

# PI Biographical sketch – Gordon S. Hamilton

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EDUCATION ◇ **University of Cambridge**, Cambridge, UK.  
*Ph.D. in Geophysics*: 1992.

◇ **University of Aberdeen**, Aberdeen, UK.  
*B.Sc. (Honors) in Geoscience*: 1988.

CAREER ◇ **University of Maine**, Orono, ME.

HISTORY 2006–present: Associate Research Professor; Climate Change Institute, and Department of Earth Sciences.

2000–2006: Assistant Research Professor; Climate Change Institute, and Department of Earth Sciences.

◇ **The Ohio State University**, Columbus, OH.

1994–2000: Senior Research Associate, Byrd Polar Research Center

◇ **Norwegian Polar Institute**, Oslo, Norway.

1992–1994: Research Scientist, Geophysics Division

FIVE RELEVANT PUBLICATIONS Hamilton, G.S., L.A. Stearns, P. Elósegui, J.L. Davis & M.L. Andersen. 2008. Tidal modulation of ice flow on Kangerdlugssuaq Glacier, East Greenland, from high-rate GPS observations. *Geophysical Research Letters*, submitted November 2008.

Nettles, M., T. Larsen, P. Elósegui, G.S. Hamilton, L.A. Stearns, A. Ahlstrøm, J.L. Davis, M.L. Andersen, J. de Juan, S.A. Khan, L. Stenseng, G. Ekström & R. Forsberg. 2008. Step-wise changes in glacier flow speed coincide with calving and glacial earthquakes at Helheim Glacier, Greenland. *Geophysical Research Letters*, in press, October 2008.

Sneed, W.A & G.S. Hamilton. 2007 Evolution of melt pond volume on the surface of the Greenland Ice Sheet. *Geophysical Research Letters*, **34**, L03501, doi:10.1029/2006GL028697.

Stearns, L.A. & G.S. Hamilton. 2007. Rapid volume loss from two East Greenland outlet glaciers quantified using repeat stereo satellite imagery. *Geophysical Research Letters*, **34**, L05503, doi:10.1029/2006GL028982.

Stearns, L.A., G.S. Hamilton & N. Reeh. 2005. Multi-decadal record of ice dynamics on Dugaard Jensen Gletscher, East Greenland, from satellite imagery and terrestrial measurements. *Annals of Glaciology*, **42**, 53-58.

FIVE OTHER PUBLICATIONS Hamilton, G.S. & I.M. Whillans. 2000. Point measurements of mass balance of the Greenland Ice Sheet using precision vertical GPS surveys. *Journal of Geophysical Research*, **105** (B7), 16,295-16,301.

Hamilton, G.S. & I.M. Whillans. 2002. Local rates of ice sheet thickness change in Greenland. *Annals of Glaciology*, **35**, 79-83.

Khan, S.A., J. Wahr, L.A. Stearns, G.S. Hamilton, T. van Dam, K.M. Larson & O. Francis. 2007. Elastic uplift in southeast Greenland due to rapid ice mass loss. *Geophysical Research Letters*, **34**, L21701, doi:10.1029/2007GL031468.

Sneed, W.A., R. LeB. Hooke & G.S. Hamilton. 2008. Accelerated thinning rate of Barnes Ice Cap, Baffin Island, Arctic Canada. *Geology*, **36**(1), 71-74, doi: 10.1130/G24013A.1.

Stearns, L.A., B.L. Smith & G.S. Hamilton. 2008. Subglacial floods cause rapid increase in flow speed of a major East Antarctic outlet glacier. *Nature Geoscience*, in press, doi:10.1038/ngeo0356

SYNERGISTIC ♦ **Panelist**, *NASA ICESat II review panel* (October 2008).

ACTIVITIES ♦ **Associate Editor**, *Journal of Geophysical Research – Earth Surface* (July 2007 – present)

♦ **Board member**, *Maine Global Climate Change, Inc.* (December 2006 – present).

♦ **Technical expert**, *Parliament of Finland – Committee on Climate Change* (March 2006).

♦ **Institutional representative**, *UNAVCO* (October 2005 – present).

♦ **Science Team Member**, *NASA – Terra/ASTER mission* (May 2004 – present)

♦ **Chief Editor**, *Annals of Glaciology, volume 41* (March 2004 – October 2005)

ADVISORS & ♦ **Advisors**

COLLABORATORS PhD: Julian Dowdeswell, (*University of Cambridge*); Postdoctoral: Jon Ove Hagen, (*Norsk Polarinstitutt, now University of Oslo*)

♦ **Major collaborators in the last 48 months**

Steven Arcone (*US Army Cold Regions Research and Engineering Lab*), James Davis (*Smithsonian Astrophysical Observatory*), Pedro Elósegui (*Spanish Institute for Space Studies*), Roger Hooke (*University of Maine*), Shfaqat Abbas Kahn (*Danish National Space Center*), Meredith Nettles (*Lamont Doherty Earth Observatory*), Bruce Raup (*University of Colorado*), Niels Reeh (*Technical University of Denmark*), Benjamin Smith (*University of Washington*), Fiammetta Straneo (*Woods Hole Oceanographic Institution*), David Sutherland (*Woods Hole Oceanographic Institution*), John Wahr (*University of Colorado*)

♦ **Thesis committee chair**

Blue Spikes, PhD (*graduated 2004*), Leigh Stearns, PhD (*graduated 2007*), William Sneed, MS (*graduated 2007*), Daniel Breton, PhD (*expected 2009*), Monica Hall, MS (*expected 2010*), Kristin Schild, MS (*expected 2010*), William Sneed, PhD (*expected 2010*)