ASP Publications for 21-22 FY

Note: Examples of media & outreach info not listed here but can be found on the ASP website.

Annotation:
** Postgraduate Student*
 # Early Career Researcher

Peer Reviewed Journal Papers [32]

1. Brett, G.M., Price, D., Rack, W., & Langhorne, P.J. (2021). Satellite altimetry detection of ice-shelf-influenced fast ice. Cryosphere, 15(8), 4099-4115.
2. Conte, R., Rebesco, M., De, Santis, L., Colleoni, F., Bensi, M., Bergamasco, A., Kovacevic, V., Gales, J., Zgur, F., Accettella, D., De, Steur, L., Ursella, L., McKay, R., Kim, S., & Lucchi, R.G. (2021). Bottom current control on sediment deposition between the Iselin Bank and the Hillary Canyon (Antarctica) since the late Miocene: An integrated seismic-oceanographic approach. Deep-Sea Research Part I: Oceanographic Research Papers, 176.
3. Dolan, A., Escutia, C., Gasson, E., McKay, R., Naish, T.R., Patterson, M., Pérez, L., Shevenell, A., van de, Flierdt, T., Dickinson, W., Kowalewski, D., Meyers, S., Ohneiser, C., Sangiorgi, F., Williams, T., Chorley, H., De Santis, L., Florindo, F., Golledge, N., Grant, G., Halberstadt, A., Harwood, D., Lewis, A., Powell, R., & Verret, M. (2022). Antarctic environmental change and ice sheet evolution through the Miocene to Pliocene – a perspective from the Ross Sea and George V to Wilkes Land Coasts. Antarctic Climate Evolution.
4. Escutia, C., De, Santis, L., Donda, F., Duncan, B., Gohl, K., Gulick, S., Hernández-Molina, J., Hillenbrand, C., Hochmuth, K., Kim, S., Kuhn, G., Larter, R., Leitchenkov, G., Levy, R.H., Naish, T.R., O'Brien, P., Pérez, L., Shevenell, A., & Williams, T. (2022). Cenozoic history of Antarctic glaciation and climate from onshore and offshore studies. Antarctic Climate Evolution.
5. Fan, S., Cross, A.J., Prior, D.J., Goldsby, D.L., Hager, T.F., Negrini, M., & Qi, C. (2021). Crystallographic Preferred Orientation (CPO) Development Governs Strain Weakening in Ice: Insights From High-Temperature Deformation Experiments. Journal of Geophysical Research: Solid Earth, 126(12).
6. Fan, S., Prior, D.J., Hager, T.F., Cross, A.J., Goldsby, D.L., & Negrini, M. (2021). Kinking facilitates grain nucleation and modifies crystallographic preferred orientations during high-stress ice deformation. Earth and Planetary Science Letters, 572.
7. Farooq, U., Rack, W., McDonald, A., & Howell, S. (2022). Representation of sea ice regimes in the Western Ross Sea, Antarctica, based on satellite imagery and AMPS wind data. Climate Dynamics.
8. Friedrichs, D.M., McInerney, J.B.T., Oldroyd, H.J., Lee, W.S., Yun, S., Yoon, S.T., Stevens, C.L., Zappa, C.J., Dow, C.F., Mueller, D., Sepúlveda, Steiner, O., & Forrest, A.L. (2022). Observations of submesoscale eddy-driven heat transport at an ice shelf calving front. Communications Earth and Environment, 3(1).
9. 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.N., Dunbar, G.B., & Carlson, A.E. (2021). Retreat of the Antarctic Ice Sheet During the Last Interglaciation and Implications for Future Change. Geophysical Research Letters, 48(17).
10. Gomez-Fell, R., Rack, W., Purdie, H., & Marsh, O. (2022). Parker Ice Tongue Collapse, Antarctica, Triggered by Loss of Stabilizing Land-Fast Sea Ice. Geophysical Research Letters, 49(1).
11. Johnson, K.M., McKay, R.M., Etourneau, J., Jiménez-Espejo, F.J., Albot, A., Riesselman, C.R., Bertler, N.A.N., Horgan, H.J., Crosta, X., Bendle, J., Ashley, K.E., Yamane, M., Yokoyama, Y., Pekar, S.F., Escutia, C., & Dunbar, R.B. (2021). Sensitivity of Holocene East Antarctic productivity to subdecadal variability set by sea ice. Nature Geoscience, 14(10), 762-768.

12. Johnston, N.M., Murphy, E.J., Atkinson, A., Constable, A.J., Cotté C., Cox, M., Daly, K.L., Driscoll, R., Flores, H., Halfter, S., Henschke, N., Hill, S.L., Höfer, J., Hunt, B.P.V., Kawaguchi, S., Lindsay, D., Liszka, C., Loeb, V., Manno, C., Meyer, B., Pakhomov, E.A., Pinkerton, M.H., Reiss, C.S., Richerson, K., Jr, W.O.S., Steinberg, D.K., Swadling, K.M., Tarling, G.A., Thorpe, S.E., Veytia, D., Ward, P., Weldrick, C.K., & Yang, G. (2022). Status, Change, and Futures of Zooplankton in the Southern Ocean. Frontiers in Ecology and Evolution, 9.
13. Kim, S., Lee, M.K., Shin, J.Y., Yoo, K.C., Lee, J.I., Kang, M.I., Moon, H.S., & **Prebble**, J.G. (2022). Variation in magnetic susceptibility in the Bellingshausen Sea continental rise since the last glacial period and implications for terrigenous material input mechanisms. Palaeogeography, Palaeoclimatology, Palaeoecology, 594.
14. King, M.V., Gales, J.A., Laberg, J.S., **McKay**, R.M., De, Santis, L., Kulhanek, D.K., Hosegood, P.J., & Morris, A. (2022). Pleistocene depositional environments and links to cryosphere-ocean interactions on the eastern Ross Sea continental slope, Antarctica (IODP Hole U1525A). Marine Geology, 443.
15. **Krapp**, M., Beyer, R.M., Edmundson, S.L., Valdes, P.J., & Manica, A. (2021). A statistics-based reconstruction of high-resolution global terrestrial climate for the last 800,000 years. Scientific Data, 8(1).
16. ***Lawler**, K.A., **Cortese**, G., ***Civel-Mazens**, M., Bostock, H., Crosta, X., Leventer, A., ***Lowe**, V., Rogers, J., & Armand, L.K. (2021). The Southern Ocean Radiolarian (SO-RAD) dataset: a new compilation of modern radiolarian census data. Earth System Science Data, 13(11), 5441-5453.
17. **Lohrer**, A.M., Norkko, A.M., Thrush, S.F., & **Cummings**, V.J. (2021). Climate cascades affect coastal Antarctic seafloor ecosystem functioning. Global Change Biology, 27(23), 6181-6191.
18. ***Lowe**, V., **Cortese**, G., ***Lawler**, K.A., ***Civel-Mazens**, M., & Bostock, H.C. (2022). Ecoregionalisation of the Southern Ocean Using Radiolarians. Frontiers in Marine Science, 9.
19. #**Lowry**, D.P., **Krapp**, M., **Golledge**, N.R., & ***Alevropoulos-Borrill**, A. (2021). The influence of emissions scenarios on future Antarctic ice loss is unlikely to emerge this century. Communications Earth & Environment, 2.
20. Lund-Hansen, L.C., Bjerg-Nielsen, M., Stratmann, T., **Hawes**, I., & Sorrell, B.K. (2021). Upwelling irradiance below sea ice—par intensities and spectral distributions. Journal of Marine Science and Engineering, 9(8).
21. Marschalek, J.W., Zurli, L., Talarico, F., van de, Flierdt, T., Vermeesch, P., Carter, A., Beny, F., Bout-Roumazeilles, V., Sangiorgi, F., Hemming, S.R., Pérez, L.F., Colleoni, F., **Prebble**, J.G., van, Peer, T.E., Perotti, M., Shevenell, A.E., Browne, I., Kulhanek, D.K., **Levy**, R., Harwood, D., Sullivan, N.B., Meyers, S.R., Griffith, E.M., Hillenbrand, C.D., Gasson, E., Siegert, M.J., Keisling, B.A., Licht, K.J., Kuhn, G., Dodd, J.P., Boshuis, C., De, Santis, L., **McKay**, R.M., Ash, J., Browne, I.M., **Cortese**, G., Dodd, J.P., Esper, O.M., Gales, J.A., Harwood, D.M., Ishino, S., Kim, S., Kim, S., Laberg, J.S., Leckie, R.M., Müller, J., Patterson, M.O., Romans, B.W., Romero, O.E., Seki, O., Singh, S.M., Cordeiro de, Sousa, I.M., Sugisaki, S.T., Xiao, W., & Xiong, Z. (2021). A large West Antarctic Ice Sheet explains early Neogene sea-level amplitude. Nature, 600(7889), 450-455.
22. **Martin**, A.P. 2021 A review of the composition and chemistry of peridotite mantle xenoliths in volcanic rocks from Antarctica and their relevance to petrological and geophysical models for the lithospheric mantle. doi: 10.1144/M56-2021-26 IN: Martin, A.P.; van der Wal, W. (eds) The geochemistry and geophysics of the Antarctic mantle. London: Geological Society. Memoir (Geological Society of London) 56.
23. Martínez-Pérez, C., Greening, C., Bay, S.K., Lappan, R.J., Zhao, Z., De, Corte, D., **Hulbe**, C., **Ohneiser**, C., **Stevens**, C., Thomson, B., Stepanauskas, R., González, J.M., Logares, R., Herndl, G.J., Morales, S.E., & Baltar, F. (2022). Phylogenetically and functionally diverse microorganisms reside under the Ross Ice Shelf. Nature Communications, 13(1).
24. **McKay**, R., Albot, O., **Dunbar**, G.B., Lee, J.I., Lee, M.K., Yoo, K.C., Kim, S., Turton, N.,

Kulhanek, D., Patterson, M., & **Levy**, R. (2022). A Comparison of Methods for Identifying and Quantifying Ice Rafted Debris on the Antarctic Margin. Paleoceanography and Paleoclimatology, 37(4).

25. #**Montiel**, F., Kohout, A.L., & Roach, L.A. (2022). Physical Drivers of Ocean Wave Attenuation in the Marginal Ice Zone. Journal of Physical Oceanography, 52(5), 889-906.
26. Patterson, M.O., **Levy**, R.H., Kulhanek, D.K., Van, De, Flierdt, T., **Horgan**, H., **Dunbar**, G.B., **Naish**, T.R., Ash, J., Pyne, A., **Mandeno**, D., Winberry, P., Harwood, D.M., Florindo, F., Jimenez-Espejo, F.J., Läufer, A., Yoo, K.C., Seki, O., Stocchi, P., Klages, J.P., Lee, J.I., Colleoni, F., Suganuma, Y., Gasson, E., **Ohneiser**, C., Flores, J.A., Try, D., Kirkman, R., & **Koch**, D. (2022). Sensitivity of the West Antarctic Ice Sheet to +2 °C (SWAIS 2C). Scientific Drilling, 30, 101-112.
27. Södergren, A.H., & **McDonald**, A.J. (2022). Quantifying the Role of Atmospheric and Surface Albedo on Polar Amplification Using Satellite Observations and CMIP6 Model Output. Journal of Geophysical Research: Atmospheres, 127(12).
28. Sorrell, B.K., **Hawes**, I., Stratmann, T., & Lund-Hansen, L.C. (2021). Photobiological effects on ice algae of a rapid whole-fjord loss of snow cover during spring growth in Kangerlussuaq, a west Greenland fjord. Journal of Marine Science and Engineering, 9(8).
29. ***Tankersley**, M.D., **Horgan**, H.J., Siddoway, C.S., Caratori, Tontini, F., & Tinto, K.J. (2022). Basement Topography and Sediment Thickness Beneath Antarctica's Ross Ice Shelf. Geophysical Research Letters, 49(10).
30. ***Valdes**, L.M.L., **Katurji**, M., & Meyer, H. (2021). A machine learning based downscaling approach to produce high spatio-temporal resolution land surface temperature of the antarctic dry valleys from MODIS data. Remote Sensing, 13(22).
31. van de, Flierdt, T., **McKay**, R., & Naish**,** T.R. (2022). Pleistocene Antarctic climate variability: ice sheet, ocean and climate interactions. Antarctic Climate Evolution.
32. Will, M., **Krapp**, M., Stock, J.T., & Manica, A. (2021). Different environmental variables predict body and brain size evolution in Homo. Nature Communications, 12(1).

Book Chapters [9]

1. **Martin, A.P**. 2021 A review of the composition and chemistry of peridotite mantle xenoliths in volcanic rocks from Antarctica and their relevance to petrological and geophysical models for the lithospheric mantle. IN: Martin, A.P.; van der Wal, W. (eds) The geochemistry and geophysics of the Antarctic mantle. London: Geological Society. Memoir (Geological Society of London) 56.

2. Florindo, F., Siegert, M., Santis, L.D., **Naish, T**. (Eds.), Antarctic Climate Evolution (Second Edition). Elsevier, Amsterdam, 2022. https://doi.org/10.1016/B978-0-12-819109-5.00016-5

In: Florindo, F., Siegert, M., Santis, L.D., Naish, T. (Eds.), Antarctic Climate Evolution (Second Edition). Elsevier, Amsterdam.

3. Florindo, F., Siegert, M., De Santis, L., R. **Naish, T**., 2022. Chapter 1 - Antarctic Climate Evolution, pp. 1-7.
4. **Levy, R.H.,** Dolan, A.M., Escutia, C., Gasson, E.G.W., **McKay, R.M**., **Naish, T.,** Patterson, M.O., Pérez, L.F., Shevenell, A.E., van de Flierdt, T., Dickinson, W., Kowalewski, D.E., Meyers, S.R., Ohneiser, C., Sangiorgi, F., Williams, T., Chorley, H.K., Santis, L.D., Florindo, F., **Golledge, N.R.,** Grant, G.R., Halberstadt, A.R.W., Harwood, D.M., Lewis, A.R., Powell, R., Verret, M., 2022. Chapter 9 - Antarctic environmental change and ice sheet evolution through the Miocene to Pliocene – a perspective from the Ross Sea and George V to Wilkes Land Coasts, pp. 389-521.
5. **McKay, R.,** Escutia, C., De Santis, L., Donda, F., #**Duncan, B.,** Gohl, K., Gulick, S., Hernández-Molina, J., Hillenbrand, C.-D., Hochmuth, K., Kim, S., Kuhn, G., Larter, R., Leitchenkov, G., H. Levy, R., Naish, T., O'Brien, P., F. Pérez, L., E. Shevenell, A., Williams, T., 2022. Chapter 3 -

Cenozoic history of Antarctic glaciation and climate from onshore and offshore studies, pp. 41-164.

6. **Naish, T., #Duncan, B., Levy, R., McKay, R.,** Escutia, C., De Santis, L., Colleoni, F., Gasson, E., DeConto, R., Wilson, G., 2022. Chapter 8 - Antarctic Ice Sheet dynamics during the Late Oligocene and Early Miocene: climatic conundrums revisited, pp. 363-387.
7. Siegert, M., **Golledge, N.R**., 2022. Chapter 5 - Advances in numerical modelling of the Antarctic ice sheet, pp. 199-218.
8. Siegert, M., Florindo, F., De Santis, L., **Naish, T.R.,** 2022. Chapter 13 - The future evolution of Antarctic climate: conclusions and upcoming programmes, pp. 769-775.
9. Wilson, D.J., van de Flierdt, T., **McKay, R.M., Naish, T.R**., 2022. Chapter 10 - Pleistocene Antarctic climate variability: ice sheet, ocean and climate interactions, pp. 523-621.

Reports (for external body) [3]

1. Gutt,J., Isla,E., Xavier,J., Adams,B.J., Ahn,I-Y., Cheng,C.-H., Colesie,C., **Cummings,V.,** Griffiths,H., Hogg,I., McIntyre, T., Meiners, K., Pearce, D., Peck, L., Piepenburg, D., Reisinger, R., Saba, G., Schloss, I., Signori, C., Smith, C., Vacchi, M., Verde, C., Wall, D. (2022). Ten messages on risks and opportunities for life in the Antarctic. Antarctic Environments Portal https://environments.aq/publications/ten-scientific-messages-on-risks-and-opportunities-for-life-in-the- antarctic/

Report Chapters (for external body)

2. Douville, H., K. Raghavan, **J. Renwick**, R.P. Allan, P.A. Arias, M. Barlow, R. Cerezo-Mota, A. Cherchi, T.Y. Gan, J. Gergis, D. Jiang, A. Khan, W. Pokam Mba, D. Rosenfeld, J. Tierney, and O. Zolina, 2021: Water Cycle Changes Supplementary Material. In Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Available from https://www.ipcc.ch/
3. Fox-Kemper, B., H.T. Hewitt, C. Xiao, G. Aðalgeirsdóttir, S.S. Drijfhout, T.L. Edwards, **N.R. Golledge,** M. Hemer, R.E. Kopp, G. Krinner, A. Mix, D. Notz, S. Nowicki, I.S. Nurhati, L. Ruiz, J.-B. Sallée, A.B.A. Slangen, and Y. Yu, 2021: Ocean, Cryosphere and Sea Level Change. In Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1211–1362, doi:10.1017/9781009157896.011.

Science Reports (publicly accessible) [4]

1. Chown, S.L., Leihy, R.I., **Naish, T.R**., Brooks, C.M., Convey, P., Henley, B.J., Mackintosh, A.N., Phillips, L.M., Kennicutt, M.C. II & Grant, S.M. (Eds.) (2022) Antarctic Climate Change and the Environment: A Decadal Synopsis and Recommendations for Action. Scientific Committee on Antarctic Research, Cambridge, United Kingdom. www.scar.org
2. On the Precipice https://online.flippingbook.com/view/300309973/
3. ***Gardiner, N., Gilbert, N., Liggett, D**. 2022. New Zealand Antarctic Stakeholder Workshop 2022. ASP Report-004. 26 p.
4. **Bertler, N., Climo, M**. 2022. Antarctic Science Platform Submission on Te Ara Paerangi Future Pathways 2021 Green Paper. ASP Report-005. 22 p.

Invited / Keynote @ Conferences [3]

1. **Golledge, N.R** COLDEX invited talk. “Climate-forced changes of the Antarctic Ice Sheet: evidence, inference, and speculation”. 03/05/22
2. **Golledge, N.R** PALSEA invited talk. “Climate-forced changes of the Antarctic Ice Sheet: evidence, inference, and speculation”. 13/04/22
3. **Renwick, J.A**., The Past and Future of Antarctic Sea Ice, Invited presentation at the 2022 International Conference on Southern Hemisphere Meteorology and Oceanography (ICSHMO), 10 February 2022.

Conference Proceedings Papers [1]

1. I Woodhead, **A Tan**, K Eccleston, I Platt, D Rankin, (2021) Dispersion errors in time domain reflectometry, Intl Conf. Electromagnetic Wave Interaction with Water & Moist Substances, Kiel, Germany.

Conference / Workshop Presentations [31]

1. **#Behrens, Bowen and #Fernandez** co-conveners of a session on the Ross Sea at ICSHMO
2. **Bowen** co-convened a session on the Southern Ocean, ICSHMO February 2022.
3. **Bowen, #Fernandez**, Gordon, Huber, Castagno, Falco, Budillon, Gunn, Forcen-Vazquez, 2022. Tides regulate Antarctic bottom water flow from the western Ross Sea , presented at the Ocean Sciences Conference, 3 March, 2022.
4. ***Cristi, A**.; S. Deppeler; N. Barr; M. Druce; M. Gall; K. Safi; S. Seabrook; M.Y. Gorbunov; **A. Gutiérrez- Rodríguez**; **C. Law** (2022). Response of Ross Sea phytoplankton communities to projected future increases in iron and sea surface temperature. The Integrated Microbial Ocean, Gordon Research Conference, Les Diablerets, VD, Switzerland, May 29 - June 3, 2022 [student]
5. **Fernandez** et al 2022. Potential heat gateways into the Ross Sea from profiling floats and model simulations. ICSHMO meeting, (virtual) feb. 2022, Poster presentation.
6. **#Gossart, A.** A simplified version of a numerical atmospheric model to represent extreme wind events over the Ross Sea Sector, virtual ICSHMO (13th International Conference on Southern Hemisphere Meteorology and Oceanography), 8-12, 15-17 February 2022
7. **#Gossart, A., #Malyarenko, A**. Update on regional climate and ocean modelling. Project 1 workshop, ASP meeting, Wellington. 07/2021
8. **#Gossart, A., #Bahamondes Dominguez, A., and #Jendersie, S**. The National Modelling Hub: simulating the past, the present and the future of Antarctic Climate and Ecosystems. ESCI Seminar, VUW. 23/03/22
9. **#Gossart, A**. Climate modelling. SNAP workshop, Wellington (VUW) 13/04/22
10. **#Gossart, A**. A simplified version of a numerical atmospheric model to represent extreme wind events over the Ross Sea Sector. 13th International Conference on Southern Hemisphere Meteorology and Oceanography. 9 February 2022
11. ***Hayward, A.; M. Pinkerton; A. Gutierrez-Rodriguez; C. Law** (2022). Characterizing the Southern Ocean's Microbial Community Through Novel Pigment Analysis. Ocean Biogeochemistry, 30 April. 2022, Gordon Research Seminar, Barcelona.
12. ***Hayward, A.; M. Pinkerton; A. Gutierrez-Rodriguez; C. Law** (2022). The Evaluation of a Novel Chemotaxonomic Method and its Application to Southern Ocean Pigment Data. Ocean Biogeochemistry, 03 May. 2022, Gordon Research Conference, Barcelona.
13. ***Hofsteenge, M**. The surface energy balance during foehn warming events at Joyce glacier, McMurdo Dry Valleys, Antarctica. 13th International Conference on Southern Hemisphere Meteorology and Oceanography. 10 February 2022
14. **Krapp M**, **Kvale K, Keller E, Prebble J, Cortese G**. “Marine ecoregions and their sensitivity to past and future climate change” IN: ICSHMO 2022 : 8-12, 15-17 February 2022 : 13th

International Conference on Southern Hemisphere Meteorology and Oceanography. Wellington, N.Z.: Conferences & Events Ltd

15. **Kvale K**, Kriest I, Frenger I, Oschlies A. "Southern Ocean circulation metrics predict global biogeochemical change with warming" IN: ICSHMO 2022 : 8-12, 15-17 February 2022 : 13th International Conference on Southern Hemisphere Meteorology and Oceanography. Wellington, N.Z.: Conferences & Events Ltd
16. **Lowry, D.,** Menviel, L., **Golledge,N.R**., December 2021, Sensitivity of the West Antarctic Ice Sheet to ice sheet melt feedbacks during the Last Interglaciation
17. **#Malyarenko A., #Gossart A**. Coupled Climate-Ice-Ocean Modelling: Setting up a framework. New Zealand Research Software Engineering Conference 2021 (NZRSE, September 2021)
18. **#Malyarenko A., #Gossart A**., Sun R. Balancing fluxes through WRF - MITgcm interface in the Scripps-KAUST model for the Ross Sea Region. 13th International Conference on Southern Hemisphere Meteorology and Oceanography (ISCHMO, February 2022)
19. **#Malyarenko A.,** Nakayama Y., **Stevens C., #Jendersie S., Krapp M**. The Ross Sea Has Been Freshening ... Does The Ross Ice Shelf Cavity Care About It? 2022 Ocean Sciences Meeting (February-March 2022)
20. ***Nielsen, E**. Data driven approach for assessment of extreme foehn warming in McMurdo Dry Valleys, Antarctica. 13th International Conference on Southern Hemisphere Meteorology and Oceanography. 10 February 2022
21. ***Pletzer, T.** Characterizing glacial meltwater runoff variability in the Ross Sea Region of Antarctica. 13th International Conference on Southern Hemisphere Meteorology and Oceanography. 10 February 2022
22. ***Rickard, G., #Bahamondes Dominguez, A., Behrens, E.,** Chiswell, S., **Law, C., Pinkerton, M.** Physical and Biogeochemical Assessments of CMIP5 and CMIP6 Models for the New Zealand EEZ and the Ross Sea Region. 13th International Conference on Southern Hemisphere Meteorology and Oceanography. 9 February 2022
23. **Smith, I.J**., **#Thomas, M**., Mackie, S., Ridley, J.K, Stevens, D.P., Bitz, C.M. Steps towards enabling spatially varying rates of change of Antarctic freshwater fluxes in HadGEM3-GC3.1. Poster presentation (Presenter: Inga Smith) at the 2021 New Zealand Antarctic Science Conference, 9-13 February 2021.
24. **Stevens, Robinson, #Stewart**, ***Li, #Malyarenko**, Horgan, Washam, Schmidt, Lawrence, **Hulbe** 2022. A Synthesis of Ocean Mixing Processes in the Ross Ice Shelf Cavity, ICSHMO meeting, (virtual) Feb. 2022. https://confer.eventsair.com/icshmo-2022/
25. **Stevens,** Yoon, Elliott, Lee, Yun, Zappa and Lee. 2021, Polynya Preconditioning: Ocean Processes South of the Drygalski Ice Tongue, Western Ross Sea, KOPRI POET meeting, (virtual) Sep. 2021.
26. ***Tankersley, M**., Caratori-Tontini, F., **Horgan, H.,** Tinto, K., Siddoway, C., November 2021, Sediment thickness and basement depths beneath the Ross Ice Shelf from aeromagnetic data. New Zealand Antarctic Science Conference, Christchurch, New Zealand.
27. ***Tankersley, M.,** Siddoway, C., **Horgan, H.,** Caratori-Tontini, F., Tinto, K. (2021). New contribution to Ross Ice Shelf (Antarctica) boundary conditions: Basement depths and sediment thickness determined from aeromagnetic data. American Geophysics Union Fall Meeting, New Orleans, USA, 13-17 December, 2021
28. **#Thomas, M., Smith, I.J.,** Mackie, S., Ridley, J.K, Stevens, D.P., Bitz, C.M. Initial steps towards enabling spatially varying rates of change of Antarctic freshwater fluxes in HadGEM3-GC3.1. Oral presentation (Presenter: Max Thomas) at the Antarctic Science Platform project 4 workshop, Wellington, New Zealand, 7-8 July 2021.
29. **#Thomas, M., Smith, I.J.,** Mackie, S., Ridley, J.K, Stevens, D.P., Bitz, C.M. Enabling spatially varying rates of change of Antarctic freshwater fluxes in HadGEM3-GC3.1. Poster presentation (Presenter: Max Thomas) at the 2021 NZIP/PHYSIKOS Conference, Wellington, New Zealand, 12-14 July 2021.

30. Trayling, N., **Lowry, D.,** and Dadic, R.: Projected increases in Antarctic snow accumulation from CMIP6 to 2300, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-10547, https://doi.org/10.5194/egusphere-egu22-10547, 2022
31. ***Truax, O**., Riesselman R., Stevens S., Wilson, G. 2022. Evidence of SAM and ENSO influence on last millennium Antarctic climate from paleoclimate data assimilation, Oral Presentation at the ICSHMO meeting, (virtual) Feb. 2022.

Student Theses [3]

1. *Burns J (2022), Paleo and environmental magnetic studies from Coulman High short sediment cores. BSc Hons Thesis at University of Otago.
2. *Calkin, T (2021), Sedimentology of the grounding zone of the Kamb Ice Stream, Siple Coast, West Antarctica, Thesis at: Victoria University of Wellington.
3. *Mills, F. (2021) Resilience of microbial mats in Antarctic ponds to climate-relevant environmental disturbance. MSc thesis, University of Waikato.

Talks, Lectures & Webinars [14]

1. **Cummings, V.J**. Ocean acidification: a challenge for marine ecosystems. Invited presentation, University of the 3rd Age Wellington City. Embassy Theatre, Wellington, 10 May 2022
2. **Cummings, V.J.,** Tait, L., Massuger, J., Pryor Rogers, L., Tyler, J., Hefford, A. (2021). Brian and Bluey's undersea adventures. Invited presentation on event K882-A at Scott Base, 2 November 2021.
3. **Golledge, N.R** World Climate Research Programme invited talk. 22/03/22
4. **Golledge, N.R.** University of California Santa Cruz, invited talk: "Climate-forced changes of the Antarctic Ice Sheet: evidence, inference, and speculation". 09/03/22
5. **Golledge, N.R.** West Antarctic Ice Sheet (WAIS) Workshop. Invited talk. "Marine ice sheet retreat: are we taking the MICI?". 22/09/21
6. **Grant, G.R.** March 2022. "Continuous record of sea-level change during the intensification of North Hemisphere Ice Sheets (3.3 – 1.7 Ma)". Invited talk, PALSEA webinar series on Ice Sheets, Sea Level and GIA.
7. **Lee, C.K.** Synthesising Antarctic Terrestrial Biogeography using Machine Learning. Invited seminar at the Artificial Intelligence Institute, University of Waikato. 9 December 2021
8. **Lohrer, D**. Climate-related change affects coastal Antarctic benthic biodiversity and ecosystem function. Invited Distinguished Moore Lecture, Department of Environmental Sciences, University of Virginia, Charlottesville, Virginia, USA. 20 January 2022
9. **Lohrer, D.** Climate-related change affects coastal Antarctic benthic biodiversity and ecosystem function. Invited Special Departmental Seminar, Woods Hole Oceanographic Institute (WHOI), Woods Hole, Massachusetts, USA. 24 January 2022
10. #**Malyarenko, A., Stevens, C.,** Nakayama, Y., #**Gossart, A.,** Sun, R. How do you solve a problem like ... Ross Ice Shelf cavity modelling? Joint KOPRI-NIWA seminar series POET (September 2021, Online)
11. **Robinson, N. J.,** Climate science in Antarctica, lecture for University of Auckland Climate Change course, 11 May 2022
12. **Robinson, N. J.,** Antarctica's role in global climate, lecture for VUW Environmental Science course, 23 March 2022
13. **Robinson, N. J.,** K892A – Platelet Sampler Testing, to POET international group, 12 January 2022.
14. **Robinson, N. J.,** Antarctica and the Global Ocean, to VUW ESCI (Antarctic) Science course, 26 July 2021.