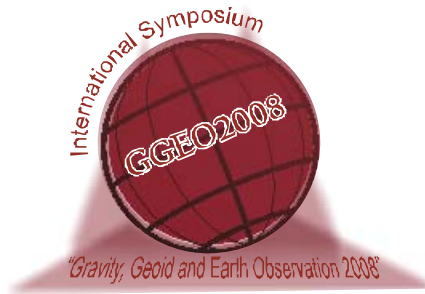


# Poster Presentations



IAG International Symposium  
Gravity, Geoid and Earth Observation 2008

23-27 June 2008  
The Venetian Arsenal building  
Center of Mediterranean Architecture,  
Old Venetian Harbor,  
Chania, Crete,  
Greece.

**Posters can remain on display during their scheduled day from 8:00 in the morning till 19:00. Then they have to be removed. Time for discussions at the Posters will be available after the end of the oral session from 17:30-19:00 everyday except Wednesday. Refreshments will be served during that time.**

**As of 6 June 2008.**

<http://www.geomatlab.tuc.gr/GGeo2008>

**Session 1: Gravimetry (terrestrial, shipborne, airborne) and gravity networks.**

 Chairs: *Yoichi Fukuda (Japan), Leonid F. Vitushkin (France)*

- S1-072** Spatio-temporal filters for use in high speed airborne gravimetry.  
*Dru A. Smith, Vicki Childers, Dan R. Roman, Yan M Wang, Jarir Saleh, Xiopeng Li*
- S1-134** Post-Newtonian Covariant Formulation for Gravity Determination by Differential Chronometry.  
*P. Romero*
- S1-268** Periodic variations in SG and GPS data from Ny-Ålesund.  
*O.C.D. Omang and H.P. Kierulf*
- S1-117** Realizing the national gravity system: an improved solution for the Estonian gravity network.  
*T. Oja*
- S1-214** The French combined geodetic and gravimetric network.  
*F. Duquenne, H. Duquenne, J. Beilin*
- S1-118** Test results of the LaCoste-Romberg G and Scintrex CG5 spring gravimeters from the repeated measurements of Estonian and Finnish calibration lines.  
*T. Oja*
- S1-198** Seasonal gravity variations at the Pecny station.  
*Vojtech Pálinskás, Jakub Kostecký*
- S1-143** Robust and Efficient Weighted Least Squares Adjustment of Relative Gravity Data.  
*F. Touati, S. Kahlouche, M. Idres*
- S1-121** Readjusting the old gravity network in Iran using the recently measured gravities.  
*A. Soltanpour, B. Sharifat, Y. Hatam, M. Sedighi, H. Cheraghi, R. Saadat*
- S1-011** Preliminary results of a GPS/INS airborne gravimetry experiment over the German Alps.  
*Ch. Gerlach, R. Dorobantu, N. Kjørsvik, Ch. Ackermann, G. Boedecker*
- S1-175** Absolute gravimetry at BIPM, Sèvres (France), at the time of Akihiko Sakuma.  
*M. Amalvict*
- S1-258** A cold atom gravimeter based on atom interferometry.  
*S. Merlet, J. Le Gouët, Q. Bodart, A. Landragin, F. Pereira Dos Santos*
- S1-269** Gravity gradients above piers in absolute gravimetry: use remove-restore for the pier attraction.  
*J. Mäkinen*
- S1-112** Extension of the Croatian Fundamental gravity network to the north Adriatic islands.  
*M. Repanic, B. Barisic, I. Grgic, M. Liker, M. Lucic T. Basic*
- S1-218** Evaluating Handheld GPS Applications in the Environmental locations of Gully Erosion Sites in the Rural Communities of the Imo State of South East, Nigeria.  
*M.N.Ono, J.I Igbokwe, J.D.Dodo*
- S1-167** First experience with the portable MPG-2 absolute gravimeter.  
*S Svitlov, Ch Rothleitner and L J Wang*
- S1-259** Establishment of a New Working Group on Absolute Gravity.  
*H. Wilmes, H. Wziontek, R. Falk, R. Forsberg, L. Vitushkin*
- S1-261** Comparisons of six absolute gravimeters at four sites 2004–2007.  
*J. Mäkinen, M. Bilker-Koivula, H. Ruotsalainen, V. Kaftan, N. Gusev, N. Korolev, V. Yushkin, R. Falk, W. Hoppe, O. Gitlein*
- S1-067** Observing Absolute Gravity Acceleration in the Fennoscandian Land Uplift Area.  
*O. Gitlein, L. Timmen, J. Müller, H. Denker, J. Mäkinen, M. Bilker-Koivula, B.R. Pettersen, D.I. Lysaker, J.G.O. Gjevestad, K. Breili, H. Wilmes, R. Falk, A. Reinhold, W. Hoppe, H.-G. Scherneck, O.C.D. Omang, A. Engfeldt, M. Lilje, J. Ågren, M. Lidberg, G. Strykowski, R. Forsberg*
- S1-162** Near-shore marine gravity survey by small vessels.  
*Chi-Hsun Huang and Cheinway Hwang*
- S1-200** Modernization of absolute gravity zero order network in Poland – first stage.  
*M.Barlik, T.Olszak, A.Pachuta, D.Próchniewicz, R.Szpunar, J.Walo*

- S1-133** Joint use of relative gravity observations routinely acquired on MT Etna using spring gravimeters and absolute measurements recorded by the IMGC-02 transportable absolute gravimeter.  
*C. Del Negro, A. Germak, F. Greco, G. D'Agostino, C. Origlia, A. Sicali*
- S1-166** High-precision balancing of falling bodies for absolute free-fall gravimeters.  
*Ch. Rothleitner, S. Svitlov, and L. J. Wang*
- S1-217** Gravity measurements in Panamá with the IMGC-02 transportable absolute gravimeter.  
*G. D'Agostino, A. Germak and D. Quagliotti*
- S1-173** Application of Kalman filtering to gravity field determination by means of moving gravimetry.  
*J. Verdun, B. De Saint-Jean, H. Duquenne, J. Cali*
- S1-048** Design & preliminary results of gravimeter with atom interferometry in NIM.  
*Wangxi Ji, Jinyi Xu, Shuqing Wu, Dalun Liu, Duowu Su, Chunjian Li*
- S1-213** Comparison of different approaches to combine superconducting and absolute gravity measurements.  
*H. Wziontek, R. Falk, H. Wilmes, P. Wolf*
- S1-199** Absolute gravimetric measurements at Polish Geodynamic Test Fields sites.  
*J. Walo, T. Olszak, A. Pachuta, R. Szpunar, D. Próchniewicz*
- S1-212** AGrav: An international database for absolute gravity measurements.  
*H. Wziontek, H. Wilmes, J. Ihde, S. Bonvalot*
- S1-080** Airborne Gravimetry by Using Low-cost Strapdown INS.  
*Xiaopeng Li, Dan R. Roman, Yan M Wang, Vicki Childers, Jarir Saleh, Dru A. Smith*
- S1-086** Galathea-3: A global marine gravity profile.  
*G. Strykowski, R. Forsberg, A.V. Olesen, O.B. Andersen and K. Cordua*
- S1-205** Correcting strapdown GPS/INS gravimetry estimates with GPS attitude data.  
*B. Gunter, B. Alberts, A. Muis, P. Chu, L. Huisman, P. Buist, G. Giorgi, C. Tiberius, H. Lindenburg*
- S1-037** Harmonic continuation and gravimetric inversion of gravity in areas of negative geodetic heights.  
*Vajda P., A. Ellmann, B. Meurers, P. Vaniček, P. Novák, R. Tenzer*
- S1-049** DESIRE – Dead Sea Rift Integrated Research Project: Technical approaches and GPS processing results of a helicopter-borne gravity survey over the Dead Sea Rift.  
*C. Köhler, I. Heyde, U. Meyer, H.-J. Götze, S. Choi, G. Xu*
- S1-060** Aerogravity survey of the German Bight (North Sea).  
*I. Heyde*
- S1-036** On ambiguities in definitions and applications of Bouguer gravity anomaly.  
*Vajda P., P. Vaniček, P. Novák, R. Tenzer, A. Ellmann, B. Meurers*
- S1-050** DESIRE – Dead Sea Rift Integrated Research Project: A multidisciplinary geoscientific project to reveal the structure of the Dead Sea Rift utilizing helicopter-borne gravimetry  
*U. Meyer, I. Heyde, C. Köhler, H.-J. Götze, S. Choi*
- S1-220** Ethiopian Airborne Gravity Survey 2006/2007.  
*A.V. Olesen, A. Hunegnaw, S. Kenyon, R. Forsberg, R. Hipkins*
- S5-288** The First Airborne Gravity Survey in Ethiopia.  
*A. Hunegnaw, A.V Olesen, R. Hipkin, R. Forsberg, S. Kenyon, T. Besha*

**Session 2: Space-borne gravimetry: Present and Future.**Chairs: *Roland Pail (Austria) and Pieter Visser (The Netherlands).*

- S2-087** Validation methods for the GOCE gradiometer.  
*Gernot Plank, Michael Kern, Roger Haagmans, Rune Floberghagen*
- S2-186** Fast variance component estimation in GOCE data processing.  
*J.M. Brockmann and W.-D. Schuh*
- S2-105** External Calibration of SGG Observations on Accelerometer Level.  
*R. Mayrhofer*
- S2-108** Covariance propagation of latitude-dependent orbit errors within the energy integral approach.  
*H. Goinger, R. Pail*
- S2-107** Gravity field recovery from highly reduced dynamic orbits.  
*R. Pail, H. Goinger, A. Jäggi, H. Bock*
- S2-219** Analysis of the covariance structure of the GOCE space-wise solution with possible applications.  
*L. Pertusini, M. Reguzzoni, F. Sansò*
- S2-206** A simulated space-wise solution using GOCE kinematic orbits.  
*F. Migliaccio, M. Reguzzoni, N. Tselfes*
- S2-077** GOCE Gradiometry - A Guide for Users.  
*Claudia Stummer, Thomas Gruber, Johannes Bouman, Sietse Rispens*
- S2-085** Robust estimation in the context of the GOCE mission.  
*Christian Siemes*
- S2-221** Modelling degree variances in the space-wise approach to GOCE data analysis.  
*M. Reguzzoni, N. Tselfes*
- S2-029** Internal Robust Estimation of GOCE SGG Error Model Parameters.  
*F. Jarecki, J. Mueller*
- S2-292** The GOCE User Toolbox.  
*Jérôme Benveniste, Per Knudsen and the GUTS Team*
- S2-093** The study of the combination approaches in solving the polar gap problems.  
*Jianqing Cai, Nico Sneeuw, Xiancai Zou and Oliver Baur*
- S2-181** Gravity field determination at the AIUB based on GPS data.  
*L. Prange, A. Jäggi, G. Beutler, R. Dach, L. Mervart*
- S2-247** Frequency-domain filtering of GRACE data for the detection of geophysical signals.  
*S.D. Pagiatakis and T. Eadie*
- S2-026** On the equivalence of the acceleration-, the energy-balance and the boundary value approach for SST.  
*Wolfgang Keller*
- S2-242** Improved kHz-SLR Tracking Techniques and Orbit Quality Analysis for LEO-Missions.  
*W. Hausleitner, R. Pail, G. Kirchner, S. Krauss, J. Weingrill, H. Goinger*
- S2-264** Global Gravity Field Pattern Recognition on the Torus Using First Generation Wavelets.  
*M.M. Elhabiby, C. Xu, M. Weigelt, M.G. Sideris*
- S2-208** Repeat orbit design using genetic algorithms.  
*M.A. Sharifi, N.J. Sneeuw, T. Reubelt, O. Baur*
- S2-106** Gravity field simulator for the evaluation of future gravity field mission concepts.  
*R. Pail, R. Mayrhofer*
- S2-153** Determination of precise baselines of the FORMOSAT-3/COSMIC tandem satellites using GPS data.  
*Tzupang Tseng and Cheinway Hwang*
- S2-010** Designing Earth gravity field missions for the future: the role of modeling errors.  
*P.N.A.M. Visser*

- S2-256** DEOS approach to gravity field modeling from KBR data acquired by the GRACE satellite mission.  
*R.Klees, X. Liu, P.Ditmar, E.Revtova, Q. Zhao*
- S2-188** Comprehensive modeling of orbital position noise in future satellite data intended for gravity field retrieval.  
*J. Encarnação, X. Liu, P. Ditmar*
- S2-125** Comparison of satellite formations for gravity field determination.  
*J. Encarnação, X. Liu, P. Ditmar*
- S2-144** Efficient Algorithm for Deriving Accelerations from Relative Kinematic Ephemerides of LEO GPS-SST.  
*F. Touati, S. Kahlouche, M. Idres, N. Benaraba*
- S2-294** Laser Interferometry for a future GRACE follow-on mission.  
*M. Dehne, B. Sheard, G. Heinzl, K. Danzmann*
- S2-296** Least-squares Spectral Analysis of GRACE SST Data.  
*Majid Naeimi, Mehdi Nikkhoo, Mohammad Ali Sharifi, Mehdi Najafi Alamdari*

**Session 6: Global gravity field modelling & EGM08.**Chairs: *Nikos Pavlis (USA) and Jianliang Huang (Canada).*

- S6-250** Refining global gravity reference field computations.  
*Uwe Schäfer*
- S6-231** The new World Gravity Map project : a tool for geodynamic studies.  
*Anne Briais, Sylvain Bonvalot, Michel Sarrailh, and the BGI Team*
- S6-196** The global gravity field model EIGEN-GL05C – Improvements and Inter-Comparison.  
*Christoph Förste, Frank Flechtner, Roland Schmidt, Richard Stubenvoll, Markus Rothacher, Jürgen Kusche, Hans Neumayer, Rolf König, Ulrich Meyer, Franz Barthelmes, Jean Claude Raimondo, Richard Biancale, Jean-Michel Lemoine, Sean Bruinsma*
- S6-090** The DNSC07 global marine gravity field.  
*Ole Andersen , Per Knudsen, Philippa Berry, N. Pavlis, Steve Kenyon*
- S6-035** Surface Gravity Data Preparation For EGM2008.  
*Steve C. Kenyon, John K. Factor, Nikolaos K. Pavlis, Siomon A. Holmes*
- S6-088** On high-resolution global gravity field modelling by direct BEM using combined gravity data.  
*R. Čunderlík, K. Mikula*
- S6-103** Mathematical Basis For The Relationship To Separate The Oscillatory And Stable Behaviour Of Legendre Associate Functions.  
*Abelardo Bethencourt Fernández*
- S6-114** Preliminary results of PGM07A testing and its comparison with EGM96.  
*Milan Burša, Steve Kenyon, Jan Kouba, Zdislav Šíma, Viliam Vatrť, Marie Vojtišková*
- S6-276** Towards the numerical evaluation of high degree and order associated Legendre functions as in EGM08.  
*Otakar Nesvadba*
- S6-165** The convergence problem in collocation theory revisited.  
*F. Sansò, G. Venuti*
- S6-281** Testing EGM08 on levelling data from Greenland and from Scandinavia and the adjacent areas.  
*G. Strykowski and R. Forsberg*
- S6-193** Validating recent global geopotential models through comparison of local quasi-geoid models with GPS/leveling data.  
*P. Novák, J. Kostecký, J. Klokočník*
- S6-262** Evaluation of the EGM08 Geopotential Model based on Mexican Data.  
*Marcelo C. Santos, David Avalos, Petr Vaniček and Genevieve Baker*
- S6-138** PGM2007A evaluation for South America.  
*Denizar Blitzkow, Ana Cristina Oliveira Cancoro de Matos*
- S6-280** Evaluation of the EGM08 Gravity Field over the Arctic Ocean.  
*McAdoo, D C, Farrell, S L, Wagner, C A, Laxon, S W, Ridout, A L*
- S6-195** Evaluation of the Earth Gravitational Model EGM08 over the Baltic countries.  
*A. Ellmann*
- S6-128** Evaluation of PGM2007A over Sweden.  
*Jonas Ågren*
- S6-157** Evaluation of PGM2007A Geopotential Model in Egypt.  
*Hussein A. Abd-Elmotaal*
- S6-236** Evaluation of PGM2007A by comparison with globally and locally estimated gravity solutions from CHAMP.  
*Matthias Weigelt, Nico Sneeuw, Wolfgang Keller*
- S6-145** Evaluation Of Earth Geopotential Model 2008 In Turkey.  
*Ali Kilicoglu, Mehmet Simav, Onur Lenk, Ahmet Direnc, Hasan Yildiz, Bahadir Aktug, Yasemin Uyuklu*
- S6-002** Assessment of the preliminary Earth gravity model PGM2007A in Algeria.  
*S. A. Benahmed Daho*
- S6-298** EGM 08a: simulations for GOCE.  
*Klokocnik J., P. Novak, I. Pesek, J. Kostecky, C.A.Wagner*



**Session 4: Geoid modeling and vertical datums.**

Chairs: *Ambrus Kenyeres (Hungary) and William Kearsley (Australia).*

- S4-061** Using vertical deflections to constrain gravimetric geoid model errors.  
*W.E. Featherstone and D.D. Lichti*
- S4-096** Using upward and downward continuation to resolve optimal flight parameters for the GRAV-D project.  
*Yan M Wang, J. Saleh, V. Childers, D. Roman and D. Smith*
- S4-172** Evaluation of the quasigeoid models EGG97 and EGG07 with GPS/leveling data for the territory of Bulgaria.  
*Elena Peneva, Ivan Georgiev*
- S4-062** Detecting spirit-levelling errors in the Australian Height Datum: recent findings and some issues for any new Australian vertical datum.  
*M.S. Filmer and W.E. Featherstone*
- S4-079** DEM and Terrain Correction issues for GEOID08.  
*Jarir Saleh, Yan Ming Wang, Daniel R. Roman, Dru A. Smith and Xiaopeng Li*
- S4-192** Comparison of two modeling strategies for evaluation of the terrain correction using high-resolution digital elevation models.  
*M. Kadlec, P. Novák, D. Tsoulis*
- S4-171** Vertical datum unification on Iberia and Macaronesian islands with a local gravimetric geoid: First results.  
*J. Catalão, M. J. Sevilla*
- S4-283** Preliminary Results Of Spatial Modelling OF GPS/Levelling Heights: A Local Quasi-Geoid/Geoid For The Lisbon Area.  
*Ana Paula Falcão, João Matos, João Casaca, Jorge. Sousa*
- S4-190** On the posedness and accuracy of discrete downward continuation of ground gravity anomalies given in a high resolution coordinate grid.  
*M. Kadlec*
- S4-150** On Determining the Accuracy of the Regional Geoid Derived from Global Geopotential Models.  
*H. Yang, C. Jekeli, J.H. Kwon*
- S4-113** How Most Recent Global Geopotential Models Fit The Croatian Territory?  
*M. Liker, M. Lucic, I. Grgic, B. Barisic, M. Repanic, T. Basic*
- S4-139** Grace and the geoid in South America  
*Denizar Blitzkow, Ana Cristina Oliveira Cancoro de Matos, Maria Cristina Barboza Lobianco, Ilce de Oliveira Campos*
- S4-007** Evaluation of the topographic effect using the various gravity reduction methods for precise geoid model in Korea.  
*S.B. Lee, D.H. Lee*
- S4-006** Development of Precise Geoid Model for Jeju Island in Korea.  
*D. H. Lee, S. B. Lee, H. S. Yun*
- S4-045** Determination Of Geoid In Saudi Arabia Using GPS/Benchmark Data And EGM96.  
*Mohammad Al Rajhi, Ramazan Yanar, Ali Al Omar*
- S4-180** Combination Schemes for Local Orthometric Height Determination from GPS Measurements and Gravity Data.  
*A. Fotiou, V.N. Grigoriadis, C. Pikridas, D. Rossikopoulos, I.N. Tziavos, G.S. Vergos*
- S4-273** Analysis of the Geopotential Anomalous Component at Brazilian Vertical Datum Region Based on the Imarui Lagoon System.  
*S.R.C. de Freitas; V.G. Ferreira; A.S. Palmeiro; J.L.B. de Carvalho; L. F. da Silva*
- S4-038** A New European Gravimetric Quasigeoid EGG2008.  
*H. Denker, R. Barzaghi, D. Fairhead, R. Forsberg, J. Ihde, A. Kenyeres, U. Marti, M. Sarrailh, I.N. Tziavos*
- S4-164** A Unified Vertical Datum for the Indonesian Archipelago.  
*A.Kasenda, A.W.Kearsley, R.Forsberg, R.Poerawiardi*

**Session 5: Regional gravity field modeling.**Chairs: *Urs Marti (Switzerland) and Steve Kenyon (USA)*

- S5-059** Validation of the SRTM and SRTM PLUS DTMs in Northern Greece for geoid and gravity field modelling.  
*G.S. Vergos, I.N. Tziavos, P. Papageorgiou, V.N. Grigoriadis*
- S5-054** Validation Of The PGM2007A Over Argentina.  
*María Cristina Pacino and Claudia Tocho*
- S5-104** The new Austrian geoid solution.  
*R. Pail, N. Kühtreiber, B. Wiesenhofer, O. Steinbach, G. Of, N. Höggerl, C. Ullrich, D. Ruess*
- S5-058** Smoothing effect of topographical corrections on various types of gravity anomalies.  
*Hamayun, Tenzer Robert, Prutkin Ilya*
- S5-185** Regional Geoid Improvement in Antarctica, using Airborne Gravity, Ice Radar and Altimetry Data.  
*J. Müller, S. Riedel, M. Scheinert, R. Dietrich, D. Steinhage, W. Jokat*
- S5-169** Quasi-geoid of New Caledonia : computation, results and analysis.  
*P. Valtý, H. Duquenne*
- S5-020** Optimal integration method for solving Newton's integral in the detailed gravity field modelling.  
*Hamayun, Tenzer Robert, Prutkin Ilya*
- S5-017** On modelling the regional distortions of the European Gravimetric Geoid EGG97 in Romania.  
*Tenzer Robert, Prutkin Ilya, Klees Roland, Rus Tiberiu, Avramiuc Neculai*
- S5-019** Long-wavelength part of the topography-generated gravitational field.  
*Tenzer Robert, Novák Pavel*
- S5-216** Inverse gravimetric problems for GOCE data.  
*M. Reguzzoni, D. Sampietro, F. Sansò*
- S5-210** Improving gravity field modelling in the German-Danish border region by combining airborne, satellite and terrestrial gravity data.  
*Uwe Schäfer, Gunter Liebsch, Uwe Schirmer, Johannes Ihde, Arne V. Olesen, Henriette Skourup, Rene Forsberg, Hartmut Pflug, Jürgen Neumeyer*
- S5-003** Impact of the new GRACE Geopotential Model and SRTM data on the Geoid Height in Algeria.  
*S. A. Benahmed Daho, J. D. Fairhead*
- S5-021** Gravitational field generated by the world ocean mass.  
*Hamayun, Tenzer Robert*
- S5-032** Further Improvements in the Determination of the Marine Geoid in Argentina by Employing Recent GGMs and Sea Surface Topography Models.  
*C. Tocho, G.S. Vergos, M.G. Sideris*
- S5-016** Far-zone effects in the direct gravity inversion.  
*Tenzer Robert, Prutkin Ilya, Novák Pavel, Ellmann Artu, Vajda Peter*
- S5-044** Evaluation Of Recent Global Geopotential Models In Argentina.  
*Ayelen Pereira, María Cristina Pacino*
- S5-191** Computing selected gravity field parameters from current global geopotential models and from high-resolution local gravity data over the area of Central Europe.  
*M. Kadlec*
- S5-222** Computing gravity terrain corrections at global scale: An application for the World Gravity Map (WGM) project.  
*G. Moreaux, G. Balmino, M. Sarrailh, S. Bonvalot, R. Biancale, A. Briais*
- S5-018** Comparison of the low-degree Earth's gravity field and the low-degree no-topography gravity field.  
*Tenzer Robert, Novák Pavel*
- S5-234** A new gravity model of the European lithosphere based on a joint analysis of the gravity and seismic data.  
*M.K. Kaban and M. Tesauero*
- S5-120** A new attempt to geoid modeling for Iran using the readjusted gravity data.  
*A. Soltanpour, M. Sedighi, H. Cheraghi, Y. Hatam, R. Saadat, N. Azizian*



<b>S5-047</b>	A GOCE Regional Validation Experiment with Vertical Deflections in Germany. <i>C. Voigt, H. Denker</i>
<b>S5-005</b>	A Geoid Solution for Airborne Gravity Data. <i>Lars Sjöberg, M Eshagh</i>
<b>S5-122</b>	A fast computation of the vertical deflection components. <i>E.A.Boyarisky, L.V.Afanasiyeva, V.N.Koneshov</i>
<b>S5-252</b>	The World Gravity Map (WGM) project: objectives and status. <i>S. Bonvalot, M. Sarrailh, A. Briais, R. Biancale T. Fayard, G. Gabalda</i>
<b>S5-158</b>	The Geoid as a Transformation Surface. <i>Norbert Kühtreiber and Hussein A. Abd-Elmotaal</i>
<b>S5-267</b>	Shape of the Solution Domain and the Optimization in Combining Terrestrial and Satellite Gravity Field Data. <i>P. Holota</i>
<b>S5-095</b>	A New Approach for Evaluation of the Global Geopotential Models Using GPS-leveling Networks. <i>M. A. Sharifi, M. Abbaszadeh, M. Nikkhoo, M. Najafi</i>
<b>S9-055</b>	Geoid determination by the RCR- and the LSMS-techniques – a comparison. <i>L E Sjöberg</i>
<b>S5-040</b>	Comparison of various topographic-isostatic effects in terms of smoothing the gradiometric observations. <i>Juraj Janák, Franziska Wild-Pfeiffer</i>
<b>S5-295</b>	Application of two dimensional least squares spectral analysis to precise determination of geoid combining a global geopotential model with heterogeneous data. <i>Mehdi Nikkhoo, Mehdi Najafi Alamdari, Majid Naeimi</i>
<b>S5-297</b>	Interpretation of spatial data sets using two-dimensional least squares spectral analysis. <i>Mehdi Nikkhoo, Mehdi Najafi Alamdari, Majid Naeimi</i>

**Session 7: Temporal gravity changes and geodynamics.**Chairs: *Nico Sneeuw (Germany) and Juergen Kusche (Germany).*

- S7-043** Water Storage Changes In The PARANÁ River Basin.  
*Ayelen Pereira, María Cristina Pacino, Andreas Güntner*
- S7-137** Water level temporal variation analysis at Solimões and Amazonas rivers.  
*Ilce de Oliveira Campos, Denizar Blitzkow, Ana Cristina Oliveira Cancoro de Matos, Edvaldo Simões da Fonseca Junior, Flavio Guilherme Vaz de Almeida, Augusto César Barros Barbosa*
- S7-211** Time-Variability Of The Long Wavelength Gravity Field Derived From CHAMP And GRACE.  
*H. Neumayer, F. Flechtner, R. Schmidt, Ul. Meyer, R. König*
- S7-279** The role of crustal motion in the assessment of the Mexican Gravimetric Geoid.  
*D. Avalos, M. Santos, P. Vaniček*
- S7-022** The high-resolution regional inversion of GRACE satellite data for modelling water storage variations at river basin scale (case study for the Zambezi river basin).  
*Tenzer Robert, Klees Roland*
- S7-272** Subsurface fluids movement monitored by repeated gravity observations.  
*J. Mrlina*
- S7-155** Spatiotemporal analysis of the GRACE-derived mass variations in North America by means of multi-channel singular spectrum analysis.  
*E. Rangelova, W. van der Wal, M.G. Sideris and P. Wu*
- S7-068** Significance of secular trends of mass variations determined from GRACE monthly solutions.  
*Jürgen Müller, Holger Steffen*
- S7-224** Robust combination of GPS site displacements with global GRACE solutions.  
*J.P. van Loon*
- S7-156** Recovery of time-varying gravity using GPS data of COSMIC, GRACE and CHAMP.  
*Tingjung Lin and Cheinway Hwang*
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*J. Virtanen, J. Mäkinen, M. Bilker-Koivula, H. Virtanen, M. Nordman, C.K. Shum, H. Lee, A. Kangas, M. Johansson, M. Thomas*
- S7-203** Analysis of GRACE water storage estimates using water storage models in Finland.  
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Chairs: *Richard Gross (USA) and Hans-Peter Plag (USA).*

- S8-126** Modelling the motion of the Celestial Intermediate Pole of the Earth.  
*M. Folgueira, N. Capitaine and J. Souchay*
- S8-009** Geodetic observations of Earth shape change and dynamic mechanism.  
*S.G. Jin, Y. Barkin, and P. Park*
- S8-141** Seasonal gravity campaign carried out on permanent GPS stations in Walloon region (Belgium).  
*M. Everaerts*
- S8-073** Detection of Hydrological Loading Effect (HLE) variations from GRACE/GPS over the Amazon basin.  
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*H. R. Nankali, Y.Djamour, M.Sedeghi, Z.Mousavi*
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- S9-063** Glacial Isostatic Adjustment Model Errors in Fennoscandia.  
*A. Lumbaca and W.E. Featherstone*
- S9-028** GRACE hydrological monitoring of Australia: current limitations and future prospects.  
*J.L. Awange, M.A. Sharifi, O. Baur, W. Keller, W.E. Featherstone, M. Kuhn*
- S9-034** Implementation of Motorized Leveling on Precise Leveling Networks in Order to Improve the Detection of Vertical Displacements in Iran.  
*A.Poursharifi, A.Aghamohammadi, Y. Djamour, M. Kasser, M. Sedighi, K. Bayat, Y. Hatam, S. Arabi, A. Soltan pour*
- S9-282** Absolute altimeter calibration, sea-level monitoring and tectonics from project GAVDOS.  
*Erricos C. Pavlis, Stelios P. Mertikas*
- S9-248** Radar and Laser Altimeter Experiences for Sea Level determination at Ibiza Island and Cape of Begur (Spain).  
*J. J. Martinez Benjamin, J. Martín Davila, J. Garate Pasquin, B. Schutz, T. Urban, M. A. Ortiz Castellon, J. Talaya Lopez, M. Martinez Garcia, G. Rodriguez Velasco, B. Perez Gomez and Pascal Bonnefond*
- S9-151** Effect of surface properties on the accuracy of LiDAR derived Digital Elevation Models.  
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- S9-274** Crustal Deformation Monitoring Using Satellite Radar Altimetry.  
*Hyongki Lee, C.K. Shum, Chungyen Kuo, Alexander Braun, Georgia Fotopoulos, Erik Ivins*
- S9-299** Temporal variations of snow and ice volume in Greenland drainage systems derived from GRACE and ICESat data.  
*C. Slobbe, E. Revtova, R. Klees, P. Ditmar, R. Lindenbergh*

**Session 3: Earth Observation by Satellite Altimetry and InSAR.**Chairs: *Wolfgang Bosch (Germany), Masato Furuya (Japan), Roger Haagmans (ESA).*

- S3-013** Monitoring River systems using multi-mission Satellite Radar Altimetry.  
*Luke A. Attwood, Philippa A.M. Berry, Richard G. Smith*
- S3-099** Grided Mean Sea Level of The Caspian Sea using TOPEX/Poseidon mission data.  
*E. Foroootan, M.A. Sharifi, M. Torabi*
- S3-065** Determination and Assessment of new Altimetry derived Mean Sea Surface Models over North Atlantic and the Arctic Sea.  
*Kouros Ghazavi, Hossein Nahavandchi*
- S3-257** Determination and analysis of the sea surface topography along the Brazilian coast.  
*R. T. Luz, W. Bosch, S. R. C. Freitas, R. Dalazoana, B. Heck*
- S3-015** ACE2 New Global Digital Elevation Model: Case Studies of Rainforest & Dunes.  
*Richard G. Smith, Philippa A.M. Berry*
- S3-227** Marine gravity gradient derived from altimetry observations based on radial basis functions.  
*A. Safari, M.A. Sharifi*
- S3-194** Filtering of Altimetric Sea Surface Heights with local and global approaches.  
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- S3-094** ESA's future and candidate EO SAR missions.  
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- S3-102** Spatial-Temporal Parametric Model with Covariance Structure based on Multiple Satellite Altimetry for Predicting and Interpolating Sea Surface Heights in the South China Sea.  
*H. B. Iz, C. K. Shum, H. S. Fok, Y. Yi*
- S3-030** Global measurement of inland surface water from multi-mission satellite radar altimetry: sustained global monitoring for climate change.  
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- S3-146** Sea Level Variations In The Eastern Mediterranean And Adjacent Seas From Satellite And In Situ Observations.  
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- S3-265** On the recovery of the mean dynamic topography – a profile approach.  
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- S3-285** An alternative procedure for the estimation of the altimeter bias for the Jason-1 satellite using the dedicated calibration site at Gavdos.  
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- S3-255** Coastal sea surface heights from improved altimeter data in the Mediterranean Sea.  
*L. Fenoglio-Marc, M. Fehlaue, L. Ferri, M. Becker*
- S3-025** An Enhanced Ocean and Coastal Zone Retracking Technique for Gravity Field Computation.  
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- S3-176** Geoid and sea surface height measurements in the North Aegean Sea.  
*P. Limpach, A. Somieski, S. Guillaume, B. Bürki, H.-G. Kahle, I. Tziavos*
- S3-014** Representation of rivers and Lakes within the forthcoming ACE2 GDEM.  
*Richard G. Smith, Philippa A.M. Berry*
- S3-226** Improvement and validation of satellite altimetry in coastal regions.  
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- S3-293** The Basic Radar Altimetry Toolbox.  
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