Ian M. Nesbitt

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Education

Since 2017 **Masters Student in Earth and Climate Sciences**, *School of Earth and Climate Sciences, College of Natural Sciences, Forestry, and Agriculture, University of Maine*, Orono, ME, USA.
Thesis: Using diverse methods to determine the volume and stratigraphy of sediment in a formerly glaciated lake in central Maine, USA
Advisor: Seth W. Campbell, *Co-advisor*: Sean M.C. Smith
Associated Projects: readgssi, a Python tool to read and process radar data; SeidarT, a seismic and radar survey modeling toolbox

2009–2013 **Bachelor of Arts in Geosciences with Honors**, *Williams College*, Williamstown, MA, USA.
Thesis: A comparative study of snowmelt-driven water budgets in adjacent alpine basins, Niwot Ridge, Colorado Front Range
Advisor: David P. Dethier

Awards and Scholarships

2021 Golden Key (invited)
2018–2023 Co-President, Williams College class of 2013
2013 Sigma Xi induction
2012 Williams College Class of 1960 Scholar in Geosciences

Work Experience

2018–2020 **Lead Scientist**, *Raspberry Shake, S.A.*, Boquete, Chiriqui, Panama.
Duties: Technical support, software development, QA/QC of seismic instruments, development and QA/QC of educational materials.
Projects: https://github.com/raspishake/rsudp

2019–2020 **Lead Geophysicist**, *Allan Hills Antarctic Expedition I-165-M, Princeton University - NSF Award Number 1744993*, McMurdo Station, Antarctica.
Duties: Collected and processed 100 km of ground-penetrating radar (GPR) survey data from a blue ice area on the eastern side of the Trans-Antarctic Mountains.

2014–2017 **Geophysical Scientist**, *e4sciences LLC*, Newtown, CT, USA.
Duties: Led field team for many types of geophysical survey including Mobile LiDAR, ground-penetrating radar, high-precision GPS, multibeam echosounding, sub-bottom seismic, sidescan sonar. Field interpretation, and on-the-ground operations decision-making including boat handling.
Projects: Created survey-to-delivery workflow for 3D LiDAR end-user deliverables.

2013–2014 **Assistant Nordic Ski Coach**, *St. Michael's College*, Colchester, VT, USA.
Duties: Created and supervised individualized training plans for athletes, technique instruction, race day logistics including ski preparation.

Teaching

2018 **Global Environmental Change - ERS 201**, *University of Maine*, Orono, ME, USA.
Karl J. Kreutz and Ian M. Nesbitt instructed students in accepted and debated climate theory from an earth systems perspective.

2017 **Earth Systems - ERS 200**, *University of Maine*, Orono, ME, USA.
Aaron E. Putnam, Sean M.C. Smith, Peter O. Koons, and Ian M. Nesbitt instructed students in earth systems theory.

2012–2013 **GIS and Remote Sensing**, *Williams College*, Williamstown, MA, USA.
David P. Dethier and Ian M. Nesbitt instructed students in traditional and emerging geomorphologic theory, methods, and practice.

2012 **Geomorphology**, *Williams College*, Williamstown, MA, USA.
David P. Dethier and Ian M. Nesbitt instructed students in geographical information systems (GIS) theory, technology and software, and advised in the application of these methods via end-of-term projects.

Publications

Peer-reviewed scientific articles

in prep. **GPR use in paleolimnology**.
Ian M. Nesbitt, Seth W. Campbell, Steven A. Arcone, and Sean M.C. Smith

in review **The sediment delivery continuum from deglaciation to the modern watershed based on lake sedimentary deposits in the Northeastern USA**, *Quaternary Research*.
Ian M. Nesbitt, Seth W. Campbell, Sean M.C. Smith, Bess G. Koffman, Steven A. Arcone, and Kristin M. Schild

in review **rsudp: A Python package for real-time seismic monitoring with Raspberry Shake instruments**, *Journal of Open Source Software*.
Ian M. Nesbitt, Richard I. Boaz, and Justin Long
doi: 10.21105/joss.02565

2020 **Global quieting of high-frequency seismic noise due to COVID-19 pandemic lockdown measures**, *Science*.
Thomas Lecocq, Stephen P Hicks, Koen Van Noten, Kasper van Wijk, Paula Koelemeijer, Raphael SM De Plaen, Frédérick Massin, Gregor Hillers, Robert E Anthony, Maria-Theresia Apoloner, ... Ian M. Nesbitt et al.
doi: 10.1126/science.abd2438

2016 **Tracing subarctic Pacific water masses with benthic foraminiferal stable isotopes during the LGM and late Pleistocene**, *Deep-Sea Research Part II: Topical Studies in Oceanography*.
Mea S. Cook, A. Christina Ravelo, Alan C. Mix, Ian M. Nesbitt, and Nari V. Miller
doi: 10.1016/j.dsr2.2016.02.006

Conference proceedings and presentations

2019 **A decision-making framework for sedimentation analyses in dammed river corridor impoundments** , *Geological Society of America Abstracts with Programs 51*, Portland, ME, Talk.
Ian M. Nesbitt, Sean M.C. Smith, Bess G. Koffman, Seth W. Campbell, and Steven A. Arcone

2018 **Sedimentary architecture and accumulation rates of multiple lakes in New England, USA**, *AGU Fall Meeting Abstracts 2018*, Washington, D.C., Poster NS41B-0830.
Ian M. Nesbitt, Seth W. Campbell, Steven A. Arcone, Sean M.C. Smith, and Bess G. Koffman

2018 **Holocene sediment volume determined by ground-penetrating radar and sidescan sonar in Maine, USA**, *Geological Society of America, Northeastern Section - 53rd Annual Meeting*, Talk.
Ian M. Nesbitt, Seth W. Campbell, Steven A. Arcone, and Sean M.C. Smith

2017 **Using ground-penetrating radar and sidescan sonar to compare lake bottom geology in New England**, *AGU Fall Meeting Abstracts 2017*, New Orleans, LA, Talk PP44B-01.
Ian M. Nesbitt, Seth W. Campbell, Steven A. Arcone, and Sean M.C. Smith

2017 **New England lake bottom geology and sedimentation rates derived from ground-penetrating radar**, *GSA Annual Meeting*, Seattle, WA.
Seth W. Campbell, Ian M. Nesbitt, Steven A. Arcone, Sean M.C. Smith

2014 **Tracing Bering Sea circulation with benthic foraminiferal stable isotopes during the Pleistocene**, *AGU Fall Meeting Abstracts 2014*, PP23D-08.
Mea S. Cook, A. Christina Ravelo, Alan C. Mix, Ian M. Nesbitt, and Nari V. Miller

2013 **A comparative study of snowmelt-driven water budgets in adjacent alpine basins, Niwot Ridge, Colorado Front Range**, *Geological Society of America, Northeastern Section - 48th Annual Meeting*, Bretton Woods, NH.
Ian M. Nesbitt and David P. Dethier

Open-source software

2021 **SeidarT: Seismic and radar survey modeling toolbox**.
Steven P. Bernsen, Christopher C. Gerbi, Ian M. Nesbitt, and Ben Hills
https://github.com/UMainedynamics/SeidarT

2020 **rsudp: Continuous visual display, sudden motion monitoring, and historical replay of Raspberry Shake data**.
Ian M. Nesbitt, Richard I. Boaz, and Justin Long
https://github.com/raspishake/rsudp
doi: 10.21105/joss.02565

2019 **gpx2dzg: a tool to convert GPX files to GSSI's proprietary DZG format, and plot comparisons of marks in GPX and DZT/DZX files**, *Zenodo*.
Developer and maintainer
https://github.com/iannesbitt/gpx2dzg
doi: 10.5281/zenodo.3260948

2019 **readgssi: an open-source tool to read and plot GSSI ground-penetrating radar data**, *Zenodo*.
Developer and maintainer
https://github.com/iannesbitt/readgssi
doi: 10.5281/zenodo.1439119

Technical Skills

Programming	Python, bash, javascript
Markup	Markdown, LaTeX, HTML, CSS
Tools	GNU/Linux, Unix Terminal, bash, zsh, git, GitHub, Jupyter Notebooks, GNU Make, Inkscape, GIMP

Languages

English	Native
Spanish	Beginner