

Daniel Lowry

Curriculum Vitae

University of South Florida
College of Marine Science
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Research Interest

My research is aimed at understanding how ice sheets interact with the ocean, atmosphere, and Earth's crust, and how these system interactions impact the global sea level and climate system. To do this, I use physics-based numerical models of ice sheet flow constrained by geophysical observations and paleoclimate proxies as well as applying statistical and machine learning approaches. Recent contributions include work determining the relative influences of glaciological, oceanic, and solid earth processes on Antarctic grounding line fluctuations during the Holocene. I was a Contributing Author to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report for the Chapter on Ocean, Cryosphere, and Sea Level Change.

Appointments

- 2025–present **Assistant Professor**, *College of Marine Science*, University of South Florida, USA.
- 2023–2025 **Senior Research Scientist**, *Department of Surface Geosciences*, GNS Science, NZ.
- 2021–2023 **Research Scientist**, *Department of Surface Geosciences*, GNS Science, NZ.
- 2019–2021 **Postdoctoral Research Fellow**, *Department of Surface Geosciences*, GNS Science, NZ.

Education

- 2016–2019 **PhD**, *Antarctic Research Centre*, Victoria University of Wellington, NZ.
Deglacial climate and ice sheet evolution of the Ross Embayment, Antarctica
- 2012–2014 **MSc**, *Department of Earth & Environmental Science*, University of Michigan, USA.
Thresholds for Paleozoic ice sheet initiation
- 2008–2012 **BSc with Honors**, *Department of Geological Sciences*, Brown University, USA.

Publications

h-index: 20 (source: ResearchGate); Citations: >2000

Journal Articles

- 2025 Charnay, V., **Lowry, D.P.**, Keller, E.D., Sood, A. Evaluation of regional climate features over Antarctica in the PMIP past1000 experiment and implications for 21st-century sea level rise. *Climate of the Past*, In Press.
- 2025 Golledge, N.R., Keller, E.D., Gossart, A., Malyarenko, M., Bahamondes-Dominguez, A., Krapp, M., Jendersie, S., **Lowry, D.P.**, Alevropoulos-Borrill, A., Notz, D. Antarctic coastal polynyas in the global climate system. *Nature Reviews Earth & Environment*, 6, 126–139, <https://doi.org/10.1038/s43017-024-00634-x>.
- 2025 Baldacchino, F., Golledge, N.R., Morlighem, M., Horgan, H., Alevropoulos-Borrill, A., Malyarenko, A., Gossart, A., **Lowry, D.P.**, van Haastrecht, L. Modelling GNSS-observed seasonal velocity changes of the Ross Ice Shelf, Antarctica, using the Ice-sheet and Sea-level System Model (ISSM). *The Cryosphere*, 19(1), 107-127, <https://doi.org/10.5194/tc-19-107-2025>.
- 2024 **Lowry, D.P.**, Han, H.K., Golledge, N.R., Gomez, N., Johnson, K.M. and McKay, R.M., 2024. Ocean cavity regime shift reversed West Antarctic grounding line retreat in the late Holocene. *Nature Communications*, 15(1), 3176, <https://doi.org/10.1038/s41467-024-47369-3>.

- 2024 Levy, R., Naish, T., **Lowry, D.**, Priestley, R., Winefield, R., Alevropoulos-Borrill, A., . . . Trayling, N. Melting Ice and Rising Seas – Connecting Projected Change in Antarctica's Ice Sheets to Communities in Aotearoa New Zealand. *Journal of the Royal Society of New Zealand*, 1-24, <https://doi.org/10.1080/03036758.2023.2232743>.
- 2024 Seroussi, H., et al. (ISMIP6 team, including **Lowry, D.P.**). Evolution of the Antarctic Ice Sheet Over the Next Three Centuries From an ISMIP6 Model Ensemble. *Earth's Future*, 12(9), e2024EF004561, <https://doi.org/10.1029/2024EF004561>.
- 2024 Alevropoulos-Borrill, A., Golledge, N.R., Cornford, S.L., **Lowry, D.P.** and Krapp, M., Sustained ocean cooling insufficient to reverse sea level rise from Antarctica. *Communications Earth & Environment*, 5(1), 150, <https://doi.org/10.1038/s43247-024-01297-8>.
- 2023 Seroussi, H., et al. (ISMIP6 team, including **Lowry, D.P.**). Insights on the vulnerability of Antarctic glaciers from the ISMIP6 ice sheet model ensemble and associated uncertainty. *The Cryosphere*, 17, 5197–5217, <https://doi.org/10.5194/tc-17-5197-2023>.
- 2023 Stutz, J., Eaves, S., Norton, K., Lowry, D., Licht, K., McKay, R., Johnson, K. Inland thinning of Byrd Glacier, Antarctica during Ross Ice Shelf formation. *Earth Surface Processes & Landforms*, 1-18, <https://doi.org/10.1002/esp.5701>.
- 2022 Patterson, M. O., et al. (SWAIS 2C Team, including **Lowry, D.P.**). Sensitivity of the West Antarctic Ice Sheet to +2° C. *Scientific Drilling*, 30, 101-112, <https://doi.org/10.5194/sd-30-101-2022>.
- 2021 **Lowry, D.P.**, Krapp, M., Golledge, N. R., Alevropoulos-Borrill, A. The influence of emissions scenarios on future Antarctic ice loss is unlikely to emerge this century. *Communications Earth & Environment*, 2(1), 1-14, <https://doi.org/10.1038/s43247-021-00289-2>.
- 2021 Payne, A. J., et al. (ISMIP6 team, including **Lowry, D.P.**). Future sea level change under coupled model intercomparison project phase 5 and phase 6 scenarios from the Greenland and Antarctic ice sheets. *Geophysical Research Letters*, 48(16), e2020GL091741, <https://doi.org/10.1029/2020GL091741>.
- 2021 Golledge, N.R., Clark, P.U., He, F., Dutton, A., Turney, C.S.M., Fogwill, C.J., Naish, T.R., Levy, R.H., McKay, R.M., **Lowry, D.P.**, Bertler, N.A. Retreat of the Antarctic Ice Sheet during the Last Interglaciation and implications for future change. *Geophysical Research Letters*, 48(17), e2021GL094513, <https://doi.org/10.1029/2021GL094513>.
- 2021 Stutz, J., Mackintosh, A., Norton, K., Whitmore, R., Baroni, C., Jamieson, S. S., . . . **Lowry, D.P.**, Woodruff, T. Mid-Holocene thinning of David Glacier, Antarctica: chronology and controls. *The Cryosphere*, 15(12), 5447-5471, <https://doi.org/10.5194/tc-15-5447-2021>.
- 2021 Ashley, K.E., McKay, R., Etourneau, J., Jimenez-Espejo, F.J., Condrón, A., Albot, A., Crosta, X., Riesselman, C., Seki, O., Massé, G., Golledge, N.R., Gasson, E., **Lowry, D.P.**, Barrand, N. E., Johnson, K., Bertler, N.A.N., Esciuta, C., Dunbar, R., Bendle, J.A. Mid-Holocene Antarctic sea-ice increase driven by marine ice sheet retreat. *Climate of the Past*, 17(1), 1-19, <https://doi.org/10.5194/cp-17-1-2021>.
- 2021 Edwards, T., et al. (ISMIP6 and Glacier MIP teams, including **Lowry, D.P.**). Projected land ice contributions to twenty-first-century sea level rise. *Nature*, 593(7857), 74-82, <https://doi.org/10.1038/s41586-021-03302-y>.
- 2021 Golledge, N.R., & **Lowry, D.P.** Is the marine ice cliff hypothesis collapsing? *Science*, 372(6548), 1266-1267, DOI: 10.1126/science.abj3266.
- 2020 **Lowry, D.P.**, Golledge, N.R., Bertler, N.A.N., Jones, R.S., McKay, R., Stutz, J. Geologic controls on ice sheet sensitivity to deglacial climate forcing in the Ross Embayment, Antarctica. *Quaternary Science Advances*, 1, 100002, <https://doi.org/10.1016/j.qsa.2020.100002>.
- 2020 Goelzer, H. et al. (ISMIP6 team, including **Lowry, D.P.**). The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6. *The Cryosphere*, 14(9), 3071-3096, <https://doi.org/10.5194/tc-14-3071-2020>.

- 2020 Seroussi, H., et al. (ISMIP6 team, including **Lowry, D.P.**). ISMIP6 Antarctica: a multi-model ensemble of the Antarctic ice sheet evolution over the 21st century. *The Cryosphere*, 14(9), 3033-3070, <https://doi.org/10.5194/tc-14-3033-2020>.
- 2019 **Lowry, D.P.**, Golledge, N.R., Bertler, N.A.N., Jones, R.S., McKay, R. Deglacial grounding-line retreat in the Ross Embayment, Antarctica, controlled by ocean and atmosphere forcing. *Science Advances*, 5(8), eaav8754, <https://doi.org/10.1126/sciadv.aav8754>.
- 2019 **Lowry, D.P.**, Morrill, C. Is the Last Glacial Maximum a reverse analog for future hydroclimate changes in the Americas? *Climate Dynamics*, 52(7-8), 4407-4427, <https://doi.org/10.1007/s00382-018-4385-y>.
- 2019 **Lowry, D.P.**, Golledge, N.R., Meniel, L., Bertler, N.A.N. Deglacial evolution of regional Antarctic climate and Southern Ocean conditions in transient climate simulations. *Climate of the Past* 15, 189-215, <https://doi.org/10.5194/cp-15-189-2019>.
- 2019 Seroussi, H., et al. (ISMIP6 team, including **Lowry, D.P.**). initMIP-Antarctica: an ice sheet model initialization experiment of ISMIP6. *The Cryosphere*, 13(5), 1441-1471, <https://doi.org/10.5194/tc-13-1441-2019>.
- 2018 Morrill, C., **Lowry, D.P.**, Hoell, A. Thermodynamic and Dynamic Causes of Pluvial Conditions during the Last Glacial Maximum in Western North America, *Geophysical Research Letters*, 45(1), 335-345, <https://doi.org/10.1002/2017GL075807>.
- 2018 Bertler, N.A., et al. (Roosevelt Island Climate Evolution community, including **Lowry, D.P.**). The Ross Sea Dipole–temperature, snow accumulation and sea ice variability in the Ross Sea region, Antarctica, over the past 2700 years. *Climate of the Past*, 14(2), 193-214, <https://doi.org/10.5194/cp-14-193-2018>.
- 2014 **Lowry, D.P.**, Poulsen, C. J., Horton, D. E., Torsvik, T. H., Pollard, D. Thresholds for Paleozoic ice sheet initiation. *Geology*, 42(7), 627-630, <https://doi.org/10.1130/G35615.1>.
- 2013 Friedlander, S.M., Herrmann, A.L., **Lowry, D.P.**, Mephram, E.R., Lek, M., North, K.N., Organ, C.L. ACTN3 allele frequency in humans covaries with global latitudinal gradient. *PLoS one*, 8(1), e52282, <https://doi.org/10.1371/journal.pone.0052282>.

Book Chapters

- 2025 **Lowry, D.P.**, Duncan, B., Davies, B.J., Halberstadt, A.R.W. The evolution of the Antarctic Ice Sheet from inception through the Anthropocene. In Press: *Comprehensive Cryospheric Science and Environmental Change*, Elsevier. Edited by: C. Stokes, <https://doi.org/10.1016/B978-0-323-85242-5.00004-X>.
- 2025 Arblaster, J., Chiessi, C.M., Gillett, Z.E., **Lowry, D.**, Meehl, G.A. Climate Change and Long-Term Climate Variability. In Press: *Southern Hemisphere Meteorology & Climate*, Cambridge University Press. Edited by: A. S. Taschetto, T. Ndarana, T. Ambrizzi.
- 2020 Levy, R., Naish, T., Bell, R., Golledge, N., Clarke, K., Garner, G., Hamling, S., Heine, Z., Hreinsdottir, S., Lawrence, J., **Lowry, D.**, Priestley, R. E., and Vargo, L. J.: Te tai pari o Aotearoa - Future Sea Level Rise around New Zealand's Dynamic Coastline, In: Hendtlass, C., Morgan, S, and Neale, D (eds.) *Coastal Systems & Sea Level Rise: What to look for in the future*. New Zealand Coastal Society, pp. 11-20.

Selected Presentations

- 2024 **Lowry, D.P.**, Golledge, N.R., Krapp, M., Alevropolous-Borrill, A. Emulating sea level contributions from the Antarctic Ice Sheet. Ice Sheets and Artificial Intelligence Workshop, Wellington, NZ., (Invited).
- 2024 **Lowry, D.P.**, Han, H.K., Golledge, N.R., Gomez, N., Johnson, K.M., McKay, R., Dunbar, G. Relative influences of the ocean and solid Earth on Holocene retreat and advance of the West Antarctic Ice Sheet's Siple Coast. The INSTabilities & Thresholds in ANTarctica (INSTANT) Holocene Readvance Working Group, Virtual.

- 2023 **Lowry, D.P.**, Han, H.K., Golledge, N.R., Gomez, N., Johnson, K.M., McKay, R. Influence of climate and the solid earth on Holocene readvance of the West Antarctic Ice Sheet. The INSTabilities & Thresholds in ANTArctica (INSTANT) Conference 2023, Trieste, Italy.
- 2023 **Lowry, D.P.**, Han, H.K., Golledge, N.R., Gomez, N., Johnson, K.M., McKay, R. What caused Late Holocene advance of the West Antarctic Ice Sheet at the Siple Coast? The New Zealand—Australian Antarctic Science Conference 2023, Christchurch, NZ.
- 2023 **Lowry, D.P.** The Antarctic Ice Sheet's uncertain future. Capital City Complex Systems Symposium, Wellington, NZ.
- 2022 **Lowry, D.P.**, Jendersie, S., Golledge, N.R. Solid earth versus climatic controls on Holocene grounding line migration of the Siple Coast, Antarctica. American Geophysical Union Fall Meeting, Chicago, USA.
- 2022 **Lowry, D.P.**, Jendersie, S., Golledge, N.R. What caused Late Holocene ice sheet advance at the Siple Coast?, Atmosphere and Ocean Research Institute Seminar, The University of Tokyo, Chiba, Japan.
- 2022 **Lowry, D.P.**, Golledge, N.R., Krapp, M., Alevropolous-Borrill, A. When does an emissions signal emerge in projections of Antarctic ice loss?, Institute of Low Temperature Science Seminar, Hokkaido University, Sapporo, Japan, (*Invited*).
- 2022 **Lowry, D.P.**, Golledge, N.R., Krapp, M., Alevropolous-Borrill, A. When does an emissions signal emerge in projections of Antarctic ice loss?, National Institute of Polar Research Seminar, Tokyo, Japan, (*Invited*).
- 2022 Trayling, N., **Lowry, D.**, Dacic, R. Projected increases in Antarctic snow accumulation from CMIP6 to 2300. European Geophysical Union General Assembly, Virtual, (*Student led*).
- 2021 **Lowry, D.P.**, Golledge, N.R., Menviel, L. Model-proxy comparison of Antarctic Ice Sheet retreat during Termination 2 and implications of future change. Palaeoclimate Commission (PALCOM) Multi-year Project on Past Glacial Terminations, Virtual.
- 2020 **Lowry, D.P.**, Golledge, N.R., Krapp, M., Antarctic sensitivity to environmental forcing in the Holocene. American Geophysical Union Fall Meeting, Virtual, (*Invited*).
- 2020 O'Leary, K., **Lowry, D.**, Alevropolous-Borrill, A., Projected Southern Ocean sea ice and surface temperature evolution beyond 2100. American Geophysical Union Fall Meeting, Virtual, (*Student led*).
- 2020 **Lowry, D.P.**, Golledge, N.R., Krapp, M., Alevropolous-Borrill, A. Addressing Uncertainty in projections of the Antarctic Ice Sheet's future sea level contribution. New Zealand Antarctic Science Platform Conference, Wellington, NZ, (*Invited*).
- 2020 **Lowry, D.P.**, Golledge, N.R., Bertler, N., Environmental controls on deglacial ice sheet retreat in the Ross Sea, Antarctica, Past Global Changes (PAGES) Quaternary Interglacial (QUIGS) Virtual Workshop on Glacial terminations, Virtual, (*Invited*).
- 2019 **Lowry, D.P.** Developments and challenges in paleo-ice sheet modelling to constrain past sea level. Geoscience Society of New Zealand Annual Conference, Hamilton, New Zealand, (*Invited, Keynote*).
- 2018 **Lowry, D.P.** Golledge, N., Bertler N. Integration of climate and ice sheet model simulations with the Roosevelt Island Climate Evolution (RICE) ice core record for the last deglaciation. American Geophysical Union Fall Meeting, Washington D.C., USA.
- 2018 **Lowry, D.P.** Golledge, N., Bertler, N. Evolution of the Ross Ice Shelf since the Last Glacial Maximum. POLAR 2018 - Where the Poles come together; SCAR-IACS Conference, Davos, Switzerland.
- 2017 **Lowry, D.P.** Golledge, N., Bertler, N. Transient ice sheet simulation of the Ross Ice Shelf deglaciation. Past Antarctic Ice Sheet Dynamics (PAIS) Conference, Trieste, Italy.

- 2017 **Lowry, D.P.** Gollidge, N., Bertler, N.: Climate-forced ice-sheet modelling of the Ross Ice Shelf. International Glaciology Symposium, The Cryosphere in a Changing Climate, Wellington, New Zealand.

Fellowships & Awards

- 2024 **Frontiers Planet Prize, National Winner (New Zealand)** awarded by Royal Society Te Apārangi for research addressing planetary challenges.
- 2022 **International Glaciological Society's Richardson Medal** awarded to the ISMIP6 team.
- 2021 **Science New Zealand Early Career Researcher Award** for early career achievement by a public sector researcher.
- 2020 **Science New Zealand Team Award** awarded to the "Our Rising Tide" team (sea level research at GNS Science).
- 2020 **GNS Science Excellence Team Award** awarded to the "Our Rising Tide" team (sea level research at GNS Science).
- 2019 **Postdoctoral Research Fellowship** jointly funded: NZ SeaRise and the Antarctic Science Platform.
- 2019 **Victoria University of Wellington Dean's List** awarded for PhD dissertation of exceptional quality.
- 2019 **Sir Robin Irvine Scholarship** awarded by Antarctica New Zealand.
- 2016 **Marsden PhD Scholarship** awarded by the Antarctic Research Centre, Victoria University of Wellington.
- 2012 **Graduate Fellowship** awarded by the University of Michigan Department of Earth and Environmental Science.
- 2012 **Fritz Pollard Award** for outstanding male student-athlete achievement at Brown University.
- 2010 **Ernest F. Hollings Scholarship** awarded by the National Oceanic Atmospheric Administration.

Grants and Funded Projects

2024–present **Antarctic Science Platform: Tiaki Whenua:** \$12M NZD

NZ Ministry of Business, Innovation, & Entrepreneurship-funded program to investigate how Antarctic ice sheet dynamics and Antarctic terrestrial environments will change in a +2°C world. Role: Principal Investigator during proposal submission and review (2024-2025); Presently an international Key Researcher.

2019–2025 **Antarctic Science Platform: Antarctic Ice Dynamics Project:** \$11M NZD

NZ Ministry of Business, Innovation, & Entrepreneurship-funded program to investigate how Antarctic ice sheet dynamics will change in a +2°C world. Role: Principal Investigator (2023-2025), Co-Principal Investigator (2021-2023), Postdoctoral Research Fellow (2019-2021).

2023–2025 **Past abrupt Antarctic melt events and impacts on sea level and climate:** \$929k NZD

Royal Society Te Apārangi Marsden-funded program to investigate past millennial-scale Antarctic Ice Discharge events in the Pliocene and Miocene. Role: Co-Principal Investigator (2022-2025).

2022–2025 **Our Changing Coast: Sea-level rise on Aotearoa's dynamic margin:** \$13M NZD

NZ Ministry of Business, Innovation, & Entrepreneurship-funded program to promote effective coastal adaptation to future sea level rise. Role: Co-Principal Investigator (2022-2025).

2023–2024 **How unprecedented were the Auckland anniversary floods of 2023?:** \$99k NZD

GNS Science Capability Development Fund to develop new climate and econometric modeling capabilities for extreme precipitation events, as well as strengthen stakeholder relations with NZ Treasury. Role: Principal Investigator.

2023–2024 **Building our Antarctic science future with scientific drilling and modeling:** \$60k NZD

Royal Society Te Apārangi Catalyst fund to promote research between NZ and Japan (Hokkaido University and the National Institute of Polar Research). Role: Co-Principal Investigator.

2019–2022 **New Zealand SeaRise Programme:** \$9M NZD

NZ Ministry of Business, Innovation, & Entrepreneurship-funded program to improve sea level rise projections of NZ coastlines. Role: Postdoctoral Research Fellow (2019-2022).

Teaching and Mentorship

Teaching

- 2024 **Guest lecture: Ice sheet dynamics** Victoria University of Wellington undergraduate course: “Antarctica: Unfreezing the Continent”.
- 2024 **Guest lecture: Paleo-ice sheet modeling** Victoria University of Wellington undergraduate course: “Antarctica: Unfreezing the Continent”.
- 2021–2024 **Guest lecture: Climate and sea level projections, and their uncertainty** Victoria University of Wellington undergraduate course: “Climate change & New Zealand’s future”.
- 2021–2024 **Antarctic Science Platform National Modeling Hub Winter School** 3-day course on data analysis and computational techniques for Earth and climate sciences aimed at NZ-based graduate students and research scientists of all career levels. Role: Co-Coordinator and Lecturer: Setting up a simple energy balance model; Plotting climate reanalysis data; Introduction to the Coupled Model Intercomparison Project.
- 2021–2022 **GNS Science Quaternary Techniques Shortcourse** 3-day course on methods for environmental reconstruction for 25 NZ-based graduate students. Role: Co-Coordinator and Lecturer: Climate, ice sheet, and sea level reconstruction using numerical models.
- 2021 **GNS training course:** An introduction to working with climate model outputs using Python. 2-day training session on using Python and CMIP output in research to GNS paleoclimate scientists. Role: Co-Coordinator and Lecturer.
- 2013 **Teaching Assistant:** University of Michigan undergraduate course, Global Change. Role: Lab instruction, developing exams from course content, and grading of assignments.
- 2011 **Teaching Assistant:** Brown University undergraduate course, Fossil Record. Role: Assisted lab instruction.

Student supervision

- 2023–present **Vincent Charnay** Victoria University of Wellington PhD Candidate Project: Controls on Antarctic surface mass balance during the last millennium
- 2023–present **Jack Williams** Victoria University of Wellington MSc Candidate Project: Bathymetric influence on future ice sheet retreat in the Ross Sea region of Antarctica
- 2021–2022 **Natalie Trayling** Victoria University of Wellington MSc Candidate Project: Is there a tipping point in Antarctic surface mass balance beyond 2100 in CMIP6 models? Current position: Analyst at NZ Climate Change Commission
- 2021–2022 **Katie O’Leary** Brown University undergraduate Project: Is there a tipping point in Southern Ocean sea ice beyond 2100 in CMIP6 models? Current position: Data Scientist at RPM

Student proposal and dissertation review

- 2024 **Martina Tenti**, Università Ca’ Foscari Venezia, PhD examination
- 2023 **Huiling Zou**, Victoria University of Wellington, PhD Pre-candidacy examination

Service and Professional Activities

- 2025 **Proposal Review:** European Research Council (ERC Synergy Grant 2025)
- 2025 **Proposal Review:** UK Research & Innovation (Natural Environment Research Council Highlight Topic 2024)
- 2021 **IPCC AR6 Working Group 1 Contributing Author** (Ocean, cryosphere, and sea level change)

- 2018–2024 **Ice Sheet Model Intercomparison Project 6 (ISMIP6)** contributor
- 2019–2025 Member of the **Antarctic Science Platform CMIP6 expert group**, advising on CMIP needs of NZ's Antarctic Science Platform
- 2018–present Member of the Scientific Committee on Antarctic Research (SCAR) **INStabilities and Thresholds in ANTArctica (INSTANT) working group**
 - 2020 **Session chair** of the Past Global Changes (PAGES) Quaternary Interglacial (QUIGS) Virtual Workshop on Glacial terminations: Deglacial climate and ice sheet dynamics
 - 2018 Participant in **“Great Antarctic Climate Hack” workshop** sponsored by AntClim2100 – focus on using Southern Ocean and Antarctic observational datasets to create assessment and validation tools for CMIP models
 - 2017 Certificate from the **TU Delft Climate Institute summer course “Sea level change: observations, processes, & modelling”**
- 2017–present **Journal Review:** Nature Climate Change, Nature Communications, Nature Geoscience, Nature Sustainability, The Cryosphere, Climate of the Past, Paleoceanography and Paleoclimatology

Media

- 2024 **Science News:** A rapid shift in ocean currents could imperil the world's largest ice shelf, <https://www.sciencenews.org/article/ocean-currents-imperil-ross-ice-shelf>
- 2024 **Newshub:** West Antarctic Ice Sheet meltdown avoidable 'by mitigating greenhouse gas emissions', <https://www.sciencenews.org/article/ocean-currents-imperil-ross-ice-shelf>
- 2024 **The Conversation:** West Antarctica's ice sheet was smaller thousands of years ago – here's why this matters, <https://theconversation.com/west-antarcticas-ice-sheet-was-smaller-thousands-of-years-ago-heres-why-this-matters-today-225670>
- 2024 **Newstalk ZB:** Morning Edition: 27 April 2024, <https://www.newstalkzb.co.nz/podcasts/news-fix/morning-edition-27-april-2024/>
- 2024 **Science Alert:** 7,000 Years Ago, This Ice Sheet Was Smaller. Scientists Think They Know Why., <https://www.sciencealert.com/7000-years-ago-this-ice-sheet-was-smaller-scientists-think-they-know-why>
- 2024 **Stuff:** International team attempt to drill deep for 'critical to humanity' Antarctic climate clues, <https://www.stuff.co.nz/nz-news/360481400/international-team-attempt-drill-deep-critical-humanity-antarctic-climate-clues>
- 2024 **Radio New Zealand:** Is the West Antarctic ice sheet already doomed?, <https://www.rnz.co.nz/news/national/533488/is-the-west-antarctic-ice-sheet-already-doomed>
- 2024 **Phys.org:** International team launch second attempt to drill deep for Antarctic climate clues, <https://phys.org/news/2024-11-international-team-drill-deep-antarctic.html>
- 2024 **The Conversation:** Why artificial submarine curtains won't save West Antarctica's retreating glaciers, <https://theconversation.com/why-artificial-submarine-curtains-wont-save-west-antarcticas-retreating-glaciers-225998>
- 2024 **Radio New Zealand:** Building wall not enough to stop sea level rising, research says, <https://www.rnz.co.nz/news/national/513353/building-wall-not-enough-to-stop-sea-level-rising-research-says>
- 2023 **Newshub:** Scientists drill 600m into ice to unlock West Antarctica's frozen past, <https://www.stuff.co.nz/world-news/350463271/scientists-drill-600m-into-ice-to-unlock-west-antarctica-s-frozen-past>
- 2023 **Inews:** Scientists in West Antarctica make major drilling breakthrough
- 2023 **Radio New Zealand:** Christmas in Antarctica, <https://www.rnz.co.nz/national/programmes/morningreport/in-antarctica>

- 2023 **1news:** West Antarctica science expedition first of its kind
- 2023 **Stuff:** Drilling deep into a remote part of Antarctica looking for clues, <https://www.stuff.co.nz/science/133268878/drilling-deep-into-a-remote-part-of-antarctica-looking-for-clues-to-how-fast-the-ice-will-melt>
- 2023 **The Conversation:** We can still prevent the collapse of the West Antarctic ice sheet – if we act fast to keep future warming in check, <https://theconversation.com/we-can-still-prevent-the-collapse-of-the-west-antarctic-ice-sheet-if-we-act-fast-to-keep-future-warming-in-check-215878>
- 2022 **Stuff:** Researchers get \$13m funding boost to better understand sea-level rise effects, <https://www.stuff.co.nz/environment/climate-news/129837870/researchers-get-13m-funding-boost-to-better-understand-sealevel-rise-effects>
- 2022 **1news:** Kiwis can now see how sea level rise will affect them
- 2022 **Newshub:** Alarming new statistics reveal New Zealand's sea level could rise 30cm in next 10 to 20 years, <https://www.stuff.co.nz/nz-news/350490413/alarming-new-statistics-reveal-new-zealand-s-sea-level-could-rise-30cm-in-next-10-to-20-years>
- 2022 **Stuff:** PM Jacinda Ardern says shocking new sea level predictions not 'inevitable', highlight importance of reducing emissions, <https://www.stuff.co.nz/politics/350490417/pm-jacinda-ardern-says-shocking-new-sea-level-predictions-not-inevitable-highlight-importance-of-reducing-emissions>
- 2021 **The Conversation:** Widespread collapse of West Antarctica's ice sheet is avoidable, <https://theconversation.com/widespread-collapse-of-west-antarcticas-ice-sheet-is-avoidable-if-we-keep-global-warming-below-2-169651>
- 2021 **The Independent:** Catastrophic collapse of West Antarctic ice sheet 'avoidable' if warming stays below 2°C, <https://www.independent.co.uk/climate-change/news/antarctic-ice-sheet-warming-cop-b1940492.html>
- 2021 **Stuff:** Widespread collapse of West Antarctica's ice sheet is avoidable, <https://www.stuff.co.nz/environment/climate-news/300432062/widespread-collapse-of-west-antarcticas-ice-sheet-is-avoidable-if-we-keep-global-warming-below-2-degrees-celsius>
- 2021 **Radio New Zealand:** Widespread collapse of West Antarctica's ice sheet is avoidable, <https://www.rnz.co.nz/news/world/453646/widespread-collapse-of-west-antarctica-s-ice-sheet-is-avoidable-if-we-keep-global-warming-below-2c>
- 2021 **"On the Precipice"**, a GNS-led report summarizing what we know about Antarctica and its ice sheets in a warming world (2021): <https://www.gns.cri.nz/news/on-the-precipice/>
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