

Guyot Hall Department of Geosciences Princeton, NJ 08544

Dr. Christopher T. Harig Short Curriculum Vitae

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http://polarice.princeton.edu

Positions Held

2013 – present	Associate Research Scholar, Princeton University
2010 - 2013	Postdoctoral Research Associate, Princeton University
2006 - 2010	Research Assistant, University of Colorado at Boulder
2004 - 2006	Teaching Assistant, University of Colorado at Boulder

Education

12/2010 University of Colorado at Boulder, Boulder, CO

Ph.D., Geophysics, Department of Geological Sciences

Advisors: Peter Molnar and Shijie Zhong

Topic: The effects of lithospheric thickness variations on the dynamics

of the Earth's upper mantle.

5/2004 Cornell University, Ithaca, NY

B.S., Geological Sciences, Department of Earth and Atmospheric Sciences

Research Interests

Mass balance of polar ice sheets and alpine glaciers in response to changing climate. Gravitational-field localization and spectral analysis on the sphere. Rheology and geopotential expression of Earth's lithosphere and upper mantle in relation to ice sheet mass balance.

Recent Teaching

Fall 2015 Instructor, State of the Earth: Shifts and Cycles, course by A. C. Maloof and

F. J. Simons, Princeton FRS 135. Introduced freshmen to the tools of scientists, with hands on data collection, analysis, MATLAB programming exercises, and

scientific writing in LATEX.

Fall 2015 Instructor, Data, Models, and Uncertainty in the Natural Sciences, course by

F. J. Simons, Princeton GEO 422.

Recent Publications

http://goo.gl/sNDvUD Harig, C. and F. J. Simons.

Ice mass loss in the North American Arctic.

Submitted, In Review.

Mordret, A., D. Mikesell, C. Harig, B. P. Lipovsky, and G. A. Prieto.

Monitoring South-West Greenland's ice sheet melt with ambient seismic noise.

Submitted, In Review at Nature Publishing Group.

Harig, C. and F. J. Simons.

Accelerated West Antarctic ice mass loss continues to outpace

East Antarctic gains.

Earth Planet. Sci. Let., 415, 134-141, 2015.

http://dx.doi.org/10.1016/j.epsl.2015.01.029

Harig, C., K. W. Lewis, A. Plattner, and F. J. Simons.

A suite of software analyzes data on the sphere,

Eos, 96, 2015. http://dx.doi.org/10.1029/2015E0025851

Morrow, E., J. X. Mitrovica, M. G. Sterenborg, and C. Harig.

A test of recent inferences of net polar ice mass balance based on

long-wavelength gravity.

Journal of Climate, 26, 6535-6540, 2013.

http://dx.doi.org/10.1175/JCLI-D-13-00078.1

Harig, C. and F. J. Simons.

Mapping Greenland's mass loss in space and time. Proc. Natl. Acad. Sc., 109(49), 19934–19937, 2012.

http://dx.doi.org/10.1073/pnas.1206785109

Published Software:

SLEPIAN Delta: Analysis of time-variable gravity from the GRACE

Main Author

satellite mission using Spherical Harmonics and spherical Slepian functions,

version 1.0, 2014.

http://csdms.colorado.edu/wiki/Model:SLEPIAN_Delta

http://dx.doi.org/10.5281/zenodo.15707

Recent Community

Refereeing	National Science Foundation, Annals of Glaciology, Earth and Planetary Science
	Letters, Geophysical Journal International, Journal of Geophysical Research-Solid
	Earth
2015	AGU Fall Meeting Session convener (SEDI)
2012 - 2015	NASA Program for Arctic Regional Climate Assessment (PARCA)
	meeting participant
2015	Co-Founder, Princeton Department of Geosciences Post-doc council

2014 National Academy of Sciences (NAS), Antarctica Science Priorities Committee,

Community outreach meeting participant

2014 Princeton Department of Geosciences, Advisory Council Post-doc representative