

EGU General Assembly 2012
Programme Group Programme
GI – Geosciences Instrumentation & Data Systems

Monday, 23 April	2
CL1.15.....	2
ESSI1.6.....	4
GI1.1.....	4
GI1.3.....	5
GI1.5.....	5
GI2.2.....	6
GI3.6.....	6
Tuesday, 24 April	8
SM1.4/G6.2/GI1.6.....	10
GI2.1/AS4.6.....	12
GI2.5.....	14
GI3.4.....	15
GI3.5.....	16
Wednesday, 25 April	18
SM1.3/GI1.7.....	18
Thursday, 26 April	23
GI2.3/PS1.3.....	23
Friday, 27 April	25
GI3.1.....	25
GI3.2.....	26
SSS4.1.....	28

Monday, 23 April

CL1.15 – Temperature observations in the subsurface: contributions to climate sciences, soil sciences, permafrost, glaciology, hydrology, and heat flow studies (co-listed) – Orals

Convener: V. Rath | Co-Conveners: J. Noetzli, F. González-Rouco, J.S. Safanda

Room: 13

Chairperson: Jeanette Noetzli

- 08:30–08:45 EGU2012-9221
S. Gruber
Decreasing sensitivity of permafrost temperature to environmental change challenges monitoring and data interpretation
- 08:45–09:00 EGU2012-7686
D. Kitover, H. Renssen, R. van Balen, J. Vandenberghe, and D.M. Roche
Simulating permafrost evolution in Eurasia during the last deglaciation
- 09:00–09:15 EGU2012-3943
M. N. Gooseff, S. E. Godsey, J. E. Barrett, and A. Lewcowicz
The Influence of Snow, Water Bodies, and Permafrost Degradation on Shallow Soil Energy and Hydrology in the Arctic and Antarctic
- 09:15–09:30 EGU2012-6375
S.C. Steele-Dunne, N. van de Giesen, J.H.A.M. Jansen, C. Hatch, J. Selker, S. Tyler, T. Ochsner, and M.H. Cosh
Distributed Temperature Sensing as a tool for monitoring heat transfer processes in the shallow subsurface
- 09:30–09:45 EGU2012-795
A. Markert, S. Trinks, M Facklam, and G. Wessolek
A new method using evaporation for high-resolution measurements of soil thermal conductivity at changing water contents
- 09:45–10:00 EGU2012-1835
A. Rabinovich, G. Dagan, and T. Miloh
Underground heat conduction near a spherical inhomogeneity: theory and applications

COFFEE BREAK

Chairperson: J.F. González Rouco

- 10:30–10:45 EGU2012-14423
V. Cermák
Air - Ground - Bedrock Temperature Coupling, Its Monitoring at Borehole Climate Observatories
- 10:45–11:00 EGU2012-6252
J. Majorowicz, J. Šafanda, W. Gosnold, and M. Unsworth
Subsurface temperature signature of a large Pleistocene - Holocene surface warming in the North Alberta, Canada
- 11:00–11:15 EGU2012-1423
F. Lucazeau and F. Rolandone
Heat-Flow and Subsurface Temperature History in Eastern Senegal (West Africa)
- 11:15–11:30 EGU2012-13996
V. Bense
Hydrogeological analysis using heat as a tracer in a variety of geological settings
- 11:30–11:45 EGU2012-12137
K. Zhu, P. Bayer, and P. Blum
Urban heat fluxes in the subsurface of Cologne, Germany
- 11:45–12:00 EGU2012-13383
M. Dłuzewski, **E. Zmudzka**, D. Woronko, and K. Biejat
The influence of barchan shape on the moisture and temperature of the dune sand and the diversity of local climate

CL1.15 – Temperature observations in the subsurface: contributions to climate sciences, soil sciences, permafrost, glaciology, hydrology, and heat flow studies (co-listed) – Posters

Convener: V. Rath | Co-Conveners: J. Noetzli, F. González-Rouco, J.S. Safanda

Hall Z | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Jan Safanda

- Z67 EGU2012-4470
S. Schneider, M. Hoelzle, and C. Hauck
Influence of subsurface heterogeneity on observed borehole temperatures at a mountain permafrost site in the Upper Engadine, Swiss Alps
- Z68 EGU2012-2859
P. Dedecek, J. Šafanda, and D. Rajver
Detection and Quantification of Local Anthropogenic and Regional Climatic Transient Signals in Temperature Logs from Czechia and Slovenia
- Z69 EGU2012-7382
V. Cermák, J. Safanda, P. Dedecek, and M. Kresl
Round-Air Temperature Coupling: Results of Long-Term Temperature-Time Monitoring at the Experimental Borehole Site at Prague (The Czech Republic)
- Z70 EGU2012-6475
V. Rath
GUMNET - A new subsurface observatory in the Guadarrama Mountains, Spain
- Z71 EGU2012-2754
V. Rath, J. E. Smerdon, J. F. González-Rouco, and H. Beltrami
Which boreholes do we need to resolve the Common Era in borehole paleoclimatology?
- Z72 EGU2012-2870
G. Bouron, D. Mimoun, and D. Graillot
Analysis of mechanisms and effects of snow-melting on the groundwater recharge downstream mountainous watershed in a climate-changing context. Example: the Lignon du Forez watershed, Massif Central, France.
- Z73 EGU2012-7609
D. Demezhko, A. Kotlovanova, and **Yu. Khachay**
Geothermal evidences of pre-industrial ground temperature changes in the Urals and Eastern Europe
- Z74 EGU2012-3707
N. Andrés, D. Palacios, J.J. Zamorano, C.E. Mendoza-Margáin, and L. Vázquez-Selem
Ten years monitoring ground temperature at Iztaccíhuatl Volcano (México).
- Z75 EGU2012-3716
N. Andrés, D. Palacios, J.J. Zamorano, C.E. Mendoza-Margáin, and L. Vázquez-Selem
Deglaciation, ground temperature and volcanic activity in Popocatepetl (México).
- Z76 EGU2012-6493
L.M. Tanarro, D. Palacios, A. Gómez-Ortiz, and F. Salvador-Franch
Snow cover and ground surface temperature on a talus slope affected by mass movements. Veleta cirque, Sierra Nevada, Spain
- Z77 EGU2012-9346
A. Kellerer-Pirklbauer, G. Winkler, and M. Pauritsch
Widespread evidences of hoarfrost formation at a rock glacier in the Seckauer Tauern, Austria
- Z78 EGU2012-11953
E. Santolaria and V. Rath
Parametrizations of land-atmosphere energy and mass transfer: the role of the snow layer and the freeze/thaw cycle
- Z79 EGU2012-12336
M. B. Stevens, H. Beltrami, and J. F. Gonzalez-Rouco
New metrics for permafrost model validation
- Z80 EGU2012-11182
D. Mottaghy, **V. Rath**, and G. Schwamborn
The influence short and long term climate changes on the temperature field at the Lake El'gygytyn site: results from borehole data and modelling
- Z81 EGU2012-3160
G. Matharoo, H. Beltrami, V. Rath, and L. Tarasov
Effects of long-term history on borehole paleoclimatology
- Z82 EGU2012-12874
V. Rath, J. Alvarez-Solas, M. Montoya, and C. Ritz
Can boreholes help to constrain the dynamics of the Laurentide ice sheet on the millennial time-scale during last glacial period?
- Z83 EGU2012-13109
J. Noetzli, P. Deline, M. Phillips, and A. von Poschinger
Characteristics of the thermal regime in steep bedrock permafrost in the European Alps described by borehole temperatures and heat conduction modeling

Z84 EGU2012-12981

M. Keuschnig, I. Hartmeyer, A. Schmidjell, and L. Schrott

The adaptation of iButtons® for near-surface rock temperature and thermal offset measurements in a high alpine environment - Instrumentation and first results, Kitzsteinhorn (3203 m), Hohe Tauern, Austria

ESSI1.6 – Laser Scanning: 3D Spatial Data, Analysis, and Infrastructures in Geosciences (co-listed) – Orals

Convener: B. Höfle | Co-Conveners: N. Pfeifer, B. Székely, A. Zipf

Room: 32

Chairperson: Bernhard Höfle

08:30–09:00 EGU2012-13998

C. Baru, R. Arrowsmith, C. Crosby, V. Nandigam, M. Phan, and C. Cowart

OpenTopography

09:00–09:15 EGU2012-6324

B. Höfle, M. Forbriger, C. Siart, and E. Nowaczinski

Fusion of terrestrial LiDAR and tomographic mapping data for 3D karst landform investigation

09:15–09:30 EGU2012-5081

M. A. Brovelli, L. Biagi, and G. Zamboni

DTMs: discussion of a new multi-resolution function based model

09:30–09:45 EGU2012-6665

M. Milenkovi?, B. Székely, G. Mandlbürger, and N. Pfeifer

Characterization of artificial and natural roughness present in DTMs derived from Airborne Laser Scanning data

09:45–10:00 EGU2012-4372

T. Dewez and J. Costeraste

Global dynamic topography: geoscience communities requirements

10:00–10:05 **Wrap Up****COFFEE BREAK**

Chairperson: Balazs Szekely

10:30–11:00 EGU2012-8378

G. Mandlbürger, M. Pfennigbauer, F. Steinbacher, and N. Pfeifer

Potential of a novel airborne hydrographic laser scanner for capturing shallow water bodies

11:00–11:15 EGU2012-8299

F. Bretar, P. Mériaux, and C. Fauchard

How integrating 3D LiDAR data in the dike surveillance protocol: The French case

11:15–11:30 EGU2012-6411

K. Koenig and B. Höfle

Laser Scanning for 3D Object Characterization: Infrastructure for Exploration and Analysis of Vegetation Signatures

11:30–11:45 EGU2012-5316

I. Davenport, K. Fieber, R. Gurney, J. Ferryman, J. Hacker, and J. Walker

Extracting vertical foliage profiles of individual Eucalypt trees using last significant return airborne laser altimetry and on-site photography

11:45–12:00 EGU2012-11539

A. Zlinszky, W. Mücke, H. Lehner, C. Briese, and N. Pfeifer

Vegetation mapping from medium-density discrete echo Airborne Laser Scanning data: a case study of the Lake Balaton wetlands

GI1.1 – Open Session on Geoscience Instrumentation – Orals

Convener: H. Svedhem | Co-Conveners: Prof. Korepanov, W. Schmidt, J.-L. Josset

Room: 34

Chairperson: H. Svedhem

08:30–08:45 EGU2012-8224

A.-M. Harri, W. Schmidt, H. Guerrero, and L. Vázquez

Future Plans for MetNet Lander Mars Missions

08:45–09:00 EGU2012-1349

A. Marusenkov

Time-domain operation mode study of flux-gate magnetometer

- 09:00–09:15 EGU2012-3885
C. Guralp and **H. Rademacher**
A new Approach to Miniaturized Seismic Broadband Sensors
- 09:15–09:30 EGU2012-2258
M.L. Khodachenko, E.J. Kallio, V.N. Génot, T. Al-Ubaidi, F. Topf, W. Schmidt, I.I. Alexeev, R. Modolo, N. André, M. Gangloff, and E.S. Belenkaya
Integrated Medium for Planetary Exploration (IMPEX): an infrastructure to bridge space missions data and computational models in planetary science
- 09:30–09:45 EGU2012-4530
T. Mahr, E. Peper, D. Pöhler, U. Platt, and T. Wagner
Spectral classification of plants for satellite remote sensing
- 09:45–10:00 EGU2012-11749
H. Zafrir, G. Haquin, U. Malik, and S. M. Barbosa
Differentiation between the Effect of Temperature and Pressure on Radon Transport within the Subsurface Geological Media

GI1.3 – Data Assimilation and Data Publishing in Geosciences – Orals

Convener: M. Diepenbroek | Co-Conveners: Dr. Klump, J. Brase, A. Geyer, P. Fox

Room: 34

Chairperson: Peter Fox

- 13:30–13:45 EGU2012-6157
M. Parsons and **P. Fox**
Exploring Metaphors for Making Data Broadly Available.
- 13:45–14:00 EGU2012-11078
M Wallace, S Metson, L Holcombe, M Anderson, D Newbold, and N Brook
High-throughput landslide modelling using computational grids
- 14:00–14:15 EGU2012-13299
R. S. J. Sparks, S. C. Loughlin, E. Cottrell, G. Valentine, C. Newhall, G. Jolly, P. Papale, S. Takarada, S. Croswell, M. Nayembil, B. Arora, J. Lowndes, C. Connor, J. Eichelberger, F. Nadim, A. Smolka, G. Michel, R. Muir-Wood, and C. Horwell
Global Volcano Model
- 14:15–14:30 EGU2012-13378
U. Schindler, M. Diepenbroek, and H. Grobe
PANGAEA® - Research Data enters Scholarly Communication
- 14:30–14:45 EGU2012-12759
B. Keall
How Elsevier's Article of the Future supports researchers in the digital era
- 14:45–15:00 EGU2012-11376
N. Rettberg
Enabling cross-disciplinary research by linking data to Open Access publications

GI1.5 – Intelligent geo-Information Management in the Future Internet (co-organized) – Orals

Convener: Dr. Havlik | Co-Conveners: Z A Sabeur, S. Nativi, W. Schmidt

Room: 7

Chairperson: n.n.

- 15:30–15:45 EGU2012-14355
Z. A Sabeur, H Denis, and S Nativi
Advanced situation awareness with localised environmental community observatories in the Future Internet
- 15:45–16:00 EGU2012-7404
B. Stollberg
Development of a Mobile Application for Disaster Information and Response
- 16:00–16:15 EGU2012-13173
S. Fritz, P. Purgathofer, F. Kayali, M. Fellner, M. Wimmer, T. Sturn, G. Triebnig, S. Krause, F. Schindler, M. Kollegger, C. Perger, M. Dürauer, W. Haberl, L. See, and I. McCallum
Landspotting: Social gaming to collect vast amounts of data for satellite validation
- 16:15–16:30 EGU2012-12902
B Arbab-Zavar, A. Chakravarthy, and Z A Sabeur
Geospatial intelligence and visual classification of environmentally observed species in the Future Internet

- 16:30–16:45 EGU2012-12384
N. Dawes, M. Bavay, T. Egger, S. Sarni, A. Salehi, A. Davison, H. Jeung, K. Aberer, and M. Lehning
 From sensor networks to connected analysis tools
- 16:45–17:00 EGU2012-14432
P. Siusaliek, R. Jochem, K. Sons, and H. Hoffmann
 Intelligent Visualization of Geo-Information on the Future Web
- 17:00–17:15 EGU2012-8430
M. Plieger
 Automatic visualization of OpenDAP data resources using OGC services.

GI2.2 – Instrumentation, Measurement Strategies and Methods for Ocean-Based Geoscience Investigations – Orals

Convener: C. Waldmann | Co-Conveners: L. Beranzoli, I. Puillat-Felix

Room: 42

Chairperson: Christoph Waldmann

- 13:30–13:45 EGU2012-11528
J.-F. Rolin
 ESONET , a milestone towards sustained multidisciplinary ocean observation.
- 13:45–14:00 EGU2012-3293
G. Camoin, C. Mevel, R. Gatliff, and D. McInroy
 ECORD-IODP new opportunities in sub-seafloor investigation
- 14:00–14:15 EGU2012-4741
G. Wefer, T. Freudenthal, and A. Kopf
 The installation of a sub sea floor observatory using the sea floor drill rig MeBo
- 14:15–14:30 EGU2012-4062
Y. Kaneda, K Kawaguchi, E. Araki, H Matsumoto, T. Nakamura, S. Kamiya, K. Ariyoshi, T Hori, N Takahashi, T. Baba, M. Nakano, J. Choi, and S. Nishida
 Development and Utilization of the Ocean floor observatory DONET/DONET2 (Dense Ocean Network for Earthquakes and Tsunamis)
- 14:30–14:45 EGU2012-5597
E. Fahrbach, A. Beszczynska-Möller, S. Rettig, G. Rohardt, H. Sagen, S. Sandven, and E. Hansen
 The Fram Strait integrated ocean observatory
- 14:45–15:00 EGU2012-13237
J Pearlman, A Fischer, and R Houtman
 GEO Ocean Community of Practice - addressing the future of ocean observations

GI3.6 – Geophysical tomography with high-energy particles: recent developments and applications – Orals

Convener: D. Gibert | Co-Conveners: N. Lesparre, D. J. Marteau, H. Tanaka, P. Strolin, D. Carbone, P. A. Hernández

Room: 34

Chairperson: n.n.

- 15:30–15:45 EGU2012-3891
H.K.M. Tanaka, T. Kusagaya, A. Taketa, H. Oshima, and T Maekawa
 Development of the GDM system for imaging the internal structure of the Usu Cryptodome
- 15:45–16:00 EGU2012-3041
D. Gibert, N. Lesparre, J. Marteau, J.-C. Komorowski, F. Nicollin, O. Coutant, D. Carbone, B. Kergosien, and P. Rolland
 Density Muon Radiography of Soufrière of Guadeloupe Volcano: Comparison with Geological, Electrical Resistivity and Seismic data.
- 16:00–16:15 EGU2012-7484
P. Labazuy and the TOMUVOL Team
 Development and validation of muon imaging techniques to investigate the internal structure of volcanoes by integrating geophysical and muon tomography methods
- 16:15–16:30 EGU2012-12022
F. Ambrosino and MuRay Collaboration Team
 Status and perspectives of the MuRay project
- 16:30–16:45 EGU2012-9781
F. Webb, S. Kedar, J. Plaut, C. Jones, and C. Naudet
 Geological investigation of Mars using muon radiography - Target selection and priorities
- 16:45–17:00 EGU2012-3246
K. Hoshina and H.K.M. Tanaka
 Neutrino Radiography of the Earth's Core with the IceCube neutrino observatory

GI3.6 – Geophysical tomography with high-energy particles: recent developments and applications – Posters

Convener: D. Gibert | Co-Conveners: N. Lesparre, D. J. Marteau, H. Tanaka, P. Strolin, D. Carbone, P. A. Hernández

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A30 EGU2012-6747
S. Miyamoto, C Bozza, N D'Ambrosio, G De Lellis, A Di Crescenzo, N Di Marco, U Kose, N Naganawa, M Nakamura, R Rescigno, A Russo, H Shimizu, C Sirignano, S Stellacci, P Strolin, H Tanaka, and V Tioukov
The lava dome tomography in Unzen : the discussion about the observation and data treatment
- A31 EGU2012-1938
S Miyamoto, C Bozza, N D'Ambrosio, G De Lellis, A Di Crescenzo, N Di Marco, U Kose, N Naganawa, M Nakamura, R Rescigno, A Russo, H Shimizu, C Sirignano, S Stellacci, P Strolin, H Tanaka, and V Tioukov
The first radiography result of the latest lava dome in Unzen by cosmic muons
- A32 EGU2012-5068
D. Carbone, D. Gibert, J. Marteau, M. Diament, and L. Zuccarello
Application of muon radiography to Mt. Etna volcano
- A33 EGU2012-3185
N. Lesparre, D. Gibert, J. Marteau, B. Carlus, and C. Nussbaum
Muon tomography in the Mont Terri underground rock laboratory
- A34 EGU2012-3930
A. Taketa, H. K. M. Tanaka, and S. Okubo
The non-destructive measurement of soil water content of upper part of the cave using soft component of air shower
- A35 EGU2012-2778
A. Sannomiya and H. Tanaka
Introduction of a test measurement for a monitoring technology inside a large-scale civil engineering structure using muon radiography
- A36 EGU2012-3069
J. Marteau, B. Carlus, S. Gardien, C. Girerd, J.-C. Ianigro, J.-L. Montorio, D. Gibert, and F. Nicollin
Readout architecture based on the use of Silicon PhotoMultiplier (SiPM, or MMPC)
- A37 EGU2012-3059
J. Marteau, B. Carlus, S. Gardien, C. Girerd, J.-C. Ianigro, J.-L. Montorio, D. Gibert, and F. Nicollin
Readout architecture for sub-nanosecond resolution TDC
- A38 EGU2012-3236
H. Suenaga, K. Kiho, K. Miyakawa, and H. Tanaka
Development of a Logging Tool for Muon Radiography
- A39 EGU2012-9450
k. Takamatsu, h. Tanaka, and d. Shoji
Development of a simple-material discrimination method with three plastic scintillator strips for visualizing nuclear reactors
- A40 EGU2012-3867
H.K.M. Tanaka and the DENKA Collaboration
Development of muon radiography for a repetitional phenomenon
- A41 EGU2012-5365
R. Nishiyama, H. Tanaka, Y. Tanaka, S. Okubo, H. Oshima, and T. Maekawa
Development of a Joint Inversion Technique using Gravimetric and Muon-radiographic Data for Resolving Three-dimensional Density Structure of a Gigantic Body
- A42 EGU2012-13760
T. Kusagaya, T. Uchida, H. K. M. Tanaka, and M. Tanaka
Development and evaluation of a time-dependent radiographic technology by using a muon read out module
- A43 EGU2012-5795
A. Aleksandrov, **C. Bozza**, L. Consiglio, N. D'Ambrosio, G. De Lellis, A. Di Crescenzo, N. Di Marco, U. Kose, A. Lauria, E. Medinaceli, S. Miyamoto, C. Montesi, F. Pupilli, R. Rescigno, A. Russo, C. Sirignano, S.M. Stellacci, P. Strolin, and V. Tioukov
Automatic readout for nuclear emulsions in muon radiography of volcanoes

Tuesday, 24 April

ESS1.6 – Laser Scanning: 3D Spatial Data, Analysis, and Infrastructures in Geosciences (co-listed) – Posters

Convener: B. Höfle | Co-Conveners: N. Pfeifer, B. Székely, A. Zipf

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL148 EGU2012-5743
N. Slatcher, M. R. James, and G. Hunter
Optimising terrestrial LIDAR field deployment
- XL149 EGU2012-9864
I. Nichersu, I. Grigoras, A. Constantinescu, M. Mierla, and C. Tifanov
Processing and utilization of LiDAR data as a support for a good management of DDBR
- XL150 EGU2012-10798
S. Ghuffar, B. Székely, A. Roncat, A. Pocsai, and N. Pfeifer
An investigation of landslide deformation using range flow motion constraint applied on LiDAR data
- XL151 EGU2012-11709
C. Bews, I. Hartmeyer, M. Keuschnig, and L. Schrott
Semi-automatic discontinuity extraction from rock faces with LIDAR and Photogrammetry. A comparison validated by geotechnical data.
- XL152 EGU2012-12954
A. Vrežko, G. Kovacs, T. Podobnikar, and B. Székely
The Effects of the Terrain Variation and Changed Parameters of the Moving Window on the LIDAR DEM Spectrum
- XL153 EGU2012-13722
P. Dorninger, Z. Koma, and B. Székely
The influence of control parameter estimation on large scale geomorphological interpretation of pointclouds
- XL154 EGU2012-442
N. Kamp
Using High-Resolution Airborne LiDAR-Data for Landslide Mapping in the Eastern Alps
- XL155 EGU2012-2578
Y. S. Hayakawa
Morphological analysis of waterfall cliff face by terrestrial laser scanning
- XL156 EGU2012-5131
G. Gattolin, M. Franceschi, A. Breda, G. Teza, and N. Preto
Three dimensional modeling of depositional geometries. A case study from Tofane Group (Dolomites, Italy).
- XL157 EGU2012-9200
T. Knudsen and S. L. Kokkendorff
Updating a national scale LiDAR based height model
- XL158 EGU2012-9495
A. Mayr, M. Rutzinger, M. Bremer, C. Wiegand, K. Kringer, and C. Geitner
Analysis of shallow landslides by morphometry parameters derived from terrestrial laser scanning point clouds
- XL159 EGU2012-9742
Zs. Koma, A. Pocsai, B. Székely, P. Dorninger, A. Zámolyi, and A. Roncat
Analysis of multitemporal laserscanned DTMs of an active landslide (Doren, Western Austria) using a robust planefitting segmentation
- XL160 EGU2012-11485
M. Forbriger, B. Höfle, C. Siart, K. Schitteck, and O. Bubenzer
High-resolution Terrestrial Laser Scanning (TLS) on cushion peatlands - a case study from the Peruvian Andes

GI1.1 – Open Session on Geoscience Instrumentation – Posters

Convener: H. Svedhem | Co-Conveners: Prof. Korepanov, W. Schmidt, J.-L. Josset

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: V. Korepanov

- A50 EGU2012-8120
W. Schmidt, M.T. Capria, and G. Chanteur
Europlanet-RI: Access to Planetary Data, Tools, Models and Support Information

- A51 EGU2012-7089
A. Galkin, **J. Klump**, and M. Wiedenbeck
From Ions to Bits - Developing the IT infrastructure around the CAMECA IMS 1280-HR SIMS lab at GFZ
Potsdam
- A52 EGU2012-912
S. Evdokimov, R. Kadyrov, and N. Nourgalieva
Using Definiens eCognition and Arcgis programs in determination of reservoir properties
- A53 EGU2012-700
R. Ullah, S. H. Abdul-Jauwad, and K. M. Yahya
Structure from Motion using Tomasi-Kanade Factorization, SIFT and RANSAC
- A54 EGU2012-1901
M. Krassovski and T. Boden
Fossil-Fuel CO2 Emissions Database and Exploration System
- A55 EGU2012-12524
A. Schmidt, E. Tréguier, F. Schmidt, and S. Moussaoui
Compressing Data by Source Separation
- A56 EGU2012-11237
S. M. Barbosa, A. J. S. C. Pereira, L. J. P. F. Neves, G. Steinitz, H. Zafrir, R. Donner, and H. Woith
Experimental assessment of indoor radon and soil gas variability: the RADON project
- A57 EGU2012-12567
G. Haquin, **H. Zafrir**, D. Ilzyer, Y. Ganot, N. Weisbrod, Z.B. Alfassi, and S.M. Barbosa
A New Laboratory System for the Study of the Effect of Temperature on Radon Transport processes
- A58 EGU2012-13239
F.P. Pentaris, J.P. Makris, J. Stonham, and F. Vallianatos
Principles in wireless building health monitoring systems.
- A59 EGU2012-1301
V. Korepanov
Gamma-magnetic normalization - new effect to reduce flux-gate magnetometer noise level

GI1.3 – Data Assimilation and Data Publishing in Geosciences – Posters

Convener: M. Diepenbroek | Co-Conveners: Dr. Klump, J. Brase, A. Geyer, P. Fox

Hall A | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- A60 EGU2012-5175
F.L. Murphy, S.A. Callaghan, P.J. Hardaker, and R.J. Allan
The Geoscience Data Journal: collaboration between data repositories and publishing houses in data publishing
- A61 EGU2012-1440
L. Raymond, **C Chandler**, R. Lowry, E. Urban, G. Moncoiffe, P. Pissierssens, C. Norton, and H. Miller
Data Publication: A Partnership between Scientists, Data Managers and Librarians
- A62 EGU2012-6006
A. Düsterhus, F. Quadt, H. Höck, M. Stockhause, F. Toussaint, M. Dames, M. Lautenschlager, A. V. Hense, and A. N. Hense
Quality Assurance in Publication Processes of Environmental Data
- A63 EGU2012-8393
P. Gebauer, I. Kirchner, W. Peters-Kottig, J. Klump, R. Bertelmann, B. Rusch, D. Ulbricht, and M. Wattenbach
Geoscience data: Defining policies and workflow tools for long-term storage of continuously and temporarily collected data
- A64 EGU2012-8181
M. Diepenbroek, S. Bernonville, R. Bertelmann, M. Bittner, J. Brase, H. Grobe, H. Hoeck, J. Klump, M. Lautenschlager, U. Schindler, I. Sens, S. Peters, F. Toussaint, D. Ulbricht, and F. Ziedorn
Competence Center for Earth & Environmental Data (KomFor)
- A65 EGU2012-6596
D. Fleischer
A future data environment - reusability vs. citability and synchronisation vs. ingestion
- A66 EGU2012-6036
F. Toussaint, H. Höck, M. Dames, A. Düsterhus, A.N. Hense, A.V. Hense, M. Lautenschlager, F. Quadt, and M. Stockhause
The Data Publication Process at WDCC with the Assistant System Atarrabi
- A67 EGU2012-7058
D. Ulbricht, J. Klump, and R. Bertelmann
Publishing datasets with eSciDoc and panMetaDocs

- A68 EGU2012-7960
B. Pfeil, A. Olsen, A. Kozyr, S. Hankin, H. Koyuk, D. Bakker, C. Sabine, N. Metzl, and M. Telszewski
 SOCAT - Surface Ocean CO2 Atlas - a showcase for transparent data management and international collaboration
- A69 EGU2012-12673
F. Teichmann
 Information Superiority generated through proper application of Geoinformatics
- A70 EGU2012-5991
T. Klein, J. Langner, B. Broman, J. Svensson, B. Frankenberg, T. Langborg, and C. Bennet
 Environment Climate Data Sweden - Facilitating a wider sharing of environment and climate data
- A71 EGU2012-9211
H. Dixon, J Hannaford, and MJ Fry
 The UK National River Flow Archive - systems and procedures for managing a national hydrometric data archive
- A72 EGU2012-2832
J. Hakac and M. Sabo
 Gabcikovo dam and Liptovska Mara dam - statistical analysis of measurement data
- A73 EGU2012-6666
S. Tarquini, L. Nannipieri, M. Favalli, A. Fornaciai, S. Vinci, and F. Doumaz
 Release of a 10-m-resolution DEM for the whole Italian territory: a new, freely available resource for research purposes
- A74 EGU2012-6742
A Ratdomopurbo, C Widiwijayanti, N-T-Z Win, L-D Chen, and C Newhall
 WOVOdat Progress 2012: Installable DB template for Volcano Monitoring Database

SM1.4/G6.2/GI1.6 – Integrating large-scale European Research infrastructures for solid Earth Sciences: from data centers to core services (co-organized) – Orals

Convener: M. Cocco | Co-Conveners: F. Boler, L. Demicheli, T. Eck Van, C. Thomas, R. Carbonell

Room: 32

Chairperson: Massimo Cocco

- 13:30–13:45 EGU2012-5086
J. Ludden, D. Giardini, M. Cocco, M. Diament, and J. Lauterjung
 Building a Roadmap for European Solid Earth Sciences Infrastructure
- 13:45–14:00 EGU2012-1453
M. Cocco and EPOS Consortium
 Integrating Research Infrastructures for solid Earth Science: the EPOS preparatory phase roadmap and achievements
- 14:00–14:15 EGU2012-11933
W. Lengert, H.-J. Popp, and J.-P. Gleyzes
 GEO Supersites Data Exploitation Platform
- 14:15–14:30 EGU2012-8428
S. Cloetingh
 TOPO-EUROPE: An integrated solid earth approach to Continental Topography and Deep Earth - Surface Processes in 4D
- 14:30–14:45 EGU2012-14249
L Demicheli, J.N. Ludden, and F. Robida
 EuroGeoSurveys
- 14:45–15:00 EGU2012-2662
E. Kohler, H. Pedersen, A. Clémenceau, and R. Evans
 Governance of Large Scale Research Infrastructures: Tailoring Infrastructures to Fit the Research Needs
- Chairperson: Torild van Eck
- 15:30–15:45 EGU2012-11771
F. Boler and C. Meertens
 UNAVCO Data Center Initiatives in CyberInfrastructure for Discovery, Services, and Distribution of Data and Products
- 15:45–16:00 EGU2012-9536
W. Crawford, A. Brisbourne, G. D'Anna, E.R. Flüh, A. Galve, D. Graindorge, N. Harmon, T. Henstock, F. Klingelhöfer, G. Mangano, L. Matias, C. Peirce, V. Sallares, M. Schmidt-Aursch, F. Tilmann, and P. Voss
 Coordinating OBS Parks in Europe
- 16:00–16:15 EGU2012-10929
T. van Eck, R. Bossu, W Hanka, S Mazza, N Melis, L Ottemöller, A Villasenor, J Zednik, orfeus, and epos wg1
 Seismological observatories and research infrastructure within EPOS

- 16:15–16:30 EGU2012-9543
J.-P. Vilotte, M. Atkinson, A. Michelini, H. Igel, and T. van Eck
 The Virtual Earthquake and Seismology Research Community e-science environment in Europe (VERCE) FP7-INFRA-2011-2 project
- 16:30–16:45 EGU2012-6501
 W. Los and **S Sorvari**
 Common operations of European Environmental Research Infrastructures
- 16:45–17:00 EGU2012-10994
M. Harrison, F. Thomas, and R. Tomas
 INSPIRE Natural Risk Zones Data Specification

SM1.4/G6.2/GI1.6 – Integrating large-scale European Research infrastructures for solid Earth Sciences: from data centers to core services (co-organized) – Posters

Convener: M. Cocco | Co-Conveners: F. Boler, L. Demicheli, T. Eck Van, C. Thomas, R. Carbonell

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Torild van Eck

- XY450 EGU2012-11097
T. van Eck, S Mazza, L Ottemöller, R Sleeman, and J Zednik
 EPOS WG1: Seismological observatories and research infrastructure: A comprehensive example from four countries
- XY451 EGU2012-10540
G. Puglisi, P. Bachelery, T.J.L. Ferreira, K.S. Vogfjörð and the EPOS Volcano Observations Working Group Team
 Initiative for the creation of an integrated infrastructure of European Volcano Observatories
- XY452 EGU2012-7493
R.M.S. Fernandes, L.C. Bastos, C. Bruyninx, N. D'Agostino, J. Dousa, A. Ganas, M. Lidberg, J.-M. Nocquet and the WG4 Members Team
 The Contribution of the Geodetic Community (WG4) to EPOS
- XY453 EGU2012-8459
C. Freda, F. Funicello, P. Meredith, L. Sagnotti, P. Scarlato, V.R. Troll, E. Willingshofer, and Epos-wg6
 A European Network of Analytical and Experimental Laboratories for Geosciences: Challenges and Perspectives
- XY454 EGU2012-5885
A. Michelini, V. Lauciani, S. Mazza, G. Fiameni, C. Cacciari, P. Wittenburg, and D. Lecarpentier
 EPOS e-infrastructure and EUDAT: the development of a Collaborative Data Infrastructure
- XY455 EGU2012-8740
J. Zednik and P. Hejda
 CzechGeo/EPOS - Building a national data portal
- XY456 EGU2012-4466
W. Debski, G. Mutke, J. Suchcicki, W. Jozwiak, P. Wiejacz, and J. Trojanowski
 Polish Geophysical Solid Earth Infrastructure Contributing to EPOS
- XY457 EGU2012-5164
 ED Debayle, **PB Barra**, HP Pedersen, and RESIF Working Group
 RESIF-SI : an information system to collect, archive and distribute French seismological and geodetic data
- XY458 EGU2012-6502
R. Leonhardt, P. Melichar, R. Steiner, B. Leichter, and J. Berger
 The Conrad Observatory: Geomagnetism at the new geophysical observatory in Austria
- XY459 EGU2012-11246
K. Atakan, P. Heikkinen, C. Juhlin, H. Thybo, and K. Vogfjord
 European Plate Observing System - the Arctic dimension and the Nordic collaboration
- XY460 EGU2012-13734
K. S. Vogfjörð, F. Sigmundsson, S. Hjaltadóttir, H. Björnsson, P. Arason, S. Hreinsdóttir, E. Kjartansson, R. Sigbjörnsson, B. Halldórsson, and G. Valsson
 Networking of Icelandic Earth Infrastructures - Natural laboratories and Volcano Supersites
- XY461 EGU2012-11426
T. Megies, R. Barsch, M. Beyreuther, L. Krischer, and J. Wassermann
 ObsPy: A Python Toolbox for Seismologists, Seismological Observatories and Data Centers
- XY462 EGU2012-13346
B. Pirene and E. Guillemot
 Oceans 2.0: a Data Management Infrastructure as a Platform
- XY463 EGU2012-2274
C. Faccenna and F. Funicello
 The TOPOMOD-ITN project: unravel the origin of Earth's topography from modelling deep-surface processes

- XY464 EGU2012-4184
H. Igel and the QUEST Team
 The QUEST Project: Research and Training in Computational Seismology
- XY465 EGU2012-10938
 G. Suárez, T. van Eck, and **T. Ahern**
 The International Federation of Digital Seismograph Networks (FDSN): An example of open access to scientific data sharing
- XY466 EGU2012-1455
T. Ahern, C. Trabant, B. Weertman, R. Karstens, and Y. Suleiman
 Web services at the IRIS DMC to support integration of data sets

GI2.1/AS4.6 – Atmospheric and Meteorological Instrumentation (co-organized) – Orals

Convener: J. Vivekanandan | Co-Conveners: D. Parsons, M. Rose, C. Waldmann, M. Lange, J. Reuder, A. La Cour-Harbo

Room: 41

Chairperson: Manfred Lange and Joachim Reuder

- 08:30–08:45 EGU2012-897
J. Born, O. Möhler, W. Haunold, J. Schrod, I. Brooks, S. Norris, B. Brooks, M. Hill, and T. Leisner
 Meteorological and Aerosol Sensing with small Unmanned Aerial Systems
- 08:45–09:00 EGU2012-3471
J. Reuder and M. Jonassen
 Turbulence measurements in a wind park with the Micro-UAS SUMO
- 09:00–09:15 EGU2012-8218
K. Nicoll and R.G. Harrison
 Cloud detection using disposable airborne sensors
- 09:15–09:30 EGU2012-11103
A. Sobester, S. J. Johnston, J. P. Scanlan, E. E. Hart, and N. S. O'Brien
 Rapid Development of Bespoke Unmanned Platforms for Atmospheric Science
- 09:30–09:45 EGU2012-11404
G. Lohmann, S. Martin, A. Lampert, and P. Vörsmann
 UAS Measurements of the Boundary Layer Late Afternoon Transition
- 09:45–10:00 EGU2012-13124
Ó. Rögnvaldsson, H. Ágústsson, M.O. Jonassen, and H. Ólafsson
 Small unmanned airplanes and their use to improve on-demand local forecasts

COFFEE BREAK

Chairperson: Mike Rose, and Christoph Waldmann

- 10:30–10:45 EGU2012-11478
S. Langebner, C. Hasler, R. Schnitzhofer, F. Brilli, M. Jocher, and A. Hansel
 Ambient VOC-Measurements by GC-PTR-TOF
- 10:45–11:00 EGU2012-11454
A. Pierce, D. Obrist, H. Moosmuller, and C. Moore
 Cavity ring-down spectroscopy (CRDS) system for measuring atmospheric mercury using differential absorption
- 11:00–11:15 EGU2012-2467
R. A. Goldberg, F. J. Schmidlin, A. G. Feofilov, M. Bedrick, and R. L. Rose
 Comparison of Temperature Measurements in the Middle Atmosphere by Satellite with Profiles Obtained by Meteorological Rockets
- 11:15–11:30 EGU2012-2902
M. Ghysels, J. Cousin, N. Amarouche, L. Gomez-Martin, E. D. Riviere, and G. Durry
 Development of PicoSDLA laser sensors for in-situ measurements of CH₄, CO₂ and H₂O in the UTLS in the frame of the TRO-pico project.
- 11:30–11:45 EGU2012-682
R.A. Rose, T.R. Tsai, N.A. Macleod, G. Wysocki, and D. Weidmann
 Quantum Cascade Laser Heterodyne Radiometry for Atmospheric Observation
- 11:45–12:00 EGU2012-13843
J. Vivekanandan, E. Eloranta, S. Spuler, and B. Morley
 Calibration of High Spectral Resolution Lidar

- 12:00–12:15 EGU2012-13415
A. Heikkilä, T. Koskela, K. Lakkala, P. Kärhä, S. Syrjälä, H. Lemmetyinen, U. Feister, N. Kouremeti, A. Bais, S. Kazadzis, J.M. Vilaplana, J.J. Rodriguez, C. Guirado, and E. Cuevas
 New approaches in assessment of solar UV exposure ageing materials
- 12:15–12:30 EGU2012-10698
K. Y. Choi and E. J. Milton
 Airborne Hyperspectral Skydome: A New Dimension for Hyperspectral Sensing

GI2.1/AS4.6 – Atmospheric and Meteorological Instrumentation (co-organized) – Posters

Convener: J. Vivekanandan | Co-Conveners: D. Parsons, M. Rose, C. Waldmann, M. Lange, J. Reuder, A. La Cour-Harbo

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jothiram Vivekanandan

- A75 EGU2012-862
D. E. Constantin, A. Merlaud, M. Van Roozendaal, F. Mingireanu, M. Voiculescu, and L.P. Georgescu
 DOAS monitoring of tropospheric NO₂ from an UAV
- A76 EGU2012-4288
P. Anderson
 In situ measurements of TKE decay over sea-ice during evening transition using UAS.
- A77 EGU2012-5949
M. Horbanski, D. Pöhler, T. Mahr, T. Wagner, and U. Platt
 Application of DOAS Instruments for Trace Gas Measurements on Unmanned Aerial Systems
- A78 EGU2012-6327
S. Mayer, M. O. Jonassen, and J. Reuder
 The Unmanned Aerial System SUMO: an alternative measurement tool for polar boundary layer studies
- A79 EGU2012-6387
 M. A. Lange, S. Ioannou, and **C. Keleshis**
 A UAS-Facility at the Energy, Environment and Water Research (EEWRC) Center of The Cyprus Institute (Cyl)
- A80 EGU2012-10562
D. Martinez and J. Cuxart
 Application of the Micro-Meteorological UAV (M2AV) Carolo T200 for the Study of Barocline Flows
- A81 EGU2012-2326
A. Geddes and H Boesch
 Development of a Fabry-Perot Etalon Spectrometer for High-resolution Aerosol Observations in the Oxygen A-Band
- A82 EGU2012-3169
F. J. Schmidlin, E. T. Northam, C. E. Ashburn, and C. B. Brothers
 Upper Air Measurement Improvements
- A83 EGU2012-4155
 E. Zabolotskikh and **L. Bobylev**
 Enhanced Techniques for Mesoscale Cyclone Studies using Satellite Multi-sensor Approach
- A84 EGU2012-4819
C. Holstein-Rathlou, J.P. Merrison, J.J. Iversen, and P. Nornberg
 Quantification of wind flow in the European Mars Simulation Wind Tunnel Facility
- A85 EGU2012-7078
H. J. Jost, J.J. Scherer, J.B. Paul, and M.L. Fischer
 Analyzers for Ambient CH₄, CO, and N₂O Monitoring based on Mid-IR Difference Frequency Lasers
- A86 EGU2012-9877
A. H. Mortimer
 A Novel Miniaturised Infrared Imaging Spectrometer for the Measurement of Atmospheric Trace Gases
- A87 EGU2012-12102
M. Weiß and B. van den Hurk
 Land use change affecting our (modelled) climate
- A88 EGU2012-12491
M. Dorninger
 MELIFT - A new device for accurate measurements in a snow rich environment
- A89 EGU2012-12779
T. Guggenmoser and the GLORIA Team
 ESSenCe 2011 GLORIA Measurements
- A90 EGU2012-13240
J. Blank, J. Ungermann, T. Guggenmoser, M. Kaufmann, and M. Riese
 JURASSIC Retrieval Processing

GI2.2 – Instrumentation, Measurement Strategies and Methods for Ocean-Based Geoscience Investigations – Posters

Convener: C. Waldmann | Co-Conveners: L. Beranzoli, I. Puillat-Felix

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ingrid Puillat

- A91 EGU2012-11118
S. Sommer, M. Schmidt, and P. Linke
Dissolved methane plume mapping using Membrane Inlet Mass-Spectrometry (MIMS) at a blow out site in the North Sea
- A92 EGU2012-12452
M. Best, L. Thomsen, and D. de Beer
Challenges and Early Results: Interactive benthic experiments in hydrate environments of Barkley Canyon, NEPTUNE Canada.
- A93 EGU2012-13130
K. Moran, K. Juniper, M. Heesemann, M. Hoeberechts, M. Matabos, S. Mihaly, and **M. Scherwath**
Two Years of Regional Cabled Seafloor Observations Across Northern Cascadia
- A94 EGU2012-2842
R. Huber, A. Behnken, C. Waldmann, M. Kononets, A. Tengberg, and P.O.J. Hall
Real time access and long term archiving concepts for HYPOX observatory data
- A95 EGU2012-7189
M. Best and A. De Santis
Importance and Challenges of Coordinated Multiparameter Long-term Observing in the Deep Sea
- A96 EGU2012-12941
L. Belabbassi, S. Ingle, Z. Wang, S. DiMarco, M. Stoessel, X. Zhang, and K. DuVall
Six Years of Operational History of Cabled Ocean Observatories Installed off the Coast of Oman

GI2.5 – Preparatory activities for the scientific utilisation of the GMES Sentinel satellites constellations including Cal/Val activities of their optical instruments. – Posters

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

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Hugh Mortimer, Michael Berger, Josef Aschbacher

- A97 EGU2012-8674
A. H. Mortimer and D. Smith
The Spectral Response Recharacterisation of the Advanced Along Track Scanning Radiometer (AATSR) Using a High Resolution Fourier Transform Spectrometer.
- A98 EGU2012-11166
K. Y. Choi and E. J. Milton
Significance of Radiometric Calibration Accuracy in Multi-Scale Validation between Ground, Airborne and Spaceborne Platforms
- A99 EGU2012-589
Y.J. Li, Y. Xue, C. Li, and L.K. Yang
LABITS: An Algorithm for Land Aerosol and Bidirectional Reflectance Inversion by Time Series Technique and its Applications on NOAA AVHRR Data
- A100 EGU2012-1662
H. Nett, P. Ingmann, and K. McMullan
ESA's Sentinel-5 Precursor Mission: a GMES Mission for Global Observations of Atmospheric Composition
- A101 EGU2012-2335
F. Olschewski, C. Rolf, P. Steffens, A. Kleinert, C. Piesch, A. Ebersoldt, C. Monte, B. Gutschwager, J. Hollandt, P. Preusse, F. Friedl-Vallon, and R. Koppmann
Large-Area Radiation Sources for the In-flight Calibration of the GLORIA Interferometer
- A102 EGU2012-4156
C.-R. Li, L.-L. Tang, H.-B. Niu, X.-N. Zhou, Z.-Y. Liu, L.-L. Ma, and Y.-S. Zhou
Potential of Sentinel Satellites for Schistosomiasis Monitoring
- A103 EGU2012-4194
V.R. Gavrillov, A. A. Katysheva, B.B. Khlevnoy, B. E. Lisyansky, S.P. Morozova, A.S. Panfilov, V.I. Sapritsky, and M.V. Solodilov
Uncertainty evaluation of optical instruments radiometric calibration using integrating sphere
- A104 EGU2012-5038
J. Verrelst, J.P. Rivera, L. Alonso, L. Guanter, J. Delegido, and J. Moreno
Evaluating Machine learning regression algorithms for operational retrieval of biophysical parameters: opportunities for Sentinel-2 and -3

- A105 EGU2012-6067
K. Dabrowska-Zielinska, M. Budzynska, M. Tomaszewska, M. Bartold, and K. Turlej
ENVISAT.MERIS spectral bands and ENVISAT ASAR - discussion on applications of Sentinel 1 and 2 for agriculture in Poland.
- A106 EGU2012-6137
R. Roebeling, J. Schulz, T. Hewison, and B. Theodore
Inter-calibration of METEOSAT IR and WV channels using HIRS
- A107 EGU2012-7265
S.C. Wagner, T. Hewison, and R.A. Roebeling
A Review of the Strategy for the Meteosat Solar Band Calibration
- A108 EGU2012-7376
S.C. Wagner and T. Hewison
Implementation of an Inter-Calibration Method between Meteosat SEVIRI and MODIS Solar Bands using Deep Convective Cloud Targets
- A109 EGU2012-7439
A. Regan, P. Silvestrin, D. Fernandez, N. Leveque, and S. Eves
Earth Observation Convoy: Synergetic Observations with Satellites Flying in Formation with European Operational Missions - Possibilities for New Science
- A110 EGU2012-9317
H. Rebhan, C. Donlon, B. Berruti, A. Buongiorno, P. Femenias, P. Goryl, U. Klein, B. Seitz, J. Nieke, and C. Mavrocordatos
Sentinel-3 Mission Overview and Status
- A111 EGU2012-10160
J. Balodis, I. Janpaule, A. Rubans, A. Zarinsh, M. Abele, A. Ubelis, and M. Cekule
Eventual Participation in GMES of Institute of Geodesy and Geoinformation
- A112 EGU2012-11042
D. Odermatt, J. Pitarch, J. Carpenter, F. Pomati, M. Kawka, A. Wuest, and M. Schaeppman
Matching stratified plankton blooms with satellite data estimated chl-a
- A113 EGU2012-11278
S. Salvi, F. Sarti, A. Mouratidis, A. Coletta, and S. Zoffoli
InSAR monitoring for seismic risk management: the Sentinel 1 contribution
- A114 EGU2012-11523
C. Lamarche, M. Tomaszewska, K. Dabrowska-Zielinska, and P. Defourny
Object-based automatic change detection in forested areas of Poland between 2000 and 2006 using NDVI times series at moderate resolution.
- A115 EGU2012-12740
P. Féménias, H. Rebhan, C. Donlon, A. Buongiorno, and C. Mavrocordatos
Sentinel-3 Surface Topography Mission: Payload, Data Products and Cal/Val Preparation
- A116 EGU2012-13224
H.C. Winsemius, G.R. Brakenridge, R. Westerhoff, J. Huizinga, N. Villars, and C. Bishop
Flood mapping by combining the strengths of optical and Sentinel active radar remote sensing

GI3.4 – From Artefact to Historical Site : Geoscience and Non-Invasive Methods for the Study and Conservation of Cultural Heritage – Posters

Convener: N. Masini | Co-Conveners: L.V. Eppelbaum, M. Alvarez de Buergo, F. Soldovieri

Hall A | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Monica Alvarez - Nicola Masini

- A117 EGU2012-719
C. Ferrara, P.M. Barone, L. Pajewski, E. Pettinelli, and G. Rossi
The detectability of archaeological structures beneath the soil using the ground penetrating radar technique
- A118 EGU2012-1757
M. Alvarez de Buergo, P. Lopez-Arce, and R. Fort
Ion chromatography to detect salts in stone structures and to assess salt removal methods
- A119 EGU2012-8165
G. Leucci, D. Malfitana, G. Cacciaguerra, R. Lanteri, and G. Fragalà
Integrated Archaeological and Geophysical Surveys at the archaeological site of Priolo (Eastern Sicily, Italy).
- A120 EGU2012-2671
I. Mosca, F. Bilgili, T. Meier, and K. Sigloch
A Monte Carlo approach applied to ultrasonic non-destructive testing
- A121 EGU2012-4737
D. Tapete, F. Cigna, N. Masini, and R. Lasaponara
Satellite SAR imagery for site discovery, change detection and monitoring activities in cultural heritage sites: experiments on the Nasca region, Peru

- A122 EGU2012-9496
M. D. Robador, J.L. Pérez-Rodríguez, A. Muñoz-García, I. Garófano, M. A. Garrote, C. Odriozola, and A. Durán
Study by non-destructive technique of gilding coat of arms of the Real Alcázar of Seville, Spain
- A123 EGU2012-13862
I. Popister and A. Zeman
Analysis of the black crust on Saint Michael's Church
- A124 EGU2012-5423
M. Delle Rose, G. Leucci, and **G. Quarta**
Integrated geological and geophysical methods for the evaluation of the ceiling collapse hazard of the Poesia Cave in the Salento peninsula (southern Italy)
- A125 EGU2012-6521
G. Scardozzi and G. Leucci
Integration of archaeological and geophysical surveys in Hierapolis of Phrygia (Turkey)
- A126 EGU2012-10064
M. Bavusi, A. Loperte, and F. Soldovieri
A low cost ERT prototype in the Cultural Heritage monitoring
- A127 EGU2012-13287
M. Koehl and M. Viale
TLS and photogrammetry for the modeling of a historic wooden framework
- A128 EGU2012-9459
S. Vettori, E. Pecchioni, M. Camaiti, F. Garfagnoli, M. Benvenuti, P. Costagliola, and S. Moretti
Portable hyperspectral device as a valuable tool for the detection of protective agents applied on historical buildings
- A129 EGU2012-10219
M. Garcia-Valles, A.M. Puig, D. Gimeno, and M. Aulinas
Archeological glass from the Ciutadella de Roses site (Empordà, Girona, NE Spain): chemical characterization
- A130 EGU2012-12438
L. Gonçalves, H.A. Sampaio, A.M.S. Bettencourt, and M.I.C. Alves
GPR Surveys for Archaeological Investigation in a Bronze Age site from NW Portugal
- A131 EGU2012-12781
R. Antoine and C. Fauchard
Revealing the hidden structures of an historical bridge by high resolution geophysical methods : A case study of Pont de Coq, France
- A132 EGU2012-13128
R. Boaventura and **P. Moita**
Close or not so close? Provenance studies of megalithic monuments from Alentejo (Portugal)
- A133 EGU2012-1791
R Fort and **M. Alvarez de Buergo**
Stone decay assessment of the Madrid's Royal Palace (Spain) by means of ultrasound and magnetometric prospection
- A134 EGU2012-13858
N. Masini and R. Lasaponara
Remote sensing for archaeological site reconnaissance : the role of edge detection and enhancement

GI3.5 – Electromagnetic sensing techniques and geophysical methods for critical and transport infrastructures monitoring and diagnostics – Posters

Convener: J. Dumoulin | Co-Conveners: F. Soldovieri, L. Bigagli, S. Nordebo

Hall A | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: S. Nordebo and L. Bigagli

- A135 EGU2012-13976
L. Capozzoli and E. Rizzo
Non-destructive testing for the structures and civil infrastructures characterization
- A136 EGU2012-1427
M. Marchetti, **J. Dumoulin**, and L. Ibos
Winter risk estimations through infrared cameras an principal component analysis
- A137 EGU2012-1430
V. Boucher, **J. Dumoulin**, and M. Marchetti
Benefit of infrared images in visibility appreciation for fog conditions
- A138 EGU2012-7511
F. Sagnard
Design of a radar system based on compact cavity-backed ultra wide band slot antennas for ground penetrating applications

- A139 EGU2012-9656
S. Pignatti, A. Palombo, S. Pascucci, and F. Santini
 Integration of reflectances and thermography imagery for transport infrastructures diagnostics
- A140 EGU2012-5161
J. Hugenschmidt and P. Fürholz
 Selected topics related to the automation of mobile GPR data acquisition and handling
- A141 EGU2012-13048
 M. Bonano, S. Arangio, F. Calò, M. Di Mauro, M. Manunta, M. Marsella, **E. Sansosti**, A. Sonnessa, V. Tagliaferro, and R. Lanari
 Deformation analysis through the SBAS-DInSAR technique and geotechnical methods for structural damage assessment
- A142 EGU2012-10004
 G. Fornaro, V. Lapenna, A. Pauciuillo, D. Reale, **F. Soldovieri**, and S. Verde
 4D SAR Imaging with Very High-Resolution SAR systems
- A143 EGU2012-11770
J. K. Hagene
 Transport infrastructure monitoring: Testing of the NIODIM optical displacement monitoring system at the Sihlhochstrasse bridge in Zürich, Switzerland.
- A144 EGU2012-11693
 G. Persichetti, A. Minardo, G. Testa, and **R. Bernini**
 Long term structural health monitoring by distributed fiber-optic sensing
- A145 EGU2012-11115
A. Loperte, A. Satriani, M. Bavusi, and G. Cerverizzo
 A methodological integrated approach to optimize a hydrogeological engineering work
- A146 EGU2012-9972
A. Loperte, M. Bavusi, G. Cerverizzo, V. Lapenna, and F. Soldovieri
 Intergated geophysical investigations by GPR and ERT on the largest rock fill dam in Europe: Monte Cotugno dam (Southern Italy)
- A147 EGU2012-10193
A. Loperte, M. Bavusi, and F. Soldovieri
 A mobile GPR system for evaluating road landslide damage and effectiveness of the restoration works at Potenza District scale
- A148 EGU2012-1065
C. Shan and L. Pedersen
 Near Field and Tunnel Effects Study of Controlled Source Magnetotellurics on the Hallandsåsen Horst; Sweden
- A149 EGU2012-13933
 G. Leone and **R. Solimene**
 \begin{center} MUSIC Algorithms for Rebar Detection \end{center}
- A150 EGU2012-3553
 S. Nordebo, **T. Sjöden**, M. Gustafsson, and F. Soldovieri
 Fisher information analysis in electrical impedance tomography
- A151 EGU2012-3562
S. Nordebo, M. Gustafsson, J. Dumoulin, A. Perrone, S. Pignatti, and F. Soldovieri
 Frequency analysis and data correlation for beam displacement measurements based on the ISTIMES campaign in Montagnole
- A152 EGU2012-8554
 M. Bavusi, J. Dumoulin, A. Loperte, E. Rizzo, and **F. Soldovieri**
 2D and 3D Ground Penetrating Radar monitoring of a reinforced concrete asphalt plate affected by mechanical deformation.
- A153 EGU2012-9537
I. Catapano, L. Crocco, and F. Soldovieri
 A tomographic approach for full 3D imaging of hidden objects from GPR data
- A154 EGU2012-11569
 Y. A. Manstein, S. N. Lavrov, and **A. Scozzari**
 Geological and geophysical survey of a building site: the "European Coast
- A155 EGU2012-7905
L.V. Eppelbaum
 Combined Magnetic - VLF Remote Operated Vehicle Multi-Altitude Observations: A Powerful Tool for the Transport Infrastructures Geophysical Monitoring

Wednesday, 25 April

SM1.3/GI1.7 – Improving seismic networks performances: from site selection to data integration (co-organized) –

Orals

Convener: D. Pesaresi | Co-Conveners: F. Vernon

Room: 26

Chairperson: D. Pesaresi

- 08:30–08:45 EGU2012-10770
F. Vernon, J. Tytell, M.A.H. Hedlin, K. Walker, R. Busby, and R. Woodward
 Integration of Infrasound, Atmospheric Pressure, and Seismic Observations with the NSF EarthScope USArray Transportable Array
- 08:45–09:00 EGU2012-9257
N.S. Melis, C.P. Evangelidis, K. Boukouras, I.S. Kalogeras, and K. Makropoulos
 The Hellenic Seismic Network (HL): Recent Upgrades and Developments
- 09:00–09:15 EGU2012-3615
S. Lebedev, C. Horan, P. W. Readman, A.J. Schaeffer, M.R. Agius, L. Collins, F. Hauser, B. M. O'Reilly, and T. Blake
 Ireland Array: A new broadband seismic network targets the structure, evolution and seismicity of Ireland and surroundings
- 09:15–09:30 EGU2012-7107
K. Plenkers, T. Kraft, F. Bethmann, S. Husen, and M. Schnellmann
 Optimizing Site Selection in Urban Areas in Northern Switzerland
- 09:30–09:45 EGU2012-3881
 H. Rademacher, **D. Hart**, and C. Guralp
 A Technique to Determine the Self-Noise of Seismic Sensors for Performance Screening
- 09:45–10:00 EGU2012-11345
 A. Brisbourne, **J. Clinton**, G. Hetenyi, C. Pequegnat, M. Wilde-Piorko, A. Villasenor, P. Comelli, and the AlpArray Working Group
 AlpArray - technical strategies for large-scale European co-operation in broadband seismology

SM1.3/GI1.7 – Improving seismic networks performances: from site selection to data integration (co-organized) –

Posters

Convener: D. Pesaresi | Co-Conveners: F. Vernon

Hall XL | Display Time 08:00–19:30

Author in Attendance: 10:30–12:00

Chairperson: F. Vernon

- XL294 EGU2012-1077
S. I. Kaka
 Seismic noise study for a new seismic station at King Fahd University of Petroleum and Minerals in Saudi Arabia
- XL295 EGU2012-2272
A.-A Mohamed
 Role of the Egyptian National Seismological Network to mitigate the seismic hazard in Egypt
- XL296 EGU2012-2614
M.-T. Apoloner and G. Bokelmann
 Improving identification of regional depth phases in sparse networks
- XL297 EGU2012-3072
Dr. L. Zimakov and P. Passmore
 HIGH-RESOLUTION, LOW POWER, INTERGRATED AFTERSHOCK and MICROZONATION SYSTEM
- XL298 EGU2012-3376
S. Hirahara, N. Uchida, and J. Nakajima
 Autonomous telemetry system by using mobile networks for a long-term seismic observation
- XL299 EGU2012-3924
Y. Jia, N. Horn, and W. Lenhardt
 Site effects in seismic data acquisition
- XL300 EGU2012-5052
A. Ala Amjadi, Z. H. Shomali, and M. R. Hatami
 Real-time seismic data processing using seiscomp3 in Central Alborz region/Iran
- XL301 EGU2012-6598
J. Bajc, Ž. Zaplotnik, M. Živčič, and M. Šarman
 Local magnitude scale in Slovenia

- XL302 EGU2012-7310
P. L. Bragato, **D. Pesaresi**, A. Saraò, P. Di Bartolomeo, and G. Duri
OGS improvements in the year 2011 in running the Northeastern Italy Seismic Network
- XL303 EGU2012-7717
M. Cantarero, S. Di Prima, **M. Mattia**, D. Patanè, and M. Rossi
Geophysical monitoring of a complex geologic framework: the multi-disciplinary sensor networks in Sicily (Italy)
- XL304 EGU2012-7830
C. Baillard, W. Crawford, V. Ballu, and C. Hibert
Kurtosis based automated P-S phase picking procedure for hypocenter determination: Vanuatu region case study
- XL305 EGU2012-8121
O. Valtonen, M. Uski, A. Korja, T. Tiira, and J. Kortström
Simulations of a Microearthquake Network
- XL306 EGU2012-8654
A. Lois, E. Sokos, P. Paraskevopoulos, and G-A. Tselentis
S-onset time automatic picking based on polarization analysis and higher order statistics
- XL307 EGU2012-9374
J.-J. Lévêque, M. Bès de Berc, A. Maggi, and J.-Y. Thoré
Broad-band seismometers in the extreme cold: what we learn from the observatory station CCD (Concordia, Antarctica)
- XL308 EGU2012-9468
D. Spallarossa, L. Tiberi, and G. Costa
Comparison of manual and automatic onset Time picking for local earthquake in North Eastern Italy.
- XL309 EGU2012-9523
I.S. Kalogeras, C.P. Evangelidis, N.S. Melis, and K. Boukouras
The Athens Acropolis Strong Motion Array
- XL310 EGU2012-9764
R. Steiner, **G. Costa**, W. Lenhardt, N. Horn, and P. Suhadolc
Rigorous noise test and calibration check of strong-motion instrumentation at the Conrad Observatory in Austria.
- XL311 EGU2012-10922
T. Demachi, S. Miura, Y. Ohta, K. Tachibana, S. Ueki, T. Sato, M. Ohzono, and N. Umino
Continuous GPS observations in Tohoku University and recovery effort after the 2011 off the Pacific coast of Tohoku Earthquake
- XL312 EGU2012-11006
A. Tramelli, G. De Natale, C. Troise, and M. Orazi
A new integrated approach to seismic network optimization
- XL313 EGU2012-11620
M. Langlais, B. Vial, and O. Coutant
A noise comparison between two different types of sensor installation
- XL314 EGU2012-12370
J. Reyes, R. Newman, F. Vernon, and G. van den Hazel
Moment Tensor code for the Antelope Environmental Monitoring System
- XL315 EGU2012-12521
F. Vallianatos, G. Hloupis, and I. Papadopoulos
Evaluation results after seven years of operation for the permanent Hellenic Seismological Network of Crete (HSNC).

GI2.5 – Preparatory activities for the scientific utilisation of the GMES Sentinel satellites constellations including Cal/Val activities of their optical instruments. – Orals

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

Room: 42

Chairperson: Michael Berger & Hugh Mortimer

- 08:30–08:45 EGU2012-7324
S.C. Wagner, T. Hewison, R.A. Roebeling, M. Koenig, J. Schulz, and P. Miu
An Introduction to the Global Space-based Inter-Calibration System from a EUMETSAT Perspective
- 08:45–09:00 EGU2012-7966
E. Johansson and K.-G. Karlsson
An Intercomparison of AVHRR, MERIS, AATSR and MODIS radiances using a SNO approach
- 09:00–09:15 EGU2012-3082
G. Zibordi, F. Mélin, and J.-F. Berthon
Trends and Intra-annual variations of spectral biases in multi-mission remote sensing primary ocean color products at a coastal site

- 09:15–09:30 EGU2012-6112
D. Smith, B. G. Latter, and C. Poulsen
 Providing Consistent (A)ATSR Solar Channel Radiometry for Climate Studies
- 09:30–09:45 EGU2012-4704
H. Bonekamp, A. O'Carroll, E. Kwiatkowska, F. Montagner, H. Wilson, V. Fournier Sicre, V. Santacesaria, and C. Loddo
 EUMETSAT activities in preparation of the Sentinel-3 Marine Centre
- 09:45–10:00 EGU2012-7042
A. Bracher, T. Dinter, M. Altenburg Soppa, B. Taylor, and V. Rozanov
 Using OLCI/Sentinel-3 and Sentinel-5-P data synergistically for retrieving different phytoplankton groups from space

COFFEE BREAK

Room: 7

Chairperson: Josef Aschbacher & Michael Berger

- 10:30–10:45 EGU2012-4381
J. Aschbacher and M.P. Milagro-Perez
 GMES Space Component: Programme overview
- 10:45–11:00 EGU2012-13148
M.W. Hansen, J.A. Johannessen, B. Chapron, and K.-F. Dagestad
 Monitoring the surface inflow of Atlantic Water to the Norwegian Sea using Synthetic Aperture Radar
- 11:00–11:15 EGU2012-6569
P.F. Levelt, J.P. Veefkind, M. van Weele, E.A.A. Aben, C. Clerbaux, and T. Phulpin
 Exploiting Sentinel 5's synergy with IRS and 3MI on METOP-SG for Protocol Monitoring and Air Quality-Climate Interaction
- 11:15–11:30 EGU2012-7550
R. Engelen, V.-H. Peuch and the MACC-II Team
 The use of Sentinel satellite data in the MACC-II GMES pre-operational atmosphere service
- 11:30–11:45 EGU2012-4087
 J. A. Sobrino, J. C. Jimenez-Muñoz, A. Ruescas, C. Brockmann, **A. Heckel**, P.R.J. North, J.J. Remedios, G. Darren, C. Merchant, M. Berger, G. Soria, and O. Danne
 Land Surface Temperature retrieval from Sentinel 2 and 3 Missions: a conceptual framework
- 11:45–12:00 EGU2012-7619
 S. Bontemps, **P. Defourny**, J. Radoux, V. Kalogirou, and O. Arino
 Global land cover products tailored to the needs of the climate modeling community - Land Cover project of the ESA Climate Change Initiative

GI3.4 – From Artefact to Historical Site : Geoscience and Non-Invasive Methods for the Study and Conservation of Cultural Heritage – Orals

Convener: N. Masini | Co-Conveners: L.V. Eppelbaum, M. Alvarez de Buergo, F. Soldovieri

Room: 41

Chairperson: Monica Alvarez - Nicola Masini

- 08:30–08:45 EGU2012-1382
L.V. Eppelbaum
 Optimization of archaeogeophysical investigations in complex environments on example of advanced magnetic data analysis
- 08:45–09:00 EGU2012-5873
 L. Capozzoli, N. Masini, **E. Rizzo**, R. Lasaponara, and G. Orefici
 Electrical Resistivity Tomographies on the detection of adobe buried archaeological structures in Piramide Sur in Cahuachi (Peru)
- 09:00–09:15 EGU2012-9345
F. Soldovieri, E. Utsi, A. Alani, and R. Persico
 Imaging of Archaeological Remains at Barcombe Roman Villa using Microwave Tomographic Depictions of Ground Penetrating Radar Data
- 09:15–09:30 EGU2012-8389
D. Tapete, G. Gigli, F. Mugnai, P. Vannocci, E. Pecchioni, S. Morelli, R. Fanti, and N. Casagli
 Rock and stone weathering at Citadel fortifications, Gozo (Malta): benefits from terrestrial laser scanning combined with conventional investigations

- 09:30–09:45 EGU2012-5269
M. Mele, M. Cremaschi, M. Giudici, A. Bassi, C. Pizzi, and A. Lozej
 Reconstructing hidden landscapes. DC and EM prospections in the Terramara Santa Rosa (bronze age settlement - northern Italy)
- 09:45–10:00 EGU2012-1762
M. Alvarez de Buergo, R. Fort, D.M. Freire, P. Lopez-Arce, and C. Vazquez-Calvo
 How to scientifically assess a restoration project: a case study
- 10:00–10:15 EGU2012-1517
M. Drdacky and Z. Slizkova
 Enhanced affordable methods for assessment of material characteristics and consolidation effects on stone and mortar

COFFEE BREAK

Chairperson: Lev Eppelbaum - Francesco Soldovieri

- 10:30–10:45 EGU2012-1844
M.I. Martínez-Garrido, S. Aparicio, R. Fort, M.A.G Izquierdo, and J.J. Anaya
 Implementing wireless sensor networks for architectural heritage conservation
- 10:45–11:00 EGU2012-5876
M. Gomez-Heras, W Wedekind, and P. Lopez-Arce
 Discerning total salt contents and surface humidity on building stone with a portable moisture meter (Protimeter) in the region of Petra (Jordan)
- 11:00–11:15 EGU2012-7827
L. Pappalardo, D. Bracchitta, O. Palio, G. Pappalardo, and F. Rizzo
 Obsidian provenance determination by using the beam stability controlled BSC-XRF and the PIXE-alpha portable spectrometers of the LANDIS laboratory of the LNS-INFN and IBAM-CNR in Catania (Italy)
- 11:15–11:30 EGU2012-9860
A. Calia, M. Sileo, and G. Leucci
 The assessment of ultrasonic tests as a tool for qualification and diagnostic study of traditional highly porous and soft stone materials used in the built heritage of the past.
- 11:30–11:45 EGU2012-9760
L. Gentaz, T. Lombardo, and A. Chabas
 The use of Interferometric Microscopy to assess 3D modifications of deteriorated medieval glass.
- 11:45–12:00 EGU2012-10289
N. Masini, M. A. Aiello, L. Capozzoli, and E. Vasanelli
 Thermographic inspection of bond defects in Fiber Reinforced Polymer applied to masonry structures
- 12:00–12:15 EGU2012-14090
 A. Guida, **B. Dimitrijevic**, and A. Pagliuca
 Reinforced Concrete Condition Assessment in Architectural Heritage. The Lion Chambers (Glasgow, UK) and the Theatre E. Duni (Matera, Italy)

GI3.5 – Electromagnetic sensing techniques and geophysical methods for critical and transport infrastructures monitoring and diagnostics – Orals

Convener: J. Dumoulin | Co-Conveners: F. Soldovieri, L. Bigagli, S. Nordebo

Room: 41

Chairperson: n.n.

- 13:30–14:00 EGU2012-13850
V. Cuomo, M. Proto, F. Soldovieri and the ISTIMES Team
 ISTIMES project: status and outcomes
- 14:00–14:15 EGU2012-13463
J. Stainbruch and K. Karmazin
 Geophysical survey and diagnostic monitoring of the water main Zelivka in Czech Republic
- 14:15–14:30 EGU2012-8808
J. K. Hagene
 Transport infrastructure monitoring: A ground based optical displacement monitoring system, field tests on a bridge, the Musmeci's bridge in Potenza, Italy.
- 14:30–14:45 EGU2012-7467
M.R. Gallipoli, A. Perrone, T.A. Stabile, F.C. Ponzio, and R. Ditommaso
 Joint application of non-invasive techniques to characterize the dynamic behavior of engineering structures

- 14:45–15:00 EGU2012-6338
L. Alperovich, **L. Eppelbaum**, V. Zheludev, J. Dumoulin, F. Soldovieri, M. Proto, M. Bavusi, and A. Loperte
A new combined wavelet methodology applied to GPR and ERT data in the Montagnole experiment (French Alps)
Chairperson: F. Soldovieri and S. Nordebo
- 15:30–15:45 EGU2012-9997
M. Argenti, V. Giannini, R. Averty, L. Bigagli, and J. Dumoulin
ISTIMES Integrated System for Transport Infrastructures Surveillance and Monitoring by Electromagnetic Sensing
- 15:45–16:00 EGU2012-12838
J. Dumoulin and R. Averty
IrLaW an OGC compliant infrared thermography measurement system developed on mini PC with real time computing capabilities for long term monitoring of transport infrastructures
- 16:00–16:15 EGU2012-9493
I. Catapano, M. Bavusi, A. Loperte, L. Crocco, and **F. Soldovieri**
On the combined use of radar systems for multi-scale imaging of transport infrastructures
- 16:15–16:30 EGU2012-5085
G. Riccio and G. Gennarelli
Electromagnetic sensing for the monitoring of structures and infrastructures: a model for the diffraction by penetrable wedges
- 16:30–16:45 EGU2012-12034
A. Brancaccio, G. Leone, and R. Solimene
Fault Detection in Reinforced Concrete: Numerical Results
- 16:45–17:00 EGU2012-11265
F. Soldovieri, D. Comite, A. Galli, G. Valerio, P.M. Barone, **S.E. Lauro**, E. Mattei, and E. Pettinelli
Retrieval of Shape Characteristics for Buried Objects with GPR Monitoring
- 17:00–17:12 **Oral Session Discussion**
- 17:12–17:15 **Oral Session Conclusion**
- 17:15–17:20 **Forewords on poster session discussion: PSD 14.4**

Thursday, 26 April

GI1.5 – Intelligent geo-Information Management in the Future Internet (co-organized) – Posters

Convener: Dr. Havlik | Co-Conveners: Z A Sabeur, S. Nativi, W. Schmidt

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY451 EGU2012-12534
B. L. Bye, I. McCallum, and J. Maso
 GEO label: The General Framework for Labeling and Certification
- XY452 EGU2012-13158
 C.B. Geyer and **D. Havlik**
 Mobile VGI applications for the Future Internet
- XY453 EGU2012-10157
F. Zander and S. Kralisch
 RBIS - An Environmental Information System
- XY454 EGU2012-9942
C. Lussana, M. Ranci, and F. Uboldi
 A Quality-Control-Oriented Database for a Mesoscale Meteorological Observation Network
- XY455 EGU2012-10174
D. Gaitanaru, A. Priceputu, and C.R. Gogu
 Geospatial Data Management Platform for Urban Groundwater

GI2.3/PS1.3 – Space Instrumentation, Planetary landers and Rovers (co-organized) – Orals

Convener: M. Leese | Co-Conveners: P. Falkner, L. Richter, G. Kargl

Room: 41

Chairperson: Mark Leese

- 10:30–10:45 EGU2012-6385
R. D. Lorenz
 MP3 - A Meteorology and Physical Properties Package to explore Air:Sea interaction on Titan
- 10:45–11:00 EGU2012-5031
M. Knapmeyer, A. Akito, G. Bampasidis, W.B. Banerdt, A. Coustenis, M.J. Fouch, E.J. Garnero, O. Khavroshkin, N. Kobayashi, X. Moussas, W.T. Pike, K.J. Seidensticker, A. Solomonidou, H. Yu, and A. Zakharov
 Planetary Seismometers: An Overview
- 11:00–11:15 EGU2012-1403
N. Bost, F. Westall, C. Ramboz, and F. Foucher
 The International Space Analogue Rock Store (ISAR): A key tool for future planetary exploration.
- 11:15–11:30 EGU2012-7608
D. Devismes, P.-Y. Gillot, J.-C. Lefevre, E. Chassefière, and F. Chiavassa
 A New K-AR Development For In Situ Geochronology On The Surface Of Mars
- 11:30–11:45 EGU2012-5809
C. Pilorget, J.-P. Bibring, M. Berthe, and the MicrOmega team
 MicrOmega: an IR hyperspectral microscope to in-situ analyze planetary and small bodies samples, at their grain scale
- 11:45–12:00 EGU2012-11660
S. Barabash, M. Wieser, and P. Wurz
 Spectrometers for particle measurements in space based on surface reflection

GI2.3/PS1.3 – Space Instrumentation, Planetary landers and Rovers (co-organized) – Posters

Convener: M. Leese | Co-Conveners: P. Falkner, L. Richter, G. Kargl

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Gunter Kargl

- A22 EGU2012-8073
H. Haukka, A.-M. Harri, S. Alexashkin, H. Guerrero, W. Schmidt, M. Genzer, and L. Vazquez
 Mars MetNet Mission Payload Overview

- A23 EGU2012-2058
R. Sanz, **A. B. Fernandez**, J.A. Dominguez, B. Martin, and M. Díaz-Michelena
Radiation test of AMR sensors for MetNet Mars Precursor Mission
- A24 EGU2012-4318
F. Foucher, G. López Reyes, N. Bost, F. Rull, P. Rüßmann, and F. Westall
Effect of the crushing process on Raman analyses: consequences for the Mars 2018 mission
- A25 EGU2012-2925
W. Macher, N. Kömle, **G. Kargl**, M. Bentley, and E. Kaufmann
Study of the temperature evolution of a heated cylinder with mantle and consequences for spaceborne thermal conductivity sensors
- A26 EGU2012-9622
E. Brageot, O. Groussin, **P. Lamy**, J.-L. Reynaud, and G. Fargant
THERMAP: a mid-infrared spectro-imager based on an uncooled micro-bolometer for space missions to small bodies of the solar system
- A27 EGU2012-7271
P. Zhu, O. Karatekin, J.-P. Noel, M. van Ruymbeke, and V. Dehant
A high-dynamic and accurate electromagnetic radiation and thermal energy detector for planetary studies
- A28 EGU2012-12577
M. Tulej, A. Riedo, S. Meyer, M. Iakovleva, M. Neuland, and P. Wurz
A miniaturised laser ablation/ionisation analyser for investigation of elemental/isotopic composition with the sub-ppm detection sensitivity
- A29 EGU2012-10905
V. J. Scott, X. Amashukeli, P. H. Siegel, A. Fisher, Y. Bae, and R. Toda
An RF-powered micro-extractor for the detection of astrobiological target molecules.
- A30 EGU2012-12800
C. Briois, L. Thirkell, A. Boukrara, J.P. Lebreton, R. Thissen, P. Puget, H. Cottin, N. Grand, C. Pennanech, P. Zapf, C. Szopa, N. Carrasco, C. Chapuis, A. Bouabdellah, J.J. Berthelier, C. Engrand, and A. Makarov
A High Resolution Orbitrap Mass Spectrometer for In-Situ Analysis in Planetary Science
- A31 EGU2012-11041
M. Wieser, S. Barabash, M. Emanuelsson, K. Brinkfeldt, and P. Enoksson
The PRIMA instrument onboard of the Swedish Prisma mission
- A32 EGU2012-3390
A. Cadu, P. Devoto, P. Louarn, and J.-A. Sauvaud
Development of grazing incidence devices for space-borne time of flight mass spectrometry
- A33 EGU2012-8859
R. Rispoli, E. De Angelis, L. Colasanti, N. Vertolli, S. Orsini, J. Scheer, A. Mura, A. Milillo, P. Wurz, S. Selci, A.M. Di Lellis, R. Leoni, M. D'Alessandro, F. Mattioli, and S. Cibella
ELENA MCP detector: absolute efficiency measurement for low energy neutral atoms
- A34 EGU2012-13806
J.-P. Lebreton
On the issue of surface contamination of a Langmuir Probe sensor: Demeter ISL results
- A35 EGU2012-8728
M. Sampl, Th. Oswald, H.O. Rucker, W. Macher, D. Plettemeier, and W.S. Kurth
The true properties of the Waves antennas onboard the Juno S/C
- A36 EGU2012-8449
H. Ishii, H. Kojima, H. Fukuhara, S. Okada, and H. Yamakawa
The development of the miniaturized waveform receiver with the function measuring Antenna Impedance in space plasmas
- A37 EGU2012-7223
H. Fukuhara, H. Kojima, H. Ishii, S. Okada, and H. Yamakawa
Development of Small Plasma Wave Receiver with a Dedicated Chip for Scientific Spacecraft

Friday, 27 April

GI3.1 – Civil Engineering Applications of Ground Penetrating Radar – Orals

Convener: L. Pajewski | Co-Conveners: A. Benedetto, A. Loizos, E. Slob

Room: 34

Chairperson: Andreas Loizos, Lara Pajewski

- 13:30–13:45 EGU2012-12179
A. Alani, G. Kilic, and M. Aboutalebi
 Applications of Ground Penetrating Radar in Bridge Health Monitoring Using Different Frequency Antennae Systems
- 13:45–14:00 EGU2012-8494
K. Z. Jadoon, L. Weihermüller, B. Scharnagl, M. B. Kowalsky, M. Bechtold, S. S. Hubbard, H. Vereecken, and S. Lambot
 Identifying unsaturated soil hydraulic parameters using integrated hydrogeophysical inversion approach on time-lapse ground-penetrating radar data
- 14:00–14:15 EGU2012-13447
 I. Trinks, **M. Kucera**, A. Hinterleitner, K. Löcker, E. Nau, W. Neubauer, and T. Zitz
 Large-scale, high-definition Ground Penetrating Radar prospecting in archaeology
- 14:15–14:30 EGU2012-7019
L. Krysiński and J. Sudyka
 Assessment of an Impulse GPR Antenna Abilities in Investigation of Transversal Cracks of the Bituminous Pavement
- 14:30–14:45 EGU2012-10068
A. Lalagüe and I. Hoff
 Use of Ground Penetrating Radar in tunnel maintenance: detection of loose rocks on top of the concrete inner lining
- 14:45–15:00 EGU2012-12522
 L. Reindl, F. Schilling, **T. Ostertag**, L. Chen, and M. Wilde
 Use of Ground Penetrating Radar for detection of trapped and buried people

GI3.1 – Civil Engineering Applications of Ground Penetrating Radar – Posters

Convener: L. Pajewski | Co-Conveners: A. Benedetto, A. Loizos, E. Slob

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Evert Slob, Lara Pajewski

- A9 EGU2012-4269
A. Benedetto
 Tracking of cracks in bridges using GPR: a 3D approach
- A10 EGU2012-5163
C. Plati, K. Georgouli, and A. Loizos
 Investigation of antenna frequency impact on assessing voids of asphalt pavements using GPR
- A11 EGU2012-12501
T. Golebiowski
 GPR monitoring of rock mass stability in selected post-mining region in Poland
- A12 EGU2012-9233
J. Poikajärvi, K. Peisa, and A. Narbro
 GPR in Nondestructive Quality Assurance of New Asphalt Pavements
- A13 EGU2012-4742
S. Kadioglu and Y. K. Kadioglu
 Research of Stability Problems on Ankara-Konya High Speed Railway Line (Turkey) using Ground Penetrating Radar and Petrographical Methods
- A14 EGU2012-8447
K. Czaja
 Application of modeling of electromagnetic field and GPR measurements in investigations of antique tenement
- A15 EGU2012-3565
 Y.-F. Lin, **H.-H. Hsu**, K.-T. Hsu, and J.-Y. Wang
 Using Ground Penetrating Radar to Investigate Cavities below Spillway
- A16 EGU2012-803
 E. Eshaghi, A. Kamkar Rouhani, **M. Esteki**, and A. arabamiri
 Using ERT and GPR methods to detect shallow subsurface targets

- A17 EGU2012-2505
F. Frezza, L. Pajewski, C. Ponti, G. Schettini, and N. Tedeschi
Cylindrical-Wave Approach for Electromagnetic Scattering by Subsurface Targets in a Lossy Medium
- A18 EGU2012-9343
E. Slob
Full waveform inverse modeling of GPR Data of layered media
- A19 EGU2012-4120
F. Benedetto and **A. Benedetto**
Enhancing the resolution of gpr spectra for pavement engineering applications
- A20 EGU2012-7312
N. Spanoudakis, M. Manataki, N. Economou, and A. Vafidis
Attribute analysis and deconvolution on GPR data
- A21 EGU2012-14311
F. Frezza, **F. Mangini**, and N. Tedeschi
A numerical study for the electromagnetic scattering of an elliptically polarized plane wave by a concentric spherical object in a dissipative medium
- A22 EGU2012-7780
F. Tosti and C. Patriarca
Time and frequency GPR waveforms analysis for clay content evaluation in soils
- A23 EGU2012-11755
A. Tzanis
Extraction of orientation-and-scale-dependent information from GPR B-scans with tunable two-dimensional wavelet filters
- A24 EGU2012-2052
S. Meschino, L. Pajewski, M. Pastorino, A. Randazzo, and G. Schettini
Detection of Buried Objects by Means of a SAP Technique: Comparing MUSIC- and SVR-Based Approaches
- A25 EGU2012-12247
C. Ekes and B. Neducz
Pipe Penetrating Radar: a New Tool for the Assessment of Critical Infrastructure
- A26 EGU2012-13882
C. Fauchard, B. Li, and M. Kadi
Density measurements of road overlays samples with nuclear gauges and a Step Frequency Radar

GI3.2 – Geophysical Field Analysis in Complex Environments – Orals

Convener: L.V. Eppelbaum | Co-Conveners: P. Gaillot, M. Ezersky, Anatoly Legchenko, Prof. Al-Zoubi, J. Kück, D. Meldrum, M. Rose

Room: 42

Chairperson: Lev Eppelbaum, Michael Ezersky, Jochem Kück, P. Gaillot

- 13:30–13:45 EGU2012-1450
M. Ezersky, A. Al-Zoubi, L. Eppelbaum, S. Keydar, E. Akkawi, B. Medvedev, E. Levi, and A. Legchenko
Mechanism of sinkhole formation along the Dead Sea shores -geophysical evidences
- 13:45–14:00 EGU2012-3418
L.V. Eppelbaum, L.S. Alperovich, V. Zheludev, M. Ezersky, A. Al-Zoubi, and E. Levi
Integration of potential and quasipotential geophysical fields and GPR data for delineation of buried karst terranes in complex environments
- 14:00–14:15 EGU2012-10105
C. Virgil, S. Ehmann, A. Hördt, M. Leven, and E. Steveling
Measuring and interpretation of three-component borehole magnetic data
- 14:15–14:30 EGU2012-1434
A. Legchenko, M. Ezersky, M. Boucher, A. Chevalier, and J.-M. Vouillamoz
3D magnetic resonance imaging as a non-invasive tool for investigating water-filled karst formations
- 14:30–14:45 EGU2012-1980
A. Al-Zoubi, E. Akkawwi, A. Abueadas, L. Eppelbaum, S. Keydar, B. Medvedev, E. Levi, and M. Ezersky
Integrated Geophysical Tools for Sinkholes Study along the Dead Sea Shoreline
- 14:45–15:00 EGU2012-12603
C. Moore, A. Steffen, D. Obrist, R. Staebler, T. Douglas, and S. Nghiem
Mercury Surface-Atmosphere Flux and Speciation Measurements in Barrow, Alaska, USA during the BROMEX campaign
- 15:00–15:15 EGU2012-3271
A. Behar
Recent Polar Instrumentation Developments Using Low Cost, New Access Methods via Iridium Short Burst Data (SBD)
-

GI3.2 – Geophysical Field Analysis in Complex Environments – Posters

Convener: L.V. Eppelbaum | Co-Conveners: P. Gaillot, M. Ezersky, Anatoly Legchenko, Prof. Al-Zoubi, J. Kück, D. Meldrum, M. Rose

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Anatoly Legtchenko, Abdallah Al-Zoubi, M. Rose, D. Meldrum

- A27 EGU2012-1432
S. Keydar, B Medvedev, A. Al-Zoubi, and M. Ezersky
Another look of imaging of shallow subsurface. Real examples from the Dead Sea sinkhole development areas
- A28 EGU2012-1603
G. Kaufmann, D. Romanov, G. Jahn, and J. Galindo Guerreros
Revealing hidden karst structures: From geophysical measurements towards predictive modelling
- A29 EGU2012-1948
H. R. Ahmed, **S. I. Kaka**, and A. Al-Mulhim
Electrical Resistivity Tomography for the Detection of Subsurface Cavities in the Hofuf area of Eastern Saudi Arabia
- A30 EGU2012-1982
A. Al-Zoubi, E. Abueadas, E. Akawwi, L. Eppelbaum, E. Levi, and M. Ezersky
Use of Microgravity Survey in the Dead Sea Areas Affected by the Sinkholes Hazard
- A31 EGU2012-2244
E. Akawwi, A. Al-Zoubi, A. Abueadas, L. Eppelbaum, M. Ezersky, E. Levi, A. Legchenko, and M. Boucher
Mechanism of Sinkhole Formation in the Ghor Al-Haditha Based on Geophysical Data
- A33 EGU2012-3473
B. Medvedev, S. Keydar, A. Al-Zoubi, A-R. Abueladas, M. Ezersky, and P. Trachtman
3D reflection on the edge of a sinkhole: Evidence from the western Dead Sea shore.
- A34 EGU2012-3959
M. Ezersky, L. Bodet, A. Al-Zoubi, C. Camerlynck, A. Dhemaied, P-Y. Galibert, and S. Keydar
Seismic surface-wave prospecting methods for sinkhole hazard assessment along the Dead Sea shoreline
- A35 EGU2012-4486
C. Rolstad Denby and R. Gundersen
Ground based radar measurements in a marine environment for glacier calving front studies.
- A36 EGU2012-4536
D. Jones, C. Robinson, B. Causton, and H. Gudmundsson
Design and test of an aircraft deployable sensor for the Antarctic peninsula
- A37 EGU2012-4695
E. Levi, A-R. Abueladas, A. Al-Zoubi, E. Akkawi, and M. Ezersky
Application of geoelectrical methods in the DS sinkhole problem, Israel and Jordan
- A38 EGU2012-5552
D.A. Newnham, P.J. Espy, M.A. Clilverd, D.J. Maxfield, P. Hartogh, K. Holmén, S. Blindheim, and R.B. Horne
High time resolution observations of the polar stratosphere and mesosphere using a ground-based 230-250 GHz microwave radiometer
- A39 EGU2012-5624
K. Jaksch, R. Giese, and M. Kopf
Development of a seismic borehole sonde for high resolution geophysical exploration ahead and around the drill bit
- A40 EGU2012-8924
A. Chevalier, A. Legchenko, and M. Boucher
3D Monte Carlo inversion of magnetic resonance measurements applied to karst conduit imaging
- A41 EGU2012-9043
S. Haffen, Y. Géraud, M. Diraison, and C. Dezayes
Determining majors fluid-flow zones in a geothermal sandstone reservoir from thermal conductivity and temperature logs
- A42 EGU2012-9094
M. Boucher, A. Legchenko, M. Ezersky, C. Camerlynck, and A. Al-Zoubi
Contribution of Magnetic Resonance Sounding to karst aquifer characterization and sinkhole hazard evaluation on the Jordanian coast of the Dead Sea
- A43 EGU2012-9336
C.J.P.P. smeets, W. Boot, A. Hubbard, R. Pettersson, F. Wilhelms, M.R. van den Broeke, and R.S.W. van de Wal
A wireless subglacial probe for deep ice applications
- A44 EGU2012-11475
K. Deniz, S. Kadioglu, and Y.K. Kadioglu
A new Method in the displaying of Deep Contact relationships of an intrusive body with the wall rocks: Ground Penetrating Radar (GPR) Buzlukdagi Syenitoids (Kirsehir-Turkey)

A45 EGU2012-12804

M. J. Jurado, J. Crespo, and R. Espallargas

Logging in the campus: borehole research and monitoring in a test hole in Barcelona (Spain)

SSS4.1 – Digital soil mapping: novel approaches and sensing techniques to the prediction of key soil properties (co-listed) – Orals

Convener: U. Werban | Co-Conveners: G. Grandjean, H. Reuter, U. Sauer, P. Dietrich, V.L. Mulder, H. Bartholomeus

Room: 6

Chairperson: n.n.

08:30–08:45 EGU2012-13025

M. Bock, R. Köthe, U. Schuler, A. Günther, E. Pickert, J. Willer, R. Baritz, J. Zawadzka, T. Mayr, V. L. Mulder, R. Moussadek, and V. van Engelen

Soil and terrain modeling to develop medium to small scale conceptual soil maps

08:45–09:00 EGU2012-12771

T. Behrens, K. Schmidt, U. Werban, P. Dietrich, and T. Scholten

Concepts for landscape scale digital soil mapping using field scale geophysical sensor data

09:00–09:15 EGU2012-2208

G. Grandjean and the DIGISOIL's Team

Soil properties mapping with the DIGISOIL multi-sensor system

09:15–09:30 EGU2012-9162

S. Rudolph, A. Mester, J. van der Kruk, L. Weihermüller, E. Zimmermann, and H. Vereecken

Calibration of EMI derived apparent electrical conductivity based on ERT measurements

09:30–09:45 EGU2012-7684

F. Veronesi, R. Corstanje, J. Rickson, and T. Mayr

Landscape scale estimation of soil carbon stock in three-dimensions for creating a carbon loss risk map

09:45–10:00 EGU2012-12655

J. Krüger, U. Franko, U. Werban, and J. Fank

Linking geophysics and soil function modelling - biomass production

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2012-9593

T. Wunderlich, H. Petersen, S.A. al Hagrey, and W. Rabbel

Mobile geophysical study of peat deposits in Fuhrberger Field, Germany

10:45–11:00 EGU2012-1981

A. Stevens, M. Nocita, P. Panagos, G. Tóth, B. van Wesemael, and L. Montanarella

Prediction of topsoil organic carbon with Vis-NIR reflectance spectroscopy at the European scale: the LUCAS spectral library

11:00–11:15 EGU2012-13879

M. Knadel, F. Deng, A. Thomsen, and M.H. Greve

Vis-NIRS sensor fusion for local, regional and global calibrations of SOC content

11:15–11:30 EGU2012-6465

C. Gomez, P. Lagacherie, and S. BachaUsing an Vis-NIR hyperspectral image to map topsoil properties over bare soil surfaces of the Lebna catchment in Tunisia (300 km²)

11:30–11:45 EGU2012-3636

E. Vaudour, J.M. Gilliot, L. Bel, A. De Junet, J. Michelin, D. Hadjar, P. Cambier, S. Houot, and Y. Coquet

Performance degradation in predicting topsoil organic carbon contents using reflectance spectra from lab, field to SPOT scales over a periurban region

11:45–12:00 EGU2012-11311

U. Schuler, M. Bock, R. Baritz, J. Willer, E. Pickert, K. Kardel, and L. Herrmann

The potential of gamma-ray spectrometry as supplementary information for mapping central European soils

SSS4.1 – Digital soil mapping: novel approaches and sensing techniques to the prediction of key soil properties (co-listed) – Posters

Convener: U. Werban | Co-Conveners: G. Grandjean, H. Reuter, U. Sauer, P. Dietrich, V.L. Mulder, H. Bartholomeus

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- XY531 EGU2012-6935
A.I.J.M. van Dijk, G. Warren, and T. Doody
Estimating plant available water content from remotely sensed evapotranspiration
- XY532 EGU2012-1610
M. Nocita, A. Stevens, D. De Brogniez, F. Bampa, G. Toth, P. Panagos, B. van Wesemael, and L. Montanarella
Prediction of SOC content by Vis-NIR spectroscopy at European scale using a modified local PLS algorithm
- XY533 EGU2012-4753
M. Nussbaum, A. Papritz, A. Baltensweiler, and L. Walthert
Mapping organic carbon stocks of Swiss forest soil
- XY534 EGU2012-12819
M. Steffens, M. Kohlpaintner, and H. Buddenbaum
High resolution mapping of soil organic matter quality in a Histosol profile with imaging spectroscopy
- XY535 EGU2012-13095
L. Brodský, R. Kodešová, A. Klement, and O. Jakšík
The potential of soil organic carbon mapping by combined in-situ spectroscopy and WorldView-2 satellite data
- XY536 EGU2012-12289
S. Hamzeh, A.A. Naseri, S.K. Alavi Panah, **H. Bartholomeus**, B. Mojaradi, J. Clevers, and M. Behzad
An evaluation of hyperspectral vegetation indices for detecting soil salinity in sugarcane fields using EO-1 Hyperion Data
- XY537 EGU2012-9
E.C. Brevik, J. Heilig, J. Kempenich, J. Doolittle, and M. Ulmer
Evaluation of Electromagnetic Induction to Characterize and Map Sodium-Affected Soils in the Northern Great Plains of the United States
- XY538 EGU2012-1261
E.C. Brevik
Analysis of the Representation of Soil Map Units using a Common Apparent Electrical Conductivity Sampling Scheme for the Mapping of Soil Properties
- XY539 EGU2012-7345
A. Brovelli and G. Cassiani
Contribution of Stern layer and membrane polarization to spectral induced polarization of variably saturated sandy soils
- XY540 EGU2012-4019
E.H. Loonstra
The role of sensor design in modelling top soil properties with mobile gammaray sensors based on the iSOIL experience
- XY541 EGU2012-8071
C. Dierke, U. Werban, and **P. Dietrich**
Use of mobile gammaspectrometry for estimation of texture at regional scale
- XY542 EGU2012-9666
T. Wunderlich, H. Petersen, S.A. al Hagrey, and W. Rabbel
Comparison of geophysical pedotransfer functions using laboratory measurements
- XY543 EGU2012-9857
T. Wunderlich and W. Rabbel
Investigating the influence of clay and water content on GPR signals
- XY544 EGU2012-13992
A. Rochat, **G. Grandjean**, O. Cerdan, and K. Samyn
Regional scale soil thickness prediction using digital terrain modeling and seismic data: application to erosion hazard mapping.
- XY545 EGU2012-10063
Dr. H. Aïchi, **Dr. Y. Fouad**, Pr. C. Walter, Pr. M. Sanaa, Dr. Lili Chabaane, Dr. D. Michot, and Pr. H. Nicolas
Prediction performance of "Site specific
- XY546 EGU2012-11397
M. R. Mahmoudzadeh Ardekani, Ph. A. Tran, J. Minet, M. Vanclooster, and S. Lambot
Ground-penetrating radar for temporal soil moisture variability analysis along a land slope
- XY547 EGU2012-11646
F. Castaldi, R. Casa, S. Pascucci, A. Palombo, and S. Pignatti
Estimation of soil textural properties at the field scale from airborne and satellite hyperspectral remote sensing
- XY548 EGU2012-13971
V.L. Mulder, S. de Bruin, and M.E. Schaepman
Soil mapping at regional scale using Remote Sensing - integrating multiple research methods

- XY549 EGU2012-13983
A.R. Bakker and V.L. Mulder
Soil texture prediction at a regional scale with the use of remote sensing
- XY550 EGU2012-14147
U Schuler, M Bock, A Günther, J Willer, E Pickert, K Asch, and R Baritz
The importance of parent material information derived from globally available small scale legacy data for soil mapping at medium scale
- XY551 EGU2012-14150
J Zawadzka, T Mayr, J Hannam, R MacMillan, M Bock, R Köthe, U Schuler, J Willer, R Baritz, T Mulder, R Moussadek, and V van Engelen
Terrain characterisation using automated landscape dissection and slope break analyses: Applications for soil information systems
- XY552 EGU2012-2509
H. Bartholomeus and L. Kooistra
Use of aerial photographs for assessment of soil organic carbon and delineation of agricultural management zones.
- XY553 EGU2012-2954
H. I. Reuter and T. Hengl
Global Soil Information Facilities - Component Worldgrids.org
- XY554 EGU2012-3122
O. Dewitte, A. Jones, S. Horion, H. Elbelhiti, C. Bosco, and L. Montanarella
Soil mapping in Africa using satellite remote sensing at regional and continental scales
- XY555 EGU2012-4348
J. Cierniewski, **S. Krolewicz**, J. Piekarczyk, C. Kazmierowski, and M. Rymaniak
The BRF of cultivated soils with various roughness and their DSR equivalents

