

EGU General Assembly 2012
Programme Group Programme
TS – Tectonics & Structural Geology

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Monday, 23 April

HS8.2.3 – Fissured and karstified aquifers (co-listed) – Orals

Convener: T. Geyer | Co-Conveners: E. Zechner, S. Birk, F. Gabrovsek, N. Dörfli

Room: 38

Chairperson: Steffen Birk

- 10:30–10:45 EGU2012-853
M. Covington
A theoretical framework for the interpretation of karst spring signals
- 10:45–11:00 EGU2012-1604
T. Hiller, G. Kaufmann, D. Romanov, and F. Grabrovsek
Formation of large collapse dolines: A three-dimensional numerical perspective
- 11:00–11:15 EGU2012-2637
A. Malard, J. Vouillamoz, P.-Y. Jeannin, E. Weber, and U. Eichenberger
SWISSKARST Project - how to document the karst aquifers in Switzerland using the KARSYS approach.
- 11:15–11:30 EGU2012-4081
A. Erőss, J. Mádl-Szűnyi, and A.É. Csoma
Hypogenic karst development in a regional discharge area: Buda Thermal Karst, Hungary
- 11:30–11:45 EGU2012-11158
J. Doummar, M. Baierl, K. Noedler, T. Licha, M. Sauter, and T. Geyer
Carbamazepine as indicator for potential short-term contamination of karst springs
- 11:45–12:00 EGU2012-11949
A. Lafare, H. Jourde, V. Leonardi, S. Pistre, and N. Dörfli
Simulate speleogenesis processes with an approach based on fracturing and hydrogeological processes: effect of various hydraulic boundary conditions

HS8.2.3 – Fissured and karstified aquifers (co-listed) – Posters

Convener: T. Geyer | Co-Conveners: E. Zechner, S. Birk, F. Gabrovsek, N. Dörfli

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Tobias Geyer

- A221 EGU2012-238
O. Bonacci and I. Andrić
Interpretation of the first hydrological measurements at the Blue Lake (Dinaric karst of Croatia)
- A222 EGU2012-1490
J. Kordilla, A. Tartakovsky, and T. Geyer
Simulation of film and droplet flow on wide aperture fracture using Smoothed Particle Hydrodynamics
- A223 EGU2012-3135
P. Adler, L. Jasinski, J.-F. Thovert, and V.V. Mourzenko
Reactive transport in fractured porous media
- A224 EGU2012-5904
P. Stadler and H. Häusler
Isotope hydrology reveals a fissured aquifer enclosed in the karst of Gorski Kotar. The Zeleni Vir case study (Outer Dinarides, Western Croatia)
- A225 EGU2012-7102
T. Wagner, C. Mayaud, R. Benischke, and S. Birk
Evaluating the changing discharge behaviour of a karst spring (Hammerbach, Austria)
- A226 EGU2012-7120
T. Wagner, G. Winkler, W. Woessner, and S. Birk
The influence of cave stream sediments on the transport behavior of karst springs
- A227 EGU2012-8735
P. Meglić and M. Brenčič
Groundwater infiltration from alluvial aquifer into karstic aquifer - case study of recharge from river Iška to Ižica karstic springs
- A228 EGU2012-9440
R. Reh, T. Licha, K. Nödl, T. Geyer, and M. Sauter
Organic compounds as indicators for transport in an urban characterized complex karst system
- A229 EGU2012-9580
J. Doummar, A. Margane, M. Sauter, and T. Geyer
Assessment of transport parameters in a karst system under various flow periods through extensive analysis of artificial tracer tests

- A230 EGU2012-11700
M. Cypel
 Groundwater vulnerability assessment in Jaworzynka's Valley catchment basin (Tatra Mountains, Poland)
- A231 EGU2012-11803
T. Geyer, M. Selg, T. Gudera, and M. Sauter
 Discharge behaviour of the Blautopf spring and Gallusquelle spring (Swabian Alb / Germany) - relative importance of the fissured matrix and the karst conduit system
- A232 EGU2012-12362
S. El Janyani, J.P. Dupont, N. Massei, and N. Dörfliger
 Evidence of influence of regional and local heterogeneities within a chalk karst aquifer based on nitrates and chlorides analysis
- A233 EGU2012-12428
V. Denic-Jukic, T. Juras, M. Plenkovic, A. Kadic, and D. Jukic
 Turbidity dynamics of the karst spring Ombla (Croatia)
- A234 EGU2012-13887
F. Petit, N. Massei, T. Berthe, J. Deloffre, M. Fournier, F. Bertel, F. Jolivet, H. Lallemand, F. Niepceron, C. Sellier, and S. Benjamin
 Change in the structure of *Escherichia coli* population related to the settling velocities in karst aquifer
- A235 EGU2012-14160
M. Baierl, J. Kordilla, T. Reimann, N. Dörfliger, M. Sauter, and T. Geyer
 Hydraulic characterisation of carbonate aquifers with pumping tests - comparison of analytical and numerical data evaluation methods

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. Palessky
 Deep seated inclusions in kimberlites from Kharamai field and some kimberlite fields of Priabarie.

- 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. Palessky
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. Palessky, 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. Fulla
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

TS2.3/EMRP2.8/HS8.1.7 – Flow Properties of Transforming Porous Media (co-organized) – Orals

Convener: R. Toussaint | Co-Conveners: D. Koehn, E. Aharonov

Room: 11

Chairperson: Renaud Toussaint, Einat Aharonov

- 15:30–15:45 EGU2012-9168
P. Szymczak and A. J. C. Ladd
Dissolution in Fractured and Porous Rocks - the Cave Formation Paradox and Other Instabilities
- 15:45–16:00 EGU2012-3087
P. Adler, T.M. Tan Minh Vu, C. Varloteaux, and S. Békri
Pore network and pore scale modelings of reactive transport in porous media
- 16:00–16:15 EGU2012-11753
M. Kobchenko, D.K. Dysthe, F. Renard, and O. Galland
Tight rock fracturing due to internal gas production
- 16:15–16:30 EGU2012-7998
B. Sandnes, K.J. Måløy, and E.G. Flekkøy
Gas penetration into a deformable porous medium
- 16:30–16:45 EGU2012-7447
M. Ebner, D. Koehn, and R. Toussaint
Styrolite aperture scaling - implications for localised pressure solution (and fluid flow).
- 16:45–17:00 EGU2012-1877
M. J. Heap, P. Baud, P. G. Meredith, and T. Reuschlé
Styrolites in carbonate rock: barriers to fluid flow?

TS2.3/EMRP2.8/HS8.1.7 – Flow Properties of Transforming Porous Media (co-organized) – Posters

Convener: R. Toussaint | Co-Conveners: D. Koehn, E. Aharonov

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Daniel Koehn

- A347 EGU2012-2891
R. Clement, S. Courrech du Pont, and S. Douady
Penetration and blown-air effect in sand
- A348 EGU2012-13560
M. Niebling, **R. Toussaint**, E.G. Flekkoy, and K.J. Maloy
Fluid-fracturing: shaping permeability patterns according to time dependent pumping
- A349 EGU2012-3516
E. I. Debolskaya, E.V. Zamjatina, I.I. Gritsuk, and O.Ja. Maslikova
The modeling of the channel deformations in the rivers flowing into permafrost with an increase in ambient temperature

- A350 EGU2012-5763
V. Vidal, G. Varas, and J.-C. Géminard
Morphology and dynamics of an immersed porous medium crossed by an ascending gas flow
- A351 EGU2012-8092
B. Sandnes
Pattern palette for complex fluid flows
- A352 EGU2012-2074
G. Desbois, J.L. Urai, M. Houben, S. Hemes, and J. Klaver
BIB-SEM of representative area clay structures paving towards an alternative model of porosity
- A353 EGU2012-12029
F. Balsamo, F.H.R. Bezerra, M.M. Vieira, and F. Storti
Fault-related Fe-oxide concretions and Liesegang bands in sandstones: insights into advective versus diffusive fluid flow in deforming porous media
- A354 EGU2012-9041
D. Koehn and P. Chung
The Formation of Banded Zebra Rocks, Permeability Changes and Ore Formation
- A355 EGU2012-11171
E. Salomon, D. Koehn, and C.W. Passchier
Development of Deformation Bands in Lower Cretaceous Sandstones in Namibia
- A356 EGU2012-5631
S. Hemes, G. Desbois, and J.L. Urai
New insights to pore space morphologies in Boom Clay - results from 2D BIB-SEM investigations and mercury injection porosimetry
- A357 EGU2012-1851
P. Baud, Y. Ji, V. Vajdova, and T.-f. Wong
Characterization of pore geometry of Indiana limestone in relation to mechanical compaction
- A358 EGU2012-6065
L. Zinsmeister, J. Dautriat, A. Dimanov, J. Raphanel, M. Bornert, and N. Gland
Evolution of flow properties in homogeneously altered limestone specimens
- A359 EGU2012-10538
a. raouf, c. Spiers, and s. m. Hassanizadeh
Upscaling porosity-permeability relation in porous media; reactive pore-scale modeling
- A360 EGU2012-3374
H. Milsch and M. Priegnitz
Evolution of microstructure and elastic wave velocities in dehydrated gypsum samples
- A361 EGU2012-967
R. Vasilyev, K. Gerke, M. Karsanina, and D. Korost
Sequential and gravitational algorithms for soil and other porous media modeling
- A362 EGU2012-13840
M. Broz, L. Novakova, K. Sosna, **J. Najser**, and P. Novak
Parameters of Seismic Velocities and their Relationship to the Geomechanical Characteristic of the Podlesí Granites
- A363 EGU2012-9135
M. Lupi, E. H. Saenger, F. Fuchs, and S. A. Miller
A seismic wave propagation study for the triggering of the Lusi mud-volcano, Indonesia.

TS2.4/HS8.1.8 – Fractures, faults and fluid flow: from observations to mechanisms (co-organized) – Orals

Convener: N. De Paola | Co-Conveners: D. Koehn, F. Renard, J. Richard, S. Smith, F. Balsamo, I. Ghani, M. Arndt

Room: 11

Chairperson: Nicola De Paola, Daniel Koehn

- 08:30–08:45 EGU2012-10914
I. Korneva, E. Tondi, F. Agosta, R. Di Cuia, R. Bitonte, and M. Giorgioni
Scaling relationships and permeability structures of fault zones crosscutting tight Cretaceous platform carbonates (Murge Plateau, southern Italy)
- 08:45–09:00 EGU2012-8540
M.H. Voorn, A. Rath, and U. Exner
Extracting porosity and modelling permeability from μ CT and FIB-SEM data of fractured dolomites from a hydrocarbon reservoir
- 09:00–09:15 EGU2012-11804
C. J. Spiers
How do fluid-rock interactions control the frictional and transport properties of fault rocks?
- 09:15–09:30 EGU2012-10310
B. Lacroix, A. Travé, M. Buatier, and P. Labaume
Syntectonic fluid-flow along thrust faults: Example of the South Pyrenean fold-and-thrust belt

- 09:30–09:45 EGU2012-9612
H. Leclère, G. Daniel, O. Fabbri, and F. Cappa
 Overpressured fluid imaging from focal mechanisms during the 2003-2004 Ubaye seismic swarm (Southern-Alps, France)
- 09:45–10:00 EGU2012-7829
M. Violay, S. Nielsen, D. Cinti, E. Spagnuolo, G. Di Toro, and S. Smith
 Role of fluids in experimental calcite-bearing faults at seismic deformation conditions.

COFFEE BREAK

Chairperson: Francois Renard, Julie Richards

- 10:30–10:45 EGU2012-8001
A. Niemeijer, C. Collettini, S.A.F. Smith, and C.J. Spiers
 Frictional properties of Zuccale Fault rocks from room temperature to in-situ conditions: results from high strain rotary shear experiments
- 10:45–11:00 EGU2012-8130
 E. Lecomte, **L. Le Pourhiet**, and O. Lacombe
 Mechanical basis for slip along low-angle normal faults
- 11:00–11:15 EGU2012-5998
H. Dyer, D. Amitrano, and A.-M. Boullier
 Scaling properties of fault rocks
- 11:15–11:30 EGU2012-7079
G. Michlmayr, D. Cohen, and D. Or
 Linking acoustic emission signatures with grain-scale mechanical interactions during granular shearing
- 11:30–11:45 EGU2012-10949
N. Brantut, P. Baud, M. J. Heap, and P. G. Meredith
 Micromechanics of brittle creep and implications for the strength of the upper crust
- 11:45–12:00 EGU2012-9272
B.A. Verberne, A.R. Niemeijer, C.J. Spiers, C.-R. He, and M.R. Drury
 Microphysical mechanisms controlling slip stability in calcite-rich fault gouges

LUNCH BREAK

Chairperson: Steven Smith, Fabrizio Balsamo

- 13:30–13:45 EGU2012-2433
W.-L. Zhu
 Fracture and Faulting Induced Permeability Change in Porous Sedimentary Rocks
- 13:45–14:00 EGU2012-12097
M. Arndt, S. Virgo, S. Cox, and J. Urai
 Changes of fluid flow regimes in a complex calcite vein network (Natih Formation, Oman Mountains): Insights from Stable Isotope Analysis
- 14:00–14:15 EGU2012-11548
G. Ballas, R. Soliva, J.-P. Sizun, and A. Benedicto
 Impact of deformation bands on subsurface fluid flow (Provence, France)
- 14:15–14:30 EGU2012-11223
E. Mariani, D.R. Faulkner, D.A.H. Teagle, C.D. Menzies, R. Sutherland, J. Townend, V.G. Toy, and D.J. Prior
 Evolution of the structural, geochemical and mechanical properties of the Alpine Fault zone from the Deep Fault Drilling Project (DFDP): current achievements and future goals
- 14:30–14:45 EGU2012-9923
L.-W. Kuo, S. Nielsen, G. Di Toro, S. Smith, E. Spagnuolo, M. Violay, J. Suppe, and S.-R. Song
 High-velocity frictional properties of clay-rich fault gouges from the Chelungpu fault zones, Taiwan
- 14:45–15:00 EGU2012-5750
D. Cohen, G. Michlmayr, and D. Or
 Statistics of acoustic emissions and stress drops during granular shearing using a stick-slip fiber bundle mode

TS2.4/HS8.1.8 – Fractures, faults and fluid flow: from observations to mechanisms (co-organized) – Posters
 Convener: N. De Paola | Co-Conveners: D. Koehn, F. Renard, J. Richard, S. Smith, F. Balsamo, I. Ghani, M. Arndt

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Max Arndt, Irfan Ghani

- A364 EGU2012-577
F. Bolognesi, V. Donghi, and A. Bistacchi
The Simplon Line fault rocks: reworking of inherited mechanical anisotropy and weakening mechanisms
- A365 EGU2012-1150
R.E. Holdsworth, **S. Smith**, and G.E. Lloyd
The precipitation of silica gels along seismogenic faults due to sudden fluid pressure drops: an example from the Zuccale low angle normal fault, Italy
- A366 EGU2012-2017
M. Zerlauth
Fold-related fractures - a brittle tectonic case study of the Helvetic zone in Vorarlberg (western Austria) and Upper Allgäu (Bavaria)
- A367 EGU2012-3106
F. Perez, **C. Mügler**, P. Jean-Baptiste, and J. L. Charlou
Modelling of hydrothermal fluid circulation in a heterogeneous medium: Application to the Rainbow Vent site (Mid-Atlantic-Ridge, 36°14N)
- A368 EGU2012-3508
L. De Filippis, C. Faccenna, A. Billi, E. Anzalone, M. Brilli, M. Özkul, M. Soligo, P. Tuccimei, and I. M. Villa
Growth of fissure ridge travertines from geothermal springs of Denizli basin, western Turkey
- A369 EGU2012-5253
L. Bertrand, E. LeGarzic, Y. Géraud, and M. Diraison
Multiscale analysis of the fracture pattern in granite, example of Tamariu's granite, Catalunya.
- A370 EGU2012-5290
L. Bertrand, E. LeGarzic, Y. Géraud, and M. Diraison
Use of markers of paleo-circulations to characterize the porous network of fractured granite.
- A371 EGU2012-6199
L. Clemenzi, G. Molli, F. Botti, A. Ungari, and F. Storti
3D architecture and structural characterization of the Lima Valley low-angle fault system (Northern Apennines, Italy).
- A372 EGU2012-6296
S. Hammerschmidt, E.E. Davis, and A. Kopf
Implications for Petrophysical and Hydrological Properties of the Nankai Trough Megasplay Fault Based on SmartPlug Borehole Observatory Data
- A373 EGU2012-6911
Y.-M. Chou, C. Aubourg, S.-R. Song, T.-Q. Lee, and Y.-F. Song
Creep versus Earthquake Slip: New insights from rock magnetic data
- A374 EGU2012-8104
I. Ghani, D. Koehn, and R. Toussaint
Ontogenesis Of Hydrofracturing: Pore Pressure Diffusion And Its Implications For Stress Dependant Matrix Permeability Stimulation
- A375 EGU2012-8262
R. Veeningen, B. Grasemann, K. Decker, R. Bischoff, and A.H.N. Rice
Fracture and vein characterization of a crystalline basement reservoir, central Yemen
- A376 EGU2012-8791
J.-O. Schwarz and F. Enzmann
Dynamic coupling between fluid flow and vein growth in fractures: a 3D numerical model
- A377 EGU2012-10570
B. Lacroix, H. Leclère, and M. Buatier
Microtectonic characterization of the deformation in fault zone: A key to understand the mechanical evolution of a thrust fault (Monte Perdido thrust fault, Spain)
- A378 EGU2012-10790
M. Lommatzsch, U. Exner, S. Gier, and M. Harzhauser
Relative timing of cementation and deformation band formation in Miocene calcareous sands (Eisenstadt Basin, Austria)
- A379 EGU2012-11177
N. Beaudoin, N. Bellahsen, O. Lacombe, L. Emmanuel, and J. Pironon
From fold-related fracture population analysis to paleofluid flow reconstruction at basin-scale : a case study in the Bighorn Basin (Wyoming, USA)
- A380 EGU2012-11216
A. Neuville, E.G. Flekkøy, R. Toussaint, K.J. Måløy, and J. Schmittbuhl
Hydro-thermal exchanges in rough fractures: solving the equations with or without lubrication approximations?

- A381 EGU2012-11637
G. Ballas, R. Soliva, A. Taboada, and A. Benedicto
Tectonic regime and strain localization in porous sandstones (Provence, France).
- A382 EGU2012-11643
C. Tarragoni
Fault control on the hydrogeological setting of the Sibillini Mountains aquifers (Central Apennines, Italy): an example of hydrogeological structures in thrust-belt contexts
- A383 EGU2012-13198
S. Y. Hsieh, F. Neubauer, and J. Genser
Geomorphic expression of strike-slip faults: field observations vs. analog experiments: preliminary results
- A384 EGU2012-13212
P.I.R. Wilson, K.J.W. McCaffrey, I. Jarvis, P. Murphy, and J.P. Davidson
Deformation Structures associated with the emplacement of high level intrusions: A study of Trachyte Mesa Intrusion, Henry Mountains, Utah
- A385 EGU2012-13399
N. De Paola, F. Agosta, F. Balsamo, R. Bullock, E. Dempsey, I. Faoro, R.E. Holdsworth, and F. Storti
Constraints on fault dynamic weakening mechanisms from natural slip surfaces in carbonate faults
- A386 EGU2012-4782
B.I. Kleine, A.D.L. Skelton, and I.K. Pitcairn
Quantification of Fe-fluxes in metamorphic fluids in the SW Scottish Highlands
- A387 EGU2012-5159
A. Suzuki, H. Makita, Y. Niibori, S. Fomin, V. Chugunov, and T. Hashida
Prediction of mass transport in complex fractured reservoirs based on tracer testing
- A388 EGU2012-6672
Q. Li, S. Shao, and X. Xia
Characterization and Geological Model of Fractured shale Reservoir in Eastern China
- A389 EGU2012-8573
K. Okamoto, C. Iijima, M. Kurosawa, Y.C. Chan, and M. Terabayashi
Fluid chemistry in the fault propataion zone in the mid-crust -fluid inclusion chemistry from the Lishan fault, Taiwan
- A390 EGU2012-9018
S. Azizmohammadi, S. K. Matthäi, and J. D. Paul
Scale Dependence of Equivalent Permeability Tensor in Naturally Fractured Reservoirs
- A391 EGU2012-10176
Y. Hafeznia, S. Bourlange, and M. Ohnenstetter
Tectonic conditions of hydrothermal polymetallic vein-type mineralization, Sainte Marie-aux-Mines, France
- A392 EGU2012-11613
J. Chan, D. R. Schmitt, G. Nieuwenhuis, E. Poureslami Ardakani, J. Kueck, and M. R. Abasolo
Mapping permeable fractures at depth in crystalline metamorphic shield rocks using borehole seismic, logging, and imaging

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

Convener: I. Bianchi | Co-Conveners: M. Miensoopust, 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. Miensoopust, 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. Bokermann, 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

TS4.5 – Geodynamics of collisional type orogenic belts and plateaus and its response to climate and erosional process - Himalaya, Pamir, Central Asia & Tibet – Orals

Convener: R. Thiede | Co-Conveners: B. Mukherjee, Dr. Mukherjee, M. Fuchs, M. Jolivet, M.B. Allen

Room: 20

Chairperson: n.n.

10:30–10:45 EGU2012-3447

E. Kirby, K. Furlong, E. Wang, X. Shi, M. van Soest, G. Xu, P. Kamp, and K. Hodges

Episodic growth of topography in eastern Tibet

- 10:45–11:00 EGU2012-2972
D. Cunningham and J. Zhang
Major Fault Systems and Mountain Building Processes in the Tibetan Foreland and Beishan Region, NW China
- 11:00–11:15 EGU2012-3404
C. Sippl, B. Schurr, F. Schneider, X. Yuan, J. Mechie, C. Haberland, M. Gadoev, I. Oimahmadov, U. Abdybachaev, S. Orunbaev, V. Minaev, S. Negmatullaev, H. Rui, and L. Pingren
Seismicity of the Pamir and Hindu Kush: new constraints on regional tectonics
- 11:15–11:30 EGU2012-3370
K. sen
Syntectonic felsic magmatism in the Karakoram fault Zone, Eastern Ladakh, India: Some new constraints on its age of initiation
- 11:30–11:45 EGU2012-3381
S Mukherjee
Channel flow extrusion model to constrain viscosity and Prandtl number of the Higher Himalayan Shear Zone
- 11:45–12:00 EGU2012-7775
Y. Daoudene, **D. Gapais**, J.P. Cogné, and G. Ruffet
Early Cretaceous extension in northern Asia and Paleo-Pacific plate kinematics

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2012-14140
P. van der Beek, X. Robert, J. Mercier, and J. Braun
Tectonic control on topographic and exhumational segmentation of the Himalaya
- 13:45–14:00 EGU2012-4226
K. Bhattacharyya and G. Mitra
Geometry and Kinematics of the Darjeeling - Sikkim Himalaya, India: Implications for the Evolution of the Himalayan Fold-Thrust Belt
- 14:00–14:15 EGU2012-10200
I Coutand, D Grujic, D.M. Whipp Jr., M Bernet, M.G. Fellin, K Landry, and N McQuarrie
Deformation and exhumation of the Bhutan Himalaya derived from the inversion of thermochronologic and thermometric data
- 14:15–14:30 EGU2012-7751
M. Mukul
Climate-Tectonics interactions in the light of symptomatic critical wedge theory: Insights from Darjiling-Sikkim-Tibet Himalayan wedge
- 14:30–14:45 EGU2012-12879
D. Scherler, H. Munack, J. Mey, H. Wittmann, P. Kubik, and M.R. Strecker
Prolonged and massive river damming by Siachen Glacier, Karakoram, during the penultimate glacial period
- 14:45–15:00 EGU2012-11424
S. Singh, A. Awasthi, B. Parkash, and S. Kumar
Himalayan orogeny and palaeovegetational changes: a relook into the factors controlling global expansion of C4 grasslands.

Chairperson: Mukherjee, M. Fuchs, and Mukherjee

- 15:30–15:45 EGU2012-6304
J.-P. Cogné, D. Gapais, Y. Daoudene, and V.A. Kravchinsky
Paleomagnetic timing of Mesozoic Mongol-Okhotsk Ocean closure
- 15:45–16:00 EGU2012-9786
M. Jolivet, A. Arzhannikova, S. Arzhannikov, A. Chauvet, R. Vassallo, N. Kulagina, and **V. Akulova**
Tectonic evolution of the Transbaikial region (Siberia) from Late Jurassic to Present. Implications for the Mongol-Okhotsk orogeny.

TS4.5 – Geodynamics of collisional type orogenic belts and plateaus and its response to climate and erosional process - Himalaya, Pamir, Central Asia & Tibet – Posters

Convener: R. Thiede | Co-Conveners: B. Mukherjee, Dr. Mukherjee, M. Fuchs, M. Jolivet, M.B. Allen

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Thiede, Mukherjee, Fuchs, Jolivet,

- A393 EGU2012-8083
P.K. Khan and S. Chowdhury
Recurrences of large earthquakes near Western Himalayan Syntaxis: tectonic implications
- A394 EGU2012-10559
G. Mathew, S. De Sarkar, and K. Pande
Foreland out-of Sequence thrusting and rapid Pleistocene exhumation of Higher Himalayan crustal rocks in the Western Arunachal Himalaya
- A395 EGU2012-8172
T. Goswami, D. Bezbaruah, and R. K. Sarmah
Structural Framework of the Sub-Himalaya and its tectonic evolution along Kameng river section: Arunachal Pradesh, India
- A396 EGU2012-4548
R. Thiede and T. Ehlers
Large Spatial and Temporal Variations in Himalayan Denudation
- A397 EGU2012-5232
B. Parkash, S. Rathor, and P. Pati
Strong Coupled and Segmented Nature of the Himalaya and the Adjoining Gangetic Foreland Basin
- A398 EGU2012-5383
A. Shah, J. Malik, and B. Lohani
Influence of active fault on the evolution of landscape and drainage: Evidence from lateral propagation of a branching out fault along Himalayan front and deflection of Dabka River, Kumaun Himalayas
- A399 EGU2012-10972
H. Munack, J.H. Blöthe, D. Scherler, H. Wittmann, P.W. Kubik, and O. Korup
Postglacial denudation outpaced by long-term exhumation, Ladakh and Zaskar, India
- A400 EGU2012-11088
J.H. Blöthe, H. Munack, A. Fülling, P.W. Kubik, and O. Korup
Late Pleistocene to recent incision dynamics near the western Tibetan Plateau margin, Zaskar, India
- A401 EGU2012-5294
A. Shah
Active faults in the Kashmir Valley
- A402 EGU2012-5684
S Mukherjee and P Nasipuri
Trapezoid-shaped mineral grains in micro-scale from the Higher Himalayan Shear Zone, Sutlej section, Indian Himalaya: their morphometry and tectonic implications
- A403 EGU2012-3582
B. Mukherjee and S. Mukherjee
Prograde fluid in Tso Moriri UHP rocks, Ladakh India
- A404 EGU2012-8123
P. K. Khan and Md. A. Ansari
Role of plate convergence obliquity behind deformation along the Himalaya between Himachal and Darjeeling
- A405 EGU2012-3597
P. Roy
Microstructures and kinematic vorticity analysis from the mylonites along the Karakoram Shear Zone, Pangong Mountains, Karakoram
- A406 EGU2012-5707
P. Nasipuri and S Mukherjee
Viscous dissipations in simple shear zones- analytical models and a Himalayan example
- A407 EGU2012-3601
P. Roy and S. Mukherjee
Structural geology of the Bhagirathi section of the Higher Himalayan Shear Zone with special reference to back-thrusting
- A408 EGU2012-3819
H. Zhang, P. Zhang, D. Zheng, W. Zheng, Z. Chen, and W. Wang
Tectonic geomorphology of the Qilian Shan: insights into the Late Cenozoic landscape evolution and deformation in northeastern Tibetan Plateau
- A409 EGU2012-3853
X. Hu, B. Pan, H. Gao, Z. Hu, H. Geng, and B. Cao
Rates and kinematics of deformations along the eastern Qilian Shan Mountain, NE Tibetan Plateau, constraint by deformed fluvial terraces
- A410 EGU2012-10971
J. van der Woerd, A. Perrineau, Y. Gaudemer, P.-H. Leloup, J. Liu-Zeng, L. Barrier, and R. Thuizat
Extensional step-over between the Zhongdian and Red River faults: kinematics of the Daju normal fault constrained by cosmogenic dating of the Yangtze terraces (Yulong Shan, Yunnan)
- A411 EGU2012-4095
D. Kornfeld, E. Appel, L. Ding, D. Liu, S. Eckert, S. Gast, and J. Matthes
Opposite block rotation in westernmost Yunnan at present and during the last 5 Ma?

- A412 EGU2012-12328
K. Chen, **C. Gumiaux**, R. Augier, Y. Chen, and Q. Wang
The Mesozoic palaeo-relief and immature front belt of northern Tianshan
- A413 EGU2012-8053
N. Seib, J. Kley, T. Voigt, and M. Kober
Tectonically controlled relief evolution in the Northern Tien Shan and Junggar Alatau from the Eocene to the Present
- A414 EGU2012-1020
G. Heilbronn, M. Jolivet, C. Robin, S. Bourquin, L. Barrier, Y. Jia, L. Guerit, and B. Fu
Assessing the Mesozoic paleorelief of the NE Tian Shan (China): Constraints from sedimentological marker strata.
- A415 EGU2012-5452
W. Li, Y. Liu, F. Neubauer, J. Genser, S. Ren, G. Han, and C. Liang
Evolution of the Qimantagh magmatic arcs: constraints from U-Pb zircon ages and implications for subduction of Proto- and Paleo-Tethyan Oceans
- A416 EGU2012-10777
M.C. Fuchs, R. Gloaguen, M. Krbetschek, and A. Szulc
OSL dating of fluvial terraces for incision rate estimation and indication of neotectonic activity in Pamir
- A417 EGU2012-4965
F. M. Schneider, X. Yuan, C. Sippl, B. Schurr, J. Mechie, C. Haberland, V. Minaev, I. Oimahmadov, M. Gadoev, U. Abdybachaev, and S. Negmatullaev
Evidence for southward subduction beneath the eastern Pamir constrained by teleseismic converted seismic waves
- A418 EGU2012-10528
E. Pohl and R. Gloaguen
Suspended sediment flux characteristics in the central Pamirs
- A419 EGU2012-13283
J. Tympel and S. Sobolev
Two-/three-dimensional thermo-mechanical modeling of Cenozoic lithospheric deformation in the Himalaya-Tibet-Pamir-Tien Shan orogen
- A420 EGU2012-1133
S. Rajesh
What drives the Tibetan crust to the South East Asia? Role of upper mantle density discontinuities as inferred from the continental geoid anomalies
- A421 EGU2012-10343
P. Maierová, O. ?adek, K. Schulmann, and O. Lexa
Numerical model of continental collision: comparison between Variscan (Bohemian Massif) and modern (Himalayan) orogeny
- A422 EGU2012-10662
S. Dey and R. Thiede
Variation in Erosion Rates in Sikkim Himalaya for the past 5 Myr

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. Amoroso 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. Trippanera, 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. Arnoso, 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 Inclinator (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. Tammara, 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. Amoroso, **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

GM8.4/OS3.6/TS4.10 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Orals

Convener: S. Krastel | Co-Conveners: J. K. Hillier

Room: 21

Chairperson: n.n.

- 13:30–13:45 EGU2012-13865
A. Green, R. Leuci, Z. Thackeray, and J.A.G. Cooper
An overstepped segmented lagoon complex on the KZN continental shelf, South Africa

- 13:45–14:00 EGU2012-13227
D. Ridente, D. Di Bucci, F. Foglini, E. Campiani, U. Fracassi, and F. Trincardi
 Late Quaternary activity and lateral variability of regional deformation belts in marine foreland settings: the South-Western Adriatic margin case study
- 14:00–14:15 EGU2012-166
Ch.L Gong, Y.M Wang, W.G Li, and X.Ch Peng
 Interactions between down-slope and along-slope processes on the South China Sea Slope off southwestern Taiwan: Processes, products, and depositional models
- 14:15–14:30 EGU2012-6838
 P. B. Flemings, **I. Song**, and D. M. Saffer
 Laboratory investigation of coupled deformation and fluid flow in mudrock: implications for slope stability in the Ursa Basin, Gulf of Mexico
- 14:30–14:45 EGU2012-9425
A. Bronner, M. Munschy, D. Sauter, J. Carlut, R. Searle, and M. Cannat
 Deep-tow geophysical survey above large exhumed mantle domains of the eastern Southwest Indian ridge
- 14:45–15:00 EGU2012-12418
C. A. Stein
 Depth anomalies in old oceanic lithosphere

GM8.4/OS3.6/TS4.10 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Posters

Convener: S. Krastel | Co-Conveners: J. K. Hillier

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL274 EGU2012-9585
I.S. Patina
 Seismostartigraphy of the Maykopian clinoforms in the Middle Caspian
- XL275 EGU2012-13332
S. Okay, G. Cifci, S. Ozel, O. Atgin, O. Ozel, B. Barin, M. Er, D. Dondurur, M. Kucuk, S. Gurcay, D. Choul Kim, and B. Sung-Ho
 New discovered Izmir and Busan Mud Volcanoes and Application of Seismic Attributes and AVO Analysis in the Easternmost Black Sea.
- XL276 EGU2012-40
H. Saritas, G. Cifci, L. Géli, Y. Thomas, B. Marsset, A. Rochat, G.K. Westbrook, S. Ker, O. Atgin, S.D. Akhun Ço?kun, C. Grall, P. Henr, S. Gürçay, S. Okay, S. Ço?kun, Ö. Özkan, and B. Bar?n
 2D - 3D high resolution seismic survey on the Sea of Marmara - Western High
- XL277 EGU2012-12739
M. Huuse
 3D seismic images of tectonic, sedimentary and fluid flow processes affecting the seafloor offshore West Africa
- XL278 EGU2012-8124
M. Vrabec, P. Slavec, S. Poglajen, and M. Buseti
 Geomorphology of submerged river channels indicates Late Quaternary tectonic activity in the Gulf of Trieste, Northern Adriatic
- XL279 EGU2012-5240
B. Jolly, L. Lonergan, and A. Whittaker
 The interaction between deepwater channel systems and growing thrusts and folds, toe-thrust region of the deepwater Niger Delta
- XL280 EGU2012-6441
J. Schwab, F. Gross, S. Krastel, P. Jintasaerane, S. Bunsomboonsakul, D. Winkelmann, and W. Weinrebe
 Morphodynamics and slope stability at Mergui Ridge, off western Thailand
- XL281 EGU2012-7652
L.A. Muller, A.B. Watts, and the JC066 shipboard scientific party
 The Morphology, Structure and Origin of Seamounts on the South-West Indian Ocean Ridge
- XL282 EGU2012-13013
F.K.J. Oberle, T.J.J. Hanebuth, and T. Schwenk
 Volumetric facies analysis of a Late Holocene mudbelt environment on the Galician shelf (NW Spain).
- XL283 EGU2012-1628
J.A.G. Cooper, D.W.T. Jackson, R.J. Quinn, R. Plets, J.T. Kelley, D.F. Belknap, A.J. Long, D.A. Long, X. Monteys, R. Edwards, and G.A. Milne
 Topographic and stratigraphic expression of submerged shorelines in the Irish Sea
-

TS5.1/GD4.3 – Rifted margins and onshore analogues: mechanisms of deformation, sedimentation, and magmatism (co-organized) – 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-organized) – 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. Jeanniot, 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 Soddo 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. Kusznir, 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. Martinez-Loriente, M. Prada, A. Gailler, M.-A. Gutscher, R. Bartolome, and E. Gracia
 Thrusting between exhumed mantle blocks at the Gorringe 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.

SM2.0/GD2.10/NH4.10/TS8.8 – The 23 October 2011 Van Earthquake - Losses and Lessons (co-organized) – Orals

Convener: M. Erdik | Co-Conveners: F. Wenzel

Room: 26

Chairperson: Mustafa Erdik and Friedemann Wenzel

- 15:30–15:45 EGU2012-11361
 P. Albini, M.B. Demircioglu, M. Locati, **A. Rovida**, K. Sesetyan, M. Stucchi, and D. Viganò
 Revising the historical seismicity of the region of Van
- 15:45–16:00 EGU2012-14409
S. Altuncu Poyraz, M. Alper ?engül, and A. P?nar
 Source Rupture Process And Seismotectonic Implication Of Van Tabanlı Earthquake, October 23, 2011
- 16:00–16:15 EGU2012-12139
A. M. Akoglu, S. Jonsson, Z. Cakir, S. Ergintav, U. Dogan, G. Feng, and C. Zabc?
 The Surface Deformation and Source Parameters of the October 23rd, 2011, Mw 7.1 Van (Turkey) Earthquake from InSAR, GPS and Field Observations
- 16:15–16:30 EGU2012-14393
 E. Harmandar and **M. Erdik**
 Strong Ground Motion Data from the October 23 and November 9, 2011 Van, Turkey Earthquakes
- 16:30–16:45 EGU2012-13931
Y. Kamer, A. C. Zulfikar, M. B. Demircioglu, C. Tuzun, K. Sesetyan, and M. Erdik
 Post-Earthquake Rapid Loss Estimation for the October 23, 2011 Van Earthquake
- 16:45–17:00 EGU2012-14403
E. Uckan
 Damage to industry and utilities during the October (Mw=7.2) and November(M=5.6), Van Lake Earthquakes, Eastern Turkey

SM2.0/GD2.10/NH4.10/TS8.8 – The 23 October 2011 Van Earthquake - Losses and Lessons (co-organized) – Posters

Convener: M. Erdik | Co-Conveners: F. Wenzel

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Mustafa Erdik and Friedemann Wenzel

- XY496 EGU2012-5040
 G. Ameri, **F. Gallovi?**, A. Askan, and J. Zahradnik
 Broadband Ground Motion Simulations of the 23 October 2011 Van (Eastern Turkey) Earthquake
- XY497 EGU2012-14411
N. Meral Ozel and A. Kusmezer
 2011 Van earthquake (Mw=7.2) aftershocks using the source spectra an approach to real-time estimation of moment magnitude

- XY498 EGU2012-14401
H. Ozener, U. Dogan, Z. Çakir, S. Ergintav, R. Reilinger, R. Cakmak, B. Turgut, A. Akoglu, M.A. Floyd, and D. Oz
 The Postseismic deformation of the October 23, 2011, Mw 7.2 Van (Turkey) Earthquake from GPS and InSAR
- XY499 EGU2012-254
A. Tan, H. Eyidogan, V. Gecgel, and A. Yoruk
 Recent Seismotectonics Implications Of The East Anatolian Fault Zone Close to Van, Eastern Turkey
- XY500 EGU2012-6956
A. Akinci and A. Antonioli
 Observations and Modeling of Strong Ground Motions for the 23 October 2011 Mw 7.1 Van, Turkey, Earthquake
- XY501 EGU2012-9424
S. Pulinets, D. Ouzounov, G. Giuliani, K. Tsybulya, and I. Yudin
 Results of short-term earthquake precursors multiparameter monitoring during preparation phase of Van earthquake as manifestation of the crust, surface, atmospheric and ionospheric processes synergy
- XY502 EGU2012-2791
Y. Altiner, W. Söhne, and C. Güney
 The geodetic impact of the Van earthquake from 23 October 2011
- XY503 EGU2012-5565
J.E. Daniell, B. Khazai, F. Wenzel, T. Kunz-Plapp, A. Vervaeck, B. Muehr, and M. Markus
 A discussion of the socio-economic losses and shelter impacts from the Van, Turkey Earthquakes of October and November 2011
- XY504 EGU2012-13905
M. Erdik, M. B. Demircioglu, Y. Kamer, K. Sesetyan, C. Tuzun, and A. C. Zulfikar
 Rapid Earthquake Hazard and Loss Assessment with ELER© Software

TS9.1/GD8.5 – Recent advances in analogue and numerical modeling of tectonic processes (co-organized) – Orals

Convener: M. Frehner | Co-Conveners: M. Rosenau, G. Schreurs, D. Weatherley, E. Aharonov, S. Abe

Room: 12

Chairperson: M. Frehner & M. Rosenau

- 13:30–13:45 EGU2012-4294
N. S. Mancktelow
 Behaviour of a rimmed elliptical inclusion in 2D slow incompressible viscous flow
- 13:45–14:00 EGU2012-2616
J. E. Reber, O. Galland, M. Dabrowski, D. W. Schmid, and P. R. Cobbold
 A combined analytical and experimental study on the formation of sheath folds
- 14:00–14:15 EGU2012-12003
M. Adamuszek, D.W. Schmid, and M. Dabrowski
 LAF: Theoretical Model of Large Amplitude Folding of a Single Viscous Layer
- 14:15–14:30 EGU2012-6536
P. Souloumiac, B. Mary, J. Herbert, B. Maillot, and M. Cooke
 Study of the friction variation of shear bands in analogue models of accretionary wedges.
- 14:30–14:45 EGU2012-10357
B. C. L. Mary, Y. M. Leroy, and B. Maillot
 Temporal and spatial organisation of faulting in frictional wedges
- 14:45–15:00 EGU2012-5094
A. Massmeyer, A. Davaille, T. Rolf, P. Tackley, and E. Di Giuseppe
 Combined Laboratory and Numerical Study on Thermal Plumes in Yield-Stress Fluids : Implications for Midocean-Ridge Systems
- Chairperson: M. Rosenau & S. Abe
- 15:30–15:45 EGU2012-8166
C. Faccenna
 Subduction dynamics - an interdisciplinary approach
- 15:45–16:00 EGU2012-2147
M. von Tscharner and S. Schmalholz
 3D FEM modeling of fold nappe formation in the Western Swiss Alps
- 16:00–16:15 EGU2012-11728
M.P.J. Schöpfer, C. Childs, E.P. Holohan, and J.J. Walsh
 Applications of the Distinct Element Method in Structural Geology: A critical review of common practices in model presentation and suggestions for a more quantitative approach
- 16:15–16:30 EGU2012-8850
A. Rathbun and F. Renard
 Numerical investigation of fault zone roughness: Interplay between fault geometry and friction

- 16:30–16:45 EGU2012-718
M. Griffa, B. Ferdowsi, J. Carmeliet, E.G. Daub, R.A. Guyer, P.A. Johnson, and C. Marone
 Mesoscopic scale analysis of deformation patterns for dynamically triggered slip in sheared granular layers: insights into the granular mechanics of dynamic earthquake triggering via Discrete Element Method numerical simulations
- 16:45–17:00 EGU2012-10942
L. Goren, E. Aharonov, D. Sparks, R. Toussaint, and E. Marder
 Shearing fluid-filled granular media: A coupled discrete element - continuous approach

TS9.1/GD8.5 – Recent advances in analogue and numerical modeling of tectonic processes (co-organized) – Posters

Convener: M. Frehner | Co-Conveners: M. Rosenau, G. Schreurs, D. Weatherley, E. Aharonov, S. Abe

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A447 EGU2012-7943
S. Abe, D. Weatherley, and T. Ayton
 Generation of Random Particle Packings for Discrete Element Models
- A448 EGU2012-7996
 V. Boros, **D. Weatherley**, and S. Abe
 Performance benchmarking results for a parallel implementation of the discrete element method
- A449 EGU2012-7667
T. Santimano, M. Rosenau, M. Morlock, and O. Oncken
 On the precision of sandbox experiments - insight from test-retest variability
- A450 EGU2012-2298
M. Rosenau, T. Santimano, and O. Oncken
 Ain't Enough Enough? Constraints on the uncertainty and repeatability of sandbox experiments from probabilistic modelling
- A451 EGU2012-6826
F. Hofmann, M. Rosenau, G. Schreurs, and A. M. Friedrich
 Quantifying the effects of material properties on analog models of critical taper wedges
- A452 EGU2012-687
F. Albert, N. Kukowski, A. Tassara, and O. Oncken
 Understanding Subduction Erosion Through Scaled Sandbox Analogue Experiments
- A453 EGU2012-6539
D.A. Boutelier, A.R. Cruden, and O. Oncken
 Plate deformation at the transition between collision and subduction: insights from 3D thermo-mechanical laboratory experiments
- A454 EGU2012-2245
A. Pons and Y.M. Leroy
 Stability of accretionary wedges with heterogeneous basal pressure and frictional properties
- A455 EGU2012-6150
A. Pons and R. Mourgues
 Effect of fluid overpressure on thrust wedges deformation - insight from sandbox models
- A456 EGU2012-8970
L. Wenk and K. Huhn
 Numerical simulation to investigate the influence of a viscous layer on the mechanics and kinematics of accretionary wedges
- A457 EGU2012-6815
N. Makedonska, D. W. Sparks, and E. Aharonov
 Discrete Element Modeling of Rock Deformation via Pressure Solution (PSDEM)
- A458 EGU2012-8294
D. Weatherley and T. Ayton
 Numerical investigations on the role of micro-cracks in determining the compressive and tensile strength of rocks
- A459 EGU2012-7426
S. Virgo, S. Abe, and J.L. Urai
 DEM modeling of fracture propagation in veined rock
- A460 EGU2012-7488
O. I. Ulven, H. Storheim, M. Dabrowski, H. Austrheim, and A. Maltre-Sørenssen
 Modelling of fracture initiation during volume increasing reactions in rocks
- A461 EGU2012-8643
A. Hafver, M.E. Kobchenko, A. Maltre-Sørenssen, and P. Meakin
 Fracturing driven by gas exsolution

- A462 EGU2012-4810
M. Kettermann, H. W. van Gent, and J. L. Urai
Modeling the effect of preexisting joints on normal fault geometries using a brittle and cohesive material
- A463 EGU2012-5717
M. Rosenau and O. Oncken
On the earthquake potential of creeping faults: Insights from lab-scale fault analogues
- A464 EGU2012-11715
L. Bonini, G. Toscani, and S. Seno
The investigation of blind continental earthquake sources through analogue and numerical models
- A465 EGU2012-2395
M. Frehner and U. Exner
Do foliation refraction patterns around buckle folds represent finite strain?
- A466 EGU2012-2646
S. Abe and J.L. Urai
Discrete Element Modelling of Boudinage in 3D
- A467 EGU2012-9645
C.-Y. Lu, J. Malavieille, and C. H. Huang
Large scale overturned structures in the Central Range of Taiwan: Insight from sandbox models
- A468 EGU2012-9883
L. Vynnytska, D. Stegman, and S. Clark
The Afar Region: Numerical Modeling Using Geological Data
- A469 EGU2012-10015
Y. Nestola, C. Cavozi, A. Cappelletti, G. Davoli, M. Meda, F. Salvi, G. Spadini, and F. Storti
High- to low-angle normal faulting and sag basin evolution in analogue modeling of orthogonal rifting
- A470 EGU2012-10085
Y. Nestola, C. Cavozi, M. Cella, C. Magistroni, F. Salvi, G. Spadini, and F. Storti
Sandbox analogue modeling of strike-slip crustal shear zones involving structural inheritance
- A471 EGU2012-2232
L.W Wei, C.M. Lo, C.F. Lee, H.T. Chou, and M.L. Lin
A kinematic model of the Suao landslide calibrated to the morphology of the landslide deposit
- A472 EGU2012-6922
W.-K. Huang, H.-K. Chu, C.-M. Lo, and M.-L. Lin
The Hungtsaping landslide: A kinematic model based on morphology
- A473 EGU2012-2931
A. D. Christensen, D. L. Egholm, J. A. Piotrowski, and S. Tulaczyk
Discrete element modelling of subglacial sediment deformation
- A474 EGU2012-9671
M. Kis, G. Detzky, and A. Koppán
3D Finite Element Modelling for the investigation of the cavity effect in extensometric rock-deformation measurements
- A475 EGU2012-8760
L. Torbahn and K. Huhn
Numerical analysis of granular soil fabrics
- A476 EGU2012-8333
D. Weatherley, B. Wruck, W. Hancock, and G.P. Chitombo
Investigations on comminution of sheared prismatic granular materials using the discrete element method
- A477 EGU2012-13288
W. Hancock, D. Weatherley, B. Wruck, and G.P. Chitombo
Numerical investigations on flow dynamics of prismatic granular materials using the discrete element method
- A478 EGU2012-4117
O. Katz and J.K. Morgan
Stress analysis during slope failure from DEM simulations

GD8.1/TS9.6 – Recent advances in computational geodynamics (co-organized) – Orals

Convener: B.J.P. Kaus | Co-Conveners: A. Popov, M. Dabrowski

Room: 22

Chairperson: Boris Kaus and Anton Popov

- 10:30–10:45 EGU2012-12014
D. A. May
Advances in three-dimensional, finite-element based marker-in-cell methods applied to geodynamics
- 10:45–11:00 EGU2012-8842
T. Gerya, T. Duretz, and D.A. May
New 2D adaptive mesh refinement algorithm based on conservative finite-differences with staggered grid

- 11:00–11:15 EGU2012-679
H. Samuel
Time-domain parallelization for geodynamic modeling
- 11:15–11:30 EGU2012-7110
Y. Podladchikov
Nonlinear waves and rheologies
- 11:30–11:45 EGU2012-12237
L. Liu and **D.R. Stegman**
Techniques to achieve geodynamic self-consistency in data-assimilation models of mantle convection
- 11:45–12:00 EGU2012-7805
F. Cramer, P.J. Tackley, I. Meilick, T.V. Gerya, and B.J.P. Kaus
A free plate surface and weak oceanic crust produce single-sided subduction on Earth

GD8.1/TS9.6 – Recent advances in computational geodynamics (co-organized) – Posters

Convener: B.J.P. Kaus | Co-Conveners: A. Popov, M. Dabrowski

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Boris Kaus and Anton Popov

- XL220 EGU2012-833
A.-C. Plesa, N. Tosi, and C. Hüttig
Thermo-chemical convection in planetary mantles: advection methods and magma ocean overturn simulations
- XL221 EGU2012-4524
E. Mulyukova, M. Dabrowski, and B. Steinberger
Numerical Modeling of the Deep Mantle Convection: Accuracy of the Tracer Methods
- XL222 EGU2012-5559
W.F. Austmann and R.M.A. Govers
The effect of elastic compressibility in geodynamic models using a benchmark of a sinking cylinder in a bounded medium
- XL223 EGU2012-5581
T. Baumann, B. Kaus, and A. Popov
Data-driven forward modeling using a direct search approach
- XL224 EGU2012-5905
J. Weismüller, M. Mohr, and H.-P. Bunge
A new axis-symmetric, multigrid based Stokes solver for compressible flow
- XL225 EGU2012-6035
A. A. Popov and B. J. P. Kaus
Implementation of Newton-Raphson iterations for parallel staggered-grid geodynamic models
- XL226 EGU2012-6070
T. Rolf, F. Cramer, and P. J. Tackley
Combining floating continents and a free surface in a 3D spherical mantle convection model with self-consistent plate tectonics
- XL227 EGU2012-7008
N. Fernandez and B.J.P. Kaus
Wavelength selection and evolution in high-resolution 3D numerical models of multilayer detachment folding
- XL228 EGU2012-7528
S. Buiter and S. Ellis
SULEC: Benchmarking a new ALE finite-element code
- XL229 EGU2012-8690
S. Omlin, V. Keller, and Y. Podladchikov
Performance of Basic Geodynamic Solvers on BG/p and on Modern Mid-sized CPU Clusters
- XL230 EGU2012-9075
L. Noack and N. Tosi
Influence of the Geometry on Mantle Convection Models
- XL231 EGU2012-9100
C. Stein, J.P. Lowman, and U. Hansen
A comparison of mantle convection models featuring plates
- XL232 EGU2012-9939
F. Zaussinger, A. Plesa, C. Egbers, and D. Breuer
Mantle Convection in a Spherical Shell: Comparison of Numerical Simulations with the GeoFlow Experiment on the ISS
- XL233 EGU2012-10945
A. G. Petrunin, M. K. Kaban, I. Rogozhina, and V.P. Trubetsyn
Revising the spectral method as applied to the mantle dynamics modeling.

- XL234 EGU2012-4523
C. Thieulot
 A new way to recover pressure in Finite Element geodynamics codes based on the penalised pressure formulation
- XL235 EGU2012-12519
S. Zavialov and V. Zakharov
 Calculation of Tectonic Block Rotation Parameters from GPS Data
- XL236 EGU2012-12640
M. Krotkiewski and M. Dabrowski
 An Efficient Stencil Implementation for Modern GPUs
- XL237 EGU2012-14113
D.A. May
 Generating volumetric composition maps from particle based computational geodynamic simulations.
- XL238 EGU2012-14116
B.J.P. Kaus, A Popov, and D.A. May
 Recent progress in modelling 3D lithospheric deformation

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. Kuszniir

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 Oceanic 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. Kuszniir

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

GD3.7/G3.2/TS9.9 – Integrating geodetic and geological studies of active crustal deformation (co-organized) – Orals

Convener: M. Westerhaus | Co-Conveners: M. Becker, A. Demoulin, C. Hwang, W B Shen, T. Wright

Room: 30

Chairperson: Malte Westerhaus

- 10:30–10:45 EGU2012-13740
A. M. Friedrich
 Broadband Approach To Quantification Of Lithospheric Deformation On Scales Ranging From Earthquakes To Fault Systems
- 10:45–11:00 EGU2012-13200
O. Trubienko, L. Fleitout, JD Garaud, and C. Vigny
 The far-field deformations associated with the seismic cycle: The lessons from the postseismic deformations of the recent giant subduction earthquakes
- 11:00–11:15 EGU2012-9726
 A. Walpersdorf, I. Manighetti, F. Tavakoli, **Z. Mousavi**, M. Vergnolle, A. Jadidi, D. Hatzfeld, A. Aghamohammadi, Y. Djamour, H. Nankali, M. Sedighi, and L. Lutz
 New insights on the recent and current deformation in Central-Eastern Iran, derived from a combined tectonic and GPS analysis
- 11:15–11:30 EGU2012-10328
T. Fuhrmann, M. Westerhaus, K. Zippelt, and B. Heck
 Vertical Displacements in the Upper Rhine Graben Area Derived from Precise Levelling Data
- 11:30–11:45 EGU2012-6839
C. Hwang and Y.N. Lo
 TOPEX/Poseidon observation of ice thinning over Mt. Tanggula, Tibet
- 11:45–12:00 EGU2012-3345
W B Shen and J C Han
 Investigations of the gravity profile below the Tibetan plateau

GD3.7/G3.2/TS9.9 – Integrating geodetic and geological studies of active crustal deformation (co-organized) – Posters

Convener: M. Westerhaus | Co-Conveners: M. Becker, A. Demoulin, C. Hwang, W B Shen, T. Wright

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: WenBin Shen

- XL202 EGU2012-13089
J. van der Woerd
 Kinematics of strike-slip faults: the geological perspective
- XL203 EGU2012-6785
 C. Kreemer, W. C. Hammond, **G. Blewitt**, A. A. Holland, and R. A. Bennett
 A Geodetic Strain Rate Model for the Pacific-North American Plate Boundary, western United States
- XL204 EGU2012-13005
A. Dapo, B. Pribicevic, M. Herak, and E. Prelogovic
 Geodetic, Geologic and Seismic Interdisciplinary Research of Tectonically Caused Movements in the Wider Area of the City of Zagreb
- XL205 EGU2012-2940
G. Pezzo, C. Tolomei, S. Atzori, and S. Salvi
 New kinematic constraints of the western Doruneh fault (Central-Eastern Iran), from interseismic deformation analysis
- XL206 EGU2012-3340
E. Cetin, M. Meghraoui, Z. Cakir, O. Mimouni, S. Belabbes, A. Akoglu, S. Bouraoui, and M. Chebbah
 Seven years of postseismic deformation in the Mw=6.8, 2003 Zemmouri (Algeria) earthquake area from PS-InSAR

- XL207 EGU2012-3905
W.C. Chung and J.C. Hu
 Analysis of Active Crustal Deformation in Chiayi Area, Southwestern Taiwan by Continues GPS network and numerical modeling
- XL208 EGU2012-10124
 E. Serpelloni, **L. Anderlini**, B. Mastrolembro, A. Cavaliere, P. Baldi, and M. E. Belardinelli
 Geodetic slip-rates from block-modeling of a dense GPS velocity field in Italy: comparison with geological slip-rates and seismic moment release
- XL209 EGU2012-7047
M. Mayer, A. Knöpfler, F. Masson, P. Ulrich, and B. Heck
 Determination of 3D surface displacement rates in the Upper Rhine Graben based on GURN (GNSS Upper Rhine Graben Network)
- XL210 EGU2012-6832
A. Fadil, R. Tenzer, and P. Denys
 Vertical motions in New Zealand from dense GNSS network

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: WenBin Shen

- XL211 EGU2012-3314
A. Ganas, K. Chousianitis, M. Papanikolaou, P. Argyrakis, G. Drakatos, and K. Makropoulos
 Velocity profiles along continuous GPS stations in central and western Greece: Comparison with geological data
- XL212 EGU2012-5072
F. Nilfouroushan, P. Hodacs, C. Talbot, H. Koyi, and L. Sjöberg
 Geodetic horizontal velocity and strain rate fields around Lake Vänern (SW Sweden) derived from GPS measurements between 1997 and 2011
- XL213 EGU2012-12158
O. Ewiak, P. Victor, T. Ziegenhagen, and O. Oncken
 Investigating the deformation of upper crustal faults at the N-Chilean convergent plate boundary at different scales using high-resolution topography datasets and creepmeter measurements
- XL214 EGU2012-3343
 P. Schindler, **T. Jahr**, G. Jentzsch, and N. Kukowski
 High resolution strain observations: Installation and first results of new laser strainmeters at the Geodynamic Observatory Moxa/Germany
- XL215 EGU2012-3448
H.H. Wang, C.K. Shum, Z.C. Luo, and K.H. Tseng
 Lake Level Variations of Ngangzi Co Lake in Tibetan Plateau from Retracked TOPEX and Jason-1 data
- XL216 EGU2012-5242
Z.C. Luo, Q. Li, B. Zhong, and H.H. Wang
 Terrestrial water storage variations in China from GRACE
- XL217 EGU2012-5036
Q. Li, Z.C. Luo, H.H. Wang, and B. Zhong
 Satellite-based estimates of the Mass variations over Tibet-plateau
- XL218 EGU2012-1728
X. Jiang and Y. Jin
 The Rheological Structure of the East Tibetan Plateau
- XL219 EGU2012-6133
R. Kiamehr
 Monitoring of Fault Patterns Based on the Deflection of the Vertical Components, a Case Study in Zagros Belt

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. Youssof, 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

Tuesday, 24 April

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. Olugboji
 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

TS2.2 – Stress states of the Earth's crust and stress inversion techniques – Orals

Convener: D. Koehn | Co-Conveners: F. Maerten, O. Lacombe, R. Soliva, Z. Shipton

Room: 11

Chairperson: Daniel Koehn, Olivier Lacombe

- 08:30–08:45 EGU2012-13416
R. Toussaint, A. Rolland, D. Koehn, E. Aharonov, P. Baud, J.P. Gratier, F. Renard, M. Ebner, F. Cornet, J. Schmittbuhl, and N. Conil
 Stylolite morphology, stress and strain markers
- 08:45–09:00 EGU2012-10997
N. Beaudoin, R. Leprêtre, N. Bellahsen, O. Lacombe, K. Amrouch, J.-P. Callot, L. Emmanuel, and J.-M. Daniel
 Stress and strain evolution in foreland basins and its relation to the structural style : insights from the Bighorn Basin (Wyoming, USA)
- 09:00–09:15 EGU2012-3285
U. Riller, I. Lenauer, H. Daxberger, and T. Santimano
 Significance of fault-slip analyses in active and fossil orogens
- 09:15–09:30 EGU2012-9944
F. Maerten, L. Maerten, B. Madden, and D.D. Pollard
 Paleo-stress inversion using a full mechanical scenario and multiple types of data
- 09:30–09:45 EGU2012-529
S. Pourbeyranvand, B. Lund, Z. H. Shomali, Th. Árnadóttir, and M. Tatar
 Stress and strain studies in the Zagros region, southwest Iran
- 09:45–10:00 EGU2012-147
F. Lanza, A. Tibaldi, G. P. Waite, C. Corazzato, F. Bonali, and A. Nardin
 Stress patterns of the Plio-Quaternary brittle deformation along the Calama-Olacapato-El Toro Fault, Central Andes

TS2.2 – Stress states of the Earth's crust and stress inversion techniques – Posters

Convener: D. Koehn | Co-Conveners: F. Maerten, O. Lacombe, R. Soliva, Z. Shipton

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Frantz Maerten

- A420 EGU2012-5899
D. Delvaux
 Release of program Win-Tensor 4.0 for tectonic stress inversion: statistical expression of stress parameters
- A421 EGU2012-5554
A. Rolland, R. Toussaint, P. Baud, and N. Conil
 Evolution of paleostresses with depth in the limestone formations at Bure (east of France) inferred from stylolite morphologies
- A422 EGU2012-1298
C. Brandes, C. Schmidt, D. Tanner, and J. Winsemann
 Paleostress perturbations and salt tectonics in the Subhercynian Basin, northern Germany
- A423 EGU2012-6878
H. Lee and I. Song
 Borehole breakouts in transversely isotropic formations and their use as an indicator of in-situ principal stress orientation
- A424 EGU2012-6655
K. Leith, J. Moore, F. Amann, and S. Loew
 Long-term intact rock strength and critical in situ stresses in near-surface bedrock
- A425 EGU2012-10878
Y. Yamada and J. Shibamura
 Local disturbances of stress field around faults: insights from borehole breakouts

- A426 EGU2012-14231
T Sachau, D Koehn, and K Aanyu
 Complex Stress Histories in the East African Rift System, paleostress systems or complex new-stresses due to localized uplift and block rotation?
- A427 EGU2012-7993
D. Koehn, M. Ebner, R. Toussaint, F. Kulzer, E. Gomez-Rivas, and P.D. Bons
 Stylolite stress scaling: determining depth of sedimentary basins, tectonic stresses and fault location.
- A428 EGU2012-14266
R Toussaint and F Cornet
 Influence of chemistry and climate on large induced large scale stresses in anisotropically fractured carbonates.
- A429 EGU2012-11516
M.T. Mariucci, P. Montone, and S. Pierdominici
 Present-day stress magnitude at depth from leak-off tests in Italy
- A430 EGU2012-617
K. Vandysheva and V. Phylatov
 Role of tectonic stresses in formation of protrusion
- A431 EGU2012-3650
H. Daxberger and U. Riller
 Causes for Neogene to Recent horizontal extension in the Southern Central Andes
- A432 EGU2012-10072
J. -A. Hansen, S. G. Bergh, P. T. Osmundsen, and T. Redfield
 Stress inversion of heterogeneous fault-slip data with unknown slip sense - an OFA clustering technique tested on artificial and real data
- A433 EGU2012-10872
M.R. Barchi, C. Collettini, and G. Lena
 The role of rock anisotropy in developing non-Andersonian faults: staircase trajectories for strike-slip faults

EMRP2.4/TS2.8 – Strain localization and hydro-mechanical coupling (co-organized) – Orals

Convener: P. Baud | Co-Conveners: E. Tondi, F. Balsamo, J. Fortin, P. Adler, A. Maineuil, M. Cacace

Room: 42

Chairperson: Pierre Adler

- 10:30–10:45 EGU2012-12229
P. Besuelle
 Characterization of the process of the strain localization in some porous rocks in plane strain condition using a new true triaxial apparatus
- 10:45–11:00 EGU2012-5478
C. Mallet, J. Fortin, Y. Guéguen, and A. Schubnel
 Propagation of Crack in Glasses under Creep Conditions
- 11:00–11:15 EGU2012-1597
 P. Japsen, D.K. Dysthe, E.H. Hartz, and **B. Jamtveit**
 A compaction front in North Sea chalk
- 11:15–11:30 EGU2012-9985
A. Cilona, F.R. Faulkner, P. Baud, A. Rustichelli, E. Tondi, and F. Agosta
 Compaction localization in the porous carbonates of Bolognano Formation (Majella Mountain, Italy)
- 11:30–11:45 EGU2012-2317
P. Adler and A. Pazdniakou
 Dynamic permeability of porous media by the lattice Boltzmann method
- 11:45–12:00 EGU2012-7024
 H. Steeb, P. Kurzeja, **M. Frehner**, and S.M. Schmalholz
 Phase velocity dispersion and attenuation of seismic waves due to trapped fluids in residual-saturated porous media
- 12:00–12:15 EGU2012-11099
J. Barriere, C Bordes, P Sénéchal, D Brito, and H Perroud
 P-wave monitoring of an unconsolidated and partially saturated porous medium : an experimental study

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. Grzemba, 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. Hériré, 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

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

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

TS4.4/G6.1/GD3.8/GM3.3 – TOPOEUROPE: Coupled deep earth - surface processes, and their role in shaping Europe's topography (co-organized) – Orals

Convener: S. Cloetingh | Co-Conveners: S. Willett

Room: 12

Chairperson: Cloetingh, S., Willett, S.D.

- 08:30–08:45 EGU2012-11342
S.D. Willett, M. Fox, P. Sternai, B.C. Salcher, and F. Herman
Late Cenozoic Exhumation of the Alps
- 08:45–09:00 EGU2012-4441
F. Schlunegger and K.P. Norton
Headward retreat of streams in the Late Oligocene to Early Miocene Swiss Alps
- 09:00–09:15 EGU2012-400
G. Kovács and T. Telbisz
Pleistocene alteration of drainage network and diverse surface morphology forced by basement structure in the foreland of the Eastern Alps

- 09:15–09:30 EGU2012-8524
Z. Erdos, R.S. Huismans, and P. van der Beek
 Evaluating balanced section restoration with thermochronological data in the Central Pyrenees
- 09:30–09:45 EGU2012-14391
C. Fillon, R. Huismans, and P. van der Beek
 Numerical modeling of sedimentation controls on the growth of the fold-and-thrust belts
- 09:45–10:00 EGU2012-6004
K.M. Stange, R.T. van Balen, and J. Carcaillet
 External controls on formation and preservation of fluvial terrace staircases in the Southern Pyrenees foreland

COFFEE BREAK

Chairperson: Willett, S.D., Cloetingh, S.

- 10:30–10:45 EGU2012-12616
L.C. Matenco
 On the link between orogenic shortening and back-arc extensional collapse in low topography orogens
- 10:45–11:00 EGU2012-7991
M. Chertova, T. Geenen, A. P. van den Berg, and W. Spakman
 3D subduction modelling of the Betic-Rif Alboran region.
- 11:00–11:15 EGU2012-14470
 I. Midtkandal, R.H. Gabrielsen, J.-P. Brun, and **R. Huismans**
 Along-strike complex geometry of subduction zones - an experimental approach
- 11:15–11:30 EGU2012-11786
D. Fernández-Blanco and G. Bertotti
 Miocene to present kinematics in Cilicia Basin, the link between the Central Anatolia Plateau and the Kyrenia Range
- 11:30–11:45 EGU2012-4545
M Tesauro, M.K Kaban, and S.A.P.L Cloetingh
 Strength and Elastic thickness of the lithosphere and implication on ductile crustal flow in Europe
- 11:45–12:00 EGU2012-7736
A. Köhler, N. Balling, J. Ebbing, R. England, A. Frassetto, S. Gradmann, B.H. Jacobsen, T. Kvarven, V. Maupin, A. Bondo Medhus, R. Mjelde, J. Ritter, J. Schweizer, W. Stratford, H. Thybo, B. Wawerzinek, and C. Weidle
 Upper mantle and crustal structure of southwestern Scandinavia: Results of the TopoScandiaDeep project

TS4.4/G6.1/GD3.8/GM3.3 – TOPOEUROPE: Coupled deep earth - surface processes, and their role in shaping Europe's topography (co-organized) – Posters

Convener: S. Cloetingh | Co-Conveners: S. Willett

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Cloetingh, S. and Willett, S.D.

- A434 EGU2012-2441
T. Duretz, T. V. Gerya, B.J.P. Kaus, and T.B. Andersen
 Thermomechanical modelling of slab eduction
- A435 EGU2012-8247
S. Mohammadi, T. Geenen, A. P. van den Berg, and W. Spakman
 Instantaneous mantle dynamics of the Western Mediterranean region
- A436 EGU2012-1902
P.G. Valla, P.A. van der Beek, and J. Braun
 Extracting denudation and relief histories from thermochronology data: rethinking sampling strategies?
- A437 EGU2012-6315
C. von Hagke, O. Oncken, H. Ortner, and C. Cederbom
 Post 12 Ma tectonic activity of the Subalpine Molasse resolved by combining thermochronology and critical wedge analysis
- A438 EGU2012-14392
C. Fillon, C. Gautheron, and P. van der Beek
 Quantifying the timing and extent of syn-orogenic sedimentation in the southern Pyrenean foreland using low-temperature thermochronology

- A439 EGU2012-5293
J. Campanyà, J. Ledo, P. Queral, A. Marcuello, M. Liesa, J.A. Muñoz, and A.G. Jones
Lithospheric-scale geoelectrical characterisation of a continental collision zone in Pyrenees: preliminary results.
- A440 EGU2012-2645
S. Jammes and R.S. Huisman
Factors controlling the tectonic inversion of the Pyrenean mountain belt : from observations to modelling
- A441 EGU2012-12632
H. Seillé, J. Pous, **D. Pedreira**, J. Gallastegui, J.A. Pulgar, J.M. González-Cortina, and E. Asensio
Geoelectrical characterization of the lithosphere beneath the Cantabrian Mountains and Duero Basin
- A442 EGU2012-11992
H. Seillé, A. Garcia, I. Romero, J. Pous, J. Guimerà, and R. Salas
Crustal structure of the Iberian Chain inferred from magnetotelluric data
- A443 EGU2012-403
G. Kovács
Pleistocene alterations of drainage network between the Alps and the Pannonian Basin
- A444 EGU2012-10455
T. Fuhrmann, A. Knöpfler, F. Masson, M. Mayer, P. Ulrich, M. Westerhaus, K. Zippelt, and B. Heck
Horizontal and Vertical Surface Displacements in the Upper Rhine Graben Derived from GNSS and Precise Levelling Data
- A445 EGU2012-5357
E.M. Bartel, F. Neubauer, B. Heberer, and J. Genser
Structural similarities and differences north and south of the Periadriatic fault with examples of the Drau Range and Friauli
- A446 EGU2012-5096
U. Stojadinovic, L. Matenco, P. Andriessen, M. Tolji?, and J. Foeken
The balance between orogenic building and subsequent collapse during the Tertiary evolution of the NE Dinarides: Constraints from low-temperature thermochronology
- A447 EGU2012-5060
C.I. Trifan, P.A.M. Andriessen, and L. Matenco
Detrital zircon fission track thermochronology in key stratigraphic formations of the Danube system, Romania: climatic or tectonic signals?
- A448 EGU2012-4278
M. K. Reiser, B. Fügenschuh, and R. Schuster
Thermotectonic evolution of the Apuseni mountains (Romania) based on structural and geothermochronological data
- A449 EGU2012-12063
M. ?migielski, F.M. Stuart, P. Krzywiec, C. Persano, H.D. Sinclair, K. Pisaniec, and K. Sobien
Neogene exhumation of the Northern Carpathians revealed by low temperature thermochronology.
- A450 EGU2012-11800
J. Francu, J. Šafanda, V. Cermak, O. Krejci, and P. Andriessen
Subsidence, erosion and thermal history of the West Carpathian Foredeep Basin, Czech Republic
- A451 EGU2012-13197
I. Munteanu, L. Matenco, C. Dinu, and S. Cloetingh
Effects of large sea-level variations in connected basins: the Dacian - Black Sea system of the Eastern Paratethys
- A452 EGU2012-4562
J. Petrovski, B. Székely, and G. Timár
River Sinuosity Classification - Case study in the Pannonian Basin
- A453 EGU2012-9853
J. Minár, M. Kováč, M. Bielik, J. Hók, S. Králiková, A. Smetanová, M. Šabo, and R. Vojtko
Neogene and Quaternary development of the Western Carpathian lithosphere: impact on georelief and geohazards
- A454 EGU2012-9409
A. Floroiu, M. Stoica, W. Krijgsman, and I. Vasiliev
Maeotian / Pontian Boundary from the East Carpathian Foredeep (Dacian Basin)
- A455 EGU2012-12244
D. Fernández-Blanco, G. Bertotti, and A. Çiner
Miocene tectonic motions in the Central Anatolia Plateau interior: a seismo-structural study in the Tuz Gölü Basin
- A456 EGU2012-12472
E. Miccadei, T. Piacentini, C. Berti, and F. Daverio
Long term landscape evolution within central Apennines (Italy): Marsica and Peligna region morphotectonics and surface processes

- A457 EGU2012-8661
E. D. McGregor, S. B. Nielsen, R. A. Stephenson, O. R. Clausen, K. D. Petersen, and D. I. M. Macdonald
Rift flank uplift and isostatic response to glacial erosion: Creation of a high-elevation continental margin.
- A458 EGU2012-5573
K. Stüwe and S. Hergarten
An approximate fluvial equilibrium topography for the Alps
- A459 EGU2012-7397
S. Hergarten and K. Stüwe
A puzzle about the Scandinavian topography
- A460 EGU2012-1626
A. A. Beylich, K. Laute, and S. Liermann
Holocene to contemporary source-to-sink fluxes in a valley-fjord system in western Norway: Erdalen and Bødalen site project (SedyMONT - IP Norway)
- A461 EGU2012-7400
A.B. Medhus, **N. Balling**, B.H. Jacobsen, R.W. England, R. Kind, C. Weidle, P. Voss, and H. Thybo
Upper mantle P-wave velocity structure beneath southern Scandinavia
- A462 EGU2012-4322
C. Schiffer, B. H. Jacobsen, N. Balling, and S. B. Nielsen
Geophysical investigations of the East Greenland Caledonides using receiver functions, gravity and topography data
- A463 EGU2012-4334
B. Hejrani, B. H. Jacobsen, N. Balling, and R. W. England
A seismic tomography study of lithospheric structure under the Norwegian Caledonides
- A464 EGU2012-2813
B. Gozdowski, D.L. Egholm, **O.R. Clausen**, and S.B. Nielsen
Cenozoic erosion and flexural isostasy of Scandinavia
- A465 EGU2012-1129
H. M. Küçük, D. Dondurur, and G. Çifçi
GAS ACCUMULATIONS and WIDE-SPREAD BSRs OBSERVED on CENTRAL BLACK SEA*
- A466 EGU2012-1131
H. M. Küçük, D. Dondurur, and G. Çifçi
SEDIMENTARY PROCESSES OBSERVED ON OFFSHORE of ZONGULDAK-KOZLU REGION, CENTRAL BLACK SEA*

GD2.1/SSP5.5/TS4.8 – Basin Dynamics (co-organized) – Orals

Convener: M. Scheck-Wenderoth | Co-Conveners: F. Roure

Room: 30

Chairperson: Magdalena Scheck-Wenderoth, Francois Roure

- 15:30–15:45 EGU2012-3329
Y Elesin, I Artemieva, and **H Thybo**
Factors controlling depth of continental rift zones
- 15:45–16:00 EGU2012-10868
P. Holt, M.B. Allen, and J Van Hunen
Thermally-driven subsidence of large platformal basins: linking growth of the lithosphere subsidence patterns on the surface
- 16:00–16:15 EGU2012-12586
J. I. Faleide and the PETROBAR & BarMod Team
Barents Sea crustal architecture and basin development
- 16:15–16:30 EGU2012-4863
M. Scheck-Wenderoth, Y. Maystrenko, M. Cacace, B. O. Kaiser, V. Noack, and Y. Cherubini
Models of the thermal field in the North German Basin
- 16:30–16:45 EGU2012-8898
S. Nagel, S. Castelltort, S. D. Willett, F. Mouthereau, A. T. Lin, D. Granjeon, and B. Kaus
Paleoenvironmental evolution in a steady state foredeep, Taiwan
- 16:45–17:00 EGU2012-9479
S. Rougier, C. Gautheron, J. Barbarand, Y. Missenard, H. Zeyen, R. Pinna, B. Bonin, J.-P. Liégeois, A. Ouabadi, and D. Frizon de Lamotte
Meso-Cenozoic morphological evolution of NW Africa, the case of the Tuareg swell.

GD2.1/SSP5.5/TS4.8 – Basin Dynamics (co-organized) – Posters

Convener: M. Scheck-Wenderoth | Co-Conveners: F. Roure

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Francois Roure, Magdalena Scheck-Wenderoth

- XL161 EGU2012-542
D. Osipova, R. Vafin, R. Surmashev, and O. Bondareva
Super viscous oil reservoir formations of Ufa unit of Republic of Tatarstan and their properties
- XL162 EGU2012-807
S. Usmanov, B. Sharipov, A. Akhmetov, and A. Delev
Geo-information approach to the study of Romashkino oil field geodynamics
- XL163 EGU2012-661
A. Malz, St. Donndorf, and J. Kley
Hidden inversion tectonics in the Thuringian Basin (central Germany) - Structural analysis of the Schlottheim graben as an example of an inversion structure
- XL164 EGU2012-1299
C. Brandes, L. Pollok, C. Schmidt, V. Wilde, and J. Winseman
Subsidence and basin-fill architecture of a lignite-bearing salt rim syncline: insights into rim syncline evolution and salt diapirism
- XL165 EGU2012-2805
A. Souche, M. Dabrowski, T. B. Andersen, and S. Medvedev
Heat transfer and fluid flow modelling in supra-detachment basins: a case study of the Devonian basins of western Norway
- XL166 EGU2012-5103
P. Klitzke, J. I. Faleide, J. Sippel, and M. Scheck-Wenderoth
A lithosphere-scale 3D-structural model of the Barents Sea and Kara Sea region
- XL167 EGU2012-10037
A. Lahfid, B. Lacroix, G. Hoareau, F. Meresse, K. Michel, and M. Buatier
Thermal evolution of the syn-tectonic Ainsa-Jaca basin (South Pyrenean Zone). New constraints from a multiproxy approach.
- XL168 EGU2012-5467
L. Rodriguez, J. Cuevas, and J. M. Tubía
Inversion tectonics in the Anayet Permian basin (Axial Zone, Central Pyrenees)
- XL169 EGU2012-9073
R Mastouri, R Marchant, M Jaboyedoff, S Bouaziz, and F Marillier
Structure and evolution of the Kerkennah high (eastern Tunisia) based on 3D seismic
- XL170 EGU2012-4462
A. Argnani and S. Rogledi
Inversion tectonics in the Neogene basins of Tuscany (Northern Apennines, Italy): Insights from the Pisa-Viareggio basin.
- XL171 EGU2012-2856
E. Rossello and S. Cossey
What is the evidence for subduction in the Caribbean Margin of Colombia?
- XL172 EGU2012-9614
F.M. Davila and **C. Lithgow-Bertelloni**
Basin dynamics in the Pampas Plain, Argentina
- XL173 EGU2012-12950
A. Garcia, N Orihuela, and A. Espeso
Gravity anomalies over Orinoco Oil Belt
- XL174 EGU2012-3115
W.A. Sonibare, **M. Scheck-Wenderoth**, J. Sippel, and D. Mikeš
BASIN ANALYSIS AND PETROLEUM SYSTEM CHARACTERISATION OF WESTERN BREDASDORP BASIN, SOUTHERN OFFSHORE OF SOUTH AFRICA: INSIGHTS FROM A 3D CRUST-SCALE BASIN MODEL - (Phase 1)
- XL175 EGU2012-10602
R.H.C. Bruijn, B.S.G. Almqvist, P.M. Benson, and A.M. Hirt
The role of stress on chemical compaction of illite shale: An experimental study
- XL176 EGU2012-5235
G. Han, F. Neubauer, Y. Liu, J. Genser, W. Li, and C. Liang
Formation mechanisms of the Songliao basin, China and its relationships to the exhumation of an Upper Jurassic to Lower Cretaceous metamorphic core complex
- XL177 EGU2012-402
I. Sidorova
Integrated geophysical GIS&RS model of the Amu Darya basin in Western Uzbekistan
- XL178 EGU2012-3598
I. Plotnikova, F. Nosova, N. Pronin, J. Nosova, and T. Budkevich
Geochemical Aspects of Formation of Large Oil Deposits in the Volga-Ural Sedimentary Basin

XL179 EGU2012-3600

R. Muslimov and **I. Plotnikova**

About the Relation Between Geodynamics of the Sedimentary Basin and the Properties of Crude Oil

GD4.2/SM2.8/TS5.3 – Evolution of the North and South Atlantic, adjacent continents, and passive continental margins, in general (co-organized) – Orals

Convener: U. A. Glasmacher | Co-Conveners: Dr.scient. Japsen, P. C. Hackspacher, H.-P. Bunge, M. Scheck-Wenderoth, R.B. Trumbull, A. O. B. Franco-Magalhaes, F. Guillocheau

Room: 30

Chairperson: n.n.

08:30–08:45 EGU2012-10670

R.H. Gabrielsen, J.I. Faleide, and E.M. Jarsve

The evolution of the passive continental margin of Norway and its adjacent mainland - using the sub-Cambrian peneplain as a reference surface.

08:45–09:00 EGU2012-4177

N.M. Sushchevskaya, B.V. Belyatsky, and E.P. Dubinin

Mantle heterogeneity under spreading zones of polar regions of the Atlantic Ocean: sources and formation

09:00–09:15 EGU2012-6308

L. Colli, A. Fichtner, and H.-P. Bunge

Full waveform tomography of the South Atlantic upper mantle

09:15–09:30 EGU2012-6810

N. Flament, M. Gurnis, S. Williams, M. Seton, R. D. Müller, and J. Skogseid

A deep mantle origin for the asymmetry of the South Atlantic margins

09:30–09:45 EGU2012-4133

Y. P. Maystrenko, M. Scheck-Wenderoth, A. Hartwig, Z. Anka, A.B. Watts, K.K. Hirsch, S. Fishwick, H.-J. Goetze, and C. Reichert

Regional structure of the Southwest African continental margin based on results of lithosphere-scale 3D gravity and thermal modelling

09:45–10:00 EGU2012-10576

N. Baristeads, Z. Anka, R. di Primio, J. F. Rodriguez, D. Marchal, and F. Dominguez

Tectono-stratigraphic analysis of the Malvinas Basin, offshore the southernmost Argentinean continental margin

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2012-14206

R. D. Müller, N. Herold, and M. Huber

The Miocene Atlantic Ocean

10:45–11:00 EGU2012-6498

F. Guillocheau and O. Dauteuil

Post-rift uplift, paleorelief and sedimentary fluxes: the case example of the African margin of the South Atlantic

11:00–11:15 EGU2012-7659

P. Japsen, P.R. Cobbold, J.A. Chalmers, P.F. Green, and J.M. Bonow

Changes in plate motion and vertical movements along passive continental margins

11:15–11:30 EGU2012-7267

U. A. Glasmacher and P.C. Hackspacher

Postrift exhumation caused by movement along faults, shear, and fracture zones on both sides of the South Atlantic continental margins, an overview

11:30–11:45 EGU2012-11275

M.C. Bianchi, S. Clark, M. Smethurst, and H.-P. Bunge

Opening of the South Atlantic: Rate estimation for different models

11:45–12:00 EGU2012-3355

J. O'Connor, W. Jokat, A. le Roex, C. Class, J. Wijbrans, S. Keßling, K. Kuiper, and O. Nebel

Synchronous age progressive hotspot trails on the African Superswell

GD4.2/SM2.8/TS5.3 – Evolution of the North and South Atlantic, adjacent continents, and passive continental margins, in general (co-organized) – Posters

Convener: U. A. Glasmacher | Co-Conveners: Dr.scient. Japsen, P. C. Hackspacher, H.-P. Bunge, M. Scheck-Wenderoth, R.B. Trumbull, A. O. B. Franco-Magalhaes, F. Guillocheau

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Guillocheau, Franco-Magalhaes

- XL201 EGU2012-1635
L. Pinna and T. Dahl-Jensen
Relocated local earthquakes in SE Greenland align on old geological boundaries and structures
- XL202 EGU2012-3543
E. Le Breton, P.R. Cobbold, and A. Zanella
Cenozoic right-lateral slip on the Great Glen Fault, Scotland: Additional Evidence and Possible Causes
- XL203 EGU2012-13090
R. Meyer, L. Schultz, B.W.H. Hendriks, D. Harbor, J. van Wijk, and C. Connors
Central Appalachian Valley and Ridge Province Cenozoic igneous activity and their relation in space and time with the Late Jurassic rift to drift related alkalic dikes.
- XL204 EGU2012-10992
R. Nerlich, S. R. Clark, and H.-P. Bunge
The Scotia Sea - no asthenosphere outlet from under the Pacific
- XL205 EGU2012-5866
M. Sehr, **U. A. Glasmacher**, D. F. Stockli, O. Kluth, and H. Jabour
Variscan to Neogene thermal and exhumation history at the Moroccan passive continental margin assessed by low temperature thermochronology
- XL206 EGU2012-4916
S. Brune, S. V. Sobolev, and A. A. Popov
The Thermo-Mechanical Impact of Plume Arrival on Continental Break-Up
- XL207 EGU2012-5995
T. C. Chust, G. Steinle-Neumann, and H.-P. Bunge
Effects of Mineralogical Thermodynamics in Geodynamic Models
- XL208 EGU2012-8332
C. Heine, S. Brune, A. Young, J. Zoethout, N. Flament, and R. D. Müller
Kinematics of the South Atlantic rift
- XL209 EGU2012-4719
J. Freymark, J. Sippel, **M. Scheck-Wenderoth**, H.-J. Götze, and C. Reichert
Data based 3D modelling of the southwest African continental margin
- XL210 EGU2012-12072
R. B. Trumbull, D. Franke, W. Jokat, Y. Maystrenko, M. Scheck-Wenderoth, M. Schnabel, and B. Schreckenberger
Comparative anatomy of volcanic rifted margins in the South Atlantic, with emphasis on the high-velocity lower crust
- XL211 EGU2012-7502
F. Strozyk, S. Back, and P.A. Kukla
Comparative analysis of post-breakup basin evolution along the South-American and South-African margins, southern Atlantic
- XL212 EGU2012-4896
H. Koopmann, A. Hartwig, H. Schulz, B. Schreckenberger, and D. Franke
New findings on the aspect of margin segmentation along the South African margin
- XL213 EGU2012-6689
E. Rossello, O.R. López-Gamundí, G. Veroslavsky, and H. de Santa Ana
The Santa Lucia-Aiguá-Merin rifting (Uruguay): an early aborted branch of the South Atlantic break-up
- XL214 EGU2012-7203
V.F. Sachse, Z. Anka, R. di Primio, O. Almendra, H. Belotti, and M. Cagnolatti
Meso- to Cenozoic seismostratigraphic units of the Austral Basin, southern Argentina
- XL215 EGU2012-4268
J. Gruetzner, G. Uenzelmann-Neben, and D. Franke
Seismic reflection imaging of a canyon system at the Argentine continental margin to identify changes in sediment transport und ocean circulation
- XL216 EGU2012-6489
A.C. Chaboureau, **F. Guillocheau**, C. Robin, S. Rohais, M. Moulin, and D. Aslanian
Palaeogeographic evolution of the central segment of the South Atlantic during Early Cretaceous times: palaeotopographic and geodynamic implications

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Trumbull, Bunge

- XL217 EGU2012-12726
A. Døssing, P. Japsen, T. Nielsen, H. Thybo, and T. Dahl-Jensen
 Link between Mid-Ocean Ridge kinematics and uplift of passive continental margins
- XL218 EGU2012-6654
P. C. Hackspacher, I.A. Souza, S.H. Almeida, and U.A. Glasmacher
 Tectonic relations between shallow and deep crust in the southeastern Brazilian continental margin: low temperature thermochronology, gravimetry and seismic reflection
- XL219 EGU2012-592
A. O. B. Franco-Magalhaes, U. A. Glasmacher, I. A. De Souza, A. R. Saad, and P. C. Hackspacher
 Tectonically driven differentiated exhumation along S-SE Brazilian "Passive " Continental Margin
- XL220 EGU2012-4001
 M.P. Karl, **U.A. Glasmacher**, P.C. Hackspacher, D.F. Stockli, and A.O.B. Franco-Magalhaes
 Evolution of the South Atlantic passive continental margin in Southern Brazil derived from zircon and apatite (U-Th-Sm)/He and fission-track data
- XL221 EGU2012-5881
N. Cogné, K. Gallagher, P.R. Cobbold, and C. Riccomini
 Thermochronological evidence for polyphase post-rift reactivation in SE Brazil
- XL222 EGU2012-867
J. de Souza Silva, U. Glasmacher, and P. Hackspacher
 Denudation history of Cretaceous intrusions on both sides of the South Atlantic, Brazil - Namibia.
- XL223 EGU2012-887
D.F. Godoy, P.C. Hackspacher, and U.A. Glasmacher
 Pre-rifting evolution of Neoproterozoic to Cambrian low to high grade metamorphic rocks of the South Atlantic passive continental margin, as revealed by 40Ar/39Ar and Zircon Fission-Track thermochronology, SE Brazil
- XL224 EGU2012-4025
 S. Kollenz, **U. A. Glasmacher**, E. A. Rossello, and R. Pereyra
 Thermal history and evolution of the South Atlantic passive continental margin in eastern Argentina based on different geochronometers and 2D- and 3D-modelling
- XL225 EGU2012-11071
E. Salomon, D. Koehn, C.W. Passchier, P.C. Hackspacher, and U.A. Glasmacher
 Shear zone reactivation during South Atlantic rifting in NW Namibia
- XL226 EGU2012-4006
 M.P. Karl, M.J. Perner, **U.A. Glasmacher**, P.C. Hackspacher, and G. Schneider
 Exhumation rates and long-term landscape evolution, Northwest Namibia
- XL227 EGU2012-11434
F.U. Bauer, U.A. Glasmacher, U. Ring, M. Starz, R.W. Grobe, and V.S. Mambo
 Initial rifting and long-term landscape evolution of the Albertine Rift in East Africa
- XL228 EGU2012-7309
U. A. Glasmacher, F.U. Bauer, S. Kollenz, and D. Delvaux
 Evolution of the Congo Basin
- XL229 EGU2012-6160
J. Julià, I.D. Bastow, R. Nascimento, A.F. Nascimento, M.P. Rocha, J.M. Ferreira, and R.A. Fuck
 Unraveling the Structure and Dynamics of the Borborema Province, NE Brazil, With Broadband Seismology
- XL230 EGU2012-10073
G. Kapinos, O. Ritter, U. Weckmann, and M. Jegen-Kulcsar
 On/offshore deep electrical conductivity structure to investigate the Walvis Ridge magmatism and its interaction with the Kaoko Mobile Belt in northern Namibia (ELCONA)
- XL231 EGU2012-12413
J.K. Keiding, O. Frei, A. Renno, I.V. Veksler, and R.B. Trumbull
 Magma storage and evolution in the Henties Bay-Outjo dyke swarm, Namibia -feeder systems of the Etendeka lavas

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 serpentinitized 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. Klápvová
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

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

SM2.1/GD1.3/NH4.9/TS8.5 – Large Earthquake and Tsunami Activity (co-organized) – Orals

Convener: M. Bezzeghoud | Co-Conveners: E. Bufo, H. Hebert, H. M. Fritz

Room: 26

Chairperson: n.n.

- 08:30–08:45 EGU2012-4596
S. Stiros and P. De Jevonois Acillona
The AD 365 giant earthquake and tsunami in the Eastern Mediterranean
- 08:45–09:00 EGU2012-8111
C. Larroque, O. Scotti, M. Ioualalen, V. Hassoun, and S. Migeon
Reappraisal of the 1887 Ligurian earthquake (western Mediterranean) from macroseismicity, active tectonics and tsunami modelling
- 09:00–09:15 EGU2012-2634
E. Bufo, C. Pro, M. Bezzeghoud, and A. Udias
Mechanism of 2003, 2007 and 2009 earthquakes (S. Vicente Cape) and implications for the 1755 Lisbon earthquake.
- 09:15–09:30 EGU2012-13242
R. M. L. Ferreira, D. Conde, R. Canelas, and M. A. Baptista
Mathematical modeling of a tsunami propagating over the mobile bed reaches of the Tagus-Coia estuary
- 09:30–09:45 EGU2012-13267
S. Riquelme, S. Ruiz, Y. Yamazaki, and J. Campos
Fault Parameters of the 1868 and 1877 earthquakes, inferred from historical records: Run-up measurements, Isoleismals and coseismic deformation
- 09:45–10:00 EGU2012-3638
Z. Zarifi and M. Raeesi
Revisiting the November 27, 1945 Makran (Mw=8.2) interplate earthquake

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-10297
A. Fuenzalida, H. Lyon-Caen, M. Lancieri, A. Rietbrock, and R. Madariaga
The 2010 Maule earthquake: How far south did it break?
- 10:45–11:00 EGU2012-3844
C.-S. Lee, F. Klingelhoefer, M. Gutscher, M. Miller, and V. Gallardo
The Aftershock Analyses of 27 February 2010 Chile M=8.8 Mega Earthquake
- 11:00–11:15 EGU2012-5501
M. Ando, M. Ishida, Y. Nishikawa, C. Mizuki, and Y. Hayashi
What caused a large number of fatalities in the Tohoku earthquake?

- 11:15–11:30 EGU2012-3542
K. Satake, Y. Fujii, T. Harada, and Y. Namegaya
 Tsunami source model of the 2011 Tohoku earthquake and comparison with the 1896 Sanriku and 869 Jogan earthquakes
- 11:30–11:45 EGU2012-4273
Y. Ohta, R. Hino, D. Inazu, M. Ohzono, M. Mishina, J. Nakajima, Y. Ito, T. Sato, Y. Tamura, H. Fujimoto, K. Tachibana, T. Demachi, Y. Osada, M. Shinohara, and S. Miura
 Co- and postseismic slip distribution for the 2011 March 9 earthquake based on the geodetic data: Role on the initiation of the 2011 Tohoku earthquake
- 11:45–12:00 EGU2012-13168
H. M. Fritz, D.A. Phillips, A. Okayasu, T. Shimozono, H. Liu, F. Mohammed, V. Skanavis, C.E. Synolakis, and T. Takahashi
 2011 Japan tsunami survivor video based hydrograph and flow velocity measurements using LiDAR

SM2.1/GD1.3/NH4.9/TS8.5 – Large Earthquake and Tsunami Activity (co-organized) – Posters

Convener: M. Bezzeghoud | Co-Conveners: E. Bufo, H. Hebert, H. M. Fritz

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XY467 EGU2012-11641
D. Tappin
 The impact of the 2011 Tohoku-oki tsunami in the Sendai area: interpretations of time series satellite images and videos.
- XY468 EGU2012-11588
A. Yalciner, F. Imamura, E. Mas, I. Necmioglu, C. Ozer, A. Zaytsev, S. Takahashi, T. Tomita, G. Yon, N. Kalligeris, H. Fritz, V. Skanavis, C. Synolakis, and N. Meral Ozel
 Field survey of the coastal impact of the March 11, 2011 great East Japan tsunami
- XY469 EGU2012-10999
V.E. Kunitsyn, I. A. Nesterov, S.L. Shalimov, B.Yu. Krysanov, A.M. Padokhin, and D. Rekenhaller
 Japan Tohoku Earthquake of March 11, 2011: GPS-TEC Evidence for the Ionospheric Disturbances with Application for Early Warning
- XY470 EGU2012-8986
H. Shimazu
 Geomorphic impacts of the 2011 tsunami on the lower reaches of the R. Natori, northeast Japan
- XY471 EGU2012-7238
J.S. Hwang, D.H. Lee, H.S. Yun, and B.I. Min
 Seismic Displacement Analysis of GPS Permanent Stations due to the Tohoku-Oki Mega-thrust Earthquake in Korea and Asian Regions
- XY472 EGU2012-6577
T. Harada and K. Satake
 A New View on the Space-Time Pattern of $M > 7$ Earthquakes in the Northern Japan to Kurile Subduction Zones
- XY473 EGU2012-3916
A. Nishiyama, K. Satake, T. Yata, A. Urabe, and Y. Maejima
 The trial edition of historical earthquake data base in Japan
- XY474 EGU2012-11402
F. Waldhauser, D.P. Schaff, T.C. Diehl, and E.R. Engdahl
 Splay faults imaged by fluid-driven aftershocks of the 2004 Mw 9.2 Sumatra-Andaman earthquake
- XY475 EGU2012-2363
J.-Y. Lin, C.-L. Lo, J.-C. Sibuet, and S.-K. Hsu
 Crustal gravitational potential energy change induced by the Great Sumatra-Andaman earthquake of 26 December 2004
- XY476 EGU2012-3854
H. Haridhi, S. Rizal, M. Ridha, and C.S. Lee
 A Seismic Gap Study in the western offshore of Sumatra, Indonesia
- XY477 EGU2012-182
W. Renteria
 Tsunami Forecast for Galapagos Islands
- XY478 EGU2012-3588
P.-Y. Lai, B. F. Chao, E. T.-Y. Chang, and T.-R. Wu
 The Seismic Sources of the 2009 Samoa Earthquake from Tsunami Simulation
- XY479 EGU2012-4910
M. A. Baptista, J.M. Miranda, J. Batlo, and H. Ferreira
 Tsunami flooding along Tagus estuary, Portugal, the 1531 event

- XY480 EGU2012-8821
S. Allgeyer, C. Daubord, H. Hébert, A. Loevenbruck, F. Schindelé, and R. Madariaga
 Could a 1755-like tsunami reach the French Atlantic coastline? Constraints from 20th century observations and numerical modeling.
- XY481 EGU2012-5829
G. Kulikova and F. Krüger
 The 1911 Chon-Kemin (M 8.3) earthquake in the Tien-Shan region*: preliminary investigation results by means of historical data.
- XY482 EGU2012-11649
M. Karpytchev, C. Daubord, H. Hébert, and G. Woppelmann
 Re-analysis of the Krakatoa Tsunami Records along the European Atlantic Coast
- XY483 EGU2012-12291
 K. Hodgkinson, **D. Mencin**, A. Borsa, B. Henderson, and W. Johnson
 Tsunami Signals Recorded By Plate Boundary Observatory Borehole Strainmeters
- XY484 EGU2012-10
S. Nakamura
 Note to Energy Source of Tsunami Earthquake on the Planet Earth
- XY485 EGU2012-4969
L. Ostrihansky
 Earthquake triggering, Earth's rotation variations, Meton's cycle and torques acting on the Earth.

NH4.2/NP7.4/SM5.3/TS8.7 – Fracture and earthquake physics: modeling precursory phenomena and seismic hazard also with nonlinear seismology (including Plinius Medal Lecture) (co-organized) – Orals

Convener: F. Vallianatos | Co-Conveners: P. Sammonds, V. Lapenna, G. Marmureanu, R. Madariaga, GF Panza

Room: 1

Chairperson: G. Marmureanu

- 13:30–13:45 EGU2012-2243
G. Marmureanu, C.O. Cioflan, and A. Marmureanu
 Nonlinear seismology a reality. The quantitative data
- 13:45–14:00 EGU2012-14469
A.A. Skarlatoudis, C.B. Papazachos, B.N. Margaris, Ch. Ventouzi, I. Kalogeras, and D. Vambakaris
 Ground motion prediction equations for intermediate-depth earthquakes in the Southern Aegean Subduction Zone : Identification of significant along-arc/back-arc differences and their impact on seismic hazard
- 14:00–14:15 EGU2012-7713
G. A. Papadopoulos, M. Avlonitis, B. Di Fiore, and G. Minadakis
 The Predictive Value of Foreshocks
- 14:15–14:30 EGU2012-1790
R. Teisseyre
 Fracture Recess: Asymmetric Continuum Approach
- 14:30–14:45 EGU2012-8070
N.V. Sarlis and S.-R.G. Christopoulos
 Natural time analysis of global seismicity: the identification of magnitude correlations.
- 14:45–15:00 EGU2012-4986
P. Senatorski
 Seismic state equation and scaling relations for earthquake parameters
- Chairperson: n.n.
- 15:30–16:30 EGU2012-14456
T.J. Sullivan
 Towards Improved Considerations of Risk in Seismic Design (Plinius Medal Lecture)
- 16:30–17:00 EGU2012-7882
 N.V. Sarlis, E.S. Skordas, M.S. Lazaridou, and **P.A. Varotsos**
 Natural time analysis: An overview.
- 17:00–17:15 EGU2012-12421
F. Vallianatos
 From rock fracture to plate tectonics. Evidence of non extensive statistical mechanics in Earth physics, A review

NH4.2/NP7.4/SM5.3/TS8.7 – Fracture and earthquake physics: modeling precursory phenomena and seismic hazard also with nonlinear seismology (including Plinius Medal Lecture) (co-organized) – Posters

Convener: F. Vallianatos | Co-Conveners: P. Sammonds, V. Lapenna, G. Marmureanu, R. Madariaga, GF Panza

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: P. Sammonds, R. Madariaga, J. Panza

- XY250 EGU2012-678
N. Jorjashvili, T. Yokoi, and Z. Javakhishvili
Uncertainties related to seismic hazard assessment
- XY251 EGU2012-3586
S. F. Balan, B.F. Apostol, and C.O. Cioflan
Soil Deposit Response due to Crustal Seismogenic Zone of Fagaras-Campulung, Romania
- XY252 EGU2012-4265
A. Bala, A. Aldea, S.F. Balan, and C. Arion
Geological and Geophysical Models Underneath Bucharest City Responsible for the Variability of Seismic Site Effects
- XY253 EGU2012-4600
D. Solakov, S. Simeonova, L. Christoskov, P. Trifonova, and I. Aleksandrova
Probabilistic Seismic Hazard Assessment for Bulgaria as a Basis for a new National Building Code
- XY254 EGU2012-2757
G. Chouliaras, G. Drakatos, K. Makropoulos, and N.S. Melis
Recent seismicity detection increase at Santorini's volcanic islands
- XY255 EGU2012-5150
J. Trømborg, D. S. Amundsen, K. Thøgersen, J. Scheibert, and A. Malthé-Sørensen
Precursor evolution in recent dry friction experiments explained by 2D simulation
- XY256 EGU2012-9934
Ch. G. Gkaraouni, V. G. Karakostas, E. E. Papadimitriou, and A. A. Kiliadis
Seismotectonic properties with implications on faulting identification revealed from recent seismicity in Greece
- XY257 EGU2012-11656
F. Vallianatos, V. Karakostas, and E. Papadimitriou
Non extensive statistical physics properties of the 2003 (Mw6.2), Lefkada, Ionian island Greece, aftershock sequence
- XY258 EGU2012-11799
F. Vallianatos, G. Michas, G. Papadakis, and P. Sammonds
Pore Pressure Diffusion as a possible mechanism for the Ag. Ioanis 2001 earthquake swarm activity (Gulf of Corinth, Central Greece).
- XY259 EGU2012-11835
F. Vallianatos, G. Papadakis, G. Michas, and P. Sammonds
A non extensive statistical physics analysis of the Hellenic subduction zone seismicity
- XY260 EGU2012-13460
A. Cartwright-Taylor, F. Vallianatos, and P. Sammonds
Non-extensive statistical physics properties of acoustic and pressure-stimulated current emissions measured concurrently during triaxial deformation experiments on marble and limestone samples
- XY261 EGU2012-11726
F. Vallianatos and D. Triantis
Is Pressure Stimulated Current relaxation in amphibolite a case of non-extensivity ?
- XY262 EGU2012-257
O.A. Hachay, O.Y. Khachay, V.K. Klimko, and O.V. Shipeev
Investigation of Non-Linear Dynamics of the Rock Massive, Using Seismological Catalogue data and Induction Electromagnetic Monitoring Data in a Rock Burst Mine.
- XY263 EGU2012-11760
R. Ditommaso and M. Mucciarelli
Non-linearity is not only softening: examples from L'Aquila (2009) and Christchurch (2011) earthquakes
- XY264 EGU2012-8194
I. Stavrakas, G. Hloupis, D. Triantis, and F. Vallianatos
Concurrent recordings of Electrical Current Emissions and Acoustic Emissions detected from marble specimens subjected to mechanical stress up to fracture
- XY265 EGU2012-1057
Closson, Abou Karaki, Pasquali, Holecz, Riccardi, Milisavljevic, and Bouaraba
Earthquakes' local site effects in Christchurch revealed by Cosmo-Skymed and Envisat radar images

TS9.4 – Geophysical methods in the service of Structural Geology – Posters

Convener: S.-A. OUADFEUL | Co-Conveners: L. Aliouane, A. Boudella, A. Khalil

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Sid-Ali OUADFEUL

- A487 EGU2012-4943
A. Abtout, H. Boukerbout, B. Bouyahiaoui, and M. E. M. Derder
Gravimetric evidences of active faults and underground structure of Chelif seismogenic basin (Algeria)
- A488 EGU2012-12060
V. Yutsis, K. Krivosheya, and A. Tamez Ponce
Mapping of Basement Faults with Gravity and Magnetic Data at NE Mexico
- A489 EGU2012-10164
F. Villani, P.P. Bruno, L. Improta, A. Castiello, M. Punzo, and F. Varriale
Shallow architecture of the 2009 Mw 6.1 L'Aquila earthquake fault (Central Italy): Insights from high-resolution multiscale refraction tomography and reflection profiles
- A490 EGU2012-8049
T. Ayy?ld?z, B. Varol, K. S?zeri, and Z. Karaka?
Miocene Evaporites in the Intermountain Tuzluca -I?dir Neogene Basin, Eastern Turkey
- A491 EGU2012-1089
A. Khalil and A. Khalaf
Modeling of Geophysical Data Using Artificial Neural Network
- A492 EGU2012-11061
S. Heinonen, M. Heinonen, and E. Koivisto
Full waveform forward seismic modeling of geologically complex environment: Comparison of simulated and field seismic data
- A493 EGU2012-39
L. Aliouane, S. Ouadfeul, and A. Boudella
Structural Boundaries delimitation from gravity data using the wavelet transform
- A494 EGU2012-857
Zs. Fekete and G. Kovács
Reconstruction of gravel coverage on an Eastern Alps foothill
- A495 EGU2012-1092
A. Shater
Stations Correction and Earthquake hypocenter relocation in the Kalabsha area, Aswan, Egypt
- A496 EGU2012-1276
Ö. Özel, D. Dondurur, S. Gürçay, and G. Çifçi
Analysis of Shallow Gas Accumulations and a Reef Structure Observed on the Western Black Sea Continental Slope
- A497 EGU2012-2173
S. Samai, M. Ouyed, M. Idress, A. Bourmatte, and S. Ouadfeul
Active Faults Mapping of Boumerdes Region (Algeria), Using Gravity Data, in Relation to the Earthquake of May 21, 2003
- A498 EGU2012-6894
C. H. Hung and C. S. Liu
Velocity Structure of a Large-offset Seismic Profile Derived from tau-p Velocity Analysis Approach
- A499 EGU2012-8508
S. Ouadfeul, M. Hamoudi, and L. Aliouane
Structural boundaries delimitation from geomagnetic data using the horizontal gradient and the continuous wavelet transform.
- A500 EGU2012-8802
Y. L. Ekinici and **E. Yi?itba?**
Investigation of Plutonic Rocks in Biga Peninsula, NW Turkey, using 3D Normalized Full Gradient of Magnetic Data

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. Ruppichter, 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 build 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 Simkooei, and M.A Sharifi
Realistic Noise Assessment and Strain Analysis of Iranian Permanent GPS Stations

SM3.4/TS9.10 – Active seismic investigations of the Earth's crust (co-organized) – Orals

Convener: Dr. Malehmir | Co-Conveners: S. Buske

Room: 26

Chairperson: Alireza Malehmir and Stefan Buske

- 15:30–15:45 EGU2012-3939
Z. Zhang, Z.M. Bai, and J.W. Teng
Crustal structure across East Tibet from wide-angle seismic profile between Xiazhayu, Xizang and Gonghe, Qinghai
- 15:45–16:00 EGU2012-504
M. Andersson, A. Malehmir, M. Dehghannejad, V. R. Troll, and M. Ask
A reflection seismic study of the Alnö alkaline and carbonatite igneous complex
- 16:00–16:15 EGU2012-10660
H. Sato, T. Iwasaki, T. Ishiyama, S. Abe, and N. Kato
Seismic investigation of the plate boundary beneath Mt. Fuji, the Izu collision zone, central Japan

- 16:15–16:30 EGU2012-3074
D. Sopher and C. Juhlin
 Seismic reprocessing of 2D marine seismic reflection data from the Baltic Sea
- 16:30–16:45 EGU2012-5132
S. Gutjahr and S. Buske
 Seismic Images of the Non-Volcanic Tremor Region around Cholame, California, USA
- 16:45–17:00 EGU2012-6799
Y.-P. Lin, L. Zhao, and S.-H. Hung
 Shallow Crustal Structure in Northern Taiwan from the TAIGER Active-Source Experiment

SM3.4/TS9.10 – Active seismic investigations of the Earth's crust (co-organized) – Posters

Convener: Dr. Malehmir | Co-Conveners: S. Buske

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Stefan Buske and Alireza Malehmir

- XY486 EGU2012-6127
N. Mullick, S. Buske, S. Shapiro, P. Wigger, B. Ruzek, J. Horalek, P. Hrubcova, and T. Fischer
 Reflection seismic investigation of the geodynamically active West-Bohemia/Vogtland region
- XY487 EGU2012-1925
 L. Moreira, **M. Friedel**, and G. França
 Uncertainty in crustal imaging of the Paraná basin, Brazil
- XY488 EGU2012-11502
T. Ishiyama, N. Kato, H. Sato, T. Takeda, and S. Abe
 Multi-scale seismic reflection imaging of active fold-and-thrust belts in Niigata backarc basin in central Japan
- XY489 EGU2012-2152
J.D. Eccles, G. Lamarche, R. Wysoczanski, I. Wright, F. Caratori Tontini, C. Kenedi, and C. Castellazzi
 KARMA reveals true origins of the Kermadec Ridge, north of New Zealand
- XY490 EGU2012-2211
Y. F. Chen, J. Y. Lin, C. S. Lee, S. K. Hsu, and C. W. Liang
 Seismotectonics of the Gagua Ridge area from OBS data
- XY491 EGU2012-2912
 V. Starostenko, W. Czuba, M. Grad, O. Gintov, D. Gryn, A. Guterch, E. Heged?s, **T. Janik**, K. Kolomiyets, K. Komminaho, R. Kutas, O. Legostaeva, D. Lysynchuk, V. Omelchenko, P. ?roda, R. Stephenson, H. Thybo, T. Tiira, and A. Tolkunov
 Velocity model of the crust and upper mantle along the profile PANCAKE from Pannonian basin across Carpathians towards the cratonic Europe
- XY492 EGU2012-4236
H. Shahrokhi, A. Malehmir, and D. Sopher
 New insights on shallow and deep crustal geological structures of BABEL line 7 marine reflection seismic data revealed from reprocessing
- XY493 EGU2012-3743
G. Laske, G. Masters, Z. Ma, and M.E. Pasyanos
 CRUST1.0: An Updated Global Model of Earth's Crust
- XY494 EGU2012-4302
E. Koivisto, A. Malehmir, P. Heikkinen, S. Heinonen, and I. Kukkonen
 2D reflection seismic investigations in the Kevitsa Ni-Cu-PGE deposit, northern Finland
- XY495 EGU2012-6218
 L. Urbanek and **S. Buske**
 Seismic imaging of the near-surface structure at the San-Andreas-Fault system near the SAFOD drill site (Parkfield, California)
- XY496 EGU2012-10822
H. Sato, S. Abe, N. Kawai, H. Saito, N. Kato, T. Ishiyama, T. Iwasaki, E. Kurashimo, M. Inaba, and A. Van Horne
 Crustal architecture of an inverted back arc rift basin, Niigata, central Japan
- XY497 EGU2012-10643
S. Heinonen, D.B. Snyder, P.J. Heikkinen, and I.T. Kukkonen
 Seismic reflection profiling employed in the 3D-modeling of mineralized regions: A case study from Pyhäsalmi VHMS-deposit, Finland
- XY498 EGU2012-10203
P. Sroda and P. Hrubcova
 Full waveform modelling of the anomalous upper mantle seismic phases in the Western Carpathians - a trace of the plates contact at the Moho level?

- XY499 EGU2012-4520
A. Guterch, **M. Malinowski**, A. Maksym, J. Probulski, M. Majdański, M. Narkiewicz, W. Czuba, E. Gaczyński,
M. Grad, T. Janik, L. Jankowski, and P. Żroda
POLCRUST - a deep reflection seismic profile across the Trans-European Suture Zone in SE Poland
- XY500 EGU2012-6853
N. Kato, T. Ishiyama, H. Sato, H. Saito, E. Kurashimo, and S. Abe
Active emergent thrust associated with a detachment fold: A case study of the eastern boundary fault of
Takada plain, central Japan
- XY501 EGU2012-10126
T. Tiira, T. Janik, E. Kozlovskaya, M. Grad, A. Korja, K. Komminaho, E. Hegedüs, C.A. Kovács, H.
Silvennoinen, and E. Brückl
New seismic Vp- and Vp/Vs- models of HUKKA 2007 wide-angle reflection and refraction profile in northern
Fennoscandian Shield
- XY502 EGU2012-2652
I. Lahti, T. Korja, M. Smirnov, K. Vaittinen, E. Sandgren, T. Niiranen, and V. Nykänen
3-D imaging of the Central Lapland Greenstone Belt using magnetotelluric and seismic data
- XY503 EGU2012-7567
U. Herter and W. Jokat
Crustal structure across the Filchner Ronne Shelf, Antarctica
- XY504 EGU2012-8553
A. Goepel, **M. Krause**, and N. Kukowski
Seismic Imaging of the Thuringian Basin, Central Germany, in the framework of INFLUINS

Wednesday, 25 April

TS3.1/EMRP2.9/GD2.8 – Deformation and strain localization from micro- to lithospheric scales (co-organized) – 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 pseudotachylyte-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, J.L. 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. Stünitz, 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. Chemia
 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-organized) –

Posters

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

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. Stünitz, 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

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

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 pyrolyte 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. Klemd, 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}

TS6.1/GD5.5 – The Alpine-Himalayan convergence zone: from the Mediterranean to SE Asia (co-organized) – Orals
 Convener: C. Faccenna | Co-Conveners: Dr Govers, A. Robertson, Dr. Schattner, L. Jolivet, L.V. Eppelbaum, E. Sharkov, A. L. Sobisevich

Room: 12

Chairperson: n.n.

- 08:30–08:45 EGU2012-1899
G. Mohn and G. Manatschal
 How far the convergence in Alpine-type orogens is controlled by rift inheritance?
- 08:45–09:00 EGU2012-2638
S. Jammes and R.S. Huismans
 Influence of the strength of the crust on mountain building processes
- 09:00–09:15 EGU2012-2846
F. Kirst, N. Froitzheim, T. Nagel, B. Leiss, and J. Pleuger
 Extraction faulting and out-of-sequence thrusting in collisional orogeny - An example from the Swiss-Italian Western Alps
- 09:15–09:30 EGU2012-9508
A. Walpersdorf, C. Sue, S. Baize, L. Thirard, N. Cotte and the Briançon Team
 Repeated GPS measurements spanning 15 years to study the extensional deformation regime in the inner southwestern Alps (Briançon region, France)
- 09:30–09:45 EGU2012-12319
Y. Ren, G. W. Stuart, G. A. Houseman, B. Dando, C. Ionescu, E. Hegedus, S. Radovanovic, and South Carpathian Project Working Group
 Upper mantle structures beneath the Carpathian-Pannonian region: Implications for the geodynamics of continental collision
- 09:45–10:00 EGU2012-1255
A.H.F. Robertson
 Late Palaeozoic-Cenozoic assembly of the Tethyan orogen in the light of evidence from Greece and Albania

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-6626
S. Lebedev, E. Neenan, B. Knapmeyer-Endrun, T. Meier, M. R. Agius, A. J. Schaeffer, C. Tirel, and W. Friederich
 Lithospheric dynamics in eastern Mediterranean: Insights from seismic structure and anisotropy
- 10:45–11:00 EGU2012-2688
S. Rondenay, F.D. Pearce, J.-A.L. Olive, and M.D. Behn
 A detailed seismic investigation of the transition from oceanic to continental subduction in the Western Hellenic Subduction Zone
- 11:00–11:15 EGU2012-11778
J. Bartol, R Govers, and M. J. R Wortel
 Mantle delamination as the cause for the Miocene-Recent evolution of the Central and Eastern Anatolian Plateau
- 11:15–11:30 EGU2012-827
A.D Bottrill, J van Hunen, and M.B Allen
 The use of surface topography at continental collision zones to understand the dynamics of collision and break-off
- 11:30–11:45 EGU2012-12748
Dr. M. Keskin, Dr. E.V. Sharkov, Dr. V.A. Lebedev, Dr A.V. Chugaev, Dr. V. Oyan, Dr. S.C. Genc, E. Unal, and Dr. N. Aysal
 Miocene to Recent Magmatism and Geodynamics of Eastern Turkey

- 11:45–12:00 EGU2012-5651
R. Wortel and P.Th. Meijer
 The role of continental collision in the separation of Arabia from Africa and the formation of the Dead Sea Fault

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2012-2903
M. Frehner, D. Reif, and B. Grasemann
 Mechanical versus kinematical shortening reconstructions of the Zagros High Folded Zone (Kurdistan Region of Iraq)
- 13:45–14:00 EGU2012-4549
S. Tavakoli, D. Frizon de Lamotte, J.-C. Ringenbach, and J.-F. Ballard
 Geometry and Kinematics of the High Zagros Belt (Iran)
- 14:00–14:15 EGU2012-12669
J. Austermann, G. Iaffaldano, and H. Bunge
 The competing roles of Zagros orogeny and Tethys slab-break-off in slowing down Arabia/Eurasia convergence since ~5 Ma
- 14:15–14:30 EGU2012-7059
F. Cifelli, M. Mattei, H. Alimohammadian, J. Sabouri, H. Rashid, and M. Ghassemi
 The role of block rotations and oroclinal bending in Iran during the Cenozoic Arabia-Eurasia shortening
- 14:30–14:45 EGU2012-7812
M.B. Allen, I. Neill, M. Kheirkhah, J. van Hunen, J.P. Davidson, Kh. Meliksetian, and M.H. Emami
 Orogenic plateau magmatism of the Arabia-Eurasia collision zone
- 14:45–15:00 EGU2012-2500
A. L. Sobisevich, Yu. P. Masurenkov, I. N. Pouzich, and N. I. Laverova
 Fluid-magmatic systems and volcanic centers in Northern Caucasus

Chairperson: n.n.

- 15:30–15:45 EGU2012-1341
L.V. Eppelbaum
 Geophysical Investigations in the Caucasus (1925 - 2012): Initial, Basic and Modern Stages
- 15:45–16:00 EGU2012-2670
E. Sharkov
 Features of the Caucasian segment of the Alpine-Himalayan-Indonesian Convergence Zone
- 16:00–16:15 EGU2012-2095
D.J.J. van Hinsbergen, P.C. Lippert, G. Dupont-Nivet, N. McQuarrie, P. Doubrovine, W. Spakman, and T.H. Torsvik
 The Greater India Basin Hypothesis: Closing the Gap between India-Asia Crustal Shortening and Lithospheric Convergence Records
- 16:15–16:30 EGU2012-6538
F. Bajolet, A. Replumaz, C. Faccenna, and R. Lainé
 Curved orogen and syntaxes formation during subduction and collision
- 16:30–16:45 EGU2012-10796
X. Shi, E. Kirby, K. P. Furlong, E. Wang, K. Meng, F. M. Phillips, R. Robinson, and S. Marrero
 Preliminary constraints on rheology of the deep crust beneath central Tibet from Late Pleistocene - Early Holocene shorelines
- 16:45–17:00 EGU2012-4234
S. Guillot and A. Replumaz
 Importance of India and Asia subductions for the growth of the Tibetan plateau

TS6.1/GD5.5 – The Alpine-Himalayan convergence zone: from the Mediterranean to SE Asia (co-organized) – Posters
 Convener: C. Faccenna | Co-Conveners: Dr Govers, A. Robertson, Dr. Schattner, L. Jolivet, L.V. Eppelbaum, E. Sharkov, A. L. Sobisevich

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. L. Sobisevich

- A430 EGU2012-5486
A. Gil, J. Díaz, and J. Gallart
 New Pn and Sn tomographic images of the uppermost mantle beneath the Mediterranean region

- A431 EGU2012-10615
J. Pleuger and Y. Podladchikov
A new restoration of the NFP20-East cross section and possible tectonic overpressure in the Penninic Adula Nappe (Central Alps)
- A432 EGU2012-8968
H. Munzarova, J. Plomerova, L. Vecsey, and H. Karousova
Anisotropy of the upper mantle beneath the Northern Apennines based on data from the passive seismic experiment RETREAT (Italy)
- A433 EGU2012-8981
J. Schnyder, G. L. Cardello, and A. M. Hirt
A structural and Anisotropy of Magnetic Susceptibility study from the Paleozoic basement, the Mesozoic-Tertiary sedimentary cover and the Pleistocene lavas from the Island of Zannone (Tyrrhenian Sea, Italy).
- A434 EGU2012-8707
A. Vitale Brovarone, D. Herwartz, D. Castelli, and J. Malavieille
On the timing of high-pressure metamorphism in Alpine Corsica: the first Lu-Hf garnet and lawsonite ages
- A435 EGU2012-12931
T. Scheiber, O.A. Pfiffner, and G. Schreurs
Structural evolution and finite geometry of the Siviez-Mischabel nappe, Valais, Swiss Alps
- A436 EGU2012-7553
G. L. Cardello and N.S. Mancktelow
Syn-sedimentary tectonics in the Cretaceous succession of the Wildhorn nappe (SW Switzerland)
- A437 EGU2012-6939
L.C. Matenco and **D. Radivojevic**
On the formation and evolution of the Pannonian basin: constraints derived from the orogenic collapse recorded at the junction between Carpathians and Dinarides
- A438 EGU2012-1130
H. M. Küçük, D. Dondurur, G. Çifçi, S. Gürçay, J. Hall, C. Yaltırak, and A.E. Aksu
NEOGENE TECTONICS of PART of THE JUNCTION of CYPRUS and HELLENIC ARCS in THE EASTERN MEDITERRANEAN SEA
- A439 EGU2012-9609
A. Vitale Brovarone, P. Agard, P. Monié, and A. Chauvet
Detailed thermal fingerprinting of obduction-related processes: insights from Northern New Caledonia
- A440 EGU2012-4558
L. Kaislaniemi, J. van Hunen, and M. B. Allen
Numerical modeling of continental collision magmatism on Turkish-Iranian plateau
- A441 EGU2012-13254
E. Mposkos, A. Krohe, **N. Wawrzenitz**, and R. L. Romer
From an active continental plate margin to continental collision: New constraints from the petrological, structural and geochronological record of the (ultra) high-P metamorphic Rhodope domain (N-Greece)
- A442 EGU2012-12474
S. C. Ülgen, A.I. Okay, E. Özcan, A.M.C. Engör, and K. Akbayram
Regional Implications of Ypresian Flysch Sequence From South of Marmara Sea: Structural, Stratigraphic and Paleontological Data
- A443 EGU2012-8600
L. Tunini, I. Jiménez-Munt, and M. Fernández
Deep structure of the Zagros Mountains and the Iranian plateau: results from petrological and geophysical modelling
- A444 EGU2012-10386
T. François, P. Agard, B. Meyer, M. Zarrinkoub, S.L. Chung, and E. Burov
Uprising of the Iranian plateau: Inferences from (U-Th)/He and AFT thermochronology
- A445 EGU2012-5195
I. Albino, W. Cavazza, M. Zattin, A.I. Okay, S. Adamia, and N. Sadradze
Apatite fission-track analysis of the tectonic effects of the Arabia-Eurasia collision
- A446 EGU2012-12073
C. Ducassou and C. Robin
The depositional environments of the Muti Formation (Upper Cretaceous), a key to understand the obduction in the Oman Mountains
- A447 EGU2012-6388
G. Göçmengil, G. Topuz, Ö.F. Çelik, ?E. Altın?, and M. Özkan
Geochemical features of metabasic rocks from an Early to Middle Jurassic Accretionary Complex (Refahiye metamorphics, Eastern Pontides, NE Turkey): Implications for Late Jurassic-Early Cretaceous magmatic lull
- A448 EGU2012-9996
B. Andreucci, M. Zattin, S. Mazzoli, R. Szaniawski, and L. Jankowski
Variable thermal histories along the northern Outer Carpathians: new thermochronological and thermal maturity data from Ukraine

- A449 EGU2012-10542
W. Stolk, M. Kaban, F. Beekman, M. Tesauro, and S. Cloetingh
Moho depth and crustal velocities from the Bosphorus to S.E. Asia
- A450 EGU2012-12004
R. Akdo?an, M. Turan, and A. Dokuz
Geochemical properties and provenance characteristics of the Early-Middle Jurassic sandstone and shales, NE Turkey
- A451 EGU2012-157
M. Ayg?l and A. I. Okay
Blueschist-facies metamorphic rocks in the Central Pontides, Northern Turkey
- A452 EGU2012-2043
C. Huebscher, A. McGrandle, G. Scaife, R. Spoors, and T. Stieglitz
A new plate tectonic concept for the eastern-most Mediterranean
- A453 EGU2012-10091
M. L. Kopp
Strike-slip and extrusion tectonics of the Greater Caucasus-Kopetdagh region
- A454 EGU2012-4657
V. Kovalevsky and A. Sobisevitch
Monitoring of low-energy seismic activity in Elbrus volcanic area with the use of underground seismic array
- A455 EGU2012-1827
V. Milyukov and A. Myasnikov
Monitoring the resonant properties of the magmatic structures of Elbrus volcano based on observation of lithospheric deformations by the Baksan laser interferometer - strainmeter
- A456 EGU2012-2501
A. L. Sobisevich, A. N. Ovsuychenko, L. E. Sobisevitch, and I. N. Pouzich
Mud volcanoes in North-Western Caucasus: deep seated structures and scenarios of activity
- A457 EGU2012-3356
D.V. Likhodeev
The results of studies of temperature fields in the Elbrus volcanic center
- A458 EGU2012-4299
R.A. Zhostkow, Yu.P. Masurenkov, Z.I. Dudarov, A.V. Shevchenko, S.M. Dolov, and K.B. Danilov
Deep structure of the Pyatigorsk volcanic center (Northern Caucasus)
- A459 EGU2012-4917
A. Dokuchaev, S. Bubnov, O. Bogatkov, and Yu. Goltsman
Main peculiarities of N-Q magmatism of the Greater Caucasus
- A460 EGU2012-6912
T. Verkholtantseva, D. Shulakov, P. Butyrin, F. Verkholtantsev, and I. Gabsatarova
The results of microseismic observations in the Baksan Neutrino Observatory, Russia
- A461 EGU2012-14139
M. G. Daniyalov and O. A. Saidov
Information value of underground water-gas systems parameters in connection with earthquakes precursors search
- A462 EGU2012-14276
M. G. Daniyalov and A. I. Suleymanov
The variations of geomagnetic field in the region of the Sulaksky cascade of hydro-electric power station
- A463 EGU2012-14278
D. G. Taimazov, **T. I. Sharapudinov**, M. G. Magomed-Kasumov, and M. S. Sultanakhmedov
About the ways of hydrodynamic observations informativity enhancement
- A464 EGU2012-3639
V. Kovalevsky, B. Glinsky, M. Khairtdinov, and D. Karavaev
Experimental investigations of mud volcano Karabetova Gora and the results of mathematical modeling
- A465 EGU2012-7222
C.-C. Wang, J.B.H. Shyu, Y. Wang, C.-C. Shen, H.-W. Chiang, S. Min, O. Than, and S. T. Tun
Paleoseismological investigations in northern Ramree Island, western Myanmar (Burma)
- A466 EGU2012-8242
T. Chelidze, G. Gugunava, N. Gamkrelidze, P. Mindeli, J. Kiria, S. Ghonghadze, and O. Janovskaya
The Deep Structure and 3D Thermo-geodynamics of the Caucasus by Geophysical Data.
- A467 EGU2012-11802
Y. L. Lin, M. W. Yeh, C. H. Lo, T. Y. Lee, and P. Charusiri
In-situ ⁴⁰Ar/³⁹Ar Laser Probe Dating of Micas from Mae Ping Shear Zone, Northern Thailand
- A468 EGU2012-5609
T. Berthet, G. Hetényi, R. Cattin, C. Champollion, E. Doerflinger, S. Sapkota, D. Drukpa, and J. Chopel
Lateral variations of gravity anomalies in the Eastern Himalayas: preliminary results and interpretations

A469 EGU2012-11644

F. Meresse, D. Savva, M. Pubellier, S. Steuer, D. Franke, F. Cordey, C. Muller, F. Sapin, B. Mouly, and J-L. Auxièrre
Late tectonic uplift of an inverted oceanic basin in South East Asia: the case of Palawan Island (western Philippines)

TS7.1/GD3.12 – Structural evolution of continental transform boundaries and transpressional fault systems (co-organized) – Orals

Convener: Z. Garfunkel | Co-Conveners: D. Cunningham, K. Leever

Room: 29

Chairperson: Z. Garfunkel, D. Cunningham

10:30–10:45 **Session overview**

10:45–11:00 EGU2012-9522

D. C. Tanner, S. Pruefer, D. Kuhn, and C. M. Krawczyk
Scales of deformation caused by fault zone complexity within a compressional flower structure

11:00–11:15 EGU2012-5015

K.A. Leever and O. Oncken
Erosion controls transpressional wedge kinematics

11:15–11:30 EGU2012-5236

M. Devès, G.C.P. King, Y. Klinger, and A. Agnon
Localised and distributed deformation in the lithosphere: Modelling the Dead Sea region in 3 dimensions

11:30–11:45 EGU2012-10448

D. Zampieri, A. A. Gutierrez, M. Massironi, and R. Mon
Reconciling opposite strike-slip kinematics in the transpressional belt of the Sierras Pampeanas (Argentina)

11:45–12:00 EGU2012-10713

L. Gregory, C. Mac Niocaill, G. Bayasgalan, A. Bayasgalan, and R. Walker
Patterns of active faulting and paleomagnetic data suggest recent (last 5 m.y.) onset of deformation in the eastern Mongolian Altay

TS7.1/GD3.12 – Structural evolution of continental transform boundaries and transpressional fault systems (co-organized) – Posters

Convener: Z. Garfunkel | Co-Conveners: D. Cunningham, K. Leever

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Z. Garfunkel, K.A. Leever

A470 EGU2012-240

k. akbayram and a. okay
The cumulative offset of North Anatolian Fault in the Marmara region, northwest Turkey

A471 EGU2012-1207

M.M. Abdeen and A. A. Abdelghaffar
Syn- and Post-Accretionary Structures in the Neoproterozoic Central Allaqi-Heiani Suture Zone, Southeastern Egypt

A472 EGU2012-1998

O. Atg?n, G. Çifçi, C. Sorlien, L. Seeber, M. Steckler, D. Sillington, H. Kurt, D. Dondurur, S. Okay, S. Gürçay, H. Sar?ta?, and H.M. Küçük
INVESTIGATION OF ÇINARCIK BASIN AND NORTH ANATOLIAN FAULT WITHIN THE SEA OF MARMARA WITH MULTICHANNEL SEISMIC REFLECTION DATA

A473 EGU2012-3014

D. Cunningham
Mountain building processes in intraplate, intracontinental oblique deformation belts: Lessons from the Gobi Altai, Mongolia

A474 EGU2012-3354

E. Aylan, K. Akbayram, and C. ?mren
Structural and seismic data on a new branch of the North Anatolian Fault: A reworked Tertiary thrust fault in northwestern Turkey

A475 EGU2012-3530

T. Santimano and U. Riller
The kinematic relationship between thrusting, reverse faulting and transpression: An example from the Sudbury Basin, Canada

- A476 EGU2012-4809
N. Lom, O. Tüysüz, S.C. Genç, U. Tar?, C. ?mren, and Ö. Teke?in
 Investigation Of Active Faults In Antakya (Southeastern Turkey) And Its Surroundings
- A477 EGU2012-9000
K. Aubele, V. Bachtadse, G. Muttoni, A. Ronchi, and M. Durand
 European Sedimentary Basins: Deciphering Palaeozoic intra-Pangea Wrench Faulting
- A478 EGU2012-9511
U. Kirscher, D. Alexeiev, A. Mikolaichuk, and V. Bachtadse
 Constraints on the structural evolution of the southern segment of the Central Asian Orogenic Belt by Paleomagnetic data

TS8.1/SM2.6 – Active tectonics along continental faults (co-organized) – Orals

Convener: M. Ferry | Co-Conveners: K. Vanneste, I. T. Kukkonen, MVS Ask, Dr. Olesen

Room: 11

Chairperson: K. Vanneste

- 08:30–08:45 EGU2012-4208
S. Toda, H. Tsutsumi, N. Sugito, and H. Yasuda
 Reactivated inland normal faults due to the 2011 Mw=9.0 Tohoku, Japan, earthquake
- 08:45–09:00 EGU2012-7332
T. Ishiyama, N. Sugito, T. Echigo, H. Sato, and T. Suzuki
 Rare normal faulting earthquake induced by subduction megaquake: example from 2011 Tohoku-oki earthquake
- 09:00–09:15 EGU2012-9184
S. Beaupretre, I. Manighetti, S. Garambois, J. Malavieille, G. S  n  chal, and M. Chatton
 Finding the buried record of past earthquakes with GPR-based paleoseismology
- 09:15–09:30 EGU2012-10839
R. Vassallo, V. Vignon, J.-L. Mugnier, R. Jayangondaperumal, P. Srivastava, M. A. Malik, M. Mouchen  , and F. Jouanne
 A future big one in the North-West Himalayan syntax ?
- 09:30–09:45 EGU2012-8588
 H. Li, **J. van der Woerd**, Z. Sun, J. Si, P. Tapponnier, J. Pan, D. Liu, and M.-L. Chevalier
 Co-seismic and cumulative offsets of the recent earthquakes along the Karakax left-lateral strike-slip fault in western Tibet
- 09:45–10:00 EGU2012-5739
M. Ferry, R. D. Gold, and M. Meghraoui
 Slip history of the Dead Sea fault system since 100 ka

COFFEE BREAK

Chairperson: M. Ferry and I. T. Kukkonen

- 10:30–10:45 EGU2012-6919
I. T. Kukkonen, M.S.V. Ask, and O. Olesen
 Project DAFNE - Drilling Active Faults in Northern Europe
- 10:45–11:00 EGU2012-13080
O. Olesen, M. Br  nner, J. Dehls, C. Lindholm, H. Bungum, H.P. Kierulf, and L. Bockmann
 Neotectonics and strandflat formation in Nordland, northern Norway
- 11:00–11:15 EGU2012-4745
C. Brandes, J. Winsemann, J. Roskosch, J. Meinsen, D. Tanner, M. Frechen, H. Steffen, and P. Wu
 Young glacially-induced tectonic activity of the Osning Thrust in Central Europe
- 11:15–11:30 EGU2012-5121
 F. Storti, **F. Balsamo**, L. Aldega, S. Corrado, L. Di Paolo, M. Mastalertz, and M. Tallini
 Evidence of strong Quaternary earthquakes in the epicentral area of the April 6th 2009 L'Aquila seismic event from sediment paleofluidization and overconsolidation
- 11:30–11:45 EGU2012-9050
P. Boncio, P. Galli, G. Naso, and A. Pizzi
 Zoning surface rupture hazard along normal faults: Insight from L'Aquila, 2009 (Mw 6.3, Central Italy) and other global earthquakes
- 11:45–12:00 EGU2012-12392
J. Woessner, L. Danciu, D. Giardini, and the SHARE consortium
 Harmonized Probabilistic Seismic Hazard Assessment in Europe: Earthquake Geology Applied

TS8.1/SM2.6 – Active tectonics along continental faults (co-organized) – Posters

Convener: M. Ferry | Co-Conveners: K. Vanneste, I. T. Kukkonen, MVS Ask, Dr. Olesen

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: M. Ask and O. Olesen

- A479 EGU2012-9163
G. Valensise, S. Barba, and R. Basili
Introducing individual seismogenic sources and geology-derived strain rates into Europe's new seismic hazard model
- A480 EGU2012-8021
C.H. Grützner, **K. Reicherter**, and J. Winandy
A 13 km Long Paleoseismological Trench in Western Germany
- A481 EGU2012-6170
J.J. Martínez-Díaz, M. Béjar-Pizarro, **J.A. Álvarez-Gómez**, F.L. Mancilla, D. Stich, G. Herrera, and J. Morales
Seismic and tectonic implications of an intersegment rupture. The damaging May 11th 2011 MW 5.2 Lorca, Spain, earthquake.
- A482 EGU2012-12283
S. Silva, P. Terrinha, L. Matias, W. Geissler, N. Zitellini, M. Romsdorf, and NEAREST Working Group
Seismotectonics of the Gulf of Cadiz based on the NEAREST OBS experiment: mechanisms and faults
- A483 EGU2012-5775
M. Ferry, J. Carvalho, J. Borges, and D. Fitzenz
Searching for Earthquake Sources in the Lower Tagus Valley (Portugal): First Results
- A484 EGU2012-7956
D. Fang and W. Xue-Ze
The Post-seismic Slip of the 1973 M7.6 earthquake on the Luhuo Segment of the Xianshuihe Fault Zone, Sichuan, China
- A485 EGU2012-5508
L. Xiaofan
The analysis of observed coseismic deformation and dynamic triggering of Ms 8.0 Wenchuan Earthquake
- A486 EGU2012-7677
W. Xue-ze and D. Fang
Correlation of major earthquake sequences on the eastern and northern boundaries of the Bayanhar block, China, and the tectonic dynamics of the block
- A487 EGU2012-3291
C.-P. Chang, X.-W. Xu, R.-M. Yuan, K. Li, X.-Z. Sun, and W.-S. Chen
Tectonic evolution of the frontal Longmen Shan thrust belt
- A488 EGU2012-11075
J-F. Ritz, C. Larroque, **R. Vassallo**, A. Arzhannikova, S. Arzhannikov, and M. Jolivet
Holocene kinematics and slip rate of the Sayan fault (Southern Siberia, Russia)
- A489 EGU2012-8568
M. Etchebes, P. Tapponnier, Y. Klinger, J. Van Der Woerd, X. Xu, S. Xinzhe, T. Xibin, M. Rizza, and T. Lok Hang
Slow late quaternary slip rate and long earthquake recurrence time along the Fuyun fault, Xinjiang, China
- A490 EGU2012-5803
M. Ferry, A. Schlupp, U. Munkhuu, M. Munsch, and S. Fleury
Tectonic Morphology of the Hustai Fault (Northern Mongolia)
- A491 EGU2012-8027
J.-R. Dujardin, M. Bano, M. Gillard, A. Schlupp, M. Ferry, U. Munkhuu, and T.-A. Nyambayar
Characterization of the Emeelt active fault by 2D and 3D GPR survey for seismic hazard assessment of Ulaanbaatar, capital of Mongolia.
- A492 EGU2012-5596
S. Fleury, M. Munsch, A. Schlupp, M. Ferry, and U. Munkhuu
High Resolution Magnetic surveys across the Emeelt and Hustai faults near Ulaanbaatar, Mongolia
- A493 EGU2012-1860
J. Alonso-Henar, W. Montero, J.J. Martínez-Díaz, J.A. Álvarez-Gómez, and J.M. Insua-Arévalo
Paleoseismic evidence of the most destructive earthquake in Costa Rica history: 4th May 1910 Cartago earthquake.
- A494 EGU2012-2377
S.-F. Xue, F. Sun, and B. Zhou
Relationship between the reservoir-induced seismic activity and the role of reservoir fluid - A case study of Zipingpu Reservoir, China
- A495 EGU2012-266
N. Deseta, **L. Ashwal**, and T.B. Andersen
Intermediate-depth earthquake generation: what hydrous minerals can tell us

- A496 EGU2012-684
F.L. Bonali, A. Tibaldi, C. Corazzato, F. Lanza, A. Cavallo, and A. Nardin
Elastic stress interaction between faulting and volcanism in the Olcapato-San Antonio de Los Cobres area (NW Argentina)
- A497 EGU2012-9545
M. Chatton, J. Malavieille, S. Dominguez, I. Manighetti, C. Romano, S. Beauprêtre, S. Garembois, and C. Larroque
Interaction between slip events, erosion and sedimentation along an active strike-slip fault: Insights from analog models
- A498 EGU2012-9370
M. Bavec, T. Ambrožič, J. Atanackov, I. Ceci?, B. Celarc, A. Gosar, P. Jamšek, J. Jež, D. Kogoj, B. Koler, M. Kuhar, B. Milani?, M. Novak, P. Pavlov?, Prešeren, S. Savšek, O. Sterle, B. Stopar, M. Vrabec, M. Zajc, and M. Živ?,
Some seismotectonic characteristics of the Ljubljana Basin, Slovenia
- A499 EGU2012-10731
H. Mejsi, R. Ghribi, S. Bouaziz, and S. Balescu
Post Tyrrhénian deformation analysis in the Sahel coast (Eastern Tunisia): seismotectonic events implication
- A500 EGU2012-13091
D. Kalafat, R. Polat, S. Altuncu Poyraz, K. Kekovali, and M.F. Akkoyunlu
19 May 2011 Simav Earthquake Sequence : Western Turkey
- A501 EGU2012-12048
L. Drab, A. Hubert-Ferrari, S. Schmidt, and P. Martinez
The earthquake sedimentary record in marine sediment from cores in the western part of the Marmara Sea, Turkey
- A502 EGU2012-13131
S. Uskulu and O. Tuysuz
Earthquake Scenarios and Comparison with Historical Earthquakes, Hatay Region, SE Turkey
- A503 EGU2012-12591
A. Bäckström, N. Rantakokko, and M.V.S. Ask
Fault-slip analyses of brittle structures in the Corruvágge valley along the Pärvie fault in North Sweden
- A504 EGU2012-11597
E. Kozlovskaya, O. Usoltseva, N. Konstantinovskaya and the POLENET/LAPNET Working Group Team
Local seismicity in the area of Tornio River (northern Fennoscandia) revealed by analysis of local events registered by the POLENET/LAPNET array
- A505 EGU2012-9076
B. Lund, E. Lindblom, A. Tryggvason, and R. Bödvarsson
What do earthquakes on the endglacial faults tell us about the current stress field?
- A506 EGU2012-8446
I. Smedberg, M. Uski, T. Tiira, K. Komminaho, and A. Korja
Intraplate earthquake swarm in Kouvola, south-eastern Finland
- A507 EGU2012-8096
M. Uski, **T. Tiira**, M. Grad, and J. Yliniemi
Seismicity and depth of faulting in the Archean Kuusamo region based on relocation of earthquakes with new velocity models
- A508 EGU2012-6117
C. Lindholm, D. Lang, O. Olesen, and J. Gellein
A temporary seismic small-sized network around Masi, Finnmark, for monitoring the Stuoragurra micro-seismicity.
- A509 EGU2012-13872
E. Roaldset
The postglacial Stuoragurra Fault, North Norway - A textural and mineralogical study.

TS8.2/G3.8/NH4.4/SM2.11 – Seismotectonics and crustal deformation in Africa (co-organized) – Orals

Convener: M. Meghraoui | Co-Conveners: R. Durrheim, A. AYELE, V. Midzi

Room: 27

Chairperson: Mustapha Meghraoui and Vunganai Midzi

- 15:30–15:45 EGU2012-14089
T. Wright, A. Ayele, T. Barnie, M. Belachew, E. Calais, L. Field, I. Hamling, J. Hammond, D. Keir and the Afar Rift Consortium Team
Witnessing the birth of a new ocean? The first 6 years of the Dabbahu rifting episode, and other activity in Afar

- 15:45–16:00 EGU2012-1474
A. Deprez, C. Doubre, F. Masson, A. Socquet, P. Ulrich, C. Vigny, and J.C. Ruegg
 Evidence of changes in the velocity field in the Asal-Ghoubbet rift using GPS data: results of repeated GPS campaigns over a 13-year period.
- 16:00–16:15 EGU2012-11567
A. Tokam Kamga, C. T. Tabod, A. A. Nyblade, and S. S. Nguiya
 Imaging the Lithosphere beneath Cameroon and implications to the origin of the Cameroon Volcanic Line
- 16:15–16:30 EGU2012-7588
R.M.S. Fernandes, M. Meghraoui, J.M. Miranda, M.S. Bos, A. Radwan, A. Tahayt, and M. Muhammad
 Constraints to the strain field of Africa from geodetic solutions: a contribution for the Seismotectonic Map of Africa
- 16:30–16:45 EGU2012-14174
M. Bezzeghoud, C. Adam, E. Bufor, J.F. Borges, and B. Caldeira
 Seismicity along the western part of the Eurasia-Nubian plate boundary
- 16:45–17:00 EGU2012-11779
A. Ayele
 Earthquake and Volcanic Hazard Mitigation and Capacity Building in Sub-Saharan Africa

TS8.2/G3.8/NH4.4/SM2.11 – Seismotectonics and crustal deformation in Africa (co-organized) – Posters

Convener: M. Meghraoui | Co-Conveners: R. Durrheim, A. AYELE, V. Midzi

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Atalay Ayele and Ray Durrheim

- A510 EGU2012-474
E. Saria, E. Calais, Z. Altamimi, P. Willis, R. Fernandes, S. Stamps, and H. Farah
 Rigidity of Nubia from combined GPS and DORIS solutions: Implication to Africa Reference Frame (AFREF)
- A511 EGU2012-1551
M. Lindenfeld, G. Rumpker, I. Wölbern, A.G. Batte, and A. Schumann
 Complex seismicity patterns in the Rwenzori region: insights to rifting processes at the Albertine Rift.
- A512 EGU2012-5849
D. Delvaux, F. Kervyn, A.S. Macheyeki, and E.B. Temu
 Geodynamic significance of the TRM segment in the East African Rift: active tectonics and paleostress in western Tanzania
- A513 EGU2012-5931
J.-L. Mulumba and D. Delvaux
 Pre-instrumental seismicity in Central Africa using felt seisms recorded mainly at the meteorological stations of DRC, Rwanda and Burundi during the colonial period
- A514 EGU2012-10491
M. Singh
 Seismotectonic Analysis for the KZN region of South Africa
- A515 EGU2012-14093
V Midzi
 Status of Seismotectonic and seismic hazard studies in South Africa
- A516 EGU2012-14203
D. Keir, M. Belachew, C. Ebinger, M. Kendall, J. Hammond, G. Stuart, A. Ayele, and J. Rowland
 Mapping the evolving strain field during continental breakup from crustal anisotropy in the Afar Depression
- A517 EGU2012-1425
A. Deprez, F. Masson, C. Doubre, and P. Ulrich
 African plate motions constraining and Euler pole determination using permanent GPS data
- A518 EGU2012-1529
 A. Ahmed, **C. Doubre**, S. Leroy, J. Perrot, L. Audin, F. Rolandone, D. Keir, I. Al-Ganad, K. Khanbari, K. Mohamed, J. Vergne, E. Jacques, and A. Nercessian
 Seismic constraints on a large dyking event in Western Gulf of Aden
- A519 EGU2012-3334
M. Meghraoui and A. Ayadi
 Seismotectonics of North Africa
- A520 EGU2012-3350
R. Ghedhoui, B. Deffontaines, and M.C Rabia
 Lateral extrusion of Tunisia : Contribution of Jeffara Fault (southern branch) and Petroleum Implications
- A521 EGU2012-6540
A. Ben-Suleman
 reevaluation of seismicity and seismotectonics of Libya

- A522 EGU2012-13155
J. Kacem and M. Hfaiedh
 Importance of macroseismic data from moderate local earthquakes for seismic microzoning effects distribution during the 2003 Bardo, Tunisia, earthquake
- A523 EGU2012-14204
S. Maouche, A. Abtout, N. Merabet, T. Aïfa, A. Lamali, B. Bouyahyaoui, S. Boughchiche, and M. Ayache
 Tectonic and hydrothermal activities in Debbagh, Guelma Basin, Eastern Algeria

SM2.4/G3.7/NH4.8/TS8.6 – Investigating earthquake physics through source imaging and scaling studies (co-organized) – Orals

Convener: G. Kwiitek | Co-Conveners: H. Sudhaus, R. M. Harrington, P.M. Mai, A. Piatanesi

Room: 26

Chairperson: n.n.

- 15:30–15:45 EGU2012-3790
A.M.G. Ferreira, J. Weston, and G.J. Funning
 Joint earthquake source inversions of InSAR and seismic data using 3D Earth models
- 15:45–16:00 EGU2012-12258
J. R. Elliott, Z. Li, E. K. Nissen, J. A. Jackson, S. Lamb, B. Parsons, and R. A. Sloan
 Recent continental earthquakes constrained by InSAR: determining source complexity
- 16:00–16:15 EGU2012-4604
G.C. Feng, S. Jónsson, X.L. Ding, and Z. Li
 The coseismic deformation and fault slip distribution of the Mw9.0 Tohoku-Oki earthquake estimated from GPS and InSAR
- 16:15–16:30 EGU2012-8546
V. Dionicio, C. Satriano, E. Kiraly, J.-P. Vilotte, and P. Bernard
 Broadband characterization of large subduction earthquakes through the combination of coherent rupture imaging and kinematic modeling
- 16:30–16:45 EGU2012-9989
E. Tinti, L. Scognamiglio, A. Cirella, M. Cocco, and A. Piatanesi
 Complex earthquake directivity during the 2009 L'Aquila mainshock
- 16:45–17:00 EGU2012-8578
P.M. Mai, D. Schorlemmer, and M. Page
 The Source Inversion Validation (SIV) Initiative: A Collaborative Study on Uncertainty Quantification in Earthquake Source Inversions

SM2.4/G3.7/NH4.8/TS8.6 – Investigating earthquake physics through source imaging and scaling studies (co-organized) – Posters

Convener: G. Kwiitek | Co-Conveners: H. Sudhaus, R. M. Harrington, P.M. Mai, A. Piatanesi

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL317 EGU2012-2731
R. M. Harrington and G. Kwiitek
 Volcanic seismic earthquakes at Mount St. Helens exhibit a constant seismically radiated energy per unit size.
- XL318 EGU2012-7183
 E Popescu, M Radulian, **M Craiu**, A Craiu, I. A Moldovan, and A. O Placinta
 Source characteristics of the crustal moderate earthquakes occurred between 2007 and 2011, in the South Carpathians and Romanian Plain
- XL319 EGU2012-7118
 E. Popescu, A Craiu, **M Craiu**, M Popa, and M Radulian
 Earthquake sequence in western getic depression (Romania), December 2011 - January 2012: source characteristics and seismotectonics
- XL320 EGU2012-12042
G. Kwiitek and Y. Ben-Zion
 Assessment of radiated P and S wave energy from shear and tensile picoseismicity in the Mponeng deep gold mine, South Africa
- XL321 EGU2012-788
A. Barth
 Spatial b-value variations in the Upper Rhine Graben
- XL322 EGU2012-4020
Y.-T. Ko, B.-Y. Kuo, and S.-H. Hung
 The source scaling and depth-dependent stress drops for subduction zone events

- XL323 EGU2012-8479
M.D. Martinez, M. Monterrubio, and X. Lana
Time behavior of aftershock series simulated by using a modified version of the Dynamic Fiber Bundle (FBM) model
- XL324 EGU2012-8919
F. N. Bekler, N.M. Ozel, and G.B. Tanircan
Kinematic Rupture Process Of Karakocan-Elazig Earthquake, Eastern Turkey
- XL325 EGU2012-7539
A. Demirci, T. Bekler, and S. Ozden
The 19 May 2011 Simav Earthquake (Mw=5.8) and its aftershocks, Western Turkey: Source mechanisms and spectral source parameters
- XL326 EGU2012-11208
M.-A. Schröter, C. Weimann, H. Sturm, and M. Holschneider
Bridging the scales: Direct SEM imaging of micrometer vibrations for the analysis of stick-slip behavior at microscale
- XL327 EGU2012-382
O. Castro-Artola and A. Iglesias Mendoza
Simplified Scheme for the Kinematic Inversion of the Rupture Process: Application to Mexican Earthquakes.
- XL328 EGU2012-4256
F. Gallovi?, J. Zahradník, and K. Vachek
Complexity of the Mw6.3, 2009 L'Aquila (Central Italy) earthquake rupture
- XL329 EGU2012-5459
C.-F. Chen, J.B.H. Shyu, and Y.-M. Wu
Seismotectonic characteristics of the northernmost part of the Longitudinal Valley suture, eastern Taiwan
- XL330 EGU2012-7153
A. Gallo, G. Costa, and P. Suhadolc
Strong motion inversion for slip distribution on a finite fault using strong motion data: L'Aquila 2009 earthquake
- XL331 EGU2012-9116
S. Ruiz and R. Madariaga
Kinematic inversion of Maule 2010, Chile and Tohoku 2011, Japan earthquakes using cGPS and Strong Motion data
- XL332 EGU2012-9386
J.A. López-Comino, F. Mancilla, J. Morales, and **D. Stich**
Source parameters of the 2011, Mw 5.2 Lorca earthquake (Spain)
- XL333 EGU2012-9719
M. Hensch, Th. Árnadóttir, B. Lund, and B. Brandsdóttir
Spatial stress variations in the aftershock sequence following the 2008 M6 earthquake doublet in the South Iceland Seismic Zone
- XL334 EGU2012-10383
H. Razafindrakoto and M. Mai
Uncertainty Quantification of Kinematic Source Parameters using a Bayesian Approach
- XL335 EGU2012-11610
C.P. Evangelidis and H. Kao
Rupture plane identification of intermediate depth earthquakes in the Hellenic arc by back projection of local seismic waveforms
- XL336 EGU2012-12071
C. Kyriakopoulos, T. Masterlark, M. Chini, C. Bignami, and S. Stramondo
Post-seismic deformation of the 2011 Tohoku earthquake, Japan
- XL337 EGU2012-9945
A. Cirella, A. Piatanesi, E. Tinti, M. Chini, and M. Cocco
Rupture process of the 2009 L'Aquila, central Italy, earthquake, from the separate and joint inversion of Strong Motion, GPS and DInSAR data.
- XL338 EGU2012-13355
H. Sudhaus and S. Heimann
Data Democracy in Simultaneous Monte Carlo Optimizations of Geodetic and Seismological Data

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. François, 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. Oliot, 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

Thursday, 26 April

ML26 – Stephan Mueller Medal Lecture by Jacques Malavieille (co-listed) – Orals

Convener: F. Storti

Room: 1

Chairperson: n.n.

19:00–20:00 EGU2012-14449

J. Malavieille

Mountain building, from subduction to collision and erosion: insights from 30 years of field and analog modeling studies (Stephan Mueller Medal Lecture)

SM1.1 – Open Session on Seismology (including Beno Gutenberg Medal Lecture) (co-listed) – Orals

Convener: C.M. Krawczyk | Co-Conveners: M. Cocco

Room: 27

Chairperson: CharLotte Krawczyk and Massimo Cocco

13:30–13:45 EGU2012-7050

T. Fischer, J. Horálek, F. Bouchaala, A. Boušková, H. ?ermáková, and J. Michálek

Earthquake swarm 2011 in West Bohemia - new insights to the old problems

13:45–14:00 EGU2012-7142

I. tiberi, g. costa, and p. suhadolc

Ground shaking scenarios for historical earthquakes in the southeastern Alps

14:00–14:15 EGU2012-8761

M. Youssef, H. Thybo, A. Levander, and I. Artemieva

Why is the Kaapvaal different from other cratons?

14:15–14:30 EGU2012-4450

Nasim Karamzadeh, Gholam D. Javan, and Peter H. Voss

Automatic earthquake detection and P- and S- phase picking for local seismic networks

14:30–14:45 EGU2012-6752

P. Arroucau, J. Davies, T. Bodin, M. Sambridge, and G. Vlahovic

A Bayesian transdimensional algorithm for earthquake location and 1D velocity model determination

14:45–15:00 EGU2012-3219

A. Mignan

The Earthquake Frequency-Magnitude Distribution Functional Shape

Chairperson: CharLotte Krawczyk and Massimo Cocco

15:30–15:45 EGU2012-1883

M. Obrebski, F. Ardhuin, M. Schimmel, and E. Stutzmann

Location, size and shape of ocean sources for Rayleigh and compressional (P) waves contained in microseisms.

15:45–16:00 EGU2012-11535

F. Ardhuin, T. H. C. Herbers, L. Marié, J. Y. Royer, M. Obrebski, E. Stutzmann, and M. Schimmel

Low frequency noise generated by ocean waves: a consistent theory from surface gravity waves to seismic Rayleigh and waves.

16:00–17:00 EGU2012-14460

M. Campillo

To what extent can seismology image the structures and the continuous deformation of the Earth? (Beno Gutenberg Medal Lecture)

TS1.1 – Open Session: Tectonics and Structural Geology – 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. Sopeña
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

GD3.3/TS1.5 – Tectonic reconstructions with deforming plates (co-organized) – Posters

Convener: C. Heine | Co-Conveners: D. van Hinsbergen, N. Flament

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Douwe v.Hinsbergen

- XL184 EGU2012-2625
O.-H. Kwon, H.-B. Cheong, and Y.-W. Lee
 GIS-based Reconstruction of Pangaea with Recent Progresses in Plate Tectonics
- XL185 EGU2012-5879
D. Delvaux, M.L. Kipata, and A.S. Macheyeki
 Late Pan-African and early Mesozoic brittle compressions in East and Central Africa: lithospheric deformation within the Congo-Tanzania Cratonic area
- XL186 EGU2012-9277
C. Sue, M. Branellec, A. Mazuel, M. Ghiglione, and M. Maia
 Scotia Plate Dynamics: insights from seismotectonics and numerical modeling
- XL187 EGU2012-10247
C. D. J. Lin, J. Wu, and J. Suppe
 Seismic tomographic constraints on the India-Asia collision using the 3D geometries of mapped and unfolded subducted slabs
- XL188 EGU2012-13857
 M. Palzer, **J. Österle**, and U. Klötzli
 Lithological and structural investigations of the Finero back thrust
- XL189 EGU2012-7590
V. Acocella, A. Gudmundsson, and G. Norini
 Magma-induced oblique spreading in the rift zones of Iceland and Ethiopia
- XL190 EGU2012-10019
J. Wu, J. Suppe, and R.V.S. Kanda
 Constraints on the extrusion of SE Asia from subducted slabs of the Indian, Australian, Philippine Sea and Molucca Sea plates
- XL191 EGU2012-6903
G. Shephard, C. Heine, and R.D. Müller
 : Integrating lithosphere deformation into plate kinematic models for the Arctic
- XL192 EGU2012-10256
F. Wobbe, K. Gohl, A. Chambord, and R. Sutherland
 Morphology and kinematics of the rifted margin of West Antarctica in relation to separation from Zealandia and Bellingshausen plate motion

GD3.1/GM3.7/SM4.4/TS1.6 – Plate kinematics, mantle convection, paleogeography and sea level (co-organized) –

Posters

Convener: R. D. Müller | Co-Conveners: H.-P. Bunge, J. Golonka, M. Seton, S. Brune, L. Quevedo, G. Helffrich, G. Laske, Y. Ricard

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XL163 EGU2012-5692
B. Guillaume, L. Husson, and G. Choblet
 Freeboard, sea level and dynamic topography during aggregation of a supercontinent

- XL164 EGU2012-6101
M. W?osi?ska, T. Niedzielski, I. G. Priede, and P. Migo?
On a goodness-of-fit between theoretical hypsometric curve and its empirical equivalents derived for various depth bins from 30 arc-second GEBCO bathymetry
- XL165 EGU2012-6897
L. G. Yeo, C. Heine, and R. D. Müller
Using global paleogeographic datasets towards ground-truthing dynamic topography models
- XL166 EGU2012-9517
S. M. Masterton, P. Markwick, R. Bailiff, D. Campanile, E. Edgecombe, D. Eue, A. Galsworthy, and K. Wilson
The integration of palaeogeography and tectonics in refining plate tectonic models: an example from SE Asia
- XL167 EGU2012-5537
E. Ostanciaux, C. Robin, F. Guillocheau, G. Trotin, and **L. Husson**
The eustatic chimera: isn't the Cenomanian maximum flood a dynamic topography puzzle?
- XL168 EGU2012-12121
A. Rozel, T.W. Becker, C. Faccenna, F. Funiciello, and L. Husson
Scaling laws of dynamic topography and uplift-rate in 3D spherical geometry
- XL169 EGU2012-10926
L. Anderson, F. Ferraccioli, G. Eagles, B. Steinberger, and J. Ritsema
Spatial and Temporal variability in Dynamic Topography in East Antarctica
- XL170 EGU2012-4670
L. Quevedo, C. Heine, and R. D. Müller
Reconstructing global grids of oceanic and continental lithospheric thickness
- XL171 EGU2012-6981
M. Seton and R.D. Muller
Long-term sea level and the cycle of supercontinent formation and dispersal
- XL172 EGU2012-1208
H. Zhang and J.M. Zhao
P-wave velocity structure under Tibetan plateau revealed by seismic tomography
- XL173 EGU2012-1219
J.M. Zhao
Where Has the Shortened Lithosphere Gone —Mantle Flow below the Tibet
- Hall XL | Display Time 08:00–19:30**
Author in Attendance: 17:30–19:00
Chairperson: n.n.
- XL174 EGU2012-3942
V. Puchkov
Lithospheric response to plume- and plate-tectonic interactions
- XL175 EGU2012-4885
S. Brune and C. Heine
3d Numerical Modeling of the Equatorial Atlantic Break-Up
- XL176 EGU2012-5433
C. Cadio, M. Ballmer, **I. Panet**, N. Ribe, and M. Diamant
New constraints on the Hawaiian swell origin using wavelet analysis of the geoid to topography ratio
- XL177 EGU2012-6145
J. Reyes and **L.E. Lara**
Juan Fernández Ridge (Nazca Plate): petrology and thermochronology of a rejuvenated hot spot trail
- XL178 EGU2012-7692
E. Koivisto and R.G. Gordon
A Globally Self-Consistent Model of Plate Motions Relative to the Hotspots for the Past 48 Million Years
- XL179 EGU2012-3262
M. D. Ballmer, G. Ito, C. J. Wolfe, C. Cadio, and S. C. Solomon
Double layering of a thermochemical plume in the upper mantle beneath Hawaii
- XL180 EGU2012-8537
M. Pears and C. Lithgow-Bertelloni
Can plumes collapse?: Experimental results and applications to Iceland.
- XL181 EGU2012-8601
R. Govers, K. Warners-Ruckstuhl, C. Hochard, P. Webb, R. Wortel, G. Stampfli, C. van Oosterhout, and H. Davies
Evolution of forces on Eurasia since the Miocene
- XL182 EGU2012-8930
Á. Benediktsdóttir, R.N. Hey, F. Martinez, and Á. Höskuldsson
Tectonic Evolution of the Reykjanes Ridge During the Past 15
- XL183 EGU2012-11400
P. Szatmari
Rifting by continental rotation, mantle flow and hotspot volcanism in the salt-depositing South Atlantic

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
 ^{238}U - ^{234}U activity ratio as tracer of water pathway 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)

EMRP2.4/TS2.8 – Strain localization and hydro-mechanical coupling (co-organized) – Posters

Convener: P. Baud | Co-Conveners: E. Tondi, F. Balsamo, J. Fortin, P. Adler, A. Maineuult, M. Cacace

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Patrick Baud

- A8 EGU2012-2792
A. Rustichelli, E. Tondi, F. Agosta, A. Cilona, and M. Giorgioni
Development and distribution of bed-parallel compaction bands and pressure solution seams in carbonates (Bolognano Formation, Majella Mountain, Italy)
- A9 EGU2012-9836
A. Cilona, P. Baud, E. Tondi, F. Agosta, S. Vinciguerra, A. Rustichelli, and C.J. Spiers
Deformation bands in porous carbonate grainstones: field and laboratory observations
- A10 EGU2012-5865
Y. Ji, **P. Baud**, S. Hall, and T.-f. Wong
Imaging strain localization in porous limestone by X-ray Computed Tomography and Digital Image Correlation
- A11 EGU2012-9408
J. Raphanel, M. Bourcier, A. Dimanov, E. Héripré, and M. Bornert
Digital Image Correlation and Finite Element Simulations Applied to the Analysis of the Mechanisms of Plastic Deformation of Synthetic Halite
- A12 EGU2012-5641
X.-q. Wang, A. Schubnel, J. Fortin, Y. Gueguen, and H.-k. Ge
Crack Damage in Granite: Physical and Mechanical Consequences
- A13 EGU2012-5660
S. Loaiza, J. Fortin, A. Schubnel, Y. Guéguen, M. Moreira, and S. Vinciguerra
Mechanical behavior and localized failure modes in a porous basalt from the Azores
- A14 EGU2012-5994
B. Haimson and X. Ma
From KTB amphibolite to Bentheim sandstone: the diminishing effect of the intermediate principal stress on faulting and fault angle
- A15 EGU2012-1943
J.-J. Dong and W.-J. Wu
Estimating the permeability-depth relation of sedimentary rocks based on the porosity-permeability relation and porosity well logging
- A16 EGU2012-2250
D. Picard, A. Dimanov, and J. Raphanel
Experimental investigation of structures and rheology on halite single-crystals: In-situ approach.
- A17 EGU2012-2779
A. Förster and Ch. Lempp
Microscale Rock mechanics: Determination with finite strain analyses
- A18 EGU2012-5613
G. Okay and **P. Leroy**
Induced polarization of clay-sand mixtures. Experiments and modelling.
- A19 EGU2012-6934
G. Gurin, Yu. Ilyin, A. Tarasov, and **K. Titov**
Spectral induced polarization of disseminated electronic conductors: laboratory data obtained through time domain measurements
- A20 EGU2012-12961
D. Korost, K. Gerke, R. Valsiliyev, and M. Karsanina
Filtration and electrical properties of porous media determined via microscale numerical modeling

A21 EGU2012-13527

M. Duda and J. Renner

Ultrasound P-wave velocities and amplitudes during triaxial deformation of three sandstone varieties: the chances to monitor different states of internal drainage

TS4.1/GM3.5/SSP3.4 – Tectonics, sedimentation and surface processes: from the erosional engine to basin deposition (sponsored by IAS) (co-organized) – Orals

Convener: A. Whittaker | Co-Conveners: S. Castelltort, L. Kirstein, J. Vergés

Room: 29

Chairperson: n.n.

08:30–08:45 EGU2012-3613

U. Ryb, A. Matmon, N. Porat, and O. Katz

From mass-wasting to slope stabilization - putting constraints on the transition in slope erosion mode: A case study in the Judea Hills, Israel

08:45–09:00 EGU2012-1361

M. Vanmaercke, A. Kettner, M. Van Den Eeckhaut, J. Poesen, G. Govers, A. Mamaliga, G. Verstraeten, M. Radoane, and J. Syvitski

Predicting sediment yield for catchments under pristine conditions: the role of tectonic activity

09:00–09:15 EGU2012-8710

G. de Jager, A. Forzoni, and J.E.A. Storms

Climate, sea level and tectonics signal propagation - an analysis using 2DStratSim: a source-to-sink numerical model

09:15–09:30 EGU2012-14406

G. Duclaux and T. Salles

3D Stratigraphic and geomorphic modelling from source to sink

09:30–09:45 EGU2012-212

E. Garzanti, P. Vermeesch, S. Andò, M. Boni, M. Lustrino, and G. Vezzoli

From Lesotho basaltic highlands to the Namib Sand Sea: long-distance transport and compositional variability in the wind-displaced Orange Delta

09:45–10:00 EGU2012-8951

V. Olivetti, M. L. Balestrieri, F. Rossetti, and F. M. Talarico

Tectonic/climatic control on sediment provenance in the Cape Roberts Project core record (southern Victoria Land, Antarctica): A pulsing late Oligocene/early Miocene signal from south revealed by detrital thermochronology

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2012-10360

B. Salcher, J. Lomax, B. Meurers, J. Smit, F. Preusser, and K. Decker

Tectonics and Quaternary sequence development of basins along the active Vienna Basin strike-slip fault

10:45–11:00 EGU2012-4230

D. Huyghe, C. Bonnel, B. Nivière, G. Messenger, D. Dhont, B. Fasentieux, Y. Hervouët, and J-P Xavier

Tectono-sedimentary evolution of the Neuquén basin (Argentina) between 39°S and 41°S during the Neogene

11:00–11:15 EGU2012-10345

E. Costa, M. Garcés, M. López-Blanco, E. Beamud, M. Gómez-Paccard, and J.C. Larrasoaña

Closing and continentalization of the South Pyrenean Foreland Basin (NE Spain) and its impact on basin fill trends and thrust-belt evolution

11:15–11:30 EGU2012-1657

P.D. Clift and L. Giosan

Sediment Source-to-Sink Processes in the Indus River since the Last Glacial Maximum

11:30–11:45 EGU2012-5741

C. Petit and S. Migeon

Submarine erosion and active tectonics offshore Nice (Southern Alps, France): insights from numerical models

11:45–12:00 EGU2012-9700

C.-S. Liu, **Y.-T. Chang**, H.-H. Hsu, S.-C. Chen, and S.-H. Chung

Development of an Intra-Slope Basin Offshore Southwestern Taiwan

TS4.3/GD3.9/GM3.1 – Orogen-scale coupling between tectonics, erosion and climate (co-organized) – Orals

Convener: F. Mouthereau | Co-Conveners: Dr. Garcia-Castellanos, P.A. van der Beek, F. Herman, J.-D. Champagnac, P. Valla

Room: 29

Chairperson: F. Mouthereau and P. van der Beek

- 13:30–13:45 EGU2012-1345
F. Schlunegger and K.P. Norton
Surface control on contrasts in deformation between eastern and western margins of the Central Andes
- 13:45–14:00 EGU2012-1518
J.-D. Champagnac, P. Molnar, C. Sue, and F. Herman
Tectonics, Climate, and Mountain Topography
- 14:00–14:15 EGU2012-1893
M. Trauerstein, K. P. Norton, F. Schlunegger, and F. Preusser
Climatic imprint on landscape morphology in the western escarpment of the Andes
- 14:15–14:30 EGU2012-3242
J.A. McDermott, K.X Whipple, K.V. Hodges, and M.C. van Soest
Plio-Pleistocene N-S extension at the southern margin of the Tibetan Plateau as evidenced from fluvial incision patterns and thermochronology
- 14:30–14:45 EGU2012-7957
L. M. Mesalles, F. Mouthereau, C.P. Chang, M. Bernet, and X. Sengelen
New thermochronological constraints on the exhumational history at the Taiwan subduction-collision transition.
- 14:45–15:00 EGU2012-10441
L. Goren, S. Castelltort, S. D. Willett, J.-D. Champagnac, F. Herman, and J. Braun
Passive advection and dynamic reorganization of mountainous bedrock rivers: A landscape evolution modeling approach

Chairperson: J.-D. Champagnac and D. Garcia-Castellanos

- 15:30–15:45 EGU2012-6301
G. Roe, R. Headley, and J. Tomkin
Glacier long profiles in regions of active uplift, and their role in orogen dynamics.
- 15:45–16:00 EGU2012-2627
D. Scherler, B. Bookhagen, and M.R. Strecker
Hillslope-glacier coupling: from debris cover to landscape evolution
- 16:00–16:15 EGU2012-4433
P. Steer, R. S. Huisman, P. G. Valla, S. Gac, and F. Herman
Recent glacial erosion of fjords and low-relief surfaces in western Scandinavia
- 16:15–16:30 EGU2012-7305
P. Sternai, F. Herman, J.-D. Champagnac, M. Fox, B. Salcher, and S. D. Willett
Pre-glacial topography of the European Alps
- 16:30–16:45 EGU2012-4341
V.K. Pedersen and D.L. Egholm
Interactions between glacial erosion, the extent of glaciation, and topography investigated using numerical modeling
- 16:45–17:00 EGU2012-9478
M. Dühnforth, R.S. Anderson, and W. Colgan
The influence of glacier ice temperature on the long-term evolution of longitudinal valley profiles: Can a landscape escape from the "glacial buzzsaw"?

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

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

Room: 30

Chairperson: Susanne Buitier 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. Köméc 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. Buiter
 A numerical investigation of the sensitivity of continental collision styles
- Chairperson: Francesca Funiciello and Susanne Buiter
- 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. Funiciello, 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?

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

SM2.4/G3.7/NH4.8/TS8.6 – Investigating earthquake physics through source imaging and scaling studies (co-organized) – Orals

Convener: G. Kwiatek | Co-Conveners: H. Sudhaus, R. M. Harrington, P.M. Mai, A. Piatanesi

Room: 26

Chairperson: n.n.

- 08:30–08:45 EGU2012-5287
G.A. Prieto, M. Florez, S.A. Barrett, G.A. Lopez, and G.C. Beroza
Earthquake source scaling, stress drops and seismic efficiency of intermediate-depth earthquakes
- 08:45–09:00 EGU2012-1471
R. Davi and V. Vavrycuk
Moment tensor inversion using uncalibrated sensors
- 09:00–09:15 EGU2012-4321
A. Oth
Lateral stress drop variations and the Tohoku aftershocks in the context of earthquake source characteristics in Japan
- 09:15–09:30 EGU2012-1708
V.M. Zobin
Source scaling of volcanic eruption seismicity
- 09:30–09:45 EGU2012-5349
K. Chanard, **A. Schubnel**, S. Nielsen, S. Vinciguerra, J. Tadeucci, and R. Madariaga
Radiation of kinked faults in laboratory earthquakes
- 09:45–10:00 EGU2012-11388
S. Latour, T. Gallot, S. Catheline, F. Renard, C. Voisin, M. Campillo, E. Larose, B. Vial, and A. Richard
Dynamic friction of soft solids studied by ultrasonic speckle interferometry: slow slip and supershear rupture

TS10.1 – Geodynamic, tectonic and paleoenvironmental evolution of the Eastern Mediterranean: from Dinarides to

Turkey – Posters

Convener: L. Le Pourhiet | Co-Conveners: A. Okay, D. J. J. van Hinsbergen, N. Chamot-Rooke, K. Ustaszewski, B. Huet

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A435 EGU2012-8818
B. Rojay, E. Özsay?n, and A. Çiner
Post-Miocene Tectonics from Black Sea to Mediterrenean Sea along Central Anatolian Plateau
- A436 EGU2012-5650
E. Bozdag, H. Zhu, D. Peter, and J. Tromp
Tectonic History of Anatolia from Adjoint Tomography
- A437 EGU2012-1256
A.H.F. Robertson, O. Parlak, and T. Ustaömer
New Mesozoic-Cenozoic palaeotectonic maps used to shed light on Tethyan geological development (Eastern Mediterranean, Taurides and Arabian margin)
- A438 EGU2012-1257
A.H.F. Robertson, Y. Metin, O. Parlak, O. Vergili, K. Tasl?, N ?nan, and H Soykan
Role of carbonate platforms, continental margin sediments/volcanics and oceanic units in Tethyan assembly: evidence from the Eastern Taurides, Turkey
- A439 EGU2012-1253
N. Yildirim, **O. Parlak**, and A. Robertson
Geochemistry and tectonic significance of the Koçali ophiolite and the related Koçali melange, Adiyaman region, SE Turkey
- A440 EGU2012-1251
O. Parlak, F. Karao?lan, M. Thöni, A. Robertson, A. Okay, and F. Koller
Geochemistry, geochronolgy and tectonic significance of high-temperature meta-ophiolitic rocks: possible relation to Eocene South-Neotethyan arc magmatism (Malatya area, SE Anatolia)
- A441 EGU2012-7440
A. Plunder, **P. Agard**, C. Chopin, and A.I. Okay
New petrological insights from the Tav?anlı zone (Izmir-Ankara suture, Western Anatolia)
- A442 EGU2012-2497
E.J. Catlos, T.A. Shin, P. Speciale, G.O. Yildiz, and K. Black
Linked magmatic events in central Turkey: geochemistry and geochronology of the Beypazari and Sivrihisar granitoids
- A443 EGU2012-2096
D. van Hinsbergen and S.M. Schmid
Map-view restoration of the Aegean back-arc
- A444 EGU2012-814
K. N. Black, E. J. Catlos, T. Oyman, and M. Demirbilek
Relationships between subduction and extension in the Aegean region: evidence from granite plutons of the Biga Peninsula, NW Turkey
- A445 EGU2012-2997
F. ?engün, ?.O. Tunç, and E. Yi?itba?
Geochemical, geochronological characterization and tectonic setting of the metamorphic rocks from the Biga Peninsula, NW Turkey
- A446 EGU2012-7573
S. Cao and F. Neubauer
The lateral boundary of a metamorphic core complex: the Moutsounas shear zone on Naxos, Cyclades, Greece
- A447 EGU2012-11830
A. H. N. Rice, B. Huet, B. Grasemann, K. Soukis, and C. Tschegg
SSW-directed low-angled extension on Makronisos, Western Cyclades, Greece
- A448 EGU2012-3051
A. Menant, L. Jolivet, R. Augier, and N. Skarpelis
The North Cycladic Detachment System and associated mineralization, Mykonos, Greece: insights on the evolution of stress regime in the Aegean domain
- A449 EGU2012-4978
B.I. Kleine, B. Huet, and A.D.L. Skelton
Fluid-induced Blueschist Preservation on Syros, Cyclades, Southern Greece
- A450 EGU2012-8319
E. Skourtsos, I. Fountoulis, S. Mavroulis, and H. Kranis
Late Cenozoic extensional faulting in Central-Western Peloponnesus, Greece

- A451 EGU2012-5638
M. Anti?, I. Peytcheva, A. von Quadt, A. Kounov, B. Trivi?, T. Serafimovski, G. Tasev, and I. Gerdjikov
 Protholith age and geochemistry of magmatic rocks from the Serbo-Macedonian massif (south Serbia, southwest Bulgaria and east Macedonia)
- A452 EGU2012-7759
A. Ehrhardt, M. Schnabel, and V. Damm
 The Eratosthenes Seamount - Eastern Mediterranean
- A453 EGU2012-1479
A. Kioka, J. Ashi, S. Muraoka, T. Sato, Y. Nakamura, and H. Tokuyama
 Origin and burial depth of Médée-Hakuho Mud Volcano in the Eastern Mediterranean Sea
- A454 EGU2012-5446
F. Donda, D. Civile, V. Volpi, E. Forlin, and L. De Santis
 New insights on the geological setting of the Northern Adriatic sea

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: G.V. 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. Campanyà, 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. Kusznir
 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

TS10.4/GD5.7/SM2.9 – Structure and evolution of the greater Alpine area (co-organized) – Orals

Convener: G. Hetényi | Co-Conveners: A. Paul, S. Schmid

Room: 20

Chairperson: Anne Paul, Stefan Schmid

- 08:30–08:45 EGU2012-6391
 M. Wagner, E. Kissling, and **S. Husen**
 A new crustal model of the western Alpine region derived by combining controlled-source seismology and local earthquake tomography data
- 08:45–09:00 EGU2012-8432
E. Kissling, R. Bousquet, M. Ford, and S. Schmid
 Formation of the arc of the Western Alps and Alps-Apennines transition in the light of new geophysical data on the lithospheric architecture around the Ligurian knot
- 09:00–09:15 EGU2012-5455
S. Favaro, M. R. Handy, A. Scharf, R. Schuster, and G. Pestal
 Exhumation structures in the Tauern Window and their relation to present-day crust-mantle structure in the Eastern Alps
- 09:15–09:30 EGU2012-7657
P. Hrubcova, P. Sroda, and Celebration 2000 and Sudetes 2003 Working Groups
 Contact of the Western Carpathians with the European Platform in the light of seismic refraction data
- 09:30–09:45 EGU2012-9176
M.R. Handy, K. Ustaszewski, E. Kissling, W. Spakman, and C.L. Rosenberg
 Kinematic model for decoupling orogenic crust from upper mantle during a switch in subduction polarity at the junction of the Alps, Carpathians and Dinarides
- 09:45–10:00 EGU2012-10178
F. Horváth, O. Sztanó, A. Uhrin, L. Fodor, A. Balázs, M. Kóbor, and G. Wórum
 Towards a dynamic model for the formation of the Pannonian basin

TS10.4/GD5.7/SM2.9 – Structure and evolution of the greater Alpine area (co-organized) – Posters

Convener: G. Hetényi | Co-Conveners: A. Paul, S. Schmid

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: György Hetényi

- A484 EGU2012-2786
U. Blaha, H. v. Rochow, M. Freimoser, and U. Teipel
 Reconstruction of the Tectonic Evolution of the Helvetic Zone between Lake Chiemsee and Saalach River, East Upper Bavaria, Germany
- A485 EGU2012-7378
S. Cao, F. Neubauer, J. Liu, and J. Genser
 Microfabrics and textures of the Rechnitz window, Eastern Alps
- A486 EGU2012-7443
M. Schulz, H. Pomella, M. Zerlauth, H. Ortner, and B. Fügenschuh
 The Helvetic nappes in the boundary area between Eastern and Western Alps
- A487 EGU2012-7579
D. Egli and N. Mancktelow
 Neogene Tectonic Evolution of the Mont Blanc Area
- A488 EGU2012-8435
 S. P. Jourdan, M.B. Bernet, T.D. Dumont, **S.G. Guillot**, S.S. Schwartz, and P.T. Tricart
 Oligocene - early Miocene evolution of the Western Alps drainage divide: constraints from multidisciplinary provenance analysis

- A489 EGU2012-8520
J. Pleuger, H. Zwingmann, N. Mancktelow, and M. Manser
K-Ar age data of clay fault gouges from some major Neoalpine faults
- A490 EGU2012-10371
S. Favaro, R. Schuster, M.R. Handy, A. Scharf, and G. Pestal
The Mallnitz synform and its relation to the Mölltal fault (Tauern Window, Eastern Alps, Austria)
- A491 EGU2012-11096
T. Dumont, V. Franzi, and S. J. Matthews
Gravity sliding in basinal setting, a surficial record of tectonic and geodynamic evolution; examples from the southern W. Alps and their foreland
- A492 EGU2012-4317
S. Kilian, M. Bischof, C. Garber, A. Kositz, J. Mackowitz, P. Sommer, H. Ortner, and B. Fügenschuh
Structural synthesis of the western Northern Calcareous Alps
- A493 EGU2012-5360
N. Vouillamoz, **C. Sue**, JD. Champagnac, and P. Calcagno
3D cartography of the Alpine Arc
- A494 EGU2012-12402
S. Lloyd and G. Bokelmann
Ambient Noise Classification in the Vienna Basin
- A495 EGU2012-13391
C. Baranaba, A. Saraò, and M. Plasencia Linares
Seismicity of North East Italy and data quality of the broadband network managed by OGS
- A496 EGU2012-12383
Y. Ren, B. Grecu, G. W. Stuart, G. A. Houseman, C. Ionescu, E. Hegedus, S. Radovanovic, and South Carpathian Project Working Group
Ambient noise tomography in the Carpathian-Pannonian region
- A497 EGU2012-10058
G. Hetényi and the AlpArray Working Group
AlpArray - an initiative to advance understanding of Alpine geodynamics
- A498 EGU2012-9077
J. Plomerova, V. Babuska, L. Vecsey, H. Munzarova, and H. Karousova
Regional models of the upper mantle structure in the greater Alpine area
- A499 EGU2012-7888
E. Márton, V. ?osovi?, and D. Zampieri
The Northern segment of the External Dinarides (Croatia) in relation to stable Adria: paleomagnetic constraints
- A500 EGU2012-8527
J. Stipcevic, Lj. Vucic, **M. Herak**, and D. Herak
Structure of the crust and upper mantle in the Southern External Dinarides as derived from receiver function analysis
- A501 EGU2012-9965
M. Trajanova
Neogene evolution of the Slovenj Gradec Basin, Northern Slovenia (preliminary results)
- A502 EGU2012-8478
E. Brueckl, J. Brueckl, G.R. Keller, and B. Dando
Coherent features of the Alpine mantle slabs imaged by recent seismic tomography studies
- A503 EGU2012-4413
G. Giacomuzzi, M. Civalleri, P. De Gori, and C. Chiarabba
Vs and Vp/Vs models of the upper mantle beneath Italy: Insight into the geodynamics of central Mediterranean

TS10.5 – Rifting, assembly, and collisional processes in the Caledonides: the first step on the way to Pangea – Orals

Convener: F. Corfu | Co-Conveners: H. Stünitz, D. Gasser

Room: 20

Chairperson: Deta Gasser, Fernando Corfu

- 13:30–13:45 EGU2012-2085
T.B. Andersen
The Scandinavian Caledonides: new results and highlights
- 13:45–14:00 EGU2012-6473
L. Menegon, H. Stünitz, and P. Nasipuri
Partitioning of metamorphism and deformation at the nappe scale and implications for nappe-stacking mechanisms: The example of the Kalak nappe complex (north-Norwegian Caledonides)
- 14:00–14:15 EGU2012-10347
J. Majka, M. Janák, D.G. Gee, H.L.M. Van Roermund, and J. Verbaas
First evidence of UHP metamorphism within the Seve Nappe Complex of central Sweden

- 14:15–14:30 EGU2012-10473
L. E. Augland, J.M. Prouty, F. Corfu, A. Andresen, N.Y. Agyei-Dwarko, and M.G. Steltenpohl
 Intercontinental interactions: Laurentian crustal pieces in the northern Scandinavian Caledonides
- 14:30–14:45 EGU2012-1190
D.M. Chew, J.S. Daly, L.M. Page, and M.J. Whitehouse
 Timing of ophiolite obduction and regional metamorphism in the Grampian orogen
- 14:45–15:00 EGU2012-4579
M. Krabbendam, J.G. Ramsay, A.G. Leslie, P.W.G. Tanner, D. Dietrich, and K.M. Goodenough
 Where the Caledonides crosses the Grenville: The Grenvillian Glenelg Inlier as an allochthonous pip within a fold-nappe complex in the Scottish Caledonides
- Chairperson: Holger Stunitz, Lars Augland
- 15:30–15:45 EGU2012-3433
B.R. Hacker and A.R.C. Kylander-Clark
 Laser-Ablation Split-Stream (LASS) Petrochronology of the Ultrahigh-Pressure Western Gneiss Region
- 15:45–16:00 EGU2012-10250
P. Robinson, R. D. Tucker, M. P. Terry, S. L. Kamo, D. Roberts, D. G. Gee, and J. P. Butler
 A major synmetamorphic Early Devonian thrust and extensional fault system in the Mid-Norway Caledonides: Key to exhumation of HP and UHP rocks
- 16:00–16:15 EGU2012-11964
A. H. N. Rice
 Restoration of the NNE margin of the exposed Scandinavian Caledonides
- 16:15–16:30 EGU2012-11792
T. Slagstad, C. Pin, D. Roberts, C. L. Kirkland, T. Grenne, G. Dunning, S. Sauer, and T. Andersen
 Formation, obduction and provenance of the Støren-Bymarka-Løkken ophiolite, Central Norwegian Caledonides; constraints from geochronology, geochemistry, Sm-Nd and Lu-Hf data
- 16:30–16:45 EGU2012-9746
M.G. Steltenpohl, A. Andresen, N.Y. Agyei-Dwarko, and K. McCall
 Tectonic implications of U-Pb zircon analysis of metasedimentary cover sequences upon basement rocks of the Tornetrask-Lofoten geotranssect, North Norway
- 16:45–17:00 EGU2012-9986
D. G. Gee, A. Ladenberger, P. Dahlqvist, and D. Frei
 Detrital Zircon Signatures of the Baltoscandian Margin in the central Scandes

TS10.5 – Rifting, assembly, and collisional processes in the Caledonides: the first step on the way to Pangea –

Posters

Convener: F. Corfu | Co-Conveners: H. Stunitz, D. Gasser

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Deta Gasser, Holger Stunitz, Fernando Corfu

- A504 EGU2012-13733
R. Rutland
 The Beiar Nappe (Uppermost Allochthon) revisited
- A505 EGU2012-10346
L.E. Augland, A. Andresen, F. Corfu, S.L. Simonsen, and T. A. Andersen
 The Beiar Nappe Complex: a record of Laurentian Early Silurian arc magmatism in the Uppermost Allochthon, Scandinavian Caledonides
- A506 EGU2012-11059
M.W. Anderson, M.G. Steltenpohl, T.B. Key, A. Andresen, and W.E. Hames
 Exhumation of the Baltoscandian continental margin during late-stage (Early Devonian) Caledonian contraction, northern Norway
- A507 EGU2012-10123
 K. Hollocher, **D. Roberts**, P. Robinson, and E. Walsh
 Inferred paleotectonic settings and paleogeography at 500-450 Ma based on geochemical evaluation of Ordovician volcanics and gabbros of the Upper Allochthon, Mid Norway
- A508 EGU2012-4619
A. K. Engvik, T. Grenne, O. Lutro, and G.B. Meyer
 Metamorphic constraints on the Caledonian Upper Allochthon of Central Norway - the Gula Complex staurolite-garnet-kyanite mica schist
- A509 EGU2012-5479
P. Hedin, C. Juhlin, and D. G. Gee
 High resolution 2D reflection seismic profiling in the Scandinavian Caledonides for defining ICDP drilling sites

- A510 EGU2012-10428
I. Klonowska, Å. Rosén, J. Majka, A. Ladenberger, and D. G. Gee
Did the entire Seve Nappe Complex in the Scandinavian Caledonides undergo HP metamorphism?
- A511 EGU2012-12633
A. Ladenberger, D.G. Gee, Y. Be'eri Shlevin, S. Claesson, and J. Majka
The Scandian collision revisited - when did the orogeny start?
- A512 EGU2012-13276
S. Cuthbert and H. Brueckner
Disruption and translation of an orogenic wedge by exhumation of large continental ultrahigh pressure terranes: Examples from the Scandinavian Caledonides
- A513 EGU2012-12371
H. Fournier, J.K.W. Lee, and A. Camacho
40Ar/39Ar systematics of high-strain eclogite-facies shear zones in the Lofoten islands, Norway
- A514 EGU2012-11043
A. K. Ksienzyk, F. Kohlmann, I. Dunkl, K. Wemmer, J. Jacobs, and H. Fossen
Late Caledonian orogenic collapse and continental rifting in southwestern Norway: constraints from low-temperature thermochronology
- A515 EGU2012-1839
D. Gasser and A. Andresen
Caledonian terrane amalgamation in Svalbard: Detrital zircon provenance of Mesoproterozoic to Carboniferous strata from Oscar II Land, western Spitsbergen
- A516 EGU2012-9013
A. Andresen, L. E. Augland, D. Moecher, G. Richarde, H. Brueckner, and E.J.K. Ravna
P-T-t-constraint on subduction and exhumation of the Liverpool Land Eclogite Terrane (LLET), East Greenland Caledonides
- A517 EGU2012-6021
F. Corfu and C. Roffeis
The Jotun and related nappe complexes, southern Norway
- A518 EGU2012-4822
C. Roffeis, F. Corfu, and R.H. Gabrielsen
A slice of Upper Allochthon in a Middle Allochthon terrain? An ID-TIMS U-Pb study of the Hardanger-Ryfylke Nappe Complex, SW-Norway
- A519 EGU2012-4418
H.B. O'Rourke, J.S. Daly, R. Van den Berg, MJ Whitehouse, and R. Lam
Lower Crustal xenoliths from the Iapetus Suture Zone in Ireland: isotopic evidence for juvenile crustal addition during the Caledonian Orogeny.
- A520 EGU2012-13462
J.S. Daly, M.J. Flowerdew, and M.J. Whitehouse
Grampian high-pressure-granulite-facies metamorphism of the Slieve Donard Division, NW Ireland and its enigmatic eclogite-facies precursor

TS10.6 – The Gondwana – Orals

Convener: Dr. Abu-Alam | Co-Conveners: Y. Sultan, H. Fritz

Room: 20

Chairperson: Tamer Abu-Alam and Harald Fritz

- 10:30–10:45 EGU2012-5968
M. L. Kipata, D. Delvaux, M.N. Sebagenzi, J. Cailteux, and M. Sintubin
Tectonic stress evolution in the Pan-African Lufilian Arc and its foreland (Katanga, DRC): orogenic bending, late orogenic extensional collapse and transition to rifting
- 10:45–11:00 EGU2012-8754
H. Fritz, C.A. Hauzenberger, and V. Tenczer
East African and Kuunga Orogenies in Tanzania - South Kenya
- 11:00–11:15 EGU2012-7134
P. Monié, **D. Bosch**, O. Bruguier, A. Vauchez, P. N'sungani, and Y. Rolland
The Pan-African evolution of NW Angola and peri-atlantic correlations
- 11:15–11:30 EGU2012-8291
T. Abu-Alam and K. Stüwe
The Butana Region of Central Sudan: Sahara Craton or Arabian-Nubian Shield?
- 11:30–11:45 EGU2012-8112
M. Hassan, A. Fowler, I. Hassan, T. Abu-Alam, and K. Stüwe
Tectonic evolution of the Pan-African arc assemblage in Southern Sinai An example from the Sa'al-Zaghra belt

11:45–12:00 EGU2012-292

M. Abd El Monsef, M. Slobodník, and I. A. Salem

Genetic Aspects of Gold Mineralization at Some Occurrences in the Eastern Desert of Egypt

TS10.6 – The Gondwana – Posters

Convener: Dr. Abu-Alam | Co-Conveners: Y. Sultan, H. Fritz

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Tamer Abu-Alam and Harald Fritz

A521 EGU2012-179

S.A. Torres Sanchez, J.A. Ramirez Fernandez, U. Jenchen, J.R. Barboza Gudino, and C. Augustsson
Evidence of volcanism in the Paleozoic metamorphic basement of the Sierra Madre Oriental, NE-Mexico

A522 EGU2012-1720

D.-L. Cho, Y. Takahashi, K. Yi, and S. R. Lee

SHRIMP U-Pb zircon ages of granite gneiss and paragneiss from Oki-Dogo island, southwest Japan, and their tectonic implications

A523 EGU2012-1521

T. Tsunogae

Petrology and fluid inclusions of garnet-clinopyroxene rocks from the Gondwana suture zone in southern India: Implications for prograde high-pressure metamorphism

A524 EGU2012-14145

T. Endo, T. Tsunogae, and M. Santosh

Petrology and mineral equilibrium modeling of incipient charnockite from the Trivandrum Granulite Block, southern India: implications for granulite formation in a Gondwana fragment

A525 EGU2012-5544

P. Nasipuri and S Bhadra

Structural framework for the emplacement of Proterozoic anorthosite massif in the Eastern Ghats Granulite Belts, India: implications for post Rodinia - pre Gondwana tectonics

A526 EGU2012-5626

S Bhadra and P Nasipuri

Tectono-metamorphic evolution of a hot orogen during Gondwanaland assembly: a case study from Palni hills metapelite granulite, south India

A527 EGU2012-3298

J.H. Li, X.B. Zhou, W.S. Li, and H.H. Wang

Neoproterozoic to early Paleozoic Tectonic Evolution of Tarim Block

A528 EGU2012-3300

X.B. Zhou, J.H. Li, and W.S. Li

Discussions on the sedimentary-tectonic event and tectonic setting of the North Tarim Basin in Cryogenian-Cambrian

A529 EGU2012-10001

D.A. Golynsky and **A.V. Golynsky**

East Antarctic Rift Systems - key to understanding of Gondwana break-up

A530 EGU2012-13986

Z. Hamimi, E. K. El-Sawy, A. S. El-Fakharan, A. Shujoon, M. Matsah, and M. El-Shafei

Neoproterozoic Structural Evolution of the NE-trending 620-540 Ma Ad-Damm Shear Zone, Arabian Shield, Saudi Arabia

A531 EGU2012-14101

M. Heikal, M. Ghoneim, M. El Galy, B. El Dousky, and M. Sherif

Assessment of Environmental Radiation Impacts Related to Granites, Dikes and Stream Sediments of Sharm El-Sheikh Area, South Sinai, Egypt

A532 EGU2012-8237

T. Abu-Alam and K. Stüwe

Principal stresses flipping during the East- West-Gondwana collision

A533 EGU2012-8344

Y. Sultan, **T. Abu-Alam**, and K. Stüwe

Tectonic setting of south Sinai metamorphic belts

GD3.5/SM2.7/TS10.8 – The Circum-Arctic region: Interplays between plate motions, mantle dynamics and the evolution of basins, margins and microcontinents (co-organized) – Orals

Convener: C. Gaina | Co-Conveners: R. D. Müller, J. Knies, K. Sigloch

Room: 30

Chairperson: Carmen Gaina and Jochen Knies

- 08:30–08:45 EGU2012-4752
V.A. Vernikovsky, D.V. Metelkin, A.E. Vernikovskaya, N.Yu. Matushkin, L.I. Lobkovsky, and E.V. Shipilov
 The Neoproterozoic-Paleozoic Arctic Margins: early stages of geodynamic evolution and plate reconstructions
- 08:45–09:00 EGU2012-5390
M. Tuchkova
 Triassic and Jurassic-Cretaceous deposits in the Western Chukotka: geodynamic implications, provenance studies and deformation
- 09:00–09:15 EGU2012-7707
V. Verzhbitsky, N. Kosenkova, R. Murzin, V. Vasilyev, S. Malysheva, D. Komissarov, V. Ananyev, Yu. Roslov, and A. Khudoley
 Tectonic structure, seismic stratigraphy and hydrocarbon potential of the North Kara Basin (Russian Arctic)
- 09:15–09:30 EGU2012-13474
S. Drachev, V. Pease, and R. Stephenson
 The Arctic lithosphere: an overview
- 09:30–09:45 EGU2012-9608
K. Piepjohn, W. von Gosen, and F. Tessensohn
 The structure of Ellesmere Island - a 400 km long transect across the northern margin of North America
- 09:45–10:00 EGU2012-6281
E.L. Miller, T. Dumitru, K. Brumley, E. Gottlieb, K. Meisling, and V. Akinin
 Propagating Atlantic rifts and Pacific slabs battle it out in the Arctic: A summary of extensional provinces in the Alaskan-Russian Arctic

COFFEE BREAK

Chairperson: Dietmar Müller and Karin Sigloch

- 10:30–10:45 EGU2012-1649
T. Dahl-Jensen, T.B Larsen, and P Voss
 Sedimentary thickness from Receiver Function analysis - a simple approach. Case study from North Greenland.
- 10:45–11:00 EGU2012-1447
T. Hermann and W. Jokat
 Crustal structure of the Boreas Basin formed at ultraslow spreading Knipovich Ridge - Northern North Atlantic
- 11:00–11:15 EGU2012-12868
A. Døssing, H.R. Jackson, J. Matzka, I. Einarsson, A.V. Olsen, J.M. Brozena, and T.M. Rasmussen
 New aerogeophysical results from the Lomonosov Ridge (Greenland side) and adjoining Amerasia and Eurasia Basins
- 11:15–11:30 EGU2012-3145
I. Koulakov, N.L. Dobretsov, A. Jakovlev, and N. Bushenkova
 Regional tomography reveals mantle traces of tectonic processes in the Circum-Arctic region
- 11:30–11:45 EGU2012-8302
E. Halvorsen, R. Løvlie, A. Andresen, S. Polteau, H. Walderhaug, and J. Faleide
 Complete Cenozoic remagnetization of Cretaceous sills and lavas from the High Arctic Large Igneous Province (HALIP) on Svalbard imposed during faulting and burial/ uplift.
- 11:45–12:00 EGU2012-7006
O. Petrov, N. Sobolev, A. Morozov, G. Grikurov, S. Shokalsky, S. Kashubin, and E. Petrov
 Modern Geodynamic Model of the Arctic Ocean

Friday, 27 April

SM1.1 – Open Session on Seismology (including Beno Gutenberg Medal Lecture) (co-listed) – Posters

Convener: C.M. Krawczyk | Co-Conveners: M. Cocco

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Massimo Cocco and Charlotte Krawczyk

- XY492 EGU2012-3890
M. Salmon and B. Kennett
AuSREM - Australian Seismological Reference Earth Model
- XY493 EGU2012-837
C. Buffoni, N. C. Sabbione, M. Schimmel, and M. L. Rosa
Teleseismic receiver function analysis in Tierra del Fuego Island: an estimation of crustal thickness and Vp/Vs velocity ratio
- XY494 EGU2012-1281
B. Heit, X. Yuan, W. Geissler, B. Lushetile, M. Weber, and W. Jokat
The WALPASS - Walvis Ridge Passive-Source Seismic Experiment in Namibia
- XY495 EGU2012-7064
M Craiu, A Craiu, Gh Marmureanu, and M Radulian
Reevaluation of earthquakes magnitude for the main seismic zones of Romania
- XY496 EGU2012-4389
D. Tataru, G. Stuart, and **B. Grecu**
Revealing the crust of western Romania using CCP techniques
- XY497 EGU2012-4608
L. A. Ardeleanu
Estimation of focal mechanism of low magnitude crustal earthquakes from Vrancea region
- XY498 EGU2012-8015
M. Rogozea, Gh. Marmureanu, and M Radulian
Reevaluation of the macroseismic effects of the 23 January 1838 Vrancea earthquake
- XY499 EGU2012-7947
J. Trojanowski, B. Plesiewicz, J. Wiszniowski, J. Suchcicki, and A. Tokarz
Seismic monitoring of Poland - temporary seismic project - first results
- XY500 EGU2012-2682
R. Gazdova, T. Fischer, P. Kolinsky, and O. Novotny
Tidal analysis of groundwater level variations and CO2 flow fluctuation in the seismically active region of western Bohemia
- XY501 EGU2012-5699
M. Hrdliřková and **T. Fischer**
Earthquake swarms in West Bohemia / Vogtland: at present and one century ago
- XY502 EGU2012-7915
S. Barani, D. Spallarossa, D. Scafidi, G. Ferretti, R. De Ferrari, and **M. Pasta**
Analysis of the October-November 2010 seismic swarm in the Sampeyre area (Piedmont, Italy)
- XY503 EGU2012-5485
M. Godano, A. Deschamps, S. Lambotte, H. Lyon-Caen, and P. Bernard
Focal mechanisms of earthquake multiplets in the western part of the Corinth rift (Greece)
- XY504 EGU2012-12532
S. Lambotte, H. Lyon-Caen, P. Bernard, and A. Deschamps
Multiplet analysis and microseismicity structure in the Western part of Corinth Rift (Greece) from 2000 to 2007
- XY505 EGU2012-7990
A. Zunino, G. Ferretti, D. Scafidi, S. Barani, M. Pasta, and D. Spallarossa
Microseisms and sea wave height in the Ligurian Sea: a preliminary analysis.
- XY506 EGU2012-2621
E. Buforn, C. Pro, M. Carranza, A. Zollo, A. Pazos, L. Lozano, and F. Carrilho
Estimation of Pd y İ_c parameters for earthquakes of the SW Iberia (S. Vicente Cape)
- XY507 EGU2012-10151
C. Cancela Pinto, **J. Carvalho**, S. Vilanova, and J. Borges
Estimating site effects for seismic hazard assessment in Portugal using shear wave and geotechnical data
- XY508 EGU2012-6757
M. Y. Walling, K. Megawati, and C. Zhu
ESTIMATION OF Vs30 SOIL PROFILE STRUCTURE OF SINGAPORE FROM MICROTREMOR RECORDS

- XY509 EGU2012-8093
L. W. Bjerrum, M. B. Sørensen, T. Lutro, L. Ottemöller, C. Sari, and K. Atakan
 Predicting Surface Ground Motions during Earthquakes near Izmir, Turkey - H/V Measurements and Soil Response Modeling
- XY510 EGU2012-9969
H.-C. Huang and C.-Y. Lin
 Strong Ground Motion Simulation and Source Modeling of the December 16, 1993 Tapu Earthquake, Taiwan, Using Empirical Green's Function Method
- XY511 EGU2012-6238
Q. Rodriguez-Perez, L. Ottemöller, and M. Raeesi
 Study of two intermediate earthquakes in the Guerrero seismic gap, Mexico.
- XY512 EGU2012-3951
G. Yi, F. Long, and Z. Zhang
 Seismogenic structures in Wenchuan aftershock region from focal mechanism solutions
- XY513 EGU2012-11630
F. Waldhauser, J.D. Zechar, D.P. Schaff, and P. Friberg
 Real-Time Double-Difference Location and Monitoring of Fine-Scale Seismogenic Properties, with Application to Northern California
- XY514 EGU2012-8453
M. Vallée and E.M. Dunham
 Observation of far-field Mach waves generated by the 2001 Kokoxili supershear earthquake
- XY515 EGU2012-2186
 C.-H. Chang, **Y.-F. Chang**, P.-Y. Tseng, and C.-M. Lin
 Potential Pitfalls in Seismic Interpretation for Transversely Isotropic Media - A Physical Model Study
- XY516 EGU2012-4104
J. Jansky, V. Plicka, and J. Zahradnik
 Re-evaluating possibilities of the Source Scanning Algorithm
- XY517 EGU2012-4002
K. Emoto, H. Sato, and T. Nishimura
 Stochastic synthesis of vector wave envelopes in layered random media based on the improved Markov approximation
- XY518 EGU2012-4620
L. De Siena, E. Del Pezzo, C. Thomas, A. Curtis, and L. Margerin
 Seismic envelope reconstruction in a volcanic caldera: theory, data, and modeling.
- XY519 EGU2012-954
M. K. Sayankina, A. V. Smaglichenko, and A. A. Lukianitsa
 Modification of Gaussian elimination to identify hydrocarbon reservoir (the thin-bed model reconstruction)

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. Chevreil, 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 Ascræus 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

GD3.3/TS1.5 – Tectonic reconstructions with deforming plates (co-organized) – Orals

Convener: C. Heine | Co-Conveners: D. van Hinsbergen, N. Flament

Room: 30

Chairperson: Christian Heine, Nicolas Flament

13:30–13:45 EGU2012-9101

M.R. Handy and K. Ustaszewski

Reconstructing plate motion paths where plate tectonics doesn't strictly apply

13:45–14:00 EGU2012-11455

N. McQuarrie and D.J.J. van Hinsbergen

Retrodeforming the Arabia-Eurasia collision zone : Age of collision and magnitude of continental subduction

14:00–14:15 EGU2012-7784

J. Suppe, J. Wu, R. V. S. Kanda, R. Lu, and C. D. J. Lin

New constraints of subducted mantle lithosphere on plate-tectonic reconstructions of deformed continental blocks

14:15–14:30 EGU2012-5779

J.G Watson, C.T. Glover, A.C. Adriasola Munoz, J.P. Harris, and M. Goodrich

A combined rigid/deformable plate tectonic model for the evolution of the Indian Ocean

14:30–14:45 EGU2012-7354

E. Le Breton, P.R. Cobbold, and O. Dauteuil

Palinspastic reconstruction of the opening of the NE Atlantic: differential sea-floor spreading and resulting deformation of the NW European Margin

14:45–15:00 EGU2012-6830

S. Williams, **N. Flament**, C. Heine, M. Hosseinpour Vazifehshenas, M. Seton, M. Gurnis, and R. D. Müller

Geodynamic modeling of passive margin systems from tectonic reconstructions with deforming plate boundaries

GD3.1/GM3.7/SM4.4/TS1.6 – Plate kinematics, mantle convection, paleogeography and sea level (co-organized) –

Orals

Convener: R. D. Müller | Co-Conveners: H.-P. Bunge, J. Golonka, M. Seton, S. Brune, L. Quevedo, G. Helffrich, G. Laske, Y. Ricard

Room: 30

Chairperson: n.n.

- 08:30–08:45 EGU2012-9803
J. Braun, R. Moucha, A. M. Forte, A. B. G. Bush, D. B. Rowley, N. Insel, F. Guillocheau, S. Robin, and D. Rouby
 The Topographic evolution of the African continent, constraints from coupling deep mantle, climate and surface processes models
- 08:45–09:00 EGU2012-7986
R. D. Müller, N. Flament, and M. Gurnis
 The scale and time dependence of surface dynamic topography over the last 200 million years in the Atlantic and Indian ocean domains
- 09:00–09:15 EGU2012-1087
J.D. Paul, G.G. Roberts, and N. White
 Temporal and Spatial Evolution of Dynamic Support From River Profiles: A Framework for Madagascar and Africa
- 09:15–09:30 EGU2012-7936
X. Robert, P. Reiners, K.X. Whipple, R. Moucha, and A. Forte
 Dynamic uplift and erosion history of the Colorado Plateau: New insights from a SW-NE thermochronologic transect
- 09:30–09:45 EGU2012-11867
K. Czarnota, M. J. Hoggard, N. White, and J. Winterbourne
 Linking Observations of Dynamic Topography from Oceanic and Continental Realms around Australia
- 09:45–10:00 EGU2012-4578
 E. Artyushkov and **P. Chekhovich**
 Rapid paleodepth changes in epeiric Paleozoic basins as a consequence of crustal uplift and subsidence

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-5572
L. Husson
 The dynamics of convergent boundaries over a convecting mantle
- 10:45–11:00 EGU2012-6181
C. Faccenna and T.W. Becker
 Mantle conveyor beneath the Tethyan collisional belt
- 11:00–11:15 EGU2012-4977
C. Gaina, T. H. Torsvik, C. Labails, D. van Hinsbergen, S. Werner, and S. Medvedev
 The African Plate: A history of oceanic crust accretion and subduction since the Jurassic
- 11:15–11:30 EGU2012-12689
 S.C. Cande and **D.R. Stegman**
 Surface expression of the Reunion Plumehead as witnessed by tectonics in the Indian Ocean
- 11:30–11:45 EGU2012-4084
R. Ramalho
 The evolution of ocean island volcanoes in a stationary plate environment and its implications concerning hotspot dynamics
- 11:45–12:00 EGU2012-5745
N. M. Ribe
 Inferring Properties of the Hawaiian Plume from the Hawaiian Swell

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. Açıkalın, 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. Batlle-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

TS3.2 – Salt and Evaporites – Tectonics, Mechanics and Rheology – Orals

Convener: F. Strozyk | Co-Conveners: S. Burchardt, H.W. van Gent, J. Urai, J. Schmatz

Room: 20

Chairperson: Frank Strozyk, Joyce Schmatz

- 08:30–08:45 EGU2012-10365
H. Koyi, S. Burliga, and Z. Chemia
 Salt supply to and significance of asymmetric salt diapirs
- 08:45–09:00 EGU2012-822
P. Santolaria Otin, A.M. Casas Sainz, and R. Soto Marín
 Geometry of the Naval diapir (western end of the Sierras Marginales, Southern Pyrenees), based on gravimetric, surface and seismic data.
- 09:00–09:15 EGU2012-2069
G. Desbois, J.L. Urai, and J.H.P. De Bresser
 Fluid distribution in grain boundaries of natural fine-grained rock salt deformed at low shear stress: implications for rheology and transport properties
- 09:15–09:30 EGU2012-1615
O. R. Clausen, D.L. Egholm, and R. Wesenberg
 Salt movements and faulting of the overburden - can numerical modeling predict the fault patterns above salt structures?

09:30–09:45 EGU2012-10877

P.A. Kukla

Integrated Salt Basin Evaluation

09:45–10:00 EGU2012-6854

R. Goteti and C. Beaumont

Initiation of Salt Minibasins under Uneven Sedimentation

TS3.2 – Salt and Evaporites – Tectonics, Mechanics and Rheology – Posters

Convener: F. Strozyk | Co-Conveners: S. Burchardt, H.W. van Gent, J. Urai, J. Schmatz

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Steffi Burchardt

A415 EGU2012-1625

C. Leitner, F. Neubauer, J. Urai, J. Genser, B. Borojevic-Sostaric, and J. Schoenherr

Salt rock of the Alpine Haselgebirge Formation - ages, temperatures and structures

A416 EGU2012-4455

O. Ferrer, B. C. Vendeville, and E. Roca

Impact of pre- and/or syn-tectonic salt layers in the hangingwall geometry of a kinked-planar extensional fault: insights from analogue modelling and comparison with the Parentis basin (bay of Biscay)

A417 EGU2012-5063

E.-M. Krejci, B.C. Biehl, F. Strozyk, L. Reuning, and P. Kukla

Geometry of Z3 carbonate-anhydrite stringer and kinematic restoration, onshore northern Netherlands using 3D seismic data

A418 EGU2012-5095

B.C. Biehl, E.-M. Krejci, L. Reuning, F. Strozyk, and P. Kukla

Stratigraphy, sedimentology and diagenesis of the Zechstein carbonate-evaporate cycles onshore northern Netherlands

A419 EGU2012-6404

M. Rubinat, E. Roca, B. Beamud, and R. Soto

Application of the paleomagnetism analysis in the kinematics characterization of salt diapirs: the Bicorn-Buesa salt diapir case (Prebetic Zone, SE Spain)

A420 EGU2012-8841

S. Becker, L. Reuning, J. Morawinski, P.A. Kukla, S. Abe, S. Li, J.L. Urai, S. Farqani, G. Lopes Cardozo, and Z. Rawahi

Understanding Reservoir Quality in Ara Stringers of the Ediacaran - early Cambrian Petroleum System of the South Oman Salt Basin: Diagenetic relationships in space and time

A421 EGU2012-9659

P. Arbués, O. Ferrer, E. Roca, K. Giles, M. Rowan, M. De Matteis, and J.A. Muñoz

The Bakio salt wall and its effects on synkinematic deepwater sedimentation (Basque Pyrenees, Northern Spain)

A422 EGU2012-9840

H. van Gent, **F. Strozyk**, J.L. Urai, M. de Keijzer, and P.A. Kukla

The large scale structures of the Late Permian Zechstein 3 intra-salt stringer, northern Netherlands

A423 EGU2012-11161

A. Schorn, F. Neubauer, and M. Bernroider

Polyhalite microfabrics in an Alpine evaporite mélange: Hallstatt, Eastern Alps

A424 EGU2012-11261

P. Feldens, M. Schmidt, N. Mitchell, and A.S. Basaham

Subsea salt flows in the Atlantis II Deep and Thetis Deep, Red Sea

A425 EGU2012-12002

J. Schmatz, M. Sadler, G. Desbois, and J. Urai

On the distribution and morphology of grain boundary fluids in natural rock salt

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, $\text{BaCa}_2\text{Al}_6\text{Si}_9\text{O}_{30} \cdot x\text{H}_2\text{O}$: The Behavior of Extra Framework Ca Cations and H_2O 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. Andreozzi, C. Perinelli, and V. Misiti
Cr diffusion in MgAl_2O_4 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 MgCO_3 up to 6 GPa and 1000 K
- XL221 EGU2012-7711
R. Vuilleumier, **N. Sator**, A. Seitsonen, and B. Guillot
 CO_2 speciation and transport properties of CO_2 -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. Špaček, and R. Abart
Domain structure and texture in fine grained symplectite from garnet breakdown in peridotite xenoliths (Zinst, Bavaria, Bohemian Massif)

TS4.1/GM3.5/SSP3.4 – Tectonics, sedimentation and surface processes: from the erosional engine to basin deposition (sponsored by IAS) (co-organized) – Posters

Convener: A. Whittaker | Co-Conveners: S. Castelltort, L. Kirstein, J. Vergés

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- A426 EGU2012-4641
A. Beckers, B. Bovy, and A. Demoulin
Factors of knickpoint migration on the moderately uplifted Ardennes Plateau, Western Europe

- A427 EGU2012-4732
A. Demoulin, A. Beckers, G. Rixhon, R. Braucher, D. Bourlès, and L. Siame
 A refined model of Quaternary valley downcutting emphasizing the interplay between tectonically triggered regressive erosion and climatic cyclicity
- A428 EGU2012-11198
E. Karymbalis, M. Ferentinou, K. Gaki-Papanastassiou, D. Papanastassiou, and H. Maroukian
 Late Quaternary stream incision rates due to tectonic uplift in North Peloponnese, Greece
- A429 EGU2012-11826
F. Giaconia, G. Booth-Rea, J.M. Martínez-Martínez, V. Pérez-Peña, and J.M. Azañón
 Geomorphic analysis of the Sierra Cabrera, an active pop-up in the constriction domain of conjugate strike-slip faults: the Palomares and Polopos fault zones (eastern Betics, SE Spain)
- A430 EGU2012-12654
 J.M. Azañón, V. Pérez-Peña, **F. Giaconia**, G. Booth, M.J. Rodríguez-Peces, and C. Ureña
 Uplift and active folding in the western sector of Sierra Nevada (Betic Cordillera, SE Spain).
- A431 EGU2012-11883
F. Giaconia, G. Booth-Rea, J.M. Martínez-Martínez, J.M. Azañón, and I. Villegas
 Fault segment linkage and growth of the Polopos transpressive fault zone and its influence on Pleistocene drainage captures (southeastern Betics).
- A432 EGU2012-11819
D. Gioia, M. Moretti, S. Gallicchio, and M. Schiattarella
 Morphometric analysis of drainage network in the northern sector of the southern Italian foredeep: implications for fluvial denudation processes and Late Quaternary geomorphological evolution
- A433 EGU2012-4814
A. Whittaker, S. Erhardt, A. Norori-McCormac, and F. Knight
 Quantifying the controls on grain size export from tectonically perturbed catchments: Case studies from Sicily, Calabria and Abruzzo, Italy
- A434 EGU2012-7786
F. Mirabella, M. Menichelli, F. Pazzaglia, S. Pucci, L. Melelli, L. Saccucci, and M.R. Barchi
 Tectonic control on extensional basins infill and on rivers incision. Examples from the Northern Apennines of Italy
- A435 EGU2012-6966
 T. Salles, **G. Duclaux**, J. Mansour, P. Rey, and L. Moresi
 Testing basin-scale evolution concepts on a supercomputer at realistic tectonic and sedimentary rates
- A436 EGU2012-2733
M. Collignon, B. Kaus, M. Frehner, S. Castelltort, G. Simpson, and J.P. Burg
 Modeling interactions between tectonics and surface processes in the Zagros Mountains, Iran
- A437 EGU2012-9466
G. Zeilinger, P. Ballato, M. R. Ghassemi, G. Heidarzadeh, H. R. Javadi, and M. Baghernejad
 Structural evolution and internal deformation of the Turkish-Iranian Plateau in northwestern Iran
- A438 EGU2012-3394
A. Bande, E.R. Sobel, A. Mikolaichuk, and R. Teslyuk
 Deciphering intracontinental basin evolution: the Fergana depression example.
- A439 EGU2012-4464
S.-Y. Huang, Y.-G. Chen, T.-K. Liu, C.-H. Lo, G. Yin, and Z. Cao
 Distributed unroofing history in the central and eastern Lhasa Terrane: revealed by multiple thermochronometers on detrital samples
- A440 EGU2012-13553
P. Štápaníková, M. Danišík, and N. J. Evans
 Thermochronological record of long term faulting, burial and exhumation history in the Sudetes (Bohemian Massif, Central Europe): a multi-system thermochronological approach
- A441 EGU2012-11351
F.U. Bauer, S. Roller, R.W. Grobe, U.A. Glasmacher, M. Hinderer, U. Ring, and V.S. Mambo
 Constraining the thermal and erosional evolution of the Rwenzori Mtns, Albertine Rift, by detrital thermochronology
- A442 EGU2012-394
N. B. Palacios García and M. Martini
 Provenance changes for sandstones from the Sierra de los Cuarzos (central Mexico): the possible record of a terrane accretion
- A443 EGU2012-8022
M. Genti, J. Malavieille, G. Molli, S. Dominguez, A. Taboada, and A. Vitale-Brovarone
 Development of tectono-sedimentary mélanges in accretionary wedges: Insights from analog modeling
- A444 EGU2012-13452
L. Mocochain, G. Clauzon, J. Robinet, C. Blanpied, J.P. Suc, C. Gorini, A. Al Abdalla, and F. Azki
 Messinian Erosional Surface in the Levantin margins: geodynamic implications.

- A445 EGU2012-4291
C. Bonnel, **D. Huyghe**, B. Nivière, G. Messenger, D. Dhont, B. Fasentieux, Y. Hervouët, and J-P. Xavier
Characterisation of the sedimentary processes responsible for the filling and excavation of two intra mountainous basins (Agua Amarga and Collon Cura) in the Andes of Neuquén (Argentina) during the Neogene
- A446 EGU2012-12694
S. Molliex, M. Rabineau, E. Leroux, D. Aslanian, F. Chauvet, D. Bourlès, S. Révillon, and G. Jouët
Geomorphological feedback between watershed erosion and marine sedimentation in the Gulf of Lion margin (SE France).
- A447 EGU2012-8680
J. F. Lee, C.S. Liu, H.H. Hsu, S.C. Chen, and S.H. Chung
Mapping Geological Features in a 3D Seismic Volume for Gas Hydrate Investigation Offshore Southwestern Taiwan
- A448 EGU2012-10088
J.J. Ni, C.S. Liu, and S.C. Chen
Sedimentary Processes of a Slope Ridge on the Northern South China Sea Continental Slope
- A449 EGU2012-727
M. A. Islam
Depositional Environment of Neogene Reservoir Succession of Bengal Basin, Bangladesh constrain from lithofacies and electrofacies analysis
- A450 EGU2012-2376
V. Schuller and U. Herzog
In-Sequence /Out-Of-Sequence Thrusting - Governing Processes and Implications: an Example from the Subalpine Molasse Basin
- A451 EGU2012-3123
H. Ortner, A. Kositz, E. Willingshofer, and D. Sokoutis
Fault-related progressive unconformities: Growth strata of the transpressive Northern Calcareous Alps (NCA) fold belt (Austria) in field and analogue model

TS4.3/GD3.9/GM3.1 – Orogen-scale coupling between tectonics, erosion and climate (co-organized) – Posters
Convener: F. Mouthereau | Co-Conveners: Dr. Garcia-Castellanos, P.A. van der Beek, F. Herman, J.-D. Champagnac, P. Valla

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: P. Valla

- A452 EGU2012-1348
M. Boese and D. Wenske
Late Pleistocene to Holocene geomorphological processes in the high mountains of Taiwan
- A453 EGU2012-1410
M. Dürst Stucki, F. Schlunegger, F. Christener, J.-C. Otto, and J. Götz
Deepening of inner gorges through subglacial meltwater — An example from the UNESCO Entlebuch area, Switzerland
- A454 EGU2012-2253
D. Grabowski, E. Enkelmann, and T. A. Ehlers
Quantifying the spatial distribution of rapid exhumation from glacial detritus, St. Elias Range (Alaska)
- A455 EGU2012-2427
G. Hanke, A. Oswald, and K. Stuewe
U-He dating of the highest peak of Sinai: Mt Catherine, Egypt
- A456 EGU2012-2906
S. Falkowski, E. Enkelmann, and T. A. Ehlers
Exhumation of the northwestern Fairweather Range, southeast Alaska
- A457 EGU2012-3520
S.-H. Wang, C.-P. Chang, J.-H. Hung, and C.-C. Kang
Insights into active structures of the southeastern Central Range in Taiwan: Implications from geomorphic analyses
- A458 EGU2012-3625
R.R. Makshaev and A.A. Svitoch
Neotectonics of the Manych Trough
- A459 EGU2012-4358
D. Huyghe, F. Mouthereau, and L. Emmanuel
Oxygen isotope of mollusc shells record a middle Eocene elevation change in the Pyrenees
- A460 EGU2012-4566
C.-C. Kang, L.L. Siame, C.-C. Chang, D.L. Bourlès, and L. Léanni
Tectonic activity of the Eastern Central Range front in Taiwan: Perspective from in situ cosmogenic ¹⁰Be

- A461 EGU2012-6551
P.-Y. Filleaudeau, **F. Mouthereau**, O. Lacombe, R. Pik, and M.G. Fellin
The role of rift inheritance during Cenozoic mountain building of the central Pyrenees and geodynamic implications
- A462 EGU2012-7474
A. Oswald and K. Stüwe
Geomorphology in a Rifting Environment. Can Channel Profiles from Arid Sinai, Egypt, Provide Constraints on Tectonics?
- A463 EGU2012-8329
J.-D. Champagnac, P. Sternai, F. Herman, B. Guralnik, and F. Beaud
Fracture density as a controlling factor of postglacial fluvial incision rate, Granite Range, Alaska.
- A464 EGU2012-9009
S. Nagel, M. G. Fellin, S. Castelltort, S. D. Willett, F. Mouthereau, and A. T. Lin
Provenance evolution of the Western foreland basin and its relationship to the exhumation of source rocks during arc-continent collision
- A465 EGU2012-11051
E. Kali, **J. van der Woerd**, J. Liu-Zeng, M. LeBéon, P.-H. Leloup, G. Mahéo, P. Tapponnier, and R. Thuizat
Active normal faults and river damming: the importance of tectonics and climate in shaping the landscape of the southern Tibetan plateau
- A466 EGU2012-12290
A. Carracedo, **R. Beucher**, C. Persano, J. Jansen, A. Codilean, T. Hoey, and P. Bishop
Quantifying active tectonic processes in orogenic belts from river analysis of the Sierra Nevada (Spain)
- A467 EGU2012-13220
A. Coudurier Curveur, R. Armijo, and R. Lacassin
The northern Chile coastal morphology: an interplay between recent tectonic uplift of the west andean margin and precipitation gradient
- A468 EGU2012-9885
J.L. Mugnier, C. Godon, J.F. Buoncristiani, J.L. Paquette, and E. Trouvé
Present-day subglacial erosion efficiency inferred from sources and transport of glacial clasts in the North face of Mont Blanc
- A469 EGU2012-4476
C. Thieulot, P. Steer, and R.S. Huismans
Three-dimensional numerical simulations of crustal systems subjected to convergence and to surface processes
- A470 EGU2012-7540
J. Liu, L. Wen, M. Oskin, and L. Zeng
Focused modern denudation of the Longmen Shan margin of the eastern Tibetan plateau
- A471 EGU2012-12629
D. L. Egholm and **M. F. Knudsen**
Fluvial bedrock erosion by sediment in suspension couples hillslope processes and channel evolution
- A472 EGU2012-4366
J. Babault, J. Van Den Driessche, and A. Teixell
Longitudinal to transverse drainage network evolution in the High Atlas (Morocco)
- A473 EGU2012-9843
B. Salcher, F. Kober, E. Kissling, and S. Willett
Glacial conditioning and postglacial erosion of the Central Alps - patterns and magnitude
- A474 EGU2012-12157
T. F. Schildgen, D. Cosentino, B. Bookhagen, H. Echtler, B. Rojay, M.R. Strecker, and C. Yildirim
Uplift of the southern margin of the Central Anatolian Plateau (Turkey): A record of tectonic and upper mantle processes

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

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

Room: 20

Chairperson: Javier Escuder-Virueite, 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-organized) – 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

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

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

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Jeroen van Hunen, Francesca Funiciello and Susanne Buiter

XL53 EGU2012-1680

C. Schmelzbach, J. Kummerow, P. Wigger, A. Reshetnikov, and S. A. Shapiro
Microseismic reflection imaging of the Precordillera crust, forearc of the North-Chilean subduction

XL54 EGU2012-2447

I. Wölbern and G. Rüpker
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. Funiciello, 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. Funiciello
On the frequency-magnitude distribution of subduction interplate earthquakes

XL60 EGU2012-2281

A. Heuret, C.P. Conrad, F. Funiciello, 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. Funiciello, and C. Piromallo
A new database on subduction seismicity at the global scale

XL62 EGU2012-8088

Y. van Dinther, T. Gerya, **F. Corbi**, F. Funiciello, 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 Niederhaeusern, 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. Krabbenhoef
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

TS9.2 – Visualization, Imaging and Mapping in Modern Structural Geology and Tectonics – Orals

Convener: U. Exner | Co-Conveners: K. McCaffrey, G. Pennacchioni

Room: 20

Chairperson: Exner, Ulrike; Pennacchioni, Giorgio

- 10:30–10:45 EGU2012-10835
F. Fousseis, X. Xiao, C. Schrank, J. Liu, and F. De Carlo
The application of Synchrotron radiation based microtomography in (structural) geology
- 10:45–11:00 EGU2012-13968
M. Parisatto, **F. Nestola**, G. Artioli, P. Nimis, J.W. Harris, M. Kopylova, and G. D. Pearson
3D investigation of inclusions in diamonds using X-ray micro-tomography
- 11:00–11:15 EGU2012-7026
M. Halisch and C. Müller
Modeling Stokes flow in real pore geometries derived by high resolution micro CT imaging
- 11:15–11:30 EGU2012-13614
A. Bistacchi, S.A. Smith, G. Di Toro, R. Jones, W.A. Griffith, S. Mittempergher, T.M. Mitchell, E. Spagnuolo, M. Rempe, S. Nielsen, and A. Niemeijer
Multi-scale characterization of the seismogenic Gole Larghe Fault Zone (Southern Alps, Italy): methodology and results
- 11:30–11:45 EGU2012-10459
W. Stolk, M. Kaban, F. Beekman, M. Tesauero, and S. Cloetingh
From data to a 3D model: a new method to build a crustal model, applied to Asia
- 11:45–12:00 EGU2012-3102
H. Ortner and A. Gruber
3D-model of complex km-scale fold structures using laserscanning images: The Achensee region, western Northern Calcareous Alps, Austria
- 12:00–12:15 EGU2012-2196
I. Lenauer and U. Riller
Using map view deformation patterns to constrain 3D kinematic models: the Sudbury Basin, Canada

TS9.2 – Visualization, Imaging and Mapping in Modern Structural Geology and Tectonics – Posters

Convener: U. Exner | Co-Conveners: K. McCaffrey, G. Pennacchioni

Hall A | Display Time 08:00–17:00

Author in Attendance: 08:30–10:00

Chairperson: Pennacchioni, Giorgio; Exner, Ulrike

- A488 EGU2012-745
St. Donndorf, A. Malz, and J. Kley
Construction of a 3D structural model based on balanced cross sections and borehole data to create a fundament for further geoclimatic and hydrological simulations

- A489 EGU2012-1701
R. Baumberger, Ph. Wehrens, and M. Herwegh
Large scale 3D geometry of deformation structures in the Aar massif and overlying Helvetic nappes (Central Alps, Switzerland) - A combined remote sensing and field work approach
- A490 EGU2012-3591
Y. H. Noh, H. K. Seo, J. G. Um, Y. S. Choi, and M. H. Park
Three-dimensional geological modelling workflow for fractured hydrocarbon reservoirs in the Grosmont Basin, Canada
- A491 EGU2012-7173
C. Müller and **E. Vogt**
Specific surface area of porous rocks: an integrated approach by combination of BET and Micro-CT imaging
- A492 EGU2012-7390
P. Sala, O.A. Pfiffner, and M. Frehner
Alpine fold and thrust structures: insight from the Säntis area (Switzerland)
- A493 EGU2012-8504
R. Aquè and **E. Tavarnelli**
The contribution of 3D restoration for the reconstruction of pre-thrusting basin geometries in fold-and-thrust belts
- A494 EGU2012-8972
E.A. Vsemirnova, R.R. Jones, and K.J.W. McCaffrey
Studies of fracture network geometry of reservoir outcrop analogues from terrestrial lidar data: attempts to quantify spatial variations of fracture characteristics
- A495 EGU2012-9485
P. Sala, N. Tisato, O.A. Pfiffner, and M. Frehner
Building a 3D geological near surface model from borehole and laboratory data
- A496 EGU2012-10711
P. Assali, P. Grussenmeyer, N. Pollet, F. Viguier, and T. Villemin
Sampling and modeling of rock discontinuities by terrestrial laser scanning and photogrammetry in railway environment
- A497 EGU2012-11518
I. Serpescu, E. Radu, R.G. Gogu, A. Priceputu, M.A. Boukhemacha, I. Bica, and D. Gaitanaru
3D geological model developed to analyse the aquifer - sewer network interaction in Bucharest city
- A498 EGU2012-14128
L. Hilty, U. Exner, G. Pestal, M. Linner, and R. Schuster
3D modeling of the Seidlwinkl-Nappe in the central Tauern Window, Austria
- A499 EGU2012-14224
A. Rath, M. Voorn, and U. Exner
Extraction and visualization of a fracture network using Micro-Computed Tomography
- A500 EGU2012-14327
G. Pennacchioni, N.S. Mancktelow, **N. Bucceri**, and F. Sisani
Initiation and growth of strike-slip faults in an effectively intact granodiorite (Neves area, South Tyrol, Italy). Information by laserscan mapping a decametric contractional stepover along the Mesule Fault.

TS10.1 – Geodynamic, tectonic and paleoenvironmental evolution of the Eastern Mediterranean: from Dinarides to Turkey – Orals

Convener: L. Le Pourhiet | Co-Conveners: A. Okay, D. J. J. van Hinsbergen, N. Chamot-Rooke, K. Ustaszewski, B. Huet

Room: 29

Chairperson: K. Ustaszewski and N. Chamot-Rooke

- 13:30–13:45 EGU2012-5145
S. Arsenikos, N. Chamot-Rooke, D. Frizon de Lamotte, J. Mascle, L. Caméra, and C. Blanpied
The offshore extent of the Jabal Al Akhdar anticline (Cyrenaica, Libya): timing of development and influence on the geometry of the Mediterranean ridge.
- 13:45–14:00 EGU2012-10426
A. Bruestle, L. Kueperkoch, M. Rische, T. Meier, W. Friederich, and EGELADOS working group
Seismicity of the eastern Hellenic Subduction Zone
- 14:00–14:15 EGU2012-3897
F. Neubauer and S. Cao
The brittle stage of the exhumation of a metamorphic core complex: Naxos, Cyclades, Greece and some general rules
- 14:15–14:30 EGU2012-11584
E. Draganits, B. Huet, B. Grasemann, D. Schneider, and A. Ertl
Eocene to post-Miocene kinematic evolution of the central Cyclades (Greece)

- 14:30–14:45 EGU2012-7323
N. Bonev, P. Marchev, and R. Moritz
 The Jurassic Rhodope subduction-accretion history: temporal relations between the Circum-Rhodope Belt Evros ophiolite, and the UHP-HP events and the granitoid magmatism in the underlying high-grade metamorphic basement, Thrace region, NE Greece
- 14:45–15:00 EGU2012-10394
T. J. Nagel, N. Froitzheim, S. Jahn-Awe, M. Kirchenbaur, N. Georgiev, D. Frei, and J. Pleuger
 The Eocene Rhodopes
 Chairperson: B. Huet / L. Le Pourhiet
- 15:30–15:45 EGU2012-13705
M. Maffione, A. Morris, and M. W. Anderson
 Palaeomagnetic evidence for an oceanic core complex in the Mirdita ophiolite of Albania
- 15:45–16:00 EGU2012-14368
E. Bozkurt, J. A. Winchester, M. Satir, and Q. G. Crowley
 Triassic Collision Between the Sakarya and Istanbul Zones, and Remarks on the Existence of Intra-Pontide Ocean in NW Turkey
- 16:00–16:15 EGU2012-4882
A. Pourceau, M. Sudo, P. Lanari, O. Candan, and R. Oberhänsli
 Neotethys closure history of Anatolia: insights from new ⁴⁰Ar-³⁹Ar geochronologic data and multi-equilibrium thermobarometry from blueschist-facies metasediments (Afyon Zone)
- 16:15–16:30 EGU2012-691
C. Lefebvre, D.J.J. van Hinsbergen, N. Kaymakci, and R.L.M. Vissers
 Restoring the Central Anatolian Crystalline Complex to its late Cretaceous configuration
- 16:30–16:45 EGU2012-10135
B. Erdogan, A. Hasozbek, E. Akay, T. Gungor, M. Satir, and W. Siebel
 Radiometric age determinations and their interpretations phenomena in the Menderes Massif (western Anatolia-Turkey)
- 16:45–17:00 EGU2012-7202
R. Oberhänsli, O. Candan, E. Koralay, R. Bousquet, and A. Okay
 Timing of subduction processes in Eastern Anatolia

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. Arbolea, 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. Grevemeryer, and T h e 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 Topolberia-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 sytem? 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. Grevenmeyer, and N. Zitellini
 The tectonic and sedimentary structures of the Tyrrhenian rifted basin from multichannel seismic images

GD3.5/SM2.7/TS10.8 – The Circum-Arctic region: Interplays between plate motions, mantle dynamics and the evolution of basins, margins and microcontinents (co-organized) – Posters

Convener: C. Gaina | Co-Conveners: R. D. Müller, J. Knies, K. Sigloch

Hall XL | Display Time 08:00–17:00

Author in Attendance: 08:30–10:00

Chairperson: Karin Sigloch

- XL35 EGU2012-6896
G. Shephard, R.D. Müller, and C. Heine
 Testing the kinematics and timing of the opening of the Amerasia Basin through a new coupled plate kinematic and mantle convection model
- XL36 EGU2012-1561
K. Sigloch
 Circum-Arctic mantle structure from global P-wave tomography - how consistent is it with plate-tectonic reconstructions?
- XL37 EGU2012-7228
S. Shokalsky, A. Morozov, O. Petrov, B. Belyatsky, P. Rekant, S. Shevchenko, and S. Sergeev
 Detrital zircons of deep-sea sediments of the Arctic ocean - key to the understanding of High Polar Arctic tectonics
- XL38 EGU2012-11069
C. Tegner, M. Storey, P. M. Holm, S. B. Thorarinsson, X. Zhao, S. Tappe, L. Heaman, and M. F. Knudsen
 Magmatism and Eureka deformation in the High Arctic Large Igneous Province: Age constraints from North Greenland
- XL39 EGU2012-7490
S. Suckro, K. Gohl, T. Funck, I. Heyde, A. Ehrhardt, B. Schreckenberger, and V. Damm
 The evolution of Davis Strait, a polar gateway - seismic data and tectonic modelling
- XL40 EGU2012-6077
 V. Damm, M. Block, K. Berglar, A. Ehrhardt, I. Heyde, M. Schnabel, B. Schreckenberger, **T. Altenbernd**, and S. Suckro
 Crustal structure of the West Greenland margin in North Baffin Bay
- XL41 EGU2012-2826
P. Guarnieri
 Late Cretaceous-Paleocene strike-slip faults along the East Greenland margin (63°N to 75°N): constraints for the North East Atlantic opening

- XL42 EGU2012-1621
M.F. Osmaston
 Recognition of Intermediate Crust (IC), its construction and its distinctive epeirogenic behaviour: an exciting new tool for plate kinematic analysis (PKA) of the Arctic margins and western Siberia
- XL43 EGU2012-8197
S. Malysheva, V. Vasilyev, V. Verzhbitsky, V. Ananyev, R. Murzin, D. Komissarov, N. Kosenkova, and Yu. Roslov
 Petroleum Systems of South Kara Basin: 3D stratigraphic simulation and basin modeling results

COFFEE BREAK

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Jochen Knies

- XL44 EGU2012-5536
D. Franke, K. Piepjohn, C. Gaedicke, C. Brandes, N. Sobolev, and B. Mouly
 On- Offshore correlation around the New Siberian Islands, Laptev and East Siberian Seas, Russian Arctic
- XL45 EGU2012-8507
C. Brandes and K. Piepjohn
 Structural evolution and paleostress pattern of the New Siberian Islands and De Long Islands, NE Russia
- XL46 EGU2012-5026
C. Gaina and T. H. Torsvik
 Relative and Absolute Plate Motions, Mantle Plumes and Volcanism in the Arctic region
- XL47 EGU2012-7819
K. Piepjohn, C. Brandes, C. Gaedicke, D. Franke, S. Mrugalla, N. Sobolev, and T. Tolmacheva
 The tectonic evolution of the New Siberian Islands
- XL48 EGU2012-6240
K. brumley, E.L. Miller, L.A. Mayer, J. Wooden, and M. Grove
 U-Pb zircon geochronology of Caledonian age orthogneisses dredged from the Chukchi Borderland, Arctic Ocean.
- XL49 EGU2012-2322
M.V. Luchitskaya, S.D. Sokolov, and A.V. Moiseev
 Stages of Late Mesozoic granitoid magmatism of Chukotka (NE Russia)
- XL50 EGU2012-11876
E.S. Gottlieb, V.L. Pease, E.L. Miller, and V.V. Akinin
 U-Pb zircon ages of Neoproterozoic granitoid magmatism on the Arctic coast of Chukotka and Wrangel Island
- XL51 EGU2012-3876
V.V. Akinin, E.L. Miller, E. Gottlieb, and G. Polzunenkov
 Geochronology and geochemistry of Cretaceous magmatic rocks of Arctic Chukotka: An update of GEOCHRON2.0
- XL52 EGU2012-6195
G.V. Ledneva, B.A. Bazylev, D. Kuzmin, A. Ishiwatari, N.N. Kononkova, and S.D. Sokolov
 Plutonic ultramafic-mafic complexes of the Vel'may terrane, eastern Chukotka (Russia): first petrological results and preliminary geodynamic interpretations

