

EGU General Assembly 2011
Programme Group Programme
GM – Geomorphology

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Monday, 04 April

GM3.1 – Advances in geoarchaeology: Using geomorphological techniques and digital applications for the analysis of past man-environment systems – Orals

Convener: Christoph Siart | Co-Conveners: Matthieu Ghilardi, Markus Forbriger

Room: 21

Chairperson: Christoph Siart

- 10:30–10:45 EGU2011-10985
Ben Pennington, Niels Hovius, and Judith Bunburry
 Coupled eustatic, fluvial and nutrient controls on the initiation and location of human civilization during the Holocene
- 10:45–11:00 EGU2011-11915
antoine chabrol, fouache eric, charles lecoeur, pavlopoulos kosmas, and apostolopoulos georges
 Reconstructing the early/mid Holocene landscape evolution of the Thyamis delta (Greece): implications for human populations
- 11:00–11:15 EGU2011-12492
Uta Lungershausen, Rolf Gabler-Mieck, Rainer Duttman, Sven Köllner, and Carina Hörtdörfer
 Turning human - environmental interaction into 3D landscape scenes - Visualization of landscape history in a Northern German inland dune complex
- 11:15–11:30 EGU2011-13687
Claude Vella, Victor Canut, Frédéric Magnin, Brigitte Talon, Jean Chausserie Laprée, Sandrine Duval and the CEREGE Team
 Sediment budgets for some valleys of Provence (France): climate and anthropogenic impacts deduced from the palaeoecological and palaeomorphological records
- 11:30–11:45 EGU2011-13333
Matthieu Ghilardi
 Depositional environments and chronostratigraphy of Holocene sediments in Ancient Karnak (Egypt)
- 11:45–12:00 EGU2011-3447
Hans von Suchodoletz and Dominik Faust
 Fluvial sediments in eastern Georgia as palaeoenvironmental archives of the Late Quaternary

GM3.1 – Advances in geoarchaeology: Using geomorphological techniques and digital applications for the analysis of past man-environment systems – Posters

Convener: Christoph Siart | Co-Conveners: Matthieu Ghilardi, Markus Forbriger

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A101 EGU2011-14036
Christian Seitz and Holger Altenbach
 Project Archeye - The Quadrocopter as the archaeologists eye
- A102 EGU2011-13690
Erich Nowaczinski, Antonia Koch, Gerd Schukraf, Stefan Hecht, Bernhard Eitel, and Olaf Bubenzer
 Reconstruction of the Holocene landscape development at an Early Bronze Age settlement in Vrabie, Slovakia
- A103 EGU2011-5984
Andrey Mitusov, Olga Mitusova, Stefan Dreibrodt, and Hans-Rudolf Bork
 Spatial distribution of colluvial deposits and correlations with the modern land surface
- A104 EGU2011-6499
 Maria del Mar Génova, **Juan Antonio Ballesteros**, Andrés Díez-Herrero, and Begoña Martínez-Callejo
 Correlating a documentary record of historical floods with the dendrochronological dating of a wooden decking in the old mint of Segovia (Spain)
- A105 EGU2011-6895
L.P.H. (Rens) van Beek, Hendrik Feiken, and Th.W.J. (Theo) van Asch
 Unravelling the interaction between farmer and landscape in a Mediterranean catchment: a model study for the Contrada Maddalena (Calabria, Italy)
- A106 EGU2011-12236
Markus Forbriger, Larissa Müller, Christoph Siart, Karsten Schitteck, Bernhard Höfle, Olaf Bubenzer, Markus Reindel, and Bernhard Eitel
 Terrestrial laser scanning in geoarchaeology - capturing one of the oldest settlement places in the high Andes of southern Peru
- A107 EGU2011-13688
Katerina Theodorakopoulou, Kosmas Pavlopoulos, George Apostolopoulos, and Yanis Bassiakos
 Geoarchaeological investigations in the ancient cemetery of Kamara, Agios Nikolaos, S.E. Crete, Greece

- A108 EGU2011-13692
Emilie Ecochard, Eric Fouache, Catherine Kuzuçuoğlu, Nathalie Carcaud, Mehmet Ekmekçi, Inan Ilusoy, Atilla Çiner, Laurence Cavalier, and Jacques Des Courtils
 Promoting the geomorphological heritage of the plain of Xanthos and Letoon (Turkey)
- A109 EGU2011-11885
Christoph Siart, Markus Forbriger, and Matthieu Ghilardi
 Ancient water harvesting systems in East Crete as identified by geophysics and laser scanning
- A110 EGU2011-5561
Harald Klempe
 Identification of paleochannels and floodplains by GIS analysis around the ancient city Tegea, Greece.
- A111 EGU2011-7344
Gilles Rixhon, Régis Braucher, Didier Bourlès, Lionel Siame, and Alain Demoulin
 Human presence at Belle-Roche, in the Ardenne massif (western Europe) : Terrestrial Cosmogenic Nuclides (¹⁰Be) dating of fluvial sediments confirms an age of ~580 ka
- A112 EGU2011-11507
Veerle Vanacker and Nicolas Bellin
 Holocene reconstruction of human impact and soil degradation for Southeast Spain

NH10.4/BG2.18/GM4.4/SSS1.12 – Mitigating against natural hazards: Biological contribution to sustainable soil bioengineering in a changing world (co-organized) – Orals

Convener: Hans Peter Rauch | Co-Conveners: Freddy Rey, Frank Graf, Federico Preti

Room: 2

Chairperson: Frank Graf, Freddy Rey

- 10:30–10:45 EGU2011-1874
Amandine Erktan and Freddy Rey
 Linking the morphology of Salix tillers barriers to sediment trapping efficiency in marly gully floors
- 10:45–11:00 EGU2011-4863
Joshua Wanyama, Herremans Kristoff, Moses Isabirye, Fredrick Kahimba, Willem Maetens, Didas Kimaro, Jean Poesen, and Seppe Deckers
 Evaluation of Runoff and Sediment Trapping Effectiveness of Vegetative Filter Strips in the Riparian Zone of Lake Victoria
- 11:00–11:15 EGU2011-7391
Gerda Holzapfel and Philipp Weihs
 Influence of soil bioengineering measures on river systems - Shading potential of Salix purpurea
- 11:15–11:30 EGU2011-9654
Kathrin Beglinger, Thomas Sieber, and Frank Graf
 Effects of endophytic and mycorrhizal fungi associated with Salix appendiculata on soil aggregate stability
- 11:30–11:45 EGU2011-2612
Pierre Raymond
 Soil Bioengineering for Control of Soil Erosion in a Reconstructed Waterway on an Alberta Oil Sands Dump in Canada
- 11:45–12:00 EGU2011-4817
Massimiliano Schwarz and Denis Cohen
 Influence of root distribution and compressibility of rooted soil on the triggering mechanism of shallow landslides

NH10.4/BG2.18/GM4.4/SSS1.12 – Mitigating against natural hazards: Biological contribution to sustainable soil bioengineering in a changing world (co-organized) – Posters

Convener: Hans Peter Rauch | Co-Conveners: Freddy Rey, Frank Graf, Federico Preti

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Federico Preti, Hans Peter Rauch

- XY513 EGU2011-2110
Christian Rickli and Frank Graf
 Durability of timber check dams used for toe protection in view of sustainable slope stabilisation by soil bioengineering
- XY514 EGU2011-12041
 Katrin Burri, Christof Gromke, and **Frank Graf**
 Aeolian sediment transport and spatial patterns of sand deposition in vegetation canopies: Observations from wind tunnel experiments using coloured sand

- XY515 EGU2011-11381
Madhu Sudan Acharya and **Walter Lammeranner**
 How to select the appropriate techniques and suitable plant species for soil bioengineering works? - An application example from Nepal
- XY516 EGU2011-10576
Alexander Bast, Holger Gärtner, Frank Graf, Peter Lüscher, Albert Böll, and Wolfgang Wilcke
 Towards the development and evaluation of sustainable bioengineering measures on an erosion-prone slope
- XY517 EGU2011-10338
Filippo Giadrossich, Massimiliano Schwarz, Federico Preti, and Dani Or
 Mechanical interactions between neighbouring roots
- XY518 EGU2011-10318
Michael Obriejetan, Hans Peter Rauch, and Jürgen Suda
 Design and development of technical-biological erosion protection systems
- XY519 EGU2011-9937
Gerhard Markart, Hans Peter Rauch, Florin Florineth, Bernhard Kohl, and Nils Tilch
 Analysis of the vegetation cover and the increasing soil erosion in the high montane and the subalpine altitudinal zone of Western Austria
- XY520 EGU2011-6524
Ji-yi Tsai and Chien-Yen Chen
 Utilizing pig urine and limestone application in microbial induced carbonate precipitation as a soil reinforcement technology
- XY521 EGU2011-11268
Walter Lammeranner, Michael Obriejetan, and Florin Florineth
 The impact of dense willow stands (*Salix purpurea* L.) on the hydrology of heavily compacted soils
- XY522 EGU2011-2610
Pierre Raymond
 Vegetated Riprap Installation Techniques for Streambank Protection, Fish and Wildlife Habitat Creation
- XY523 EGU2011-5424
Freddy Rey and Sophie Labonne
 Resistance and efficiency of bioengineering works made of willow species for sedimentation and erosion control in eroded marly gullies (Francon catchment, Draix, France)

GM5.1/TS4.9 – Tectonic Geomorphology and Landscape Evolution (co-organized) – Orals

Convener: Todd A. Ehlers | Co-Conveners: Eric Kirby, Klaus Reicherter, Ronald Van Balen, Andrew Carter, Frederic Herman, Linda Kirstein, Jean-Daniel Champagnac

Room: 6

Chairperson: n.n.

- 08:30–08:45 EGU2011-8742
Rebecca Reverman, M. Giuditta Fellin, Sean D. Willett, Frederic Herman, and Matthew Fox
 Low-temperature thermochronological constraints on the Miocene exhumation of the Adamello Complex, Southern Alps, Italy
- 08:45–09:00 EGU2011-13115
Cornelia Spiegel, Frank Lisker, Nina Dörr, and Karsten Piepjohn
 Cenozoic denudation history of northern Ellesmere Island: Eureka tectonics or Eocene glaciation?
- 09:00–09:15 EGU2011-5874
David Lundbek Egholm
 Modelling the processes behind alpine glacial landscapes
- 09:15–09:30 EGU2011-10856
Thibaud Simon-labric, Peter van der Beek, Peter Reiners, Christian Teyssier, Gilles Brocard, and Donna Whitney
 Glacial disruption of Cenozoic steady-state denudation in the North Cascades range
- 09:30–09:45 EGU2011-1447
Vincent Godard, Douglas Burbank, Didier Bourlès, Bodo Bookhagen, Régis Braucher, and Burch Fisher
 Constraining catchment-scale glacial erosion using a global inversion of detrital CRN data in the Himalayas of Central Nepal
- 09:45–10:00 EGU2011-14117
Mark T. Brandon, Frederic Herman, and Gerard Roe
 Rock-Strength and Characteristic Length-Scales for Orogenic Relief

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-5926
Andreas Mulch, Hari Mix, Manfred Strecker, and C. Page Chamberlain
 Topographic thresholds to atmospheric circulation patterns
- 10:45–11:00 EGU2011-4401
Bodo Bookhagen and Manfred Strecker
 Climatic forcing of erosion rates in space and time - examples from the central Andes and Himalaya
- 11:00–11:15 EGU2011-13536
Emma Finch, Simon Brocklehurst, and Robert Gawthorpe
 The interaction between antecedent drainage networks and normal fault propagation
- 11:15–11:30 EGU2011-12567
Julien Babault, Jean van den Driessche, and Antonio Teixell
 Retro- to pro-side migration of the main drainage divide in the Pyrenees: geologic and geomorphological evidence
- 11:30–11:45 EGU2011-8383
Alvar Pastor, Julien Babault, Antonio Teixell, and Maria Luisa Arboleya
 Systematic stream piracy controlling the evolution of transverse rivers in the Ouarzazate foreland basin (Morocco)
- 11:45–12:00 EGU2011-10785
Sean Willett
 Water Divide Migration as a Bifurcating Dynamic System

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-7022
Nicolas Puchol, Julien Charreau, Pierre-Henri Blard, Jean-Philippe Avouac, Elisabeth Lallier-Vergès, Didier Bourlès, Régis Braucher, Audrey Gallaud, Robert Finkel, and Marc Jolivet
 A 9 Myr record of erosion rates in Northern Tianshan based on ¹⁰Be cosmogenic nuclides
- 13:45–14:00 EGU2011-2500
Dirk Scherler, Bodo Bookhagen, and Manfred Strecker
 Cosmogenic nuclide-derived basin-wide erosion and palaeo-erosion rates from the Ganges headwaters, Indian Himalaya
- 14:00–14:15 EGU2011-4113
Taylor Schildgen, Domenico Cosentino, Bodo Bookhagen, Frank Dudas, Helmut Echtler, Samuel Niedermann, Giuditta Radeff, Manfred Strecker, Cengiz Yildirim, Natalia Hudáková and the VAMP Team
 Changing rates and patterns of surface uplift at the southern margin of the Central Anatolian plateau (Turkey): New data from marine stratigraphy and cosmogenic nuclide dating of river terraces
- 14:15–14:30 EGU2011-9861
Marion Campani, Andreas Mulch, Neil Mancktelow, Oliver Kempf, and Fritz Schlunegger
 Miocene paleoaltimetry of the Central Alps
- 14:30–14:45 EGU2011-7678
Christoph Glotzbach, Matthias Berner, and Peter van der Beek
 Detrital thermochronology records changing source areas and steady exhumation in the Western European Alps
- 14:45–15:00 EGU2011-10708
Nicolas Legrain, Kurt Stüwe, Jean L. Dixon, Friedhelm von Blanckenburg, and Peter Kubik
 Large scale, small amplitude, post-Miocene surface uplift in the non-glaciated Eastern Alps: river profiles analysis and cosmogenic-derived ¹⁰Be denudation rates

Chairperson: n.n.

- 15:30–15:45 EGU2011-2182
Carole Petit and Frédéric Mouthereau
 The Têt fault escarpment in Eastern Pyrenees : how anisotropic diffusive transport may preserve steep slopes imitating active fault scarps.
- 15:45–16:00 EGU2011-11654
Heiko Pingel, Strecker Manfred R., Hilley George E., Alonso Ricardo N., and Schmitt Axel K.
 Intermontane Basin and Landscape Evolution in the Eastern Cordillera of NW Argentina - S Humahuaca Basin (23-24° S)
- 16:00–16:15 EGU2011-1506
Richard Walker
 Comparison of geodetic, late Quaternary, and geological rates of slip in regions of distributed active faulting: a case study from eastern Iran

- 16:15–16:30 EGU2011-3477
Alex Whittaker and Sarah Boulton
 How fast do landscapes respond to active faulting?
- 16:30–16:45 EGU2011-4314
Jeni McDermott, Kelin Whipple, Kip Hodges, and Matthijs van Soest
 Quaternary N-S extension near the Himalayan crest: An investigation using river profiles and low-temperature thermochronology
- 16:45–17:00 EGU2011-1726
Negar Haghipour, Florian Kober, Susan Ivy-Ochs, Jean-Pierre Burg, Gerold Zeilinger, Peter Kubik, and Mohammad Faridi
 Incision and deformation of Quaternary fluvial terraces on the exposed Makran Accretionary Wedge in SE Iran

GM5.1/TS4.9 – Tectonic Geomorphology and Landscape Evolution (co-organized) – Posters

Convener: Todd A. Ehlers | Co-Conveners: Eric Kirby, Klaus Reichert, Ronald Van Balen, Andrew Carter, Frederic Herman, Linda Kirstein, Jean-Daniel Champagnac

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A113 EGU2011-12795
Frédéric Herman, Benny Guralnik, Frank Preusser, Sally Lowick, and Edward Rhodes
 Towards OSL-thermochronology, a new thermochrometer of very low closure temperature
- A114 EGU2011-5770
Jean-Daniel Champagnac, Pietro Sternai, Frédéric Herman, Benny Guralnik, and Flavien Beaud
 Fracture density as a controlling factor of postglacial fluvial incision rate, Granite Range, Alaska.
- A115 EGU2011-4862
Andrew Carter
 Some potential pitfalls when detrital radiogenic data are used to constrain the evolution of orogenic belts
- A116 EGU2011-10884
Thibaud Simon-Labric, Peter van der Beek, Gilles Brocard, Christian Teyssier, and Pete Reiners
 Extracting erosional denudation rates from low-temperature thermochronology in hot magmatic arcs.
- A117 EGU2011-3604
Yuki Matsushi, Masahiro Chigira, Ching-Ying Tsou, Narumi Hiraishi, and Hiroyuki Matsuzaki
 Dating abandoned channels in uplifting mountainous terrains: an approach to reconstruct watershed evolution on the absolute time scale
- A118 EGU2011-3345
Alain Demoulin
 Basin and river profile morphometry: a new index with a high potential for (at least) relative dating of tectonic uplift
- A119 EGU2011-11997
Angela Landgraf, Olaf Zielke, J. Ramon Arrowsmith, Paolo Ballato, Manfred R. Strecker, Anke M. Friedrich, and Saeid H. Tabatabaei
 Comparing fault-interaction modeling and topographic metrics to better understand the tectonic evolution with an example from the south-central Alborz mountains, Iran
- A120 EGU2011-6254
Louis Andreani and Richard Gloaguen
 Analysis of distributed deformation in Central America using remote sensing analysis of geomorphic features
- A121 EGU2011-7149
Leomaris Dominguez, Klaus Stanek, and Richard Gloaguen
 Active deformation structures using geomorphic indices from remote sensing in southern Hispaniola
- A122 EGU2011-13543
Emma Finch, Simon Brocklehurst, and Robert Gawthorpe
 The influence of fault segmentation on drainage network re-organisation and basin stratigraphy
- A123 EGU2011-7993
Miguel Castillo, Paul Bishop, Derek Fabel, and John Jansen
 Estimating incision rates in small bedrock channels using in situ cosmogenic ^{10}Be : Assessing channel adjustment to landscape transience driven by base-level fall
- A124 EGU2011-12087
Alberto Resentini, Marco G. Malusà, Giovanni Vezzoli, Sergio Andò, and Eduardo Garzanti
 Assessing sediment budgets and short-term erosion rates: petrography, heavy minerals, geochemistry, geochronology and density of modern Dora Baltea sands
- A125 EGU2011-10335
Baptiste Mary, Bertrand Maillot, and Yves Leroy
 Thrusting sequences by the maximum strength theorem coupled to erosion laws

- A126 EGU2011-2441
Ronald Van Balen, Andrea Forzoni, and Cees Biermann
Faulting and tectonic geomorphology of the Jumilla area
- A127 EGU2011-8358
Guillaume Favre-Bulle, **Eric Bardou**, and Jean-Daniel Rouiller
Use of seismic tomography applied to periglacial areas : example of one site in Valais (Switzerland)
- A128 EGU2011-11120
David Milodowski, Arnaud Burtin, Niels Hovius, Yue-Gau Chen, Yih-Min Wu, Ching-Wee Lin, and Hongey Chen
Seismic monitoring of landslides and debris flows in the Chenyoulan River catchment, Taiwan
- A129 EGU2011-964
Lénárd Pál, Judit Gál, Gábor Kovács, András Zámolyi, and Balázs Székely
Tectonic geomorphologic investigation of a transition zone in the Pannonian Basin
- A130 EGU2011-3750
Enrico Miccadei and Tommaso Piacentini
Tectonic geomorphology and landscape evolution processes of the eastern central Apennines chain (Italy).
- A131 EGU2011-10887
Thomas Wiatr, Klaus Reicherter, Tomas Fernandez-Steege, and Ioannis Papanikolaou
Morphotectonics on bedrock scarps on the Island of Crete, Greece
- A132 EGU2011-13655
Ali Faghih
Assessment of geomorphic response and landform evolution due to active tectonics in the Zagros Fold and Thrust Belt, Iran
- A133 EGU2011-1348
Annegret Bartscher, Marcel Frehner, and Bernhard Grasemann
Tectonic geomorphological investigations of antiforms using differential geometry (Permian Anticline, Northern Iraq)
- A134 EGU2011-4001
Flavio Giaconia, Guillermo Booth-Rea, José-Miguel Martínez-Martínez, José-Miguel Azañón, and Vicente Pérez-Peña
Geomorphic response to Carboneras fault activity in Sierra Cabrera (SE Betics, Spain)
- A135 EGU2011-4991
Taylan Sançar, Cengiz Zabc?, and H. Serdar Akyüz
Morphometric Analysis of Secondary Faults Around Karlova Triple Junction
- A136 EGU2011-8290
Angela Oswald and Kurt Stüwe
Analysis of Channel Profiles as an Indicator for Uplift in Sinai, Egypt
- A137 EGU2011-2393
Ronald Van Balen and Cornelis Kasse
Testing the tectonic significance of sinuosity changes- The Maas river in the Roer Valley Rift System
- A138 EGU2011-1324
Euan Macaulay, Edward Sobel, Alexander Mikolaichuk, Barry Kohn, and Finlay Stuart
Unravelling the deformation and erosional history of the Kyrgyz Central Tien Shan
- A139 EGU2011-4003
Flavio Giaconia, Guillermo Booth-Rea, José-Miguel Martínez-Martínez, José-Miguel Azañón, and Vicente Pérez-Peña
Geomorphologic evidence of active tectonics in Sierra Alhamilla (eastern Betics, SE Spain)
- A140 EGU2011-4120
Georgios Maniatis, Andrea Hampel, and Heidi Turpeinen
Response of active faults within fault arrays in extensional tectonic settings to mass redistribution on Earth's surface due to erosion and sedimentation
- A141 EGU2011-11278
Nadine Seib, Jonas Kley, Thomas Voigt, and Martin Kober
Late Neogene landforms as indicators of neotectonic movements in the Katutau - Altynemel Range (Tien Shan, Kazakhstan)
- A142 EGU2011-5291
Kellen Gunderson, Frank Pazzaglia, David Anastasio, Kenneth Kodama, Kurt Frankel, Alessio Ponza, Claudio Berti, David Smith, Brian Tanen, and Molly O'Neill
Along-strike partitioning of shortening on thrust-related folds, Northern Apennine mountain front, Italy
- A143 EGU2011-9367
Sebastien Jourdan, Mathias Bernet, Pierre Tricart, Stéphane Guillot, Stéphane Schwartz, and Thierry Dumont
New constraints on the Western Alpine wedge 30-20 My ago from multi-method provenance analysis of foreland basin deposits

- A144 EGU2011-10462
Marta Limoncelli, Marco G. Malusà, Andrew Carter, François Guillot, and Eduardo Garzanti
Short term erosion patterns constrained by downstream changes of detrital zircon U-Pb ages (Po River Basin)
- A145 EGU2011-13567
Glenda M. Besana-Ostman, Susana Vilanova, Ana Falcao-Flor, Eliza Nemser, Helder Ferreira, Sandra Heleno, and Joao Fonseca
Overview, New Insights and Future Challenges on the Lower Tagus Valley Fault Zone
- A146 EGU2011-12671
Tímea Téglás, Gabriella Józsa, Balázs Székely, Gábor Molnár, and János Mészáros
Implications on small-scale incision and deposition in a deeply incised gorge of the Visegrád Hills (Hungary) from repeated levelling
- A147 EGU2011-2159
Mikhail L. Kopp
Plan configuration of denudation escarps as an indicator of neotectonic stresses for the platform plains
- A148 EGU2011-10755
Klaus Reicherter and Thomas Wiatr
Are "postglacial" fault scarps really postglacial?
- A149 EGU2011-3657
Heidi Turpeinen, Georgios Maniatis, and Andrea Hampel
The effect of erosion and sediment deposition on the slip evolution of normal faults after cessation of far-field extension
- A150 EGU2011-11927
Klaus Reicherter, Thomas Wiatr, Torsten Haberzettl, Silke Schmidt, Thomas Kasper, and Peter Frenzel
Active tectonics in the northern Tangra Yum Co Basin (central Tibet)
- A151 EGU2011-10468
Nadine Hoffmann and Klaus Reicherter
From Space to Ground: The seismogenic landscape of Lake Ohrid
- A152 EGU2011-5810
Jean-Daniel Champagnac, Peter Molnar, Christian Sue, and Frédéric Herman
Tectonic, climate and topography of mountains ranges
- A153 EGU2011-10989
Pierre Valla, Peter van der Beek, David Egholm, and Frederic Herman
Modelling alpine glacier dynamics over geological timescales: sensitivity of paleo-ice extent reconstructions to surface mass-balance
- A154 EGU2011-6637
Paul Bishop, Esperanza Muñoz-Salinas, and Christophe Schnabel
Lithology and landscape transience in a post-orogenic setting with rock uplift driven by denudational isostatic rebound
- A155 EGU2011-6859
Vivi Kathrine Pedersen, David Lundbek Egholm, Jean Braun, Frédéric Herman, and Søren Bom Nielsen
Predicting thermochronological data from a fluvio-glacial surface process model
- A156 EGU2011-4174
Robert Duller, Alex Whittaker, James Swinehart, John Armitage, and Philip Allen
Identifying tectonic versus climatic controls on Late Cenozoic landscape development of the central Great Plains, Nebraska
- A157 EGU2011-3413
Arnaud Beckers, Benoît Bovy, and **Alain Demoulin**
Modelling the migration of a mid-Pleistocene erosion wave in the Ardennes (western Europe) drainage network: approach and first implications
- A158 EGU2011-13353
Corine Davids, Geoffrey D. Corner, and Steffen G. Bergh
GIS analysis of elevated erosion surfaces in northern Norway
- A159 EGU2011-7286
Romain Darnault, Yann Rolland, Guillaume Sanchez, Stéphane Bouissou, Régis Braucher, and Didier Bourlès
The interplay of glacier retreat, tectonic and landslides: Contribution of cosmonuclides (10Be)
- A160 EGU2011-7640
Jochen Schmitt, Barbara Seth, and Hubertus Fischer
How to derive global weathering rates from ice core measurements of atmospheric tetrafluoromethane?
- A161 EGU2011-384
Plamen Ganey, James Dolan, Sally McGill, and Kurt Frankel
Implications of Pleistocene-Holocene climate transitions for the slip rate of the Garlock fault, southern California, USA
- A162 EGU2011-3653
Enrico Miccadei and **Tommaso Piacentini**
Quaternary drainage evolution on the eastern piedmont of Central Apennines (Italy).

- A163 EGU2011-4606
Sarah Boulton, Martin Stokes, Anne Mather, Alaeddine Belfoul, and Farid Faik
Fluvial geomorphology of the Dades River, Morocco: Implications for fault activity along the Southern Atlas Fault
- A164 EGU2011-5892
Tim Dempster and Cristina Persano
The influence of inefficient erosion on orogen structure
- A165 EGU2011-5743
Domenico Cosentino, Taylor F. Schildgen, Antonio Caruso, Costanza Faranda, and Cengiz Yildirim
Quantifying post-Tortonian relief change at the southern margin of the Central Anatolian plateau (Turkey)
- A166 EGU2011-6276
Ryan McKeon, Peter Zeitler, and Frank Pazzaglia
Long-Term landscape evolution from apatite U-Th/He thermochronology in slowly eroding landscapes: Problems and potential from the southern Appalachians, U.S.A.
- A167 EGU2011-8618
Gloria Heilbronn, Laurie Barrier, Marc Jolivet, Sylvie Bourquin, Cécile Robin, Audrey Gallaud, Julien Charreau, Romain Augier, and Yan Chen
Caracterisation of the evolution of a foreland basin active margin from sedimentary record and AFT analysis on detrital apatite: example of the NE Tian Shan foothills.
- A168 EGU2011-9624
Jing Liu, Li Wen, Mike Oskin, and Lingsen Zeng
Pattern of modern denudation in the Longmen Shan, eastern Tibetan plateau: Tectonic controls on focused erosion along plateau margin
- A169 EGU2011-11983
Simon Elfert, Wolfgang Reiter, and Cornelia Spiegel
Doming and unroofing of the Lepontine Dome (Central European Alps). New insights from Low-Temperature thermochronology
- A170 EGU2011-13459
Sanjeev Gupta, Rajiv Sinha, Ajit Singh, Andrew Carter, Philippa Mason, Andrew Murray, Jan-pieter Buylaert, Gs Yadav, Marion Ferrat, and Kristina Thomsen
Large-scale drainage shifts on the Indo-Gangetic plains: implications for reading mountain belt evolution from the sedimentary record
- A171 EGU2011-5287
J Bruce H Shyu, Yen-Sheng Lin, Ching-Hua Lo, Chuan-Chou Shen, and Gabriel González
A slow-slipping active fold and thrust system at the southeastern corner of the Atacama Basin, northern Chile
- A172 EGU2011-4014
Flavio Giaconia, Guillermo Booth-Rea, José-Miguel Martínez-Martínez, José-Miguel Azañón, Joaquín Pérez-Romero, and Irene Villegas
Mountain front migration in response to fault segment linkage and growth: the Polopos transpressive fault zone, southeastern Betics (SE Spain)
- A173 EGU2011-9818
Angelika Popotnig and Kurt Decker
The kinematic evolution and tectonic geomorphology of the active Lavanttal Fault System, Austria
- A174 EGU2011-2944
Audrey Decou, **Hilmar von Eynatten**, Jörn F. Wotzlaw, Mirian Mamani, Gerhard Wörner, Istvan Dunkl, and Dirk Frei
Timing of early Andean uplift based on provenance analysis of Cenozoic sediments from southern Peru, northern Chile and adjacent Bolivia
- A175 EGU2011-5385
Vicky Haider, István Dunkl, Hilmar von Eynatten, Dirk Frei, and Lin Ding
Geo- and thermochronology of Cretaceous intrusions forming peneplains in the Lhasa terrain, southern Tibetan Plateau
- A176 EGU2011-5930
Kouakou Fulgence Eric Yao, Christine Franke, Médard Thiry, Pawel Aleksandrowski, Adam Szuszkiewicz, and Krzysztof Turniak
Albitization as Record of the Triassic Paleosurface in the Sudetic Crystalline Massif (Poland)
- A177 EGU2011-10594
Angelika Popotnig, Dana Homolova, and Kurt Decker
Quantitative geomorphologic data from the Hluboká Fault System, Budejovice Basin (southern Bohemian Massif)
- A178 EGU2011-2881
Hongbo Zheng, Juntao Jia, Mengying He, Ling Li, Xiaochun Wei, Yuliang Chen, and Ping Wang
A Miocene Age Yangtze River: Evidence from Finger-printing Sediments
- A179 EGU2011-5459
Ufuk Tari, Okan Tuysuz, S. Can Genc, Nalan Lom, and Ozge Tekesin
Evolution Of The Hatay Graben, Southern Turkey: Evidence From Morphology And Structural Data

A180 EGU2011-12963

Paolo Ballato, Daniel Stockli, Angela Landgraf, Manfred Strecker, Anke Friedrich, Mohammad Ghassemi, and Saeid Tabatabaei

Exhumation pattern revealed by zircon and apatite (U-Th)/He thermochronology across a transpressional duplex: an example from the central southern Alborz mountains (N Iran)

NH3.2/GM6.3 – Mechanisms and processes of landslides in seismically- or volcanically-active environments (co-organized) – Orals

Convener: Randall W. Jibson | Co-Conveners: Vincenzo Del Gaudio, Janusz Wasowski, Chyi-Tyi Lee, Hiroshi Fukuoka

Room: 1

Chairperson: n.n.

10:30–10:45 EGU2011-6628

Georgia Diakogianni, Anna Fokaefs, and Gerassimos A. Papadopoulos

Landslides in Seismically and Volcanically Active Areas of Greece and Adjacent Regions: A Review

10:45–11:00 EGU2011-722

Xuanmei Fan, Cees J. van Westen, Tolga Gorum, and Qiang Xu

Spatial Distribution and Casual Factors of Landslide Dams Triggered by the 2008 Wenchuan Earthquake

11:00–11:15 EGU2011-3493

Engielle Mae Paguican, Alfredo Mahar Francisco Mahar, and Benjamin van Wyk de Vries

One Mother Two DADs: the two fault-related avalanches of Iriga, Philippines

11:15–11:30 EGU2011-8140

Tolga Gorum, Cees J. van Westen, Emmanuel John M. Carranza, Mark van der Meijde, Xuanmei Fan, Dai Fuchu, and Qing Xu

The role of rupture dynamics and style of faulting on regional pattern of coseismic landslides

11:30–11:45 EGU2011-11165

Patrick Meunier, Taro Ushida, and Niels Hovius

What controls the size of earthquake-triggered landslides ?

11:45–12:00 EGU2011-10685

Lucile Tatard and Jean-Robert Grasso

Control of Seismic Slip on Spatial Distribution of Earthquake-Triggered Landslides

NH3.2/GM6.3 – Mechanisms and processes of landslides in seismically- or volcanically-active environments (co-organized) – Posters

Convener: Randall W. Jibson | Co-Conveners: Vincenzo Del Gaudio, Janusz Wasowski, Chyi-Tyi Lee, Hiroshi Fukuoka

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY434 EGU2011-323

Zoia Kalmetieva and Bolot Moldobekov

On principal reason of landslides occurrence in seismically active environment

XY435 EGU2011-3885

Keizo Ugai

Mechanism of earthquake-induced landslides considered from geotechnical aspects

XY436 EGU2011-4802

Teresa Vaz and José Luís Zêzere

Landslides induced by seismic events in Portugal mainland: identification and characterization

XY437 EGU2011-5255

Chyi-Tyi Lee

Automatic extraction of slope parameters from DEM for seismic topographic amplification study

XY438 EGU2011-5361

Dragos Armand Stanica and **Maria Stanica**

Near real-time electromagnetic monitoring system of the seismically-induced landslides in the Subcarpathians' area

XY439 EGU2011-5378

Shibiao Bai, Thomas Glade, Rainer Bell, and Jian Wang

Distribution and susceptibility assessments of landslides triggered by Wenchuan earthquake using rare events logistic regression analyses

XY440 EGU2011-5441

Qiang Xu and Xiujun Dong

Genetic types of large-scale landslides induced by The Wenchuan earthquake

- XY441 EGU2011-5463
Qiang Xu, Hanxiang Liu, Wei Zou, Xuanmei Fan, and Jianjun Chen
 Large-scale shaking table test study of acceleration dynamic responses characteristics of slopes
- XY442 EGU2011-5523
Vincenzo Del Gaudio, Janusz Wasowski, and Chyi-Tyi Lee
 Deciphering seismic response of landslide-prone slopes from reconnaissance microtremor measurements with a broad-band velocimeter
- XY443 EGU2011-6588
Kuo-Jen Chang, Rou-Fei Chen, Yu-Chang Chan, and Chih-Yu Kuo
 Landslide mechanism, geomorphic change and surface process: evidence from earthquake-triggered Tsaoling avalanche
- XY444 EGU2011-8182
Tolga Gorum and Cees J. van Westen
 Regional distribution of landslides induced by the January 2010 Haiti earthquake
- XY445 EGU2011-13060
Jorge Yepes, Martín Rodríguez-Peces, and Rodrigo Del Potro
 Morphological evidence of a large collapse on the north-western flank of Gran Canaria (Canary Islands)
- XY446 EGU2011-5656
Weile Li, Chuan Tang, and Ming Chang
 Debris flows on 13 August 2010 in the Wenchuan Earthquake disaster area in Qingping town, Mianyu River Basin, China
- XY447 EGU2011-8115
Darwin Riguer, Tolga Gorum, and Cees van Westen
 Characterizing an earthquake induced landslide from two different events in the same area

GM8.2 – Beach and Dune: Aeolian Processes and Landforms – Orals

Convener: Andreas Baas | Co-Conveners: Andrew Cooper, Kevin Lynch

Room: 21

Chairperson: Andreas Baas

- 13:30–13:45 EGU2011-4218
Derek Jackson, Andrew Cooper, Andreas Baas, Kevin Lynch, Irene Delgado-Fernandez, and Meiring Beyers
 Offshore airflow over coastal foredunes: new approaches and methodology
- 13:45–14:00 EGU2011-5846
Irene Delgado-Fernandez, Derek Jackson, Andrew Cooper, Andreas Baas, Kevin Lynch, and Meiring Beyers
 Characterization of airflow turbulent zones across a foredune and beach surface under offshore winds: implications for aeolian sediment transport
- 14:00–14:15 EGU2011-8828
Meiring Beyers, Derek Jackson, Irene Delgado-Fernandez, Andrew Cooper, Andreas Baas, and Kevin Lynch
 Comparison of field measurements and CFD simulation of spatial offshore windflow patterns across a foredune system
- 14:15–14:30 EGU2011-4959
Alma de Groot, Frank Berendse, Michel Riksen, Andreas Baas, Pieter Slim, Han van Dobben, and Leo Stroosnijder
 Modelling coastal dune formation and associated vegetation development
- 14:30–14:45 EGU2011-749
Zoe Lee
 The vertical structure of airflow turbulence characteristics within a boundary layer as a driver of sediment transport on a beach
- 14:45–15:00 EGU2011-12757
Douglas Sherman, Bailiang Li, Jean Ellis, and Eugene Farrell
 Field calibration of aeolian sand transport models

GM8.2 – Beach and Dune: Aeolian Processes and Landforms – Posters

Convener: Andreas Baas | Co-Conveners: Andrew Cooper, Kevin Lynch

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Andrew Cooper

- A181 EGU2011-237
Michael O'Shea, Dr. Jimmy Murphy, and Patricia Sala
Morphological Monitoring and Modelling of Rossbeigh Barrier Dune Breach
- A182 EGU2011-371
Thomas Smyth, Derek Jackson, and Andrew Cooper
Near surface airflow dynamics over a coastal dune blowout during oblique and onshore flow
- A183 EGU2011-443
Joep Keijzers
Modelling coastal dune development under climate change
- A184 EGU2011-6426
Ate Poortinga, Saskia M. Visser, Michel Riksen, and Andreas Baas
Capturing spatio-temporal variability in wind driven sediment transport on the beach
- A185 EGU2011-518
Guilhem Amin Douillet, Daniel Alejandro Pacheco, Ulrich Kueppers, Jorge Bustillos, and Donald Bruce Dingwell
Dune bedforms formed by dilute pyroclastic density currents
- A186 EGU2011-8763
Cheryl McKenna Neuman
A wind tunnel simulation of the response of the coastal-aeolian transport system to the inclusion of mollusc seashells
- A187 EGU2011-9903
Irene Delgado-Fernandez, Derek Jackson, Andrew Cooper, Kevin Lynch, Andreas Baas, and Meiring Beyers
Sediment input to lee-side coastal foredunes: preliminary description of frequency and magnitude of potential transport events at Magilligan Strand, Northern Ireland
- A188 EGU2011-10374
Andreas C.W. Baas, Derek W.T. Jackson, J. Andrew G. Cooper, Kevin Lynch, Irene Delgado-Fernandez, Meiring Beyers, and Zoe S. Lee
A field study of flow turbulence and sediment transport dynamics on a beach surface in the lee of a coastal foredune under offshore winds
- A189 EGU2011-12275
Luminita Preoteasa, Alfred Vespremeanu-Stroe, and Florin Tatui
Alongshore variability in foredune and nearshore bars dynamics
- A190 EGU2011-13227
Kevin Lynch, Derek Jackson, Andrew Cooper, Andreas Baas, Irene Delgado-Fernandez, and Meiring Beyers
Leeside aeolian sediment transport on a sandy beach under offshore winds
- A191 EGU2011-10389
Andreas C.W. Baas and Li Zhang
Landscape Metrics of Coastal Dunefields from LiDAR and Hyperspectral Remote Sensing

GM8.3 – Coastal zone geomorphologic interactions: natural versus human-induced driving factors – Orals

Convener: Margarita Stancheva | Co-Conveners: Andreas Baas, Giorgio Anfuso, Hannes Tönisson

Room: 21

Chairperson: Margarita Stancheva and Andreas Baas

- 15:30–15:45 EGU2011-4789
Edward J. Anthony
The geomorphology of Mediterranean Coasts: Imbrication of natural and human-induced driving forces over the last five thousand years
- 15:45–16:00 EGU2011-581
Daria Ryabchuk, Igor Leont'ev, Alexander Sergeev, and Elena Nesterova
Genesis and morphology of sand spits of the Eastern Gulf of Finland and their development under natural and anthropogenic impact
- 16:00–16:15 EGU2011-3329
Dafydd Lloyd Jones and **Joni Thomas Backstrom**
Regional Modelling of Hydrodynamic Changes as a Result of Cumulative Marine Aggregate Dredging, South Coast, UK
- 16:15–16:30 EGU2011-4227
Derek Jackson and Andrew Cooper
Coastal dune fields in Ireland: rapid regional response to climatic change
- 16:30–16:45 EGU2011-3504
Manuel Garcin, Marissa Yates, Goneri Le Cozannet, Patrice Walker, and Vincent Donato
Sea level rise and coastal morphological changes on tropical islands: examples from New Caledonia and French Polynesia (SW Pacific)

16:45–17:00 EGU2011-13209

Robert Young

Are there any natural beaches remaining in the United States?

GM8.3 – Coastal zone geomorphologic interactions: natural versus human-induced driving factors – Posters

Convener: Margarita Stancheva | Co-Conveners: Andreas Baas, Giorgio Anfuso, Hannes Tõnisson

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Hannes Tõnisson

A192 EGU2011-3446

Goneri Le Cozannet, Anny Cazenave, David Salas Y Mélia, Guy Wöppelmann, Vincent Donato, Patrice Walker, Philippe Rogel, Manuel Garcin, and Marissa Yates

Sea level rise implications on shoreline changes: expectations from a retrospective analysis

A193 EGU2011-4154

Neki Frasherri, Alfred Frasherri, Niko Pano, and Salvatore Bushati

Outlook on seawaters dynamics and geological factors of development of Albanian Adriatic coastline

A194 EGU2011-4891

Mark Horwitz and Ping Wang

Barrier Island Response to Hurricane Ivan: Santa Rosa Island, Florida, USA

A195 EGU2011-7630

Andrew Cooper and Derek Jackson

Barrier island migration over bedrock and implications for climate change adaptation.

A196 EGU2011-6573

Kwang Hee Choi, **Sae Rom Han**, Pil Mo Jung, Yoon Mi Kim, Jae Ho Lee, Jung Hyo Lee, Young Kyu Shin, and Min Hwan Suh

Responses of coastal dunes to the tropical cyclone along the west coast of Korea

A197 EGU2011-7666

Andrew Cooper and Derek Jackson

Ireland's only two barrier islands: human and natural genesis.

A198 EGU2011-6099

Tae Soo Chang, Dong Geun Yoo, and Eunil Lee

Multi time-scale morphologic responses of a mid-channel tidal bar to anthropogenic impacts and natural processes: its application to shipping hazard assessment

A199 EGU2011-12782

Cheng-Hwa Lu and Shyh-Jeng Chyi

The model for the development of shore platform in Penghu Islands, Taiwan

A200 EGU2011-6619

Goesta Hoffmann

Forcing factors of coastal change: case study Sultanate of Oman (Arabian Peninsula)

A201 EGU2011-4933

Tiffany M. Roberts and Ping Wang

Factors Influencing the Performance of Several Beach Nourishment Projects: Pinellas County, Florida, USA

A202 EGU2011-5975

Carmen Maria Roszkopf, Pietro Patrizio, Ciro Aucelli, and Emanuela Iannantuono

Recent shoreline evolution and erosion trends of the Molise coast (southern Italy) and their possible relation to natural and human-induced driving factors

A203 EGU2011-968

Mohamed Moncef Serbaji and Khaled Medhioub

Integrated coastal zone management of Sfax region including the Kerkennah island (Tunisia)

A204 EGU2011-6873

Hannes Tõnisson, Kaarel Orviku, and Are Kont

Coastal zone management and changing character of shore processes - a story about Kiipsaare lighthouse.

A205 EGU2011-4883

Atanas Palazov, Margarita Stancheva, Adrian Stanica, Gheorghe Viorel Ungureanu, Hristo Stanchev, Florin Dutu, and Georgi Parlichev

Inventory of port/coastal defence structures along the Bulgarian-Romanian part of the Western Black Sea coast

A206 EGU2011-4200

Pauline Letortu, Stéphane Costa, Jean-Michel Cador, Romain Le Gendre, and Hervé Quéno

To the determination of triggering factors of chalk cliff collapses in Upper Normandy

A207 EGU2011-7783

Xianrong Ding, Xiaoping Ge, Qing Li, Yanyan Kang, and Tingting Zhang

Comparison of the Coastal Landforms along Jiangsu Province of China with Inland Desert Landforms

- A208 EGU2011-9949
bora rojay and lütfi süzen
 Shift of the Büyük Menderes River and the evolution of the delta plain, Western Anatolia, Turkey.
- A209 EGU2011-13600
 José Pinho, Helena Granja, **Luisa Bastos**, José Gonçalves, Renato Henriques, Ana Bio, Eduardo Loureiro, and Américo Magalhães
 Coastal zone geomorphologic interactions: natural versus human-induced driving factors

GM10.1 – Planetary Geomorphology – Orals

Convener: Susan Conway | Co-Conveners: Matthew Balme, Colman Gallagher

Room: 21

Chairperson: Susan Conway

- 08:30–08:45 EGU2011-11739
Stéphane Pochat and Nicolas Loget
 Origin of martian valleys : some highlights by geomorphic and hydraulic properties.
- 08:45–09:00 EGU2011-1604
Benjamin Black, Taylor Perron, Sarah Drummond, and Devon Burr
 Amount of Erosional Exhumation on Titan Inferred from Drainage Network Morphology
- 09:00–09:15 EGU2011-6999
Kate Goddard, Sanjeev Gupta, Alexander Densmore, Jung-Rack Kim, Nicholas Warner, Patrice Carbonneau, and Jan-Peter Muller
 Sediment Fan Evolution and Hydrologic Activity in Mojave Crater, Mars
- 09:15–09:30 EGU2011-11115
William Poole, Jan-Peter Muller, and Peter Grinrod
 Surface roughness mapping from multi-resolution DTMs for landing site selection
- 09:30–09:45 EGU2011-338
Gro Pedersen and James Head
 Evidence of widespread degraded Amazonian-aged ice-rich deposits in the transition between Elysium Rise and Utopia Planitia, Mars: Guidelines for the recognition of degraded ice-rich materials
- 09:45–10:00 EGU2011-953
Thomas Appéré, Bernard Schmitt, Yves Langevin, Aymeric Spiga, Sylvain Douté, Antoine Pommerol, François Forget, Brigitte Gondet, and Jean-Pierre Bibring
 Peculiar Phenomena of Sublimating Seasonal Deposits During Northern Spring on Mars

GM10.1 – Planetary Geomorphology – Posters

Convener: Susan Conway | Co-Conveners: Matthew Balme, Colman Gallagher

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Susan Conway

- A210 EGU2011-1052
Samantha K. Harrison, Matthew R. Balme, Alex Hagermann, and John B. Murray
 Observation and interpretation of an inverted channel feature in the middle member of the Medusae Fossae Formation
- A211 EGU2011-13602
Kyeong Park, Jungrack Kim, and Hyewon Yun
 The investigation of yardang field over Medusa Fossae Formation by the very high resolution stereo topography
- A212 EGU2011-1310
Davide Baioni and Forese Carlo Wezel
 Karst landforms on an evaporite dome in northern Coprates Chasma, Mars: similarities with Earth karst.
- A213 EGU2011-5750
Maria Teresa Brunetti, Goro Komatsu, Paolo Mancinelli, Kazuhisa Goto, Michele Santangelo, Hitoshi Saito, Federica Fiorucci, Mauro Cardinali, and Fausto Guzzetti
 Detection, mapping, classification, and statistics of mass movements on Mars
- A214 EGU2011-13467
Balázs Székely, Peter Dorninger, Josef Jansa, Tomaž Podobnikar, Zsófia Koma, Dalma Trosits, and Melinda Dósa
 Martian and Terrestrial debris slopes: Automated recognition attempts using a multi-method approach
- A215 EGU2011-7091
 Dennis Reiss, **Jan Raack**, Angelo P. Rossi, Gaetano di Achille, and Harald Hiesinger
 First in situ analysis of dust devil tracks on Earth and their comparison with tracks on Mars

- A216 EGU2011-10710
Jan Raack, Dennis Reiss, and Harald Hiesinger
Bright Dust Devil Tracks on Earth: Implications for their Formation on Mars.
- A217 EGU2011-8336
Thomas Cornet, Olivier Bourgeois, Stéphane Le Mouélic, Sébastien Rodriguez, Christophe Sotin, Jason W. Barnes, Robert H. Brown, Kevin H. Baines, Bonnie J. Buratti, Roger N. Clark, and Philip D. Nicholson
Geology and Temporal Survey of Ontario Lacus on Titan from 2005 to 2009.
- A218 EGU2011-13503
Flora Paganelli, Robert Pappalardo, Gerald Schubert, Randolph Kirk, and The Cassini RADAR Science Team
Structural patterns on Titan identified using Cassini SAR PCA
- A219 EGU2011-6489
Matthew Balme, Colman Gallagher, William Hartmann, and David Rothery
Morphologies associated with small impact crater clusters in the Western Elysium Planitia region of Mars.
- A220 EGU2011-8692
Susan Conway and Nicolas Mangold
Observations and Modelling on Crater Shape Evolution with Latitude in Terra Cimmeria, Mars - Implications for Climate.
- A221 EGU2011-11812
Colman Gallagher and Matt Balme
Effluent crater breaches and channels on Mars: processes, morphological relationships and implications for understanding hydrology
- A222 EGU2011-13983
Nicholas Warner, Sanjeev Gupta, Jung-Rack Kim, Shih-Yuan Lin, Lucille LeCorré, and Jan-Peter Muller
Retreat of a giant cataract in a martian outflow channel

NH3.3 – Rockfalls, rockslides and rock avalanches (co-listed) – Orals

Convener: Michael Krautblatter | Co-Conveners: Jeffrey Moore, Luuk Dorren, Federico Agliardi, Giovanni Crosta

Room: 1

Chairperson: Michael Krautblatter

- 13:30–13:45 EGU2011-13787
Christoph Prager, **Marc Andre Ostermann**, and Christian Zangerl
Time-dependent rock slope weakening processes: evidence from dated landslides in the Eastern Alps
- 13:45–14:00 EGU2011-2546
Valentin Gischig, Jeffrey R Moore, Keith F Evans, Florian Amann, and Loew Simon
Thermo-mechanical forcing of seasonal rock slope deformation at Randa (Switzerland)
- 14:00–14:15 EGU2011-1890
Clara Levy, **Denis Jongmans**, and Laurent Baillet
Analysis of the seismograms recorded on a prone-to-fall rock column (Vercors massif, French Alps)
- 14:15–14:30 EGU2011-6752
Andreas Schober, Markus Keuschnig, Ingo Hartmeyer, Lothar Schrott, and Jan-Christoph Otto
Mass movements in a high mountain environment, Kitzsteinhorn (3203 m), Hohe Tauern, Austria: Controlling factors and geotechnical surveys.
- 14:30–14:45 EGU2011-1612
Diethard Sanders and Gernot Patzelt
Long-term accumulation rates of subaerial scree slopes: implications of numerical ages and field observations.
- 14:45–15:00 EGU2011-6134
Thierry Oppikofer, **Luzia Fischer**, Reginald L. Hermanns, Graziella Devoli, Halvor Bunkholt, Andrea Taurisano, and Ollianne Eikenæs
Hazard mapping of rockfalls and rock avalanches in Norway - how to prioritise areas?
- Chairperson: Jeffrey Moore
- 15:30–15:45 EGU2011-4202
Shiva P. Pudasaini and Stephen A. Miller
The Hypermobility of Huge Landslides and Avalanches
- 15:45–16:00 EGU2011-1504
Anja Dufresne
A laboratory approach to the complexities in rock/debris avalanche emplacement introduced by interaction with runout path material
- 16:00–16:15 EGU2011-3466
Anthony Thornton, Mark Woodhouse, Chris Johnson, Peter Kokelaar, and Nico Gray
Segregation induced fingering instabilities in granular avalanches

- 16:15–16:30 EGU2011-3472
Denis Mercier, Armelle Decaulne, Etienne Cossart, Thierry Feuillet, Þorsteinn Sæmundsson, and Helgi Páll Jónsson
 Dating of a rock avalanche in Skagafjörður, Northern Iceland: pieces of evidence of a paraglacial origin
- 16:30–16:45 EGU2011-4925
Oliver Jancke and Frédéric Berger
 Innovative real-size tests for assessing the mechanical resistance of coppice stems against rockfall
- 16:45–17:00 EGU2011-13273
James Glover, Axel Volkwein, Werner Gerber, and Matthias Denk
 Design criteria for rock fall attenuating systems

NH3.3 – Rockfalls, rockslides and rock avalanches (co-listed) – Posters

Convener: Michael Krautblatter | Co-Conveners: Jeffrey Moore, Luuk Dorren, Federico Agliardi, Giovanni Crosta

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: M. Krautblatter, J. Moore, L. Dorren, G. Crosta, F. Agliardi

- XY448 EGU2011-1066
Stefano Devoto, Eugenio Castelli, Chiara Boccali, and Fulvio Podda
 Rock fall analysis: a case study in the eastern Alps (Italy)
- XY449 EGU2011-1671
Battista Matasci, Dario Carrea, Thierry Oppikofer, Michel Jaboyedoff, Andrea Pedrazzini, and Greg M. Stock
 Toward an accurate detection of Rockfall sources in Yosemite Valley
- XY450 EGU2011-2196
Sandra Melzner, Luuk Dorren, Arben Kociu, and Richard Baek
 Rockfall susceptibility assessment in the "Upper Moelltal", Carinthia, Austria
- XY451 EGU2011-8517
Ludovic Ravanel and Philip Deline
 Frequency and volume of rockfalls in permafrost-affected rockwalls in the Mont Blanc massif
- XY452 EGU2011-13513
Florian Haas, Tobias Heckmann, and Michael Becht
 Measuring of Rockfall on Alpine Rockfaces and the Corresponding Talus Cones Using Terrestrial Laserscanning Data
- XY453 EGU2011-13091
Andreas Kellerer-Pirklbauer
 Freeze-thaw cycles and frost shattering potential at alpine rockwalls in the Hohe and Niedere Tauern Ranges (Austria) between 2006 and 2010
- XY454 EGU2011-12979
Andrea Pedrazzini, Kerry Leith, Sarrasin Nicolas, Jeffrey Moore, and Michel Jaboyedoff
 Analysis of predisposing factors and slope activity of rockfall prone areas based on terrestrial laser scanner and time laps photography
- XY455 EGU2011-12493
 Daniel Funk and **Michael Krautblatter**
 Frictional behaviour of cohesionless rock joints under frozen conditions - data analysis from laboratory experiments and their implementation in rock mechanical concepts
- XY456 EGU2011-11103
Jeffrey Moore, Jan Burjanek, Valentin Gischig, Simon Loew, and Donat Faeh
 Response of the Randa rock slope instability to small regional earthquakes
- XY457 EGU2011-5156
Ming-Lang Lin, Chia-Ming Lo, Tsun-Kai Lien, and Wei-Che Lu
 Fragmentation and Deposition of Rock Mass with Joint Strength during Rockfall
- XY458 EGU2011-5221
 Tamzin Linnell, **Marc-Andre Brideau**, and Jonathan Procter
 Contrasting the morphology and internal structure of hummocky mounds in two landslide deposits, North Island, New Zealand.
- XY459 EGU2011-7041
Marie Charrière, Michel Jaboyedoff, Andrea Pedrazzini, Michele Volpi, and Corey Froese
 New insights on the Frank Slide's deposit
- XY460 EGU2011-9288
Paolo Frattini, Crosta Giovanni Battista, and Agliardi Federico
 Effect of DEM resolution and roughness in rockfall model restitution and friction coefficients
- XY461 EGU2011-3451
Lydie Staron, Pierre-Yves Lagrée, and Stéphane Popinet
 Continuum modelling of the granular column collapse experiment

- XY462 EGU2011-8479
Thomas Weinhart, Anthony R Thornton, Onno Bokhove, and Stefan Luding
 Closure laws for dry granular avalanche flows
- XY463 EGU2011-9011
 Sebastian Pisi, **Michael Krautblatter**, Richard Dikau, and Christoph Dittrich
 A quantitative and qualitative study on risk perception of multiple rockfall hazards in the Zugspitze Mountains (German/Austrian Alps)
- XY464 EGU2011-8200
Katharina Kern, Gernot Seier, Gerhard K. Lieb, Ulrich Strasser, Andreas Kellerer-Pirklbauer, and Florian Hanzer
 Modelling mass movements to estimate the risk potential for Alpine tourists and infrastructure in the Grossglockner-Pasterze glacier area (Hohe Tauern, Austria)

PS2.7 – Terrestrial and Extraterrestrial Impact Cratering (co-listed) – Orals

Convener: Fred Jourdan | Co-Conveners: Uwe Reimold, Martin Schmieder, Alexander Deutsch, Christian Koeberl

Room: 32

Chairperson: Fred Jourdan / Uwe Reimold

- 10:30–10:45 EGU2011-9377
Frank Schäfer, Klaus Thoma, Tobias Hoerth, Bernd Lexow, Stefan Hiermaier, Frank Bagusat, Thomas Kenkmann, Michael H. Poelchau, Alex Deutsch and the MEMIN Team
 MEMIN - Hypervelocity Impact Cratering Experiments into Sandstone: Initial results
- 10:45–11:00 EGU2011-1187
Jens Ormö, Kevin Housen, Keith Holsapple, Alain Lepinette, Irene Melero Asensio, and Josefina Torres Redondo
 A new facility for low-velocity experimental studies of wet target impacts at Centro de Astrobiología, Spain.
- 11:00–11:15 EGU2011-461
Denise Anders, Philip Kegler, Elmar Buchner, and Martin Schmieder
 Carbonate melt lithologies from the Steinheim impact structure (Baden-Württemberg, Germany)
- 11:15–11:30 EGU2011-13322
Alexander Rocholl, Maria Ovtcharova, Urs Schaltegger, Jan Wijbrans, Jean Pohl, Mathias Harzhauser, Jerome Prieto, Albert Ulbig, and Madelaine Boehme
 A precise and accurate "astronomical" age of the Ries impact crater, Germany: A cautious note on argon dating of impact material
- 11:30–11:45 EGU2011-2339
Fred Jourdan and Martin Schmieder
 The age of the Lappajärvi impact structure
- 11:45–12:00 EGU2011-11281
Martin Schmieder, Elmar Buchner, Mario Tieloff, Winfried H. Schwarz, and Philippe Lambert
 The latest Triassic Rochechouart impact (France) - $^{40}\text{Ar}/^{39}\text{Ar}$ dating and potential relation to catastrophic paleoenvironmental effects in the western Tethys domain
- 12:00–12:15 EGU2011-7559
Ulrich Bläß, Martin Schmieder, and Elmar Buchner
 Microstructural TEM-investigations on shock-metamorphic chert from the Jebel Waqf as Suwwan impact structure, Jordan

PS2.7 – Terrestrial and Extraterrestrial Impact Cratering (co-listed) – Posters

Convener: Fred Jourdan | Co-Conveners: Uwe Reimold, Martin Schmieder, Alexander Deutsch, Christian Koeberl

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Alex Deutsch / Martin Schmieder

- Z14 EGU2011-691
 Martin Schmieder and **Elmar Buchner**
 A water-saturated continental impact scenario for the Ries-Steinheim event (Germany)
- Z15 EGU2011-1334
Elmar Buchner and the *Ries-Steinheim Dating Team
 Concurrent ages of the Nördlinger Ries and the Steinheim Basin? - An extremely voluminous versus an inexistent isotopic data set for the two impact craters in Southern Germany
- Z16 EGU2011-11890
 Lidia Pittarello, **Christian Koeberl**, Julie Brigham-Grette, Martin Melles, and Pavel Minyuk
 The puzzle of an impact crater in siliceous volcanic rocks: preliminary characterization of the El'gygytyn ICPD drill core

- Z17 EGU2011-4573
Vera Assis Fernandes, Mario Trieloff, Natalia A. Artemieva, Joerg Fritz, and W. Uwe Reimold
Need to re-evaluate the age of Chesapeake Bay and Popigai Craters and their relevance for the Eocene/Oligocene boundary
- Z18 EGU2011-1392
Jaroslav Klokocnik, **Jan Kostealecky**, and Josef Sebera
Catalogue of proved impact craters on the Earth as seen by gravity data
- Z19 EGU2011-4246
Anna Losiak, Ludovic Ferrière, and Christian Koeberl
Specific combinations of planar deformation feature orientations in shocked quartz grains from the Bosumtwi impact crater as a signature of α -quartz
- Z20 EGU2011-4567
Ulli Raschke, Uwe Reimold, and Ralf-Thomas Schmitt
Preliminary stratigraphy and first petrographic and geochemical results from the ICDP drill core from El'gygytgyn crater (Russia).
- Z21 EGU2011-6098
Anca Isac, Michael E. Purucker, Mioara Manda, and Herbert Frey
Magnetic characteristics of the largest impacts on the Moon, Mars, and Earth
- Z22 EGU2011-9131
Irene Melero Asensio, Fátima Martín-Hernández, and Jens Ormö
Rock magnetic properties of drill core LOC-9 from the Lockne crater, Sweden
- Z23 EGU2011-9148
Irene Melero Asensio, Jens Ormö, and Erik Sturkell
Preliminary geophysical survey of the Malingen structure, Sweden
- Z24 EGU2011-7189
Elmar Buhl, Michael H. Poelchau, Thomas Kenkmann, and Georg Dresen
Sub-surface Grain Comminution in Experimentally Produced Impact Craters in Sandstone
- Z25 EGU2011-8021
Katarina Miljkovic and Manish R. Patel
Oblique impact experiments into soil-ice targets: conditions for uncovering ice
- Z26 EGU2011-4435
Ralf T. Schmitt, **Wolf Uwe Reimold**, and Ulrich Hornemann
Shock Recovery Experiments with Dry Sandstone at Low Shock Pressures
- Z27 EGU2011-1503
Anja Dufresne, Michael H. Poelchau, Thomas Kenkmann, and Memin Team
Crater morphologies in impact experiments into sandstone
- Z28 EGU2011-10097
Alexander Deutsch, Anja Dufresne, Thomas Kenkmann, Michael Poelchau, Peter Schulte, and The MEMIN team
MEMIN - sidestep: a cratering experiment into limestone
- Z29 EGU2011-10937
Matthias Saric and Julia Lanz
Post-impact deformation of complex aqueous deposits in an impact crater in Aeolis Planum, Mars
- Z30 EGU2011-11996
Ildiko Gyollai, Friedrich Popp, and Christian Koeberl
Global warming after the Snowball Earth glaciation: The search for an extraterrestrial component

SSS5.6 – Digital soil mapping: novel approaches (including geophysical measurements, micromorphology) to the prediction of key soil properties for modelling physical processes (co-listed) – Orals

Convener: Gilles Grandjean | Co-Conveners: Ulrike Werban, Uta Sauer, Jay Jabro, Luca Trombino

Room: 22

Chairperson: G. Grandjean, P. Dietrich

- 08:30–08:45 EGU2011-2365
Eddie Loonstra
Applications of proximal gamma ray soil sensor systems
- 08:45–09:00 EGU2011-3500
Erika Lück and Joerg Ruehlmann
Resistivity mapping with Geophilus electricus
- 09:00–09:15 EGU2011-4976
Isabelle Cousin, Marion Tétégan, Maud Séger, Arlène Besson, Guillaume Giot, Catherine Pasquier, and Bernard Nicoullaud
Field-scale estimation of rock content in stony soils from electrical resistivity measurements

- 09:15–09:30 EGU2011-5840
Julien Thiesson, Solène Buvat, Maud Séger, Guillaume Giot, Arlène Besson, and Alain Tabbagh
 The use of magnetic susceptibility and viscosity measurements as a mapping tool for soil properties: DIGISOIL field results
- 09:30–09:45 EGU2011-6381
 Antoine Stevens, **Bas van Wesemael**, and Isabel Miralles
 Validation of soil organic carbon predictions based on airborne imaging spectroscopy and multivariate regressions
- 09:45–10:00 EGU2011-6611
Bas van Wesemael, Antoine Stevens, and Marco Nocita
 Evaluating imaging spectroscopy for mapping soil organic carbon content and quantifying SOC stocks in the plough layer of an arable field

COFFEE BREAK

Chairperson: P. Dietrich, G. Grandjean

- 10:30–10:45 EGU2011-7538
Grant Tranter, Nick Jarvis, Julien Moeys, and Mats Söderström
 Broad-scale digital soil mapping with geographically disparate geophysical data: a Swedish example
- 10:45–11:00 EGU2011-9918
Frédéric André, Davood Moghadas, Harry Vereecken, and Sébastien Lambot
 Full-waveform modelling of electromagnetic induction data for improved estimation of soil electrical properties
- 11:00–11:15 EGU2011-10556
Claudia Dierke, Ulrike Werban, Eddie Loonstra, Tina Wunderlich, and Peter Dietrich
 Analysis of gamma-ray results at different field sites with varying conditions
- 11:15–11:30 EGU2011-10828
Tina Wunderlich, Hauke Petersen, Said Attia al Hagrey, and Wolfgang Rabbel
 Relating the composition and water content of soils to electrical permittivity and conductivity: Results from laboratory and field measurements
- 11:30–11:45 EGU2011-10864
Uwe Franko, Janine Krüger, Thorsten Behrens, Karsten Schmidt, Milan Kroulik, and Ulrike Werban
 Soil function modelling based on soil property maps produced by digital soil mapping from geophysical data
- 11:45–12:00 EGU2011-11634
Thorsten Behrens, Karsten Schmidt, Leonardo Ramirez-Lopez, Ulrike Werban, and Thomas Scholten
 Digital Soil Sensing and Mapping - Lessons from the iSOIL Project

SSS5.6 – Digital soil mapping: novel approaches (including geophysical measurements, micromorphology) to the prediction of key soil properties for modelling physical processes (co-listed) – Posters

Convener: Gilles Grandjean | Co-Conveners: Ulrike Werban, Uta Sauer, Jay Jabro, Luca Trombino

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: J. Jabro, L. Trombino

- Z112 EGU2011-2543
Gilles Grandjean and the DIGISOIL Team
 The DIGISOIL multi-sensor system: from geophysical measurements to soil properties mapping
- Z113 EGU2011-1627
Fabio Scarciglia and Donatella Barca
 A new methodological approach for the assessment of heavy metal pollution in soils: the use of Laser Ablation ICP-MS in thin sections coupled with traditional micromorphological and geochemical techniques
- Z114 EGU2011-2841
Raluca-Mihaela Maftei, Nicolas Coppo, Emil Rusu, Roxana Ciurean, Ovidiu Avram, Constantina Porumbescu, and Elena Tudor
 Shallow landslides mapping at Telega (Prahova County, Romania)
- Z115 EGU2011-2960
Peter Dietrich, Uta Sauer, Anne-Kathrin Nüsch, and Ulrike Werban
 Need for standardizing geophysical measurement - CEN Workshop "Best practice approach for electromagnetic induction (EMI) measurements of the near surface"

- Z116 EGU2011-2997
Gareth Clay, Fred Worrall, and Andy Lloyd
Simulated livestock trampling and compaction of a peat soil - impact on gaseous CO₂ fluxes
- Z117 EGU2011-3502
Stephania Ern, Luca Trombino, and Cristina Cattaneo
Micromorphological Aspects of Forensic Geopedology: Ultramicroscopic Characterization of Phosphatic Impregnations on Soil Particles in Experimental Burials
- Z118 EGU2011-4038
Mohammad Monirul Islam, Marc Van Meirvenne, Eddie Loonstra, Eef Meerschman, Philippe De Smedt, Fun Meeuws, Ellen Van De Vijver, and Liesbet Cockx
Identifying key properties for mapping stable soil management zones
- Z119 EGU2011-4073
Azam Jafarisirizi, Peter Finke, Shamsollah Ayoubi, and Hossein Khademi
Role of geomorphology in identifying soil types in an arid region in southeastern Iran
- Z120 EGU2011-5556
Selen Deviren Saygin, **Gunay Erpul**, and Mustafa Basaran
Evaluation of different aggregate stability methodologies for clay soils of semi arid landuses
- Z121 EGU2011-5764
Maud Seger, Arlène Besson, Guillaume Giot, Bernard Nicoullaud, and Isabelle Cousin
Soil water-structure interaction in the tilled horizon as monitored in space and time by 2D Electrical Resistivity Tomography method
- Z122 EGU2011-7063
Kévin Samyn, Gilles Grandjean, Adnand Bitri, and Olivier Cerdan
Digital mapping of soil thickness and stiffness using spectral analysis of multi-channel surface-wave data
- Z123 EGU2011-7119
Ivano Rellini, **Luca Trombino**, Cristina Carbone, and Marco Firpo
Petroplinthite formation in a Quaternary complex paleosol along NW Italian coast: from micromorphology to landscape evolution.
- Z124 EGU2011-7120
Francesca Garfagnoli, Andrea Ciampalini, **Sandro Moretti**, and Leandro Chiarantini
Mapping of soil properties from hyperspectral remote sensing: the DIGISOIL strategy for soil processes modelling.
- Z125 EGU2011-7146
Solène Buvat, Yves Coquet, and Alain Tabbagh
Geoelectrical cartography of soils
- Z126 EGU2011-8725
Carlo Innocenti, Andrea Taramelli, Emiliana Valentini, and Sergio Cappucci
Use of airborne LiDAR and hyperspectral data to study the sandy beach morphology along the Lazio region coast (Italy)
- Z127 EGU2011-8932
Caroline Chartin, Hocine Bourennane, Sébastien Salvador-Blanes, Florent Hinschberger, and Jean-Jacques Macaire
Classification and mapping of morphological features associated to important soil thickenings within cultivated hillslopes - Example from southwestern Parisian Basin, France
- Z128 EGU2011-9073
Greet Ruysschaert, Lorens Coorevits, Bart Vandecasteele, Alex De Vliegheer, and Jozef Deckers
Soil compaction related to root growth of cover crops and N dynamics
- Z129 EGU2011-9337
Eric Lund
Simultaneous Proximal Sensing of Soil EC and Organic Matter: Implications for Digital Soil Mapping, Modeling, and Management
- Z130 EGU2011-9357
Andreas Gubler and Marco Carizzoni
Using Near Infrared Spectroscopy in Digital Soil Mapping
- Z131 EGU2011-9482
Inês Lopes da Fonseca
Modelling the Thresholds of Soil-Landscape Units using Fuzzy Logic
- Z132 EGU2011-10140
Florent Hinschberger, Caroline Chartin, **Sébastien Salvador-Blanes**, Emilien Aldana-Jague, and Jean-Jacques Macaire
Bedrock and soil resistivity mapping as a tool for characterizing soil thickness on cultivated hillslopes. A case study in Seuil, SW Parisian Basin, France
- Z133 EGU2011-10175
Christoph Müller, Silke Waldhauer, Raimund Schneider, Marion Stellmes, Johannes Stoffels, Sören Thiele-Bruhn, and Joachim Hill
Identifying areas of drought risk in forest: developing a method for forestry planners

- Z134 EGU2011-10960
László Pásztor, Zsófia Bakacsi, and József Szabó
Spatio-temporal integration of soil data originating from different sources for the estimation of national carbon stock in Hungary
- Z135 EGU2011-11230
Arlène Besson, Maud Seger, Guillaume Giot, and **Isabelle Cousin**
Soil properties mapping at the field scale from DC landscape survey sensor.
- Z136 EGU2011-11737
Hauke Petersen, Tina Wunderlich, Said A. al Hagrey, and Wolfgang Rabbel
Integrative field and lab approach to study soil parameters
- Z137 EGU2011-12082
Laura Gargiulo, Giacomo Mele, and Fabio Terribile
Soil fauna activity and soil porosity: characterization by micromorphological image analysis

Tuesday, 05 April

CL4.12 – Advances in Quaternary Geochronology (co-listed) – Orals

Convener: Geoff Duller | Co-Conveners: Irka Hajdas, Thorsten Kiefer, Andreas Lang

Room: 13

Chairperson: Thosten Kiefer

- 13:30–14:00 EGU2011-13982
Dirk Hoffmann
 MC-ICPMS U-Th isotope measurements for precise speleothem chronologies in Quaternary climate research
- 14:00–14:15 EGU2011-3735
Dominique Raynaud, Vladimir Lipenkov, and Marie-France Loutre
 Dating ice cores by local insolation tuning
- 14:15–14:30 EGU2011-12006
Esther Ruth Gudmundsdóttir, Gudrún Larsen, and Jón Eiríksson
 Tephrochronology as a tool for precise dating and correlation of Quaternary records
- 14:30–14:45 EGU2011-13468
Mark Sier, Wil Roebroeks, Mark Dekkers, Corrie Bakels, and Sabine Gaudzinski-Windheuser
 Mismatch between MIS 5e and the Last Interglacial (Eemian) of Central Europe
- 14:45–15:00 EGU2011-6793
Silke Schmidt, Ralf Hetzel, Sumiko Tsukamoto, and Manfred Frechen
 10Be, 10C and OSL dating of alluvial sediments from the eastern Andes

CL4.12 – Advances in Quaternary Geochronology (co-listed) – Posters

Convener: Geoff Duller | Co-Conveners: Irka Hajdas, Thorsten Kiefer, Andreas Lang

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Thosten Kiefer

- XY365 EGU2011-594
Baolin Pan, Chaolu Yi, and Zhongping Lai
 Environment change records of delta and sand wedge of lakeshore at LingGo Co of Qiangtang plateau
- XY366 EGU2011-1870
Lovisa Zillén, Conny Lenz, and Tom Jilbert
 Stable lead (Pb) isotopes and concentrations - a useful independent dating tool for Baltic Sea sediments
- XY367 EGU2011-3409
Rienk H. Smittenberg, Maximilian P.W. Schneider, Irka Hajdas, Wacker Lukas, Stefano M. Bernasconi, and Michael W.I. Schmidt
 Molecular-scale radiocarbon dating of charcoal and black carbon
- XY368 EGU2011-3712
 Marie-France Loutre, Vladimir Lipenkov, **Dominique Raynaud**, and Amaelle Landais
 Dating ice cores by local insolation tuning: A comparison between wavelet analysis and peak-to-peak matching techniques
- XY369 EGU2011-4906
Merle Gierga, Axel Birkholz, Rienk Smittenberg, Irka Hajdas, Lukas Wacker, Nao Ohkouchi, and Stefano M. Bernasconi
 Compound-specific radiocarbon analyses of individual fatty acids isolated with high performance liquid chromatography
- XY370 EGU2011-5074
Octavian G. Duliu, Constantin Costea, Ana Danis, and Stefan A. Szobotka
 Th-230 - excess and Pa - 231 excess geochronology of manganese nodules
- XY371 EGU2011-8248
Romain Delunel, Didier Bourlès, Peter van der Beek, and Emmanuel Paquet
 Cosmic-ray attenuation by seasonal snow cover revealed by neutron-detector monitoring: implications for cosmic-ray exposure studies in mountainous areas
- XY372 EGU2011-8747
Pierre Sabatier, Jean Louis Reyss, Jason M. Hall-Spencer, Christophe Colin, Norbert Frank, Louise Bordier, and Eric Douville
 Growth rate of deep-sea Scleractinian corals (*Madrepora oculata*, *Lophelia pertusa*) inferred from 210Pb-226Ra chronology

- XY373 EGU2011-8820
David Domínguez-Villar, Jane Willenbring, Rosa Carrasco, and Javier Pedraza
 Sub-aerial granite and gneiss weathering rates in Spanish Central System and their implications for terrestrial cosmogenic nuclide dating
- XY374 EGU2011-10418
Koen Beerten, Koen Deforce, and Dirk Mallants
 Age constraints for pedological and hydrological processes in natural analogues of earth covers for waste disposal: case study from a sediment-soil sequence in Dessel, Northern Belgium
- XY375 EGU2011-11485
 Véronique Michel, **Chrystèle Vérati**, Guanjun Shen, Chuan-Chou Shen, and Sylvain Gallet
 230Th/234U and 40Ar/39Ar dating of Orgnac 3, a Quaternary Prehistoric Site in Ardèche, France
- XY376 EGU2011-12412
Agnes Novothny, Zsolt Ruszkiczay-Rüdiger, Manfred Frechen, Gabor Csillag, and Edit Thamone Bozso
 Dating Danube terraces with IRSL and cosmogenic 10Be exposure ages
- XY377 EGU2011-12461
Adam Michczyński and Irka Hajdas
 Complex statistical model of the Lake Soppensee chronology
- XY378 EGU2011-13986
Irka Hajdas, Georges Bonani, Wallace S. Broecker, Elizabeth Clark, Michael Molnar, Carla Taricco, Gulianna Vivaldo, and Lukas Wacker
 Radiocarbon dating of carbonate samples—different treatment methods compared

GM2.5 – Simplicity and complexity in evolution of coupled geomorphologic systems: concepts, models and applications – Orals

Convener: Margreth Keiler | Co-Conveners: Johnny Douvinet, Derek Karssenberg, Arnaud Temme

Room: 21

Chairperson: Margreth Keiler & Arnaud Temme

- 13:30–13:45 EGU2011-10287
Kirsten v. Elverfeldt
 After all, what does "far from equilibrium" mean?
- 13:45–14:00 EGU2011-4042
Thomas Euler
 Self-organisation of fluvial obstacle marks
- 14:00–14:15 EGU2011-10714
Eric Masson
 Toward a new system approach of catchment complexity
- 14:15–14:30 EGU2011-4371
Greg Hancock
 Numerically modelling landscape evolution - how good can we get the predictions?
- 14:30–14:45 EGU2011-10614
Liran Goren and Sean Willett
 Landscape characterization with DAC (DIVIDE AND CAPTURE), a new surface evolution model
- 14:45–15:00 EGU2011-13012
Sebastien Salvador-Blanes, Budiman Minasny, and Alex B. McBratney
 Modelling soil formation at the profile scale
- Chairperson: Johnny Douvinet & Derek Karssenberg
- 15:30–15:45 EGU2011-2092
Jantiene Baartman, Wouter Van Gorp, Arnaud J.A.M. Temme, and Jeroen M. Schoorl
 Modelling sediment dynamics due to hillslope-river interactions: incorporating fluvial behaviour in landscape evolution model LAPSUS
- 15:45–16:00 EGU2011-2247
Lieven Claessens, Jeroen M. Schoorl, Peter H. Verburg, Lieke Geraedts, and Tom Veldkamp
 Modelling interactions and feedback mechanisms between land use change and landscape processes
- 16:00–16:15 EGU2011-4064
Jose Munoz-Rojas, Javier de Pedraza Gilsanz, and Rosa M Carrasco González
 Contesting the role of regional geomorphology in spatial planning through non-euclidian geometries and fuzzy clustering methodologies.
- 16:15–17:00 **Discussion and Poster Introduction**

GM2.5 – Simplicity and complexity in evolution of coupled geomorphologic systems: concepts, models and applications – Posters

Convener: Margreth Keiler | Co-Conveners: Johnny Douvinet, Derek Karssenberg, Arnaud Temme

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Derek Karssenberg & Margreth Keiler

- A106 EGU2011-3034
Mike Kirkby
Langbein and Schumm revisited
- A107 EGU2011-4019
David Dunkerley
Widespread Hortonian overland flow in deserts: is the classical argument applicable in the drylands of western New South Wales, Australia?
- A108 EGU2011-1611
Diethard Sanders
Hitherto undescribed pattern of rock cliff/talus development: The 'breach concept'.
- A109 EGU2011-12023
Margreth Keiler and Kirsten von Elverfeldt
Can we predict and control complex, self-organized systems?
- A110 EGU2011-8181
Dave Favis-Mortlock
Early warning of emergent connectivity on an eroding hillslope
- A111 EGU2011-12231
Derek Karssenberg
Early-warning signals in ecogeomorphology: the example of a hillslope system
- A112 EGU2011-7139
Julia Eisl and Christian Scheidl
Flow process identification in torrent catchments by geomorphological parameters in the Austrian Alps
- A113 EGU2011-10442
Victor Clamote, Jose Nobre, and Ana Gomes
Classification and study of geomorphologic forms present in Serra das Mesas (Sabugal, Portugal). A first approach to identify the processes associated.
- A114 EGU2011-141
Inga Voropaeva
The structure and specific features of formation of floodplain wetlands in Amur Region
- A115 EGU2011-7683
Johnny Douvinet, Cyril Fleurant, Daniel Delahaye, Sebastien Caillaud, and Vincent Viel
Cellular Automata and Agent-Based Models in response to different environmental problems: a review of French research over the last ten years
- A116 EGU2011-8836
Luca Ziliani, Nicola Surian, and Tom Coulthard
Cellular automata modelling of future channel changes in a large gravel-bed river
- A117 EGU2011-10282
Arnaud Temme
Form-process relations versus multi-process landscape evolution models
- A118 EGU2011-10271
Arnaud Temme, Jeroen Schoorl, and Lieven Claessens
Strategies for the set-up of a multi-process landscape evolution model.
- A119 EGU2011-3277
Christopher Hackney, Prof. Stephen Darby, and Dr. Julian Leyland
Modelling the effects of climate change and sea-level rise on the evolution of incised coastal gullies.
- A120 EGU2011-2100
Domenico Capolongo, **Alberto Refice**, and Emanuele Giachetta
Investigating valley spacing dynamics in linear mountain fronts through terrain numerical modeling
- A121 EGU2011-880
Tom Coulthard, Greg Hancock, and John Lowry
Using a downscaled landscape evolution model to model plot scale soil erosion
- A122 EGU2011-12499
Niladri Gupta, Peter M. Atkinson, and Paul A. Carling
A spatially distributed probabilistic model for forecasting river planform change of an alluvial mega-river
- A123 EGU2011-9598
Garry Willgoose and Greg Hancock
Unique Challenges in Modelling Post-mining Landforms Using Landform Evolution Models
- A124 EGU2011-1304
Jan Nyssen, Dominiek Vermeersch, Stijn Diependaele, Jo Palmers, **Matthias Vanmaercke**, and Jean Poesen
Geomorphic processes on coal tips in Belgium

- A125 EGU2011-10467
Yulia Blinova and Andrey Bredikhin
 Assessment of geomorphic risks and attractiveness for recreational purposes

SSS2.3/GM3.7/HS12.11 – Practical application of geomorphology, hydrology and erosion research in agricultural and forest areas. Discovering and implementing frameworks for translating research into sustainable management (co-organized) – Orals

Convener: Jose Gomez | Co-Conveners: Peter Hairsine, Cyril Ciesiolka, Gil eshel, Encarnación Taguas, Seth Dabney

Room: 9

Chairperson: Josè A. Gomez

- 15:30–15:45 EGU2011-693
Mourad Arabi and Eric Roose
 Agricultural intensification and fight erosion by Water and soil fertility management" (G.C.E.S.) in Algeria
- 15:45–16:00 EGU2011-1421
Seth Dabney, Daniel Yoder, and David Lightle
 Current Status and Uses of RUSLE2 within the USA
- 16:00–16:15 EGU2011-13104
Gil Eshel, Dafna DiSegni, Eran Raveh, Marcelo Sternberg, Alex Furman, Ahamed Nasse, Yonatan Avrams, Yoel Drishpoun, and Roey Egozi
 A multi-disciplinary approach for promoting soil conservation in modern Industrialized Agriculture
- 16:15–16:30 EGU2011-13535
Rory Walsh
 The orientation of past, current and future catchment and slope erosion research in Sabah (Malaysian Borneo) to the design and implementation of more sustainable land management strategies
- 16:30–16:45 EGU2011-4693
Encarnación V. Taguas, Juan V. Giráldez, José L. Ayuso, Rafael Pérez, Carlos Castillo, and José A. Gómez
 Preliminary assesment and cost analysis of incentives for gully control in agricultural areas of Andalusia (Southern Spain)
- 16:45–17:00 EGU2011-13268
Joris de Vente, Albert Solé-Benet, Jorge López, and Carolina Boix-Fayos
 Sustainable Land Management in SE-Spain: effective and feasible measures to reduce soil and water loss for agriculture

SSS2.3/GM3.7/HS12.11 – Practical application of geomorphology, hydrology and erosion research in agricultural and forest areas. Discovering and implementing frameworks for translating research into sustainable management (co-organized) – Posters

Convener: Jose Gomez | Co-Conveners: Peter Hairsine, Cyril Ciesiolka, Gil eshel, Encarnación Taguas, Seth Dabney

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Josè A. Gomez

- Z36 EGU2011-7848
Jesús Rodríguez González, José Alfonso Gómez, and Pablo J. Zarco-Tejada
 Assessing soil surface roughness using reflectance band indices obtained with an airborne multispectral sensor at very high spatial resolution
- Z37 EGU2011-4078
Azam Jafarisirizi, Shamsollah Ayoubi, and Hossein Khademi
 Relationship between geomorphic surfaces and the establishment of pistachio gardens in Zarand region, southeastern Iran
- Z38 EGU2011-6447
 Patricia Ayuso-Ruiz, **Jose Luis Ayuso**, Encarnación Taguas, Amanda García-Marín, and Rafael Ayuso-Muñoz
 Estimation of the mean annual erosivity in the region Eastern Andalusia (Spain) through the maximum annual precipitation values of 24 hours and daily duration.
- Z39 EGU2011-12858
Rafael Pérez, Pedro Merino, Encarnación V. Taguas, Juan V. Giráldez, and José A. Gómez
 Preliminary development of a drone for the qualitative evaluation of the grass cover and gullies in agricultural lands
- Z40 EGU2011-7431
Gema Guzmán, Rosemarie Hoesl, Peter Strauss, and José A. Gómez
 A rainfall simulation experiment to evaluate two sediment tracers in a furrow-shoulders system

- Z41 EGU2011-12821
Rafael Pérez, Luis Galisteo, Encarnación V. Taguas, Juan V. Giráldez, and José A. Gómez
Portable laser topographic profiler for the evaluation of gully volumes
- Z42 EGU2011-9711
Gema Guzman, Juan Carlos Cañasveras, Hakim Boulal, Helena Gómez-McPherson, H. Vidal Barrón, and Jose A. Gómez
Soil redistribution after rainfall events in a furrow-shoulder system at field scale using iron oxides as sediment tracers
- Z43 EGU2011-7620
Verena Butzen, Manuel Seeger, Markus Casper, Stefan Wirtz, and Johannes B. Ries
Investigation of the spatial distribution of runoff generation and soil erosion processes by means of experimental methods and field mapping
- Z44 EGU2011-10460
Laura Marqués, Ramón Bienes, and Marta Ruiz-Colmenero
Studying relation between plants and soil: use of vegetation covers in a vineyard to improve soil physical properties
- Z45 EGU2011-14003
Giussepe Bombino, Pietro Denisi, Vincenzo Tambourino, **Demetrio Zema**, and Santo Zimbone
HYDROLOGICAL EFFECTS OF DIFFERENT SOIL MANAGEMENT PRACTICES IN MEDITERRANEAN CONDITIONS
- Z46 EGU2011-6273
Feliciana Licciardello, Encarnación V. Taguas, Mark Nearing, Salvatore Barbagallo, and José A. Gómez
Evaluation of the WEPP model in olive orchards under different soil managements in a vertic soil under Mediterranean type of climate
- Z47 EGU2011-6513
Encarnación V. Taguas, Rafael Pérez, Jose Luis Ayuso, and Jose A. Gómez
Analysis of the runoff and soil loss temporal variability in a small experimental olive orchard catchment in Southern Spain

GM5.1/TS4.9 – Tectonic Geomorphology and Landscape Evolution (co-organized) – Orals

Convener: Todd A. Ehlers | Co-Conveners: Eric Kirby, Klaus Reichert, Ronald Van Balen, Andrew Carter, Frederic Herman, Linda Kirstein, Jean-Daniel Champagnac

Room: 22

Chairperson: n.n.

- 08:30–08:45 EGU2011-3531
Matthew Fox, Sean D. Willett, and Frédéric Herman
Space-time Inversion of Thermochronologic Data for Exhumation Rates within the Alps
- 08:45–09:00 EGU2011-8194
Roderick Brown, Romain Beucher, Kerry Gallagher, Cristina Persano, Finlay Stuart, and Paul Fitzgerald
A new approach to deriving thermal history information from apatite (U-Th)/He analyses which exploits the natural dispersion of single crystal age determinations
- 09:00–09:15 EGU2011-8211
Jane Willenbring and Friedhelm von Blanckenburg
Neogene erosion and accumulation rate increase: revisited
- 09:15–09:30 EGU2011-3406
Matthias Bernet
Can we upscale short-term to long-term erosion rates?
- 09:30–09:45 EGU2011-5819
Eva Enkelmann
Combining long- and short-term observations to understand the spatial and temporal evolution of mountain belts
- 09:45–10:00 EGU2011-10381
Marco Giovanni Malusà and Eduardo Garzanti
Detrital geochronology, mineral fertility and short-term erosion patterns

SM1.4/EG12/G6.5/GD2.10/GM5.8/TS4.8 – TOPOEUROPE, The Evolving Topography of Europe (co-organized) – Orals

Convener: Sierd Cloetingh | Co-Conveners: Jörg Ebbing, Josep Gallart

Room: 27

Chairperson: Sierd Cloetingh

- 10:30–10:45 EGU2011-7071
Wim Spakman, Trond H. Torsvik, Paul Tackley, Taras Gerya, Carlo Doglioni, Thomas Meier, Wolfgang Friederich, and Arie P. van den Berg
 Mantle forcing of Earth surface evolution in Europe and the Mediterranean: From Past to Present (TOPO-4D)
- 10:45–11:00 EGU2011-3491
Mariya Chertova, Thomas Geenen Geenen, Arie van den Berg, and Wim Spakman
 Modeling of self-consistent lithosphere subduction dynamics using a composite rheology.
- 11:00–11:15 EGU2011-7959
 Karin Warners-Ruckstuhl, **Rob Govers**, and Rinus Wortel
 The Eurasian stress field: important role of topography and mantle flow
- 11:15–11:30 EGU2011-3346
giorgio manzoni
 GNSS in Eurasian Corridors
- 11:30–11:45 EGU2011-5474
Andreas Knöpfner, Michael Mayer, Frédéric Masson, Patrice Ulrich, and Bernhard Heck
 The transnational geo-scientific initiative GURN (GNSS Upper Rhine Graben Network) - Recent results and future plans
- 11:45–12:00 EGU2011-7433
Søren B. Nielsen and the TOPOREAL Team
 TOPOREAL: Topography of the North Atlantic realm

LUNCH BREAK

Chairperson: Sean Willett

- 13:30–13:45 EGU2011-7384
Zoltan Erdos, Ritske S. Huismans, and Peter van der Beek
 Evaluating balanced section restoration with thermochronological data
- 13:45–14:00 EGU2011-5849
Charlotte Fillon, Luis Barbero, David Pedreira, Cecile Gautheron, and Peter van der Beek
 Thermochronological evidence for significant Cenozoic exhumation in the Eastern Cantabrian Mountains
- 14:00–14:15 EGU2011-4063
Suzon Jammes and Ritske S. Huismans
 Influence of structural inheritance during inversion tectonics at lithospheric scale: the example of Pyrenean-Cantabrian mountain belt
- 14:15–14:30 EGU2011-2763
Javier Fernández-Lozano, Dimitrios Sokoutis, Ernst Willingshofer, Alfonso Muñoz-Martín, Gerardo De Vicente-Muñoz, and Sierd Cloetingh
 Integration of gravity and topography analyses in analogue modelling: understanding lateral strength variations in Iberia and their influence on intra-plate mountain building.
- 14:30–14:45 EGU2011-5928
Enric Suades Sala and Ana Crespo Blanc
 Onshore study of syn-orogenic olistostromic deposits in the Gibraltar Arc: a tool to reveal mountain front uplift
- 14:45–15:00 EGU2011-8617
Kurt Stüwe, Nicolas Legrain, Andreas Wölfler, Istvan Dunkl, and Todd Ehlers
 New U-He ages for the Eastern Alps
- Chairperson: Paola Campus
- 15:30–15:45 EGU2011-10128
Andreas Wölfler, Walter Kurz, Harald Fritz, and Kurt Stüwe
 Lateral Extrusion in the Eastern Alps: Time constraints and plate tectonic controls during Oligocene to Miocene times
- 15:45–16:00 EGU2011-12938
Michał Smigielski, Piotr Krzywiec, Katarzyna Pisaniec, Finlay Stuart, Cristina Persano, Hugh Sinclair, Nestor Oszczypko, and Katarzyna Sobien
 Inversion of the Central Carpathian Basin constrained using low temperature thermochronology and its implications for Carpathian orogenesis.
- 16:00–16:15 EGU2011-1287
Gilles Lericolais, Julien Bourget, Paul Jermannaud, Stephan Jorry, Thierry Mulder, and Irina Popescu
 The active sink of the Danube river Basin: The Danube deep-sea fan

- 16:15–16:30 EGU2011-11100
David Fernández-Blanco and Giovanni Bertotti
 Neogene vertical movements in the Mut-Ermenek Basin, south Turkey: New insights from structural studies
- 16:30–16:45 EGU2011-1691
Giuditta Radeff, Domenico Cosentino, Taylor F. Schildgen, Güldemin Darba?, and Kemal Gürbüz
 Differences and similarities in the Late Miocene geohistory of the Mut and Adana basins (southern Turkey): a record of surface uplift of the southeast margin of the Central Anatolian plateau
- 16:45–17:00 EGU2011-625
Stella Lucifora, Francesca Cifelli, Massimo Mattei, Andrew Roberts, Domenico Cosentino, Paola Cipollari, and Elsa Gliozzi
 Inconsistent magnetic polarities from Upper Messinian greigite-bearing sediments from Adana Basin (Southern Turkey)

SM1.4/EG12/G6.5/GD2.10/GM5.8/TS4.8 – TOPOEUROPE, The Evolving Topography of Europe (co-organized) – Posters

Convener: Sierd Cloetingh | Co-Conveners: Jörg Ebbing, Josep Gallart

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Sierd Cloetingh

- XY725 EGU2011-7682
Britta Wawerzinek, Corinna Roy, and Joachim Ritter
 Teleseismic Shear-Wave Analysis in Southern Norway
- XY726 EGU2011-1114
Jörg Ebbing, Richard W. England, Toivo Korja, and Maxim Smirnov
 Insights into the lithospheric structure beneath the Central Scandes from combining different geophysical observations
- XY727 EGU2011-1223
Trond Kvarven, Wanda Stratford, and Rolf Mjelde
 TopoScandiaDeep: Results from an OBS survey off Møre, mid Norway
- XY728 EGU2011-3144
Babak Hejrani, Bo Holm Jacobsen, Anna Bondo Medhus, and Niels Balling
 Resolving a deep lithosphere transition between Southern Norway and Southern Sweden
- XY729 EGU2011-9456
Sofie Gradmann, Joerg Ebbing, and Javier Fullea
 Tracing lithospheric mantle variations underneath Norway and Sweden - An integrated modelling approach with LitMod3D
- XY730 EGU2011-10339
Christian Weidle, Niels Balling, Andy Frassetto, Bo Holm Jacobsen, Andreas Köhler, Valérie Maupin, Anna Bondo Medhus, Joachim Ritter, and Britta Wawerzinek
 Upper mantle structure of southwestern Scandinavia reveals the rim of cratonic Baltica
- XY731 EGU2011-6921
 Monika Dec, **Edward Perchuc**, and Blanka Nita
 A new model of upper mantle structure beneath Polish part of the Precambrian East European Craton
- XY732 EGU2011-9842
Shalaleh Mohammadi, Thomas Geenen, Arie van den Berg, and Wim Spakman
 Topography response to instantaneous mantle dynamics of the European-Mediterranean region
- XY733 EGU2011-2109
 Lapo Boschi, **Claudio Faccenna**, and Thorsten Becker
 Mantle structure and dynamic topography in the Mediterranean Basin
- XY734 EGU2011-3807
Nuno Afonso Dias, Fernando Carrilho, Christian Haberland, Joao Fonseca, Mourad Bezzeghoud, Susana Custodio, Antonio Villasenor, Conceicao Neves, Rui Fernandes and the WILAS Team
 Closing the Seismic Coverage on Western Iberia: Project WILAS
- XY735 EGU2011-3860
Juanjo Ledo, Alan G Jones, Agata Sisnicalchi, Joan Campanyà, Duygu Kiyan, Gerardo Romano, Mohamed Rouai and the TopoMed MT Team
 The TopoMed broad band magnetotelluric experiment: crustal images of the Atlas mountains of Morocco.
- XY736 EGU2011-4181
Benjamin Guillaume, Francesca Funicello, Claudio Faccenna, and Carlo Doglioni
 Effects of background mantle flow on subduction dynamics: insights from laboratory models
- XY737 EGU2011-6456
Duygu Kiyan, Alan G. Jones, Javier Fullea, Colin Hogg, Juanjo Ledo, Agata Siniscalchi, Joan Campanyà, Gerardo Romano, Pierpaolo Moretti, Mohamed Rouai and the The TopoMed MT Team
 Lithospheric-scale geometry of the Atlas Mountains of Morocco revealed by magnetotelluric surveying

- XY738 EGU2011-4217
Maria Neves, Filipe Rosas, Pedro Terrinha, Luis Matias, Marylin Moulin, and Joaquim Luis
 Gravitational stresses and tectonic loading near shore: insights from the Gulf of Cadiz.
- XY739 EGU2011-7006
 Giorgi Khazaradze, **Eva Asensio**, Anna Echeverria and the Topo-Iberia GPS Team
 Crustal deformation studies in Iberia: Topo-Iberia CGPS network
- XY740 EGU2011-8420
Antonio Villasenor, Sébastien Chevrot, Mimoun Harnafi, Josep Gallart, and Topo-Iberia Seismic Working Group
 Seismic structure beneath the Gibraltar Arc, Western Mediterranean region using broadband data from IberArray and permanent networks
- XY741 EGU2011-8811
Jaume Pous, Galindo-Zaldívar, J Ruiz-Constán, A Anahnah, F, Asensio, E Seillé, H, Ibarra, P Pedrera, A, Chalouan, A Benmakhlouf, M Ahmamou, M, Ruano, P López-Garrido, AC Sanz de Galdeano, C, Muñoz, A Olaiz, A De Vicente, G, and González-Cortina, JM Gallastegui, J Pedreira, D
 On-going Magnetotelluric (MT) activities within the Topo-Iberia project
- XY742 EGU2011-8948
Jan-Philipp Schmoldt, Alan G. Jones, Mark Muller, Duygu Kiyan, Colin Hogg, and Oriol Rosell Novel
 Geometries and structures within the Iberian lithosphere and asthenosphere beneath the Tajo Basin and Betic Cordillera revealed using magnetotellurics - Results of the PICASSO Phase I project
- XY743 EGU2011-12654
 Oriol Rosell, Anna Martí, Àlex Marcuello, Juanjo Ledo, **Pilar Queralt**, Eduard Roca, and Joan Campanyà
 Geoelectrical deep structure of the Betic Cordillera (South Spain) revealed: an evidence of asthenospheric upwelling
- XY744 EGU2011-5875
Charlotte Fillon and Ritske Huismans
 Coupled tectonic-surface processes modeling of the southern Pyrenean fold and thrust belt
- XY745 EGU2011-7621
Jordi Diaz, David Pedreira, Mario Ruiz, Javier A. Pulgar, and Josep Gallart
 Mapping the indentation between the Iberian and European crusts between the Pyrenees and the Cantabrian Mountains (N Iberia) from seismic methods.
- XY746 EGU2011-9406
Ivar Midtkandal, Roy Helge Gabrielsen, Jean-Pierre Brun, and Ritske Huismans
 Modelling compression along an extended plate boundary; the influence of along-strike mantle strength variation on subduction polarity
- XY747 EGU2011-12566
David Pedreira, Javier A. Pulgar, and Juan Carlos Afonso
 Geophysical-petrological modelling of the lithosphere beneath the Cantabrian Mountains and North-Iberian margin: mantle wedge hydration triggered by eclogitization reactions?
- XY748 EGU2011-1373
Christoph von Hagke, Onno Oncken, Charlotte E. Cederbom, Daniel F. Stöckli, and Hugo Ortner
 Did thrusting cease in the Northern Alpine Foreland Basin at 12Ma? - Answers from low-temperature thermochronology
- XY749 EGU2011-4147
Pietro Sternai, Frédéric Herman, and Sean Willett
 Reconstruction of the pre-glacial Alpine topography to address the glacially-induced modifications
- XY750 EGU2011-8639
Kurt Stüwe and Ruedi Homberger
 The Geology of the Alps from the Air
- XY751 EGU2011-10031
Pierre Valla, Peter van der Beek, David Shuster, Jean Braun, and Frédéric Herman
 Alpine pre-glacial topography and Quaternary landscape evolution from (U-Th-Sm)/He, $4\text{He}/3\text{He}$ thermochronometry and numerical modelling, Western European Alps
- XY752 EGU2011-10101
Andreas Wölfler, Kurt Stüwe, Nicolas Legrain, and Harald Fritz
 Neogene denudation rates in the Eastern Alps as determined by low temperature thermochronology
- XY753 EGU2011-957
Csilla Karina Biró and Balázs Székely
 Historical river avulsion at the Danube Bend - insights from archive shallow boreholes and vertical geoelectric sounding data at Pilismarót
- XY754 EGU2011-12824
Gábor Kovács, Tamás Telbisz, and Balázs Székely
 Quaternary alterations of drainage network in the transition zone between the Alps and the Pannonian Basin

- XY755 EGU2011-13362
András Zámolyi, Martin Olsen, Balázs Székely, Gábor Timár, Gábor Varga and the Húge Hernád Research Team
 Tectonically influenced landscape evolution in the Hernád-valley region (NE Hungary)
- XY756 EGU2011-11246
Martin Schmeer, Michael Schmidt, Benoit Meyssignac, Wouter van der Wal, and Frank Flechtner
 Regional Gravity fields from GRACE observations
- XY757 EGU2011-4032
Damien Delvaux, Sierd Cloetingh, Fred Beekman, Dimitrios Sokoutis, Evgueni Burov, and Michael Kaban
 Basin evolution in a folding lithosphere. Examples from the Altay-Sayan and northern Tien Shan

TS6.8/GD5.8/GM5.9 – Pamir: a natural laboratory to understand intra-continental subduction. (co-organized) – Orals

Convener: Richard Gloaguen | Co-Conveners: Lothar Ratschbacher

Room: 26

Chairperson: Richard Gloaguen and Adam Szulc

- 08:30–08:45 EGU2011-9980
Yann Rolland, Michel Corsini, Dimitiy Alexeiev, Alfred Kroener, and Yamirka Rojas-Agramonte
 Timing and style of tectonic events, crustal-scale structure, in the Central Asian Orogenic Belt (Kyrgyzstan)
- 08:45–09:00 EGU2011-8489
Bradley Hacker, Lothar Ratschbacher, Michael Stearns, Jennifer McGraw, Stübner Konstanze, Andrew Kylander-Clark, Jörg Pfänder, Carsten Weise, Vladislav Minaev, Mustafo Gadoev and the Ilhomjon Oimahmadoc (4) and the TIPAGE Team
 Widespread, Synchronous, Large-Magnitude Exhumation of the Deep Pamir
- 09:00–09:15 EGU2011-7033
Edward R. Sobel, Lindsay M. Schoenbohm, Jie Chen, Rasmus Thiede, Daniel F. Stockli, Masafumi Sudo, and Manfred R. Strecker
 Late Miocene - Pliocene deceleration of dextral slip between Pamir and Tarim: Implications for Pamir orogenesis
- 09:15–09:30 EGU2011-4822
Bernd Schurr, Xiaohui Yuan, Felix Schneider, Christian Sippl, James Mechie, Vlad Minaev, Ulan Abdybachaev, Ilhomjon Oimahmadov, Mustafo Gadoev, and Sobit Negmatullaev
 Seismicity and lithospheric structure in the Pamir - Hindu Kush - Tien Shan region from TIPAGE seismological data
- 09:30–09:45 EGU2011-8944
Violaine Vignon, Anne Replumaz, Stéphane Guillot, and Ana Negroed
 Geometry, timing and consequences of subduction processes in the Pamir and Hindu Kush regions
- 09:45–10:00 EGU2011-13627
Stephan Sobolev and Jens Tympel
 Models of orogeny in Tibet and Pamir

TS6.8/GD5.8/GM5.9 – Pamir: a natural laboratory to understand intra-continental subduction. (co-organized) – Posters

Convener: Richard Gloaguen | Co-Conveners: Lothar Ratschbacher

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bernd Schurr and Adam Szulc

- XL333 EGU2011-726
Margret Fuchs, Richard Gloaguen, Matthias Krbetschek, and Adam Szulc
 OSL dating for incision rate estimation in Pamir
- XL334 EGU2011-521
Adam Szulc, Lothar Ratschbacher, and Richard Gloaguen
 Detrital geo/thermochronology of Tajik Depression sediments
- XL335 EGU2011-4846
Claudia Krumbiegel, Bernd Schurr, Sagynbek Orunbaev, He Rui, Liu Pingren and the TIPAGE Team
 The 05/10/2008 Mw 6.7 Nura earthquake sequence on the Main Pamir Thrust
- XL336 EGU2011-6114
Richard Gloaguen, Lothar Ratschbacher, Margret Fuchs, Matthias Krbetschek, Vlad Minaev, Ilhomjon Oimahmadov, Mustafo Gadoev, and Negmat Rasshabov
 Neotectonics of the Pamir.

- XL337 EGU2011-6535
Felix Schneider, Xiaohui Yuan, Christian Sippl, Bernd Schurr, James Mechie, Christian Haberland, Mustafo Gadoev, Ilhomjon Oimahmadov, Ulan Abdybachaev, and Sobit Negmatullaev
 A cross section through the eastern Pamir and Tien Shan obtained by teleseismic receiver functions
- XL338 EGU2011-8039
Christian Sippl, Bernd Schurr, Felix Schneider, Xiaohui Yuan, James Mechie, Christian Haberland, Sagynbek Orunbaev, Mustafo Gadoev, Ilhomjon Oimahmadov, and Sobit Negmatullaev
 Analysis of local seismicity in the Pamir-Tien Shan-Hindu Kush region, central Asia
- XL339 EGU2011-8624
Paul Sass, Oliver Ritter, Gerard Muñoz, Anatolii Rybin, and Vladislav Batalev
 Magnetotelluric data analysis from the continental collision zone in the Pamir and Tien Shan, Central Asia
- XL340 EGU2011-8804
Jens Tynpel and Stephan Sobolev
 First results of 2D Thermo-mechanical modelling of Cenozoic lithospheric deformation in the Himalaya-Tibet-Pamir-Tien Shan orogen
- XL341 EGU2011-9247
Sarah Schröder and Andrey Babeyko
 Developing Surface Processes Model for the Pamir-Tien Shan Region
- XL342 EGU2011-9849
 Richard Gloaguen and **Mehdi Rahnama**
 The Shahrud-Doruneh-Herat-Chaman fault system and its prolongation in Pamir
- XL343 EGU2011-9792
 Richard Gloaguen, **Pohl Eric**, Stephan Weise, Stefan Geier, Tino Rödiger, Christian Siebert, Jamila Baidulloeva, and Malte Knoche
 Hydrological modelling of the Gunt (Western Pamir) using remote sensing data
- XL344 EGU2011-10487
 Thomas Voigt, **Jonas Kley**, Nadine Seib, and Martin Kober
 Tectonic and sedimentary evolution of the Ili Basin (northern Tien Shan, Kazakhstan)
- XL345 EGU2011-5043
Rasmus Thiede, Edward Sobel, Schoenbohm Lindsay, Jie Chen, and Daniel Stockli
 Shift in Temporal Pattern of Dome Formation and Extension of the NE-Pamir Plateau
- XL346 EGU2011-4243
Lukasz Gagala, Lothar Ratschbacher, Jean-Claude Ringenbach, Blanka Sperner, Richard Gloaguen, Alexandra Kässner, Arief Wijaya, Negmat Rajabov, and Vladislav Minaev
 Tajik Basin: structure and kinematics of an external fold-and-thrust belt of the Pamir revealed by cross-section balancing
- XL347 EGU2011-440
Alexandra Kaessner, Benita-Lisette Sonntag, Lukasz Gagala, Richard Gloaguen, and Lothar Ratschbacher
 Cenozoic tectonic evolution of the Pamir-Tien Shan system: Evidence from thermochronology, provenance analysis, and tectonic geomorphology in the Tajik depression and its margins
- XL348 EGU2011-794
Daniel Rutte, Ratschbacher Lothar, and Hacker Bradley
 Cenozoic structure of the Central Pamir
- XL349 EGU2011-2497
James Mechie, Xiaohui Yuan, Bernd Schurr, Felix Schneider, Christian Sippl, Vlad Minaev, Mustafo Gadoev, Ilhomjon Oimahmadov, Ulan Abdybachaev, Bolot Moldobekov and the Sagynbek Orunbaev (3), Sobit Negmatullaev (4) Team
 Project TIPAGE wide-angle seismic data reveals the crustal structure along a profile across the Pamir and southern Tien Shan.
- XL350 EGU2011-5091
Ines Roehringer, Uwe Abramowski, Roland Zech, Piotr Sosin, Ala Aldahan, Silke Merchel, Peter Kubik, Ludwig Zoeller, and Wolfgang Zech
 Timing and paleoclimate forcings of Late Quaternary glaciations in the Pamir Mountains: ^{10}Be surface exposure dating of glacial landforms
- XL351 EGU2011-8993
Matthias Franz, Ralf Dedow, Jan Brückner, Jörg Schneider, Adam Szulc, Benita-Lisette Sonntag, Lothar Ratschbacher, Martin Klocke, Negmat Rajabov, and Vladislav Minaev
 The eastern Tajik basin: Late Cretaceous to Neogene basin evolution and exhumation of the Pamir
- XL352 EGU2011-9992
Konstanze Stübner, Lothar Ratschbacher, Carsten Weise, Jörg Pfänder, Richard Gloaguen, Bradley Hacker, István Dunkl, Raymond Jonckheere, Klaus Stanek, and Vladislav Minaev
 Miocene gneiss domes and syn-orogenic extension in the Pamir

GM7.4 – River and slope responses to climate change in steep landscapes – Orals

Convener: John Jansen | Co-Conveners: Etienne Cossart, Pierre Valla, Monique Fort, Romain Delunel

Room: 22

Chairperson: John Jansen

- 13:30–13:45 EGU2011-3620
Kevin Norton, Fabien van den Berg, Sara Savi, Mirjam Dürst Stucki, and Fritz Schlunegger
 After the ice: Geomorphic processes and rates in Alpine settings following deglaciation
- 13:45–14:00 EGU2011-11826
Dirk Scherler
 Climate variability and glacial dynamics in the Himalaya and potential impacts on rivers
- 14:00–14:15 EGU2011-7865
Christophe Corona, Lopez Saez Jérôme, Edouard Jean-Louis, Rovéra Georges, and Berger Frédéric
 Impact of climate change on snow avalanche activity: contribution of a continuous 1338-2010 dendrogeomorphic reconstruction (Queyras massif, French Alps)
- 14:15–14:30 EGU2011-7276
Florian Kober, Kristina Hippe, Bernhard Salcher, Susan Ivy-Ochs, Peter W. Kubik, and Sean D. Willett
 On the influence of debris flows and river restoration on cosmogenically derived catchment wide denudation rates
- 14:30–14:45 EGU2011-8472
Ludovic Ravanel and Philip Deline
 Rockfalls and climate in the permafrost-affected rockwalls of the Mont Blanc massif
- 14:45–15:00 EGU2011-11543
Calligaris Chiara, Ceccone Giulio, Dini Michela, Liuzzi Franco, Poretti Giorgio, and Zini Luca
 Can climate changes influence the triggering of a DGSD? A possible example in northern Italy.

GM7.4 – River and slope responses to climate change in steep landscapes – Posters

Convener: John Jansen | Co-Conveners: Etienne Cossart, Pierre Valla, Monique Fort, Romain Delunel

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Pierre Valla

- A126 EGU2011-181
Katja Laute, Achim A. Beylich, and Louise Hansen
 Late Holocene hillslope dynamics in two paraglacial valley systems, Western Norway
- A127 EGU2011-1613
Diethard Sanders and Marc Ostermann
 From Late-Glacial aggradation to Holocene incision of talus: Examples from the Northern Calcareous Alps (Austria).
- A128 EGU2011-2593
Chenet Marie and Roussel Erwan
 Evaluation of a paraglacial crisis on slopes deglaciated since the Little Ice Age in South-east Iceland
- A129 EGU2011-7157
Benoît Bovy, Alain Demoulin, and Jean Braun
 A new numerical model to study the influence of climate on hillslope sediment supply: first results
- A130 EGU2011-12969
Marco Giardino, Sara Ratto, Mauro Palomba, and Walter Alberto
 Static and dynamic controls on slope instabilities: the interplay of litho-structural conditions and climate change in the Aosta Valley Region (Western Alps, Italy)
- A131 EGU2011-12682
Stephan Gruber
 Thermal regime and permafrost conditions within bedrock slopes
- A132 EGU2011-12825
Kerry Leith, Jeff Moore, Florian Amann, and Simon Loew
 Effect of glacial ice cover on fracturing in critically stressed bedrock
- A133 EGU2011-8268
Bernhard Salcher, Florian Kober, and Sean Willett
 Contemporary erosion rates above and below the Alpine LGM ELA
- A134 EGU2011-8100
Esperanza Muñoz-Salinas, Paul Bishop, David Palacios, Miguel Castillo, David Sanderson, Tim Kinnaird, and Javier Marcos
 Unravelling fluvioglacial and post-glacial debris flows on Gredos mountain range, Central Spain, using OSL
- A135 EGU2011-12604
Veronica Ochoa-Tejeda, Victor Hugo Garduño, Jean-François Parrot, and Monique Fort
 Devastation caused by mud flow in a narrow valley. Simulation of the event that affected in 2010 the town of Angangueo, Michoacan State, Mexico.

GM8.4/OS3.6/SSP1.6/TS4.7 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Orals

Convener: Sebastian Krastel | Co-Conveners: John K. Hillier, C.L. Jacobs, Dina Vachtman

Room: 22

Chairperson: S. Krastel, J.K. Hillier

- 10:30–10:45 EGU2011-1706
Myriam Janin, Christophe Hemond, and Marcia Maia
 The Capricorn/Australian plates' suture highlighted by seamounts morphology
- 10:45–11:00 EGU2011-8329
Ian Watkinson, Robert Hall, and Farid Ferdian
 Structural evolution of the southern Molucca Sea, Indonesia: Insights from multibeam bathymetry
- 11:00–11:15 EGU2011-1831
Kan-Hsi Hsiung and Ho-Shing Yu
 Comparison of the sediment dispersal routes between offshore SW Taiwan and Huon Gulf west of Papua New Guinea in incipient oblique arc-continental collision zones
- 11:15–11:30 EGU2011-9926
Gueorgui Ratzov, Jean-Yves Collot, Sébastien Migeon, Boris Marcaillou, and Jean-Frédéric Lebrun
 Evidences for a sub-marine active fault along the North-Ecuador South Colombia oblique-convergent margin: implication for fault maturity and tectonic escape
- 11:30–11:45 EGU2011-9731
Domenico Ridente, Eleonora Martorelli, and Francesco L. Chiocci
 The problem of the 1908 Reggio and Messina earthquake and tsunami sources. A geomorphic perspective
- 11:45–12:00 EGU2011-491
Mustafa Ergin, Emel Bayhan, and Abidin Temel
 Variations in sedimentation rates in the eastern Marmara Sea (Turkey) as related to bottom morphology, active tectonism, sea-level changes and sediment input patterns

GM8.4/OS3.6/SSP1.6/TS4.7 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Posters

Convener: Sebastian Krastel | Co-Conveners: John K. Hillier, C.L. Jacobs, Dina Vachtman

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: C.L. Jacobs, D. Vachtman

- A136 EGU2011-8478
Antonio Cattaneo, Nathalie Babonneau, Alessandra Asioli, Karim Yelles, Jacques Déverchère, Guillaume Jamet, and Ricardo Silva Jacinto
 Searching for the seafloor signature of the May 21, 2003 Boumerdès earthquake offshore central Algeria
- A137 EGU2011-6394
Hsui-may Lin and Char-Shine Liu
 Deep Structures of the Forearc Region at the Western End of the Ryukyu Subduction-Collision Zone Offshore Eastern Taiwan
- A138 EGU2011-10019
Anne Krabbenhoef, Wilhelm Weinrebe, Heidrun Kopp, Ernst Flueh, Stefan Ladage, Cord Papenberg, and Lars Planert
 Morphological structures relate to the location and extent of the seismogenic zone - bathymetric studies of the Sunda margin, Indonesia
- A139 EGU2011-1832
Ho-Shing Yu and Kan-Hsi Hsiung
 Morpho-sedimentary features and longitudinal sediment transport in the Taiwan-Luzon region
- A140 EGU2011-3166
Monika Breitzke, Wilfried Jokat, Ralph Krockner, Mike Watkeys, and Errol Wiles
 High-resolution bathymetry and shallow acoustic images of current-controlled sedimentary processes in the Southern Mozambique Channel
- A141 EGU2011-8058
Benedikt Weiß, Christian Hübscher, Luis Batista, Ali Dehghani, Thomas Lüdmann, and Jonas Wagner
 Hotspot dominated rifting - The instance of São Miguel (south-eastern Terceira Rift, Azores)
- A142 EGU2011-11755
Anne Bernhardt, Zane R. Jobe, Marty Grove, and Donald R. Lowe
 Paleogeography of an Ancient Deep-Marine Foreland Basin, Upper Cretaceous Cerro Toro Formation, Magallanes Basin - Insights from U/Pb Geochronology and Strontium Isotope Stratigraphy
- A143 EGU2011-10032
Gemma Fay, Andrew Fowler, and Peter Howell
 Prediction of Ignition of a Turbidity Current in a Submarine Canyon Using a Reduced Model

A144 EGU2011-3033
László Körtvélyessy
 Prediction of earthquakes

GM9.1 – Cold regions geomorphology – Orals

Convener: Isabelle Gärtner-Roer | Co-Conveners: Sven Lukas, Matteo Spagnolo

Room: 21

Chairperson: Isabelle Gärtner-Roer, Sven Lukas

- 08:30–08:45 EGU2011-1619
Bernd Etzelmueller and Ivar Berthling
 Cryo-conditioning of landform and landscape development - suggestions and examples from northern Europe
- 08:45–09:00 EGU2011-5997
Karianne S. Lilleøren, Bernd Etzelmueller, Kjersti Gisnås, and Thomas V. Schuler
 Estimating depth and spatial distribution of Holocene permafrost in Norway
- 09:00–09:15 EGU2011-13327
Alexander Bast and Christof Kneisel
 The surface in the subsurface? - Towards small-scale permafrost distribution and quasi-3D resistivity imaging
- 09:15–09:30 EGU2011-10874
Martin Kirkbride
 What do glacial moraine chronologies really tell us about climate?
- 09:30–09:45 EGU2011-189
Clare Boston, Sven Lukas, and Simon Carr
 Patterns of ice retreat and plateau icefield dynamics in the Monadhliath Mountains, Scotland
- 09:45–10:00 EGU2011-87
Matt Strzelecki
 Paraglacial processes operating on High Arctic coastal margins - recent advances from Svalbard.

GM9.1 – Cold regions geomorphology – Posters

Convener: Isabelle Gärtner-Roer | Co-Conveners: Sven Lukas, Matteo Spagnolo

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Matteo Spagnolo

- A145 EGU2011-1779
Michael Dietze, Manfred Buchroithner, and Arno Kleber
 The Valle de Barrancas Blancas: landscape evolution of a hyper arid, high-altitude basin in the Atacama Andes
- A146 EGU2011-11465
Adrien Moulin, Lucilla Benedetti, Jérôme Van der Woerd, Ata Elias, Pierre-Henri Blard, Robert Finkel, Regis Braucher, Jérôme Lavé, Didier Bourles, Mathieu Daeron and the Paul Tapponnier Team
 LGM glaciers on Mount Lebanon? New insights from 36Cl exposure dating of moraine boulders
- A147 EGU2011-11416
Matteo Spagnolo, Isabelle Gärtner-Roer, and Sven Lukas
 Linking glacial, periglacial and paraglacial processes: the challenge of cold regions geomorphology
- A148 EGU2011-13040
Sven Lukas, Sandro Coray, and Andreas Graf
 The influence of using mixed lithologies in clast shape measurements on its discriminatory power - a case study from a temperate Alpine glacier
- A149 EGU2011-2537
Maarten Krabbendam and Neil Glasser
 Bedrock properties and glacial erosion: hardness and joint spacing, abrasion and plucking
- A150 EGU2011-6069
Karianne S. Lilleøren, Isabelle Gärtner-Roer, Bernd Etzelmueller, and Ægust Guðmundsson
 A new assessment of rock glacier distribution in Tröllaskagi peninsula, northern Iceland
- A151 EGU2011-9741
 Lorenzo Rieg, Erik Bollmann, Tobias Huber, Karl Krainer, Volkmar Mair, Rudolf Sailer, Maximilian Sproß, and Johann Stötter
 Multivariate statistical analyses of the south-tyrolean rockglacier inventory
- A152 EGU2011-9758
Lorenzo Rieg, Erik Bollmann, Rudolf Sailer, Maximilian Sproß, and Johann Stötter
 Vegetation on alpine rockglaciers in relation to surface velocity and surface structure

- A153 EGU2011-13037
Andreas Kellerer-Pirklbauer
 Potential and limitations of the Schmidt-hammer as a relative age dating tool for rock glacier surfaces
- A154 EGU2011-11173
Michèle Curtaz, Marco Vagliasindi, Stéphanie Letey, Umberto Morra di Cella, and Paolo Pogliotti
 A new rock glaciers inventory in the North-Western Alps
- A155 EGU2011-11643
Riccardo Scotti, Francesco Brardinoni, Giovanni Battista Crosta, Paolo Frattini, and Elena Valbuzzi
 Rock glacier inventory in the Orobic Alps and the Livigno Valley, central Italian Alps

GM9.2 – Glacial landforms and palaeoclimatic interpretation – Orals

Convener: Stefan Winkler | Co-Conveners: Tim Davies, Lasafam Iturrizaga, Martin Kirkbride

Room: 21

Chairperson: Stefan Winkler

- 10:30–10:45 EGU2011-9961
Philip Deline
 Influences of rock avalanches on glacier behaviour and moraine formation in the Western European Alps
- 10:45–11:00 EGU2011-1808
Rosa M. Carrasco, Javier de Pedraza, and David Dominguez-Villar
 The supraglacial debris supply in Cuerpo de Hombre paleoglacier (Spanish Central System).
 Reconstruction and interpretation of a rock avalanche event
- 11:00–11:15 EGU2011-202
Natalya V. Reznichenko
 A criterion for recognising rock avalanche sediments in glacial moraines
- 11:15–11:30 EGU2011-8669
Lasafam Iturrizaga
 End moraine systems in the context of catastrophic and gradual processes in the Central Andes
 (33°–34°S)
- 11:30–11:45 EGU2011-5327
Martin Brook, Vince Neall, Bob Stewart, Rob Dykes, and Derek Birks
 Recognition and paleoclimatic implications of Late Holocene glaciation on Mt Taranaki, North Island, New Zealand
- 11:45–12:00 EGU2011-4084
Anna Agatova, Andrei Nazarov, Roman Nepop, and Ljubov' Orlova
 The late Holocene climatic variations in Russian Altai (Central Asia) on the basis of glaciations
 radiocarbon chronology

GM9.2 – Glacial landforms and palaeoclimatic interpretation – Posters

Convener: Stefan Winkler | Co-Conveners: Tim Davies, Lasafam Iturrizaga, Martin Kirkbride

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Lasafam Iturrizaga

- A156 EGU2011-13828
Stuart Dunning, John Woodward, Andrew Turner, and Tim Davies
 Landslides onto glaciers - absence of evidence is not evidence of absence
- A157 EGU2011-13830
 James Shulmeister, Daniel Santamaria-Tovar, Natalya Reznichenko, and **Tim Davies**
 Classical Moraine, Non-classical Cause: The Waiho Loop, New Zealand
- A158 EGU2011-2770
 Samuel McColl and **Timothy Davies**
 Rock avalanche demolishes paleoclimatic evidence in New Zealand: 'The Hillocks'
- A159 EGU2011-13833
Martin Brook and Stefan Winkler
 Moraine formation at advancing temperate maritime glaciers: Fox and Franz Josef Glaciers, Southern Alps, New Zealand
- A160 EGU2011-13831
 John A. Matthews and **Stefan Winkler**
 Recent terminal moraine formation at Jostedalbreen, South Norway, and its palaeoclimatic implication
- A161 EGU2011-13832
 Daniel Jäger and **Stefan Winkler**
 The potential of lateral moraines on alpine glacier forelands for reconstructing Holocene glacier chronologies - some examples

- A162 EGU2011-13852
Jianwei Lin, Shihjieng Chyi, Lide Ho, Shanshan Chang, Chen Chu, Huayu Lu, and Shuangwen Yi
Late Pleistocene to early Holocene glacial landforms of Yushan area, Taiwan
- A163 EGU2011-9340
Regina Reber, Naki Akçar, Susan Ivy-Ochs, Peter W. Kubik, and Christian Schlüchter
New exposure ages from Erratic-boulders in the lower Reuss-valley (Switzerland)
- A164 EGU2011-10853
Martin Kirkbride and Andrew Dugmore
Tephrochronology and the status of the Little Ice Age glacial maximum in Iceland.
- A165 EGU2011-1106
Stefan Winkler
Application of Schmidt-hammer exposure-age dating (SHD) to improve numerical age dating of Holocene moraines
- A166 EGU2011-13829
Martin Brook and Jacob Williams
Recognition of a pronival ("protalus") rampart in the Tararua Range, North Island, New Zealand

GMPV11 – New methods and concepts in volcanic geomorphology (co-listed) – Orals

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

Room: 31

Chairperson: Dávid Karátson

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

GMPV11 – New methods and concepts in volcanic geomorphology (co-listed) – Posters

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Simone Tarquini

- XY423 EGU2011-13895
Mattia de' Michieli Vitturi, Ramon Arrowsmith, Alessandro Fornaciai, Massimiliano Favalli, and **Simone Tarquini**
Erosional modification of cinder cones explored using non-linear diffusion with spatially variable diffusivity and applied to the 2002-2003 scoria cone complex (C2002) at Mount Etna, Italy
- XY424 EGU2011-13841
Dávid Karátson, Emőke Fodor, Balázs Székely, and Szabolcs Harangi
A DEM-analysis of the youngest (30 ka) volcano in the Carpathians: Ciomadul (Csomád), East Carpathians
- XY425 EGU2011-13408
Jorge Yepes, Martín Rodríguez-Peces, and Rodrigo Del Potro
Geomorphologic evidences of an extensional NW-SE fault zone in the central sector of Gran Canaria (Canary Islands, Spain)

- XY426 EGU2011-1617
Melanie Brandmeier
 Remote sensing of Carhuarazo volcanic complex. Using ASTER imagery in Southern Peru to detect alteration zones and volcanic structures - a combined approach of image processing in ENVI and ArcGIS/ArcScene
- XY427 EGU2011-12556
Balázs Székely, Dávid Karátson, Melanie Brandmeier, Gerhard Wörner, Peter Dorninger, and Clemens Nothegger
 Erosional patterns of ancient ignimbrite paleosurface in the Central Andes
- XY428 EGU2011-12695
Emőke Fodor, Dávid Karátson, and Tamás Telbisz
 Morphometric analysis of scoria cones in the Persani (Persányi) Mountains, East Carpathians
- XY429 EGU2011-7254
 Wouter van Gorp, **Arnaud Temme**, Jantien Baartman, Jeroen Schoorl, and Tom Veldkamp
 A Landscape Evolution Model to study volcanic landscape evolution
- XY430 EGU2011-7776
Alessandro Fornaciai, Dávid Karátson, Massimiliano Favalli, and Simone Tarquini
 Scoria cones occurring in various volcanological settings: a DEM-based geomorphometric analysis
- XY431 EGU2011-12595
Tiffany Salvany, Pierre Lahitte, Pierre Nativel, and Pierre-Yves Gillot
 Morphological evolution throughout the last 1.4 Myr of Piton des Neiges volcano (Réunion Island, Indian Ocean): competition between volcanic construction and erosion.
- XY432 EGU2011-13272
Aurelie Germa-Charbonnier, Pierre Lahitte, and Xavier Quidelleur
 DEM-based palaeotopography reconstructions and evolution through time of the recent volcanoes in Martinique Island (Mount Conil and Mount Pelée).
- XY433 EGU2011-11761
Massimiliano Favalli, Simone Tarquini, and Alessandro Fornaciai
 Morphology-due uncertainties in gravity-driven mass movements on the Earth surface
- XY434 EGU2011-7910
Pierre Lahitte, Agnes Samper, and Xavier Quidelleur
 Geomorphological evolution through time of southern Basse-Terre volcanoes inferred from DEM-based reconstructions as estimations to the construction rates and magma production

HS2.11/NH1.14 – Hydrological extremes: from droughts to floods (co-listed) – Orals

Convener: Alberto Viglione | Co-Conveners: Jan Szolgay, Lena M. Tallaksen, Gregor Laaha

Room: 36

Chairperson: Hege Hisdal

- 15:30–15:45 EGU2011-8123
Simon Parry, Christel Prudhomme, and Jamie Hannaford
 How well do large-scale models reproduce hydrological extremes in Europe?
- 15:45–16:00 EGU2011-4188
Claire Lang and Didier François
 From flood to low flow: analysis of recession processes
- 16:00–16:15 EGU2011-11649
Peter Molnar, Samuel Peter, and Paolo Burlando
 Power law tails in streamflow extremes: effect of precipitation and basin properties
- 16:15–16:30 EGU2011-5762
Rodrigo Rojas, Davide Bavera, and Luc Feyen
 On the value of bias correction to improve pan-European hydrological simulation of extreme events
- 16:30–16:45 EGU2011-8418
Shaochun Huang, Fred F. Hattermann, Valentina Krysanova, and Axel Bronstert
 Projections of hydrological extremes under climate change in Germany by combining three RCMs with a regional hydrological model
- 16:45–17:00 EGU2011-4134
Sarka Blazkova and Keith Beven
 Floods and droughts in continuous simulation with uncertainty

ML13 – Ralph Alger Bagnold Medal Lecture by Stuart Lane (co-listed) – Orals

Convener: Niels Hovius

Room: 6

Chairperson: Niels Hovius

19:00–20:00 EGU2011-14151

Stuart Lane

Surface processes, landscapes and 21st Century climate change: the scale gap (Ralph Alger Bagnold Medal Lecture)

NH7.2/AS4.14/BG2.17 – Fire in the Earth System: Impacts and Feedbacks (co-listed) – Orals

Convener: Kirsten Thonicke | Co-Conveners: Allan Spessa

Room: 2

Chairperson: Kirsten Thonicke

10:30–10:45 EGU2011-383

Fernando Castro, Francesca Barnaba, Federico Angelini, and Gian Paolo Gobbi

The relative role of Amazonian and non-Amazonian fires in building up the aerosol optical depth in South America

10:45–11:00 **Placeholder**

11:00–11:15 EGU2011-1097

ronan Paugam, martin Wooster, george Papadakis, and martin Schultz

Estimation of the Injection Height of Biomass Burning Emission

11:15–11:30 EGU2011-2668

João Silva, João Carreiras, Isabel Rosa, and José Pereira

Greenhouse gas emissions from shifting cultivation in the tropics, including uncertainty and sensitivity analysis

11:30–11:45 EGU2011-7074

Elisa Garcia-Hurtado, Esther Borrás, Pilar Sanchez, **Teresa Vera**, M.Jaime Baeza, and V.Ramon Vallejo

Determination of emissions from Mediterranean shrubland fires.

11:45–12:00 EGU2011-13297

Brian Magi, Elena Shevliakova, Sergey Malyshev, and Stephen Pacala

Modeling Anthropogenic Drivers of Fires

NH7.2/AS4.14/BG2.17 – Fire in the Earth System: Impacts and Feedbacks (co-listed) – Posters

Convener: Kirsten Thonicke | Co-Conveners: Allan Spessa

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Kirsten Thonicke

XY574 EGU2011-621

Faith Taylor, Ronan Paugam, and Martin Wooster

Exploring and Improving Methods of Validating a 1D Plume Rise Model for Wildfire Emissions: The Use of BIRD and MODIS Earth Observation Products

XY575 EGU2011-2921

Matthias Forkel, Kirsten Thonicke, Sibyll Schaphoff, Ursula Heyder, and Christiane Schmullius

Hotspots, vulnerable ecosystems and global change of fire-influenced permafrost degradation

XY576 EGU2011-3542

Mirco Migliavacca, Alessandro Dosio, Alessandro Cescatti, Andrea Camia, Jesus San Miguel-Ayanz, and Tracy Durrant Houston

Modeling forest fires dynamics in Europe using the Community Land Model

XY577 EGU2011-7184

Elisa Garcia-Hurtado, Jorge Pey, Esther Borrás, Andrés Alastuey, Xavier Querol, and V.Ramon Vallejo

Determination of particle tracers released in forest fire events in the Mediterranean basin. Ayora burning experiment.

XY578 EGU2011-9614

Jane Liu, David Tarasick, Mark Parrington, Paul Palmer, Huixia He, Kevin Strawbridge, and Tom Duck

Observation of High Ozone From Canadian Boreal Forest Fires in 2010

XY579 EGU2011-10524

Anatoly Prokushkin, Oleg Pokrovsky, and Jerome Viers

Wildfire effects on stream hydrochemistry within the zone of continuous permafrost distribution in Central Siberia

XY580 EGU2011-11273

Beatriz Monge-Sanz, Steve Arnold, and Sarah Monks

Estimation of boreal fire emissions under future climate scenarios and their impacts on Arctic atmospheric composition

- XY581 EGU2011-11696
Margarita Evtyugina, Ana Patricia Fernandes, **Ana Calvo**, Teresa Nunes, Célia Alves, Luis Tarelho, and Ana Vicente
Characterisation of emissions from wildfires in Portugal in summer 2010
- XY582 EGU2011-12635
Iryna Khlystova, Silvia Kloster, Alex Loew, and Christian Reick
Integration of satellite burned area products into the land biosphere model JSBACH
- XY583 EGU2011-10782
Thomas Smith, Katherine Allen, Robert Marrs, Michael Harris, John Dold, and Martin Wooster
Emissions of greenhouse gases and selected volatile organic compounds from UK moorland burning estimated using open-path FTIR spectrometry and burnt area measures.

Wednesday, 06 April

GI-14 – GMES Sentinel Satellites: New Possibilities for Science (co-listed) – Orals

Convener: Michael Berger | Co-Conveners: Josef Aschbacher

Room: 24

Chairperson: n.n.

- 15:30–15:45 EGU2011-9767
Josef Aschbacher, Maria Pilar Milagro-Pérez, Antonio Ciccolella, Thomas Beer, Giancarlo Filippazzo, and Eleni Paliouras
 “GMES Space Component - Programme Overview
- 15:45–16:00 EGU2011-4216
Jose Moreno
 GMES/Sentinels in Land-Surface Earth System Science: temporal series and data synergy
- 16:00–16:15 EGU2011-6213
Hervé Yesou, Francesco Sarti, Nadine Tholey, Antonios Mouratidis, and Stephen Cladillon
 Synergy of Sentinel 1 and 2 for emergency flood mapping and the monitoring of large inland water bodies based on a 10-year experience with active and passive remote sensing from space
- 16:15–16:30 EGU2011-3425
Wolfgang Wagner, Marcela Doubkova, Daniel Sabel, Annett Bartsch, Michael Hornacek, Jean-Pierre Klein, and Stefan Schlaffer
 Global Land Surface Hydrology Monitoring using Sentinel-1: Opportunities and Challenges
- 16:30–16:45 EGU2011-3593
Pieter Levelt, Pepijn Veefkind, and Michiel Weele
 Contribution of sentinel 4, 5 and s5p for further understanding of air quality - climate and ozone layer - climate interactions
- 16:45–17:00 EGU2011-12208
Maria Fabrizia Buongiorno, Pierre Briole, Fabiano Costantini, Francesco Guglielmino, Mattia Marconcini, Antonios Mouratidis, Giuseppe Puglisi, Francesco Sarti, Claudia Spinetti, and Salvatore Stramondo
 Long-term experience gathered on Etna for volcano monitoring using optical and radar remote sensing, in preparation for Sentinel Missions
- 17:00–17:15 EGU2011-642
Claus Zehner
 Sentinel User Requirements from the Application Volcanic Ash Monitoring

GI-14 – GMES Sentinel Satellites: New Possibilities for Science (co-listed) – Posters

Convener: Michael Berger | Co-Conveners: Josef Aschbacher

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A105 EGU2011-13779
Paul Snoeij, Ramon Torres, Malcolm Davidson, Betlem Rosich, and Guido Levrini
 SENTINEL-1 Implementation Status
- A106 EGU2011-3754
 Bianca Hoersch, François Spoto, Philippe Martimort, Omar Sy, Claudia Isola, **Pier Bargellini**, Olivier Colin, Ferran Gascon, Umberto del Bello, Aimé Meygret and the Sentinel-2 Team
 The GMES Sentinel-2 Mission
- A107 EGU2011-14008
Ulf Klein, Bruno Berruti, Craig Donlon, Johannes Frerick, Constantin Mavrocordatos, Jens Nieke, Bernd Seitz, Juergen Stroede, Helge Rebhan, and Nicolas Picot
 Sentinel-3 Mission Status
- A108 EGU2011-11629
J. Pepijn Veefkind, Ilse Aben, Johan de Vries, Gerard Otter, Paul Ingmann, and Pieter Levelt
 TROPOMI on the ESA Sentinel-5 Precursor: Global Observations of the Atmospheric Composition for Climate and Air Quality Applications
- A109 EGU2011-1011
Jochem Verrelst, Luis Alonso, Jesus Delegido, Juan Pablo Rivera, and Jose Moreno
 Gaussian Processes regression for biophysical parameter retrieval from Sentinel-2 and Sentinel-3 data
- A110 EGU2011-8446
Jean-Damien Desjonqueres
 A new tracking mode for altimeters using an on-board digital elevation model

- A111 EGU2011-8982
 Nicolas Picot and **Francois Boy**
 SAR Data over Ocean, CNES Proposed Processing Strategy and Continuity with LRM Data.

GM1.1 – Geophysical monitoring of surface processes (EGU-AGU Geomorphology Symposium) – Orals

Convener: Michael Ellis | Co-Conveners: Arnaud Burtin

Room: 21

Chairperson: Michael Ellis, Arnaud Burtin

15:30–15:35 **Introduction**

15:35–16:05 EGU2011-1759

Dieter Rickenmann, **Jens M. Turowski**, Jonathan B. Laronne, Ronel Barzilai, Helmut Habersack, and Hugo Seitz

Experience from an indirect bedload transport measuring system with geophone sensors

16:05–16:35 EGU2011-5109

Colin Stark and Goran Ekstrom

Landslide Force History inversion: Measuring the dynamics of catastrophic landslides using seismology and satellite remote-sensing

16:35–16:50 EGU2011-838

Aleš Létal, **Libor Burian**, and Anna Smetanová

Mapping erosion-accumulation forms using electromagnetic conductivity

16:50–17:00 **Discussion**

NP2.3/AS4.20/CL4.6/GM2.7/HS12.9 – Modelling and Understanding Geophysical Systems as Complex Networks (co-organized) – Orals

Convener: Reik Donner | Co-Conveners: Jürgen Kurths, Wolfgang Schwanghart, Tobias Heckmann

Room: 13

Chairperson: n.n.

13:30–14:00 EGU2011-5364

Efi Foufoula, Ilya Zaliapin, Stefano Zanardo, Michael Ghil, Mary Power, and Bill Dietrich

Dynamic River Networks (DRNs): a new conceptual framework for modeling spatially explicit and temporally dynamic fluxes connecting channels and landscapes

14:00–14:15 EGU2011-13541

A. Surjalal Sharma, Julia Cline, Aram Vartanyan, and Samuel Wascher

The magnetosphere as a multiscale complex network

14:15–14:30 EGU2011-2459

Norbert Marwan, Jonathan F. Donges, Friedrich-Wilhelm Gerstengarbe, Peter C. Werner, and Jürgen Kurths

Graph-theoretical analysis of regional climate variability

14:30–14:45 EGU2011-12674

Cristina Masoller, Marcelo Barreiro, and Arturo Marti

Inferring long memory processes in the climate network via nonlinear time series analysis

14:45–15:00 EGU2011-9579

Milan Palus, David Hartman, Martin Vejmelka, and Dagmar Novotna

(Tele)Connectivity in climate variability at different spatial/temporal scales in relation to solar and geomagnetic activity

NP2.3/AS4.20/CL4.6/GM2.7/HS12.9 – Modelling and Understanding Geophysical Systems as Complex Networks (co-organized) – Posters

Convener: Reik Donner | Co-Conveners: Jürgen Kurths, Wolfgang Schwanghart, Tobias Heckmann

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY435 EGU2011-12579

Tobias Heckmann and Wolfgang Schwanghart

Graph theory as a tool for the analysis of cascading systems in geomorphology

XY436 EGU2011-11986

Wolfgang Schwanghart

Assessing the potential of time-slicing in numerical models of landscape evolution

- XY437 EGU2011-13884
Jobst Heitzig, Jonathan F. Donges, and Jürgen Kurths
 Agglomerative clustering of climate networks by representation optimization
- XY438 EGU2011-11598
Jakob Runge, Jonathan Donges, and Jürgen Kurths
 Climate Networks with Conditioned Links
- XY439 EGU2011-2105
Jonathan Donges, Hanna C.H. Schultz, Norbert Marwan, Yong Zou, and Jürgen Kurths
 Coupled climate networks for analysing the terrestrial atmosphere's vertical dynamical structure
- XY440 EGU2011-4528
Kira Rehfeld, Norbert Marwan, Jonathan F. Donges, and Jürgen Kurths
 Linear and nonlinear similarity measures for networks from irregularly sampled data
- XY441 EGU2011-12883
Reik Donner, Jonathan F. Donges, Martin H. Trauth, Norbert Marwan, and Jürgen Kurths
 Large-scale transitions in Plio-Pleistocene African dust flux dynamics identified by recurrence network analysis
- XY442 EGU2011-11852
Reik Donner, Jobst Heitzig, Jonathan F. Donges, Yong Zou, Norbert Marwan, and Jürgen Kurths
 The Geometry of Chaotic Dynamics - A Complex Network Perspective
- XY443 EGU2011-1749
Naoya Fujiwara and Jürgen Kurths
 Parameter estimation of nonlinear dynamical systems using synchronization
- XY444 EGU2011-9725
ham ghaffari, Farzine Nasseri, and Robert Paul Young
 Topological Spatio-Temporal Complexity Analysis of an Evolvable Rough Fracture
- XY445 EGU2011-4661
Florin Caldararu
 How Does Earth Maintain the Stability of its Rotation Motion?: An Irreversible Thermodynamics Approach
- XY446 EGU2011-5501
Ye Pu
 Parallel Applications Infrastructure for the ESM

GM4.1 – Critical Zone Processes across Environmental Gradients – Orals

Convener: François Chabaux | Co-Conveners: Steven A. Banwart

Room: 21

Chairperson: n.n.

- 08:30–08:45 EGU2011-13079
James Kirchner
 Environmental observatories and environmental gradients: challenges and opportunities for exploring the Earth's critical zone
- 08:45–09:00 EGU2011-12641
Pavel Kram and Jakub Hruska
 Streamwater patterns in geochemically contrasting monolithologic spruce catchments
- 09:00–09:15 EGU2011-7517
 Lars Lundin and **Stefan Löfgren**
 Chemical transformations along soil hydrological critical zone pathways in a Swedish till soil catchment
- 09:15–09:30 EGU2011-6967
 Philippe Merot, **Chantal Gascuel-Oudoux**, Laurent Ruiz, Gérard Gruau, Luc Aquilina, and Mickael Faucheux
 AGRHYS: an observatory of the critical zone in the context of high anthropogenic pressures (intensive livestock farming); research issues.
- 09:30–09:45 EGU2011-10787
Jean Dominique Meunier, Catherine Keller, and Flore Guntzer
 Bioavailability of Si in natural and perturbed soils
- 09:45–10:00 EGU2011-7768
Peter Stille, Anne-Désirée Schmitt, Marc Steinmann, Eric Lucot, Florence Guéguen, Florian Cobert, Laure Brioschi, Marie-Claire Pierret, and François Chabaux
 A 100 years retrospective of atmosphere and vegetation controlled chemical and isotopical evolution of a soil in a forested silicate catchment. Evidence from Sr, Nd, Pb and Ca isotopes in tree rings. (Strengbach case; Vosges mountains, France)

GM4.1 – Critical Zone Processes across Environmental Gradients – Posters

Convener: François Chabaux | Co-Conveners: Steven A. Banwart

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A112 EGU2011-2463
Svetlana M. Ilina, Yuriy V. Alekhin, Sergey A. Lapitsky, Jérôme Viers, and Oleg S. Pokrovsky
Speciation, size fractionation and migration of trace elements in small rivers from contrasting climatic environments of boreal zone
- A113 EGU2011-2945
Sylvie Derenne, Marion Bardy, Thierry Allard, Marc Benedetti, and Emmanuel Fritsch
Characterization of organic matter in a soil sequence at a laterite/podzol transition in the upper Amazon basin. Implication for organic matter exportation in black waters
- A114 EGU2011-12998
Marc Benedetti, Emily Lloret, Céline Dessert, Patrick Alberic, and Jérôme Gaillardet
Comparison of dissolved inorganic and organic carbon yields and fluxes in the watersheds of tropical volcanic islands, examples from Guadeloupe (FWI)
- A115 EGU2011-5718
Daniel Viville, François Chabaux, Marie Claire Pierret, and Peter Stille
Determination of sedimentary fluxes and their comparison with chemical weathering fluxes at the outlet of the granitic Strengbach catchment (Vosges massif, Eastern France)
- A116 EGU2011-9826
Virginie Vergnaud, Luc Aquilina, Thierry Labasque, and Anne-Catherine Pierson-Wickmann
Increase of erosion processes induced by the evolution of anthropogenic agricultural pressure during the last decades
- A117 EGU2011-2734
Jan Veizer
Coupling of terrestrial water and carbon cycles: implications for climate models
- A118 EGU2011-8782
Aurélie Violette, Yves Goddérés, Jean-Christophe Maréchal, Jean Riotte, Muddu Sekhar, and Jean-Jacques Braun
Weathering flux sensitivity to short time scale climatic variability: out of steady-state modelling study (Mule Hole watershed, South India)
- A119 EGU2011-3316
Emilie Beaulieu, Yves Goddérés, David Labat, and Yannick Donnadieu
CO₂ consumption by weathering processes at high latitudes : the case of the Mackenzie river
- A120 EGU2011-6451
Romain Millot and Philippe Négrel
Water/rock interactions: clues from experiments and Pb-Li isotopes tracing
- A121 EGU2011-7118
Jonathan Bridge, Steven Banwart and the NERC Weathering Science Consortium Team
Using integrated experiments and mathematical modeling to upscale biotic weathering processes from pore to field and global scales
- A122 EGU2011-10955
Matthias Leopold and Jörg Völkel
Imaging the architecture of the Critical Zone along an altitudinal gradient in the Rocky Mountains Front Range of Colorado, USA
- A123 EGU2011-9668
Katerina Dontsova, Genna Gallas, Edward Hunt, Jon Chorover, and Sujith Ravi
Plant-mediated weathering of granular basalt
- A124 EGU2011-10259
Damien Lemarchand, Damien Cividini, Marie-Pierre Turpault, and François Chabaux
Boron isotopes profile in temperate forest granitic soils: a clue for exploring past and present weathering conditions
- A125 EGU2011-11027
Alexandre Voinot, Damien Lemarchand, Marie-Pierre Turpault, and François Chabaux
Experimental approach reveals distinct mechanisms of biotite weathering under different chemical conditions.
- A126 EGU2011-6026
Marie-Laure Bagard, **François Chabaux**, Oleg Pokrovsky, Jérôme Viers, Anatoly Prokushkin, Sophie Rihs, Anne-Désirée Schmitt, Peter Stille, and Bernard Dupré
Temporal variations of dissolved chemical fluxes carried by Siberian rivers (Kochuchum river and Nizhnyaya Tunguska river, Central Siberia)
- A127 EGU2011-12643
Joëlle templier, Oleg Pokrovsky, Sylvie Derenne, Jérôme Viers, and François Chabaux
Influence of permafrost thawing on dissolved organic matter composition

A128 EGU2011-13052

Stefano M. Bernasconi and the BigLink Consortium Team

Chemical and biological gradients along the soil chronosequence of the Damma Glacier Critical Zone observatory (Switzerland)

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

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

Room: 21

Chairperson: Niklaus Kuhn

10:30–11:00 EGU2011-9652

Asmeret Asefaw Berhe, Margaret S. Torn, Jennifer W. Harden, Sarah D. Burton, Markus Kleber, and John Harte

Stabilization Mechanisms of Soil Organic Matter in Eroding Watersheds: Implications for Erosion induced Terrestrial Carbon Sequestration

11:00–11:15 EGU2011-2037

Jianhui Zhang, Shijun Ni, and Zhengan Su

Dual roles of tillage erosion in lateral SOC movement in the landscape

11:15–11:30 EGU2011-10747

Xiang Wang, Erik Cammeraat, Zhengang Wang, Gerard Govers, and Karsten Kalbitz

Stability of organic matter in soils of the Belgium Loess Belt upon erosion and deposition

11:30–11:45 EGU2011-12061

Shailaja Vinjili, Ruth Robinson, and Richard Bates

Investigating Peatland Hydrology and Stratigraphy using Geophysical techniques

11:45–12:00 EGU2011-644

Elisabet Nadeu, Asmeret A. Berhe, Joris de Vente, and Carolina Boix-Fayos

Soil organic carbon replacement and deposition in a highly eroding Mediterranean catchment

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

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

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Martin Evans

A129 EGU2011-3181

Martin Evans, **Fred Worrall**, and Gareth Clay

Interpreting carbon loss from surface recession in peatland gully systems

A130 EGU2011-9660

Asmeret Asefaw Berhe, Jennifer W. Harden, Margaret S. Torn, and John Harte

Lateral distribution of soil nitrogen in a naturally eroding zero-order watershed

A131 EGU2011-7079

Sebastian Dötterl, **Kristof Van Oost**, and Johan Six

Soil organic carbon pool composition in eroding landscapes and the link to topography

A132 EGU2011-9546

Claire Goulsbra, Martin Evans, and Tim Allott

Oxidation of POC in floodplain environments, evidence from eroding blanket peatlands

A133 EGU2011-11478

Laura Quijano-Gaudes, **Leticia Gaspar**, and Ana Navas

Soil organic carbon fractions in uncultivated and tilled profiles of mountain Mediterranean agroecosystems.

A134 EGU2011-13426

Yaxian Hu and Wolfgang Fister

Soil organic carbon erosion from two silty loam soils - a laboratory rainfall experiment

A135 EGU2011-13456

Wolfgang Fister and Johannes B. Ries

Wind erosion of soil organic carbon from arable land in Aragón, Spain

A136 EGU2011-13834

Richard Jones, Phillip Owens, and **Katrina Caley**

Paleolimnological records of Holocene carbon cycling: a late-glacial - Holocene record from Boswell Lake, British Columbia

A137 EGU2011-13836

Elisabeth Armstrong

Crusting and interrill C erosion: event characteristic and sediment C enrichment on silts and loams

- A138 EGU2011-13837
Holly Croft and **Karen Anderson**
New approaches of monitoring spatio-temporal soil organic carbon dynamics in agricultural systems
- A139 EGU2011-13840
Nikolaus J. Kuhn
A full emission balance for soil organic matter erosion
- A140 EGU2011-13925
Martin Evans, Fred Worrall, Steve Daniels, and Richard Pawson
Particulate carbon loss from eroding and restored peatlands at the plot and catchment scale
- A141 EGU2011-13928
Wolfgang Schwanghart and Thomas Jarmer
Spatial patterns of topsoil organic carbon in semi-arid areas - examples from SE Spain and Israel
- A142 EGU2011-13930
Erik Cammeraat, Michiel Moerland, and Joachim Hill
Spatial distribution of soil erosion and soil organic carbon in a semi-arid environment derived from hyperspectral images
- A143 EGU2011-13972
Kristof van Oost, Peter Fiener, Gerard Govers, and Zhi Wang
A spatially explicit and multi-class model to simulate sediment and SOC redistribution

GM4.3 – Process geomorphology and ecosystems – disturbance regimes and interactions – Orals

Convener: Markus Stoffel | Co-Conveners: Stephen Rice, Jens Turowski, Annett Wolf

Room: 21

Chairperson: n.n.

- 13:30–13:45 EGU2011-2164
Benoît Crouzy and Paolo Perona
Evidence and modelling biomass selection by floods in a riverbed
- 13:45–14:00 EGU2011-3988
Natalia Deligne, Katharine Cashman, Daniel Gavin, and Joshua Roering
Forest response to recent lava flow disturbances in the central Oregon Cascades, USA
- 14:00–14:15 EGU2011-5299
Colin P. Stark and Paola Passalacqua
Regolith-vegetation dynamics and landslide versus runoff erosion
- 14:15–14:30 EGU2011-5365
Philip N. Owens, Ellen L. Petticrew, Tim Giles, William H. Blake, R. Dan Moore, Brett Eaton, Roland Bol, and Neil Williams
Response of fine-grained sediment to a wildfire in British Columbia
- 14:30–14:45 EGU2011-9605
Thomas Buffin-Bélanger, Suzan McNider Taylor, Sylvio Demers, and Taylor Olsen
Analysis of ice jam floodings from the study of riparian tree scars
- 14:45–15:00 **Short poster presentations (1 slide per poster)**

GM4.3 – Process geomorphology and ecosystems – disturbance regimes and interactions – Posters

Convener: Markus Stoffel | Co-Conveners: Stephen Rice, Jens Turowski, Annett Wolf

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A144 EGU2011-10
Patrick Little, John Richardson, and Younes Alila
The role of climate and hydrogeomorphic disturbance on riverine forest dynamics and landscape pattern in the Carmanah Valley temperate rainforest of coastal British Columbia, Canada.
- A145 EGU2011-2374
Zdenek Macka and Lukas Krejci
Controls on longitudinal variability of large woody debris in submontane river - an example from the Moravka River, Czech Republic
- A146 EGU2011-3016
Mirek Smetana
Reconstruction of temporal changes of a lowland river from historical maps and recent measurements - a case study from the Morava River, Czech Republic

- A147 EGU2011-4807
Yvonne Martin, Edward Johnson, Joan Gallaway, and Olga Chaikina
Modelling Impacts of Wildfire Disturbance and Tree Population Dynamics on Tree Throw, Sediment Transport and Microtopography
- A148 EGU2011-5703
Liesbet Van der Burght, Christof Bigler, Michelle Bollschweiler, and **Markus Stoffel**
Analysis and modelling of tree succession on the 1991 Randa rockslide (Switzerland)
- A149 EGU2011-6671
Peter Vorpahl, Claudia Dislich, Helmut Elsenbeer, Michael Märker, and Boris Schröder
Modeling vegetation landslides - An extension to the infinite slope model to accommodate thick organic layers
- A150 EGU2011-8273
Markus Stoffel, Alejandro Casteller, Brian H Luckman, and Ricardo Villalba
Spatio-temporal analysis of channel wall erosion in ephemeral torrents - an example from the Patagonian Andes
- A151 EGU2011-8378
Jérôme Lopez Saez, Christophe Corona, Markus Stoffel, Georges Rovéra, Laurent Astrade, and Frédéric Berger
Mapping of areal erosion rate in marly badlands based on anatomical changes in exposed roots
- A152 EGU2011-9289
Estelle Arbellay, **Markus Stoffel**, and Michelle Bollschweiler
Wood anatomical analysis of *Alnus incana* and *Betula pendula* injured by a debris-flow event
- A153 EGU2011-11946
Mélanie Bertrand, Hervé Piégay, Didier Pont, Frédéric Liébault, and Eric Sauquet
Risk assessment of environmental changes associated with riverscape evolutions at a network scale: Application to the Drôme River basin, France
- A154 EGU2011-13875
Natalie Zurbruggen, Heike Lischke, Peter Bebi, and Harald Bugmann
Forest-avalanche feedbacks under environmental changes in the Swiss Alps
- A155 EGU2011-13994
Olimpiu T. Pop, Stefan Buimaga-Iarinca, Markus Stoffel, Titu Anghel, and Virgil Surdeanu
Reaction of Norway spruce (*Picea abies* (L.) Karst.) to sedimentation by toxic debris in the Dumitrelel Basin (sulphur mining area, Calimani Massif, Romania)

HS10.1/GM8.1 – Coasts, Estuaries and Deltas (co-organized) – Orals

Convener: Hubert H.G. Savenije | Co-Conveners: Andreas Baas, Andrea Rinaldo, Marco Toffolon, Liviu Giosan, Stefan Constantinescu, Carles Ibañez

Room: 38

Chairperson: n.n.

- 08:30–08:45 EGU2011-4867
Ping Wang, Tiffany M. Roberts, and Mark H. Horwitz
Deposition of Deepwater Horizon oil spill on Florida and Alabama beaches: At the surface and beneath
- 08:45–09:00 EGU2011-8101
David Kelly, Nicholas Dodd, and Michiel Knaapen
Modelling Tsunami Hydro- Morphodynamics For Real World Applications
- 09:00–09:15 EGU2011-1616
Thorsten Albers and Nicole von Lieberman
Limits of sediment transport formulas in the Wadden Sea - Comparison of measured and computed transport rates
- 09:15–09:30 EGU2011-7627
Andrea D'Alpaos, Simon Marius Mudd, and Luca Carniello
Analytical solutions for salt-marsh equilibrium states and transient dynamics
- 09:30–09:45 EGU2011-6644
Luana Stefanon, Luca Carniello, Andrea D'Alpaos, and Stefano Lanzoni
Laboratory observations on tidal network growth and development
- 09:45–10:00 EGU2011-13210
Fantina Madricardo, Jaroslaw Tegowski, and Sandra Donnici
A multidisciplinary approach for tidal palaeochannel reconstruction: a case study from the lagoon of Venice

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-7081
Albert Kettner, Fei Xing, Andrew Ashton, Mark Hannon, Carles Ibañez, and Liviu Giosan
 Unraveling the impact of humans versus climate on the morphological evolution of the Ebro Delta, Spain.
- 10:45–11:00 EGU2011-8495
Gilles Erkens, Kim Cohen, and Hans Middelkoop
 Quantification of the impact of pre-historic land use on suspended sediment accumulation in the Rhine delta
- 11:00–11:15 EGU2011-4564
Liviu Giosan
 Are Old World Deltas Human Constructs?
- 11:15–11:30 EGU2011-1760
Carles Ibañez, Liviu Giosan, Enrique Reyes, and John W. Day
 The Response of Deltas to Sea Level Rise under Natural- and Human-impacted Conditions
- 11:30–11:45 EGU2011-5250
Paul Liu
 Fates of River-Derived Sediments to the Sea: Longshore vs cross-shelf transport
- 11:45–12:00 EGU2011-5305
Andrew Ashton, Liviu Giosan, Albert Kettner, Eric Hutton, and Carles Ibanez
 Influence of wave angle distribution and sediment supply variation on plan-view delta morphology: application to the Ebro Delta, Spain

HS10.1/GM8.1 – Coasts, Estuaries and Deltas (co-organized) – Posters

Convener: Hubert H.G. Savenije | Co-Conveners: Andreas Baas, Andrea Rinaldo, Marco Toffolon, Liviu Giosan, Stefan Constantinescu, Carles Ibañez

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- A391 EGU2011-6464
Kwang Hee Choi, Yeong Bae Seong, Pil Mo Jung, and Su Yong Lee
 Pleistocene origin of the shore platforms defined by cosmogenic ¹⁰Be exposure dating, west coast of Korea
- A392 EGU2011-3176
Antonio Jabaloy Sánchez, Francisco José Lobo, Antonio Azor, Patricia Bárcenas, Luis Miguel Fernández-Salas, Víctor Díaz del Río, José Vicente Pérez-Peña, and Mercedes Vázquez-Vílchez
 Holocene coastline changes in the Guadalfeo River deltaic system of SE Spain
- A393 EGU2011-3392
Sukran Acikel, Mehmet Ekmekci, Levent Tezcan, Turker Kurttas, and Deniz Ozbek
 Conceptualization of a Brackish Coastal Karst System: Implications For Resilience of a Groundwater Dependent Wetland
- A394 EGU2011-3293
Elena Brambilla, Frédéric Bouchette, Georgios Sylaios, Nicolas Robin, and Raphael Certain
 Net Seaward sEdiment Transport during Storms (NESTS) at the beach of Sète, NW Mediterranean Sea
- A395 EGU2011-4953
Philippe Larroudé, Mehdi Daoui, Nicolas Robin, and Raphaël Certain
 Comparison of sediment transport formulae 2DH simulation of several storms on a sandy beach
- A396 EGU2011-5335
Andrew Ashton and Alejandra Ortiz
 Overwash controls of basic barrier response to sea-level rise and the potential for transgressive instabilities
- A397 EGU2011-6659
Oleg Andrejev, Alexander Sokolov, Tarmo Soomere, and Kai Myrberg
 Construction of environmentally friendly fairways based on properties of Lagrangian surface transport
- A398 EGU2011-12551
Mohamed Maanan, Agnès Baltzer, and Marc Robin
 Coastal sediment budget and shoreline changes for the Noirmoutier Island (France)
- A399 EGU2011-13848
Iris Möller, Jasmin Mantilla-Contreras, Tom Spencer, and Adrian Hayes
 Wave-vegetation interactions within Baltic coastal reed beds
- A400 EGU2011-9759
David Hill, Sierd de Vries, Matthieu de Schipper, and Marcel Stive
 Remote sensing of coastal waves using stereo imaging
- A401 EGU2011-7731
Ying Zhang and Huan Li
 A New Method Exploration on the Measurements of the Sand Ridges Changes in Exposed Radial Sand Ridges Area by means of Remote

- A402 EGU2011-1697
Cristina Da Lio, Andrea D'Alpaos, and Marco Marani
Biomorphological modeling of tidal landscapes: the role of physical and biological processes in determining equilibrium states and transient dynamics
- A403 EGU2011-13255
Marco Marani, Andrea D'Alpaos, Marco Santalucia, and Stefano Lanzoni
Marsh margin retreat due to wind waves
- A404 EGU2011-2195
Christian Ferrarin, Franco Arena, Miro Ga?i?, Giuliano Lorenzetti, Isac Mancero-Mosquera, Giulia Manfé, Georg Umgieser, and Luca Zaggia
Hydrodynamic circulation and sediment transport along the Venice Lagoon littoral
- A405 EGU2011-12197
Chiara De Capitani di Vimercate, Nicoletta Tambroni, and Giovanni Seminara
Is tidal flat hydrodynamics dominantly dissipative?
- A406 EGU2011-2667
Axel Winterscheid
Analysis of the near-bed morphological processes in a sediment trap in the Tidal Elbe near Hamburg
- A407 EGU2011-6027
Nicolette D. Volp, Guus S. Stelling, and Bram C. van Prooijen
Accounting for a High Resolution Bathymetry in Shallow Water Simulations on a Coarse Grid
- A408 EGU2011-3070
Jacqueline Isabella Gisen and Hubert H.G. Savenije
Salt Intrusion in Malaysian Estuaries
- A409 EGU2011-4049
Huayang Cai, Hubert H.G. Savenije, Qingshu Yang, Suying Ou, and Yaping Lei
The influence of recent change in river discharge and bathymetry on tidal wave propagation in the Modaomen estuary, China
- A410 EGU2011-4052
Huayang Cai, Hubert H.G. Savenije, and Marco Toffolon
Exploring linear and nonlinear solutions to the tidal hydraulic equations
- A411 EGU2011-10155
Hou Wen-Shang, **Teng Te-Hui**, Hsieh Hwey-Lian, Chen Chang-Po, and Huang Shou-Chung
Performance of energy-saving water exchange device used in tidal wetland to improve water quality
- A412 EGU2011-10313
Aurelia Caldararu, Gabriel Murariu, Lucian P. Georgescu, and Catalina Iticescu
The interaction between taxa metrics and environmental variables, as indicator of aquatic ecosystem state
- A413 EGU2011-12989
Maximiliano Sassi and Ton Hoitink
Towards an extension of the hydraulic geometry concept to include tidal networks
- A414 EGU2011-9386
Toru Tamura, Mark Bateman, Yoshiki Saito, Van Lap Nguyen, Thi Kim Oanh Ta, Minh Dao Le, Dan Matsumoto, and Shota Yamashita
Constraining centennial to decadal changes of a deltaic coastline over the last millennia, Mekong River delta, Vietnam
- A415 EGU2011-12914
Mikhail Lychagin, Nikolay Kasimov, and Anna Kuryakova
Environmental Geochemistry of the Volga Delta
- A416 EGU2011-11057
albert Rovira and Carles Ibáñez
Sediment Budget of the Lowermost Ebro River Basin (Catalonia, Spain)
- A417 EGU2011-12339
Alfred Vespremeanu-Stroe, Stefan Constantinescu, Luminita Preoteasa, Florin Tatui, and Liviu Giosan
Present-day changes of Sf. Gheorghe (Danube) arm mouth long-term evolution pattern
- A418 EGU2011-6794
Stefan Constantinescu, Alfred Vespremeanu-Stroe, Ionut Ovejanu, Florin Filip, and Liviu Giosan
Natural and far-field anthropogenic effects on the evolution of Sf. Gheorghe mouth
- A419 EGU2011-4898
Florin Filip, Stefan Constantinescu, and Liviu Giosan
On the evolution of Chilia distributary in Danube delta

SC10/GM11.1 – Reviewing paper manuscripts and research proposals in Geomorphology (co-organized) – Orals

Convener: Jens Turowski

Room: SM1

Chairperson: n.n.

10:30–12:00

HS2.11/NH1.14 – Hydrological extremes: from droughts to floods (co-listed) – Orals

Convener: Alberto Viglione | Co-Conveners: Jan Szolgay, Lena M. Tallaksen, Gregor Laaha

Room: 36

Chairperson: Alberto Viglione

08:30–09:00 EGU2011-10327

Thomas Kjeldsen

COST Action ES0901: European procedures for flood frequency estimation (FloodFreq)

09:00–09:15 EGU2011-5736

Olivier Payrastre, Eric Gaume, and Hervé Andrieu

Usefulness of historical information for flood frequency analyses: developments based on a case study and a Bayesian MCMC approach

09:15–09:30 EGU2011-4613

Magdalena Rogger, Jürgen Komma, Ralf Merz, Alberto Viglione, Robert Kirnbauer, and Günter Blöschl

Step changes in the flood frequency curve - process controls

09:30–09:45 EGU2011-10517

Björn Guse, Attilio Castellarin, and Bruno Merz

Improving flood frequency analysis by integration of empirical and probabilistic regional envelope curves

09:45–10:00 EGU2011-1142

Yoann Aubert, Arnaud Patrick, and Pierre Ribstein

A regional method for the prediction of flood hazards in France

COFFEE BREAK

Chairperson: Gregor Laaha

10:30–11:00 EGU2011-9912

Lena M. Tallaksen and Henny A.J. van Lanen

Droughts in Europe under current and future climate - initial results of the EU-funded WATCH project

11:00–11:15 EGU2011-6260

Gonzalo Sapriza, Jorge Jodar, and Jesus Carrera

Hydrogeological drought characterization in semi-arid zones

11:15–11:30 EGU2011-3855

Luis Samaniego, Rohini Kumar, Matthias Zink, and Sabine Attinger

Retrospective drought analysis over Germany during the last 60 yrs

11:30–11:45 EGU2011-12547

Anne Fleig, Lena Tallaksen, and Paul James

Understanding trends and changes in European streamflow and drought: circulation vs precipitation and temperature changes

11:45–12:00 EGU2011-3199

Nadia Kitova, Jean-Philippe Vidal, Jean-Michel Soubeyroux, Eric Martin, and Christian Pagé

Meteorological, agricultural and hydrological drought projections over France for the 21st century

HS2.11/NH1.14 – Hydrological extremes: from droughts to floods (co-listed) – Posters

Convener: Alberto Viglione | Co-Conveners: Jan Szolgay, Lena M. Tallaksen, Gregor Laaha

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Alberto Viglione

A204 EGU2011-1298

Giuseppina Monacelli and Maria Carmela Galluccio

Developing Tools for Hydrological Extremes Warning Systems

A205 EGU2011-1904

Anne Van Loon, Olda Rakovec, and Henny Van Lanen

Processes behind multi-year droughts in catchments with seasonal climate and storage

A206 EGU2011-2584

Lisa Stewart, Dave Morris, David Jones, and Harry Gibson

Progress in generalising a new model of rainfall depth-duration-frequency for the UK

- A207 EGU2011-3118
Marjolein van Huijgevoort, Gerald Corzo Perez, and Henny van Lanen
Multi-model analysis of global droughts in the second part of the 20th century
- A208 EGU2011-3658
Elfride Lindner and Masato Kobiyama
Proposal of Tank Moisture Index to predict floods and droughts in Peixe River watershed, Brazil
- A209 EGU2011-4530
Sven Kotlarski, Stefan Hagemann, Ralf Podzun, and Daniela Jacob
The Elbe Flooding 2002 as seen by an extended regional climate model
- A210 EGU2011-4861
Ali S Akanda, Dinesh Prashar, and Shafiqul Islam
Too Much Water, or Too Little Water? Droughts and Floods in the Ganges-Brahmaputra-Meghna Basin
- A211 EGU2011-5060
Dusan Trninic
Contribution to the low streamflow hydrological analysis of the Sava River in Croatia
- A212 EGU2011-5496
Mihael Brenčič and Andrej Gosar
Unexpected drying of the river bed after floods and weak earthquakes - case of the River Iška in the central Slovenia
- A213 EGU2011-6337
Rohini Kumar, Luis Samaniego, and Matthias Zink
Investigation on extreme runoff characteristics in major German river basins
- A214 EGU2011-6778
Arnaud Verstraete, Sebastien Gailliez, Eleonore Beckers, and **Aurore Degré**
Statistical analysis of low-flow based on short time series. The case of Wallonia
- A215 EGU2011-6987
Dagmar Stojková
Utilization of the local minimum method for assessment of groundwater runoff development and drought occurrence in Topla and Ondava River catchments, Eastern Slovakia
- A216 EGU2011-7696
Ageel Bushara, Mekonnen Gebremichael, Riccardo Rigon, and Tagreed Abdelrahim
Time series analysis of 44 years of daily-observed flows of the Nile River
- A217 EGU2011-8198
Mehmet C. Demirel and Martijn J. Booij
Low flow forecasting with a lead time of 14 days for navigation and energy supply in the Rhine River
- A218 EGU2011-9866
Benjamin Renard and the EXTRAFLO project Team
Comparing frequency analysis approaches: a data-based methodological framework.
- A219 EGU2011-12163
Giuseppe Rossi and Enrica Caporali
Regional statistical analysis of rivers low flow
- A220 EGU2011-13097
Gregor Laaha, Eric Sauquet, Hege Hisdal, Charles N. Kroll, Henny van Lanen, Lena M. Tallaksen, and Ross Woods
UNESCO-FRIEND's contribution to the PUB Benchmark Assessment Report on low flow estimation
- A221 EGU2011-13474
Chiara Bocci, Enrica Caporali, and Alessandra Petrucci
Understanding rainfall extreme values in Tuscany (Italy)
- A222 EGU2011-2114
Rudolf Brázdil, Ladislava Ježníková, Hubert Valášek, Marek Havlíček, Petr Dobrovolný, Eva Soukalová, Tomáš Jeřábek, and Hana Skokanová
Fluctuations of floods of the River Morava (Czech Republic) in A.D. 1691-2009: interactions of natural and anthropogenic factors
- A223 EGU2011-4349
Chandra Kiran B Krishnamurthy, Christina Karamperidou, **Francesco Cioffi**, and Upmanu Lall
Space-time structure of extreme precipitation in Europe over the last century: a climate perspective.
- A224 EGU2011-5037
Cristina Andrade, João A. Santos, Joaquim G. Pinto, and João Corte-Real
The hydrological impacts and large-scale atmospheric dynamics of the 2009-10 wet winter in Portugal
- A225 EGU2011-6079
Barbara Kerek, Laszlo Kuti, and Tamas Muller
Agrogeological effects of drought vulnerability
- A226 EGU2011-6771
Pierre Brigode, Pietro Bernardara, Emmanuel Paquet, Joël Gailhard, Pierre Ribstein, and Ralf Merz
Complete application of the SCHADEX method on an Austrian catchment: extreme flood estimation on the Kamp river

- A227 EGU2011-6948
Miriam Fendekova, Marian Fendek, and Milos Gregor
Base flow drought index
- A228 EGU2011-6960
Andrej Machlica, Oliver Horvat, Milos Gregor, and Miriam Fendekova
Comparison of base flow estimation using two hydrological models and some hydrological programs in the terms of groundwater drought assessment
- A229 EGU2011-7972
Wai Kwok Wong, Stein Beldring, Torill Engen-Skaugen, Ingjerd Haddeland, and Hege Hisdal
Climate change effects on summer droughts in Norway
- A230 EGU2011-9722
Hironori Inomata, Kuniyoshi Takeuchi, and Kazuhiko Fukami
Comparison of MRI-AGCM precipitation outputs with observed precipitation as a basis for the prediction of future extreme precipitation in Asian region
- A231 EGU2011-9814
Lev Kuchment and Alexander Gelfan
Coupling of probabilistic and deterministic approaches for assessment of extreme flood risk
- A232 EGU2011-10410
Wojciech Jakubowski
Application of 3-dimensional copula in the estimation of low flow extremes
- A233 EGU2011-10417
Tamara Tokarczyk and Wiviana Szalińska
The concept of the operational drought hazard assessment scheme
- A234 EGU2011-10994
Nathalie Bertrand and Jan Polcher
Droughts in the Twentieth Century: Spatial and temporal patterns of Soil moisture variations at large surface scheme
- A235 EGU2011-12071
Clorinda Cortis, Montaldo Nicola, Saba Andrea, and Albertson John D
On the estimation of the design flood of the Rio Mogoro dam in Sardinia
- A236 EGU2011-13481
Jesús López and Félix Francés
Possible influence of large-scale climate indices on the variability of maximum streamflow in rivers of Peninsular Spain
- A237 EGU2011-563
Kwok Pan Chun, Howard S Wheeler, and Christian J Onof
Non-stationary extreme rainfall estimation for the UK
- A238 EGU2011-4151
Thierry Leviandier
A probabilistic definition of a characteristic duration of floods relevant for the transformation of rainfall distribution to flood distribution
- A239 EGU2011-5842
Chi Cong Nguyen, Eric Gaume, and Olivier Payrastre
Incorporation of information on extreme floods in regional flood frequency analyses: some methodological reflections.
- A240 EGU2011-6147
Laszlo Kuti and **Barbara Kerek**
The effect of aridity on the soil-parent material-groundwater system in the Danube-Tisza Interfluve
- A241 EGU2011-8038
Ignazio Giuntoli, Benjamin Renard, and Antoine Bard
Low flow trends in France: analysis of 236 undisturbed catchments over 40 years
- A242 EGU2011-11182
Jan Kocum, Bohumír Janský, Julius Šesák, and Jakub Šurda
Potential reduction of hydrological extremes in headwaters: case study of upper Vltava River basin, Czechia
- A243 EGU2011-12117
Francesco Laio
Linear estimation of design values

HS2.20 – Floodplain processes and inundation modelling (co-listed) – Orals

Convener: Giuliano Di Baldassarre | Co-Conveners: Roger Moussa

Room: 38

Chairperson: Giuliano Di Baldassarre

- 13:30–13:45 EGU2011-2553
Guy J.-P. Schumann, Kerry Willcocks, Niko Verhoest, Hilde Vernieuwe, Patrick Matgen, and Paul D Bates
 How fuzziness increases information content
- 13:45–14:00 EGU2011-10033
Christine Gschöpf, Michael Vetter, Wolfgang Wagner, and Günter Blöschl
 Parameterising and validating hydrodynamic models of floodplains from airborne laser scanning data
- 14:00–14:15 EGU2011-10762
Laura Giustarini, Patrick Matgen, Renaud Hostache, Mara Montanari, Douglas Plaza, Valentijn R.N. Pauwels, Gabrielle J.M. De Lannoy, Laurent Pfister, Lucien Hoffmann, and Hubert H.G. Savenije
 Linking SAR-derived water level data to flood models: proof of concept
- 14:15–14:30 EGU2011-2112
Nguyen Nghia Hung, Andreas Güntner, Bruno Merz, and Heiko Apel
 Sediment dynamics in the floodplains of the Mekong Delta
- 14:30–14:45 EGU2011-8065
Jeffrey Neal, Paul Bates, Ignacio Villanueva, and Nigel Wright
 Benchmarking three two-dimensional hydraulic models within a single code
- 14:45–15:00 EGU2011-11590
Angelica Tarpanelli, Silvia Barbetta, Luca Brocca, Florisa Melone, and Tommaso Moramarco
 Improving hydraulic modelling using remote sensing-derived flood extent data

HS2.20 – Floodplain processes and inundation modelling (co-listed) – Posters

Convener: Giuliano Di Baldassarre | Co-Conveners: Roger Moussa

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Roger Moussa

- A256 EGU2011-11624
Guy J.-P. Schumann and Jeffrey C. Neal
 Capturing flood events with SAR satellites is all about being lucky or is it?
- A257 EGU2011-13236
Micha Werner and Abebe Angassa Besha
 Flood hazard assessment in data poor areas - is the limited data available reliable?
- A258 EGU2011-4622
Alessandro Masoero, Pierluigi Claps, Nathalie Asselman, and Giuliano Di Baldassarre
 The River Po flood inundation of 1951: reconstruction and analysis
- A259 EGU2011-5487
Marcela Doubkova, Catherine Ticehurst, Ben Gouweleeuw, Albert van Dijk, Steffan Schlaffer, and Wolfgang Wagner
 Can ASAR GM data be used to improve water balance estimation in areas receiving surface water inflows?
- A260 EGU2011-9854
Attilio Castellarin, Alessio Domeneghetti, and Armando Brath
 Flood risk mitigation strategies for the Po river: a quasi-2D hydraulic model for a large-scale analysis
- A261 EGU2011-10589
 Mitja Brilly and **Andrej Vidmar**
 Extreme Flood flow measurement of the Sava River
- A262 EGU2011-10975
Francesco Dottori and Ezio Todini
 Developments of a flood inundation model based on the cellular automata approach: testing different methods to improve model performance
- A263 EGU2011-11414
Giuliano Di Baldassarre, Attilio Castellarin, and Philip Padi
 Floodplain mapping in Africa: large scale analysis of flood data
- A264 EGU2011-6957
 Lenka Weyskrabová, **Tomáš Dostál**, Petr Valenta, Jana Valentová, Petr Koudelka, and Václav David
 Floodplains as Part of Flood Prevention and Conservation System
- A265 EGU2011-4152
Chiriloaei Francisca Anca and Radoane Maria
 Channel changes of Moldova River in relation with system sediment - water changes, in the last century
- A266 EGU2011-10654
Azadeh Ramesh, Thomas Glade, Gabriel Parodi, and Dinand Alkema
 Dyke failure scenarios in Ubaye River, France using hydraulic modeling

- A267 EGU2011-8052
Nicola Pasquale, Umberto Villero, Andreas Wombacher, **Paolo Perona**, and Paolo Burlando
Non-invasive calibration technique of a 2D hydrodynamic model based on pattern recognition and digital mapping

NH5.4 – Coastal flooding and erosion risk: present and future (co-listed) – Orals

Convener: Fernando J. Mendez | Co-Conveners: Barbara Zanuttigh, Robert J. Nicholls

Room: 4

Chairperson: Fernando J. Mendez

- 08:30–08:45 EGU2011-7576
Sylvain Elineau, Anne Duperret, Pascal Mallet, and Rémi Caspar
Urban tidal flooding in Normandy (Le Havre, NW France)
- 08:45–09:00 EGU2011-5578
Debora Bellafigliore, Christian Ferrarin, and Georg Umgieser
Analysis of coastal hydrodynamic variations using modeling to assess climate changes on a local scale
- 09:00–09:15 EGU2011-10394
Siddharth Narayan, Susan Hanson, Robert Nicholls, and Derek Clarke
Use of the Source - Pathway - Receptor - Consequence Model in Coastal Flood Risk Assessment
- 09:15–09:30 EGU2011-13680
Fernando J. Mendez, Inigo J. Losada, Sonia Castanedo, Roberto Minguez, Raul Medina, Borja G. Reguero, and Cristina Izaguirre
Present and Future Coastal risk assessment
- 09:30–09:45 EGU2011-6741
Andrea Critto, Silvia Torresan, Alex Zabeo, Jonathan Rizzi, Valentina Gallina, Silvio Giove, and Antonio Marcomini
DESYCO: a Decision Support System for the assessment of coastal flooding and erosion risk due to climate change
- 09:45–10:00 EGU2011-12548
Phoebe Koundouri, Bénédicte Rulleau, and Mavra Stithou
Can Coastal Europe Insure Against Climate Change: A Review of Experiences on Floods and Soil Erosion.

NH5.4 – Coastal flooding and erosion risk: present and future (co-listed) – Posters

Convener: Fernando J. Mendez | Co-Conveners: Barbara Zanuttigh, Robert J. Nicholls

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Fernando J. Mendez

- XY357 EGU2011-1694
Barbara Zanuttigh, Luisa Perini, and Paolo Mazzoli
Scenarios of combined river and sea water inundation along the Adriatic Coast
- XY358 EGU2011-6554
Victor Ntegeka, Patrick Willems, and Jaak Monbaliu
Incorporating the correlation between upstream inland, downstream coastal and surface boundary conditions into climate scenarios for flood impact analysis along the river Scheldt
- XY359 EGU2011-1540
Li-Chung Wu, Dong-Jiing Doong, Yang-Ming Fan, and Chia Chuen Kao
Information System for the Early Warning of Coastal Flooding
- XY360 EGU2011-13683
Melisa Menendez, Fernando J. Mendez, and Inigo J. Losada
Short-term extrapolation of extreme sea level statistical distributions
- XY361 EGU2011-13682
Cristina Izaguirre, Paula Camus, Melisa Menendez, Fernando J. Mendez, and Inigo J. Losada
Projection of extreme marine climate in coastal areas using statistical downscaling
- XY362 EGU2011-1221
J Javier Diez, Rosa Paz, M.Dolores Esteban, José-Santos López, and Vicente Negro
Coastal urban flood resilience vs climate change
- XY363 EGU2011-3684
Enrique Peña and Luis Cea
Baldaio lagoon hydrodynamics and flooding. Evolution of natural and shellfish production.

- XY364 EGU2011-12460
Amit Mushkin and Oded Katz
LiDAR monitoring of coastal cliff geomorphic response to an extreme winter storm with comparison to the long term retreat rate of the cliff (Eastern Mediterranean Sea, Israel)
- XY365 EGU2011-4833
Sergey Lebedev
Assimilation satellite altimetry data in flood wave propagation model of the Caspian Sea
- XY366 EGU2011-7096
Marzenna Sztobryn, **Beata Kowalska**, Jacek Lendzion, and Arkadiusz Fabrycki
Meteorological conditions of storm surges in Hel peninsula: past, present, future and impact on flooding vulnerability.
- XY367 EGU2011-8980
Gianluigi Di Paola, Ines Alberico, Pietro Aucelli, Gerardo Pappone, and Carmen Roskopf
A new GIS based methodology to assess coastal vulnerability by using a Modified Coastal Vulnerability Index (MCVI)
- XY368 EGU2011-10025
Christian Breitung, Florian Haas, Tobias Heckmann, and Michael Becht
Measuring Coastal Erosion on Moraine Cliffs of the Baltic Sea using Ground-Based LIDAR - Creating a disposition model of soft rock cliff erosion

Thursday, 07 April

ESSI8 – Uncertainty in Environmental Data and Models (co-listed) – Orals

Convener: Dan Cornford | Co-Conveners: Stefano Nativi, Edzer Pebesma, Gerard Heuvelink

Room: 19

Chairperson: n.n.

- 13:30–13:45 EGU2011-13514
Sarah Cornell
 Social perspectives on environmental risk and uncertainty
- 13:45–14:00 EGU2011-11580
Jon Olav Skøien, Grégoire Dubois, Phuong Truong, Dan Cornford, and Michael Shulz
 Uncertainty propagation in assessing ecosystems similarities - an example application using eHabitat
- 14:00–14:15 EGU2011-5932
Kristin Vogel, Carsten Riggelsen, and Frank Scherbaum
 Learning Ground Motion Models from Data using Bayesian Networks
- 14:15–14:30 EGU2011-7767
Johan deHaan, Maarten Sneep, and Pepijn Veefkind
 Retrieval algorithms for TROPOMI - improving error estimates of retrieved quantities by using Optimal Estimation with explicit a priori data
- 14:30–14:45 EGU2011-1880
Lindsay Collins, Ken Carslaw, Graham Mann, Kirsty Pringle, and Dominick Spracklen
 A systematic approach to computer model evaluation, using a global aerosol model
- 14:45–15:00 EGU2011-11001
Wouter Dorigo, Robert Parinussa, Klaus Scipal, Yi Liu, Richard de Jeu, and Wolfgang Wagner
 Error characterisation of global active and passive microwave soil moisture data sets
- Chairperson: n.n.
- 15:30–15:45 EGU2011-9677
Heiko Mueller, Qing Liu, Quan Bai, Corne Kloppers, and Andrew Terhorst
 Enabling Assessment and Propagation of Information Quality in the South Esk Hydrological Sensor Web
- 15:45–16:00 EGU2011-5384
Lucy Bastin, Matthew Williams, John Paul Gosling, Phuong Truong, Dan Cornford, Gerard Heuvelink, and Frederic Achard
 Web Based Expert Elicitation of Uncertainties in Environmental Model Inputs
- 16:00–16:15 EGU2011-8339
Judith Verstegen, Floor van der Hilst, Derek Karssenberg, and André Faaij
 Communicating Uncertainty in Spatial Decision Support Systems - a Case Study of Bioenergy-Crop Potentials in Mozambique
- 16:15–16:30 EGU2011-3230
Didier G. Leibovici, Amir Pourabdollah, and Mike Jackson
 Meta-propagation of Uncertainties for Scientific Workflow Quality Management in Interoperable Spatial Data Infrastructures
- 16:30–16:45 EGU2011-10149
Siegbert Kunz and Kym Watson
 A Spatial Information Infrastructure for linking environmental and health data: the approach to information fusion including uncertainty handling in the EO2HEAVEN project
- 16:45–17:00 EGU2011-5554
Lydia E. Gerharz, Benjamin Proß, Christoph Stasch, and Edzer Pebesma
 A Web-based Uncertainty-enabled Information System for Urban Air Quality Assessment

ESSI8 – Uncertainty in Environmental Data and Models (co-listed) – Posters

Convener: Dan Cornford | Co-Conveners: Stefano Nativi, Edzer Pebesma, Gerard Heuvelink

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Dan Cornford

- XL199 EGU2011-769
Euan Macrae, Clare Bond, and Zoe Shipton
 Quantification of uncertainty in geoscience interpretation: a statistical analysis of the factors that affect interpretational ability

- XL200 EGU2011-2965
Antonia K. Runge, Frank Scherbaum, and Carsten Riggelsen
Quantification of expert knowledge for PSHA using graphical tools
- XL201 EGU2011-2642
Christopher Moseley, Claus Döring, Bernd Ahrends, and Oleg Panferov
Uncertainties in regional climate scenarios data and their effect on results of impact models in forestry
- XL202 EGU2011-3372
Rachel Lowe, David Stephenson, Trevor Bailey, Tim Jupp, Richard Graham, and Adrian Tompkins
Communicating probabilistic climate-sensitive disease risk forecasts
- XL203 EGU2011-13186
Dan Cornford, Richard Jones, Alexis Boukouvalas, and Remi Barillec
Statistical Issues of Managing Uncertainties in Environmental Models
- XL204 EGU2011-13126
Dan Cornford, Edzer Pebesma, Stefano Nativi, Matthew Williams, Christoph Stasch, Richard Jones, and Lydia Gerharz
Realising the Uncertainty Enabled Model Web
- XL205 EGU2011-4077
Kerry Gallagher, Thomas Bodin, Malcolm Sambridge, Dominik Weiss, Malin Kylander, and David Large
Inference of abrupt changes in noisy data records using Bayesian transdimensional changepoint models
- XL206 EGU2011-5057
Matthias Vanmaercke, Jean Poesen, Faruk Ocaoglu, Mahmood Arabkhedri, and Maria Radoane
How long should we measure to obtain reliable average catchment sediment yields?
- XL207 EGU2011-11108
Mohamar Ouedraogo, **Aurore Degré**, Eléonore Beckers, and Charles Debouche
A methodology to assess the exactness of Stream Network modeling process on agricultural watersheds
- XL208 EGU2011-10893
Philipp Weihs and the actiniflux Team
The influence of the spatial resolution of topographic input data on the accuracy of 3-D UV actinic flux and irradiance calculations
- XL209 EGU2011-7018
Nadine Goris and Hendrik Elbern
Singular vector based uncertainties of initial values and emissions for the ZEPTEP-2 campaign
- XL210 EGU2011-2566
Maurice Cox, Alistair Forbes, Nigel Fox, Peter Harris, Graham Machin, and Michael de Podesta
Metrological issues in producing gridded temperature data sets
- XL211 EGU2011-9630
Greg Timms, Ben Howell, Paulo de Souza, Claire D'Este, Daniel Smith, Ross Atkins, and Chris Sharman
Automated Assessment and Visualisation of Measurement Uncertainties in a Low-Cost Marine Sensor Network
- XL212 EGU2011-7137
Richard Wartenburger, Alexander Stickler, and Stefan Brönnimann
Quality Control of Selected Historical Radiosonde Observations from 1948-1966
- XL213 EGU2011-8871
David Huard and Diane Chaumont
Bayesian uncertainty analysis of climatological changes in IDF curves
- XL214 EGU2011-7428
Nikos Gianniotis, Carsten Riggelsen, and Frank Scherbaum
Ensembles of Ground Motion Models
- XL215 EGU2011-9504
Anja Vrečko and Tomaž Podobnikar
Error Assessment of DEM generated from Contours

GM1.2/SSP3.7 – Teleconnections: Far-field links in sedimentary source-to-sink systems (GSL/GSA Session) (co-organized) – Orals

Convener: Philip Allen | Co-Conveners: Alex Whittaker

Room: 21

Chairperson: n.n.

- 10:30–10:45 EGU2011-13677
Philip Allen, John Armitage, Andrew Carter, Robert Duller, Nikolas Michael, Hugh Sinclair, and Alex Whittaker
Volume balance model for dispersal of particulate sediment in geological source-to-sink systems
- 10:45–11:00 EGU2011-13935
Silvan Hoth and Nina Kukowski
Teleconnections in orogenic belts?

- 11:00–11:15 EGU2011-6836
Gareth G. Roberts and Nicky White
 Estimating Uplift Rate Histories From River Profiles: Examples From the Colorado Plateau
- 11:15–11:30 EGU2011-877
Tom Coulthard
 How tectonic inputs are ignored by the drainage basin
- 11:30–11:45 EGU2011-13855
Emilie Pepin, Sébastien Carretier, and Gérard Herail
 Erosional feedback between mountain and foreland: Effects on internal system dynamics and the response to climate change
- 11:45–12:00 EGU2011-12907
Paolo Ballato, Angela Landgraf, Manfred Strecker, Andreas Mulch, Daniel Stockli, Norbert Nowaczyk, Anke Friedrich, Mohammad Ghassemi, and Saeid Tabatabaei
 Stratigraphic architecture of the Miocene foreland basin deposits of the Southern Alborz mountains (N Iran): tectonic versus climatic external forcing

GM1.2/SSP3.7 – Teleconnections: Far-field links in sedimentary source-to-sink systems (GSL/GSA Session) (co-organized) – Posters

Convener: Philip Allen | Co-Conveners: Alex Whittaker

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Philip Allen

- A110 EGU2011-3449
Alex Whittaker, Robert Duller, Joshua Springett, Rosie Smithells, Amy Whitchurch, and Philip Allen
 Decoding downstream trends in stratigraphic grain-size as a function of tectonic subsidence and sediment supply
- A111 EGU2011-3591
John Armitage, Rob Duller, Tom Dunkley Jones, Alex Whittaker, and Philip Allen
 Climate signals lost and found in the sediment archive
- A112 EGU2011-4467
Nikolas Michael, Maria Mange, Andy Carte, Alex Whittaker, and Philip Allen
 Functioning of a sediment routing system: teleconnection of sediment sources with depositional sinks (Eocene Escanilla Formation), Spanish Pyrenees
- A113 EGU2011-4716
Nynke Keulen and Tjerk Heijboer
 The provenance of garnet: semi-automatic plotting and classification of garnet compositions
- A114 EGU2011-10746
Linda Kirstein, Andrew Carter, and Yue-Gau Chen
 What do changes in sediment flux mean? An example of structural controls from Taiwan
- A115 EGU2011-11693
Stéphane Pochat, Laurent Husson, Jean Van Den Driessche, and Antoine Bézous
 The Strontium curve : endoreism versus exoreism

GM6.1 – The geomorphic significance of mass wasting processes – Orals

Convener: Francesco Brardinoni | Co-Conveners: Oliver Korup

Room: 21

Chairperson: Francesco Brardinoni and Oliver Korup

- 13:30–13:45 EGU2011-3362
Benjamin van Wyk de Vries, Pablo Grosse, Engiella Paguican, Mahar Lagmay, Karine Bernard, and Matthieu Kervyn
 Volcanic morphology shaped by mass wasting processes: especially debris avalanches
- 13:45–14:00 EGU2011-4772
Philippe Schoeneich
 Impact of mass movements on valley shape and profile. Two examples from the Swiss Prealps and the Massif des Ecrins
- 14:00–14:15 EGU2011-8500
Georgie Bennett, Henri Eisenbeiss, Peter Molnar, Brian McArdeell, Fritz Schlunegger, and Paolo Burlando
 The Illgraben sediment cascade, 1963-2009
- 14:15–14:30 EGU2011-5162
Michi Strasser
 An underwater perspective on the significance of mass-movement processes

- 14:30–14:45 EGU2011-10202
Mads-Peter J Dahl, Lis E Mortensen, Niels H Jensen, and Anita Veihe
 Magnitude-frequency characteristics and preparatory factors for debris slide activity in the Northern Faroe Islands
- 14:45–15:00 EGU2011-5642
Thomas Dewez and Céline Cnudde
 Coastal cliff retreat rates: a probabilistic approach fed by Terrestrial Laser Scanner monitoring data

GM6.1 – The geomorphic significance of mass wasting processes – Posters

Convener: Francesco Brardinoni | Co-Conveners: Oliver Korup

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Francesco Brardinoni and Oliver Korup

- A116 EGU2011-1548
Sara Savi, Michelle Bollschweiler, Markus Stoffel, and Fritz Schlunegger
 From source to sink: analysis of debris flow events assessed by Dendro-geomorphology.
- A117 EGU2011-2525
Christoff Andermann, Richard Gloaguen, Stephane Bonnet, Alain Crave, and Silke Merchel
 Erosion patterns in the Nepal Himalayas from river gauging, cosmogenic nuclides and precipitation data
- A118 EGU2011-3352
Oldrich Navratil, Frédéric Liébault, Laigle Dominique, Bellot Hervé, Ravanat Xavier, Ousset Frédéric, Theule Joshua, Demirdjian Jean-Luc, Segel Vincent, and Ficquet Marc
 High-frequency monitoring of debris-flows and flash floods in the French Alps
- A119 EGU2011-4017
Federica Fiorucci, Michele Santangelo, Francesca Ardizzone, Alessandro Cesare Mondini, Dino Torri, and Fausto Guzzetti
 Geometry of gullies and shallow landslides obtained from VHR stereoscopic satellite images
- A120 EGU2011-12016
Sarah Doyle and Louis Scuderi
 Remotely Identifying Geomorphic Processes on Alluvial Fans Using The Bidirectional Reflectance Distribution Function (BRDF)
- A121 EGU2011-11674
Michele Santangelo, Dario Gioia, Federica Fiorucci, Mauro Cardinali, Fausto Guzzetti, and Marcello Schiattarella
 Relationships between mass movements and tectonic uplift in the upper Sinni River valley, Calabria-Lucania border, Southern Italy
- A122 EGU2011-11877
Mélanie Bertrand, Aurélie Carlin, Frédéric Liébault, and Hervé Piégay
 Torrential susceptibility at a regional scale, Southern Alps (France)
- A123 EGU2011-5266
Ching-Ying Tsou, Masahiro Chigira, Yuki Matsushi, and Su-Chin Chen
 The interactions of channel and hillslope process of Shihmen reservoir watershed, northern Taiwan
- A124 EGU2011-9031
André Fonseca, José Luis Zêzere, and José Madeira
 Examples of deep-seated slope deformation in the headwaters of the Audour and Bouhya Rivers in the Central Rif Mountains, Morocco
- A125 EGU2011-6583
Francesco Troiani, Jorge Pedro Galve, Daniela Piacentini, and Marta Della Seta
 An integrated geomorphological approach based on Stream-Length Gradient Index to detect deep-seated landslides
- A126 EGU2011-9557
Francesco Brardinoni, Maria Mammoliti, and Alessandro Simoni
 Debris-flow sediment transfer in Alto Adige, central Eastern Alps (Italy)
- A127 EGU2011-9454
 Kevin Hyde and **Scott Woods**
 Gully erosion following wildfire in steep, mountainous terrain in the western U.S.A.
- A128 EGU2011-8368
Georgie Bennett, Peter Molnar, Oliver Korup, and Paolo Burlando
 Modelling uncertainty in short-term catchment erosion rates
- A129 EGU2011-12767
Benjamin Rudaz and Michel Jaboyedoff
 Debris flow pulse activity driven by rock collapse events and associated hazards
-

GM6.6 – The changing geomorphic effectiveness of hydrologic events – Orals

Convener: Michelle Bollschweiler | Co-Conveners: Markus Stoffel, Marco Borga, Andreas Lang, Bastiaan Notebaert

Room: 21

Chairperson: Michelle Bollschweiler

- 15:30–15:45 EGU2011-1703
Aleksander Borejsza
Alluvial archives of land use histories in small drainage basins of the Mexican highlands
- 15:45–16:00 EGU2011-5569
Annegret Larsen and Hans-Rudolf Bork
Processes and timing of sediment delivery from headwaters to trunk streams in Central Europe
- 16:00–16:15 EGU2011-7889
Esperanza Muñoz-Salinas, Paul Bishop, David Sanderson, and Tim Kinnaird
Using OSL to evaluate the impacts of land-use change with the arrival of Europeans in SE Australia: Applications on Grabben Gullen Creek (NSW, Australia)
- 16:15–16:30 EGU2011-12069
Irina Pavlova, Vincent Jomelli, Nicolas Eckert, Delphine Grancher, and Daniel Brunshtein
Debris flow and climate relations in the North French Alps region
- 16:30–16:45 EGU2011-1777
Armelle Decaulne, Ólafur Eggertsson, Estelle Arbella, Katja Laute, and Achim A. Beylich
Recent extreme snow-avalanche events tracked through tree-ring analysis - a case-study from Western Norway
- 16:45–17:00 EGU2011-3209
Christophe Corona, Jérôme Lopez Saez, and Frédéric Berger
Tree-ring reconstruction of snow avalanches: an evaluation of the dendrogeomorphic approach by comparison with historical archives on an accurately documented path (Chamonix, French Alps).

GM6.6 – The changing geomorphic effectiveness of hydrologic events – Posters

Convener: Michelle Bollschweiler | Co-Conveners: Markus Stoffel, Marco Borga, Andreas Lang, Bastiaan Notebaert

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bastiaan Notebaert

- A130 EGU2011-904
Patrick Belmont, Jane Willenbring, and Julia Marquard
Measuring event- and century-scale changes in sediment sources to the upper Mississippi River
- A131 EGU2011-1217
Romain Schläppy, Vincent Jomelli, Markus Stoffel, Delphine Grancher, Michael Deschatres, and Daniel Brunstein
Improvement of snow avalanche hazard and vulnerability assessment in the French Alps using a combination of dendrogeomorphic and statistical approaches
- A132 EGU2011-2295
Mélanie Pateau, Monique Fort, Abdelkhalak Ben Moussa, and Chakib Darraz
The assessment of erosive potential: Application to the northern Rif (Morocco)
- A133 EGU2011-2824
Stanley Trimble
Historical Gully Erosion in the Upper Mississippi River Valley Hill Country
- A134 EGU2011-3319
Tereza Novakova, Tomas Matys Grygar, Ondrej Babek, Martin Mihaljevic, Ladislav Strnad, Jan Sedlacek, and Ivo Svetlik
Dating of fluvial sediments in the Morava River watershed (Czech Republic) based on ¹³⁷Cs and Pb and Zn contamination
- A135 EGU2011-3565
Jérôme Lopez Saez, Christophe Corona, and Frédéric Berger
Assessing the reconstruction of landslide activity using anatomical changes in stems and exposed roots.
- A136 EGU2011-4402
Pantaleone De Vita and Pasquale Smaldone
Spatial distribution and hydrological threshold of the October 1954 high magnitude debris flow event occurred in the Amalfi coast (southern Italy)
- A137 EGU2011-6017
Virginia Ruiz-Villanueva, Jose-Maria Bodoque, Andres Diez-Herrero, Miguel-Angel Eguibar, Anastasio Fernandez-Yuste, and Ignacio Guitierrez
Hydro-geomorphic response of the Arroyo Cabrera 1997 flash flood (Central Spain)

- A138 EGU2011-6092
Reka-H Fülöp, Paul Bishop, Derek Fabel, Gordon T Cook, Christoph Schnabel, Philip Naysmith, Sheng Xu, and Jeremy Everest
 Using in-situ cosmogenic C-14 and Be-10 depth-profiles to quantify site-specific Holocene soil erosional events: a sensitivity analysis
- A139 EGU2011-6427
Juan Antonio Ballesteros, Jose María Bodoque, Andrés Díez-Herrero, Mauricio Sanchez-Silva, and Markus Stoffel
 Roughness calibration and peak discharge estimation based on scars on trees inflicted by woody sediments
- A140 EGU2011-7195
Raul Ortega, Veerle Vanacker, Isabel Miralles, and Nicolas Bellin
 Changes in human occupation and soil erosion rates through historical time: evidence from an agricultural complex in Toledo (Spain).
- A141 EGU2011-7922
Emily Procter, Michelle Bollschweiler, and Markus Stoffel
 A regional reconstruction of debris-flow frequency in a dolomitic valley in the western Austrian Alps
- A142 EGU2011-9116
Kazimierz Klimek
 Downstream migration of human impact in the mid-mountain foreland, temperate climatic zone.
- A143 EGU2011-9119
Filipe Carvalho and Lothar Schulte
 Assessment of Late Holocene sediment volume and accumulation rates in valley floors of the Swiss Alps: The Hasli valley and Lütschine Fan delta case study
- A144 EGU2011-9182
Markus Dotterweich
 Causes and effects of soil erosion in small catchments of Central Europe
- A145 EGU2011-9192
 Valentina Garavaglia, **Giovanni Leonelli**, Manuela Pelfini, and Laura Camilla Vezzola
 Tree-ring responses to climate and to seasonal changes in water levels of an ice-contact glacier in the Western Italian Alps
- A146 EGU2011-10422
Michelle Bollschweiler, Markus Stoffel, Marco Borga, Francesco Comiti, and Bruno Mazzorana
 Tree rings as a tool to better understand debris-flow occurrence and initiation - a case study from South Tyrol
- A147 EGU2011-10543
Barbara Kogelnig-Mayer, Markus Stoffel, Michelle Bollschweiler, and Johannes Hübl
 Frequency and magnitude reconstructions on sites influenced by debris flows and snow avalanches using tree-ring series and physically-based process models
- A148 EGU2011-12799
Michael Maerker and the EROMED Team
 EROMED Project: "Definition of an integrated model for the predictive evaluation of the water erosion phenomena in the Mediterranean environment"

GM7.6/HS12.5 – Sedimentary source-to-sink fluxes and sediment budgets (co-organized) – Orals

Convener: Achim A. Beylich | Co-Conveners: Francesco Brardinoni, Katja Laute, Susan Liermann

Room: 21

Chairperson: Achim A. Beylich, Francesco Brardinoni

- 08:30–08:45 EGU2011-1547
Sara Savi, Kevin Norton, Naki Akçar, Fritz Schlunegger, Vincenzo Picotti, and Francesco Brardinoni
 Sediment transfer in an alpine catchment, assessed by ¹⁰Be
- 08:45–09:00 EGU2011-4434
 Carolien Toté, **Gerard Govers**, Stijn Van Kerckhove, Isabel Filiberto, Gert Verstraeten, and Herman Eerens
 Effect of ENSO events on sediment production and transfer in a large coastal basin in northern Peru
- 09:00–09:15 EGU2011-6949
Gerben de Jager, Andrea Forzoni, and Joep Storms
 2DStratSim: an efficient source-to-sink model to calculate sediment volumes and forcing propagation
- 09:15–09:30 EGU2011-7052
Janneke IJmker, Georg Stauch, Kai Hartmann, Bernhard Diekmann, Elisabeth Dietze, Stephan Opitz, Bernd Wünnemann, and Frank Lehmkuhl
 Environmental reconstructions on the NE Tibetan Plateau based on sediment characteristics and multivariate statistics (EMMA)
- 09:30–09:45 EGU2011-7804
Jacob Covault, William Craddock, Brian Romans, and Andrea Fildani
 Terrestrial sediment flux: the importance of timescale of observation and drainage-basin size

09:45–10:00 EGU2011-10496

Martin Geilhausen, Jan-Christoph Otto, and Lothar Schrott

Geomorphic system analysis and paraglacial landform adjustment in two glacier forefields (Pasterze & Obersulzbachkees, Hohe Tauern, Austria)

GM7.6/HS12.5 – Sedimentary source-to-sink fluxes and sediment budgets (co-organized) – Posters

Convener: Achim A. Beylich | Co-Conveners: Francesco Brardinoni, Katja Laute, Susan Liermann

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Katja Laute, Susan Liermann

A149 EGU2011-182

Katja Laute and Achim A. Beylich

Holocene hillslope development in paraglacial tributary valleys in Nordfjord, Western Norway

A150 EGU2011-4231

Gwangsoo Lee, Daechoul Kim, and Hiil Yi

Depositional history of late Quaternary mud deposits using high resolution seismic profile in the southeastern Yellow Sea

A151 EGU2011-4874

Susan Liermann and Achim A. Beylich

Holocene to contemporary fluvial sediment fluxes and budgets of two glacier-fed valley-fjord systems in the Nordfjord area, western Norway

A152 EGU2011-5913

Ying-Ying Shih, Saulwood Lin, Kuo-Yen Wei, Jiann-Yuh Lou, and Char-Shine Liu

Climate change and variation in organic carbon deposition since the LGM in the Northeastern South China Sea

A153 EGU2011-8127

Vincent Balthazar, Veerle Vanacker, Atkilt Girma, and Semunesh Golla

Regional scale analysis of human and biophysical control of sediment yield variability in the Ethiopian Highlands

A154 EGU2011-10531

Joachim Götz, Jan-Christoph Otto, and Lothar Schrott

Quantification and temporal evolution of sediment storage in a Lateglacial inner-alpine basin (Gradenmoos, Schober Mountains, Austria)

A155 EGU2011-11494

Alexandre Loye, Benoît Mazotti, Eric Bardou, Michel Jaboyedoff, and Benjamin Rudaz

Alpine catchment sediment budget modelling through a quantitative sediment cascade procedure

A156 EGU2011-13761

Achim A. Beylich and Ulf Molau

Dynamics and Landscape Formation in Cold Environments: The DYNAFLUX / DYNACOLD Network

A157 EGU2011-13772

Armelle Decaulne, Thorsteinn Sæmundsson, and Olafur Eggertsson

Geomorphological and dendrochronological data comparison to assess the frequency and magnitude of snow-avalanches fluxes in a subpolar maritime environment

A158 EGU2011-13777

Achim A. Beylich, Katja Laute, and Susan Liermann

Holocene to contemporary source-to-sink fluxes in a valley-fjord system in western Norway: Erdalen and Bødalen site project (SedyMONT-Norway)

A159 EGU2011-13795

Louise Hansen, Susan Liermann, Katja Laute, and **Achim A. Beylich**

Volume estimation of the Bødalen delta, western Norway - a first outline

TS4.2/GD2.7/GM7.7/HS12.15/SSP3.2 – From Source to Sink: Quantification of mass transfer from mountain ranges to active sedimentary basins (co-organized) – Orals

Convener: Liviu Matenco | Co-Conveners: Paul Andriessen, Bernhard Fügenschuh, Lothar Schrott

Room: 28

Chairperson: Liviu Matenco, Paul Andriessen

15:30–15:45 EGU2011-2979

Hilmar von Eynatten

The Role of Provenance Analysis in Quantifying Source-Sink relations

- 15:45–16:00 EGU2011-7077
Andrea Forzoni, Gerben de Jager, and Joep Storms
 An integrated source-to-sink model simulating sediment flux through a river system and fluvio-deltaic stratigraphy
- 16:00–16:15 EGU2011-12137
Endre Dombrádi, Frank Horváth, Marco Sacchi, Gábor Bada, and Tamás Tóth
 The role of tectonics and erosion in the evolution of topography in the western Pannonian basin
- 16:15–16:30 EGU2011-6492
Marten ter Borgh, Iuliana Vasiliev, Marius Stoica, Slobodan Knežević, Liviu Matenco, Wout Krijgsman, Ljupko Rundic, and Sierd Cloetingh
 The age of the isolation and the evolution of the sedimentary infill of the Pannonian basin
- 16:30–16:45 EGU2011-9713
Andrei Briceag and Mihaela Melinte-Dobrinescu
 Palaeoenvironmental changes in the Holocene deposits of the Romanian Black Sea inner shelf
- 16:45–17:00 EGU2011-368
Bartosz Goleadowski, Søren Bom Nielsen, and Ole Rønø Clausen
 Norway and adjacent sedimentary basins during Cenozoic times - sediment fluxes, accumulation rates and mass balance

TS4.2/GD2.7/GM7.7/HS12.15/SSP3.2 – From Source to Sink: Quantification of mass transfer from mountain ranges to active sedimentary basins (co-organized) – Posters

Convener: Liviu Matenco | Co-Conveners: Paul Andriessen, Bernhard Fügenschuh, Lothar Schrott

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bernhard Fügenschuh, Nicolae Panin

- XL335 EGU2011-13766
Liviu Matenco, Paul Andriessen, Bernhard Fügenschuh, Lothar Schrott and the Source Sink Team
 Source to Sink systems: Quantification of mass transfer from mountain ranges to active sedimentary basins in the Danube basin system
- XL336 EGU2011-11006
Mehdi Pasha Karami, Paul Meijer, Anna von der Heydt, Arjan de Leeuw, and Rinus Wortel
 Circulation and water properties of the Miocene Mediterranean Sea and Paratethys before and after closure of the Tethys Seaway: a regional ocean model study
- XL337 EGU2011-6831
Nicolae Panin and How Kin Wong
 Sedimentation processes and depocentres of the Danube - Black Sea system
- XL338 EGU2011-5822
Ioan Munteanu, Liviu Matenco, Corneliu Dinu, and Sierd Cloetingh
 The Miocene-Quaternary evolution of NW part of Black Sea Basin and connection with Dacian Basin
- XL339 EGU2011-5780
Dorina Tambrea, Corneliu Dinu, and Ioan Munteanu
 Structural characteristics of Paleogene deposits, in central Romanian Black Sea offshore
- XL340 EGU2011-5861
Alina Floroiu, Marius Stoica, Ioan Munteanu, and Corneliu Dinu
 Stratigraphical and paleontological data from Upper Miocene-Pliocene sediments, Romanian Black Sea shelf
- XL341 EGU2011-7395
 Michal Kováč, **Rastislav Synak**, Bohuslava Sopková, and Jozef Minár
 Upper Miocene and Pliocene history of the northern Danube Basin
- XL342 EGU2011-11146
Juraj Franc?, Jan Šafanda, Vladimír Permák, Oldřich Krejčí, and Paul Andriessen
 Heat flow pattern and thermal history of the West Carpathian-Pannonian basins in respect to the uplift and erosion of the adjacent fold-and-thrust belts
- XL343 EGU2011-8367
Judit Petrovski, Balázs Székely, and Gábor Timár
 The classification of multiple window-size based sinuosity spectrum - a new evaluation method in river sinuosity calculation
- XL344 EGU2011-3513
Uros Stojadinovic, Liviu Matenco, Paul Andriessen, Marinko Toljic, and Jurgen Foeken
 From Mountain Building to Orogenic Collapse: Interferences Between Dinaridic and Carpathian Orogenic Systems
- XL345 EGU2011-12861
Martin Reiser, Bernhard Fügenschuh, and Ralf Schuster
 The tectonic evolution of the Biharia nappe system documented by structural and thermochronological data. Apuseni Mountains, Romania.

XL346 EGU2011-9947

Wolfgang Reiter, Simon Elfert, and Cornelia Spiegel

Plio-Pleistocene denudation history of the Central European Alps revealed through detrital thermochronology

XL347 EGU2011-369

Vivi Kathrine Pedersen, Søren Bom Nielsen, and Kerry Gallagher

Post-orogenic evolution of the Northeast Greenland Caledonides

HS2.14/NH3.13 – Landslide hydrology: from hillslope hydrology to landslide understanding (co-listed) – Orals

Convener: Thom Bogaard | Co-Conveners: Jean-Philippe Malet, Roberto Greco, Emilia Damiano

Room: 36

Chairperson: n.n.

08:30–09:00 EGU2011-4548

Horst H. Gerke

Modelling of preferential flow in structured soils and along hillslopes

09:00–09:15 EGU2011-2415

Leopold Stadler, Kai Germer, and **Reinhard Hinkelmann**

Developing model concepts for simulating water infiltration into macroporous soils for understanding triggers for landslides

09:15–09:30 EGU2011-8247

Lucio Olivares, Roberto Greco, Andrea Guida, and Emilia Damiano

Physical and mathematical modelling of infiltration into layered pyroclastic covered slopes

09:30–09:45 EGU2011-9906

Vincent Marc, Stéphane Ruy, Olivier Poilleux, Thomas Madre, Michel Daniel, Bruno Jouaud, and Roland Simler

Flow processes investigation in soft clay shales from tracing experiments at laboratory scale

09:45–10:00 EGU2011-13951

Dominika Krzeminska and Thom Bogaard

On the influence of fissure flow on the landslide activity

COFFEE BREAK

Chairperson: n.n.

10:30–11:00 EGU2011-13704

Alessio Ferrari, Jordi Corominas, Lyesse Laloui, and Alberto Ledesma

Linking hydrogeological and geomechanical landslide modelling

11:00–11:15 EGU2011-1396

Okan Avci, Bernd Markert, and Wolfgang Ehlers

Numerical investigation of landslide scenarios in laboratory and real scale

11:15–11:30 EGU2011-5796

Grigorios Anagnostopoulos and Paolo Burlando

Hydrological Modelling of Slope Stability

11:30–11:45 EGU2011-5707

Elisa Arnone, Leonardo V. Noto, Chiara Lepore, and Rafael L. Bras

A coupled stability and eco-hydrological model to predict shallow landslides

11:45–12:00 EGU2011-9779

Jonas von Ruette, Peter Lehmann, and Dani Or

Catchment scale hydro-mechanical modeling of shallow landslides: dynamics and spatial distribution

HS2.14/NH3.13 – Landslide hydrology: from hillslope hydrology to landslide understanding (co-listed) – Posters

Convener: Thom Bogaard | Co-Conveners: Jean-Philippe Malet, Roberto Greco, Emilia Damiano

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

A247 EGU2011-8524

Cristiano Lanni, Jeff McDonnell, Riccardo Rigon, and Jurriaan Spaaks

The influence of subsurface topography on the triggering of rainfall-induced shallow landslide: a laboratory study

- A248 EGU2011-1720
Kai Germer and Jürgen Braun
Laboratory container experiments to observe slope failures under dynamic groundwater situations
- A249 EGU2011-10058
Marco Peli, **Stefano Barontini**, Mark Bakker, Thom A. Bogaard, and Roberto Ranzi
Numerical results on perched waters in 1D and sloping 2D gradually layered soils
- A250 EGU2011-13321
Sandy Budi Wibowo
Potential indicator for future landslide behavior: duration between time of soil saturation and time of failure
- A251 EGU2011-11511
Francesco Ponziani, Nicola Berni, Claudia Pandolfo, Marco Stelluti, Luca Brocca, and Tommaso Moramarco
An integrated approach for an operative early warning system of landslides forecasting based on rainfall thresholds and soil moisture assessment
- A252 EGU2011-9284
Davide Luciano De Luca, Giovanna Capparelli, Pasquale Versace, and Daniela Biondi
Hydrological models for early warning of landslides induced by rainfall
- A253 EGU2011-4097
Federico Cervi, Vincent Marc, Catherine Bertrand, and Jean Philippe Malet
Hydrogeochemical modelling of clay-rich landslides and anomalies in groundwater compositions: evidences from case studies in the northern Apennines of Italy and South Alps of French
- A254 EGU2011-8795
Federico Cervi, Francesco Ronchetti, Alessandro Corsini, Thom Bogaard, and Vincent Marc
Hydrological and chemical characterization of an earth slide-flow
- A255 EGU2011-7646
Luzie Schnieders, Martin Kölling, and Horst D. Schulz
What pore water geochemistry can reveal - Identification and Interpretation of the Geologic Record of young slide events
- A256 EGU2011-6634
Guénolé Mainsant, Guillaume Chambon, Denis Jongmans, Laurent Baillet, Eric Larose, and Grégory Bièvre
Rheological behaviour of Trièves clay, and applications to landslide dynamics
- A257 EGU2011-6971
Amin Askarinejad, Alexander Beck, Francesca Casini, and Sarah M. Springman
Measurement of unsaturated hydraulic conductivity with the instantaneous profile method
- A258 EGU2011-7952
Benoît Deffontaines, **Sophie Violette**, Noémi d'Ozouville, Esben Auken, and Kurt Sorensen
Landslides and hydrogeology in a volcanic island revealed from transient electromagnetic data, San Cristobal, Galapagos Archipelago
- A259 EGU2011-12491
Urs Böniger, Michael Rumpf, and Jens Tronicke
Refraction seismics to explore subsurface architecture of a creeping alpine hillslope
- A260 EGU2011-7526
Steffen Popp-Hofmann, Daniel Altdorff, David Sauer, and Peter Dietrich
Goelectrical exploration of subsurface structures and processes of the Alpine "Heumöser" hillslope
- A261 EGU2011-12343
Marco Walter and Manfred Joswig
Permanent seismic monitoring of fracture processes caused by fast water infiltrations at the Heumoes slope, Austria
- A262 EGU2011-2767
Elias Garcia Urquia and Kennet Axelsson
The Role of Antecedent Rainfall on the Activation of Landslides in Tegucigalpa, Honduras
- A263 EGU2011-3633
Julien Gance, Séverine Bernardie, Rosalie Vandromme, and Gilles Grandjean
Contribution of seismic tomography for taking soil variability into account in landslide stability numerical modelling
- A264 EGU2011-13774
Emilie Garel, **Anne-Laure Cognard-Plancq**, Michel Esteves, Nicolle Mathys, Sébastien Klotz, Dominique Renard, Micheline Debroux, and Vincent Marc
Monitoring water content in highly-clayey soils: calibration, temperature dependence and field use of "WCR" probes.
- A265 EGU2011-10995
Seraina Kauer, Philipp Schneider, Cornelia Brönnimann, Manfred Stähli, and Jan Seibert
Monitoring soil moisture dynamics at a hillslope prone to slide
- A266 EGU2011-7720
Wei Meng, Thom.A. Bogaard, and Rens van Beek
Dynamic effects of vegetation on the long-term stability of slopes: components of evaporation

- A267 EGU2011-6331
Kevin Briggs, Joel Smethurst, William Powrie, and Tony O'Brien
The influence of extreme wet weather on railway embankment hydrology
- A268 EGU2011-13945
Emilie Garel, Vincent Marc, Stéphane Ruy, Jean-Philippe Malet, Anne-Laure Cognard-Plancq, Christophe Emblanch, Sébastien Klotz, and Roland Simler
Analysis of water infiltration in soft clay-shale unstable hillslopes (South French Alps): proposition of a three reservoirs conceptual model.
- A269 EGU2011-12928
Cornelia Broennimann, **Clément Michoud**, Denis Jongmans, Ludovic Baron, Michel Jaboyedoff, Eric Larose, Guenole Mainsant, and Laurent Tacher
Hydrogeological processes on the active Pont Bourquin landslide, Swiss Alps
- A270 EGU2011-3143
Stella Pytharouli and Stathis Stiros
Mandria landslide (Greece): a different approach in the determination of the kinematics of a deep-seated landslide
- A271 EGU2011-9391
Jan Wienhöfer, Falk Lindenmaier, and Erwin Zehe
Hydrology and slope mobility at the Heumöser landslide in the Austrian Alps (Vorarlberg)
- A272 EGU2011-12899
Chadi Abdallah and Nicolas Baghdadi
Monitoring and surveying the catastrophic landslide of Jwaya-Lebanon
- A273 EGU2011-13725
Frank Molkenthin, Vikramjeet Notay, and Reinhard Hinkelmann
Web-Based Information System For Multi-Scale Physical State Variables Applied In Landslide Hydrology

HS9.3 – Sediment transport monitoring and modeling in rivers (co-listed) – Orals

Convener: Alison D. Reeves | Co-Conveners: Nicolle Mathys, Dieter Rickenmann

Room: 39

Chairperson: Dr Alison Reeves

- 15:30–15:45 EGU2011-17
Eliisa Lotsari, David Wainwright, Geoffrey Corner, Petteri Alho, and Jukka Käyhkö
Dynamic relationship between discharge and river morphology in the braided sub-arctic lower Tana River: 2D-morphology modelling as a tool for river channel change detection
- 15:45–16:00 EGU2011-2284
Markus Promny
Monitoring and Modeling of Sediment Transport Velocities
- 16:00–16:15 EGU2011-5021
Matthias Vanmaercke, Jean Poesen, Gerard Govers, Gert Verstraeten, and Jolina Vanesch
Towards the prediction of pre-anthropocene sediment yields for small catchments in Europe
- 16:15–16:30 EGU2011-9046
Henri Etcheber, **Aldo Sottolichio**, Sabine Schmidt, Gérard Chabaux, Patrice Castaing, and Eric Maneux
Long-term monitoring of water quality and suspended sediment transport in the Gironde fluvial-estuarine system (MAGEST program)
- 16:30–16:45 EGU2011-11402
Maximiliano Sassi and Ton Hoitink
Quantifying suspended sediment discharge in the Mahakam river and tributary channels
- 16:45–17:00 EGU2011-5493
Johannes Schneider, Jens Turowski, and Dieter Rickenmann
Comparing fractional bedload transport equations with field data

HS9.3 – Sediment transport monitoring and modeling in rivers (co-listed) – Posters

Convener: Alison D. Reeves | Co-Conveners: Nicolle Mathys, Dieter Rickenmann

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Dr Dieter Rickenmann

- A398 EGU2011-18
Eliisa Lotsari, Juha Aaltonen, Noora Veijalainen, Petteri Alho, and Jukka Käyhkö
River Kokemäenjoki (SW Finland) in the 21st century - modelling impacts of climate change and isostatic land uplift on discharges and morphology

- A399 EGU2011-1026
José A. López-Tarazón, Ramon J. Batalla, Damià Vericat, and J. Carles Balasch
The hydrosedimentological response to rainfall of a mountainous catchment: the river Isabena
- A400 EGU2011-1368
Michael Nones, Mariateresa Franzoia, and Giampaolo Di Silvio
Computation of sediment transport in rivers: analysis of the sediment rating curves
- A401 EGU2011-2051
Gary Sheridan, Patrick Lane, Christopher Sherwin, and Phillip Noske
Post-fire changes in sediment rating curves in a wet Eucalyptus forest in SE Australia
- A402 EGU2011-3291
Achim A. Beylich, Katja Laute, and Susan Liermann
Analysis of bedload transport in steep mountain streams: Integrating field measurements with flume experiments
- A403 EGU2011-4156
M. Mercedes Taboada-Castro, M. Luz Rodríguez-Blanco, **Laura Palleiro**, and M. Teresa Taboada-Castro
Investigation of sediment yield under different flow conditions: an example in humid temperate environment
- A404 EGU2011-4369
Fabian Friedl and Michael Chiari
An experimental study on bedload transport measurements in a steep flume
- A405 EGU2011-6823
Daniel Buscombe and Daniel Conley
Formula for Motion Threshold per Grain Size for Graded Sediments in Steady Flows
- A406 EGU2011-10463
Annamaria De Vincenzo, Francesco Brancati, and Rosa Viparelli
A Methodological approach for calculating braided gravel bed stream geometry
- A407 EGU2011-10756
Antonio Moñino, Agustín Millares, Javier Herrero, María José Polo, and Miguel Ángel Losada
Measurement of infilling rate in a small reservoir in a Mediterranean semi-arid area
- A408 EGU2011-11350
Julien Duc, Jacques Béchet, Alexandre Loye, Michel Jaboyedoff, Nicolle Mathys, Sébastien Klotz, André Jacomé, Julien Travelletti, and Jean Philippe Malet
Quantification of seasonal erosion processes at the scale of the elementary gully using high resolution terrestrial laser scanner in Draix (south French Alps).
- A409 EGU2011-12099
A.N. Thanos Papanicolaou and Achilleas Tsakiris
Calibration of an Acoustic Sensor (Geophone) for Continuous Bedload Monitoring in Mountainous Streams
- A410 EGU2011-13076
Patrick Meunier, Arnaud Burtin, Morgane Houssais, Pauline Souloumiac, and Francois Metivier
Discharge and sediment transport of a small braiding river inferred from seismic survey.

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

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

Room: 32

Chairperson: Thomas Platz, Matteo Massironi

- 10:30–10:45 EGU2011-1570
Ronald Greeley
Terrestrial analogs to planetary basaltic volcanism
- 10:45–11:00 EGU2011-4197
Krishan Khurana, Xianzhe Jia, Margaret Kivelson, Francis Nimmo, Gerald Schubert, and Christopher Russell
Evidence of a global magma ocean in Io's interior
- 11:00–11:15 EGU2011-658
Paul Byrne, Eoghan Holohan, Matthieu Kervyn, Benjamin van Wyk de Vries, John Murray, and Valentin Troll
A Spreading-Sagging Continuum for the Structure of Large Volcanoes on the Terrestrial Planets
- 11:15–11:30 EGU2011-11521
Rikke Pedersen
Remote sensing observations of active volcanic and tectonic processes in Iceland
- 11:30–11:45 EGU2011-814
Riccardo Pozzobon, Andrea Bistacchi, and Matteo Massironi
Association of cone sheets and radial dykes on Ascraeus Mons (Mars): structural analysis and modelling

11:45–12:00 EGU2011-8785

Amanda L. Nahm, Richard A. Schultz, and David A. Kring

Forward mechanical modeling of the Rupes Recta normal fault in eastern Mare Nubium, the Moon

12:00–12:15 **Poster Introductions & Discussion**

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

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

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Matteo Massironi, Paul Byrne

Z114 EGU2011-14136

Paul K. Byrne, Benjamin van Wyk de Vries, Eoghan P. Holohan, John B. Murray, and Valentin R. Troll
The Influence of Lithospheric Flexure Upon the Structure of Olympus Mons

Z116 EGU2011-7772

Klaus Gwinner, James W. Head, and Lionel Wilson

Types, morphology, and significance of vent structures on the summit and flanks of Pavonis Mons, Mars

Z117 EGU2011-12975

Thomas Platz, Ernst Hauber, Oryaëlle Chevrel, Laetitia Le Deit, Frank Trauthan, Frank Preusker, Ralf Jaumann, and Gerhard Neukum

Preliminary results on lava flow morphology and vent structures: an example from the Western Volcanic Zone, Iceland

Z118 EGU2011-12860

Ernst Hauber, **Thomas Platz**, Laetitia Le Deit, Oryaëlle Chevrel, Bernd Hoffmann, Lena Kuhlmann, Frank Trauthan, Frank Preusker, and Ralf Jaumann

Mapping of Postglacial Icelandic Lava Flows as Analogues for Mars

Z119 EGU2011-13166

Thomas Platz and Greg Michael

Eruption history of the Elysium Volcanic Centre, Mars

Z120 EGU2011-8545

Anne Deschamps, Pascal Allemand, and Christophe Delacourt

Comparative study of volcanic landforms on Mars and on the East Pacific Rise using high-resolution AUV and HiRISE data

Z121 EGU2011-6316

Anezina Solomonidou, Georgios Bampasidis, Athena Coustenis, Konstantinos Kyriakopoulos, Karen Seymour, Mathieu Hirtzig, Emmanuel Bratsolis, and Xenophon Moussas

Morphotectonic and cryovolcanic structures on Titan and Enceladus with resemblance to terrestrial morphologies

Z122 EGU2011-165

Munkhtsetseg Oidov and **Hirokazu Fujimaki**

Magmatism in Tsagaandelger, Eastern Mongolian Volcanic belt: Petrological and Isotopic Constraints on Mesozoic Geodynamic Setting

Z123 EGU2011-3480

Glaciale Tiu, Benjamin van Wyk de Vries, and Alfredo Mahar Francisco Lagmay

Volcanic morphology, volcano alignment and basement structure in the Limagne Fault and Chaîne des Puys: perspectives for remote sensing in the solar system

Z124 EGU2011-2451

Clinton Conrad, Todd Bianco, Eugene Smith, and Paul Wessel

Patterns of intraplate volcanism on Earth controlled by asthenospheric shear

SSS1.7 – Badlands and badlands processes in relation to regolith, soil, biodiversity and human pressure (co-listed) –

Orals

Convener: ESTELA NADAL ROMERO | Co-Conveners: Aaron YAIR, Dino Torri, Rorke Bryan

Room: 9

Chairperson: Dino Torri

08:30–08:45 EGU2011-13964

Rorke Bryan

Considerations on the Role and Significance of Badland Research

08:45–09:00 EGU2011-2026

aaron Yair, rorke Bryan, nikolaus Kuhn, and **hanoch Lavee**

Sensitivity of the Zin badlands (Israel) to climate change

- 09:00–09:15 EGU2011-30
Hazel Faulkner
 Badlands in marl lithologies: a field guide to soil dispersion, sub-surface erosion and piping-origin gullies
- 09:15–09:30 EGU2011-7413
Kohei Higuchi and Masahiro Chigira
 Periodic change of erosion and the weathering process in a badland of Plio-Pleistocene mudstone in southwestern Taiwan
- 09:30–09:45 EGU2011-13942
Francesc Gallart, Nuria Pérez Gallego, Jerome Latron, Nuria Martínez Carreras, and Guillaume Nord
 Badland dynamics and its role in runoff and sediment response in a small Mediterranean mountain basin (Vallcebre, eastern Pyrenees)
- 09:45–10:00 EGU2011-3184
John Boardman
 Badland development in South Africa

SSS1.7 – Badlands and badlands processes in relation to regolith, soil, biodiversity and human pressure (co-listed) –

Posters

Convener: ESTELA NADAL ROMERO | Co-Conveners: Aaron YAIR, Dino Torri, Rorke Bryan

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY733 EGU2011-1624
 Milica Kasanin-Grubin, **Nikolaus J. Kuhn**, Aaron Yair, Rorke Bryan, and Wolfgang Schwanghart
 Badland evolution and climate change: a sensitivity analysis
- XY734 EGU2011-13873
Nikolaus J. Kuhn
 Climate change in badlands: impact or no impact?
- XY735 EGU2011-13966
Milica Kasanin-Grubin and Rorke Bryan
 Clay mineralogy as a crucial factor in badland hillslope processes
- XY736 EGU2011-2867
Nikolaus J. Kuhn
 Badlands as analogue models for landscape change: a case study from the Negev
- XY737 EGU2011-2085
David Regües and Estela Nadal-Romero
 Uncertainty on the evaluation of sediment yield from badland areas: suspended sediment transport estimation in the Araguás catchment (Central Spanish Pyrenees).
- XY738 EGU2011-13497
Nicolle Mathys, Sebastien Klotz, and Freddy Rey
 Erosion and sediment yield in mountain Mediterranean badlands catchments: processes and factors observed in the Experimental catchments of Draix, (Alpes-de-haute-Provence), France
- XY739 EGU2011-5086
Artemi Cerdà and Félix Ángel González-Peñaloza
 The infiltration process in the Badlands of eastern Iberian Peninsula
- XY740 EGU2011-649
Estela Nadal Romero, Juan Francisco Martínez Murillo, Matthias Vanmaercke, and Jean Poesen
 Erosion and sediment yield in Mediterranean badland areas
- XY741 EGU2011-650
Juan Francisco Martínez-Murillo, Estela Nadal-Romero, David Regües, Artemi Cerdà, and Jean Poesen
 Assessment of the hydrological and erosional response of Mediterranean badlands through rainfall simulation experiments: a review
- XY742 EGU2011-7256
 Lorenzo Borselli, Rorke Bryan, Federica Fiorucci, Alessandro C. Mondini, Jean Poesen, Mauro Rossi, and **Dino Torri**
 Rill and pipe channel characteristics in badlands with a case study in Tuscany (Italy)
- XY743 EGU2011-13854
Artemi Cerdà, Félix Ángel González Peñaloza, and Merche B. Bodí
 Road embankments versus badlands. Are they the same from an erosional point of view?
- XY744 EGU2011-8356
Sandra Werb, Susanna Werth, Till Francke, and Axel Bronstert
 Surveying accuracy of badland surface morphology in Central Spanish Pyrenees using a high resolution terrestrial LIDAR scanner

- XY745 EGU2011-8823
Jose Maria Bodoque, Juan Antonio Ballesteros, Ana Lucía, José Francisco Martín Duque, Juan Manuel Rubiales, and Mar Genova
Applying dendrogeomorphological analysis for measuring medium-term sheet erosion: a case study of sand slope gullies at central Iberia
- XY746 EGU2011-7608
Laouina Abdellah, Machouri Nadia, Chaker Miloud, Aderghal Mohammed, Alkarkouri Jamal, and Sfa Mohammed
The biologic correction of gullies by *Atriplex halimus* plantation
- XY747 EGU2011-14027
Simona Maccherini, Michela Marignani, Margherita Gioria, Monia Renzi, Elisa Santi, Dino Torri, Jonas Tundo, and Olivier Honnay
Determinants of plant community composition of remnant biancane badlands: a hierarchical approach to quantify species-environment relationships
- XY748 EGU2011-2942
Kristien Petric, **Estela Nadal Romero**, Els Verachtert, Esther Bochet, and Jean Poesen
Spatial patterns of vegetation in sub-humid badlands: a case study from the Central Spanish Pyrenees

Friday, 08 April

GM2.2/NH10.3/PS10.2 – Digital Landscapes: From Laser Scanning and High-resolution Measurement Technologies to Quantitative Interrogation of Geomorphic Processes (co-organized) – Orals

Convener: John K. Hillier | Co-Conveners: Sanjeev Gupta, Lara Kalnins, David Mason, Paolo Tarolli, Paola Passalacqua, Dirk Rieke-Zapp, Balázs Székely, Bernhard Höfle, Norbert Pfeifer, Jim Chandler, Alexander Reiterer

Room: 21

Chairperson: n.n.

- 10:30–10:45 EGU2011-633
Elina Kasvi, Hannu Hyypä, Anttoni Jaakkola, Joni Mäkinen, Juha Hyypä, and Petteri Alho
 Estimating sediment features and hydraulic parameters on a sand bedded point bar using LiDAR height and intensity and high resolution UAV-based images
- 10:45–11:00 EGU2011-9479
Sarah Derouin and Lucille Piety
 Seeing faults through the trees: A case study on using LiDAR in highly vegetated areas to determine fault activity and geomorphology
- 11:00–11:15 EGU2011-4647
Francesco Zucca, Fabio Remondino, Giorgio Agugiaro, Marco Franceschi, Davide Zizioli, and Christian Peloso
 Mapping the vertical: Oblique LIDAR acquisition for mapping Dolomites cliff (NE Italy)
- 11:15–11:30 EGU2011-11858
Christoph Siart, Markus Forbriger, and Matthieu Ghilardi
 Fusing surface and subsurface geodata: a case study on Cretan karst landforms
- 11:30–11:45 EGU2011-10198
Robert Barneveld
 Measuring microtopography with Terrestrial Laser Scanning: Aspects of data quality
- 11:45–12:00 EGU2011-7933
Gottfried Mandlbauer, Johannes Otepka, Wilfried Karel, Markus Hollaus, Camillo Ressler, Alexander Haring, Christian Briesse, Gabor Molnar, and Bernhard Höfle
 OPALS - a comprehensive laser scanning software for geomorphological analysis

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-11459
Jean-Stephane Bailly and Carole Delenne
 Riverbed image simulation for a better exploration of coarse-grained sediment sizing image analysis methods
- 13:45–14:00 EGU2011-3631
Thomas Dewez, Christian Mathon, Hiromi Kobayashi, Aude Nachbaur, Olivier Sedan, Frederic Berger, Emilie Nowak, and Emmanuel Des Gares
 Real-size rockfall trajectory and derived mechanical quantities from close-range stereo video experiment in Tahiti, French Polynesia
- 14:00–14:15 EGU2011-1329
Dirk Rieke-Zapp
 In situ measurement of bedrock erosion
- 14:15–14:30 EGU2011-4479
Rafael Caduff, Fritz Schlunegger, Andrew Kos, Charles Werner, and Andreas Wiesmann
 Assessment of precise spatial and temporal slope deformation with the GAMMA Portable Radar Interferometer in the Illgraben debris flow catchment, Central Swiss Alps
- 14:30–14:45 EGU2011-5193
Chih-Ming Tseng, Ching Weei Lin, and Jin King Liu
 Application of High-resolution LiDAR-derived DEM in Landslide Volume Estimation
- 14:45–15:00 EGU2011-4065
David Hodgetts
 Quantitative geology from digital outcrop data for the characterisation of hydrocarbon reservoirs.

Chairperson: Paola Passalacqua

- 15:30–15:45 EGU2011-10133
Tim Le Bas, Aaron Micallef, and Philippe Blondel
 Use of texture analysis techniques for digital mapping of underwater environments: The case of a submerged karstic landscape offshore Malta.
- 15:45–16:00 EGU2011-5594
Paolo Tarolli and Paola Passalacqua
 The statistical signature of Earth-Surface Processes
- 16:00–16:15 EGU2011-2980
Giulia Sofia, Paolo Tarolli, Federico Cazorzi, and Giancarlo Dalla Fontana
 Channel network identification from high-resolution DTM: a statistical approach.
- 16:15–16:30 EGU2011-7484
John Hillier and Mike Smith
 Testing Quantification Methods with Synthetic Drumlins in a real DEM
- 16:30–16:45 EGU2011-2646
Florent Levasseur, Jean-Stéphane Bailly, Philippe Lagacherie, Colin François, and Rabotin Michaël
 Uncertainties of water flow-paths in digital cultivated landscape : consequences on overland flows and channel run-off
- 16:45–17:00 EGU2011-9831
Jungrack Kim, ShiYuan Lin, JeongWoo Hong, SangYoon Yun, Youghwi Kim, and HeaWoon Yun
 Very high resolution Martian topographic data processing and its application for virtual reality implementation

GM2.2/NH10.3/PS10.2 – Digital Landscapes: From Laser Scanning and High-resolution Measurement Technologies to Quantitative Interrogation of Geomorphic Processes (co-organized) – Posters

Convener: John K. Hillier | Co-Conveners: Sanjeev Gupta, Lara Kalnins, David Mason, Paolo Tarolli, Paola Passalacqua, Dirk Rieke-Zapp, Balázs Székely, Bernhard Höfle, Norbert Pfeifer, Jim Chandler, Alexander Reiterer

Hall A | Display Time 08:00–17:00

Author in Attendance: 08:30–10:00

Chairperson: n.n.

- A94 EGU2011-923
Susanne Schnitzer
 Estimation of mass loss due to soil erosion in the Loess Plateau in China: A comparison of the erosion model RUSLE, multi-temporal DEMs and GRACE satellite gravimetry.
- A95 EGU2011-12089
Maximilian Sproß, Erik Bollmann, Andrea Fischer, Lorenzo Rieg, Rudolf Sailer, and Johann Stötter
 Spatial statistical analysis on glacier surface elevation change based on ALS data
- A96 EGU2011-1147
Stefan Harnischmacher and Harald Zepp
 Detection and Quantification of Mining Subsidence in the Ruhr District (Germany) Using Historic Maps and Digital Elevation Models
- A97 EGU2011-12173
Alberto Guarnieri, Nicola Milan, Antonio Vettore, and Paolo Tarolli
 A prototype of landslide observatory in the eastern Italian Alps
- A98 EGU2011-12225
Alice Ciulli, Gianluca Chessa, Leonardo Disperati, Simone Gadenz, and Massimo Perna
 Topographic units mapping from DEM analysis: evaluation of the Upslope Position Index (UPI) in two Tuscany (Italy) study areas
- A99 EGU2011-12557
Vincenzo D'Agostino and Gabriele Bertoldi
 Hazard hierarchization of debris flow sediment source areas
- A100 EGU2011-5309
Paola Passalacqua, Colin P. Stark, Yuichi S. Hayakawa, Zhou Lin, Takashi Oguchi, and Tsuyoshi Hattaji
 The objective mapping of channel initiation and landsliding on lidar DTMs in Japan and their interaction with vegetation
- A101 EGU2011-8188
Marco Cavalli, Sebastiano Trevisani, and Lorenzo Marchi
 Geomorphometric assessment of spatial sediment connectivity in small alpine catchments
- A102 EGU2011-8286
Marco Cavalli, Sebastiano Trevisani, Beatrice Goldin, Elena Mion, and Lorenzo Marchi
 Derivation of channel network of an alpine region from high-resolution DTM: the example of the Autonomous Province of Trento (Italy)
- A103 EGU2011-10449
Markus Thiel, Tobias Heckmann, Florian Haas, and Michael Becht
 Quantification of coarse sediment connectivity in alpine geosystems

- A104 EGU2011-3804
Federico Cazorzi, Paolo Tarolli, Giulia Sofia, Alberto De Luca, and Giancarlo Dalla Fontana
Surface water storage in alluvial and urbanized plains: the effectiveness of high resolution topography
- A105 EGU2011-12442
Bastiaan Notebaert, Piégay Hervé, and Alber Adrien
Structural properties of floodplain width in the Rhone catchment: methodology and results
- A106 EGU2011-12580
Svetlana Samsonova and Aleksandr Koshkarev
Eco-geomorphological digital model of Moscow city
- A107 EGU2011-11648
Wolfgang Schwanghart, Geoff Groom, Nikolaus J. Kuhn, and Goswin Heckrath
Automatic identification of water-logged agricultural areas using LiDAR DEMs
- A108 EGU2011-398
pradeep Lodha
GIS based critical watershed analysis for soil conservation management using SWAT model
- A109 EGU2011-14048
Domenica Costantino and Maria Giuseppa Angelini
Production of checked DTM by Terrestrial Laser Scanner (TLS)
- A110 EGU2011-4886
Roderick OHara and Gerhard Neukum
Refined elevation models and reflectance for HRSC images
- A111 EGU2011-10908
Luigi Perotti, **Massimo Lanfranco**, Marco Giardino, and Paolo Zamparutti
Creation and test of a mobile GIS application to support field data collection and mapping activities
- A112 EGU2011-1555
Lorenzo Picco, Paolo Vitti, Luca Mao, Diego Ravazzolo, **Emanuel Rigon**, Johnny Moretto, and Mario Aristide Lenzi
Large Woody Debris measurements, in a gravel bed braided river environment, using Terrestrial Laser Scanner: the Piave River study case.
- A113 EGU2011-3570
Thomas Dewez, Aude Nachbaur, Olivier Sedan, Emilie Nowak, and Emmanuel Des Garets
Monitoring the degradation of weathered volcanic man-made escarpments by close-range photogrammetry in Tahiti, French Polynesia
- A114 EGU2011-4378
Greg Hancock and **Garry Willgoose**
Rapid erosion assessment on disturbed site: Quantification of erosion rates using laser scanning and modelling on a mine waste rock dump
- A115 EGU2011-10667
Dave Favis-Mortlock
The role of high-resolution microtopographic grids in validating the RillGrow model
- A116 EGU2011-12718
Michael Winkler, W. Tad Pfeffer, Klaus Hanke, and Georg Kaser
Close range photogrammetry reveals recession pattern of Kilimanjaro ice cliffs
- A117 EGU2011-12931
Muhammad Anggri Setiawan
Evaluation of interpolation methods in tillage surface area
- A118 EGU2011-13663
Inna Stepanova
On the finding of the earth's surface topography with the help of toda-hierachy
- A119 EGU2011-14050
Sierd de Vries, Roderik Lindenbergh, Sylvie Soudarissanane, and Matthieu de Schipper
Monitoring short term aeolian beach sand transport using terrestrial laser scanning
- A120 EGU2011-410
Tanja Vicovac, Alexander Reiterer, and Dirk Rieke-Zapp
Change Detection of Geological Surfaces by Image-Based Sensor Systems
- A121 EGU2011-6204
Luca Carturan, Simone Calligaro, Alberto Guarnieri, Nicola Milan, Paolo Tarolli, Daniele Moro, Giovanni Baldassi, Federico Cazorzi, Antonio Vettore, and Giancarlo Dalla Fontana
Terrestrial Laser Scanner survey of two small glacial formations in the Eastern Italian Alps
- A122 EGU2011-11627
Hubert Lehner, Christian Briese, and Rudolf Sailer
Radiometric calibration of airborne laser scanning data: case study rockglaciers
- A123 EGU2011-6847
Rudolf Sailer, Erik Bollmann, Johann Stötter, Susanna Hoinkes, Lorenzo Rieg, and Maximilian Spross
Quantification of morphodynamic processes in glaciated and recently deglaciated terrain

- A124 EGU2011-10541
Ekaterina Vsemirnova, Richard Jones, Jiulin Guo, and Kenneth McCaffrey
Quantitative characterization of fracture networks using terrestrial lidar data, an example from high porosity sandstones at Appleby, UK
- A125 EGU2011-10815
Luigi Perotti, Marco Bacenetti, Marco Giardino, and Stefano Marta
Geomorphological and geostructural characterisation of Veny Valley (Courmayeur, Italy) using an integrated field-based, Lidar and Remote Sensing techniques
- A126 EGU2011-8362
Petteri Alho, Matti Vaaja, Elina Kasvi, Antero Kukko, Hannu Hyyppä, Juha Hyyppä, Harri Kaartine, Matti Kurkela, and Claude Flener
Multitemporal MLS data and terrestrial photogrammetry in a change detection of point bars
- A127 EGU2011-12268
Markus Forbriger, Karsten Schitteck, Christoph Siart, and Bernhard Höfle
New approaches in vegetation mapping - use of terrestrial laser scanning on high Andean cushion peatlands
- A128 EGU2011-13847
Andreas Roncat, Balázs Székely, Gábor Molnár, András Zámolyi, Angelika Pocsai, and Camillo Ressler
High-resolution terrestrial laser scanning of temporary small-scale terraces in a dynamic landscape - a pilot study at the Doren landslide
- A129 EGU2011-14039
Andreas Roncat, Yuri Dublyansky, Christoph Spötl, Peter Dorninger, and Norbert Pfeifer
A full-3D laser-scan mapping of a hypogene cave: a morphogenetic study of Märchenhöhle, Austria
- A130 EGU2011-10670
Markus Hollaus, Norbert Pfeifer, Andreas Roncat, and Hieu Van Duong
Analyzing ICESat/GLAS derived terrain roughness parameter using airborne LiDAR data
- A131 EGU2011-8673
Martin Rutzinger, Bernhard Höfle, and Korbinian Kringer
Quality of geomorphological breaklines extracted from airborne laser scanning
- A132 EGU2011-8512
Cristina Castagnetti, Eleonora Bertacchini, **Alessandro Capra**, Marco Dubbini, Riccardo Rivola, and Alessandro Corsini
Integrating LIDAR and terrestrial laser scanning for a detailed description of landslides geomorphology

HS9.2/GM3.4/SSS2.10 – Erosion and sediment delivery in agricultural landscapes: monitoring, modelling and management (co-organized) – Orals

Convener: Stéphane Follain | Co-Conveners: Rossano Ciampalini, Peter Fiener, João Pedro Nunes

Room: 39

Chairperson: João Pedro Nunes

- 08:30–08:45 EGU2011-8936
Léonard Bernard-Jannin, Maria Ermitas Rial, Maria Luz Rodríguez-Blanco, José António Rodríguez-Suárez, and João Pedro Nunes
Runoff generation and soil erosion processes at multiple spatial scales in a Mediterranean mountain catchment
- 08:45–09:00 EGU2011-13794
Lillian Øygarden, Johannes Deelstra, Anne-Grete B. Blankenberg, and Hans Olav Eggestad
Climate change, erosion and nutrient loss from agricultural dominated catchments in Norway
- 09:00–09:15 EGU2011-5208
Wei Wei and Liding Chen
Responses of water erosion processes to natural rainfall change in terrestrial ecosystems
- 09:15–09:30 EGU2011-10188
Saskia Keesstra and Arnaud Temme
Modelling daily sediment delivery in meso-scale catchments: LAPSUS-D: a test for temperate climate.
- 09:30–10:00 EGU2011-6997
Dave Favis-Mortlock and John Boardman
What more do we know, twenty years later? Updating the potential impacts of future climate change on soil erosion by water on the English South Downs

COFFEE BREAK

Chairperson: Peter Fiener

- 10:30–10:45 EGU2011-1620
Nikolaus J. Kuhn
Assessing lateral organic Carbon movement in small agricultural catchments
- 10:45–11:00 EGU2011-10435
Rossano Ciampalini, Stéphane Follain, and Yves Le Bissonnais
LandSoil: a model for the analysis of the impact of erosion on agricultural landscape evolution
- 11:00–11:15 EGU2011-6015
Jana Moravcova, Tomas Pavlicek, Monika Koupilova, Pavel Ondr, Tomas Kvitek, and Jan Vachal
The comparison between theoretical annual loss of sediments and real sediment loss during the extreme rainfall runoff events
- 11:15–11:30 EGU2011-4700
Ronald Pöppel, Margreth Keiler, Kirsten von Elverfeldt, and Thomas Glade
The effects of different land use patterns on sedimentological (dis)connectivity in small agricultural catchments
- 11:30–11:45 EGU2011-3917
Douglas Smith and Stanly Livingston
Reducing hydrological connectivity of depressions to streams in glacial till landscapes
- 11:45–12:00 **Discussion**

HS9.2/GM3.4/SSS2.10 – Erosion and sediment delivery in agricultural landscapes: monitoring, modelling and management (co-organized) – Posters

Convener: Stéphane Follain | Co-Conveners: Rossano Ciampalini, Peter Fiener, João Pedro Nunes

Hall A | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Rossano Ciampalini

- A317 EGU2011-3134
Ondrej Jaksik, Radka Kodesova, Iva Stehlikova, Tereza Zadorova, Ales Kapicka, and Vit Penizek
Spatial soil material redistribution due to soil erosion studied using magnetic susceptibility mapping
- A318 EGU2011-3155
Tereza Zadorova, Ondřej Jakšík, Radka Kodešová, and Vít Penízek
Influence of topography and soil properties on soil aggregates stability
- A319 EGU2011-3541
Hans von Suchodoletz, Marco Herrmann, Marcus Schmidt, and Christoph Zielhofer
Tracking and quantifying recent soil erosion in a semi-arid catchment area at Lanzarote (Canary Islands)
- A320 EGU2011-6732
Legrain Xavier, Colard Francois, Colinet Gilles, Demarcin Pierre, and **Degré Aurore**
Soil redistribution in rural catchment: how fifty years old soil survey can help model improvement
- A321 EGU2011-10113
Susanna Werth, Sandra Werb, Till Francke, and Axel Bronstert
Analysis on underlying connectivity mechanisms of a mesoscale dryland river basin, NE Spain
- A322 EGU2011-10639
Alemayehu Muluneh, Saskia Keesstra, and Leo Stroosnijder
Strategies to adapt to climate change in the Central Rift Valley of Ethiopia: Linking regional drought stress patterns to on-farm water management.
- A323 EGU2011-10954
Annegret Larsen and Hans-Rudolf Bork
Agricultural terraces and their influence on sediment storage, transport and reworking
- A324 EGU2011-12863
João Pedro Nunes, Júlio C. Lima, Léonard Bernard-Jannin, Elsa Sampaio, María Ermitas Rial-Rivas, Madalena Moreira, Jan Jacob Keizer, and João Corte-Real
Estimating the impacts of climate change on soil erosion in Mediterranean watersheds
- A325 EGU2011-4179
María Luz Rodríguez-Blanco, María Mercedes Taboada-Castro, María Teresa Taboada-Castro, João Pedro Nunes, María Ermitas Rial, and Jan Jacob Keizer
Sediment yield response to climate change in an atlantic catchment in NW Spain: preliminary results with the SWAT model
- A326 EGU2011-7599
Nicolas Feltz, Alexandre Maignard, Hélène Cordonnier, Charles Biélders, and Abdel Ilah Mokadem
Mapping erosion at field scale in Wallonia
- A327 EGU2011-8998
Youssef Chahor, Carlos Antoñanzas, Javier Loizu, Javier Casalí, Miguel Angel Campo, and Rafael Giménez
Evaluation of the AnnAGNPS model for predicting runoff in large agricultural watershed in Navarre (Spain)

A328 EGU2011-11133
Olga Khvostova
 Gorky reservoir slope stability assessment

A329 EGU2011-11163
 Nora Kummert, Eléonore Beckers, and **Aurore Degré**
 Erosion and rainfall erosivity under climate change: rainfall simulation and soil losses measurement at field scale

NH3.10/GM6.2 – Rock mechanics and structural controls on hillslope processes (co-organized) – Orals

Convener: Federico Agliardi | Co-Conveners: Giovanni Crosta, Carlos Carranza-Torres, Doug Stead, Christian Zangerl

Room: 2

Chairperson: F. Agliardi, C. Zangerl, G.B. Crosta

- 10:30–10:45 EGU2011-8426
Federico Agliardi, Giovanni B. Crosta, Stefano Zanchetta, Marco Secondi, Valentina Barberini, Nicoletta Fusi, and Elena De Ponti
 Fabric controls on the failure mode of strongly deformed metamorphic rocks: investigation, modelling, and impact on rock-slope stability
- 10:45–11:00 EGU2011-3235
Martin Ziegler, Simon Loew, Jeffrey Moore, and Florian Amann
 Distribution and fractographic features of exfoliation joints in the Central Swiss Alps (Grimsel area, Aar Massif)
- 11:00–11:15 EGU2011-6454
Thomas Strauhal, Christian Zangerl, Daniela Anna Engl, Wolfgang Fellin, and Peter Tropper
 Geotechnical and mineralogical sliding zones properties of rockslides in paragneissic rock masses
- 11:15–11:30 EGU2011-13348
Riccardo Castellanza, Matteo Ciantia, Claudio di Prisco, Federico Agliardi, and Giovanni Crosta
 Weathering effects on the mechanical behavior of calcarenites: experimental evidences and impact on the stability of coastal cliffs and cavities
- 11:30–11:45 EGU2011-13069
Andrea Pedrazzini, Michel Jaboyedoff, and Alexandre Loye
 From Sackung to rock avalanche: the example of Sierre landslide (Switzerland)
- 11:45–12:00 EGU2011-1533
Irene Manzella, Herbert H. Einstein, and Giovanni Grasselli
 Propagation of large debris avalanches: analytical, DEM and FEMDEM modelling of granular and block flows.

NH3.10/GM6.2 – Rock mechanics and structural controls on hillslope processes (co-organized) – Posters

Convener: Federico Agliardi | Co-Conveners: Giovanni Crosta, Carlos Carranza-Torres, Doug Stead, Christian Zangerl

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: F. Agliardi, C. Zangerl, G.B. Crosta

- XY221 EGU2011-1632
 Laura Superchi, **Andrea Wolter**, Doug Stead, John J. Clague, Monica Ghirotti, and Rinaldo Genevois
 Comparison of photogrammetric and field survey data from the sliding surface of the 1963 Vajont Slide, Italy
- XY222 EGU2011-12424
Stefano Margiotta, Fiorella Mazzone, and Sergio Luigi Negri
 Integrated approach based on qualitative rock classification system (Qsrm) and quantitative geological and geophysical surveys to characterize coastal cliffs
- XY223 EGU2011-5233
Marc-Andre Brideau, Matthieu Sturzenegger, Doug Stead, Michel Jaboyedoff, Martin Lawrence, Nicholas Roberts, John Clague, Brent Ward, and Tom Millard
 Structural controls on the 2007 Chehalis Lake landslide, British Columbia, Canada
- XY224 EGU2011-10946
Florian Humair, Jean-Luc Epard, Andrea Pedrazzini, Corey Froese, and Michel Jaboyedoff
 Genesis and related slope stability analyses of the Turtle Mountain anticline (Alberta, Canada)
- XY225 EGU2011-4969
Oded Katz and Julia K. Morgan
 The role of fractures in controlling the size and geometry of landslides; Insights from Discrete Element Method computer simulations
- XY226 EGU2011-11515
Alexander Preh, Rainer Poisel, and Kurt Mair am Tinkhof
 3D-effects on structural controls on hillslope processes

- XY227 EGU2011-1953
Jia-Jyun Dong and Huai-Houh Hsu
 Effects of Hydraulic Conductivity / Strength Anisotropy on the Stability of Stratified, Poorly Cemented Rock Slopes
- XY228 EGU2011-8783
James Glover, Nick Rosser, Werner Gerber, and Dave Petley
 Quantifying the influence of rock shape on the run out of rock fall
- XY229 EGU2011-10083
Aucelli Pietro, Roskopf Carmen, and Di Paola Gianluigi
 The role of mass wasting in the evolution of valley systems: an example from the Molise region (Southern Italy)
- XY230 EGU2011-1821
Jia-Jyun Dong and Yi-Ju Su
 Topography, rock mass strength and pore water pressure
- XY231 EGU2011-8090
 Assaf Klar, **Einat Aharonov**, and Oded Katz
 Landslide volume and surface area - Analytical and observational relations
- XY232 EGU2011-11254
Alexandre Loye, Josh I. Theule, Michel Jaboyedoff, Frédéric Liébault, Andréa Pedrazzini, and Richard Metzger
 Geological and morphostructural implication for sediment and debris supplying channels of small alpine catchments prone to debris flow
- XY233 EGU2011-1778
Thomas Bois, Thomas Lebourg, Emmanuel Tric, and Swann Zerathe
 Evolution of rock slopes submitted to time scaled alteration: New Insights from three dimensional numerical modelling of the La Clapière slope (Alpes Maritimes, France).

GM7.1/HS12.3 – Interactions of hydraulics, sediment transport and channel morphology (co-organized) – Orals

Convener: manuel nitsche | Co-Conveners: Johannes Schneider, Jens Turowski, Christian Winter, Jesper Bartholdy

Room: 21

Chairperson: Manuel Nitsche

- 08:30–08:45 EGU2011-10577
Andy Large, Andy Russell, Meredith Williams, Stuart Dunning, Matthew Ross, and Qihua Liang
 IMPACTS OF THE SEPTEMBER 2008 FLOODS IN NORTHEAST ENGLAND ON RIVER MORPHOLOGY & SEDIMENTOLOGY
- 08:45–09:00 EGU2011-1873
Margot Chapuis, Simon Dufour, Mireille Provansal, and Bernard Couvert
 Interactions of hydraulics, bedform and particle mobility in a steep and large meandering system (Durance River, South-Eastern France)
- 09:00–09:15 EGU2011-4325
Peter Nelson, Richard McDonald, Jonathan Nelson, and William Dietrich
 Numerical experiments on the coevolution of bed surface patchiness and channel morphology
- 09:15–09:30 EGU2011-8108
Jerome Lave and Matthieu Dubille
 Real-time measurements and modelling of bedrock river erosion along two rivers of the Frontal Himalaya
- 09:30–09:45 EGU2011-6871
Fereshteh Bagherimiyab and Ulrich Lemmin
 Effects of bed form structure on particle-turbulence interaction in unsteady suspended sediment-laden laboratory open-channel flows
- 09:45–10:00 EGU2011-4995
Arvind Singh, Kristin Sweeney, Peter Wilcock, and Efi Foufoula-Georgiou
 Effect of migrating bed topography on tracer dynamics

GM7.1/HS12.3 – Interactions of hydraulics, sediment transport and channel morphology (co-organized) – Posters

Convener: manuel nitsche | Co-Conveners: Johannes Schneider, Jens Turowski, Christian Winter, Jesper Bartholdy

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Johannes Schneider

- A133 EGU2011-8047
Henning Baewert, Eric Rascher, Karl-Heinz Schmidt, Martin Bimböse, and David Morche
 Calculation of surface roughness of an alpine river reach using Terrestrial Laser Scanning data

- A134 EGU2011-7165
Sandrine Tacon, Frédéric Liébault, and Hervé Piégay
LiDAR-derived morphological changes of gravel-bed rivers in the French Prealps
- A135 EGU2011-11368
Maximiliano Sassi, Ton Hoitink, Bart Vermeulen, and Hidayat Hidayat
Method to estimate river discharge from a horizontally deployed Acoustic Doppler Current Profiler in a tidal river subject to sidewall effects and a mobile bed
- A136 EGU2011-12342
Philipp Gmeiner, Marcel Liedermann, Michael Tritthart, and Helmut Habersack
Development of a device for direct bed shear stress measurement in a gravel bed river
- A137 EGU2011-12471
Mariana Morell, Manuel Gallego, Carlos Vionnet, and **Leticia Rodriguez**
On the projection of ADCP data associated to secondary currents driven by curvature on river bends
- A138 EGU2011-11014
Stuart Dunning, Nigel King, Bruce Carlisle, Danny Donoghue, Jeff Warburton, Andy Russell, and Andy Large
Unmanned Aerial Vehicle low-level aerial photography of flood induced change - the 2009 Cumbria event
- A139 EGU2011-121
Geraldine Quénéhervé and Michael Märker
An integrated approach to assess hydrological processes and sediment dynamics in Northern Tanzania
- A140 EGU2011-13529
Andy Large, Andy Russell, Stuart Dunning, Jeff Warburton, and Danny Donoghue
Controls on reach-scale geomorphological and sedimentary impacts of the November 2009 flood, River Derwent, Cumbria, UK
- A141 EGU2011-8633
Noam Greenbaum and **Lea Wittenberg**
Runoff and sediment yield in Nahal Oren Basin, Mt. Carmel Israel - a comparison between pre and post 2010 forest fire (preliminary-results)
- A142 EGU2011-1560
Jonny Moretto, Emanuel Rigon, Lorenzo Picco, Nicola Surian, Luca Mao, Francesco Comiti, and Mario Aristide Lenzi
Medium and short term channel planform changes and vegetation cover dynamics on a regulated gravel bed river, Brenta River, Italy
- A143 EGU2011-10686
Peter Fischer, Florian Haas, Gerald Blasch, Tobias Heckmann, Barbara Stammel, and Bernd Cyffka
Efficiency of restoration measures - Interaction between discharge and morphodynamik processes in a semi-natural water course at the Danube between Neuburg and Ingolstadt (Germany)
- A144 EGU2011-4827
Philipp Stadler and Elmar Pröll
Hydromorphology - Quantifying a creek's naturalness
- A145 EGU2011-462
Pauline Dieras, Herve Piegay, and Jose A. Constantine
Controls on initial oxbow sedimentation as observed within recently cut-off channels of the Ain River, France
- A146 EGU2011-7326
Hugo Seitz, Lukas Strahlhofer, Johann Aigner, Bettina Mühlburger, Andrea Kreisler, and Helmut Habersack
Temporal Variation of Bedload Transport studied by Integrative and Innovative Bedload Measurement Systems
- A147 EGU2011-14006
Manuel Nitsche, Dieter Rickenmann, Jens M. Turowski, Alexandre Badoux, and James W. Kirchner
Evaluation of bedload transport predictions using different flow resistance equations for large scale roughness in steep mountain streams
- A148 EGU2011-209
Jens Turowski, Alexandre Badoux, and Dieter Rickenmann
Start and end of bedload transport in gravel-bed streams
- A149 EGU2011-13446
Mario Kloesch and Helmut Habersack
Riverbank stability analysis considering the limited longitudinal extent of mass failures
- A150 EGU2011-4331
Gustavo Adolfo Mazza de Almeida and Jose Fernando Rodriguez
Formation and degradation of pool-riffle sequences
- A151 EGU2011-4857
Joseph Wagenbrenner and Peter Robichaud
Evaluating a post-wildfire mitigation treatment using a flume
- A152 EGU2011-1727
Clement Narteau, Deguo Zhang, and Olivier Rozier
Coexistence of bedforms: the star dune paradigm

- A153 EGU2011-12625
Francisco Núñez-González and Juan Pedro Martín-Vide
 Hydraulic analysis of propagation direction of antidunes

HS9.4/GM7.5 – Transfer and storage of sediment and associated substances in river basins: : budgets, pathways, transit times, and ecological feedbacks (co-organized) – Orals

Convener: Marcel Van der Perk | Co-Conveners: Ulrike Scherer, Olivier Cerdan, Saskia Keesstra, Philip Owens, John Quinton, Ellen Petticrew

Room: 38

Chairperson: n.n.

- 13:30–13:45 EGU2011-4574
Liviu Giosan and Peter Clift
 Landscape Dynamics in the Indus Basin: From Harappa to the Flood of 2010
- 13:45–14:00 EGU2011-13590
Scott Lamoureux, Maryse Veillette, and John Orwin
 Suspended sediment transport, storage and hysteresis characteristics in an Arctic catchment subject to recent permafrost disturbances
- 14:00–14:15 EGU2011-4536
Philip Greenwood, Desmond Walling, and Timothy Quine
 Using caesium-134 and cobalt-60 as tracers to assess the remobilization of recently-deposited overbank-derived sediment on river floodplains over subsequent inundation events
- 14:15–14:30 EGU2011-10252
Philipp Theuring, Abhinand Jha, Gerald Kirchner, Stefan Behrens, and Michael Rode
 Fingerprint analysis of suspended sediment transport in a mesoscale catchment in northern Mongolia
- 14:30–14:45 EGU2011-8694
Jim Bogen
 The sediment budget of Norwegian rivers and the flux of particle bound chemical elements
- 14:45–15:00 EGU2011-11793
Murugesu Sivapalan, Sopan Patil, Marwan Hassan, Sheng Ye, and Ciaran Harman
 Process controls on scaling behavior of sediment delivery: Exploration with a physically based network scale coupled flow and sediment model
- Chairperson: n.n.
- 15:30–15:45 EGU2011-7554
Geraldene Wharton
 The role of macrophytes in the deposition, erodibility, and transport of fine sediments in lowland permeable streams
- 15:45–16:00 EGU2011-10103
Michael Schaeffer, Melanie Hartwig, Philipp Theuring, Michael Rode, and Dietrich Borchardt
 Impact of upland erosion and sediment transport on macroinvertebrate communities: An interdisciplinary pressure-impact study in the Kharaa catchment (Mongolia)
- 16:00–16:15 EGU2011-3327
Tom Liffen, Angela Gurnell, Matthew O'Hare, Judith O'Hare, Natasha Pollen-Bankhead, and Andrew Simon
 River ecosystem engineering by the aquatic macrophyte *Sparganium erectum*: the influence of biomechanical traits on sediment retention and fluvial landform development.
- 16:15–16:30 EGU2011-12211
Núria Martínez-Carreras, Andreas Krein, Francesc Gallart, Jean François Iffly, Lucien Hoffmann, and Laurent Pfister
 Using the diffuse reflectance spectrometry technique to predict nutrient and heavy metal concentration and fluxes of suspended sediment in the Attert River basin (Luxembourg)
- 16:30–16:45 EGU2011-2471
Barry Rawlins
 Controls on the phosphorus content of fine stream bed sediments in agricultural headwater catchments at the landscape-scale
- 16:45–17:00 EGU2011-11477
Gunnel Göransson, David Bendz, and Magnus Larson
 Mass transport of contamination released into surface water by landslide

HS9.4/GM7.5 – Transfer and storage of sediment and associated substances in river basins: : budgets, pathways, transit times, and ecological feedbacks (co-organized) – Posters

Convener: Marcel Van der Perk | Co-Conveners: Ulrike Scherer, Olivier Cerdan, Saskia Keesstra, Philip Owens, John Quinton, Ellen Petticrew

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- A330 EGU2011-9369
Toru Tamura, Mark Bateman, Yoshinori Kodama, Yu Saitoh, Kazuaki Watanabe, Naofumi Yamaguchi, and Dan Matsumoto
Decadal- to centennial-scale fluctuations of East Asian winter monsoon intensity over the last millennium recorded in coastal dune sediment, Japan Sea
- A331 EGU2011-1765
Peter Clift, Andrew Carter, Liviu Giosan, Anwar Alizai, Sam VanLaningham, Geoff Duller, Julie Durcan, and Mark Macklin
Evolution of the rivers in the western Thar Desert since the LGM traced by U-Pb zircon ages
- A332 EGU2011-2492
Ludmila Kuksina
Suspended sediment flow features of volcanic territories' rivers
- A333 EGU2011-3610
Olivier Cerdan, Magalie Delmas, Sébastien Salvador-Blanes, Emmanuelle Petelet, Philippe Négrel, and Jean-Marie Mouchel
French rivers export to the sea
- A334 EGU2011-8326
Willemijn Appels and Sjoerd van der Zee
Field measurements of surface runoff in lowland catchments
- A335 EGU2011-3578
Josef Krasa, Tomas Dostal, and Josef Hejzlar
Sediment from agricultural catchments as a source of phosphorus loads
- A336 EGU2011-447
Péter Csáfordi, Péter Kalicz, and Zoltán Gribovszki
Examination of sediment sources in a small forested catchment of Sopron Hills
- A337 EGU2011-4989
Susan Liermann, Achim A. Beylich, and Aurelien van Welden
Contemporary sedimentary processes and suspended sediment transfer in the small Sætrevatnet sub-catchment in Bødalen, western Norway
- A338 EGU2011-1027
José A. López-Tarazón, Ramon J. Batalla, and Damià Vericat
In-channel fine sediment storage in an extremely dynamic mountainous catchment: the river Isabena
- A339 EGU2011-13266
Georg Schuster, Cedomil Josip Jugovic, Franz Steiner, and Robert Koloseus
Implementation of an Artificial Bed Load Retention Structure
- A340 EGU2011-6814
Shih-Chieh Chou, Wen-Hsiao Tseng, Chjeng-Lun Shieh, and Yu-Lin Kao
Experimental Study on the Evolution of the Dam-break
- A341 EGU2011-11825
Rui M.L. Ferreira, Lara M. Ferreira, Ana Margarida Ricardo, and Mário J. Franca
Vertical distribution of dissolved oxygen in gravel-bed streams: impacts of sand transport
- A342 EGU2011-2634
Tom Gallé and Viola Huck
Using river metabolism monitoring to quantify sediment budgets in river stretches
- A343 EGU2011-5343
Katrina Caley and **Philip N. Owens**
Examining the sediment retention function of wetlands in response to forestry activities in British Columbia
- A344 EGU2011-12413
John Rex, Sam Albers, and **Ellen Petticrew**
Capture and retention of marine derived nutrient based flocs in low gradient streams: A flume analogue
- A345 EGU2011-13015
Ellen Petticrew, John Rex, and Sam Albers
Marine-derived organic matter transport in river systems: upstream and downstream salmon nutrient transfers, storage and use.
- A346 EGU2011-12624
Sam Albers and Ellen Petticrew
Sedimentation and salmon: Salmon-mediated floc formation and biofilm sediment trapping ability can drive lotic primary productivity
- A347 EGU2011-8571
Christoph Hauer, Günther Unfer, and Helmut Habersack
Sediment continuum, surplus and deficit - Scopes and Limits for spawning habitat restoration measures

- A348 EGU2011-4769
Ulrike Scherer, Sarah Sagemann, and Stephan Fuchs
Emission via erosion and retention of heavy metals in river basins of Germany
- A349 EGU2011-10371
Marcel van der Perk, Veronica Arribas Arcos, Laura Miguel Ayala, Hans Middelkoop, and Björn Scheepers
Metal inventory of the floodplain of the mining-impacted Geul River, The Netherlands
- A350 EGU2011-9775
Marcel van der Perk, Marloes L.H.M. van Lipzig, Gosro Karimlou, Philip N. Owens, and Ellen L. Petticrew
Transfer of sediment-associated metals downstream of abandoned and active mining sites in the Quesnel River catchment, British Columbia
- A351 EGU2011-3126
John Higson, Michael Singer, L. Allan James, and Subhajit Ghoshal
Evolution of a Toxic Fan: Lessons from the Yuba River, California
- A352 EGU2011-3919
Martha Zwonitzer, Michelle Soupir, and Laura Jarboe
Exploring the relationship between attachment, transport and resistance of E. coli from swine systems
- A353 EGU2011-9187
Telse David, Wolf von Tümpling, Peter Krebs, and Dietrich Borchardt
Contribution of stormwater to contaminants in bed sediment

HS10.2/OS2.3 – Lakes and inland seas (co-listed) – Orals

Convener: Peter Zavialov | Co-Conveners: Jana Friedrich, Elena Roget

Room: 33

Chairperson: n.n.

- 13:30–13:45 EGU2011-13755
Cvetanka Popovska
Tectonic Lakes-Climatic and Anthropogenic Impacts
- 13:45–14:00 EGU2011-10284
Sebastiano Piccolroaz and **Marco Toffolon**
Modelling climate change impacts on deep water renewal in Lake Baikal
- 14:00–14:15 EGU2011-134
Kür?ad Kadir Eri? and M.Nam?k Ça?atay
Late Pleistocene to Holocene water exchanges between the Marmara and Black seas and wa-ter level changes: new evidence from high-resolution seismic and core studies
- 14:15–14:30 EGU2011-7919
Georg Umgieser, Christian Ferrarin, Andrea Cucco, Angel Perez Ruzafa, Francesca De Pascalis, Michol Ghezzi, Debora Bellafiore, and Marco Bajo
A comparison study of 6 Mediterranean lagoons with numerical modeling
- 14:30–14:45 EGU2011-10459
Fabio Güttler, Simona Niculescu, Francis Gohin, Yannick Lageat, and Ioan Grigora?
Comparing turbidity patterns of Danube Delta waters with remote sensing techniques: from deltaic lakes to the western Black Sea coastal zone
- Chairperson: J.Friedrich
- 15:30–15:45 EGU2011-12075
Victor Stepanenko, Andrey Martynov, Klaus D. Joehnk, Marjorie Perroud, Xing Fang, Zack M. Subin, Frank Beyrich, Annika Nordbo, Dmitrii Mironov, and Jussi Huotari
Thermal regime and water-atmosphere interactions of shallow mid-latitude lakes: a case study within the framework of the Lake Model Intercomparison Project
- 15:45–16:00 EGU2011-4168
Peter Zavialov, Slava Kremenetskiy, Valeriy Peresypkin, Oleg Kopelevich, Ruey-Chy Kao, and Chung-Feng Ding
Submarine Groundwater Discharge in Taiwan Strait
- 16:00–16:15 EGU2011-8473
Alfred Wüest
Near-sediment oxygen dynamics in lakes
- 16:15–16:30 EGU2011-460
Areti Gianni and Ierotheos Zacharias
Morphology and anoxia in enclosed seas: Aitoliko lagoon - Greece
- 16:30–16:45 EGU2011-9848
Elena Debolskaya and Evgeny Yakushev
The mathematical modeling of the Shatura lakes ecological state

16:45–17:00 EGU2011-10590

Noel Urban, Galen McKinley, Cory McDonald, and Val Bennington
Carbon cycling in inland seas: contrasts among the Laurentian Great Lakes

17:00–17:15 EGU2011-319

Jana Friedrich, Sorin Balan, Marian-Trajan Gomoiu, Sebastian Naeher, Dan Secieru, Sara Wilcken, and Oliver Zielinski
Monitoring the Formation of Hypoxia on the North-Western Black Sea Shelf

HS10.2/OS2.3 – Lakes and inland seas (co-listed) – Posters

Convener: Peter Zavialov | Co-Conveners: Jana Friedrich, Elena Roget

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

A355 EGU2011-13757

Ivar Murdmaa, Ramiz Aliev, Nikolay Esin, Elena Ivanova, Vyacheslav Krylenko, and V i Rudnev
Rapid sapropel accumulation on the upper continental slope of the NE Black Sea during the past century: a response to the global warming?

A356 EGU2011-1552

Philipp Schneider and Simon Hook
Global trends in lake surface temperatures observed from space

A357 EGU2011-4158

Peter Makkaveev and **Peter Zavialov**
Interannual and interdecadal variability of pH in the seas of Russia

A358 EGU2011-13799

Francesc Forcat, Elena Roget, Lidia Dmitrieva, Marina Shatunova, and Valentina Khan
Evaluation of different errors in lake dynamics due to a poor determination of cloud cover

A359 EGU2011-382

Alexander Osadchiov and Peter Zavialov
Mzymta river plume dynamics in the eastern part of the Black Sea: observations and modeling

A360 EGU2011-533

Alexander Izhitsky and Peter Zavialov
Latest Observations of Thermohaline Structure and Circulation of the Dying Aral Sea

A361 EGU2011-547

Natalia Zhurbas
Effect of river plume on Ekman drift velocity in the sea surface layer (dimensional analysis and numerical simulation)

A362 EGU2011-13957

Vera Rostovtseva, Dmitriy Khlebnikov, Vadim Pelevin, Boris Konovalov, Peter Zavialov, Alexandre Grabovskiy, Oleg Abramov, and Georgiy Karlsen
Mapping small-scale river plumes in the Black Sea using shipboard spectrophotometry and fluorimetry

A363 EGU2011-4136

Anthony Kettle and **Richard Back**
Combined Water and Heat Budget to Constrain the Vertical Flow in a Meromictic Lake

A364 EGU2011-6333

Natalya Demchenko
Development of the seasonal thermally-induced front in the Baltic sea after cold winter 2010

A365 EGU2011-8514

Anh Dao Le T., Francesca De Pascalis, Georg Umgieser, and Walter Wildi
Seasonal thermal structure variations of Lake Geneva using 3D finite element modeling

A366 EGU2011-10796

Maria Magdalena Eder, Dirk Schlabing, Marieke Frassl, Karsten Rinke, and András Bárdossy
Climate sensibility of a large lake - a scenario study using a 3D hydrodynamic model and a statistical weather generator

A367 EGU2011-10781

Philip Wallhead
Inference using plankton models forced by spline interpolations: a study of algal loss processes in Lake Geneva

A368 EGU2011-151

Sebastian Naeher, Adrian Gilli, Rienk Smittenberg, and Carsten Schubert
Use of lipid biomarkers to reconstruct past hypoxia and past environmental conditions in two Swiss lakes

A369 EGU2011-13900

Torben Gentz and Michael Schlüter
High resolution mapping of methane concentrations measured by membrane inlet mass spectrometry around pockmarks in Lake Constance, in the North Sea and in the North Atlantic west of Svalbard

A370 EGU2011-13636

Chen Yi- Ron and Hou Wen- Shang

The relationship between variations of the fish fauna and water quality of the Feitsui reservoir in Taiwan

SSS2.2/EMRP15/GM10.2/PS7.0 – Modeling the Experiment, Experimenting the Models (co-listed) – Orals

Convener: Manuel Seeger | Co-Conveners: Luigi Colangeli, Javier Martin-Torres, Nikolaus J. Kuhn, Karsten Seiferlin, Markus Casper, Derek W. G. Sears, Ulrike Scherer, Ruth Ziethe, Tobias Heckmann, Sandra Schumacher

Room: 9

Chairperson: Manuel Seeger

08:30–08:45 EGU2011-2476

Mike Kirkby

Modelling overland flow generation on a rough hillslope

08:45–09:00 EGU2011-2012

Afshin Ghahramani and Yoshiharu Ishikawa

Rain splash transport over steep hillslope; modeling of transport

09:00–09:15 EGU2011-629

Stefan Wirtz, Manuel Seeger, and Johannes B. Ries

Experimental validation of basic model assumptions

09:15–09:30 EGU2011-5410

Zhengyao Nie, Gavan McGrath, and **Christoph Hinz**

Rock particle fragmentation, as an alternative to fluvial transport, explains size sorting on arid hillslopes

09:30–09:45 EGU2011-10118

Olivier Dewitte, Claudio Bosco, Miet Van Den Eeckhaut, and Mohamed Daoudi

A statistical approach to predict gully initiation susceptibility with common spatial data

09:45–10:00 EGU2011-1025

Aleksey Sidorchuk

Stochastic theory of soil erosion: the novel approach to modelling and experimentation

COFFEE BREAK

Chairperson: Ulrike Scherer, Luigi Colangeli

10:30–10:45 EGU2011-1311

Michael Dietze and Arno Kleber

Orientation patterns of stone pavements: from field experiments to a physically-based model and towards laboratory experiments

10:45–11:00 EGU2011-7977

An Van den Putte, Gerard Govers, Jan Diels, Annemie Leys, Christoph Langhans, and Wim Clymans

Can rainfall simulation data be used to parameterize a dynamic infiltration model?

11:00–11:15 EGU2011-2287

Willem Maetens, Jean Poesen, and Matthias Vanmaercke

Confrontation of the PESERA map with measured soil loss rates at plot scale

11:15–11:30 EGU2011-2938

Jonathan Merrison, Haraldur Gunnlaugsson, Christina Holstein-Rathlou, Svend Knak Jensen, Per Nørnberg, and Keld Rasmussen

Granular Electrification, Sand Transport and Mineralogy.

11:30–11:45 EGU2011-6606

Gregor Golabek, Tobias Keller, **Taras Gerya**, Paul Tackley, Guizhi Zhu, and James Connolly

Core and early crust formation on Mars

11:45–12:00 EGU2011-8070

Rafael Escribano, Oscar Gálvez, Belén Maté, Miguel A. Moreno, Víctor J. Herrero, and F. Javier Martín-Torres

Anomalies in the spectra of planetary ice particles

LUNCH BREAK

Chairperson: Javier Martin Torres

- 13:30–13:45 EGU2011-10584
Ha Tran, Jean-Michel Hartmann, and Geoffrey Toon
 Line-mixing effects on spectral shape and consequences for laboratory and atmospheric spectra analyses
- 13:45–14:00 EGU2011-8929
Ludmilla Kolokolova
 Remote Sensing of Aggregated Aerosols Using Photopolarimetry
- 14:00–14:15 EGU2011-13452
Enric Pallé
 Earthshine measurements and extrasolar planet spectral retrieval
- 14:15–14:30 EGU2011-10233
Séverine Robert, Arnaud Mahieux, Valérie Wilquet, Rachel Drummond, Ann Carine Vandaele, Jean Vander Auwera, Yuri Borkov, Valery I. Perevalov, Sergei A. Tashkun, and Jean-Loup Bertaux
 Analysis of new Absorption Bands of the Carbon Dioxide Isotopologues in Venus Spectra
- 14:30–14:45 EGU2011-2366
David Jacquemart
 Recent progress in acetylene laboratory measurements for astrophysical applications
- 14:45–15:00 EGU2011-12177
Wladimir Neumann, Doris Breuer, and Tilman Spohn
 The efficiency of magma heat transport in accreting planetesimals

SSS2.2/EMRP15/GM10.2/PS7.0 – Modeling the Experiment, Experimenting the Models (co-listed) – Posters

Convener: Manuel Seeger | Co-Conveners: Luigi Colangeli, Javier Martin-Torres, Nikolaus J. Kuhn, Karsten Seiferlin, Markus Casper, Derek W. G. Sears, Ulrike Scherer, Ruth Ziethe, Tobias Heckmann, Sandra Schumacher

Hall Z | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Nikolaus Kuhn

- Z58 EGU2011-8109
Pelin Aklik and Wei Wu
 Centrifuge modeling of geotextile reinforced slopes
- Z59 EGU2011-13632
Constance Bornkamp and Jürgen Schmidt
 Experimental research and modelling macropore flow in soils
- Z60 EGU2011-870
Tom Coulthard, Greg Hancock, and John Lowry
 Modelling soil erosion with a downscaled landscape evolution model
- Z61 EGU2011-1433
Stefan Strohmeier and Andreas Klik
 Erosion Plot Monitoring: Impact of different Tillage Systems on average annual Soil Erosion and the Significance of Extreme Rainfall Events
- Z62 EGU2011-1625
Nikolaus J. Kuhn and Elizabeth K. Armstrong
 Organic Matter erosion from sandy soils: solving the mass balance
- Z63 EGU2011-4123
Ulrike Scherer, Erwin Zehe, Klaus Traebing, and Kai Gerlinger
 Parameterisation of a soil detachment model using rainfall simulation experiments
- Z64 EGU2011-5740
Claude Mügler, Olivier Planchon, Jérémy Patin, Sylvain Weill, Norbert Silvera, Patricia Richard, and Emmanuel Mouche
 Modelling of overland flow and tracer transport experiments under simulated rainfall at plot scale
- Z65 EGU2011-7541
Verena Butzen, Manuel Seeger, Markus Casper, and Johannes B. Ries
 Parameterization of the process-based soil erosion model LISEM by means of experimental measurements
- Z66 EGU2011-7857
Mazhar Ali, Geert Sterk, and Piet Peters
 Influence of hydraulic parameters on sediment transport in shallow flows
- Z67 EGU2011-888
Mazhar Ali, Geert Sterk, Manuel Seeger, and Leo Stroosnijder
 Experimental Estimation of Mean Flow Velocity under Overland Flow
- Z68 EGU2011-12811
Lucy Clarke, Timothy Quine, and Andrew Nicholas
 Experimental study of flow width dynamics on alluvial fans

- Z69 EGU2011-12945
Marc Biancheri - Astier, Valérie Ciarletti, and Alain Reineix
3D characterization of the deep sub-surface by a bistatic HF GPR operating from the surface
- Z70 EGU2011-4665
María J. García-Algaba, **Encarnación V. Taguas**, Luciano Mateos, and José A. Gómez
Describing and modelling the rainfall-runoff pattern of an olive orchard large catchment in Southern Spain
- Z71 EGU2011-875
Mary Elise Rumpf, Sarah Fagents, Christopher Hamilton, and Ian Crawford
The Search for a Solar Record in Lunar Paleoregoliths through Numerical Modeling and Analogous Experiments
- Z72 EGU2011-2006
Hiroko Nagahara and Kazuhito Ozawa
Phyllosilicate and its role on the evolution of organic materials in the early solar nebula
- Z73 EGU2011-2378
Attila Császár, Csaba Fábri, and Edit Mátyus
Toward a Line List for Methane
- Z74 EGU2011-2728
Jiri Pavlu, Martin Beranek, Jakub Vaverka, Ivana Richterova, Zdenek Nemecek, and Jana Safrankova
Lunar dust simulants (LHT, JSC, MLS) compared in the frame of secondary emission
- Z75 EGU2011-3601
Juris Freimanis
Polarized radiative transfer equation in some special curvilinear coordinate systems
- Z76 EGU2011-13174
Erwan Tréguier, Albrecht Schmidt, Frédéric Schmidt, Alejandro Cardesín, Stéphane Erard, Patrick Martin, Patrick Pinet, Saïd Moussaoui, and Nicolas Dobigeon
Analysis of a collection of planetary hyperspectral images through non-negative source separation
- Z77 EGU2011-4899
Marie-Claire Gazeau, Yves Benilan, Et-Touhami Es-Sebbar, Antoine Jolly, Emmanuel Arzoumanian, Nicolas Fray, and Hervé Cottin
Characterization of continuous vacuum ultraviolet lamps - Implication on the study of methane photolysis at Lyman alpha (121.6 nm)
- Z78 EGU2011-7729
Jeremy Guignard, Misha Bystricky, and Mickael Toplis
Grain Growth in Experimental Forsterite $\pm$ Metal $\pm$ Silicate Melt Systems: Analogues of Chondritic and Achondritic Parent Bodies.
- Z79 EGU2011-9862
Alexander Stiegler and Günter Kargl
A broadband frequency characterisation of Martian analogue dielectric behaviour
- Z80 EGU2011-11540
Olivia Golle, **Caroline Dumoulin**, Ondrej Cadek, and Gael Choblet
A method to compute topography and geoid from viscous convection overlaid by an elastic lithosphere
- Z81 EGU2011-12375
Javier Martin-Torres, Alejandro Soto, Mark Richardson, Ian McEwan, and Javier Gómez-Elvira
Radiative Transfer Calculations for the REMS/Mars Science Laboratory Ground Temperature Sensors
- Z82 EGU2011-12284
Javier Martin-Torres
Calculation of Refraction Indices of Mars and Terrestrial Atmospheres Using Spectroscopic Databases
- Z83 EGU2011-2972
Jonathan Morrison, Line Drube, Haraldur Gunnlaugsson, Christina Holstein-Rathlou, Svend Knak Jensen, Jon Mason, Morten Bo Madsen, Per Nørnberg, and Manish Patel
Research Using the European Mars Simulation Wind Tunnel Facility
- Z84 EGU2011-2727
Jakub Vaverka, Jiri Pavlu, Martin Beranek, Ivana Richterova, Jana Safrankova, and Zdenek Nemecek
Secondary emission from Martian soil simulant

