EGU General Assembly 2012
Programme Group Programme
G – Geodesy

Monday, 23 April

GD3.7/G3.2/TS9.9 – Integrating geodetic and geological studies of active crustal deformation (co-organized) – Orals
Convener: M. Westerhaus | Co-Conveners: M. Becker, A. Demoulin, C. Hwang, W B Shen, T. Wright
Room: 30
Chairperson: Malte Westerhaus

10:30–10:45 EGU2012-13740
A. M. Friedrich
Broadband Approach To Quantification Of Lithospheric Deformation On Scales Ranging From Earthquakes To Fault Systems

10:45–11:00 EGU2012-13200
O. Trubienko, L. Fleitout, JD Garaud, and C. Vigny
The far-field deformations associated with the seismic cycle: The lessons from the postseismic deformations of the recent giant subduction earthquakes

11:00–11:15 EGU2012-9726
A. Walpersdorf, I. Manighetti, F. Tavakoli, **Z. Mousavi**, M. Vergnolle, A. Jadidi, D. Hatzfeld, A. Aghamohammadi, Y. Djamour, H. Nankali, M. Sedighi, and L. Lutz
New insights on the recent and current deformation in Central-Eastern Iran, derived from a combined tectonic and GPS analysis

11:15–11:30 EGU2012-10328
T. Fuhrmann, M. Westerhaus, K. Zippelt, and B. Heck
Vertical Displacements in the Upper Rhine Graben Area Derived from Precise Levelling Data

11:30–11:45 EGU2012-6839
C. Hwang and Y.N. Lo
TOPEX/Poseidon observation of ice thinning over Mt. Tanggula, Tibet

11:45–12:00 EGU2012-3345
W B Shen and J C Han
Investigations of the gravity profile below the Tibetan plateau

GD3.7/G3.2/TS9.9 – Integrating geodetic and geological studies of active crustal deformation (co-organized) – Posters
Convener: M. Westerhaus | Co-Conveners: M. Becker, A. Demoulin, C. Hwang, W B Shen, T. Wright
Hall XL | Display Time 08:00–19:30
Author in Attendance: 15:30–17:00
Chairperson: WenBin Shen

XL202 EGU2012-13089
J. van der Woerd
Kinematics of strike-slip faults: the geological perspective

XL203 EGU2012-6785
C. Kreemer, W. C. Hammond, **G. Blewitt**, A. A. Holland, and R. A. Bennett
A Geodetic Strain Rate Model for the Pacific-North American Plate Boundary, western United States

XL204 EGU2012-13005
A. Dapo, B. Pribicevic, M. Herak, and E. Prelogovic
Geodetic, Geologic and Seismic Interdisciplinary Research of Tectonically Caused Movements in the Wider Area of the City of Zagreb

XL205 EGU2012-2940
G. Pezzo, C. Tolomei, S. Atzori, and S. Salvi
New kinematic constraints of the western Doruneh fault (Central-Eastern Iran), from interseismic deformation analysis

XL206 EGU2012-3340
E. Cetin, M. Meghraoui, Z. Cakir, O. Mimouni, S. Belabbes, A. Akoglu, S. Bouraoui, and M. Chebbah
Seven years of postseismic deformation in the Mw=6.8, 2003 Zemmouri (Algeria) earthquake area from PS-InSAR

XL207 EGU2012-3905
W.C. Chung and J.C. Hu
Analysis of Active Crustal Deformation in Chiayi Area, Southwestern Taiwan by Continues GPS network and numerical modeling

XL208 EGU2012-10124
E. Serpelloni, **L. Anderlini**, B. Mastrolembo, A. Cavaliere, P. Baldi, and M. E. Belardinelli
Geodetic slip-rates from block-modeling of a dense GPS velocity field in Italy: comparison with geological slip-rates and seismic moment release

XL209 EGU2012-7047
M. Mayer, A. Knöpfler, F. Masson, P. Ulrich, and B. Heck
Determination of 3D surface displacement rates in the Upper Rhine Graben based on GURN (GNSS Upper Rhine Graben Network)

XL210 EGU2012-6832
A. Fadil, R. Tenzer, and P. Denys
Vertical motions in New Zealand from dense GNSS network

Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: WenBin Shen

XL211 EGU2012-3314
A. Ganas, K. Chousianitis, M. Papanikolaou, P. Argyrakis, G. Drakatos, and K. Makropoulos
Velocity profiles along continuous GPS stations in central and western Greece: Comparison with geological data

XL212 EGU2012-5072
F. Nilfouroushan, P. Hodacs, C. Talbot, H. Koyi, and L. Sjöberg
Geodetic horizontal velocity and strain rate fields around Lake Vänern (SW Sweden) derived from GPS measurements between 1997 and 2011

XL213 EGU2012-12158
O. Ewiak, P. Victor, T. Ziegenhagen, and O. Oncken
Investigating the deformation of upper crustal faults at the N-Chilean convergent plate boundary at different scales using high-resolution topography datasets and creepmeter measurements

XL214 EGU2012-3343
P. Schindler, **T. Jahr**, G. Jentzsch, and N. Kukowski
High resolution strain observations: Installation and first results of new laser strainmeters at the Geodynamic Observatory Moxa/Germany

XL215 EGU2012-3448
H.H. Wang, C.K. Shum, Z.C. Luo, and K.H. Tseng
Lake Level Variations of Ngangzi Co Lake in Tibetan Plateau from Retracked TOPEX and Jason-1 data

XL216 EGU2012-5242
Z.C. Luo, Q. Li, B. Zhong, and H.H. Wang
Terrestrial water storage variations in China from GRACE

XL217 EGU2012-5036
Q. Li, Z.C. Luo, H.H. Wang, and B. Zhong
Satellite-based estimates of the Mass variations over Tibet-plateau

XL218 EGU2012-1728
X. Jiang and Y. Jin
The Rheological Structure of the East Tibetan Plateau

XL219 EGU2012-6133
R. Kiamehr
Monitoring of Fault Patterns Based on the Deflection of the Vertical Components, a Case Study in Zagros Belt

G5.1 – Observing and understanding Earth rotation variability and its geophysical excitation – Orals
Convener: F. Seitz | Co-Conveners: A. Brzezinski, D. Salstein
Room: 18
Chairperson: Florian Seitz

08:30–08:45 EGU2012-1352
A. D. Di Virgilio, F. Bosi, G. C. Cella, A. Ortolan, A. Porzio, S. Solimeno, M. Cerdonio, J.P. Zendri, M. Allegrini, J. Belfi, N. Beverini, B. Bouhadef, G. Carelli, E. Maccioni, F. Stefani, M.L. Ruggiero, A. Tartaglia, K.U. Schreiber, A. Gebaure, and J.P. Wells
Measuring gravito-magnetic effects by multi ring-laser gyroscope

08:45–09:00 EGU2012-6175
J.M. Ferrandiz, T. Baenas, and A. Escapa
Effect of the potential due to lunisolar deformations on the Earth precession

09:00–09:15 EGU2012-4747
S. Böhm, T. Nilsson, M. Schindelegger, and H. Schuh
High-frequency signals of oceans and atmosphere in Earth rotation

09:15–09:30 EGU2012-2983
J. R. Ray and J. Griffiths
High-accuracy Subdaily ERPs from the IGS

09:30–09:45 EGU2012-3921
W. Kosek
Geophysical causes of pole coordinates data prediction errors

09:45–10:00 EGU2012-3842
H. Yan and B Chao
Inferencing Core-Mantle Geodynamics with Angular-Momentum Excitation of Length-of-Day Variations

COFFEE BREAK

Chairperson: Aleksander Brzezinski

10:30–10:45 EGU2012-10580
J. Chen
Long-term climate change signatures in polar wander

10:45–11:00 EGU2012-2525
S. Marcus, J. Dickey, I. Fukumori, and O. de Viron
Detection of the Length-of-Day Response to a Sub-Monthly Fluctuation of the Antarctic Circumpolar Current in November 2009

11:00–11:15 EGU2012-9276
J. Nastula and M. Pa?nicka
Analysis of regional hydrological excitation functions on polar motion based on the available models of land hydrosphere

11:15–11:30 EGU2012-14152
F. Seitz
Simulation, prediction and analysis of Polar Motion with a dynamic Earth system model

11:30–11:45 EGU2012-12783
N. Schoen, M. Kniebusch, U. Ulbrich, G. C. Leckebusch, P. Névir, M. Thomas, and F. Seitz
Climate Change impact on Polar motion excitation in a comparison of Coupled General Circulation Models

11:45–12:00 EGU2012-801
C. Petrick, L. Neef, and K. Matthes
The Angular Momentum Budget of ENSO in the Community Earth System Model

G5.1 – Observing and understanding Earth rotation variability and its geophysical excitation – Posters
Convener: F. Seitz | Co-Conveners: A. Brzezinski, D. Salstein
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: David Salstein

XL114 EGU2012-3911
Z. Malkin
Consistency assessment of celestial pole offset series

XL115 EGU2012-6179
c. bizouard
Generalized Euler-Liouville equations

XL116 EGU2012-11445
V. Luceri, C. Sciarretta, and G. Bianco
EOP and low degree geopotential coefficients from SLR data

XL117 EGU2012-1903
N. Stamatakos, D. Bolbotz, K. Kingham, and B. Luzum
New Geodetic VLBI Data Source and its Applications

XL118 EGU2012-3392
V. Milyukov, A. Mironov, V. Kravchuk, A. Amoruso, and L. Crescentini
Short-period variations of the Earth's rotation rate and global deformation processes in the Lithospere

XL119 EGU2012-9737
T. Nilsson, J. Böhm, S. Böhm, M. Schindelegger, H. Schuh, U. Schreiber, A. Gebauer, and T. Klügel
High frequency Earth rotation variations from CONT11

XL120 EGU2012-11587
N. Panafidina and M. Rothacher
Reliability of empirical tidal models from GPS observations

XL121 EGU2012-8107
M. Schindelegger, J. Böhm, **D. Salstein**, and H. Schuh
Comparison of ECMWF analysis fields and station observations of barometric tides in the context of sub-daily excitation of Earth rotation

XL122 EGU2012-10530
A. Brzezinski, H. Dobslaw, M. Thomas, and **L. Slusarczyk**
Subdiurnal atmospheric and oceanic excitation of Earth rotation estimated from 3-hourly AAM and OAM data

XL123 EGU2012-14253
M. Rajner and A. Brzezinski
Estimation of the Free Core Nutation period and quality factor from tidal gravity measurements at Jozefoslaw, Poland

XL124 EGU2012-7781
M. Bloßfeld, M. Seitz, and D. Angermann
Effects of residual station motion signals on terrestrial pole coordinates

XL125 EGU2012-3998
F. Göttl, A. Heiker, S. Kirschner, H. Kutterer, M. Schmidt, and **F. Seitz**
Combination of geodetic observations and geophysical models for estimating consistent Earth rotation and gravity field parameters, individual excitation mechanisms and physical Earth parameters

XL126 EGU2012-10843
A. Heiker and M. Schmidt
Validation of Earth orientation parameters (EOP), geophysical excitation functions (EF) and the second degree gravity field coefficients (GFC)

XL127 EGU2012-721
S. Kirschner and F. Seitz
Recursive adjustment approach for the inversion of the Euler-Liouville Equation

XL128 EGU2012-1951
R. Dill
Using modeled short-term angular momentum forecasts from atmosphere, ocean, and hydrology to improve 90-day EOP predictions

XL129 EGU2012-12734
D. Salstein and K. Quinn
Angular momentum from CMIP5 climate change simulations, as related to Earth rotation excitation

XL130 EGU2012-3375
R. Gross
The Rotational and Gravitational Signature of Recent Great Earthquakes

XL131 EGU2012-7504
A. Androsov, J. Schröter, S. Brunnabend, and J. Saynisch
Assimilation of Earth rotation parameters into a global ocean model (FESOM)

G5.4 – Atmospheric Water Vapour Retrieval by Space Geodetic Techniques – Orals
Convener: R. Pacione | Co-Conveners: H. Vedel
Room: 18
Chairperson: R.Pacione

13:30–13:45 EGU2012-12212
G. Kirchengast, S. Schweitzer, and V. Proschek
A Next-Generation Space Geodetic Technique: Profiling of Greenhouse Gases and Climate by Microwave and Infrared-Laser Occultation

13:45–14:00 EGU2012-6369
J. Wang, L. Zhang, A. Dai, T. Ning, and G. Elgered
Global Water Vapor Trends from Ground-Based GNSS Measurements and Homogenized Radiosonde Data

14:00–14:15 EGU2012-12647
M. Schwärz, G. Kirchengast, A. Leuprecht, J. Fritzer, B. Scherllin-Pirscher, and C. Retscher
Validating Satellite Observations of Thermodynamic Variables by Reference Datasets from GPS Radio Occultation

14:15–14:30 EGU2012-2636
T. Hobiger, P. Baron, and R. Ichikawa
Do we need to consider dispersive troposphere delays for current and next generation space-geodetic instruments?

14:30–14:45 EGU2012-2800
M. Shangguan, M. Bender, J. Wickert, G. Dick, A. Raabe, and R. Galas
GPS Tomography: Validation of Reconstructed 3D Humidity Fields with Radiosonde Data

14:45–15:00 EGU2012-4285
H. Brenot, C. Champollion, A. Deckmyn, R. van Malderen, N. Kumps, R. Warnant, and M. De Mazière
Humidity 3D field comparisons between GNSS tomography, IASI satellite observations and ALARO model

15:00–15:15 EGU2012-11432
R. Haas
Atmospheric water vapour from CONT-campaigns

G5.4 – Atmospheric Water Vapour Retrieval by Space Geodetic Techniques – Posters
Convener: R. Pacione | Co-Conveners: H. Vedel
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: H.Vedel

XL132 EGU2012-10859
S. Heise, G. Beyerle, L. Grunwaldt, G. Michalak, T. Schmidt, J. Wickert, and F. Zus
Processing and application of GPS radio occultation data from TerraSAR-X and TanDEM-X

XL133 EGU2012-12557
P. Vergados and **S. Pagiatakis**
GPS/RO-derived water vapour profiles of the atmosphere

XL134 EGU2012-9823
R. Zandbergen, W. Enderle, C. Marquardt, and F. Wollenweber
Ground Support Network for Operational Radio Occultation Missions

XL135 EGU2012-9845
J. Danzer, B. Scherllin-Pirscher, and U. Foelsche
Systematic Residual Ionospheric Error in the Radio Occultation Data

XL136 EGU2012-9476
J. K. Nielsen, K. B. Lauritsen, and K. Kinch
Improvement metrics for water vapour and temperature profiles retrieved from GPS RO profiles through 1D-Var.

XL137 EGU2012-13982
F. Vespe, C. Benedetto, R. Tolve, and R. Pacione
Refinements of the Inversion Techniques Helpful to Retrieve Atmospheric Parameters from GPS Radio Occultation Data

XL138 EGU2012-10431
C. Desjardins, P. Gegout, L. Soudarin, and R. Biancale
Geometry of the refractivity field for GNSS signals propagation

XL139 EGU2012-13759
Dr. Santos, McAdam, and Dr. Boehm
Status and Validation of the UNB-VMF1

XL140 EGU2012-9315
M. Madzak, V. Nafisi, J. Böhm, and H. Schuh
A new atmospheric ray-tracing algorithm and its use in VLBI analysis

XL141 EGU2012-9872
D. O. Nitti, R. Nutricato, F. Intini, F. Bovenga, **M. T. Chiaradia**, R. Pacione, and F. Vespe
On the use of weather models in the mitigation of atmospheric artifacts in X-band SAR interferometry

XL142 EGU2012-3386
B. Pace, R. Pacione, and C. Sciarretta
On the computation of Zenith Total Delay Residual Fields by using Ground-Based GNSS estimates

XL143 EGU2012-6291
F Ahmed, **FN Teferle**, and RM Bingley
First Zenith Total Delay and Integrated Water Vapour Estimates from the Near Real-Time GNSS Data Processing Systems at the University of Luxembourg

XL144 EGU2012-3127
J. Bosy, J. Kaplon, J. Sierny, W. Rohm, M. Ryczywolski, T. Hadas, A. Oruba, and K. Wilgan
The high resolution Water Vapour model on the area of Poland

XL145 EGU2012-3248
W. Rohm, K. Zhang, S. Choy, Y. Kuleshov, J. Bosy, and K. Kroszczy?ski
Severe weather investigation using GNSS signals - a new dimension of GNSS meteorology

XL146 EGU2012-7636
O. Bock, B. Garayt, Y. Bar-Sever, and S. Byun
Analysis of long time series of reprocessed GPS total column water vapour estimates

XL147 EGU2012-10788
R. Van Malderen, H. Brenot, E. Pottiaux, K. Mies, S. Beirle, T. Wagner, C. Hermans, M. De Mazière, H. De Backer, and C. Bruyninx
Inter-technique comparison of integrated water vapour measurements for climate change analysis

XL148 EGU2012-10298
F. Ladstädter, H. Gleisner, K. Kinch, K.B. Lauritsen, U. Foelsche, C. Marquardt, J. Ackermann, and A. von Engeln
Collocating GRAS with AMSU onboard of Metop: An assessment for instrument and climate monitoring

XL149 EGU2012-11292
G.V. Bennitt and T. Schueler
An assessment of zenith total delay corrections from numerical weather prediction models

XL150 EGU2012-8895
H. Vedel and B. Amstrup
Impact of gb GNSS data in NWP, as case study

XL151 EGU2012-9994
M. Kruczyk, T. Liwosz, and A. Mazur
IPW and ZTD from numerical weather prediction model in the context of GNSS tropospheric products

G6.3 – Geodetic and Geodynamic Programmes of the Central Europe – Orals
Convener: J. Sledzinski | Co-Conveners: T. Olszak, J. Kostelecky
Room: 2
Chairperson: J. Hefty; B. Kontny

08:30–08:45 EGU2012-2225
A. Caporali, M. Barlik, M. Becker, L. Gerhatova, G. Grenerczy, J. Hefty, A. Krauss, P. Legovini, D. Medac, G. Milev, M. Mojzes, M. Mulic, O. Odalovic, T. Rus, J. Simek, J. Sledzinski, G. Stangl, B. Stopar, F. Vespe, and G. Virag
The CEGRN 2011 Campaign and the densification of ETRF2000 in Central Europe

08:45–09:00 EGU2012-3599
J. Hefty and L. Gerhatova
Possibilities of detection of dynamic seismic displacements in Central Europe by analysis of high-rate GPS recordings

09:00–09:15 EGU2012-3763
B. Kontny
Comparison of regional and local horizontal strain field on the area of Central Europe determined from GPS data

09:15–09:30 EGU2012-10083
J. Balodis, **I. Janpaule**, D. Haritonova, M. Normand, G. Silabriedis, A. Zarinjsh, and J. Zvirgzds
GNSS Network Time Series Analysis

09:30–09:45 EGU2012-8650
J. Kostelecky, R. Machotka, and J. Simek
Combination of heterogeneous geodetic data in detailed gravity field modelling

09:45–10:00 EGU2012-5495
M. Mojzes, J. Papco, and M. Mikolaj
Reprocessing of GPS and Repeated Absolute Gravity Measurements Realized in the Tatra Mountain

G6.3 – Geodetic and Geodynamic Programmes of the Central Europe – Posters
Convener: J. Sledzinski | Co-Conveners: T. Olszak, J. Kostelecky
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: D. Próchniewicz; M. Wo?niak

XL152 EGU2012-1983
J. Sledzinski, W. Graszka, and G. Rosenthal
Ten years of establishment of the satellite reference station system EUPOS in Central and Eastern Europe

XL153 EGU2012-5308
J. Bogusz, M. Figurski, B. Kontny, P. Grzempowski, and A. Klos
Continuous model of the regional velocity field for Poland

XL154 EGU2012-2528
J Walo, A. Pachuta, **D. Próchniewicz**, T. Olszak, R. Szpunar, and M. Barlik
Geodynamical studies of the Pieniny Klippen Belt in 1994 - 2011

XL155 EGU2012-4848
T. Olszak, **M. Barlik**, and A. Pachuta
Adjustment of the Polish gravity network in zero tide system

XL156 EGU2012-11651
M Rajner and **T Olszak**
The atmospheric corrections for absolute and relative gravity measurements in Józefos?aw, Poland

XL157 EGU2012-1137
A. Banachowicz and **A. Wolski**
Integration of the equations of movement in dead reckoning navigation
XL158 EGU2012-6434
A. Fellner, J. Sulkowski, P. Trominski, and P. Zadrag
The use of reference systems for UAV flight routing
XL159 EGU2012-11260
J. Cwiklak, H Jafernik, J Sledzinski, and A Fellner
Results of Studies of The Monitoring System for Aircraft and Vehicles Based on GNSS
XL160 EGU2012-2522
M. Wozniak, R Malarski, and K Nagórski
Application of inclinometer measurements to relative horizontal displacement investigations on landslide grounds

GMPV4.2/TS4.9 – Volcanoes: Tectonics, Deformation, Geodesy (co-listed) – Orals
Convener: V. Acocella | Co-Conveners: A. Gudmundsson, T. R. Walter, G. Puglisi, S. Jonsson
Room: 27
Chairperson: acocella/walter

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

LUNCH BREAK

Chairperson: n.n.

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

14:45–15:00 EGU2012-384
R. Grapenthin, J.T. Freymueller, S.S. Serovetnikov, and N. Titkov
Geodetic observations at Bezymianny Volcano, Kamchatka: The eruptions from 2005-2010 and long-term, long-wavelength subsidence as seen by the PIRE GPS network

Chairperson: n.n.

15:30–15:45 EGU2012-7985
J. W. Neuberg and K. Pascal
Quantifying the errors due to the superposition of analytical deformation sources

15:45–16:00 EGU2012-1300
H. Bathke, H. Sudhaus, M. Shirzaei, and T.R. Walter
Caldera formation at Tendurek, East Turkey

16:00–16:15 EGU2012-2219
A.V. Newman, S.C. Stiros, F. Moschas, V. Saltogianni, L. Feng, G.T. Farmer, P. Psimoulis, and Y. Jiang
Renewed Geodetic Unrest at Santorini Caldera, Greece

16:15–16:30 EGU2012-9380
J. Ruch, V. Acocella, N. Geshi, A. Nobile, and F. Corbi
Kinematic analysis of vertical collapse on volcanoes using experimental models time series

16:30–16:45 EGU2012-3648
A. Amoruso and L. Crescentini
The 1982-1984 unrest of the Campi Flegrei caldera (Italy): clues on the resolving power of the available geodetic data and the robust features of the deformation source

16:45–17:00 EGU2012-13167
P.I.R. Wilson, K.J.W. McCaffrey, J.P. Davidson, R.E. Holdsworth, P. Murphy, and I. Jarvis
Accommodating structures and deformation associated with the emplacement of high level magmatic intrusions, Henry Mountains, Utah

GMPV4.2/TS4.9 – Volcanoes: Tectonics, Deformation, Geodesy (co-listed) – Posters
Convener: V. Acocella | Co-Conveners: A. Gudmundsson, T. R. Walter, G. Puglisi, S. Jonsson
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

XL308 EGU2012-11126
E. Geiss, J. Rohrmüller, J. Wassermann, M. Hackl, U. Kirscher, and V. Bachtadse
Geophysical Investigations on a Suspected Quarternary Volcanic Structure in North Eastern Bavaria, Germany

XL309 EGU2012-3046
L. Passarelli, E. Rivalta, F Maccaferri, and Y Aoki
On the physical links between the dynamics of the Izu Islands 2000 dike intrusions and the statistics of the induced seismicity

XL310 EGU2012-11580
O. Cocina, **A. Siniscalchi**, G. Barberi, G. Romano, S. Sicali, and S. Tripaldi
Correlation between resistivity and seismicity at Etna volcano (Italy)

XL311 EGU2012-4346
R. Azzaro, **A. Bonforte**, S. Branca, and F. Guglielmino
Geometry and kinematics of the fault systems controlling the unstable flank of Etna volcano (Sicily)

XL312 EGU2012-11191
A. Bonforte, F. Guglielmino, and G. Puglisi
Monitoring Mt. Etna volcano from "Envisat Extended Orbit"

XL313 EGU2012-10771
A. Bonforte, F. Guglielmino, and **G. Puglisi**
3D temporal evolution and modeling of ground deformation recorded on Mt. Etna from the 2007 to 2008 through the SISTEM method

XL314 EGU2012-2981
A. Cappello, G. Bilotta, M. Neri, V. Acocella, G. Gallo, and C. Del Negro
Spatiotemporal probability of vent opening at Mt Etna volcano (Sicily, Italy)

XL315 EGU2012-2289
M. Neri, S. Giammanco, E. Ferrera, G. Patanè, and V. Zanon
Active faults on the eastern flank of Etna volcano (Italy) monitored through soil radon measurements

XL316 EGU2012-11231
A. Bonforte, **A. Carnazzo**, S. Gambino, F. Guglielmino, F. Obrizzo, and G. Puglisi
A multidisciplinary approach to study an active fault crossing densely inhabited areas through ground deformation data: the Trecastagni fault at Mt. Etna (Italy)

XL317 EGU2012-8938
E. Sansosti, S. Pepe, G. Solaro, F. Casu, P. Tizzani, V. Acocella, J. Ruch, A. Nobile, G. Puglisi, F. Guglielmino, and S. Zoffoli
SAR4Volcanoes: an international ASI funded research project on volcano deformation through new generation SAR sensors

XL318 EGU2012-365
Z. Barnett and A Gudmundsson
Field data and numerical models on the emplacement of sill complexes

XL319 EGU2012-13789
M. Shirzaei
A satellite geodetic survey of spatiotemporal deformation of Iranian volcanos

XL320 EGU2012-11049
C. Adam, N. Loureço, P. Madureira, M. Miranda, and M. Yoshida
Mantle dynamics and volcanism emplacement in the Azores

XL321 EGU2012-479
D. Trippanera, M. Salvatore, M. Porreca, J. Ruch, A. Pimentel, J. Pacheco, and V. Acocella
Relationship between tectonics and magmatism on Faial island (Azores, Portugal)

XL322 EGU2012-2356
J Biggs, **I Bastow**, D Keir, and W Hutchison
Volcano Deformation in the Main Ethiopian Rift

XL323 EGU2012-5373
J. Arnoso, FG. Montesinos, M. Benavent, and EJ. Vélez
The 2011 volcanic crisis at El Hierro (Canary Islands): monitoring ground deformation through tiltmeter and gravimetric observations

XL324 EGU2012-4050
G. Prates, M. Berrocoso, A. Fernández-Ros, A. García, and R. Ortiz
Processes of Compression-Expansion and Subsidence-Uplift detected by the Spatial Inclinometer (IESHI) in the El Hierro Island eruption (October, 2011)

XL325 EGU2012-4351
M. Berrocoso, A. Fernandez-Ros, G. Prates, M. Martin, R. Hurtado, J. Pereda, M.J. Garcia, L. Garcia-Cañada, R. Ortiz, and A. Garcia
Analysis of surface deformation during the eruptive process of El Hierro Island (Canary Islands, Spain): Detection, Evolution and Forecasting.

XL326 EGU2012-1421
S. Barde-Cabusson, J. Gottsmann, J. Martí, X. Bolós, A. Camacho, A. Geyer, Ll. Planagumà, E. Ronchin, and A. Sánchez
Geophysical insights on the distribution of monogenetic volcanoes in the Garrotxa volcanic field

XL327 EGU2012-2162
X. Bolós, **S. Barde-Cabusson**, D. Pedrazzi, J. Marti, A. Casas, M. Himi, R. Lovera, and A. Geyer
Investigation of the inner structure of La Crosa de Sant Dalmai maar (Catalan Volcanic Zone, Spain)

XL328 EGU2012-2185
N Geshi, V Acocella, and J Ruch
Evolution of deep collapse caldera: from structural to gravitational process

XL329 EGU2012-5334
S. Poppe, M. Kervyn, H. Soulé, V. Cnudde, T. De Kock, and P. Jacobs
Volcano-tectonic architecture of a Caldera Complex, Karthala volcano, Grande Comore: new field observations

XL330 EGU2012-2744
V. Acocella, D.M. Palladino, R. Cioni, P. Russo, and S. Simei
Caldera structure, amount of collapse and erupted volumes:

XL331 EGU2012-11185
G. De Natale, A. Troiano, M.G. Di Giuseppe, S. Carlino, C. Troise, and R. Somma
Possible mechanisms for uplift and subsidence at collapse calderas

XL332 EGU2012-12562
R. Scarpa, P. Capuano, U. Tammaro, and R. Bilham
Ground deformation at Campi Flegrei caldera using long water pipe tiltmeters and sea level gauges

XL333 EGU2012-7904
M. Paulatto, A. B. Watts, C. Peirce, J. Hunter, D. Basset, W. Stratford, and L. M. Kalnins
Potential field and bathymetric constraints on volcanism and tectonics at the submarine Monowai cone and caldera (Kermadec arc)

XL334 EGU2012-3657
A. Amoruso, **L. Crescentini**, and I. Sabbetta
Is the Campi Flegrei (Italy) deformation pattern constant with time? Comparing the 1982-1984 unrest, 1994-1999 subsidence, 2000-2001 and 2005-2007 miniuplifts.

XL335 EGU2012-2091
T. R. Walter, D. Legrand, G.D. Granados, G. Reyes, and R. Arámbula
Volcano eruption monitoring by thermal image correlation: pixel offsets show episodic dome growth at Colima volcano

XL336 EGU2012-2353
J. Gottsmann
The Great Tambora 2015 eruption: Could we see it coming?

XL337 EGU2012-9888
M. Gerbault, F. Cappa, and R. Hassani
Effects of gravity and the state of pore-fluid pressure in the bedrock surrounding an idealised magma chamber, compared to the "Mogi" approach.

XL338 EGU2012-9404
E. P. Holohan, H. Sudhaus, T. R. Walter, M. P. J. Schöpfer, and J. J. Walsh
Interpreting sub-surface deformation sources at volcanoes: Insights from DEM models

XL339 EGU2012-2888
J. Hickey, **J. Gottsmann**, and R. del Potro
What's causing the world's largest deformation anomaly in southern Bolivia? Insights from Finite Element Analysis

XL340 EGU2012-2218
P. Kalenda and L. Neumann
The relationship between volcanic and seismic activity

XL341 EGU2012-8102
J. Liu and X. Chen
Volcanisms and Earthquakes Related to the Pacific Plate Subduction in Northeast Asia

XL342 EGU2012-2548
X. Mao and J.H. Li
The distribution and tectonic framework of Late Paleozoic volcanoes in the Junggar basin and its adjacent area, NW China

Tuesday, 24 April

G3.1/CR1.80/GD3.11 – Glacial Isostatic Adjustment, Mantle Viscosity and Ice Sheet Fluctuations (co-organized) – Orals
Convener: M. Poutanen | Co-Conveners: W. Fjeldskaar, T. James, V. Klemann, H. Steffen, B. Vermeersen
Room: 17
Chairperson: Willy Fjeldskaar, Volker Klemann

15:30–15:45 EGU2012-3620
L.M. Cathles
Requirements for extracting mantle viscosity from glacial isostatic adjustment

15:45–16:00 EGU2012-9773
G. Spada, **V. R. Barletta**, V. Klemann, W. van der Wal, T.S. James, K. Simon, R.E.M. Riva, Z. Martinec, P. Gasperini, B. Lund, D. Wolf, L.L.A. Vermeersen, and M.A. King
Benchmarking and testing the “Sea Level Equation

16:00–16:15 EGU2012-904
R. Steffen, P. Wu, D.W. Eaton, and H. Steffen
Effects of changes in frictional strength and mantle viscosity on the stress behaviour in northeastern Canada

16:15–16:30 EGU2012-8451
R. Dietrich, A. Groh, and H. Ewert
Geodetic observations to estimate ice mass changes and GIA in Antarctica

16:30–16:45 EGU2012-11356
S. Pagiatakis and M. El-Diasty
Improved g-dot signature in Canada by terrestrial gravity inversion

16:45–17:00 EGU2012-1431
W. Fjeldskaar and A. Amantov
Tilting of post-glacial Fennoscandian shorelines requires a low-viscosity asthenosphere

G3.1/CR1.80/GD3.11 – Glacial Isostatic Adjustment, Mantle Viscosity and Ice Sheet Fluctuations (co-organized) – Posters
Convener: M. Poutanen | Co-Conveners: W. Fjeldskaar, T. James, V. Klemann, H. Steffen, B. Vermeersen
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Markku Poutanen, Holger Steffen

Z186 EGU2012-2279
H. Konrad, I. Sasgen, V. Klemann, E. R. Ivins, and **Z. Martinec**
Re-assessing the influence of glacial-isostatic adjustment on Antarctic ice-mass balance estimated from GRACE

Z187 EGU2012-7563
L. Metivier and M. Greff-Lefftz
The static contribution of Glacial Isostatic Adjustment on the Geoid

Z188 EGU2012-8862
G. Ruggieri, R. Tenzer, G. Spada, and A. Fadil
Geophysical implications of presen-day and late Pleistocene ice melting across New Zealand

Z189 EGU2012-12605
N. Gomez, D. Pollard, J. X. Mitrovica, P. Huybers, and P. U. Clark
Evolution of a Coupled Marine Ice Sheet - Sea Level Model

Z190 EGU2012-2559
S. Rasskazov and E. Chebykin
Glaciation control of melting rates in the mantle: U-Th systematics of young basalts from Southern Siberia and Central Mongolia

Z191 EGU2012-7924
E. Kozlovskaya and the POLENET/LAPNET Working Group Team
Temporal and spatial distribution of glacial earthquakes in Greenland during the IPY 2007-2009

Z192 EGU2012-6545
J. Mäkinen, J. Näränen, H. Koivula, and M. Poutanen
Gravity change and vertical motion in Dronning Maud Land: implications for models of Glacial Isostatic Adjustment

Z193 EGU2012-2679
G. A. Nield, P. L. Whitehouse, M. A. King, P. J. Clarke, and M. J. Bentley
The effect of recent accumulation changes in the Antarctic Peninsula upon Glacial Isostatic Adjustment

Z194 EGU2012-6877
J. Okuno, H. Miura, and Y. Nogi
Effect of glacial isostasy on the depth of Antarctic continental margin

Z195 EGU2012-7012
H. Jürgenson, A. Liibusk, and T. Kall
Height Connections and Land Uplift Rates in West-Estonian Archipelago

Z196 EGU2012-9658
T. Klügel, R. Falk, G. Liebsch, E. Kühmstedt, C. Plötz, A. Reinhold, P. Steigenberger, R. Wojdziak, and H. Wziontek
Vertical uplift rates measured by different geodetic techniques at GARS O'Higgins, Antarctic Peninsula

Z197 EGU2012-2825
A. Barnhoorn, W. van der Wal, and M.R. Drury
Upper mantle viscosity and lithospheric thickness under Iceland determined from a microphysical modelling approach of mantle rheology

Z198 EGU2012-13638
W. Van der Wal, A. Barnhoorn, P. Stocchi, P. Wu, M. Drury, and L.L.A. Vermeersen
Constraints on upper mantle rheology from a 3D GIA model for Fennoscandia

Z199 EGU2012-12858
H. Steffen and P. Wu
Determination of mantle viscosity in Fennoscandia from multiple datasets

Z200 EGU2012-13078
P. Wu, H.S. Wang, and H. Steffen
The role of thermal effect on mantle seismic anomalies from observations of GIA

Z201 EGU2012-10781
A. Auriac, F. Sigmudsson, K. H. Spaans, A. J. Hooper, P. Schmidt, and B. Lund
Rheology beneath Iceland: new insights from InSAR measurements and finite element modeling of uplift due to ice load changes around Vatnajökull ice cap

TS9.5/G3.5/GD8.6/GM3.6/GMPV6.20/SM3.5 – Crustal faulting and deformation processes observed by InSAR, GPS and modelling techniques (co-organized) – Orals
Convener: T. R. Walter | Co-Conveners: R. Malservisi, R. Lanari, T. Dixon, F. Zucca, M. Shirzaei
Room: 11
Chairperson: Walter / Shirzaei

10:30–10:45 EGU2012-10002
E. Sansosti
The impact of new generation SAR sensors in ground deformation studies

10:45–11:00 EGU2012-13821
R.F. Hanssen, **M. Caro Cuenca**, A. Hooper, P. Mahapatra, M. Arikan, and D. Bekaert
New trends in InSAR time series analysis for wide area deformation mapping

11:00–11:15 EGU2012-10784
E. Cetin, Z. Cakir, A.M. Akoglu, S. Ergintav, U. Dogan, H. Ozener, and M. Meghraoui
Persistent Scatterer InSAR time series analysis of the creeping section of the North Anatolian Fault at Ismetpasa

11:15–11:30 EGU2012-12569
K. Hodgkinson, D. Mencin, A. Borsa, O. Fox, C. Walls, and E. Van Boskirk
Recording Plate Boundary Deformation Processes Around The San Jacinto Fault, California

11:30–11:45 EGU2012-10391
G. Ducret, M. P. Doin, R. Grandin, A. Socquet, C. Vigny, M. Métois, and M. Béjar-Pizzaro
Measurement of interseismic strain accumulation in the Southern Andes (25°-35°S) using Envisat SAR data

11:45–12:00 EGU2012-3234
R. Barzaghi, A. Borghi, and A. Kunzle
Statistical inference in comparing DInSAR and GPS data in fault areas

LUNCH BREAK

Chairperson: Zucca / Lanari

13:30–13:45 EGU2012-7144
S. Jónsson
Probing Mechanical Properties of Rock with InSAR

13:45–14:00 EGU2012-3919
J.-C. Lee, H. T Chu, S. H. Chang, W. J. Huang, C. H. Mu, and H. Y. Chen
Frictional properties of a rapid creeping mega-thrust: a case study of the Chihshang Fault in eastern Taiwan
14:00–14:15 EGU2012-3125
R.A. Bennett, S. Ventkataramani, J.N. McElwaine, and J.M. Restrepo
Geodetic expressions of upper mantle dynamics?
14:15–14:30 EGU2012-10604
K.H. Spaans, F. Sigmundsson, S. Hreinsdóttir, and B.G. Ófeigsson
High resolution surface deformation measurements in Iceland's Northern Volcanic Zone: Unraveling multiple deformation sources using InSAR and GPS
14:30–14:45 EGU2012-2331
P. J. González, K. F. Tiampo, M. Palano, F. Cannavò, and J. Fernández
Concurrent tectonic and aquifer-compaction deformation around Lorca (SE, Spain)
14:45–15:00 EGU2012-9635
S. Rieger, N. Adam, and A.M. Friedrich
Quantification of crustal deformation based on analysis of Persistent Scatterer Interferometry of W-Crete
Chairperson: Malservisi / Dixon

15:30–15:45 EGU2012-7409
S. Metzger, S. Jónsson, G. Danielsen, S. Hreinsdóttir, F. Jouanne, and T. Villemin
The accumulated seismic moment of the locked Húsavík-Flatey fault, North Iceland, derived from an interseismic model using GPS time-series 1997-2010
15:45–16:00 EGU2012-4404
P. Teatini, A. Lovison, C. Janna, and A. Ferretti
Three-dimensional seasonal deformations induced by underground gas storage. Monitoring by PSI and modeling by FE
16:00–16:15 EGU2012-5510
N. Gourmelen, A. Shepherd, D. Angus, Q. Fisher, D. Lesnic, and A. Gouldson
Quantifying the success of onshore carbon capture and storage from surface deformation measurement and geo-mechanical modeling
16:15–16:30 EGU2012-2946
R. Castaldo, P. Tizzani, A. Manconi, M. Manzo, S. Pepe, A. Pepe, and R. Lanari
3D time dependent thermo-fluid dynamic model of ground deformation at Campi Flegrei caldera
16:30–16:45 EGU2012-4654
V. Poncos, **F. Serban**, D. Teleaga, V. Ciocan, M. Sorin, D. Caranda, F. Zamfirescu, M. Andrei, S. Copaescu, M. Radu, and V. Raduca
Water induced geohazards measured with spaceborne interferometry techniques
16:45–17:00 EGU2012-9299
J. Ruch, J. Warren, F. Risacher, T.R. Walter, and R. Lanari
Salt lake deformation detected from space

TS9.5/G3.5/GD8.6/GM3.6/GMPV6.20/SM3.5 – Crustal faulting and deformation processes observed by InSAR, GPS and modelling techniques (co-organized) – Posters
Convener: T. R. Walter | Co-Conveners: R. Malservisi, R. Lanari, T. Dixon, F. Zucca, M. Shirzaei
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: T. R. Walter , M. Shirzaei , R. Malservisi, R. Lanari , T. Dixon , F. Zucca

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

A505 EGU2012-2483
C. Tolomei, E. Trasatti, S. Atzori, J. Merryman, A. Antonioli, G. Pezzo, and S. Salvi
The Mw 7.2 Van Earthquake (2011): co-seismic and post-seismic deformation imaged by DInSAR data, and source modeling

A506 EGU2012-3479
Y.-J. Hsu, M. Simons, C.A. Wiliams, and E. Casarotti
3-D FEM derived elastic Green's functions for the coseismic deformation of the 2005 Mw 8.7 Nias-Simeulue, Sumatra earthquake

A507 EGU2012-3895
M. Rupprechter, A. Roepert, and G Hoffmann
Differential GPS measurements as a tool to quantify Late Cenozoic crustal deformation (Oman, Arabian Peninsula)

A508 EGU2012-3992
Y.-A. Chen, C.-P. Chang, and J.-Y. Yen
Interferometric SAR time series analysis for measuring the surface deformation caused by the 1999 Chi-Chi earthquake in Taiwan

A509 EGU2012-4159
J.-Y. Yen, C.-P. Chang, and Y.-I. Wen
Spatial and temporal variations of surface deformation along the Longitudinal Valley, eastern Taiwan, observed by Persistent SAR Interferometry using ERS, Envisat, and ALOS archives

A510 EGU2012-4329
T. Yamasaki and G.A. Houseman
The crustal viscosity gradient measured from post-seismic deformation: a case study of the 1997 Manyi (Tibet) earthquake

A511 EGU2012-2209
W.-J. Huang and K. M. Johnson
Strain accumulation across the Aksay segment of Altyn Tagh fault: Investigation of the influence of laterally varying lithospheric properties and a low-viscosity channel

A512 EGU2012-5914
D.U. Sanli, K. Coban, V. Akarsu, and E. Arslan
Effect of Span of GPS Campaigns on Estimated Static Positioning Velocities

A513 EGU2012-5940
M. Moreno, D. Melnick, M. Rosenau, J. C. Baez, J. Klotz, O. Oncken, A. Tassara, J. Chen, K. Bataille, M. Bevis, A. Socquet, C. Vigny, B. Brooks, I. Ryder, B. Smalley, M. Bartsch, V. Grund, and H. Hase
Tectonic control on the Mw 8.8 2010 Maule Chile earthquake

A514 EGU2012-8444
C. Völksen and M. Hackl
Crustal Deformation and Seismicity in Southern Bavaria revealed by GNSS observations

A515 EGU2012-10099
P. Kourkouli, T. Strozzi, and U. Wegmüller
Ground-motion monitoring in the Venice Lagoon using combined DInSAR and Persistent Scatterer Interferometry

A516 EGU2012-11035
R. Barzaghi, **A. M. Marotta**, R. Splendore, and A. Borghi
A new procedure to built a model covariance matrix: first results

A517 EGU2012-11308
C. Bignami, M. Chini, C. Kyriakopoulos, and S. Stramondo
Seismic swarm detection by satellite DInSAR technique in the south-west Peloponnese, Greece

A518 EGU2012-11474
A. Schenk and **M. Westerhaus**
Upgrading InSAR observations by combination with leveling data to understand small scale deformation processes

A519 EGU2012-13947
J. Ha, K.-D. Park, J. Won, and M.-B. Heo
GPS-based Analysis of the Crustal Deformation of the Korean Peninsula due to the Tohoku-Oki Earthquake

A520 EGU2012-12973
M. Mantovani and H.-G. Scherneck
Observation of Crustal Deformation around the Pärvie Postglacial Fault, Lapland, Sweden, using InSAR techniques

A521 EGU2012-12176
A. Gualandi, E. Serpelloni, L. Anderlini, and M.E. Belardinelli
Space-time evolution of postseismic afterslip following the Mw 6.3, 2009 L'Aquila earthquake (central Italy) from principal component analysis inversion of GPS position time-series.

A522 EGU2012-11428
C. Bignami, C. A. Brunori, M. Chini, C. Kyriakopoulos, D. Melini, M. Moro, M. Picchiani, M. Saroli, and S. Stramondo
DInSAR techniques for studying the October 23, 2011, Van earthquake (Turkey), and its relationship with neighboring structures

A523 EGU2012-10733
K. Wiencke, T. R. Walter, M. Manzo, A. Manconi, G. Solaro, and R. Lanari
InSAR time series monitoring at Istanbul city shows faulting, landslides and soil compaction

A524 EGU2012-12631
S. H. Jaramillo, G. Suárez, and P. López-Quiroz
Subsidence history of the city of Morelia, Mexico based on InSAR images processed as time series

A525 EGU2012-1591
A. Caporali, F. Neubauer, G. Stangl, and D. Zuliani
Modeling surface velocities in the Southern and Eastern Alps by finite dislocations at crustal depths

A526 EGU2012-4642
C.-C. Kang, C.-C. Chang, L.L Siame, and J.-C. Lee
Recent surface deformation and its geodynamic insights for the Ilan Plain: an extensional basin in northern Taiwan orogenic belt

A527 EGU2012-5130
Y.-C. Chan, K.-J. Chang, R.-J. Chen, J.-C. Lee, Y.-C. Hsieh, and K.-S. Chen
Evidence for Active Normal Faulting in Northern Taiwan and its Seismogenic Implications

A528 EGU2012-6802
G. Lin, W-L Chang, C-Y Chiu, and C-P Chang
Transition of Ground Uplift and Kinematic Model in Southwestern Taiwan from PSI and GPS Observations

A529 EGU2012-9846
Z. Mousavi, E. Pathier, A. Walpersdorf, C. Lassere, F. Tavakli, and H. Nankali
InSAR Time Series Analysis of Interseismic Deformation in Eastern Iran

A530 EGU2012-11011
Z. Çakir, S. Ergintav, H. Ozener, U. Dogan, A.M. Akoglu, M. Meghraoui, and R. Reilinger
Fault weakening and onset of aseismic creep on mature strike-slip faults

A531 EGU2012-12517
S.M Razeghi, A.A Amiri Simkooei, and M.A Sharifi
Realistic Noise Assessment and Strain Analysis of Iranian Permanent GPS Stations

G5.2 – Determination of Mass Transport and Distribution in the Earth System – Orals
Convener: E. Schrama | Co-Conveners: J. Kusche
Room: 17
Chairperson: Schrama and Kusche

10:30–10:45 EGU2012-11823
C. de Linage, H. Kim, and J. Famiglietti
Statistical analysis of climate-driven spatio-temporal variations of GRACE Total Water Storage in the Amazon River basin

10:45–11:00 EGU2012-8726
C. Gruber, C. Dahle, F. Flechtner, E. Fagiolini, and H. Neumayer
GRACE derived geopotenial models on regional and global scales

11:00–11:15 EGU2012-10214
A. Eicker, A. Springer, L. Jensen, and J. Kusche
Regional ice mass balance for Greenland from GRACE and ICESat modelled by radial basis functions

11:15–11:30 EGU2012-6011
C. W. Hughes, M. E. Tamisiea, R. J. Bingham, and J. Williams
Weighing the ocean: How a single mooring in the mid-Pacific can monitor changes in ocean mass.

11:30–11:45 EGU2012-943
H. Wang, L. Jia, **H. Steffen**, P. Wu, L. Jiang, L. Xiang, and Z. Wang
An inversion method for the separation of present-day water transport and glacial isostatic adjustment and its results

11:45–12:00 EGU2012-10195
H. Dobslaw, M. Thomas, I. Bergmann, S. Esselborn, F. Flechtner, and L. Zenner
OMCT - New time-series for oceanic mass, angular momentum and sea level variability

12:00–12:15 EGU2012-3770
E. Schrama
Uncertainties in the mass balances of Greenland and Antarctica reconstructed from monthly GRACE level 2 temporal gravity solutions

G5.2 – Determination of Mass Transport and Distribution in the Earth System – Posters
Convener: E. Schrama | Co-Conveners: J. Kusche
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

Z202 EGU2012-2375
O. Engels, E. Forootan, and J. Kusche
Analysis of atmospheric data products for the reduction of satellite gravity measurements

Z203 EGU2012-3773
E. Schrama and **Z. Xu**
A better GRACE solution for improving the regional Greenland mass balance

Z204 EGU2012-9717
V. R. Barletta and G. Spada
Assessment of errors and uncertainty patterns in GIA modeling

Z205 EGU2012-2797
M. Gebler, R. Rietbroek, J. Schröter, and J.-O. Wolff
Improving a joint inversion of GRACE, GPS and modelled ocean bottom pressure by using in-situ data.

Z206 EGU2012-2993
L. Jensen, R. Rietbroek, and J. Kusche
Quantifying the contribution of land water storage changes to sea level variability

Z207 EGU2012-5405
K. Yamamoto, Y. Fukuda, T. Nakaegawa, and T. Hasegawa
Recovery of Interannual Terrestrial Water Storage Variations over the Indochina Peninsula and the Relationship with Decadal-Scale Climate Variations

Z208 EGU2012-2593
F. Frappart, L. Seoane, and G. Ramillien
Detection of large flood events using GRACE regional solutions

Z209 EGU2012-6823
B. Kallenberg and P. Tregoning
Antarctic mass balance changes from GRACE

Z210 EGU2012-7900
C. Schwatke, T. Koch, and W. Bosch
Monitoring lake levels by retracking Envisat altimeter data: A case study on Lake Constance

Z211 EGU2012-9513
O. Akyilmaz and **H. Mercan**
Surface water storage variations in Anatolia and Surrounding Territories observed by GRACE

Z212 EGU2012-10180
O. Baur, M. Kuhn, and W.E. Featherstone
Continental mass change from GRACE over 2002-2011 and its impact on sea level

Z213 EGU2012-12772
T. Janjic, A. Albertella, **J. Schroeter**, R. Savcenko, R. Rummel, and W. Bosch
Assimilation of geodetic dynamic ocean topography with ensemble based Kalman filter

Z214 EGU2012-9085
P. Ditmar and H. Hashemi Farahani
Added value of GOCE data to the recovery of linear trends in natural mass re-distribution in the Earth's system

Z215 EGU2012-13039
C. Harig and F. J. Simons
Mass loss over the Greenland ice sheet from GRACE: A reappraisal

Z216 EGU2012-2773
V. Michel and D. Fischer
Inversion of Monthly GRACE Potentials for Mass Transports in the Amazon Area

Z217 EGU2012-7163
S. Spiridonova, F. Seitz, K. Hedman, and F. Meyer
Water mass change in the Amazon basin estimated by multi-temporal SAR data, GRACE gravimetry and water level observations

Z218 EGU2012-12719
W. Bosch and R. Savcenko
Error assessment of dynamic ocean topography profiles

Z219 EGU2012-4946
J. Kusche, E. Forootan, A. Eicker, and H. Hoffmann-Dobrev
Identification of statistically independent climatic pattern in GRACE and hydrological model data over West-Africa

Z220 EGU2012-9894
V. R. Barletta, A. Borghi, and A. Aoudia
Using GPS and GRACE data to assess Solid Earth elastic parameters at regional scale.

G5.3 – What's signal and what's an artifact in GNSS solutions ? – Orals
Convener: F. Perosanz | Co-Conveners: R. Weber, S.G. Jin
Room: 17
Chairperson: n.n.

08:30–08:45 EGU2012-3808
A. Al-Shaery, S. Zhang, S. Lim, and C. Rizos
Multi-GNSS Opportunities and Challenges
08:45–09:00 EGU2012-6901
M. Moore and S. McClusky
Mitigation of Site Specific Errors
09:00–09:15 EGU2012-9694
F. Fund, F. Perosanz, F. Mercier, and S. Loyer
Assessment of Integer Precise Point Positioning performances at different temporal scales
09:15–09:30 EGU2012-11932
S. Häberling, M. Rothacher, and A. Geiger
Assessment of high-rate GPS using a single-axis shake table
09:30–09:45 EGU2012-6548
E. Schoenemann, T. Springer, M. Becker, and W. Enderle
Raw Observation PPP and Global Network Solution
09:45–10:00 EGU2012-6887
G. Blewitt, C. Kreemer, J. Goldfarb, H.-P. Plag, and W. C. Hammond
Global Spatial Filtering (GSF) of GNSS Coordinates to Capture Small Transient Signals
10:00–10:15 EGU2012-8026
M. Meindl, R. Dach, D. Thaller, S. Schaer, G. Beutler, and A. Jaeggi
The Impact of the Processing Batch Length in GNSS Data Analysis on the Estimates of Earth Rotation Parameters with Daily and Subdaily Time Resolution

G5.3 – What's signal and what's an artifact in GNSS solutions ? – Posters
Convener: F. Perosanz | Co-Conveners: R. Weber, S.G. Jin
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

Z221 EGU2012-8605
Kasparian and Kuznetzov
Communication parameters between local coordinate system and WGS 84 global geodetic system to use in economical and industrial activity of the Vostochny mine, “Apatit
Z222 EGU2012-13406
M. Mulic and A. Bilajbegovic
Improved accuracy of the reference network of Bosnia and Herzegovina
Z223 EGU2012-3507
P. Wielgosz, J. Paziewski, K. Stepniak, M. Krukowska, J. Kaplon, J. Sierny, T. Hadas, and J. Bosy
Application of NTR ZTD estimates from GBAS network to improve fast-static GNSS positioning
Z224 EGU2012-3561
J. Paziewski, K. Stepniak, **P. Wielgosz**, A. Krypiak-Gregorczyk, and M. Krukowska
Multi-GNSS precise single-epoch positioning
Z225 EGU2012-4338
E. Umnig, G. Möller, and R. Weber
Geodetic monitoring of intra-plate velocities
Z226 EGU2012-4963
Q. Baire, E. Pottiaux, C. Bruyninx, P. Defraigne, W. Aerts, J. Legrand, N. Bergeot, and J.M. Chevalier
Impact of different individual GNSS receiver antenna calibration models on geodetic positioning
Z227 EGU2012-7199
E. Orliac, R. Dach, K. Wang, M. Rothacher, D. Voithenleitner, U. Hugentobler, M. Heinze, and D. Svehla
Deterministic and Stochastic Receiver Clock Modeling in Precise Point Positioning
Z228 EGU2012-7402
J. Hefty and L. Gerhatova
Effects of non-modeled signal biases in multi-GNSS Precise Point Positioning

Z229 EGU2012-8184
M. Ferenc, J. Nicolas, T. Van Dam, and P. Gegout
Can environmental loading effects be an artifact in tectonic velocity obtained from GPS measurements?
Z230 EGU2012-7600
F. Moreau and O. Dauteuil
Hydrogeological deformation from GPS time series in Northern Morocco.
Z231 EGU2012-10531
D. Moreira, F. Perosanz, S. Calmant, A. Santos, J. Silva, G Ramillien, O. Rotunno, F. Seyler, A. Monteiro, and C.K Shum
Applications of GNSS data for hydrological studies in the Amazon basin.
Z232 EGU2012-11448
F. Mercier, S. Houry, A. Couhert, and L. Cerri
HY-2A altimetry satellite GPS orbits processing and performances
Z233 EGU2012-5017
C. J. Rodriguez-Solano, U. Hugentobler, P. Steigenberger, K. Sosnica, and M. Fritsche
Non-conservative GNSS satellite modeling: long-term orbit behavior
Z234 EGU2012-13930
U. Hugentobler, O. Montenbruck, C. Rodriguez-Solano, and P. Steigenberger
Modeling of the GIOVE-B clock as a tool for studying radiation pressure models
Z235 EGU2012-6850
J. Weiss, Y. Bar-Sever, W. Bertiger, S. Desai, B. Haines, N. Harvey, and A. Sibthorpe
Characterizing GPS Block IIA Shadow and Post-Shadow Maneuvers

G5.5 – Monitoring and modelling of the ionosphere from space-geodetic techniques – Orals
Convener: M. Schmidt | Co-Conveners: M. O. Karslioglu, A. Krankowski, D. Dettmering
Room: 17
Chairperson: Michael Schmidt

13:30–13:45 EGU2012-6888
D. Bilitza
Progress Towards the Real-Time International Reference Ionosphere
13:45–14:00 EGU2012-12164
I. Zakharenkova, Iu. Cherniak, A. Krankowski, I. Shagimuratov, R. Sieradzki, and E. Koltunenko
Estimation of plasmaspheric electron content derived from GPS TEC and FORMOSAT-3/COSMIC GPS RO measurements under solar minimum condition
14:00–14:15 EGU2012-3513
A.G. Pavelyev, K Zhang, Y Liou, C. Wang, J Wickert, T Schmidt, A.A. Pavelyev, and Yu. Kuleshov
Experimental and theoretical analysis of the ionospheric impact on the amplitude and phase oscillations of GPS signals in the satellite-to-satellite and satellite-to ground communication links
14:15–14:30 EGU2012-1746
H.-P. Ranner, S. Krauss, and G. Stangl
Comparison of global and regional ionospheric models
14:30–14:45 EGU2012-3401
W. Liang, M. Schmidt, D. Dettmering, U. Hugentobler, and M. Limberger
Solving the non-linear model of the electron density of the ionosphere
14:45–15:00 EGU2012-7501
C. Toker, Y. E. Gokdag, F. Arikan, and O. Arikan
Application of Modified Particle Swarm Optimization Method for Parameter Extraction of 2-D TEC Mapping

G5.5 – Monitoring and modelling of the ionosphere from space-geodetic techniques – Posters
Convener: M. Schmidt | Co-Conveners: M. O. Karslioglu, A. Krankowski, D. Dettmering
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: A. Krankowski

Z236 EGU2012-1941
E. Macalalad, **L.C. Tsai**, and J. Wu
Global Application of TaiWan Ionospheric Model to Single-Frequency GPS Positioning
Z237 EGU2012-4985
D. Dettmering and M. Schmidt
Error Assessment of Global Ionosphere Models for the Vertical Electron Content

Z238 EGU2012-5198
M. Schmidt, U. Hugentobler, N. Jakowski, D. Dettmering, W. Liang, M. Limberger, V. Wilken, T. Gerzen, M. Hoque, and J. Berdermann
Multi-scale model of the ionosphere from the combination of modern space-geodetic satellite techniques - project status and first results

Z239 EGU2012-7028
C. Tierno Ros, M.M. Alizadeh, and H. Schuh
Regional Ionosphere Maps over Austria using the Kriging Interpolation Technique

Z240 EGU2012-8648
N. Magnet and R. Weber
Investigation of the Quality of a new Regional Model of the Ionospheric Electron Content

Z241 EGU2012-3604
M. O. Karslioglu and M. Durmaz
Regional Ionosphere Modeling using Multivariate Adaptive Regression B-Splines (BMARS)

Z242 EGU2012-3684
M. Limberger, U. Hugentobler, M. Schmidt, D. Dettmering, W. Liang, N. Jakowski, and M. Hoque
The use of vertical electron density profiles to determine key parameters of the Chapman function for ionosphere modeling

Z243 EGU2012-5142
M. M. Alizadeh, H. Schuh, and M. Schmidt
Global 4D modeling of electron density from GNSS, using spherical harmonics

Z244 EGU2012-13159
R. Sieradzki and I Cherniak
The Mapping of high-latitude TEC fluctuations during the last extended solar minimum

Z245 EGU2012-13073
Iu. Cherniak, A. Krankowski, I. Shagimuratov, R. Sieradzki, I. Zakharenkova, N. Korenkova, and V Leschenko
The ionospheric storms' dynamics at new solar activity cycle biginning

Z246 EGU2012-8683
JM Chevalier, N Bergeot, C Bruyninx, E Pottiaux, W Aerts, Q Baire, J Legrand, and P Defraigne
New Near-Real Time Monitoring of the Ionosphere over Europe Available On-line

Z247 EGU2012-7586
U. Sezen and F. Arikan
A Novel Algorithm for Cycle Slip Detection and Repair

Z248 EGU2012-12852
T. Gaussiran, D. Rainwater, and B. Barnum
Multi-satellite DORIS receivers for improved ionospheric specification

---

TS4.4/G6.1/GD3.8/GM3.3 – TOPOEUROPE: Coupled deep earth - surface processes, and their role in shaping Europe's topography (co-organized) – Orals
Convener: S. Cloetingh | Co-Conveners: S. Willett
Room: 12
Chairperson: Cloetingh, S., Willett, S.D.

08:30–08:45 EGU2012-11342
S.D. Willett, M. Fox, P. Sternai, B.C. Salcher, and F. Herman
Late Cenozoic Exhumation of the Alps

08:45–09:00 EGU2012-4441
F. Schlunegger and K.P. Norton
Headward retreat of streams in the Late Oligocene to Early Miocene Swiss Alps

09:00–09:15 EGU2012-400
G. Kovács and T. Telbisz
Pleistocene alteration of drainage network and diverse surface morphology forced by basement structure in the foreland of the Eastern Alps

09:15–09:30 EGU2012-8524
Z. Erdos, R.S. Huismans, and P. van der Beek
Evaluating balanced section restoration with thermochronological data in the Central Pyrenees

09:30–09:45 EGU2012-14391
C. Fillon, R. Huismans, and P. van der Beek
Numerical modeling of sedimentation controls on the growth of the fold-and-thrust belts

09:45–10:00 EGU2012-6004
K.M. Stange, R.T. van Balen, and J. Carcaillet
External controls on formation and preservation of fluvial terrace staircases in the Southern Pyrenees foreland

COFFEE BREAK

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

10:30–10:45 EGU2012-12616
L.C. Matenco
On the link between orogenic shortening and back-arc extensional collapse in low topography orogens

10:45–11:00 EGU2012-7991
M. Chertova, T. Geenen, A. P. van den Berg, and W. Spakman
3D subduction modelling of the Betic-Rif Alboran region.

11:00–11:15 EGU2012-14470
I. Midtkandal, R.H. Gabrielsen, J.-P. Brun, and **R. Huismans**
Along-strike complex geometry of subduction zones - an experimental approach

11:15–11:30 EGU2012-11786
D. Fernández-Blanco and G. Bertotti
Miocene to present kinematics in Cilicia Basin, the link between the Central Anatolia Plateau and the Kyrenia Range

11:30–11:45 EGU2012-4545
M Tesauro, M.K Kaban, and S.A.P.L Cloetingh
Strength and Elastic thickness of the lithosphere and implication on ductile crustal flow in Europe

11:45–12:00 EGU2012-7736
A. Köhler, N. Balling, J. Ebbing, R. England, A. Frassetto, S. Gradmann, B.H. Jacobsen, T. Kvarven, V. Maupin, A. Bondo Medhus, R. Mjelde, J. Ritter, J. Schweizer, W. Stratford, H. Thybo, B. Wawerzinek, and C. Weidle
Upper mantle and crustal structure of southwestern Scandinavia: Results of the TopoScandiaDeep project

TS4.4/G6.1/GD3.8/GM3.3 – TOPOEUROPE: Coupled deep earth - surface processes, and their role in shaping Europe's topography (co-organized) – Posters
Convener: S. Cloetingh | Co-Conveners: S. Willett
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Cloetingh, S. and Willett, S.D.

A434 EGU2012-2441
T. Duretz, T. V. Gerya, B.J.P. Kaus, and T.B. Andersen
Thermomechanical modelling of slab eduction

A435 EGU2012-8247
S. Mohammadi, T. Geenen, A. P. van den Berg, and W. Spakman
Instantaneous mantle dynamics of the Western Mediterranean region

A436 EGU2012-1902
P.G. Valla, P.A. van der Beek, and J. Braun
Extracting denudation and relief histories from thermochronology data: rethinking sampling strategies?

A437 EGU2012-6315
C. von Hagke, O. Oncken, H. Ortner, and C. Cederbom
Post 12 Ma tectonic activity of the Subalpine Molasse resolved by combining thermochronology and critical wedge analysis

A438 EGU2012-14392
C. Fillon, C. Gautheron, and P. van der Beek
Quantifying the timing and extent of syn-orogenic sedimentation in the southern Pyrenean foreland using low-temperature thermochronology

A439 EGU2012-5293
J. Campanyà, J. Ledo, P. Queralt, A. Marcuello, M. Liesa, J.A. Muñoz, and A.G. Jones
Lithospheric-scale geoelectrical characterisation of a continental collision zone in Pyrenees: preliminary results.

A440 EGU2012-2645
S. Jammes and R.S. Huismans
Factors controlling the tectonic inversion of the Pyrenean mountain belt : from observations to modelling

A441 EGU2012-12632
H. Seillé, J. Pous, **D. Pedreira**, J. Gallastegui, J.A. Pulgar, J.M. González-Cortina, and E. Asensio
Geoelectrical characterization of the lithosphere beneath the Cantabrian Mountains and Duero Basin

A442 EGU2012-11992
H. Seillé, A. Garcia, I. Romero, J. Pous, J. Guimerà, and R. Salas
Crustal structure of the Iberian Chain inferred from magnetotelluric data

A443 EGU2012-403
G. Kovács
Pleistocene alterations of drainage network between the Alps and the Pannonian Basin

A444 EGU2012-10455
T. Fuhrmann, A. Knöpfler, F. Masson, M. Mayer, P. Ulrich, M. Westerhaus, K. Zippelt, and B. Heck
Horizontal and Vertical Surface Displacements in the Upper Rhine Graben Derived from GNSS and Precise Levelling Data

A445 EGU2012-5357
E.M. Bartel, F. Neubauer, B. Heberer, and J. Genser
Structural similarities and differences north and south of the Periadriatic fault with examples of the Drau Range and Friauli

A446 EGU2012-5096
U. Stojadinovic, L. Matenco, P. Andriessen, M. Tolji?, and J. Foeken
The balance between orogenic building and subsequent collapse during the Tertiary evolution of the NE Dinarides: Constraints from low-temperature thermochronology

A447 EGU2012-5060
C.I. Trifan, P.A.M. Andriessen, and L. Matenco
Detrital zircon fission track thermochronology in key stratigraphic formations of the Danube system, Romania: climatic or tectonic signals?

A448 EGU2012-4278
M. K. Reiser, B. Fügenschuh, and R. Schuster
Thermotectonic evolution of the Apuseni mountains (Romania) based on structural and geothermochronological data

A449 EGU2012-12063
M. ?migielski, F.M. Stuart, P. Krzywiec, C. Persano, H.D. Sinclair, K. Pisaniec, and K. Sobien
Neogene exhumation of the Northern Carpathians revealed by low temperature thermochronology.

A450 EGU2012-11800
J. Francu, J. Šafanda, V. Cermak, O. Krejci, and P. Andriessen
Subsidence, erosion and thermal history of the West Carpathian Foredeep Basin, Czech Republic

A451 EGU2012-13197
I. Munteanu, L. Matenco, C. Dinu, and S. Cloetingh
Effects of large sea-level variations in connected basins: the Dacian - Black Sea system of the Eastern Paratethys

A452 EGU2012-4562
J. Petrovszki, B. Székely, and G. Timár
River Sinuosity Classification - Case study in the Pannonian Basin

A453 EGU2012-9853
J. Minár, M. Ková?, M. Bielik, J. Hók, S. Králiková, A. Smetanová, M. Šabo, and R. Vojtko
Neogene and Quaternary development of the Western Carpathian lithosphere: impact on georelief and geohazards

A454 EGU2012-9409
A. Floroiu, M Stoica, W. Krijgsman, and I. Vasiliev
Maeotian / Pontian Boundary from the East Carphatian Foredeep (Dacian Basin)

A455 EGU2012-12244
D. Fernández-Blanco, G. Bertotti, and A. Çiner
Miocene tectonic motions in the Central Anatolia Plateau interior: a seismo-structural study in the Tuz Gölü Basin

A456 EGU2012-12472
E. Miccadei, T. Piacentini, C. Berti, and F. Daverio
Long term landscape evolution within central Apennines (Italy): Marsica and Peligna region morphotectonics and surface processes

A457 EGU2012-8661
E. D. McGregor, S. B. Nielsen, R. A. Stephenson, O. R. Clausen, K. D. Petersen, and D. I. M. Macdonald
Rift flank uplift and isostatic response to glacial erosion: Creation of a high-elevation continental margin.

A458 EGU2012-5573
K. Stüwe and S. Hergarten
An approximate fluvial equilibrium topography for the Alps

A459 EGU2012-7397
S. Hergarten and K. Stüwe
A puzzle about the Scandinavian topography

A460 EGU2012-1626
A. A. Beylich, K. Laute, and S. Liermann
Holocene to contemporary source-to-sink fluxes in a valley-fjord system in western Norway: Erdalen and Bødalen site project (SedyMONT - IP Norway)

A461 EGU2012-7400
A.B. Medhus, **N. Balling**, B.H. Jacobsen, R.W. England, R. Kind, C. Weidle, P. Voss, and H. Thybo
Upper mantle P-wave velocity structure beneath southern Scandinavia

A462 EGU2012-4322
C. Schiffer, B. H. Jacobsen, N. Balling, and S. B. Nielsen
Geophysical investigations of the East Greenland Caledonides using receiver functions, gravity and topography data

A463 EGU2012-4334
B. Hejrani, B. H. Jacobsen, N. Balling, and R. W. England
A seismic tomography study of lithospheric structure under the Norwegian Caledonides

A464 EGU2012-2813
B. Go??dowski, D.L. Egholm, **O.R. Clausen**, and S.B. Nielsen
Cenozoic erosion and flexural isostasy of Scandinavia

A465 EGU2012-1129
H. M. Küçük, D. Dondurur, and G. Çifçi
GAS ACCUMULATIONS and WIDE-SPREAD BSRs OBSERVED on CENTRAL BLACK SEA*

A466 EGU2012-1131
H. M. Küçük, D. Dondurur, and G. Çifçi
SEDIMENTARY PROCESSES OBSERVED ON OFFSHORE of ZONGULDAK-KOZLU REGION, CENTRAL BLACK SEA*

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. Funiciello, 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. Vogfjörd, F. Sigmundsson, S. Hjaltadóttir, H. Björnsson, Þ. 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. Pirenne and E. Guillemot
Oceans 2.0: a Data Management Infrastructure as a Platform

XY463 EGU2012-2274
C. Faccenna and F. Funiciello
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

Wednesday, 25 April

G1.1 – Recent Developments in Geodetic Theory – Orals
Convener: P. Holota | Co-Conveners: B. Heck, N. Sneeuw
Room: 2
Chairperson: P. Holota, N. Sneeuw

15:30–15:45 EGU2012-8337
R. Barzaghi, A. Gatti, M. Reguzzoni, and G. Venuti
A solution to the global height datum problem based on satellite derived global models and the corresponding error budget

15:45–16:00 EGU2012-8827
Z. Fašková, M. Macák, R. ?underlík, and K. Mikula
Finite volume numerical scheme for high-resolution gravity field modelling and its parallel implementation

16:00–16:15 EGU2012-14247
P. Varga, E. Grafarend, and J. Engels
From Gravitostatics to Gravitodynamics: The space-time dependent gravity field by Eulerian versus Lagrangean force fields: Examples

16:15–16:30 EGU2012-3915
P. Xu
Combining different types of data for ill-posed geophysical/geodetic problems

16:30–16:45 EGU2012-11640
B. Devaraju and N. Sneeuw
Design and analysis of anisotropic low-pass filters on the sphere

16:45–17:00 EGU2012-2364
E. Forootan and J. Kusche
Independent Component Analysis (ICA) as a tool for exploring geodetic time series

17:00–17:15 EGU2012-8061
M. Gilardoni, M. Reguzzoni, and D. Sampietro
A least-squares collocation procedure to merge local geoids with the aid of satellite-only global gravity models: the Italian-Swiss geoid case study

G1.1 – Recent Developments in Geodetic Theory – Posters
Convener: P. Holota | Co-Conveners: B. Heck, N. Sneeuw
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

XL53 EGU2012-1083
G. Panou and D. Delikaraoglou
Expansion of the gravitational potential in triaxial ellipsoidal harmonics

XL54 EGU2012-13496
P. Holota and O. Nesvadba
Reproducing kernel for the exterior of an ellipsoid and its use for generating function bases in gravity field studies

XL55 EGU2012-41
G. Manoussakis, P. Milas, and D. Delikaraoglou
Neutral directions for the normal gravity vector

XL56 EGU2012-4771
R. ?underlík, R. Špir, and K. Mikula
Oblique derivative and its treatment in the direct BEM for the fixed gravimetric BVP

XL57 EGU2012-1468
E. Mazurova, A. Lapshin, and A. Menshova
Comparison of Methods of Height Anomaly Computation

XL58 EGU2012-3307
W B Shen
Comments on Stokes' approach in determining the global gravimetric geoid and its new formulation

XL59 EGU2012-14039
A.A. Ardalan, A. Safari, R. Karimi, and Y. AllahTavakoli
Simultaneous solution of the geoid and the surface density anomalies

XL60 EGU2012-223
H. Abd-Elmotaal and N. Kuehtreiber
Comparison between Astrogravimetric and Astrogeodetic Geoids for Austria

XL61 EGU2012-10024
P. Novak, R. Tenzer, and P. Vajda
Spectral representations of Earth inner density structures and gravity field
XL62 EGU2012-9347
J. Janák and **M. Pitonak**
Comparison of Stoke's and Hotine's integral transformation
XL63 EGU2012-13579
P. Holota and O. Nesvadba
On the differences and compatibility of global and GOCE-based models of the gravity field of the Earth
XL64 EGU2012-9927
M. Roth
Euler deconvolution in satellite geodesy
XL65 EGU2012-11817
P. Nerge, T. Ludwig, M. Thomas, J. Jungclaus, J. Sündermann, and P. Brosche
Simulations of the tides of ancient oceans and the evolution of the Earth-Moon system
XL66 EGU2012-10982
F. Panzetta and S. Casotto
On the Computation of the Orthotide Constants
XL67 EGU2012-8259
J.-Y. Richard, F Deleflie, and D Gambis
Satellite Orbital Interpolation Comparison Methods
XL68 EGU2012-3080
G. Mader, A. Bilich, and C. Geoghegan
Absolute GNSS Antenna Calibration at the National Geodetic Survey
XL69 EGU2012-14111
N. Kheloufi, S. Kahlouche, and H. Naamaoui
Positioning improvement by L1-L2 wave combination implementation in Data process
XL70 EGU2012-5117
L. Biagi, S. Caldera, and D. Perego
An optimized Leave One Out approach to efficiently identify outliers

G1.2 – Mathematical methods in the analysis and interpretation of potential field data and geodetic time series – Orals
Convener: V. Michel | Co-Conveners: M. HAMOUDI, W. Kosek, J. Kusche, M. Schmidt, A. Chambodut
Room: 2
Chairperson: n.n.

13:30–13:45 EGU2012-4802
J.-P. Montillet, P. Tregoning, A. Purcell, and S. McClusky
Improving Coseismic Offset Estimation Using Statistical Tests
13:45–14:00 EGU2012-11970
B. Devaraju, C. Lorenz, M. J. Tourian, and N. Sneeuw
On the cyclo-stationarity of the time-variable Kaula rule
14:00–14:15 EGU2012-10101
O. Baur
On the computation of mass-change trends from GRACE gravity field time-series
14:15–14:30 EGU2012-6505
V. Lieb, M. Schmidt, D. Dettmering, K. Bentel, and C. Gerlach
Regional gravity field modeling via multi-resolution representation and the combination of various observation techniques
14:30–14:45 EGU2012-6270
M. Hayn, I. Panet, M. Diament, M. Holschneider, M. Mandea, and A. Davaille
Wavelet based directional analysis of the gravity field: evidence for large-scale undulations
14:45–15:00 EGU2012-3541
S. Ouadfeul, M. Hamoudi, L. Aliouane, and S. Eladj
Aeromagnetic data analysis using the 2D Directional Continuous Wavelet Transform (DCWT).

G1.2 – Mathematical methods in the analysis and interpretation of potential field data and geodetic time series – Posters
Convener: V. Michel | Co-Conveners: M. HAMOUDI, W. Kosek, J. Kusche, M. Schmidt, A. Chambodut
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

XL71 EGU2012-4768
J.-P. Montillet, P. Tregoning, S. McClusky, and K. Yu
Extracting white noise statistics in GPS coordinate time series

XL72 EGU2012-4801
Q. Chen, T. van Dam, N. Sneeuw, X. Collilieux, and P. Rebischung
Extracting seasonal signals from continuous GPS time series with modern statistical methods

XL73 EGU2012-7850
M. Hackl, R. Malservisi, U. Hugentobler, and Y. Jiang
Detection of transients in GPS time series based on covariance analyses of the rate

XL74 EGU2012-11773
J. Rasi and S.M Razeghi
Comparison of Variance Component Estimators in Geodetics Science through Noise Analysis

XL75 EGU2012-5987
T. Niedzielski, **M. W?osi?ska**, B. Mizi?ski, M. Hewelt, P. Migo?, W. Kosek, and I. G. Priede
Development of new geoinformation methods for modelling and prediction of sea level change over different timescales - overview of the project

XL76 EGU2012-8916
E. Fagiolini and Ch. Gruber
Entropy-based method for optimal temporal and spatial resolution of gravity field variations

XL77 EGU2012-6143
K. Bentel, M. Schmidt, V. Lieb, and C. Gerlach
Different radial basis functions and their applicability for regional gravity representation on the sphere

XL78 EGU2012-2705
V. Michel and D. Fischer
Automatic Construction of a Sparse Best Basis for Potential Approximation and Inversion

XL79 EGU2012-9819
R. Telschow
Iterative Sparse Approximation of the Gravitational Potential

XL80 EGU2012-10640
J. Schall, J. Kusche, and A. Eicker
Optimisation of point grids in regional gravity field analysis

XL81 EGU2012-14223
Y. AllahTavakoli, H. Bagheri, A. Safari, and M. Sharifi
Dissatisfaction of Compact Picard Condition (CPC) with GRACE satellite data and its treatment by Generalized Tikhonov in Sobolev subspace

XL82 EGU2012-4874
O. Abrykosov and Ch. Förste
Computation of spherical harmonic coiefficients from rigorous integration of gridded terrestrial data

XL83 EGU2012-2572
H.-B. Cheong, J.-R. Park, and H.-G. Kang
Fourier-Series Expansion of Spherical Harmonic Functions

XL84 EGU2012-7559
W. Liang, M. Wattenbach, M. Schmidt, A. Güntner, F. Seitz, and M. Van Oijen
Bayesian inference and B-spline representation of model parameters for the global hydrological model WGHM

XL85 EGU2012-844
I. Prutkin, G. Jentzsch, and T. Jahr
Separation of sources and 3D potential field data inversion for the Thuringian Basin

SM2.4/G3.7/NH4.8/TS8.6 – Investigating earthquake physics through source imaging and scaling studies (co-organized) – Orals
Convener: G. Kwiatek | Co-Conveners: H. Sudhaus, R. M. Harrington, P.M. Mai, A. Piatanesi
Room: 26
Chairperson: n.n.

15:30–15:45 EGU2012-3790
A.M.G. Ferreira, J. Weston, and G.J. Funning
Joint earthquake source inversions of InSAR and seismic data using 3D Earth models

15:45–16:00 EGU2012-12258
J. R. Elliott, Z. Li, E. K. Nissen, J. A. Jackson, S. Lamb, B. Parsons, and R. A. Sloan
Recent continental earthquakes constrained by InSAR: determining source complexity

16:00–16:15 EGU2012-4604
G.C. Feng, S. Jónsson, X.L. Ding, and Z. Li
The coseismic deformation and fault slip distribution of the Mw9.0 Tohoku-Oki earthquake estimated from GPS and InSAR

16:15–16:30 EGU2012-8546
V. Dionicio, C. Satriano, E. Kiraly, J.-P. Vilotte, and P. Bernard
Broadband characterization of large subduction earthquakes through the combination of coherent rupture imaging and kinematic modeling

16:30–16:45 EGU2012-9989
E. Tinti, L. Scognamiglio, A. Cirella, M. Cocco, and A. Piatanesi
Complex earthquake directivity during the 2009 L'Aquila mainshock

16:45–17:00 EGU2012-8578
P.M. Mai, D. Schorlemmer, and M. Page
The Source Inversion Validation (SIV) Initiative: A Collaborative Study on Uncertainty Quantification in Earthquake Source Inversions

SM2.4/G3.7/NH4.8/TS8.6 – Investigating earthquake physics through source imaging and scaling studies (co-organized) – Posters
Convener: G. Kwiatek | Co-Conveners: H. Sudhaus, R. M. Harrington, P.M. Mai, A. Piatanesi
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

XL317 EGU2012-2731
R. M. Harrington and G. Kwiatek
Volcanic seismic earthquakes at Mount St. Helens exhibit a constant seismically radiated energy per unit size.

XL318 EGU2012-7183
E Popescu, M Radulian, **M Craiu**, A Craiu, I. A Moldovan, and A. O Placinta
Source characteristics of the crustal moderate earthquakes occurred between 2007 and 2011, in the South Carpathians and Romanian Plain

XL319 EGU2012-7118
E. Popescu, A Craiu, **M Craiu**, M Popa, and M Radulian
Earthquake sequence in western getic depression (Romania), December 2011 - January 2012: source characteristics and seismotectonics

XL320 EGU2012-12042
G. Kwiatek and Y. Ben-Zion
Assessment of radiated P and S wave energy from shear and tensile picoseismicity in the Mponeng deep gold mine, South Africa

XL321 EGU2012-788
A. Barth
Spatial b-value variations in the Upper Rhine Graben

XL322 EGU2012-4020
Y.-T. Ko, B.-Y. Kuo, and S.-H. Hung
The source scaling and depth-dependent stress drops for subduction zone events

XL323 EGU2012-8479
M.D. Martinez, M. Monterrubio, and X. Lana
Time behavior of aftershock series simulated by using a modified version of the Dynamic Fiber Bundle (FBM) model

XL324 EGU2012-8919
F. N. Bekler, N.M. Ozel, and G.B. Tanircan
Kinematic Rupture Process Of Karakocan-Elazig Earthquake, Eastern Turkey

XL325 EGU2012-7539
A. Demirci, T. Bekler, and S. Ozden
The 19 May 2011 Simav Earthquake (Mw=5.8) and its aftershocks, Western Turkey: Source mechanisms and spectral source parameters

XL326 EGU2012-11208
M.-A. Schröter, C. Weimann, H. Sturm, and M. Holschneider
Bridging the scales: Direct SEM imaging of micrometer vibrations for the analysis of stick-slip behavior at microscale

XL327 EGU2012-382
O. Castro-Artola and A. Iglesias Mendoza
Simplified Scheme for the Kinematic Inversion of the Rupture Process: Application to Mexican Earthquakes.

XL328 EGU2012-4256
F. Gallovi?, J. Zahradník, and K. Vachek
Complexity of the Mw6.3, 2009 L'Aquila (Central Italy) earthquake rupture

XL329 EGU2012-5459
C.-F. Chen, J.B.H. Shyu, and Y.-M. Wu
Seismotectonic characteristics of the northernmost part of the Longitudinal Valley suture, eastern Taiwan

XL330 EGU2012-7153
A. Gallo, G. Costa, and P. Suhadolc
Strong motion inversion for slip distribution on a finite fault using strong motion data: L'Aquila 2009 earthquake

XL331 EGU2012-9116
S. Ruiz and R. Madariaga
Kinematic inversion of Maule 2010, Chile and Tohoku 2011, Japan earthquakes using cGPS and Strong Motion data

XL332 EGU2012-9386
J.A. López-Comino, F. Mancilla, J. Morales, and **D. Stich**
Source parameters of the 2011, Mw 5.2 Lorca earthquake (Spain)

XL333 EGU2012-9719
M. Hensch, Th. Árnadóttir, B. Lund, and B. Brandsdóttir
Spatial stress variations in the aftershock sequence following the 2008 M6 earthquake doublet in the South Iceland Seismic Zone

XL334 EGU2012-10383
H. Razafindrakoto and M. Mai
Uncertainty Quantification of Kinematic Source Parameters using a Bayesian Approach

XL335 EGU2012-11610
C.P. Evangelidis and H. Kao
Rupture plane identification of intermediate depth earthquakes in the Hellenic arc by back projection of local seismic waveforms

XL336 EGU2012-12071
C. Kyriakopoulos, T. Masterlark, M. Chini, C. Bignami, and S. Stramondo
Post-seismic deformation of the 2011 Tohoku earthquake, Japan

XL337 EGU2012-9945
A. Cirella, A. Piatanesi, E. Tinti, M. Chini, and M. Cocco
Rupture process of the 2009 L'Aquila, central Italy, earthquake, from the separate and joint inversion of Strong Motion, GPS and DInSAR data.

XL338 EGU2012-13355
H. Sudhaus and S. Heimann
Data Democracy in Simultaneous Monte Carlo Optimizations of Geodetic and Seismological Data

TS8.2/G3.8/NH4.4/SM2.11 – Seismotectonics and crustal deformation in Africa (co-organized) – Orals
Convener: M. Meghraoui | Co-Conveners: R. Durrheim, A. AYELE, V. Midzi
Room: 27
Chairperson: Mustapha Meghraoui and Vunganai Midzi

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

15:45–16:00 EGU2012-1474
A. Deprez, C. Doubre, F. Masson, A. Socquet, P. Ulrich, C. Vigny, and J.C. Ruegg
Evidence of changes in the velocity field in the Asal-Ghoubbet rift using GPS data: results of repeated GPS campaigns over a 13-year period.

16:00–16:15 EGU2012-11567
A. Tokam Kamga, C. T. Tabod, A. A. Nyblade, and S. S. Nguiya
Imaging the Lithosphere beneath Cameroon and implications to the origin of the Cameroon Volcanic Line

16:15–16:30 EGU2012-7588
R.M.S. Fernandes, M. Meghraoui, J.M. Miranda, M.S. Bos, A. Radwan, A. Tahayt, and M. Muhammad
Constraints to the strain field of Africa from geodetic solutions: a contribution for the Seismotectonic Map of Africa

16:30–16:45 EGU2012-14174
M. Bezzeghoud, C. Adam, E. Buforn, J.F. Borges, and B. Caldeira
Seismicity along the western part of the Eurasia-Nubian plate boundary

16:45–17:00 EGU2012-11779
A. Ayele
Earthquake and Volcanic Hazard Mitigation and Capacity Building in Sub-Saharan Africa

TS8.2/G3.8/NH4.4/SM2.11 – Seismotectonics and crustal deformation in Africa (co-organized) – Posters
Convener: M. Meghraoui | Co-Conveners: R. Durrheim, A. AYELE, V. Midzi

Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Atalay Ayele and Ray Durrheim

A510 EGU2012-474
E. Saria, E. Calais, Z. Altamimi, P. Willis, R. Fernandes, S. Stamps, and H. Farah
Rigidity of Nubia from combined GPS and DORIS solutions: Implication to Africa Reference Frame (AFREF)

A511 EGU2012-1551
M. Lindenfeld, G. Rümpker, I. Wölbern, A.G. Batte, and A. Schumann
Complex seismicity patterns in the Rwenzori region: insights to rifting processes at the Albertine Rift.

A512 EGU2012-5849
D. Delvaux, F. Kervyn, A.S. Macheyeki, and E.B. Temu
Geodynamic significance of the TRM segment in the East African Rift: active tectonics and paleostress in western Tanzania

A513 EGU2012-5931
J.-L. Mulumba and D. Delvaux
Pre-instrumental seismicity in Central Africa using felt seisms recorded mainly at the meteorological stations of DRC, Rwanda and Burundi during the colonial period

A514 EGU2012-10491
M. Singh
Seismotectonic Analysis for the KZN region of South Africa

A515 EGU2012-14093
V Midzi
Status of Seismotectonic and seismic hazard studies in South Africa

A516 EGU2012-14203
D. Keir, M. Belachew, C. Ebinger, M. Kendall, J. Hammond, G. Stuart, A. Ayele, and J. Rowland
Mapping the evolving strain field during continental breakup from crustal anisotropy in the Afar Depression

A517 EGU2012-1425
A. Deprez, F. Masson, C. Doubre, and P. Ulrich
African plate motions constraining and Euler pole determination using permanent GPS data

A518 EGU2012-1529
A. Ahmed, **C. Doubre**, S. Leroy, J. Perrot, L. Audin, F. Rolandone, D. Keir, I. Al-Ganad, K. Khanbari, K. Mohamed, J. Vergne, E. Jacques, and A. Nercessian
Seismic constraints on a large dyking event in Western Gulf of Aden

A519 EGU2012-3334
M. Meghraoui and A. Ayadi
Seismotectonics of North Africa

A520 EGU2012-3350
R. Ghedhoui, B. Deffontaines, and M.C Rabia
Lateral extrusion of Tunisia : Contribution of Jeffara Fault (southern branch) and Petroleum Implications

A521 EGU2012-6540
A. Ben-Suleman
reevaluation of seismicity and seismotectonics of Libya

A522 EGU2012-13155
J. Kacem and M. Hfaiedh
Importance of macroseismic data from moderate local earthquakes for seismic microzoning effects distribution during the 2003 Bardo, Tunisia, earthquake

A523 EGU2012-14204
S. Maouche, A. Abtout, N. Merabet, T. Aïfa, A. Lamali, B. Bouyahyaoui, S. Boughchiche, and M. Ayache
Tectonic and hydrothermal activities in Debbagh, Guelma Basin, Eastern Algeria

Thursday, 26 April

G2.1 – The Global Geodetic Observing System: Tying and Integrating Geodetic Techniques for Research and Applications – Posters
Convener: R. Gross | Co-Conveners: E. C. Pavlis, M. Seitz, D. Behrend
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Richard Gross

XL58 EGU2012-1439
J.-Y. Richard, R. Biancale, C. Bizouard, F. Deleflie, G. Gambis, R. Koenig, S. Loyer, C. Sciaretta, M. Seitz, H. Spicakova, T. Springer, and D. Thaller
IERS Working group on Combination of Space Geodetic Techniques at the Observation Level (COL)

XL59 EGU2012-7861
C. Schwatke
EUROLAS Data Center (EDC) - A new website for tracking the SLR data flow

XL60 EGU2012-5894
S. Rudenko, T. Schöne, S. Esselborn, and H. Storr
Computation and evaluation of new consistent orbits of Envisat, ERS-1 and ERS-2 in the ITRF2008 reference frame

XL61 EGU2012-24
A. Alothman and S. Schillak
Determination of positions and velocity of Riyadh SLR station using satellite laser ranging observations to Lageos1 and Lageos2 satellites

XL62 EGU2012-11217
X. Wang, P. Exertier, J.-M. Lemoine, R. Biancale, and F. Pierron
Data analysis of French mobile telemetry laser campaign in Tahiti in 2011

XL63 EGU2012-6087
K. Szafranek, S. Schillak, A. Araszkiewicz, M. Figurski, M. Lehmann, and P. Lejba
Comparison of long-term SLR and GNSS solutions from selected stations in the frame of GGOS realization

XL64 EGU2012-2889
K. So?nica, D. Thaller, R. Dach, A. Jäggi, and G. Beutler
Impact of atmospheric loading corrections on SLR solutions and on the consistency between GNSS and SLR results

XL65 EGU2012-8801
H. Bock, R. Dach, and A. Jäggi
Impact of inconsistent use of IERS Conventions on PPP results

XL66 EGU2012-10418
W. Tian, M. Soffel, T. Klügel, K.U. Schreiber, and A. Gebauer
Is the Geographic Latitude Variations detectable with Large Ring Laser Gyroscopes(RLG)?

XL67 EGU2012-13256
P. Stepanek, V. Filler, J. Dousa, C. Rodriguez Solano, and U. Hugentobler
Different approaches how to deal with the South Atlantic Anomaly effect on the SPOT-5 DORIS measurement

XL68 EGU2012-2432
M. Wilkinson, R. Sherwood, T. Shoobridge, J. Rodriguez, and G. Appleby
Monitoring for long-term and short-term site instabilities at the SGF, Herstmonceux

XL69 EGU2012-10909
E. C. Pavlis and M. Kuzmicz-Cieslak
Impact of Survey Tie Errors in the GGOS Core Site Network on the ITRF

XL70 EGU2012-10627
M. Pa?nicka, K. Szafranek, and A. Zwirowicz-Rutkowska
Description of ITRF construction using UML notation

XL71 EGU2012-12922
N. Schoen, **S. Rudenko**, M. Uhlemann, G. Gendt, and T. Schöne
Vertical land movement rates from the analysis of GPS data compared with tide gauge, hydrology model and GRACE data

XL72 EGU2012-9262
P. Gegout
Reference and Site-dependent Love numbers

G2.3 – The next International Terrestrial Reference Frame and an update on geocenter motions – Orals
Convener: Z. Altamimi | Co-Conveners: J. R. Ray, T. van Dam, L. Conan

Room: 17
Chairperson: n.n.

08:30–08:45 EGU2012-8196
G. Woppelmann, X. Collilieux, M. Gravelle, and A. Santamaria-Gomez
Rationale for sub-millimetre per year ITRF accuracy for long-term sea level studies
08:45–09:00 EGU2012-2181
X. Wu, C. Abbondanza, Z. Altamimi, T. Chin, R. Gross, and M. Heflin
An experimental Kalman filter approach to the International Terrestrial Reference Frame realization
09:00–09:15 EGU2012-5080
M. Seitz, P. Steigenberger, and T. Artz
Consistent realization of ITRS and ICRS
09:15–09:30 EGU2012-2358
A. Nothnagel, T. Artz, and A. Iddink
International VLBI Service for Geodesy and Astrometry: Challenges of the next ITRF
09:30–09:45 EGU2012-3181
J. Griffiths, P. Rebischung, B. Garayt, and J. Ray
IGS preparations for the next reprocessing and ITRF
09:45–10:00 EGU2012-6788
E. C. Pavlis, V. Luceri, C. Sciarretta and the The ILRS AWG Team
Forthcoming Improvements in SLR Data Analysis for the Next ITRF
10:00–10:15 EGU2012-13799
L. Soudarin, G. Moreaux, F. Lemoine, P. Willis, P. Stepanek, M. Otten, R. Govind, S. Kuzin, and P. Ferrage
Research activities for the DORIS contribution to the next International Terrestrial Reference Frame

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2012-5115
V. Klemann and Z. Martinec
Solid-Earth Processes and Secular Geocenter Motion
10:45–11:00 EGU2012-3056
M. Greff-Lefftz and L. Métivier
The geocenter motion from decadal to geological time-scales: geophysical modelling
11:00–11:15 EGU2012-13929
U. Hugentobler, C. Rodriguez-Solano, P. Steigenberger, and M. Fritsche
Impact of solar radiation pressure modeling on GNSS-derived geocenter motion
11:15–11:30 EGU2012-7446
P. Rebischung, **X. Collilieux**, and Z. Altamimi
Geocenter motion estimates from the IGS Analysis Center solutions
11:30–11:45 EGU2012-2904
D. Thaller, K. So?nica, A. Jäggi, R. Dach, G. Beutler, and M. Mareyen
Geocenter coordinates from SLR and combined GNSS-SLR analysis
11:45–12:00 EGU2012-10108
R. Rietbroek, C. Dahle, R. König, S.-E. Brunnabend, M. Gebler, M. Fritsche, J. Kusche, F. Flechtner, J. Schröter, and R. Dietrich
Estimating geocenter motion from a GRACE, GPS and SLR combination

G2.3 – The next International Terrestrial Reference Frame and an update on geocenter motions – Posters
Convener: Z. Altamimi | Co-Conveners: J. R. Ray, T. van Dam, L. Conan
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

XL73 EGU2012-2678
Z. Altamimi, X. Collilieux, L. Métivier, and P. Rebischung
The International Terrestrial Reference Frame: lessons from the past and preparation for the future.
XL74 EGU2012-11920
C Abbondanza, TM Chin, RS Gross, MB Heflin, and X Wu
Evaluation of the relative precision of space-geodetic techniques at ITRF co-located sites with the Three Corner Hat approach

XL75 EGU2012-2541
M. Xu and G. Wang
The Work on the Terrestrial Reference Frame at SHAO analysis center

XL76 EGU2012-3940
J. Dawson, M. Deo, M. Jia, G. Hu, and R. Ruddick
Asia Pacific Reference Frame (APREF): Densification of the ITRF in the Asia Pacific

XL77 EGU2012-7361
X. Collilieux, T. van Dam, and Z. Altamimi
Call for space geodetic solutions corrected for non-tidal atmospheric loading at the observation level

XL78 EGU2012-8992
D. Blagojevic, G. Todorovic, and V. Vasilic
Assessment of Reference Frame Stability trough offset detection in GPS coordinate time series

XL79 EGU2012-3084
Dr. Weston, Dr. Mader, and Dr. Schenewerk
The evolution of OPUS: A set of web-based GPS processing tools offered by the National Geodetic Survey

XL80 EGU2012-11566
G. Appleby, T. Otsubo, E.C. Pavlis, V. Luceri, and C. Sciarretta
Improvements in systematic effects in satellite laser ranging analyses - satellite centre-of-mass corrections

XL81 EGU2012-11209
L. Soudarin, H. Capdeville, J.-M. Lemoine, and P. Schaeffer
Recent improvements in DORIS orbit determination and station coordinates estimation at CNES/CLS Analysis Center

XL82 EGU2012-11427
A. Jaeggi, F. Dilssner, R. Schmid, R. Dach, T. Springer, H. Bock, P. Steigenberger, Y. Andres, and W. Enderle
Extension of the GPS satellite antenna patterns to nadir angles beyond 14°

XL83 EGU2012-2178
X. Wu, J. Ray, and T. van Dam
Degree-1 mass transport, deformation and geocenter motion - An overview of theoretical developments and inverse approaches

XL84 EGU2012-10504
M. Cheng, J. Ries, and B. Tapley
Geocenter motion from space geodetic observation

XL85 EGU2012-9164
R. Koenig and M. Vei
On the effect of atmospheric loading and mass variations on a geocenter time series from 30 years of LAGEOS SLR data

XL86 EGU2012-6915
E. C. Pavlis and M. Kuzmicz-Cieslak
Variations in the Realization of the Origin of the ITRF From Satellite Laser Ranging

XL87 EGU2012-11429
V. Luceri, C. Sciarretta, and G. Bianco
Determination of geocenter motion from SLR data

XL88 EGU2012-9154
L. He, J. Wang, Sh. Song, H. Zhou, and W. Zhu
Seasonal Variation Analysis of Geo-Center Motion based on SLR Time Series with respect to ITRF2005

XL89 EGU2012-9620
R.E.M. Riva, W. van der Wal, D.A. Lavallée, H. Hashemi Farahani, and P. Ditmar
Geocenter motion due to surface mass transport from GRACE satellite data

XL90 EGU2012-7913
M. Meindl, R. Dach, G. Beutler, S. Schaer, and A. Jaeggi
Geocenter Coordinates Estimated from a Combined Multi-GNSS Data Analysis

XL91 EGU2012-1240
S. Kuzin, S. Tatevian, and A. Klyuykov
Geocenter dynamics investigations using DORIS and GPS tracking data

XL92 EGU2012-3917
W. Kosek, W. Popi?ski, A. Wn?k, and M. Zbylut
Wavelet based time-frequency comparison of centre of mass time series determined by DORIS, SLR and GNSS techniques

SM2.4/G3.7/NH4.8/TS8.6 – Investigating earthquake physics through source imaging and scaling studies (co-organized) – Orals
Convener: G. Kwiatek | Co-Conveners: H. Sudhaus, R. M. Harrington, P.M. Mai, A. Piatanesi
Room: 26
Chairperson: n.n.

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

G4.1 – Gravity field research - data acquisition - processing and - interpretation – Orals
Convener: B. Meurers | Co-Conveners: M. Kaban, C. Braitenberg, H.-J. Götze, G. Strykowski
Room: D
Chairperson: G. Strykowski

08:30–08:45 EGU2012-8777
J. Bouman, J. Ebbing, S. Gradmann, M. Fuchs, R. Abdul Fattah, S. Meekes, M. Schmidt, V. Lieb, and R. Haagmans
GOCE gravity gradient data for lithospheric modeling - From well surveyed to frontier areas
08:45–09:00 EGU2012-7245
R. Barzaghi, A. Borghi, M. Reguzzoni, and **D. Sampietro**
Local Moho estimate in the Italian area based on a global Moho from GOCE data
09:00–09:15 EGU2012-8833
C. Hwang, H.J. Hsu, T.Y. Chang, and R. Tenzer
A new gravity field of Taiwan from multi-sources: Revelations of new tectonic features
09:15–09:30 EGU2012-7306
M. Fuchs, T. Broerse, J. Bouman, B. Vermeersen, and P. Visser
Assessment of the possibility to observe gravity changes due to the Japan-Tohoku 2011 earthquake by GOCE gravity gradiometry
09:30–09:45 EGU2012-3116
J.A. Bonin and D.P. Chambers
Uncertainty Estimates of Forward Modeling over Ice-Covered Regions from GRACE
09:45–10:00 EGU2012-8322
O. B. Andersen, **L. Stenseng**, M. Jain, and P. Knudsen
Increasing the accuracy of Arctic gravity field modeling using Cryosat-2 SAR altimetry

COFFEE BREAK

Chairperson: C. Braitenberg

10:30–10:45 EGU2012-5027
D. Dettmering, W. Bosch, and M. Schmidt
Cryosat-2 LRM Data for Regional Marine Gravity Modeling
10:45–11:00 EGU2012-7738
C. Schwatke, T. Koch, and W. Bosch
Satellite altimetry over inland water: A new tool to detect geoid errors!
11:00–11:15 EGU2012-11509
G Strykowski and N.L.B. Lauritsen
Gravity modeling: the Jacobian function and its approximation

11:15–11:30 EGU2012-14205
Y. AllahTavakoli
A new approach to precise upward and downward continuation and gridding land-based gravity data based on Hessian matrix computation, applied for exploration studies

11:30–11:45 EGU2012-633
NK Köther, WS Szwillus, HG Goetze, and SS Schmidt
Accurate topographic reduction of potential field data

11:45–12:00 EGU2012-5588
B. Foulon, K. Douch, B. Christophe, I. Panet, D. Boulanger, and V. Lebat
GREMLIT : an airborne gravity gradiometer inheriting from GOCE

LUNCH BREAK

Chairperson: B. Meurers

13:30–13:45 EGU2012-12642
H. Wziontek, B. Cordoba, D. Crossley, H. Wilmes, P. Wolf, J.M. Serna, and R. Warburton
Stability and accuracy of relative scale factor estimates for Superconducting Gravimeters

13:45–14:00 EGU2012-3977
M. Karbon, J. Boehm, B. Meurers, and H. Schuh
Atmospheric correction for superconducting gravimeters based on operational weather models

14:00–14:15 EGU2012-9827
H. Ruotsalainen
Broad band of geophysical signals recorded with an interferometrical tilt meter in Lohja, Finland

14:15–14:30 EGU2012-3336
T. Jahr, N. Kukowski, P. Schindler, A. Weise, and G. Jentzsch
Local, regional and global signals in longterm time series of gravity, tilt and strain at the Geodynamic Observatory Moxa/Germany

14:30–14:45 EGU2012-6200
X. D. Chen, H. P. Sun, H. Z. Xu, J. Q. Xu, and X. H. Hao
High-precision Gravity Measurements of the Superconducting Gravimeter 057 at Lhasa Station

14:45–15:00 EGU2012-12006
M. Calvo, B. Cordoba, J.M Serna, S. Rosat, and J. López
Presentation of the new Spanish Gravimeter Station; Yebes

G4.1 – Gravity field research - data acquisition - processing and - interpretation – Posters
Convener: B. Meurers | Co-Conveners: M. Kaban, C. Braitenberg, H.-J. Götze, G. Strykowski
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: R. Biancale

XL93 EGU2012-11091
S. Bonvalot, G. Balmino, A. Briais, M. Kuhn, A. Peyrefitte, N. Vales, R. Biancale, G. Gabalda, and F. Reinquin
World Gravity Map: a set of global complete spherical Bouguer and isostatic anomaly maps and grids

XL94 EGU2012-4945
O. Abrykosov, Ch. Förste, Ch. Gruber, R. Shako, and F. Barthelmes
Harmonic analysis of the DTU10 global gravity anomalies

XL95 EGU2012-8753
R. Biancale, J.-M. Lemoine, F. Reinquin, F. Deleflie, G. Ramillien, and P. Gégout
Behaviour of the low degree terms of the Earth gravity field over the last 30 years

XL96 EGU2012-1469
J. Klokocnik, J. Kostelecky, J. Sebera, and A. Bezdek
Comparison of EIGEN 6C and EGM 2008 gravity field models via Marussi tensor computed for selected areas of the Earth

XL97 EGU2012-10967
P. Novak, O. Baur, Z. Martinec, N. Sneeuw, D. Tsoulis, B. Vermeersen, W. van der Wal, M. Roth, J. Sebera, M. Valko, and E. Hoeck
Towards a better understanding of the Earth's interior and geophysical exploration research "GOCE-GDC"

XL98 EGU2012-7548
T. Grombein, K. Seitz, J.L. Awange, and B. Heck
Detection of hydrological mass variations by means of an inverse tesseroid approach

XL99 EGU2012-6425
O. Alvarez, M. Gimenez, **C. Braitenberg**, and P. Martinez
Comparison of onshore Bouguer anomalies with GOCE Satellite Data in two sections of the Andes: at 29ºS and at 39ºS.

XL100 EGU2012-5183
P. Mariani, C. Braitenberg, A. De Min, and N. Ussami
The Paraná large igneous magmatism at surface and lower crustal levels

XL101 EGU2012-7235
I. Daras, K. Papazissi, R. Pail, A. Marinou, and D. Fairhead
A precise gravimetric geoid model for the Gulf of Corinth (KTH-COR12)

XL102 EGU2012-4974
A. Rülke, G. Liebsch, U. Schäfer, U. Schirmer, and J. Ihde
Geoid determination in Central Europe based on terrestrial data and GOCE observations

XL103 EGU2012-3312
W B Shen and J C Han
Global gravimetric geoid model based a new method

XL104 EGU2012-12957
N. Kühtreiber and C. Pock
The significance of GPS/leveling points for the high precision geoid computation

XL105 EGU2012-836
G.N. Guimarães, D Blitzkow, A.C.O.C. Matos, and R. Barzaghi
The Geoid Model in Brazil Using Three Different Methodologies

XL106 EGU2012-7383
D.H. Lee, H.S. Yun, Y.C. Suh, J.S. Hwang, and B.I. Min
KGEOID10: A New Hybrid Geoid Model in Korea

XL107 EGU2012-6289
S.A.H. Beheshty and S.M. Beheshti
Evaluation of the Recent Local and Global Geoid Models in Iran based on the GPS/levelling and Vertical Gravity Components

XL108 EGU2012-5814
R. Kiamehr
Evaluation of the SRTM, ASTER and Photogrammetric Digital Elevation Models versus GPS/levelling Data in Iran

XL109 EGU2012-11707
B. D. Gutknecht, R. Mahatsente, and H.-J. Götze
Stress anomaly and gravitational potential energy of the Andean convergent margin from gravity modelling

XL110 EGU2012-10168
R. Tenzer, M. Bagherbandi, and **P. Novak**
Crust-mantle density contrast derived globally using gravity and seismic models

XL111 EGU2012-10252
R. Tenzer, M. Bagherbandi, P. Sirguey, and **P. Novak**
Evidence of the ocean floor spreading in gravity data

XL112 EGU2012-1587
S. Demirel
2D Gravity Data Modelling of the Black Sea

XL113 EGU2012-7088
T. Hao, Y. Xu, Q. You, S. Huang, C. Lv, and W. Hu
The Moho depth map of the South China Sea based on gravity data inversion

XL114 EGU2012-6022
C. Braitenberg, T. Pivetta, and Y. Li
The youngest generation GOCE products in unraveling the mysteries of the crust of North-Central Africa

XL115 EGU2012-4852
D.H. Lee, H.S. Yun, J.S. Hwang, and T.J. Jeong
Comparison of Topographic Effects using Various Gravity Reduction Methods in Korea

XL116 EGU2012-2346
E. Sz?cs and G. Papp
Effect of the difference between surface and terrain models on gravity field related quantities

XL117 EGU2012-2348
G. Papp, E. Sz?cs, and L. Battha
Preliminary analysis of the connection between ocean dynamics and the noise of gravity tide observed at the Sopronbánfalva Geodynamical Observatory, Hungary

XL118 EGU2012-2897
P. Trifonova, **S. Simeonova**, D. Solakov, and M. Metodiev
Exploring seismicity using geomagnetic and gravity data - a case study for Bulgaria

XL119 EGU2012-1194
E. Spiridonov, O. Vinogradova, E. Boyarskiy, and L. Afanasieva
Oceanic Loading Eect near the European Coast

XL120 EGU2012-4449
P. Dykowski, **J. Krynski**, and M. Sekowski
Stability of metrological parameters and performance of the A10 free-fall gravimeter

XL121 EGU2012-14213
B. Meurers, N. Blaumoser, and Ch. Ullrich
Remarks on superconducting gravimeter calibration by co-located gravity observations

XL122 EGU2012-7292
H. Virtanen, J. Mäkinen, **A. Raja-Halli**, T. Hokkanen, and R.P. Mäkinen
Temporal gravity variations observed with the superconducting gravimeter at Metsähovi, Finland: interpreted by local hydrological sensors

XL123 EGU2012-4502
P. Arneitz, **B. Meurers**, D. Ruess, Ch. Ullrich, J. Abermann, and M. Kuhn
Gravity effect of glacial ablation in the Eastern Alps - observation and modeling

XL124 EGU2012-5516
C. Del Negro, E. Sansosti, **F. Greco**, A. Pepe, G. Currenti, G. Solaro, R. Napoli, S. Pepe, and A. Pistorio
Insights into the dynamics of Mt Etna volcano from gravity and DInSar observations

XL125 EGU2012-1550
L. Besutiu
New insights on the deep geodynamic processes within Vrancea active seismic zone as inferred from non-tidal gravity changes

G4.2 – Satellite Gravimetry: GRACE, GOCE and Future Gravity Missions – Orals
Convener: F. Flechtner | Co-Conveners: T. Gruber, T. Mayer-Guerr, R. Biancale
Room: D
Chairperson: Flechtner

15:30–15:45 EGU2012-12776
B. Tapley, F. Flechtner, S. Bettadpur, and M. Watkins
The Status of GRACE After the First Decade

15:45–16:00 EGU2012-11403
M. Watkins and F. Flechtner
Status of the GRACE Follow-On Mission

16:00–16:15 EGU2012-8536
R Floberghagen, M Fehringer, B Frommkecht, Ch Steiger, A da Costa, D Lamarre, and Ch Siemes
GOCE: extended mission status and future plans

16:15–16:30 EGU2012-1810
T. Gruber and R. Rummel
Characteristics and Performance of GOCE based Gravity Field Models

16:30–16:45 EGU2012-6066
M.-H. Rio, S. Mulet, S. Bruinsma, J.C. Marty, Ch. Förste, and O. Abrikosov
Accuracy of recent GRACE and GOCE geoid models from an oceanographic perspective

16:45–17:00 EGU2012-6049
C. Braitenberg, Y. Li, and T. Pivetta
Earth Science interpretations where GOCE improved the gravity field most: North Africa

G4.2 – Satellite Gravimetry: GRACE, GOCE and Future Gravity Missions – Posters
Convener: F. Flechtner | Co-Conveners: T. Gruber, T. Mayer-Guerr, R. Biancale
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

XL126 EGU2012-4216
B. Frommknecht, R. Floberghagen, A. Bigazzi, L. Mizzi, and M. Meloni
GOCE PDGS Level 1b and Level 2 processing status

XL127 EGU2012-8891
M. Meloni, A. Bigazzi, L. Mizzi, B. Frommknecht, and R. Floberghagen
Quality management of GOCE Level 1b data products

XL128 EGU2012-2016
K. Arsov
GOCEPARSER - A program to parse GOCE level 1b and level 2 data

XL129 EGU2012-6459
P. Knudsen and J. Benveniste
GOCE User Toolbox and Tutorial

XL130 EGU2012-5318
C. Siemes, C. Stummer, T. Fecher, M. Rexer, R. Haagmans, and R. Floberghagen
Improved GOCE Gradiometer Level 1b Data Processing - Impact on Gravity Gradients and Gravity Field Models

XL131 EGU2012-2821
C. Förste, S. L. Bruinsma, R. Shako, O. Abrikosov, F. Flechtner, J.-C. Marty, J.-M. Lemoine, C. Dahle, H. Neumeyer, F. Barthelmes, R. Biancale, G. Balmino, and R. König
A new release of EIGEN-6: The latest combined global gravity field model including LAGEOS, GRACE and GOCE data from the collaboration of GFZ Potsdam and GRGS Toulouse

XL132 EGU2012-3138
W. Yi, Th. Gruber, and R. Rummel
Gravity field contribution analysis of GOCE gravitational gradient components

XL133 EGU2012-5685
B. Zhong, Z. C. Luo, J. C. Li, and H. H. Wang
Gravity Field Recovery from GOCE High-low SST and SGG Data by the Combined Adjustment Method

XL134 EGU2012-4284
T. Reubelt, O. Baur, M. Weigelt, M. Roth, and N. Sneeuw
GOCE long-wavelength gravity field recovery from high-low satellite-to-satellite-tracking using the acceleration approach

XL135 EGU2012-1241
C. C. Tscherning and M. Veicherts
Use of GOCE radial gravity gradients for direct spherical harmonic coefficient estimation

XL136 EGU2012-4713
N. Zehentner, T. Mayer-Gürr, and R. Mayrhofer
Gravity field determination using the acceleration approach - Considerations on numerical differentiation

XL137 EGU2012-7297
G. Pajot-Métivier, I. Panet, and O. de Viron
Noise reduction in GOCE gradient data

XL138 EGU2012-8109
H. Hashemi Farahani and P. Ditmar
Comparison and validation of combined GRACE/GOCE models of the Earth's gravity field

XL139 EGU2012-1808
A. Bobojc and A. Drozyner
Comparison of the Selected Geopotential Models in Terms of the GOCE Satellite Orbit Computation

XL140 EGU2012-2316
M. Sprlak, C. Gerlach, B.R. Pettersen, and O.C.D. Omang
Validation of GOCE global gravitational field models by comparison with regional geoid and gravity anomaly surfaces

XL141 EGU2012-2394
E. Sz?cs
Validation of GOCE time-wise gravity field models using GPS-levelling, gravity, vertical deflections and gravity gradient measurements in Hungary

XL142 EGU2012-7593
B. R. Pettersen, M. Sprlak, D. I. Lysaker, O. C. D. Omang, M. Sekowski, and P. Dykowski
Validation of GOCE by absolute and relative gravimetry

XL143 EGU2012-10964
P. Brieden and **J. Mueller**
Cross-overs for evaluating GOCE gravitational gradients

XL144 EGU2012-32
G.S. Vergos and I.N. Tziavos
Assessment of the recent GOCE/GRACE earth geopotential models over a network of collocated GPS/Levelling benchmarks in Greece

XL145 EGU2012-31
G.S. Vergos and I.N. Tziavos
A first outlook of GOCE contribution to the determination of the dynamic ocean topography and ocean circulation in the Mediterranean Sea

XL146 EGU2012-8373
J.M. Sánchez Reales, O.B. Andersen, and M.I. Vigo
Assessing three generations of GOCE data through its induced surface geostrophic currents

XL147 EGU2012-8409
J.M. Sánchez Reales, O.B. Andersen, and M.I. Vigo
Improving Surface Geostrophic Current from a GOCE derived Mean Dynamic Topography using Edge Enhancing Diffusion filtering

XL148 EGU2012-9196
M. Herceg and P. Knudsen
Regional Enhancement of the Mean Dynamic Topography using GOCE Gravity Gradients

XL149 EGU2012-2222
R. Pail, A. Albertella, T. Fecher, and R. Savcenko
Rigorous covariance propagation of geoid errors to geodetic MDT estimates

XL150 EGU2012-5206
P. Mariani, C. Braitenberg, and N. Ussami
GOCE data to analyze Moho undulations in Brazil

XL151 EGU2012-6444
O. Alvarez, M. Gimenez, **C. Braitenberg**, and A. Folguera
Satellite gravity field derivatives for identifying geological boundaries.

XL152 EGU2012-3937
N Darbeheshti, P Tregoning, and S McClusky
Extracting high spatial resolution local gravity field from GRACE data

XL153 EGU2012-10103
L. Zenner, I. Bergmann, H. Dobslaw, and T. Gruber
Enhanced spatial resolution of the ocean de-aliasing model - Improved GRACE gravity field time series

XL154 EGU2012-12683
J. Flury, T. Bandikova, J. Matschke, G. Apelbaum, N. Peterseim, and A. Schlicht
Unexpected signals on GRACE from platform and environmental processes

XL155 EGU2012-13800
M. Shafiei Joud and V. Ebrahimzadeh A.
A Spherical Wavelet Approach to Localize Satellite Gravity Field Data for Delineating Water Storage Variations Signal case study: South-Eastern Iran

XL156 EGU2012-11055
M. Weigelt and W. Keller
Refinement of the differential gravimetry approach for future intersatellite observations

XL157 EGU2012-62
S. Iran Pour, T. Reubelt, M. Ellmer, and N. Sneeuw
Quality assessment of sub-Nyquist recovery from future gravity satellite missions

XL158 EGU2012-4277
B. Christophe, B. Foulon, D. Boulanger, V. Lebat, and F. Liorzou
SuperSTAR-FO, the accelerometers for the GRACE-FO mission: improvement and evolution since GRACE

XL159 EGU2012-10955
G. Stede, B. Sheard, C. Mahrdt, D. Schütze, O. Gerberding, V. Müller, N. Brause, M. Dehne, G. Heinzel, and K. Danzmann
Breadboard testing of the Laser Ranging Instrument for the GRACE follow-on mission

XL160 EGU2012-12367
V. Müller, B. Sheard, G. Stede, C. Mahrdt, D. Schütze, O. Gerberding, M. Dehne, N. Brause, G. Heinzel, and K. Danzmann
Optical Simulations of the Laser Ranging Instrument for the GRACE follow-on mission

XL161 EGU2012-5980
A. Bezd?k, J. Sebera, J. Kloko?ník, and J. Kostelecký
Global gravity field models from the GPS positions of CHAMP, GRACE and GOCE satellites

XL162 EGU2012-7432
E. Orliac, A. Jaeggi, R. Dach, U. Weinbach, and S. Schoen
Receiver Clock Modelling for GPS-only Gravity Field Recovery from GRACE

EOS7/G6.4 – Education and Outreach in Geodesy (co-organized) – Posters
Convener: W. Soehne | Co-Conveners: H. van der Marel, D. Dettmering, M. Lidberg
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: W. Soehne

A3 EGU2012-5276
K. Hedman, **S. Kirschner**, and F. Seitz
ESPACE - a geodetic Master's program for the education of Satellite Application Engineers

A4 EGU2012-7016
M. Mayer
Techniques and methods to guarantee Bologna-conform higher education in GNSS

A5 EGU2012-7025
M. Mayer
Using forum-based competitions to improve sustainability and motivation in higher education GNSS learning - Chances and risks

A6 EGU2012-7099
T. A. Springer, M. Otten, and C. Flohrer
Spreading the usage of NAPEOS, the ESA tool for satellite geodesy.

A7 EGU2012-9121
M. Seitz and **W. Bosch**
A High School Project Seminar on Sea Level Rise

GM2.1 – High definition topography - data acquisition, modelling, interpretation (co-listed) – Posters
Convener: D. Rieke-Zapp | Co-Conveners: A. Reiterer, J. Chandler, D. Vericat, N. Tate, D. M. Powell, J. Brasington, I. Marzolff
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: D. Vericat / N. Tate

XL206 EGU2012-7714
A. Wagner, A. Reiterer, P. Wasmeier, **D. Rieke-Zapp**, and T. Wunderlich
Vision-Based Geo-Monitoring - A New Approach for an Automated System

XL207 EGU2012-7858
R. Berther and D. Rieke-Zapp
Geomonitoring for understanding of sediment transport in an Alpine river catchment

XL208 EGU2012-5566
A. Beer, L. Campana, and D. Rieke-Zapp
Evaluating sub-millimetre erosion monitoring in a mountain torrent

XL209 EGU2012-14172
P. Marzahn, D. Rieke-Zapp, and R. Ludwig
Soil surface roughness characterization for microwave remote sensing applications

XL210 EGU2012-4952
D. Rieke-Zapp
Insitu measurement of bedrock erosion

XL211 EGU2012-12789
A. Volkwein, A. Beer, and L. Egli
Applications of terrestrial laser scanning in natural hazard sciences

XL212 EGU2012-10565
M. Lo Brutto
Automatic reconstruction of 3D models in geomorphology through close-range photogrammetry and 3D web-based services

XL213 EGU2012-5759
J. Gance, T. Dewez, J.-P. Malet, and A. Stumpf
Time-lapse stereo-photogrammetry to monitor electrical sounding electrodes on an unstable slope

XL214 EGU2012-3537
H.K. Seo, Y.H. Noh, J.G. Um, Y.S. Choi, and M.H. Park
Applicability of digital photogrammetry technique to quantify rock fracture surfaces

XL215 EGU2012-8167
F. Bretar, M. Pierrot-Deseilligny, D. Schelstraete, O. Martin, and P. Quernet
Generating High resolution surfaces from images: when photogrammetry and applied geophysics meets

XL216 EGU2012-936
M. Westoby, J. Brasington, N.F. Glasser, M.J. Hambrey, and J.M. Reynolds
Structure-from-Motion photogrammetry: a novel, low-cost tool for geomorphological applications

XL217 EGU2012-6261
C. Hugenholtz, K. Whitehead, B. Moorman, O. Brown, T. Hamilton, T. Barchyn, K. Riddell, and A. LeClair
High-resolution terrain and landcover mapping with a lightweight, semi-autonomous, remotely-piloted aircraft (RPA): a case study and accuracy assessment

XL218 EGU2012-8822
C. Wiegand, C. Geitner, K. Heinrich, and M. Rutzinger
Multi-temporal analysis of aerial images for the investigation of spatial-temporal dynamics of shallow erosion - a case study from the Tyrolean Alps

XL219 EGU2012-10016
C. Capanna, L. Jorda, G. Gesquière, and **P. Lamy**
A new 3D reconstruction technique applied to small solar system bodies

XL220 EGU2012-9765
S. Delalieux, S. Livens, M. Goossens, I. Reusen, and **C. Tote**
Spatial unmixing for environmental impact monitoring of mining using UAS and WV-2

XL221 EGU2012-8875
A Constantinescu, I. Nichersu, **C Trifanov**, I. Nichersu, and M. Mierla
Morphometric analyze for flood hazard map using DTM built with LIDAR and Echo-sounder data in Danube Delta

XL222 EGU2012-8905
M. Avian
First results of repeated Terrestrial Laserscanning monitoring processes at the rock fall area Burgstall/Pasterze Glacier, Hohe Tauern Range, Central Austria

XL223 EGU2012-10081
M. Avian
Performance and limits of different long-range TLS-sensors for monitoring high mountain geomorphic processes at different spatial scales

XL224 EGU2012-12400
A. Prokop and M. Chiari
Long term monitoring of geomorphological changes caused by torrent activity using terrestrial laser scanning

XL225 EGU2012-10244
D.J. Luscombe, K. Anderson, A. Wetherelt, E. Grand-Clement, N. Le-Feuvre, D. Smith, and R.E. Brazier
Understanding the structure of Exmoor's peatland ecosystems using laser-scanning technologies

XL226 EGU2012-10512
N. Perez-Gallego, T. Francke, J. Latron, S. Werth, S. Werb, and **F. Gallart**
Testing a Terrestrial Laser Scanner for studying badlands forms and erosion rates. Vallcebre (Catalan Pre-Pyrenees)

XL227 EGU2012-2469
M. Dotterweich and S. Bub
Using of high resolution morphometric thalweg analyses of dry valleys under woodland to assess land use impact and soil erosion in the late Holocene

XL228 EGU2012-13442
B.D. Collins, S.C. Corbett, and H.C. Fairley
Measuring and modeling high-resolution topographic change at archaeological sites in Grand Canyon National Park, Arizona, U.S.A.

XL229 EGU2012-731
Á. Gómez, S. Schnabel, F. Lavado, and J. Rubio
Developing a methodology to estimate historical sheet erosion rates using exposed roots and terrestrial laser scanner

XL230 EGU2012-5543
D. Vericat, M. Smith, J.A. López-Tarazón, A. Tena, J. Brasington, and R.J. Batalla
Monitoring Topographic Change In Highly Erodible Landscapes By Means Of Terrestrial Laser Scanning

XL231 EGU2012-8691
M. Etchebes, P. Tapponnier, Y. Klinger, J. Van Der Woerd, X. Xu, S. Xinzhe, T. Xibin, M. Rizza, and T. Lok Hang
Application of terrestrial LiDAR topographic data to reconstruct offset geomorphic markers along the Fuyun strike-slip fault, Xinjiang, China

XL232 EGU2012-1288
R.M. Frings and S. Vollmer
Use of 3D photogrammetry for measurement of river bed porosity

XL233 EGU2012-4785
M. Smith and D. Vericat
Evaluating through-water terrestrial laser scanning under a range of flow and suspended sediment conditions

GM2.2 – Digital Landscapes: Quantitative Interrogation and Use to Examine Geomorphic Processes (co-listed) – Posters
Convener: J. K. Hillier | Co-Conveners: P. Tarolli, P. Passalacqua, D.C. Mason, S. Conway
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Susan Conway

XL234 EGU2012-4560
A.P. Valentine, L.M. Kalnins, and J. Trampert
Hunting for seamounts using neural networks: learning algorithms for geomorphic studies

XL235 EGU2012-13482
VB Ernstsen, A Lefebvre, J Bartholdy, A Bartholomä, and C Winter
On the determination of net bedload transport patters in a natural tidal inlet system (Knudedyb in the Danish Wadden Sea)

XL236 EGU2012-13310
F. Haas, **T. Heckmann**, L. Hilger, and M. Becht
Measuring debris flows in the proglacial area of the Gepatschferner/Austrian Alps using repeat ground-based and airborne LiDAR data

XL237 EGU2012-5046
J. K. Hillier and M. S. Smith
Robust 3D Quantification of Glacial Landforms: A Use of Idealised Drumlins in a Real DEM

XL238 EGU2012-7660
L. Carturan, S. Calligaro, F. Cazorzi, G.A. Baldassi, D. Moro, A. Carton, G. Dalla Fontana, A. Guarnieri, N. Milan, and P. Tarolli
Mass balance and surface dynamics of Montasio Occidentale glacier (Eastern Italian Alps) investigated by Terrestrial Laser Scanner

XL239 EGU2012-10137
A. J. Cook, T. Murray, A. Luckman, and D. G. Vaughan
A new 100-m Digital Elevation Model of the Antarctic Peninsula suitable for glacier morphology studies, using ASTER Global DEM

XL240 EGU2012-9296
L. Rieg, R. Sailer, M. Sproß, M. Rutzinger, and V. Wichmann
Comparison of different DTM resolutions for surface change calculations in a high mountain environment

XL241 EGU2012-8750
S. Trevisani, M. Cavalli, and L. Marchi
Reading alpine morphology according to surface texture: two approaches compared

XL242 EGU2012-13565
J. B. Salisbury, J R. Arrowsmith, T. K. Rockwell, D. Haddad, O. Zielke, and C. Maddugo
The Climatic Role in Formation of Fault-Offset Geomorphic Features: Reliable Measurements for Slip-Per-Event Studies

XL243 EGU2012-215
Yu. Yu. Yurchenko and S.V. Sokolov
Experience using of DEM's as a basis for landscapes classification at selection of geochemical methods of prospecting.

XL244 EGU2012-8510
A. Doglioni and V. Simeone
Identification of large geomorphological anomalies based on 2D discrete wavelet transform

XL245 EGU2012-3422
C. W. Lin, P. Tarolli, C. M. Tseng, and Y. H. Tseng
Recognition of large scale deep-seated landslides in vegetated areas of Taiwan

XL246 EGU2012-5000
C.-M. Tseng, P. Tarolli, and C.-W. Lin
Variations of Geomorphic Signatures after a Major Typhoon

XL247 EGU2012-5035
S. Calligaro, P. Tarolli, M. Mancini, A. Righetto, D. Capraro, G. Mei, and A. Spinazzè
Terrestrial Laser Scanner survey of a small headwater basin in the Dolomites

XL248 EGU2012-6729
J.-K. Liu, M.-S. Yang, M.-C. Wu, and W.-C. Hsu
LiDAR DEM for Slope regulations of land development in Taiwan

XL249 EGU2012-9407
L. Cavallari, M. Dierna, M. Gelmini, and **G. P. M. Vassena**
Multiresolution and multisensors 3D laser scanner survey of a landslide in the Italian Apls

XL250 EGU2012-9865
P. Tarolli and A. Righetto
Regional scale analysis of the topographic signatures of landslide/debris flow dominated processes

XL251 EGU2012-843
A. Tomczyk and M. Ewertowski
Digital Elevation Models of Differences (DODs): implementation for assessment of soil erosion on recreational trails.

XL252 EGU2012-914
S. d'Oleire-Oltmanns, I. Marzolff, and L. Schrott
The use of very high resolution DSMs for the investigation of gully evolution in the Souss Basin, Morocco derived from UAV missions

XL253 EGU2012-12427
J. H. Blöthe, H. Munack, and O. Korup
Sediment storage and stability along the western Tibetan plateau margin

XL254 EGU2012-3184
F. Cazorzi, A. De Luca, A. Checchinato, F. Segna, and G. Dalla Fontana
A LiDAR based analysis of hydraulic hazard mapping

XL255 EGU2012-4114
G. Sofia, P. Tarolli, and G. Dalla Fontana
LiDAR DTMs and anthropogenic feature extraction: testing the feasibility of geomorphometric parameters in floodplains

XL256 EGU2012-4636
M. Della Seta, J.P. Galve, D. Piacentini, and F. Troiani
Computation, validation and sensitivity of the DTM-derived geomorphic parameters: the case of Stream-Length Gradient Index

XL257 EGU2012-5363
K. Fieber, I. Davenport, J Ferryman, R Gurney, J Walker, and J Hacker
Analysis of full-waveform LiDAR pulse properties for vegetation discrimination and characterisation

XL258 EGU2012-6172
F. Pirotti, A. Guarnieri, and A. Vettore
Full waveform airborne laser scanning for mapping morphometric parameters in terrain with varying vegetation cover

XL259 EGU2012-6345
J. Filski
The State of Health of Nature Reserves: A Case Study using the Fusion of Hyperspectral and Lidar Data

ML10 – Vening Meinesz Medal Lecture by Che-Kwan Shum (co-listed) – Orals
Convener: M. Poutanen
Room: 12
Chairperson: n.n.

19:00–20:00 EGU2012-14443
C. K. Shum
Space Geodesy: The Cross-Disciplinary Earth science (Vening Meinesz Medal Lecture)

TS1.1 – Open Session: Tectonics and Structural Geology (co-listed) – Posters
Convener: F. Storti | Co-Conveners: S. Buiter
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Fabrizio Storti and Susanne Buiter

A413 EGU2012-2078
I.D. Bastow, R.S.M. De Plaen, and R.J. Gallacher
The Nature of the Cameroon Volcanic Line: Evidence from Seismic Anisotropy and Receiver Functions

A414 EGU2012-5053
H. Otsuka, J. Ashi, S. Morita, and M. Tanahashi
Attempt to estimate uplift process of outer ridge taking account of distribution and geometry of Foldback Reflectors

A415 EGU2012-9801
C.-Y. Hsieh, K.-M. Yang, and B.-I. Chuang
Trishear model and kinematics of a fault-related structure in the frontal part of Fault-and-thrust belt, NW Taiwan

A416 EGU2012-2555
Y.T. Lo and H.Y. Yen
Gravity data inversion for 3D topography of the Moho discontinuity by separation of sources in Taiwan region

A417 EGU2012-8177
K.-M. Yang, J.-C. Wu, E.-W. Cheng, Y.-R. Chen, W.-C. Huang, C.-C. Tsai, J.-B. Wang, and H.-H. Ting
Development of Tectonostratigraphy in Distal Part of Foreland Basin in Southwestern Taiwan

A418 EGU2012-492
J. Ukass, T. Saks, and K. Popovs
Thickness Reconstruction of Layers by 3D Geometrical Model to Characterize Caledonian Tectonic Complex and Data in Latvia

A419 EGU2012-4846
H. Kranis, E. Skourtsos, L. Gouliotis, and S. Lozios
Structural Setting and Upper Quaternary landscape evolution at Delphi, Central Greece

A420 EGU2012-5032
J. Scheibz, H. Haeusler, F. Kohlbeck, W. Chwatal, and C. Koenig
High resolution geophysics reveal a new Neogene basin southeast of the Leitha Mountains - The Winden Syncline (Burgenland, Austria)

A421 EGU2012-5201
H. Häusler
Contribution to the discussion of folded Pannonian strata in the Southern Vienna Basin

A422 EGU2012-2623
J. E. Reber, O. Galland, M. Dabrowski, D. W. Schmid, and P. R. Cobbold
On the usefulness of sheath folds as kinematic indicators

A423 EGU2012-5359
L. Rodriguez, J. Cuevas, and J. M. Tubía
Paleozoic-involving thrust array in the central Sierras Interiores (South Pyrenean Zone, Central Pyrenees): regional implications

A424 EGU2012-5422
L. Rodriguez, J. Cuevas, and J. M. Tubía
Structure of the Anayet Permian basin (Axial Zone, Central Pyrenees)

A425 EGU2012-8223
C. García-Lasanta, B. Oliva-Urcia, T. Román-Berdiel, A. Casas-Sainz, I. Gil-Peña, Y. Sánchez-Moya, and A. Sopeña
Tectonically controlled magnetic fabrics in the Iberian Triassic basin

A426 EGU2012-10979
M.R. Barchi, G. Lena, W. Alvarez, F. Felici, and A. Lupattelli
Mesoscopic S-C fabrics in shallow fault zones: a case history from the Umbria-Marche Apennines (Central Italy)

A427 EGU2012-11423
F. Bucci, R. Novellino, I. Adurno, E. Gueguen, F. Guzzetti, M. Cardinali, E. Tavarnelli, P. Guglielmi, and G. Prosser
Low Angle Extensional Faults in a Thrusting/Compressive Regime

A428 EGU2012-7977
L. Gonzalez and **O.A. Pfiffner**
The Central Andes of Peru: Structure and Evolution

A429 EGU2012-10923
J.M. Tubía, F.D. Hongn, A. Aranguren, and N. Vegas
Inversion tectonics in the pre-andean basement of the Sierra de Cachi (Salta, Argentina)

A430 EGU2012-4811
O. Bolle, H. Diot, J. Bascou, and B. Charlier
Anisotropy of magnetic susceptibility in the giant Lac Tio hemo-ilmenite ore body (Quebec Province, Canada): source and geological implications

A431 EGU2012-10272
T. Torvela, J. Moreau, R.W.H. Butler, A. Korja, and P. Heikkinen
Toward detailed structural analysis of seismic reflection data from crystalline basement: the seismic attribute approach

A432 EGU2012-3518
G. Berberich, D. Klimetzek, C. Wöhler, and A. Grumpe
Statistical Correlation between Red Wood Ant Sites and Neotectonic Strike-Slip Faults

A433 EGU2012-9123
D. Herwartz, T.J. Nagel, S. Sandmann, A. Vitale Brovarone, S. Rexroth, Y. Rojas-Agramonte, N. Froitzheim, A. Kröner, S.G. Skublov, and C. Münker
Traditional applications and novel approaches in Lu-Hf geochronology

A434 EGU2012-11615
M. Leitner, S. Tschürtz, G. Kirchengast, H. Kranzelbinder, B. Prügger, R.A. Krause, M. Kalliokoski, and E. Thórhallsdóttir
Greenland Expeditions by Alfred Wegener - A photographic window to past

Friday, 27 April

G2.1 – The Global Geodetic Observing System: Tying and Integrating Geodetic Techniques for Research and Applications – Orals
Convener: R. Gross | Co-Conveners: E. C. Pavlis, M. Seitz, D. Behrend
Room: 17
Chairperson: Richard Gross

10:30–10:45 EGU2012-6608
M. R. Pearlman, H. V. Frey, R. S. Gross, F. G. Lemoine, J. L. Long, C. Ma, J. F. McGarry, S. M. Merkowitz, C. E. Noll, E. C. Pavlis, D. A. Stowers, F. H. Webb, and T. W. Zagwodski
NASA's Next Generation Space Geodesy Program

10:45–11:00 EGU2012-6618
M. Poutanen, K. Arsov, U. Kallio, H. Koivula, J. Mäkinen, J. Näränen, A. Raja-Halli, H. Virtanen, and N. Zubko
Renewal of Metsähovi Fundamental Station and the GNSS reference network of Finland

11:00–11:15 EGU2012-12017
K. U. Schreiber
Considerations for improved Integration of Geodetic Techiques

11:15–11:30 EGU2012-6709
Y. Kwak, T. Kondo, T. Gotoh, J. Amagai, H. Takiguchi, M. Sekido, L. Plank, R. Ichikawa, J. Cho, T. Kim, and T. Sasao
Geodetic Analysis of the First 24-hour GPS-VLBI Hybrid Observation

11:30–11:45 EGU2012-7925
M. Otten, C. Flohrer, T. Springer, and W. Enderle
Multi-technique combination at observation level with NAPEOS: combining GPS, GLONASS and LEO satellites.

11:45–12:00 EGU2012-666
J.S. Löfgren, R. Haas, K. Larson, and H-G. Scherneck
Integrating space geodesy and coastal sea level observations

G4.2 – Satellite Gravimetry: GRACE, GOCE and Future Gravity Missions – Orals
Convener: F. Flechtner | Co-Conveners: T. Gruber, T. Mayer-Guerr, R. Biancale
Room: D
Chairperson: Gruber

08:30–08:45 EGU2012-3289
Y. Fukuda and Y. Nogi
Gravity field determination around the Japanese Antarctic stations by combining GOCE and in-situ gravity data

08:45–09:00 EGU2012-2974
X. Li, J.L. Huang, **Y.M. Wang**, M. Véronneau, and D. Roman
Geoid improvement over Alaska/Yukon area by GRACE and GOCE models

09:00–09:15 EGU2012-7260
I. Panet, G. Pajot-Métivier, O. Jamet, L. Métivier, M. Holschneider, F. Deleflie, D. Coulot, and M. Diament
Regional wavelet modelling of the GOCE gradients

09:15–09:30 EGU2012-9876
A. Gatti, F. Migliaccio, **M. Reguzzoni**, and F. Sansò
Grids of GOCE gravity gradients by the space-wise approach

09:30–09:45 EGU2012-5480
U. Meyer, A. Jäggi, H. Bock, and G. Beutler
GOCE Gravity fields established by the Celestial Mechanics Approach

09:45–10:00 EGU2012-2215
R. Pail, T. Fecher, T. Mayer-Gürr, D. Rieser, W.D. Schuh, J.M. Brockmann, A. Jäggi, and E. Höck
What have we gained from GOCE, and what is still to be expected?

COFFEE BREAK

Chairperson: Mayer-Guerr

10:30–10:45 EGU2012-6409
S Bettadpur and the CSR Level-2 Team
Insights into the Earth System mass variability from CSR-RL05 GRACE gravity fields
10:45–11:00 EGU2012-10475
Ch. Dahle, F. Flechtner, Ch. Gruber, D. König, R. König, G. Michalak, and K.H. Neumayer
The New GFZ RL05 GRACE Gravity Field Model Time Series
11:00–11:15 EGU2012-8260
S. McClusky, P. Tregoning, and H. McQueen
GRACE observations of 2010/2011 eastern Australian floods: Producing precise GRACE gravity fields in the absence of satellite accelerometer observations.
11:15–11:30 EGU2012-4219
J. Kusche, A. Löcher, R. Rietbroek, A. Eicker, F. Flechtner, J.-C. Raimondo, L. Fenoglio-Marc, and J. Schröter
On the benefit of next-generation gravity missions for sea level and ocean mass applications
11:30–11:45 EGU2012-10402
M. Murböck, R. Pail, and I. Daras
Virtual constellations of Future Satellite Gravity Missions
11:45–12:00 EGU2012-10917
B. Sheard, C. Mahrdt, D. Schütze, G. Stede, O. Gerberding, N. Brause, V. Müller, G. Heinzel, K. Danzmann, F. Fletchner, D. Shaddock, W. Klipstein, and W. Folkner
The GRACE follow-on Laser Ranging Instrument

GM2.1 – High definition topography - data acquisition, modelling, interpretation (co-listed) – Orals
Convener: D. Rieke-Zapp | Co-Conveners: A. Reiterer, J. Chandler, D. Vericat, N. Tate, D. M. Powell, J. Brasington, I. Marzolff
Room: 22
Chairperson: J. Brasington

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

COFFEE BREAK

Chairperson: D. Rieke-Zapp

10:30–10:45 EGU2012-4368
N. Brodu and **D. Lague**
3D point cloud classification of complex natural scenes using a multi-scale dimensionality criterion: applications in geomorphology

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

GM2.2 – Digital Landscapes: Quantitative Interrogation and Use to Examine Geomorphic Processes (co-listed) – Orals
Convener: J. K. Hillier | Co-Conveners: P. Tarolli, P. Passalacqua, D.C. Mason, S. Conway
Room: 22
Chairperson: Paolo Tarolli

13:30–13:45 EGU2012-13881
A. B. Watts and the SONNE 215 Shipboard Scientific Party
Repeat swath bathymetry surveys and the rates of growth and collapse of active submarine volcanoes
13:45–14:00 EGU2012-6079
Q. Li and S. Dehler
Identify Foot of Continental Slope by singular spectrum and fractal singularity analysis
14:00–14:15 EGU2012-10599
M. D. Hurst, S. M. Mudd, and M. Attal
Hysteresis in transient landscape topography recorded by hillslopes.
14:15–14:30 EGU2012-7207
G. Bertoldi, M. Reginato, and V. D'Agostino
Merging field survey and LiDAR technology for the analysis of debris-flow erosion
14:30–14:45 EGU2012-9898
R. Bell and H. Petschko
Landslide persistence and human impact in Lower Austria assessed by lidar data and aerial photography
14:45–15:00 EGU2012-10318
R. Rivola, E. Bertacchini, C. Castagnetti, A. Capra, A. Corsini, F. Ronchetti, and F. Bonacini
GB-InSAR 3D maps for deformation monitoring: the importance of the digital surface models in data georeferencing and interpretation
Chairperson: John Hillier

15:30–15:45 EGU2012-6988
F. Shahzad and T. A. Ehlers
Quantification of glacial and ground surface velocities from repeat terrestrial LiDAR scans
15:45–16:00 EGU2012-11024
M.J. Westoby, J. Brasington, N.F. Glasser, M.J. Hambrey, and J.M. Reynolds
Close-range photogrammetric reconstruction of moraine dam failures
16:00–16:15 EGU2012-13302
C. Eisank, L. Dr?gu?, and T. Blaschke
Object-based mapping of drumlins from DTMs
16:15–16:30 EGU2012-7816
J.R. Ford, B. Napier, P.R. Wilby, A.H. Cooper, A.J.M. Barron, and L.B. Bateson
The central role of digital landscapes in virtual field reconnaissance for geological surveying
16:30–16:45 EGU2012-9258
S. J. Conway, M. R. Balme, and P. M. Grindrod
Using Topographic Derivatives of High Resolution Data on Earth and Mars to Determine Active Processes on Mars.
16:45–17:00 EGU2012-11180
S. Ferrari, M. Massironi, R. Pozzobon, A. Castelluccio, G. Di Achille, and G. Cremonese
DTM analysis and displacement estimates of a major mercurian lobate scarp.