
CURRICULUM VITAE

ILIAS N. TZIAVOS, Dipl. Eng., Dr. Eng.

**Professor,
Aristotle University of Thessaloniki
Faculty of Rural and Surveying Engineering
Department of Geodesy and Surveying**

**THESSALONIKI, GREECE
OCTOBER 2010**

NAME: Ilias N. Tziavos
 DATE OF BIRTH: March 5, 1955
 PLACE OF BIRTH: Grevena, Greece
 CITIZENSHIP: Greek
 MARITAL STATUS: Married, one son, one daughter.
 DEGREES: Dipl. Eng., Dr. Eng. (School of Rural and Surveying Engineering, Dept. of Geodesy and Surveying, University of Thessaloniki).
 LANGUAGES: Greek (fluent); English (very good); French (very good); German (reading knowledge only).
 POST-DOCTORAL POSITIONS 1986 - 1987, May 1989: Post doctorate fellow, Department of Surveying Engineering, University of Calgary, Calgary, Alberta, Canada.
 AND 1992: Alexander von Humboldt Fellowship, Post doctorate fellow, Institut für Erdmessung, University of Hannover.
 FELLOWSHIPS: 1998: Award of the Academy of Sciences of Athens (Lambadarios competition) for research work in geodesy.
 2000: Visiting Fellow, C.Y.O' Connor Fellowship, School of Spatial Sciences, Curtin Univ. of Technology, Perth, Australia.
 OTHER POSITIONS: 1991 - 1999: Associate of the International Association of Geodesy (IAG).
 1999 - : IAG Fellow.
 1999 - 2007: Member of the editorial board of "Journal of Geodesy".
 1996 - : Secretary of section "Geodetic Methodology" of the European Geophysical Society (EGS).
 1995 -1998: Co-chairman, IAG Special Study Group 3.167 "Regional land and marine geoid modeling".
 1998 - 2003: Chairman, IAG Special Study Group 3.167 "Regional land and marine geoid modeling".
 1986 - 2008: Member of more than 20 SSGs of IAG.
 2003-2007: Vice President, IAG Commission 2 – "Gravity Field"
 1998 - 2000, 2004 - 2006: Head of the Department of Geodesy and Surveying, Aristotle University of Thessaloniki.
 PRESENT POSITION: Full Professor and chairman of the Faculty of Rural and Surveying Engineering.
 PRESENT ADDRESS: Aristotle University of Thessaloniki,
 Department of Geodesy and Surveying,
 Univ. Box 440, 541 24 Thessaloniki, Greece.
 phone: +32310 996125
 FAX: +32310 996408
 e-mail: tziavos@olimpia.topo.auth.gr, tziavos@topo.auth.gr
<http://olimpia.topo.auth.gr/>

1. CHRONOLOGICAL SUMMARY

- 1973 High school finished (with award of excellence). Accepted at the University of Thessaloniki, Greece, School of Rural and Surveying Engineering (with scholarship).
- 1973 - 1977 Undergraduates' studies at the School of Rural and Surveying Engineering of the University of Thessaloniki, Greece. Diploma thesis on the "Study of the local gravity anomaly in the area of Thessalia".
- 1977 - 1979 Service in the Hellenic Army.
- 1979 - 1980 Work for the Greek government on land surveys of monuments, churches and archaeological regions.
- 1980 - 1982 Research Associate in the chair of "Geodetic Astronomy" University of Thessaloniki. Teaching and research assistant at the same institution. Research work on geodetic astronomy, gravimetry, physical geodesy. Preparation of Dr. Eng. thesis on local gravity field approximation.
- 1982 - 1984 Research Associate in the Department of "Geodesy and Surveying", School of Rural and Surveying Engineering, University of Thessaloniki. Teaching and research assistant at the same institution. Research work on physical geodesy, local and global gravity field approximation.
- 1984 Degree of Dr. Eng. (with excellence) in the Department of Geodesy and Surveying, University of Thessaloniki. Topic: "Study of the optimal combination of heterogeneous data for geoid determination with applications for the area of Greece".
- 1984 - 1986 Research work on physical geodesy and teaching in the Department of Geodesy and Surveying, University of Thessaloniki.
- 1986 Lecturer, Department of Geodesy and Surveying, School of Rural and Surveying Engineering, University of Thessaloniki.
- 1986 - 1987 Post doctorate fellow in the Department of Surveying Engineering, The University of Calgary, Calgary, Alberta, Canada. Research work on airborne gravity-gradiometry, local and global gravity field approximation, Global Positioning System (GPS) and satellite geodesy, applications of fast Fourier transforms (FFT) techniques on gravity field problems.
- 1987 - 1988 Lecturer, research and teaching in the Department of Geodesy and Surveying, University of Thessaloniki.
- 1988 - 1989 Assistant Professor, research and teaching in the Department of Geodesy and Surveying, University of Thessaloniki.
- 1 - 31 May 1989 Post doctorate fellow in the Department of Surveying Engineering, The University of Calgary, Calgary, Alberta, Canada. Research on spectral techniques using Molodensky's operator.
- 1989 - 1990 Assistant Professor, research and teaching in the Department of Geodesy and Surveying, University of Thessaloniki.
- 1990 - 1991 Assistant Professor, research and teaching in the Department of Geodesy and Surveying, University of Thessaloniki.
- 1991 - 1992 Assistant Professor, research and teaching in the Department of Geodesy and Surveying, University of Thessaloniki.

- 1992 Alexander von Humboldt Fellowship. Research work on gravity field modeling in the Institute of Geodesy (Institut für Erdmessung) of the University of Hannover.
- 1992 - Jan. 23, 1996 Associate Professor, research and teaching in the Department of Geodesy and Surveying, University of Thessaloniki.
- Jan. 23, 1996 - Full Professor, Department of Geodesy and Surveying, Faculty of Rural and Surveying Engineering, University of Thessaloniki.
- 1998 – 2000, 2004-2006 Head of the Department of Geodesy and Surveying, University of Thessaloniki.
- 2007-2011 Chairman, Faculty of Rural and Surveying Engineering, Aristotle University of Thessaloniki.

2. DIPLOMAS - DEGREES - FELLOWSHIPS

- 1977 Diploma in Rural and Surveying Engineering, University of Thessaloniki, Greece.
- 1984 Doctor of Engineering (with excellence) in Department of Geodesy and Surveying, School of Rural and Surveying Engineering, University of Thessaloniki, Greece.
- 1992 Alexander von Humboldt Fellowship. Post doctorate fellow in the "Institut für Erdmessung" in the University of Hannover.
- 1998 Award of the Academy of Sciences of Athens (Lambadarios competition) for the research work "Comparisons of spectral techniques for geoid computations over large areas".
- 2000 C.Y. O' Connor Fellowship, School of Spatial Sciences, Curtin University of Tecnology, Perth, Australia.

3. PROFESSIONAL AND SCIENTIFIC RECORD

3.1 Professional and Scientific Practice

- 1979 - 1980 Research and teaching assistant, Department of Geodesy and Surveying, University of Thessaloniki, Greece.
Duties: Lab teaching of the 2nd and 3rd year course "Astrogeodetic Determinations".
Research and software development on physical geodesy and geodetic astronomy.
- 1980 - 1981 Research and Teaching Assistant, Department of Geodesy and Surveying University of Thessaloniki, Greece.
Duties: Lab teaching of the 2nd year course "Astrogeodetic determinations" and the 4th year course "Geoid determination".
Research on local and global gravity field approximation and geodetic astronomy.
- 1981 - 1983 Research and Teaching Assistant, Department of Geodesy and Surveying, University of Thessaloniki, Greece.
Duties: Lab teaching of the 4th year course "Geoid Determination".
Research on local and global gravity field approximation using mainly the collocation approach and integral formulas.

- 1983 - 1984 Research and teaching assistant, Department of Geodesy and Surveying, University of Thessaloniki, Greece.
Duties: Lab teaching of the 5th year course "Gravimetry" and the 2nd year course "Surveying".
Research and software development on geoid and deflections of the vertical determination using heterogeneous data and employing least squares collocation and integral formulas.
- 1984 - 1986 Lecturer, Department of Geodesy and Surveying, University of Thessaloniki, Greece.
Duties: Teaching of the 5th year course "Applications of Urban Surveying".
Research on physical geodesy.
- 1986 - 1987 Post doctorate fellow in the Department of Surveying Engineering, The University of Calgary, Alberta, Canada.
Research on terrain corrections for airborne gravity and gradiometry, spectral methods (with emphasis on FFT) for local and global gravity field approximation, static GPS and its application on geodesy and geophysics.
- 1987 - 1988 Lecturer, Department of Geodesy and Surveying, University of Thessaloniki, Greece.
Duties: Teaching of the 4th year courses "Applications of Urban Surveying", "Physical Geodesy" and the 5th year course "Hydrography and Physical Oceanography".
Research work on local and global gravity field approximation, spectral techniques and GPS applications.
- 1988 - 1989 Assistant Professor, Department of Geodesy and Surveying, University of Thessaloniki.
Duties: Teaching of the 4th year courses "Applications of Urban Surveying", "Physical Geodesy" and the 5th year course "Hydrography and Physical Oceanography".
Research work on local and global gravity field approximation, spectral techniques, satellite altimetry and kinematic GPS.
- 1 - 31 May 1989 Post doctorate fellow in the Department of Surveying Engineering, The University of Calgary, Alberta, Canada.
Research on spectral techniques in solving Molodensky's problem using the homonym operator.
- 1989 - 1990 Assistant Professor, Department of Geodesy and Surveying, University of Thessaloniki.
Duties: Teaching of the 4th year courses "Applications of Urban Surveying", "Physical Geodesy" and the 5th year course "Hydrography and Physical Oceanography".
Research work on gravity field approximation, satellite altimetry, spectral techniques, static and kinematic GPS.
- 1990 - 1991 Assistant Professor, Department of Geodesy and Surveying, University of Thessaloniki.
Duties: Teaching of the 4th year courses "Applications of Urban Surveying", "Physical Geodesy" and the 5th year course "Hydrography and Physical Oceanography".
Research work on gravity field approximation, satellite altimetry, spectral techniques, airborne gravity and gradiometry, static and kinematic GPS, gravity and GPS modeling.
- 1991 - 1992 Assistant Professor, Department of Geodesy and Surveying, University of Thessaloniki.
Duties: Teaching of the 4th year courses "Applications of Urban Surveying", "Physical Geodesy" and the 5th year course "Hydrography and Physical Oceanography".

	Research work on gravity field approximation, satellite altimetry, spectral techniques, airborne gravity and gradiometry, static and kinematic GPS, gravity and GPS modeling.
1992 - 1995	Associate Professor, Department of Geodesy and Surveying, University of Thessaloniki. Duties: Teaching of the 4th year courses "Applications of Urban Surveying", "Physical Geodesy" and the 5th year course "Hydrography and Physical Oceanography". Research work on gravity field approximation, satellite altimetry, spectral techniques, airborne gravity and gradiometry.
23 Jan. 1996 - today	Full Professor, Department of Geodesy and Surveying, University of Thessaloniki. Duties: Teaching of the 3 rd year "Signals and spectral methods in geoinformatics, the 4th year courses "Applications of Urban Surveying", "Physical Geodesy" and the 5th year course "Hydrography and Physical Oceanography". Research work on gravity field approximation, satellite altimetry, spectral techniques, airborne gravity and gradiometry.

3.2 Professional and Scientific Societies, Professional and Scientific Services

Since 1977 I am member of the Technical Chamber of Greece and the Association of Surveying Engineering of Greece.

As a recognition of my expertise in gravity field approximation methods by use of spectral and stochastic techniques I was asked to be chairman and co-chairman in Special Study Groups (SSGs) of the International Association of Geodesy (IAG) and member of a number of other SSGs. For my services to the IAG, I became an Associate (1991) and fellow (1999) of IAG. I was appointed in 1994 member of a Special Working Group of the International Geoid Service for the evaluation of new geopotential models produced by GSFC/DMA (NASA Goddard Space Flight Center / U.S. Defense Mapping Agency). The scientific results of this group have been published in a joint publication of the Bureau Gravimetric Internationale (BGI) and the International Geoid Service. As a recognition of my research activities in Geodesy I was asked to be Secretary of section "Geodetic Methodology" of the European Geophysical Society (EGS). My international activities are given more analytically in the following:

1987 - 1991	Member, IAG Special Study Group 3.111 "Terrestrial and airborne gravity gradiometry".
1987 - 1991	Member, IAG Special Study Group 3.113 "Spectral gravity field modeling methods".
1987 - 1991	Member IAG Special Study Group 4.91 "Local gravity field approximation".
1987 - 1991	Member IAG Special Study Group 4.92 "Global gravity field approximation".
Since 1991	Associate Member of IAG.
1991 - 1995	Member, IAG Special Study Group 3.116 "Optimization of spectral gravimetric techniques".
1991 - 1995	Member, IAG Special Study Group 3.136 "High resolution geoid modeling and evaluation".
1991 - 1995	Member, IAG Special Study Group 4.00 "Integrated inverse gravity modeling".
1991 - 1995	Member, IAG Special Study Group 4.125 "Application of boundary value problem techniques to space and airborne gravity field observations".

1988 - 1994	Member of the "GEOMED" scientific group. The main goal of this group chaired by Professor F. Sanso of the University of Milano, is the geoid study in the Mediterranean Sea.
1995 - 1999	Co-chairman, IAG Special Study Group 3.167 "Regional land and marine geoid modeling".
1995 - 1999	Member, IAG Special Study Group 3.163 "Assessment and refinement of global digital terrain models (DTMs)".
1995 - 1999	Member, IAG Special Study Group 3.165 "Global gravity field determination and evaluation".
1995 - 1999	Member, IAG Special Study Group 4.125 "Local gravity field modeling and interpretation".
1995 - 1999	Member, IAG Special Study Group 4.170 "Integrated inverse gravity modeling".
1995 - 1999	Member, IAG Special Study Group 3.164 "Airborne gravimetry instrumentation and methods".
1995 - 1999	Member of the Special Working Group on the GSFC/DMA Model Evaluation.
1995 - 2008	Secretary of section "Geodetic Methodology" of the European Geosciences Union.
1998 – 2003	Chairman, IAG Special Study Group 3.167 "Regional land and marine geoid modeling".
Since 1985	Regular reviewer of the journals " <i>Journal of Geodesy</i> ", " <i>Manuscripta Geodaetica</i> ", " <i>Marine Geodesy</i> ", " <i>Geophysical Journal International</i> ", " <i>Physics of the Earth and Planetary Interiors</i> ", " <i>Geophysical Prospecting</i> ", " <i>Physics and Chemistry of the Earth</i> ", " <i>Technika Chronika</i> ".

3.3 Teaching Experience

Since 1980, I have taught 13 undergraduate courses, 6 graduate courses in the graduate program in the Department of Geodesy and Surveying of the Aristotle University of Thessaloniki, continuing education courses and short courses and seminars at other institutions. I have also been invited to give short courses, seminars and lectures at International Summer Schools, government agencies, professional services and various Universities. I was supervisor of three graduate students and member of the supervisory committee of more than 12 graduate students who have been completed their Ph. D. thesis. Currently, I am supervising 3 graduate students (1 M.Sc. and 2 Ph.D.). I have served on more than 20 graduate examination and supervisory committees in different Universities.

Subjects taught since 1980 in the undergraduate program of the Department of Geodesy and Surveying, Aristotle University of Thessaloniki:

- (a) Geodetic Astronomy.
- (b) Gravimetry.
- (c) Geoid determination.
- (d) Local and global gravity field approximation.
- (e) Hydrography and Physical Oceanography.
- (f) Physical Geodesy.
- (g) Geophysical prospecting.
- (h) Satellite Geodesy.
- (i) Surveying.
- (j) Applications of Urban Surveying.

- (k) Signals and spectral methods in geoinformatics.
- (l) Hydrography and sea geodesy.
- (m) GPS applications.

Subjects taught since 1997 in the graduate program of the Department of Geodesy and Surveying, Aristotle University of Thessaloniki:

- (a) Advanced numerical analysis.
- (b) Spectral methods in geosciences.
- (c) Stochastic methods in geosciences.
- (d) Determination of the gravity field.
- (e) Positioning-GPS-Geodynamics.
- (f) Theory and methodology.

4. RESEARCH ACTIVITIES

4.1 Research Areas

- (a) Geodetic Astronomy.
5 publications since 1980.
- (b) Gravity field modeling with emphasis on collocation, integral and FFT techniques for local and global gravity field approximation, geoid determination and airborne gravity gradiometry.
80 publications since 1980.
- (c) Magnetic field modeling with emphasis on survey of archaeological regions and establishment-measurements of magnetic networks.
4 publications since 1985.
- (d) Static and kinematic GPS. GPS applications on geodesy and geophysics, especially in combination with gravimetric methods.
15 publications since 1986.
- (e) Satellite altimetry. Determination of accurate sea-surface heights and geoid approximation.
50 publications since 1988.
- (f) Study of the potential anomalies with respect to geoid approximations.
6 publications since 1989.

4.2 Scientific cooperation and invited lectures in other Universities

Since 1985 scientific and research cooperation was established with the following Universities, where also invited lectures were given:

- (a) University of Calgary, Department of Surveying Engineering/Department of Geomatics Engineering. Scientific cooperation with Prof. K.-P. Schwarz and M.G. Sideris.
1987: Invited lecture: "The GPS and the geoid"
1996: Invited lecture: "Satellite altimetry - the state of the art"
- (b) University of Hannover, Department of Geodesy. Scientific cooperation with Professor W. Torge and Dr.-Ing. H. Denker.
1992: Invited lecture: "Gravity field modeling using FFT"
1997: Invited lecture: "Principles in gravity field modeling"

- (c) University of Braunschweig, Department of Aeronautics.
1992: "Numerical considerations of airborne gradiometer data in gravity field modeling"
- (d) Taiwan Military University, Cheng Chung Institute of Technology.
1994: Three invited lectures in the frame of the School "The applications of GPS and Gravity Field Modeling":
- "Gravity field modeling I. Theoretical background"
 - "Gravity field modeling II. Numerical considerations"
 - "Applications of Satellite Altimetry"
- 1995: Four invited lectures
- "Regional geoid computations by transform techniques"
 - "Marine geoid solutions by spectral and stochastic techniques - Examples for the Mediterranean Sea"
 - "Analysis of ERS-1 and TOPEX data in the Mediterranean Sea"
 - "Comparisons of the global ETOPO5U model with local DTMs"
- (e) Complutense University of Madrid, Institute of Astronomy and Mathematics. Scientific cooperation with Professor M. Sevilla.
1993: Invited lecture: "Numerical considerations in gravity field modeling"
- (f) Wuhan University of Technology. Scientific cooperation with Prof. Jinsheng Ning.
1994: Three invited lectures.
- "Gravity field modeling - I. Theoretical background"
 - (b) "Gravity field modeling - II. Numerical considerations"
 - (c) "Satellite altimetry studies in the Mediterranean Sea"

4.3 Research Projects

Since 1987, I have been actively involved in research projects as principal investigator or co- investigator in several national and international projects. A summary of the most recent of them is given below:

- (i) Principal Investigator in the «**Satellite Altimetry Studies in the Black Sea and the Aegean**» project funded by the Greek Secretariat of Research and Technology (GSRT). The project was funded in the frame of the bilateral cooperation program between Greece and Bulgaria. Duration: 06/2003 – 06/2005. Funding: 11.740 €.
- (ii) Principal Investigator in the “**Optimal Combination of Terrestrial and Altimetric Data with Data from the New Satellite Missions of CHAMP and GOCE for the Accurate Determination of the Gravity Field**” project funded by the GSRT. The project was funded in the frame of the bilateral cooperation program between EU and non-EU countries. Duration: 10/2003 – 10/2005. Funding: 60.000 €
- (iii) Principal Investigator in the “**Satellite Altimetry Studies in the Mediterranean Sea and the Aegean**” project. The project is conducted in the frame of the ESA call for the utilization of ERS1/2 and ENVISAT data. Duration: 10/2003 – 10/2005.
- (iv) Co-investigator in the “**Forest and Environmental Impact of road cutting in natural ecosystems**” project under the ΕΠΕΑΕΚ II program «Nature-Archimedes»: Support to Research Teams in TEI», Meter 2.6, funded by the Greek Ministry of Education. Duration: 01/2004 – 01/2007. Funding: 55.000 €
- (v) Principal Investigator in the «**Modeling and interpretation of the gravity field in local and regional scale combining terrestrial and satellite data**» project under the ΕΠΕΑΕΚ II program «Pythagoras II – Support to Research Teams in the Universities». Duration: 01/1/2005 – 31/12/2006. Funding: 90.000 €.

- (vi) Principal Investigator in the «**Gravity Field Modeling for the Mediterranean Sea by Combining Satellite and Marine Gravity Data**» project funded by the GSRT. The project was funded in the frame of the bilateral cooperation program between Greece and Italy. Duration: 11/2005 – 11/2007. Funding: 11.740 €
- (vii) Co-investigator in the «**Development of an Information System for Natural Risk Management in the Mediterranean - SyNaRMa**» program funded by the European Regional Development Fund and Greek National Funds. The project is in the frame of the INTEREG III Community Initiative, Strand B, program ARCHIMED, Priority Axes 3 «Integrated and sustainable management of cultural and natural resources and of landscapes and risk management», Measure 3.3.5 «Management, prevention and reduction of natural risks: drought, desertification, fires, earthquakes etc.». Duration: 06/2006 – 12/2007. Funding: 1.752.300 €.
- (viii) Co-investigator in the GAVDOS project funded by the European Union Energy, Environment and Sustainable Development Program. Duration: 04/2002 – 12/2004. The project is entitled “**GAVDOS: Establishment of a European radar altimeter calibration and sea-level monitoring site for JASON, ENVISAT and Euro-GLOSS**” and its objectives are: the establishment of an absolute sea level monitoring and altimeter calibration facility on the isle of Gavdos, south of the island of Crete, Greece; to monitor deformations of the earth’s surface at the tide gauges in the area as a contribution to the European Sea-level Observing System (EOSS) project; the development of a detailed regional geoid and Sea Surface Topography (SST) model. These models are required for referencing the altimeter measurements over the calibration facility and for studying the regional sea current circulation. Funding: 2.400.000 €. in the GAVDOS project funded by the European Union Energy, Environment and Sustainable Development Program. Duration: 04/2002 – 12/2004. The project is entitled “GAVDOS: Establishment of a European radar altimeter calibration and sea-level monitoring site for JASON, ENVISAT and Euro-GLOSS” and its objectives are: the establishment of an absolute sea level monitoring and altimeter calibration facility on the isle of Gavdos, south of the island of Crete, Greece; to monitor deformations of the earth’s surface at the tide gauges in the area as a contribution to the European Sea-level Observing System (EOSS) project; the development of a detailed regional geoid and Sea Surface Topography (SST) model. These models are required for referencing the altimeter measurements over the calibration facility and for studying the regional sea current circulation. Funding: 2.400.000 €.

4.4 Technology Transfer

I have been involved with research on gravity field approximation since 1980. I have developed new techniques and softwares, based on spectral techniques and stochastic methodologies as well, for computing geoid undulations, deflections of the vertical, and terrain effects on surface and airborne gravity and gradiometry measurements. Some of these softwares have been developed with the scientific group of Prof. Dr. M.G. Sideris of the University of Calgary. All the aforementioned techniques and softwares due to their efficiency and ability to handle huge sets of data simultaneously, are being used internationally by universities and national agencies (e.g., the Universities of Athens and Thessaloniki, Greece; Graz, Austria; Milan, Italy; New South Wales, Australia; C.C.I.T., Taiwan; the National Geodetic Survey of the USA; the Alberta Bureau of Surveying and Mapping. Through contracts with the University of Calgary, some of these packages have also been obtained and are utilized by oil and survey companies in Canada and the United States.

5. PUBLICATIONS

BOOKS AND LECTURE NOTES

1. **I.N. Tziavos**, 1986: *Field application of layout plans and surveying practice*. Lecture notes (in Greek), pp. 106.
2. **I.N. Tziavos**, 1988: *Hydrography and Physical Oceanography*. Lecture notes (in Greek), pp. 200.
3. **I.N. Tziavos**, 1990: *The Global Positioning System and its applications to Geodesy*. Lecture notes (in Greek), pp. 50.
4. K. Katsambalos and **I.N. Tziavos**, 1991: *Physical Geodesy (in Greek)*. Ziti editions, pp. 426, Thessaloniki, Greece.
5. **I.N. Tziavos**, 1997: *Stochastic methods in geosciences – Input/output systems theory*. Lecture notes (in Greek), pp. 35.
6. **I.N. Tziavos**, 1999: *Numerical analysis – One and two-dimensional discrete and continuous Fourier transform*. Lecture notes (in Greek), pp. 27.
7. D. Arabelos and **I.N. Tziavos**, 2000: *Introduction to gravity field*. Lecture notes (in Greek), pp. 172.
8. **I.N. Tziavos** and S. Spatalas, 2001: *Field application of layout plans and surveying practice*. Lecture notes (in Greek), pp. 144.
9. A. Dermanis and **I.N. Tziavos**, 2001: *Signal and spectral methods in geo-informatics*. Lecture notes (in Greek), pp. 100.
10. **I.N. Tziavos**, 2002: *Hydrography and Marine Geodesy, 2002*. Lecture notes (in Greek), pp. 208.
11. **I.N. Tziavos**, 2004: *GPS applications*, Lecture notes (in Greek), pp. 35.
12. D.N. Arabelos and **I.N. Tziavos**, 2007. *Introduction to the gravity field of the Earth (in Greek)*. Ziti editions, pp. 342, Thessaloniki, Greece.

EDITOR IN CONFERENCE PROCEEDINGS AND DEDICATED VOLUMES

1. D. Arabelos and **I.N. Tziavos**, 1994: "*MARE NOSTRUM*", *GEOMED report 4*, Proceedings of the 4th GEOMED Meeting, 211 pages, Thessaloniki, 1994.
2. **I.N. Tziavos**, M. Vermeer, 1996: "Techniques for local geoid determination", Proceedings of session G7, XX EGS General Assembly, in *Reports of the Finnish Geodetic Institute*, 96:2, 181 pages, The Hague, May 6 - 10, 1996.
3. **I.N. Tziavos**, M. Vermeer, 1997: "Developments in spectral stochastic techniques for gravity field modeling", Proceedings of session G12, XXII EGS General Assembly, Vienna, April 21 - 25, 1997, In *Physics and Chemistry of the Earth*, vol. 23(1), 81 pages, 1998.
4. G. Asteriadis, A. Badellas, M. Condadakis, K. Katsambalos, A. Papadimitriou and **I.N. Tziavos**, 1997: "The Earth and the Universe", Dedicated volume to Prof. Mavridis, 684 pages, Thessaloniki, 1998.
5. **I.N. Tziavos**, M. Vermeer, 1998: "Recent advances in Precise Geoid Determination Methodology", Proceedings of session G11, XXIII EGS General Assembly, Nice, April 20 - 24, 1998, In *Physics and Chemistry of the Earth (A)*, vol. 24, 96 pages, 1999.
6. **I.N. Tziavos**, R. Forsberg, 1999: "Local and regional gravity field modeling in land/sea areas", Proceedings of session G13, XXIV EGS General Assembly, Nice, April 20 - 24, 1998, In *Physics and Chemistry of the Earth (A)*, vol. 25, 93 pages, 2000.

7. **I.N. Tziavos**, R. Barzaghi, 2002: "Regional and local gravity field approximation", Proceedings of session G7, XXVI EGS General Assembly, Nice, April 25 - 30, 2001, International Geoid Service (IGeS), Bulletin N. 13, special issue, 143 pages, 2002.
8. **I.N. Tziavos**, 2002: "Gravity and Geoid 2002 – GG2002": Proceedings of the 3rd Meeting of the International Gravity and Geoid Commission, Ziti editions, 441 pages, Thessaloniki, August 26 - 30, 2002.

MONOGRAPH

1. **I.N. Tziavos**, 1992: *Numerical considerations of FFT methods in gravity field modeling*. Wiss. Arb. d. Fachr. Verm.wesen, Univ. Hannover, Nr. 188, Hannover, 1993.

SCIENTIFIC PAPERS

1. D. Arabelos, L.N. Mavridis and **I.N. Tziavos**, 1981: Gravimetric geoid determination for the area of Greece. *Sun and Planetary System. Proceedings of the 6th European Regional Meeting in Astronomy*. Dubrovnik Oct.19 - 23. W. Fricke and G.Teleki (eds.). D. Reidel, pp. 203 - 204.
2. D. Arabelos and **I.N. Tziavos**, 1983: Determination of deflections of the vertical using a combination of spherical harmonics and gravimetric data for the area of Greece. *Bulletin Géodésique*, 57, 240 - 256.
3. L.N. Mavridis, P. Savaidis, A.C. Tsioumis and **I.N. Tziavos**, 1983: Astronomical determination of the deviation of the vertical in various areas of Greece. I: Measurements in central Macedonia during the year 1980. *Proceedings of the Academy of Athens*, vol. 58, pp. 401 - 414.
4. L.N. Mavridis, A.C. Tsioumis and **I.N. Tziavos**, 1983: Astronomical determination of the deviation of the vertical in various areas of Greece. II: Measurements in western Macedonia and Peloponnese during the year 1981. *Proceedings of the Academy of Athens*, vol. 58, pp. 415 - 425.
5. **I.N. Tziavos**, 1984: Study of the optimal combination of heterogeneous data on geoid determination with applications for the area of Greece. Dr. Eng. Thesis (in Greek), Thessaloniki, Greece.
6. **I.N. Tziavos**, 1986: Fehler-Kovarianzfunktionen und Modelle für Schwereanomalien und Kugelfunktionsentwicklungen. *ZfV*, 9, 417 - 429.
7. **I.N. Tziavos** and A.G. Tsioumis, 1985: Planning of observations and reductions for the determination of astronomic geographic latitude and longitude. In Greek, *Quaterniones Geodesiae*, 6, 231 - 262.
8. E. Livieratos, T. Marketou, S. Proussalis, **I.N. Tziavos**, A. Tsioumis and A. Fotiou, 1985: Application of a magnetometric survey in the archaeological area of Ialissos in Rodos island. In Greek, *Quaterniones Geodesiae*, 6, 189 - 216.
9. A. Fotiou, E. Livieratos and **I.N. Tziavos**, 1986: Comparisons of the various representations of the geoid for the Hellenic area. *Bolletino di Geodesia e Scienze Affini*, XLV, 3, 273 - 291.
10. K. Katsambalos, E. Livieratos, **I.N. Tziavos**, A. Tsioumis and A. Fotiou, 1986: Establishment and measurement of a magnetometric network-Preliminary reductions. In Greek, presented at the conference "Land surveys of monuments and archaeological regions", Thessaloniki, Sept. 29 - Oct. 3, 1986.
11. D. Arabelos and **I.N. Tziavos**, 1987: A comparison of two methods to compute degree variances of the gravity field. *Manuscripta Geodaetica*, 12, 223 - 237.

12. **I.N. Tziavos**, 1987: Determination of geoidal heights and deflections of the vertical for the Hellenic area using heterogeneous data. *Bulletin Géodésique*, 61, 177 - 197.
13. **I.N. Tziavos**, M.G. Sideris and K.P. Schwarz, 1987: Effect of terrain representation, grid spacing and flight altitude on topographic corrections for airborne gradiometry. Paper presented at the *15th Gravity Gradiometer Conference*, Colorado Springs, Feb. 11 - 13, 1987, and published in the *Proceedings of the Conference*.
14. K.P. Schwarz, R.V.C. Wong and **I.N. Tziavos**, 1987: Common mode errors in airborne gravity gradiometry. *Contract Report* of the Department of Surveying Engineering, University of Calgary, 37 pages.
15. **I.N. Tziavos**, 1987: Comparison of the gravity spectrum as derived from a 360x360 geopotential model and regional gravity data. Paper presented at the *XIX General Assembly of IUGG/IAG*, Vancouver, Canada, Aug. 9-22, 1987. *Proceedings*, vol. I, pp. 177 - 193.
16. **I.N. Tziavos**, 1987: Cycle slips software. *Internal report* of the Department of Surveying Engineering, University of Calgary, 15 pages.
17. K.W. Pointon, **I.N. Tziavos**, M.E. Cannon, T. Yokokura, E.J. Krakiwsky and K.P. Schwarz, 1987 : Implementation of GPS model improvements for geophysical applications. Paper presented at the *XIX General Assembly of IUGG/IAG*, Vancouver, Canada, Aug. 9 - 2, 1987.
18. D.A.G. Arden, E.J. Krakiwsky, J. Krynski, S.M. Nakiboglou, K. Pointon, K.P. Schwarz and **I.N. Tziavos**, 1987: Analysis of GPS measurements of a first epoch strain network in Northern Yukon. *Final Report on Contract # 23294-6-0986/01-SG*, Institute of Sedimentary and Petroleum Geology, Geological Survey of Canada, EM&R, Calgary, 57 pages.
19. **I.N. Tziavos**, M.G. Sideris, R. Forsberg and K.P. Schwarz, 1988: The effect of the terrain on airborne gravity and gradiometry. *Journal of Geophysical Research*, 93 (B8), 9173 - 9186.
20. A. Fotiou, E. Livieratos and **I.N. Tziavos**, 1988: The GRS80 combined geoid for the Hellenic area and upper crust density anomalies corresponding to its high frequency representations. *Manuscripta Geodaetica*, 13, 267 - 274.
21. M.G. Sideris and **I.N. Tziavos**, 1988: On the FFT-evaluation of gravity-field convolution integrals with mean and point data. *Bulletin Géodésique*, 62, 521 - 540.
22. **I.N. Tziavos**, 1988: The Hellenic geoid to the GRS80 reference system. In Greek, *Eratosthenes*, vol. 22, pp. 157 - 180.
23. M.G. Sideris, **I.N. Tziavos** and K.P. Schwarz, 1989: Computer software for terrain reductions using Molodensky's operator. Contract Report 89-003, GEODETIC SURVEY DIVISION, Canada, Centre for Surveying, Energy, Mines and Resources, Geodetic Survey of Canada, 26 pages.
24. D. Arabelos and **I.N. Tziavos**, 1989: The Hellenic Geoid - New considerations and experiences. *Dedicated volume to Prof. G. Birardi*, Ricerche di Geodesia, Topografia e Fotogrammetria, pp. 1 - 20, Milano.
25. **I.N. Tziavos**, 1989: Baseline solution using GPS carrier phase difference observations. *Eratosthenes*, 26, 327 - 341.
26. D. Arabelos, **I.N. Tziavos** and R. Forsberg, 1989: Sea surface height determination in the Mediterranean sea by local adjustment of GEOSAT altimeter data. International Association of Geodesy Symposia, H. Sünkel and T. Baker (eds), "*Sea surface heights and the geoid*", pp. 95 - 107, Springer-Verlag, 1990.
27. D. Arabelos and **I.N. Tziavos**, 1990: Sea surface heights in the Mediterranean Sea from GEOSAT altimeter data. *Journal of Geophysical Research (Oceans)*, 95 (C10, part 2), 17947 - 17956.
28. D. Arabelos and **I.N. Tziavos**, 1990: Estimation of the gravity field and sea surface heights from heterogeneous data in the Central Mediterranean. International Association of Geodesy Symposia,

R.H. Rapp and F. Sansò (eds), "*Determination of the geoid – Presence and Future*", pp. 95 - 107, Springer-Verlag, 1991.

29. **I.N. Tziavos** and D. Arabelos, 1990: Estimation of disturbing potential components and comparison with GPS and astrogeodetic data. International Association of Geodesy Symposia, R.H. Rapp and F. Sansò (eds.), "*Determination of the geoid – Presence and Future*", pp. 141 - 151, 1991.
30. E. Livieratos and **I.N. Tziavos**, 1990: Correlation of the strain representation of the potential anomalies with the geoid. International Association of Geodesy Symposia, R.H. Rapp and F. Sansò (eds), "*Determination of the geoid – Presence and Future*", pp. 374 - 381, 1991.
31. D. Arabelos and **I.N. Tziavos**, 1990: Analysis of GEOSAT altimeter data. International Association of Geodesy Symposia, R.H. Rapp and F. Sansò (eds), "*Determination of the geoid – Presence and Future*", pp. 476 - 483, 1991.
32. **I.N. Tziavos**, 1990: The combination of GPS with inertial systems to geodetic applications. In Greek, presented at the Symposium "The Rural and Surveying Engineer toward the year 2000. Evolutions, perspectives, possibilities", Thessaloniki, December 6 - 8, 1990.
33. D. Arabelos and **I.N. Tziavos**, 1991: Gravity anomalies and deflections of the vertical from airborne gravity gradiometer data. Presented at the *IAG meeting "Gravity field determination and related problems"*, XX General Assembly IUGG, Vienna, 11 - 24 August, 1991.
34. D. Arabelos, R. Barzaghi, M. Brovelli, R. Forsberg, W. Fürst, A. Gill, P. Knudsen, M. Poutanen, O. Remmer, G. Rodriguez, F. Sansò, W.-D. Schuh, M. Sevilla, D. Sguerso, H. Sünkel, C.C. Tscherning, **I.N. Tziavos**, M. Vermeer, 1991: The GEOMED project. *Presented at the IUGG XX General Assembly, Symposium U5*, Vienna, 11 - 24 August, 1991.
35. **I.N. Tziavos**, K.P. Schwarz, R. V. C. Wong and J. Panenka, 1991: Controlling common mode stabilization errors in airborne gravity gradiometry. International Association of Geodesy Symposia, O.L. Colombo (ed.), "*From Mars to Greenland: Charting Gravity With Space and Airborne Instruments*", pp. 301 - 310, 1992.
36. D. Arabelos and **I.N. Tziavos**, 1992: Gravity field approximation using airborne gravity gradiometer data. *Journal of Geophysical Research*, 79, B5, 7097 - 7108.
37. **I.N. Tziavos**, M.G. Sideris and K.P. Schwarz, 1992: A study of the contribution of various gravimetric data types on the estimation of gravity field parameters in the mountains. *Journal of Geophysical Research*, 97, B6, 8843 - 8852.
38. D. Arabelos and **I.N. Tziavos**, 1991: Geoid mapping in the Mediterranean Sea using heterogeneous data. *MARE NOSTRUM, GEOMED Rep. 1*, Milano, May 1992.
39. A. Dermanis, A. Filaretou, E. Livieratos and **I.N. Tziavos**, 1991: Strain representation of the potential anomalies in the Eastern Mediterranean. *Manuscripta Geodaetica*, 17(3), 164 - 173.
40. **I.N. Tziavos**, 1992: Alternative numerical techniques for the efficient computation of terrain corrections and geoid undulations. Presented in the *First Continental Workshop for the Geoid in Europe "Towards a precise Pan-European geoid for the nineties"*, Prague, May 11-14, 1992, in *Proceedings*. (P. Holota and M. Vermeer eds), pp. 312 - 326, 1992.
41. D. Arabelos, S.D. Spatalas and **I.N. Tziavos**, 1992: Altimeter data from ERS-1 in the Mediterranean Sea. *MARE NOSTRUM, GEOMED Rep. 2*, Madrid, 1992.
42. **I.N. Tziavos**, 1992: *Numerical considerations of FFT methods in gravity field modeling*. Wiss. Arb. d. Fachr. Verm.wesen, Univ. Hannover, Nr. 188, Hannover, 1993.
43. **I.N. Tziavos**, D. Arabelos and S.D. Spatalas, 1993: Geoid modeling and comparisons with GPS and satellite altimetry in the Hellenic area. Presented at the *EGS XVIII General Assembly, Session G3 "The European Geoid Determination"*, Wiesbaden, 1993, in *Proceedings* (R. Forsberg and H. Denker eds), pp. 26 - 33, 1993.

44. **I.N. Tziavos**, 1993: Gravity field modeling using the fast Hartley transform, 1993: Presented at the *EGS XVIII General Assembly, Session G3 "The European Geoid Determination"*, Wiesbaden, 1993, in *Proceedings (R. Forsberg and H. Denker eds)*, pp. 46 - 53, 1993.
45. D. Arabelos, S.D. Spatalas and **I.N. Tziavos**, 1993: Crossover analysis of ERS-1 altimetry in the Mediterranean sea and inversion of the adjusted data to recover gravity anomalies. *MARE NOSTRUM, GEOMED Rep. 3*, Graz, 1993.
46. D. Arabelos and **I.N. Tziavos**, 1994: Geoid solutions in the Mediterranean sea by different methods. *MARE NOSTRUM, GEOMED Rep. 4*, pp. 185-211, Thessaloniki, 1994.
47. D. Arabelos, S. Spatalas, **I.N. Tziavos**, M. Sevilla, C. de Toro and R. Vieira, 1994: Tidal corrections of the ERS-1 satellite altimeter data in the Mediterranean Sea. *MARE NOSTRUM, GEOMED Rep. 4*, pp. 149-170, Thessaloniki, 1994.
48. D. Arabelos and **I.N. Tziavos**, 1994: Analysis of ERS-1 and TOPEX altimeter data in the Mediterranean Sea. Presented at the *XIX General Assembly of EGS, Grenoble, April 25-29, 1994*.
49. G.-C. Tsuei, D. Arabelos, R. Forsberg, M.G. Sideris and **I.N. Tziavos**, 1994: Geoid computations in Taiwan. International Association of Geodesy Symposia, H. Sünkel and I. Marson (eds), "*Gravity and Geoid*", pp. 446-458, Springer, 1995.
50. D. Arabelos and **I.N. Tziavos**, 1994: Gravity and geoid in the Mediterranean from a common adjustment of ERS-1 and TOPEX altimeter data. International Association of Geodesy Symposia, H. Sünkel and I. Marson (eds), "*Gravity and Geoid*", pp. 376-385, Springer, 1995.
51. D. Arabelos and **I.N. Tziavos**, 1994: The contribution of bathymetry to gravity field modeling. Presented at the *INSMAP 94*, Hannover, Sept. 19-23, 1994, in Proc. of the *Int. Symp. on Marine Positioning -INSMAP 1994 - (Kumar, Maul, Seeber eds)*, pp. 114 - 123, 1994.
52. D. Arabelos and **I.N. Tziavos**, 1994: Comparisons of the global ETOPO5U model with local DTMs. Presented at the *INSMAP 94*, Hannover, Sept. 19 - 23, 1994, in Proc. of the *Int. Symp. on Marine Positioning -INSMAP 1994 - (Kumar, Maul, Seeber eds)*, pp. 132 - 141, 1994.
53. D. Arabelos and **I.N. Tziavos**, 1994: Marine geoid solutions by spectral and stochastic techniques-Examples for the Mediterranean Sea. Presented at the *INSMAP 94*, Hannover, Sept. 19 - 23, 1994, in Proc. of the *Int. Symp. on Marine Positioning -INSMAP 1994 - (Kumar, Maul, Seeber eds)*, pp. 177 - 189, 1994.
54. D. Arabelos and **I.N. Tziavos**, 1994: Recent results of the GEOMED project. Presented at *INSMAP 94*, Hannover, Sept. 19-23, 1994, in Proc. of the *Int. Symp. on Marine Positioning -INSMAP 1994 - (Kumar, Maul, Seeber eds)*, pp. 467 - 479, 1994.
55. **I.N. Tziavos**, 1995: Regional geoid computations by transform techniques. Presented at the *XIX EGS General Assembly, Session G4 "Latest developments in the computation of regional geoids"*, Hamburg, April 3 - 7, 1995.
56. D. Arabelos and **I.N. Tziavos**, 1995: Gravity field improvement in the Mediterranean Sea by correcting the bottom topography using collocation. Presented at the *XXI IUGG/IAG General Assembly, Section G10 (III)*, Boulder, Colorado, July 2 - 4, 1995.
57. G.-C. Tsuei, D. Arabelos, **I.N. Tziavos**, 1995: Recent geoid computations in Taiwan. Presented at the *XXI IUGG/IAG General Assembly, Section G2*, Boulder, Colorado, July 2-14, 1995, *Geomatics Research Australasia*, 65, 43 - 58, 1996.
58. **I.N. Tziavos**, 1996: Comparisons of spectral techniques for geoid computations over large regions. *Journal of Geodesy*, 70, 357 - 373.
59. D. Arabelos and **I.N. Tziavos**, 1996: Combination of ERS-1 and TOPEX altimetry for precise geoid and gravity recovery in the Mediterranean Sea. *Geophysical Journal International*, 125, 285-302.
60. Arabelos D., S. Spatalas, **I.N. Tziavos**, M. Sevilla, J. Catalao, 1996: Geoid and tidal studies in the Mediterranean sea. Presented at the *XXI General Assembly*, The Hague, The Netherlands, 6-10

May, 1996, in *Proceedings (I.N. Tziavos and M. Vermeer eds.)*, pp. 175 - 180, Finnish Geodetic Institute, Masala 1996.

61. **I.N. Tziavos**, M.G. Sideris and J. Li, 1996: Optimal spectral combination of satellite altimetry and marine gravity data. Presented at the *XXI General Assembly*, The Hague, The Netherlands, 6-10 May, 1996, in *Proceedings (I.N. Tziavos and M. Vermeer eds.)*, pp. 41 - 56, Finnish Geodetic Institute, Masala 1996.
62. **I.N. Tziavos**, M.G. Sideris and H. Sünkel, 1996: The effect of surface density variations on terrain modeling - A case study in Austria. Presented at the *XXI General Assembly*, The Hague, The Netherlands, 6-10 May, 1996, In *Proceedings (I.N. Tziavos and M. Vermeer eds.)*, pp. 99 - 110, Finnish Geodetic Institute, Masala 1996.
63. **I.N. Tziavos**, 1996: Evaluation of the new GSFC/DMA geopotential models in the Hellenic area and the Mediterranean Sea. *IGeS Bulletin No 6*, 151 - 163.
64. **I.N. Tziavos**, J. Li and M.G. Sideris, 1996: Marine gravity field modeling using non-isotropic a priori information. International Association of Geodesy Symposia. J. Segawa, H. Fujimoto and S. Okubo (eds.), *Gravity, Geoid and Marine Geodesy (GraGeoMar96)*, *Gravity, Geoid and Marine Geodesy*, pp. 400 - 407, 117, Springer, 1997.
65. **I.N. Tziavos** and V.D. Andritsanos, 1997: Improvements in the computation of gravimetric deflections of the vertical by FFT. Presented at the *XXII General Assembly*, Vienna, 21 - 25 April, 1997, In *Proceedings journal (I.N. Tziavos and M. Vermeer eds.)*, *Physics and Chemistry of the Earth*, vol. 23(1), 71 - 75, 1998.
66. **I.N. Tziavos**, R. Forsberg, M.G. Sideris, and V.D. Andritsanos, 1997: A comparison of satellite altimetry methods for the recovery of gravity field quantities. International Association of Geodesy Symposia, R. Forsberg, M. Feissel, R. Dietrich (eds.), pp. 150 - 155, Springer, 1998.
67. **I.N. Tziavos**, 1997: Least squares collocation and systems theory - A comparison. Dedicated volume to Prof. L.N. Mavridis (G. Asteriadis, A. Badellas, M. Codadakis, A. Papadimitriou and I.N. Tziavos eds), pp. 561 - 573.
68. V.D. Andritsanos, C. Pikridas, D. Rossikopoulos, **I.N. Tziavos** and A. Fotiou, 1997: Orthometric height determination using GPS for Cartographic applications (in Greek). *Presented at the 4th Cartographic Symposium of the Hellenic Cartographic Society*, Kastoria, September 16 - 17, 1997. *Proceedings*, pp. 47-58.
69. V.D. Andritsanos, C. Pikridas, D. Rossikopoulos, **I.N. Tziavos** and A. Fotiou, 1997: Depth representation in closed sea areas, lakes and rivers using an echo sounder and the Global Positioning System (GPS) (in Greek). *Presented at the 4th Cartographic Symposium of the Hellenic Cartographic Society*, Kastoria, September 16 - 17, 1997. *Proceedings*, pp. 69 - 80.
70. **I.N. Tziavos** and V.D. Andritsanos, 1998: Recent advances in terrain correction computations. *Presented at the 2nd Continental Workshop on the Geoid in Europe, Budapest Hungary, March 10-14, 1998, Proceedings (M. Vermeer and J. Adam eds.)*, pp. 169 - 176.
71. **I.N. Tziavos**, J. Adam, J. Toth, V. Andritsanos and Sz. Rozsa, 1998: Recent geoid computations in Hungary and the surrounding area. *Presented at the 2nd Continental Workshop on the Geoid in Europe, Budapest Hungary, March 10 - 14, 1998, Proceedings (M. Vermeer and J. Adam eds.)*, pp. 257-262.
72. D. Arabelos and **I.N. Tziavos**, 1998: Gravity field improvement in the Mediterranean Sea by estimating the bottom topography using collocation. *Journal of Geodesy*, 72, 136 - 143.
73. **I.N. Tziavos**, M.G. Sideris and R. Forsberg, 1998: Combined satellite altimetry and shipborne gravimetry data processing. *Marine Geodesy*, 21, 299 - 317.
74. **I.N. Tziavos**, R. Forsberg and M.G. Sideris, 1998: Marine gravity field modeling using shipborne gravity and geodetic mission altimetry data. *Geomatics Research Australasia*, 69, 1 - 18.

75. **I.N. Tziavos** and V.D. Andritsanos, 1998: Recent geoid computations for the Hellenic area. Presented at the XXIII General Assembly of EGS, Nice, France 20-24 April, 1998. *Physics and Chemistry of the Earth (A)*, vol. 24(1), 91 - 96, 1999.
76. V.D. Andritsanos, K.E. Katsambalos, K.E. Kehaidou and **I.N. Tziavos**, 1999: Optimization of a local geoid using gravity, height, density and GPS data and FFT and GIS softwares. *Techn. Chron. Sci. J. TCG*, 19(1 - 2), 43 - 61.
77. V.D. Andritsanos, V. Kagiadakis, V. Kostakis, E. Milona-Kotrogianni, C. Pikridas, D. Rossikopoulos, **I.N. Tziavos** and A. Fotiou, 1999: Local geoid determination combining GPS, Gravity and Height data - A case study in the area of Thessaloniki. *Techn. Chron. Sci. J. TCG*, 19(3), 61 - 74.
78. **I.N. Tziavos**, R. Forsberg and M.G. Sideris, 1998: Marine gravity field recovery by combining satellite altimetry and shipborne gravimetry. *Bollettino di Geofisica Teorica ed Applicata*, 40(3 - 4), 219 - 226, 1999.
79. H. Denker and **I.N. Tziavos**, 1998: Investigation of the Molodensky series terms for terrain reduced gravity field data. *Bollettino di Geofisica Teorica ed Applicata*, 40(3-4), 195 - 203, 1999.
80. J. Toth, J. Adam, Sz. Rozsa, **I.N. Tziavos** and V. Andritsanos, 1998: Gravimetric geoid computations in Hungary and the surrounding area. *Bollettino di Geofisica Teorica ed Applicata*, 40(3 - 4), 403 - 409, 1999.
81. D. Arabelos, S. Spatalas, **I.N. Tziavos**, M.J. Sevilla, G. Rodriguez, C. De Toro, J. Catalao and J. Calvao, 1998: A new high resolution geoid for the Iberian Atlantic continental shelf area. *Bollettino di Geofisica Teorica ed Applicata*, 40(3 - 4), 411 - 419, 1999.
82. I. Paraschakis, C. Kaltsikis, I. Maniatis, A. Nakou, K. Papadimitriou, C. Pikridas, D. Sarafidis, **I.N. Tziavos** and I. Tsionas, 1998: Bas relief maps for the city of Thessaloniki. Proceedings of the 5th National Cartographic Conference, Hellenic Cartographic Society, pp. 221 - 227, Thessaloniki, Nov. 25 - 27, 1998.
83. V.D. Andritsanos and **I.N. Tziavos**, 1999: Estimation of gravity field parameters by a multiple input/output system. *Physics and Chemistry of the Earth (A)*, vol. 25(1), 39 - 46, 2000.
84. J. Toth, Sz. Rozsa, V. Andritsanos, J. Ádám and **I.N. Tziavos**, 1999: Towards a cm-geoid for Hungary: recent efforts and results. *Physics and Chemistry of the Earth (A)*, vol. 25(1), 91 - 96, 2000.
85. V.D. Andritsanos, D. Arabelos, S. Spatalas and **I.N. Tziavos**, 1999: Mean sea level studies in the Aegean Sea. *Physics and Chemistry of the Earth (A)*, vol. 25(1), 53 - 56, 2000.
86. V.D. Andritsanos, A. Fotiou, E. Paschalaki, C. Pikridas, D. Rossikopoulos and **I.N. Tziavos**, 1999: Local geoid computation and evaluation. *Physics and Chemistry of the Earth (A)*, vol. 25(1), 63 - 69, 2000.
87. **I.N. Tziavos**, 1999: Regional land and marine geoid modeling. 1995 - 1999 Report of IAG SSG 3.167. Presented at IUGG99, IAG Section III "Determination of the Gravity Field", Birmingham, July 18 - 30, 1999.
88. V.D. Andritsanos, M.G. Sideris and **I.N. Tziavos**, 1999: Sea surface topography estimation by a generalized multiple input-output method. Presented at IUGG99, IAG Section III "Determination of the Gravity Field", Birmingham, July 18 - 30, 1999.
89. M.G. Sideris, P. Vanicek, J.L. Huang and **I.N. Tziavos**, 1999: A comparison of downward continuation techniques of terrestrial gravity anomalies. Presented at IUGG99, IAG Section III "Determination of the Gravity Field", Birmingham, July 18 - 30, 1999.
90. E. Livieratos, M. Miridis, A. Fotiou, D. Rossikopoulos and **I.N. Tziavos**, 1999: Revitalising interest on History of Cartography. Presented at 19th Int. Cartographic Conference, 11th General Assembly of the Int. Cartographic Association, Ottawa, Canada, 14 - 29 Aug., 1999.

91. E. Zidrou, M. Matziri, M. Papadopoulou, **I.N. Tziavos**, M. Tsakiri-Starti, and S. Hatzigaki, 1999: Multispectral bathymetry supported by sounding and GPS data. *Techn. Chron. Sci. J. TCG*, 20(2), 99 - 110.
92. V.D. Andritsanos, M.G. Sideris and **I.N. Tziavos**, 2000: A survey of gravity field modeling applications of the Input-Output System Theory (IOST). *IGeS Bulletin No. 10*, 1 - 17, 2000.
93. V.D. Andritsanos and **I.N. Tziavos**, 2000: Modeling the sea surface topography in the Eastern Mediterranean Sea: Comparisons and results. Presented at *XXV EGS General Assembly, Nice, France*, 25 - 29, 2000.
94. V.D. Andritsanos, G.S. Vergos, **I.N. Tziavos** and E.C. Pavlis, 2000: Alternative geoid solutions in the southern Aegean Sea. Presented at *XXV EGS General Assembly, Nice, France*, 25 - 29, 2000.
95. V.D. Andritsanos and **I.N. Tziavos**, 2000: Investigation of the input error propagation and the kernel modification in a multiple input – multiple output system. Presented at the *IAG Int. Symposium on Geoid, Gravity and Geodynamics 2000*, Banff, Canada, July 31 - August 4, 2000.
96. V.D. Andritsanos, G.S. Vergos, **I.N. Tziavos**, E.C. Pavlis and S.P. Mertikas, 2000: A high resolution geoid for the establishment of GAVDOS multi-satellite calibration site. International Association of Geodesy Symposia, M.G. Sideris (ed.), *Gravity, Geoid and Geodynamics 2000*, pp. 347-353, Springer-Verlag, 2001.
97. **I.N. Tziavos** and W.E. Featherstone, 2000: First results of using digital density data in gravimetric geoid computation in Australia. International Association of Geodesy Symposia, M.G. Sideris (ed.), *Gravity, Geoid and Geodynamics 2000*, pp. 335 - 340, Springer-Verlag, 2001.
98. **I.N. Tziavos**, 2000: The geoid in the Mediterranean – Recent results and future plans. **Invited** paper, presented at the FIG Symposium *Mediterranean Surveyors in the New Millenium*, September 18 - 21, 2000, Malta.
99. V.D. Andritsanos, M.G. Sideris and **I.N. Tziavos**, 2001: Quasi-stationary Sea Surface Topography estimation by the multiple input-output method". *Journal of Geodesy*, 75, 216 - 226.
100. G. Mintsis, S. Basbas, P. Papaioannou, C. Taxiltaris and **I.N. Tziavos**, 2001: Applications of GPS technology in the land transportation system. Proceedings, *13th National Conference, Hellenic operational Society "Transport and New Technology"*, pp. 53-64, Athens, 30 Nov. - 2 Dec., 2001.
101. Gy. Toth, Sz. Rosza, J. Adam and **I.N. Tziavos**, 2001: Gravity field recovery from torsion balance data using collocation and spectral methods. Presented at the *EGS XXVI General Assembly, Nice, France*, March 26 - 30, 2001.
102. G.S. Vergos, F.A. Bayoud, M.G. Sideris and **I.N. Tziavos**, 2001: High resolution geoid computation by combining shipborne and multi-satellite altimetry data in the Eastern Mediterranean. Presented at the *EGS XXVI General Assembly, Nice, France*, March 26 - 30, 2001.
103. W.E. Featherstone, S.A. Holmes, **I.N. Tziavos** and V.D. Andritsanos, 2001: Generalisation of vertical deflection formulae for a reference spheroid: Application to Australia and Greece. Presented at the *IAG Scientific Assembly, Budapest, Hungary*, Sept. 2 - 8, 2001.
104. K. Tokmakidis, **I.N. Tziavos**, G. Mintsis, C. Taxiltaris C. and S. Basbas S., 2002: The use of GPS technology and its applications to the Greek road and railway networks. *The European Navigation Conference – ENC-GNSS 2002*, Copenhagen, May 27 - 30, 2002.
105. C. Pikridas, V.D. Andritsanos, V.D. Fotiou, A. Rossikopoulos and **I.N. Tziavos**, 2002: Computing orthometric heights and controlling their accuracy by GPS and local geoid in northern Greece. *The European Navigation Conference – ENC-GNSS 2002*, Copenhagen, May 27 - 30, 2002.
106. Gy. Toth, Sz. Rosza, J. Adam and **I.N. Tziavos**, 2001: Gravity field modeling by torsion balance data – a case study in Hungary. International Association of Geodesy Symposia, J. Ádám and K.-P. Schwarz (eds.), *Vistas for Geodesy in the New Millenium*, pp. 193 - 198, Springer-Verlag, 2002.

107. A.V. Olesen, **I.N. Tziavos** and R. Forsberg, 2002: New Airborne Gravity Data Around Crete - First Results from the CAATER Campaign, in: I.N. Tziavos (ed.) *Gravity and Geoid 2002*, 3rd meeting of the International Gravity and Geoid Commission, 326 - 331, Ziti editions, Thessaloniki, Greece, Aug. 26 - 30, 2002.
108. D. Tsoulis and **I.N. Tziavos**, 2002: A comparison of some existing methods for the computation of terrain corrections in local gravity field modelling, in: I.N. Tziavos (ed.) *Gravity and Geoid 2002*, 3rd meeting of the International Gravity and Geoid Commission, 156 - 160, Ziti editions, Thessaloniki, Greece, Aug. 26 - 30, 2002.
109. J.L. Huang, M.G. Sideris, P. Vanicek, and **I.N. Tziavos**, 2003: Numerical investigation of downward continuation techniques for gravity anomalies. *Bollettino di Geodesia e Scienze Affini*, LXII, 1, 33 - 48, 2003.
110. **I.N. Tziavos** and V.D. Andritsanos, 2003: Error modeling and kernel modification in a multiple input – multiple output system. In honour of the memory of Professor A. Tsioumis – *From Stars to Earth and Culture* (A. Dermanis ed.), pp. 208 - 213.
111. Gy. Tóth, J. Ádám, L. Földváry, **I.N. Tziavos** and H. Denker, 2003: Calibration/validation of GOCE data by terrestrial torsion balance observations. International Association of Geodesy Symposia, F. Sansò (ed.), *A window on the future of Geodesy*, Sapporo, Japan, June 30-July 11, 2003, pp. 214 - 220, Springer, 2005.
112. G.S. Vergos, **I.N. Tziavos** and V.D. Andritsanos, 2003: On the determination of marine geoid models by least-squares collocation and spectral methods using heterogeneous data. International Association of Geodesy Symposia, F. Sansò (ed.), *A window on the future of Geodesy*, Sapporo, Japan, June 30-July 11, 2003, pp. 332 - 337, Springer, 2005.
113. C. Kotsakis and **I.N. Tziavos**, 2003: Parametric versus non-parametric methods for optimal weighted averaging of noisy data sets. International Association of Geodesy Symposia, F. Sansò (ed.), *A window on the future of Geodesy*, Sapporo, Japan, June 30-July 11, 2003, pp. 434-439, Springer, 2005.
114. Gy. Tóth, L. Földváry, **I.N. Tziavos** and J. Ádám, 2004: Upward/downward continuation of gravity gradients for precise geoid determination. 2nd Int. GOCE User Workshop, ESA *ESRIN*, 8-10 March, 2004.
115. G. Mintsis, S. Basbas, P. Papaioannou, C. Taxiltaris and **I.N. Tziavos**, 2004: Applications of GPS technology in the land transportation system. *European Journal of Operational Research*, 152, 399 - 409, 2004.
116. V.N. Grigoriadis and **I.N. Tziavos**, 2004: Development of a Software Package for the Automation of Measurements in Bathymetric Mapping. *FIG Working Week 2004*, Athens, Greece, May 22 - 27, 2004.
117. I. Doukas, A. Fotiou, I.M. Ifantis, K. Katsambalos, K. Lakakis, N. Petridou-Chrisochoidou, C. Pikridas, D. Rossikopoulos, P. Savvaidis, K. Tokmakidis and **I.N. Tziavos**, 2004: Displacement field estimation from GPS measurements in Volvi area. *FIG Working Week 2004*, Athens, Greece, May 22 - 27, 2004.
118. G.S. Vergos, **I.N. Tziavos** and M.G. Sideris, 2004: On the validation of CHAMP- and GRACE-type EGMs and the construction of a combined model. Presented at the joint CHAMP/GRACE Science Meeting, Potsdam, July 6-8, 2004.
119. G.S. Vergos, **I.N. Tziavos** and V.D. Andritsanos, 2004: Gravity Data Base Generation and Geoid Model Estimation Using Heterogeneous Data. International Association of Geodesy Symposia, Vol. 129, Jekeli C, Bastos L, Fernandes J (eds.), *Gravity Geoid and Space Missions 2004*, Springer – Verlag Berlin Heidelberg, pp. 155 - 160.
120. G.S. Vergos, **I.N. Tziavos** and M.G. Sideris, 2004: A first validation of the new EGMs from CHAMP and GRACE and some notes on the combined adjustment of altimetric, gravimetric, QSST, TG and orthometric heights. Presented at the Gravity Geoid and Space Missions 2004 Conference, Porto, Portugal, Aug. 30 - Sept. 3, 2004.

121. G.S. Vergos, **I.N. Tziavos**, 2004: A geodetic perspective to the estimation of the quasi-stationary sea surface topography and current velocities in a closed sea area. Presented at the Gravity Geoid and Space Missions 2004 Conference, Porto, Portugal, Aug. 30 - Sept. 3, 2004.
122. **I.N. Tziavos**, G.S. Vergos, V. Kotzev and L. Pashova, 2004: Mean sea level and sea level variation studies in the Black Sea and the Aegean. International Association of Geodesy Symposia, Vol. 129, Jekeli C, Bastos L, Fernandes J (eds.), Gravity Geoid and Space Missions 2004, Springer – Verlag Berlin Heidelberg, pp. 254 - 259.
123. **I.N. Tziavos**, V.D. Andritsanos, R. Forsberg and A. Olesen, 2004: Numerical investigation of downward continuation methods for airborne gravity data. International Association of Geodesy Symposia, Vol. 129, Jekeli C, Bastos L, Fernandes J (eds.), Gravity Geoid and Space Missions 2004, Springer – Verlag Berlin Heidelberg, pp. 119 - 124.
124. G. Fotopoulos, **I.N. Tziavos** and M.G. Sideris, 2004: On the incorporation of sea surface topography in establishing vertical control. International Association of Geodesy Symposia, Vol. 129, Jekeli C, Bastos L, Fernandes J (eds.), Gravity Geoid and Space Missions 2004, Springer – Verlag Berlin Heidelberg, pp. 185 - 190.
125. H. Denker, J.-P. Barriot, R. Barzaghi, R. Forsberg, J. Ihde, A. Kenyeres, U. Marti and **I.N. Tziavos**, 2004: Status of the European Gravity and Geoid Project EGGP. International Association of Geodesy Symposia, Vol. 129, Jekeli C, Bastos L, Fernandes J (eds.), Gravity Geoid and Space Missions 2004, Springer – Verlag Berlin Heidelberg, pp. 125 - 130.
126. S.P. Mertikas, E.C. Pavlis, **I.N. Tziavos**, E. Koutroulis, K. Palamartchouk, Th. Papadopoulos and G.S. Vergos, 2004: Permanent facility for calibration/validation of satellite altimetry: GAVDOS. **Invited** paper, Proceedings of SPIE, The International Society for Optical Engineering, Remote Sensing of the Ocean and Sea Ice 2004, Vol. 5569, Bostater S.R. Jr., Santorelli R (eds), pp.14-25.
127. P. Savvaidis, I.D. Doukas, **I.N. Tziavos**, A. Kiratzi, A. Savvaidis, S. Koutoupes and G. Karantonis, 2004: Evaluation and exploitation of earthquake damage to buildings based on GIS techniques. Presented at the International Symposium "Modern technologies and professional practice in geodesy and related fields", Sofia, 4 - 5 November 2004.
128. V.D. Andritsanos, A. Fotiou, C. Pikridas, D. Rossikopoulos, **I.N. Tziavos** and G. Fotopoulos, 2004: New local geoid model for northern Greece. Presented at the 3rd International Central and Eastern Conference on Engineering Surveying, FIG Regional Central and Eastern European Conference, Bratislava, Slovakia, 11 - 13 November 2004.
129. P. Savvaidis, I. Doukas, Th. Hatzigogos, **I.N. Tziavos**, A. Kiratzi, A. Roumelioti, A. Savvaidis, N. Theodoulidis, G. Drakatos, S. Koutoupes, G. Karantonis and A. Sotiriadis, 2004: Data base development and evaluation of earthquake damage reports under the Seis-Impact system. Bulletin of the Geological Society of Greece. Vol. XXXVI (3), 1509-1518, 2004.
130. S. Koutoupes, G. Karantonis and A. Sotiriadis, A. Kiratzi, A. Valadaki, N. Theodoulidis, A. Savvaidis, **I.N. Tziavos**, P. Savvaidis and I. Doukas, 2004: Seisimpact-Thess: Design, development and application of an information system to assess the vulnerability to earthquake hazard of the built environment of the prefecture of Thessaloniki, (in Greek). Bulletin of the Geological Society of Greece. Vol. XXXVI (3), 1328-1336, 2004.
131. A. Kiratzi, A. Roumelioti, Ch. Benetatos, A. Savvaidis, A. Panou, **I.N. Tziavos**, P. Savvaidis, Th. Hatzigogos, S. Koutoupes and G. Karantonis, 2004: Seisimpact-Thess: A scenario earthquake affecting the built environment of the prefecture of Thessaloniki. Bulletin of the Geological Society of Greece. Vol. XXXVI (3), 1412-1421, 2004.
132. Y. Xenidis, D. Angelides, **I.N. Tziavos**, C. Koutitas and P. Savvaidis, 2005: An integrated framework for sustainable coastal zones management in Greece. **Invited paper** in the conference "Energy, Environment, Ecosystems, Sustainable Development 2005", Athens, 12 - 14 July, 2005, *IASME Transactions*, Vol. 2, No. 5, pp. 813-822.

133. G. Fotopoulos and **I.N. Tziavos**, 2005: The Greeks and the navigation – A review from the antiquity to nowadays (in Greek). Presented at the conference “The progress of the instruments, methods and measurements of the science of surveying in Greece”, Thessaloniki, April 15 - 16, 2005.
134. V.N. Grigoriadis and **I.N. Tziavos**, 2005: Methods and instruments for bathymetric surveying, (in Greek). Presented at the conference “The progress of the instruments, methods and measurements of the science of surveying in Greece”, Thessaloniki, April 15 - 16, 2005.
135. G.S. Vergos, V.N. Grigoriadis, **I.N. Tziavos** and M.G. Sideris, 2005. Combination of multi-satellite altimetry data with CHAMP and GRACE EGMs for geoid and sea surface topography determination. International Association of Geodesy Symposia, vol. 130, Tregoning P and Rizos C (eds.), Dynamic Planet - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, Springer – Verlag Berlin Heidelberg, pp. 244 - 250.
136. G.S. Vergos, V.N. Grigoriadis, G. Kalampoukas, **I.N. Tziavos**, 2005. Accuracy assessment of the SRTM 90m DTM over Greece and its implications to geoid modeling. International Association of Geodesy Symposia, vol. 130, Tregoning P and Rizos C (eds.), Dynamic Planet - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, Springer – Verlag Berlin Heidelberg, pp. 309 - 315.
137. G. Fotopoulos, M.G. Sideris and **I.N. Tziavos**, 2005. Establishing regional vertical control using heterogeneous height data. Presented at the 2005 Joint Scientific Assembly of IAG, IAPSO and IABO, Dynamic Planet 2005 - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, August 22 - 26, Cairns, Australia.
138. P. Savvaidis, I.D. Doukas, **I.N. Tziavos**, A. Kiratzi, A. Savvaidis, A. Sotiriadis and S. Koutoupes, 2005: Use of web-based GIS for the assessment of damage due to natural or man-made disasters to the urban environment. Proceedings of the International Symposium “Modern technologies, Education and Professional Practice in Geodesy and Related Fields”, pp. 495-504, FIG International Symposium, Sofia, 3 - 4 November, 2005.
139. P. Savvaidis, A. Sotiriadis, A. Valadaki, I.D. Doukas, **I.N. Tziavos**, A. Kiratzi A., A. Savvaidis, and S. Koutoupes, 2005: Use of web-based GIS for the evaluation of earthquake damage to the built environment. Proceedings of the International Conference “DPPGIS 2005”, Pardubice, 2005.
140. **I.N. Tziavos**, M.G. Sideris, G.S. Vergos, V.N. Grigoriadis and V.D. Andritsanos, 2006. An overview of spectral methods for the optimal processing of satellite altimetry and other data. Presented at the ESA International Conference “15 years of progress in radar altimetry”, Venice, Italy, 13-17 March 2006.
141. Gy. Tóth, L. Földváry, **I.N. Tziavos** and J. Ádám, 2006: Upward/downward continuation of gravity gradients for precise geoid determination. *Acta Geod. Geoph. Hung.*, 41(1), 21-30.
142. D. Tsoulis, V.N. Grigoriadis and **I.N. Tziavos**, 2006: Evaluation of the CRUST 2.0 global database for the Hellenic area in view of regional gravity field modelling. In: Forsberg R, Kiliçoğlu A (eds) 1st International Symposium of the International Gravity Field Service, Gravity Field of the Earth, General Command of Mapping, Special Issue 18, pp. 348-353.
143. G.S. Vergos and **I.N. Tziavos**, 2006: Determination of the quasi-stationary sea surface topography from a common adjustment of a geodetic and an oceanographic model. In: Forsberg R, Kiliçoğlu A (eds) 1st International Symposium of the International Gravity Field Service, Gravity Field of the Earth, General Command of Mapping, Special Issue 18, pp. 235-241.
144. A. Müller, B. Bürki, P. Limpach, H.-G. Kahle, V.N. Grigoriadis, G.S. Vergos and **I.N. Tziavos**, 2006. Validation of marine geoid models in the North Aegean Sea using satellite altimetry, marine GPS data and astrogeodetic measurements. In: Forsberg R, Kiliçoğlu A (eds) 1st International Symposium of the International Gravity Field Service, Gravity Field of the Earth, General Command of Mapping, Special Issue 18, pp. 90-95.
145. H. Denker, J.-P. Barriot, R. Barzaghi, R. Forsberg, J. Ihde, A. Kenyeres, U. Marti and **I.N. Tziavos**, 2006: The European Gravity and Geoid Project EGGP. Presented at the 1st International Symposium of the International Gravity Field Service, 28 August – 1 September 2007, Istanbul.

146. G.S. Vergos, **I.N. Tziavos** and M.G. Sideris, 2006: On the validation of CHAMP- and GRACE-type GGMs and the construction of a combined model. *Geodesy and Cartography*, 55(3), 115-131.
147. I.D. Doukas, P. Savvaidis, **I.N. Tziavos**, V.N. Grigoriadis, I. Papadopoulou, I. Vavassis, 2007: The use of a web-based GIS for the management of databases related to natural disasters. *Geodesy and Cartography*, 56(1), 37-52.
148. **I.N. Tziavos**, G.S. Vergos, V.N. Grigoriadis, D. Tsoulis, V.D. Andritsanos, E.A. Tzanou, 2007: Analysis of Repeated GPS Measurements over a geodetic network and a common adjustment of heterogeneous height data. Presented at the XXIV General Assembly of the IUGG (IUGG2007), July 2-13, Perugia, Italy.
149. G.S. Vergos and **I.N. Tziavos**, 2007: Height Datum Unification in Greece employing tide gauge, marine geoid and sea surface topography data. Presented at the XXIV General Assembly of the IUGG (IUGG2007), July 2-13, Perugia, Italy.
150. G.S. Vergos and **I.N. Tziavos**, 2007: Estimating the Time-Variable Component of the Sea Surface Topography with Geodetic Data. Presented at the XXIV General Assembly of the IUGG (IUGG2007), July 2-13, Perugia, Italy.
151. G. Fotopoulos and **I.N. Tziavos**, 2007: On theory and practice: Pythagoras, Euclid, Archimedes and their influence on navigation. *Geomatica*, 61(4), 470-475.
152. R. Barzaghi, N. Tselfes, **I.N. Tziavos**, G.S. Vergos, 2009: Geoid and high resolution sea surface topography modelling in the Mediterranean from gravimetry, altimetry and GOCE data: Evaluation by simulation. *Journal of Geodesy*, 83, 751-772, DOI: 10.1007/s00190-008-0292-z.
153. G.S. Vergos and **I.N. Tziavos** 2008. Monitoring system earth with the recent and forthcoming gravity-field dedicated satellite missions. Presented at the "Studying, Modeling and Sense Making of Planet Earth" 2008 International Conference, June 1-6, Mytilene, Greece.
154. G.S. Vergos and **I.N. Tziavos** 2008. Sea level variability in the Aegean Sea as a tool for climate change monitoring. Presented at the "Studying, Modeling and Sense Making of Planet Earth" 2008 International Conference, June 1-6, Mytilene, Greece.
155. V.N. Grigoriadis, I.D. Papadopoulou, P. Spyridaki, I. Doukas, **I.N. Tziavos**, P. Savvaidis, 2008. Presentation of a Web-based GIS system for the management of natural disasters. Presented at the "Studying, Modeling and Sense Making of Planet Earth" 2008 International Conference, June 1-6, Mytilene, Greece.
156. G.S. Vergos, **I.N. Tziavos**, P. Papageorgiou, V.N. Grigoriadis 2008. Validation of the SRTM and SRTM PLUS DTMs in northern Greece for geoid and gravity field modeling. Presented at the Gravity, Geoid and Earth Observation 2008 (GGEO2008) of the IAG, June 23-27, Chania, Greece.
157. P. Limpach, A. Somieski, S. Guillaume, B. Bürki, H.-G. Kahle, **I.N. Tziavos**, 2008. Geoid and sea surface height measurements in the north Aegean Sea. Presented at the Gravity, Geoid and Earth Observation 2008 (GGEO2008) of the IAG, June 23-27, Chania, Greece.
158. A. Fotiou, V.N. Grigoriadis, C. Pikridas. D. Rossikopoulos, **I.N. Tziavos**, G.S. Vergos, 2008. Combination schemes for local orthometric height determination from GPS measurements and gravity data. Presented at the Gravity, Geoid and Earth Observation 2008 (GGEO2008) of the IAG, June 23-27, Chania, Greece.
159. F. Sansò, G. Venuti, **I.N. Tziavos**, G.S. Vergos, V.N. Grigoriadis, 2008: Geoid and sea surface topography from satellite and ground data – A review and new proposals. *Bulletin of Geodesy and Geomatics*, LXVII, 3, 155-201.
160. **I.N. Tziavos**, G.S. Vergos, V.N. Grigoriadis, 2009: Investigation of topographic reductions and aliasing effects on gravity and the geoid over Greece based on various digital terrain models. *Surveys in Geophysics*, 31, 23-67, DOI: 10.1007/s10712-009-9085-z.
161. V. Kotzev, L. Pashova, **I.N. Tziavos**, G.S. Vergos, R. Grebenitcharsky, 2009: Multi-satellite marine geoid for the Black Sea. *Compt. rend. Acad. bulg. Sci.*, 62(5), 621-630.

162. R. Barzaghi, A. Maggi, N. Tselfes, D. Tsoulis, **I.N. Tziavos**, G.S. Vergos, 2007: Combination of gravimetry, altimetry and GOCE data for geoid determination in the Mediterranean: Evaluation by simulation. *International Association of Geodesy Symposia*, vol. 133, Sideris MG (ed.), *Observing our Changing Earth*, Springer Berlin Heidelberg New York, pp. 195-202.
163. H. Denker, J.-P. Barriot, R. Barzaghi, D. Fairhead, R. Forsberg, J. Ihde, A. Kenyeres, U. Marti, M. Sarrailh and **I.N. Tziavos**, 2009. The development of the European gravimetric geoid model EGG07. *International Association of Geodesy Symposia*, vol. 133, Sideris MG (ed.), *Observing our Changing Earth*, Springer Berlin Heidelberg New York, pp. 177-185.
164. J. Ågren, R. Barzaghi, D. Carrion, H. Denker, V.N. Grigoriadis, R. Kiamehr, G. Sona, C.C. Tscherning and **I.N. Tziavos**, 2009. Different geoid computation methods applied on a test dataset: results and considerations. VII Hotine-Marussi Symposium, July 6-10, 2009, Rome, Italy.
165. P. Spyridaki, I.D. Papadopoulou, V.N. Grigoriadis, **I.N. Tziavos** and P. Savvaidis, 2009: "Methodology for identification of emergency assembly areas and road network in cities using geographic information systems tools", *Proceedings of the 9th International Multidisciplinary Scientific GeoConference SGEM 2009*, Bulgaria, 14-19 June 2009, Volume II, pp 135 – 142.
166. S.P. Mertikas, R.T. Ioannides, X. Frantzis, A. Tripolitsiotis, P. Partsinevelos, **I.N. Tziavos**, G.S. Vergos, W. Hausleitner, 2009: Recent developments for the estimation of the altimeter bias for the Jason-1&2 satellites using the dedicated calibration site at Gavdos. *Proc vol 7473 (74730C)*, Bostater CR, Mertikas SP, Neyt X, Velez-Reyes M (eds.), *Remote Sensing of the Ocean, Sea Ice and Large Water Regions 2009*, doi: 10.1117/12.830403.
167. **I.N. Tziavos**, G.S. Vergos, V.N. Grigoriadis, V.D. Andritsanos, 2009: Adjustment of collocated GPS, geoid and orthometric height observations in Greece. Geoid or orthometric height improvement? Presented at the 2009 Scientific Assembly of the IAG, *Geodesy for Planet Earth*, August 31 – September 4, Buenos Aires, Argentina.
168. G.S. Vergos, **I.N. Tziavos**, M.G. Sideris, 2009: On the determination of sea level changes by combining altimetric, tide gauge, satellite gravity and atmospheric observations. Presented at the 2009 Scientific Assembly of the IAG, *Geodesy for Planet Earth*, August 31 – September 4, Buenos Aires, Argentina.
169. V.N. Grigoriadis and **I.N. Tziavos**, 2009: Gravity data inversion for applications in geodesy and geophysics – A case study in the Hellenic area. Presented at the 2009 Scientific Assembly of the IAG, *Geodesy for Planet Earth*, August 31 – September 4, Buenos Aires, Argentina.
170. V.D. Andritsanos and **I.N. Tziavos**, 2009: A sensitivity analysis in spectral gravity field modelling using systems theory. Presented at the 2009 Scientific Assembly of the IAG, *Geodesy for Planet Earth*, August 31 – September 4, Buenos Aires, Argentina.
171. S.P. Mertikas, R.T. Ioannides, **I.N. Tziavos**, G.S. Vergos, W. Hausleitner, X. Frantzis, A. Tripolitsiotis, P. Partsinevelos, D. Andrikopoulos, 2009: Statistical Models and Latest Results in the Determination of the Absolute Bias for the Radar Altimeters of Jason Satellites using the Gavdos facility. *Marine Geodesy*, 33, S1, 114-149, DOI: 10.1080/01490419.2010.488973.
172. Gy. Tóth, L. Földváry and **I.N. Tziavos**, 2007: Upward/downward continuation of gravity gradients for precise geoid determination. Practical aspects of upward/downward continuation of gravity gradients, In proc. "The 3rd International GOCE user workshop", ESA-ESRIN, Frascati, Italy, 6-8 Nov. 2006 (ESA SP-627, January 2007).
173. A.E. Somieski, B. Bürki, H.-G. Kahle, U. Marti, C. Hirt, **I.N. Tziavos**, 2007: Determination of highly-precise deflections of the vertical: Switzerland 2003/2005, Portugal 2004 and Greece 2005. In: Swiss national report on the geodetic activities in the years 2003–2007, presented to the XXIV General Assembly of the IUGG in Perugia, Italy. Swiss Geodetic Commission, pp 47–52. ISBN 978-3-908440-15-4.
174. S.P. Mertikas, A. Daskalakis, W. Hausleitner, **I.N. Tziavos**, G.S. Vergos, V. Zervakis, P. Partsinevelos, X. Frantzis, D. Andrikopoulos, A. Tripolitsiotis, 2010: Calibration of satellite radar altimeters at Gavdos Cal/Val facility using three different methodologies. *Proceedings of the ESA Living Planet Symposium*, June 28 – July 2, Bergen, Norway. ESA Special Publication SP-686.

175. I.D. Papadopoulou, P. Savvaidis, **I.N. Tziavos**, 2010: Using the SyNaRMa system as a disaster management tool. *Natural Hazards*, DOI: 10.1007/s11069-010-9626-2.
176. V.N. Grigoriadis and **I.N. Tziavos**, 2010: The use of high-resolution gravity databases to geoid and Moho topography modelling. Presented at the 2nd International Symposium of the International Gravity Field Service, University of Alaska Fairbanks, USA, September 20-22, 2010.
177. S.P. Mertikas, A. Daskalakis, V. Tserolas, W. Hausleitner W, **I.N. Tziavos**, G.S. Vergos, V. Zervakis, X. Frantzis, A. Tripolitsiotis, P. Partsinevelos, D. Andrikopoulos, 2010: Absolute calibration of Jason satellite radar altimeters at Gavdos Cal/Val facility using independent techniques. Proceedings vol. 7825 (78250C), Bostater CR, Mertikas SP, Neyt X, Velez-Reyes M (eds.), Remote Sensing of the Ocean, Sea Ice and Large Water Regions 2010, DOI: 10.1117/12.865991.
178. G.S. Vergos and **I.N. Tziavos**, 2010: On the combined adjustment of tide gauge, marine geoid and sea surface topography towards the unification of the Greek vertical datum. Submitted to *Studia Geophysica et Geodaetica*.