

## Wilson Sauthoff (he/him)

Contact Information	Hydrologic Sciences & Engineering Program Department of Geophysical Engineering Colorado School of Mines 1500 Illinois St. Golden, CO 80401 USA	<a href="mailto:sauthoff@mines.edu">sauthoff@mines.edu</a> <a href="https://wsauthoff.github.io">https://wsauthoff.github.io</a> <a href="https://glaciology.mines.edu">https://glaciology.mines.edu</a>
Education	<b>Hydrologic Science and Engineering Ph.D. (in progress, expected 2025)</b> <b>Data Science M.Sc. (in progress, expected 2023)</b> Colorado School of Mines Advisor: Dr. Matthew Siegfried, (8/2020–Present)  <b>Ocean Sciences M.Sc.</b> University of California Santa Cruz Advisors: Drs. Christina Ravelo & Matthew McCarthy, (9/2013–9/2016)  <b>Environmental Science and Management B.Sc.</b> University of California Davis Oceanography minor, Advisor: Dr. Tessa Hill, (9/2010–6/2013)	
Peer-Reviewed Publications	Brault, E., Koch, P., McMahon, K., Broach, K., Rosenfield, A., <b>Sauthoff, W.</b> , Loeb, V., Arrigo, K., Smith, W. (2018). Carbon and nitrogen isoscapes in West Antarctica reflect oceanographic transitions. <i>Marine Ecology Progress Series</i> . <a href="https://doi.org/10.3354/meps12524">https://doi.org/10.3354/meps12524</a>  Serrato Marks, G., LaVigne, M., Hill, T., <b>Sauthoff, W.</b> , Guilderson, T., Roark, B., Dunbar, R., Horner, T. (2017). Reproducible Ba/Ca variations recorded by northeast Pacific bamboo corals. <i>Paleoceanography and Paleoclimatology</i> . <a href="https://doi.org/10.1002/2017PA003178">https://doi.org/10.1002/2017PA003178</a>  Moffitt, S., Moffitt, R., <b>Sauthoff, W.</b> , Hewett, K., Davis, K., Hill, T. (2015) Paleooceanographic insights on recent oxygen minimum zone expansion: Lessons for modern oceanography. <i>PLOS ONE</i> . <a href="https://doi.org/10.1371/journal.pone.0115246">https://doi.org/10.1371/journal.pone.0115246</a>	
Other Publications	Siegfried, M., Schroeder, D., <b>Sauthoff, W.</b> , Smith, B. (2021) Investigating a large subglacial lake drainage in East Antarctica with ice-penetrating radar. <i>SEG Technical Program Expanded Abstracts</i> . <a href="https://doi.org/10.1190/segam2021-3582777.1">https://doi.org/10.1190/segam2021-3582777.1</a>  Ruck, K., Sheffield Guy, L., Chetty, S., French, N., Seefeldt, M., Carpenter, P., Frey, K., Griffith, P., Prior-Jones, M., <b>Sauthoff, W.</b> (Eds.). (2020). Polar Technology Conference 2020 Report. Arctic Research Consortium of the US (ARCUS). <a href="https://www.arcus.org/publications/31301">https://www.arcus.org/publications/31301</a>  Isern, A., Burtler, N., Shanhun, F., <b>Sauthoff, W.</b> (Eds.) (2019). Report on International Ross Sea Region Collaboration and Coordination Workshop. Scientific Committee on Antarctic Research. <a href="https://www.scar.org/scar-news/pais-news/ross-sea-workshop-report/">https://www.scar.org/scar-news/pais-news/ross-sea-workshop-report/</a>  <b>Sauthoff, W.</b> , Ravelo, C., McCarthy, M. (2016). Nitrogen isotopes of amino acids in marine sediment: A burgeoning tool to assess organic matter quality and changes in supplied nitrate $\delta^{15}\text{N}$ . M.Sc. thesis, University of California Santa Cruz. <a href="http://escholarship.org/uc/item/63r5v4zj">http://escholarship.org/uc/item/63r5v4zj</a>	

	<p><b>Sauthoff, W.</b> (2013) Gulf of Alaska and California bamboo corals: A new archive of climate change. <i>Explorations: The UC Davis Undergraduate Research Journal</i>, Vol. 15.  <a href="http://explorations.ucdavis.edu/2013/sauthoff_wilson.html">http://explorations.ucdavis.edu/2013/sauthoff_wilson.html</a></p>
Selected Conference Presentations	<p><i>CryoSat-2/ICESat-2 integrated time series and comparison of shoreline evolution in Antarctic active subglacial lakes</i> (talk), 2022 AGU Fall Meeting Session C008, Chicago, IL (12/2022)</p> <p><i>ICESat-2-extended time series of subglacial volume fluxes using time-variable shorelines of Antarctic active subglacial lakes</i> (talk) Ice, Cloud and Land Elevation Satellite-2 Science Symposium 2022, Austin, TX (10/2022)</p> <p><i>Variable shorelines of Antarctic active subglacial lakes reveal large underestimates of subglacial volume fluxes</i> (poster), 2022 GSA Connects Session T107, Denver, CO (10/2022)</p> <p><i>Refined time series of Antarctic active subglacial lakes: New multimission volume flux estimates using evolving shorelines</i> (talk), 2022 WAIS Workshop, Estes Park, CO (9/2022)</p> <p><i>Antarctic active subglacial lake shoreline migration and novel features of ice height anomaly</i> (talk), AGU Frontiers in Hydrology Meeting, San Juan, PR (6/2022)</p> <p><i>Antarctic active subglacial lake shoreline migration and novel features of ice height anomaly</i> (talk), Spring 2022 Ice, Cloud and Land Elevation Satellite-2 Science Team Meeting, Boulder, CO (5/2022)</p> <p><i>Observing connected subglacial lake drainage at Slessor Glacier, East Antarctica, using ICESat-2 laser altimetry</i> (poster), 2021 WAIS Workshop, Sterling, VA (9/2021)</p>
Workshop Participation	<p>Participant, Joint IAPSO/IACS <a href="#">Commission on Ice-Ocean Interactions Online workshop</a>, virtual (10/2022)</p> <p>Participant, CLIVAR <a href="#">Sources, Pathways and Impacts of Fresh water in northern and southern Polar oceans and seas</a> (SPICE UP), virtual (9/2022)</p> <p>Co-organizer, International Ross Sea Region Collaboration and Coordination Workshop, Scientific Committee on Antarctic Research (SCAR) <a href="#">XIII International Symposium on Antarctic Earth Sciences (ISAES) Conference</a>, Incheon, Korea (7/2019)</p> <p>NSF Representative, <a href="#">2019 Next Generation of Polar Researchers Leadership Symposium</a>, Catalina, CA (5/2019)</p>
Awards	<p>WAIS Workshop Early Career Researcher Travel Grant, \$280, (9/2021)</p> <p>ESIP Request for Machine Learning Tutorials Grant (Project Partner), \$5,000, (7-12/2022)</p> <p>Mines Hydrological Science &amp; Engineer Student Leadership Award, \$400, (7/2022)</p> <p>WAIS Workshop Early Career Researcher Travel Grant, \$651, (9/2021)</p> <p>Mines Hydrological Science &amp; Engineer Student Leadership Award, \$220 (5/2021)</p> <p>NSF Antarctic Service Medal, (03/2017)</p> <p>Graduate Student Association Travel Grant, \$288, (5/2015)</p> <p>Myers Oceanographic Trust Grant, \$1100, (4/2015)</p> <p>Friends of Long Marine Lab Grant, \$950, (1/2015)</p> <p>PADI Foundation Grant, \$1685, (9/2013)</p> <p>Provost's Undergraduate Fellowship, \$894, (12/2011)</p>

Mentoring	<b>Colorado School of Mines</b> Venezia Follingstad, B.Sc. student (2022) Kayla Hubbard, M.Sc. student, (2021), now NSF science assistant  <b>University of California Santa Cruz</b> Natalia Spritzer, Science Internship Program high school intern, (2015) Sami Chen, undergraduate lab assistant, (2014-2015), now Ph.D. student at Stanford Nicolette Chiem, undergraduate CalTeach intern, (2014-2015) Linda Pineda, undergraduate researcher, (2015-2016)
	<b>Teaching Experience</b> <b>Colorado School of Mines</b> <i>Teaching Assistant</i> Applications of Remote Sensing (Geophysics 470/570), 1/2022-5/2022, Instructor: Dr. Matthew Siegfried  <b>University of California Santa Cruz</b> <i>Teaching Assistant</i> Ecology & Society (Environmental Studies 100L), 1/2016-3/2016, Instructors: Drs. Sharifa Crandall & Philip Longo Microbiology (Microbiology & Environmental Toxicology 119), 9/2015-12/2015, Instructor: Dr. Victoria Stone Our Changing Planet (Oceans 80B), 9/2014–12/2014, 4/2014–6/2014, Instructor: Dr. Matthew McCarthy  <b>University of California Davis</b> <i>Laboratory Teaching Assistant</i> , Mathematics and Science Teaching Program for biological science laboratory (BIS 2A-CL), 1/2012–3/2012 <i>Biological Sciences Tutor</i> , Student Academic Success Center, 6/2011–12/2011 <i>Instructor</i> , Biological Sciences supplemental course (BIS 98), 4/2011–6/2011
Professional Experience	<b>National Science Foundation Office of Polar Programs</b> Alexandria, Virginia <i>Science Assistant</i> , Facilitated merit-based review of scientific proposals for funding consideration; Performed proposal and award data analysis to assess trends in metrics including institution parameters, proposing researcher demographics, etc. to achieve portfolio balance and broader impacts; Wrote internal documentation surrounding funding decisions; Project management of special initiatives to increase stakeholder engagement; Executive Secretary to Executive Management Board of cross-agency management partners of the U.S. Antarctic Program, (3/2018–8/2020)
	<b>Pacific Architects &amp; Engineers</b> McMurdo Station, Antarctica <i>Environmental Specialist</i> , Coordinated site assessments, remediation, monitoring, and training activities at primary logistical hub and remote field camps; Ensured compliance with regulatory policies pertaining to environmental protection and waste management observing the Antarctic Treaty; Collected and analyzed environmental samples; Maintained GIS and GPS records; Authored technical reports, (7/2017–2/2018)
	<b>Monterey Bay Aquarium Research Institute</b> Moss Landing, California <i>Ocean Chemistry Intern</i> , Researched deep-sea oil leaks using laser Raman spectroscopy to model environmental fate of oil pollution and methane seeps; Coded data reduction program; Mobilized materials for fieldwork, (6-9/2013)

**Sacramento Air Quality Management District**

Sacramento, California

*Mobile Sources Intern*, Implemented incentive program oversight; Analyzed air quality surveys; Prepared technical documents including grant final reports; Organized public outreach efforts, (6/2012-6/2013)