

**EGU General Assembly 2012**  
**Programme Group Programme**  
**NH – Natural Hazards**

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## Monday, 23 April

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

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### GM8.4/OS3.6/TS4.10 – Seafloor Expression of Tectonic and Geomorphic Processes (co-listed) – 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. Busetti  
 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. Jintasaeranee, 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

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

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**LUNCH BREAK**

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Chairperson: n.n.

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

Chairperson: n.n.

- 15:30–15:45 EGU2012-7985  
**J. W. Neuberg** and K. Pascal  
Quantifying the errors due to the superposition of analytical deformation sources
- 15:45–16:00 EGU2012-1300  
**H. Bathke**, H. Sudhaus, M. Shirzaei, and T.R. Walter  
Caldera formation at Tendurek, East Turkey
- 16:00–16:15 EGU2012-2219  
**A.V. Newman**, S.C. Stiros, F. Moschas, V. Saltogianni, L. Feng, G.T. Farmer, P. Psimoulis, and Y. Jiang  
Renewed Geodetic Unrest at Santorini Caldera, Greece
- 16:15–16:30 EGU2012-9380  
**J. Ruch**, V. Acocella, N. Geshi, A. Nobile, and F. Corbi  
Kinematic analysis of vertical collapse on volcanoes using experimental models time series
- 16:30–16:45 EGU2012-3648  
**A. Amoruso** and L. Crescentini  
The 1982–1984 unrest of the Campi Flegrei caldera (Italy): clues on the resolving power of the available geodetic data and the robust features of the deformation source
- 16:45–17:00 EGU2012-13167  
**P.I.R. Wilson**, K.J.W. McCaffrey, J.P. Davidson, R.E. Holdsworth, P. Murphy, and I. Jarvis  
Accommodating structures and deformation associated with the emplacement of high level magmatic intrusions, Henry Mountains, Utah

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#### GMPV4.2/TS4.9 – Volcanoes: Tectonics, Deformation, Geodesy (co-listed) – 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 Quaternary 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. Giannanco, 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 <b>Z. Barnett</b> and A Gudmundsson Field data and numerical models on the emplacement of sill complexes
XL319	EGU2012-13789 <b>M. Shirzaei</b> A satellite geodetic survey of spatiotemporal deformation of Iranian volcanos
XL320	EGU2012-11049 <b>C. Adam</b> , N. Loureço, P. Madureira, M. Miranda, and M. Yoshida Mantle dynamics and volcanism emplacement in the Azores
XL321	EGU2012-479 <b>D. Tripanera</b> , 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, <b>I Bastow</b> , D Keir, and W Hutchison Volcano Deformation in the Main Ethiopian Rift
XL323	EGU2012-5373 <b>J. Arnoso</b> , FG. Montesinos, M. Benavent, and E.J. Vélez The 2011 volcanic crisis at El Hierro (Canary Islands): monitoring ground deformation through tiltmeter and gravimetric observations
XL324	EGU2012-4050 <b>G. Prates</b> , M. Berrocoso, A. Fernández-Ros, A. García, and R. Ortiz Processes of Compression-Expansion and Subsidence-Uplift detected by the Spatial Inclinometer (IESHI) in the El Hierro Island eruption (October, 2011)
XL325	EGU2012-4351 <b>M. Berrocoso</b> , 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 <b>S. Barde-Cabusson</b> , 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, <b>S. Barde-Cabusson</b> , D. Pedrazzi, J. Martí, 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 <b>N Geshi</b> , V Acocella, and J Ruch Evolution of deep collapse caldera: from structural to gravitational process
XL329	EGU2012-5334 <b>S. Poppe</b> , 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 <b>V. Acocella</b> , D.M. Palladino, R. Cioni, P. Russo, and S. Simei Caldera structure, amount of collapse and erupted volumes:
XL331	EGU2012-11185 <b>G. De Natale</b> , 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 <b>R. Scarpa</b> , P. Capuano, U. Tammaro, and R. Bilham Ground deformation at Campi Flegrei caldera using long water pipe tiltmeters and sea level gauges
XL333	EGU2012-7904 <b>M. Paulatto</b> , A. B. Watts, C. Peirce, J. Hunter, D. Bassett, W. Stratford, and L. M. Kalnins Potential field and bathymetric constraints on volcanism and tectonics at the submarine Monowai cone and caldera (Kermadec arc)
XL334	EGU2012-3657 A. Amoruso, <b>L. Crescentini</b> , 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 <b>T. R. Walter</b> , 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 <b>J. Gottsmann</b> The Great Tambora 2015 eruption: Could we see it coming?

XL337	EGU2012-9888 <b>M. Gerbault</b> , 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 <b>E. P. Holohan</b> , 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 <b>J. Hickey, J. Gottsmann</b> , and R. del Potro What's causing the world's largest deformation anomaly in southern Bolivia? Insights from Finite Element Analysis
XL340	EGU2012-2218 <b>P. Kalenda</b> and L. Neumann The relationship between volcanic and seismic activity
XL341	EGU2012-8102 <b>J. Liu</b> and X. Chen Volcanisms and Earthquakes Related to the Pacific Plate Subduction in Northeast Asia
XL342	EGU2012-2548 <b>X. Mao</b> and J.H. Li The distribution and tectonic framework of Late Paleozoic volcanoes in the Junggar basin and its adjacent area, NW China

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**HS2.5 – Mountain Hydrology: Monitoring and modeling of snow (merged with Sub-arctic hydrology) (co-listed) –**

Orals

Convener: J. Parajka | Co-Conveners: M. Lehning, C. B. Ménard, H. Dahlke, S. McGrane

**Room: 33**

Chairperson: H. Dahlke

08:30–08:45	EGU2012-8543 <b>H. Kooi</b> , V. Watson, and V.F. Bense What controls inter-basin variation in cold-season river flow recession in permafrost basins in sub-Arctic Siberia?
08:45–09:00	EGU2012-2880 <b>S. Lyon</b> , M. Nathanson, A. Spans, T. Grabs, H. Laudon, J. Temnerud, K. Bishop, and S. Seibert Specific discharge variability in a boreal landscape
09:00–09:15	EGU2012-11699 <b>N. Wever</b> and M. Lehning Snow cover and soil moisture in mountains
09:15–09:30	EGU2012-5556 <b>C. B. Ménard</b> , R. Essery, and J. Pomeroy Modelling snow distribution and snowmelt energetics in shrub tundra
09:30–09:45	EGU2012-13690 <b>M.K. MacDonald</b> , R.L.H. Essery, and J.W. Pomeroy Effects of Chinook winds (foehn) on snow cover in western Canada
09:45–10:00	EGU2012-4011 <b>D. Tetzlaff</b> , C. Soulsby, J. Buttle, S. Carey, H. Laudon, J. McDonnell, K. McGuire, J. Seibert, and J. Shanley Northern Watershed Ecosystem Response to Climate Change (North-Watch) - Towards a comparative ecohydrology of northern catchments.

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**COFFEE BREAK**

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Chairperson: C. Ménard

10:30–10:45	EGU2012-780 <b>A.A. Sorman</b> , A. Sensoy, E. Yamankurt, and E. Gozel A comparison of SRM and HBV models for real time runoff forecasting in the Upper Euphrates Basin, Turkey
10:45–11:00	EGU2012-905 <b>M. Girotto</b> , S.A. Margulis, and M. Durand Exploration of long-term reanalysis of Sierra Nevada snowpack inferred from snow covered area information

- 11:00–11:15 EGU2012-7531  
**R. Mott**, D. Scipion, A. Berne, N. Dawes, and M. Lehning  
Dynamics of small-scale precipitation enhancement in mountainous terrain
- 11:15–11:30 EGU2012-7849  
**T. Grunewald**, M. Schirmer, and M. Lehning  
Statistical modeling of the small-scale spatial variability of snow depth
- 11:30–11:45 EGU2012-3250  
**A. Winstral**, D. Marks, R. Gurney, and A. Kahl  
A computationally efficient tool for simulating wind-affected snow accumulations
- 11:45–12:00 EGU2012-7053  
**A. Nolin**, K. Blauvelt, K. Gleason, H. Lintz, T. Roth, and E. Sproles  
Linkages between snowcover, fire, and vegetation in mountain watersheds of the Pacific Northwest, USA

**HS2.5 – Mountain Hydrology: Monitoring and modeling of snow (merged with Sub-arctic hydrology) (co-listed) –**

## Posters

Convener: J. Parajka | Co-Conveners: M. Lehning, C. B. Ménard, H. Dahlke, S. McGrane

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: S. McGrane

- A102 EGU2012-1394  
T. Kerr, S. Singh, L. Kees, C. Webster, M. Clark, J. Hendrikx, and **R. Woods**  
J-SEx : The Jollie Snow Experiment, New Zealand
- A103 EGU2012-1451  
S. K. Singh, T. Kerr, C. Zammit, and **R. Woods**  
Representation of sub-grid snow variability in stream flow modelling in an Alpine catchment
- A104 EGU2012-1614  
**A. A. Beylich** and K. Laute  
Controls and spatio-temporal variability of runoff, solute fluxes and chemical denudation in the fjord landscape of the inner Nordfjord, western Norway
- A105 EGU2012-1731  
**K. Förster** and G. Meon  
Assessing the model performance of snow water resources simulated by a coupled mesoscale atmospheric and hydrologic model
- A106 EGU2012-2230  
**S. Morin**, Y. Lejeune, B. Lesaffre, J.-M. Panel, D. Poncet, P. David, and M. Sudul  
18 years of quality-controlled snow and meteorological data from a mid-altitude mountain site (Col de Porte, France) for driving and evaluating the snowpack component of land-surface models
- A107 EGU2012-2612  
**K. Helfricht**, M. Keuschnig, A. Heilig, C. Mayer, and M. Kuhn  
Airborne laser scan measurements of winter snow accumulation in high alpine catchments - hydrological implications and verification by ground penetrating radar at glacier surface
- A108 EGU2012-3444  
**M. Shrestha**, L. Wang, T. Koike, H. Tsutsui, Y. Xue, and Y. Hirabayashi  
Inverse simulation of snowmelt runoff and snow cover area using the energy balance-based distributed snowmelt model (WEB-DHM-S) for the correction of basin-scale snowfall
- A109 EGU2012-3725  
**D. Vikhamar-Schuler**, J. M. Edwards, G. Rooney, and J. Kristiansen  
Evaluation of JULES multi-layer snow scheme for Norwegian snow conditions
- A110 EGU2012-4304  
**T. Grabs**, H. Laudon, J. Seibert, M. Wallin, and K. Bishop  
Links between topography and the architecture of near stream zones in the Swedish Krycklan study catchment: Implications for aqueous and gaseous fluxes of organic and inorganic carbon
- A111 EGU2012-4553  
**J. Mäkinen**, M. Tammelin, and T. Kauppila  
Natural phosphorus and dry matter loading from clayey boreal catchments in Finland
- A112 EGU2012-5110  
B. Luks, **M. Osuch**, and R.J. Romanowicz  
A comparison of two approaches to modelling snow cover dynamics at the Polish Polar Station at Hornsund
- A113 EGU2012-5204  
**A. Frampton**, S. L. Painter, and G. Destouni  
Effects of hydrological inputs on the dynamics of permafrost system formation and degradation

- A114 EGU2012-5279  
**K. Schneider**, J. Schöber, and J. Stötter  
Comparing the spatial variability of snow depth on glacierized and non- glacierized surfaces using a geostatistical approach
- A115 EGU2012-5426  
**L. A. Boscarello**, G. Ravazzani, D. Rabuffetti, and M. Mancini  
Raster based snow and glaciers models in large Alpine catchments hydrological balance: the Rhone case study
- A116 EGU2012-5671  
**M. Rogger**, H. Hausmann, K. Krainer, E. Brueckl, and G. Bloeschl  
On the use of geophysical information for distributed hydrological modelling in a mountain catchment
- A117 EGU2012-5893  
**P. Vre?a**, M. Bren?i?, I. Sinjur, and S. Sokratov  
Detail isotopic stratigraphy of snowpack - case study from Julian Alps (Slovenia)
- A118 EGU2012-7233  
C. Tobin, **A. Rinaldo**, and B. Schaeefli  
Integrating snowfall limit forecasts to improve hydrological modeling
- A119 EGU2012-7272  
**S. Surer**, K. Bolat, and Z. Akyurek  
A webgis supported snow information system with long time satellite data for Turkey
- A120 EGU2012-7333  
**S. Frey** and H. Holzmann  
Snow cover modelling as an important tool in the rainfall runoff relationship
- A121 EGU2012-8226  
**Z. Akyurek**, S. Surer, and K. Bolat  
Temporal Analysis of Snow Cover Depletion in the Eastern Part of Turkey Based on MODIS-Terra and Temperature Data
- A122 EGU2012-8316  
**V.F. Bense**, H. Kooi, G. Ferguson, and T. Read  
Permafrost degradation as a control on hydrogeological regime shifts in a warming climate
- A123 EGU2012-8820  
**R. Pimentel**, J. Herrero, and M.J. Polo  
Assimilation of multiscale terrestrial photography data into a physical model of snow processes
- A124 EGU2012-9205  
**U. Strasser**, T. Marke, F. Hanzer, H. Ragg, H. Kleindienst, R. Wilcke, and A. Gobiet  
A1B scenario simulations of future natural snow conditions in Tyrol and Styria (Austrian Alps)
- A125 EGU2012-9371  
**A. Petrelli**, B. Crouzy, and P. Perona  
Snow cover and End of Summer Snowline statistics from a simple stochastic model
- A126 EGU2012-9993  
**E. Mayr**, W. Hagg, C. Mayer, and L. Braun  
Influence of snow accumulation and annual glacier mass balance on the calibration results of a spatially distributed conceptual hydrological model
- A127 EGU2012-10181  
**J. Garvelmann**, S. Pohl, and M. Weiler  
The application of time-lapse photography for the observation of snow processes in mountainous catchments
- A128 EGU2012-10782  
**F. Martina**, F. Caparrini, S. Gabellani, R. Rudari, F. Castelli, and G. Boni  
Data assimilation in a multilayer dynamic model for soil moisture estimation in mountain regions
- A129 EGU2012-10881  
**A.-L. Dhomps**, E.A. Zakharova, A.V. Kouraev, S. Biancamaria, and N.M. Mognard  
Decadal dynamics of Arctic continental water cycle in the framework of MONARCH-A .
- A130 EGU2012-11050  
**J. Bellinger**, S. Achleitner, J. Schöber, K. Schneider, F. Schöberl, and R. Kirnbauer  
Sensing runoff sensitivity of snow covered area influenced by vertical discretisation of a hydrological model
- A131 EGU2012-11194  
**L. Kuksina**, N. Alekseevsky, D. Aibulatov, and A. Chetverova  
Substantial flows transformation processes in the Lena River delta
- A132 EGU2012-11477  
**M. Bavay**, T. Egger, C. Fierz, and M. Lehning  
MeteoIO: A Pre-Processing Library for Numerical Models
- A133 EGU2012-11622  
**K. Abdollahi** and O. Batelaan  
A snow extent time series assimilation using MODIS images and temperature data, case study Koohrang, Iran

- A134 EGU2012-11694  
**L. Hülsmann**, T. Geyer, D. Karthe, J. Priess, and C. Schweitzer  
 Process-based hydrological modeling using SWAT: The effect of permafrost on water resources in the large-scale river catchment Kharaa / Mongolia
- A135 EGU2012-476  
**M. Dosa**, L. Holko, and Z. Kostka  
 How long does the snow water stay in a catchment?
- A136 EGU2012-11769  
**I. Clemenzi**, F. Pellicciotti, and P. Burlando  
 Understanding snow accumulation patterns in an highly glacierized alpine catchment
- A137 EGU2012-13716  
**R. Holden**  
 Snow-vegetation interactions across the tundra-taiga interface: stabilising feedbacks or drivers of rapid environmental change?

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**HS4.6 – Why predict? The value of prediction in hydrological sciences and policy (co-listed) – Orals**

Convener: J.S. Verkade | Co-Conveners: A. Iglesias, M. Haasnoot, H. Winsemius, S. Dessai

**Room: 39**

Chairperson: n.n.

- 10:30–10:45 EGU2012-9534  
**A. Lopez** and L.A. Smith  
 Will current probabilistic climate change information, as such, improve adaptation?
- 10:45–11:00 EGU2012-8763  
 J.H. Kwakkel and **J.S. Timmermans**  
 Exploring predictions of safe operating spaces for human water use
- 11:00–11:15 EGU2012-2927  
**H. Middelkoop** and M. Haasnoot  
 Learning from a History of Futures: 60 Years of Scenario use for Water Management in the Netherlands
- 11:15–11:30 EGU2012-11253  
**S. Quiroga**, A. Iglesias, A. Diz, and L. Garrote  
 Potential economic value of drought information to support early warning in Africa
- 11:30–11:45 EGU2012-1462  
**T.C. Pagano**  
 The Value of Humans in the Operational River Forecasting Enterprise
- 11:45–12:00 EGU2012-14071  
**M.D. Cranston**, R. Maxey, A.C.W. Tavendale, and P. Buchanan  
 Using ensemble rainfall predictions in a countrywide flood forecasting model in Scotland

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**HS4.6 – Why predict? The value of prediction in hydrological sciences and policy (co-listed) – Posters**

Convener: J.S. Verkade | Co-Conveners: A. Iglesias, M. Haasnoot, H. Winsemius, S. Dessai

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A165 EGU2012-2008  
**N. Candogan Yossef**, H. Winsemius, L.P.H. van Beek, E. van Beek, and M.F.P. Bierkens  
 Value assessment of a global hydrological forecasting system
- A166 EGU2012-12133  
**M. Latraverse1**, P. Cote, and B. Larouche1  
 Assessing The Value of Hydrological Ensemble Predictions for Rio Tinto Alcan's Hydropower System in Eastern Canada
- A167 EGU2012-9646  
**A. Lopez** and L.A. Smith  
 Signal, Insight and Noise: Contrasting the Decision Relevance of climate models with climate science
- A168 EGU2012-13904  
**J Sepulveda** and M Mendizabal  
 Defining adaptation strategies to climate change combining hydro-economic impact studies with uncertainty
- A169 EGU2012-13145  
**D. Miozzo**, L. Ferraris, and M. Altamura  
 Prediction, Communication and Urban policies. Is there enough space for three faces on a single medal?

A170	EGU2012-14070 <b>W.J. de Lange</b> In search of criteria for the integrated hydrological model NHI to adequately support national decisions on climate adaptation in the Netherlands
A171	EGU2012-13426 <b>P. Wikman-Svahn</b> , H. Carlsen, and K. Mossberg Sonnek Value judgments and treatment of uncertainty in sea level rise projections
A172	EGU2012-11372 <b>N. Pineux</b> and A. Degré Runoff inundation hazard cartography
A173	EGU2012-484 <b>S. Ashraf Vaghefi</b> , S. J. Mousavi, K.C. Abbaspour, and H. Yang An Imperialist Competitive Algorithm Artificial Neural Network Method to Predict Runoff
A174	EGU2012-5447 <b>E. Paleologos</b> , I. Skitzi, and K. Katsifarakis The value of "black-box" neural network modeling in subsurface flow prediction

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**NH1.4/AS4.14 – Lightning: physics, detection and atmospheric effects (co-organized) – Orals**

Convener: Y. Yair | Co-Conveners: S. Soula, H. D. Betz, Y. Takahashi, C. Price

**Room: 1**

Chairperson: Yoav Yair and Yukihiro Takahashi

08:30–08:45	EGU2012-4091 <b>Y. Hobara</b> , S. Watahiki, M. Hayakawa, R. Holzworth, and M. Parrot Global lightning characteristics deduced from ELF/VLF electromagnetic emissions observed by the DEMETER spacecraft
08:45–09:00	EGU2012-12917 <b>M. L. Hutchins</b> , R. H. Holzworth, C. J. Rodger, S. Heckman, and J. B. Brundell WWLLN Absolute Detection Efficiencies and the Global Lightning Source Function
09:00–09:15	EGU2012-3429 <b>C. Morales</b> , R.I Albrecht, S. Goodman, H. Hoeller, J. Bailey, R. Blakeslee, S. Rudlosky, J. Hall, E.M. Anselmo, J.R Neves, and M. Lacerda Understanding the different lightning detection technologies: A contribution from CHUVA-GLM field campaign
09:15–09:30	EGU2012-6169 <b>H. Höller</b> , H.-D. Betz, K. Schmidt, and S. Diebel Severe Weather Identification based on LINET Lightning Data
09:30–09:45	EGU2012-13711 <b>C. Liu</b> , E. Novakovskiaia, and S. Heckman Relations Between Total Lightning Flash Rate and Radar Reflectivity in Convective Storms
09:45–10:00	EGU2012-10591 M. Formenton, D. Casella, S. Dietrich, <b>A. Mugnai</b> , G. Panegrossi, P. Sanò, H.-D. Betz, C. Price, and Y. Yair Using a cloud electrification model to study charge separation processes and their relationships with cloud microphysical structure

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**COFFEE BREAK**

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Chairperson: Yukihiro Takahashi and Yoav Yair

10:30–10:45	EGU2012-1285 <b>T. Farges</b> , C. Millet, and R. S. Matoza Infrasound from lightning measured in Ivory Coast
10:45–11:00	EGU2012-6541 <b>O A van der Velde</b> , J Montanyà, D Romero, N Pineda, and S Soula Ebro Lightning Mapping Array: sprite-producing lightning and ground-to-cloud-to-ground flashes
11:00–11:15	EGU2012-13413 Y. Sanmiya, N. Kobayashi, T. Kudo, <b>Y. Takahashi</b> , M. Sato, Y. Shima, T. Yamada, NHK Cosmic Shore Project, H. C. Stenbaek-Nielsen, M. G. McHarg, T. Kanmae, R. Haaland, Y. Yair, W. A. Lyons, and S. A. Cummer Development of sprite streamers and preceding halos and elves

- 11:15–11:30 EGU2012-2515  
**T.-Y. Huang**, C. L. Kuo, C. Y. Chiang, A. B. Chen, H. T. Su, and R. R. Hsu  
 Lightning-Induced Transient Emissions in the mesospheric airglow layers - ISUAL Observations and Modeling
- 11:30–11:45 EGU2012-10867  
**T. Neubert**, O. Chanrion, E. Arnone, F. Zanotti, S. Cummer, J. Li, M. Füllekrug, and O. van der Velde  
 The Giant Jet
- 11:45–12:00 EGU2012-7406  
**T. Gjesteland**, N. Østgaard, A. B. Collier, B. E. Carlson, C. Eyles, and D. M. Smith  
 Many new RHESSI TGFs

**NH1.4/AS4.14 – Lightning: physics, detection and atmospheric effects (co-organized) – Posters**

Convener: Y. Yair | Co-Conveners: S. Soula, H. D. Betz, Y. Takahashi, C. Price

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Serge Soula and Yoav Yair

- XY195 EGU2012-1262  
**Y. Yair**, K. Mezuman, B. Ziv, M. Priente, M. Glickman, Y. Takahashi, and T. Inoue  
 Predicting global thunderstorm activity for sprite observations from the International Space Station
- XY196 EGU2012-1270  
**G. Elhalel**, Y. Yair, C. Price, S. Halatzi, Y. Reuveni, and D. Shtibelman  
 Diurnal variation of the global fair weather current from measurements at a Negev desert station in Israel
- XY197 EGU2012-1685  
 J. A. Santos, J. Sousa, M.A. Reis, S.M. Leite, S. Correia, **H. Fraga**, and M. Fragoso  
 Large-scale forcing on lightning in Portugal
- XY198 EGU2012-1778  
**S. Shalev**, H. Saaroni, B. Ziv, and Y. Yair  
 Lightning multiplicity characteristics in Eastern Mediterranean thunderstorms
- XY199 EGU2012-4249  
**M. Iwamoto**, Y. Hobara, K. Ohta, T. Minatohara, T. Otsuyama, and M. Hayakawa  
 Subionospheric VLF perturbations of red sprites: 3D FDTD modeling and experimental results
- XY200 EGU2012-6265  
**A. Mezentsev** and M Füllekrug  
 On 3D detection of lightning discharges and associated events with a small scale interferometric network of radio receivers
- XY201 EGU2012-6549  
**Z. Kawasaki**  
 Estimation of charge distributions related with individual lightning discharges
- XY202 EGU2012-8213  
**R. S. Hansen**, N. Østgaard, T. Gjesteland, and B. Carlson  
 Fluence of photons from Terrestrial Gamma ray flashes in aircraft and balloon altitudes - dependence of initial parameters in simulations
- XY203 EGU2012-9978  
**S. Soula**, H. Bresson, Z. Yu, O. van der Velve, J. Montanya, M. Füllekrug, and J.-F. Georgis  
 Characteristics of the CG lightning flashes producing sprites and elves above a same storm
- XY204 EGU2012-9283  
**J. Bór**, J. Tóth, K. Yamashita, Y. Hobara, G. Sátori, M. Hayakawa, and H.D. Betz  
 Relation between the height and size of sprites and the parameters of the triggering lightning flash - preliminary results
- XY205 EGU2012-10375  
**D. Cinar**, O. Chanrion, and T. Neubert  
 X-and gamma- emissions in the upper atmosphere related with thunderstorms
- XY206 EGU2012-13291  
**C. Abril** and L.F. Cristancho  
 Simulation of electron avalanches using Geant4
- XY207 EGU2012-13550  
 A. Kulak, **J. Mlynarczyk**, M. Ostrowski, J. Kubisz, and A. Michalec  
 Analysis of impulse signals with Hylaty ELF station
- XY208 EGU2012-10647  
**G. Satori**, V Mushtak, M Neska, T Nagy, and V Barta  
 Global lightning dynamics deduced from Schumann resonance frequency variations at two sites ~ 550 km apart

- XY209 EGU2012-10610  
**CG Price**, B Lynn, Y Yair, N Reicher, and A Khain  
 Modeling Lightning Activity in Hurricanes
- XY210 EGU2012-6656  
**S. M. Mendes** and J. A. Corte-Real  
 Investigation of the atmospheric environment in which deep convection associated with thunderstorms and lightning develops over continental Portugal - the RAIDEN Project.
- XY211 EGU2012-1417  
**I. Kolmasova**, O. Santolik, and P. Novak  
 Bursts of Regular Magnetic Field Pulses Produced by Lightning Discharges
- XY212 EGU2012-4137  
**Z. Kawasaki**  
 Observations of thunderstorm activity by RADAR network in Osaka
- XY213 EGU2012-9369  
**B. E. Carlson**, P. Kochkin, A. P. J. van Deursen, R. Hansen, T. Gjesteland, and N. Ostgaard  
 A direct search for energetic electrons produced by laboratory sparks
- XY214 EGU2012-9465  
**M. Marisaldi**, F. Fuschino, M. Tavani, S. Dietrich, C. Labanti, M. Galli, A. Argan, A. Trois, E. Del Monte, F. Longo, G. Barbiellini, A. Bulgarelli, F. Gianotti, and M. Trifoglio  
 Observational evidence of two different populations of Terrestrial Gamma-ray Flashes
- XY215 EGU2012-9489  
**G. Harrison** and M. Joshi  
 Early twentieth century response of the global atmospheric electric circuit to ENSO
- XY216 EGU2012-13047  
**M. Fullekrug**, A. Mezentsev, S. Soula, O. van der Velde, J. Poupeney, C. Sudre, S. Gaffet, and J. Pincon  
 Digital Low Frequency Radio Camera
- XY217 EGU2012-7116  
**A.A Toropov**, V.I. Kozlov, V.A. Mullayarov, and S.A. Starodubtsev  
 Neutron bursts associated with cloud-to-ground lightning discharges.
- XY218 EGU2012-5801  
**E. Arnone**, J. Bor, O. A. Chanrion, R. Labanti, K. Mezuman, T. Neubert, A. Odzimek, S. Soula, O. van der Velde, Y. Yair, and Eurosprite  
 On the distribution and seasonal cycle of transient luminous events above Europe
- XY219 EGU2012-5659  
**N. Ostgaard**, B. Carlson, R. S. Hansen, T. Gjesteland, and A. Collier  
 How common are TGFs?

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**NH1.6/HS4.7 – Flood risk and uncertainty (co-organized) – Orals**

Convener: G. T. Aronica | Co-Conveners: H. Apel, G. J.-P. Schumann

**Room: 1**

Chairperson: n.n.

- 13:30–13:45 EGU2012-886  
**J.S. Wong**, J. Freer, P.D. Bates, and D.A. Sear  
 Sensitivity analysis of hydraulic model to morphological changes and changes in flood inundation extent
- 13:45–14:00 EGU2012-1741  
**N. Van Steenbergen** and P. Willems  
 Non-parametric data-based approach for the quantification and communication of uncertainties in river flood forecasts
- 14:00–14:15 EGU2012-1750  
**C Neuhold**  
 Quantifying uncertainty inherent to state-of-the-art flood risk assessment
- 14:15–14:30 EGU2012-9663  
**R. Hostache**, P. Matgen, and L. Giustarini  
 A new GNSS-enabled floating device as a means for retrieving river bathymetry by assimilation into a hydrodynamic model
- 14:30–14:45 EGU2012-12253  
**A. Domeneghetti**, S. Vorogushyn, A. Castellarin, B. Merz, and A. Brath  
 Effects of uncertainty in boundary-conditions on flood hazard assessment
- 14:45–15:00 EGU2012-13312  
**J. Delgado**, N. Dung, B. Merz, and H. Apel  
 Climate and floods in the Mekong delta: uncovering GCM uncertainty

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**NH1.6/HS4.7 – Flood risk and uncertainty (co-organized) – Posters**

Convener: G. T. Aronica | Co-Conveners: H. Apel, G. J.-P. Schumann

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY220 EGU2012-436  
**J. Sanyal** and P. Carboneau  
 Low-cost, open access flood inundation modelling with sparse data: A case study of the Lower Damodar River Basin, India
- XY221 EGU2012-738  
**A. Mentzafou**, E. Dimitriou, and V. Markogianni  
 Flood hazard assessment based on a GIS based methodology
- XY222 EGU2012-2619  
**S. Barbettà**, F. Melone, M. Franchini, and T. Moramarco  
 Estimating river discharge uncertainty by applying the Rating Curve Model
- XY223 EGU2012-3730  
**S. Grimaldi**, A. Petroselli, and F. Serinaldi  
 Continuous simulation method versus event-based approach for design hydrograph estimation in small and ungauged basins
- XY224 EGU2012-4487  
**A. Tarpanelli**, T. Moramarco, S. Barbettà, F. Melone, N. Berni, C. Pandolfo, and R. Morbidelli  
 Analyzing the spillway failure of the Montedoglio dam in Central Italy
- XY225 EGU2012-4688  
**R.J. Romanowicz**, A. Kiczko, and M. Osuch  
 Influence of model reduction on uncertainty of flood inundation predictions
- XY226 EGU2012-4970  
**A. Gelfan**  
 Flood risk assessment in a poorly gauged basin
- XY227 EGU2012-5166  
**K. Vandersteen**, K. Beerten, and B. Leterme  
 Small scale flood risk assessment: a case study from inter-dune catchments in the Campine area, Belgium
- XY228 EGU2012-6557  
 J. Eleuterio, R. Mosé, A. Rozan, and **S. Payraudeau**  
 Impact on hydrological confidence intervals on floods damage potential estimations
- XY229 EGU2012-8570  
 I. Nalbantis, **I. Papageorgaki**, P. Sioras, and Ch. Ioannidis  
 Effect of uncertainty in Digital Surface Models on the boundary of inundated areas
- XY230 EGU2012-8793  
**P. Pun?ochá?** and A. Podlaha  
 Flood Loss Model for Austria
- XY231 EGU2012-8812  
 J. Valentova, P. Valenta, L. Weyskrabova, and **T. Dostal**  
 Hydraulic analysis of measures for flood mitigation in floodplain
- XY232 EGU2012-9559  
**I. Ott**, D. Düthmann, J. Liebert, P. Berg, H. Feldmann, J. Ihringer, H. Kunstmann, B. Merz, G. Schädler, and S. Wagner  
 Climate change impact on medium and small sized river catchments in Germany: An ensemble assessment
- XY233 EGU2012-10348  
**H. Apel**, N.V. Dung, J.M. Delgado, and B. Merz  
 Future flood hazard under climate change in the Mekong Delta
- XY234 EGU2012-10439  
 P. Alfredini, **D.L. Cartacho**, E. Arasaki, M. Rosso, W.C. Sousa Jr, D. R. Lanzieri, and J.P.M. Ferreira  
 Extreme events assessment methodology coupling rainfall and tidal levels in the coastal floodplain of the São Paulo North Coast (Brazil) for drainage purposes
- XY235 EGU2012-10749  
**G.T. Aronica**, J. Neal, A. Candela, and P.D. Bates  
 Influence of microtopography for “uncertain
- XY236 EGU2012-11657  
**W.H.J. Toonen**, M.M. de Molenaar, F.P.M. Bunnik, and H. Middelkoop  
 Palaeoflood extremes of the Lower Rhine
- XY237 EGU2012-11900  
**A. Domeneghetti**, A. Castellarin, A. Brath, and A. Colombo  
 A simplified quasi-2d model of the Po River for the identification of large-scale flood-risk mitigation measures
- XY238 EGU2012-12744  
**A. Candela**, S. Naso, and G.T. Aronica  
 On the use of innovative post-event data for reducing uncertainty in calibrating flood propagation models

XY239 EGU2012-13179

**M.E. Wilkinson**, P.F. Quinn, A. Nicholson, and G.M. O'Donnell

Flood risk mitigation through natural flood management: reducing uncertainty through process studies at the local catchment scale

XY240 EGU2012-13215

**M.-M. Gy?ri** and I. Haidu

Flood plain analysis for Petris, , Troas, and Monoros, tia watersheds, the Arad department, Romania

**NH2.1 – Modeling of Volcanic Hazards (including Arne Richter Award for Outstanding Young Scientists Lecture) –**

Orals

Convener: S. Charbonnier | Co-Conveners: C. Bonadonna, C. Connor

**Room: 4**

Chairperson: S.J. Charbonnier, C. Bonadonna, C. Connor

08:30–08:45 EGU2012-5037

**G. Wadge**

Pyroclastic flow hazard assessment at Soufriere Hills Volcano, Montserrat

08:45–09:00 EGU2012-6183

**E.T. Spiller**, E.S. Calder, A. Patra, E.B. Pitman, J.O. Berger, R.L. Wolpert, and M.J. Bayarri

Efficient use of flow simulations for developing probabilistic hazard maps

09:00–09:15 EGU2012-2012

**P. Rowley**, D. Waltham, and S. McLean

Reverse-engineering a submarine pyroclastic flow from its deposit

09:15–09:30 EGU2012-4163

T. Esposti Ongaro, **A. Neri**, and M. Todesco

Assessing pyroclastic density current dynamics and hazard of Plinian events at Campi Flegrei (Italy) by using 3D numerical simulations

09:30–09:45 EGU2012-8574

**A Costa**, A. Folch, G. Macedonio, B. Giaccio, R. Isaia, and V.C. Smith

Quantifying distal dispersal and impact of volcanic ash from super-eruptions: an application to Campanian Ignimbrite

09:45–10:00 EGU2012-5619

**E. Piegari**, R. Di Maio, and R. Scandone

Cellular automaton simulations of the temporal pattern of activity of a volcano with an application to Vesuvius activity between 1631 and 1944

**COFFEE BREAK**

Chairperson: S.J. Charbonnier, C. Bonadonna, C. Connor

10:30–11:30 EGU2012-14451

**L. Clarisse**

Atmospheric measurements of volcanic eruptions with the infrared sounder IASI (Arne Richter Award for Outstanding Young Scientists Lecture)

11:30–11:45 EGU2012-12809

**H. Delgado Granados**, R. Ramírez Guzmán, J. L. Villareal Benítez, and T. García Sánchez

VOLCWORKS: A suite for optimization of hazards mapping

11:45–12:00 EGU2012-6701

J.L. Palma, **S. Charbonnier**, L. Courtland, G. Valentine, C. Connor, and L. Connor

Assessing volcanic hazards with Vhub

12:00–12:15 EGU2012-6612

**E. R. Stefanescu**, A. Patra, M. F. Sheridan, and G. Cordoba

Estimating conditional probability of volcanic flows for forecasting event distribution and making evacuation decisions

12:15–12:30 EGU2012-6092

**R. Sobradelo**, J. Martí, A.T. Mendoza-Rosas, and G. Gómez

Volcanic hazard assessment for the Canary Islands (Spain) using extreme value theory, and the recent volcanic eruption of El Hierro

**NH2.1 – Modeling of Volcanic Hazards (including Arne Richter Award for Outstanding Young Scientists Lecture) –**

Posters

Convener: S. Charbonnier | Co-Conveners: C. Bonadonna, C. Connor

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: S.J. Charbonnier, C. Bonadonna, C. Connor

- XY241 EGU2012-2005  
**D. Pedraza, J. Martí, and A. Geyer**  
Stratigraphy, sedimentology and eruptive mechanism of the El Golfo phreatomagmatic edifice (Lanzarote, Canary Islands)
- XY242 EGU2012-2040  
**O. Garcia, J. Martí, G. Aguirre-Díaz, A. Geyer, and I. Iribarren**  
Pyroclastic density currents from Teide-Pico Viejo (Tenerife, Canary Islands): implications for hazard assessment
- XY243 EGU2012-6688  
**A. Bevilacqua, C. Fourmentraux, A. Bertagnini, M. Bisson, T. Esposti Ongaro, F. Flandoli, R. Isaia, A. Neri, and M. Rosi**  
Mapping long-term pyroclastic density current hazard in a caldera setting: application to Campi Flegrei caldera (Italy)
- XY244 EGU2012-8997  
**R. Constantinescu, J.C. Thouret, L. Sandri, I.A. Irimus, and R. Stefanescu**  
BET\_VH probabilistic assessment of pyroclastic flows hazard at El Misti volcano, South Peru, based on geological record and numerical simulations with TITAN2D
- XY245 EGU2012-587  
**S.J. Charbonnier, C.B. Connor, L. Connor, T. Dixon, and J.A. Saballos**  
Numerical modeling of volcanic flows: towards a short-term hazard assessment tool
- XY246 EGU2012-12959  
**J.N. Procter, A.V. Zernack, I. Fuller, E. Philips, and S.J. Cronin**  
Quantifying the geomorphic impacts and sediment transport of a lake break-out lahar, Mt. Ruapehu, New Zealand.
- XY247 EGU2012-2417  
**B. Cagnoli and G.P. Romano**  
Mobility of Pyroclastic Flows and Rock Avalanches: a Functional Relationship of Scaling Parameters
- XY248 EGU2012-11869  
**B. Cordonnier, S. Self, and M. Manga**  
Lava Flows Cooling: The initial hypothesis
- XY249 EGU2012-10837  
Dr Bonasia, **Dr Costa, Dr Folch, Dr Macedonio, and Dr Capra**  
Numerical inversion and reconstruction of the medial and distal tephra deposit of the 1982 El Chichón eruption (Chiapas, Mexico). Implications for hazard assessment
- XY250 EGU2012-11025  
**C. Bonadonna and A. Costa**  
Estimating the volume of tephra deposits: a new simple strategy
- XY251 EGU2012-5985  
**S Bartolini, R Sobradelo, A Geyer, and J Martí**  
Volcanic hazard assessment at Deception Island
- XY252 EGU2012-3695  
G Phillipson and **J Gottsmann**  
An assessment of volcanic unrest in the 21st century
- XY253 EGU2012-14398  
**F Vallianatos, A Tzanis, G Michas, and G Papadakis**  
Evidence of non-extensivity and complexity in the seismicity observed during 2011–2012 at the Santorini volcanic complex, Greece

**NH3.1 – Mechanisms and processes of landslides induced by water – Orals**

Convener: H. Fukuoka | Co-Conveners: P. Frattini, G. Crosta, N. Huvaj, T.A. Bogaard, J.-P. Malet, R. Greco

**Room: 4**

Chairperson: Nejan Huvaj, Thom Bogaard, Hiroshi Fukuoka

- 13:30–13:45 EGU2012-8079  
**N.K. Meyer, A.V. Dyrrdal, R. Frauenfelder, B. Etzelmüller, and F. Nadim**  
Estimating critical water supply for debris flow initiation in Norway
- 13:45–14:00 EGU2012-7580  
**M. N. Papa, V. Medina, A. Bateman, and F. Ciervo**  
Derivation of debris flow critical rainfall thresholds from land stability modeling

- 14:00–14:15 EGU2012-5378  
**M. Ahmadiadli, N. Huvaj, and K. Toker**  
 Rainfall triggered landslides in unsaturated soils: a numerical sensitivity analysis for rainfall threshold
- 14:15–14:30 EGU2012-10757  
**A. Galeandro, V. Simeone, and J. Šim?nek**  
 Effects of rainfall infiltration into fractured and swelling soils on triggering shallow landslides
- 14:30–14:45 EGU2012-11737  
**J.M. Azañón, J. Castro, C. Ureña, and M.J. Rodríguez-Peñes**  
 The role of water in the formation of clay-rich layers at the slip surface of slope instabilities (Diezma landslide, SE Spain)
- 14:45–15:00 EGU2012-13604  
**P. Schneider, L. Strouhal, S. Pool, and J. Seibert**  
 True colors - changing perceptions of hydrological processes at a hillslope prone to slide

**NH3.1 – Mechanisms and processes of landslides induced by water – Posters**

Convener: H. Fukuoka | Co-Conveners: P. Frattini, G. Crosta, N. Huvaj, T.A. Bogaard, J.-P. Malet, R. Greco

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Paolo Frattini, Roberto Greco, Hiroshi Fukuoka

- XY254 EGU2012-2307  
**L. Brocca, F. Ponziani, F. Melone, T. Moramarco, N. Berni, and W. Wagner**  
 Improving landslide movement forecasting using ASCAT-derived soil moisture data
- XY255 EGU2012-4365  
**B. Udvardi, A. Raveloson, F. Visnovitz, Cs. Szabó, I. Kovács, and B. Székely**  
 Sedimentological features of lateritic and saprolitic horizons in a mid-slope lavaka, Central Highlands, Madagascar
- XY256 EGU2012-6466  
**P. Hazenberg, S. Estifanos, R. T. W. L. Hurkmans, and R. Uijlenhoet**  
 Linking a physically based model with a stochastic hollow evolution model to improve our understanding on the spatial and temporal behavior of landslide prone areas and the impact of climate change
- XY257 EGU2012-6492  
**D. Rozos, C. Loupasakis, J. Koumantakis, P. Tsangaratos, and K. Markantonis**  
 Remediating Mass Movements, induced by Water, in Urban Environments - an example from Chalki Village, Peloponnese, Greece
- XY258 EGU2012-8420  
**J. Hradecký, T. Pánek, R. Brázdil, K. Šilhán, V. Smolková, and P. Zahradní?ek**  
 Rainfall-induced landslide event of May 2010 in the eastern part of the Czech Republic - case study of the recurrent Girová landslide
- XY259 EGU2012-9529  
**F. Preti, A. Dani, and G.B. Chirico**  
 Coupling a distributed hydrological model with a vegetated slope stability model
- XY260 EGU2012-9960  
**L. Olivares, E. Damiano, R. Greco, and A. Guida**  
 Infiltration into pyroclastic slopes
- XY261 EGU2012-11954  
**S. Barontini, M. Peli, and R. Ranzi**  
 Stream function of a perched water table in a sloping gradually layered soil: effect of the soil anisotropy on the flow patterns
- XY262 EGU2012-13650  
**A. Dok, H. Fukuoka, and Y. Hong**  
 TRMM Applications for Rainfall-Induced Landslide Early Warning
- XY263 EGU2012-7246  
**E. Suba??, S.B. ?kizler, Z. Ang?n, G. Demir, and A. Kayahan**  
 An Assessment of Rainfall-Induced Rize Landslide and Flooding
- XY264 EGU2012-7598  
**A. Kayahan, S.B. ?kizler, Z. Ang?n, G. Demir, and E. Suba??**  
 Investigation of Persembe Yenikoy Landslide
- XY265 EGU2012-11441  
**T.A. Bogaard, W Meng, and L.P.H. van Beek**  
 The long-term hydrological effect of forest stands on the stability of slopes
- XY266 EGU2012-2437  
**I. Pla-Sentís**  
 Effects of changes in land use and management on landslide processes induced by water under semi-arid Mediterranean and humid tropical conditions

- XY267 EGU2012-8252  
**C. Camera, T. Apuani, M. Masetti, and M. Mele**  
 Comparison of the results of different scale hydrogeological models on a terraced slope of Valtellina (Northern Italy)
- XY268 EGU2012-13645  
**D. Karnawati, H Fukuoka, J. Kimbrough, and T. Fathani**  
 Engineering behaviour of volcanic ash with respect to rain-induced mass movement

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**NH3.2 – Mechanisms and processes of landslides in seismically- or volcanically-active environments – Orals**

Convener: V. Del Gaudio | Co-Conveners: J. Wasowski, H. Fukuoka, C.-T. Lee, R. W. Jibson

**Room: 4**

Chairperson: J. Wasowski, C.T. Lee

- 15:30–15:45 EGU2012-6937  
**C.-T. Lee**  
 Characteristics of earthquake-induced landslides and differences compared to storm-induced landslides
- 15:45–16:00 EGU2012-13779  
**C. Sigarán-Loría, R. Hack, and J.D. Nieuwenhuis**  
 Advance in prediction of soil slope instabilities
- 16:00–16:15 EGU2012-1418  
**A. Torgoev** and H.-B. Havenith  
 Verification of the GIS-based Newmark method through 2D dynamic modelling of slope stability
- 16:15–16:30 EGU2012-1642  
**F. Glüer** and S. Loew  
 Kinematic Analyses of Rock Slope Failures Triggered by the Aysén 2007 Earthquake (Patagonia, Chile)
- 16:30–16:45 EGU2012-4393  
**V. Del Gaudio, J. Wasowski, and S. Muscillo**  
 Spatial and temporal variability of seismic noise records on landslide-prone slopes
- 16:45–17:00 EGU2012-5791  
**M.R. Gallipoli, M. Mucciarelli, and R. Pagliuca**  
 Seismic amplification measured on landslides compared with requirements from simple activation models

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**NH3.2 – Mechanisms and processes of landslides in seismically- or volcanically-active environments – Posters**

Convener: V. Del Gaudio | Co-Conveners: J. Wasowski, H. Fukuoka, C.-T. Lee, R. W. Jibson

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: V. Del Gaudio, H. Fukuoka

- XY269 EGU2012-14337  
**H. Fukuoka, D. Higaki, and K. Ugai**  
 Landslides induced by the 11 March 2011 Tohoku Earthquake, Japan
- XY270 EGU2012-14341  
**H. Fukuoka, D. Karnawati, and A. Dok**  
 Critical displacement for unlimited displacement of earthquake-induced landslides
- XY271 EGU2012-1861  
**T. Kubota**  
 Consideration to the early warning rainfall criteria of landslides after strong earthquake in Japan
- XY272 EGU2012-4021  
**M.-J. Huang, Y.-L. Chiang, and K.-J. Chang\***  
 Kinematic simulations of the rainfall-triggered Shiaolin debris avalanche, southern Taiwan
- XY273 EGU2012-4008  
**K.-J. Chang, R.-F. Chen, Y.-C. Chan, C.-Y. Kuo, and C.-H. Weng**  
 Earthquake-triggered Tsaojing landslide mechanics and dynamic process revealed by discrete element method
- XY274 EGU2012-3387  
**O. Trofimchuk and Iu. Kaliukh**  
 The numerical-statistical approach for hazard prediction of landslides and its application in Ukraine
- XY275 EGU2012-4438  
**R.-F. Chen, K.-J. Chang, Y.-C. Chan, C.-W. Lin, and C.-Y. Kuo**  
 Landslide events in Tsaojing and their effect on sediment flux distributions, Taiwan
- XY276 EGU2012-8480  
**K.-J. Shou, L.Y. Fei, M.M. Chen, C.Y. Wei, and C.Y. Hong**  
 On the Correlation of Landslides and Sedimentation in Western Taiwan after the 1999 Chi-Chi Earthquake

- XY277 EGU2012-2894  
**p. lacroix**, e. berthier, b. zavala, l. audin, jr. grasso, and e. chaljub  
 Landslides triggered by the Pisco earthquake (Peru, Mw8.0, 2007) : automatic detection of landslides in SPOT5 panchromatic images, and analysis of the distribution patterns.
- XY278 EGU2012-5698  
**M. Micu**, D. Balteanu, M. Jurchescu, V. Chendes, M. Sima, and V. Zumpano  
 Landslide susceptibility assessment in the Southern part of Vrancea-Buzau Seismic Region
- XY279 EGU2012-8725  
 N. Berni, G. Fanelli, F. Ponziani, **D. Salciarini**, M. Stelluti, and C. Tamagnini  
 Forecasting earthquake-induced landslides at the territorial scale by means of PBEE approaches
- XY280 EGU2012-10241  
**G. Zoppe**<sup>\*</sup>, G. Costa, G. Marcato, and E. Forte  
 Geophysic data interpretation of Passo della Morte landslide: Eastern Italian Alps

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**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<sup>\*</sup>  
 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 Tabanli 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?<sup>\*</sup>  
 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

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**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. Zahradník  
 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

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**NH7.3/AS4.3/BG2.25/ESSI1.8/NP4.6/SSS5.24 – Spatial and temporal patterns of wildfires: models, theory, and reality (co-organized) – Orals**

Convener: M.G. Pereira | Co-Conveners: R. Trigo, A. Camia, M. Penning de Vries, Dr Clarisse, L Boschetti

**Room: D**

Chairperson: n.n.

- 08:30–08:45 EGU2012-1162  
**C. D. Vega Orozco**, M. Kanevski, J. Golay, M. Tonini, and M. Conedera  
 Multifractal analysis of forest fires in complex regions
- 08:45–09:00 EGU2012-2092  
**M. Kanevski**, A. Champendal, C. Vega Orozco, M. Tonini, and M. Conedera  
 A new concept of wildland-urban interface based on city clustering algorithm
- 09:00–09:15 EGU2012-6519  
 T. Penman, **R. Bradstock**, G. Caccamo, and O. Price  
 Developing a probabilistic fire risk model and its application to fire danger systems
- 09:15–09:30 EGU2012-11497  
**D. Oom**, I. Bistinas, A. C. L. Sa, and J.M.C. Pereira  
 Continental spatial non-stationarity of fire-human relationship using GWR
- 09:30–09:45 EGU2012-13822  
**M. Long**, A. Ganteaume, M. Jappiot, G. Andrienko, and N. Andrienko  
 Analysis of fire causes spatial and temporal distribution in France
- 09:45–10:00 EGU2012-12008  
**Y. Zhang**, D. Obrist, B. Zielinska, and A. Gerler  
 Emissions of carbon species, organic polar compounds, potassium, and mercury from prescribed burning activities

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**COFFEE BREAK**

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Chairperson: n.n.

- 10:30–10:45 EGU2012-3335  
**A. Bastos**, C. M. Gouveia, R. M. Trigo, and C. C. DaCamara  
 Vegetation recovery assessment following large wildfires in the Mediterranean Basin
- 10:45–11:00 EGU2012-13785  
**T. Brown**, C. Kolden, and J. Abatzoglou  
 Assessing fuels treatments in the context of climate change
- 11:00–11:15 EGU2012-12648  
**T. Calheiros**, M.G. Pereira, T.J. Calado, C.C. Dacamara, and J.G. Pinto  
 Potential effects of regional climate change on rural fires over Europe
- 11:15–11:30 EGU2012-3852  
**R. Bradstock**, M. Boer, T. Penman, and O. Price  
 Divergent responses of fire to recent climate change: evidence from bio-regional patterns across south-eastern Australia
- 11:30–11:45 EGU2012-1967  
**D. Cane**, C. Wastl, S. Barbarino, L. Renier, C. Schunk, and A. Menzel  
 Evaluation of fire potential in the climatic scenario: an Alpine area perspective

11:45–12:00 EGU2012-7340

**A. Shvidenko** and D. Schepaschenko

Wildfire in Northern Eurasia and climate change

Chairperson: n.n.

15:30–15:45 EGU2012-3173

**I. Csiszar**, W. Schroeder, L. Giglio, E. Ellicott, and C.O. Justice

A comparison of remote sensing of active fires from MODIS and VIIRS

15:45–16:00 EGU2012-11107

**G. Ruecker**, E. Lorenz, A.A. Hoffmann, D. Oertel, and J. Tiemann

A mission concept for a dedicated Fire Monitoring Constellation of small satellites based on the BIRD heritage

16:00–16:15 EGU2012-12485

**C. C. DaCamara**, R. Libonati, A. Barros, G. Gaspar, and T. J. Calado

Using MODIS imagery to assign dates to maps of burn scars in Portugal

16:15–16:30 EGU2012-8366

**r. Paugam**, m. Wooster, s. Freitas, s. Gonzi, and p. Palmer

Parameterization of Fire Injection Height in Large Scale Transport Model

16:30–16:45 EGU2012-9558

**E. Athanasopoulou**, C. Giannakopoulos, H. Vogel, D. Rieger, C. Knote, M. Hatzaki, B. Vogel, and A. Karali

Fire risk and air pollution assessment during the 2007 wildfire events in Greece using the COSMO-ART atmospheric model

16:45–17:00 EGU2012-10521

**J.W. Kaiser**, A. Benedetti, R. Detmers, A. Heil, J.-J. Morcrette, M.G. Schultz, G.R. van der Werf, M.J. Wooster, and W. Xu

Assimilation of FRP Observations for Global Fire Emission Estimation in MACC-II

**NH7.3/AS4.3/BG2.25/ESSI1.8/NP4.6/SSS5.24 – Spatial and temporal patterns of wildfires: models, theory, and reality (co-organized) – Posters**

Convener: M.G. Pereira | Co-Conveners: R. Trigo, A. Camia, M. Penning de Vries, Dr Clarisse, L Boschetti

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY281 EGU2012-14135

N.J. Gonçalves, **M.G. Pereira**, P. Fernandes, C. Loureiro, C.C. DaCamara, and M.T. Calado

Landscape-structure metrics influence on fire size distribution in Portugal

XY282 EGU2012-12208

R. Costa, **M.G. Pereira**, L. Caramelo, C. Vega Orozco, and M. Kanevski

Spatio-temporal clustering of wildfires in Portugal

XY283 EGU2012-779

**E. Íñiguez-Remón**, D. Badía-Villas, and P. Ibarra-Benlloch

Spatial and temporal changes in land cover and its relation to the wildfire risk in Montes de Zuera (NE-Spain)

XY284 EGU2012-12737

**Panagiota Papakosta**, Florian Klein, Simon König, Stefan Peters, and Daniel Straub

Linking spatio-temporal data to the Fire Weather Index to estimate the probability of wildfire in the Mediterranean

XY285 EGU2012-11226

**B. Arca**, G. Pellizzaro, A. Canu, G.V. Pintus, R. Ferrara, and P. Duce

An analysis on Wildland Urban Interface in North Sardinia

XY286 EGU2012-9852

**C.M. Gouveia**, A. Bastos, R.M. Trigo, and C. DaCamara

Drought impact on vegetation in pre and post fire events in Iberian Peninsula

XY287 EGU2012-12172

**V. Bacciu**, G. Pellizzaro, P. Santoni, B. Arca, A. Ventura, M. Salis, T. Barboni, V. Leroy, D. Cancellieri, E. Leoni, L. Ferrat, Y. Perez, P. Duce, and D. Spano

Fuel type characterization and potential fire behavior estimation in Sardinia and Corsica islands

XY288 EGU2012-2419

**D. Cane**, A. Arpacı, M. Conedera, E. Valese, S. Barbarino, H. Vacik, and G.B. Pezzatti

Suitability of different Fire Weather Indices for alpine conditions: an extensive evaluation with high resolution data

- XY289 EGU2012-8422  
**C. Schunk**, C. Wastl, M. Leuchner, C. Schuster, and A. Menzel  
Forest fire danger indices under extreme meteorological conditions in a complex topography - the situation in the Bavarian Alps in autumn 2011
- XY290 EGU2012-13793  
**K. Koster**, J Pumpanen, and F Berninger  
Recovery of soil carbon and nitrogen pools following forest fires in eastern Lapland, Finland.
- XY291 EGU2012-10307  
**A. Ganteaume**, M. Jappiot, and C. Lampin  
Assessing and ranking the flammability of some ornamental plant species to select firewise plants for landscaping in WUI (SE France).
- XY292 EGU2012-597  
**E. Shvetsov**  
The Correlation Analysis of Fire Energy Release and Weather Conditions
- XY293 EGU2012-13648  
**M. Amraoui**, C.C. DaCamara, and S.L. Ermida  
An algorithm to detect fire activity using Meteosat: fine tuning and quality assesment
- XY294 EGU2012-3196  
**I. Csizsar**, C.O. Justice, E. Prins, W. Schroeder, C. Schmidt, and L. Giglio  
Fire Monitoring from the New Generation of US Polar and Geostationary Satellites
- XY295 EGU2012-11870  
**G. Mazzeo**, C. Filizzola, I. Covello, F. Marchese, R. Corrado, T. Lacava, R. Paciello, N. Pergola, and V. Tramutoli  
Performance assessment of a Robust Satellite Techniques (RST-FIRES) for forest fire detection and monitoring
- XY296 EGU2012-1704  
**S. Veraverbeke** and S. Hook  
Evaluating spectral indices and spectral mixture analysis for assessing fire severity and adjusting burning efficiency using Landsat data
- XY297 EGU2012-1705  
**S. Veraverbeke**, S. Hook, and G. Hulley  
A single date SWIR-MIR index (SMI) for rapid fire severity assessments
- XY298 EGU2012-10622  
**T. Thonat**, C. Crevoisier, A. Chédin, R. Armante, L. Crépeau, and N. A. Scott  
Study of biomass burning emissions with Aqua/AIRS and MetOp-A/IASI
- XY299 EGU2012-7916  
C. Kontoes, I. Papoutsis, D. Michail, Th. Herekakis, M. Koubarakis, K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, M. Sioutis, G. Garbis, S. Vassos, **I. Keramitsoglou**, M. Kersten, S. Manegold, and H. Pirk  
Wildfire monitoring via the integration of remote sensing with innovative information technologies
- XY300 EGU2012-8868  
**I. Berdufi**, O. Jaupaj, M. Marku, M. Deda, E. Fiori, M. D'Andrea, G. Biondi, P. Fioruci, M. Massabò, P. Zorba, and M. Gjonaj  
Bulletin of Forest Fire risk in Albania- The experience of the Albania National Centre for forecast and Monitoring of Natural Risks
- XY301 EGU2012-525  
**V. Rakitin**, A. Safronov, L. Yurganov, E. Fokeeva, E. Grechko, and A. Dzhola  
CO atmospheric pollution of Moscow area during wild fires in summer 2010, estimates of emissions and their uncertainties
- XY302 EGU2012-1254  
**N. Ursino** and M.C. Rulli  
Hydrological minimal model for fire regime assessment in Mediterranean ecosystem
- XY303 EGU2012-7298  
**O. Stein**, J.W. Kaiser, A. Heil, and M.G. Schultz  
Model sensitivity to global fire emissions: GFED versus GFAS
- XY304 EGU2012-7945  
**M.J.M. Penning de Vries**, O.N.E. Tuinder, T. Wagner, and M. Fromm  
Calculation of smoke plume mass from passive UV satellite measurements by GOME-2 polarization measurement devices
- XY305 EGU2012-10052  
**M. Salis**, B. Arca, A. Ager, C. Fois, V. Bacciu, P. Duce, and D. Spano  
Extreme Wildfire Spread and Behaviour: Case Studies from North Sardinia, Italy
- XY306 EGU2012-6855  
**C.I. Mason**, G.J. Sheridan, H.G. Smith, O. Jones, D. Chong, and K. Tolhurst  
FIRESTORM: Modelling the water quality risk of wildfire.

- XY307 EGU2012-13343  
**M. D'Andrea**, P. Fiorucci, G. Biondi, and D. Negro  
 PROPAGATOR: a synchronous stochastic wildfire propagation model with distributed computation engine
- XY308 EGU2012-11419  
**J. Mandel**, A. K. Kochanski, V. Y. Kondratenko, and J. D. Beezley  
 Coupled atmosphere-fire modeling with data assimilation for 2007 Santa Ana fires
- XY309 EGU2012-4307  
**V. Khan**  
 Long-range forecasting of forest fire danger index based on PLAV model outputs

**NH7.5 – Fire information needs for global modelling of fire effects – Posters**

Convener: E. Chuvieco

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Emilio Chuvieco

- XY310 EGU2012-345  
**K. P. Guenther**, T. Krauss, R. Richter, R. Mueller, B. Fichtelmann, E. Borg, M. Bachmann, M. Wurm, V. Gsteiger, and A. Mueller  
 Operational pre-processing of MERIS, (A)ATSR and VEGETATION data for the ESA-CCI project "Fire-Disturbance"
- XY311 EGU2012-1364  
**E. Chuvieco**  
 Proposal for a research agenda to meet global fire information needs
- XY312 EGU2012-2492  
**P. Oliva**, T. Calado, and F. Gonzalez  
 MERIS burned area algorithm in the framework of the ESA Fire CCI Project
- XY313 EGU2012-3427  
 A. Bradley, **K. Tansey**, and E. Chuvieco  
 Multi-sensor merging techniques for improving burned area estimates
- XY314 EGU2012-4295  
**F. Mouillot**, J. Ruffault, and F. Moebius  
 Modelling carbon emissions in mediterranean fire-prone ecosystems: errors in Translating across scales from global to landscape
- XY315 EGU2012-4451  
 C. Yue, P. Cadule, P. Ciais, N. Viovy, V. Bellassen, and **S. Luyssaert**  
 Simulation of boreal forest carbon dynamics after stand-replacing fire disturbance: validation and model evaluation of a global vegetation model
- XY316 EGU2012-5888  
**L.G. Gutiérrez Caballero**, M. Fernandez Cortizo, J. Pacios Martinez, and F. Ibañez Casado  
 System Design for Data Processing in the Very Long Term
- XY317 EGU2012-9452  
**F. Oehler**, S. Oliveira, J. I. Barredo, A. Camia, J. San Miguel Ayanz, D. Pettenella, and R. Mavsar  
 Assessing European wild fire vulnerability
- XY318 EGU2012-10598  
**J. M.C. Pereira**, B.W.C. Mota, M.L. Campagnolo, and R. Killick  
 An algorithm for satellite-based burned area mapping using change point detection and Markov random fields
- XY319 EGU2012-12708  
**S. Hantson**, M. Padilla, R. Cardoso, D. Corti, and E. Chuvieco  
 A global comparison between MODIS hotspot and high resolution burned area data

**NH8.6 – Sinkholes: from susceptibility to risk evaluation and mapping – Orals**

Convener: M. Parise | Co-Conveners: G. G.R. IOVINE, S. Nisio

**Room: 1**

Chairperson: Mario Parise

- 15:30–15:45 EGU2012-13033  
**S.-E. Lauritzen**, Ø. Hammer, W Wheeler, T. Redfield, M Blanco, L Rosales Lagarde, and B Jamtveit  
 Morphology and mechanics of large collapses: Sotano de las Golondrinas, Mexico
- 15:45–16:00 EGU2012-3360  
**D Closson**, N Abou Karaki, N Milisavljevic, P Pasquali, F Holecz, and A Bouaraba  
 Hydrogeological perturbations along the Dead Sea coast revealed by submarine sinkholes, Lisan and Ghor al Haditha, Jordan

- 16:00–16:15 EGU2012-2407  
**G. Kovacic** and N. Ravbar  
 Destruction of dolines: the examples from Slovene karst
- 16:15–16:30 EGU2012-5226  
**J. Vouillamoz**, P.-Y. Jeannin, L. Kopp, and R. Chantry  
 Inception horizon concept as a basis for sinkhole hazard mapping
- 16:30–16:45 EGU2012-6624  
**M. Trappe**, T. Heckmann, S. Mehlhorn, K. Umstädtter, H. Miedaner, and M. Becht  
 Cover-collapse sinkholes of the Franconian Alb / Germany
- 16:45–17:00 EGU2012-3164  
**C.M. Krawczyk**, U. Polom, and T. Dahm  
 Imaging of urban sinkhole structures - combination of P-wave and shear-wave reflection seismic profiling in the metropolitan region of Hamburg

**NH8.6 – Sinkholes: from susceptibility to risk evaluation and mapping – Posters**

Convener: M. Parise | Co-Conveners: G. G.R. IOVINE, S. Nisio

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Mario Parise

- XY320 EGU2012-340  
**M. Pepe** and M. Parise  
 Structural control in sinkhole development and speleogenesis: a case study from the High Murge karst landscape (Apulia, Italy)
- XY321 EGU2012-6879  
**G. Ferrini**, A. Moretti, C. De Rose, E. Stagnini, and M. Serafini  
 Relationships between sinkholes areal distribution and main tectonic alignments in Abruzzo (Central Italy)
- XY322 EGU2012-12559  
**D. Mucke**  
 Genetic variety of sinkholes and their reconnaissance and classification for the derivation of hazards and to forecast of collapses
- XY323 EGU2012-7132  
**M. Garasic**  
 Crveno jezero - the biggest sinkhole in Dinaric Karst (Croatia)
- XY324 EGU2012-9698  
**C. Romey**, P. Rochette, C. Vella, B. Arfib, C. Champollion, P. Dussouillez, D. Hermitte, and J-C. Parisot  
 A Quaternary paleolake in a sinkhole at Cassis (SE France) : a geomorphology and geophysical study
- XY325 EGU2012-4066  
**A. Basso**, E. Bruno, M. Parise, and M. Pepe  
 Morphometric analysis of sinkholes in a karst coastal area
- XY326 EGU2012-11240  
 F. Canora, F. Caporale, A. D'Angella, D. Fidelibus, F. Gutierrez, R. Pellicani, and **G. Spilotro**  
 Sinkhole hazard assessment in Lesina Marina area (Apulia, Italy)
- XY327 EGU2012-2789  
 G. G.R. Iovine, **M. Parise**, T. Caloiero, G. Lanza, and S. Suriano  
 The Sinkholes at "Piano dell'Acqua"
- XY328 EGU2012-7774  
**S. Margiotta**, S. Negri, and F. Mazzone  
 High resolution integrated geological and geophysical surveys for the detection of cavities in coastal karst areas
- XY329 EGU2012-12467  
**J. Rey**, J. Martínez, C. Hidalgo, and J. Dueñas  
 Application of electrical resistivity tomography techniques for mapping man-made sinkholes
- XY330 EGU2012-7693  
 S. Margiotta, S. Negri, and **M. Parise**  
 Integration of geological, geomorphological and geophysical methods in the study of sinkholes
- XY331 EGU2012-2952  
**P. Nicolet**, M. Choffet, M. Jaboyedoff, B. Lauraux, J.-L. Lance, and E. Champod  
 Sinkhole risk analysis from the point of view of a public building insurance, the case of Vaud County (Switzerland)
- XY332 EGU2012-7642  
**P. Lollino**, S. Margiotta, and M. Parise  
 Geological and numerical modelling of sinkholes induced by instability of man-made underground caves

- XY333 EGU2012-1414  
**D. Flum** and A. Roduner  
 New method for bridging sinkholes using flexible steel components as reinforcement
- XY334 EGU2012-6038  
**F. La Vigna**, P. Teoli, R. Mazza, G. Leoni, and G. Capelli  
 Regional sinkhole susceptibility maps: The Latium Region case (central Italy)
- XY335 EGU2012-6547  
**A. Mureddu** and A.S. Corda  
 Urban areas of Carbonia (Sardinia, Italy): anthropogenic and natural sinkhole
- XY336 EGU2012-4733  
 M. Bonamini, C. Di Maggio, P. Lollino, G. Madonia, M. Parise, and **M. Vattano**  
 Anthropogenic sinkholes in the Marsala area (western Sicily) linked to underground quarries

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**SSS5.20 – Understanding Fire Phenomena in the Earth System Using Interdisciplinary Approaches (co-listed) – Orals**

Convener: C. M. Belcher | Co-Conveners: G. Rein, N. Tessler, C. Chafer, A. C. Scott

**Room: 22**

Chairperson: Claire M. Belcher, Guillermo Rein, Andrew C. Scott

- 15:30–15:45 EGU2012-5864  
**E. Planas** and E. Pastor  
 Fuel, wildfire danger and behaviour modelling: state of the art and medium-term prospects
- 15:45–16:00 EGU2012-9757  
**S. Turquety**, A. Anav, L. Menut, P. Drobinski, P. Messina, B. Bessagnet, and S. Stromatas  
 Fire emissions in the Euro-Mediterranean area: variability and impact on air quality
- 16:00–16:15 EGU2012-129  
**G. Rein**  
 Smouldering Fires in the Earth System
- 16:15–16:30 EGU2012-8118  
**C. M. Belcher**  
 Experimental Approaches to Understanding Ancient Ecosystems Flammability
- 16:30–16:45 EGU2012-1028  
**V.A Hudspith**, A.C Scott, and M.E Collinson  
 Temporal variability in charcoal distribution in Permian coal: Implications for interpreting palaeowildfire history
- 16:45–17:00 EGU2012-12930  
**T. M. Lenton**  
 Fires and the rise and regulation of atmospheric oxygen

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**SSS5.20 – Understanding Fire Phenomena in the Earth System Using Interdisciplinary Approaches (co-listed) – Posters**

Convener: C. M. Belcher | Co-Conveners: G. Rein, N. Tessler, C. Chafer, A. C. Scott

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Claire M. Belcher, Guillermo Rein, Andrew C. Scott

- XY583 EGU2012-14132  
**R. Hadden** and G Rein  
 Laboratory study of smouldering peat fires: dynamics and emissions
- XY584 EGU2012-14130  
**E Pastor**, D Tarragó, and E Planas  
 New tendencies in wildland fire simulation for understanding fire phenomena: An overview of the WFDS system capabilities in Mediterranean ecosystems
- XY585 EGU2012-12813  
 J.C. Thomas, **A. Simeoni**, F. Colella, and J.L. Torero  
 Piloted Ignition Regimes of Wildland Fuel Beds
- XY586 EGU2012-5906  
**S. Pueyo**  
 Complex systems approach to fire dynamics and climate change impacts
- XY587 EGU2012-7762  
**S. Gonzi**, P. I. Palmer, L. Feng, R. Paugam, and M. Wooster  
 Using fire radiative power (FRP) observations to describe the vertical transport of wildfire emissions: impacts on atmospheric pollutant transport and inferred flux estimates

XY588	EGU2012-3332 <b>A. Bastos</b> , C. M. Gouveia, C. C. DaCamara, and R. M. Trigo Post-fire vegetation behaviour in large burnt scars from 2005 fire season in Spain
XY589	EGU2012-12537 <b>PL Ascough</b> , E Tilston, and M Garnett Assessing the mineralisation of charcoal carbon in temperate soils
XY590	EGU2012-2296 <b>J. Heath</b> , C. Chafer, T. Bishop, and F. Van Ogtrop Ten years post-wildfire recovery and health of Eucalypt forests and woodland in the Sydney Basin, Australia, using remotely sensed vegetation indices
XY591	EGU2012-3778 <b>E.U. Hobley</b> , G.R. Willgoose, S Frisia, and G Jacobsen Chemical changes in soil charcoal of differing ages inferred from DRIFT spectra
XY592	EGU2012-4618 <b>A. C. Scott</b> , M. Hardiman, N. Pinter, and R.S Anderson Charcoal as evidence of fire regimes in the Pleistocene of the California Islands
XY593	EGU2012-11366 B.I. Magi, <b>S. Rabin</b> , E. Sheviakova, and S. Pacala A data-based method to determine the regional impact of agriculture on fire seasonality
XY594	EGU2012-12152 <b>A. Simeoni</b> Experimental understanding of wildland fires
XY595	EGU2012-13092 <b>A. C. Scott</b> and I.J. Glasspool The uses of charcoal to reconstruct fire history in deep time.

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**SSS6.2 – Eco-engineering mitigations against natural hazards: Biological and Geophysical contributions to sustainable soil bioengineering in a changing world (co-listed) – Orals**

Convener: H. P. Rauch | Co-Conveners: F. Rey, F. Preti, F. Graf, F. Ozcep

**Room: 3**

Chairperson: F. Graf, F. Ozcep

15:30–15:45	EGU2012-14122 <b>H.B. Msita</b> , D.N. Kimaro, P.W. Mtakwa, B.M. Msanya, S. Dondyene, J. Poesen, and J. Deckers Effectiveness Of Miraba an Indigenous Soil and Water Conservation Measures On Reducing Runoff And Soil Loss In Arable Land Of Western Usambara Mountains
15:45–16:00	EGU2012-8324 D Ilangovan and <b>L Fernandes</b> Simple and Effective Undisturbed Core sampling in Mudflats
16:00–16:15	EGU2012-1864 <b>A. Erktan</b> , B. Pianu, P. Lucisine, and F. Rey Role of the morphology of Salix tillers barriers in marly sediment trapping efficiency in gully floor under ecological restoration: a flume experiment
16:15–16:30	EGU2012-1422 <b>J. Eisenmann</b> Wave basin model tests of technical-biological bank protection
16:30–16:45	EGU2012-14175 <b>M. Schwarz</b> Influence of root and root channels distributions on the lateral subsurface flow of homogeneous soils
16:45–17:00	EGU2012-11888 <b>W. Lammeranner</b> Root Development of Salix purpurea L. on Heavily Compacted Levee Soils

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**SSS6.2 – Eco-engineering mitigations against natural hazards: Biological and Geophysical contributions to sustainable soil bioengineering in a changing world (co-listed) – Posters**

Convener: H. P. Rauch | Co-Conveners: F. Rey, F. Preti, F. Graf, F. Ozcep

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: F. Preti, Freddy Rey

XY596	EGU2012-10799 <b>M. von der Thannen</b> , C. Weisseiner, H.P. Rauch, N. Tilch, and B. Kohl The Influence of vegetation on processes of shallow soil erosion in subalpine catchment areas in Western Austria
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- XY597 EGU2012-1062  
**F. Ozcep**, S. Karabulut, and T. Ozcep  
 On comparisons between Shear Wave Velocities and Soil-Water Content
- XY598 EGU2012-1067  
**S. Karabulut**, N. ?mre, S. Dalgic, and F. Ozcep  
 Geotechnical Investigation of Landslides in Gurpinar Region
- XY599 EGU2012-4394  
**Ch. Rickli**, S. Burger, H. Herranhof, T. Michel, A. Moser, and A. Tröger  
 A new inclinable shear apparatus for large sample testing: design and perspectives
- XY600 EGU2012-4456  
**F. Graf** and Ch. Gromke  
 Wind erosion in the alpine zone - a case study at Latschuelfurgga (Davos, Switzerland)
- XY601 EGU2012-4902  
**H.-H. Hsu**  
 A Preliminary Design of a Calibration Chamber for Evaluating the Stability of Unsaturated Soil Slope
- XY602 EGU2012-6581  
 P. Borja, **V. Vanacker**, D. Alvarado, and G. Govers  
 Restoration of badlands through applying bio-engineering techniques in active gully systems: Evidence from the Ecuadorian Andes
- XY603 EGU2012-6684  
**K.-L. Wang**, C.-C. Ho, J.-Y. Lin, and H.-S. Tsao  
 Sediment Transport and Control of Keelung River - From Watershed Management Aspect
- XY604 EGU2012-6917  
**F. Ali**, N. Osman, R. Hashim, and A. Khalilnejad  
 Numerical and Experimental Investigation on Root Anchorage
- XY605 EGU2012-7879  
**G. Holzapfel**, P. Weihs, L. Stockreiter, and E. Hoffmann  
 Determination of the Annual Shading Potential of *Salix Purpurea* Coppice using Hemispherical Photographs
- XY606 EGU2012-9616  
**M. Obrijetan**, F. Florineth, and H.P. Rauch  
 Erosion Control and Recultivation Measures at a Headrace Channel of a Hydroelectric Power Plant using Different Combined Soil Bioengineering Techniques
- XY607 EGU2012-10739  
**S. Tron**, A. Dani, F. Laio, F. Preti, and L. Ridolfi  
 Root profile modeling as a link between ecohydrology and slope stability
- XY608 EGU2012-11431  
**R. Matu?a**  
 Hydro-geophysics in highway monitoring - new approach to jointing multimodal MASW and refraction surveying.

## Tuesday, 24 April

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### **GI2.5 – Preparatory activities for the scientific utilisation of the GMES Sentinel satellites constellations including Cal/Val activities of their optical instruments. (co-listed) – Posters**

Convener: M. Berger | Co-Conveners: J. Aschbacher, H. Mortimer, B. Bojkov

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Hugh Mortimer, Michael Berger, Josef Aschbacher

- A97 EGU2012-8674  
**A. H. Mortimer** and D. Smith  
 The Spectral Response Recharacterisation of the Advanced Along Track Scanning Radiometer (AATSR)  
 Using a High Resolution Fourier Transform Spectrometer.
- A98 EGU2012-11166  
**K. Y. Choi** and E. J. Milton  
 Significance of Radiometric Calibration Accuracy in Multi-Scale Validation between Ground, Airborne and Spaceborne Platforms
- A99 EGU2012-589  
**Y.J. Li**, Y. Xue, C. Li, and L.K. Yang  
 LABITS: An Algorithm for Land Aerosol and Bidirectional Reflectance Inversion by Time Series Technique and its Applications on NOAA AVHRR Data
- A100 EGU2012-1662  
**H. Nett**, P. Ingmann, and K. McMullan  
 ESA's Sentinel-5 Precursor Mission: a GMES Mission for Global Observations of Atmospheric Composition
- A101 EGU2012-2335  
**F. Olschewski**, C. Rolf, P. Steffens, A. Kleinert, C. Piesch, A. Ebersoldt, C. Monte, B. Gutschwager, J. Hollandt, P. Preusse, F. Friedl-Vallon, and R. Koppmann  
 Large-Area Radiation Sources for the In-flight Calibration of the GLORIA Interferometer
- A102 EGU2012-4156  
**C.-R. Li**, L.-L. Tang, H.-B. Niu, X.-N. Zhou, Z.-Y. Liu, L.-L. Ma, and Y.-S. Zhou  
 Potential of Sentinel Satellites for Schistosomiasis Monitoring
- A103 EGU2012-4194  
**V.R. Gavrilov**, A. A. Katysheva, B.B. Khlevnov, B. E. Lisyansky, S.P. Morozova, A.S. Panfilov, V.I. Sapritsky, and M.V. Solodilov  
 Uncertainty evaluation of optical instruments radiometric calibration using integrating sphere
- A104 EGU2012-5038  
**J. Verrelst**, J.P. Rivera, L. Alonso, L. Guanter, J. Delegido, and J. Moreno  
 Evaluating Machine learning regression algorithms for operational retrieval of biophysical parameters: opportunities for Sentinel-2 and -3
- A105 EGU2012-6067  
**K. Dabrowska-Zielinska**, M. Budzynska, M. Tomaszewska, M. Bartold, and K. Turlej  
 ENVISAT.MERIS spectral bands and ENVISAT ASAR - discussion on applications of Sentinel 1 and 2 for agriculture in Poland.
- A106 EGU2012-6137  
**R. Roebeling**, J. Schulz, T. Hewison, and B. Theodore  
 Inter-calibration of METEOSAT IR and WV channels using HIRS
- A107 EGU2012-7265  
**S.C. Wagner**, T. Hewison, and R.A. Roebeling  
 A Review of the Strategy for the Meteosat Solar Band Calibration
- A108 EGU2012-7376  
**S.C. Wagner** and T. Hewison  
 Implementation of an Inter-Calibration Method between Meteosat SEVIRI and MODIS Solar Bands using Deep Convective Cloud Targets
- A109 EGU2012-7439  
**A. Regan**, P. Silvestrin, D. Fernandez, N. Leveque, and S. Eves  
 Earth Observation Convoy: Synergetic Observations with Satellites Flying in Formation with European Operational Missions - Possibilities for New Science
- A110 EGU2012-9317  
**H. Rebhan**, C. Donlon, B. Berruti, A. Boungiorno, P. Femenias, P. Goryl, U. Klein, B. Seitz, J. Nieke, and C. Mavrocordatos  
 Sentinel-3 Mission Overview and Status
- A111 EGU2012-10160  
**J. Balodis**, I. Janpaule, A. Rubans, A. Zarinjsh, M. Abele, A. Ubelis, and M. Cekule  
 Eventual Participation in GMES of Institute of Geodesy and Geoinformation

- A112 EGU2012-11042  
**D. Odermatt**, J. Pitarch, J. Carpenter, F. Pomati, M. Kawka, A. Wuest, and M. Schaepman  
 Matching stratified plankton blooms with satellite data estimated chl-a
- A113 EGU2012-11278  
**S. Salvi**, F. Sarti, A. Mouratidis, A. Coletta, and S. Zoffoli  
 InSAR monitoring for seismic risk management: the Sentinel 1 contribution
- A114 EGU2012-11523  
**C. Lamarche**, M. Tomaszewska, K. Dabrowska-Zielinska, and P. Defourny  
 Object-based automatic change detection in forested areas of Poland between 2000 and 2006 using NDVI times series at moderate resolution.
- A115 EGU2012-12740  
**P. Féminias**, H. Rebhan, C. Donlon, A. Buongiorno, and C. Mavrocordatos  
 Sentinel-3 Surface Topography Mission: Payload, Data Products and Cal/Val Preparation
- A116 EGU2012-13224  
**H.C. Winsemius**, G.R. Brakenridge, R. Westerhoff, J. Huizinga, N. Villars, and C. Bishop  
 Flood mapping by combining the strengths of optical and Sentinel active radar remote sensing

**HS2.4 – Hydrology and remote sensing for monitoring, modelling and improve the management of urban and rural water systems (co-listed) – Orals**

Convener: G. Di Baldassarre | Co-Conveners: J. Neal, M. Maglionico, G. J.-P. Schumann, F Pappenberger, P. Matgen

**Room: 34**

Chairperson: Giuliano Di Baldassarre, Jeff Neal

- 13:30–13:45 EGU2012-1974  
**D.C. Mason**, G.J-P. Schumann, J.C. Neal, J. Garcia-Pintado, and P.D. Bates  
 Automatic selection of flood water levels from high resolution Synthetic Aperture Radar images for assimilation into hydraulic models
- 13:45–14:00 EGU2012-8474  
**T. Persson** and I. Westerberg  
 Integrated monitoring and modelling for flood management in an urban Swedish catchment
- 14:00–14:15 EGU2012-11254  
**L. Giustarini**, R. Hostache, P. Matgen, G. Schumann, P.D. Bates, and D.C. Mason  
 A change detection approach to flood mapping in urban areas using very high-resolution microwave remote sensing imagery
- 14:15–14:30 EGU2012-1267  
**F. Zhou** and G. Chen  
 Adaptive moving finite volume scheme for flood inundation modeling under dry and complex topography
- 14:30–14:45 EGU2012-12579  
**A. Palla**, F. Franzia, I. Gnecco, G.T. Aronica, and L.G. Lanza  
 Pluvial flooding and efficiency of urban drainage
- 14:45–15:00 EGU2012-5765  
**M.H. Spekkers**, J.A.E. ten Veldhuis, M. Kok, and F.H.L.R. Clemens  
 Relationships between rainfall data and water-related damage data for a case study in the Netherlands
- Chairperson: Patrick Matgen, Jeff Neal
- 15:30–15:45 EGU2012-6699  
**A. Asadzadeh Jarihani** and J.N. Callow  
 Assessing Remote Topographic Datasets: Comparing ASTER GDEM, SRTM and the Role of Icesat/GLAS Transect Data with Survey Control Points for Floodplain Modelling
- 15:45–16:00 EGU2012-8048  
**D. Schaffrath**, S.H. Vetter, and C. Bernhofer  
 Modelling spatial evapotranspiration with BROOK90, MODIS surface temperature and leaf area index for managed grasslands in Inner Mongolia, China
- 16:00–16:15 EGU2012-2299  
**L. Brocca**, F. Melone, T. Moramarco, G. Zucco, and W. Wagner  
 Soil moisture assimilation into rainfall-runoff modelling: which is the impact of the model structure on runoff predictions?
- 16:15–16:30 EGU2012-9251  
**P. Knoefel**, U. Falk, C. Conrad, and S. Dech  
 Comparative analysis and validation of remotely sensed estimation of actual evapotranspiration in cotton ecosystems of Middle Asia
- 16:30–16:45 EGU2012-12514  
**C. Corbari**, G. Ravazzani, M. Mancini, J. Li, and B. Su  
 Internal calibration of a distributed hydrological model using satellite data of land surface temperature similarly to ground discharge measurements

16:45–17:00 EGU2012-12618

**T. Skaugen** and F. Randen

Updating the snow reservoir in hydrological models from satellite derived snow covered area

**HS2.4 – Hydrology and remote sensing for monitoring, modelling and improve the management of urban and rural water systems (co-listed) – Posters**

Convener: G. Di Baldassarre | Co-Conveners: J. Neal, M. Maglionico, G. J.-P. Schumann, F Pappenberger, P. Matgen

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Marco Maglionico, Giuliano Di Baldassarre

- A173 EGU2012-33  
**E.A. Tzanou and G.S. Vergos**  
Determination of the hydrological properties of a small-scale catchment area in Northern Greece from ASTER and SRTM DEMs and accuracy assessment with a local DTM
- A174 EGU2012-483  
**X.H. Xiang**, X.L. Wu, and C.H. Wang  
River-Network Numerical Model Base on Flux Difference Split Method
- A175 EGU2012-1061  
**R. Cherif**, V. Simonneaux, V. Rivalland, S. Gascoin, M. Le Page, and E. Ceschia  
Distributed modelling of evapotranspiration using high-resolution NDVI maps over cropland in South-West France
- A176 EGU2012-2254  
**O. Hoes**, G. de Haan, G. Stelling, E. van Leeuwen, A. van Dam, O. Pleumeekers, and W. Schuurmans  
Fast 3D stereo flood simulations in urban areas
- A177 EGU2012-2345  
S. Segni Abawallo, **L. Brandimarte**, and M. Maglionico  
Urban flood management: on the optimal design of off-line detention basins
- A178 EGU2012-3914  
Y.J. Lin, K.C. Ma, Y.C. Tan, T.J. Chang, and **J.S. Lai**  
Koaping River Flood Simulation due to Climate Change
- A179 EGU2012-4016  
**S. A. Arévalo** and J. Schmidt  
Modelling muddy floods in urban areas
- A180 EGU2012-4158  
**M. Brilly**, S. Rusjan, and A. Vidmar  
Flood Problematic of the City of Ljubljana and the September 2010 Flood
- A181 EGU2012-6712  
**M. Trudel**, R. Leconte, and C. Paniconi  
Assimilation of streamflow and soil moisture observations in a distributed physically-based hydrological model
- A182 EGU2012-7672  
**M. N. Papa**, F. Ciervo, y. Koussoube, G. Di Martino, A. Iodice, A. Natale, D. Riccio, G. Ruello, and I. Zinno  
Potential of remote sensing data for improving water resources management in semi-arid regions: a case study in Burkina Faso
- A183 EGU2012-8365  
**P. Bauer-Gottwein** and C.I.B. Michailovsky  
Radar altimetry assimilation in catchment-scale hydrological models
- A184 EGU2012-8884  
J. Jaros?aw, S. Szporak, B. Verbeiren, and **O. Batelaan**  
Coping with vegetation dynamics in low-land wetlands - Integration of RS derived interception into the rainfall-runoff model WetSpa
- A185 EGU2012-9081  
**A. Piliksere**, J. Se??ikovs, J. Virbulis, U. Bethers, P. Bethers, and A. Valainis  
Modeling urban flood risk territories for Riga city
- A186 EGU2012-9739  
**T. Törnros** and L. Menzel  
The Leaf Area Index as a function of precipitation within a hydrological model
- A187 EGU2012-10031  
**K. Yan**, G. Di Baldassarre, L. Giustarini, and D.P. Solomatine  
Flood Inundation Modelling Under Uncertainty Using Globally and Freely Available Remote Sensing Data
- A188 EGU2012-10392  
**T. Berezowski**, J. Chormanski, O. Batelaan, F. Canters, and T. Van de Voorde  
Quantifying land-cover proportions for urban runoff prediction. The advantage of distributed remote sensing techniques.

A189	EGU2012-10871 <b>M.M. Mukolwe</b> , G. Di Baldassarre, T.A. Bogaard, J-P. Malet, and D.P. Solomatine Probabilistic Flood Mapping and Visualization Issues: Application to the River Ubaye, Barcelonnette (France)
A190	EGU2012-12160 <b>V. Iacobellis</b> , A. Gioia, P. Milella, G. Satalino, A. Balenzano, and F. Mattia Inter-comparison of hydrological model simulations with dense time series of SAR-derived soil moisture maps
A191	EGU2012-12407 <b>E. Ridolfi</b> , K. Yan, L. Alfonso, G. Di Baldassarre, F. Napolitano, F. Russo, and P. D. Bates Optimization of floodplain monitoring sensors through an entropy approach
A192	EGU2012-12796 <b>A. Giangola-Murzyn</b> , A. Gires, J. Richard, I. Tchiguirinskaia, and D. Schertzer A multi module physically based model for the evaluation of the effect of the land use changes
A193	EGU2012-12980 <b>P. Kalicz</b> , M. Kucsara, Z. Gribovszki, M. Er?sz, and P. Csáfordi Monitoring and modeling of runoff from a natural and an urbanized part of a small stream catchment
A194	EGU2012-13110 <b>I.M. Hartanto</b> , S.J. van Andel, A.H. Lobbrecht, A. van Griensven, and D.P. Solomatine Integrating earth observation data into hydrological modeling and water management

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#### **HS5.9 – Hydrological, ecological, geomorphic and economic implications of Mountain Resort Development (co-listed) – Orals**

Convener: C. de Jong | Co-Conveners: B. Wemple

##### **Room: 39**

Chairperson: C. de Jong, B. Wemple

10:30–10:45	EGU2012-12589 <b>B. McGlynn</b> , K. Gardner, and L Marshall Quantifying watershed sensitivity to spatially variable N loading from mountain resort development
10:45–11:00	EGU2012-14025 <b>S. Gaucherand</b> and I Mauz Winter Tourism and mountain wetland management and restoration
11:00–11:15	EGU2012-13938 <b>G. David</b> Effects of mountain resort development on stream geomorphic function in the White River National Forest, Colorado, USA
11:15–11:30	EGU2012-9417 <b>R Ristic</b> , B Radic, N Vasiljevic, Z Nikic, and I Malusevic Erosion Processes, Sediment Transport and Hydrological Responses Due to Land Use Changes in Serbian Ski Resorts
11:30–11:45	EGU2012-14085 A.L. Shnyparkov, Y.G. Seliverstov, <b>S.A. Sokratov</b> , and K.P. Koltermann Change in snow avalanche and debris flow hazards in the region of Krasnaya Polyana as the result of anthropogenic activity
11:45–12:00	EGU2012-11398 <b>C. Gonseth</b> The economic aspects of artificial snow production in the perspective of climate change

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#### **HS5.9 – Hydrological, ecological, geomorphic and economic implications of Mountain Resort Development (co-listed) – Posters**

Convener: C. de Jong | Co-Conveners: B. Wemple

##### **Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: B. Wemple, C. de Jong

A306	EGU2012-12889 <b>P. Allamano</b> , P. Claps, and D. Poggi Reproducing snow making strategies with deterministic modeling and image-based validation
A307	EGU2012-3754 <b>M. Bonriposi</b> and E. Reynard Water use demand in the Crans-Montana-Sierre region (Switzerland)
A308	EGU2012-3761 <b>E. Magnier</b> and E. Reynard Artificial snowmaking and potential water conflicts in mountain resorts. The case of Avoriaz (Haute-Savoie, France)

A309	EGU2012-14027 <b>M. Breiling</b> and S Sokratov Water demand for ski resort development in the Austrian Alps: an Overview
A310	EGU2012-12979 <b>T. Covino</b> , B. McGlynn, R. McNamarra, and K. Gardner In-stream nutrient uptake kinetics along stream size and development gradients in a rapidly developing mountain resort watershed
A311	EGU2012-13485 J. Shanley and <b>B. Wemple</b> Effects of mountain resort development - a case study in Vermont USA
A312	EGU2012-13763 <b>A. del Peral</b> and B. Wemple Evaluating the effects of mountain resort development on snowmelt and runoff production: a case study from northern New England, USA
A313	EGU2012-14024 <b>B Radi?</b> , R Risti?, N Vasiljevi?, Z Niki?, J Beloica, and I Maluševi? Multi-level landscape degradation due to tourist-oriented land use changes in Serbian mountainous regions
A314	EGU2012-655 <b>I. Blinova</b> and A. Bredikhin Assessment of geomorphic risks and attractiveness to recreational systems: a case of Nalychevo Nature Park (Kamchatka, Russia).
A315	EGU2012-12937 <b>C. de Jong</b> Natural hazards in the Alps triggered by ski slope engineering and artificial snow production
A316	EGU2012-14186 <b>H.P. Rauch</b> , S. Schuler, and M. Oberhammer Monitoring of performance of greening techniques on skiing runs at the skiing region of Montafon/Vorarlberg
A317	EGU2012-14424 <b>R Imhof</b> Tourism and Water: Themes of the Alpine Convention
A318	EGU2012-2694 S. Piccione, <b>E. Comino</b> , M. Rosso, and I. Chouquet Hydrological, geomorphological and ecological river characterization: PELLIDRAC (Alcotra Project)

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**HS4.3/AS1.18/NH1.2 – Ensemble hydro-meteorological forecasting for improved risk management: across scales and applications (co-organized) – Orals**

Convener: M.-H. Ramos | Co-Conveners: J. Thielen, F Pappenberger, J.D. Brown, S. J. van Andel, Y. HE, G. Mascaro

**Room: 36**

Chairperson: Maria-Helena Ramos

13:30–13:45	EGU2012-1459 <b>T.C. Pagano</b> Operational Ensemble River Forecasting in the United States and Australia: Practices and Challenges
13:45–14:00	EGU2012-3596 <b>W. Collischonn</b> , A. Meller, P. L. S. Dias, and D. S. Moreira Hindcast experiments of ensemble streamflow forecasting for the Paraopeba river (Brazil)
14:00–14:15	EGU2012-2476 <b>P. Horton</b> , C. Obled, and M. Jaboyedoff Real-time precipitation forecasting in the Swiss Alps by means of the analogue method
14:15–14:30	EGU2012-11909 <b>T. Mathevret</b> , L. Moulin, J. Gailhard, R. Garçon, P. Bernard, M. Le Lay, I. Zalachori, and J. Chardon A one year experience of an operational streamflow ensemble forecasting chain taking into account human expertise
14:30–14:45	EGU2012-8002 <b>N. Rebora</b> , F. Silvestro, and L. Ferraris Predicting flash flood in small basins with a probabilistic multicatchment tool
14:45–15:00	EGU2012-12953 S.J. van Andel, <b>F. Pappenberger</b> , M.H. Ramos, and J. Thielen Do probabilistic forecasts lead to better decisions? Try it yourself!
Chairperson: Yi He	
15:30–15:45	EGU2012-8935 M. Teasdale, <b>J. Gaudet</b> , and L. Perreault Statistical Properties and Quality of some Operational Inflow Forecasts at Hydro-Québec over Different Temporal Scales

- 15:45–16:00 EGU2012-13607  
**K. Foster**, J. Olsson, C. Uvo, W. Yang, and J. Söderling  
A comparison of different approaches for forecasting spring floods in Sweden
- 16:00–16:15 EGU2012-3993  
**P. Burek**, L. Alfieri, J. Thielen-del Pozo, D. Muraro, F. Pappenberger, and B. Krzeminski  
Looking at the big scale - Global Flood Forecasting
- 16:15–16:30 EGU2012-13021  
**H. Kim**, B. Kim, Z. Liu, D. Yamazaki, B. Sanders, T. Oki, and J. Famiglietti  
Boundary Condition Transfer from Global Atmospheric Model to Local Flood Inundation Model
- 16:30–16:45 EGU2012-6677  
**D. Brochero**, F. Anctil, and C. Gagné  
Comparison of three methods for the optimal allocation of hydrological model participation in an Ensemble Prediction System
- 16:45–17:00 EGU2012-11181  
**S. J. van Andel**, J.D. Brown, M.H. Ramos, A. Weerts, J. Thielen, and J.C. Schaake  
HEPEX post-processing intercomparison experiment

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**HS4.3/AS1.18/NH1.2 – Ensemble hydro-meteorological forecasting for improved risk management: across scales and applications (co-organized) – Posters**

Convener: M.-H. Ramos | Co-Conveners: J. Thielen, F Pappenberger, J.D. Brown, S. J. van Andel, Y. HE, G. Mascaro

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Giuseppe Mascaro

- A243 EGU2012-528  
**S. Liguori** and M.A. Rico-Ramirez  
Probabilistic forecasts based on radar rainfall uncertainty
- A244 EGU2012-8487  
**T.-H. Kang**, K.-T. Lee, and Y.-O. Kim  
Characteristics of Short-Range Probabilistic Flood Prediction in Korea
- A245 EGU2012-4721  
**P.J. Smith**, K. Beven, A. Marchandise, and F. Pappenberger  
Forecasting future water levels to aid in flash flood risk management
- A246 EGU2012-5274  
**N. Addor**, S. Jaun, F. Fundel, and M. Zappa  
An operational hydrological ensemble prediction system for the city of Zurich (Switzerland): assessing the added value of probabilistic forecasts
- A247 EGU2012-2985  
**F. Rousset-Regimbeau**, E. Martin, G. Thirel, F. Habets, M. Coustau, S. Roquelaure, C. De Saint Aubin, and C. Ardilouze  
The Operational Hydro-meteorological Ensemble Prediction System at Meteo-France and its representation interface for the French Service for Flood Prediction (SCHAPI) : description and undergoing developments.
- A248 EGU2012-9565  
**P. Laiolo**, S. Gabellani, N. Rebora, R. Rudari, L. Ferraris, S. Ratto, and H. Stevenin  
Verification of a probabilistic flood forecasting system for an Alpine Region of northern Italy
- A249 EGU2012-10327  
**G. Smiatek**, H. Kunstmann, and J. Werhahn  
Performance of a coupled lagged ensemble weather and river runoff prediction model system for the Alpine Ammer River catchment
- A250 EGU2012-10077  
N. Guyennon, **E. Romano**, I. Portoghesi, F. Salerno, S. Calmant, A.B. Petrangeli, E. Bruno, G. Tartari, and D. Copetti  
Comparing dynamical, stochastic, and combined downscaling approaches. Lessons from a case study in the Mediterranean
- A251 EGU2012-1712  
**T. Y. Gan** and A. Gobena  
Incorporation of seasonal climate forecasts in the ensemble streamflow prediction system
- A252 EGU2012-10385  
**A. S. Jarman** and L. A. Smith  
Distinguishing between skill and value in hurricane forecasting
- A253 EGU2012-3724  
DY Manful, **Y He**, J-F Exbrayat, F Pappenberger, H Cloke, L Breuer, NR Viney, and H-G Frede  
Development of a novel Nutrient Prediction System (NPS) for a perennial river in a semi-arid region

- A254 EGU2012-3909  
**Q. Ma**, K.C. Wang, and Z.H. Xie  
A Study on Ensemble Forecasting of Soil Moisture Based on TIGGE
- A255 EGU2012-12710  
**W. Song**, X. Xu, Q. Duan, S.J. van Andel, A.H. Lobbrecht, and D.P. Solomatine  
Development of pre-processing method for use of meteorological ensemble predictions as input to hydrological models: case study of the Huai River Basin, China
- A256 EGU2012-12277  
**R. Marty**, H. Kuswanto, V. Fortin, and A.-C. Favre  
Combining the Bayesian Processor of Forecast with Bayesian Model Averaging for reliable weather forecasting
- A257 EGU2012-10443  
**S.S Johansen**  
Local calibration of probabilistic quantitative precipitation forecasts using geostatistical model averaging
- A258 EGU2012-14046  
**I. Zalachori**, M.-H. Ramos, R. Garçon, J. Gailhard, and T. Mathevret  
Statistical processing of forecasts for hydrological ensemble prediction: a comparative study of bias correction strategies
- A259 EGU2012-6326  
**F. Brissette**, J. Chen, Z. Li, and R. Turcotte  
Combining stochastic weather generation and ensemble streamflow predictions for short to medium term flow forecasting over Quebec, Canada
- A260 EGU2012-9166  
T. Van Pham, **M.-H. Ramos**, M. J. Booij, and M. S. Krol  
Impact of different sources of uncertainty on the quality of ensemble streamflow forecasts
- A261 EGU2012-14202  
**G. Thirel** and P. Burek  
Assessing the quality of the snow model used in the European Flood Awareness System (EFAS) against MODIS satellite observations over 8 years

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**NH1.8/AS4.15/ESSI1.3/HS5.10/HS7.7 – ICT-based hydrometeorology science and natural disaster societal impact assessment (co-organized) – Posters**

Convener: A. Parodi | Co-Conveners: N. Rebora, G.C. Craig, A. Clematis, D. Kranzmueller, M. Schiffers

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Antonio Parodi

- XY168 EGU2012-7308  
**D. D'Agostino**  
An overview of Grid portal technologies for the development of HMR science gateways
- XY169 EGU2012-7622  
**Q. Harpham**  
FluidEarth with OpenMI version 2.0 - Lowering the Barriers to Integrated Hydro-meteorological Modelling
- XY170 EGU2012-9137  
**L. Deki?**, A Mihalovi?, I Jovi?i?, D Vladikovi?, J Jerini?, and M Ivkovi?  
Forecasting river discharge using coupled WRF-NMM meteorological model and HBV runoff model, case studies
- XY171 EGU2012-9794  
**M. Marku**, V. Mustaqi, E. Abazi, K. Zaimi, E. Vako, M. Gjonaj, F. Hoxhaj, M. Deda, E. Fiori, M. Massabò, and F. Castelli  
Meteorological and Hydrogeological Warning Thresholds in the operational bulletins of the Albanian National Centre for Forecast and Monitoring of Natural Risks
- XY172 EGU2012-10960  
**T. Bedrina**, A. Parodi, A. Quarati, A. Clematis, N. Rebora, and D. Laiosa  
Integrating data and mashup concepts in Hydro-Meteorological Research: the torrential rainfall event in Genoa (4th November 2011) case study.
- XY173 EGU2012-11270  
**E. Boldrini**, F. Salas, D. R. Maidment, P. Mazzetti, M. Santoro, S. Nativi, and B. Domenico  
Bridging the gap between Hydrologic and Atmospheric communities through a standard based framework
- XY174 EGU2012-11898  
**L. Mediero**, L. Garrote, A. Requena, and A. Chávez  
Comparison between genetic programming and an ensemble Kalman filter as data assimilation techniques for probabilistic flood forecasting

- XY175 EGU2012-12246  
**V. Bacu**, D. Mihon, T. Stefanut, D. Rodila, P. Cau, S. Manca, C. Soru, and D. Gorgan  
 Hydrological Scenario Using Tools and Applications Available in enviroGRIDS Portal
- XY176 EGU2012-12962  
**H.R.A. Jagers**, M. Genseberger, and M.A.F.H. van den Broek  
 Using HPC within an operational forecasting configuration
- XY177 EGU2012-13796  
**M. Shapovalov**  
 Effect of Severe Weather Processes on the Social and Economic Activity in the North Caucasus Region

**NH1.11/AS4.16/CL2.4 – Hazard Risk Management in Agriculture and Agroecosystems (co-organized) – Orals**

Convener: A. M. Tarquis | Co-Conveners: N. R. Dalezios, A. Saa, M. Semenov, A. Gobin, M. van der Velde, M. Ruiz-Ramos, M. Ramos

**Room: 1**

Chairperson: M. Semenov

- 08:30–08:45 EGU2012-7685  
**A. Gobin** and I. Piccard  
 Meteorological risks, impacts on crop production systems and agricultural insurances in Belgium
- 08:45–09:00 EGU2012-556  
**S.A. Khresat**  
 Adaptation measures to reduce the impact of climate variability on crop production in Jordan
- 09:00–09:15 EGU2012-13551  
**K. C. Kersebaum**, M. Gandorfer, and M. Wegehenkel  
 Assessment of production risks for winter wheat in different German regions under climate change conditions
- 09:15–09:30 EGU2012-4151  
**E. Vanuytrecht**, D. Raes, P. Willems, and M. Semenov  
 Comparing climate change impacts on crops in Belgium based on CMIP3 and EU-ENSEMBLES multi-model ensembles
- 09:30–09:45 EGU2012-1690  
**H. Fraga**, J. A. Santos, A.C. Malheiro, and J. Moutinho-Pereira  
 Viticultural zoning in Portugal: current conditions and future scenarios
- 09:45–10:00 EGU2012-6249  
**Z. Dunkel**, E. Vincze, and A. Moring  
 Meteorological contribution to the mitigation and adaptation of the 'extreme water events' of Hungarian Great Plain

**COFFEE BREAK**

Chairperson: A. Gobin

- 10:30–10:45 EGU2012-13848  
**M. Capa-Morocho**, B. Rodríguez-Fonseca, and M. Ruiz-Ramos  
 Climatic variability effects on summer cropping systems of the Iberian Peninsula
- 10:45–11:00 EGU2012-14106  
**M. Bielza**, T. Maestro, A. Algarra, and A. Garrido  
 Analysis of the impact of water shortage on irrigated fruit yields in Spain
- 11:00–11:15 EGU2012-8204  
**M. Gil**, A. Garrido, and N. Hernández-Mora  
 Economic Drought Impact on Agriculture: analysis of all agricultural sectors affected
- 11:15–11:30 EGU2012-4085  
**N. R. Dalezios**, A. Blanta, and N.V. Spyropoulos  
 Remotely Sensed Quantitative Drought Risk Assessment in Vulnerable Agroecosystems
- 11:30–11:45 EGU2012-13927  
 E. Iglesias and **K. Baez**  
 Innovation in drought risk management: exploring the potential of weather index insurance
- 11:45–12:00 EGU2012-13945  
**J.A. Escribano Rodríguez**, A.M. Tarquis, and C.G. Hernandez Díaz-Ambrona  
 Pasture Drought Insurance Based on NDVI and SAVI

**NH1.11/AS4.16/CL2.4 – Hazard Risk Management in Agriculture and Agroecosystems (co-organized) – Posters**

Convener: A. M. Tarquis | Co-Conveners: N. R. Dalezios, A. Saa, M. Semenov, A. Gobin, M. van der Velde, M. Ruiz-Ramos,

M. Ramos

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Nicolas Dalezios

- XY178 EGU2012-378  
**D. Lobo**, K. Verbist, D. Gabriels, M. Puche, G. Bracho, G. Soto, and F. Santibañez  
 Zonation of hydric regimens in Venezuela based on rainfall characteristics
- XY179 EGU2012-4817  
**Z. Hussain** and S. Saeed  
 Intraseasonal to interannual variability of summer monsoon rainfall and its influence on the Agricultural corps in mountainous Kashmir
- XY180 EGU2012-6667  
**R.R Muita**, F.F van Ogtrop, and R.W Vervoort  
 Dry spell trend analysis in Kenya and the Murray Darling Basin using daily rainfall
- XY181 EGU2012-10700  
**M. G. Cortina-Januchs**, J. Quintanilla-Dominguez, A. Vega-Corona, and D. Andina  
 Time series prediction in agroecosystems
- XY182 EGU2012-10745  
**J M Anton**, J B Grau, A M Tarquis, D Andina, and M E Sanchez  
 Prediction in cases with superposition of different hydrological phenomena, such as from weather “cold drops”
- XY183 EGU2012-13094  
**V. Mereu**, A. Gallo, G. Carboni, and D. Spano  
 Impact of climate change and adaptation strategies on crop production in Nigeria
- XY184 EGU2012-13788  
**A. Florentino**, D. Torres, A. Ospina, J. Contreras, Z. Palma, and J. Silvera  
 Soil physical conditions as livestock treading effect in tropical Agroecosystem of dryland and strategies to mitigate desertification risk
- XY185 EGU2012-13790  
**A. Ospina**, A. Florentino, and V. Lorenzo  
 Soil management system for water conservation and mitigation of global change effect
- XY186 EGU2012-13851  
**M. Capa-Morocho**, M. Ruiz-Ramos, and B. Rodríguez-Fonseca  
 Methodological discussion for interdisciplinary project on the effects of climatic variability on cropping systems.
- XY187 EGU2012-14338  
**M.A. Rodrigues**, A. Monteiro, A. Rocha, H. Quenol, and J.R. de Freita  
 Application of Bioclimatic Indexes to the Characterization of the Viticulture Aptitude within the Demarcated Douro Region
- XY188 EGU2012-14339  
**M.A. Rodrigues**, A. Rocha, A. Monteiro, H. Quénol, and J.R. de Freitas  
 Prediction of Frost Risks and Plagues using WRF model: a Port Wine region case study
- XY189 EGU2012-2396  
**MA Semenov** and S Pilkington-Bennett  
 Validation of ELPIS baseline scenarios using ECA&D observed data
- XY190 EGU2012-6224  
**A. Giarolla**, N. Resende, S. C. Chou, P. S. Tavares, and D. C. Rodrigues  
 COFFEE BEVERAGE QUALITY ASSESSMENT BASED ON ETA/CPTEC-HadCM3 MODEL (A1B-IPCC/SRES SCENARIO), SOUTHEASTERN BRAZIL
- XY191 EGU2012-9024  
**K. Szafranek**, B. Jakubiak, R. Lech, and M. Tomczuk  
 Results of analysis of archive MSG data in the context of MCS prediction system development for economic decisions assistance - case studies
- XY192 EGU2012-9473  
**H. S. Choi**, U. Schneider, E. Schmid, and H. Held  
 The value of seasonal forecasting and crop mix adaptation to climate variability for agriculture under climate change
- XY193 EGU2012-13944  
**J.L. Valencia**, A. Saa-Requejo, J.M. Gascó, and A.M. Tarquis  
 Frequency and Intensity of drought events over Ebro River basin
- XY194 EGU2012-5666  
 J M Anton, J B Grau, A M Tarquis, D Andina, J M Cisneros, and **E Sanchez**  
 Discussion about decision support systems using continuous multi-criteria methods for planning in areas with hydro-basins, agriculture and forests, from examples in Argentine.

- XY195 EGU2012-5774  
**D. Perez-Lopez**, M. Ruiz-Ramos, E. Sánchez-Sánchez, A. Centeno, I. Prieto-Egido, and N. Lopez-de-la-Franca  
Influence of climate change on the flowering of temperate fruit trees
- XY196 EGU2012-2697  
**J. M. Anton**, J. B. Grau, A. M. Tarquis, D. Andina, and J. M. Cisneros  
Development of mathematical models to elaborate strategies, select alternatives and development of plans for adaptation of communities to climate change in different geographical areas including costs to implement it
- XY197 EGU2012-3698  
**J. M. Mirás Avalos**, E. Vidal Vázquez, P. Sande Fouz, and A. Paz González  
Coping with Uncertainties in Mapping Extreme and Mean Temperatures at the Regional Level for Risk Management in Agriculture: A Case Study in Galicia, NW Spain
- XY198 EGU2012-12312  
**T. Calheiros**, M.G. Pereira, J.G. Pinto, L. Caramelo, J. Gomes-Laranjo, and C.C. Dacamara  
Assessing potential changes of chestnut productivity in Europe under future climate conditions
- XY199 EGU2012-12447  
**M. G. Castiglione**, M. C. Sasal, M. G. Wilson, A. Paz González, and J. D. Oszust  
Temporal Variability of Physical Properties on an Aquic Argiudoll under no Tillage
- XY200 EGU2012-12860  
**J. Ramarohetra** and B. Sultan  
Are satellite based rainfall estimates accurate enough for crop modelling under Sahelian climate?
- XY201 EGU2012-13138  
**M. A. Pilatti**, R. Marano, O. Felli, A. Alessio, M. E. Carrizo, and M. C. Miretti  
Degradation and Improvement of Argiudolls in Centre Santa Fe (Argentina): Changes in Physical and Chemical Soil Properties and in its Productive Capacity Using a sSimulation Model of Crop Growth
- XY202 EGU2012-14075  
**C. Lozano**, A.M. Tarquis, and J.A. Gómez-Barona  
Sum Insured Determination for Cereal, Citrus and Vineyards in the Spanish Agricultural Insurance System

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**NH3.3/GM6.3 – Rockfalls, rockslides and rock avalanches (co-organized) – Orals**

Convenors: JR Moore, Krautblatter | Co-Convenors: A. Volkwein, F. Agliardi, G. Crosta, LKA Dorren

**Room: 4**

Chairperson: Krautblatter, Moore

- 08:30–08:45 EGU2012-1567  
**K. Thoeni**, A. Giacomini, C. Lambert, and S.W. Sloan  
Numerical and experimental investigation of a rockfall drapery system
- 08:45–09:00 EGU2012-11022  
**J. Glover**, A. Schweizer, M. Christen, W. Gerber, R. Leine, and P. Bartelt  
Numerical investigation of the influence of rock shape on rockfall trajectory
- 09:00–09:15 EGU2012-12728  
A. Volkwein, J. Glover, F. Bourrier, and W. Gerber  
A quality assessment of 3D video analysis for full scale rockfall experiments
- 09:15–09:30 EGU2012-9304  
**F. X. Yugsi Molina**, T. Oppikofer, L. Fischer, R. L. Hermanns, and A. Taurisano  
Rockfall hazard assessment integrating probabilistic physically based rockfall source detection (Norddal municipality, Norway).
- 09:30–09:45 EGU2012-295  
**L.M. Vick**, T.R. Davies, M Villeneuve, and C Massey  
Two- and Three-dimensional coseismic rockfall modelling, Christchurch, New Zealand
- 09:45–10:00 EGU2012-12053  
**G.M. Stock**, B.D. Collins, S.J. Martel, and R.J. Sas  
Factors promoting rock falls along sheeting joints

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**COFFEE BREAK**

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Chairperson: Moore, Krautblatter

- 10:30–10:45 EGU2012-6037  
**A. Abellán**, D. Carrea, A. Loyer, M. Tonini, M. Jaboyedoff, M. Royan, and A. Pedrazzini  
Understanding precursory rockfalls along cracks

- 10:45–11:00 EGU2012-10659  
**U. Schwaderer**, M. Walter, and M. Joswig1  
Seismic precursory signals from a rockfall at Rappenlochschlucht, Vorarlberg, Austria
- 11:00–11:15 EGU2012-12460  
**M. Bundschuh** and K. Thuro  
Mechanisms of rock slope failure in conglomerates with variable lithification
- 11:15–11:30 EGU2012-13223  
**B.D. Collins** and G.M. Stock  
Exfoliation-type rock fall triggering from thermally-induced cyclic deformation
- 11:30–11:45 EGU2012-1413  
**D. Bakun-Mazor** and Y.H. Hatzor  
Rockslides in Masada: thermally induced "ratchet" mechanism vs. response to seismic loading
- 11:45–12:00 EGU2012-12479  
**S. Ivy-Ochs**, S. Martin, P. Campedel, V. Alfimov, E. Andreotti, A. Viganò, G. Carugati, C. Vockenhuber, and S. Cocco  
Constructing a time series for large landslides in Trentino (Italy) with 36Cl exposure dating

**NH3.3/GM6.3 – Rockfalls, rockslides and rock avalanches (co-organized) – Posters**

Convenors: JR Moore, Krautblatter | Co-Convenors: A. Volkwein, F. Agliardi, G. Crosta, LKA Dorren

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Moore, Krautblatter

- XY203 EGU2012-1108  
M. Spadari, A. Giacomini, **O. Buzzi**, and J. Hambleton  
Application of dimensional analysis to predict the performance of rockfall barrier
- XY204 EGU2012-5514  
**A.J.A.M. Temme**  
Assessing the value of information in climber's guidebooks to derive spatio-temporal rockfall patterns
- XY205 EGU2012-11251  
**X. Wang**, P. Frattini, F. Agliardi, and G.B. Crosta  
The influence of slope profile extraction techniques and DEM resolution on 2D rockfall simulation
- XY206 EGU2012-10891  
**B. Sellmeier** and K. Thuro  
Possibilities and limitations of 2D and 3D rockfall simulations - which kinds of uncertainties do we have to consider?
- XY207 EGU2012-12239  
**F Humair**, B Matasci, D Carrea, A Pedrazzini, A Loyer, G Pedrozzi, P Nicolet, and M Jaboyedoff  
MONTE GENEROSO ROCKFALL FIELD TEST (SWITZERLAND): Real size experiment to constraint 2D and 3D rockfall simulations
- XY208 EGU2012-3878  
**S. Melzner**, G.M. Stock, and P. Reichenbach  
Back-analysis of rockfall events using 3D trajectory simulation models
- XY209 EGU2012-8388  
**R. Pellicani**, G. Spilotro, G. Colangelo, A. Petraglia, and V. Pizzo  
Rockfall risk assessment for a road along the coastal rocky slope of Maratea (Basilicata Region, Italy)
- XY210 EGU2012-11412  
**P. Frattini**, S. Lari, F. Agliardi, G.B. Crosta, and H. Salzmann  
Probabilistic Rockfall Hazard Analysis in the area affect by the Christchurch Earthquakes, New Zealand
- XY211 EGU2012-13875  
**A. Schober**, C. Bannwart, and M. Keuschnig  
Rockfall modelling in high alpine terrain - Validation and limits, Kitzsteinhorn, Hohe Tauern, Austria.
- XY212 EGU2012-12348  
**T. Piacentini**, E. Miccadei, G. Boscaino, L. Del Sordo, R. Di Michele, F. Leonardi, and G. Pipponzi  
Rock falls landslides in Abruzzo (Central Italy) after recent earthquakes: morphostructural control
- XY213 EGU2012-10875  
**J.M. Reitner**, R. Schuster, and A. Geyer  
From Rock to Silt: The Auernig Sturzstrom (Eastern Alps/Carinthia/Austria)
- XY214 EGU2012-3526  
**M. Farin**, A. Mangeney, O. Roche, I.R. Ionescu, and O. Hungr  
Landslide boost from entrainment of erodible material along the slope
- XY215 EGU2012-11572  
**G. Crosta**, F. De Blasio, M. De Caro, G. Volpi, and P. Frattini  
Granular flows on erodible layers: type and evolution of flow and deposit structures

- XY216 EGU2012-5147  
**A. Dufresne**, T. R. Davies, and M. J. McSaveney  
Emplacement of rock avalanche material across saturated sediments, Southern Alp, New Zealand
- XY217 EGU2012-7512  
**P. Köpfli**, J.R. Moore, and S. Ivy-Ochs  
The Oeschinensee rock avalanche: reconstruction and dating of a prehistoric event
- XY218 EGU2012-10769  
**L. Grämiger**, J.R. Moore, and S. Ivy-Ochs  
Prehistoric rock avalanches at Rinderhorn, Switzerland
- XY219 EGU2012-2330  
**JR Moore**, V Gischig, F Amann, M Hunziker, and J Burjanek  
The 1946 Rawilhorn rock avalanche (Valais, Switzerland) - linking earthquake-induced rock mass damage to seismic amplification
- XY220 EGU2012-4603  
**M. Ostermann**, D. Sanders, S. Ivy-Ochs, V. Alfimov, M. Rockenschaub, and A. Römer  
An early Holocene rock avalanche at Obernberg (Brenner Pass Area, Tyrol)
- XY221 EGU2012-9320  
**C. Longchamp**, M. Charrière, and M. Jaboyedoff  
Analogue modelling of rock avalanches and structural analysis of the deposits
- XY222 EGU2012-1973  
**S. Hergarten**  
Topography-based modeling of large rock avalanches and application to hazard assessment
- XY223 EGU2012-8548  
D. Aringoli, B. Gentili, **M. Materazzi**, G. Pambianchi, and N. Sciarra  
Large rockslides and slope deformations in active tectonic areas of Adriatic central Italy
- XY224 EGU2012-4538  
**P. Bottelin**, D. Jongmans, L. Baillet, J. Turpin, C. Levy, T. Lebourg, D. Hantz, O. Leroux, H. Cadet, L. Lorier, and J-D. Rouiller  
Study of the dynamic response of prone-to-fall spurs using seismic noise
- XY225 EGU2012-6867  
**R. Nishii**, F. Imaizumi, W. Murakami, H. Daimaru, T. Miyamae, and Y. Ogawa  
LiDAR monitoring of retrogressive processes on the steep rockslope of a large landslide in the Japanese Alps
- XY226 EGU2012-12379  
**B. Matasci**, G.M. Stock, M. Jaboyedoff, T. Oppikofer, A. Pedrazzini, and D. Carrea  
Rock face stability analysis and potential rockfall source detection in Yosemite Valley
- XY227 EGU2012-12331  
**B. Matasci**, L. Ravanel, M. Jaboyedoff, and P Deline  
Structural analysis and stability assessment of the West face of the Drus (3733m, Mont Blanc massif)
- XY228 EGU2012-12488  
**I. Hartmeyer**, M. Keuschnig, R. Delleske, and L. Schrott  
Reconstruction of the Magnetkoepfl rockfall event - Detecting rock fall release zones using terrestrial laser scanning, Hohe Tauern, Austria
- XY229 EGU2012-10787  
**F. Gallo**, J. Lavé, G. Morin, C. France-Lanord, and A.P. Gajurel  
Hillslope erosion and landslide dynamics in the central Himalayas
- XY230 EGU2012-10495  
**M. Weber**, M. Bimböse, K.-H. Schmidt, and D. Morche  
On the contemporary morphodynamics of an alpine talus cone and the granulometry and morphometry of its surface particles

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**NH3.5 – Advanced methods in landslides research I: remote sensing and geophysics – Orals**

Convener: M. Jaboyedoff | Co-Conveners: V. Del Gaudio, G. Grandjean, J. Wasowski

**Room: 4**

Chairperson: M. Jaboyedoff &amp; J. Wasowski

- 13:30–13:45 EGU2012-4575  
**F. Bovenga**, A. Refice, and G. Pasquariello  
Corner reflector deployment for X-band SAR interferometry to monitor the landslide of Carlantino, Daunia Region (Italy)
- 13:45–14:00 EGU2012-8599  
D. Notti, **C. Meisina**, F. Zucca, A. Colombo, A. Cucchi, and F. Poggi  
Pro and Cons of non-linear SqueezSAR Time Series compared with other monitoring systems in landslides study

- 14:00–14:15 EGU2012-12259  
**A. Tamburini**, S. Del Conte, L. Lopardo, C. Malaguti, G. Larini, and P. Vescovi  
 Advance InSAR techniques for the characterization of deep seated gravitational slope deformation
- 14:15–14:30 EGU2012-10342  
**M. Mulas**, M. Petitta, M. Brazanti, E. Benedetti, A. Corsini, and C. Iasio  
 Spatio-temporal analysis of SAR based time series for slope instability characterization: the Corvara in Badia landslide (Dolomites, Italy)
- 14:30–14:45 EGU2012-9837  
**T. Oppikofer**, M. Böhme, L. Fischer, and R.L. Hermanns  
 Quantification of rotational and toppling movements of unstable rock slopes based on discontinuity orientations
- 14:45–15:00 EGU2012-327  
**A. Malehmir**, C. Krawczyk, U. Polom, E. Lundberg, A. Adamczyk, M. Malinowski, M. Bastani, M. Gurk, C. Juhlin, L. Persson, and N. Ismail  
 A multidisciplinary geophysical, geotechnical and hydrogeological investigation of quick-clay landslides in Sweden

Chairperson: V. Del Gaudio & G. Grandjean

- 15:30–15:45 EGU2012-13348  
**S. Saba**  
 Landslide detection through horizontal displacement by using multi temporal optical imagery
- 15:45–16:00 EGU2012-7513  
**D. Hölbling**, P. Füreder, V. Tsai, and B. Friedl  
 Automated object-based landslide and debris flow identification - a case study for supporting disaster management in Taiwan
- 16:00–16:15 EGU2012-10802  
**J. Wasowski**, C. Lamanna, M. Dipalma, and D. Casarano  
 Land use change, landsliding and agricultural land degradation: a case history from the Southern Apennines, Italy
- 16:15–16:30 EGU2012-6537  
 A. Stumpf, **J.-P. Malet**, N. Kerle, V. Tofani, S. Segoni, N. Casagli, C. Michoud, M. Jaboyedoff, G. Fornaro, D. Peduto, L. Cascini, I. Baron, R. Supper, T. Oppikofer, J.-S. L'Heureux, M. Van Den Eeckhaut, J. Hervás, J. Moya, D. Raucoules, and M. Carman  
 Guidelines for the selection of appropriate remote sensing technologies for landslide detection, monitoring and rapid mapping: the experience of the SafeLand European Project.
- 16:30–16:45 EGU2012-2709  
**C. Levy**, S. Zerathe, and T. Lebourg  
 Contribution of pluri-annual electrical time laps survey to the understanding of short and long term landslide dynamics
- 16:45–17:00 EGU2012-13816  
 R. Supper, **I. Baron**, E. Winkler, K. Motschka, W. Jaritz, G. Moser, and M. Carman  
 Caesium-137 as Indicator of Present Mass-Movement and Erosion Processes

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#### NH3.5 – Advanced methods in landslides research I: remote sensing and geophysics – Posters

Convener: M. Jaboyedoff | Co-Conveners: V. Del Gaudio, G. Grandjean, J. Wasowski

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: M. Jaboyedoff

- XY231 EGU2012-2329  
**K. Samyn**, J. Travelletti, A. Bitri, G. Grandjean, and J. P. Malet  
 Characterization of landslide geometry using 3D seismic refraction travelttime tomography
- XY232 EGU2012-4323  
**J. Gance**, K. Samyn, G. Grandjean, and J.-P. Malet  
 Quasi-Newton algorithm using Fresnel wavepaths and frequency increase for P-wave tomography inversion: application to a landslide in the South French Alps
- XY233 EGU2012-8372  
 C. Camera, T. Apuan, **M. Mele**, S.L. Kuriakose, and M. Giudici  
 Soil depth map definition on a terraced slope for a following distributed, high resolution, numerical modelling analysis
- XY234 EGU2012-10607  
**S. Rothmund**, U. Niethammer, and M. Joswig  
 UAV-based remote sensing of landslides as complement to geophysical subsurface monitoring

- XY235 EGU2012-11489  
**A. Burtin**, N. Hovius, D. Milodowski, Y.-G. Chen, Y.-M. Wu, C.-W. Lin, and H. Chen  
 Continuous catchment-scale monitoring of geomorphic processes with a 2-D seismological array
- XY236 EGU2012-6784  
**H-K Chuang**, M-L Lin, and W-C Huang  
 Combining Landform Thematic Layer and Object-Oriented Image Analysis to Map the Surface Features of Mountainous Flood Plain Areas
- XY237 EGU2012-6928  
**Y. H. Lin**, C. M. Huang, J. Keck, L. W. Wei, and K. L. Pan  
 Using Google Earth To Interpret The Southern Taiwan Hsiaolin Village Catastrophe
- XY238 EGU2012-7375  
**D. Lagomarsino**, L. Tanteri, G. Forzieri, A. Battistini, and F. Catani  
 Testing the combined use of LIDAR and High-Resolution Multispectral data for Automatic detection of Landslides in the Marecchia valley, Italy.
- XY239 EGU2012-4370  
**D. Carrea**, M.-H. Derron, N. Gauvin, and M. Jaboyedoff  
 One year terrestrial laser scanning monitoring of an active rockslide in highly deformed rocks in western Swiss Alps
- XY240 EGU2012-5654  
**M. Berti**, A. Corsini, and A. Daehne  
 Comparative analysis of roughness algorithms for the identification of active landslides
- XY241 EGU2012-7100  
**M.-H. Derron**, R. Metzger, D. Carrea, and M. Jaboyedoff  
 Various approaches for vegetation filtering of terrestrial laser scans
- XY242 EGU2012-8663  
**B. Friedl**, D. Hölbling, and P. Füreder  
 Combining TerraSAR-X and SPOT-5 data for object-based landslide detection
- XY243 EGU2012-2914  
**C. Michoud**, A. Abellan, F.-J. Baillifard, J. Demierre, M.-H. Derron, M. Jaboyedoff, J. Jakubowski, and F. May-Delasoe  
 The structurally-controlled rockslide of Barmasse (Valais, Switzerland): structural geology, ground-based monitoring and displacement vs. rainfall modeling.
- XY244 EGU2012-6617  
**L. Rouyet**, L. Kristensen, M.-H. Derron, C. Michoud, L. H. Blikra, and M. Jaboyedoff  
 Characterization of large instabilities displacements using Ground-Based InSAR
- XY245 EGU2012-4319  
**F. Ardizzone**, M.G. Angeli, F. Calò, R. Castaldo, F. Federica, F. Guzzetti, P. Lollino, A. Manconi, M. Manunta, M. Manzo, M. Cardinali, L. Paglia, F. Pontoni, P. Reichenbach, M. Rossi, and P. Tizzani  
 Temporal and Spatial Analysis of Landslides Through the SBAS-DInSAR Approach: the Ivancich, Assisi, test case
- XY246 EGU2012-3344  
**S. Bouraoui**, Z. Cakir, R. Bougda, and M. Meghraoui  
 MT-InSAR monitoring of ground deformation around the Haoud Berkaoui sinkhole (SE Algeria)
- XY247 EGU2012-8335  
**S. Plank, J. Singer**, Ch. Minet, and K. Thuro  
 Differential synthetic aperture radar interferometry for landslide monitoring: a priori GIS based assessment of feasibility
- XY248 EGU2012-13403  
**J. Singer**, M. Riedmann, O. Lang, J. Anderssohn, K. Thuro, Th. Wunderlich, O. Heunecke, and Ch. Minet  
 Corner reflector SAR interferometry as an element of a landslide early warning system
- XY249 EGU2012-11202  
**S. Bianchini**, F. Cigna, C. Del Ventisette, S. Moretti, and N. Casagli  
 Monitoring landslide-induced deformation with TerraSAR-X Persistent Scatterer Interferometry (PSI): Gimigliano case study in Calabria Region (Italy)

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**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-Convenors: 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. Hilairet, 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 Mg<sub>2</sub>GeO<sub>4</sub>
- 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

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**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. Fidríková** and D.Sc. Kubi?ár  
 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 pseudotachylites?
- 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. Bloecker, 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. Elkhouri, 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. Héripé, 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

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**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. Teissseyre**

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

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**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 Assesment 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. Malthe-Sørenssen  
 Precursor evolution in recent dry friction experiments explained by 2D simulation
- XY256 EGU2012-9934  
**Ch. G. Gkarlaouni**, V. G. Karakostas, E. E. Papadimitriou, and A. A. Kilias  
 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. Ioannis 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

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

Convener: M. Bezzeghou | Co-Conveners: E. Buforn, H. Hebert, H. M. Fritz

**Room: 26**

Chairperson: n.n.

- 08:30–08:45 EGU2012-4596  
**S. Stiros** and P. De Jevenois 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. Buforn**, C. Pro, M. Bezzeghou, and A. Udiás  
 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-Coina 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, Isoseismals 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

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**COFFEE BREAK**

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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

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

Convener: M. Bezzeghou | Co-Conveners: E. Buorn, 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. Rekenthaler  
 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. Hebert, 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.

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**NH9.9 – Natural hazard impact on technological systems and urban areas – Orals**

Convener: E.G. Petrova | Co-Conveners: E. Krausmann, M. Naranjo, C. Arregoitia

**Room: 7**

Chairperson: Elena Petrova, Maria Naranjo

- 15:30–15:45 EGU2012-890  
**E.G. Petrova**  
Natural hazard impact on the technosphere: “blackouts
- 15:45–16:00 EGU2012-3646  
**N. Frolova**, V. Larionov, and J. Bonnin  
Seismic risk assessment at local level taking into account possible technological accidents
- 16:00–16:15 EGU2012-3952  
**T. Tutnova**  
Natural Disasters and Safety Risks at Nuclear Power Stations
- 16:15–16:30 EGU2012-5496  
**S. Gavrilova**  
The criteria of natural disasters, caused by hydro-meteorological natural phenomena in winter period in different urban regions of Russia
- 16:30–16:45 EGU2012-6041  
**E. Krausmann** and A.M. Cruz  
Impact of the 11 March, 2011, Tohoku earthquake and tsunami on the chemical industry
- 16:45–17:00 EGU2012-14234  
**A.I. Ozunu** and C. Botezan  
Vulnerability assessment and risk perception: the case of the Arie? River Middle Basin

**NH9.9 – Natural hazard impact on technological systems and urban areas – Posters**

Convener: E.G. Petrova | Co-Conveners: E. Krausmann, M. Naranjo, C. Arregoitia

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Elena Petrova, Carla Arregoitia Sarabia

XY266 EGU2012-10254

**M. Naranjo**

Hurricane-driven floods in Mexico City

XY267 EGU2012-14363

**C.A. Arregoitia Sarabia**

The look of into Desalination and Natural Hazard

XY268 EGU2012-10587

**C. Michellier**, M. Dramaix, S.R. Arellano, F. Kervyn, and J.B. Kahindo

The human health impact of Nyiragongo and Nyamulagira eruptions on Goma city and its surrounding area

XY269 EGU2012-2822

**A.-D. Gheorghiu** and A. Ozunu

Systematic risk assessment methodology for critical infrastructure elements - Oil and Gas subsectors

XY270 EGU2012-12576

**S. Gavrilova** and E.G. Petrova

Problems of mapping natural hazard impact on technological systems and urban areas

XY271 EGU2012-6400

**A.L. Shnyparkov**, E.G. Petrova, T.V. Vashchalova, S.A. Gavrilova, A.V. Danilina, and V.V. Gryaznova

Influence of natural and technological emergency situations on tourism and sustainable development in St.Petersburg and Leningrad region (Russia)

XY272 EGU2012-11562

**D. Sideri**, D. Rozos, C. Loupasakis, and D. Kotsanis

New Data on Land Subsidence Phenomena Due to Excessive Ground Water Withdrawal in the Western Thessaly Basin, Central Greece

XY273 EGU2012-13351

**V. Nevrly**, P. Bitala, P. Danihelka, P. Dobeš, J. Dlabka, T. Hejzlar, B. Baudišová, D. Míšek, and Z. Zelinger

Predicting the formation and the dispersion of toxic combustion products from the fires of dangerous substances

XY274 EGU2012-12613

**P. Dobes**, P. Danihelka, S. Janickova, J. Marek, S. Bernatikova, J. Suchankova, B. Baudisova, L. Sikorova, and P. Soldan

Ecotoxicity of waste water from industrial fires fighting

XY275 EGU2012-14248

**A. Petrova**

Shimoda 1854: Historical Consequences of a Natural Disaster

XY276 EGU2012-11811

**M. Faruolo**, I. Covello, A. Falconieri, T. Lacava, N. Pergola, and V. Tramutoli

Rapid detection of flooded areas after Tohoku March 2011 tsunami

XY277 EGU2012-3500

**O. Girina** and Ch. Neal

Kamchatkan Volcanic Eruption Response Team (KVERT), Russia: preventing the danger of volcanic eruptions to aviation.

## Wednesday, 25 April

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### **GI2.5 – Preparatory activities for the scientific utilisation of the GMES Sentinel satellites constellations including Cal/Val activities of their optical instruments. (co-listed) – Orals**

Convener: M. Berger | Co-Conveners: J. Aschbacher, H. Mortimer, B. Bojkov

#### **Room: 42**

Chairperson: Michael Berger & Hugh Mortimer

08:30–08:45 EGU2012-7324

**S.C. Wagner**, T. Hewison, R.A. Roebeling, M. Koenig, J. Schulz, and P. Miu

An Introduction to the Global Space-based Inter-Calibration System from a EUMETSAT Perspective

08:45–09:00 EGU2012-7966

**E. Johansson** and K.-G. Karlsson

An Intercomparison of AVHRR , MERIS, AATSR and MODIS radiances using a SNO approach

09:00–09:15 EGU2012-3082

**G. Zibordi**, F. Mélin, and J.-F. Berthon

Trends and Intra-annual variations of spectral biases in multi-mission remote sensing primary ocean color products at a coastal site

09:15–09:30 EGU2012-6112

**D. Smith**, B. G. Latter, and C. Poulsen

Providing Consistent (A)ATSR Solar Channel Radiometry for Climate Studies

09:30–09:45 EGU2012-4704

**H. Bonekamp**, A. O'Carroll, E. Kwiatkowska, F. Montagner, H. Wilson, V. Fournier Sicre, V.

Santacesaria, and C. Loddo

EUMETSAT activities in preparation of the Sentinel-3 Marine Centre

09:45–10:00 EGU2012-7042

**A. Bracher**, T. Dinter, M. Altenburg Soppa, B. Taylor, and V. Rozanov

Using OLCI/Sentinel-3 and Sentinel-5-P data synergistically for retrieving different phytoplankton groups from space

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### **COFFEE BREAK**

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#### **Room: 7**

Chairperson: Josef Aschbacher & Michael Berger

10:30–10:45 EGU2012-4381

**J. Aschbacher** and M.P. Milagro-Perez

GMES Space Component: Programme overview

10:45–11:00 EGU2012-13148

**M.W. Hansen**, J.A. Johannessen, B. Chapron, and K.-F. Dagestad

Monitoring the surface inflow of Atlantic Water to the Norwegian Sea using Synthetic Aperture Radar

11:00–11:15 EGU2012-6569

**P.F. Levelt**, J.P. Veefkind, M. van Weele, E.A.A. Aben, C. Clerbaux, and T. Phulpin

Exploiting Sentinel 5's synergy with IRS and 3MI on METOP-SG for Protocol Monitoring and Air Quality-Climate Interaction

11:15–11:30 EGU2012-7550

**R. Engelen**, V.-H. Peuch and the MACC-II Team

The use of Sentinel satellite data in the MACC-II GMES pre-operational atmosphere service

11:30–11:45 EGU2012-4087

J. A. Sobrino, J. C. Jimenez-Muñoz, A. Ruescas, C. Brockmann, **A. Heckel**, P.R.J. North, J.J. Remedios, G. Darren, C. Merchant, M. Berger, G. Soria, and O. Danne

Land Surface Temperature retrieval from Sentinel 2 and 3 Missions: a conceptual framework

11:45–12:00 EGU2012-7619

S. Bontemps, **P. Defourny**, J. Radoux, V. Kalogirou, and O. Arino

Global land cover products tailored to the needs of the climate modeling community - Land Cover project of the ESA Climate Change Initiative

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### **NH1.1/AS1.16 – Extreme meteorological and hydrological events induced by severe weather and climate change (co-organized) – Orals**

Convener: A. Loukas | Co-Conveners: U. Ulbrich, M.C. Llasat

**Room: D**

Chairperson: M.C. Llasat

- 08:30–08:45 EGU2012-242  
**K. A. Reed**, M. F. Wehner, and C. Jablonowski  
 Towards the Direct Simulation of Tropical Cyclones in the High-Resolution Community Atmosphere Model
- 08:45–09:00 EGU2012-1311  
**B. D. Malamud** and D.L. Turcotte  
 Statistics of Severe Tornadoes and Severe Tornado Outbreaks
- 09:00–09:15 EGU2012-3119  
**R.M. Trigo**, F. Varino, J. Vaquero, and M.A. Valente  
 Atmospheric circulation leading to record breaking precipitation and floods in southern Iberia in December 1876
- 09:15–09:30 EGU2012-8647  
**A. Comellas**, E. Fiori, L. Molini, F. Pignone, N. Rebora, F. Silvestro, F. Siccardi, and A. Parodi  
 Cloud-permitting simulation of the torrential rainfall event in Genoa (Liguria, Italy) on November 4th, 2011
- 09:30–09:45 EGU2012-9617  
**I. Yucel** and A. Onen  
 Evaluating the extreme precipitation events using a mesoscale atmosphere model
- 09:45–10:00 EGU2012-44  
**Y. Tramblay**, W. Badi, F. Driouech, S. El Adlouni, L. Neppel, and E. Servat  
 Climate change effects on extreme precipitation events in Morocco

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**COFFEE BREAK**

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Chairperson: U. Ulbrich

- 10:30–10:45 EGU2012-7741  
**M.C. Llasat**, R. Marcos, and M. Turco  
 Is convective precipitation increasing? The case of Catalonia
- 10:45–11:00 EGU2012-1990  
**K. Breinl**  
 Pluvial and fluvial flooding: integration in probabilistic flood hazard assessment using a coupled rainfall-discharge generator
- 11:00–11:15 EGU2012-4662  
**D. Panagoulia**, I. Trichakis, and G. J. Tsekouras  
 Flow Forecasting via Artificial Neural Networks - A Study for Input Variables conditioned on atmospheric circulation
- 11:15–11:30 EGU2012-7157  
**Y.J. Kwak**, K. Takeuchi, K. Fukami, and J. Magome  
 Assessment of Flood Risk and Future Change due to Climate Change in Asia-Pacific Region Based on MRI-GCM Model
- 11:30–11:45 EGU2012-8967  
**M. Velasco**, A. Cabello, A. Barrera-Escoda, P.A. Versini, and M. Zappa  
 Application of a rule-based system for flash flood forecasting taking into account climate change in the Llobregat basin
- 11:45–12:00 EGU2012-12156  
**V. Ntegeka**, P. Willems, and J. Monbaliu  
 On the relative importance of the climate change factors along the river Scheldt considering climate scenarios for upstream inland and downstream coastal (mean sea level and surge) boundary conditions

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**LUNCH BREAK**

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Chairperson: A. Loukas

- 13:30–13:45 EGU2012-13060  
**H. von Waldow** and O. Martius  
 Joint probabilities of extreme precipitation and wind gusts in Germany
- 13:45–14:00 EGU2012-1892  
**Z. Zhang**, C. Xu, X. Chen, and Y. Hong  
 The characteristics of global droughts and ENSO teleconnections

14:00–14:15	EGU2012-7257 <b>B. Kurnik</b> , L. Kajfez - Bogataj, and A. Jol Analyzing uncertainties of climate impacts on the water deficit in agriculture soil over Europe
14:15–14:30	EGU2012-13870 <b>G. Di Baldassarre</b> Evaluating the benefits of risk prevention initiatives
14:30–14:45	EGU2012-2796 <b>L.A.T. Machado</b> , J. Sukaragi, C. Freitas, W. Escobar, and C. Angelis Pilot Project for Early Warning; The CHUVA-SOS
14:45–15:00	EGU2012-5808 <b>H. Held</b> , F.-W. Gerstengarbe, F. Hattermann, J. G. Pinto, U. Ulbrich, U. Böhm, K. Born, M. Büchner, M. G. Donat, M. Kücken, G. C. Leckebusch, K. Nissen, T. Nocke, H. Österle, T. Pardowitz, P. C. Werner, O. Burghoff, U. Broecker, and A. Kubik Future projections of insured losses in the German private building sector following the A1B climatic change scenario

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**NH1.1/AS1.16 – Extreme meteorological and hydrological events induced by severe weather and climate change (co-organized) – Posters**

Convener: A. Loukas | Co-Conveners: U. Ulbrich, M.C. Llasat

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 15:30–17:00

Chairperson: M.C. Llasat, U. Ulbrich, A. Loukas

XY180	EGU2012-95 <b>O. Martius</b> , H. Sodemann, H. Joos, S. Pfahl, A. Winnschall, M. Croci-Maspoli, M. Graf, E. Madonna, B. Mueller, S. Schemm, J. Sedlacek, M. Sprenger, and H. Wernli On the dynamics of the July 2010 Pakistan precipitation events and the central role of land surface - atmosphere interactions
XY181	EGU2012-541 <b>G. Wong</b> , D. Maraun, and M. Vrac Stochastic bias correction for mean and extreme precipitation
XY182	EGU2012-2949 <b>L. Campo</b> and F. Caparrini The effects of future climate on the flow regime in Tuscany: a numerical simulation with the distributed hydrological model MOBIDIC
XY183	EGU2012-3126 <b>F. Varino</b> , R.M. Trigo, and J.L. Zézere Reassessing the impacts and the atmospheric circulation of the large storms over Portugal
XY184	EGU2012-4097 <b>B. Gräler</b> , S. Vandenberghe, M.J. van den Berg, S. Grimaldi, A. Petroselli, B. De Baets, and N.E.C. Verhoest Multivariate Return Periods based on Vine Copulas
XY185	EGU2012-4726 <b>S. Ahmad</b> , T. Koike, and K. Nishii A Study on Extremely Dry and Wet Summer Monsoon in Pakistan by Focusing on the Anomalous States of the Upper Troposphere
XY186	EGU2012-4812 <b>M. Kallache</b> Drought assessment in the Duero basin (Central Spain) by means of multivariate extreme value statistics
XY187	EGU2012-5188 <b>M. Nied</b> , T. Pardowitz, K. Nissen, Y. Hundecha, B. Merz, and U. Ulbrich Elbe floods: An interaction of hydrological and meteorological (pre-)conditions
XY188	EGU2012-5358 <b>S. Pfahl</b> Quantifying the relevance of local blockings for temperature extremes on sub-daily to daily time scales
XY189	EGU2012-5490 <b>Z. Popova</b> , M. Ivanova, L.S. Pereira, V. Alexandrov, K. Doneva, P. Alexandrova, and M. Kercheva Drought vulnerability quantification in Bulgaria through modeling crop productivity and irrigation requirements
XY190	EGU2012-5871 <b>M. Biafore</b> , L. Cristiano, S. Gentile, M. Gentilella, M. Giannattasio, and F. Napoli The 2010 flood in the Sele river basin (Southern Italy)
XY191	EGU2012-5978 <b>Y. Huang</b> , Y. Qian, Y. Yao, and D. Huang Impact of the inhomogeneous temperature variation on the extreme precipitation events in East China

- XY192 EGU2012-7208  
**N. Kawano**, S. Sobue, M. Shimada, and K. Ohyoshi  
Flood disaster monitoring in Thailand by using a airborne L-band SAR: Polarimetric and interferometry Synthetic Aperture Radar with L-band(Pi-SAR-L)
- XY193 EGU2012-7681  
**V. Potop**, C. Boronean?, M. Mozny, P. Stepanek, and P. Skalak  
Observed evolution of drought episodes assessed with the Standardized Precipitation Evapotranspiration Index (SPEI) over the Czech Republic
- XY194 EGU2012-7683  
**A. Bonazzi**, E. Bellone, and S. Khare  
The probability of tropical cyclone landfalls in Western North Pacific
- XY195 EGU2012-7787  
**Sj Chyi**, Jw Lin, and MI Hsieh  
The temporal and spatial characteristics of river accumulation events from LIA(Little Ice Age) in Taiwan
- XY196 EGU2012-8577  
**T. D. Hewson**  
The sting jet that roared - a remarkable windstorm crosses Scotland
- Hall X/Y | Display Time 08:00–19:30**  
Author in Attendance: 17:30–19:00  
Chairperson: M.C. Llasat, U. Ulbrich, A. Loukas
- XY197 EGU2012-9328  
**J. Hosek**  
Calculation of extreme wind climate for landscape modelling
- XY198 EGU2012-9330  
**M. Lakatos**, A. Möring, T. Szentimrey, Á. Németh, Z. Bihari, T. Kovács, and E. Vincze  
Identifying areas with high risk of wind gusts, precipitation and hail based on interpolated and recorded data in Hungary
- XY199 EGU2012-9714  
**I. Zveryaev**, Yu. Zyulyaeva, S. Gulev, and P. Koltermann  
Intercomparison of the Russian Summer Heat Waves of 2010 and 1972
- XY200 EGU2012-9938  
**Y. Yulizar**, S. Kumar Singh, and A. Bárdossy  
Study of Changes in the Frequencies of Unusual Hydrological and Meteorological Events
- XY201 EGU2012-10380  
**P.-L. Lin**, W.-K. Tao, and C.-Y. Chen  
The impact of Microphysics and Data assimilation on simulation of Typhoon Morakot
- XY202 EGU2012-10919  
**H. Zhang** and K. Fraedrich  
Greatest point rainfall related to duration: Scaling and multifractal analysis in climate model simulations
- XY203 EGU2012-11462  
**A. Amiri Farahani**, D. Maraun, and J. Luterbacher  
Predictors for local daily precipitation extremes in Germany representing the general atmospheric circulation
- XY204 EGU2012-12114  
**C. Dessy**, L. Di Carlo, G. Fois, P. Fiorucci, M. d'Andrea, and E. Trasforini  
Operational setup of a diagnostic chain, implemented within the Proterina-C project, to include weather measures in the RISICO system for dynamic wildfire risk evaluation in Sardinia (Italy)
- XY205 EGU2012-12662  
**F.E.L. Otto**, M.R. Allen, A. Bowery, J. Imbers, R. Jones, N. Massey, J. Miller, S. Rosier, C. Rye, M. Thurston, S. Wilson, and H. Yamazaki  
Attribution of precipitation changes in African rainforest
- XY206 EGU2012-12856  
**A. Yatagai**, H. Nakamura, T. Miyasaka, and K. Okumiya  
Meteorological Conditions Related to the August 2010 Flood Event in Ladakh, in the West Himalayas
- XY207 EGU2012-13317  
**H. Ágústsson**, Á. J. Elíasson, E. Thorsteins, Ó. Rögnvaldsson, and H. Ólafsson  
Atmospheric icing of structures: Observations and simulations
- XY208 EGU2012-13688  
**M.O. Jonassen**, H. Ágústsson, and H. Ólafsson  
Sensitivity of atmospheric gravity waves to surface roughness and surface heat fluxes
- XY209 EGU2012-13802  
G. Lysitsa, **A. Loukas**, and L. Vasiliades  
A stochastic bias-corrected downscaling method for climate change impacts assessment on droughts

- XY210 EGU2012-14304  
**E. Fiori**, C. Keil, A. Parodi, N. Rebora, and G.C. Craig  
Dynamical downscaling of severe hydrometeorological events: the role of a stochastic parameterization for convection
- XY211 EGU2012-14362  
**M. Fiorini**, R. Rudari, L. Candela, A. Corina, and G. Boni  
Added value flooding products coupling hydraulic modeling and COSMO Sky-Med SAR imagery

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**HS4.1/GM7.8/NH1.7 – Flash floods: processes, forecasting and risk management (co-organized) – Orals**

Convener: M. Borga | Co-Conveners: G. T. Aronica, G. Blöschl, J. Szolgay, J. J. Gourley, E. Gaume, J. Boardman

**Room: 39**

Chairperson: Marco Borga

- 08:30–08:45 EGU2012-8894  
**F. Pignone**, **N. Rebora**, and F. Silvestro  
Estimation of rainfall field by combining radar data and raingauge observations: the modified conditional merging technique
- 08:45–09:00 EGU2012-11734  
**F. Marra** and E. Nikolopoulos  
Radar rainfall estimation as a support for the hydro-meteorological analysis of debris flow and flash flood events
- 09:00–09:15 EGU2012-4682  
**P.J. Smith**, K. Beven, and L. Panziera  
Flash flood forecasting using simplified hydrological models, radar rainfall forecasts and data assimilation
- 09:15–09:30 EGU2012-13404  
**E.I. Nikolopoulos**, D. Zoccatelli, and E.N. Anagnostou  
Mapping storm velocity over catchments: Distribution and scale dependence for flash flood-inducing storms.
- 09:30–09:45 EGU2012-1619  
**J. Boardman**  
Flash Flooding and 'Muddy Floods' on Arable Land
- 09:45–10:00 EGU2012-12846  
**K. Larnier**, H. Roux, P. Garambois, and D. Dartus  
Data assimilation method for real-time flash flood forecasting using a physically based distributed model

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**COFFEE BREAK**

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Chairperson: John Boardman

- 10:30–10:45 EGU2012-7145  
**D. Defrance**, P. Javelle, P. Arnaud, and V. Andréassian  
Flash flood warning at ungauged locations: can proxy data be useful to calibrate the hydrological model used?
- 10:45–11:00 EGU2012-5721  
**A. Bronstert**, B Creutzfeldt, T Graeff, I Hajnsek, M Heistermann, S Itzerott, T Jagdhuber, D Kneis, E Lück, D Reusser, and E Zehe  
Potentials and constraints of different types of soil moisture observations for flood simulations in headwater catchments
- 11:00–11:15 EGU2012-6535  
**G. Werren**, D. Balin, E. Reynard, and S. N. Lane  
Flash flood hazard assessment through modelling in small semi-arid watersheds. The example of the Beni Mellal watershed in Morocco
- 11:15–11:30 EGU2012-3045  
**M. Calianno**, I. Ruin, and JJ. Gourley  
The use of SHAVE and NWS flash flood reports for impact characterization and prediction
- 11:30–11:45 EGU2012-11730  
**G. Brigandì**, G.T. Aronica, G. Basile, L. Pasotti, and M. Panebianco  
An experimental operative system for shallow landslide and flash flood warning based on rainfall thresholds and soil moisture modelling
- 11:45–12:00 EGU2012-6889  
**T. Yamakoshi**, Y. Nakano, T. Ishizuka, K. Tamura, and Y. Hasegawa  
Time Sequence on the Flash Flood Disaster in the Tsurugi River, Hofu City, in Japan

**HS4.1/GM7.8/NH1.7 – Flash floods: processes, forecasting and risk management (co-organized) – Posters**

Convener: M. Borga | Co-Conveners: G. T. Aronica, G. Blöschl, J. Szolgay, J. J. Gourley, E. Gaume, J. Boardman

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: E. Nikolopoulos

- A139 EGU2012-991  
**L. D. Donado**, E. Bravo, and R. O. Ortiz  
 A proposal for mitigation of floods in main colombian rivers
- A140 EGU2012-2768  
 J.L. Ruiz-Bellet, J.C. Balasch, J. Tuset, and **D. Vericat**  
 Flash floods reconstruction from historical data in the ungauged Ondara River basin at Tàrrega (NE Iberian Peninsula)
- A141 EGU2012-3606  
**Z.-Y. Feng**, S.-C. Chen, C.-W. Kao, and C.-M. Lo  
 A numerical simulation of overflow failure of landslide dams by particle flow technique
- A142 EGU2012-3757  
**M. Merheb**, C. Abdallah, and N. Baghdadi  
 Flash flood modeling in semiarid regions - NE Lebanon as a case study
- A143 EGU2012-4127  
**V.I. Arghius**, A. Ozunu, I. Samara, and Gh. Rosian  
 Results of the post flash-flood disaster investigation occurred in the Transylvanian Depression during the last decade (2001-2010)
- A144 EGU2012-7558  
**D. Bertermann**, C. Bialas, and A. Zacherl  
 An expeditious risk analysis of intense rainfall events in low mountain ranges of Central German Uplands under the aspect of a sustainable and decentralised flood retention
- A145 EGU2012-9010  
**K. Hlav?ová**, S. Kohnová, K. Jeneiová, O. Horvát, L. Blaškovi?ová, and J. Szolgay  
 Estimation of flash floods on Svácnický and Debernícky Creeks in Slovakia
- A146 EGU2012-7802  
**C. Abon**, M. Heistermann, D. Kneis, and A. Bronstert  
 Hydrologic simulations using rainfall radar data for flood forecasting in Marikina River Basin, Philippines
- A147 EGU2012-9148  
**J. Moravcová**, T. Pavlí?ek, M. Koupilová, P. Ondr, and T. Kvítek  
 Modeling of runoff conditions in the pasture sites of small catchments
- A148 EGU2012-9437  
 C. Ruch, **C. Reszler**, G Rock, and M Plieschnegger  
 Flash Flood Warning System - One Model, Two Methods
- A149 EGU2012-11084  
**D. Zoccatelli**  
 Roles of hillslope processes and river network routing in the hydrologic response to spatially variable rainfall fields
- A150 EGU2012-11287  
**B. Bhattacharya** and A. Suman  
 Flash flood characterisation of the Haor area of Bangladesh
- A151 EGU2012-12112  
**F. Ciervo**, M.N. Papa, V. Medina, and A. Bateman  
 Reconstruction and numerical modelling of a flash flood event: Atrani 2010
- A152 EGU2012-12230  
**P. Tarolli**, G.T. Aronica, D. Penna, M. Borga, and G. Brigandì  
 Shallow landslides and debris flows triggering and rainfall thresholds using a quasi-dynamic wetness index: a case study in Sicily
- A153 EGU2012-12777  
**A. Cavallo**, S. Gabellani, R. Rudari, and F. Silvestro  
 An Hydrological Description of the 4th November 2011 event in Genoa
- A154 EGU2012-13864  
**S. Schnabl**, M. Brilly, N. Humar, and A Kryžanowski  
 Structural measures to cope with floods: KULTURisk case studies
- A155 EGU2012-14480  
**F. Marra** and D. Zoccatelli  
 Design of rain gauge networks for flash flood prediction: assessment based on spatial moments of catchment rainfall
- A156 EGU2012-13657  
**C. Fouchier**, P. Javelle, P. Arnaud, and D. Defrance  
 Comparison of different routing functions in the AIGA flood forecasting method for ungauged watersheds.

- A157 EGU2012-11393  
**P-A Garambois**, H Roux, K Larnier, and D Dartus  
 Flash flood modelling for ungauged catchments

**NH3.6 – Advanced methods in landslides research II: modelling – Orals**

Convener: G. G.R. IOVINE | Co-Conveners: D. Cohen

**Room: 4**

Chairperson: Cohen D. and Iovine G.

- 08:30–08:45 EGU2012-6905  
**E. R. Stefanescu**, A . Patra, M Bursik, and M. F. Sheridan  
 Feature Based Error model construction for Digital Elevation Models and Hazard Analysis
- 08:45–09:00 EGU2012-2131  
**J. Rohmer** and E. Foerster  
 Global sensitivity analysis of complex numerical landslide models based on Gaussian-Process meta-modelling
- 09:00–09:15 EGU2012-2837  
**M. Tonini**, A. Pedrazzini, I. Penna, and M. Jaboyedoff  
 Spatial pattern characterization of landslides in Swiss Rhone Valley
- 09:15–09:30 EGU2012-4078  
**S.-h. Chiang**, D. Bellugi, K.-t Chang, and W.E. Dietrich  
 A New Shallow Landslide Model for Predicting the Location, Timing, Size and Landslide Runout
- 09:30–09:45 EGU2012-7610  
**P. Lehmann**, J. von Ruette, and D. Or  
 Effect of soil heterogeneity on precursor events and landslide patterns
- 09:45–10:00 EGU2012-12864  
**Z. Liu**, H. Koyi, F. Nilforoushan, J. Swantesson, and Y. Reshetnyuk  
 Internal deformation within an unstable granular slope: insights from physical modeling

**NH3.6 – Advanced methods in landslides research II: modelling – Posters**

Convener: G. G.R. IOVINE | Co-Conveners: D. Cohen

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Cohen D. and Iovine G

- XY212 EGU2012-13122  
**D. Termini**  
 Flow characteristics of a channelized debris-flow and implications in numerical modelling: a study case
- XY213 EGU2012-3850  
 C.-W. Shen, W.-C. Lo, C.-Y. Hsiao, B.-H. Ku, and **Y.-C. Chen**  
 Characteristics of Debris Flow-inducing Factors in Typhoon Morakot Affected Area— An Examination of the Topographic factors, rainfall intensity and Landslide Rate
- XY214 EGU2012-3731  
**B. Haddad**, J.J. Zamorano, M. Pastor, N. Andrés, L.M. Tanarro, and D. Palacios  
 Lahars simulation and field calibration in Popocatépetl Volcano (Mexico)
- XY215 EGU2012-12593  
**H.Y. Hussin**, B. Quan Luna, C.J. van Westen, M. Christen, J.-P. Malet, and Th. W. J. van Asch  
 Assessing the debris flow run-out frequency of a catchment in the French Alps using a parameterization analysis with the RAMMS numerical run-out model
- XY216 EGU2012-4043  
**Y.-C. Chen**, Y.-J. Chiu, Y.-H. Wu, H.-Y. Lee, and C.-W. Shen  
 Combination of landslide volumes estimation and debris flow simulation in the Xinkai village, southern Taiwan
- XY217 EGU2012-10069  
 E Damiano, M. Giorgio, **R. Greco**, A. Guida, N. Netti, L. Olivares, and V. Savastano  
 An integrated tool for real time prediction of hydrological response of steep-slopes in shallow pyroclastic deposits
- XY218 EGU2012-3368  
**I. Penna**, S. Daicz, S. Zlotnik, M-H. Derron, and M. Jaboyedoff  
 Natural dam failure in the eastern slope of the Central Andes of Argentina. Numerical modelling of the 2005 Santa Cruz river outburst flood
- XY219 EGU2012-10620  
**H.-F. Lei**, C.-H. Jen, S.-J. Chyi, and M-Y. Shei  
 The spatial characteristics of mass movements in Chishan catchment after Typhoon Morakot

XY220	EGU2012-12219 <b>G. Martelloni</b> , E. Massaro, and F. Bagnoli Computational modelling for landslide: molecular dynamic 2D application to shallow and deep landslides
XY221	EGU2012-826 <b>F E Taylor</b> and B D Malamud The Statistical Distributions of Landslide Length to Width Ratios
XY222	EGU2012-6555 <b>M. Schwarz</b> and D. Cohen Influence of vegetation on the triggering mechanism of shallow landslides: a review.
XY223	EGU2012-8057 <b>M. Mergili</b> , I. Marchesini, W. Fellin, M. Rossi, S. Raia, and F. Guzzetti A three-dimensional slope stability model based on GRASS GIS and its application to the Collazzone area, Central Italy
XY224	EGU2012-11262 <b>C. Gassner</b> , H. Petschko, R. Bell, and T. Glade Effect of lithological data of different scales on modelling landslide susceptibility maps
XY225	EGU2012-5683 <b>E. Piegari</b> and R. Di Maio Geotechnical vs. Geophysical models for slope stability
XY226	EGU2012-1013 <b>A. Maghsoudloo</b> and N. Huvaj Prediction of landslide movements and its relation to damage in structures
XY227	EGU2012-2028 <b>C. Mignelli</b> and D. Peila Proposal of a management method of rockfall risk induced on a road
XY228	EGU2012-11233 <b>R. Passalacqua</b> and R. Bovolenta IHG: an Integrated Hydrological-Geotechnical model for large landslides' susceptibility assessments
XY229	EGU2012-3393 <b>Sc D. Cuanalo Oscar</b> , Sc D. Oliva Aldo, and M. E. Polanco Gabriel Landslides geotechnical analysis. Qualitative assessment by valuation factors

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**NH3.8 – Prediction and forecasting of landslides – Orals**

Convener: F. Catani | Co-Conveners: F. Guzzetti, N. Huvaj

**Room: 4**

Chairperson: Filippo Catani, Nejan Huvaj

10:30–10:45	EGU2012-5623 <b>M. Berti</b> , M. Martina, S. Franceschini, S. Pignone, A. Simoni, and M. Pizzoli Probabilistic rainfall thresholds for landslide occurrence using a Bayesian approach
10:45–11:00	EGU2012-2397 <b>J. Rohmer</b> and T. Dewez What if the power-law model did not apply for the prediction of very large rockfall events?
11:00–11:15	EGU2012-4103 <b>I. Kleivane</b> , H. Colleuille, L.E. Haugen, P. Alve Glad, and G. Devoli Debris flow early warning systems in Norway: organization and tools
11:15–11:30	EGU2012-8043 <b>S. Bernardie</b> , N. Desramaut, G. Russo, and G. Grandjean Prediction of changes in landslide movements induced by rainfalls: from the use of a black box model to a 1D mechanical model
11:30–11:45	EGU2012-11914 <b>I. Sandric</b> , Y. Petropoulos, Z. Chitu, and B. Mihaï Bayesian analysis of uncertainty in predisposing and triggering factors for landslides hazard assessment
11:45–12:00	EGU2012-2374 <b>Z. Bednarczyk</b> Prediction of landslide activation at locations in Beskydy Mountains using standard and real-time monitoring methods

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**NH3.8 – Prediction and forecasting of landslides – Posters**

Convener: F. Catani | Co-Conveners: F. Guzzetti, N. Huvaj

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Fausto Guzzetti, Nejan Huvaj

- XY230 EGU2012-5951  
**D. Carrea**, A. Abellan, and M. Jaboyedoff  
 Understanding pre-failure deformation in non-cohesive soils using analogue models
- XY231 EGU2012-4333  
**G. Vessia** and M. Parise  
 A stationary criterion to identify the duration of efficient rainfalls to trigger shallow landslide
- XY232 EGU2012-5469  
 L. Montrasio, R. Valentino, and **A. Terrone**  
 Regional scale analysis and prediction of shallow landslides induced by rain, occurred in the Emilian Apennines, northern Italy.
- XY233 EGU2012-13051  
**G. Capparelli**, D.L. De Luca, and P. Versace  
 The FlaIR regional model in landslide early warning.
- XY234 EGU2012-6908  
**L.W. Wei**, C.M. Huang, W.K. Huang, H.H. Lin, C.C. Chi, C.T. Cheng, C.M. Lo, and S.Y. Chi  
 Rainfall threshold for the initiation of debris slide in Taiwan
- XY235 EGU2012-11325  
**M. Jaboyedoff**, J. Demierre, and B. Rudaz  
 2D application of a friction-limited model for debris flow propagation
- XY236 EGU2012-7633  
**F. L. M?gu?**, S. Zaharia, T. Glade, and I. A. Irimu?  
 Comparing performances of heuristic and logistic regression models for a spatial landslide susceptibility assessment in Maramures, County, Northwestern Romania
- XY237 EGU2012-10499  
**H. C. Chan**, C. C. Chang, and P. Y. Laio  
 Application of Logistic Regression for Landslide Susceptibility Mapping in the Alishan Area, Southern Taiwan
- XY238 EGU2012-11414  
 P. Horton, **M. Jaboyedoff**, and B. Rudaz  
 Concepts and parameterisation of Perla and FLM model using Flow-R for debris flow
- XY239 EGU2012-10618  
**H. Katzensteiner**, R. Bell, H. Petschko, and T. Glade  
 The relationship between extreme precipitation events and landslides distributions in 2009 in Lower Austria
- XY240 EGU2012-14188  
**A Ciampalini**, C Del Ventisette, S Moretti, M Manunta, F Calò, L Paglia, F Ardizzone, F Guzzetti, M Rossi, F Bellotti, D Colombo, T Strozzi, U Wegmuller, O Mora, and F Sanches  
 DORIS downstream service: a support to civil defence authorities in landslides and subsidence risk management
- XY241 EGU2012-7564  
**M.T. Brunetti**, S. Peruccacci, S. Luciani, D. Bartolini, S.L. Gariano, M.R. Palladino, G. Vessia, A. Viero, L. Antronico, A.M. Degnutti, G. Iovine, F. Luino, M. Parise, and F. Guzzetti  
 Rainfall thresholds for the possible initiation of shallow landslides in the Italian Alps
- XY242 EGU2012-4315  
**S. Peruccacci**, M.T. Brunetti, S. Luciani, C. Vennari, F. Ungaro, M.C. Calzolari, and F. Guzzetti  
 Influence of topography and soil type on rainfall thresholds for the possible initiation of shallow landslides in central Italy
- XY243 EGU2012-2683  
**C. Abancó**, M. Hürlimann, D. Sempere, and M. Berenguer  
 Benefits and limitations of using the weather radar for the definition of rainfall thresholds for debris flows. Case study from Catalonia (Spain).
- XY244 EGU2012-11916  
**D. J. Peres** and A. Cancelliere  
 Rainfall thresholds for landslide early warning in Sicily: development and comparison
- XY245 EGU2012-13714  
**J. Cepeda**, F. Sandersen, H. Colleuille, T. Humstad, S. Myrabø, L.E. Haugen, G. Devoli, and L. Ehlers  
 Probabilistic classification of triggering conditions for precipitation-induced landslides in Norway
- XY246 EGU2012-6977  
**F. Catani**, D. Lagomarsino, D. Petracca, S. Segoni, and V. Tofani  
 Exploring the relative importance of environmental variables across scales in landslide susceptibility mapping
- XY247 EGU2012-7607  
**D. Lagomarsino**, G. Martelloni, S. Segoni, R. Fanti, and F. Catani  
 SIGMA: an operational warning system for the forecasting of landslide occurrence
- XY248 EGU2012-12113  
**D. Zizoli**, C. Meisina, R. Valentino, and L. Montrasio  
 Comparison between different approaches of modeling shallow landslide susceptibility: a case history in the area of Oltrepo Pavese, Northern Italy

XY249 EGU2012-4645

**J. F. Díaz**, R.A. Prieto, E.L. Gómez, and M.R. Villarraga

Geotechnical Multi-Temporal Analysis: A Practical Methodology for Geotechnical Problems Diagnosis

**NH3.9 – Submarine Landslides: Mechanisms, Processes and their Sedimentary Record – Orals**

Convener: S. Krastel | Co-Conveners: M. Strasser, A. Errera, J. Chaytor, R Urgeles

**Room: 4**

Chairperson: Krastel, Sebastian &amp; Strasser, Michael

13:30–13:45 EGU2012-7264

**K. Kremer**, G. Simpson, and S. Girardclos

Mass movement deposit and Tsunami in Lake Geneva (Switzerland-France) caused by a rockslide in 563 AD

13:45–14:00 EGU2012-14251

**M. Galbiati**, C. Joanne, S. Migeon, J. Mascle, and P. Rocchini

Interaction between turbidite systems and MTDs at the sea-bottom of the Eastern Nile Delta Offshore

14:00–14:15 EGU2012-1068

**M. Urlaub**, P.J. Talling, and D.G. Masson

Climate control on submarine landslides: How certain can we be?

14:15–14:30 EGU2012-13354

**A. Tsukui**, **H. Fukuoka**, and S. Yamasaki

Possibility of unlimited shear displacement due to sliding-surface-liquefaction of MH gasification and long runout submarine landslides

14:30–14:45 EGU2012-444

**S. Parkinson**, J. Hill, P.A. Allison, and M.D. Piggott

An adaptive finite element approach to modelling sediment laden density currents

14:45–15:00 EGU2012-6711

**R. Weiss**, S. Krastel, and A. Anasetti

Constraining the characteristics of tsunami waves from deformable submarine slides

**NH3.9 – Submarine Landslides: Mechanisms, Processes and their Sedimentary Record – Posters**

Convener: S. Krastel | Co-Conveners: M. Strasser, A. Errera, J. Chaytor, R Urgeles

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Strasser, Michael &amp; Sebastian Krastel

XY250 EGU2012-723

**A. Burminskij**

Mathematical modelling of submarine landslide motion

XY251 EGU2012-11908

**G. Crosta**, S. Imposimato, D. Roddeman, and P. Frattini

Landslide/reservoir interaction: 3D numerical modelling of the Vajont rockslide and generated water wave

XY252 EGU2012-12822

**J. O'Shay**, R. Weiss, and C.E. Synolakis

How long are submarine landslides coupled to the water column?

XY253 EGU2012-2379

**S Chand**, L. Rise, J. Knies, H. Haflidason, B.O. Hjelstuen, and R Bøe

Influence of stratigraphic development on subsurface focussed fluid flow and Mid-Norwegian margin stability

XY254 EGU2012-4614

**S.F.L. Watt** and P.J. Talling

Progressive and frontally-confined seafloor sediment failure in response to volcanic debris avalanche emplacement

XY255 EGU2012-4702

**Y. Cheng** and C.C. Su

Sediment-laden flow induced submarine cable failures off southwestern Taiwan

XY256 EGU2012-14364

**R. Govey**, L. Carter, P. Talling, and C.-C. Su

Sequential earthquake and climatic events as triggers of seabed instability: insights into geohazard analysis

XY257 EGU2012-8007

**J.P. Corella**, J.L. Loizeau, N. Le Dantec, V. Sastre, F.S. Anselmetti, N Stark, T del Sontro, and S Girardclos

Sedimentary processes and triggering mechanisms of debris flows in subaqueous canyons in Rhone delta (Lake Geneva, Switzerland, France)

- XY258 EGU2012-9030  
M Tremblay, V Svahn, B Lind, K Lundström, **CE Cederbom** and the Göta river working group Team  
Landslide hazard mapping in the Göta river valley to limit
- XY259 EGU2012-9870  
**Y. Yamada**, H. Nakagiri, and A. Miyakawa  
Development of slope failures at thrust fault scarps in analogue models: application to submarine landslides
- XY260 EGU2012-5505  
**P. Nomikou**, P. Papanikolaou, A. Tibaldi, S. Carey, K. Croff Bell, F.A. Pasquarè, and I. Livanos  
Debris Avalanches along the South Aegean Volcanic Arc

**NH3.12 – SafeLand Project and other research on effects of global change on spatial and temporal patterns of landslide risk – Oral**

Convener: F. Nadim | Co-Conveners: L. Cascini, H. Modaressi, J. Corominas, Picarelli, j. bayer, N. Casagli

**Room: 4**

Chairperson: Jordi Corominas

- 15:30–15:45 EGU2012-2246  
**F. Nadim and B. Kalsnes**  
Changing pattern of landslide risk in Europe - The SafeLand project
- 15:45–16:00 EGU2012-8557  
**J. Corominas**, O. Mavrouli and the Safeland Project Team  
Comparison of landslide hazard and risk assessment practices in Europe
- 16:00–16:15 EGU2012-2911  
**U. Eidsvig**, A. McLean, B. V. Vangelsten, B. Kalsnes, R. L. Ciurean, S. Argyroudis, M. Winter, J. Corominas, O. C. Mavrouli, S. Fotopoulou, K. Pitilakis, A. Baills, and J. P. Malet  
Socio-economic vulnerability to natural hazards - proposal for an indicator-based model
- 16:15–16:30 EGU2012-1347  
**S. Bazin** and the SafeLand Team  
SafeLand guidelines for landslide monitoring and early warning systems in Europe - Design and required technology
- 16:30–16:45 EGU2012-4836  
**A. Scolobig**, J. Bayer, L. Cascini, and S. Ferlisi  
To protect or abandon: a participatory process on landslide risk mitigation
- 16:45–17:00 EGU2012-12623  
**J.-P. Malet, S. Bégueria-Portuguès**, T. Glade, A. Remaitre, A. Puissant, C. Promper, and A. Morajvek  
ChangingRISKS: Research challenges for the assessment and communication on possible effects of global changes on landslide risks

**NH3.12 – SafeLand Project and other research on effects of global change on spatial and temporal patterns of landslide risk – Posters**

Convener: F. Nadim | Co-Conveners: L. Cascini, H. Modaressi, J. Corominas, Picarelli, j. bayer, N. Casagli

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Farrokh Nadim

- XY261 EGU2012-7010  
**C. Jaedicke**, F. Nadim, B. Kalsnes, K. Sverdrup-Thygeson, C. Radermacher, G. Fischer, J. Hervas, and M. Van Den Eeckhaut  
Impacts of global change on landslide hazard and risk in Europe in 21st century
- XY262 EGU2012-2959  
**M G Winter**, J T Smith, S Fotopoulou, K Pitilakis, O-C Mavrouli, J Corominas, and S Argyroudis  
Determining the physical vulnerability of roads to debris flow by means of an expert judgement approach
- XY263 EGU2012-1691  
**S. Fotopoulou** and K. Pitilakis  
Evolution trends in vulnerability of R/C buildings exposed to earthquake induced landslide hazard
- XY264 EGU2012-2445  
**R. Vandromme**, N. Desramaute, A. Baills, A. Hohmann, G. Grandjean, O. Sedan, and J.P. Mallet  
Contribution of physical modelling to climate-driven landslide hazard mapping: an alpine test site
- XY265 EGU2012-13694  
**J. Cepeda**, J.P. Malet, A. Remaitre, P. Versace, A. Ferrari, L. Laloui, J. Eichenberger, H. Narasimhan, M.H. Faber, and K. Kronholm  
Empirical thresholds for precipitation-induced landslides in Europe

- XY266 EGU2012-2919  
**C. Michoud**, S. Bazin, L.H. Blikra, M.-H. Derron, and M. Jaboyedoff  
 Overview of Existing Landslide Early-Warning Systems in Operation
- XY267 EGU2012-2923  
**C. Michoud**, M. Jaboyedoff, M.-H. Derron, F. Nadim, and E. Leroi  
 New classification of landslide-inducing anthropogenic activities
- XY268 EGU2012-7889  
**R.-M. Maftei**, G. Vina, and C. Filipciuc  
 Study on landslide hazard zonation based on factor weighting-rating theory in Slanic Prahova
- XY269 EGU2012-4427  
**S. Lacasse**, G. Vaciago, Y.J. Choi, and B. Kalsnes  
 A web-based tool for ranking landslide mitigation measures
- XY270 EGU2012-7373  
**C. Melchiorre** and P. Frattini  
 Estimating slope stability conditions for rainfall-induced shallow landslides in a changing climate. An example from Otta, Central Norway.
- XY271 EGU2012-10051  
 R. Hermanns, **T. Oppikofer**, E. Anda, L.H. Blikra, M. Böhme, H. Bunkholt, H. Dahle, G. Devoli, O. Eikenæs, L. Fischer, C.B. Harbitz, M. Jaboyedoff, S. Loew, and F.X. Yugsi Molina  
 A hazard and risk classification system for catastrophic rock slope failures in Norway
- XY272 EGU2012-11703  
**F. Agliardi**, O. Mavrouli, M. Schubert, J. Corominas, G.B. Crosta, M.H. Faber, P. Frattini, and H. Narasimhan  
 A toolbox for rockfall Quantitative Risk Assessment
- XY273 EGU2012-13112  
 G. Capparelli, **P. Versace**, G. Artese, S. Costanzo, P. Corsonello, G. Di Massa, G. Mendicino, D. Maletta, S. Leone, F. Muto, A. Senatore, A. Troncone, E. Conte, and D. Galletta  
 Landslides risk mitigation along lifelines

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**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. Nguuya  
 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. Buorn, 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

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**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 <b>E. Saria</b> , 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 <b>M. Lindenfeld</b> , G. Rümpker, 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 <b>D. Delvaux</b> , F. Kervyn, A.S. Machekeyki, 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 <b>J.-L. Mulumba</b> 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 <b>M. Singh</b> Seismotectonic Analysis for the KZN region of South Africa
A515	EGU2012-14093 <b>V Midzi</b> Status of Seismotectonic and seismic hazard studies in South Africa
A516	EGU2012-14203 <b>D. Keir</b> , 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 <b>A. Deprez</b> , F. Masson, C. Doubre, and P. Ulrich African plate motions constraining and Euler pole determination using permanent GPS data
A518	EGU2012-1529 A. Ahmed, <b>C. Doubre</b> , 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 <b>M. Meghraoui</b> and A. Ayadi Seismotectonics of North Africa
A520	EGU2012-3350 <b>R. Ghedhoui</b> , B. Deffontaines, and M.C Rabia Lateral extrusion of Tunisia : Contribution of Jeffara Fault (southern branch) and Petroleum Implications
A521	EGU2012-6540 <b>A. Ben-Suleiman</b> reevaluation of seismicity and seismotectonics of Libya
A522	EGU2012-13155 <b>J. Kacem</b> 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 <b>S. Maouche</b> , 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

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**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.

15:30–15:45	EGU2012-3790 <b>A.M.G. Ferreira</b> , 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 <b>J. R. Elliott</b> , 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 <b>G.C. Feng</b> , 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. Kwiatek | 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. Kwiatek  
 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. Kwiatek** 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 ( $M_w=5.8$ ) 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  $M_w6.3$ , 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 <b>A. Gallo</b> , 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 <b>S. Ruiz</b> 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 <b>D. Stich</b> Source parameters of the 2011, Mw 5.2 Lorca earthquake (Spain)
XL333	EGU2012-9719 <b>M. Hensch</b> , 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 <b>H. Razafindrakoto</b> and M. Mai Uncertainty Quantification of Kinematic Source Parameters using a Bayesian Approach
XL335	EGU2012-11610 <b>C.P. Evangelidis</b> and H. Kao Rupture plane identification of intermediate depth earthquakes in the Hellenic arc by back projection of local seismic waveforms
XL336	EGU2012-12071 <b>C. Kyriakopoulos</b> , T. Masterlark, M. Chini, C. Bignami, and S. Stramondo Post-seismic deformation of the 2011 Tohoku earthquake, Japan
XL337	EGU2012-9945 <b>A. Cirella</b> , 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 <b>H. Sudhaus</b> and S. Heimann Data Democracy in Simultaneous Monte Carlo Optimizations of Geodetic and Seismological Data

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**NH5.3/NP 7.3/OS2.6 – Nonlinear Dynamics of the Coastal Zone (co-organized) – Orals**

Convener: I. Didenkulova | Co-Conveners: E. Pelinovsky

**Room: 1**

Chairperson: n.n.

10:30–10:45	EGU2012-1302 <b>R. Grimshaw</b> The reduced Ostrovsky equation: integrability and breaking
10:45–11:00	EGU2012-6167 <b>H. Kalisch</b> Mechanical balance laws for a class of Boussinesq systems
11:00–11:15	EGU2012-8764 <b>O. Bokhove</b> and E. Gagarina Hamiltonian Boussinesq Model with Sheared Currents
11:15–11:30	EGU2012-3372 <b>G.M. Reznik</b> and V. Zeitlin Nonlinear excitation of trapped waves by Poincaré waves in the coastal waveguides
11:30–11:45	EGU2012-4149 <b>V. Liapidevskii</b> and A. Chesnokov Stability and horizontal mixing in shear shallow flows
11:45–12:00	EGU2012-2676 <b>S. P. Pudasaini</b> Tsunami Generated by a Two-Phase Submarine Debris Flow

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**LUNCH BREAK**

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Chairperson: n.n.

13:30–13:45	EGU2012-1577 <b>E.G. Morozov</b> and A.V. Marchenko Asymmetric tide in Spitsbergen fjords
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- 13:45–14:00 EGU2012-3641  
**A. Ezersky** and N. Abcha  
 Laboratory modelling of run-up amplification due to resonant waves
- 14:00–14:15 EGU2012-4007  
**F. Løvholt** and G. Pedersen  
 Modelling highly non-linear waves with depth integrated models
- 14:15–14:30 EGU2012-2669  
**E. K. Lindstrøm**, G. Pedersen, A. Jensen, and A. Bertelsen  
 Evolution of boundary layers on beaches
- 14:30–14:45 EGU2012-6732  
**M. Tian**, A. Sheremet, and J. Smith  
 A Hyperbolic Nonlinear Wave Model Based On The Stream Function Formulation
- 14:45–15:00 EGU2012-7500  
**J. B. Frandsen**, M. Mier-Torrecilla, M. Zurita-Gotor, and D. M. Holman  
 Predictions of nearshore hydrodynamics based on free-surface lattice Boltzmann approximations

**NH5.3/NP 7.3/OS2.6 – Nonlinear Dynamics of the Coastal Zone (co-organized) – Posters**

Convener: I. Didenkulova | Co-Conveners: E. Pelinovsky

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: I. Didenkulova and E. Pelinovsky

- XY274 EGU2012-11784  
**O. Khvostova** and E. Averbukh  
 On the dynamics of nonlinear, unsteady landslide flow within the smoothed particle hydrodynamics
- XY275 EGU2012-764  
**I. Nikolkina** and I. Didenkulova  
 Waves generated by landslides in rivers: data of Nizhniy Novgorod region
- XY276 EGU2012-1085  
**Sh. Chatraee** and I. Didenkulova  
 Effective fully-reflective boundary conditions at the shore for modeling of wave processes in long bays
- XY277 EGU2012-110  
I. Didenkulova and **A. Rodin**  
 Statistics of waves within a ship wake
- XY278 EGU2012-112  
**A. Rodin**, I. Didenkulova, and E. Pelinovsky  
 Nonlinear interaction of large-amplitude unidirectional waves in shallow water
- XY279 EGU2012-1390  
**P. Denissenko**, I. Didenkulova, E. Pelinovsky, and J. Pearson  
 Laboratory study of statistical characteristics of nonlinear long wave runup on a beach
- XY280 EGU2012-120  
M Cannalire and **E. Pelinovsky**  
 Soliton propagation over a submarine hill: The variable-coefficient Korteweg - de Vries framework
- XY281 EGU2012-13244  
**A. Osborne**  
 Coastal Zone Dynamics in 2+1 Dimensions: Theory and Hyperfast Modeling
- XY282 EGU2012-4126  
**E. Gagarina**, O. Bokhove, and J.J.W. van der Vegt  
 Hamiltonian Boussinesq Model with Horizontally Sheared Currents.
- XY283 EGU2012-9441  
**T. Lyubimova**, A. Lepikhin, V. Konovalov, Ya. Parshakova, and A. Tiunov  
 Mixing in three-dimensional turbulent flow near the river confluence
- XY284 EGU2012-12096  
**M. Drivdal** and J.E.H. Weber  
 Mean Lagrangian drift in continental shelf waves
- XY285 EGU2012-12182  
V. Vasilieva and **O. Shishkina**  
 An effect of the near-bottom pycnocline on the loads of the bottom hill
- XY286 EGU2012-6816  
**I. Tereshchenko**, A. Filonov, and A. Anis  
 Internal Nonlinear Tides on the Mexican Pacific Shelf
- XY287 EGU2012-6162  
**A. Filonov**, M.F. Lavin, L.B. Ladah, and I. Tereshchenko  
 The dynamics of internal tidal waves in Todos Santos Bay, Baja California, during experiment FLOO-2007

- XY288 EGU2012-518  
**J.M. Magalhaes** and J.C.B. da Silva  
Internal solitary wave generation and refraction observed at the Estremadura Promontory off the west Iberian Coast (Portugal)
- XY289 EGU2012-9237  
**T. Reisner**, H. Steeb, and J. Renner  
A numerical investigation on the fluid flow at the interface of a porous and a free flow domain
- XY290 EGU2012-9761  
**T. Szekely**, L. Marie, and Y. Morel  
Numerical model and observations of interactions between coastal shelf tidal front and a barotropic jet.
- XY291 EGU2012-9267  
**D. Lyubimov**, T. Lyubimova, and D. Baidina  
Travelling waves above the canopy of aquatic vegetation

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**NH5.5 – Storm surges, coastal flooding and erosion: extreme events, damage and risk – Oral**

Convener: C. Mudersbach | Co-Conveners: J. Jensen, J. Kropp, D. Rybski, F. J. Mendez, R. J. Nicholls, B. Zanuttigh

**Room: 1**

Chairperson: F. J. Mendez

- 08:30–08:45 EGU2012-5526  
**I. Grabemann**, N. Groll, and L. Gaslikova  
Climate change impact estimates for extreme marine events in the German Bight (North Sea)
- 08:45–09:00 EGU2012-12007  
**D.J. Befort**, U. Ulbrich, A. Ganske, G. Rosenhagen, H. Heinrich, and G.C. Leckebusch  
Wind Induced Storm Surge Risk in the German Bight: Present Day Climate and GHG Scenario
- 09:00–09:15 EGU2012-14265  
**A. Polonsky**, A. Garmashov, V. Fomin, N. Valchev, and E. Trifonova  
XXI century projections of wind-wave conditions and sea-level rise in the Black sea
- 09:15–09:30 EGU2012-14212  
**M. Menendez**, J. Perez, F.J. Mendez, and I.J. Losada  
Probabilistic Climate Change Projections of Nearshore Wave Climate
- 09:30–09:45 EGU2012-6042  
**C. Wilson**, K. J. Horsburgh, and J. A. Williams  
Quantifying the temporal and spatial sensitivity of forecast storm surge to initial and boundary forcing using the novel technique of adjoint modelling
- 09:45–10:00 EGU2012-14215  
**Y.M. Fan**, L.C. Wu, D.J. Doong, C.C. Kao, and J.H. Wang  
Development of an Operational Typhoon Swell Forecasting and Coastal Flooding Early Warning System

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**NH5.5 – Storm surges, coastal flooding and erosion: extreme events, damage and risk – Posters**

Convener: C. Mudersbach | Co-Conveners: J. Jensen, J. Kropp, D. Rybski, F. J. Mendez, R. J. Nicholls, B. Zanuttigh

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: D. Rybski

- XY292 EGU2012-14478  
P. Lollino and **A. Reina**  
Analysis of the evolution of the instability process of a coastal cavern
- XY293 EGU2012-1343  
**C. Mudersbach**, S. Dangendorf, T. Wahl, and J Jensen  
Trends in sea level percentiles along the German North Sea coastline compared to regional mean sea level changes
- XY294 EGU2012-13587  
**J. Wolf**, J Lowe, and T Howard  
Climate downscaling: Local mean sea-level rise, surge and wave modelling
- XY295 EGU2012-14261  
**I.J. Losada**, E. Garcia Alonso, F.J. Mendez, B. Zanuttigh, R.J. Nicholls, R. Thompson, J.P. Vanderlinden, F. Fernandez, B. Ondiviela, P. Diaz-Simal, and S. Bagli  
A holistic evaluation of risks in coastal regions under changing climatic, environmental and socioeconomic conditions: the Theseus Decision Support System.
- XY296 EGU2012-393  
**H.Z. Abidin**, S. Hadi, H. Andreas, I. Gumilar, S.L. Nurmaulia, and Y. Fukuda  
Coastal Flooding of Jakarta (Indonesia): Causes and Impacts

XY297	EGU2012-1159 A. Lamberti and <b>M. Masina</b> Seasonal statistics of highest sea levels along the northwestern Adriatic coast
XY298	EGU2012-1160 <b>A. Lamberti</b> , M. Masina, and R. Archetti Investigating dependence in the main sea state parameters with copula approach
XY299	EGU2012-5001 <b>D. Rybski</b> , M. Boettle, and J.P. Kopp On the estimation of damages due to coastal floods
XY300	EGU2012-5615 <b>J. Maskell</b> Storm surge and river interaction in estuaries
XY301	EGU2012-6193 <b>J. J. Diez</b> , M.D Esteban, J.S. López-Gutiérrez, and V. Negro Climate, storm surging and inland flooding risks
XY302	EGU2012-7726 <b>A. Mushkin</b> and O. Katz The role of extreme winter storms in the overall retreat pattern of an actively eroding eolianite coastal cliff-line in the eastern Mediterranean
XY303	EGU2012-8285 <b>H. Hein</b> , S. Mai, B. Mayer, T. Pohlmann, and U. Barjenbruch A multi-scale and model approach to estimate future tidal high water statistics in the southern German Bight
XY304	EGU2012-9915 <b>I. Haltas</b> Estimating Extreme High Still Water Levels in North San Francisco Bay with Annual Maxima and Convolution Methods
XY305	EGU2012-10656 <b>P. Letortu</b> , S. Costa, O. Cantat, F. Levoy, J.C. Dauvin, and E. De Saint-Léger Coastal flooding events on the French coast of the eastern English Channel: the result of a combination of meteorological, marine, and morphological factors
XY306	EGU2012-11590 <b>A. Critto</b> , V. Gallina, S. Torresan, J. Rizzi, A. Zabeo, S. Carniel, M. Sclavo, and A. Marcomini Coastal erosion impacts under climate change scenarios at the regional scale in the North Adriatic Sea
XY307	EGU2012-11780 <b>T. Woeffler</b> , C. Grimm, D. Bachmann, J. Jensen, C. Mudersbach, P. Froehle, F. Thorenz, and H. Schuettrumpf Risk Management in Coastal Engineering - Applied Research Projects for the German Wadden Sea
XY308	EGU2012-12024 <b>S. Bagli</b> , B. Zanuttigh, L. Martinelli, I.J. Losada, V. Laborie, and A. Pistocchi A raster-based model for mapping storm surge flooding in urbanized coastal area: a watershed segmentation approach
XY309	EGU2012-12305 <b>S. Dangendorf</b> , C. Mudersbach, T. Wahl, and J. Jensen Meteorological forcing of the annual MSL cycle and its impacts on flood risk in the German Bight
XY310	EGU2012-12436 <b>J.-F. Breilh</b> , E. Chaumillon, and X. Bertin Simulating coastal flooding during Xynthia through an improved static inundation method
XY311	EGU2012-13096 R. R. C. Perinotto, <b>J. Bonetti</b> , A. V. Campos, and F. M. Rudorff Coastal susceptibility to erosion induced by storm surges: an approach using Geoindicators
XY312	EGU2012-14021 <b>D. Dillingh</b> , F. Baart, and J. de Ronde Do we have to take an acceleration of sea level rise into account?
XY313	EGU2012-14217 <b>V. Laborie</b> , F. Hissel, and P. Sergent Future extreme water levels and floodplains in Gironde Estuary considering climate change
XY314	EGU2012-14219 <b>J. Weiss</b> , P. Bernardara, M. Andreewsky, and M. Benoit Seasonal autoregressive modeling of a skew storm surge series

**NH5.6 – Sea hazards and ship operations – Orals**

Convener: E. Bitner-Gregersen | Co-Conveners: A. Toffoli

**Room: 1**

Chairperson: E. Bitner-Gregersen and A. Toffoli

- 15:30–15:45 EGU2012-7001  
**A. Iafrati**, M. Onorato, and A. Babanin  
Kinematics of modulated wave trains in presence of wave breaking events
- 15:45–16:00 EGU2012-11678  
**M. Onorato**, D. Proment, G. Clauss, and M. Klein  
From NLS breathers to sea-keeping tests
- 16:00–16:15 EGU2012-13176  
**A. Osborne**  
Computation and Prediction of Rogue Waves in Extreme Sea States
- 16:15–16:30 EGU2012-10735  
P. Alfredini, **A. Pezzoli**, E. I. Cristofori, A. Dovetta, and E. Arasaki  
Wave and tidal level analysis, maritime climate change, navigation's strategy and impact on the coastal defences - Study case of São Paulo State Coastline Harbour Areas (Brazil)
- 16:30–16:45 EGU2012-752  
**A. Rodin** and I. Didenkulova  
A typical wave wake from high-speed vessels: its group structure and run-up
- 16:45–17:00 EGU2012-14141  
**E. M. Bitner-Gregersen** and A. Toffoli  
A wave crest distribution of random directional wave fields

**NH5.6 – Sea hazards and ship operations – Posters**

Convener: E. Bitner-Gregersen | Co-Conveners: A. Toffoli

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: A. Toffoli and E. Bitner-Gregersen

- XY315 EGU2012-1497  
**E. Vanem** and E.M. Bitner-Gregersen  
A stochastic model for predicting future ocean wave climate and potential impact on ship environmental loads
- XY316 EGU2012-2531  
**A. Toffoli**, E. M. Bitner-Gregersen, and M. Onorato  
Statistics of deep-water wave kinematics
- XY317 EGU2012-5974  
**B. Viikmae** and T. Soomere  
Patterns of Hits to the Nearshore from a Major Fairway in the Gulf of Finland
- XY318 EGU2012-7037  
**G. Zodiatis**, R. Lardner, M. De Dominicis, G. Coppini, and N. Pinardi  
An advance forecasting system for ship originated oil spills in the Mediterranean
- XY319 EGU2012-7122  
**G. Zodiatis**, D. Hayes, A. Karaolia, S. Stylianou, A. Nikolaidis, I. Constantinou, S. Michael, G. Galanis, and G. Georgiou  
Technologies for Online Data Management of Oceanographic Data
- XY320 EGU2012-11386  
**L. Fernandez**, A. Toffoli, and J. Monbaliu  
Evaluating the role of higher order nonlinearity in water of finite and shallow depth with a direct numerical simulation method of Euler equations
- XY321 EGU2012-11452  
**C. S. L. Grimaldi**, I. Coviello, T. Lacava, N. Pergola, and V. Tramutoli  
RST analysis of thermal infrared satellite data for a continuous oil spill detection and monitoring
- XY322 EGU2012-14146  
L. Cavaleri, L. Bertotti, L. Torrisi, E. M. Bitner-Gregersen, M. Serio, and **M. Onorato**  
Rogue waves in crossing seas: the Louis Majesty accident
- XY323 EGU2012-14151  
T. B. Nilssen, M. Strandmyr Eide, **L. I. Eide**, and Ø. Endresen  
Shipping across the Arctic Ocean -A feasible option in 2030-2050 as a result of global warming?
- XY324 EGU2012-14306  
**JM Lefevre**, L Aouf, P Queffeulou, A Bentamy, and Y Quilfen  
Operational forecasting of wind-generated waves by tropical cyclones
- XY325 EGU2012-14307  
**AK Magnusson** and EM Bitner-gregersen  
Statistics of extreme waves - role of sensors and quality control
- XY326 EGU2012-14309  
**L. Loffredo**, J Monbaliu, and C Anderson  
An application of a queuing model for sea states

XY327 EGU2012-14346

**H. Houtani**, T Waseda, and A Toffoli

Short-term and long-term evolution of modulational wave train under influence of current

**NH9.7 – Vulnerability assessments in natural hazard and risk analysis – Orals**

Convener: S. Fuchs | Co-Conveners: J. Birkmann, T. Glade

**Room: 8**

Chairperson: n.n.

13:30–13:45 EGU2012-578

**M. Muler and J. Bonetti**

An integrated approach to assess wave exposure on vulnerability analysis

13:45–14:00 EGU2012-4899

**C. Heitz**, M.A. Bchir, and M. Willinger

Does exposure to lahars risk affect people's risk-preferences and other attitudes? Field data from incentivized experiments and surveys in Arequipa - Peru

14:00–14:15 EGU2012-8416

**I. C. Stanga** and A. Grozavu

Multi-level significance of vulnerability indicators. Case study: Eastern Romania

14:15–14:30 EGU2012-8515

**M. Dovžak**, S. Stani?, K. Bergant, and G. Gregori?

Protection of agriculture against drought in Slovenia based on vulnerability and risk assessment

14:30–14:45 EGU2012-11930

**e. moulin** and j-f. deroubaix

Assess the flood resilience tools integration in the landuse projects

14:45–15:00 EGU2012-12561

**R. L. Ciurean** and T. Glade

Uncertainty analysis in vulnerability estimations for elements at risk- a review of concepts and some examples on landslides

**NH9.7 – Vulnerability assessments in natural hazard and risk analysis – Posters**

Convener: S. Fuchs | Co-Conveners: J. Birkmann, T. Glade

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY328 EGU2012-8699

**R. Totchnig** and S. Fuchs

Validating vulnerability functions for buildings exposed to Alpine torrent processes

XY329 EGU2012-4266

**M. Papathoma-Koehle**, A. Zischg, S. Fuchs, M. Keiler, and T. Glade

Loss estimation of debris flow events in mountain areas - An integrated tool for local authorities

XY330 EGU2012-28

**C. Ornetsmüller**, C. Heidger, R. Totchnig, and **S. Fuchs**

Applying spatial scan statistics on vulnerability to mountain hazards

XY331 EGU2012-2626

**C.-H. Hsu**, T.-C Tsao, and **S. Fuchs**

The comparison of different approaches to establish the vulnerability of brick buildings to debris flow hazards

XY332 EGU2012-27

**S. Fuchs**, M. Keiler, and T.-C. Tsao

A comparison of different vulnerability functions for mountain hazard risk management

XY333 EGU2012-7048

**B. Mazzorana**, S. Fuchs, and L. Levaggi

The physical vulnerability of elements at risk: a methodology based on fluid and classical mechanics

XY334 EGU2012-3908

**T.-Y. Pan**, T.-J. Chang, J.-S. Lai, and H.-K. Chang

Impacts of urbanization on the hazard, vulnerability and risk of pluvial disaster

XY335 EGU2012-4060

**D. Choi**, H. D. Jun, and S. Kim

Vulnerability Assessment of Natural Disasters for Small and Mid-Sized Streams due to Climate Change and Stream Improvement

XY336 EGU2012-4361

**P. Bion**, B. Van Wyk de Vries, and G. Valentine

Conception of a method for the creation of volcanic risk index maps

- XY337 EGU2012-5930  
**T. Kunz-Plapp**, B. Khazai, and J.E. Daniell  
 Integrating Social impacts on Health and Health-Care Systems in Systemic Seismic Vulnerability Analysis
- XY338 EGU2012-9917  
**C. Tarragoni**, P. Bellotti, C. Caputo, L. Davoli, S. Evangelista, F. Pugliese, R. Raffi, and E. Lupia Palmieri  
 Coastal vulnerability and the implications of sea level rise between the cities of Pescara and Ortona (Adriatic Sea - Central Italy)
- XY339 EGU2012-12674  
**P. Gurbas**  
 A Survey about resilience of Turkish People to a Potential Disaster
- XY340 EGU2012-159  
**N. Tsereteli**, V. Arabidze, O. Varazanashvili, and T. Gugeshashvili  
 Vulnerability assessment at a national level in Georgia
- XY341 EGU2012-458  
**L. Etienne**, R. Bouaziz, S. Dahech, A. Daoud, and G. Beltrando  
 Environmental changes and vulnerability in the Gharbi Island (Kerkennah, Tunisia)
- XY342 EGU2012-4484  
**G. Trendafiloski**, O. Gaspa Rebull, C. Ewing, A. Podlaha, and B. Magee  
 Calibration and validation of earthquake catastrophe models. Case study: Impact Forecasting Earthquake Model for Algeria
- XY343 EGU2012-12741  
**M. Wieland**, M. Pittore, S. Parolai, and J. Zschau  
 A transferable approach towards rapid inventory data capturing for seismic vulnerability assessment using open-source geospatial technologies

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**NH9.10 – Incorporating spatio-temporal variability into risk management – Posters**

Convener: C. Neuhold | Co-Conveners: S. Fuchs, C. Aubrecht

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: C. Neuhold, S. Fuchs

- XY344 EGU2012-631  
**F. Salit**, B Beltrando, and L Zaharia  
 The assessment of river basin and flood management from early twentieth century to the present on the lower Siret River (Romania)
- XY345 EGU2012-1915  
**H. Kreibich** and C. Neuhold  
 Cross-country transferability of flood damage models for residential buildings
- XY346 EGU2012-3519  
**H. Cammerer** and A. Thieken  
 Spatio-temporal dynamics in the flood exposure due to land use changes
- XY347 EGU2012-4422  
**C. Promper**, T. Glade, A. Puissant, and J.-P. Malet  
 Land cover as an important factor for landslide risk assessment
- XY348 EGU2012-7507  
 C. Aubrecht, **K. Steinnocher**, S. Freire, W. Loibl, J. Peters-Anders, and J. Ungar  
 Considering Time-Dependency of Social Vulnerability in Crisis Modeling and Management
- XY349 EGU2012-7533  
**B. Jongman**, P.J. Ward, and J.C.J.H. Aerts  
 Global scale flood exposure assessment - Methodologies and results
- XY350 EGU2012-11080  
**M. Lingg**, M. Keuschnig, I. Hartmeyer, J.-C. Otto, and L. Schrott  
 Risk Management in a fast changing and complex environment. A feasibility study from the Kitzsteinhorn (3203 m), Hohe Tauern, Austria.
- XY351 EGU2012-11895  
**M. Santos**, L. Martins, S. Moreira, A. Costa, F. Matos, M. Teixeira, and C. Bateira  
 Modeling of natural risks in GIS, decision support in the Civil Protection and Emergency Planning
- XY352 EGU2012-12699  
**J. Luther**  
 An approach for the anticipatory and participatory management of current and future flood risks
- XY353 EGU2012-13111  
**S. bachri**, J. Stöetter, J. Sartohadi, and M. A. Setiawan  
 Evaluation of volcanic risk management in Merapi and Bromo Volcanoes

- XY354 EGU2012-13180  
**M. Pittore**, M. Wieland, A. Duisheev, and P. Yasunov  
 Improved seismic risk assessment based on probabilistic multi-source information integration
- XY355 EGU2012-1613  
**C. Neuhold**, K. Hogl, W. Seher, H.P. Nachtnebel, P. Scherhauser, R. Nordbeck, and L. Löschner  
 Anticipatory flood risk assessment under climate change scenarios: from assessment to adaptation
- XY356 EGU2012-13993  
**S. Fuchs**, C. Heidger, and C. Ornsmüller  
 Applying spatiotemporal statistics to derive vulnerability patterns resulting from torrent events
- XY357 EGU2012-13994  
**S. Fuchs**, P. Koltermann, S. Sokratov, Y. Seliverstov, and A. Shnyparkov  
 Spatial aspects of vulnerability and risk resulting from snow avalanches

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**NH9.11 – Multi-type hazard and risk assessment – Orals**

Convener: J. Zschau | Co-Conveners: K. Fleming, H. Modaressi, P. Gasparini

**Room: 8**

Chairperson: Jochen Zschau, Paolo Gasparini

- 15:30–15:45 EGU2012-708  
**J. C. Gill** and B. D. Malamud  
 Reviewing and visualising interaction relationships for natural hazards
- 15:45–16:00 EGU2012-3642  
**N. Frolova**, V. Larionov, and J. Bonnin  
 Multi-hazards risk assessment at different levels
- 16:00–16:15 EGU2012-5498  
**H. Kreibich** and P. Bubeck  
 Modelling direct tangible damages due to natural hazards
- 16:15–16:30 EGU2012-5553  
**A. Garcia-Aristizabal**, A. Di Ruocco, E. Bucchignani, F. De Paola, F. Jalayer, W. Kombe, G. Uhinga, W. Marzocchi, and P. Gasparini  
 An integrated multi-risk framework considering climate change impacts on African cities
- 16:30–16:45 EGU2012-11255  
**A.R. Reveillere**, D.B. Bertil, J.D. Douglas, L.G. Grisanti, S.L. Lecacheux, D.M. Monfort, H.M. Modaressi, H.M. Müller, J.R. Rohmer, and O.S. Sedan  
 Comparative risk assessments for the city of Pointe-à-Pitre (French West Indies): earthquakes and storm surge
- 16:45–17:00 EGU2012-5180  
**S. Esposito**, I. Iervolino, F. Silvestri, A. d'Onofrio, A. Santo, P. Franchin, and F. Cavalieri  
 Multi-risk assessment of L'Aquila gas distribution network

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**NH9.11 – Multi-type hazard and risk assessment – Posters**

Convener: J. Zschau | Co-Conveners: K. Fleming, H. Modaressi, P. Gasparini

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Hormoz Modaressi, Kevin Fleming

- XY358 EGU2012-2380  
**F. Euchner** and A. Mignan  
 MATRIX City: A Multi-Risk Platform
- XY359 EGU2012-7386  
 G. Barreca, **A. Bonforte**, and M. Neri  
 A GIS tool for Integrated Hazard Evaluation on the faults of Mt. Etna (Sicily)
- XY360 EGU2012-13495  
**M. Pittore**, M. Wieland, D. Bindi, K. Fleming, and S. Parolai  
 Multi-resolution adaptive data collection prioritisation for multi-risk assessment
- XY361 EGU2012-8886  
**M. Fernandez** and J. Ruegg  
 Territory management an appropriate approach for taking into account dynamic risks
- XY362 EGU2012-8803  
**M. Fernandez** and J. Ruegg  
 A challenge for land and risk managers: differents stakeholders, differents definitions of the risks
- XY363 EGU2012-12374  
**J.M. Marrero**, A. Garcia, A. Llinares, P. Lopez, and R. Ortiz  
 Assessing the vulnerability of the evacuation emergency plan: the case of the El Hierro, Canary Island, Spain

- XY364 EGU2012-7839  
**C. Huggel**, A. Raissig, G. Romero, M. Rohrer, N. Salzmann, A. Díaz, and D. Acuña  
On trends and climatic effects of multi-type and cascading hazards in the Andes of Peru
- XY365 EGU2012-2726  
**O. Petrucci** and A.A. Pasqua  
The impact of Damaging Hydro Geological events on people in a Mediterranean region
- XY366 EGU2012-13467  
**V. Zumpano**, H.Y. Hussin, and K. Breinl  
Exploring probabilistic tools for the development of a platform for Quantitative Risk Assessment (QRA) of hydro-meteorological hazards in Europe
- XY367 EGU2012-13860  
**S. Tyagunov**, K. Fleming, S. Parolai, M. Pittore, S. Vorogushyn, M. Wieland, and J. Zschau  
Seismic Hazard and Risk Assessment in Multi-Hazard Prone Urban Areas: The Case Study of Cologne, Germany
- XY368 EGU2012-14323  
**M. Raschke**  
Earthquake and storm risk of the power transmission grid of Switzerland

**SSS7.3 – Where does all the Pyrogenic Organic Matter go? Its Fate in Soils, Water and Sediments (co-listed) – Orals**

Convener: C. Santin | Co-Conveners: J. M. De la Rosa, S. Doerr

**Room: 3**

Chairperson: Cristina Santín

- 08:30–08:45 EGU2012-6357  
**M. W. I. Schmidt**, N. Singh, B. Maestrini, M. P. W. Schneider, and S. Abiven  
Where does all the fire-derived organic matter go? Do we know what we don't know (yet)?
- 08:45–09:00 EGU2012-12242  
**C.M.. Preston**, M. Simard, and G.M. Bernard  
Some reflections on the natural history of pyrogenic C in boreal forests
- 09:00–09:15 EGU2012-908  
**E. Kane** and W. Hockaday  
Does more intense burning in warmer, drier boreal forest create more stable black carbon in soils?
- 09:15–09:30 EGU2012-5343  
**M Ohlson**, A E Bjune, I Kasin, and A Nordtug Wist  
Spatial variation in the charcoal pool
- 09:30–09:45 EGU2012-5975  
**PL Ascough**, W Meredith, M Bird, D Large, C Snape, and E Tilston  
Evaluating hydrolysis as a method for quantification and characterisation of Black Carbon in environmental matrices
- 09:45–10:00 EGU2012-2038  
**Y. Kuzyakov**, I. Bogomolova, and B. Glaser  
Black carbon decomposition during 7 years and its transformation in soil estimated by <sup>14</sup>C labeling

**COFFEE BREAK**

Chairperson: José María De la Rosa

- 10:30–10:45 EGU2012-830  
**C.A. Masiello**, Z. Liu, K.L. Ziegelgruber, B. Dugan, H. Gonnermann, V.J. Chuang, and K. Zygourakis  
Density and porosity as controls on charcoal storage in soils
- 10:45–11:00 EGU2012-699  
**A. A. Berhe**, E. Stacy, S.C. Hart, C Hunsaker, and D Johnson  
Lateral Transport of Black vs. Bulk SOM with soil erosion
- 11:00–11:15 EGU2012-2948  
**C. Rumpel**  
Composition and dynamics of pyrogenic C depend on its physical form
- 11:15–11:30 EGU2012-198  
**J. Hatten**, J. Warrick, M. Goni, R. Wheatcroft, G. Pasternack, A. Gray, and E. Watson  
The Role of Wildfire in the Export of Particulate and Pyrogenic Organic Carbon from a Small Mountainous River

11:30–11:45 EGU2012-2566

M.M. Bisiaux, **A.C. Heyvaert**, and R. Edwards

Distribution and Fate of Black Carbon Nanoparticles from Regional Urban Pollution and Wildfire at a Large Subalpine Lake in the Western United States

11:45–12:00 EGU2012-5903

**T. Dittmar**, C. E. Rezende, M. Manecki, J. Niggemann, A. R. Coelho Ovalle, and M. C. Bernardes

Continuous flux of dissolved black carbon from a vanished tropical forest biome

**SSS7.3 – Where does all the Pyrogenic Organic Matter go? Its Fate in Soils, Water and Sediments (co-listed) – Posters**

Convener: C. Santin | Co-Conveners: J. M. De la Rosa, S. Doerr

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY619 EGU2012-9913

**L. Sánchez-García**, I. Cato, and Ö. Gustafsson

The sequestration sink of soot black carbon in the Northern European Shelf sediments

XY620 EGU2012-13741

**C Licata** and R Sanford

Soil total and charcoal carbon from mountain shrublands to subalpine forests in the Colorado Front Range

XY621 EGU2012-1022

**N.A. Vasilyeva** and C. Chenu

Century scale char and non-char C co-stabilization in soil free C fractions

XY622 EGU2012-468

**C. Santín**, S.H. Doerr, R.A. Shakesby, R. Bryant, G.J. Sheridan, P.N.J. Lane, H.G. Smith, and T.L. Bell

Pyrogenic carbon in wildfire ash: characteristics and potential as C sink

XY623 EGU2012-7729

**S. Fernández**, P. Roces, C. Recondo, and C. Santin

Ortophoto and satellite imagery to monitoring biochar in mountain soils (NW of Cantabrian Range, Spain)

XY624 EGU2012-3802

**L.N. Soucemarianadin**, M.D. MacKenzie, R.E. Wasylyshen, and S.A. Quideau

Influence of the forming conditions on Black Carbon properties

XY625 EGU2012-2762

**T. Maxfield**

Mechanisms of biochar stability and functionality

XY626 EGU2012-13915

**W.C Hockaday** and C.A Masiello

The aromatic domains in charcoal are small: Implications for the fate and transport of pyrogenic carbon

XY627 EGU2012-14259

**C Santin** and SH Doerr

Quantifying pyrogenic carbon: don't miss the big bits?

XY628 EGU2012-14260

R Bryant, **SH Doerr**, and C Santin

Black Carbon Production in Open Biomass Combustion

XY629 EGU2012-13523

G. Almendros, Z. Hernández, F.J. González-Vila, J. Sanz, J.M. De la Rosa, and **H. Knicker**

Analysis of carbon forms in chemically-modified peat humic acids by partial least squares regression analysis of solid-state nuclear magnetic resonance spectra

XY630 EGU2012-4893

**H. Knicker**, F.J. González Vila, and L. Clemente Salas

Biochemical resistance of pyrogenic organic matter in fire-affected mineral soils of Southern Europe

XY631 EGU2012-264

**J. M. De la Rosa** and H Knicker

Fast effects of biochar amendment on soil C and N dynamics, nutrient availability and fertility under controlled conditions

XY632 EGU2012-2644

**N. Singh**, S. Abiven, B. Maestrini, J.A. Bird, E.L. Eoin, M.S. Torn, and M.W.I. Schmidt

Changes in biogeochemistry of pyrogenic carbon in soil after one year

XY633 EGU2012-2777

**B. Maestrini**, S Abiven, N Singh, J. Bird, M. S. Torn, and M.W.I. Schmidt

Pyrogenic carbon loss pathways under natural and increased N deposition and its priming effect on soil organic matter

- XY634 EGU2012-9971  
M.E. Varela, S.R. Faria, **I. Campos**, M.M.P.F. Caria, R.S.V. Ferreira, A.I. Machado, M.A.S. Martins, R. Pinto, S.A. Prats, V.I. Esteves, and J.J. Keizer  
Effects of wildfire on soil organic carbon export by runoff in Central Portugal
- XY635 EGU2012-1113  
F. Worrall and **GD Clay**  
Prescribed burning as a natural, long-term experiment in biochar addition - Can prescribed burns contribute to carbon storage in peat soils?
- XY636 EGU2012-8712  
G. Almendros, F.J. González-Vila, J.A. González-Pérez, H. Knicker, **J.M. De la Rosa**, C. Dettweiler, and Z. Hernández  
On the structural factors of soil humic matter related to soil water repellence in fire-affected soils
- XY637 EGU2012-14331  
**A. Cerdá**, F. González Peñaloza, C. Santín, and S.H. Doerr  
Land abandonment, fire recurrence and soil carbon content in the Macizo del Caroig, Eastern Spain
- XY638 EGU2012-14086  
**R. Menéndez-Duarte**, S. Fernández, C. Santin, L. Gaspar, and A. Navas  
Wildfire effects on C stocks in mountain soils

Thursday, 26 April

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**GM2.1 – High definition topography - data acquisition, modelling, interpretation (co-listed) – Posters**

Convener: D. Rieke-Zapp | Co-Conveners: A. Reiterer, J. Chandler, D. Vericat, N. Tate, D. M. Powell, J. Brasington, I. Marzolff

**Hall XL | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: D. Vericat / N. Tate

- XL206 EGU2012-7714  
A. Wagner, A. Reiterer, P. Wasmeier, **D. Rieke-Zapp**, and T. Wunderlich  
Vision-Based Geo-Monitoring - A New Approach for an Automated System
- XL207 EGU2012-7858  
**R. Berther** and D. Rieke-Zapp  
Geomonitoring for understanding of sediment transport in an Alpine river catchment
- XL208 EGU2012-5566  
**A. Beer**, L. Campana, and D. Rieke-Zapp  
Evaluating sub-millimetre erosion monitoring in a mountain torrent
- XL209 EGU2012-14172  
**P. Marzahn**, D. Rieke-Zapp, and R. Ludwig  
Soil surface roughness characterization for microwave remote sensing applications
- XL210 EGU2012-4952  
**D. Rieke-Zapp**  
Insitu measurement of bedrock erosion
- XL211 EGU2012-12789  
**A. Volkwein**, A. Beer, and L. Egli  
Applications of terrestrial laser scanning in natural hazard sciences
- XL212 EGU2012-10565  
**M. Lo Brutto**  
Automatic reconstruction of 3D models in geomorphology through close-range photogrammetry and 3D web-based services
- XL213 EGU2012-5759  
**J. Gance**, T. Dewez, J.-P. Malet, and A. Stumpf  
Time-lapse stereo-photogrammetry to monitor electrical sounding electrodes on an unstable slope
- XL214 EGU2012-3537  
**H.K. Seo**, Y.H. Noh, J.G. Um, Y.S. Choi, and M.H. Park  
Applicability of digital photogrammetry technique to quantify rock fracture surfaces
- XL215 EGU2012-8167  
**F. Bretar**, M. Pierrot-Deseilligny, D. Schelstraete, O. Martin, and P. Quernet  
Generating High resolution surfaces from images: when photogrammetry and applied geophysics meets
- XL216 EGU2012-936  
**M. Westoby**, J. Brasington, N.F. Glasser, M.J. Hambrey, and J.M. Reynolds  
Structure-from-Motion photogrammetry: a novel, low-cost tool for geomorphological applications
- XL217 EGU2012-6261  
**C. Hugenholtz**, K. Whitehead, B. Moorman, O. Brown, T. Hamilton, T. Barchyn, K. Riddell, and A. LeClair  
High-resolution terrain and landcover mapping with a lightweight, semi-autonomous, remotely-piloted aircraft (RPA): a case study and accuracy assessment
- XL218 EGU2012-8822  
**C. Wiegand**, C. Geitner, K. Heinrich, and M. Rutzinger  
Multi-temporal analysis of aerial images for the investigation of spatial-temporal dynamics of shallow erosion - a case study from the Tyrolean Alps
- XL219 EGU2012-10016  
C. Capanna, L. Jorda, G. Gesquière, and **P. Lamy**  
A new 3D reconstruction technique applied to small solar system bodies
- XL220 EGU2012-9765  
S. Delalieux, S. Livens, M. Goossens, I. Reusen, and **C. Tote**  
Spatial unmixing for environmental impact monitoring of mining using UAS and WV-2
- XL221 EGU2012-8875  
A Constantinescu, I. Nichersu, **C Trifanov**, I. Nichersu, and M. Mierla  
Morphometric analyze for flood hazard map using DTM built with LIDAR and Echo-sounder data in Danube Delta

XL222	EGU2012-8905 <b>M. Avian</b> First results of repeated Terrestrial Laserscanning monitoring processes at the rock fall area Burgstall/Pasterze Glacier, Hohe Tauern Range, Central Austria
XL223	EGU2012-10081 <b>M. Avian</b> Performance and limits of different long-range TLS-sensors for monitoring high mountain geomorphic processes at different spatial scales
XL224	EGU2012-12400 <b>A. Prokop</b> and M. Chiari Long term monitoring of geomorphological changes caused by torrent activity using terrestrial laser scanning
XL225	EGU2012-10244 <b>D.J. Luscombe</b> , K. Anderson, A. Wetherelt, E. Grand-Clement, N. Le-Feuvre, D. Smith, and R.E. Brazier Understanding the structure of Exmoor's peatland ecosystems using laser-scanning technologies
XL226	EGU2012-10512 N. Perez-Gallego, T. Francke, J. Latron, S. Werth, S. Werb, and <b>F. Gallart</b> Testing a Terrestrial Laser Scanner for studying badlands forms and erosion rates. Vallcebre (Catalan Pre-Pyrenees)
XL227	EGU2012-2469 <b>M. Dotterweich</b> and S. Bub Using of high resolution morphometric thalweg analyses of dry valleys under woodland to assess land use impact and soil erosion in the late Holocene
XL228	EGU2012-13442 <b>B.D. Collins</b> , S.C. Corbett, and H.C. Fairley Measuring and modeling high-resolution topographic change at archaeological sites in Grand Canyon National Park, Arizona, U.S.A.
XL229	EGU2012-731 <b>Á. Gómez</b> , S. Schnabel, F. Lavado, and J. Rubio Developing a methodology to estimate historical sheet erosion rates using exposed roots and terrestrial laser scanner
XL230	EGU2012-5543 <b>D. Vericat</b> , M. Smith, J.A. López-Tarazón, A. Tena, J. Brasington, and R.J. Batalla Monitoring Topographic Change In Highly Erodible Landscapes By Means Of Terrestrial Laser Scanning
XL231	EGU2012-8691 <b>M. Etchebes</b> , P. Tapponnier, Y. Klinger, J. Van Der Woerd, X. Xu, S. Xinze, T. Xibin, M. Rizza, and T. Lok Hang Application of terrestrial LiDAR topographic data to reconstruct offset geomorphic markers along the Fuyun strike-slip fault, Xinjiang, China
XL232	EGU2012-1288 <b>R.M. Frings</b> and S. Vollmer Use of 3D photogrammetry for measurement of river bed porosity
XL233	EGU2012-4785 <b>M. Smith</b> and D. Vericat Evaluating through-water terrestrial laser scanning under a range of flow and suspended sediment conditions

**GM2.2 – Digital Landscapes: Quantitative Interrogation and Use to Examine Geomorphic Processes (co-listed) – Posters**

Convenor: J. K. Hillier | Co-Conveners: P. Tarolli, P. Passalacqua, D.C. Mason, S. Conway

**Hall XL | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Susan Conway

XL234	EGU2012-4560 <b>A.P. Valentine</b> , L.M. Kalnins, and J. Trampert Hunting for seamounts using neural networks: learning algorithms for geomorphic studies
XL235	EGU2012-13482 <b>VB Ernstsen</b> , A Lefebvre, J Bartholdy, A Bartholomä, and C Winter On the determination of net bedload transport patters in a natural tidal inlet system (Knudedyb in the Danish Wadden Sea)
XL236	EGU2012-13310 F. Haas, <b>T. Heckmann</b> , L. Hilger, and M. Becht Measuring debris flows in the proglacial area of the Gepatschferner/Austrian Alps using repeat ground-based and airborne LiDAR data

XL237	EGU2012-5046 <b>J. K. Hillier</b> and M. S. Smith Robust 3D Quantification of Glacial Landforms: A Use of Idealised Drumlins in a Real DEM
XL238	EGU2012-7660 <b>L. Carturan</b> , S. Calligaro, F. Cazorzi, G.A. Baldassi, D. Moro, A. Carton, G. Dalla Fontana, A. Guarneri, N. Milan, and P. Tarolli Mass balance and surface dynamics of Montasio Occidentale glacier (Eastern Italian Alps) investigated by Terrestrial Laser Scanner
XL239	EGU2012-10137 <b>A. J. Cook</b> , T. Murray, A. Luckman, and D. G. Vaughan A new 100-m Digital Elevation Model of the Antarctic Peninsula suitable for glacier morphology studies, using ASTER Global DEM
XL240	EGU2012-9296 <b>L. Rieg</b> , R. Sailer, M. Sproß, M. Rutzinger, and V. Wichmann Comparison of different DTM resolutions for surface change calculations in a high mountain environment
XL241	EGU2012-8750 <b>S. Trevisani</b> , M. Cavalli, and L. Marchi Reading alpine morphology according to surface texture: two approaches compared
XL242	EGU2012-13565 <b>J. B. Salisbury</b> , J.R. Arrowsmith, T. K. Rockwell, D. Haddad, O. Zielke, and C. Maddugo The Climatic Role in Formation of Fault-Offset Geomorphic Features: Reliable Measurements for Slip-Per-Event Studies
XL243	EGU2012-215 <b>Yu. Yu. Yurchenko</b> and S.V. Sokolov Experience using of DEM's as a basis for landscapes classification at selection of geochemical methods of prospecting.
XL244	EGU2012-8510 <b>A. Doglioni</b> and V. Simeone Identification of large geomorphological anomalies based on 2D discrete wavelet transform
XL245	EGU2012-3422 <b>C. W. Lin</b> , P. Tarolli, C. M. Tseng, and Y. H. Tseng Recognition of large scale deep-seated landslides in vegetated areas of Taiwan
XL246	EGU2012-5000 <b>C.-M. Tseng</b> , P. Tarolli, and C.-W. Lin Variations of Geomorphic Signatures after a Major Typhoon
XL247	EGU2012-5035 <b>S. Calligaro</b> , P. Tarolli, M. Mancini, A. Righetto, D. Capraro, G. Mei, and A. Spinazzè Terrestrial Laser Scanner survey of a small headwater basin in the Dolomites
XL248	EGU2012-6729 <b>J.-K. Liu</b> , M.-S. Yang, M.-C. Wu, and W.-C. Hsu LiDAR DEM for Slope regulations of land development in Taiwan
XL249	EGU2012-9407 L. Cavallari, M. Dierna, M. Gelmini, and <b>G. P. M. Vassena</b> Multiresolution and multisensors 3D laser scanner survey of a landslide in the Italian Alps
XL250	EGU2012-9865 <b>P. Tarolli</b> and A. Righetto Regional scale analysis of the topographic signatures of landslide/debris flow dominated processes
XL251	EGU2012-843 <b>A. Tomczyk</b> and M. Ewertowski Digital Elevation Models of Differences (DODs): implementation for assessment of soil erosion on recreational trails.
XL252	EGU2012-914 <b>S. d'Oleire-Oltmanns</b> , I. Marzolff, and L. Schrott The use of very high resolution DSMs for the investigation of gully evolution in the Souss Basin, Morocco derived from UAV missions
XL253	EGU2012-12427 <b>J. H. Blöthe</b> , H. Munack, and O. Korup Sediment storage and stability along the western Tibetan plateau margin
XL254	EGU2012-3184 <b>F. Cazorzi</b> , A. De Luca, A. Checchinato, F. Segna, and G. Dalla Fontana A LiDAR based analysis of hydraulic hazard mapping
XL255	EGU2012-4114 <b>G. Sofia</b> , P. Tarolli, and G. Dalla Fontana LiDAR DTMs and anthropogenic feature extraction: testing the feasibility of geomorphometric parameters in floodplains

XL256	EGU2012-4636 <b>M. Della Seta</b> , J.P. Galve, D. Piacentini, and F. Troiani Computation, validation and sensitivity of the DTM-derived geomorphic parameters: the case of Stream-Length Gradient Index
XL257	EGU2012-5363 <b>K. Fieber</b> , I. Davenport, J Ferryman, R Gurney, J Walker, and J Hacker Analysis of full-waveform LiDAR pulse properties for vegetation discrimination and characterisation
XL258	EGU2012-6172 <b>F. Pirotti</b> , A. Guarnieri, and A. Vettore Full waveform airborne laser scanning for mapping morphometric parameters in terrain with varying vegetation cover
XL259	EGU2012-6345 <b>J. Filski</b> The State of Health of Nature Reserves: A Case Study using the Fusion of Hyperspectral and Lidar Data

**GMPV4.4 – Recent explosive eruptions: Conduit processes, ash dispersal and effects on aviation (co-listed) – Orals**

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

**Room: 27**

Chairperson: Magnus T. Gudmundsson

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

**COFFEE BREAK**

Chairperson: n.n.

10:30–10:45	EGU2012-12715 <b>S.A. Carn</b> , K. Yang, and A.J. Prata A-Train Satellite Observations of Recent Explosive Eruptions in Iceland and Chile
10:45–11:00	EGU2012-6614 <b>A.J. Durant</b> , A.J. Prata, G. Villarosa, W.I. Rose, P. Delmelle, and J. Viramonte Long-range volcanic ash transport and fallout during the 2008 eruption of Chaiten volcano, Chile
11:00–11:15	EGU2012-7392 <b>K. Turnbull</b> , B. Johnson, S. Newman, L. Clarisse, D. Hurtmans, S. Havemann, F. Marceno, A. Baran, D. O'Sullivan, S. Leadbetter, A. Minikin, B. Weinzierl, H. Schlager, U. Schumann, A. Woolley, and J. Haywood In-situ and remote sensing measurements of volcanic ash from airborne and satellite platforms: a case study from the Eyjafjallajökull eruption
11:15–11:30	EGU2012-10324 <b>G. Prata</b> , A. Durant, F. Prata, G. Villarosa, J. Viramonte, T. Mather, and D. Pyle Transport of fine ash in the southern hemisphere

- 11:30–11:45 EGU2012-9669  
**G. N. Petersen**, H. Bjornsson, P. Arason, and S. von Löwis  
Recent eruptions in Iceland from a meteorological perspective
- 11:45–12:00 EGU2012-12854  
A. Vogel, **K. Weber**, J. Eliasson, A. Palsson, H.M. Moser, T. Palsson, S. von Löwis, and C. Fischer  
Airborne and groundbased measurements of ash particles on Iceland and over Germany during the Grímsvötn eruption May 2011

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**HS2.6 – Hydrological extremes: from droughts to floods (co-listed) – Orals**  
Convener: A. Viglione | Co-Conveners: L. M. Tallaksen, G. Laaha, A. Castellarin, J. Szolgay

**Room: 36**  
Chairperson: Alberto Viglione

- 10:30–11:00 EGU2012-1152  
**G. Di Baldassarre**  
Flood trends and population dynamics
- 11:00–11:15 EGU2012-6970  
**S. Westra**, J. Evans, R. Mehrotra, and A. Sharma  
Disaggregating from daily to sub-daily rainfall under a future climate
- 11:15–11:30 EGU2012-7166  
**G. Ravazzani**, D. Bocchiola, B. Groppelli, A. Soncini, M. C. Rulli, F. Colombo, M. Mancini, and R. Rosso  
Continuous streamflow simulation for index flood estimation in an Alpine basin of Northern Italy
- 11:30–11:45 EGU2012-8866  
**L. Gaál**, J. Szolgay, S. Kohnová, J. Parajka, and G. Blöschl  
Regional patterns of flood time scales in Austria - interplay of climatological and geological controls
- 11:45–12:00 EGU2012-7721  
**B. Merz**, F. Cioffi, E. Rus Peres, R. Purini, J. Reusser, and U. Lall  
From local to global classification of atmospheric circulation patterns associated with some European floods

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**LUNCH BREAK**

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Chairperson: Lena Tallaksen

- 13:30–13:45 EGU2012-2429  
**A.F. Van Loon** and H.A.J. Van Lanen  
A new perspective on hydrological drought: a process-based classification into different drought types
- 13:45–14:00 EGU2012-794  
**M. Stoelze**, M. Weiler, and K. Stahl  
Are streamflow recession characteristics characteristic?
- 14:00–14:15 EGU2012-5133  
**A.J. Teuling**, S.I. Seneviratne, I. Lehner, C. Bernhofer, and A.F. van Loon  
The role of evapotranspiration and runoff in the development of recent droughts in Central-Western Europe
- 14:15–14:30 EGU2012-11957  
D.F. Lekkas, **S. Anastasiadis**, and K. Mammas  
Detection and Statistical Analysis of Severe Drought Events Using Standardized Precipitation Index and Reconnaissance Drought Index, Case Study: Central Aegean Sea, Greece
- 14:30–14:45 EGU2012-5424  
E. Sauquet, **J.-P. Vidal**, C. Perrin, P.-Y. Bourgin, M. Chauveau, and S. Chazot  
Climate and hydrological uncertainties in projections of flood and low-flows in France
- 14:45–15:00 EGU2012-6625  
**L. Samaniego**, H. Feldmann, R. Kumar, and G. Schaedler  
Assessment of soil moisture drought uncertainty using mHM and TERRA-ML simulations in Germany
- Chairperson: Jan Szolgay
- 15:30–16:00 EGU2012-6730  
**T. Wagener**, G. Laaha, D. Koffler, and R. Singh  
Hydrologic similarity, comparative hydrology and hydrologic extremes
- 16:00–16:15 EGU2012-5050  
**M. Nied**, Y. Hundecha, and B. Merz  
Flood-initiating catchment conditions: A spatio-temporal analysis of soil moisture patterns in the Elbe river basin

16:15–16:30	EGU2012-4671 <b>A. Bichler</b> and J. Fürst Groundwater Flooding: Practical Methods for the Estimation of Extreme Groundwater Levels
16:30–16:45	EGU2012-12625 <b>A. Botto</b> , D. Ganora, F. Laio, and P. Claps Combining uncertainty-estimation techniques and cost-benefit analysis to obtain consistent design-flood estimators
16:45–17:00	EGU2012-10652 <b>Dr. C. Donnelly</b> , J. Dahné, Dr. J. Andersson, and Dr. B. Arheimer Potential Impacts of Climate Change on Hydrological Extremes Across Europe

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**HS7.1 – Precipitation: from measurement to modelling and application in catchment hydrology (co-listed) – Orals**

Convener: R. Uijlenhoet | Co-Conveners: A. Langousis, C. Onof, A. Berne, P. Burlando, T. Bellerby, G. Grossi, A. A. Carsteau

**Room: 33**

Chairperson: Remko Uijlenhoet

08:30–08:45	EGU2012-100 <b>N. Peleg</b> and E. Morin Convective rain cells: radar-derived spatio-temporal characteristics and synoptic patterns
08:45–09:00	EGU2012-2653 <b>I. Emmanuel</b> , H. Andrieu, E. Leblois, and N. Janey Influence of rainfall spatial variability on hydrological modelling: a simulation approach
09:00–09:15	EGU2012-2692 <b>W. J. Vanhaute</b> , S. Vandenberghe, K. Scheerlinck, B. De Baets, and N. E. C. Verhoest Improving the extreme value behaviour of Bartlett-Lewis rectangular pulse models
09:15–09:30	EGU2012-3317 <b>G. Bruni</b> , J.A.E. ten Veldhuis, T. Otto, and H. Leijnse Rainfall resolution from weather radars and their application in urban drainage modelling
09:30–09:45	EGU2012-3665 <b>O. Rakovec</b> , P. Hazenberg, P. J. J. F. Torfs, A. H. Weerts, and R. Uijlenhoet Generating spatial precipitation ensembles: impact of temporal correlation structure
09:45–10:00	EGU2012-5023 <b>C. J. Skinner</b> , H. Greatrex, T. J. Bellerby, and D. Grimes Ensemble Characterisation of Precipitation-Uncertainty in the Hydrological Modelling of the Senegal River Basin

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**COFFEE BREAK**

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Chairperson: Tim Bellerby

10:30–10:45	EGU2012-5430 <b>H. Lebrenz</b> and A. Bárdossy Defining random and systematic error in precipitation interpolation
10:45–11:00	EGU2012-5477 <b>L. Nicotina</b> , A. Hilberts, S. Eppert, and D. Lohmann Long term modelling of precipitation and temperature at the continental scale
11:00–11:15	EGU2012-8904 <b>P.-A. Versini</b> , M. Berreguer, and D. Sempere-Torres Reconstruction of historical precipitation based on radar fields: application on Catalonia region (Spain)
11:15–11:30	EGU2012-9579 <b>J.-C. Huang</b> , C.-K. Yu, J.-Y. Lee, L.-W. Cheng, T.-Y. Lee, and S.-J. Kao From Tropical Cyclone Tracks to Flood lead-time Predictions over a Mesoscale Mountainous Watershed
11:30–11:45	EGU2012-10100 <b>F. Fenicia</b> , L. Pfister, J. Iffly, D. Kavetski, and R. Uijlenhoet Rainfall estimation with microwave links: a substitute for rain gauges? Results from a long-term experiment in Luxembourg-City.
11:45–12:00	EGU2012-10334 <b>M. Savina</b> Local Area Weather Radar in Alpine Setting

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**HS7.1 – Precipitation: from measurement to modelling and application in catchment hydrology (co-listed) – Posters**

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Convener: R. Uijlenhoet | Co-Conveners: A. Langousis, C. Onof, A. Berne, P. Burlando, T. Bellerby, G. Grossi, A.

A. Carsteau

#### Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Remko Uijlenhoet and Tim Bellerby

- A78 EGU2012-1076  
**A. El Hassan**, H. Sharif, H. Xie, J. Terrance, and J. McClelland  
Physical Modeling of Hydrologic Processes in South Central Texas
- A79 EGU2012-2908  
**S.A.P. de Jong**, R.W. Hut, R. Bagree, and N.C. van de Giesen  
Dense network of disdrometers in an urban environment
- A80 EGU2012-3070  
C.Z. van de Beek, H. Leijnse, P. Hazenberg, and **R. Uijlenhoet**  
Close-range radar rainfall estimation and error analysis
- A81 EGU2012-3811  
**C. Liang**, F. Van Ogtrop, and V. Willem  
Model Sensitivity to Parameters in the Simple 1-D Land-Atmosphere Model
- A82 EGU2012-5652  
**E. Rabiei**, U. Haberlandt, M. Sester, and D. Fitzner  
Areal rainfall estimation using moving cars as rain gauges - modeling study and laboratory experiment
- A83 EGU2012-5896  
A. Overeem, H. Leijnse, and **R. Uijlenhoet**  
Sampling uncertainties of precipitation estimates from satellites using a climatological radar rainfall data set
- A84 EGU2012-5937  
A. Overeem, H. Leijnse, and **R. Uijlenhoet**  
Country-wide rainfall maps from a commercial cellular telephone network
- A85 EGU2012-6818  
**C.- A. Chen**, C. Chou, and C.- T. Chen  
Estimation of Thermodynamic and Dynamic Contribution on Regional Precipitation Intensity and Frequency Changes under Global Warming
- A86 EGU2012-7969  
**M. Herrnegger** and H.-P. Nachtnebel  
From runoff to precipitation: Predicting catchment precipitation by inverting a conceptual rainfall-runoff model
- A87 EGU2012-8531  
**V. Kaleris**, A. Langousis, and K. Siampi  
Case study for the identification and evaluation of rainfall-runoff models
- A88 EGU2012-10373  
**A. Paschalis**, P. Molnar, S. Fatichi, and P. Burlando  
Stochastic modeling of high resolution space-time precipitation fields
- A89 EGU2012-10410  
**L. Gaal**, P. Molnar, and J. Szolgay  
Multivariate modelling of storm characteristics on the basis of copulas in Switzerland
- A90 EGU2012-10417  
**M. Savina** and P. Burlando  
Alpine radar conversion for LAWR
- A91 EGU2012-10511  
M. Heistermann, Th. Pfaff, and **S. Jacobi**  
wradlib - An Open Source Library for Weather Radar Data Processing
- A92 EGU2012-11079  
**A. Verworn** and U. Haberlandt  
Benefit of merging precipitation from rain gauges and radar for event based and continuous simulations of floods
- A93 EGU2012-11337  
**E. Volpi**, A. Fiori, and M. Di Lazzaro  
Exploring the variability of the hydrologic response due to rainfall spatial heterogeneity: Analytical derivations and numerical simulations
- A94 EGU2012-13736  
**L. Cunha**, B. Seo, W. Krajewski, and R. Mantilla  
Investigating the effects of rainfall uncertainty on flood prediction across scales
- A95 EGU2012-1711  
**T. Y. Gan**, J. Hanrahan, and C. C. Kuo  
Validation of regional precipitation-related indices dynamically downscaled from ERA-Interim Reanalysis Data by a Mesoscale Atmospheric Model

- A96 EGU2012-2400  
**J.A.E. ten Veldhuis**, C. Maksimovic, D. Schertzer, and P. Willems  
 High resolution rainfall data for urban hydrology, flood modelling and prediction
- A97 EGU2012-3727  
**S. Grimaldi**, A. Petroselli, and N. Romano  
 Mixing the Green-Ampt model and Curve Number method as an empirical tool for rainfall excess estimation in small ungauged catchments.
- A98 EGU2012-4643  
**H. Li**, C-Y Xu, H. Chen, Z.X. Zhang, and H.L. Xu  
 Evaluation of interpolating methods for daily precipitation at various station densities
- A99 EGU2012-6227  
**R. Arsenault** and F. Brissette  
 Determining the optimal spatial distribution of weather station networks for lumped and distributed hydrological modelling purposes using RCM datasets
- A100 EGU2012-9218  
**K. Vormoor** and T. Skaugen  
 Temporal disaggregation of daily meteorological grid data
- A101 EGU2012-9355  
**T. Plunke**, D. Pavlik, and C. Bernhofer  
 Reduction of uncertainty of hydrological modelling using different precipitation inputs
- A102 EGU2012-10469  
**Y. Derin** and K. K. Yilmaz  
 Evaluation of Multiple Satellite-based Rainfall Products over a Topographically Complex Watershed
- A103 EGU2012-10896  
**F. Serinaldi** and C.G. Kilsby  
 Analysis and modelling of spatio-temporal properties of daily rainfall over the Danube basin

**HS7.2/AS1.20/CL5.16/NH1.3/NP3.6 – Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized) – Posters**

Convener: R. Deidda | Co-Conveners: T. Bellerby, G. Grossi, A. Langousis, X. L. Wang, S. Vogl, P. Laux, H. Kunstmann

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Roberto Deidda

- A104 EGU2012-1147  
**G. Naumann**, P. Barbosa, H. Carrao, A. Singleton, and J. Vogt  
 Monitoring drought conditions and their uncertainties in areas with sparse precipitation data. Evaluation of different precipitation datasets in Africa.
- A105 EGU2012-2934  
**R.A.I. Wilcke**, T.M Mendlik, and A.G. Gobiet  
 Physical Consistency of Multi-Parameter Error-Correction and Downscaling of Regional Climate Models
- A106 EGU2012-3421  
**M. Siam**, M. Nour, and A. Wagdy  
 A Comparison of Statistical Downscaling Approaches to study the Impacts of Climate Change on the Hydrological Cycle of Upper Blue Nile basin
- A107 EGU2012-3465  
**R. Remesan** and T. Bellerby  
 Sensitivity and dependence of mesoscale downscaled prediction results on different parameterizations of convection and cloud microphysics
- A108 EGU2012-3680  
**H. Sharif**, C Furl, and M Al-Zahrani  
 Rainfall Climatology over Asir Region, Saudi Arabia
- A109 EGU2012-3922  
**J. B. Gilmore**, J. P. Evans, and S. C. Sherwood  
 The influence of physics parameterizations on precipitation extremes in the Newcastle east coast low of 2007
- A110 EGU2012-4010  
**E. Maeda**, J. Arevalo, and C. Carmona-Moreno  
 Effects of time-series length and gauge network density on rainfall climatology estimates in Latin America
- A111 EGU2012-4231  
**C. Nyunt**, H. Yamamoto, A. Yamamoto, T. Nemoto, M. Kitsuregawa, L. Wang, and T. Koike  
 Bias correction and Downscaling of GCM for basin scale simulation
- A112 EGU2012-4665  
**E. Mair**, G. Bertoldi, S. Della Chiesa, G. Niedrist, L. Egarter Vigl, and U. Tappeiner  
 An approach to improve precipitation estimation to model the water budget in Alpine catchments

- A113 EGU2012-5087  
**L. Dobor**, Z. Barcza, Á. Havasi, and N. Fodor  
 Preparation of high resolution climate scenarios for agricultural impact analysis in Hungary
- A114 EGU2012-5859  
**C. Dobler**  
 Downscaling precipitation extremes in a complex Alpine catchment
- A115 EGU2012-6448  
**S. Thober**, L. Samaniego, and R. Kumar  
 Evaluation of Regional Climate Models: Extremes important for Hydrological Projections
- A116 EGU2012-6891  
**N. Ohara**, M.L. Kavvas, S. Kure, Z.Q. Chen, and S. Jang  
 Model-based Estimation of Maximum Precipitation for the 1997 Storm Event Over American River Watershed, California, USA
- A117 EGU2012-7420  
**S.D. Blazkova**, K.J. Beven, and M. Martinkova  
 Hazard and vulnerability to climate change of the Skalka dam in Czech Republic
- A118 EGU2012-7612  
**R. Deidda**, G. Mascaro, M. Hellies, L. Baldini, and S. Sebastianelli  
 A systematic analysis of precipitation retrieved by a Polarimetric Doppler ground radar in Central Italy
- A119 EGU2012-7755  
**A. Langousis** and V. Kaleris  
 A statistical approach to resolve incompatibilities between measured runoff data and daily estimates of spatially averaged rainfall
- A120 EGU2012-8266  
**Q. Zhang**, H. Körnich, and K. Holmgren  
 How well do reanalyses represent the southern African precipitation?
- A121 EGU2012-8952  
**I. Anders** and K. Haslinger  
 Varying trends in precipitation and temperature at different elevations in the European Alps? - A regional climate modelling perspective with COSMO-CLM
- A122 EGU2012-9087  
**R. Sasse**, G. Schädler, H. Feldmann, and Ch. Kottmeier  
 Generation of Regional Climate Ensembles Using Atmospheric Forcing Shifting
- A123 EGU2012-9432  
**R. Haas**, K. Born, A. Georgiadis, M. K. Karremann, and J. G. Pinto  
 Statistical Downscaling of Large-Scale Wind Signatures Using a Two-Step Approach
- A124 EGU2012-9736  
**H.L. Cloke**, F. Pappenberger, T. Eckel, R. Buizza, and K. Bogner  
 The probabilistic Forecast Convergence Score (pFCS)
- A125 EGU2012-10021  
**P-E. Mellander**, S.G. Gebrehiwot, A.I. Gärdenäs, W. Bewket, and K. Bishop  
 Summer Rains in the Upper Blue Nile Basin: half a century of past and future spatiotemporal patterns
- A126 EGU2012-10836  
**N. Salzmann**, M. Rohrer, D. Acuna, P. Calanca, and C. Huggel  
 Assessment of future regional precipitation pattern for an Andes region in Southern Peru
- A127 EGU2012-11128  
**M. Piazza**, J Boe, C Page, E Sanchez-Gomez, and L Terray  
 21st century snowfall changes over the French Alps : the role of temperature
- A128 EGU2012-11725  
 M. Gosset and **R. Roca**  
 Propagation of Rainfall Products uncertainties in hydrological applications : Studies in the framework of the Megha-Tropiques Satellite Mission
- A129 EGU2012-11754  
**D. D'Onofrio**, V. Artale, S. Calmanti, J. von Hardenberg, E. Palazzi, and A. Provenzale  
 Stochastic rainfall downscaling of the PROTHEUS regional climate model
- A130 EGU2012-11831  
**M. Giorgio** and R. Greco  
 Modelling of eternal and internal intermittence of rainfall data via a simple event based stochastic model
- A131 EGU2012-12028  
 L.G. Lanza, **M. Colli**, and P. La Barbera  
 On the influence of rain gauge performance on extreme events statistics: the case of weighing gauges
- A132 EGU2012-12045  
**M. Muert**, B. Gauvin St-Denis, R. Ludwig, and D. Chaumont  
 Analysis of the effects of correcting biases in RCM precipitation fields with the local intensity scaling method for a small alpine catchment

- A133 EGU2012-13381  
**S Samadi**, C Wilson, H Moradkhani, and S Gummeneni  
 Uncertainty analysis of statistically downscaled temperature and precipitation regimes in a semi arid catchment
- A134 EGU2012-13397  
**E. Tan**  
 An Investigation of Extreme Precipitation in Turkey
- A135 EGU2012-13458  
 M.A. Campo, **J.J. Lopez**, and J.P. Rebole  
 Rainfall Stochastic models
- A136 EGU2012-13562  
**J C Soto-Sandoval** and A P Jacquin  
 Problems with the interpolation of precipitation amounts in mountainous catchments using traditional techniques
- A137 EGU2012-13611  
**A. Maire**, C. Fouchier, P. Arnaud, and Y. Aubert  
 Assessment of the daily areal reduction factor of precipitations with distributed rainfall data: a means of improvement of a prediction method of extremes events in France.
- A138 EGU2012-14167  
**R. Deidda**, G.N. Caroletti, V. Luccarini, M. Marrocù, M. Puliga, G. Pusceddu, and A. Speranza  
 An intercomparison and verification of outputs of several climate models on representative Mediterranean catchments

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**ST5.1/NH1.10/PS5.5 – Space Weather and its Effects on Terrestrial and Geo-Space Environments: Science and Applications (co-organized) – Orals**

Convener: V. Pierrard | Co-Conveners: H. Rothkaehl, N. Crosby, M. Menville

**Room: 24**

Chairperson: N. Crosby

- 13:30–13:45 EGU2012-5399  
**M. Grande**  
 Planetary Space Weather
- 13:45–14:00 EGU2012-12301  
**O.E. Malandraki** and the SEPServer consortium Team  
 Solar Energetic Particle Research within SEPServer - a Space Weather Perspective
- 14:00–14:15 EGU2012-5460  
**L. Barnard**, M. Lockwood, M.J. Owens, C.J. Davis, M.A. Hapgood, and F. Steinhilber  
 Long term trends in solar energetic particle events
- 14:15–14:30 EGU2012-3783  
**P. Stauning**  
 Relations of PC indices to further geophysical activity parameters.
- 14:30–14:45 EGU2012-9601  
**A. Janzhura** and O. Troshichev  
 The PC index: method of calculation and physical sense
- 14:45–15:00 EGU2012-4111  
**C. Stolle** and J. Matzka  
 PCN-index derivation at World Data Center for Geomagnetism, Copenhagen, DTU Space

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

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

**Room: 2**

Chairperson: Marion Miensopust, Martin Hensch

- 13:30–13:45 EGU2012-249  
**S. Avazpourporgou**, S. Thiel, P. Hayman, L. Moresi, and G. Heinson  
 Thermal structure of the Newer Volcanic Province, Western Victoria, Australia from a long period Magnetotelluric (MT) array
- 13:45–14:00 EGU2012-12153  
**P. Wawrzyniak**, J. Zlotnicki, P. Sailhac, and G. Marquis  
 Resistivity variations associated with the 1998 large eruption at La Fournaise volcano inferred by continuous MT monitoring

- 14:00–14:15 EGU2012-8423  
**M. Hensch**, B. Brandsdóttir, Th. Árnadóttir, and S. Cesca  
 Intrusive activity beneath Eyjafjallajökull: Moment- and Stress-Tensor-Inversion of volcanic earthquakes to constrain driving forces of the 2010 eruption
- 14:15–14:30 EGU2012-9804  
**F. Fuchs**, M. Lupi, S. S. Jakobsdóttir, T. Thordarson, and S. A. Miller  
 Seismicity revealed in the Snaefellsnes Volcanic Zone, Iceland
- 14:30–14:45 EGU2012-2039  
**C. Huebscher**, M. Ruhnau, and G.A. Dehghani  
 Frequent underwater volcanism in the central Aegean Sea
- 14:45–15:00 EGU2012-14405  
**C.B Papazachos**, D. Panagiotopoulos, A.V. Newman, S. Stiros, G. Vougioukalakis, M. Fytikas, T. Laopoulos, K. Albanakis, D. Vamvakaris, E. Karagianni, L. Feng, P. Psimoulis, and F. Moschas  
 Quantifying the current unrest of the Santorini volcano: Evidence from a multiparametric dataset, involving seismological, geodetic, geochemical and other geophysical data

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

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

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Marion Miensopust, Martin Hensch

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

A412 EGU2012-5762

**H. Brenot**, N. Theys, J. van Gent, M. Van Roozendael, R. van der A, L. Clarisse, D. Hurtmans, Y. Ngadi, P.-F. Coheur, and C. Clerbaux  
Global multi-sensor satellite monitoring of volcanic SO<sub>2</sub> and ash emissions in support to aviation control

**NH3.7 – Large slope instabilities: characterisation, dating, triggering, monitoring and modelling – Orals**

Convener: G. Crosta | Co-Conveners: M. Jaboyedoff, F. Agliardi, J. Clague, L. Blikra, O. Korup

**Room: 4**

Chairperson: n.n.

08:30–08:45 EGU2012-4656

**M. Della Seta**, S. Martino, and G. Scarascia Mugnozza

The Vasto Landslide (Adriatic coast, central Italy): geomorphological constraints and numerical modelling to reconstruct the evolution of a large instability affecting a coastal slope

08:45–09:00 EGU2012-9743

**S. Zerathe**, T. Lebourg, R. Braucher, and D. Bourlès

Middle Holocene landslide cluster in the south-western Alps: Results from cosmic ray exposure dating of numerous large-scale gravitational failures

09:00–09:15 EGU2012-10092

**V. Lebrout**, L. Baillet, S. Schwartz, D. Jongmans, J. F. Gamond, D. Bourles, O. Le Roux, J. Carcaillet, and R. Braucher

CRE dating on the scarps of large landslides affecting the Belledonne massif (French Alps)

09:15–09:30 EGU2012-7230

**T. Pánek**, J. Hradecký, K. Šilhán, A.L. Strom, V. Smolková, and O. Zerkal

Megalandslide in the Northern Caucasus foredeep (Uspenskoye, Russia): geomorphology, possible mechanism and age constraints

09:30–09:45 EGU2012-8925

**F. X. Yugsi Molina**, R. L. Hermanns, G. B. Crosta, J. Dehls, R. Sosio, and S. A. Sepúlveda

Geomorphological analysis, monitoring and modeling of large rock avalanches in northern Chile (Iquique area) for regional hazard assessment.

09:45–10:00 EGU2012-10308

**T. Strauhal**, C. Zangerl, W. Fellin, and R. Brandner

Geological and structural characterisation of deformation zones of deep seated rockslides in metamorphic rocks

**COFFEE BREAK**

Chairperson: n.n.

10:30–10:45 EGU2012-11617

**F. Agliardi**, G.B. Crosta, F. Meloni, C. Valle, C. Rivolta, and D. Leva

Kink zone localization, structurally-controlled instability, and large-scale rock slope failure at the Mt. Gorsa porphyry quarry (Trentino, Italy)

10:45–11:00 EGU2012-10674

**K.-T. Chang**

Creep behavior of slate slopes explained with numerical modeling

11:00–11:15 EGU2012-11813

G.B. Crosta, P. Cancelli, A. Tamburini, W. Alberto, M. Broccolato, R. Castellanza, P. Frattini, **F. Agliardi**, C. Rivolta, and D. Leva

Chasing a complete understanding of a rapid moving rock slide: the La Saxe landslide

11:15–11:30 EGU2012-10552

**M. Walter** and M. Joswig

Slide quake generation at softrock-landslides

11:30–11:45 EGU2012-9824

**P. Belle**, B. Aunay, J.-L. Join, and S. Bernardie

An innovative approach for very large landslide dynamic and hydrogeological triggering study by inverse modeling (Grand Ilet landslide, Reunion Island)

11:45–12:00 EGU2012-13041

**J. Singer**, K. Thuro, and J. Festl

Time Domain Reflectometry (TDR) monitoring system for deep seated landslides

**NH3.7 – Large slope instabilities: characterisation, dating, triggering, monitoring and modelling – Posters**

Convener: G. Crosta | Co-Conveners: M. Jaboyedoff, F. Agliardi, J. Clague, L. Blikra, O. Korup

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY469 EGU2012-2609  
**G. Drakatos**, D. Paradissis, D. Anastasiou, P. Elias, A. Marinou, K. Chousianitis, X. Papanikolaou, V. Zacharis, P. Argyrakis, K. Papazisi, and K. Makropoulos  
Development of a monitoring platform for slope instability and sliding prevention : preliminary results
- XY470 EGU2012-10114  
**J. Festl**, J. Singer, and K. Thuro  
Determination of landslide triggering precipitation levels based on time series analysis and numerical models - an exemplary study at the the Aggenalm landslide
- XY471 EGU2012-4017  
**C.-C. Huang**, C.-P. Chang, and S.J. Giletycz  
Typhoon-triggered landslides and regional geological structure: case from Typhoon Morakot in Taiwan
- XY472 EGU2012-6278  
**K.-L. Wang**, J.-T. Liao, C.-W. Chen, M.-L. Lin, and H.-H. Lin  
Sliding Threshold Identification of a Deep-Seated Potential Landslide
- XY473 EGU2012-6691  
**J.-C. Chen**, M.-R. Chuang, C.-J. Jeng, and J.-S. Wang  
An application of the FLO-2D Model to debris-flow simulation - a case study of Shinfia village in southern Taiwan
- XY474 EGU2012-6796  
**W.-S. Huang**, M.-L. Lin, H.-C. Liu, and H.-H. Lin  
Abduction of Toe-excavation Induced Failure Process from LEM and FDM for a Dip Slope with Rock Anchorage in Taiwan
- XY475 EGU2012-9953  
**S. Bernardie** and B. Aunay  
Modelling the behaviour of a large landslide in Reunion Island (Grand Ilet)
- XY476 EGU2012-4968  
C. Cioli, R. Genevois, M. Iafelice, and **L. Zorzi**  
Numerical analysis of the creeping behavior of the S. Andrea di Perarolo secondary landslide (Italian Eastern Alps)
- XY477 EGU2012-6003  
**P. Lollino**, M.G. Angeli, F. Ardizzone, F. Calò, M. Cardinali, R. Castaldo, F. Fiorucci, F. Guzzetti, A. Manconi, M. Manunta, M. Manzo, L. Paglia, F. Pontoni, P. Reichenbach, M. Rossi, and P. Tizzani  
Kinematic evolution of the Ivancich landslide: analysis, characterization and numerical modelling
- XY478 EGU2012-10977  
**J.M Reitner**, S. Ivy-Ochs, V. Alfimov, I. Hajdas, and C. Janda  
Pre-historic rockslides (Eastern Alps/Austria) and their impact on valley floor development up to now
- XY479 EGU2012-11511  
M. J. Rodríguez-Peces, J. V. Pérez-Peña, J. M. Azañón, and **C. Ureña**  
The Dúdar landslide: a huge slope instability associated to active tectonics in the NE border of the Granada Basin (SE Spain)
- XY480 EGU2012-12829  
**A. Guerricchio** and V. Simeone  
Deep seated gravitational slope deformations and large landslides: implications on landslide hazard of urban areas and coastal erosion phenomena of Mount Poro headland
- XY481 EGU2012-12886  
**A. Guerricchio**, A. Doglioni, and V. Simeone  
Deep seated tectonic-gravitational failure and large landslide in the area from Scilla to Punta Pezzo (Calabria region South Italy)
- XY482 EGU2012-13255  
**H. Fukuoka**, H. Akao, D. Miyauchi, A. Okamoto, T. Kawase, M. Ichimura, D. Chifu, and K. Inui  
Low H/V and its volume dependency of landslides on the lunar crater rims
- XY483 EGU2012-8880  
**A. Akgün**  
Determination of adverse effects of landslide generated impulse waves in a dam reservoir by using empirical approaches: a case study from North Turkey
- XY484 EGU2012-11343  
**G. Crosta**, R.L. Hermanns, E. Valbuszzi, J. Dehls, F.X. Yugsi Molina, and S. Sepulveda  
Slope instabilities along the Western Andean Escarpment and the main canyons in Northern Chile

- XY485 EGU2012-11469  
**G. Crosta**, R.L. Hermanns, and P. V. Murillo  
 Large rock avalanches in southern Perù: the Cerro Caquilluco - Cerrillos Negros rock slide - avalanche (Tacna, Tomasiri, Perù)
- XY486 EGU2012-11496  
**G.B. Crosta**, F. Agliardi, R. Sosio, C. Rivolta, D. Leva, and L. Dei Cas  
 Long term real-time monitoring of large alpine rockslides by GB-InSAR: mechanisms, triggers, scenario assessment and Early Warning
- XY487 EGU2012-9741  
**L. Moretti**, A. Mangeney, Y. Capdeville, E. Stutzmann, A. Lucas, C. Huggel, D. Schneider, G.B. Crosta, and F. Bouchut  
 Numerical modeling and characterization of rock avalanches and associated seismic signal
- XY488 EGU2012-12292  
**B. Matasci**, A. Pedrazzini, F. Humair, G. Pedrozzi, D. Carrea, A. Loyer, and M. Jaboyedoff  
 MONTE GENEROSO ROCKFALL FIELD TEST (SWITZERLAND): Comparison between real rockfall volumes measurements and production calculations

**NH3.10 – Documentation and monitoring of landslides and debris flows for mathematical modelling and design of mitigation measures** – Orals

Convener: L. FRANZI | Co-Conveners: M. Arattano, M. Arai

**Room: 8**

Chairperson: n.n.

- 15:30–15:45 EGU2012-2727  
**N. Lafarge**, G. Chambon, J.C. Thouret, and D. Laigle  
 Rheological behaviour of lahar flow
- 15:45–16:00 EGU2012-10585  
**D. Gauthier** and D.J. Hutchinson  
 The material, morphological, and mechanical similarities between sensitive clay landslides and dry snow slab avalanches: Implications and applications
- 16:00–16:15 EGU2012-291  
**V.O. Mikhaylov** and S.S. Chernomorets  
 Discrete element simulation of rockfalls, landslides and debris flows
- 16:15–16:30 EGU2012-7906  
**Y. Deubelbeiss** and B. W. McArdell  
 Dynamic modelling of debris flow erosion and deposition with application to the USGS debris flow flume experiments
- 16:30–16:45 EGU2012-6226  
**R. Ziade**, C. Abdallah, and N. Baghdadi  
 Mass Movement Hazards in the Mediterranean; A review on applied techniques and methodologies
- 16:45–17:00 EGU2012-9303  
**C. Mignelli**, S. Pomarico, and D. Peila  
 Multicriteria Analysis model for the comparison of different rockfalls protection devices

**NH3.10 – Documentation and monitoring of landslides and debris flows for mathematical modelling and design of mitigation measures** – Posters

Convener: L. FRANZI | Co-Conveners: M. Arattano, M. Arai

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Franzi Luca

- XY489 EGU2012-1472  
 I canelli, **a.m. ferrero**, and a. segalini  
 Debris Flow Risk mitigation by the means of flexible barriers. Experimental and field tests.
- XY490 EGU2012-2884  
**B.-S. Lin**, C.-Y . Hsiao, W.-Y. Leung, and S.-Y. Chi  
 Using Airborne LiDAR Technology to Analyze Landslide Hazards in Shih-men Watershed
- XY491 EGU2012-3535  
**A. De Agostini**, M. Floris, P. Pasquali, M. Barbieri, A. Cantone, P. Riccardi, G. Stevan, and R. Genevois  
 The contribute of DInSAR techniques to landslide hazard evaluation in mountain and hilly regions: a case study from Agno Valley (North-Eastern Italian Alps)

- XY492 EGU2012-5956  
**D. Dallavalle**, P. Scotton, and R. Genevois  
 \textbf{THE DEBRIS-FLOW MONITORING SYSTEM OF ACQUABONA TORRENT (Cortina D'Ampezzo, BL, Italy).}
- XY493 EGU2012-6719  
**M. Arai**  
 A research of phase velocity of roll waves for debris flow
- XY494 EGU2012-7597  
**F. Bettella**, G. Bertoldi, E. Pozza, B.W. Mc Ardell, and V. D'Agostino  
 A comparative 2D modeling of debris-flow propagation and outcomes for end-users
- XY495 EGU2012-10056  
 S Adami, M Bresolin, M Carraretto, P Castelletti, D Corò, F Di Mario, S Fiaschi, T Frasson, L Gandolfo, L Mazzalai, T Padovan, F Sartori, A Viganò, A Zulian, A De Agostini, M Pajola, and **M Floris**  
 An unconventional GIS-based method to assess landslide susceptibility using point data features
- XY496 EGU2012-10209  
**G. Tessari**, C. Cioli, M. Floris, G. Stevan, and R. Genevois  
 A flexible system of remediation to stabilize a road affected by landslide in the area of Val di Maso (North-Eastern Italian Alps)
- XY497 EGU2012-10331  
**M. Rosso**, P. Alfredini, L. Magni, R. de Oliveira Sakai, H. de Melo Witiski, and W. C. de Sousa Junior  
 Numerical simulation model of debris flow for the Santo Antônio Catchment, in Caraguatatuba, São Paulo State North Coast, Brazil
- XY498 EGU2012-13728  
**K.B. Jaafar**  
 Heavy rainfall intensity triggering the landslide at Sungai Ruil Cameron Highland Malaysia - A Case study

**NH3.11 – Landslide hazard and risk assessment, and landslide management – Orals**

Convener: P. Reichenbach | Co-Conveners: F. Guzzetti, A Günther

**Room: 4**

Chairperson: Gunther

- 13:30–13:45 EGU2012-11244  
**J. Hervás** and M. Van Den Eeckhaut  
 Analysis of national and regional landslide inventories in Europe
- 13:45–14:00 EGU2012-7655  
 A. Trigila, **F. Catani**, N. Casagli, G. Crosta, C. Esposito, P. Frattini, C. Iadanza, D. Lagomarsino, S. Lari, G. Scarascia Mugnozza, S. Segoni, D. Spizzichino, and V. Tofani  
 The landslide susceptibility map of Italy at 1:1 Million scale
- 14:00–14:15 EGU2012-11119  
**M. Fressard**, Y. Thiery, and O. Maquaire  
 Landslide susceptibility assessment in the Pays d'Auge plateau (Normandy, France): application at different scales
- 14:15–14:30 EGU2012-7437  
**H. Petschko**, A. Brenning, J. Goetz, R. Bell, and T. Glade  
 Assessing the quality of landslide susceptibility maps for Lower Austria
- 14:30–14:45 EGU2012-4214  
**M.C. Morandi**, E. Farabegoli, and G. Onorevoli  
 Root reinforcement and its implications in shallow landsliding susceptibility on a small alpine catchment
- 14:45–15:00 EGU2012-7920  
**P. Salvati**, C. Bianchi, M. Rossi, and F. Guzzetti  
 Landslide risk to the population and its temporal and geographical variation in Italy
- Chairperson: Reichenbach
- 15:30–15:45 EGU2012-1656  
**E. Intrieri**, G. Gigli, F. Mugnai, R. Fanti, and N. Casagli  
 Landslide management through the design and implementation of an early warning system
- 15:45–16:00 EGU2012-834  
**F E Taylor** and B D Malamud  
 Modelling the Probability of Landslides Impacting Road Networks
- 16:00–16:15 EGU2012-8099  
**L. Vranken**, P. Van Turnhout, M. Van Den Eeckhaut, L. Vandekerckhove, G. Vantilt, and J. Poesen  
 Assessing the Economic Cost of Landslide Damage in Low-Relief Regions: Case Study Evidence from the Flemish Ardennes (Belgium)

- 16:15–16:30 EGU2012-9102  
 M. Sonnleitner, **P. Nicolet**, M. Choffet, and M. Jaboyedoff  
 Risk to housing induced by slow-moving landslides and reactivations in Vaud County (Switzerland)
- 16:30–16:45 EGU2012-9695  
**R. Pellicani**, G. Spilotro, and C.J. Van Westen  
 Quantify landslide exposure in areas with limited hazard information
- 16:45–17:00 EGU2012-10921  
**F. Marques**, R. Matildes, and P. Redweik  
 Sea cliff instability susceptibility at regional scale: A statistically based assessment in southern Algarve, Portugal.

**NH3.11 – Landslide hazard and risk assessment, and landslide management – Posters**

Convener: P. Reichenbach | Co-Conveners: F. Guzzetti, A Günther

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Guzzetti

- XY499 EGU2012-12457  
**M. Santangelo**, F. Bucci, M. Cardinali, I. Marchesini, M. Rossi, and F. Guzzetti  
 Morpho-structural influences on landslide pattern and distribution: Grass GIS tool application.
- XY500 EGU2012-13454  
**A. Kosir** and T. Popit  
 Quaternary paleolandslides on Rebrnice (SW Slovenia): stratigraphy, sedimentary architecture, geomorphic processes and landslide hazards
- XY501 EGU2012-4411  
**M. Parise**  
 Multi-temporal analysis of slope movements in the Southern Apennines of Italy
- XY502 EGU2012-8286  
**S. Lo Russo**, M.G. Forno, G. Taddia, and L. Gnavi  
 Predisposing factors and susceptibility assessment for deep-seated gravitational slope deformations (DSGSDs): a case study (NW Alps, Italy)
- XY503 EGU2012-1443  
**S. Pereira**, J. L. Zêzere, and C. Bateira  
 Assessing predictive capacity and conditional independence of landslide predisposing factors for shallow landslides susceptibility models
- XY504 EGU2012-4694  
**C.-H. Wang** and C.-M. Tseng  
 Evaluation the influence of Landslide Density in the Constructed Landslide Susceptibility Models: An Example from Lao-Nong River Watershed, Taiwan
- XY505 EGU2012-12599  
 J.M. Azañón, V. Pérez-Peña, J.M. Yesares, F.J. Roldán, R.M. Mateos, J. Rodríguez-Fernández, M.J. Rodríguez-Peces, and **C. Ureña**  
 Landslide susceptibility in the Sierra Nevada National Park (SE Spain) using a multivariate statistics method.
- XY506 EGU2012-7582  
**M. C. Margarint**, A. Grozavu, and C. V. Patriche  
 Assessing the spatial variability of weights of landslide causal factors in different regions from Romania, using logistic regression
- XY507 EGU2012-12560  
**Z. Chitu**, D. Micu, I. Sandric, and B. Mihai  
 Estimation of rainfall thresholds for the initiation of landslides in the Ialomita Subcarpathians, Romania
- XY508 EGU2012-1596  
**IP Pesevski**, MJ Jovanovski, BM Markovski, and IM Milevski  
 An approach in preparation of National Landslide and Rock Fall database and Hazard-Risk maps in R. Macedonia
- XY509 EGU2012-12429  
**I. Sandric**, B. Mihai, G. Petropoulos, and Z. Chitu  
 Image segmentation and irregular shapes versus pixels in landslides hazards assessment
- XY510 EGU2012-7175  
**J. Voumard**, M. Jaboyedoff, and M.-H. Derron  
 A dynamic traffic simulator for roads affected by natural hazards
- XY511 EGU2012-6946  
 C.-T. Lee, C.-W. Chang, and **S.-H. Lin**  
 Landslide Hazard Analysis and Mapping in a Wide Region

- XY512 EGU2012-2223  
**C.-M. Huang**, W.-K. Huang, and S.-Y. Chi  
Development of a real-time susceptibility evaluation for rainfall-induced landslide on a regional scale in Taiwan
- XY513 EGU2012-3957  
**L. K. Chen**, C. H. Liu, S. C. Lin, and T. Y. Wu  
Discussion on Investigation Methods for Large-scale Landslide Disasters on Taiwan
- XY514 EGU2012-2421  
**Z.-Y. Feng**, Z.-Z. Ding, K.-C. Chang, H.-Y. Lai, and S.-C. Chen  
The mechanism and mitigation of the landslides of Leye region in Alishan, Taiwan
- XY515 EGU2012-6528  
**Z. C. Aye**, M. Jaboyedoff, and M. H. Derron  
An Integrated Web-based Decision Support System in Disaster Risk Management
- XY516 EGU2012-5988  
H.-B. Havenith, **S. Draida**, and C. Benabbas  
Impact of large slope movements on the construction of a major highway in the Constantine Province, North-East Algeria
- XY517 EGU2012-7281  
**P. Nicolet**, M. Choffet, O. Caspar, L. Foresti, and M. Jaboyedoff  
Risk back-analysis of the landslides produced by the August 2005 rainfall event in Switzerland
- XY518 EGU2012-13718  
B. Quan Luna, **J. Cepeda**, A. Stumpf, C.J. van Westen, J.P. Malet, and T.W.J. van Asch  
Application of a Monte Carlo method for modeling debris flow run-out
- XY519 EGU2012-7946  
**E. J Choi**, B. J Kim, D. W Wi, N. C Choi, S. J Lee, J. E Min, and C. Y Park  
Characteristics of leachate in Foot and Mouth Disease Carcass Disposal using Molecular Biology Method

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**SM5.4/NH4.6 – Time-dependent earthquake occurrence and seismic hazard: physics and statistics (co-organized) –**

Orals

Convener: G. Zöller | Co-Conveners: S. Hainzl, M. Cocco, M. Naylor

**Room: 26**

Chairperson: Sebastian Hainzl

- 10:30–11:00 EGU2012-8976  
**J. Schmittbuhl**, M. Bouchon, H. Karabulut, M. Aktar, S. Özalaybay, O. Lengliné, V. Durand, and M.P. Bouin  
Micro-Seismicity and Large Earthquake nucleation in Marmara Sea Region
- 11:00–11:15 EGU2012-8003  
**V. Durand**, M. Bouchon, H. Karabulut, D. Marsan, and J. Schmittbuhl  
Link between Coulomb stress changes and seismic activation in the Marmara sea after the Izmit (Turkey) earthquake
- 11:15–11:30 EGU2012-10344  
**S. S. Nalbant**, J. McCloskey, S. Murphy, N. Simao, and T. Lindsay  
Modelling Long-term Stress on the Sunda Megathrust and Implications for Earthquake Forecasting
- 11:30–11:45 EGU2012-10462  
**J. McCloskey**, S. S. Nalbant, N. Simao, and T. Lindsay  
Long Term Slip Deficit Modelling for the Sunda Megathrust beneath the Mentawai Islands, Sumatra
- 11:45–12:00 EGU2012-9357  
**K. Koketsu**, Y. Yokota, N. Kato, and T. Kato  
Identification and simulation of seismic supercycles along the Japan Trench including the 2011 Tohoku earthquake

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**LUNCH BREAK**

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Chairperson: Gert Zöller

- 13:30–13:45 EGU2012-10109  
**G. B. Brietzke**, S. Hainzl, and G. Zöller  
Synthetic Earthquake Statistics From Physical Fault Models for the Lower Rhine Embayment
- 13:45–14:00 EGU2012-2677  
**I. Mosca**, R. Console, and G. D'Addezio  
Renewal models of seismic recurrence applied to paleoseismological and historical observations

- 14:00–14:15 EGU2012-9029  
**B. Mena Cabrera**, S. Wiemer, and C. E. Bachmann  
Building robust models to forecast the induced seismicity related to geothermal reservoir enhancement
- 14:15–14:30 EGU2012-9778  
**C. Bach** and S. Hainzl  
Improving empirical aftershock modeling using additional source information
- 14:30–14:45 EGU2012-12936  
**S. Steacy**, M. Gerstenberger, C. Williams, D. Rhoades, and A. Christophersen  
Statistical and hybrid statistical/Coulomb modelling of the Canterbury earthquake sequence
- 14:45–15:00 EGU2012-3536  
M. Holschneider, **C. Narteau**, P. Shebalin, Z. Peng, and D. Schorlemmer  
Bayesian analysis of the modified Omori law
- Chairperson: Massimo Cocco
- 15:30–16:00 EGU2012-13170  
**M. J. Werner** and A. M. Rubin  
Spatial Distributions of Foreshocks and Aftershocks: Static or Dynamic Triggering
- 16:00–16:15 EGU2012-2403  
**Dr. M. Baiesi**, Dr. J. Davidsen, and C. Gu  
Triggering cascades and statistical properties of aftershocks
- 16:15–16:30 EGU2012-5007  
**M. Holschneider**, G. Zöller, and S. Hainzl  
On the statistical analysis of maximal magnitude
- 16:30–16:45 EGU2012-4350  
**N. Hirata**, S. Yokoi, K.Z. Nanjo, and H. Tsuruoka  
A forecast experiment of earthquake activity in Japan under Collaboratory for the Study of Earthquake Predictability (CSEP)
- 16:45–17:00 EGU2012-13297  
**D. Albarello** and M. Mucciarelli  
Empirical testing of earthquake recurrence models at source and site

**SM5.4/NH4.6 – Time-dependent earthquake occurrence and seismic hazard: physics and statistics (co-organized) – Posters**

Convenor: G. Zöller | Co-Convenors: S. Hainzl, M. Cocco, M. Naylor

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Mark Naylor

- A373 EGU2012-1291  
**E. Sasorova** and B. Levin  
The comparative analysis of the seismicity in subduction and spreading zones.
- A374 EGU2012-1624  
**P. Paradisopoulou**, E. Papadimitriou, J. Mirek, and V. Karakostas  
Probability distribution on faults near the city of Thessaloniki (Northern Greece)
- A375 EGU2012-2325  
**G. Vergos**, D.N. Arabelos, and M. E. Contadakis  
Evidence for Tidal triggering on the earthquakes of the Hellenic Arc, Greece.
- A376 EGU2012-7248  
**O. Lengliné**, J. Schmittbuhl, G. Daniel, H. Karabulut, V. Durand, M. Bouchon, and M.-P. Bouin  
Recent seismicity in the Cinarcik basin, east Marmara: swarm activity on localized earthquake clusters
- A377 EGU2012-9202  
**K. Leptokaropoulos**, E. Papadimitriou, B. Orlecka-Sikora, and V. Karakostas  
Stress Field Variation after the 2001 Skyros Earthquake, Greece, Derived from Seismicity Rate Changes
- A378 EGU2012-9650  
**D. De Gaetano**, J. McCloskey, and S. Nalbant  
The systematic study of the stability of forecasts in the rate- and state-dependent model.
- A379 EGU2012-11320  
**M. Nic Bhlocaidh**, J. McCloskey, S. S. Nalbant, and C. J. Bean  
Statistical quantification of time-dependence in the static Coulomb model
- A380 EGU2012-2584  
**F. Maccaferri**, E. Rivalta, L. Passarelli, and S. Jonsson  
The stress shadow induced by the 1975–1984 Krafla rifting event
- A381 EGU2012-5593  
**G. Zöller** and Y. Ben-Zion  
Modeling spatio-temporal variations of seismicity in the San Jacinto Fault Zone

- A382 EGU2012-7266  
**S. Hainzl** and D. Marsan  
Seismicity driven by transient aseismic processes: Detection and statistical modeling
- A383 EGU2012-8602  
**A.K. Adamaki**, E.E. Papadimitriou, V.G. Karakostas, and G.M. Tsaklidis  
Statistical Analysis Of Seismicity Rate Changes As Precursors Of Strong Earthquakes
- A384 EGU2012-4517  
G. Georgoulas, **A. Konstantaras**, E. Maravelakis, E. Katsifarakis, and C.D. Stylios  
On the problem of earthquake correlation in space and time over large distances
- A385 EGU2012-8645  
**T. Harada** and K. Ishibashi  
Remarkable recurrence of M~7- intermediate-depth earthquakes beneath the Hindu Kush
- A386 EGU2012-3443  
**M. Imoto**, H. Fujiwara, and B. Enescu  
M8 earthquakes in Kanto likely triggered by large events along the Japan Trench
- A387 EGU2012-9564  
**I Votsi**, N Limnios, G Tsaklidis, and E Papadimitriou  
Estimation of the occurrence rate of strong earthquakes based on hidden semi-Markov models
- A388 EGU2012-11579  
**A. Tzanis** and F. Vallianatos  
Multidimensional earthquake frequency distributions consistent with self-organization of complex systems: The interdependence of magnitude, interevent time and interevent distance
- A389 EGU2012-13708  
A. Ramírez-Rojas, E. L. Flores-Marquez, and **S. Valverde-Esparza**  
Weibull Characterization of inter-event lags of Earthquakes occurred in the Pacific Coast of Mexico
- A390 EGU2012-11791  
P. Shebalin, **C. Narteau**, J. Zechar, and M. Holschneider  
Combining earthquake forecast models using differential probability gains
- A391 EGU2012-12888  
**R.A. Clements**, Á. González, and D. Schorlemmer  
The Testability of Mmax Estimates
- A392 EGU2012-14379  
**D. Vamvakaris**, C.B. Papazachos, Ch. Papaioannou, E.M. Skordilis, and G.F. Karakasis  
Time-dependent seismic hazard using synthetic catalogs for the broader Aegean area: Quantifying the effect of uncertainty of time-dependent mainshock predictions on seismic hazard
- A393 EGU2012-7737  
**B. Polidoro**, I. Iervolino, E. Chioccarelli, and M. Giorgio  
Time dependent seismic hazard
- A394 EGU2012-9152  
**D.H. Rood**, R. Anooshehpoor, G. Balco, J. Brune, R. Brune, L. Grant Ludwig, K. Kendrick, M. Purvance, and I. Saleeby  
Testing seismic hazard models with Be-10 exposure ages for precariously balanced rocks
- A395 EGU2012-3836  
**M. Chavez**, M. Ashworth, E. Cabrera, D. Emerson, A.. Salazar, N. Perea, and Ch. Moulinec  
HPC modeling of the wave propagation of extreme magnitude earthquakes
- A396 EGU2012-6842  
**C. H. Sung** and C.-T. Lee  
Analysis of Single-Path Sigma Using SMART-1 Array Data in Taiwan
- A397 EGU2012-13666  
**C. Abril**, M.L. Bermúdez, and M.C. Dimaté  
Attenuation Relationships for Colombian Seismic Hazard Assessment
- A398 EGU2012-9451  
**S. Lennartz**, I. G. Main, M. Zaiser, and F. Kun  
Effect of ageing in fibre bundle models on the evolution of acoustic and silent damage in time-dependent failure
- A399 EGU2012-3322  
**W B Shen**, D Wang, C Hwang, and H Ding  
Detecting anomalous gravity signals prior to earthquakes larger than Mw7.0 based on a superconducting gravimeter records in recent four years
- A400 EGU2012-4080  
**E. Tsiapas**, D. Soumelidou, and C. Tsiapas  
EARTHQUAKES - VOLCANOES(Causes - Forecast - Counteraction)

Convener: S. Cesca | Co-Conveners: B. Orlecka-Sikora, A. F. do Nascimento, S. Turuntaev, J. Suckale

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: S.B. Turuntaev

A345 EGU2012-8158

**A.V. Konovalov**, V.N. Patrikeev, D.A. Safonov, and T.V. Nagornyh

The 12 June 2005 Mw 5.6 seismic event near the offshore Piltun-Astokhskoye oil field production area, Northeastern Sakhalin Island (Russia): was it induced?

A346 EGU2012-9964

**D. Kraaijpoel** and B. Dost

Analysis of subsalt induced seismicity in the Netherlands

A347 EGU2012-1972

**F. Grigoli**, S. Cesca, T. Braun, J. Philipp, and T. Dahm

Automated seismic event location by arrival time stacking: Applications to local and micro-seismicity

A348 EGU2012-5333

**L. Rudzinski** and W. Debski

Extending the Double Difference location technique - improving depth resolution

A349 EGU2012-3622

**S.V. Vorokhobina** and S.B. Turuntaev

Investigation of the seismic activity under the blasting influence

A350 EGU2012-1477

**S. Cesca**, S. Monna, D. Kaiser, and T. Dahm

Imaging velocity and attenuation anomalies in mining environments using Acoustic Emissions

A351 EGU2012-1500

**S. Maghsoudi**, S. Cesca, S. Hainzl, D. Kaiser, and T. Dahm

Spatiotemporal patterns of acoustic emission (AE) activity in salt mine

A352 EGU2012-4738

**Y. Xu** and C.H. Zhang

Seismic responses of Baozhusi gravity dam upon MS 8.0 Wenchuan Earthquake

A353 EGU2012-2009

**K. Pavlou**, V. Kouskouna, K. Makropoulos, G. Drakatos, and P. Petrou

Pournari Dam (W. Greece) Impoundment and Triggered Seismicity

A354 EGU2012-5973

**G. Yfantis**, S. Pytharouli, R. Lunn, A.F. Do Nascimento, and M. Takeya

Towards the optimisation of landslide monitoring using short-period seismometers.

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**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

**NH5.1 – New developments in tsunami science and in mitigation of tsunami risk, including early warning – Orals**

Convener: S. Tinti | Co-Conveners: H. Hebert, I. Didenkulova, Dominey-Howes

**Room: 1**

Chairperson: n.n.

10:30–10:45 EGU2012-3929

**H. Ichihara**, Y. Hamano, K. Baba, and T. Kasaya

Tsunami source estimation of the 2011 Tohoku-oki earthquake (M9.0) and its foreshock (M7.3) using ocean bottom magnetic signals

10:45–11:00 EGU2012-3455

**H. Matsumoto**, T. Ohmachi, and S. Inoue

Interpretations of water pressure response during the 2011 Tohoku earthquake

11:00–11:15 EGU2012-6553

**E. Okal**

Seismic records of the 2010 and 2011 tsunamis

11:15–11:30 EGU2012-83

**B.H. Choi**, B.I. Min, T. Yoshinobu, K.O. Kim, and **E. Pelinovsky**

Comparable Analysis of the Distribution Functions of Runup Heights of the 1896, 1933 and 2011

Japanese Tsunamis in the Sanriku Area

11:30–11:45 EGU2012-4612

**A. Hoechner**, M. Ge, and **A. Babeyko**

Rapid tsunami early warning using real-time GPS: Reviewing the 2011 Tohoku event

11:45–12:00 EGU2012-10487

**P. Monardez**, R. Salinas, and D. Comte

Hydrodynamics of tsunamis in subduction zones. The differences between the Chile 2010 and Japan 2011 tsunamis

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**LUNCH BREAK**

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Chairperson: n.n.

13:30–13:45 EGU2012-2242

**M. González**, P. González-Riancho, O.Q. Gutiérrez, O. García-Aguilar, I. Aniel-Quiroga, I. Aguirre, J.A.

Alvarez, F. Gavidia, I. Jaimes, and J.A. Larreynaga

Tsunami hazard and risk assessment in El Salvador

13:45–14:00 EGU2012-2601

**I. Vilibic**, S. Monserrat, A. Amores, V. Dadic, I. Fine, K. Horvath, D. Ivankovic, M. Marcos, H. Mihanovic, S. Pasquet, A.B. Rabinovich, J. Sepic, N. Strelec Mahovic, and P. Whitmore

Meteorological tsunamis along the U.S. coastline

14:00–14:15 EGU2012-9246

**N. Rakowsky**, S. Harig, A. Androsov, A. Fuchs, A. Immerz, J. Schröter, and W. Hiller

Operational Tsunami Modelling with TsunAWI for the German-Indonesian Tsunami Early Warning System: Recent Developments

14:15–14:30 EGU2012-7213

**O. Necmioglu**, A. Rudloff, L.M. Matias, F. Schindeler, M. Comoglu, and N. Meral Ozel

NEAMTWS-ECTE1: The First Enlarged Communication Test Exercise of the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and connected seas

14:30–14:45 EGU2012-5411

**A. Lomax** and A. Michelini

Tsunami early warning within 5 minutes

14:45–15:00 EGU2012-5457

**L. Bressan** and S. Tinti

Test of TEDA (Tsunami Early Detection Algorithm) on the 11 March 2011 Tohoku tsunami marigrams

Chairperson: n.n.

15:30–15:45 EGU2012-11787

**N. Kalligeris**, E. Flouri, E. Okal, and C. Synolakis

The AD 365 earthquake: high resolution tsunami inundation for Crete and full scale simulation exercise

15:45–16:00 EGU2012-9600

**T. Novikova**, M. Ezz, A. Kijko, and G. A. Papadopoulos

The large earthquake and tsunami of AD 365 in the Hellenic Arc revisited: implications for tsunami hazard assessment

- 16:00–16:15 EGU2012-4200  
 G. K. Pedersen, F. Løvholt, **S. Glimsdal**, and C. B. Harbitz  
 Title: Dispersive tsunamis; does it really matter?
- 16:15–16:30 EGU2012-12834  
**J.C. Laso Bayas**, C. Marohn, G. Dercon, S. Dewi, H.P. Piepho, L. Joshi, M. van Noordwijk, and G. Cadisch  
 Coastal vegetation and its influence on the 2004 tsunami event
- 16:30–16:45 EGU2012-10395  
**J. M. González-Vida**, M.J. Castro, C. Sánchez-Linares, and M. de la Asunción  
 Simulation of landslide-generated tsunamis with the HySEA platform: Application to the the Lituya Bay 1958 tsunami
- 16:45–17:00 EGU2012-13532  
**B.C. McFall**, F. Mohammed, and H.M. Fritz  
 Tsunamis generated by unconfined deformable granular landslides in various topographic configurations

**NH5.1 – New developments in tsunami science and in mitigation of tsunami risk, including early warning – Posters**

Convener: S. Tinti | Co-Conveners: H. Hebert, I. Didenkulova, Dominey-Howes

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Dale Dominey-Howes, Ira Didenkulova

- XY520 EGU2012-76  
 C. Finkl and **E. Pelinovsky**  
 A review of potential tsunami impacts to the Suez Canal
- XY521 EGU2012-105  
**I. Didenkulova** and E. Pelinovsky  
 Nonlinear wave runup in long bays and firths: Samoa 2009 and Tohoku 2011 tsunamis
- XY522 EGU2012-7031  
**G. Shevchenko**, A. Shishin, and E. Makarenko  
 Meteotsunamis as recorded on the coast of Kuril Islands
- XY523 EGU2012-2536  
**T. Pinegina** and A. Kozhurin  
 Earthquakes and Tsunami along the western margin of the Bering Sea, Kamchatka, Russia
- XY524 EGU2012-3906  
**J. DuBois**  
 Hazard assessment for a submarine landslide generated local-source tsunami from Kaikoura Canyon
- XY525 EGU2012-4951  
**H. Aykurt Vardar**, Y. Altinok, N.G. Kiyak, and T. Ozturk  
 Research on tsunami traces on Marmara Island, Sea of Marmara, Turkey
- XY526 EGU2012-5983  
**M. Franz**, Y. Podladchikov, M-H. Derron, M. Jaboyedoff, C. Michoud, F.J. Baillifard, L. Genton, and S. Omlin  
 Tsunami in Alps reservoirs: the case of Mauvoisin dam (Valais, Switzerland)
- XY527 EGU2012-5208  
 R. Jagodzi?ski, **B. Sternal**, and W. Szczuci?ski  
 Application of heavy minerals analysis in studies of tsunami deposits
- XY528 EGU2012-7301  
**E. Quentel**, A. Loevenbruck, and H. Hébert  
 Tsunami hazard assessment along the French Mediterranean coast : detailed modeling of tsunami impacts for the ALDES project
- XY529 EGU2012-12563  
**J. A. Álvarez-Gómez**, O.Q. Gutiérrez-Gutiérrez, I. Aniel-Quiroga, and M. González  
 Tsunamigenic potential of subduction outer-rise normal faults in Central America
- XY530 EGU2012-7346  
 N. Meral Ozel, **O. Necmioglu**, A.C. Yalciner, D. Kalafat, M. Yilmazer, M. Comoglu, U. Sanli, C. Gurbuz, and M. Erdik  
 Tsunami Warning Center in Turkey : Status Update 2012
- XY531 EGU2012-9290  
**L. Bressan**, S. Tinti, F. Zaniboni, and G. Pagnoni  
 Calibration of a Tsunami Early Detection Algorithm (TEDA) for the sites of Catania and Tremestieri in Sicily, Italy.
- XY532 EGU2012-9787  
**S. Harig**, A. Androsov, A. Fuchs, A. Immerz, N. Rakowsky, J. Behrens, W. Hiller, and S. Danilov  
 Tsunami Wave Propagation: Recent applications of a Finite Element Tsunami Model

- XY533 EGU2012-9901  
**R. Omira**, M. A. Baptista, C. Catita, F. Carrilho, and L. Matias  
Tsunami Risk in the NE Atlantic: Pilot Study for Algarve Portugal and Applications for future TWS
- XY534 EGU2012-10325  
**S. Tinti**, G. Pagnoni, A. Armigliato, and R. Tonini  
Tsunami inundation scenarios and tsunami vulnerability assessment for the town of Alexandria, Egypt
- XY535 EGU2012-10166  
**F. Schindelé**, R. Bossu, N. Alabrune, P. Arnoul, P. Duperray, A. Gailler, J. Guillet, H. Hébert, B. Hernandez, A. Loevenbruck, and P. Roudil  
The French Tsunami warning center for the Mediterranean and North-East Atlantic (CENtre d'ALerte aux Tsunamis, CENALT)
- XY536 EGU2012-10957  
**S. Tinti**, G. Pagnoni, A. Armigliato, R. Tonini, and B. Ranguelov  
Assessing tsunami hazard for the town of Varna (Bulgaria) by means of a worst-case scenario approach
- XY537 EGU2012-11480  
**B.D. Hamlington**, R.R. Leben, O.A. Godin, E. Gica, V.V. Titov, and B.J. Haines  
Near Real-Time Tsunami Detection Using Satellite Altimetry
- XY538 EGU2012-10808  
**S. Ceramicola**, S. Tinti, D. Praeg, F. Zaniboni, and P. Planinsek  
Potential tsunamigenic hazard associated to submarine mass movement along the Ionian continental margin (Mediterranean Sea).
- XY539 EGU2012-84  
B.H. Choi, B.I. Min, K.O. Kim, and **E. Pelinovsky**  
Estimation of runup heights of the 2011 Tokoku tsunami based on 3D numerical simulations and 1D analytical runup theory
- XY540 EGU2012-7694  
**V. Kaystrenko**  
1-D linear inverse problem for initial sea level disturbance in the tsunami source.
- XY541 EGU2012-4053  
**T. Voronina**  
Numerical simulation of an initial tsunami waveform based on sea-level data inversion: case study for the Shicotan event of the 4th October 1994
- XY542 EGU2012-8569  
**F. Zaniboni**, S. Tinti, G. Pagnoni, S. Ceramicola, P. Planinsek, and I. Marson  
Evaluation of tsunami hazard associated to the Assi submarine landslide along the Ionian Calabrian margin, Italy
- XY543 EGU2012-854  
**M. Engel**, S.M. May, and H. Brückner  
Revisiting boulder fields on Bonaire (Leeward Antilles)
- XY544 EGU2012-1433  
I.A. Garagash, **L.I. Lobkovsky**, and R.Kh. Mazova  
New approach to analysis of strongest earthquakes with upper-value magnitude in subduction zones and induced by them catastrophic tsunamis on examples of catastrophic events in 21 century
- XY545 EGU2012-5057  
**M. Raeesi** and K. Attakan  
The March 11, 2011 (Mw=9.1) Japan interplate earthquake: What happened and what is next?
- XY546 EGU2012-4667  
I.V. Marinin, **S.I. Kabanikhin**, O.I. Krivorotko, A. Karas, and D.G. Khidasheli  
Rapid processing of data based on high-performance algorithms for solving inverse problems and 3D-simulation of the tsunami and earthquakes
- XY547 EGU2012-5828  
**G. Pagnoni**, S. Tinti, and A. Armigliato  
Computed inundation heights of the 2011 Tohoku tsunami compared to measured run-up data: hints for tsunami source inversion
- XY548 EGU2012-9419  
**J. Behrens**  
Efficient triangular adaptive meshes for tsunami simulations
- XY549 EGU2012-11809  
C.W. Ebeling, **E.A. Okal**, N. Kalligeris, and C.E. Synolakis  
Modern seismological reassessment and tsunami simulation of historical Hellenic Arc earthquakes

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**NH5.7/ESSI1.7 – Architecture of Future Tsunami Warning Systems (co-organized) – Orals**

Convener: J. Wächter | Co-Conveners: Z A Sabeur, K. Watson, S. Tinti

**Room: 1**

Chairperson: Joachim Wächter

08:30–08:45	EGU2012-8040 <b>J. Moßgraber</b> , S. Middleton, M. Hammitzsch, and S. Poslad A Distributed Architecture for Tsunami Early Warning and Collaborative Decision-support in Crises
08:45–09:00	EGU2012-13958 <b>R. Tao</b> , S. Poslad, J. Moßgraber, S. Middleton, and M. Hammitzsch Scalable and Resilient Middleware to Handle Information Exchange during Environment Crisis
09:00–09:15	EGU2012-2182 <b>A. I. Chung</b> , E. S. Cochran, C. Christensen, A. E. Kaiser, and J. F. Lawrence Results from the Quake-Catcher Network Rapid Aftershock Mobilization Project (QCN-RAMP) in Christchurch, New Zealand and Advances in QCN Rapid Earthquake Detections
09:15–09:30	EGU2012-8052 A. Gailler, <b>H. Hébert</b> , A. Loevenbruck, and B. Hernandez Simulation systems for tsunami wave propagation forecasting within the French tsunami warning center
09:30–09:45	EGU2012-13771 <b>E. Jones</b> Open Standards for Emergency Management
09:45–10:00	EGU2012-13634 <b>D. K. Arctur</b> , G. Percivall, and C. Reed The Role of Geospatial and Sensor Web Standards for Development of Tsunami Warning Systems

**NH5.7/ESSI1.7 – Architecture of Future Tsunami Warning Systems (co-organized) – Posters**

Convener: J. Wächter | Co-Conveners: Z A Sabeur, K. Watson, S. Tinti

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Joachim Wächter

XY550	EGU2012-9955 <b>R. Häner</b> and J. Wächter The TRIDEC System-of-Systems; Choreography of large-scale concurrent tasks in Natural Crisis Management
XY551	EGU2012-2827 <b>M. Lendholt</b> , M. Hammitzsch, and M.A. Esbri Palomares A communication model for interlinking national tsunami early warning systems
XY552	EGU2012-4364 <b>P. Löwe</b> , M. Hammitzsch, A. Babeyko, and J. Wächter The TRIDEC Virtual Tsunami Atlas - customized value-added simulation data products for Tsunami Early Warning generated on compute clusters
XY553	EGU2012-4571 <b>A. Babeyko</b> and A. Hoechner Accuracy of tsunami source inversion with real-time GPS
XY554	EGU2012-5517 S. Tinti, <b>A. Armigliato</b> , G. Pagnoni, and F. Zaniboni Building strategies for tsunami scenarios databases to be used in a tsunami early warning decision support system: an application to western Iberia
XY555	EGU2012-7275 <b>M. Hammitzsch</b> , O. Necmioglu, S. Reißland, M. Lendholt, M. Comoglu, N.M. Ozel, and J. Wächter TRIDEC Natural Crisis Management Demonstrator for Tsunamis
XY556	EGU2012-10014 <b>M. A. Esbri Palomares</b> , M. Hammitzsch, and M. Lendholt A hazard-independent approach for the standardised multi-channel dissemination of warning messages
XY557	EGU2012-11967 <b>S. Gensch</b> The Sensor Integration Platform TSB - current status and outlook
XY558	EGU2012-10053 <b>S. Reißland</b> , S. Herrnkind, M. Guenther, A. Babeyko, M. Comoglu, and M. Hammitzsch Experiences integrating autonomous components and legacy systems into tsunami early warning systems
XY559	EGU2012-11330 <b>S. Gensch</b> , M. Günther, and R. Henneberger Monitoring and Maintenance of the German Indonesian Tsunami Early Warning System (GITEWS)
XY560	EGU2012-11323 <b>L. Lindner</b> , S. Gensch, R. Henneberger, M. Lendholt, and M. Hammitzsch An Alternative for In-Depth Monitoring of Tsunami Early Warning Systems
XY561	EGU2012-7735 <b>F. Riedel</b> , F. Chaves, and H. Zeiner Flexible Early Warning Systems with Workflows and Decision Tables

- XY562 EGU2012-12265  
**Z A Sabeur**, J Wächter, S E Middleton, Z. Zlatev, R Häner, M Hammitzsch, and P Loewe  
Knowledge base and sensor bus messaging service architecture for critical tsunami warning and decision-support
- XY563 EGU2012-12411  
**Z A Sabeur**, B. Arbab-Zavar, R. Samperio, A Armigliato, R Omira, J Wächter, and S Tinti  
Automated detection of tsunamigenic signatures and reporting using multi-scale offshore in situ measurements for early tsunami warning and critical decision-support
- XY564 EGU2012-12816  
**A. N. Küppers**  
The Good, the Bad and the Ugly: Remarks on data policies, their influence on system architecture, and the resilience of circumbasin countries against tsunami

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**NH9.1 – Natural Catastrophe Risk Assessment: Integrating Public Private Academic Partnerships into Applications and Decision Making – Orals**

Conveners: R. Gunasekera, A. Werner | Co-Conveners: R. Muir-Wood, M. Wüest, A. Allmann

**Room: 8**

Chairperson: Angelika Werner, Marc Wueest

- 08:30–08:45 EGU2012-4067  
**M.L.V. Martina**, F. Dottori, and E. Todini  
A simple and effective tool for flood scenario simulation and risk analysis
- 08:45–09:00 EGU2012-8616  
**P. Williams**, M. Huddelston, G. Michel, S. Thompson, K. Heynert, C. Pickering, I. Abbott Donnelly, T. Fewtrell, H. Galy, F. Sperna Weiland, H. Winsemius, A. Weerts, S. Nixon, P. Davies, and D. Schiferli  
The Global Flood Model
- 09:00–09:15 EGU2012-9212  
**EK Raven**, C Keef, and K Busby  
Characterising freeze in the UK: applications for the insurance industry
- 09:15–09:30 EGU2012-2118  
**M Kunz**, M Puskeiler, and M Schmidberger  
Climatology of damage-causing hailstorms over Germany
- 09:30–09:45 EGU2012-12264  
**E. Bellone** and R. Muir-Wood  
Using an extended historical record to assess the temporal behavior of high magnitude earthquakes
- 09:45–10:00 EGU2012-3668  
**J. Gottsmann** and the VUELCO Consortium Team  
The VUELCO project consortium: new interdisciplinary research for improved risk mitigation and management during volcanic unrest

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**COFFEE BREAK**

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Chairperson: Robert Muir-Wood, Alexander Allmann

- 10:30–10:45 EGU2012-10564  
J. Strachan, **P.-L. Vidale**, H. Galy, and I. Scott  
From Global Climate Modelling to Catastrophe Modelling: a risk assessment supply chain made possible through the Willis Research Network
- 10:45–11:00 EGU2012-8081  
**S. Surminski**, B. Holt Andersen, R. Hohl, and S. Andersen  
Applying Earth Observation Data to agriculture risk management: a public-private collaboration to develop drought maps in North-East China
- 11:00–11:15 EGU2012-1328  
**F. Wenzel**, J. Daniell, B. Khazai, B. Mühr, T Kunz-Plapp, M. Markus, and A. Vervaeck  
Real-time Forensic Disaster Analysis
- 11:15–11:30 EGU2012-9922  
**L. Grassby**, I. Millinship, and K. Breinl  
Overcoming challenges of catastrophe modelling in data poor regions
- 11:30–11:45 EGU2012-12126  
**A. Kubik**, U. Boehm, K. Born, U. Broecker, M. Buechner, O. Burghoff, M. Donat, F.W. Gerstengarbe, F.F. Hattermann, H. Held, M. Kuecken, G.C. Leckebusch, P. Ludwig, T. Nocke, H. Oesterle, T. Pardowitz, J.G. Pinto, B.F. Prahl, U. Ulbrich, and P.C. Werner  
Actuarial assessment of future loss scenarios in the German insurance sector

11:45–12:00 EGU2012-14035

**G. Michel**, R. Gunasekera, A. Werner, and H. GalyMaking Better Re/Insurance Underwriting and Capital Management Decisions with  
Public-Private-Academic Partnerships**NH9.1 – Natural Catastrophe Risk Assessment: Integrating Public Private Academic Partnerships into Applications and Decision Making – Posters**

Conveners: R. Gunasekera, A. Werner | Co-Conveners: R. Muir-Wood, M. Wüest, A. Allmann

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Angelika Werner, Marc Wueest, Robert Muir-Wood, Alexander Allmann

XY565 EGU2012-9106

**I. Millinship**

Strengthening the weak link: Built Environment modelling for loss analysis

XY566 EGU2012-1585

**R. Foulser-Piggott**, K. Saito, and R. Spence

Modular Exposure Disaggregation Methodologies for Catastrophe Modelling using GIS and Remotely-Sensed Data

XY567 EGU2012-5256

**R. Parker**, D. Petley, N. Rosser, A. Densmore, R. Gunasekera, and M. Brain

Spatial and temporal variability in rates of landsliding in seismically active mountain ranges

XY568 EGU2012-4685

**P. Lopez**, A. Llinares, A. Garcia, J.M. Marrero, and R. Ortiz

Psychological aspects in a volcanic crisis: El Hierro Island eruption (October, 2011).

XY569 EGU2012-14034

**R. Gunasekera**, T. Rosetto, S. Tabuchi, A. Suppasri, T. Futami, I. Scott, and H. Maegawa

A Review of Methodologies on Vulnerability Assessment of Buildings to Tsunami Damage

XY570 EGU2012-11150

**T. Fewtrell**, J. Neal, J. Smith, P. Bates, A. Miller, M.L. Baeck, and G. Villarini

Flood Inundation Modeling for Urban Watersheds

XY571 EGU2012-9524

**M.A. Trigg**, P.B. Bates, and K. Michaelides

Hydrodynamic modelling and global datasets: Flow connectivity and SRTM data, a Bangkok case study.

XY572 EGU2012-10779

**F. Serinaldi** and C.G. Kilsby

Towards large scale stochastic rainfall models for flood risk assessment in trans-national basins

XY573 EGU2012-5441

**H. Kreibich** and I. Seifert

FLEMOcs - a novel, multi-factorial model for the estimation of flood losses in the commercial sector

XY574 EGU2012-8596

**P. Mohan**, M.-K. Thomson, and **A. Das**

Modeling Flood Insurance Penetration in the European Non-Life Market: An Overview

XY575 EGU2012-12317

**C. Mitas** and S. Cusack

A 100 year record of windstorms in the Netherlands

XY576 EGU2012-8105

**O. Martinez-Alvarado**, **S. L. Gray**, J. L. Catto, and P. A. Clark

Sting jets in intense winter North-Atlantic windstorms

XY577 EGU2012-10158

**K. Born**, R. Drinka, A. Georgiadis, R. Haas, P. Ludwig, M. K. Karremann, A. Podlaha, S. Ulbrich, and J. G. Pinto

Development of a European Windstorm Event Set using a Combined Dynamical and Statistical Downscaling Approach

XY578 EGU2012-1484

**C. Franzke**

Atmospheric Extreme Events in the North Atlantic Region

XY579 EGU2012-14038

**A. Werner**, M. Sanderson, W. Hand, A. Blyth, P. Groenemeijer, M. Kunz, M. Puskeiler, G. Saville, and G. Michel

Global Hail Model

XY580 EGU2012-1801

**E. Hamilton**, R. Eade, R. J. Graham, A. A. Scaife, D. M. Smith, A. Maidens, and C. MacLachlan

Forecasting the number of extreme daily temperature events on seasonal timescales

- XY581 EGU2012-14196  
**T. Robinson**, I. Charvet, and R. Gunasekera  
Using HAZUS-MH for modelling past coastal flooding events in Japan

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**NH9.4 – Early warning systems for natural hazards and risks – Posters**

Convener: T. Glade | Co-Conveners: G. Papadopoulos

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Thomas Glade

- XY582 EGU2012-4253  
**D.A. Stanica**  
Electromagnetic ground-based measuring system used for the near real-time hazard level assessment of the earthquake-induced landslides
- XY583 EGU2012-5766  
**T. shimizu**, T. uchida, T. yamakoshi, K. yoshino, H. kisa, T. ishizuka, and A. kaji  
Quick Analysis Method for Estimating Debris Flow Prone Area Caused by Overflow from Landslide dam
- XY584 EGU2012-6875  
**A. Kaji**, H. Mizuno, T. Yamakoshi, and T. Ishizuka  
Establishment and Application of Early Warning System for Flood and Debris Flow Triggered by Rapid Erosion of Natural Barrier
- XY585 EGU2012-7595  
**A. Marmureanu**, C. Ionescu, and L. Manea  
Towards a nationwide Early Warning System in Romania
- XY586 EGU2012-9074  
**O. Bokhove**, E. Gagarina, W. Zweers, and A. Thornton  
On the relevance of the Bore-Soliton-Splash to extreme waves, tsunami run-up and wave energy?
- XY587 EGU2012-10119  
C. Centoducati, L. D'Angelo, M. Deda, L. Ferraris, E. Fiori, M. Gjonaj, S. Kelmendi, **M. Massabò**, A. Olli, and F. Siccardi  
Program for Prediction, Prevention and Mitigation of Forest Fire and Flood risk in Albania
- XY588 EGU2012-11765  
**V.J. Cortes**, S Frigerio, L. Schenato, S Sterlacchini, and A Pasuto  
Decision Support Systems and Early Warning Solutions: a review in European context.
- XY589 EGU2012-13874  
**F. Ponziani**, M. Stelluti, R. Zauri, N. Berni, L. Brocca, T. Moramarco, D. Salciarini, and C. Tamagnini  
A near real time scenario at regional scale for the hydrogeological risk
- XY590 EGU2012-1508  
**M.I. Voudoukas**, L.P. Almeida, A. Pacheco, and O. Ferreira  
An early warning system for marine storm hazard mitigation
- XY591 EGU2012-5674  
G. Zimatore, C. Rafanelli, and **M. Poscolieri**  
Earlier appraisal of seismic and volcanic events by means of recurrence quantification analysis of AE time-series: preliminary results
- XY592 EGU2012-5854  
A. Armigliato, **S. Tinti**, G. Pagnoni, and F. Zaniboni  
Tsunami early warning in the central Mediterranean: effect of the heterogeneity of the seismic source on the timely detectability of a tsunami
- XY593 EGU2012-6882  
**T. Yamakoshi**, T. Ishizuka, A. Kaji, Y. Ito, S. Osaka, and A. Nakagome  
Quick Monitoring Tool for Landslide Dam Outburst Debris Flow and Its Application to the Actual Disaster
- XY594 EGU2012-8491  
**G. A. Papadopoulos**  
NEARTOWARN: A new EU-DG ECHO-supported project for the near-field tsunami early warning
- XY595 EGU2012-13258  
**S. De Munck**, Y. Gauthier, M. Bernier, and S. Légaré  
River channel's predisposition to ice jams: a geospatial model

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**NH9.8/EOS9 – Geoethics and natural hazards: communication, education and the science-policy-practice interface (co-organized) – Orals**

Convener: S. Peppoloni | Co-Conveners: J. Wasowski, P. Reitan, G. Devoli, SW Kieffer, E. Lindquist, S. Sargeant

**Room: 8**

Chairperson: n.n.

13:30–13:45	EGU2012-2524 <b>SW Kieffer</b> Planet Earth: Its Past, Our Present, A Future (?)
13:45–14:00	EGU2012-7841 <b>J. C. Gill</b> Geology for Global Development: Training young geoscientists to communicate and do effective disaster risk reduction in the developing world
14:00–14:15	EGU2012-9375 <b>A. Taurisano</b> , E. Lyche, V. Thakur, T. Wiig, K. Øvreliid, and G. Devoli Ethical questions in landslide management and risk reduction in Norway
14:15–14:30	EGU2012-8535 <b>J. McCaughey</b> , A. M. Lubis, Z. Huang, Y. Yao, E. M. Hill, S. Eriksson, and K. Sieh Earthquake and tsunami hazard in West Sumatra: integrating science, outreach, and local stakeholder needs
14:30–14:45	EGU2012-11067 <b>S. Stein</b> , R. Geller, and M. Liu What to do given that earthquake hazard maps often fail
14:45–15:00	EGU2012-11639 <b>M.-A. del Marmol</b> , M. Bi Suh Atanga, S. Njome, G. Mafany Teke, P. Jacobs, and C.E. Suh Communication of geohazard risks by focus group discussions in the Mount Cameroon area, Cameroon.

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**NH9.8/EOS9 – Geoethics and natural hazards: communication, education and the science-policy-practice interface (co-organized) – Posters**

Convener: S. Peppoloni | Co-Conveners: J. Wasowski, P. Reitan, G. Devoli, SW Kieffer, E. Lindquist, S. Sargeant

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY596	EGU2012-1185 <b>C. Dawber and S Latchman</b> Current Methods of Natural Hazards Communication used within Catastrophe Modelling
XY597	EGU2012-101 <b>E.J.I. Apatu</b> , C. E. Gregg, M. K. Lindell, J. Sorensen, J. Hillhouse, and B. Sorensen The September 29, 2009 Earthquake and Tsunami in American Samoa: A Case Study of Household Evacuation Behavior and the Protective Action Decision Model
XY598	EGU2012-1271 <b>T. Ozcep and F. Ozcep</b> Fear based Education or Curiosity based Education as an Example of Earthquake and Natural Disaster Education: Results of Statistical Study in Primary Schools in Istanbul-Turkey
XY599	EGU2012-6335 <b>Dr. Netti</b> Natural Hazards, Poverty Traps versus Economic Growth
XY600	EGU2012-14042 <b>S. Parkash</b> Ethics in disaster management
XY601	EGU2012-11977 <b>M. Mucciarelli</b> and R Camassi Communication during an evolving seismic sequence
XY602	EGU2012-8477 <b>H. Sangster</b> , D.K Chester, and A.M Duncan Human responses to historical eruptions of Etna (Sicily) from 1600 to present and their implications for present-day disaster planning
XY603	EGU2012-9019 <b>G. Devoli</b> Scientific practices and social behaviors in managing landslide risks: comparing experiences between developing and developed countries
XY604	EGU2012-9515 <b>R. Nave</b> , G. D'Addazio, and A. Carosi A visitor study approach to INGV exhibition at Genova Science Festival 2011
XY605	EGU2012-14386 <b>P Hradecky</b> and I Baron Complex geohazard susceptibility zoning for effective landuse planning and catastroph prevention in developing countries

- XY606 EGU2012-9762  
 A. Amato, L. Arcoraci, E. Casarotti, **G. Cultrera**, R. Di Stefano, L. Margheriti, C. Nostro, G. Selvaggi, and May-11 Team  
 Earthquake prediction rumors can help in building earthquake awareness: the case of May the 11th 2011 in Rome (Italy)
- XY607 EGU2012-10606  
**S. Sargeant**  
 Reflections from the interface between seismological research and earthquake risk reduction
- XY608 EGU2012-14385  
**W. Strauch** and G Devoli  
 Performance of Early Warning Systems on Landslides in Central America
- XY609 EGU2012-14078  
**S Peppoloni**, R Matteucci, S Piacente, and J Wasowski  
 Geoethics: the responsibility of geoscientists in making society more aware of natural hazards
- XY610 EGU2012-8000  
**T. Lanza**, M. Crescimbene, and F. La Longa  
 From Colfiorito to L'Aquila Earthquake: learning from the past to communicating the risk of the present
- XY611 EGU2012-6426  
**V. Chistyakov**  
 Gas hydrates - new source of energy and new Geotechnical hazards
- XY612 EGU2012-9079  
**S. Oki** and K. Koketsu  
 Risk communication on earthquake prediction studies: Possible pitfalls of science communication
- XY613 EGU2012-2622  
**M. Crescimbene**, F. La Longa, and T. Lanza  
 Natural disasters between memory and oblivion

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**NH9.12 – Modelling of dangerous phenomena, and innovative techniques for hazard evaluation and risk mitigation – Posters**

Convener: G. G.R. IOVINE | Co-Conveners: Dr. Huebl, M. Pastor, C. Aubrecht

**Hall X/Y | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: C. Aubrecht, J. Huebl, G. Iovine and M. Pastor

- XY614 EGU2012-57  
**A. G. Rodnikov**, N. A. Sergeyeva, and L. P. Zabarinskaya  
 Geodynamic models of the deep structure of the natural disaster regions of the Earth
- XY615 EGU2012-305  
**D. Ma**  
 THREE-DIMENSIONAL CHARACTERISTICS of THE LOESS'S MICROSTRUCTURE and COMPARISON BEFORE and AFTER COLLAPSE
- XY616 EGU2012-2764  
 D. Torri, L. Borselli, P. Iaquinta, **G. Iovine**, J. Poesen, and O. Terranova  
 Generalizing a complex model for gully threshold identification in the Mediterranean environment
- XY617 EGU2012-2776  
**G. G.R. Iovine**, S.L. Gariano, R. Greco, P. Iaquinta, and O. Terranova  
 GA-SAKe: FORECASTING RAINFALL-INDUCED LANDSLIDES THROUGH A HYDROLOGICAL MODEL. AN EXAMPLE OF APPLICATION TO THE UNCINO LANDSLIDE (CALABRIA)
- XY618 EGU2012-4878  
 B. Leitl, **K. Baumann-Stanzer**, and S. Trini Castelli  
 COST Action ES1006 - Evaluation, improvement and guidance for the use of local-scale emergency prediction and response tools for airborne hazards in built environments
- XY619 EGU2012-6824  
**F.d.J. Escalona-Alcázar**, B. Escobedo-Arellano, B. Castillo-Félix, C. Carrillo-Castillo, P. García-Sandoval, L.L. Gurrola-Menchaca, E.P. Núñez-Peña, A. Esparza-Martínez, J. Bluhm-Gutiérrez, and C.J. Guijarro-Rodríguez  
 Integrated geomorphologic and GIS analysis for the assessment of erosion zones and its relationship with hazardous zones in the Zacatecas and Guadalupe quadrangles, Mexico
- XY620 EGU2012-7815  
**M. W. Wuttke**, M. Halisch, D. C. Tanner, Z. Y. Cai, Q. Zeng, and C. Wang  
 Underground Coal-Fires in Xinjiang, China: A Continued Effort in Applying Geophysics to Solve a Local Problem and to Mitigate a Global Hazard

- XY621 EGU2012-9881  
**F. Mancini**, F. Stecchi, and G. Gabbianelli  
Correlation between elevation change and groundwater level following the termination of salt exploitation in the city of Tuzla (BiH)
- XY622 EGU2012-10556  
**M. Francioni**, R. Salvini, and S. Riccucci  
Geological hazard zonation in a marble exploitation area (Apuan Alps, Italy)
- XY623 EGU2012-11003  
M. Kechaidou, **G. Ch. Sirakoulis**, and E. M. Scordilis  
Monitoring of seismic time-series with advanced parallel computational tools and complex networks
- XY624 EGU2012-11205  
V. Lupiano, F. Lucà, G. Robustelli, R. Rongo, **D. D'Ambrosio**, W. Spataro, and M.V. Avolio  
High Detailed Debris Flows Hazard Maps by a Cellular Automata Approach
- XY625 EGU2012-11459  
**S. Schmassmann**, M. Filliponi, P.-Y. Jeannin, A. Parriaux, A. Malard, and J. Vouillamoz  
KarstALEA - a scientifically based method to predict karst-related hazards in underground constructions
- XY626 EGU2012-13918  
**S. Tessitore**, G. Castiello, M. Fedi, G. Florio, V. Fuschini, M. Ramondini, and D. Calcaterra  
Integrated monitoring system for ground deformation hazard assessment in Telese Terme (Benevento province, Italy)
- XY627 EGU2012-13960  
**E.V. Perekhodtseva**  
The probability forecast evaluation of hazard and storm wind over the territories of Russia and Europe
- XY628 EGU2012-13989  
**F. Pacchiani** and M. Wyss  
Estimated damage and loss scenarios for future major earthquakes in Luzon, Philippines
- XY629 EGU2012-13990  
**L. Yilmaz**  
Meander applications at landslides in alluvium valleys

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**SC3/NH10.1 – Short Course: How to apply and interpret the Fast Fourier Transform (co-organized) – Orals**

Convener: R. Crockett

**Room: 42**

Chairperson: n.n.

15:30–17:00

## Friday, 27 April

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### CR8.10 – Mountain snow cover and avalanche formation (co-listed) – Orals

Convener: J. Schweizer | Co-Conveners: A. van Herwijnen, D. McClung, K. Kronholm

**Room: 9**

Chairperson: Alec van Herwijnen

08:30–08:45 EGU2012-2238

**D. Vikhamar-Schuler** and K. Müller

Snow modeling using SURFEX with the CROCUS snow scheme for Norway

08:45–09:00 EGU2012-2247

**J. Gaume**, G. Chambon, N. Eckert, and M. Naaim

Relative influence of mechanical and meteorological factors on avalanche release depth distributions.  
Application to French Alps.

09:00–09:15 EGU2012-11793

**C. Mitterer** and J. Schweizer

Analysis of the atmosphere-snow energy balance during wet-snow instabilities

09:15–09:30 EGU2012-7583

**M. Teich**, C. Marty, C. Gollut, A. Grêt-Regamey, and P. Bebi

Snow and weather conditions fostering avalanche releases in forests: Rare situations with decreasing trends during the last 41 years

09:30–09:45 EGU2012-11317

**J. Veitinger**, B. Sovilla, and R. Purves

Influence of snow cover on location and extension of avalanche release areas

09:45–10:00 EGU2012-8455

**K. Nishimura**, Y. Ito, C. Yokoyama, and F. Naaim

Snow particle speeds in the blowing snow

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### CR8.10 – Mountain snow cover and avalanche formation (co-listed) – Posters

Convener: J. Schweizer | Co-Conveners: A. van Herwijnen, D. McClung, K. Kronholm

**Hall Z | Display Time 08:00–17:00**

Author in Attendance: 13:30–15:00

Chairperson: Jürg Schweizer

Z117 EGU2012-12215

N. Helbig and **A. van Herwijnen**

Investigating surface hoar spatial distributions in complex topography

Z118 EGU2012-6231

**A. van Herwijnen**

SMP cone penetration in homogeneous snow layers

Z119 EGU2012-4031

**P. Hagenmuller**, T. Theile, and M. Schneebeli

Microstructure-based simulations of the tensile strength of snow

Z120 EGU2012-10746

**D. Gauthier** and D.J. Hutchinson

Limits on the critical length of damage in weak snowpack layers from en-echelon slab fracture spacing observed during avalanche release

Z121 EGU2012-2251

**J. Gaume**, G. Chambon, N. Eckert, and M. Naaim

Influence of weak layer heterogeneity on slab avalanche release. Application to the evaluation of avalanche release depths.

Z122 EGU2012-14138

**B. Reuter** and J. Schweizer

Variations of snow depth and snowpack stability at the basin scale

Z123 EGU2012-11960

**F. Monti** and J. Schweizer

Deriving snow hardness from density and its application to the 1-D snow cover model SNOWPACK

Z124 EGU2012-12471

**M. Valt**, F. Monti, P. Cianfarra, and D. Moro

Physical properties of snow cover in Alps: insight from the Davos area (Switzerland) and Veneto-Friuli Venezia Giulia regions (Italy)

Z125	EGU2012-12297 <b>E.H. Bair</b> A field study on failure of storm snow slab avalanches
Z126	EGU2012-1976 <b>K. Müller</b> , T. Humstad, R. V. Engeset, and J. Andersen Gridded snow maps supporting avalanche forecasting in Norway
Z127	EGU2012-10621 <b>A. Singh</b> , D. Chand, S. Kumar, and A. Ganju On the Snowpack Variability in Maritime Climate
Z128	EGU2012-11083 E. Marchetti, <b>G. Olivieri</b> , M. Ripepe, I. Chiambretti, and V. Segor Infrasonic monitoring of snow avalanches in the Alps
Z129	EGU2012-12663 <b>P. Perona</b> , E. Daly, and A. Porporato Prediction reliability and return times of natural snow avalanche occurrence

**ERE1.12 – Sustainability transitions of the socio-ecologic system (co-listed) – Orals**

Convener: D. E. Reusser | Co-Conveners: J. Kropp, D. Rybski, A. Cerdà, A. Ferreira

**Room: 19**

Chairperson: Cerdà, Reusser

13:30–14:00	EGU2012-14156 <b>J. Rotmans</b> Sustainability Transitions as new perspective
14:00–14:15	EGU2012-10614 <b>D. Neubersch</b> , H. Held, A. Lorenz, and E. Kriegler Conceptual Challenges in Assessing Climate Targets under Uncertainty and Learning
14:15–14:30	EGU2012-9484 <b>M. Fischer Kowalski</b> , W. Haas, D. Wiedenhofer, and F. Krausmann Socio-metabolic transitions during the 20th century and their impacts on the scale of human resource use
14:30–14:45	EGU2012-4839 <b>J.P. Kropp</b> , L. Costa, and D. Rybski Reconciliation of climate protection & development: the role of OECD & developing countries
14:45–15:00	EGU2012-13679 <b>M. Carreiras</b> , A.J.D. Ferreira, T.C.J. Esteves, F. Delgado, F. Andrade, J. Franco, and C.D. Pereira How can LCA approaches contribute to improve geo-cycles management

**ERE1.12 – Sustainability transitions of the socio-ecologic system (co-listed) – Posters**

Convener: D. E. Reusser | Co-Conveners: J. Kropp, D. Rybski, A. Cerdà, A. Ferreira

**Hall XL | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: Cerdà, Ferreira, Kropp, Rybski, Reusser

XL23	EGU2012-14302 <b>A.J.D. Ferreira</b> Geosciences for sustainability
XL24	EGU2012-3410 <b>A.-M. Burlea</b> and I. Muntele Infant mortality evolution in Romania: perspectives from a country in transition
XL25	EGU2012-4109 <b>D. E. Reusser</b> , F.A.P. Siabatto, A. Garcia Cantu Ros, C. Pape, T. Lissner, and J.P. Kropp Modelling interactions between mitigation, adaptation and sustainable development
XL26	EGU2012-4988 <b>D. Rybski</b> , L. Costa, and J.P. Kropp Projecting Human Development and CO <sub>2</sub> emissions employing correlations
XL27	EGU2012-11536 <b>S.J. Singh</b> and H. Haberl Long term socio-ecological research across temporal and spatial scales
XL28	EGU2012-3851 <b>M.D. Taylor</b> , A.D. Mackay, E. Dominati, and R.B. Hill Towards Integrating Soil Quality Monitoring Targets as Measures of Soil Natural Capital Stocks with the Provision of Ecosystem Services

XL29	EGU2012-13693 <b>A.N.S. Muacahila</b> , A.J.D. Ferreira, and C.O.A. Coelho Geosciences knowledge to improve the livelihood of the Arcos Region in the Namibe Desert , South of Angola
XL30	EGU2012-7335 <b>C. Schleupner</b> , U.A. Schneider, P. Havlik, and T. Stacke Development of a Global Wetland Sustainability Index for comprehensive land use planning
XL31	EGU2012-13499 <b>T.C.J. Esteves</b> , P. Cabral, A.J.D. Ferreira, and J.C. Teixeira Multi-criteria decision analysis for bioenergy in the Centre Region of Portugal
XL32	EGU2012-13520 <b>I. Jacquemin</b> , C. M. Fontaine, N. Dendoncker, L. François, R. De Vreese, A. Marek, D. Mortelmans, A. Van Herzele, and G. Deville Dynamic modelling of future land use change under urbanization and climate change pressures: application to a case study in central Belgium
XL33	EGU2012-13617 <b>J. Gregg</b> and A. hvid Future Diet Scenarios and Their Effect on Regional and Global Biofuel Potential
XL34	EGU2012-14049 <b>P. Pradhan</b> , D.E. Reusser, and J.P. Kropf Food transitions in last 50 years and related environmental implications

**GM2.1 – High definition topography - data acquisition, modelling, interpretation (co-listed) – Orals**

Convener: D. Rieke-Zapp | Co-Conveners: A. Reiterer, J. Chandler, D. Vericat, N. Tate, D. M. Powell, J. Brasington, I. Marzolff

**Room: 22**

Chairperson: J. Brasington

08:30–08:45	EGU2012-10924 <b>S. Van-Wierds</b> and P. Bernatchez Use of a mobile terrestrial laser system to quantify the impact of rigid coastal protective structures on sandy beaches, Quebec, Canada
08:45–09:00	EGU2012-2730 <b>D. M. Powell</b> and D Ackerley Characterising the roughness properties of alluvial river banks using terrestrial laser scanning.
09:00–09:15	EGU2012-8878 <b>J.M. Nield</b> , G.F.S. Wiggs, J. Leyland, S.E. Darby, J. King, F.D. Eckardt, R.C. Chiverrell, L.H. Vircavas, and B. Jacobs Quantifying small-scale temporal surface change on glaciers and salt pans using terrestrial laser scanning: implications for modelling ablation and dust emission
09:15–09:30	EGU2012-11944 <b>C. Fey</b> , C. Zangerl, F. Haas, M. Rutzinger, R. Sailer, and M. Bremer Rock slide deformation measurements with Terrestrial Laser Scanning in inaccessible high mountain areas
09:30–09:45	EGU2012-12284 <b>H. Croft</b> Soil surface microtopography from close-range laser data and hyperspectral directional reflectance factors
09:45–10:00	EGU2012-13139 <b>S. Filin</b> , R. Arav, A. Mushkin, and O. Katz Monitoring coastal-cliff erosion processes using a novel change detection methodology for high-resolution terrestrial laser scanner data

**COFFEE BREAK**

Chairperson: D. Rieke-Zapp

10:30–10:45	EGU2012-4368 <b>N. Brodu</b> and <b>D. Lague</b> 3D point cloud classification of complex natural scenes using a multi-scale dimensionality criterion: applications in geomorphology
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- 10:45–11:00 EGU2012-10317  
**C. Castagnetti**, E. Bertacchini, A. Capra, and A. Corsini  
 Critical aspects of integrated monitoring systems for landslides risk management: strategies for a reliable approach
- 11:00–11:15 EGU2012-3775  
**J. Müller**, I. Gärtner-Roer, G. Menz, C. Ginzler, and P. Thee  
 How accurate can we be? - An evaluation of airborne digital elevation models in a high mountain environment
- 11:15–11:30 EGU2012-911  
**S. d'Oleire-Oltmanns** and I. Marzolff  
 UAV derived data for the monitoring of gully erosion in the Souss Basin, Morocco
- 11:30–11:45 EGU2012-12606  
**P. Allemand**, C. Delacourt, A. Deschamps, A. Quiquerez, P. Grandjean, J. Ammann, G. Ori, F. Cannarsa, R. Sabbadini, I. Dell'Archiprete, and D. Gasperini  
 Drello : an photogrammetric UAV for geomorphology
- 11:45–12:00 EGU2012-4550  
**M. R. James** and S. Robson  
 The accuracy of photo-based structure-from-motion DEMs

**GM2.2 – Digital Landscapes: Quantitative Interrogation and Use to Examine Geomorphic Processes (co-listed) –**

Orals

Convener: J. K. Hillier | Co-Conveners: P. Tarolli, P. Passalacqua, D.C. Mason, S. Conway

**Room: 22**

Chairperson: Paolo Tarolli

- 13:30–13:45 EGU2012-13881  
**A. B. Watts** and the SONNE 215 Shipboard Scientific Party  
 Repeat swath bathymetry surveys and the rates of growth and collapse of active submarine volcanoes
- 13:45–14:00 EGU2012-6079  
**Q. Li** and S. Dehler  
 Identify Foot of Continental Slope by singular spectrum and fractal singularity analysis
- 14:00–14:15 EGU2012-10599  
**M. D. Hurst**, S. M. Mudd, and M. Attal  
 Hysteresis in transient landscape topography recorded by hillslopes.
- 14:15–14:30 EGU2012-7207  
**G. Bertoldi**, M. Reginato, and V. D'Agostino  
 Merging field survey and LiDAR technology for the analysis of debris-flow erosion
- 14:30–14:45 EGU2012-9898  
**R. Bell** and H. Petschko  
 Landslide persistence and human impact in Lower Austria assessed by lidar data and aerial photography
- 14:45–15:00 EGU2012-10318  
**R. Rivola**, E. Bertacchini, C. Castagnetti, A. Capra, A. Corsini, F. Ronchetti, and F. Bonacini  
 GB-InSAR 3D maps for deformation monitoring: the importance of the digital surface models in data georeferencing and interpretation
- Chairperson: John Hillier
- 15:30–15:45 EGU2012-6988  
**F. Shahzad** and T. A. Ehlers  
 Quantification of glacial and ground surface velocities from repeat terrestrial LiDAR scans
- 15:45–16:00 EGU2012-11024  
**M.J. Westoby**, J. Brasington, N.F. Glasser, M.J. Hambrey, and J.M. Reynolds  
 Close-range photogrammetric reconstruction of moraine dam failures
- 16:00–16:15 EGU2012-13302  
**C. Eisank**, L. Dr?gu?, and T. Blaschke  
 Object-based mapping of drumlins from DTMs
- 16:15–16:30 EGU2012-7816  
**J.R. Ford**, B. Napier, P.R. Wilby, A.H. Cooper, A.J.M. Barron, and L.B. Bateson  
 The central role of digital landscapes in virtual field reconnaissance for geological surveying
- 16:30–16:45 EGU2012-9258  
**S. J. Conway**, M. R. Balme, and P. M. Grindrod  
 Using Topographic Derivatives of High Resolution Data on Earth and Mars to Determine Active Processes on Mars.
- 16:45–17:00 EGU2012-11180  
**S. Ferrari**, M. Massironi, R. Pozzobon, A. Castelluccio, G. Di Achille, and G. Cremonese  
 DTM analysis and displacement estimates of a major mercurian lobate scarp.

**GMPV4.4 – Recent explosive eruptions: Conduit processes, ash dispersal and effects on aviation (co-listed) – Posters**

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

**Hall XL | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- XL229 EGU2012-8497  
**T. Hoshide**, A. Toramaru, T. Miyamoto, Y. Iriyama, K. Ikehata, and T. Matsushima  
Magma mixing and mingling processes inferred from the ejecta in the Shinmoedake 2011 eruption: Its implications for the transient behavior of eruption styles
- XL230 EGU2012-13575  
**B. Weinzierl**, D. Sauer, A. Minikin, O. Reitebuch, F. Dahlkötter, B. Mayer, C. Emde, I. Tegen, J. Gasteiger, A. Petzold, A. Veira, U. Kueppers, and U. Schumann  
On the visibility of airborne volcanic ash and other aerosols from the pilot's perspective in flight
- XL231 EGU2012-10895  
**F. Marchese**, A. Falconieri, N. Pergola, and V. Tramutoli  
Identification and tracking of ash clouds from recent explosive eruptions by using multispectral satellite infrared data
- XL232 EGU2012-8464  
**A. Piscini**, S. Corradini, M. Chini, L. Merucci, S. Stramondo, M. Picchiani, and F. Del Frate  
Volcanic monitoring from space using neural networks approach. Simultaneous ash and sulfur dioxide retrievals using multispectral measurements
- XL233 EGU2012-8595  
**C. I. Schipper**, H Tuffen, and J. M. Castro  
Shallow vent architecture of Puyehue Cordón-Caulle, as revealed by direct observation of explosive activity
- XL234 EGU2012-11451  
**H. Tuffen**, J.M. Castro, C.I. Schipper, and M.R. James  
Observations of obsidian lava flow emplacement at Puyehue-Cordón Caulle, Chile
- XL235 EGU2012-12111  
**E Aydar**, A Höskuldsson, O. Ersoy, and A. Gourgaud  
Comparison of Galunggung1982-83 and Eyjafjalla-2010 Eruptions: definition of eruption dynamics from 3D Ash Surface Morphology
- XL236 EGU2012-3007  
**E. Bagnato**, A. Aiuppa, A. Bertagnini, C. Bonadonna, R. Cioni, M. Pedone, and M. Pistolesi  
The 2010 Eyjafjallajökull volcanic summit eruption: evidences from ash-leachates analysis and ground deposition fluxes
- XL237 EGU2012-3034  
**F. Marendo**, B. Johnson, K. Turnbull, J. Haywood, S. Newman, H. Webster, M. Cooke, J. Dorsey, H. Ricketts, and L. Clarisse  
Airborne lidar observations of volcanic ash during the eruption of Eyjafjallajökull in Spring 2010
- XL238 EGU2012-14436  
**M Ripepe**, C Bonadonna, A Folch, D Delle Donne, and G Lacanna  
Ash-Plume Dynamics, Mass Discharge Rate and Atmosphere Interaction by Infrasound and Thermal Imagery: the 2010 Eyjafjallajökull Eruption
- XL239 EGU2012-9792  
**G. N. Petersen**, H. Bjornsson, Þ. Arason, S. von Löwis, G. S. Sigurðsson, and S. Karlsdóttir  
Development of the atmospheric volcanic monitoring system in Iceland
- XL240 EGU2012-9706  
H. Bjornsson, **G. N. Petersen**, and Þ. Arason  
Monitoring of plume height during the Grímsvötn 2011 eruption in Iceland
- XL241 EGU2012-9734  
H. Bjornsson, **G. N. Petersen**, and Þ. Arason  
The eruption that missed Europe - A comparison of the weather situation during the Eyjafjallajökull 2010 and Grímsvötn 2011 eruptions
- XL242 EGU2012-7279  
**H. P. Gunnlaugsson**, Á. Höskuldsson, S. Steinthorsson, N. Óskarsson, M. B. Madsen, P. Nørnberg, and J. Merrison  
Mössbauer Spectroscopy of Samples from the 2010 Eyjafjallajökull Summit Eruption
- XL243 EGU2012-7325  
**J.A. Stevenson**, S.C. Louglin, C. Rae, C. Witham, M. Hort, T. Thordarson, and A. MacLeod  
Grímsvötn 2011 tephra in the UK: public sampling, air quality and comparison with model predictions.
- XL244 EGU2012-12119  
**M.T. Gudmundsson**, Á. Höskuldsson, G. Larsen, T. Thordarson, B.A. Oladottir, B. Oddsson, J. Gudnason, T. Högnadottir, J.A. Stevenson, B.F. Houghton, D. McGarvie, and G.M. Sigurdardottir  
The May 2011 eruption of Grímsvötn

**HS2.6 – Hydrological extremes: from droughts to floods (co-listed) – Posters**

Convener: A. Viglione | Co-Conveners: L. M. Tallaksen, G. Laaha, A. Castellarin, J. Szolgay

**Hall A | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: Gregor Laaha

- A46 EGU2012-1297  
**A. Åkesson** and A. Wörman  
 Temporal moment analysis as a means to improve model parameterisation and peakflow predictions
- A47 EGU2012-1548  
**D. Penot**  
 Hydrograph stochastic generation associated to SCHADEX simulated floods
- A48 EGU2012-2506  
**D. Veneziano** and **S. Yoon**  
 A Unified Theory of Rainfall Extremes, Rainfall Excesses, and IDF Curves
- A49 EGU2012-2631  
**V. Aich**, S. Fournet, S. Liersch, and F. Hattermann  
 Floods in the Upper Niger Basin - An increasing threat under global change?
- A50 EGU2012-2953  
**L. Balatonyi**, S. Czigány, and E. Pirkhoffer  
 Modeling of surface runoff in a low-mountain catchment in SW Hungary
- A51 EGU2012-3534  
**C.C. Brauer**, A.J. Teuling, A. Overeem, Y. van der Velde, P. Hazenberg, P.M.M. Warmerdam, P. Kloosterman, and R. Uijlenhoet  
 Modelling (flash) floods in a Dutch lowland catchment
- A52 EGU2012-4048  
**M. Goñi**, F.N. Gimena, and J.J. López  
 R3GeM: New hydrological model for the simulation of rain-runoff events in wet areas.
- A53 EGU2012-4429  
**M.H.J. van Huijgevoort**, P. Hazenberg, H.A.J. van Lanen, and R. Uijlenhoet  
 A generic identification method for hydrological drought in different climates across the globe
- A54 EGU2012-4537  
 N. Bezak, M. Brilly, and **M. Sraj**  
 Flood frequency analyses with annual and partial flood series
- A55 EGU2012-4653  
**D. Panagoulia** and I. Trichakis  
 On the thresholds in modeling of high flows via artificial neural networks - A bootstrapping analysis
- A56 EGU2012-4696  
**M. Osuch**, R.J. Romanowicz, E. Paquet, and F. Garavaglia  
 Estimation of flood frequency by SCHADEX method - in Nysa K?odzka catchment
- A57 EGU2012-6111  
**F. Garavaglia**, E. Paquet, M. Lang, B. Renard, P. Arnaud, Y. Aubert, J-C. Carre, and P. Bernardara  
 Flood risk assessment in France: comparison of extreme flood estimation methods (EXTRAFLO project, action 7)
- A58 EGU2012-6132  
**T. Mathevret**, F. Garavaglia, E. Paquet, and R. Garçon  
 Sensitivity of extreme flood quantile estimation to rainfall-runoff modeling
- A59 EGU2012-6393  
**M. Becker**, B. Meyssignac, and F. Seyler  
 Interannual flood variability in the Amazon Basin over the past 30 year
- A60 EGU2012-8066  
**Y. Hundecha** and B. Merz  
 Investigating the role of changes in the distributions of hydrometeorological drivers in observed changes in extreme river flow
- A61 EGU2012-8274  
**J. Erro** and J.J. López  
 Regional Frequency Analysis of Annual Maximum Streamflow in Gipuzkoa (Spain)
- A62 EGU2012-9144  
 H. Welch, **R. Coupe**, and B. Aulenbach  
 The effect of the 2011 flood on agricultural chemical and sediment movement in the lower Mississippi River Basin
- A63 EGU2012-9434  
**J. Bender** and J. Jensen  
 An Enhanced Approach to Generate Synthetic Hydrographs with Low Probability of Occurrence

A64	EGU2012-9744 <b>S. Niculescu</b> , C. Lardeux, G. Mercier, Y. Lageat, and D. Laurence Flood Change in Floodplain wetland in the Danube delta from remotely sensed imagery
A65	EGU2012-10354 <b>S. Vorogushyn</b> , M. Langer, and B. Merz Impact of river training on flood trends along the Rhine
A66	EGU2012-10903 <b>L. Strouhal</b> , J. Seibert, and V. David Importance of temporal and spatial resolution on modelling hydrological extremes in a small catchment
A67	EGU2012-11505 <b>G. Rossi</b> , V. Chiarello, and E. Caporali Geostatistical methods for hydrological extremes assessment in ungauged river basins
A68	EGU2012-11570 <b>L. M. Tallaksen</b> and K. Stahl Major historical droughts in Europe as simulated by an ensemble of large-scale hydrological models
A69	EGU2012-11665 C. Bocci, <b>E. Caporali</b> , A. Petrucci, and G. Rossi Investigation on rainfall extremes events through a geospatial model
A70	EGU2012-12826 <b>A.L.M.R. Santos</b> , D. Oliveira, M.A. Oliveira, D. Moreira, and J.S.C. Maciel Manaus city Flow Warning system and extreme events monitoring in the Amazon Basin
A71	EGU2012-12943 <b>J.L. Salinas</b> , R. Merz, G. Laaha, J. Walther, and U. Buechner Performance of combined regionalization methods in Saxony, Germany
A72	EGU2012-12972 <b>V. David</b> Catchment slope properties as an input to estimations of flood characteristics
A73	EGU2012-13149 <b>C. Cortis</b> , M. Barrui, N. Montaldo, A. Saba, and J.D. Albertson On the estimation of the design flood of different dams in Sardinia (Italy)
A74	EGU2012-13182 <b>I. Thiele-Eich</b> , T. Hopson, E. Gilleland, J.-F. Lamarque, A. Hu, and C. Simmer Studying the impact of climate change on flooding in large river basins
A75	EGU2012-13289 <b>M.G. Pereira</b> , S. Carvalho, L. Fernandes, L. Caramelo, and A. Alencão Hydrological extreme events with Mike Basin
A76	EGU2012-13468 <b>K Banasiak</b> and L. Hejduk Variation of curve number with storm depth
A77	EGU2012-13762 S. Madadgar and <b>H. Moradkhani</b> Impacts of Climate Change on Drought Characteristics in the Northwest U.S.
A78	EGU2012-13934 <b>A. Bartczak</b> , R. Glazik, and S. Tyszkowski Parameters of streamflow droughts in agricultural basin in central Poland
A79	EGU2012-8940 <b>D. Koffler</b> and G. Laaha LFSTAT - An R-Package for Low-Flow Analysis
A80	EGU2012-13247 <b>J.L. Salinas</b> , A. Viglione, R. Merz, and G. Blöschl Climate Change Impact on Floods in Austria. Focus on mechanisms

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**HS7.2/AS1.20/CL5.16/NH1.3/NP3.6 – Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized) – Orals**

Convener: R. Deidda | Co-Conveners: T. Bellerby, G. Grossi, A. Langousis, X. L. Wang, S. Vogl, P. Laux, H. Kunstmann

**Room: 33**

Chairperson: Roberto Deidda

08:30–08:45 EGU2012-1181

**E. Morin**

To know what we cannot know: Global mapping of minimal detectable absolute trends in annual precipitation

08:45–09:00 EGU2012-7261

**H. J. D. Sørup**, M. Sunyer, O. B. Christensen, K. Arnbjerg-Nielsen, and P. S. Mikkelsen

Extreme and mean rainfall differences in observational data used as reference in climate studies

09:00–09:15	EGU2012-4866 <b>V. Thiemig</b> , R. Rojas, V. Levizzani, and A. De Roo Validation of satellite-based precipitation estimates over different African River Basins
09:15–09:30	EGU2012-8989 <b>R. Roca</b> , P Chambon, I jobard, and N. Viltard Investigating the error budget of tropical rainfall accumulations derived from combined passive microwave and infrared satellite measurements
09:30–09:45	EGU2012-9730 <b>T. Bellerby</b> Ensemble conditional precipitation simulation from spatiotemporally heterogeneous multiplatform satellite data sets.
09:45–10:00	EGU2012-1400 <b>S. Dance</b> and A. Seed Characterizing Radar Raingauge Errors for NWP Assimilation

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**COFFEE BREAK**

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Chairperson: Tim Bellerby

10:30–10:45	EGU2012-8146 <b>M.A. Sunyer</b> , H.J.D. Sørup, H. Madsen, D. Rosbjerg, and K. Arnbjerg-Nielsen Comparing Regional Climate Model output to observational data sets for extreme rainfall
10:45–11:00	EGU2012-8780 <b>S.C. van Pelt</b> , J.J. Beersma, T.A. Buishand, B.J.J.M. van den Hurk, and P. Kabat Evaluation of the probability distribution of the future change in extreme precipitation
11:00–11:15	EGU2012-2728 <b>G.G.S. Pegram</b> and A. Bárdossy Multiscale spatial recorrelation of RCM precipitation downscaling to correct predictions over large areas and small
11:15–11:30	EGU2012-1280 <b>J. Chen</b> , F. Brissette, and D. Chaumont Uncertainty of empirical downscaling methods in quantifying the hydrological impact of climate change
11:30–11:45	EGU2012-13756 <b>F.S. Mpelasoka</b> , S. Charles, F.H. Chiew, G. Fu, and S. Beecham Assessment of CMIP5 GCM daily predictor variables for statistical downscaling
11:45–12:00	EGU2012-8150 <b>G. Mascaro</b> , R. Deidda, and M. Hellies Robust characterization of rainfall intermittency in Sardinia and identification of physical controls

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**LUNCH BREAK**

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Chairperson: Andreas Langousis

13:30–13:45	EGU2012-8190 <b>G.T. Diro</b> , A.M. Tompkins, and X. Bi Dynamical downscaling of ECMWF ensemble seasonal forecast over East Africa with RegCM3
13:45–14:00	EGU2012-8417 <b>A. Champion</b> , K. Hodges, and L. Bengtsson Dynamically Downscaling Precipitation from Extra-Tropical Cyclones
14:00–14:15	EGU2012-13440 <b>E. Brisson</b> , N.P.M. van Lipzig, and M. Demuzere Downscaling precipitation at convection resolving scale using COSMO-CLM.
14:15–14:30	EGU2012-4684 <b>A. Sharma</b> , F. Woldemeskel, R. Mehrotra, and B. Sivakumar An error model for GCM precipitation and temperature simulations
14:30–14:45	EGU2012-13531 <b>F Wetterhall</b> , H. L. Cloke, Y He, J Freer, and F Pappenberger Modelling climate impact on floods under future emission scenarios using an ensemble of climate model projections
14:45–15:00	EGU2012-2478 <b>P. Horton</b> , M. Jaboyedoff, and C. Obled Calibration of the analogue method for precipitation forecasting by means of genetic algorithms

Chairperson: Stefanie Vogl

- 15:30–15:45 EGU2012-12765  
**H. W. Rust**, M. Vrac, M. Lengaigne, and B. Sultan  
 Towards downscaling precipitation for Senegal - An approach based on generalized linear models and weather types
- 15:45–16:00 EGU2012-5863  
**M. Milan** and C. Simmer  
 A Sequential Ensemble Prediction System at Convection Permitting Scales
- 16:00–16:15 EGU2012-10486  
**A. F. Prein**, A. Gobiet, M. Suklitsch, H. Truhetz, N. K. Awan, K. Keuler, and G. Georgievski  
 Added Value of Convection Resolving Climate Simulations
- 16:15–16:30 EGU2012-2843  
**D. Cane**, S. Barbarino, L. Renier, and C. Ronchi  
 Regional Climate Models Downscaling in the Alpine Area with Multimodel SuperEnsemble
- 16:30–16:45 EGU2012-9829  
 S. Vogl, P. Laux, **W. Qiu**, G. Mao, and H. Kunstmann  
 Copula-based assimilation of radar and gauge information to derive bias corrected precipitation fields
- 16:45–17:00 EGU2012-10864  
**N. Addor**, N. Salzmann, T. Ewen, and J. Seibert  
 Bias-correction conditioned on circulation patterns for ENSEMBLES precipitation simulations in mountainous regions

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#### **GM7.3/HS9.7/NH1.9 – Morphodynamics of steep mountain channels (co-organized) – Orals**

Convener: F. Brardinoni | Co-Conveners: JM Turowski, L. Mao, D. Rickenmann, a. Recking

**Room: 21**

Chairperson: n.n.

- 10:30–10:45 EGU2012-10163  
**J.W. Kean**, S.W. McCoy, G.E. Tucker, D.M. Staley, and J.A. Coe  
 Investigating controls on debris-flow initiation and surge frequency at Chalk Cliffs, USA: initial results from monitoring and modeling
- 10:45–11:00 EGU2012-8498  
**B.W. McArdell** and B. Fritschi  
 Field measurements of pressure fluctuations on an instrumented wall: implications for channel-bed erosion
- 11:00–11:15 EGU2012-3964  
**F. Kober**, K. Hippe, B. Salcher, S. Ivy-Ochs, P.W. Kubik, M. Christl, and L. Wacker  
 Debris flows and cosmogenic catchment wide denudation rates
- 11:15–11:30 EGU2012-1989  
**L. Marchi**  
 Control works in debris-flow channels: influence on morphology and sediment transfer
- 11:30–11:45 EGU2012-8590  
**I. fraccarollo** and h capart  
 Measurements and theory for transport layer structure in intense bed-load
- 11:45–12:00 EGU2012-1191  
**F. Mettra**, J. Heyman, and C. Ancey  
 Characterization of bedload transport in steep-slope streams

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#### **GM7.3/HS9.7/NH1.9 – Morphodynamics of steep mountain channels (co-organized) – Posters**

Convener: F. Brardinoni | Co-Conveners: JM Turowski, L. Mao, D. Rickenmann, a. Recking

**Hall XL | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XL140 EGU2012-54  
**JM Turowski**, A Badoux, J Leuzinger, and R Hegglin  
 Large floods, alluvial overprint, and bedrock erosion
- XL141 EGU2012-3218  
**A. Iroume**, A. Andreoli, H. Ulloa, V. Sandoval, and L.E. Lara  
 Stream channel morphology, sediment and large wood transport evolution patterns following the 2008 Chaitén volcano eruption, Chile

- XL142 EGU2012-5377  
**D. Franke**, J. Hornung, and M. Hinderer  
 Architectural analysis and chronology of an Alpine alluvial fan using 3D ground penetrating radar investigation and quantitative outcrop analysis
- XL143 EGU2012-6104  
**L. Marchi**, F. Comiti, M. Arattano, M. Cavalli, P. Macconi, and D. Penna  
 A new debris-flow monitoring system in an Alpine catchment
- XL144 EGU2012-7433  
 AR Beer, **JM Turowski**, B Fritschi, and D Rieke-Zapp  
 Field measurements of bedrock erosion driven by bedload impacts
- XL145 EGU2012-6135  
**K Whitbread**, J Jansen, and P Bishop  
 Controls on the distribution and geometry of postglacial bedrock channels
- XL146 EGU2012-7853  
**A Dell'Agne**, L Mao, and F Comiti  
 Sediment mobility and bedload transport rates in a high-elevation glacier-fed stream (Saldur river, Eastern Italian Alps)
- XL147 EGU2012-8115  
**A. Recking**  
 On how sediment supply impacts step-pool bedload transport
- XL148 EGU2012-9763  
**E. Rascher**, H. Baewert, K.-H. Schmidt, and D. Morche  
 Comparing the results of bed load transport equations to field measurements in an Alpine river
- XL149 EGU2012-10393  
**G.L. Bennett**, P. Molnar, H. Eisenbeiss, and B.W. McArdell  
 Photogrammetric analysis of slope failures feeding the head of the Illgraben debris flow channel
- XL150 EGU2012-10740  
 M. Lazzari, M. Danese, and **D. Gioia**  
 The contribution of fluvial and mass wasting processes to sedimentary budget in mountain catchments of the southern Apennines, Italy
- XL151 EGU2012-9789  
**M. Kasai**, T. Kimura, and T. Marutani  
 Airborne LIDAR investigation of lithological controls on river behavior in a mountainous catchment following a major storm event
- XL152 EGU2012-10575  
**G.L. Bennett**, P. Molnar, B.W. McArdell, F. Schlunegger, and P. Burlando  
 Sediment transfer dynamics in the Illgraben
- XL153 EGU2012-11537  
**B. Rudaz**, A. Loyer, B. Mazotti, E. Bardou, and M. Jaboyedoff  
 Materosion - Modelling sediment cascade towards prediction of solid mass wasting in steep alpine catchments
- XL154 EGU2012-13477  
**T. Müller** and T. Hoffmann  
 Simulation of long-term debris flow sediment transport based on a slope stability and a debris flow routing model
- XL155 EGU2012-13692  
**F. Brardinoni**, E. Perina, G. Bonfanti, G. Falsitta, and F. Agliardi  
 Linking high-resolution geomorphic mapping, sediment sources, and channel types in a formerly glaciated basin of northeastern Alto-Adige/Sudtirol, Italy
- XL156 EGU2012-11005  
**T. Michelini**, G. Bertoldi, and V. D'Agostino  
 Different approaches to assess the volume of debris-flows deposits: are results comparable?
- XL157 EGU2012-3538  
**K.-J. Shou** and Y.-Y. Lee  
 On the Characteristics of the Upstream Bedrock Erosion in Taiwan
- XL158 EGU2012-11263  
**A. Burtin**, N. Hovius, J. Turowski, B. McArdell, and J. Vergne  
 High-resolution seismic monitoring of geomorphic activity in a catchment
- XL159 EGU2012-6096  
**K Whitbread**, J Jansen, D Fabel, and P Bishop  
 Fluvial incision in postglacial rivers: distribution, rates and controls
- XL160 EGU2012-10257  
**P. Molnar**  
 A sandpile model of grain blocking and consequences for sediment dynamics in step-pool streams

**Applications (co-organized) – Orals**

Convener: V. Pierrard | Co-Conveners: H. Rothkaehl, N. Crosby, M. Menvielle

**Room: 26**

Chairperson: n.n.

13:30–13:45 EGU2012-10238

**A. Krankowski**, R. Sieradzki, I.E. Zakharenkova, and I.V. Cherniak  
GNSS monitoring of the ionosphere for Space Weather services

13:45–14:00 EGU2012-10458

**A. Luque** and F. J. Gordillo-Vázquez  
Transient Luminous Events: optical emissions from high altitudes to probe the Earth's upper atmosphere

14:00–14:15 EGU2012-12927

**D. Bilitza** and L. McKinnell  
International Reference Ionosphere - A tool for Space Weather Applications: Recent Developments

14:15–14:30 EGU2012-9067

**G. Cessateur**, J. Lilensten, T. Dudok de Wit, A. BenMoussa, and M. Kretzschmar  
New observational strategies for reconstructing the solar UV flux for space weather applications

14:30–14:45 EGU2012-1843

**P. O. Leye** and P. Tarits  
Ionosphere Activity Effects on Anthropogenic VLF Wave measured by DEMETER and Application to Earth Electromagnetic Survey

14:45–15:00 EGU2012-6356

**D. Przeźpiorka**, M. Gromadzki, M. Grzesiak, and H. Rothkaehl  
Statistical plasma properties in relation to geomagnetic activity derived from Demeter data

15:00–15:15 EGU2012-9707

**T. Onishi** and J.-J. Berthelier  
A statistical analysis of electrostatic turbulence obtained from plasma wave observation by DEMETER satellite

15:15–15:30 EGU2012-11339

**IW McCrea**, A. Aikio, and the EISCAT\_3D Science Working Group  
Space Weather Studies with EISCAT\_3D: Developing the Science Case

**ST5.1/NH1.10/PS5.5 – Space Weather and its Effects on Terrestrial and Geo-Space Environments: Science and Applications (co-organized) – Posters**

Convener: V. Pierrard | Co-Conveners: H. Rothkaehl, N. Crosby, M. Menvielle

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: H. Rothkaehl

XY674 EGU2012-3945

**Y. Zhang**, A. M. Du, X. S. Feng, W. Sun, C. D. Fry, Y. Liu, C. S. Deehr, M. Dryer, and B. Zieger  
Simulated STEREO views of the Solar Wind Disturbances following the CMEs of 1 August 2010

XY675 EGU2012-5320

**Y.I. Yermolaev**, N.S. Nikolaeva, I.G. Lodkina, and M.Y. Yermolaev  
Comparison of role of CIR, Sheath and ICME in generation of magnetic storms

XY676 EGU2012-2341

**H. Luo** and G. X. Chen  
Solar wind parameters dependence of energy coupling between solar wind and magnetosphere during northward interplanetary magnetic field

XY677 EGU2012-12544

**N. Crosby**, A. Veronig, E. Robbrecht, B. Vrsnak, S. Vennerstrøm, O. Malandraki, S. Dalla, N. Srivastava, M. Hesse, and D. Odstrcil  
Forecasting Geomagnetic Storms and Solar Energetic Particle Events: the COMESEP Project

XY678 EGU2012-4778

T. Rollett, C. Möstl, M. Temmer, **A.M. Veronig**, C.J. Farrugia, and H.K. Biernat  
Calculation of CME kinematics and propagation directions by constraining STEREO HI-images with in situ signatures at 1 AU

XY679 EGU2012-2442

**E.W. Wolff**, M. Bigler, M.A.J. Curran, J.E. Dibb, M.M. Frey, M. Legrand, and J.R. McConnell  
Carrington Event not recorded in nitrate in polar ice cores

XY680 EGU2012-8897

**I. Shagimuratov**, A. Krankowski, Iu. Cherniak, I. Zakharenkova, G. Yakimova, and L. Koltunenko  
The response of GPS TEC to the sequence of September 2011 geomagnetic storms

- XY681 EGU2012-2339  
**S.L. Bruinsma**  
Assessment of the Semi-Empirical Drag Temperature Model (DTM) in the Framework of the FP7 Project ATMOP
- XY682 EGU2012-3482  
**L. Lu**  
Time sequence of ring current ion-flux enhancements and ion injections around outer radiation belt during a major storm on 15 May, 2005
- XY683 EGU2012-1769  
**V. Pierrard** and K. Borremans  
Space weather effect on the inner magnetosphere: kinetic models for the plasmasphere-ionosphere coupled system, the polar wind and the radiation belts
- XY684 EGU2012-14358  
**D. Liddle** and S. Eve  
Low cost missions for space weather monitoring
- XY685 EGU2012-5030  
**O.V. Khabarova**  
Possible ways of space weather prediction improvement
- XY686 EGU2012-7843  
**E. Slominska** and H. Rothkaehl  
Hemispheric asymmetry of the electron temperature distribution in the topside ionosphere
- XY687 EGU2012-9727  
**A. Janzhura** and O. Troshichev  
Special features of procedure for PC index derivation in near-real time
- XY688 EGU2012-14082  
**P. Wintoft** and M. Wik  
Predicting local ground magnetic field variations using empirical models
- XY689 EGU2012-4101  
**C. Stolle**, J. Matzka, E. Sarauw, and L. W. Pedersen  
DTU Space magnetometer array
- XY690 EGU2012-9026  
**T.K. Breus** and T.A. Zenchenko  
Biological object's rhythmic structure formation under influence of external environmental factors during evolution
- XY691 EGU2012-9153  
**T.A. Zenchenko** and T.K. Breus  
Amplitude-time characteristics of the individual reactions of healthy people, to the action of meteorological factors
- XY692 EGU2012-7708  
**F. El-Lemdani Mazouz**, C. Lathuillière, M. Menvielle, and S. Bruinsma  
A test of geomagnetic indices for a use in upper atmosphere density modelling
- XY693 EGU2012-6435  
**A. Prestes**  
Cause of the exceptionally high AE average for 2003
- XY694 EGU2012-3785  
**P. Stauning**  
Comparison of Polar Cap (PC) index calculations.
- XY695 EGU2012-3784  
**P. Stauning**  
New unifying procedure for PC index calculations.
- XY696 EGU2012-7854  
**C. Demetrescu** and V. Dobrica  
On the long-term evolution of the PC index
- XY697 EGU2012-10050  
**N. Podorozhkina**, D. Sormakov, and O. Troshichev  
Relation of PC index to magnetic disturbances developing under conditions of northward IMF
- XY698 EGU2012-9875  
**N. Podorozhkina** and O. Troshichev  
Invariability of relationship between the polar cap magnetic activity and geoeffective interplanetary electric field
- XY699 EGU2012-10216  
**O. Troshichev** and A. Janzhura  
PC index as an indicator of solar wind energy that entered into the magnetosphere: basis for the space weather monitoring

- XY700 EGU2012-10104  
**O. Troshichev**, D. Sormakov, and A. Janzhura  
 Sawtooth substorms generated under conditions of the steadily high solar wind energy input into the magnetosphere: reasons for periodicity
- XY701 EGU2012-10149  
**O. Troshichev** and A. Janzhura  
 Discrepancy between summer and winter PC indices observed in the course of magnetospheric substorms: Physical implications

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**NH4.5 – Electro-magnetic phenomena and connections with seismo-tectonic activity – Orals**

Convener: P.F. Biagi | Co-Conveners: T. Maggipinto, M. Hayakawa

**Room: 4**

Chairperson: Pier Francesco Biagi

- 10:30–10:45 EGU2012-1402  
**M. Parrot** and L. Mei  
 Automatic analysis of a temporal series to detect variations linked to seismic activity
- 10:45–11:00 EGU2012-3016  
**D. Píša**, F. N?mec, M. Parrot, and O. Santolík  
 VLF wave attenuation in the ionosphere observed by the DEMETER spacecraft in the vicinity of earthquakes
- 11:00–11:15 EGU2012-2817  
**J. Blecki**, M. Ko?cieszka, M. Boudjada, M. Parrot, S. Savin, and R. Wronowski  
 Comparative studies of the plasma turbulence in the different regions of the ionosphere- discussion of the results from DEMETER satellite
- 11:15–11:30 EGU2012-1734  
**M. Hayakawa**, Y. Kasahara, T. Endoh, Y. Hobara, and S. Asai  
 The observation at Chofu of Doppler-shifts of subionospheric LF signal transmitted from Saga, and the mechanism of lithosphere- atmosphere-ionosphere coupling
- 11:30–11:45 EGU2012-1733  
**M. Hayakawa**, Y. Hobara, A. Schekotov, A. Rozhnoi, and M. Solovieva  
 Possible precursors to the 2011 3/11 Japan earthquake:
- 11:45–12:00 EGU2012-4222  
**Y. Hobara**, M. Iwamoto, K. Ohta, and M. Hayakawa  
 Numerical modeling of seismo-ionospheric disturbances by FDTD method and comparison with experimental results from Japanese VLF observation network

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**LUNCH BREAK**

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Chairperson: Masashi Hayakawa

- 13:30–13:45 EGU2012-7249  
**M. N. Deviren**, F. Arıkan, U. Sezen, and O. Arıkan  
 Investigation of Ionospheric Precursors of 23 October 2011, Mw=7.2 Earthquake in Van, Turkey
- 13:45–14:00 EGU2012-1601  
**T. Maggipinto**, P.F. Biagi, F. Righetti, L. Schiavulli, T. Ligonzo, A. Ermini, I.A. Moldovan, A.S. Moldovan, H.G. Silva, M. Bezzeghoud, M.E. Contadakis, D.N. Arabelos, T.D. Xenos, and A. Buyukasrac  
 The European Network for studying the radio precursors of earthquakes: Principal Component Analysis of LF radio signals collected during July 2009 - April 2011
- 14:00–14:15 EGU2012-8342  
**A.A. Namgaladze**, O.V. Zolotov, and B.E. Prokhorov  
 Main phenomenological features of the TEC variations before Japan March 11, 2011 and Turkey Oct. 23, 2011 EQs and their physical interpretation
- 14:15–14:30 EGU2012-13084  
 V. Tramutoli, C. Filizzola, N. Genzano, M. Lisi, R. Paciello, and **N. Pergola**  
 Real time of earthquakes prone areas by RST analysis of satellite TIR radiances: results of continuous monitoring over Italy and Turkey regions.
- 14:30–14:45 EGU2012-2134  
**C. Skeberis**, T.D. Xenos, L. Hadjileontiadis, M.E. Contadakis, and D. Arabelos  
 Application of Self Adaptive Unsupervised Neural Networks for Processing of VLF-LF signals to detect Seismic-Ionospheric Precursor Phenomena.

- 14:45–15:00 EGU2012-14103  
**E. Pozzo di Borgo**, J. Marfaing, and G. Waysand  
Underground statistical measurements of the world-wide magnetic-background level in the millihertz frequency range with the [SQUID]2 magnetometer  
Chairperson: Tommaso Maggipinto
- 15:30–15:45 EGU2012-1358  
**F. Dudrin**, V. Korepanov, and M. Hayakawa  
Analysis of ULF lithospheric magnetic activity in Kanto region, Japan
- 15:45–16:00 EGU2012-3450  
**X. Y. Ouyang**, X. M. Zhang, X. H. Shen, and Y. Q. Miao  
Anomalous Schumann resonance observed in China, possibly associated with Honshu, Japan Earthquake
- 16:00–16:15 EGU2012-10234  
**D. Ouzounov**, S. Pulinets, G. Papadopoulos, V. Kunitsyn, I. Nesterov, M. Hayakawa, K. Mogi, K. Hattori, M. Kafatos, and P. Taylor  
From multi-sensors observations towards cross-disciplinary study of pre-earthquake signals. What have we learned from the Tohoku earthquake?
- 16:15–16:30 EGU2012-8636  
**M. Y. Boudjada**, P.F. Biagi, E. Al-Haddad, K. Schwingenschuh, P.H.M. Galopeau, B. Besser, M. Parrot, G. Prates, and W. Voller  
Electric environment above European VLF transmitters during the Iceland volcano eruption in spring 2010
- 16:30–16:45 EGU2012-8352  
**G. C. Anagnostopoulos**  
Radiation belt electron precipitation silence in the topside ionosphere a few hours before great ( $M>6$ ) earthquakes: DEMETER observations
- 16:45–17:00 EGU2012-2836  
**D. Stanica** and D. A. Stanica  
Low frequency anomalous pre-seismic behavior of the electromagnetic normalized functions related to the sub-crustal earthquakes (Vrancea-Romania)

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**NH4.5 – Electro-magnetic phenomena and connections with seismo-tectonic activity – Posters**

Convener: P.F. Biagi | Co-Conveners: T. Maggipinto, M. Hayakawa

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 08:30–10:00

Chairperson: Pier Francesco Biagi;Tommaso Maggipinto

- XY155 EGU2012-140  
**I.V. Popova**, A.A. Rozhnoi, M.S. Solovieva, B.V. Levin, M. Hayakawa, K. Schwingenschuh, and P.F. Biagi  
Neural network approach to the prediction of seismic events based on the VLF/LF signal monitoring of the Kuril-Kamchatka region
- XY156 EGU2012-141  
**P.F. Biagi**, F. Righetti, T. Maggipinto, L. Schiavulli, T. Ligonzo, A. Ermini, I.A. Moldovan, A.S. Moldovan, H.G. Silva, M. Bezzeghoud, M. Contadakis, D.N. Arabelos, T.D. Xenos, and A. Buyukasrac  
The European Network for studying the radio precursors of earthquakes: the case of the May 19, 2011 Turkey earthquake ( $Mw=5.7$ )
- XY157 EGU2012-5771  
**P. Milillo**, F. Vespe, T. Maggipinto, L. Schiavulli, T. Ligonzo, and P.F. Biagi  
Possible variations of altitude observed on the occasion of the Tohoku earthquake ( $M=9.0$ ) occurred on March 11, 2011
- XY158 EGU2012-4035  
**M. Y. Boudjada**, I. Moldovan, K. Schwingenschuh, E. Al-Haddad, P.F. Biagi, and M. Parrot  
Demeter/ICE Experiment: Study of low frequency transmitter intensity variations
- XY159 EGU2012-761  
**D. Wolbang**, H. Biernat, K. Schwingenschuh, H. Eichelberger, G. Prates, B. Besser, M. Y. Boudjada, A. Rozhnoi, M. Solovieva, and P. F. Biagi  
Seismo electro-magnetic parameter study of sub-ionospheric VLF radio links in Europe
- XY160 EGU2012-4609  
**G. Prates**, K. Schwingenschuh, H.U. Eichelberger, W. Magnes, G. Berghofer, M. Stachel, B. Besser, D. Wolbang, M. Vellante, U. Villante, and P. Nenovski  
The influence of manmade noise and geomagnetic fluctuations on seismo-magnetic signatures

- XY161 EGU2012-8013  
**K. Schwingenschuh**, H. U. Eichelberger, B.P. Besser, G. Prates, M.Y. Boudjada, G. Stangl, D. Wolbang, A. Rozhnoi, M. Solovieva, P.F. Biagi, M. Friedrich, H. Biernat, and M. Hayakawa  
Atmospheric and ionospheric electrical parameter variations inferred from sub - ionospheric seismo - electromagnetic VLF/LF observations
- XY162 EGU2012-1467  
**X. Zhang**, X. Ouyang, J. Liu, and X. Shen  
The perturbation characteristics in plasma parameters in ionosphere before strong earthquakes
- XY163 EGU2012-2319  
M. E. Contadakis, D.N. Arabelos, and **G. Vergos**  
TEC variations over North-western Balkan Peninsula before and during the seismic activity of 24th May 2009
- XY164 EGU2012-3489  
**M. Kosciesza**, J. Blecki, M. Parrot, and R. Wronowski  
Comparison of the ionospheric plasma turbulence over seismic and equatorial regions.
- XY165 EGU2012-4431  
**I.A. Moldovan**, A.S. Moldovan, A.O. Placinta, E.M. Takla, A.P. Constantin, and E. Popescu  
Possible associations between long term anomalous geomagnetic variations, Vrancea (Romania) intermediate depths earthquakes and the solar activity for the last 15 years
- XY166 EGU2012-4478  
**I.A. Moldovan**, A.S. Moldovan, P.F. Biagi, C. Ionescu, K. Schwingenschuh, and M.Y. Boudjada  
The Terminator Time in subionospheric VLF/LF diurnal variation as recorded by the Romanian VLF/LF radio monitoring system related to earthquake occurrence and volcano eruptions
- XY167 EGU2012-5827  
S. N. Walker, **M. A. Balikhin**, O. A. Pokhotelov, and M. Parrott  
DEMETER ULF observations of turbulence during the period before large earthquakes
- XY168 EGU2012-9651  
**T. Onishi** and J.-J. Berthelier  
Statistical study of plasma density and temperature variations applied to the Great Sichuan Earthquake
- XY169 EGU2012-10188  
**I. Shagimuratov**, Iu. Cherniak, I. Zakharenkova, N. Tepenitsyna, and G. Yakimova  
Investigation of seismo-ionospheric effects associated with Elazig and Van earthquakes in Turkey
- XY170 EGU2012-11625  
**I. Zakharenkova**, Iu. Cherniak, I. Shagimuratov, and O. Suslova  
Investigation of the seismo-ionospheric effects on the base of GPS/GLONASS measurements
- XY171 EGU2012-11721  
**G. Anagnostopoulos**, D. Efthymiadis, and S. Pulinets  
Strong electron precipitation activity in the topside ionosphere (DEMETER) and increased seismic activity observed before (2-4 days) "The night of lighting startled Athens"
- XY172 EGU2012-12281  
**G. C. Anagnostopoulos**  
Space conditions during a month of a sequence of six M>6.8 earthquakes ending with the tsunami of December 26, 2004
- XY173 EGU2012-12507  
**V. Tramutoli**, S. Inan, N. Jakowski, S. Pulinets, A. Romanov, C. Filizzola, I. Shagimuratov, N. Pergola, N. Genzano, M. Lisi, E. Alparslan, V. Wilken, K. Tsybulia, A. Romanov, R. Paciello, M. Balasco, I. Zakharenkova, D. Ouzounov, G. A. Papadopoulos, M. Parrot and the PRE-EARTHQUAKES Team  
Learning from the experience: preliminary results of integration experiments within PRE-EARTHQUAKES EU-FP7 Project.
- XY174 EGU2012-12824  
**H. U. Eichelberger**, G. Prates, K. Schwingenschuh, D. Wolbang, M. Y. Boudjada, A. Rozhnoi, M. Solovieva, P. F. Biagi, T. Maggipinto, M. Stachel, I. Jernej, Ö. Aydogar, and B. P. Besser  
Characterisation of very low frequency (VLF) fluctuations at the Graz receiver knot in the INFREP system
- XY175 EGU2012-13142  
Ch. Maurer, **C.-V. Meister**, P. Dziendziel, M. Endres, and D.H.H. Hoffmann  
The Darmstadt VLF/LF radiophysical station VADar. First observations of terminator times
- XY176 EGU2012-13204  
B.R. Lee, **C.-V. Meister**, Ch. Maurer, and D.H.H. Hoffmann  
The influence of lightnings on VLF/LF signals observed by radiophysical earthquake prediction stations
- XY177 EGU2012-13264  
**C.-V. Meister**, B. Mayer, and D.H.H. Hoffmann  
Possible variations of E-layer electromagnetic fields by acoustic waves above earthquake preparation regions
- XY178 EGU2012-13330  
**E.V. Liperovskaya**, A.V. Liperovsky, C.-V. Meister, and A.S. Silina  
Daytime dependence of disturbances of ionospheric Es-layers connected to earthquakes

- XY179 EGU2012-13430  
**R.M. Umarkhodgaev**, V.A. Liperovsky, V.V. Mikhailin, C.-V. Meister, and D.Ju Naumov  
IR spectral analysis for the diagnostics of crust earthquake precursors
- XY180 EGU2012-13493  
**A. Cartwright-Taylor**, P. Sammonds, and F. Vallianatos  
Acoustic and pressure-stimulated current emissions from triaxial compression experiments on marble and limestone samples
- XY181 EGU2012-13646  
A. Kotsarenko, V. Grimalsky, A.G. Bravo Osuna, S. Koshevaya, **V. Yutsis**, R. Perez Enriquez, and J.A.L. Cruz Abeyro  
On the Radon-related mechanism of the seismo- and volcanogenic geomagnetic anomalies. Experiment and model.
- XY182 EGU2012-195  
Z. Kereselidze, N. Kachakhidze, and **M. Kachakhidze**  
Lithosphere - Atmosphere - Ionosphere Circuit Model

**SM5.1/NH4.7 – Anthropogenic seismicity and seismic hazard: methods, observations and modeling (co-organized) –**

Orals

Convener: S. Cesca | Co-Conveners: B. Orlecka-Sikora, A. F. do Nascimento, S. Turuntaev, J. Suckale

**Room: 27**

Chairperson: S. Cesca

- 13:30–13:45 EGU2012-1911  
**V. Vavrycuk** and D. Kuehn  
Determination of source parameters and full moment tensors of seismic events in a very heterogeneous mining environment
- 13:45–14:00 EGU2012-1595  
**WA Lenhardt**  
Rockburst Mechanisms at Great Depth
- 14:00–14:15 EGU2012-12960  
**S. Wehling-Benatelli**, D. Becker, M. Bischoff, W. Friederich, and T. Meier  
Cluster analysis and relative relocation of mining-induced seismicity using HAMNET data
- 14:15–14:30 EGU2012-2775  
**A. T. Sen**, S. Cesca, M. Bischoff, T. Meier, T. Dahm, and D. Kühn  
Full Moment Tensor Inversion and Rupture Modelling of Mining Induced Seismicity
- 14:30–14:45 EGU2012-5314  
**B. Orlecka-Sikora**, S. Cesca, S. Lasocki, L. Rudzinski, L. Lizurek, P. Wiejacz, P. Urban, and M. kozlowska  
Complex source mechanisms of mining-induced seismic events - implications for surface effects
- 14:45–15:00 EGU2012-452  
**T. Zmushko**, S.B. Turuntaev, and V.I. Kulikov  
The influence of the mining operation on the mine seismicity of Vorkuta coal deposit
- Chairperson: B. Orlecka-Sikora
- 15:30–15:45 EGU2012-2336  
**S. Lasocki** and B. Orlecka-Sikora  
Prediction of ground motion due to mining seismic activity: a general prediction scheme applied to assess impacts on tailings pond in Legnica-Glogow Copper District in Poland in the years 2011-2050
- 15:45–16:00 EGU2012-5350  
**A. Milev**, R. Durrheim, M. Nakatani, Y. Yabe, H. Ogasawara, and M. Naoi  
Seismic risk mitigation in deep level South African mines by state of the art underground monitoring - Joint South African and Japanese study
- 16:00–16:15 EGU2012-2938  
**S.B. Turuntaev**, O.Yu. Melchaeva, and S.V. Vorobobina  
Discrimination between induced and natural seismicity by means of nonlinear analysis
- 16:15–16:30 EGU2012-12435  
**D. Becker**, D. Kaiser, S. Wehling-Benatelli, M. Bischoff, and T. Dahm  
Frequency Magnitude Distribution of induced microseismicity - Lessons learned from the mining environment
- 16:30–16:45 EGU2012-11436  
**C. Dinske**, F. Wenzel, and S. A. Shapiro  
Characterisation of the Seismotectonic State of Reservoir Locations Using the Magnitude Distribution of Earthquakes

- 16:45–17:00 EGU2012-5939  
**B. Nunes**, A. do Nascimento, J. Ferreira, and F. Bezerra  
Reservoir-induced seismicity at Castanhao reservoir, NE Brazil

**NH5.2 – Extreme Sea Waves – Orals**

Convener: E. Pelinovsky | Co-Conveners: C Kharif, A. Slunyaev

**Room: 1**

Chairperson: A. Slunyaev. P. Liu

- 08:30–08:45 EGU2012-746  
**I. Nikolkina** and I. Didenkulova  
Rogue waves in 2006–2011
- 08:45–09:00 EGU2012-1000  
**L. Kaplan** and L. H. Ying  
Linear and Nonlinear Rogue Wave Statistics in the Presence of Random Currents
- 09:00–09:15 EGU2012-1350  
**R. Shamin**  
Statistics of Rogue Waves
- 09:15–09:30 EGU2012-13206  
**A. Osborne**  
Classification of Rogue Waves in 1+1 Dimensions
- 09:30–09:45 EGU2012-10588  
**A.I. Dyachenko**, V.E. Zakharov, and D.I. Kachulin  
Interaction of breathers in the 2-D free surface hydrodynamics
- 09:45–10:00 EGU2012-6843  
**Dr. Schober**  
Spectral analysis of the effects of wind and damping on rogue waves

**COFFEE BREAK**

Chairperson: A. Osborne, A. Dyachenko

- 10:30–10:45 EGU2012-1729  
**A. Sergeeva** and A. Slunyaev  
Rogue waves, rogue events and extreme wave kinematics in spatio-temporal sheets of simulated sea states
- 10:45–11:00 EGU2012-1379  
**A. Slunyaev** and V. Shrira  
The problem of the highest wave in a group: fully nonlinear simulations of water wave breathers vs weakly nonlinear theory
- 11:00–11:15 EGU2012-6255  
**A. Chabchoub**, N. Hoffmann, H. Branger, M. Onorato, and N. Akhmediev  
Wave tank experiments on Peregrine type surface gravity waves
- 11:15–11:30 EGU2012-512  
**A. Lechuga**  
Generation of rogue waves in a wave tank
- 11:30–11:45 EGU2012-14238  
**A. Tomas**, M. Menendez, F.J. Mendez, G. Coco, and I.J. Losada  
Predicting the occurrence probability of freak waves based on buoy data and non-stationary extreme value models
- 11:45–12:00 EGU2012-3870  
**S.-H. Oh**, W.-M. Jeong, and W.-D. Baek  
Characteristics of the large-height swell-like waves on the east coast of Korea

**LUNCH BREAK**

Chairperson: E. Pelinovsky, L. Kaplan

- 13:30–13:45 EGU2012-6715  
**P. Liu**, C. Wu, A. Bechle, H. Chen, and K. MacHutchon  
What do we NOT know about freak waves in the ocean and lakes and where to go from here?

- 13:45–14:00 EGU2012-1273  
**D.-J. Doong**, T. Talipova, and E. Pelinovsky  
Shallow freak event modeling in Taiwanese waters
- 14:00–14:15 EGU2012-10047  
**S. Dobrokhotov**  
Near-Front Wave Profile on Shallow Water over a Rapidly Oscillating Bottom Generated by Time-Dependent Spatially Localized Source
- 14:15–14:30 EGU2012-4772  
**N. Makarenko** and V. Kostikov  
Nonlinear water waves generated by impulsive motion of submerged obstacle
- 14:30–14:45 EGU2012-6431  
**A.N. Serebryany** and C.-T. Liu  
Observations of large-amplitude internal wave of the second mode in Luzon Strait
- 14:45–15:00 EGU2012-3200  
**A. Warn-Varnas** and K. Lamb  
Shoaling of internal solitary waves at the ASIAEX site in the South China Sea

**NH5.2 – Extreme Sea Waves – Posters**

Convener: E. Pelinovsky | Co-Conveners: C Kharif, A. Slunyaev

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: E. Pelinovsky, A. Slunyaev

- XY183 EGU2012-8454  
**S. I. Badulin**, D. V. Ivonin, and V. A. Dulov  
Three-dimensional freak waves and higher-order wave-wave resonances
- XY184 EGU2012-5719  
**X. Feng**, M. Tsimplis, and M. Yelland  
Extreme waves at Polar front of North Atlantic from 2000 to 2009
- XY185 EGU2012-1444  
A. Slunyaev, G.F. Clauss, **M. Klein**, and M. Onorato  
Laboratory tests of short intense envelope solitons
- XY186 EGU2012-1464  
Y.Y. Chen, **H.C. Hsu**, and M.S. Li  
Theoretical Study of Wave Breaking for Nonlinear Water Waves Propagating on a Sloping Bottom
- XY187 EGU2012-113  
I. Didenkulova, E. Pelinovsky, and **A. Rodin**  
Formation of shallow water rogue waves taking into account wave breaking effects
- XY188 EGU2012-603  
**E. Shurgalina**, E. Pelinovsky, A. Sergeeva, T. Talipova, and A. Litra  
KdV - turbulence and extreme waves in shallow water
- XY189 EGU2012-3742  
**A. Zaytsev**, I. Kostenko, E. Pelinovsky, and A. Yalciner  
Freak Waves Registration in 2009 in the Aniva, Bay, Okhotsk Sea
- XY190 EGU2012-2833  
**K.I. Kuznetsov**, G.V. Shevchenko, P.D. Kovalev, and A.A. Kurkin  
Statistics of surface waves off the south-eastern coast of the Sakhalin Island on a base of the data of instrumental measurements in 2006 - 2008
- XY191 EGU2012-128  
**E. Shurgalina** and E. Pelinovsky  
Swell freak wave manifestation on the background weak wind wave field
- XY192 EGU2012-4828  
**N. Makarenko** and E. Ulanova  
The density stratification and amplitude dispersion of internal waves
- XY193 EGU2012-1279  
**T. Talipova**, K. Terletska, V. Maderich, I. Brovchenko, R. Grimshaw, and E. Pelinovsky  
Loss of energy in transition of internal solitary wave over the bottom step
- XY194 EGU2012-1703  
**R. Thomas**, C. Kharif, and H. Branger  
A nonlinear Schrödinger equation for water waves on finite depth with constant vorticity
- XY195 EGU2012-74  
**E. Pelinovsky** and T. Talipova  
Strong wave transformation under uneven bottom: analytical results

- XY196 EGU2012-75  
**E. Pelinovsky**, E. Pasternak, A. Dyskin, and B. Gurevich  
 Reflectionless low-frequency seismic wave propagation in the “Reference Earth Model”
- XY197 EGU2012-123  
**E. Batcyna**, N. Petruhin, and E. Pelinovsky  
 Computer modeling of the Earth's atmosphere via reflectionless layers
- XY198 EGU2012-453  
 S. Kshevetskii and **K. Thiruvenkatasamy**  
 Numerical Modeling of Overturning of a Tsunami wave running onto a Shore with an abrupt declination of sea bottom
- XY199 EGU2012-6913  
**V. Maximov**, I. Nudner, G. Khakimzyanov, K. Semenov, and E. Pelinovsky  
 Extreme Waves Interaction with Construction of a Mixed Profile
- XY200 EGU2012-2271  
**Sh. Gagoshidze**  
 To the Calculation of Storm Surges in Closed and Open Sea Water Areas
- XY201 EGU2012-1516  
**N. Chaykovskaya** and A. Rodin  
 The role of PR in the formation of psychological readiness for a rogue wave events.

**NH6.2 – Snow avalanche dynamics including interaction with structures, hazard mapping and risk management –**

Orals

Convener: F. Naaim-Bouvet | Co-Conveners: T. Faug, M. NAAIM, E. Surinach

**Room: 9**

Chairperson: n.n.

- 10:30–10:45 EGU2012-1074  
**M.Y. Louge**, C.S. Carroll, and B. Turnbull  
 Frontal Dynamics of Powder Snow Avalanches
- 10:45–11:00 EGU2012-6601  
**B. Sovilla** and B. Blaschke  
 Density and granulometric structure of wet and dry-snow avalanches
- 11:00–11:15 EGU2012-13805  
**T. Faug**, B. Chanut, P. Caccamo, and M. Naaim  
 Physically-sound scaling laws for snow avalanche impact pressure
- 11:15–11:30 EGU2012-3000  
**C. Kröner** and S. P. Pudasaini  
 Three-dimensional modeling and numerical simulations of avalanches over a real mountain topography
- 11:30–11:45 EGU2012-9337  
**B. Frigo**, V. De Biagi, and B. Chiaia  
 Vulnerability assessment in avalanche hazardous areas
- 11:45–12:00 EGU2012-11141  
**P. Dobesberger** and A. Zeidler  
 Determining the impact of a changing climate on avalanche hazard potential - A practical approach

**NH6.2 – Snow avalanche dynamics including interaction with structures, hazard mapping and risk management –**

Posters

Convener: F. Naaim-Bouvet | Co-Conveners: T. Faug, M. NAAIM, E. Surinach

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- XY202 EGU2012-12482  
**A. Prokop**, V. Vionnet, F. Naaim, G. Guyomarc'h, and H. Bellot  
 Combination of measurement methods to investigate snow drift and blowing snow parameters
- XY203 EGU2012-4434  
**W. Steinkogler**, B. Sovilla, and M. Lehning  
 Influence of snow-cover properties on avalanche dynamics
- XY204 EGU2012-12620  
**J.-T. Fischer**, M. Granig, and P. Jörg  
 Snow entrainment in applied avalanche modeling using SamosAT
- XY205 EGU2012-621  
**M. Egli**  
 The effect of snow entrainment on avalanche dynamics

- XY206 EGU2012-7004  
**A. Turchaninova**  
Application of statistical and dynamics models for snow avalanche hazard assessment in mountain regions of Russia
- XY207 EGU2012-10501  
H. Bellot, **F. Naaim-Bouvet**, T. Faug, M. Naaim, P. Caccamo, and F. Ousset  
First measurements of pressure and velocity on breaking mounds in Taconnaz avalanches path : Event of 29th December 2010
- XY208 EGU2012-8063  
**D. Dallavalle**, P. Scotton, and P.R. Tecca  
Three-dimensional dynamic topographic survey of granular flows using photogrammetric techniques

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XY209 EGU2012-2980  
**C. Kröner**, S. P. Pudasaini, and S. A. Miller  
Influence of obstacles on the dynamics of rapid granular chute flows
- XY210 EGU2012-13123  
**P. Caccamo**, F. Naaim-Bouvet, H. Bellot, F. Ousset, and T. Faug  
Experimental measurements on a powder avalanche impacting an obstacle: 3D velocity field and exerted pressures
- XY211 EGU2012-12570  
**J.-T. Fischer** and M. Granig  
An objective analysis method in applied avalanche modeling
- XY212 EGU2012-13907  
**P. Favier**, D. Bertrand, N. Eckert, and M. Naaim  
Optimal design of snow avalanche passive defence structure using reliability approach to quantify buildings vulnerability
- XY213 EGU2012-14094  
**I. Ousset**, D. Bertrand, M. Brun, A. Limam, and M. Naaim  
Reinforced concrete structures loaded by snow avalanches : numerical and experimental approaches.
- XY214 EGU2012-2306  
S. Fabregas, **R. Hurtado**, and J. Mintegui  
The protection of Canfranc Internation Railway Station against natural risks. Analysis and evaluation of its effectiveness 100 years later.

**NH8.1 – Heavy-metal contamination of the environment – Orals**

Convener: J. A. Holden | Co-Conveners: B. D. Malamud, S. Oeztan

**Room: 8**

Chairperson: J.A. Holden and S. Oeztan

13:30–14:15 **2 minute Author Poster Summaries**14:15–15:00 **Discussion****NH8.1 – Heavy-metal contamination of the environment – Posters**

Convener: J. A. Holden | Co-Conveners: B. D. Malamud, S. Oeztan

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- XY215 EGU2012-413  
**Ong MC**, Menier D, Noor Azhar MS, Dupont V, and Révillon S  
Occurrence and distribution of selected heavy metals in the surface sediments of South Brittany coastal waters: An assessment using pollution indicators
- XY216 EGU2012-2303  
**Me. Maanan**, P. Fattal, M. Maanan, A-C Ruiz-Fernández, and M. Sahabi  
Evaluation of the anthropogenic influx of metallic pollutants into the Oualidia lagoon, Morocco
- XY217 EGU2012-5541  
**M I Irfan** and T Meisel  
An integrated geochemical, geophysical and mineralogical study of river sediments in alpine area and soil samples near steel plant, in Austria

- XY218 EGU2012-2995  
**A. Poitevin**, C. Lerouge, G. Wille, P. Bataillard, and L. Hennet  
Synchrotron x-ray and electron micro-probe study of contaminated dredged sediments.
- XY219 EGU2012-8738  
**A. musallam**, M. El Tokhi, S. Al Abed, and B. Mahmoud  
Heavy Metals and Petroleum Hydrocarbons Contamination of Bottom Sediments of Gulf of Oman area, United Arab Emirates
- XY220 EGU2012-12000  
**E. Bagnato**, M. Sprovieri, M. Bitetto, M. Bonsignore, S. Calabrese, V. Di Stefano, E. Oliveri, F. Parello, and S. Mazzola  
Distribution and air-sea exchange of mercury (Hg) in polluted marine environments
- XY221 EGU2012-12511  
**D. Mucke**, R. Kumann, and S. Mucke  
Heavy-metal contamination of rivers by mining gallery waters during the flood in 2002 in Saxony/Germany and low-cost rapid analysis of contaminated river sediments by XRF
- XY222 EGU2012-12903  
**C. Hissler**, R. Hostache, P. Matgen, Z. Tosheva, E. David, P. Bates, and P. Stille  
Combining multitracing and 2D-modelling to identify the dynamic of heavy metals during flooding.
- XY223 EGU2012-4108  
**V. Andreu**, E. Gimeno, E. Fernandez-Despiau, and J.A. Pascual  
Incidence and distribution of heavy metals in soils of a Mediterranean coastal wetland (L'Albufera de Valencia, Spain)
- XY224 EGU2012-4925  
**M. Udatný**, M. Mihaljevi?, Y. Kochergina, and O. Šebek  
Speciation of hazardous elements released from glass-works fly ash into soils.
- XY225 EGU2012-12329  
**D. Mucke**  
Heavy-metal contamination of soils in Saxony/Germany by foundry fumes and low-cost rapid analyses of contaminated soils by XRF
- XY226 EGU2012-13357  
**M.J. de la Torre**, C. Hidalgo, J. Rey, and J. Martínez  
Mineralogical characterization of tailing dams: incidence of abandoned mining works on soil pollution (Linares, Jaén)
- XY227 EGU2012-7112  
**A. Vanek**, M. Komarek, and I. Galuskova  
Arsenic release from Fe/Mn oxide-rich (model) soils/sediments - A comparison of single extraction procedures
- XY228 EGU2012-4506  
**S. Oeztan** and R.-A Duering  
Closed vessel microwave assisted extraction - An innovative method for determination of trace metals in plant materials
- XY229 EGU2012-8532  
**V. Ettler**, V. Knytl, M. Komarek, L. Della Puppa, M. Mihaljevic, and O. Sebek  
Stability of amorphous hydrous manganese oxide in contrasting soils and implications for its use in chemical stabilization of metals/metalloids in contaminated soil environments
- XY230 EGU2012-12887  
**R. Abou Jaoudé**, A. Pricop, I. Laffont-Schwob, P. Prudent, J. Rabier, V. Masotti, G. de Dato, and P. De Angelis  
Evaluating the potential use of Tamarix gallica L. for phytoremediation practices in heavy-metal polluted soils
- XY231 EGU2012-10430  
**P. Favas**, J. Pratas, and M.N.V. Prasad  
Evaluation of the potential of Callitriches stagnalis for phytoremediation of uranium-contaminated waters: from field into the laboratory
- XY232 EGU2012-13654  
W. Xu, **L. Y. Li**, and J. R. Grace  
Aluminum colloid formation and its effect on co-precipitation of zinc during acid rock drainage remediation with clinoptilolite in a slurry bubble column
- XY233 EGU2012-6522  
**A. Abdalaal**, G. Jordan, P. Szilassi, J. Kiss, and G. Detzky  
Testing contamination risk assessment methods for toxic elements from mine waste sites
- XY234 EGU2012-6972  
**J. Choi**, M.K Ji, H.S Yun, Y.T Park, E.D Gee, W.R Lee, and B.-H Jeon  
Inhibition of Sulfide Mineral Oxidation by Surface Coating Agents: Batch
- XY235 EGU2012-7070  
**P. Völgyesi**, G. Jordan, and Cs. Szabo  
Long-term airborne contamination studied by attic dust in an industrial area: Ajka, Hungary

XY236 EGU2012-1058

**P. Censi**, L.A. Randazzo, S. D'Angelo, A. Cuttitta, and F. Saiano

REE incorporation and behaviour in aquatic turtles as a consequence of environmental exposure and biological processes

**NH8.3 – Medical Geohazards and Geochemistry – Orals**

Conveners: R. Crockett, P. Censi | Co-Conveners: G. Gillmore, M. L. Giannossi, Y. Erel, T. Darrah, L. Randazzo

**Room: 8**

Chairperson: P. Censi and R. Crockett

- 15:30–15:35 Summary Oral Presentation: Urinary stone formation occurring at the interface of mineralogical and biological phases
- 15:35–15:40 Summary Oral Presentation: "Naturally occurring asbestos" (NOA) hazard in the Alps and Corsica, France: insights from geological mapping and petrological study
- 15:40–15:45 Summary Oral Presentation: Balneological Evaluation of the Tafadek Spring, Agadez Region, Niger Republic
- 15:45–15:50 Summary Oral Presentation: Environmental and indoor study of Radon concentration in San Joaquin area, Queretaro, Mexico
- 15:50–15:55 Summary Oral Presentation: Diagnosis of rare inherited glyoxalate metabolic disorders through in-situ analysis of renal stones
- 15:55–16:00 Summary Oral Presentation: The mathematical model of radon-222 accumulation in underground mines
- 16:00–16:05 Summary Oral Presentation: Dynamics of soil gas radon concentration in a high permeable soil based on a long-term high-resolution measurement series
- 16:05–16:10 Summary Oral Presentation: Study of a cave's air exchange pattern based on radon concentration and the time dependence of radon concentration in Pal-volgy Cave
- 16:10–16:15 Summary Oral Presentation: United role of radon decay products and nano-aerosols in radon dosimetry
- 16:15–16:20 Summary Oral Presentation: The role of natural ventilation in the exposure to radon in the Postojna Cave
- 16:20–16:25 Summary Oral Presentation: Erionite and other fibrous zeolites in volcanic environments: the need for a risk assessment in Italy
- 16:25–16:30 Summary Oral Presentation: Asbestos exposure during quarrying and processing of serpentinites: a case study in Valmalenco, Central Alps, Northern Italy
- 16:30–16:35 Summary Oral Presentation: Radon Emissions from Radium-Dial Watches
- 16:35–16:40 Summary Oral Presentation: Environmental monitoring and radiation protection in Skocjan Caves, Slovenia
- 16:40–16:45 Summary Oral Presentation: Medical Geology in the Middle East: Potential Health Risks from Mineralized Dust Exposure
- 16:45–17:00 Discussion

**NH8.3 – Medical Geohazards and Geochemistry – Posters**

Conveners: R. Crockett, P. Censi | Co-Conveners: G. Gillmore, M. L. Giannossi, Y. Erel, T. Darrah, L. Randazzo

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 08:30–10:00

Chairperson: R. Crockett, P. Censi, G. Gillmore, M. Giannossi, Y. Erel, T. Darrah, L. Randazzo

XY237 EGU2012-417

**J.M. Baumann** and B. Affolter

Urinary stone formation occurring at the interface of mineralogical and biological phases

XY238 EGU2012-1668

**M.B. Lyles**, H.L. Fredrickson, A.J. Bednar, H.B. Fannin, D.W. Griffin, and T.M. Sobecki

Medical Geology in the Middle East: Potential Health Risks from Mineralized Dust Exposure

XY239 EGU2012-13974

**K Nghargbu**, T Latour, I Ponikowska, and E Kurowska

Balneological Evaluation of the Tafadek Spring, Agadez Region, Niger Republic

XY240 EGU2012-8624

**D.E. Jacob**, B. Grohe, B. Hoppe, B.B. Beck, and R. Tessadri

Diagnosis of rare inherited glyoxalate metabolic disorders through in-situ analysis of renal stones

XY241 EGU2012-5740

**A. Cavallo** and B. Rimoldi

Erionite and other fibrous zeolites in volcanic environments: the need for a risk assessment in Italy

- XY242 EGU2012-5753  
**A. Cavallo** and B. Rimoldi  
Asbestos exposure during quarrying and processing of serpentinites: a case study in Valmalenco, Central Alps, Northern Italy
- XY243 EGU2012-7931  
**F. Cagnard**, D. Lahondère, O. Blein, A. Lahfid, and G. Wille  
“Naturally occurring asbestos
- XY244 EGU2012-2343  
**V. Debevec Gerjeviè** and P. Jovanovi?  
Envitonal monitoring and radiation protection in Škocjan Caves, Slovenia
- XY245 EGU2012-4829  
**K. Z. Szabó**, Á. Horváth, Gy. Jordán, and Cs. Szabó  
Dynamics of soil gas radon concentration in a high permeable soil based on a long-term high-resolution measurement series
- XY246 EGU2012-4912  
**H. E. Nagy**, A. Horvath, Gy. Jordan, Cs. Szabo, and A. Kiss  
Study of a cave's air exchange pattern based on radon concentration and the time dependence of radon concentration in Pál-völgy Cave (Budapest, Hungary)
- XY247 EGU2012-6980  
**A. Gregori?**, M. Smerajec, and J. Vaupoti?  
The role of natural ventilation in the exposure to radon in the Postojna Cave
- XY248 EGU2012-9950  
**M. Smerajec** and J. Vaupoti?  
United role of radon decay products and nano-aerosols in radon dosimetry
- XY249 EGU2012-9044  
**G. Gillmore** and R. Crockett  
Radon Emissions from Radium-Dial Watches.
- XY250 EGU2012-12235  
**A. Klimshin**  
The mathematical model of radon-222 accumulation in underground mines
- XY251 EGU2012-13500  
A. Kotsarenko, G. Hernandez Silva, N.A. Hinojo Alonso, **V. Yutsis**, V. Grimalsky, S. Koshevaya, and J. Martínez Reyes  
Environmental and indoor study of Radon concentration in San Joaquin area, Querétaro, México

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**NH9.2 – Social capacity building: an emerging field of research and practice for Europe – Orals**

Convener: C. Kuhlicke | Co-Conveners: A. Steinführer

**Room: 1**

Chairperson: C. Kuhlicke, A. Steinführer

- 15:30–15:45 EGU2012-4093  
**M. Buchecker** and E. Maidl  
Effects of risk communication on natural hazards on real estate owners' risk perception and risk behaviour
- 15:45–16:00 EGU2012-8809  
**I. Stanciugelu**, V. Frunzaru, I. Armas, A. Duntzer, and S. Stan  
Social Amplification of Risk and Crisis Communication Planing - Case Study
- 16:00–16:15 EGU2012-5591  
**C. Bianchizza**, D. Del Bianco, L. Pellizzoni, and A. Scolobig  
Interventionist and participatory approaches to flood risk mitigation decisions: two case studies in the Italian Alps
- 16:15–16:30 EGU2012-10710  
**S. Schneiderbauer**, L. Pedoth, and M Zebisch  
Integrating social capacity into risk reduction strategies
- 16:30–16:45 EGU2012-6295  
**B. Komac**, M. Zorn, R. Cigli?, and A. Steinführer  
Understanding European education landscape on natural disasters - a textbook research
- 16:45–17:00 EGU2012-6902  
**M. Evers**  
Collaborative modelling for interactive participation in urban flood risk management

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**NH9.2 – Social capacity building: an emerging field of research and practice for Europe – Posters**

Convener: C. Kuhlicke | Co-Conveners: A. Steinführer

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 13:30–15:00  
 Chairperson: A. Steinführer, C. Kuhlicke

- XY252 EGU2012-1170  
**M. Buchecker** and S. Menzel  
 Effects of stakeholder involvement in river management
- XY253 EGU2012-4362  
**P. Pipan**  
 Public participation in reconstruction after the earthquakes in Friuli (Italy) and the Upper Soca Valley (Slovenia) in 1976, 1998, and 2004
- XY254 EGU2012-5627  
**S. Tapsell** and S. McC arthy  
 Social vulnerability assessment: a growing practice in Europe?
- XY255 EGU2012-8353  
**C. Begg** and G. Walker  
 Social capacity building towards flood risk resilience in England: The impact of shifts in risk governance
- XY256 EGU2012-10095  
**M. Bründl** and L. Stoffel  
 IFKIS - ten years of experience with the intercantonal early warning and crisis information system as a good-practice example for local capacity building
- XY257 EGU2012-11686  
**e. moulin** and j.-f. deroubaix  
 The integration of the risk in the governance of urban projects: a key issue for a resilient city
- XY258 EGU2012-12131  
**J. Luther**, V. Meyer, C. Kuhlicke, S. Scheuer, and H. Unnerstall  
 Improving Flood Risk Maps as a Capacity Building Activity: Fostering Public Participation and Raising Flood Risk Awareness in the German Mulde Region (project RISK MAP)
- XY259 EGU2012-11648  
**M. Supramanaim** and M. Di Masso  
 Three different lenses for social capacity building: Bridging the gap between practice and theory
- XY260 EGU2012-10865  
**C. Begg**, C. Kuhlicke, A. Steinführer, and J. Luther  
 Social Capacity Assessment for communities and organisations in the CapHaz-Net context
- XY261 EGU2012-12170  
**I. Arma?**, R.Z. Cre?u, and I. St?nciugelu  
 Psychological Factors Linked to Risk Perception
- XY262 EGU2012-11561  
**A. Masi**, M. Mucciarelli, L. Chiauzzi, G. De Costanzo, and G. Loperte  
 Emergency preparedness activities during an ongoing seismic swarm: the experience of the 2011-2012 Pollino (Southern Italy) sequence
- XY263 EGU2012-13675  
 W. Biernacki, **J. Dzia?ek**, and A. Bokwa  
 Social attitudes towards floods in Poland - spatial differentiation
- XY264 EGU2012-4542  
**G Walker** and F Tweed  
 A framework for profiling the characteristics of risk governance in diverse European natural hazard contexts

**NH9.3 – The Costs of Natural Hazards – Orals**

Convener: H. Kreibich | Co-Conveners: L. Bouwer, R. Schwarze

**Room: 8**

Chairperson: H. Kreibich

- 08:30–08:45 EGU2012-4474  
**V. Meyer**, N. Becker, V. Markantonis, R. Schwarze, J.C.J.M. van den Bergh, L. M. Bouwer, P. Bubeck, P. Ciavola, A.H. Thielen, E. Genovese, C. Green, S. Hallegatte, H. Kreibich, Q. Lequeux, C. Viaattene, I. Logar, E. Papyrakis, C. Pfurtscheller, J. Poussin, V. Przyluski and the Costs of Natural Hazards (CONHAZ) Team  
 Cost assessment of natural hazards in Europe - state-of-the-art, knowledge gaps and recommendations
- 08:45–09:00 EGU2012-14091  
**J. Mysiak**, I. Galarraga, A. Garrido, E. Interwies, C. van Bers, V. Vandenberghe, F. Farinosi, S. Foudi, S. Görlitz, N. Hernández-Mora, M. Gil, and C. Grambow  
 The value of knowing better - Losses from natural hazards

- 09:00–09:15 EGU2012-5022  
**B.F. Prahł**, D. Rybski, J.P. Kropp, O. Burghoff, and H. Held  
 Stochastic Modeling of Empirical Storm Loss in Germany
- 09:15–09:30 EGU2012-11563  
**E. Genovese**, V. Przyluski, and S. Hallegatte  
 What do costs really tell us? Lessons from Xynthia windstorm in France
- 09:30–09:45 EGU2012-165  
**M. Bostenaru Dan**  
 Decision making based on analysis of benefit versus costs of preventive retrofit versus costs of repair after earthquake hazards
- 09:45–10:00 EGU2012-5784  
**D. Molinari**, G.T. Aronica, F. Ballio, N. Berni, and C. Pandolfo  
 Flood damage data gathering: procedures and use

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**COFFEE BREAK**

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Chairperson: L. Bouwer

- 10:30–10:45 EGU2012-7518  
**B. Merz**, H. Kreibich, and U. Lall  
 What are the important flood damage-influencing parameters? A data mining approach
- 10:45–11:00 EGU2012-1869  
**C. Pfurtscheller**, B. Lochner, and **A. Brucker**  
 Estimating regional long-term economic consequences of natural hazards - a case study of the 2005 flood event in Tyrol (Austria)
- 11:00–11:15 EGU2012-1142  
**F.F. Hattermann**, **S. Huang**, O. Burghoff, W. Willems, H. Österle, M. Büchner, and Z. Kundzewisz  
 Modeling flood damages under climate change - a case study for Germany
- 11:15–11:30 EGU2012-3004  
**N. Saint-Geours**, F. Grelot, J.-S. Bailly, and C. Lavergne  
 Flood damage maps: ranking sources of uncertainty with variance-based sensitivity analysis
- 11:30–11:45 EGU2012-12377  
**P. Brémond** and F. Grelot  
 What amount of flood damages miss assessment methods by negelecting induced damages on activity?
- 11:45–12:00 EGU2012-1848  
**P. Bubeck**, H. Kreibich, W.J.W. Botzen, and J.C.J.H. Aerts  
 Spatial and temporal spread of flood mitigation measures implemented by private households along the Rhine and their effectiveness

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**NH9.3 – The Costs of Natural Hazards – Posters**

Convener: H. Kreibich | Co-Conveners: L. Bouwer, R. Schwarze

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: R. Schwarze

- XY265 EGU2012-4496  
**M. Bründl**  
 EconoMe-Develop - a calculation tool for multi-risk assessment and benefit-cost-analysis
- XY266 EGU2012-7014  
**P. Pigeon**  
 Challenges related with risk governance in France : panarchy and the need for multi-scale social capacity building.
- XY267 EGU2012-1231  
**S. Zhao** and G Gao  
 Characteristics of the Main Meteorological Disasters in China During 1951-2008
- XY268 EGU2012-2075  
**M. Choffet**, J. Demierre, M. Imhof, and M. Jaboyedoff  
 Impact of a hailstorm on a building portfolio. Analysis of Cost structure and modeling of hail event consequences
- XY269 EGU2012-8269  
N. Hernández-Mora, A. Garrido, and **M. Gil**  
 The socioeconomic impacts of the 2004-2008 drought in the Ebro river basin (Spain): A comprehensive and critical assessment

- XY270 EGU2012-7663  
**B. Jongman**, H. Kreibich, P.D. Bates, A.P.J. de Roo, J.I. Barredo, A. Gericke, H. Apel, J. Neal, J.C.J.H. Aerts, and P.J. Ward  
Comparative flood damage model assessment: Towards a European approach
- XY271 EGU2012-1918  
**H. Kreibich**, S. Meyer, and B. Diekkrüger  
Further development of FLEMOPS for the modelling of damage to residential buildings caused by high groundwater levels
- XY272 EGU2012-5838  
**T. C. Do** and H. Kreibich  
Flood loss assessment in Can Tho City, Vietnam
- XY273 EGU2012-7452  
**P.J. Ward**, J.C.J.H. Aerts, H. De Moel, and J.K. Poussin  
How are flood risk estimates affected by the choice of return-periods?
- XY274 EGU2012-5532  
**A. Beckers**, S. Detrembleur, B. J. Dewals, L. Gouverneur, S. Dujardin, P. Archambeau, S. Erpicum, and M. Pirotton  
Relative impacts of climate and land use changes on future flood damage along River Meuse in Wallonia
- Hall X/Y | Display Time 08:00–17:00**  
Author in Attendance: 15:30–17:00  
Chairperson: R. Schwarze
- XY275 EGU2012-3999  
**S. A. Arévalo**, S. Reichel, M. Schindewolf, and J. Schmidt  
Muddy floods in Saxony: occurrence, damages and costs
- XY276 EGU2012-3158  
O. Petrucci and **L. Vranken**  
Determination of natural and socio-economic factors affecting landslide damage: an econometric approach using empirical evidence from the Calabria Region (Southern Italy)
- XY277 EGU2012-2080  
**I. Arma?**  
Landslide risk assessment for individual buildings. A case study from the Prahova Subcarpathians, ROMANIA
- XY278 EGU2012-6406  
**B. Schwendtner**, M. Papathoma-Köhle, and T. Glade  
Loss estimation of future debris flow events in alpine areas-The application of a vulnerability analysis method in Martell Valley (South Tyrol, Italy)
- XY279 EGU2012-18  
**H.Z. Abidin**, I. Gumilar, H. Andreas, and Y. Fukuda  
Assessment of the Economic Losses Resulting from Land Subsidence in Bandung Basin, Indonesia
- XY280 EGU2012-11687  
**A. Kontogianni**, C. Tourkolias, M. Vousdoukas, and M. Skourtos  
The social cost of coastal erosion. Using cultural theory to enrich the interpretation of stated preference data.
- XY281 EGU2012-1186  
**S. Latchman** and M. Simic  
Incorporating Uncertainty in Ground Motion into Damage Estimation Calculations
- XY282 EGU2012-1184  
**S. Latchman** and M. Simic  
Quantifying the Variability in Damage of Structures as a Result of Geohazards
- XY283 EGU2012-11245  
**M. Bostenaru-Dan**  
Modelling the costs of natural hazards in games

