

Curriculum Vitae

Dr. Hans-Peter Plag

PERSONAL:

Borne: Roßbach, Germany
Work Address: Climate Change and Sea Level Rise Initiative (CCSLRI)
Old Dominion University
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EDUCATION:

“Vordiplom” Mathematics, Technische Fachhochschule Berlin (Technical College), 1976
Diploma Geophysics, Free University of Berlin, 1982
Promotion (PhD) Free University of Berlin, Natural Sciences (summa cum laude), 1988

AREAS OF EXPERTISE:

Sustainability
decision support and assessments
sea level change
climate change, mitigation and adaptation
Earth system dynamics and global change
geohazards
disasters risk reduction
earth observations
geophysics
geodesy.

PROFESSIONAL WORK EXPERIENCE:

A. Co-Director, Climate Change and Sea Level Rise Initiative (CCSLRI) and Professor, Ocean, Earth and Atmospheric Sciences, Old Dominion University, Norfolk, Virginia, USA (June 2013 - present)

Primary duties are to co-lead the CCSLRI and to develop the program of the CCSLRI; to carry out research related to sea level rise and climate change, including adaptation, resilience, and disaster risk reduction; to participate in course development and teaching related to climate change and sea level rise resilience and adaptation.

B. Visiting professor, Stevens Institute of Technology, Hoboken, New Jersey (July 2010 - present)

Primary duties are guest lectures and participation in research project related to climate change impacts in the coastal zone.

C. Director, Global Change and Sustainability Research Institute (GCSRI), and Chair on Global Change and Sustainability; University of the Witwatersrand, Johannesburg, South Africa (November 2012 - May 2013)

Primary duties of the Chair were research, teaching, and supervision of Master and PhD students and mentoring of postdoctoral fellows all in the field of climate change research focusing on mitigation, adaptation, resilience, and integrated reporting on climate change and its drivers. Primary duties of the Director of the GCSRI were to provide leadership to the new institute and to develop it with a global relevance. Soliciting funding for the growth of the institute is a key responsibility.

D. Research professor, jointly at Nevada Bureau of Mines and Geology and the Nevada Seismological Laboratory, University of Nevada, Reno (July 2004 - November 2012; since December 2012, Adjunct Professor)

Primary duties were research in geodesy with applications to problems in global to regional geodynamics and tectonics,

global climate change and global change, geohazards, and Earth observations. Science support for policy and decision making in climate change adaptation, disaster risk reduction and sustainability was central to the position. Teaching focused on environmental applications of geodetic techniques (including climate change monitoring, local and global sea level changes, and hydrogeodesy) and problems related to sustainability

E. Professor II (20 % position) at the Mathematical Institute of the University of Oslo for “Mathematical models in geodesy” (January 2000 to June 2004).

Teaching and research with respect to the mathematical concepts for global reference frames, geophysical models for solid Earth deformation and dynamics, and the gravity field of the Earth system.

F. Head of the department “Global reference” at the Geodetic Institute, Norwegian Mapping Authority, Norway (August 1997 to June 2004).

Responsible for the scientific development of the national permanent space-geodetic infrastructure, in particular VLBI and GPS, as well as the national gravity network and the geoid model. Responsible for the research carried out at the Geodetic Institute, which was related to the development of space-geodetic techniques (including projects for the European Space Agency), improvements of the global geodetic reference frame, improved understanding of the interactions of atmosphere, ocean and solid Earth and the effect on the geodetic reference frame, including surface displacements of the solid Earth and changes in the Earth’s gravity field. Responsible for consultancy work in monitoring large infrastructure with space geodetic techniques.

G. Wissenschaftlicher Assistent (assistant professor) at the Institute of Geophysics, University of Kiel, Germany (March 1992 to July 1997; visiting scientist at Proudman Oceanographic Laboratory, April 1995 - September 1995)

Teaching and research in the field of geophysics, including studies of free oscillations of the Earth, Earth tides, surface-load induced deformation, post-glacial rebound, sea level changes, and Earth rotation. Project leader for nationally funded research projects and supervisor of diploma and doctoral students. Participation in the management of the Mathematisch-Naturwissenschaftliche Fakultät (faculty of Mathematics and Natural Sciences); member of the University-wide working group ‘Zentrum für Umweltstudien’ (Centre for Environmental Studies); participation in the ‘Graduiertenkolleg’ (participation of approx. 20 phd students): ‘Dynamik globaler Kreisläufe im System Erde’ (Dynamics of global cycles in the Earth system).

H. Post-doctoral research and teaching at the Geophysical Institute of the University of Kiel, Germany (December 1987 to February 1992)

Head of the study group ‘Global Geodynamics’; research projects: rheology of the Earth’s mantle as constrained by free oscillation and Earth tidal data as well as observations of post-glacial rebound; effect of Earth tides on satellite orbits; exogenic deformations of the Earth; Earth rotation perturbations induced by exogenic forces; long-period sea-level variations; interaction of atmosphere, ocean, and solid Earth; physical properties of sediments in Mexico City in relation to earthquake hazards.

I. Research Geophysicist at the Free University of Berlin (March 1982 - April 1983; May 1984 - December 1987, in parallel free lance programmer from May 1984 - December 1987)

Earth and ocean tides studies; long-period atmosphere and ocean interactions; Earth rotation and sea level studies.

HONORS AND AWARDS:

Deminex Grant at the Continental Shelf Institute, Trondheim, Norway; long-period atmosphere and ocean interactions, 1983-1984.

Visiting Senior Scientist (EU ‘Human Capital and Mobility’ Fellowship) at the Proudman Oceanographic Laboratory, Birkenhead, UK, 1995.

Fellow of the International Association of Geodesy, 2007.

OTHER PROFESSIONAL ACTIVITIES (selected)

Since 2012	Lead Author of the community white paper “Extreme Geohazards: Reducing the Disaster Risk and Increasing Resilience” supported by the European Science Foundation.
2011-2012	Co-chair, Program Committee for the Fifth International Geoscience Programme (IGCP) 565 Project Workshop on “Improving regional water management in Africa and Asia on the basis of geodetic water cycle monitoring,” October 2012, Johannesburg, South Africa.
2011-2012	Co-Chair, Program Committee of the Global Earth Observation System of Systems (GEOSS) Science and Technology Stakeholder Network Workshop “GEOSS: Supporting Science for the Millennium Development Goals and Beyond,” Bonn, Germany, August 2012.
2011	Co-Convener of the Session “Characterizing Major Disasters Caused by Geohazards,” AGU Fall Meeting, December 2011, San Francisco
Since 2011	Task Coordinator for GEO Work Plan Task ID-03 “Science and Technology in GEOSS”
Since 2011	IEEE Representative to the Institutional Development Implementation Board of the Group on Earth Observations (GEO)
Since 2011	IEEE Representative to the Societal Benefits Implementation Board of GEO
2011-2012	Co-chair, Program Committee for the Fourth IGCP 565 Project Workshop on “Integration of geodetic observations and products in models of the hydrological cycle - Support for water management through hydrological models and data assimilation”, November 22-23, 2011, Johannesburg, South Africa.
2011-2012	Co-Chair, European Science Foundation Workshop “Understanding Extreme Geohazards: The Science of the Disaster Risk Management Cycle”, November 28-December 1, 2011, Sant Feliu de Guixous, Spain.
Since 2010	Member of the IEEE Delegation to the GEO Plenary, Head of Delegation in 2012
2010-2011	Co-Chair, Program Committee of the Workshop “Building a User-Driven GEOSS: Methods to Capture, Analyze, and Prioritize User Needs,” April 10, 2011, Sydney, Australia.
2010-2011	Member, GEO Task Force on Gap Analysis.
2010-2011	Co-Chair, Program Committee of the Workshop “Connecting GEOSS and its Stakeholders in Science and Technology”, Bonn, Germany, May 9-11, 2011.
2010	Co-Convener of the AGU Fall meeting sessions “The Uncertainty of Future Sea Level Rise: Bridging Science and End Users” and “Understanding and Predicting Water and Energy Cycle Changes Using Multisensor Heterogeneous Data for Energy and Water Cycle Research”
2010-2011	Member, Program Committee for the Workshop “Earth Observation Support for Sustainable Tourism in Small Island States,” March, 9-11, 2011, San Juan, Puerto Rico.
2010-2011	Co-chair, Program Committee for the third IGCP 565 Project Workshop on “Separating Hydrological and Tectonic Signals in Geodetic Observations,” October 11-13, 2010, Reno, Nevada, USA.
2010	Member, Organizing Committee for the US-Africa Workshop on “Expanding the AfricaArray Network to Support Multidisciplinary Science in Africa,” June 2-4, 2010, Washington, D.C., USA.
2009-2010	Member, Program Committee for the Workshop “Decision-Making Support For Coastal Zone Management, Water Resources & Climate Change In Africa,” February, 15-18, 2010, Cotonou, Benin.
2010	Co-chair of the Program Committee for the Workshop “Building a Geohazards Community of Practice in Support of GEO Work Plan Tasks and GEOSS Implementation,” January 18-22, 2010, Paris, France.
2010-2011	IEEE Representative to the GEO Science and Technology Committee
2010-2011	IEEE Representative to the GEO User Interface Committee
Since 2010	Co-Chair, GEOSS Science and Technology Stakeholder Network.

2009 Co-Convener of four sessions, AGU Fall Meeting, December 2009, San Francisco (“Severe Storms and Sea level Rise: A Challenge for Science and Society,” “Extreme Natural Hazards: Risk Assessments, Forecasting, and Decision Support,” “The Global Geodetic Observing System: Scientific Requirements and Applications,” “Science and Technology in GEO and GEOSS”).

2009 Co-chair of the Program Committee, Second Annual Workshop of the IGCP 565 Project “Towards a Roadmap for Future Satellite Gravity Missions,” September 30 - October 2, 2009, Graz, Austria

2009 Co-Convener, “Earth observation and the Global Geodetic Observing System (GGOS),” Session at the IAG Symposium “The Global Geodetic Observing System: Science and Applications,” August 31-September 4, 2009, Buenos Aires, Argentina.

2009 Co-Convener, “The Global Geodetic Observing System: Ground and Space-based Infrastructure for Earth Science,” Session G8, EGU General Assembly, April 2009, Vienna, Austria

Since 2009 Co-Chair, Geohazards Community of Practice of GEO.

2009 - 2011 Point of Contact and Task Lead for the GEO Task ST-09-02 “Promoting Awareness and Benefits of GEO in the Science and Technology Community.”

2008 Co-Convener, “Global Geodetic Observing System: Science and Instrumentation,” Sessions G31C and G33A, AGU Fall Meeting, December 2008, San Francisco.

Since 2008 Member of the GGOS ad hoc Working Group on an ITRS ISO Standard

2008 Chair of the Program Committee, First Annual Workshop of the IGCP 565 Project “*Science of geodetic monitoring of the hydrological cycle*,” December 2008, San Francisco, USA

2008 Co-Chair of the Program Committee of the first GEO Workshop of the Coastal Zone Community of Practice: “*GEOSS Support for Decision-Making in the Coastal Zone: Managing and Mitigating the Impacts of Human Activities and Natural Hazards in the Coastal Zone*,” June 2008, Athens, Greece

Since 2008 Co-Chair of the GEO Coastal Zone Community of Practice (CZCP)

2008 Member of the Science Advisory Group for the Delta Commission of the Dutch Parliament on future sea level changes

2008 - 2012 Lead Project Leader of the IGCP 565 Project

2007 - 2010 GGOS representative to the GEO Science and Technology Committee

Since 2007 Member of IAG’s Inter-Commission Working Group 2 “Concepts and terminology related to Geodetic Reference Systems.”

2007 Organization of the GEO/GGOS Workshop 2007, November 2007, Frascati, Italy

2007 - 2010 Chair of the GGOS Working Group on GEO Activities

2007 IAG/GGOS representative in the GEO Task Force 2 for the preparation of the Ministerial Summit on Earth Observation

Since 2007 Member of the GEO “Coastal Zone” Community of Practice

2006 - 2010 GGOS Representative to the GEO Architecture and Data Committee

2006 - 2009 Point of Contact and Task Lead for the GEO Task AR-07-03 “Global Geodetic Reference Frames”

2006 - 2009 Coordinator and Lead Editor of the GGOS 2020 Strategy Process: “The Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020”

2006 Organization of the GGOS Workshop 2006, October 2006, Munich, Germany

Since 2006 Member of the GEO Community of Practice on Geohazards

2006 - 2010 GGOS representative in the Joint Committee of the UNESCO GARS and IGOS-P Geohazards Theme

2005 - 2010 GGOS Representative to the GEO User Interface Committee

2005-2007 IAG delegate to the GEO Working Group on Tsunami activities

2005 - 2010 Vice-chair of the Steering Committee of the Global Geodetic Observing System (GGOS)

2005 - 2006 Principle Investigator, “Appraisal of relative sea level rise scenarios for Venice”

2004 - 2005 Principle Investigator, “National geodetic infrastructure - current status and future requirements ”

Since 2004	Member of the Advisory Committee for the International Earth Rotation and Reference Systems Service (IERS) Conventions
2004 - 2005	External Expert member of the Project Team, European Sea Level Service Research Infrastructure (ESEAS-RI)
2004 - 2010	Alternative Head of the IAG delegation to the GEO Plenary meetings
2004 - 2005	IAG delegate to the <i>ad hoc</i> GEO Working Group “User requirements”
2004 - 2005	Chair of the GGOS working group “Copyrights, Data Access Policy, Publishing, and Certification”
Since 2002	Associate Member of the <i>International Earth Rotation Service</i>
12/2002 - 06/2004	Principle investigator, “Determination of geodetic coordinates of the EGNOS RIMS and NLES sites”
12/2002 - 06/2004	Coordinator, Norwegian Research Project OCTAS “Ocean Circulation and Transport between North Atlantic and Arctic Sea”
11/2002 - 06/2004	Coordinator, EU-Project “ESEAS-Research Infrastructure”
06/2002 - 06/2004	Principle investigator, Galileo System Test Bed V1 Stand-alone Test Case “Geodetic Galileo”
Since 2002	Co-chair, Special Bureau for Loading of the Global Geophysical Fluid Center of the IERS, since 2004 sole chair
2001 - 2004	Director, Central Bureau of the European Sea Level Service (ESEAS)
2000 - 2004	National Delegate, IAG Commission V and XIV.
Since 2000	Associated Member of the <i>International VLBI Service</i>
2000	Organisation of the IGS Network Workshop and the COST 716 Workshop “Towards operational GPS-Meteorology” in Oslo, Norway
2000 - 2004	Secretary of the EGS subsection II.B2: “Global and Regional Interdisciplinary Networks”
1999 - 2004	National Delegate & Co-chair (since 2001), COST Action 716: “Exploitation of ground-based GPS for climate and numerical weather prediction applications”
Since 1998	Associated member of the <i>International GPS Service</i>
1998	Organisation of the WEGENER 98 meeting in Norway
1998 - 2002	Chair of the COST Action 40 “European Sea Level Observing System (EOSS)”
1997 - 2004	Member of the Ny-Alesund Science Manager Committee (NySMAC)
1997 - 2002	Responsible Scientist in the EU TMR Project “VLBI-Europe” and the EU-funded Large Scale Facility Ny-Alesund
Since 1996	Editor (for Geodesy) of <i>Physics and Chemistry of the Earth</i>
1996 - 2000	Secretary of the EGS subsection II.5: “Geodetic aspects of global change phenomena”
Since 1994	Member of the Editorial Board of the <i>Journal of Geodynamics</i>
Since 1992	Several times convener at annual meetings of the EGS/EGU, the German Geophysical Society, AGU, as well as IUGG assemblies
1995 - 1999	Chairperson of the Science Panel of the WEGENER Board
1995 - 1999	Contractor of the EU project SELF II
1993 - 1994	Subcontractor of the EU project SELF
1989 - 1999	Member of the WEGENER-Consortium and participation in the DOSE-Programme of NASA
1989 - 1997	Participation in the German national Earth rotation research programme
1988 - 1995	Participation in the LAGEOS-II-Programme of NASA and ASI

PUBLICATIONS

More than 70 publications in peer-reviewed journals, books, and proceedings; more than 80 other contributions to books, newsletters, and proceedings; lead author of several community white papers; editor of three books and numerous special issues; numerous scientific reports; more than 250 invited and contributed presentations at scientific meetings.

SELECTED PUBLICATIONS (SINCE 2002)

Beutler, B., Pearlman, M., Plag, H.-P., Neilan, R., Rothacher, M., & Rummel, R., 2009. Towards GGOS in 2020, in *Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020*, edited by H.-P. Plag & M. Pearlman, 273-282, Springer Berlin.

- Blewitt, G., Altamimi, Z., Davis, J., Gross, R., Kuo, C.-Y., Lemoine, F. G., Moore, A. W., Neilan, R. E., Plag, H.-P., Rothacher, M., Shum, C. K., Sideris, M. G., Schne, T., Tregoning, P., Zerbini, S., 2010. Geodetic Observations and Global Reference Frame Contributions to Understanding Sea-Level Rise and Variability. In Aarup, T., Church, J., Wilson, S., Woodworth, P.L. (eds.): *Understanding Sea-level Rise and Variability*. Wiley-Blackwell, 256-284.
- Blewitt, G., Hammond, W. C., Kreemer, C., Plag, H.-P., Stein, S., & Okal, E., 2009. GPS for realtime earthquake source determination and tsunami warning systems, *J. Geodesy*, **83**, 335-343, doi 10.1007/s00190-008-0262-5.
- Blewitt, G., Kreemer, C., Hammond, W., Plag, H.-P., Stein, S., & Okal, E., 2006. Rapid determination of earthquake magnitude using GPS for tsunami warning systems, *Geophys. Res. Letters*, **33**, L11309, doi:10.1029/2006GL026145.
- Bos, M. S., Baker, T. F., Røthing, K., & Plag, H.-P., 2002. Testing ocean tide models in the Nordic Seas with tidal gravity observations, *Geophys. J. Int.*, **150**, 687-694.
- Cazenave, A., Chambers, D. P., Cipollini, P., Fu, L. L., Hurell, J. W., Merrifield, M., Nerem, R. S., Plag, H.-P., Shum, C. K., Willis, J., 2010. Sea level rise: Regional and global trends. Plenary Paper, in Hall, J., Harrison, D.E. & Stammer, D. (eds.): *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 1), Venice, Italy, 21-25 September 2009*, ESA Publication WPP-306, doi:10.5270/OceanObs09.pp.11.
- Garcia, M. J., Perez, B. G., Raicich, F., Rickards, L., Bradshaw, E., Plag, H.-P., Zhang, X., & Bye, B. L., 2006. Observing site oriented sea level monitoring - implementation of ESEAS quality control. In Tregoning, P. and Rizos, C. (eds.): *Dynamic Planet - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, International Association of Geodesy Symposia*, Volume 130, 67-70, Springer Verlag, Berlin.
- Gross, R., Beutler, G., & Plag, H.-P., 2009. Integrated scientific and societal user requirements and functional specifications for the GGOS, in *Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020*, edited by H.-P. Plag & M. Pearlman, 209-224, Springer Berlin.
- Hammond, W. C., Blewitt, G., Li, Z., Plag, H.-P., Kreemer, C., 2012. Contemporary uplift of the Sierra Nevada, western U.S. from GPS and InSAR measurements. *Geology*, **27**, doi: 10.1130/G32968.1.
- Hammond, W. C., Kreemer, C., Blewitt, G., Plag, H.-P., 2010. Effect of Viscoelastic postseismic relaxation on estimates of interseismic crustal strain accumulation at Yucca Mountain, Nevada. *Geophys. Res. Lett.*, **37**, doi:10.1029/2010GL042795.
- Herring, T. A., Altamimi, Z., Plag, H.-P., & Poli, P., 2009. The future geodetic reference frame, in *Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020*, edited by H.-P. Plag & M. Pearlman, 225-236, Springer Berlin.
- Katsman, C. A., A. Sterl, J. J. Beersma, H. W. van den Brink, J. A. Church, W. Hazeleger, R. E. Kopp, D. Kroon, J. Kwadijk, R. Lammersen, J. Lowe, M. Oppenheimer, H.-P. Plag, J. Ridley, H. von Storch, D. G. Vaughan, P. Vellinga, L. L. A. Vermeersen, R. S. W. van de Wal, R. Weisse, 2011. Exploring high-end scenarios for local sea level rise to develop flood protection strategies for a low-lying delta - the Netherlands as an example. *Climatic Change*, DOI: 10.1007/s10584-011-0037-5.
- Kierulf, H. P., Plag, H.-P., and Kohler, J., 2009. Surface deformation induced by present-day ice melting in Svalbard, *Geophys. J. Int.*, **179**, 1-13, doi: 10.1111/j.1365-246X.2009.04322.x.
- Kierulf, H. P., Plag, H. P., Bingley, R. M., Teferle, N., Demir, C., Cingoz, A., Yildiz, H., Garate, J., Davila, J. M., Silva, C. G., Zdunek, R., Jaworski, L., Martinez-Benjamin, J. J., Orus, P., & Aragon, A., 2008. Comparison of GPS analysis strategies for high-accuracy vertical land motion, *Phys. Chem. Earth*, **33**, 194-204, doi:10.1016/j.pce.2006.11.003.
- Kreemer, C., Blewitt, G., Hammond, W. C., & Plag, H.-P., 2006. Global deformations from the great 2004 Sumatra-Andaman earthquake observed by GPS: implications for rupture process and global reference frame, *Earth Planets Space*, **58**, 141-148.
- Mathur, A. R., Ventura-Traveset, J., Montefusco, C., Toran, F., Plag, H.-P., Ruiz, L., Stojkovic, I., & Levy, J. C., 2006. Provision of emergency communication messages through SBAS: the ESA ALIVE concept, in

ION GNSS 2005 Proceedings, Long Beach, California, 2969-2975, Institute of Navigation, USA.

(*) Plag, H.-P., 2013. Alarmist or Realist - The Art of Creating Worry. Column 2 in "On The Edge." *ApoGeo*, Summer 2013, 18-20.

(*) Plag, H.-P., 2013. Running in Fog - Finding a safe operating space for humanity. Column 1 in "On The Edge." *ApoGeo*, Spring 2013, 22-25.

Plag, H.-P., 2006. Estimating recent global sea level changes. In Tregoning, P. and Rizos, C. (eds.): *Dynamic Planet - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, International Association of Geodesy Symposia*, Volume 130, 39-48, Springer Verlag, Berlin.

Plag, H.-P., 2006. GGOS and its user requirements, linkage and outreach. In Tregoning, P. and Rizos, C. (eds.): *Dynamic Planet - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, International Association of Geodesy Symposia*, Volume 130, 711-718, Springer Verlag, Berlin.

Plag, H.-P., 2006. National geodetic infrastructure: Current status and future requirements – the example of Norway. Nevada Bureau of Mines and Geology, Bulletin, 112, 91 pages.

Plag, H.-P., 2006. Recent relative sea level trends: an attempt to quantify the forcing factors, *Phil. Trans. Roy. Soc. London, A*, **364**, 1841-1869.

Plag, H.-P., 2005. The GGOS as the backbone for global observing and local monitoring: A user driven perspective, *J. Geodynamics*, 40, 479-486, doi:10.1016/j.jog.2005.06.012.

Plag, H.-P., Adegoke, J., Bruno, M., Christian, R., Digiaco, P., McManus, L., Nicholls, R. and van de Wal, v., 2010. Observations as Decision Support for Coastal Management in Response to Local Sea Level Changes. In Hall, J., Harrison, D.E. & Stammer, D. (eds.): *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 2), Venice, Italy, 21-25 September 2009*, ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.69.

Plag, H.-P., Altamimi, Z., Bettadpur, S., Beutler, G., Beyerle, G., Cazenave, A., Crossley, D., Donnellan, A., Forsberg, R., Gross, R., Hinderer, J., Komjathy, A., Mannucci, A. J., Ma, C., Noll, C., Nothnagel, A., Pavlis, E. C., Pearlman, M., Poli, P., Schreiber, U., Senior, K., Woodworth, P., & Zuffada, C., 2009. The goals, achievements, and tools of modern geodesy, in *Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020*, edited by H.-P. Plag & M. Pearlman, 15-88, Springer Berlin.

Plag, H.-P., Beutler, G., Forsberg, R., Ma, C., Neilan, R., Pearlman, M., Richter, B., & Zerbini, S., 2006. Linking the Global Geodetic Observing System (GGOS) to the Integrated Global Observing Strategy Partnership (IGOS-P) through the Theme 'Earth System Dynamics'. In Tregoning, P. and Rizos, C. (eds.): *Dynamic Planet - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, International Association of Geodesy Symposia*, Volume 130, 727-734, Springer Verlag, Berlin.

Plag, H.-P., Beutler, G., Gross, R., Herring, T. A., Rizos, C., Rothacher, M., Rummel, R., Sahagian, D., & Zumberge, J., 2009. Introduction, in *Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020*, edited by H.-P. Plag & M. Pearlman, 1-14, Springer Berlin.

Plag, H.-P., Beutler, G., Gross, R., Herring, T. A., Rizos, C., Rothacher, M., Rummel, R., Sahagian, D., & Zumberge, J., 2009. Executive Summary, in *Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020*, edited by H.-P. Plag & M. Pearlman, xiii-xxiv, Springer Verlag, Berlin.

Plag, H.-P., Beutler, G., Gross, R., Herring, T. A., Rizos, C., Rothacher, M., Rummel, R., Sahagian, D., & Zumberge, J., 2009. Recommendations, in *Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020*, edited by H.-P. Plag & M. Pearlman, 283-292, Springer Verlag, Berlin.

Plag, H.-P., Blewitt, G., Kreemer, C., & Hammond, W. C., 2006. Solid Earth deformations induced by the Sumatra earthquakes of 2004-2005: GPS detection of co-seismic displacements and tsunami-induced loading. In Tregoning, P. and Rizos, C. (eds.): *Dynamic Planet - Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, International Association of Geodesy Symposia*, Volume 130, 549-556, Springer Verlag, Berlin.

- Plag, H.-P., Gross, R., Chao, B. F., & Van Dam, T., 2005. Forcing of polar motion in the Chandler frequency band: An opportunity to evaluate interannual climate variations, *EOS, Trans. Am. Geophys. Union*, 86(3), 26.
- Plag, H.-P., Gross, R., Rothacher, M., 2009. Global Geodetic Observing System for Geohazards and Global Change. *Geosciences, BRGM's journal for a sustainable Earth*, **9**, 96-103.
- Plag, H.-P., Jules-Plag, S., 2013. Sea-Level Rise and Coastal Ecosystems. In Pielke Sr., R. A., Seastedt, T., Suding, K. (eds.): *Vulnerability of Ecosystems to Climate*, Volume 4 of: *Climate Vulnerability: Understanding and Addressing Threats to Essential Resources*, 163-184, Elsevier.
- Plag, H.-P., Jules-Plag, S., 2013. Sea-Level Rise and Health. In Pielke Sr., R. A., Adegoke, J., Wright, C. (eds.): *Vulnerability of Human Health to Climate*. Volume 1 of: *Climate Vulnerability: Understanding and Addressing Threats to Essential Resources*, 39-47, Elsevier.
- (*) Plag, H.-P., Miller, N., 2012. Fourth Annual IGCP 565 Workshop: Support for water management through hydrological models and data assimilation. *Episodes*, **35**, 344-346.
- Plag, H.-P. & Miller, N. L., 2011. Applying Geodesy to Hydrologic Cycle Monitoring. *EOS, Trans. Am. Geophys. Union*, **92**, 136.
- (*) Plag, H.-P., Miller, N. L., 2010. Third Annual IGCP 565 Workshop: Separating hydrological and tectonic signals in geodetic observations, *Episodes*, **33**(4), 273-277.
- Plag, H.-P. & Pearlman, M., eds., 2009. Global Geodetic Observing System: Meeting the Requirements of a Global Society on a Changing Planet in 2020, Springer Berlin, 332 pages.
- Plag, H.-P., Rizos, C., Rothacher, M., Neilan, R., 2010: The Global Geodetic Observing System (GGOS): Detecting the Fingerprints of Global Change in Geodetic Quantities. In Chuvieco, E., Li, J., and Yang, X. (eds): *Advances in Earth Observation of Global Change*, Springer Verlag, Berlin, 125-143.
- Plag, H.-P., Rothacher, M., Pearlman, M., Neilan, R., & Ma, C., 2009. The Global Geodetic Observing System, in *Solid Earth (SE)*, edited by K. Satake, vol. 13 of *Advances in Geosciences*, pp. 105-127.
- Plag, H.-P. and Zerbini, S., 2008. Geodetic observations help understanding geohazards and mitigate disasters, *Eos, Trans. Am. Geophys. Union.*, **89**, doi:10.1029/2008EO170003.
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