patane', and T. Tuve'
 Near-real time 3D probabilistic earthquakes locations at Mt. Etna volcano
- XL221 EGU2012-9956
A. Bonaccorso, G. Currenti, F. Greco, C. Del Negro, G. Ganci, A. Linde, R. Napoli, and S. Sacks
 Continuous strain, gravity, magnetic and thermal-satellite data for tracking the dynamics of a lava fountain eruption : application to Etna 15 November 2011 case
- XL222 EGU2012-12986
M. Ruiz, H. Yepes, P. Palacios, L. Troncoso, P. Mothes, and H. Kumagai
 Seismic and infrasound monitoring at Cotopaxi volcano
- XL223 EGU2012-10906
J. Hamlyn, D. Keir, J. Hammond, T. Wright, J. Neuberg, A. Kibreab, G. Ogubazghi, and B. Goitom
 The 2011 Eruption of Nabro Volcano (Eritrea): Earthquake Locations from a Temporary Broadband Network
- XL224 EGU2012-11009
R. Salvage and J. W. Neuberg
 Using Seismic Signals to Forecast Volcanic Processes
- XL225 EGU2012-8615
M.E. Thomas, J.W. Neuberg, S. Karl, A. Collinson, and K. Pascal
 How conduit models can be used to interpret volcano monitoring data
- XL226 EGU2012-10589
S. Karl and J.W. Neuberg
 The source mechanisms of low frequency events in volcanoes - a comparison of synthetic and real seismic data on Soufriere Hills Volcano, Montserrat
- XL227 EGU2012-9952
L. Spina, J. Taddeucci, P. Scarlato, C. Freda, and S. Gresta
 Explosive activity at Mt. Yasur volcano: characterization of acoustic signals
- XL228 EGU2012-11980
R. Abella, J. Almendros, E. Carmona, R. Martin and the IGN Volcanic Team
 Deployment of a seismic array for volcano monitoring during the ongoing submarine eruption at El Hierro, Canary Islands
- XL229 EGU2012-12267
A. Moni, C. J. Bean, I. Lokmer, and S. Rickard
 Separation of Coincident Multiple Seismic Sources in Volcanoes
- XL230 EGU2012-12717
E. Carmona, J. Almendros, R. Martín, G. Cortés, G. Alguacil, J. Moreno, B. Martín, A. Martos, I. Serrano, D. Stich, and J. M. Ibáñez
 Seismic monitoring at Deception Island volcano (Antarctica): Recent advances
- XL231 EGU2012-12788
 R. Martín, **E. Carmona**, J. Almendros, I. Serrano, A. Villaseñor, and J. Galeano
 Seismic monitoring at Deception Island volcano (Antarctica): the 2010-2011 survey
- XL232 EGU2012-9298
D. Stich, J. Almendros, V. Jiménez, F. Mancilla, and E. Carmona
 Ocean noise triggering of LP events at Deception Island volcano
- XL233 EGU2012-10470
T.S. Eyre, C.J. Bean, L. De Barros, G.S. O'Brien, F. Martini, M.M. Mora, J.F. Pacheco, and G.J. Soto
 Comparing the source mechanisms of long period (LP) volcano-seismic events recorded in 2009 and 2011 at Turrialba volcano, Costa Rica

- XL234 EGU2012-9359
D. Zandomenighi, A. Inza, J-P. Metaxian, and O. Macedo
Long-Period seismic events at Ubinas Volcano (Peru): their implications and potentiality as monitoring tool
- XL235 EGU2012-9133
P. Lesage, G. Reyes-Dávila, and R. Arámbula-Mendoza
Velocity variations in Volcán de Colima associated with the 2003 MW = 7.4 Tecomán earthquake, Mexico
- XL236 EGU2012-3458
M. Suteanu and **C. Suteanu**
Volcano monitoring based on a re-interpretation of seismicity data
- XL237 EGU2012-1823
S. Matsumoto, H. Shimizu, T. Matsushima, K. Uehira, Y. Yamashita, M. Nakamoto, M. Miyazaki, and H. Chikura
Short-term spasmodic switching of volcanic tremor source activation in a conduit of the 2011 Kirishima eruption
- XL238 EGU2012-7084
E. Del Pezzo, F. Bianco, M. Castellano, P. Cusano, D. Galluzzo, M. La Rocca, and S. Petrosino
Detection of seismic signals from background noise in the area of Campi Flegrei: limits of the present seismic monitoring
- XL239 EGU2012-2189
AD Jolly, L. Chardot, S. Sherburn, J. Cole-Baker, B.J. Scott, N. Fournier, and J.N. Neuberg
Dropping sand bags from helicopters: A low cost and environmentally benign approach to determine subsurface velocity and attenuation structure of active volcanic systems
- XL240 EGU2012-9637
G. Roult, A. Peltier, B. Taisne, Th. Staudacher, V. Ferrazzini, A. Di Muro, and OVPF team
A new comprehensive classification of the Piton de la Fournaise activity spanning the 1985-2010 period. Search and analysis of short-term precursors from a broad-band seismological station.
- XL241 EGU2012-7497
M. Pantaleo, T.R. Walter, and S. Roedelsperger
Ground-based InSAR and Forward Looking Infrared: improving the time/space resolution of traditional monitoring technique at volcanoes.
- XL242 EGU2012-11421
R. Antoine, N. Geshi, K. Kurita, Y. Aoki, M. Ichihara, T. Staudacher, and P. Bachelery
Air-cooled volcanoes ? New insights on convective airflow process within Miyakejima and Piton de la Fournaise volcanoes
- XL243 EGU2012-3866
K. I. Konstantinou, S. Rontogianni, and C.-H. Lin
Model of the volcano-hydrothermal system of Tatun Volcano Group, northern Taiwan, inferred from seismicity and gas geochemistry
- XL244 EGU2012-6828
F. M. Schwandner, D. Hidayat, E. P. Laguerta, A. V. Baloloy, R. Valerio, R. Vaquilar, M. C. Arpa, S. S. Marcial, and M. L. Novianti
A multidisciplinary monitoring network at Mayon volcano, Philippines: A collaborative effort between PHIVOLCS and EOS
- XL245 EGU2012-1818
K. Saunders, J. Biggs, and J. Blundy
Insights into eruption precursors: linking the petrological and geophysical record
- XL246 EGU2012-2464
S. Mueller, **U. Kueppers**, N. Varley, D.B. Dingwell, and G. Reyes-Davila
Quantification of magma ascent rates from collapsing domes: image, thermal and seismic monitoring at Volcán de Colima, Mexico
- XL247 EGU2012-3225
S. De la Cruz-Reyna and E. Cárdenas-Sánchez
Estimation of the energy release and thermal properties of ejected clasts from explosive eruptions using a thermal imaging camera
- XL248 EGU2012-13544
P. Bachèlery and H. Soule Saâdi
30 years of scientific research at Karthala volcano (Grande Comore - Indian Ocean)
- XL249 EGU2012-13187
P. Scarlato, D. Andronico, C. Cimarelli, E. Del Bello, J. Taddeucci, and J. B. Johnson
FAMOUS goes to Guatemala: Integrated thermal and high-speed imaging of explosive activity at Santiaguito dome and Volcan de Fuego

GMPV4.10/GM2.7 – Spatio-temporal perspectives on volcanological processes and volcanic landforms (co-organized) – Orals

Conveners: D. Karátson, H. Tuffen, A. Germa | Co-Conveners: B. Székely

Room: 20

Chairperson: Dávid Karátson, Hugh Tuffen, Aurélie Germa

- 15:30–15:45 EGU2012-12231
A.T. Calvert
Attaining high-resolution eruptive histories for active arc volcanoes with argon geochronology
- 15:45–16:00 EGU2012-6002
H.-U. Schmincke, M. Sumita, and Paleovan scientific team
Multiple explosive rhyolite/trachyte eruptions of alkaline-peralkaline Nemrut and dacite/rhyolite eruptions of neighboring subduction zone-related Süphan volcano over 600 000 years: the East Anatolian tephra province
- 16:00–16:15 EGU2012-5155
A. Hildenbrand, F.O. Marques, **A.C.G. Costa**, A.L.R. Sibrant, P.F. Silva, B. Henry, J.M. Miranda, and P. Madureira
Reconstructing the architectural evolution of volcanic islands from combined K/Ar, morphologic, tectonic, and magnetic data: the Faial Island example (Azores)
- 16:15–16:30 EGU2012-10857
D. Karátson, T. Telbisz, Sz. Harangi, E. Magyari, B. Kiss, I. Dunkl, D. Veres, and M. Braun
Lava dome morphometry and geochronology of the youngest eruptive activity in Eastern Central Europe: Ciomadul (Csomád), East Carpathians, Romania
- 16:30–16:45 EGU2012-11679
B. Edwards, B. Oddsson, M.T. Gudmundsson, and R. Rossi
Field constraints for modeling the emplacement of the 2010 Gigjökull lava flow, southern Iceland: interplay between subaqueous, ice contact and subaerial lava emplacement
- 16:45–17:00 EGU2012-6573
S. Pepe, G. Di Martino, A. Iodice, M. Manzo, A. Pepe, D. Riccio, G. Ruello, E. Sansosti, P. Tizzani, and I. Zinno
Analysis of the fractal dimension of volcano geomorphology through Synthetic Aperture Radar (SAR) amplitude images acquired in C and X band.

GMPV4.10/GM2.7 – Spatio-temporal perspectives on volcanological processes and volcanic landforms (co-organized) – Posters

Conveners: D. Karátson, H. Tuffen, A. Germa | Co-Conveners: B. Székely

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL250 EGU2012-14334
C. Pallares, X. Quidelleur, J.A. Debreil, P.Y. Gillot, and P. Tchilinguirian
Spatial and temporal evolution of a back-arc Plio-pleistocene magmatic series: an example of Auca Mahuida and El Tromen volcanoes from Payenia Basaltic Province, Argentina
- XL251 EGU2012-14120
A. Germa, X. Quidelleur, P. Lahitte, S. Labanieh, and C. Chauvel
Evolution of Martinique Island since the Oligocene inferred from K-Ar dating, geochemical analyses and geomorphological reconstructions
- XL252 EGU2012-12736
E. Leocat, P.-Y. Gillot, and A. Peccerillo
The western Aeolian Islands volcanoes (South Tyrrhenian Sea): highlight on their eruptive history based on K-Ar dating.
- XL253 EGU2012-12702
S. Self, **A. Calvert**, A. Pimentel, and R. Gertisser
The Tempo of Recent Volcanism on Terceira, Azores
- XL254 EGU2012-11514
A. Hicks, **D.F. Mark**, J. Barclay, and S. Loughlin
Tristan da Cunha: informing future eruption scenarios using high-precision Ar/Ar dating
- XL255 EGU2012-2108
T. Sanz, M. Lago, A. Gil, A. Pocoví, C. Galé, **T. Ubide**, P. Larrea, J. Ramajo, and P. Tierz
The Upper Triassic alkaline magmatism of the western Neo-Tethys (Bajo Ebro, NE Spain): age and geodynamic implications
- XL256 EGU2012-14300
F. Aydin, W. Siebel, I. Uysal, E.Y. Ersoy, A.K. Schmitt, M. Sönmez, and R. Duncan
Geochemical, isotopic (Sr-Nd-Pb) and geochronological (Ar-Ar and U-Pb) constraints on Quaternary bimodal volcanism of the Niğde Volcanic Complex (Central Anatolia, Turkey)

- XL257 EGU2012-12005
L. Akin, E. Aydar, A. K. Schmitt, and H. E. Çubukçu
Zircon Chemistry and chronostratigraphy of tephra: case of Cappadocia
- XL258 EGU2012-6053
P. Nomikou, K. Croff Bell, S. Carey, K. Bejelou, M. Parks, and V. Antoniou
Submarine Volcanic Morphology of Santorini Caldera, Greece
- XL259 EGU2012-13100
A.V. Zernack, **J.N. Procter**, S.J. Cronin, M.S. Bebbington, R.C. Price, and I.E.M. Smith
Predicting the timescales of catastrophic stratovolcano collapse - A model based on Mt. Taranaki, New Zealand.
- XL260 EGU2012-3475
Zs. Koma, B. Székely, P. Dorninger, and C. Nothegger
Geomorphometric analysis of volcanic edifices using a robust plane fitting method
- XL261 EGU2012-8560
M. R. James and N. Varley
Near-automatic generation of lava dome DEMs from photos
- XL262 EGU2012-12964
B. Székely, D. Karátson, Zs. Koma, P. Dorninger, G. Wörner, M. Brandmeier, and C. Nothegger
Automated recognition of quasi-planar ignimbrite sheets and paleo-surfaces via robust segmentation of DTM - examples from the Western Cordillera of the Central Andes
- XL263 EGU2012-67
A. Forbes, S. Blake, D. McGarvie, and H. Tuffen
Pseudopillow fracture systems: Insights into cooling mechanisms and environments from lava flow fractures
- XL264 EGU2012-10218
J. Owen, H. Tuffen, and D.W. McGarvie
What controls the explosivity of subglacial rhyolite in Iceland?
- XL265 EGU2012-10295
J. Owen, H. Tuffen, and D.W. McGarvie
Reconstructing palaeo-ice thicknesses: on what type of volcano can the magma degassing technique be used?

GMPV5.6 – Equilibrium thermodynamics in metamorphic and magmatic petrology: state of the art, open issues and critical feedback from field and experiment – Orals

Convener: Dr. Abu-Alam | Co-Conveners: A. Proyer, P. Nantasin

Room: 20

Chairperson: Alexander Proyer

- 10:30–10:45 EGU2012-4439
E. Dachs, C.A. Geiger, and A. Benisek
The uncertainty of the standard entropy and its effect on petrological calculations
- 10:45–11:00 EGU2012-4272
A. Benisek and E. Dachs
The uncertainties of activity models and their effect on petrological calculations
- 11:00–11:15 EGU2012-4187
T.E. Johnson, R.W. White, and R. Powell
Updated and extended activity-composition models for thermodynamic calculations in metapelitic systems
- 11:15–11:30 EGU2012-13566
M Sulak and D. Dolejs
Thermodynamics of aqueous solutes at high temperatures and pressures: Application of the hydration theory and implications for fluid-mediated mass transfer
- 11:30–11:45 EGU2012-10605
P. Lanari, O. Vidal, S. Schwartz, N. Riel, S. Guillot, and E. Lewin
Deciphering P-T paths in metamorphic rocks involving zoned minerals using quantified maps (XMapTools software) and thermodynamics methods: Examples from the Alps and the Himalaya.
- 11:45–12:00 EGU2012-11942
E. Moulas, M.J. Caddick, N. Tisato, and J.-P. Burg
Another dimension to metamorphic phase equilibria: the power of interactive movies for understanding complex phase diagram sections

GMPV5.6 – Equilibrium thermodynamics in metamorphic and magmatic petrology: state of the art, open issues and critical feedback from field and experiment – Posters

Convener: Dr. Abu-Alam | Co-Conveners: A. Proyer, P. Nantasin

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Alexander Proyer and Tamer Abu-Alam

- XL266 EGU2012-11781
D. Dolejš
Fluid fluxes from petrological record: links to mineral-fluid thermodynamics and implications for flow patterns
- XL267 EGU2012-3026
A. Patiño Douce
Some physical aspects of fluid-fluxed melting
- XL268 EGU2012-11767
N. Klitscher, **M. Konrad-Schmolke**, and H. Schildhauer
Thermodynamic forward models to calculate P-T phase diagrams that reflect fractional equilibrium crystallisation of garnet in path-dependent reacting bulk rock chemistries
- XL269 EGU2012-12773
J.C. Vrijmoed, Y.Y. Podladchikov, L. Tajcmanova, and E. Moulas
The length scale of eclogitization in dolerite of the Hustad igneous complex in the northernmost UHP domain of the Western Gneiss Region in Norway
- XL270 EGU2012-5549
E. Duesterhoeft, M. Zaehle, C. de Capitani, R. Bousquet, and R. Oberhänsli
Discrepancies of mineral volumes predicted by thermodynamic databases
- XL271 EGU2012-3912
T. Bader, L. Franz, C. de Capitani, J. Mullis, and L. Zhang
The granulite facies metamorphism in the Tongbai area (east-central China): New insights from equilibrium-assemblage calculations and fluid-inclusion studies
- XL272 EGU2012-6075
S. collett and S.W. Faryad
Granulite Facies Metamorphism in the Kabul Block, Afghanistan
- XL273 EGU2012-1997
H. Shimizu, T. Tsunogae, and M. Santosh
The stability of sapphirine + quartz in magnetite-bearing high oxygen fugacity granulites: a case study of the Madurai Block (Southern India) and the Inner Mongolia Suture Zone (North China)
- XL274 EGU2012-11
A.V. Yurchenko
Archaean and Palaeoproterozoic metamorphic events in the Orekhov-Pavlograd compressional zone, Ukrainian Shield
- XL275 EGU2012-4004
O.-E. Zorigtkhuu
Pressure-temperature-fluid evolution of the Mongolian Altai in the Central Asian Orogenic Belt: evidence from mineral equilibrium modeling and fluid inclusion studies on amphibolite-facies rocks from western Mongolia
- XL276 EGU2012-8376
T. Abu-Alam and M. Hamdy
Thermodynamic modelling of Sol Hamed serpentinite, South Eastern Desert of Egypt: implication for two serpentinization stages in the Arabian-Nubian Shield ophiolites
- XL277 EGU2012-10689
C. O. Kilic and Y. K. Kadioglu
Petrochemical Characteristics of the Felsic Veins within the Kaman Metamorphic Rocks: Central Anatolia, Turkiye
- XL278 EGU2012-13988
P. Nantasin, C. Hauzenberger, X. Liu, K. Krenn, Y. Dong, M. Thöni, and p Wathanakul
Exhumation of the Thabsila metamorphic complex in the Three Pagodas shear zone, Kanchanaburi Province, western Thailand: Geothermobarometry and Geochronology

GMPV5.7/TS3.6 – Fluids in the deep Earth: Natural Observations, Experiments and Simulations of Fluid-Rock Interaction at high Pressures (co-organized) – Orals

Convener: A. Wohlers | Co-Conveners: S. Jahn, T. John

Room: 31

Chairperson: n.n.

- 13:30–13:45 EGU2012-3460
C.E. Manning, R. Thomas, and P. Tropper
ALUMINUM MOBILITY IN CRUSTAL FLUIDS: THE ROLE OF Al-Si COMPLEXING

- 13:45–14:00 EGU2012-6578
D. Rubatto, L. Martin, J. Hermann, A. Vitale Brovarone, and C. Creppis
 Fluid metasomatism in eclogite facies (Alpine Corsica) documented by microscale oxygen analysis of garnet
- 14:00–14:15 EGU2012-3980
R. Klemm, T. John, and J. Gao
 High-pressure fluid-rock interaction as the cause of bulk rock compositional changes in blueschists and eclogites
- 14:15–14:30 EGU2012-9571
T.B. Grant, R. Milke, and B. Wunder
 Evidence of alkali rich melt reactions with mantle peridotite : Natural observations and experimental analogues
- 14:30–14:45 EGU2012-5918
 M. Galvez, **O. Beyssac**, I. Martinez, K. Benzerara, and B. Malvoisin
 Graphitic carbon formation through calcite reduction in blueschist metasediments from Alpine Corsica (France)
- 14:45–15:00 EGU2012-11410
M. Konrad-Schmolke, M. Poehle, and S. Jahn
 Constraining fluid fluxes in subducted slabs with two-dimensional thermodynamic and trace element models of subduction zones

GMPV5.7/TS3.6 – Fluids in the deep Earth: Natural Observations, Experiments and Simulations of Fluid-Rock Interaction at high Pressures (co-organized) – Posters

Convener: A. Wohlers | Co-Conveners: S. Jahn, T. John

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XL279 EGU2012-659
O. Safonov
 Phase relations in the hydrous CMAS pyrolite in presence of KCl at 2 GPa
- XL280 EGU2012-1210
O. Safonov and S. Kozhukhantseva
 Experimental study of local dehydration and partial melting of biotite-amphibole gneiss with participation of the H₂O-CO₂-(K, Na)Cl fluids at the middle-crustal conditions
- XL281 EGU2012-13320
A. Wohlers and C.E. Manning
 Peralkaline fluid composition in equilibrium with K-feldspar, muscovite and quartz at 10 kbar and 700°C: Al transport in crustal fluids
- XL282 EGU2012-9815
 J. Dubrail, **S. Jahn**, and M. Wilke
 Complexation of Zr and Hf in subduction zone fluids: Insights from ab initio molecular dynamics and x-ray absorption spectroscopy
- XL283 EGU2012-3331
J. Konzett, K. Krenn, and Ch. Hauzenberger
 Mantle metasomatism in the Kaapvaal Craton lithosphere: constraints on the composition of the metasomatic agent from fluid inclusions in MARID-type xenoliths
- XL284 EGU2012-3734
E. S?aby, H. Martin, M. Hamada, M. ?migielski, A. Domonik, J. Götze, J. Hoefs, S. Ha?as, K. Simon, J-L. Devidal, J-F. Moyen, and M. Jayananda
 Mantle hydrous-fluid interaction with Archaean granite.
- XL285 EGU2012-5331
T. John, Y. Podladchikov, R. Dohmen, N. Gussone, R. Klemm, and T. Magna
 Lithium-chronometric constraints on duration and kinetics of fluid-rock interaction
- XL286 EGU2012-12227
A. El Korh, S. Th. Schmidt, T. Vennemann, and A. Ulianov
 Trace element mobilisation in garnet-phengite HP veins along a metabasite-micaschist contact: an example from the Ile de Groix, France
- XL287 EGU2012-5344
G.D. Miron, T. Wagner, M. Wälle, and C.A. Heinrich
 Fluid composition and mineral equilibria in low grade metamorphic rocks, Bündnerschiefer, Switzerland
- XL288 EGU2012-7164
H. Sommer, K. Regenauer-Lieb, J. Potgieter, M. Purchase, and B. Gasharova
 Volatiles around Microcracks in the Earth's upper Mantle (UNESCO IGCP 557)

- XL289 EGU2012-7276
A. K. Engvik, A. Korneliussen, P. Ihlen, and H. Austrheim
 Mineral replacement and element mobility during scapolitisation and albitisation of metagabbro from the Bamble sector, SE-Norway
- XL290 EGU2012-8090
K. Yoshida and T. Hirajima
 Chemical and textural characteristics of multistage fluid inclusions with high Li/B ratio found from the Sanbagawa belt.
- XL291 EGU2012-8552
A. Vitale Brovarone, C. Groppo, G. Hetényi, and R. Compagnoni
 H₂O release in cold subduction zones: eclogitization vs. lawsonite stability
- XL292 EGU2012-11743
N. Wawrzenitz, R.L. Romer, B. Grasemann, and L.F.G. Morales
 Reaction zone between pre-UHP titanite and host rock: insights into fluid-rock interaction and deformation mechanisms during exhumation of deeply subducted continental crust (Dabie Shan UHP unit, China)
- XL293 EGU2012-1512
O. Fedoryshyn
 \\textsc{ELECTROMAGNETIC EFFECT GENERATED BY FILTRATION OF FLUID IN PERMEABLE POROUS LAYER}

GD8.2/GMPV6.6/TS9.7 – Long-term rheological behavior of the lithosphere inferred from observations and models at laboratory and geological time and spatial scales (co-organized) – Orals

Convener: E. Burov | Co-Conveners: A. Watts, Y. Podladchikov, L. Jolivet, P. H. Leloup

Room: 30

Chairperson: n.n.

- 08:30–08:45 EGU2012-3612
E. Burov, A.B. Watts, T. Francois, and M. Tesaro
 Links between the mechanical, seismic and thermal thickness, rheological structure and mechanical stability of the continental lithosphere.
- 08:45–09:00 EGU2012-6984
B.-D. So, D.A Yuen, K. Regenauer-Lieb, and S.-M. Lee
 The Role played by Shear Modulus Contrast in Earth Materials on Facilitating Shear Localization in the Lithosphere
- 09:00–09:15 EGU2012-2456
B. Evans
 Constraining strength/depth profiles using laboratory experiments and field structural observations
- 09:15–09:30 EGU2012-6397
E. Boutonnet, P.H. Leloup, C. Sassier, V. Gardien, and Y. Ricard
 Ductile strain rates measurements reveal continental crust long-term deformation modes
- 09:30–09:45 EGU2012-6603
V.M. Yarushina and Y.Y. Podladchikov
 Shear-enhanced compaction in viscoplastic rocks
- 09:45–10:00 EGU2012-13398
Y. Fialko and C. Takeuchi
 Stress in Continental Lithosphere: Constraints from numerical models of earthquake cycle with laboratory-derived rheologic laws

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-9381
J.-P. Brun, C. Tirel, M. Philippon, E. Burov, C. Faccenna, F. Gueydan, and S. Lebedev
 On the role of horizontal displacements in the exhumation of high pressure metamorphic rocks
- 10:45–11:00 EGU2012-12151
D. Bercovici and Y. Ricard
 Mechanisms for lithospheric shear localization and the generation of plate tectonics by two-phase grain-damage and pinning
- 11:00–11:15 EGU2012-12221
J.A. Hunter, A.B. Watts, and SO 215 Shipboard Scientific Party
 Gravity and Flexure Modelling of Subducting Plates

- 11:15–11:30 EGU2012-11832
F. Mouthereau, A.B. Watts, and E. Burov
 Linkage between crustal shortening in collisional orogens and the long-term strength of the continental lithosphere
- 11:30–11:45 EGU2012-8703
T. Gerya
 Lithospheric rheology controls on oceanic spreading patterns
- 11:45–12:00 EGU2012-8893
 V. Allken, **R.S. Huismans**, and C. Thieulot
 Three-dimensional numerical modeling of extensional basin formation

GD8.2/GMPV6.6/TS9.7 – Long-term rheological behavior of the lithosphere inferred from observations and models at laboratory and geological time and spatial scales (co-organized) – Posters

Convener: E. Burov | Co-Conveners: A. Watts, Y. Podladchikov, L. Jolivet, P. H. Leloup

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Leloup, H., Burov, E, Jolivet, L.

- XL86 EGU2012-2854
J. Kirby and C. Swain
 Long wavelength resolution of wavelet and multitaper-Fourier spectra: application to the isostatic admittance
- XL87 EGU2012-7167
S. Wienecke and E. Lundin
 A short notice on the importance of the Young's modulus on the interpretation of crustal strength
- XL88 EGU2012-12755
A. Døssing and A.B. Watts
 Lithospheric failure and intra-plate volcanism in response to intense yielding: An example from the Greenland Fracture Zone, North Atlantic
- XL89 EGU2012-4033
E.R. Lundin and A.G. Doré
 Large-scale crustal folding as a consequence of weakening by hyperextension and partial serpentinization of the mantle
- XL90 EGU2012-9279
J.H.W. Smit, S.A.P.L. Cloetingh, E. Burov, D. Sokoutis, M. Kaban, M. Tesauro, and J.-P. Burg
 Interference of lithospheric folding in Central Asia by simultaneous Indian and Arabian plate indentation
- XL91 EGU2012-2448
T. Duretz and T. V. Gerya
 Crust rheology, slab detachment and topography
- XL92 EGU2012-4343
I.E. van Gelder, E. Willingshofer, and D. Sokoutis
 Is lateral extrusion in the Eastern Alps influenced by the back-arc extension in the Pannonian Basin? Insights from analogue crustal scale models.
- XL93 EGU2012-10759
E. Calignano, D. Sokoutis, E. Willingshofer, and J.P. Burg
 Lateral rheological lithospheric heterogeneities in the tectonic evolution of intra-plate deformation
- XL94 EGU2012-10283
T. François, E. Burov, P. Agard, and B. Meyer
 Evaluating the effect of rheology on the evolution of continental collision: Application to the Zagros orogen.
- XL95 EGU2012-14258
T. Francois, E. Burov, B. Meyer, and P. Agard
 Surface topography as key constraint on thermo-rheological structure of cratons
- XL96 EGU2012-6955
G. Duclaux, N. Thébaud, K. Gessner, and M. Doublier
 Dome and Keel dynamics in the hot Archaean lithosphere, a numerical approach
- XL97 EGU2012-4623
H. Wang, J. van Hunen, M. Allen, and W. Bai
 Geodynamic modelling of the thinning of cratonic lithosphere
- XL98 EGU2012-6650
 E. Neenan, A. J. Schaeffer, M. R. Agius, and **S. Lebedev**
 The North Anatolian Fault and lithospheric deformation in eastern Mediterranean: A seismic surface-wave study
- XL99 EGU2012-983
S. Duprat-Oualid and P. Yamato
 Syn-deformational inverted metamorphism: Insights from 2D Thermo-kinematic numerical models

- XL100 EGU2012-6161
F. Chopin, K. Schulmann, P. Štípská, J.E. Martelat, P. Pitra, O. Lexa, and B. Petri
Microstructural and metamorphic evolution of a high pressure granitic orthogneiss during continental subduction (Sudetes, European Variscan belt)
- XL101 EGU2012-13307
K. D. Petersen, S.B. Nielsen, R. Stephenson, and **T. Gerya**
Continental rifting and upper mantle strength
- XL102 EGU2012-12395
C. Gumiaux, N. Charles, R. Augier, Y. Chen, and M. Faure
Can metamorphic core complexes develop within a previously non-thickened crust? Insights from the North China Late Mesozoic continental extension
- XL103 EGU2012-9203
L. Labrousse, B. Huet, L. Le Pourhiet, E. Burov, and L. Jolivet
The roles of heritage vs thermal state of the lithosphere in the localization of detachment zones : insights from Mediterranean Core Complexes and numerical experiments.
- XL104 EGU2012-7585
A.C. Ganzhorn, L. Labrousse, L. Arbaret, R. Champallier, J.C. Vrijmoed, and T.B. Andersen
Chemical, petrological and structural analysis of syn-kinematic migmatites: insights from the Western Gneiss Region, Norway.
- XL105 EGU2012-8900
N. Traore, L. Le Pourhiet, J. Frelat, F. Rolandone, and B. Meyer
Viscoelastic properties combined with relevant boundary conditions can produce the arctangent shape of the geodetic displacement field
- XL106 EGU2012-12853
E. Olliot, P. Goncalves, K. Schulmann, D. Marquer, and O. Lexa
Mid-crustal shear zone formation in granitic rocks: constraints from quantitative textural and crystallographic preferred orientations analyses
- XL107 EGU2012-11822
S. M. Schmalholz and **X. Maeder**
Strain localization due to linkage of pinches in viscoplastic multilayers
- XL108 EGU2012-11032
E. Burov, T. Francois, and J. Leguille
Strain localization in models and nature: bridging the gaps.
- XL109 EGU2012-7978
P. H. Leloup, E. Boutonnet, N. Arnaud, J.L. Paquette, W.J. Davis, and K. Hattori
Synkinematic magmatism, heterogeneous deformation, and progressive strain localization in a strike-slip shear zone. The case of the right-lateral Karakorum fault.
- XL110 EGU2012-8634
E. Boutonnet, P.H. Leloup, A. Rozel, N. Arnaud, and J.L. Paquette
Strain localization across main continental strike-slip shear zones : a multi-methods approach for the case of the Karakorum shear zone
- XL111 EGU2012-8732
B. Huet, P. Yamato, and B. Grasemann
Physically consistent viscosity of polyphase rocks: a new method and its validation
- XL112 EGU2012-10235
P. H. Leloup, X.B Liu, G. Mahéo, J.L. Paquette, and X.H. Liu
Quantification of progressive deformation localization below the STD shear zone (Himalaya)
- XL113 EGU2012-13016
M. Stipp
Stress Measurements in the Earth's Crust - Recrystallized Grain Size Piezometry Revisited
- XL114 EGU2012-14477
S. El Arem, H. Lyon-Caen, P. Bernard, J.D. Garaud, F. Rolandone, and P. Briole
Deformation rates and localization of an active fault system in relation with rheological and frictional slip properties: The Corinth Rift case

GD6.1/GMPV6.13/SM4.5 – Whole mantle and transition zone structure, dynamics and evolution: multidisciplinary perspectives (co-organized) – Orals

Convener: P. Tackley | Co-Conveners: C. Thomas, J. H. Davies

Room: 30

Chairperson: n.n.

- 13:30–13:45 EGU2012-9145
N. Coltice, T. Rolf, P.J. Tackley, and S. Labrosse
Dynamic causes of the relation between area and age of the ocean floor

- 13:45–14:00 EGU2012-1513
S. King and H. Samuel
Combine Effects of Plate Motions and Small-Scale Convection on Mantle Stirring Efficiency
- 14:00–14:15 EGU2012-13811
T. Geenen, T. Heister, A.P. van den Berg, M. Jacobs, and W. Bangerth
3D high resolution mineral phase distribution and seismic velocity structure of the transition zone: predicted by a spherical-shell compressible mantle convection model.
- 14:15–14:30 EGU2012-7220
T. Nakagawa and P. Tackley
Influence of magmatism on mantle cooling, surface heat flow and Urey ratio
- 14:30–14:45 EGU2012-4700
P. J. Webb, J. H. Davies, and D. R. Davies
Using high-resolution mantle circulation models to understand the origin of fast seismic anomalies in the Tethyan mantle.
- 14:45–15:00 EGU2012-5101
H. Cizkova, A.P. van den Berg, W. Spakman, and C. Matyska
The viscosity of Earth's lower mantle inferred from sinking speed of subducted lithosphere
- Chairperson: n.n.
- 15:30–15:45 EGU2012-5288
F. Touitou, **A. Davaille**, G. Brandeis, I. Kumagai, and J. Vatteville
Transient mantle plumes: hot heads and cold stems
- 15:45–16:00 EGU2012-3359
H. Samuel and N. Tosi
The influence of post-perovskite strength on mantle thermo-chemical evolution
- 16:00–16:15 EGU2012-6309
R. Gassmüller and B. Steinberger
Modelling the interaction between subducted slabs and thermo-chemical piles
- 16:15–16:30 EGU2012-8630
S. Hempel, T. Nissen-Meyer, and C. Thomas
Lateral heterogeneities in the lowermost mantle - To what detail can we resolve them seismically?
- 16:30–16:45 EGU2012-10467
H. L. M. Bentham and S. Rost
Deep mantle seismic heterogeneities in Western Pacific subduction zones
- 16:45–17:00 EGU2012-6500
M.K. Young, **H. Tkalčić**, and T. Bodin
Short-scale Heterogeneity in the Lowermost Mantle Revealed Through Partition Modeling of Seismic Body Waves

EMRP2.2/GMPV6.21/SM5.6/TS3.3 – A tribute to Luigi Burlini (co-organized) – Posters

Convener: A. Schubnel | Co-Conveners: S. Vinciguerra

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Zappone

- A62 EGU2012-1167
R.H.C. Bruijn, B.S.G. Almqvist, A. Biedermann, M.I. Erni, N. Tisato, B. Tripoli, and A.S. Zappone
The Swiss Atlas of Physical Properties of Rocks (SAPHYR): progress and developments
- A63 EGU2012-2294
A.M. Hirt, Q. Wang, and A.R. Biedermann
Relationship among petrofabric, magnetic anisotropy and seismic anisotropy in dunite
- A64 EGU2012-2450
L. Caricchi, C. Annen, A. Rust, and J. Blundy
Reconstructing modalities of magma storage in the crust by thermo-rheological modelling
- A65 EGU2012-2788
P. Benson and A. Zappone
Seismic properties of Southalpine metapelite at high temperatures and pressures: revisiting the alpha-beta quartz phase transition
- A66 EGU2012-3380
M. Pistone, L. Caricchi, P. Ulmer, E. Reusser, F. Marone, and L. Burlini
Rheology of Three-Phase Magmas
- A67 EGU2012-4428
S. Vinciguerra, P. Benson, P.G. Meredith, G. Di Toro, G. De Natale, J.P. Burg, P.R. Young, and L. Caricchi
Understanding pre-eruptive patterns: the rock physics interpretation

- A68 EGU2012-4515
A. Schubnel, J. Fortin, L. Burlini, and Y. Guéguen
How Luigi saved our (experimental) life?
- A69 EGU2012-6727
H Schijns, **I Jackson**, and D R Schmitt
Laboratory Measurements of Frequency-Dependent Seismic Properties of Cracked and Fluid-Saturated Media
- A70 EGU2012-10012
C. Madonna, N. Tisato, C. Delle Piane, and E. H. Saenger
Measurements of seismic wave attenuation for frequencies between 0.1 and 100 Hz in a Paterson Rig
- A71 EGU2012-12326
B. Cordonnier, B. Kaus, M. Manga, L. Caricchi, M. Pistone, J. Castro, K.-U. Hess, S. Gottschaller, D.B. Dingwell, and L. Burlini
Brittle onset of monodispersed magmatic suspensions: from spheres to spheroid
- A72 EGU2012-12876
B.S.G. Almqvist, M. Herwegh, A.M. Hirt, A. Ebert, J. Linckens, J. Precigout, B. Leiss, J.M. Walter, and J.-P. Burg
Laboratory seismic anisotropy in mylonites

TS3.1/EMRP2.9/GD2.8 – Deformation and strain localization from micro- to lithospheric scales (co-listed) – Orals

Convener: L. Menegon | Co-Conveners: F. Fusseis

Room: 29

Chairperson: Luca Menegon

- 13:30–13:45 EGU2012-188
M. Bestmann, G. Pennacchioni, S. Nielsen, M. Göken, and H. de Wall
Deformation and ultrafine recrystallization of quartz in pseudotachylite-bearing brittle faults: A matter of a few seconds
- 13:45–14:00 EGU2012-10812
M. Pe?, H. Stünitz, R. Heilbronner, M. Drury, and C. De Capitani
Origin of Pseudotachylites during slow creep experiments
- 14:00–14:15 EGU2012-11959
J. Schmatz, D. Kempin, J.K. Becker, and P.D. Bons
Grain Growth in presence of mobile second phase particles - a microstructural simulation in Elle
- 14:15–14:30 EGU2012-4376
M. Herwegh, J. Linckens, A. Ebert, A. Berger, and S. Brodhag
The role of second phases for controlling microstructural evolution in polymineralic rocks
- 14:30–14:45 EGU2012-4894
X. Maeder, S. Schmalholz, and A. Bauville
Control of temperature, pressure gradient and flow law on the formation of crustal-scale shear zones: results from 1D thermo-mechanical modeling
- 14:45–15:00 EGU2012-4953
A. Bauville, JL. Epard, and S. M. Schmalholz
A simple thermo-mechanical crustal-scale shear zone model applied to the Morcles nappe (Switzerland)
- Chairperson: Florian Fusseis and Marco Herwegh
- 15:30–15:45 EGU2012-231
W.M. Behr and J.P. Platt
Style of exhumation and rheological evolution of a Mediterranean subduction complex
- 15:45–16:00 EGU2012-10237
M. Maggi, F. Rossetti, G. Ranalli, and T. Theye
Feedback between fluid flow and rheology during the evolution of the East Tenda Shear Zone (Haute Corse, France).
- 16:00–16:15 EGU2012-6433
P. Nasipuri, H Stunitz, L Menegon, and A. Berger
Interplay between water infiltration, metamorphic reactions and strain localization during subduction of gabbro from the basement rocks of the Lofoten anorthosite complex
- 16:15–16:30 EGU2012-11807
A. Putnis, H. Austrheim, C.V. Putnis, T. John, and H. Mukai
The direct correspondence between shear zones and fluid-rock reactions from the outcrop to the nanoscale
- 16:30–16:45 EGU2012-11420
J.-C. Poilvet, P. Goncalves, and D. Marquer
Shear zone broadening driven by metasomatism: an example from the Roffna metarhyolite (Suretta nappe, eastern central Alps)

16:45–17:00 EGU2012-10668

H. Koyi, H. Schmeling, S. Burchardt, C. J. Talbot, S. Mukherjee, H. Sjöström, and Z. Chermia
Shear zones between rock units with no relative movement

TS3.1/EMRP2.9/GD2.8 – Deformation and strain localization from micro- to lithospheric scales (co-listed) – Posters

Convener: L. Menegon | Co-Conveners: F. Fousseis

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Aurora Menegon & Rosa Astleithner

- A410 EGU2012-330
L. Fuchs* and H. Schmeling
Numerical models of diapiric structures - analysis of the finite strain distribution
- A411 EGU2012-1212
Z. Wang
Structural heterogeneities in the Southeast Tibetan plateau: Implications for crustal deformation
- A412 EGU2012-4760
S.V. Mudruk, V.V. Balagansky, I.A. Gorbunov, and A.B. Raevsky
A Palaeoproterozoic Super-Large Synformal Sheath Anticline: an example from the Keivy Terrane, northeastern Baltic Shield
- A413 EGU2012-5608
Ho gong-ruei and Lo Wei
The deformation path partitioning within the multiply deformation area, Tananao complex, Taiwan
- A414 EGU2012-11571
D.C. Yi and C.W. Lin
A mega shear zone in the Central Range of Taiwan and its implication for the Late Mesozoic subduction of the paleo-Pacific plate
- A415 EGU2012-7764
T. Eberlei, G. Habler, B. Grasemann, and M. Thöni
Pre-Alpine and Alpine microfabrics in the Austroalpine crystalline basement (Matsch Unit, Italy)
- A416 EGU2012-6040
K. Hidas, C.J. Garrido, A. Tommasi, J.A. Padrón Navarta, Z. Konc, E. Frets, C. Marchesi, and G. Booth-Rea
Phase transformation induced strain localization in mantle pyroxenite from the Ronda Peridotite Massif (Betic Cordillera, Southern Spain)
- A417 EGU2012-916
L. G. F. Viegas, C. J. Archanjo, and A. Vauchez
Fabrics of migmatites and relationships between partial melting and deformation in high-grade transpressional shear zones: the Patos anatexite (Borborema Province, NE Brazil)
- A418 EGU2012-3210
S. Mei, A. M. Suzuki, L. Xu, D. L. Kohlstedt, N. A. Dixon, and W. B. Durham
The influence of water on the Peierls stress of olivine at high pressures
- A419 EGU2012-6457
L. Menegon, H. Stünitz, P. Nasipuri, R. Heilbronner, and H. Svahnberg
Brittle-viscous transition in granulite-facies perthites: implications for lower crustal strength
- A420 EGU2012-6178
M. A. López-Sánchez, S. Llana-Fúnez, A. Marcos, and F. J. Martínez
Deformation of quartz and feldspar at mid-crustal depths in an extensional normal fault (Viveiro Fault, NW Spain)
- A421 EGU2012-7771
M. Thielmann, A. Rozel, B.J.P. Kaus, and Y. Ricard
Grain size in lithospheric-scale shear zones: Chicken or Egg?
- A422 EGU2012-9555
F. Fousseis, C.E. Schrank, and J. Liu
Thermal damage in Westerly granite investigated by means of Synchrotron radiation based microtomography
- A423 EGU2012-11758
E. Rybacki, L.F.G. Morales, and G. Dresen
Strain localization in carbonate rocks experimentally deformed in the ductile field
- A424 EGU2012-12067
R. Kilian, R. Heilbronner, and H. Stünitz
Low angle boundaries in dry quartz
- A425 EGU2012-12090
R. Kilian, R. Heilbronner, and H. Stünitz
Quartz CPO in a polymineralic ultramylonite

- A426 EGU2012-5996
M. Negrini, H. Stunitz, and A. Berger
The effect of deformation on the TitaniQ geothermobarometer
- A427 EGU2012-6110
P. Wehrens, R. Baumberger, and M. Herwegh
Structural Evolution in the Aar Massif (Central Alps): First attempts of linking the micron- to the kilometer-scale
- A428 EGU2012-199
M. Peters and M. Herwegh
Spatial distribution of quartz recrystallization microstructures across the Aar massif (Swiss Central Alps)
- A429 EGU2012-14207
A. Bistacchi, M. Massironi, L. Menegon, F. Bolognesi, and F. Zago
Interconnected weak layers of micas in fault rocks, and implications for the mechanics of misoriented faults

Thursday, 26 April

GMPV1.1/GD2.6 – Origin, evolution of Earth's crust and the formation of a habitable planet (co-sponsored by the European Association of Geochemistry (EAG)) (co-organized) – Posters

Convener: M. Boyet | Co-Conveners: B. Dhuime, Jeff Vervoort, J. van Hunen, J. Tarduno, K.O. Konhauser

Hall Z | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Bruno Dhuime, Maud Boyet

- Z1 EGU2012-2438
A. Slabunov
4-D model of the Archaean crustal evolution of the Fennoscandian Shield based on geological data
- Z2 EGU2012-3495
U. Schreiber and C. Mayer
Deep Reaching Gas-permeable Tectonic Faults of the Early Earth as Habitats for the Origin of Life
- Z3 EGU2012-3320
C. Stremtan, J. Ryan, I. Balintoni, and C. Balica
Thermo-tectonic history of Variscan post-collisional plutons from the Danubian domain (Romanian Southern Carpathians) as recorded by zircon trace element geochemistry and thermometry
- Z4 EGU2012-5136
C. François, P. Philippot, and P. Rey
Formation and exhumation mechanisms of high-grade rocks: Sagduction and Subduction processes during the Archaean
- Z5 EGU2012-11919
H.K. Brueckner
The Subduction of Continental Crust, the Variscan Evolution of the Bohemian Massif, and the Origin of PO Granitoids
- Z6 EGU2012-3549
L. Saha, A. Hofmann, and H. Xie
Style of Palaeoarchaean tectonics from the SE Kaapvaal and Singhbhum Cratons: Constraints from Metamorphic Studies and Zircon Geochronology
- Z7 EGU2012-164
E. Nitkina
Isotope U-Pb dating of the Ingozero TTG complexes (Kola Peninsula).
- Z8 EGU2012-9113
P. Serov, N. Ekimova, and T. Bayanova
Isotope-geochemical Nd-Sr evidence of Palaeoproterozoic plume magmatism in Fennoscandia and mantle-crust interaction on stages of layered intrusions formation
- Z9 EGU2012-11521
A. P. Martin, D. J. Condon, A. R. Prave, A. Lepland, and V. A. Melezhik
Age constraints from northwest Russia on the global accumulation of carbon during the Palaeoproterozoic Shunga event

GMPV1.2/GD5.3/TS6.6 – Subduction processes: geochemical inputs and outputs (co-sponsored by the European Association of Geochemistry (EAG)) (including AGU Kuno lecture) (co-organized) – Posters

Convener: C. Chauvel | Co-Conveners: O. Jagoutz, K. Kelly

Hall Z | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Chauvel, Kelley

- Z10 EGU2012-6097
B. Reynard
Geophysical imaging of water from the slab to the mantle wedge
- Z11 EGU2012-1155
J. Berger and J.-P. Burg
Physical and chemical consequences of crustal melting in fossil mature intra-oceanic arcs
- Z12 EGU2012-6638
W.-S. Lyu, W. Lo, and S.-R. Song
Geochemical Characteristics of Metavolcanics in the Area from Slate Formations of Southern Central Range, Taiwan

- Z13 EGU2012-4807
A. De La Rupelle, J.C. Thouret, H.E. Cubukcu, B. Jicha, E. Bréard, M.-C. Gerbe, J.-L. Le Pennec, H. Diot, and P. Boivin
New stratigraphic, chronologic, and magnetic fabric constraints for Neogene and Quaternary ignimbrites in the Central Andes (South Peru)
- Z14 EGU2012-11365
H. E. Çubukçu, M.-C. Gerbe, J.-C. Thouret, A. de la Rupelle, and P. Boivin
Petrological characteristics of Plio-Quaternary 'Sencca' Ignimbrites, Western Cordillera of the Central Andes in Peru
- Z15 EGU2012-3545
B. Debret, M. Andreani, M. Godard, C. Nicollet, and S. Schwartz
Trace element behaviour during serpentinisation/deserpentinisation of an eclogitised oceanic lithosphere: a LA-ICPMS study of the Lanzo ultramafic massif (Western Alps)
- Z16 EGU2012-12273
M.-F. Chu, M. Scambelluri, W. L. Griffin, S. Y. O'Reilly, and N. J. Pearson
Li isotopic constraints from the Erro-Tobbio serpentinites on Alpine subduction processes
- Z17 EGU2012-13619
A. Fedotova, E. Khain, A. Razumovskiy, M. Anosova, and A. Orlova
An exposed slab window margin: the eastern part of the Neoproterozoic Baikal-Muya belt, Russia
- Z18 EGU2012-8046
T. Donskaya, D. Gladkochub, A. Mazukabzov, and A. Ivanov
Evidences of the Late Paleozoic - Mesozoic subduction beneath the southern margin of the Siberian continent
- Z19 EGU2012-12949
H. E. Çubukçu, I. Ulusoy, E. Aydar, E. Sen, O. Ersoy, and A. Gourgaud
Peralkaline volcanism in a continental collisional setting: Mount Nemrut volcano, Eastern Anatolia
- Z20 EGU2012-1213
H. Çoban, N. Hoang, M.F.J. Flower, O. Parlak, ?. Caran, L. Dallai, Ö. Çakır, and M. Erduran
Metasomatic overprint of CO₂-rich fluids/melts from altered oceanic crust and subducted Triassic plume-influenced volcanics via shallow oceanic subduction of Cyprus arc, and remobilization of EM-II type mantle metasomes beneath Isparta Angle, SW Turkey
- Z21 EGU2012-6130
S. Corman and **A. Temel**
Petrological and geochemical characteristics of Yenice volcanics, South of Ankara, Turkey
- Z22 EGU2012-7341
G. Atabek and S. Altunkaynak
Geology and Petrogenesis of Bigadic-Sindirgi Volcanites, Western Turkey
- Z23 EGU2012-7894
Kh. Meliksetian, I. Neill, **M.B. Allen**, G. Navarsardyan, and S. Karapetyan
Pliocene-Quaternary syn-collision volcanism of the Javakheti Ridge, NW Armenia: impact on models of magma generation in the Arabia-Eurasia collision zone
- Z24 EGU2012-190
M. Kheirkhah, M.B. Allen, I. Neill, M.H. Emami, and C. McLeod
Mantle amphibole control on arc and within-plate chemical signatures: Quaternary lavas from Kurdistan Province, Iran

GMPV1.4/ERE3.5 – Elements critical to 21st century economies (co-sponsored by the Society of Economic Geologists (SEG), Society for Geology Applied to Mineral Deposits (SGA), and by the European Association of Geochemistry (EAG)) (co-organized) – Orals

Convener: R. Herrington | Co-Conveners: L. Fontbote, Y. Watanabe

Room: 31

Chairperson: R. Herrington

- 08:30–08:45 EGU2012-11889
L. Lerchbaumer and A. Audétat
The metal content of molybdenum-mineralizing fluids
- 08:45–09:00 EGU2012-11073
M. Kesraoui, **C. Marignac**, A. Hamis, and M. Cuney
A Ta-rich low-P peraluminous granite: the Rechla cupola (Hoggar, Algeria) and associated pegmatites, the result of extreme fractionation of a A2-type magma.
- 09:00–09:15 EGU2012-8709
K.N. Malitch, E.A. Belousova, I.Yu. Badanina, and W.L. Griffin
Zircon and baddeleyite from the economic ultramafic-mafic Noril'sk-1 intrusion (Russia): Hf-isotope constraints on source composition

- 09:15–09:30 EGU2012-9302
N. Ekimova, P. Serov, and T. Bayanova
The dating of ore genesis with using of sulfides: new opportunities of Sm-Nd method
- 09:30–09:45 EGU2012-12105
R.R. Hark, **R.S. Harmon**, J.J. Remus, L.J. East, M.A. Wise, B.M. Tansi, K.M. Shughrue, K.S. Dunsin, and C. Liu
Application of laser-induced breakdown spectroscopy (LIBS) as a tool to determine the origin of 'conflict minerals'
- 09:45–10:00 EGU2012-4075
o. vidal, p. christmann, d. Bol, b. Goffé, m. Groth, e. Kohler, k. Persson Nelson, and k. Schumacher
ERA-MIN: The European network (ERA-NET) on non-energy raw materials

COFFEE BREAK

Chairperson: L. Fontbote

- 10:30–10:45 EGU2012-4223
Y. Watanabe
Exploration of dysprosium: the most critical element for Japan
- 10:45–11:00 EGU2012-7418
K. Sanematsu, K. Yoshiaki, and Y. Watanabe
Genesis of ion-adsorption type REE ores in Thailand
- 11:00–11:15 EGU2012-8541
S. Broom-Fendley, F. Wall, A.G. Gunn, and E. Dowman
Targeting heavy rare earth elements in carbonatite complexes
- 11:15–11:30 EGU2012-13888
R. Herrington
Potential for cobalt recovery from lateritic ores in Europe
- 11:30–11:45 EGU2012-14380
F.-W. Wellmer
Sustainable Management of Mineral Resources—another view on criticality.
- 11:45–12:00 EGU2012-14383
R L Moss
Critical Metals in Strategic Low-carbon Energy Technologies

IG9/GMPV2.2/PS9.2 – New advances in non-traditional isotope chemistry, thermochronometry and $^{40}\text{Ar}/^{39}\text{Ar}$ dating (co-organized) – Orals

Convener: R. W. Brown | Co-Conveners: S. Nomade, F. Jourdan, O. Rouxel, C. Siebert, R. Beucher, A. Carter, D. Mark, F. Stuart

Room: 42

Chairperson: Fred Jourdan

- 08:30–08:45 EGU2012-13366
F.M. Stuart and D. Mark
Constraints on Earth degassing history from the argon isotope composition of Devonian atmosphere
- 08:45–09:00 EGU2012-10904
S. P. Kelley and S. Flude
Observation of micron to centimetre scale argon in alkali feldspars: implications for $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology
- 09:00–09:15 EGU2012-6858
F. Jourdan, E. Thern, S.A. Wilde, and L. Frewer
 $^{40}\text{Ar}/^{39}\text{Ar}$ dating of unusual minerals (tourmaline, K-richterite, yimengite, wadeite and priderite) and applicability to the geological record.
- 09:15–09:30 EGU2012-5144
K. de Jong
Does numerical modelling of apparent partial loss Ar/Ar age spectra of hornblende give the correct thermal history of terranes? Insights from the Palaeoproterozoic Lapland-Kola orogen (Russia)
- 09:30–09:45 EGU2012-8298
R. Schoenberg, I.C. Kleinhanns, M. van Zuilen, V.A. Melezhik, and R.B. Pedersen
Applicability of stable Cr isotope variations in marine sediments for the reconstruction of environmental changes through the geologic record

- 09:45–10:00 EGU2012-10481
T.J. Horner, R.B.Y. Lee, G.M. Henderson, and R.E.M. Rickaby
 A novel methodology to investigate isotopic biosignatures

COFFEE BREAK

Chairperson: Olivier Rouxel

- 10:30–10:45 EGU2012-13020
V. Dekov and O. Rouxel
 Cu- and Zn-isotope systematics of seafloor hydrothermal vent fluids from a back-arc setting (Manus Basin)
- 10:45–11:00 EGU2012-9699
M. Tanimizu and K. Nagaishi
 High precision 11B/10B analysis with a simplified MC-ICP-MS
- 11:00–11:15 EGU2012-5757
P. Vermeesch and A. Carter
 A simple method for in-situ zircon U-Th-He dating
- 11:15–11:30 EGU2012-11828
R. W. Brown, R. Beucher, S. Roper, K. Gallagher, C. Persano, and F. Stuart
 How to derive robust thermal histories from 'over-dispersed' single crystal apatite (U-Th)/He ages
- 11:30–11:45 EGU2012-12199
R. Beucher, R.W. Brown, K. Dobson, C. Persano, F. Stuart, and F. Roelofse
 Apatite Fission Track and (U-Th)/He data from deep boreholes and regional transects in South Africa: implications for the exhumation pattern and uplift of the southern African plateau
- 11:45–12:00 EGU2012-10225
R.L. Reverman, M.G. Fellin, F. Herman, and S.D. Willett
 Miocene to Pleistocene Exhumation of the Southern European Alps

IG9/GMPV2.2/PS9.2 – New advances in non-traditional isotope chemistry, thermochronometry and $^{40}\text{Ar}/^{39}\text{Ar}$ dating (co-organized) – Posters

Convener: R. W. Brown | Co-Conveners: S. Nomade, F. Jourdan, O. Rouxel, C. Siebert, R. Beucher, A. Carter, D. Mark, F. Stuart

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Cristina Persano

- A253 EGU2012-2628
F. L. Schenker, M. Forster, and J.-P. Burg
 The Eastern Pelagonian metamorphic core complex: insight from the $^{40}\text{Ar}/^{39}\text{Ar}$ dating of white micas
- A254 EGU2012-5231
K. de Jong, G. Ruffet, and M. Marker
 Ar/Ar age data of muscovite from the Keivy Terrane (central Kola Peninsula, arctic European Russia) imply a prolonged fluid-assisted recrystallisation
- A255 EGU2012-5409
K. de Jong, B. Wang, G. Ruffet, L.S. Shu, and M. Faure
 Ar/Ar geochronology in the western Tianshan (northwestern China): from Carboniferous (ultra)high-pressure metamorphism and thrusting to Permian strike-slip deformation and fluid ingress
- A256 EGU2012-8162
C.J. Warren, S.P. Kelley, S.C. Sherlock, and C.S. McDonald
 $^{40}\text{Ar}/^{39}\text{Ar}$ systematics in an exhumed ultra-high pressure terrane: implications for the timing of exhumation
- A257 EGU2012-12062
 A.J. Smye, **C.J. Warren**, and M.J. Bickle
 Excess ^{40}Ar as a tracer for metamorphic porosity
- A258 EGU2012-1192
D.M. Chew and R.A. Donelick
 Combined apatite fission track and U-Pb dating by LA-ICPMS
- A259 EGU2012-3220
R. Vocke, S. Rabb, and J. Mann
 Value Assignment of Isotopic Reference Materials - Approaches, Pitfalls and Workarounds based on Experiences from the Avogadro Project

- A260 EGU2012-3676
E. Enkelmann and T. A. Ehlers
Advantages and challenges in automated apatite fission track counting
- A261 EGU2012-4056
H. C. Chao, C. F. You, H. C. Liu, and C. -H Chung
The Origin and Post Processes of Mud Volcano Fluids in Taiwan: Evidence from Hydrogen, Oxygen, and Strontium Isotopic Compositions ($\delta^2\text{D}$, $\delta^{18}\text{O}$, $87\text{Sr}/86\text{Sr}$, $87\text{Sr}/86\text{Sr}^*$, and $^{88}\text{Sr}/86\text{Sr}$)
- A262 EGU2012-5860
N. Cogné, K. Gallagher, and P.R. Cobbold
Coupled inverse and forward modelling to assess the range of acceptable thermal histories, a case study from SE Brazil
- A263 EGU2012-6213
S. Mansour, N. Hasebe, F. I. Khalaf, M. K. El-Shafei, S. Arai, and A. Tamoura
LA-ICP-MS Zircon U-Pb Geochronology of the Neoproterozoic Basement Complex of Wadi Baba Area, West-Central Sinai, Egypt; Implications to understand the Evolution of the Arabian-Nubian Shield
- A264 EGU2012-10520
A. Voinot, M-P. Turpault, F. Chabaux, and D. Lemarchand
Mechanisms of primary mineral weathering inferred from B isotopes
- A265 EGU2012-11607
M. Konrad-Schmolke and M. Sudo
Correlation of in situ measured Ar, Li and B concentrations and isotopic compositions in fluid- and deformation-induced partially recrystallised high pressure rocks
- A266 EGU2012-11745
C. Siebert, N. Greber, T. Naegler, and T. Pettke
Towards an International Molybdenum Standard: NIST Standard Reference Materials 610, 612 and 3134
- A267 EGU2012-11274
M. Wildman, R. Beucher, R. Brown, C. Persano, F. Stuart, and F. Roelofse
The morphotectonic history of the Atlantic continental margin of South Africa: insights from combined (U-Th)/He and fission track thermochronometry
- A268 EGU2012-14487
R. Cochrane, R. Spikings, D. Chew, and J. Wotzlaw
Apatite U-Pb Thermochronology: A combined ID-TIMS and LA-ICP-MS study from southern Ecuador
- A269 EGU2012-10017
K. Stübner, L. Ratschbacher, D. M. Whipp Jr., R. Jonckheere, and I. Dunkl
Exhumation of the Shaxdara gneiss dome, Pamir Mts.: tectonics versus erosion
- A270 EGU2012-6414
O.V. Yakubovich, Yu.A. Shukolyukov, A.G. Mochalov, A.B. Kotov, and S.I. Korneev
Anomalously high retention of radiogenic helium in native platinum
- A271 EGU2012-10637
T. Schaffhauser, F. Chabaux, B. Fritz, B. Ambroise, A. Clement, and Y. Lucas
Geochemical tracing and modeling of alteration processes in the Ringelbach granitic research catchment (Vosges, France)
- A272 EGU2012-12942
O. Rouxel, A. Bekker, Y. Germain, and E. Ponzevera
Spatially resolved Fe- and S-isotope composition of sedimentary pyrite

IG1/GMPV2.3/HS2.22/SSP5.1/SSS13.5/TS1.8 – Stable isotopes in geosciences - open session, including blocks of special attention (co-organized) – Posters

Convener: P. De Groot | Co-Conveners: Dr. Bojar, E. Kerstel, J. Smit, D. R. Gröcke, Ph. Negrel, E. Petelet-Giraud

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ph. Negrel, A-V. Bojar

- A234 EGU2012-13171
F. Dong, D. Baer, **M. Gupta**, and T. Owano
Novel Instrumentation for Measurements of Isotopic Carbon Dioxide
- A235 EGU2012-9084
F.-Y. Hu, C.-F. You, H.-C. Liu, H.-C. Chao, B.-S. Wang, C.-A. Huh, and C.-H. Chung
Sr and Nd Isotopic Compositions as Tracers for Source-to-Sink Pathways of Sediments in the Taiwan Strait
- A236 EGU2012-3301
Y. Zhao, S.W. Lokier, and T. Steuber
A new stable carbon isotope record for the Cenomanian of the Arabian Plate
- A237 EGU2012-10249
C.V. Ullmann, H.J. Campbell, and C. Korte
Alteration histories of fossil biogenic calcite as indicated by $87\text{Sr}/86\text{Sr}$ ratios

- A238 EGU2012-9878
P.-H. Tsai, C.-F. You, K.-F. Huang, H.-C. Liu, and Y.-B. Sun
Lithium Isotopic Fractionation during Loess Weathering
- A239 EGU2012-4715
T. Unterweissacher, G. Rantitsch, R. Ehrreich, G. Kienast, and K. Stocker
Stable isotope evidence for fluid alteration of carbonates during Cretaceous compression and extension in the Graz Paleozoic (Eastern Alps)
- A240 EGU2012-11298
I. Gilmour, C.A. Pearce, D. Jolley, M.A. Sephton, M. Widdowson, and M.A. Gilmour
Carbon isotope stratigraphy and palynology of an eastern Tethyan Cretaceous-Paleogene boundary section from Sumbar, Turkmenistan
- A241 EGU2012-14372
F. Chabaux, Th. Schaffhausen, M.-C. Pierret, and B. Ambroise
238U-234U activity ratio as tracer of waterpathway within the watershed substratum: evidence of U data from the Strengbach and Ringelbach research catchments (Vosges, France)
- A242 EGU2012-9587
P. Saccon, A. Leis, A. Marca, J. Kaiser, L. Campisi, M.E. Böttcher, J. Savarino, P. Escher, A. Eisenhauer, and J. Erbland
Identification and characterisation of potential sources of nitrate pollution in the Marano Lagoon (Italy) applying a multi-isotope approach
- A243 EGU2012-10932
J. Jaunat, **F. Huneau**, H. Celle-Jeanton, A. Dupuy, and P. Le Coustumer
Rainwater chemistry and isotopic content in the French Basque Country
- A244 EGU2012-4954
P. Koeniger
Impacts of sampling resolution on stable isotope characteristics of precipitation and stream flow in large river basins
- A245 EGU2012-10489
L. Cary, J. Casanova, A. Mekni, N. Gaaloul, C. Guerrot, and **E. Petelet-Giraud**
Effect of artificial recharge by treated wastewater on the quality of the Korba coastal aquifer (Cape Bon, Tunisia): insights from Boron isotopes.
- A246 EGU2012-2581
L. Gourcy, F. Castres de Paulet, A. Rorive, and J. Bastien
Isotope tools to support conceptual model building of the Carboniferous limestone aquifer of Northern France and Belgium
- A247 EGU2012-5878
H. Häusler, S. Fran?iškovi?-Bilinski, D. Rank, P. Stadler, and H. Bilinski
Results from stable isotope investigations of river waters in Western Croatia
- A248 EGU2012-8192
N. Mohammed, H. Celle-Jeanton, F. Huneau, P. Le Coustumer, V. Lavastre, and G. Bertrand
Spatial hydrochemical and isotopic variations within the alluvial aquifer of the Allier River (Massif Central, France)
- A249 EGU2012-8942
Ph. Negrel and W. Kloppmann
Insight into past hydrological conditions through signatures of stable isotopes in Holocene Loire River fluvial sediments (France)
- A250 EGU2012-8964
Ph. Negrel and E. Petelet-Giraud
Lead isotopes in sediments of the Loire River (France): natural versus anthropogenic origin
- A251 EGU2012-9110
E. Petelet-Giraud, Ph. Négrel, and C. Guerrot
Boron and strontium isotopes to assess water origin and anthropogenic inputs during flood events. The Hérault River, S. France.
- A252 EGU2012-9566
C. Innocent, **E. Petelet-Giraud**, W. Kloppmann, C. Guerrot, F. Bichot, and M. Thinon-Larminach
Groundwater circulation, connection between aquifers and relation with surface water in a karstified and faulted watershed: Constraint by Sr isotopes in the upper Sèvre-Niortaise basin (western France)

GMPV4.3 – Magmatic volatiles: from the mantle to the atmosphere – Orals

Convener: P. Allard | Co-Conveners: A. Aiuppa, G. Chiodini, F. Tassi, R. Botcharnikov, K. Klimm

Room: 31

Chairperson: G. Chiodini

- 13:30–13:45 EGU2012-6820
F. M. Schwandner, S. A. Carn, S. Corradini, L. Merucci, G. Salerno, and A. La Spina
 Space-borne detection of volcanic carbon dioxide anomalies: The importance of ground-based validation networks
- 13:45–14:00 EGU2012-7313
N. Bobrowski, G. B. Giuffrida, M. Yalire, D. Tedesco, S. Arellano, B. Galle, and A. Aiuppa
 Variations in gas emissions in correlation with lava lake level changes at Nyiragongo volcano, DR Congo
- 14:00–14:15 EGU2012-8325
S. Arellano, B. Galle, and D. Melnikov
 Gas flux measurements of episodic bimodal eruptive activity at Karymsky volcano (Kamchatka, Russia)
- 14:15–14:30 EGU2012-14326
P. Allard, M. Burton, and G. Sawyer
 Remote OP-FTIR sensing of magmatic gases driving Yasur trachyandesitic explosive activity, Vanuatu island arc
- 14:30–14:45 EGU2012-1780
A. Aiuppa, E. Bagnato, S. Calabrese, G. Giudice, M. Liuzzo, G. Tamburello, P. Allard, I. Chaplygin, and Y. Taran
 Magmatic gas flux emissions from Gorelyi volcano, Kamchatka, and implications for volatile recycling in the NW Pacific
- 14:45–15:00 EGU2012-11901
N.M. Pérez, G.D. Padilla, E. Padrón, P.A. Hernández, G.V. Melián, J. Barrancos, S. Dionis, F. Rodríguez, D. Nolasco, D. Calvo, I. Hernández, and M.D. Peraza
 Precursory diffuse CO₂ emission signature of the 2011 El Hierro submarine eruption, Canary Islands
- Chairperson: P. Allard
- 15:30–15:45 EGU2012-12207
R.E. Botcharnikov, F. Holtz, M. Wilke, and S.V. Churakov
 Redox and compositional control on the degassing behaviour of magmatic volatiles
- 15:45–16:00 EGU2012-5011
F. Gaillard and B. Scaillet
 Volatile solubility laws in melts can tell us how unique the Earth is
- 16:00–16:15 EGU2012-13719
R. Moretti, I. Arienzo, L. Civetta, G. Orsi, and M. D'Antonio
 The magmatic system of Ischia island: another piece in the puzzle of the fluid-saturated, CO₂-sustained, Neapolitan volcanism (Southern Italy)
- 16:15–16:30 EGU2012-12541
D. Rouwet, F. Tassi, and R.A. Mora-Amador
 Future volcanic lake research: revealing secrets from poorly studied lakes
- 16:30–16:45 EGU2012-4594
L. D'Auria, F. Giudicepietro, M. Martini, and R. Lanari
 Imaging of fluid migration through the Campi Flegrei hydrothermal system
- 16:45–17:00 EGU2012-8128
G. Chiodini, S. Caliro, P. De Martino, R. Avino, C. Cardellini, and F. Gherardi
 Repeated episodes of magmatic fluid injections into the hydrothermal system of Campi Flegrei. Geochemical evidences and thermo-fluid-dynamic simulations

GMPV4.3 – Magmatic volatiles: from the mantle to the atmosphere – Posters

Convener: P. Allard | Co-Conveners: A. Aiuppa, G. Chiodini, F. Tassi, R. Botcharnikov, K. Klimm

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- Z25 EGU2012-1771
G. Tamburello, A. Aiuppa, A.J.S. McGonigle, and E.P. Kantzas
 Non-stationary nature of SO₂ degassing at Etna's North-east crater (Italy).
- Z26 EGU2012-2422
R. Di Napoli, C. Federico, A. Aiuppa, M. D'Antonio, and M. Valenza
 Numerical modelling of gas-water-rock interactions in volcanic-hydrothermal environment: the Ischia Island (Southern Italy) case study.
- Z27 EGU2012-8199
G. Chiodini, S. Caliro, J. Lowenstern, W.C. Evans, D. Bergfeld, F. Tassi, D. Tedesco, C. Cardellini, S. Hurwitz, and C. Werner
 Insights from fumarole gas geochemistry on the origin of hydrothermal fluids on the Yellowstone Plateau

- Z28 EGU2012-7509
G. Capasso, **C. Federico**, P. Madonia, and A. Paonita
The effect of steam-heating processes on the chemical and isotopic composition of the shallow thermal aquifer in Vulcano Island (Aeolian Arc, Sicily).
- Z29 EGU2012-8797
H E Gaunt, P Sammonds, C Kilburn, P Meredith, and R Smith
Fluid flow and degassing in high temperature magma
- Z30 EGU2012-9636
M. Todesco and **D. Rouwet**
Numerical modeling of crater lake seepage
- Z31 EGU2012-8903
G. Melián, J. Barrancos, G. Padilla, S. Dionis, F. Rodríguez, D. Nolasco, E. Padrón, P.A. Hernández, D. Calvo, I. Hernández, N.M. Pérez, and M.D. Peraza
Spatial and temporal variations of soil CO₂ degassing rate at El Hierro volcanic system and relation to the 2011 submarine eruption
- Z32 EGU2012-11331
F. Rodríguez, P.A. Hernández, E. Padrón, N.M. Pérez, H. Sumino, G.V. Melián, G.D. Padilla, J. Barrancos, S. Dionis, D. Nolasco, D. Calvo, I. Hernández, and M.D. Peraza
Dissolved gas geochemical signatures of the ground waters related to the 2011 El Hierro magmatic reactivation
- Z33 EGU2012-13949
A. Kadik and Y. Litvin
Solution behavior of reduced N-C-H-O volatiles in FeO-Na₂O-SiO₂-Al₂O₃ melt equilibrated with molten Fe alloy at high pressure and temperature
- Z34 EGU2012-12608
D. Nolasco, E. Padrón, G. Melián, S. Dionis, F. Rodríguez, G. Padilla, P.A. Hernández, N.M. Pérez, and H. Sumino
The 2011 El Hierro submarine eruption, Canary Islands: chemical and isotopic evidence in dissolved gases of seawater
- Z35 EGU2012-13473
G. Padilla, P. A. Hernández, E. Padrón, J. Barrancos, G. Melián, S. Dionis, F. Rodríguez, D. Nolasco, D. Calvo, I. Hernández, M. D. Peraza, and N. M. Pérez
Soil gas ²²²Rn and volcanic activity at El Hierro (Canary Islands) before and after the 2011 submarine eruption
- Z36 EGU2012-9020
A. Paonita, A. Caracausi, M. Martelli, and A. Rizzo
Mixing between deep and shallow magmatic fluids below Mount Etna and its key role during the recent eruptive periods
- Z37 EGU2012-8722
A.F.A. Marques, S.D. Scott, P. Madureira, C.J.P. Rosa, N. Lourenço, P. Conceição, and TerRiftic Team
Sulfide and silicate melt inclusions in the D. João de Castro Volcanic Seamount, a hydrothermally active area on the Terceira Rift, Azores
- Z38 EGU2012-9223
P. A. Hernández, G Padilla, D. Calvo, E. Padrón, G. Melian, S. Dionis, D. Nolasco, J. Barrancos, F. Rodríguez, and N. Pérez
Long- and short-term temporal variations of the diffuse CO₂ emission from Timanfaya volcano, Lanzarote, Canary Islands
- Z39 EGU2012-9896
J.E.C. Silva, A.F.A. Marques, C.J.P. Rosa, P. Madureira, P. Conceição, and N. Lourenço
Preliminary data on vesicle size distribution and magma degassing features found in basalts from the Terceira Rift (Azores)
- Z40 EGU2012-10165
K Berlo, VJ van Hinsberg, N Vigouroux, JE Gagnon, and AE Williams-Jones
Metals in melt inclusions and volcanic gases from Kawah Ijen volcano, Indonesia
- Z41 EGU2012-11347
H. Tuffen, J. Owen, and L.J. Applegarth
Measurement of volatile concentrations in volcanic glasses using thermogravimetric analysis: comparison with micro-analytical methods
- Z42 EGU2012-12303
I. Hernández, G. Melian, D. Nolasco, S. Dionis, P Hernández, N. Perez, D. Noehn, D. Nobrega, P. Gonzalez, V.H. Forjaz, and Z. França
Diffuse He degassing from Furnas Volcano, Sao Miguel, Azores

- Z43 EGU2012-12345
J. Barrancos, G. Padilla, E. Padrón, P.A. Hernández, D. Calvo, A. Marquez, N.M. Pérez, G. Melian, S. Dionis, F. Rodríguez, D. Nolasco, and I. Hernández
 Estimated CO₂, SO₂ and H₂S emission to the atmosphere from the 2011 El Hierro submarine eruption (Canary Islands) on the basis of helicopter gas surveys
- Z44 EGU2012-12386
M. Zelenski and Y. Taran
 Volcanic emissions of molecular chlorine
- Z45 EGU2012-13923
I.V. Chaplygin, V.N. Shapar, I.F. Timofeeva, and E.O. Dubinina
 Direct magmatic gas sampling at Gorely volcano (Kamchatka) in 2011
- Z46 EGU2012-13662
R. Moretti
 Ionic-polymeric models and the amphoteric behavior of water in silicate melts
- Z47 EGU2012-10931
E. Padrón, N.M. Pérez, P.A. Hernández, G.V. Melián, G.D. Padilla, J. Barrancos, S. Dionis, F. Rodríguez, D. Nolasco, D. Calvo, I. Hernández, and M.D. Peraza
 Forecasting the 2011 El Hierro submarine eruption (Canary Islands) on the basis of soil He degassing surveys
- Z48 EGU2012-4527
J. Cabassi, F. Tassi, O. Vaselli, J. Fiebig, M. Nocentini, F. Capecchiacci, and D. Rouwet
 Geochemical features of nutrients and dissolved gases in the volcanic lake of Averno (Phlegrean Fields, southern Italy)
- Z49 EGU2012-1204
M. Martínez, E. Fernández, W. Sáenz, M. J. van Bergen, G. Ayres, J. F. Pacheco, J. Brenes, G. Avard, and E. Malavassi
 Connections between hyper-acid crater lakes and flank springs: new evidence from Rincón de la Vieja volcano (Costa Rica)
- Z50 EGU2012-2207
A. Namiki
 An empirical scaling of shear-induced outgassing during magma ascent
- Z51 EGU2012-2479
F. Tassi, J. Cabassi, D. Rouwet, R. Palozzi, M. Marcelli, M. Quartararo, F. Capecchiacci, M. Nocentini, and O. Vaselli
 Seasonal evolution of water and dissolved gas chemistry in monomictic lakes: an example from Paterno sinkhole (Central Italy).
- Z52 EGU2012-10886
K. Klimm, S.C. Kohn, and R.E. Botcharnikov
 The role of Iron on the dissolution of Sulfur in hydrous silicate melts
- Z53 EGU2012-10851
C. Mueller, R. Sieland, B. Merkel, and K. Knoeller
 Hydrothermal water exhalations at the submarine volcano Panarea, Italy - insights from stable isotope investigations
- Z54 EGU2012-5788
C. Cardellini, G. Chiodini, S. Caliro, and F. Frondini
 Origin of the CO₂ rich deep fluids in Italy and associated thermal energy transfer.
- Z55 EGU2012-5595
A. Caracausi, P.M. Nuccio, R. Favara, and F. Grassa
 Carbon sources and biogeochemical processes in Monticchio maar lakes, Mt Vulture volcano (southern Italy): New geochemical constrains of active degassing of mantle derived fluids
- Z56 EGU2012-9160
N. Theys, R. Campion, L. Clarisse, H. Brenot, J. van Gent, P. Coheur, M. Van Roozendael, S. Tait, and F. Ferrucci
 Space-borne constraints on SO₂ fluxes for recent volcanic eruptions in 2011
- Z57 EGU2012-3800
J. Hermann and L. Martin
 CO₂ analysis in high-pressure melts and implications for carbon recycling in subduction zones
- Z58 EGU2012-2761
A. Di Muro, A. Aiuppa, M. Burton, N. Metrich, P. Allard, T. Fougereux, G. Giudice, and R. Guida
 Intra-eruptive gas emissions and shallow magma storage after the 2007 summit caldera collapse of Piton de la Fournaise, Reunion island.
- Z59 EGU2012-10184
M. Liotta, A. Rizzo, A. Paonita, A. Caracausi, and M. Martelli
 Sulfur isotopic composition of fumaroles and plume at Etna volcano (Italy)
- Z60 EGU2012-10262
P. Michael
 Cl and H₂O in mantle-derived magmas: Leveraging geochemical databases with element ratios and proxies

GMPV4.4 – Recent explosive eruptions: Conduit processes, ash dispersal and effects on aviation – Orals

Convener: M.T. Gudmundsson | Co-Conveners: K. Vogfjord, F. Prata, T. Thordarson, C. Witham

Room: 27

Chairperson: Magnus T. Gudmundsson

- 08:30–08:45 EGU2012-13577
S. Hreinsdottir, F. Sigmundsson, M. Roberts, Þ. Árnadóttir, B. Ófeigsson, R. Grapenthin, E. Sturkell, T. Villemin, R. Bennett, and H. Geirsson
 The 2010 Eyjafjallajökull and 2011 Grímsvötn eruptions: Insights from GPS geodesy
- 08:45–09:00 EGU2012-12722
O. Sigmarsson
 Mafic intrusions triggering eruptions in Iceland
- 09:00–09:15 EGU2012-4569
S.F.L. Watt and D.M. Pyle
 The Chaitén 2008 eruption: explosive eruption characteristics and tephra dispersal
- 09:15–09:30 EGU2012-9382
C. Silva Parejas, L.E. Lara, D. Bertin, A. Amigo, and G. Orozco
 The 2011-2012 eruption of Cordón Caulle volcano (Southern Andes): Evolution, crisis management and current hazards
- 09:30–09:45 EGU2012-7760
J.M. Castro, C. I. Schipper, and H. Tuffen
 Simultaneous pyroclastic and effusive venting at rhyolite volcanoes: the cases of Puyehue-Cordón Caulle and Chaitén
- 09:45–10:00 EGU2012-12154
A. Hoskuldsson, M. Gudmundsson, T. Thordarson, B. Óladóttir, O. Sigmarsson, and G. Larsen
 What makes a primary tephra fall?

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-12715
S.A. Carn, K. Yang, and A.J. Prata
 A-Train Satellite Observations of Recent Explosive Eruptions in Iceland and Chile
- 10:45–11:00 EGU2012-6614
A.J. Durant, A.J. Prata, G. Villarosa, W.I. Rose, P. Delmelle, and J. Viramonte
 Long-range volcanic ash transport and fallout during the 2008 eruption of Chaiten volcano, Chile
- 11:00–11:15 EGU2012-7392
K. Turnbull, B. Johnson, S. Newman, L. Clarisse, D. Hurtmans, S. Havemann, F. Marceno, A. Baran, D. O'Sullivan, S. Leadbetter, A. Minikin, B. Weinzierl, H. Schlager, U. Schumann, A. Woolley, and J. Haywood
 In-situ and remote sensing measurements of volcanic ash from airborne and satellite platforms: a case study from the Eyjafjallajökull eruption
- 11:15–11:30 EGU2012-10324
G. Prata, A. Durant, F. Prata, G. Villarosa, J. Viramonte, T. Mather, and D. Pyle
 Transport of fine ash in the southern hemisphere
- 11:30–11:45 EGU2012-9669
G. N. Petersen, H. Bjornsson, Þ. Arason, and S. von Löwis
 Recent eruptions in Iceland from a meteorological perspective
- 11:45–12:00 EGU2012-12854
 A. Vogel, **K. Weber**, J. Eliasson, A. Palsson, H.M. Moser, T. Palsson, S. von Löwis, and C. Fischer
 Airborne and groundbased measurements of ash particles on Iceland and over Germany during the Grímsvötn eruption May 2011

GD5.1/GMPV6.2/SM2.2/TS6.5 – Subduction dynamics from surface to deep mantle (co-organized) – Orals

Convener: S. Buitter | Co-Conveners: F. Funicello, J. van Hunen

Room: 30

Chairperson: Susanne Buitter and Jeroen van Hunen

- 13:30–13:45 EGU2012-5291
S. Goes, F.A. Capitanio, G. Morra, and L. Fourel
 Subduction dynamics: effects of downgoing-plate density and strength

- 13:45–14:00 EGU2012-11837
M. D. Long, K. Paczkowski, L. Montesi, C. Lynner, and B. Foley
Mantle flow beneath subducting slabs from seismological observations and geodynamical models
- 14:00–14:15 EGU2012-2913
A. Paul, G. Salaün, H. Karabulut, H.A. Pedersen, and A. Kömec Mutlu
Traces of subduction and their relation to seismic anisotropy beneath Greece and Turkey: new evidences and questions from seismic tomography
- 14:15–14:30 EGU2012-11873
W. Stratford, C. Peirce, T. Knight, A. Watts, I. Grevemeyer, M. Paulatto, D. Bassett, J. Hunter, and L. Kalnins
Louisville Ridge subduction at the Tonga-Kermadec trench: preliminary velocity models from wide-angle seismics
- 14:30–14:45 EGU2012-3385
R. Klemm, T. John, E.E. Scherer, S. Rondenay, and J. Gao
Changes in dip of subducted slabs at great depth: Petrological and geochronological evidence from oceanic eclogite-facies rocks in the Chinese Tianshan
- 14:45–15:00 EGU2012-7615
R. Khabbaz Ghazian and S. Buitter
A numerical investigation of the sensitivity of continental collision styles
- Chairperson: Francesca Funicello and Susanne Buitter
- 15:30–15:45 EGU2012-14232
A. Rietbrock
Structure, seismogenic properties, and aftershock distribution in the rupture area of the 2010 Maule, Chile, earthquake
- 15:45–16:00 EGU2012-2308
F. Corbi, F. Funicello, M. Moroni, Y. van Dinther, and C. Faccenna
Scaled models of the subduction interplate seismic cycle
- 16:00–16:15 EGU2012-9766
M. Thielmann and B.J.P. Kaus
Shear heating induced lithospheric localization: Does it result in subduction?
- 16:15–16:30 EGU2012-3875
TW Becker, LA Alpert, IW Bailey, and MS Miller
Slab deformation and seismicity
- 16:30–16:45 EGU2012-11690
K. P. Furlong and R. Govers
Partitioning subduction deformation throughout the earthquake cycle: Why Pre-earthquake and co-earthquake deformation patterns don't agree.
- 16:45–17:00 EGU2012-5511
B. Guillaume, C. Gautheron, T. Simon-Labric, J. Martinod, M. Roddaz, and E. Douville
Relief evolution above Patagonian slab window inferred from low-temperature thermochronology: subduction or climate?

ERE5.3/GMPV6.7/HS8.2.8/SS5.22 – Coupled Physical and Chemical Transformations Affecting the Performance of GeoSystems (co-organized) – Orals

Convener: H. Holländer | Co-Conveners: P. Alt-Epping, J. M. Soler, J. Taron, G. Kosakowski

Room: 19

Chairperson: Hartmut Holländer

- 13:30–14:00 EGU2012-6910
M.C. Hill, D. Kavetski, M.P. Clark, M. Ye, C.R. Tiedeman, M. Arabi, and D. Lu
Knowledge, transparency, refutability, and consequences: Using models to evaluate geologic repositories
- 14:00–14:15 EGU2012-5069
M. Kelly, **A. Carter**, L. Bailey, and M. Wellstead
Development of an Insight Model for Post-closure Radiological Risks from the Disposal of High-level Waste and Spent Fuel
- 14:15–14:30 EGU2012-1665
J.-O. Selroos, H. Cheng, S. Painter, and P. Vidstrand
Radionuclide transport during glacial cycles: Comparison of two different approaches for handling flow transients
- 14:30–14:45 EGU2012-9217
K. Beerten, M. De Craen, and S. Brassinnes
Constraints for estimating the future burial depth of host rocks for geological waste disposal: a case study from the Boom Clay, Campine area, Northern Belgium

- 14:45–15:00 EGU2012-3812
V.M. Yarushina, D. Bercovici, and M.L. Oristaglio
 Effect of rock rheology on fluid leak-off during hydraulic fracturing
 Chairperson: Peter Alt-Epping
- 15:30–15:45 EGU2012-1758
Y. Gensterblum, M. Sartorius, A. Busch, D. Cumming, and B.M. Krooss
 CO₂-ECBM related coupled physical and mechanical transport processes
- 15:45–16:00 EGU2012-363
P. Gamazo, J. Carrera, M.W. Saaltink, L. Slooten, C. Ayora, and S. Bea
 Modeling the influence of geochemical processes on multiphase fluid dynamics for concentrated solutions under dry conditions.
- 16:00–16:15 EGU2012-11374
K. De Pourcq, C. Ayora, J. Carrera, M. García-Gutiérrez, T. Missana, and M. Mingarro
 Reactive transport modeling for Cs retention: from batch to field experiments
- 16:15–16:30 EGU2012-2640
L. Haffert and M. Haeckel
 The effect of strong salinity and temperature gradients on transport processes and the formation of bathyal authigenic gypsum at a marine mud volcano
- 16:30–16:45 EGU2012-6242
A. Budek and P. Szymczak
 Network models of dissolution and precipitation of porous media
- 16:45–17:00 EGU2012-10509
P. Hron, D. Jost, C. Engwer, O. Ippisch, and P. Bastian
 Numerical Simulation of Microbiological Growth in the Capillary Fringe

ERE5.3/GMPV6.7/HS8.2.8/SSS5.22 – Coupled Physical and Chemical Transformations Affecting the Performance of GeoSystems (co-organized) – Posters

Convener: H. Holländer | Co-Conveners: P. Alt-Epping, J. M. Soler, J. Taron, G. Kosakowski

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL32 EGU2012-4849
 L. Bailey, **H. Clark**, and M. Wellstead
 Development of an Environmental Safety Case for a Geological Disposal Facility in the UK
- XL33 EGU2012-7131
M.-H. Derron and M. Jaboyedoff
 Regional scale mapping of sub-surface water-rock interactions
- XL34 EGU2012-9627
M. Biafore and the REWARD Team
 Real Time Wide Area Radiation Surveillance System
- XL35 EGU2012-8208
B. Leterme
 Climate change in safety assessment of a surface disposal facility
- XL36 EGU2012-5029
H. Clark, L. Bailey, and A. Parkes
 Interpretation and Modelling of Data from Site Investigations for a Geological Disposal facility located in the UK
- XL37 EGU2012-7080
Y. Jin, Y. Konno, and J. Nagao
 Spectroscopic study of formation and dissociation processes of methane hydrate in porous media
- XL38 EGU2012-7129
Y. Konno, Y. Jin, and J. Nagao
 Measurements of Gas-Water Relative Permeability for Methane-Hydrate-Bearing Sediments using X-ray Computed-Tomography
- XL39 EGU2012-7496
J. Nagao, H. Oyama, Y. Konno, and Y. Jin
 Development of a Large-Scale Laboratory Vessel for Methane Hydrate Production Tests
- XL40 EGU2012-7196
M. Gedeon, K. Vandersteen, and B. Rogiers
 Estimation of aquifer radionuclide concentrations by postprocessing of conservative tracer model results

- XL41 EGU2012-7241
M. Gedeon and D. Mallants
Comparison between a steady-state and a transient flow model and related radionuclide concentration predictions
- XL42 EGU2012-9341
C. Bube, V. Metz, D. Schild, E. Bohnert, and B. Kienzler
Long-term cement-corrosion in chloride-rich solutions - a thermodynamic interpretation
- XL43 EGU2012-2651
M. E. Houben, **B. Laurich**, G. Desbois, and J.L. Urai
Microstructure and porosity of Opalinus Clay at the Mont Terri rock laboratory (Switzerland)
- XL44 EGU2012-941
S. De Simone, V. Vilarrasa, and J. Carrera
Fracture instability caused by cold water injection
- XL45 EGU2012-1094
J. M. Soler
Reactive transport modeling of concrete-clay interaction: The DM borehole at Tournemire.
- XL46 EGU2012-2642
G. Kosakowski, D.A. Kulik, and H. Shao
OpenGeoSys-GEMS: Hybrid parallelization of a reactive transport code with MPI and threads
- XL47 EGU2012-1760
H. Shao, **G. Kosakowski**, U. Berner, D. Kulik, U. Mäder, and O. Kolditz
Is the clogging process in Maqarin natural analogue controlled by accessory clay minerals? A reactive transport study with new data.
- XL48 EGU2012-12088
P. Alt-Epping, B.S.G. Almqvist, and L.W. Diamond
Coupled numerical simulations of CO₂ injection into the carbonate aquifer of the Upper Muschelkalk, N-Switzerland
- XL49 EGU2012-2650
M. Hayek, **G. Kosakowski**, A. Jakob, and S. Churakov
Benchmarking of numerical codes against analytical solutions for multidimensional multicomponent diffusive transport coupled with precipitation-dissolution reactions and porosity changes
- XL50 EGU2012-4605
N. Blundell, **M. O. Cuthbert**, M. S. Riley, S. Handley-Sidhu, and J. C. Renshaw
Engineering biomineralised groundwater flow barriers for inhibiting radionuclide transport in fractured rocks
- XL51 EGU2012-9340
T. Gimmi and A. Jakob
Assessing conceptual errors and parameter errors of a transport model used for analysing a field diffusion experiment
- XL52 EGU2012-1607
J. M. Soler, M. Vuorio, and A. Hautojärvi
High-pH plume from fracture grouting. Application to low-pH-cement grouting at ONKALO (Finland).
- XL53 EGU2012-13444
J Samper, A. Mon, L. Montenegro, A. Naves, and B. Pisani
Thermal-hydrodynamic-geochemical models of engineered clay barriers
- XL54 EGU2012-3090
M. G. Davila Ordoñez, M. García Rios, J.M Soler, and J. Cama
Modeling dolomite - brine interaction in the context of geological CO₂ sequestration
- XL55 EGU2012-5097
E. Torres, C. Ayora, J.L. Arias, E. Garcia_Robledo, S. Papaspyrou, and A. Corzo
Diffusion-reaction modelling of early diagenesis of sediments affected by acid mine drainage.
- XL56 EGU2012-6368
J. M. Galíndez and C. Steefel
Incorporating surface phenomena into solute transport through compacted clays - Application of the Poisson-Nernst-Planck set of equations
- XL57 EGU2012-10965
J. Schikora, J. Kulenkampff, M. Gründig, and J. Lippmann-Pipke
Modelling and Simulation of 4D GeoPET Measurements with COMSOL Multiphysics 4.2a

GD6.1/GMPV6.13/SM4.5 – Whole mantle and transition zone structure, dynamics and evolution: multidisciplinary perspectives (co-organized) – Posters

Convener: P. Tackley | Co-Conveners: C. Thomas, J. H. Davies

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL193 EGU2012-9256
C. Thomas
Lower mantle scattering observations at temporary arrays
- XL194 EGU2012-12020
P. J. Tackley
The Death of Slabs and Segregation of Basalt at the Core Mantle Boundary: Influence of Crustal Thickness, Viscosity and Thermal Conductivity
- XL195 EGU2012-11466
U. Hansen and S Dude
Self organized layering in the Earth's mantle, phase- and compositional boundary layers
- XL196 EGU2012-6310
J. Dannberg and S.V. Sobolev
Dynamics of thermo-chemical mantle plumes and their influence on surface topography
- XL197 EGU2012-7776
N. Tosi, D. Yuen, R. Wentzcovich, and N. deKoker
Mantle Dynamics Studied with Parameterized Prescription From Mineral Physics Database
- XL198 EGU2012-5664
A. Biggin, B Steinberger, J Aubert, N Suttie, R Holme, T Torsvik, D van der Meer, and D van Hinsbergen
Long term geomagnetic variations and whole-mantle convection processes
- XL199 EGU2012-3182
J. Julià and A.A. Nyblade
Probing the upper mantle transition zone under Africa with P520s conversions: Implications for temperature and composition.
- XL200 EGU2012-7903
L. Vinnik, G. Silveira, S. Kiselev, V. Farra, M. Weber, and E. Stutzman
Architecture of the Cape Verde hotspot: implications for properties of the transition zone
- XL201 EGU2012-10045
B. Knapmeyer-Endrun, F. Krüger, and PASSEQ Working Group
Changes in the mantle transition zone from central Europe to the East European Craton as seen by receiver functions
- XL202 EGU2012-4606
M. Dec, M. Malinowski, B. Nita, and E. Perchuc
Seismic imaging of the upper mantle beneath the border of the North American Craton based on USArray data
- XL203 EGU2012-7740
F. Cramer, P.J. Tackley, I. Meilick, T.V. Gerya, and B.J.P. Kaus
Slab-mantle interactions in simulations of self-consistent mantle convection with single-sided subduction
- XL204 EGU2012-6051
T. Rolf, N. Coltice, and P. J. Tackley
Linking continental drift, plate tectonics and the thermal state of the Earth's mantle
- XL205 EGU2012-2170
M.F. Osmaston
Did clockwise rotation of Antarctica cause the break-up of Gondwanaland? An investigation in the 'deep-keeled cratons' frame for global dynamics

SM5.7/GMPV6.14/NH2.3 – Electromagnetic, seismic and other geophysical methods applied to volcano imaging and monitoring for hazard assessment (co-organized) – Orals

Convener: M. Miensopust | Co-Conveners: M. Hensch, A. G.. Jones

Room: 2

Chairperson: Marion Miensopust, Martin Hensch

- 13:30–13:45 EGU2012-249
S. Aivazpourporgou, S. Thiel, P. Hayman, L. Moresi, and G. Heinson
Thermal structure of the Newer Volcanic Province, Western Victoria, Australia from a long period Magnetotelluric (MT) array
- 13:45–14:00 EGU2012-12153
P. Wawrzyniak, J. Zlotnicki, P. Sailhac, and G. Marquis
Resistivity variations associated with the 1998 large eruption at La Fournaise volcano inferred by continuous MT monitoring
- 14:00–14:15 EGU2012-8423
M. Hensch, B. Brandsdóttir, Th. Árnadóttir, and S. Cesca
Intrusive activity beneath Eyjafjallajökull: Moment- and Stress-Tensor-Inversion of volcanic earthquakes to constrain driving forces of the 2010 eruption

- 14:15–14:30 EGU2012-9804
F. Fuchs, M. Lupi, S. S. Jakobsdóttir, T. Thordarson, and S. A. Miller
 Seismicity revealed in the Snaefellsnes Volcanic Zone, Iceland
- 14:30–14:45 EGU2012-2039
C. Huebscher, M. Ruhnau, and G.A. Dehghani
 Frequent underwater volcanism in the central Aegean Sea
- 14:45–15:00 EGU2012-14405
C.B Papazachos, D. Panagiotopoulos, A.V. Newman, S. Stiros, G. Vougioukalakis, M. Fytikas, T. Laopoulos, K. Albanakis, D. Vamvakaris, E. Karagianni, L. Feng, P. Psimoulis, and F. Moschas
 Quantifying the current unrest of the Santorini volcano: Evidence from a multiparametric dataset, involving seismological, geodetic, geochemical and other geophysical data

SM5.7/GMPV6.14/NH2.3 – Electromagnetic, seismic and other geophysical methods applied to volcano imaging and monitoring for hazard assessment (co-organized) – Posters

Convener: M. Miensopust | Co-Conveners: M. Hensch, A. G.. Jones

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Marion Miensopust, Martin Hensch

- A401 EGU2012-13537
 M. G. Di Giuseppe, A. Troiano, C. Troise, and **G. De Natale**
 Cluster analysis applied to multiparameter geophysical dataset
- A402 EGU2012-10082
K. Meier, M. Hort, and J. Wassermann
 Non-Poissonian Nature of Strombolian Surface Activity at Yasur Volcano, Vanuatu
- A403 EGU2012-5281
A. Siniscalchi, S. Tripaldi, M. Neri, M. Balasco, G. Romano, J. Ruch, and D. Schiavone
 Flank instability structure of Mt Etna inferred by a magnetotelluric survey
- A404 EGU2012-11673
A. Efstathiou, A. Tzanis, S. Chailas, E. Lagios, and M. Stamatakis
 High resolution imaging of the Methana volcanic complex, Greece, with magnetotelluric and aeromagnetic data
- A405 EGU2012-7637
A. Novák, Sz. Harangi, B. Kiss, L. Szarka, and Cs. Molnár
 Combined magnetotelluric and petrologic constrains for the nature of the magma storage system beneath the Ciomadul volcano (SE Carpathians)
- A406 EGU2012-9377
M. Neukirch, X. Garcia, S. Galiana, and E. Roux
 GarField - A MT Survey of the Crustal Structure of the Intraplate Volcanic Region La Garrotxa, Northwestern Spain
- A407 EGU2012-5861
M.P. Miensopust, A.G. Jones, G.P. Hersir, and A.M. Vilhjálmsson
 The resistivity structures around and beneath the Eyjafjallajökull volcano, Southern Iceland: first insides from electromagnetic investigations
- A408 EGU2012-6814
T. J. Lee, J. Yang, J. Choi, S. K. Lee, and Y. Song
 The sea effect in 3D magnetotelluric data obtained in Jeju Island, Korea
- A409 EGU2012-7101
S. Ballmer, C.J. Wolfe, P.G. Okubo, M.M. Haney, and C.H. Thurber
 Studying temporal velocity changes with ambient seismic noise at Hawaiian volcanoes
- A410 EGU2012-1312
K. Whaler, N.E. Johnson, M. Desissa, S. Hautot, S. Fisseha, and G.J.K. Dawes
 Large mantle magma volumes imaged magnetotellurically beneath an active magmatic segment in Afar, Ethiopia
- A411 EGU2012-4870
J. Zlotnicki, F. Li, and M. Parrot
 Detection of electromagnetic anomalies related to volcanic eruptions by DEMETER micro-satellite: August 2004 - December 2010
- A412 EGU2012-5762
H. Brenot, N. Theys, J. van Gent, M. Van Roozendaal, R. van der A, L. Clarisse, D. Hurtmans, Y. Ngadi, P.-F. Coheur, and C. Clerbaux
 Global multi-sensor satellite monitoring of volcanic SO₂ and ash emissions in support to aviation control

TS10.2/GD3.10/GMPV6.19/SM2.10 – Geodynamics of the westernmost Mediterranean and NW Africa (co-organized) –

Posters

Convener: C. J. Garrido | Co-Conveners: G. Booth-Rea, J. Galindo-Zaldivar, A. Chalouan, R. Carbonell, A. Levander, C. R. Ranero, V. Sallares, R. de Franco, N. Zitellini

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: GV. Sallares, Galindo-Zaldivar, A. Chalouan, A. Levander, R. de Franco, N. Zitellini

- A455 EGU2012-4793
F. Mancilla, D. Stich, J. Morales, J. Julià, J. Diaz, A. Pazos, D. Córdoba, J. A. Pulgar, P. Ibarra, M. Harnafi, and F. Gonzalez-Lodeiro
Crustal Thickness in the Ibero-Maghrebian region I: Northern Morocco
- A456 EGU2012-11349
F. Mancilla, D. Stich, **J. Morales**, R. Martin, J. Diaz, A. Pazos, D. Córdoba, J. A. Pulgar, P. Ibarra, M. Harnafi, and F. Gonzalez-Lodeiro
Crustal Thickness in the Ibero-Maghrebian region II: Southern Iberia Peninsula
- A457 EGU2012-8281
I. Jiménez-Munt, M Fernandez, and S. Zlotnik
Combined underthrusting and mantle dripping - lateral dragging controlling the lithosphere structure of the NW-Moroccan margin and the Atlas Mountains
- A458 EGU2012-5607
A. Siniscalchi, **G. Romano**, A. Jones, J. Ledo, J. Companyà, and D. Kiyani
Electrical signature of the Marrakech High Atlas: new insights from the TopoMed broad band magnetotelluric experiment.
- A459 EGU2012-7105
D. Bosch, R. Maury, M. El Azzouzi, F. Parat, and H. Bellon
Neogene-Quaternary Middle Atlas basaltic province (Morocco): Isotope constraints
- A460 EGU2012-7294
A. M. Alvarez-Valero, O. Jagoutz, and C. Manthei
Rapid crustal exhumation and mantle-melt extraction: Where has the crust gone?
- A461 EGU2012-3893
J.M González-Jiménez, C Marchesi, W.L. Griffin, R Gutiérrez-Narbona, J.-P Lorand, S.Y O'Reilly, C.J. Garrido, F Gervilla, and N.J. Pearson
A 1-Ga history of melting in the western Mediterranean Subcontinental Lithospheric Mantle recorded in chromitites from the Ojén Ultramafic Massif (SW Spain)
- A462 EGU2012-12929
Z. Konc, C. Marchesi, C. J. Garrido, J. M. González-Jiménez, W. L. Griffin, O. Alard, K. Hidas, S. Y. O'Reilly, and N. Pearson
Provenance and evolution of the western Mediterranean lithospheric mantle beneath the eastern Betics (S. Spain): insights from in-situ analyses of Os isotopes and platinum-group elements in sulphides from the Tallante mantle xenoliths
- A463 EGU2012-9056
Z. Konc, C. J. Garrido, A. Tommasi, J. A. Padron Navarta, K. Hidas, D. Bosch, C. Marchesi, and Cs. Szabó
Age, origin and significance of SKS splitting in SE Iberia: insights from mantle xenoliths from Neogene alkaline basalts
- A464 EGU2012-2545
L. Alpert, **T.W. Becker**, M. Miller, and A. Allam
Mantle structure beneath the Alboran Sea from shear wave splitting
- A465 EGU2012-7719
A. Martí, O. Rosell, P. Queralt, J. Ledo, A. Marcuello, and E. Roca
Are the geoelectric structures of the Betics lithosphere anisotropic? Insights from a complete dimensionality analysis of magnetotelluric data
- A466 EGU2012-2004
L. Bonatto, M. Schimmel, J. Gallart, and J. Morales
Using Cross-Correlation to Detect Upper Mantle Phases beneath Spain and Morocco
- A467 EGU2012-8387
A. Carballo, M. Fernández, and I. Jiménez-Munt
A lithospheric cross-section in the Western Mediterranean: from the Aquitanian/Ebro basins to north Algeria
- A468 EGU2012-5847
J. Gallart, R. Carbonell, J. Diaz, A. Gil, M. Ruiz, M. Harnafi, L. Elmoudnib, D. ElOuai, A. Levander, I. Palomeras, D. Cordoba, and F.J. Alonso-Chaves
Crustal structure beneath the Rif Cordillera, North Morocco, from active seismic profiling
- A469 EGU2012-6474
A. Villaseñor, M. Maceira, J. Gallart, and TOPO-IBERIA Working Group
Crustal structure of the Iberian Peninsula and Morocco obtained by joint inversion of seismic and gravity data

- A470 EGU2012-9114
L. Cowie and N. Kuszniir
Crustal Thickness and the Distribution of Oceanic Lithosphere in the Western Mediterranean from Gravity Inversion
- A471 EGU2012-12180
F. Mancilla, **B. Heit**, D. Stich, X. Yuan, J. Morales, and R. Kind
HiRe: a High Resolution seismological project to study the crustal structure variations underneath Sierra Nevada Mountains and the surrounding areas, Betic range, Southern Spain.
- A472 EGU2012-10323
M. Prada, V. Sallares, C.R. Ranero, M. Guzman, N. Zitellini, I. Grevemeyer, R. de Franco, and MEDOC Cruise Party
Deep structure of the Tyrrhenian basin from 2-D joint refraction and reflection travel-time tomography of wide angle seismic data
- A473 EGU2012-12990
C. R. Ranero, E. Gràcia, and T h e Geomargen-I cruise party
Tectonic Structure of the Imbricated Wedge of the Gulf of Cadiz (Gibraltar Arc) revealed from new seismic images of the Geomargen-I cruise.
- A474 EGU2012-13023
C. R. Ranero, E. Gràcia, and T h e TOPOMED-GASSIS cruise party
Imaging the Gibraltar Arc system across the Alboran Sea and South Balearic Basin (South Iberia): Results of the TOPOMED-GASSIS cruise
- A475 EGU2012-8795
I. Grevemeyer, **C.R. Ranero**, D. Pesquer, and J. Gallart
Slab rollback and continental break-up in a convergent setting - seismic structure of passive continental margins in the Western Mediterranean Sea
- A476 EGU2012-11994
F. Giaconia, M. Guzman Vendrell, G. Booth-Rea, C.R. Ranero, E. Gràcia, C. Lo Iacono and the TOPOMED survey party Team
Structure of the Palomares margin from preliminary results of the TOPOMED-GASSIS seismic survey (Algero-Balearic basin, Western Mediterranean)
- A477 EGU2012-6159
G. Booth-Rea, F. Giaconia, J.M. Martínez-Martínez, J.M. Azañón, and C. R. Ranero
Late Miocene east- to southeast-directed extension in the Betics and its role in the development of the Algero-Balearic basin (Southeastern Betics).
- A478 EGU2012-6083
K. Hidas, C.J. Garrido, G. Booth-Rea, J.M. Martínez-Martínez, J.A. Padrón-Navarta, Z. Konc, F. Giaconia, E. Frets, and C. Marchesi
Backarc basin inversion leading to folding, shearing and intracrustal emplacement of the subcontinental lithospheric mantle: a structural study from the Ronda Peridotite Massif (Betic Cordillera, Southern Spain)
- A479 EGU2012-7792
A. Jabaloy Sánchez, G. Booth-Rea, A. Azdimousa, L. Asebriy, M. Vázquez-Vílchez, J. M. Martínez-Martínez, and J. Gabites
40Ar/39Ar constraints on the activity of the Tamsamani extensional detachment (eastern Rif, Morocco)
- A480 EGU2012-9783
E. d'Acremont, C. Gorini, M. El Abbassi, M. Farran, S. Leroy, B. Mercier de Lépinay, S. Migeon, **J. Poort**, A. Ammar, J. Smit, D. Do Couto, G. Ercilla, and B. Alonso
Past and present active sedimentation and tectonics in the South Alboran Sea
- A481 EGU2012-12746
D. Do Couto, C. Gorini, L. Jolivet, J. Letouzey, J. Smit, E. d'Acremont, J.L. Auxietre, L. Le Pourhiet, F. Estrada, M. Elabassi, A. Ammar, H. Jabour, and B. Vendeville
Evolution of a Miocene sag basin in the Alboran Sea
- A482 EGU2012-12306
F. J. González, L. Somoza, T. Medialdea, R. León, T. Torres, J. E. Ortiz, and J. A. Martín-Rubí
Discovery of ferromanganese hydrocarbon-related nodules associated with the Meknes mud volcano (Western Moroccan margin)
- A483 EGU2012-7180
C. Caricchi, L. Aldega, F. Cifelli, S. Corrado, M. Mattei, and F. Speranza
First results from paleomagnetic and paleothermal analyses on internal Tertiary deposits (Tuscan Unit) of the Northern Apennines Chain

TS1.1 – Open Session: Tectonics and Structural Geology (co-listed) – Posters

Convener: F. Storti | Co-Conveners: S. Buiter

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Fabrizio Storti and Susanne Buiter

- A413 EGU2012-2078
I.D. Bastow, R.S.M. De Plaen, and R.J. Gallacher
The Nature of the Cameroon Volcanic Line: Evidence from Seismic Anisotropy and Receiver Functions
- A414 EGU2012-5053
H. Otsuka, J. Ashi, S. Morita, and M. Tanahashi
Attempt to estimate uplift process of outer ridge taking account of distribution and geometry of Foldback Reflectors
- A415 EGU2012-9801
C.-Y. Hsieh, K.-M. Yang, and B.-I. Chuang
Trishear model and kinematics of a fault-related structure in the frontal part of Fault-and-thrust belt, NW Taiwan
- A416 EGU2012-2555
Y.T. Lo and H.Y. Yen
Gravity data inversion for 3D topography of the Moho discontinuity by separation of sources in Taiwan region
- A417 EGU2012-8177
K.-M. Yang, J.-C. Wu, E.-W. Cheng, Y.-R. Chen, W.-C. Huang, C.-C. Tsai, J.-B. Wang, and H.-H. Ting
Development of Tectonostratigraphy in Distal Part of Foreland Basin in Southwestern Taiwan
- A418 EGU2012-492
J. Ukass, T. Saks, and K. Popovs
Thickness Reconstruction of Layers by 3D Geometrical Model to Characterize Caledonian Tectonic Complex and Data in Latvia
- A419 EGU2012-4846
H. Kranis, E. Skourtsos, L. Gouliotis, and S. Lozios
Structural Setting and Upper Quaternary landscape evolution at Delphi, Central Greece
- A420 EGU2012-5032
J. Scheibz, H. Haeusler, F. Kohlbeck, W. Chwatal, and C. Koenig
High resolution geophysics reveal a new Neogene basin southeast of the Leitha Mountains - The Winden Syncline (Burgenland, Austria)
- A421 EGU2012-5201
H. Häusler
Contribution to the discussion of folded Pannonian strata in the Southern Vienna Basin
- A422 EGU2012-2623
J. E. Reber, O. Galland, M. Dabrowski, D. W. Schmid, and P. R. Cobbold
On the usefulness of sheath folds as kinematic indicators
- A423 EGU2012-5359
L. Rodriguez, J. Cuevas, and J. M. Tubía
Paleozoic-involving thrust array in the central Sierras Interiores (South Pyrenean Zone, Central Pyrenees): regional implications
- A424 EGU2012-5422
L. Rodriguez, J. Cuevas, and J. M. Tubía
Structure of the Anayet Permian basin (Axial Zone, Central Pyrenees)
- A425 EGU2012-8223
C. García-Lasanta, B. Oliva-Urcia, T. Román-Berdiel, A. Casas-Sainz, I. Gil-Peña, Y. Sánchez-Moya, and A. Sopena
Tectonically controlled magnetic fabrics in the Iberian Triassic basin
- A426 EGU2012-10979
M.R. Barchi, G. Lena, W. Alvarez, F. Felici, and A. Lupattelli
Mesoscopic S-C fabrics in shallow fault zones: a case history from the Umbria-Marche Apennines (Central Italy)
- A427 EGU2012-11423
F. Bucci, R. Novellino, I. Adurno, E. Gueguen, F. Guzzetti, M. Cardinali, E. Tavarnelli, P. Guglielmi, and G. Prosser
Low Angle Extensional Faults in a Thrusting/Compressive Regime
- A428 EGU2012-7977
L. Gonzalez and **O.A. Pfiffner**
The Central Andes of Peru: Structure and Evolution
- A429 EGU2012-10923
J.M. Tubía, F.D. Hongn, A. Aranguren, and N. Vegas
Inversion tectonics in the pre-andean basement of the Sierra de Cachi (Salta, Argentina)
- A430 EGU2012-4811
O. Bolle, H. Diot, J. Bascou, and B. Charlier
Anisotropy of magnetic susceptibility in the giant Lac Tio hemo-ilmenite ore body (Quebec Province, Canada): source and geological implications

- A431 EGU2012-10272
T. Torvela, J. Moreau, R.W.H. Butler, A. Korja, and P. Heikkinen
Toward detailed structural analysis of seismic reflection data from crystalline basement: the seismic attribute approach
- A432 EGU2012-3518
G. Berberich, D. Klimetzek, C. Wöhler, and A. Grumpe
Statistical Correlation between Red Wood Ant Sites and Neotectonic Strike-Slip Faults
- A433 EGU2012-9123
D. Herwartz, T.J. Nagel, S. Sandmann, A. Vitale Brovarone, S. Rexroth, Y. Rojas-Agramonte, N. Froitzheim, A. Kröner, S.G. Skublov, and C. Münker
Traditional applications and novel approaches in Lu-Hf geochronology
- A434 EGU2012-11615
M. Leitner, S. Tschürtz, G. Kirchengast, H. Kranzelbinder, B. Prügger, R.A. Krause, M. Kalliokoski, and E. Thórhallsdóttir
Greenland Expeditions by Alfred Wegener - A photographic window to past

Friday, 27 April

GMPV1.1/GD2.6 – Origin, evolution of Earth's crust and the formation of a habitable planet (co-sponsored by the European Association of Geochemistry (EAG)) (co-organized) – Orals

Convener: M. Boyet | Co-Conveners: B. Dhuime, Jeff Vervoort, J. van Hunen, J. Tarduno, K.O. Konhauser

Room: 31

Chairperson: John Tarduno, Maud Boyet

- 08:30–08:45 EGU2012-11698
S. J. Daines, J. R. Clark, and T. M. Lenton
 Oxygenation of the surface ocean, global methanotrophy, and the Great Oxidation
- 08:45–09:00 EGU2012-6351
P. Driscoll and D. Bercovici
 Stabilizing planetary evolution through the coupling of magnetic field, surface tectonics, and atmosphere
- 09:00–09:15 EGU2012-3644
P. Philippot, M. van Zuilen, and C. Rollion-Bard
 Episodes of massive felsic volcanism between 3.5 and 3.2 Ga deposited sulfate on early Earth
- 09:15–09:30 EGU2012-1766
M. Reitsma, U. Schaltegger, R. Spikings, A. Ulianov, A. Gerdes, and M. Chiaradia
 Relating geodynamic setting to periods of crustal growth and reworking as illustrated by the Phanerozoic granitoids of the Eastern Cordillera of South Peru
- 09:30–09:45 EGU2012-4483
S. Claesson, E. Bibikova, L. Shumlyanskyy, and C.J. Hawkesworth
 Early Archean crust in the Ukrainian Shield - U-Pb and Hf isotopic constraints
- 09:45–10:00 EGU2012-2073
I.D. Bastow, D.A. Thompson, J-M. Kendall, G. Helffrich, J. Wookey, D. Snyder, D. Eaton, and F. Darbyshire
 HuBLE-UK: the Hudson Bay Lithospheric Experiment: Insights into the Formation of the Canadian Shield From Broadband Seismology

COFFEE BREAK

Chairperson: Bruno Dhuime, Jeff Vervoort

- 10:30–11:00 EGU2012-3792
M.J. Van Kranendonk
 EAG Eminent Speaker: Two types of Archean continental crust: plume and plate tectonics on early Earth
- 11:00–11:15 EGU2012-663
O. Laurent, H. Martin, R. Doucelance, and J.F. Moya
 Diversity of late-Archaean high-K granitoids record the evolution of crustal growth processes
- 11:15–11:30 EGU2012-8217
J.E. Hoffmann, C. Münker, T.J. Nagel, T. Næraa, A. Polat, and M.T. Rosing
 The tholeiite-TTG connection during Eoarchean crust formation in Isua, southern West Greenland: the role of subduction processes
- 11:30–11:45 EGU2012-10217
T. J. Nagel, J. E. Hoffmann, and C. Münker
 Eoarchean TTGs derived from thickened mafic arc crust
- 11:45–12:00 EGU2012-808
H. Rizo, M. Boyet, J. Blichert-Toft, M. Rosing, and J.L. Paquette
 Variation in $^{142}\text{Nd}/^{144}\text{Nd}$ of Archean rocks from southwest Greenland : Implications for early Earth mantle dynamics

LUNCH BREAK

Chairperson: Jeroen van Hunen, Jeff Vervoort

- 13:30–13:45 EGU2012-11135
M. Boyet, R. Carlson, L. Borg, J. Connelly, and M. Horan
 Early differentiation of the silicate Earth : new constraints from isotopic investigation of rocks from the lunar highlands

- 13:45–14:00 EGU2012-12498
J.D. Vervoort, A.I.S. Kemp, and P.J. Patchett
 Evolution of the depleted mantle and growth of the continental crust: improving on the imperfect detrital zircon record
- 14:00–14:15 EGU2012-3794
M.J. Van Kranendonk and C.L. Kirkland
 The stepwise growth of tectonic plates across Earth's evolving supercontinent cycle
- 14:15–14:30 EGU2012-799
C. Spencer, P. Cawood, C. Hawkesworth, and B. Dhuime
 Not all supercontinents are created equal: Nd and Hf depleted mantle model ages reveal fundamental differences in the assembly of Rodinia and Gondwana
- 14:30–14:45 EGU2012-5395
B. Dhuime, C.J. Hawkesworth, and P.A. Cawood
 Timing, rates and geodynamical conditions of continental crust generation, destruction and reworking
- 14:45–15:00 EGU2012-3062
R.L. Rudnick and X.M. Liu
 Constraints on continental crustal mass loss via chemical weathering using lithium and its isotopes

GMPV1.4/ERE3.5 – Elements critical to 21st century economies (co-sponsored by the Society of Economic Geologists (SEG), Society for Geology Applied to Mineral Deposits (SGA), and by the European Association of Geochemistry (EAG)) (co-organized) – Posters

Convener: R. Herrington | Co-Conveners: L. Fontbote, Y. Watanabe

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Y Watanabe

- XL188 EGU2012-1031
A. Jimenez
 Sulfur isotope study of the Velardeña skarn (Zn-Pb), Durango, Mexico
- XL189 EGU2012-5157
M. Kumral, A. Karada?, M. Soyal, ?. Caran, A.K. Akay, S.B. Karabel, N. Elmas, M. Karaman, and M. Budakoglu
 Excess Nd and Eu Concentrations Discovered in Chromite Deposits from the Beyagaç District, Denizli region, SW Turkey
- XL190 EGU2012-6294
E. L. Iatan and Gh. C. Popescu
 Preliminary mineralogical data on epithermal ore veins associated with Rosia Poieni porphyry copper deposit, Apuseni Mountains, Romania
- XL191 EGU2012-8442
T.M. Sushchevskaya, J.A. Popova, T.A. Velivetskaya, A.V. Ignatiev, S.S. Matveeva, and O.A. Limantseva
 Mixing of fluids in hydrothermal ore-forming (Sn,W) systems: stable isotope and rare earth elements data
- XL192 EGU2012-11387
K. Högdahl, E. Jonsson, V. Troll, and J. Majka
 The mineral treasure that almost got away: Re-evaluating yesterday's mine waste
- XL193 EGU2012-11611
A. Vishiti, S. Petersen, C.E. Suh, and C.W. Devey
 Arsenian pyrite-bearing altered volcanics dredged SE of Cheshire Seamount Woodlark Basin, Papua New Guinea.
- XL194 EGU2012-10315
A. Sakaguchi, T. Sugiyama, A. Usui, and Y. Takahashi
 Enrichment mechanisms of tellurium in ferromanganese crusts
- XL195 EGU2012-4402
M. E. Cioaca and M. Munteanu
 The present state of knowledge on the high-technology elements in porphyry copper deposit from Romania
- XL196 EGU2012-2280
J.L. Vignerresse, O. Bachmann, C. Huber, A. Parmigiani, J. Dufek, and E. Campos
 Ore formation in porphyry-type deposits during incrementally built magma chamber and fluid sparging
- XL197 EGU2012-3978
M. Hoshino, Y. Watanabe, H. Murakami, Y. Kon, and M. Tsunematsu
 Crystallization process of zircon and fergusonite during hydrothermal alteration in Nechalacho REE deposit, Thor Lake, Canada
- XL198 EGU2012-11121
C. Marignac and M. Cuney
 Evidence of Nb-Ta mobility in high temperature F-rich fluids evidenced by the La Bosse quartz-Nb-ferberite stockwork (Echassières, French Massif Central).

- XL199 EGU2012-730
S. Moldoveanu, O.G. Iancu, and H.U. Kasper
 Mineralogy and geochemistry of trace and Rare Earth Element from the Manaila massive sulphide deposit (Eastern Carpathians, Romania)
- XL200 EGU2012-4587
A.S Walters, H.S.R Hughes, K.M Goodenough, A.G Gunn, and A Lacinska
 Rare earth mineralisation in the Cnoc nan Cuilean intrusion of the Loch Loyal Syenite Complex, northern Scotland
- XL201 EGU2012-9271
T. Takagi
 The modes of occurrence of rare-earths ores and the issues on their beneficiation processes
- XL202 EGU2012-7482
N. Mondillo, M. Boni, G. Balassone, and G. Rollinson
 REE in karst bauxites: the Campania example (southern Italy)
- XL203 EGU2012-7589
C. Oztürk, E. Varol, and T. Ünlü
 Geochemistry of Chromite Occurrences of Divrigi Area, Turkey
- XL204 EGU2012-6673
M. Calibo, R. Ong, J. Leong, P. Benavidez, C. Arcilla, and J. Rafols
 Investigation of Philippine Garnierites: a close look on their mineralogy, geochemistry, morphology, and nature of nickel association

IG1/GMPV2.3/HS2.22/SSP5.1/SSS13.5/TS1.8 – Stable isotopes in geosciences - open session, including blocks of special attention (co-organized) – Orals

Convener: P. De Groot | Co-Conveners: Dr. Bojar, E. Kerstel, J. Smit, D. R. Gröcke, Ph. Negrel, E. Petelet-Giraud

Room: 42

Chairperson: A-V. Bogar, P. de Groot

- 08:30–08:45 EGU2012-9015
L. Lobo, P. Degryse, and F. Vanhaecke
 Exploring antimony isotope ratio variations for provenancing purposes
- 08:45–09:00 EGU2012-12785
A. Stracke, E.T. Tipper, and M. Bizimis
 High-temperature, inter-mineral Mg stable isotope fractionation in mantle xenoliths
- 09:00–09:15 EGU2012-11556
S. Açıkcalın, J. Smit, Ö. Yılmaz, S. Goderis, H.B. Vonhof, F. Ocakolu, P. Claeys, E. Fornaciari, S. Özkan Altın, and J. Vellekoop
 Isotopic and geochemical characterization of the K-Pg boundary sections from Central Sakarya Region, Turkey; a discussion on possible double impact
- 09:15–09:30 EGU2012-523
A. J. Prado-Pérez, M. C. Patón, J. Rodríguez Arévalo, and M. F. Diaz Teijeiro
 Tips and tricks to perform reliable stable isotope analysis with a Picarro CRDS
- 09:30–09:45 EGU2012-13328
 N. Saad and **J. Hoffnagle**
 Online Compound-Specific $\delta^{13}\text{C}$ and $\delta^2\text{D}$ Determinations Using Laser Spectroscopy
- 09:45–10:00 EGU2012-2411
M. Battistel, A. Garone, M. Barbieri, and B. Parisse
 Traditional ($\delta^2\text{D}$, $\delta^{18}\text{O}$) and non-traditional (Sr-87/Sr-86) isotopes approach to vertical lake profile study

COFFEE BREAK

Chairperson: Ph. Negrel, E. Petelet-Giraud

- 10:30–10:45 EGU2012-1234
S. Dogramaci, G. Skrzypek, W. Dodson, and P. Grierson
 Identifying recharge pattern using stable isotopes of rainfall in semi arid subtropical northwest Australia
- 10:45–11:00 EGU2012-1154
J. Battle-Aguilar, G.A. Harington, M. Leblanc, and P.G. Cook
 Geologic controls on groundwater discharge in large tropical rivers: an environmental tracers approach
- 11:00–11:15 EGU2012-8943
O. Kracht
 Isotopic composition (oxygen and hydrogen) of groundwater in Norway - a review of current knowledge and future perspectives

- 11:15–11:30 EGU2012-9507
T.W. Vennemann
 Isotopic (H, O, and C-DIC) tracing of Rhone river water and mixing within Lake Geneva determined using the MIR submersibles
- 11:30–11:45 EGU2012-2062
R. Millot, C. Guerrot, E. Petelet-Giraud, A. Brenot, and Ph. Négrel
 Hydrogeochemistry of the surface waters of the Ebro River Basin (Spain): a multi-isotopic characterization (H-O-Li-B-Sr isotopes)
- 11:45–12:00 EGU2012-5298
C. Briand, V. Plagnes, M. Sebilo, P. Ribstein, T. Chesnot, and M. Schneider
 Characterization of the nitrate source in a karstic spring (southwest of France): use of isotopic biogeochemistry

GMPV3.1 – Mineral growth and dissolution: Recent developments in the understanding of fluid-mineral processes (including Arne Richter Award for Outstanding Young Scientists Lecture) – Posters

Convener: E. Ruiz-Agudo | Co-Conveners: A. Putnis, C. V. Putnis

Hall XL | Display Time 08:00–17:00

Author in Attendance: 08:30–10:00

Chairperson: n.n.

- XL205 EGU2012-2061
S. Marincea, D.G. Dumitras, N. Calin, A.M. Anason, A.M. Fransolet, and F. Hatert
 Spurrite, tilleyite and associated minerals in the exoskarn zone from Cornet Hill (Metaliferi Massif, Apuseni Mountains, Romania)
- XL206 EGU2012-5679
K. Lisowiec, B. Budzy?, E. S?aby, A.D. Renno, and J. Götze
 Zircon and monazite patterns resulted from late- to postmagmatic fluid-interaction processes in granitoid pluton and related rhyolitic bodies
- XL207 EGU2012-8649
J. Kotková and P. Klapetek
 Surface structure of micro-diamond from ultrahigh-pressure felsic granulite, Bohemian Massif: AFM study of growth and resorption phenomena
- XL208 EGU2012-14119
 J Zhao, J Brugger, and **A Pring**
 Dissolution-precipitation versus solid state diffusion: mechanism of mineral transformations in sylvanite, (AuAg)₂Te₄, under hydrothermal conditions.
- XL209 EGU2012-10916
V. Mavromatis, Q. Gautier, O. Bosc, and J. Schott
 Partitioning of Mg in calcite as a function of precipitation rate
- XL210 EGU2012-14117
M.A. Anason, ST. Marincea, D.G. Dumitras, and A.M. Iancu
 Considerations on the Mo mineralization from the Mraconia perimeter
- XL211 EGU2012-12639
 E. Chalmin, Y. Perrette, B. Fanget, and **R. Drysdale**
 Investigation of organic matter entrapped during calcite growth by a multi-method approach
- XL212 EGU2012-6571
J. Hövelmann, C.V. Putnis, H. Austrheim, and E. Ruiz-Agudo
 Direct nano-scale observations of CO₂ sequestration during brucite (Mg(OH)₂) dissolution

GMPV3.4/TS3.4 – Behavior of Earth Materials from the Micro to Nano to Macroscopic Scale (co-organized) – Posters

Convener: C.A. Geiger | Co-Conveners: F. Nestola, R. Caracas, J. Brodholt

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- XL213 EGU2012-1116
H. Sendir, K. Sar?iz, and G. Bozkaya
 Fluid Inclusion Characteristics of Domaniç (Kütahya) Porphyry Cu-Mo Mineralization
- XL214 EGU2012-1117
K. Sariiz and H. Sendir
 Alteration Mineralogy and Geochemical Characteristics of Porphyry Cu-Mo Mineralization in Domaniç (Kütahya) Area

- XL215 EGU2012-1318
C.A. Geiger, G.D. Gatta, X. Xue, and G. J. McIntyre
 A Crystal Chemical Investigation of Armenite, BaCa₂Al₆Si₉O₃₀·xH₂O: The Behavior of Extra Framework Ca Cations and H₂O Molecules in Microporous Silicates
- XL216 EGU2012-1321
C.A. Geiger and E. Dachs
 An IR and Calorimetric Investigation of the Structural, Crystal-Chemical and Thermodynamic Properties of Hydrogrossular
- XL217 EGU2012-3843
A. Arasuna, M. Okuno, X. Xue, T. Mizukami, M. Akaogi, M. Nozawa, H. Okudera, and S. Arai
 The structural changes of silica gel by compressions up to 10 GPa
- XL218 EGU2012-5313
 C. Freda, **B. Celata**, G. Andreatti, C. Perinelli, and V. Misiti
 Cr diffusion in MgAl₂O₄ synthetic spinels: preliminary results
- XL219 EGU2012-6307
J. H. Kruhl, R. Wirth, and L.F.G. Morales
 Open grain boundaries of quartz as fluid pathways in metamorphic rocks
- XL220 EGU2012-7517
K. Mibe and S. Ono
 Electrical conductivity measurement of MgCO₃ up to 6 GPa and 1000 K
- XL221 EGU2012-7711
 R. Vuilleumier, **N. Sator**, A. Seitsonen, and B. Guillot
 CO₂ speciation and transport properties of CO₂-bearing silicate melts.
- XL222 EGU2012-8917
T. Griffiths, G. Habler, and R. Abart
 The behaviour of solid microinclusions during host mineral deformation: meta-pegmatite garnets from the Koralpe, Austria
- XL223 EGU2012-8990
A.-K. Schaeffer, E. Petrishcheva, D. Rhede, and R. Abart
 Na-K-Interdiffusion in Alkali Feldspars
- XL224 EGU2012-9294
G. Hovis, B. Scott, C. Altomare, and G. Tomaino
 Thermal expansion investigation of tourmaline-group minerals
- XL225 EGU2012-9400
K. Scheidl, A.-K. Schaeffer, F.D. Fischer, and R. Abart
 Chemically induced fracturing in alkali feldspar
- XL226 EGU2012-11214
M. Jacobs and R. Schmid-Fetzer
 Thermodynamic properties and equations of state for Ag, Al, Au, Cu and MgO using a lattice vibrational method
- XL227 EGU2012-11389
E. Petrishcheva and R. Abart
 Generalized Cahn-Hilliard equation for solutions with drastically different diffusion coefficients. Application to exsolution in ternary feldspar
- XL228 EGU2012-11568
G. Habler, P. Špaňek, and R. Abart
 Domain structure and texture in fine grained symplectite from garnet breakdown in peridotite xenoliths (Zinst, Bavaria, Bohemian Massif)

GMPV4.4 – Recent explosive eruptions: Conduit processes, ash dispersal and effects on aviation – Posters

Convener: M.T. Gudmundsson | Co-Conveners: K. Vogfjord, F. Prata, T. Thordarson, C. Witham

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- XL229 EGU2012-8497
T. Hoshide, A. Toramaru, T. Miyamoto, Y. Iriyama, K. Ikehata, and T. Matsushima
 Magma mixing and mingling processes inferred from the ejecta in the Shinmoedake 2011 eruption: Its implications for the transient behavior of eruption styles
- XL230 EGU2012-13575
B. Weinzierl, D. Sauer, A. Minikin, O. Reitebuch, F. Dahlkötter, B. Mayer, C. Emde, I. Tegen, J. Gasteiger, A. Petzold, A. Veira, U. Kueppers, and U. Schumann
 On the visibility of airborne volcanic ash and other aerosols from the pilot's perspective in flight

- XL231 EGU2012-10895
F. Marchese, A. Falconieri, N. Pergola, and V. Tramutoli
Identification and tracking of ash clouds from recent explosive eruptions by using multispectral satellite infrared data
- XL232 EGU2012-8464
A. Piscini, S. Corradini, M. Chini, L. Merucci, S. Stramondo, M. Picchiani, and F. Del Frate
Volcanic monitoring from space using neural networks approach. Simultaneous ash and sulfur dioxide retrievals using multispectral measurements
- XL233 EGU2012-8595
C. I. Schipper, H Tuffen, and J. M. Castro
Shallow vent architecture of Puyehue Cordón-Caulle, as revealed by direct observation of explosive activity
- XL234 EGU2012-11451
H. Tuffen, J.M. Castro, C.I. Schipper, and M.R. James
Observations of obsidian lava flow emplacement at Puyehue-Cordón Caulle, Chile
- XL235 EGU2012-12111
E Aydar, A Höskuldsson, O. Ersoy, and A. Gourgaud
Comparison of Galunggung1982-83 and Eyjafjalla-2010 Eruptions: definition of eruption dynamics from 3D Ash Surface Morphology
- XL236 EGU2012-3007
E. Bagnato, A. Aiuppa, A. Bertagnini, C. Bonadonna, R. Cioni, M. Pedone, and M. Pistolesi
The 2010 Eyjafjallajökull volcanic summit eruption: evidences from ash-leachates analysis and ground deposition fluxes
- XL237 EGU2012-3034
F. Marenco, B. Johnson, K. Turnbull, J. Haywood, S. Newman, H. Webster, M. Cooke, J. Dorsey, H. Ricketts, and L. Clarisse
Airborne lidar observations of volcanic ash during the eruption of Eyjafjallajökull in Spring 2010
- XL238 EGU2012-14436
M Ripepe, C Bonadonna, A Folch, D Delle Donne, and G Lacanna
Ash-Plume Dynamics, Mass Discharge Rate and Atmosphere Interaction by Infrasond and Thermal Imagery: the 2010 Eyjafjallajökull Eruption
- XL239 EGU2012-9792
G. N. Petersen, H. Bjornsson, Þ. Arason, S. von Löwis, G. S. Sigurðsson, and S. Karlsdóttir
Development of the atmospheric volcanic monitoring system in Iceland
- XL240 EGU2012-9706
H. Bjornsson, **G. N. Petersen**, and Þ. Arason
Monitoring of plume height during the Grímsvötn 2011 eruption in Iceland
- XL241 EGU2012-9734
H. Bjornsson, **G. N. Petersen**, and Þ. Arason
The eruption that missed Europe - A comparison of the weather situation during the Eyjafjallajökull 2010 and Grímsvötn 2011 eruptions
- XL242 EGU2012-7279
H. P. Gunnlaugsson, Á. Höskuldsson, S. Steinthorsson, N. Óskarsson, M. B. Madsen, P. Nørnberg, and J. Merrison
Mössbauer Spectroscopy of Samples from the 2010 Eyjafjallajökull Summit Eruption
- XL243 EGU2012-7325
J.A. Stevenson, S.C. Louglin, C. Rae, C. Witham, M. Hort, T. Thordarson, and A. MacLeod
Grímsvötn 2011 tephra in the UK: public sampling, air quality and comparison with model predictions.
- XL244 EGU2012-12119
M.T. Gudmundsson, Á. Höskuldsson, G. Larsen, T. Thordarson, B.A. Oladottir, B. Oddsson, J. Gudnason, T. Högnadóttir, J.A. Stevenson, B.F. Houghton, D. McGarvie, and G.M. Sigurdardóttir
The May 2011 eruption of Grímsvötn

TS1.2/GMPV4.14/PS2.10 – Volcanism and Tectonics in the Solar System (co-organized) – Orals

Convener: T. Platz | Co-Conveners: M. Massironi, G. Caprarelli, P. Byrne, P. Allemand, H. Hiesinger

Room: 25

Chairperson: Matteo Massironi, Pascal Allemand

- 10:30–10:45 EGU2012-10873
L. M. Prockter, J. H. Shirley, J. B. Dalton, and L. W. Kamp
Composition of bands in Argadnel Regio, Europa: Implications for Volcanic Resurfacing.
- 10:45–11:00 EGU2012-3847
A. L. Nahm, M. E. Cameron, B. R. Smith-Konter, and R. T. Pappalardo
Modeling of Stress Triggered Faulting at Agenor Linea, Europa

- 11:00–11:15 EGU2012-7846
L. Kerber, J.W. Head, J-B. Madeleine, F. Forget, and L. Wilson
 The Dispersal of Pyroclasts from Ancient Explosive Volcanoes on Mars: Implications for the Friable Layered Deposits
- 11:15–11:30 EGU2012-8876
M. O. Chevrel, T Platz, E Hauber, D Baratoux, and D.B. Dingwell
 Rheology of Icelandic lava flows as analogues for Mars: comparison between morphometric and experimental determinations
- 11:30–11:45 EGU2012-4982
R. Pozzobon, F. Mazzarini, M. Massironi, and G. Cremonese
 Self-similar clustering distribution of structural features on Ascaeus Mons (Mars): implications for magma chamber depth
- 11:45–12:00 EGU2012-690
L. Giacomini, M. Massironi, S. Marchi, and G. Cremonese
 Dating tectonic structures on Mercury

TS1.2/GMPV4.14/PS2.10 – Volcanism and Tectonics in the Solar System (co-organized) – Posters

Convener: T. Platz | Co-Conveners: M. Massironi, G. Caprarelli, P. Byrne, P. Allemand, H. Hiesinger

Hall A | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Matteo Massironi

- A410 EGU2012-725
P. Fawdon
 Syrtis Major volcano evolution characterised from a terrestrial analogue.
- A411 EGU2012-8723
p. allemand, A. Deschamps, M. Lesaout, C. Delacourt, C. Quantin, and H. Clenet
 Magma rheology from 3D geometry of martian lava flows
- A412 EGU2012-1804
A. Solomonidou, G. Bampasidis, M. Hirtzig, A. Coustenis, K. Kyriakopoulos, K. St. Seymour, E. Bratsolis, and X. Moussas
 Morphotectonic features on Titan and their possible origin
- A413 EGU2012-11218
M. Massironi, G. Di Achille, S. Ferrari, L. Giacomini, C. Popa, R. Pozzobon, M. Zusi, G. Cremonese, and P. Palumbo
 Transpressional Structures on Mercury
- A414 EGU2012-13347
A. L. Nahm
 Forward Mechanical Modeling of Rima Ariadaeus, the Moon

GD5.1/GMPV6.2/SM2.2/TS6.5 – Subduction dynamics from surface to deep mantle (co-organized) – Posters

Convener: S. Buiter | Co-Conveners: F. Funicello, J. van Hunen

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Jeroen van Hunen, Francesca Funicello and Susanne Buiter

- XL53 EGU2012-1680
C. Schmelzbach, J. Kummerow, P. Wigger, A. Reshetnikov, and S. A. Shapiro
 Microseismic reflection imaging of the Cordillera crust, forearc of the North-Chilean subduction
- XL54 EGU2012-2447
I. Wölbern and G. Rümpker
 Seismic anisotropy of the Central Andean subduction zone derived from shear-wave splitting
- XL55 EGU2012-6017
W Rabbel, Y Dzierma, M Thorwart, T Wunderlich, I Koulakov, K Hoernle, and H. Wehrmann
 Seismic evidence of a link between subducted oceanic faults and volcanism: A case study from South Central Chile
- XL56 EGU2012-2960
N.W. Bloch, J. Kummerow, P. Wigger, S.A. Shapiro, and P. Salazar
 Crustal and Slab Related Seismicity in the Northern Chilean Coastal Cordillera
- XL57 EGU2012-13761
M. Contreras, A. Tassara, R. Araya, and K. Bataille
 Interseismic strain accumulation at the Mw8.8 2010 Maule earthquake by means of finite element modeling

- XL58 EGU2012-2291
F. Funicello, F. Corbi, A. Heuret, Y. van Dinther, D. Presti, L. Sandri, W. Marzocchi, M. Moroni, T. Gerya, M. May, L. Dalguer, C. Piromallo, S. Lallemand, C.P. Conrad, V. Acocella, G. Ranalli, and C. Faccenna
Five years of EURYI project on subduction and interplate seismicity: What have we learnt?
- XL59 EGU2012-2286
W. Marzocchi, L. Sandri, A. Heuret, and F. Funicello
On the frequency-magnitude distribution of subduction interplate earthquakes
- XL60 EGU2012-2281
A. Heuret, C.P. Conrad, F. Funicello, S. Lallemand, and L. Sandri
Relation between subduction megathrust earthquakes, trench sediment thickness and upper plate strain
- XL61 EGU2012-2277
D. Presti, A. Heuret, F. Funicello, and C. Piromallo
A new database on subduction seismicity at the global scale
- XL62 EGU2012-8088
Y. van Dinther, T. Gerya, **F. Corbi**, F. Funicello, P. M. Mai, and L. A. Dalguer
The seismic cycle at subduction thrusts: benchmarking geodynamic numerical simulations and analogue models
- XL63 EGU2012-6675
M. Faccenda and F.A. Capitanio
Synthetic SKS splitting at subduction zones: reconciling observations with mantle flow
- XL64 EGU2012-2090
A. Simakin
Numerical modeling of the subduction initiation after accretion of oceanic island.
- XL65 EGU2012-3384
G. Lu, B. Kaus, L. Zhao, and T. Zheng
On the initiation of subduction by plume-induced compression: a numerical study
- XL66 EGU2012-2576
M. Yoshida and F. Tajima
3D numerical modeling of subduction dynamics: plate stagnation and segmentation, and crustal advection in the mantle transition zone
- XL67 EGU2012-2453
T. Duretz, S.M Schmalholz, and T.V. Gerya
Dynamics of slab detachment
- XL68 EGU2012-3525
B. Hillebrand, T. Geenen, W. Spakman, and A.P. van den Berg
Using the level set method in slab detachment modeling
- XL69 EGU2012-7430
S. Buiter and S. Ellis
Testing the role of rheology with simple subduction models
- XL70 EGU2012-13259
L. Fourel, G. Morra, and S. Goes
Visco-elasto-plastic rheology effects on free subduction dynamics
- XL71 EGU2012-9967
R. Hassani, **M. Gerbault**, E. Tric, and G. Gibert
Cyclic arc regimes over subduction zones at constant plate motion, due to folding over the 660 km transition zone. Insight from numerical models.
- XL72 EGU2012-10396
C. Malatesta, T. Gerya, M. Scambelluri, L. Crispini, L. Federico, and G. Capponi
3D Numerical simulations of oblique subduction
- XL73 EGU2012-4607
St. Zeumann, R. Sharma, T. Jahr, and G. Jentzsch
New 3D Finite Element models of the central Andes using realistic geometry
- XL74 EGU2012-10568
C. Malatesta, T. Gerya, L. Crispini, L. Federico, M. Scambelluri, and G. Capponi
The exhumation of an HP ophiolitic massif (Voltri Massif, Western Alps): insight from 3D numerical models
- XL75 EGU2012-8014
M. Roda, M. I. Spalla, and A. M. Marotta
Integration of natural data within a numerical model of ablative subduction: A possible interpretation for the Alpine dynamics of the Austroalpine crust.
- XL76 EGU2012-7611
B. von Niederhausern, M. Engi, and D. Rubatto
Subduction of continental crust in the Sesia Zone: Constraints on dynamics from in-situ U-Th-Pb dating of accessory phases (Western Alps, Italy)

- XL77 EGU2012-3623
A. Kozhurin and T. Pinegina
From arc-normal extension above the subduction zone to arc-normal contraction just beyond its lateral edge: the case of the Kamchatka-Aleutian junction
- XL78 EGU2012-5640
B. Guillaume, F. Funiciello, C. Faccenna, L. Husson, and L.H. Royden
Deformation and topography above the lateral transition from continental to oceanic subduction in three-dimensional laboratory models: what can we learn on the Hellenic subduction?
- XL79 EGU2012-6546
S.W Luth, E. Willingshofer, and D. Sokoutis
Orogenic Wedges and Subduction in Analogue Models: Expressions of Rheology Induced Plate Decoupling
- XL80 EGU2012-6490
P. Agard, X. Zuo, F. Funiciello, N. Bellahsen, C. Faccenna, and D. Savva
Analog modelling of obduction processes
- XL81 EGU2012-5999
E. Amiguet, B. Reynard, R. Caracas, B. Van De Moortèle, N. Hilaret, and Y. Wang
Creep of phyllosilicates at the onset of plate tectonics
- XL82 EGU2012-12506
A. Shulgin, H. Kopp, D. Klaeschen, C. Papenberg, F. Tilmann, E.R. Flueh, D. Franke, U. Barckhausen, and A. Krabbenhoft
Sunda Subduction Zone: What causes differences in the 2004 and 2005 Sumatra earthquakes ruptures?
- XL83 EGU2012-13257
T. Knight, C. Peirce, A. B. Watts, W. Stratford, I. Grevemeyer, M. Paulatto, D. Bassett, J. Hunter, and L. Kalnins
Louisville Ridge subduction at the Tonga-Kermadec trench: preliminary models to compare pre- and post collision zone crustal velocity structure.
- XL84 EGU2012-6643
F. Martinez, K. A. Kelley, and R. J. Stern
Creation and Deformation of Hydrous Lithosphere at the Southern Mariana Margin
- XL85 EGU2012-6863
T. Iwasaki, E. Kurashimo, T. Iidaka, R. Arai, A. Kato, H. Sato, T. Ito, A. Nakanishi, S. Kodaira, Y. Kaneda, and K. Ito
Lateral Structural Variation of the Downgoing Philippine Sea Plate beneath the SW Japan Arc
- XL86 EGU2012-2199
B.-Y. Kuo
Rapid rotation of shear-wave splitting at the edge of the Ryukyu subduction zone and its dynamic implications
- XL87 EGU2012-1272
W.-B. Cheng, S. -K. Hsu, and C. -H Chang
Tomography of subduction zone in southern Taiwan: an implication of subducting seamount beneath the forearc
- XL88 EGU2012-4052
Yi-Wei Lin, Cheng-Chien Peng, and Ban-Yuan Kuo
Structure of the subduction zone south of Taiwan constrained by OBS data
- XL89 EGU2012-1138
E. Király, I. Bianchi, and G. Bokelmann
Seismic anisotropy in the south western pacific region from shear wave splitting
- XL90 EGU2012-167
M. Hata, N. Oshiman, R. Yoshimura, Y. Tanaka, and M. Uyeshima
Imaging of Upwelling Fluids and Partial Melt in the Subduction Zone with 3D Regional Electrical Resistivity Structure by the Network-MT Data
- XL91 EGU2012-2562
I. Chuvashova and S. Rasskazov
Propagating pull-down effects of triangular paleoslab fragments at a convergent zone: magmatic evolution beneath Central Mongolia in the past 90 Ma
- XL92 EGU2012-2529
M.F. Osmaston
Is subduction really in the plate tectonics driving seat, or do two other global mechanisms do the driving? A review in the 'deep-keeled cratons' frame for global dynamics

TS10.2/GD3.10/GMPV6.19/SM2.10 – Geodynamics of the westernmost Mediterranean and NW Africa (co-organized) –

Orals

Convener: C. J. Garrido | Co-Conveners: G. Booth-Rea, J. Galindo-Zaldivar, A. Chalouan, R. Carbonell, A. Levander, C. R. Ranero, V. Sallares, R. de Franco, N. Zitellini

Room: 29

Chairperson: C.J. Garrido & R. Carbonell

- 08:30–08:45 EGU2012-8716
P. Ayarza, R. Carbonell, A. Teixell, A. Kchikach, M. Harnafi, D. Marti, I. Palomeras, A. Levander, J. Gallart, M.L. Arboleya, M. Charroud, and M. Amrahr
 Constrains on the topography of the Moroccan High Atlas: Contribution of the SIMA (Seismic Imaging across the Moroccan Atlas) project
- 08:45–09:00 EGU2012-11915
D. Kiyani, A. Jones, J. Ledo, J. Fulla, A. Sinischalchi, G. Romano, J. Campaña and the TopoMed MT Team
 3D structures of the crust and upper mantle in Atlas Mountains of Morocco from magnetotelluric data
- 09:00–09:15 EGU2012-12969
E. Gracia, C. R. Ranero, I. Grevemeyer, and The WestMed, TopoMed, and Geomargen-1 cruise parties
 Seismic Images and Wide-angle Velocity constrains of the structure and geodynamic origin of the Gibraltar Arc system: A geological interpretation of the Gulf of Cadiz imbricated wedge, the western and eastern Alboran basins, and the South-Balearic basin.
- 09:15–09:30 EGU2012-11961
I. Palomeras, S. Thurner, A. Levander, E. Humphreys, M.S. Miller, R. Carbonell, and J. Gallart
 PICASSO: Lithosphere Structure in the Western Mediterranean from Ps Receiver Functions and Rayleigh Wave Tomography
- 09:30–09:45 EGU2012-10197
X. Garcia, R. Evans, J. Elsenbeck, and M. Jegen
 Imaging the Alboran Domain from a marine MT survey
- 09:45–10:00 EGU2012-5538
J. Diaz Cusí, J. Gallart and the Topolberia Seismic Working Group Team
 Progress on the seismic anisotropy knowledge beneath Iberia and northern Morocco: the contribution of the second Topoiberia-Iberarray deployment

COFFEE BREAK

Chairperson: G. Booth-Rea & C. Ranero

- 10:30–10:45 EGU2012-14170
D. Garcia-Castellanos
 Tectonic uplift competing with erosion along the Betic-Rifean corridors: regulating the Messinian Salinity Crisis
- 10:45–11:00 EGU2012-12094
C. Gorini, E. d'Acremont, M. El Abbassi, D. Do Couto, S. Migeon, A. Ammar, F. Estrada, G. Ercilla, B. Alonso, J. Poort, and H. Jabour
 Giant slide in the South Alboran margin: Upper Miocene margin inversion or Messinian sea level fall?
- 11:00–11:15 EGU2012-13977
J. Vergés and M. Fernández
 Tethys-Atlantic Interaction along the Iberia-Africa Plate Boundary: the Betic-Gibraltar-Rif System
- 11:15–11:30 EGU2012-7940
L. Le Pourhiet, D. Do Couto, R. Labayed, E. d'Acremont, J. Smitt, A. Ammar, H. Jabour, and C. Gorini
 Formation and deformation of the Alboran-Rif system? Insights from 3D thermo-mechanical modelling.
- 11:30–11:45 EGU2012-5185
G. Tango, R. de Franco, G. Caielli, G. Biella, G. Boniolo, A. Corsi, A. Morrone, A. Tento, and MEDOC group
 Wide angle reflection/Refraction seismic data processing and imaging of HG-MEDOC line in southern Tyrrhenian sea: evidences of a transitional Moho boundary?
- 11:45–12:00 EGU2012-13681
M.G. Vendrell, C.R. Ranero, V. Sallarès, M. Prada, S. Moeller, I. Grevemeyer, and N. Zitellini
 The tectonic and sedimentary structures of the Tyrrhenian rifted basin from multichannel seismic images

TS6.2/GD5.4 – Subduction and Collision Zones of the Caribbean (co-listed) – Orals

Convener: J. Escuder-Viruete | Co-Conveners: C. Marchesi

Room: 20

Chairperson: Javier Escuder-Viruete, Claudio Marchesi

- 13:30–13:45 EGU2012-6567
D.A. Lao Davila
 Collisional zones in Puerto Rico

- 13:45–14:00 EGU2012-14221
J. García-Senz and A. Pérez-Estaún
Modes of active deformation in Eastern Hispaniola
- 14:00–14:15 EGU2012-7948
D.M. Buchs, P.O. Baumgartner, R. Arculus, C. Montes, G. Bayona, and A. Cardona
Early development of the south Central American margin: mechanisms and tectonic implications
- 14:15–14:30 EGU2012-14375
Y. Rojas-Agramonte, A. García-Casco, A. Kröner, D. Herwartz, A. Ibis Despaigne, and S. Wilde
New geochronological ages (U-Pb/Lu-Hf) from high-pressure rocks of the Escambray terrane and Santa Clara serpentinite mélange, central Cuba. Regional correlations and geodynamic implications
- 14:30–14:45 EGU2012-4844
L. De Min, J.-F. Lebrun, J.-J. Cornée, P. Münch, F. Quillévéré, M. Melinte-Dobrinescu, and A. Randrianasolo
The carbonate platform of the Karukera spur (Lesser Antilles fore-arc) records large Neogene-Quaternary forearc vertical movements
- 14:45–15:00 EGU2012-9758
T.A.C. Zitter and C. Rangin
Evolution of the Grenada and Tobago basins and the onset of the Lesser Antilles subduction zone

TS6.2/GD5.4 – Subduction and Collision Zones of the Caribbean (co-listed) – Posters

Convener: J. Escuder-Viruete | Co-Conveners: C. Marchesi

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Javier Escuder-Viruete, Claudio Marchesi

- A475 EGU2012-373
M. Guzman-Speziale
Is the Central America forearc sliver part of the North America plate?
- A476 EGU2012-14222
C. Ayala, J. L. García-Lobón, C. Rey Moral, and J. Escuder-Viruete
Potential fields and seismicity at northern La Hispaniola Island: useful constraints to determine the crustal structure of an oblique convergence area
- A477 EGU2012-6713
G. Simila, J. Marshall, T. Gardner, D. Fisher, M. Protti, R. Quintero, E. LaFromboise, S. Morrish, and E. Mohammadebrahim
Seismic Cycle Deformation along the Nicoya Peninsula Seismogenic Zone, Costa Rica: Morphotectonics and Seismic Strong Motion Array Project (SSMAP)
- A478 EGU2012-13438
T. Maurin, J.F. Stéphan, B. Mercier de Lépinay, and D. Dhont
New views on the Late Cenozoic tectonic history of northern Colombia
- A479 EGU2012-12555
A. Levander, M. Schmitz, M. Bezada, J. Masy, F. Niu, and J. Pindell
Subduction in the Southern Caribbean
- A480 EGU2012-13514
A. Kammer and C. Vargas
Changes in deformation styles in the foreland of the Northern Andes as a response to slab segmentation
- A481 EGU2012-4384
P. Münch, J.-F. Lebrun, J.-J. Cornée, I. Thinon, P. Guennoc, and **L. De Min**
Pliocene to Pleistocene carbonate systems of the Guadeloupe archipelago, French Lesser Antilles: a land and sea study (the KaShallow project).
- A482 EGU2012-7968
F. Barat, B. Mercier de Lépinay, M. Sosson, and C. Müller
Geologic Evolution of the eastern Panama Isthmus from biostratigraphic, tectonic and geophysical data
- A483 EGU2012-9928
C. Rangin, J. Martinez-Reyes, A. Crespy, and T.A.C Zitter
Tectonic escape of the Caribbean plate since the Paleocene: a consequence of the Chicxulub meteor impact?
- A484 EGU2012-1933
P. O. Baumgartner, K. Flores, A. Bandini, D. Buchs, G. Andjic, and C. Baumgartner-Mora
Oceanic terranes of S-Central America - 200 Million years of accretion history recorded on the W-edge of the Caribbean Plate.
- A485 EGU2012-4834
J. Escuder-Viruete, P. Valverde-Vaquero, Y. Rojas-Agramonte, J. Gabites, and A. Pérez-Estaún
From intra-oceanic subduction to arc accretion and oblique arc-continent collision: Insights from the P-T-D-t path of the southern Río San Juan metamorphic complex, northern Dominican Republic

- A486 EGU2012-4511
C. Lázaro, I.F. Blanco-Quintero, A. García-Casco, Y. Rojas--Agramonte, M. Corsini, and K. Núñez-Cambra
The Güira de Jauco amphibolite complex (eastern Cuba). A record of early Campanian collision in the Caribbean plate.
- A487 EGU2012-12161
C. Marchesi, C.J. Garrido, J.A. Proenza, Z. Konc, K. Hidas, J. Lewis, and E. Lidiak
Mineral and whole rock compositions of peridotites from Loma Caribe (Dominican Republic): insights into the evolution of the oceanic mantle in the Caribbean region

