Short CV of
Prof. Michael G. Sideris, Ph.D., Dr. h.c., P.Eng.

Education and Degrees:
Dipl.-Eng. (honours), 1981, Surveying Engineering, National Technical University, Athens, Greece.
M.Sc., 1984, Civil Engineering, University of Calgary (U of C), Canada
Ph.D., 1988, Surveying Engineering, University of Calgary, Canada
Dr. h.c, 2004, Geodesy, Univ. of Architecture, Civil Engineering and Geodesy (UACEG), Sofia, Bulgaria

Positions held:
Since 1996 *Professor,* Department of Geomatics Engineering (DGE), U of C
Since 2003 *Associate Dean,* Faculty of Graduate Studies, U of C
2005-2006 *Associate Dean (International),* Schulich School of Engineering, U of C
2005 *Interim Executive Director*, Calgary Centre for Innovative Technology (CCIT)
1999-2005 *Associate Dean (Research),* Faculty of Engineering, U of C
1998 *Alexander von Humboldt Research Fellow*, Geodetic Institute, University of Stuttgart
1993-2000 *Associate Head (Research & Graduate Studies),* DGE, U of C
1991-1996 *Associate Professor,* Department of Surveying Engineering (DSE), U of C
1988-1991 *Assistant Professor*, DSE, U of C
1987-1988 *Postdoctoral Fellow & Sessional Lecturer*, DSE, U of C
Since 1993 *Visiting Professor* at a number of European, Australian, South American, Korean and Chinese universities/institutes.
Since 1988 *Advisor/Consultant* to many geophysical and engineering companies and to the Australian, Canadian and US National Geodetic Surveys.

Areas of Expertise:
gravity field approximation; spatial and temporal geoid modeling; dedicated gravity satellite missions (CHAMP, GRACE, GOCE); satellite altimetry; airborne gravimetry; height systems and vertical datums; optimization; geodetic applications of statistical, spectral, and wavelet methods

Awards and Fellowships:
Canadian Aeronautics and Space Institute Casey Baldwin Award (2007)
Dr. honoris causa honorary doctorate degree by the UACEG (2004)
U of C Research Excellence Award in Geomatics Engineering (1999)
Fellow of the International Geoid Service (Since 1999) and the IAG (since 1991)
Alexander von Humboldt International Research Fellow (1998-99)

Research Publications (selected from last ten years only):

BOOKS, BOOK CHAPTERS AND VOLUMES EDITED

Sanso, F., Sideris M.G. (Eds.) 2010. *Geoid Determination – Theory and Methods*. Lecture Notes in Earth Sciences, Vol. 110. Springer-Verlag Berlin Heidelberg New York (in press).

Blewitt, G. et al. 2010. Chapter 9: Geodetic Observations and Global Reference Frame Contributions to Understanding Sea-Level Rise and Variability. In *Understanding Sea-level Rise and Variability*, Eds. J.A. Church, P.L. Woodworth, T. Aarup and W.S. Wilson. 456 pages. Wiley.

Sideris, M.G. (Ed,) 2008. *Observing our Changing Earth*. IAG International Symposia Vol. 133, 864 pages. Springer-Verlag Berlin Heidelberg New York.

Sideris, M.G. (Ed.) 2001. *Gravity, Geoid and Geodynamics 2000*. IAG International Symposia Vol. 123, 398 pages. Springer-Verlag Berlin Heidelberg New York.

Sideris M.G. 1994. "Chapter 4: Regional Geoid Determination" of the book *Geoid and its Geophysical Interpretations* edited by P. Vanicek and N. Christou. CRC Press Inc.

ARTICLES IN ENCYCLOPEDIAS

Sideris, M.G. 2010. Theory and Principles of Geoid Determination. In *Encyclopedia of Solid Earth Geophysics, H.K. Gupta (Editor-in-Chief)*. Springer (in press).

Sideris, M.G. 2010. Methods for Computing the GeoidIn. In *Encyclopedia of Solid Earth Geophysics, H.K. Gupta (Editor-in-Chief)*. Springer (in press).

ARTICLES IN REFEREED JOURNALS

van der Wal, W., Wu, P., Wang., H. and M.G. Sideris. 2010. Sea levels and uplift rate from composite rheology in glacial isostatic adjustment modeling. *Journal of Geodynamics* Vol. 50, pp. 38-48.

Rangelova, E., Sideris, M.G. and G. Fotopoulos. 2009. A dynamic reference surface for heights in Canada. *Geomatica* Vol. 63, No. 4, pp. 333-340.

Weigelt, M., Sideris, M.G. and N. Sneeuw. 2009. On the influence of the ground track on the gravity field recovery from high-low satellite-to-satellite tracking missions - CHAMP monthly gravity field recovery using the energy balance approach revisited. *Journal of Geodesy* Vol. 83, pp. 1131-1143.

Rangelova, E. and M.G. Sideris. 2008. Contributions of terrestrial and GRACE data to the study of the secular geoid changes in North America. *Journal of Geodynamics* Vol. 46, pp. 131-143.

Van der Wal, W., Wu, P., Sideris, M.G. and C.K. Schum. 2008. Usage of GRACE determined secular gravity rates of change for Glacial Isostatic Adjustment studies in North America. *Journal of Geodynamics* Vol. 46, Issues 3-5, pp. 144-154.

Xu, C., Weigelt, M., Sideris, M.G. and N. Sneeuw. 2007. Spaceborne gravimetry and gravity field recovery. *Canadian Aeronautics and Space Journal* Vol. 53, No. 3/4, pp. 65-75.

Rangelova, E., van der Wal, W., Braun, A., Sideris, M.G. and P. Wu. 2007. Analysis of GRACE time-variable mass redistribution signals over North America by means of principal component analysis. *Journal of Geophysical Research – Earth Surface* Vol. 112, No. F3.

El Habiby, M. and M.G. Sideris. 2007. A wavelet thresholding technique for local geoid and deflection determination. *Geophysical Journal International* Vol. 170, Issue 2, pp. 492-502.

Grebenitcharsky R. and M.G. Sideris. 2005. The compatibility conditions in altimetry-gravimetry boundary value problems. *Journal of Geodesy* Vol. 78, No. 10, pp. 626-636.

Vergos, G.S. and M.G. Sideris. 2005. Improvement in the determination of the marine geoid by estimating the bathymetry from altimetry and depth soundings. *Marine Geodesy* Vol. 28, pp. 81-102.

Bayoud, F.A. and M.G. Sideris. 2003. Two different methodologies for geoid determination from ground and airborne gravity data. *Geophysical Journal International* Vol. 155, pp. 914-922.

Liu, Q. and M.G. Sideris. 2003. Wavelet evaluation of the Stokes and Vening Meinesz integrals. *Journal of Geodesy* Vol. 77, No. 5-6, pp. 345-356.

Huang, J., Sideris, M.G., Vanicek, P. and I.N. Tziavos. 2003. Numerical investigation of downward continuation techniques for gravity anomalies. *Bolletino di Geodesia e Scienze Affini* Anno 2003, N. 1, pp. 33-48.

Kotsakis, C. and M.G. Sideris. 2001. A modified Wiener-type filter for geodetic estimation problems with non-stationary noise. *Journal of Geodesy* Vol.75, No. 12, pp. 647-660.

Andritsanos, V.D., Sideris, M.G. and I.N. Tziavos. 2001. Quasi-stationary sea surface topography estimation by the multiple input/multiple output system theory. *Journal of Geodesy* Vol. 75, pp. 216-226.

Li, Y.C., Sideris, M.G. and K.P. Schwarz. 2000. Unified terrain correction formulas for vector gravity measurements. Invited paper. *Review Journal PINSA-A of the Indian National Science Academy* Vol. 66, A, No. 5, pp. 521-535.

Fei, Z. and M.G. Sideris, 1999. Local relationships among the disturbing density, the disturbing potential and the disturbing gravity of the Earth's gravity field. *Journal of Geodesy* Vol. 73, pp. 534-542.

Ardalan, A., Grafarend, E. and M.G. Sideris. 1999. The spheroidal fixed-free two-boundary value problem for geoid determination (The spheroidal Bruns' transform). *Journal of Geodesy* Vol. 73, No. 10, pp. 513-533.