

Curriculum Vitae

Dr. Eric Oliver

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Biographical Sketch

I am an Associate Professor of Physical Oceanography in the Department of Oceanography, Dalhousie University, Halifax, Nova Scotia, Canada. My research interests involve ocean and climate variability across a range of time and space scales including extreme events (marine heatwaves, storms), the predictability of climate variations, the influence of modes of variability on the ocean, and the role of climate change on the mean state, variability and extremes of the climate system. In addition, I am of Inuit descent with roots in Nunatsiavut (northern Labrador). I am interested in Indigenous perspectives on climate, weather and oceans and bridging Indigenous and scientific knowledge of these systems.

Current Position

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| 2022- | Associate Professor, Physical Oceanography, Department of Oceanography, Dalhousie University, Halifax, Canada |
| 2017-2022 | Assistant Professor, Physical Oceanography, Department of Oceanography, Dalhousie University, Halifax, Canada |
| 2019- | Cross Appointment, Department of Physics and Atmospheric Science, Dalhousie University, Halifax, Canada |

Previous Positions

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| 2015-2017 | Research Fellow in Physical Oceanography (3-year appointment) in the Australian Research Council Centre of Excellence for Climate System Science based at the Institute for Marine and Antarctic Studies (IMAS), University of Tasmania (UTAS), Hobart, Australia. Supervisors: Prof. Nathan Bindoff and Prof. Neil Holbrook. |
| 2012-2015 | Super Science Fellow (Postdoctoral Fellow) in Physical Oceanography (3-year appointment) at IMAS, UTAS, Hobart, Australia. Supervisors: Prof. Neil Holbrook and Prof. Craig Johnson. |

2011 Postdoctoral Fellow in Physical Oceanography (4-month appointment) at the Department of Oceanography, Dalhousie University, Halifax, Canada. Supervisor: Prof. Jinyu Sheng.

Education

2011 PhD in Physical Oceanography, Dalhousie University. Supervisor: Prof. Keith Thompson. Thesis title: *Local and remote forcing of the ocean by the Madden-Julian Oscillation and its predictability*

2006 MSc in Physics, University of Ottawa Supervisor: Prof. Gary Slater. Thesis title: *Spinning and mixing: Two studies of microfluidic problems using molecular dynamics simulations*

2004 BSc with Honours in Physics and a Second Major in Mathematics and Statistics, Acadia University. Supervisors: Prof. Holger Teismann and Prof. Michael Robertson. Thesis title: *Optical bistability and soliton switching in an optical ring cavity*

Student and HQP supervision

Research Associates

2021-2022 Xianmin Hu

Postdoctoral fellows

2021- Emma Harrison

2021-2022 Christoph Renkl

2020 Uriel Zajaczkovski, co-supervised with Prof. Keith Thompson until July 2020

2019-2021 Sofia Darmaraki (finishing Oct. 2021)

2019-2020 Siren Ruehs, co-supervised with Prof. Arne Biastoch, GEOMAR

2018-2020 Robert Schlegel, co-supervised with Dr. Ke Chen, WHOI

Graduate students

2022- Taylor Davies, MSc candidate

2020- May Wang, MSc candidate

2020- Breanna Bishop, Interdisciplinary PhD, co-supervised with Prof. Claudio Aporta

2018- Claire Boteler, PhD candidate, Statistics, co-supervised with Prof. Mike Dowd

2018- Benjamin Richaud, PhD candidate, co-supervised with Prof. Katja Fennel

2019-2022 Jonathan Coyne, MSc candidate

2019-2022 Rebekah Cavanagh, MSc candidate, Dept. of Physics and Atmospheric Science

2018-2019 Breanna Bishop, MMM candidate, co-supervised with Prof. Claudio Aporta

2018-2020 Fernando Sobral, PhD candidate (withdrew)

Undergraduate students

2023-	Anna Victor, co-supervised with Dr. Clark Richards (Fisheries and Oceans Canada)
2023-	Nicole Neriuka
2020-2021	Taylor Davies, Honours in Oceanography
2018-2019	Jonathan Coyne, Honours in Oceanography
2018-2019	Rebekah Cavanagh, Honours in Physics and Atmospheric Science
2018	Kate Arpin & Mab Speelman, Undergraduate DISP research project

Research Assistants

2020	Ruby Yee, Research Assistant
2020	Chaim Anderson, Research Assistant (Community-based in Nain, Nunatsiavut)
2019, 2020	Breanna Bishop, Research Assistant
2019-2020	Taylor Davies, Research Assistant

Pre-appointment and/or remotely supervised students and postdoctoral fellows

2017-2019	Eva Cougnon, Postdoctoral fellow, co-supervised with Prof. Neil Holbrook, University of Tasmania
2013-2018	Roxana Vasile, PhD, co-supervised with Assoc. Prof. Sean Tracey and Dr. Klaas Hartmann, University of Tasmania
2016-2017	Andika Putra, MSc, co-supervised with Prof. Neil Holbrook, University of Tasmania
2017-2018	Zijie Zhao, Honours, co-supervised with Prof. Neil Holbrook, Univ. of Tasmania
2017-2018	Zeya Li, Honours, co-supervised with Prof. Neil Holbrook, University of Tasmania
2017-2018	Farnaz Pourasghar, Research assistant/Visiting researcher, University of Tasmania
2017	Zijie Zhao, Undergraduate summer research student, University of Tasmania
2016	Veronique Lago, Research assistant, University of Tasmania
2016	Roohi Ghelani, Undergraduate summer research student, University of Tasmania
2015	Genevieve Tolhurst, Undergraduate summer research student, University of Tasmania

Student Committees and Examinations

Committees

2022-	Alexis Bazinet, Msc, Oceanography, Supervisor: Sarah Fortune
2021-	Arieanna Balbar, PhD, Oceanography, Supervisor: Anna Metaxas
2020-	Laura deGelleke, PhD, Oceanography, Supervisor: Markus Kienast
2020-	Lina García Suárez, PhD, Oceanography, Supervisor: Katja Fennel
2019-	Emmanuelle Cook, PhD (transfer from MSc), Oceanography, Supervisor: David Barclay
2019-	Adam White, PhD (transfer from MSc), Oceanography, Supervisor: Stephanie Kienast
2017-	Ricardo Arruda, PhD, Oceanography, Supervisor: Douglas Wallace
2018-2022	Albert (Qiantong) Pei, MSc, Oceanography, Supervisor: Jinyu Sheng
2019-2021	Conrad Pratt, Msc, Oceanography, Supervisor: Anna Metaxas

2018-2022 Najeem Shajahan, PhD, Oceanography, Supervisor: David Barclay
2018-2021 Lorenza Raimondi, PhD, Oceanography, Supervisor: Douglas Wallace
2018-2021 Yuan Wang, PhD, Oceanography, Supervisor: Jinyu Sheng
2017-2021 Krysten Rutherford, PhD, Oceanography, Supervisor: Katja Fennel
2017-2020 Christoph Renkl, PhD, Oceanography, Supervisor: Keith Thompson
2017-2020 Erin McKee, Msc, Oceanography, Supervisor: Mike Dowd

Examinations

2023 Haley Geizer, Qualifying Exam (sup. Chris Algar), External Examiner
2023 Jake Tan, Qualifying Exam (sup. Craig Brown), Chair
2023 May Wang, Qualifying Exam (sup. Eric Oliver), Examiner
2023 Emily Sklar, Qualifying Exam (sup. Craig Brown), Examiner
2022 Adam White, PhD Proposal Exam (sup. Stephanie Kienast), Examiner
2022 Wendy Muraoka, Qualifying Exam (sup. Markus Kienast), Examiner
2022 Breanna Bishop, Comprehensive Exam #2 (IDPhD), Examiner
2022 Lina Rotermund, Qualifying Exam (sup. Ruth Musgrave), Examiner
2022 Breanna Bishop, Comprehensive Exam #1 (IDPhD), Examiner
2021 Emmanuelle Cook, Qualifying Exam (sup. David Barclay), Examiner
2021 Caitlin Stockwell, MSc Thesis Defence (sup. Ramón Filguiera and Jon Grant), Chair
2021 Brendan Smith, Qualifying Exam (sup. David Barclay), Examiner
2021 Meg Carr, PhD Proposal Defence (sup. Chris Taggart), Chair
2021 Adam White, Qualifying Exam (sup. Stephanie Kienast), External Examiner
2020 Sebastian Haas, PhD Thesis Defence (sup. Douglas Wallace), Departmental Representative
2020 Colin Hughes, PhD Proposal Defence (sup. Jinyu Sheng), Chair
2019 Laura deGelleke, Qualifying Exam (sup. Markus Kienast), Examiner
2019 Benjamin Richaud, Qualifying Exam (sups. Eric Oliver, Katja Fennel), Examiner
2019 Najeem Shajahan, Qualifying Exam (sup. David Barclay), Examiner
2019 Meghan Troup, Qualifying Exam (sup. David Barclay), Examiner
2018 Tristan Guest, PhD Proposal Defence (sup. Alex Hay), External Examiner
2018 Tristan Guest, Qualifying Exam (sup. Alex Hay), Examiner
2018 Bruce Martin, PhD Proposal Defence (sup. David Barclay), Chair
2018 Colin Hughes, Qualifying Exam (sup. Jinyu Sheng), Examiner
2017 Hansen Johnson, Qualifying Exam (sup. Chris Taggart), Examiner
2017 Jenna Hare, PhD Proposal Defence (sup. Alex Hay), Chair
2017 Bruce Martin, Qualifying Exam (sup. David Barclay), Examiner
2017 Lin Cheng, Msc Defence (sup. Douglas Wallace), Chair

Teaching Experience

Dalhousie University

Winter 2022 OCEA 4221/5221, Ocean Dynamics, Sole lecturer
Winter 2022 OCEA 4000/5004, Oceans and Global Change, Four lectures
Winter 2021 OCEA 4201 Honours Research Part II
Fall 2021 OCEA 4201 Honours Research Part I
Winter 2021 OCEA 4301/5241, Special Topics: Sea Ice, Sole lecturer
Winter 2021 OCEA 4000/5004, Oceans and Global Change, Four lectures
Winter 2020 OCEA 4221/5221, Ocean Dynamics, Sole lecturer
Winter 2020 OCEA 4000, Oceans and Global Change, Four lectures
Winter 2019 OCEA 4221/5221, Ocean Dynamics, Sole lecturer
Winter 2019 OCEA 4000, Oceans and Global Change, Four lectures
Fall 2019 PHYC 6602, Special Topics: General Circulation of the Atmosphere, Sole lecturer
Fall 2019 OCEA 1000, Conversations with Ocean Scientists, One guest lecture
Fall 2018 OCEA 1000, Conversations with Ocean Scientists, One guest lecture
Fall 2017 OCEA 1000, Conversations with Ocean Scientists, One guest lecture

University of Tasmania

Sep 2016 KGA 320, Our Changing Climate, Three guest lectures and one practical
May 2015 KSA 205, Introduction to Oceanography, Two guest lectures
Oct 2014 KSA 205, Introduction to Oceanography, Two guest lectures
Aug 2014 KGA 320, Our Changing Climate, One guest lecture
Jul 2014 KSA 319, Making Sense of Climate Change, One guest lecture
Oct 2013 KSA 205, Introduction to Oceanography, Two guest lectures
Jul 2013 KSA 319, Making Sense of Climate Change, One guest lecture

Publications

Supervised students, postdocs and research assistants underlined

Peer-reviewed Journal Articles

Richaud, B., K. Fennel, **E. C. J. Oliver**, M. D. DeGrandpre, T. Bourgeois, X. Hu and Y. Lu (2023), *Underestimation of oceanic carbon uptake in the Arctic Ocean: Ice melt as predictor of the sea ice carbon pump*, *The Cryosphere*, *in press*.

Cadman, R., M. Dicker, M. Denniston, P. McCarney, R. Laing, **E. C. J. Oliver** and Megan Bailey (2023), *Using the Framework method to support collaborative and cross-cultural qualitative data analysis*, *FACETS*, 8, pp. 1-13, doi: 10.1139/facets-2022-0147.

Klotzbach, P.J., C. J. Schreck III, G. P. Compo, K. M. Wood, **E. C. J. Oliver**, S. G. Bowen and M. M. Bell (2023), *Influence of The Madden-Julian Oscillation on Continental United States Hurricane Landfalls*, Geophysical Research Letters, 22, pp. 282-293, doi: 10.1029/2023GL102762.

Zhao, Z., N. J. Holbrook and **E. C. J. Oliver** (2022), *An eddy pathway to marine heatwave predictability off eastern Tasmania*, Frontiers in Marine Science, 4, 907828. doi: 10.3389/fclim.2022.907828.

Lotze, H., S. Mellon, J. Coyne, M. Betts, M. Burchell, K. Fennel, M.A. Dusseault, S.D. Fuller, E. Galbraith, L. Garcia Suarez, L. de Gelleke, N. Golombek, B. Kelly, S. D. Kuehn, **E.C.J. Oliver**, M. MacKinnon, W. Muraoka, I.T.G. Predham, K. Rutherford, N. Shackell, O. Sherwood, E.C. Sibert and M. Kienast (2022), *Long-term ocean and resource dynamics in a hotspot of climate change*, FACETS, 7, pp. 1142-1184, doi: 10.1139/facets-2021-0197.

Bishop, B., **E. C. J. Oliver** and C. Aporta (2022), *Co-producing maps as boundary objects: Bridging Labrador Inuit knowledge and oceanographic research*, Journal of Cultural Geography, 39(1), pp. 55-89, doi: 10.1080/08873631.2021.1998992.

Schlegel, R. W., S. Darmaraki, J. A. Benthuisen., K. Filbee-Dexter and **E. C. J. Oliver** (2021), *Marine cold-spells*, Progress in Oceanography, 198, 102684, doi: 10.1016/j.pocean.2021.102684.

Ruehs, S., **E. C. J. Oliver**, A. Biastoch, C. W. Böning, M. Dowd, K. Getzlaff, T. Martin and P. G. Myers (2021), *Changing spatial patterns of deep convection in the subpolar North Atlantic*, Journal of Geophysical Research - Oceans, 126(7), e2021JC017245, doi: 10.1029/2021JC017245.

Klotzbach, P. J., C. J. Schreck III, G. P. Compo, S. G. Bowen, E. J. Gibney, **E. C. J. Oliver**, and M. M. Bell (2021), *The Record-Breaking 1933 Atlantic Hurricane Season*, Bulletin of the American Meteorological Society, 102(3), E446-E463, doi: 10.1175/BAMS-D-19-0330.1.

Schlegel, R. W., **E. C. J. Oliver** and K. Chen (2021), *Drivers of Marine Heatwaves in the Northwest Atlantic: the role of air-sea interaction during onset and decline*, Frontiers in Marine Science, 8, 627970, doi: 10.3389/fmars.2021.627970.

Pourasghar, F., **E. C. J. Oliver** and N. J. Holbrook (2021), *Influence of the MJO on daily surface air temperature over Iran*, International Journal of Climatology, 41(9), 4562-4573, doi: 10.1002/joc.7086.

Titus, M. L., K. R. Thompson, **E. C. J. Oliver** & P. J. Klotzbach (2021), *Statistical Reconstruction of Seasonal Tropical Cyclone Variability in the North Atlantic Basin*. Journal of Geophysical Research: Atmospheres, 126, e2020JD032669, doi: 10.1029/2020JD032669.

Sen Gupta, A., M. Thomsen, J. A. Benthuisen, A. J. Hobday, **E. C. J. Oliver**, L. V. Alexander, M. T. Burrows, M. G. Donat, M. Feng, N. J. Holbrook, S. Perkins-Kirkpatrick, P. J. Moore, R. R. Rodrigues, H. A. Scannell, A. S. Taschetto, C. C. Ummenhofer, T. Wernberg and D. A. Smale (2020), *Drivers and impacts of the most extreme marine heatwaves events*. Scientific reports, 10(1), 1-15. doi: 10.1038/s41598-020-75445-3.

Zhao, Z., N. J. Holbrook, **E. C. J. Oliver**, D. Ballesterero and J. M. Vargas-Hernandez, *Characteristic atmospheric states during mid-summer droughts over Central America and Mexico*, *Climate Dynamics*, 55, pp. 681-701, doi: 10.1007/s00382-020-05283-6.

Holbrook, N. J., A. Sen Gupta, **E. C. J. Oliver**, A. J. Hobday, J. A. Benthuisen, H. A. Scannell, D. A. Smale and T. Wernberg (2020), *Keeping Pace with Marine Heatwaves*, *Nature Reviews Earth & Environment*, 1, pp. 482-493, doi: 10.1038/s43017-020-0068-4.

Li, Z., N. J. Holbrook, X. Zhang, **E. C. J. Oliver** and E. A. Cougnon (2020), *Remote forcing of Tasman Sea marine heatwaves*, *Journal of Climate*, 33 (12), pp. 5337–5354, doi: 10.1175/JCLI-D-19-0641.1.

Wahiduzzaman, M., **E. C. J. Oliver**, S. J. Wotherspoon and J.-J. Luo (2020), *Seasonal forecasting of tropical cyclones in the North Indian Ocean region: The role of El Niño-Southern Oscillation*, *Climate Dynamics*, 54, pp. 1571–1589, doi: 10.1007/s00382-019-05075-7.

Benthuisen, J. A., **E. C. J. Oliver**, K. Chen and T. Wernberg (2020), *Editorial: Advances in Understanding Marine Heatwaves and Their Impacts*, *Frontiers in Marine Science*, 7, pp. 147. doi: 10.3389/fmars.2020.00147.

Oliver, E. C. J., M. Burrows, M. Donat, A. Sen Gupta, L. Alexander, S. Perkins-Kirkpatrick, J. Benthuisen, A. Hobday, N. Holbrook, P. Moore, M. Thomsen, T. Wernberg and D. Smale (2019), *Projected marine heatwaves in the 21st century and the potential for ecological impact*, *Frontiers in Marine Science*, 6, pp. 734, doi: 10.3389/fmars.2019.00734.

Schlegel, R. W., **E. C. J. Oliver**, A. J. Hobday and A. J. Smit (2019), *Detecting marine heatwaves with sub-optimal data*, *Frontiers in Marine Science*, 6, pp. 737, doi: 10.3389/fmars.2019.00737.

Condie, S. A., **E. C. J. Oliver** and G. M. Hallegraeff (2019), *Environmental drivers of unprecedented Alexandrium catenella dinoflagellate blooms off eastern Tasmania, 2012–2018*, *Harmful Algae*, 87, 101628, doi: 10.1016/j.hal.2019.101628.

Holbrook, N. J., H. A. Scannell, A. Sen Gupta, J. A. Benthuisen, M. Feng, **E. C. J. Oliver**, L. V. Alexander, M. T. Burrows, M. G. Donat, A. J. Hobday, P. J. Moore, S. E. Perkins-Kirkpatrick, D. A. Smale, S. C. Straub and T. Wernberg (2019), *A global assessment of marine heatwaves and their drivers*, *Nature Communications*, 10, 2624, doi: 10.1038/s41467-019-10206-z.

Pourasghar, F., **E. C. J. Oliver** and N. J. Holbrook (2019), *Modulation of wet-season rainfall over Iran by the MJO, IOD and ENSO*, *Journal of Climatology*, 39(10), pp. 4029-4040, doi: 10.1002/joc.6057.

Oliver, E. C. J. (2019), *Mean warming not variability drives marine heatwave trends*, *Climate Dynamics*, 53(3), pp. 1653-1659, doi: 10.1007/s00382-019-04707-2.

Smale, D., T. Wernberg, **E. C. J. Oliver**, M. Thomsen, B. Harvey, S. Straub, M. Burrows, L. Alexander, J. Benthuisen, M. Donat, M. Feng, A. Hobday, N. Holbrook, S. Perkins-Kirkpatrick, H. Scannell, A.

Sen Gupta, B. Payne and P. Moore (2019), *Marine heatwaves threaten global biodiversity and the provision of ecosystem services*, Nature Climate Change, 9, 306-312, doi: 10.1038/s41558-019-0412-1.

Klotzbach, P., S. Abhik, H. H. Hendon, M. Bell, C. Lucas, A. Marshall and E. C. J. Oliver (2019), *On the emerging relationship between the stratospheric Quasi-Biennial oscillation and the Madden-Julian oscillation*, Scientific Reports, 9, 2981, doi: 10.1038/s41598-019-40034-6.

Perkins-Kirkpatrick, S., A. King, E. Cougnon, M. Grose, E. C. J. Oliver, N. J. Holbrook, S. Lewis and F. Pourasghar (2018), *The role of natural variability and anthropogenic climate change in the 2017/18 Tasman Sea marine heatwave [in “Explaining Extreme Events of 2017 from a Climate Perspective”]*. Bulletin of the American Meteorological Society, 100(1), S105–S110, doi: 10.1175/BAMS-D-18-0116.1.

Zhao, Z., E. C. J. Oliver, D. Ballesterio, J. M. Vargas-Hernandez and N. J. Holbrook (2019), *Influence of the MJO on Costa Rican mid-summer drought timing*, International Journal of Climatology, 39, pp. 292-301, doi: 10.1002/joc.5806.

Wahiduzzaman, M., E. C. J. Oliver, P. J. Klotzbach, S. J. Wotherspoon and N. J. Holbrook (2019), *A Statistical Seasonal Forecast Model of North Indian Ocean Tropical Cyclones using the Quasi-Biennial Oscillation*, International Journal of Climatology, 39, pp. 934-952, doi: 10.1002/joc.5853.

Oliver, E. C. J. and N. J. Holbrook (2018), *Variability and long-term trends in the shelf circulation off eastern Tasmania*, Journal of Geophysical Research, 123(1), pp. 7366-7381, doi: 10.1029/2018JC013994.

Marzloff, M., E. C. J. Oliver, N. Barrett, N. J. Holbrook, L. James, S. J. Wotherspoon and C. Johnson (2018), *Differential vulnerability to climate change yields novel deep reef communities*, Nature Climate Change, 8, 873-878, doi: 10.1038/s41558-018-0278-7.

Hobday, A. J., E. C. J. Oliver, A. S. Gupta, J. A. Benthuyesen, M. T. Burrows, M. G. Donat, N. J. Holbrook, P. J. Moore, M. S. Thomsen, T. Wernberg and D. A. Smale (2018), *Categorizing and Naming Marine Heatwaves*, Oceanography, 31(2), doi: 10.5670/oceanog.2018.5205.

Oliver, E. C. J., M. G. Donat, M. T. Burrows, P. J. Moore, D. A. Smale, L. V. Alexander, J. A. Benthuyesen, M. Feng, A. Sen Gupta, A. J. Hobday, N. J. Holbrook, S. E. Perkins-Kirkpatrick, H. A. Scannell, S. C. Straub and T. Wernberg (2018), *Longer and more frequent marine heatwaves over the past century*, Nature Communications, 9 (1324), doi: 10.1038/s41467-018-03732-9.

Benthuyesen, J. A., E. C. J. Oliver, M. Feng and A. Marshall (2018), *Extreme marine warming across tropical Australia during austral summer 2015-16*, Journal of Geophysical Research, 123 (2), pp. 1301-1326, doi: 10.1002/2017JC013326.

Oliver, E. C. J., V. Lago, A. J. Hobday, N. J. Holbrook, S. D. Ling and C. N. Mundy (2018), *Marine heatwaves off eastern Tasmania: Trends, interannual variability, and predictability*, Progress in Oceanography, 161, pp. 116-130, doi: 10.1016/j.pcean/2018.02.007.

Dunstan, P., B. R. Moore, J. D. Bell, N. J. Holbrook, **E. C. J. Oliver**, J. Risbey, S. D. Foster, Q. Hanich, A. J. Hobday, N. Bennett (2018), *How can climate predictions improve sustainability of coastal fisheries in Pacific small-island developing states*, Marine Policy, 88, pp. 295-302, doi: 10.1016/j.marpol.2017.09.033.

Vasile, R., K. Hartmann, A. J. Hobday, **E. C. J. Oliver** and S. Tracey (2018), *Evaluation of hydrodynamic ocean models as a first step in larval dispersal modelling*, Continental Shelf Research, 152, pp. 38-49, doi: 10.1016/j.csr.2017.11.001.

Oliver, E. C. J., S. E. Perkins-Kirkpatrick, N. J. Holbrook and N. L. Bindoff (2018), *Anthropogenic and natural influences on record 2016 marine heatwaves [in “Explaining Extreme Events of 2016 from a Climate Perspective”]*. Bulletin of the American Meteorological Society, 99(1), S44–S48, doi: 10.1175/BAMS-D-17-0093.1.

Ghelani, R. P. S., **E. C. J. Oliver**, N. J. Holbrook, M. C. Wheeler and P. J. Klotzbach (2017), *Joint modulation of intraseasonal rainfall in tropical Australia by the Madden-Julian Oscillation and El Niño-Southern Oscillation*, Geophysical Research Letters, 44, pp. 10754-10761, doi: 10.1002/2017GL075452.

Schlegel, R. W., **E. C. J. Oliver**, S. E. Perkins-Kirkpatrick, A. Kruger and A. J. Smit (2017), *Predominant atmospheric and oceanic patterns during coastal marine heatwaves*, Frontiers in Marine Science, 4:323, doi: 10.3389/fmars.2017.00323.

Oliver, E. C. J., J. A. Benthuisen, N. L. Bindoff, A. J. Hobday, N. J. Holbrook, C. N. Mundy and S. E. Perkins-Kirkpatrick (2017), *The unprecedented 2015/16 Tasman Sea marine heatwave*, Nature Communications, 8, 16101, doi: 10.1038/ncomms16101.

Schlegel, R. W., **E. C. J. Oliver**, T. Wernberg and A. J. Smit (2017), *Nearshore and offshore co-occurrence of marine heatwaves and cold-spells*, Progress in Oceanography, 151, pp. 189-205, doi: 10.1016/j.pocean.2017.01.004.

Wahiduzzaman, M., **E. C. J. Oliver**, S. J. Wotherspoon and N. J. Holbrook (2017), *A climatological model of North Indian Ocean tropical cyclone genesis, tracks and landfall*, Climate Dynamics, 49 (7), pp. 2585-2603, doi: 10.1007/s00382-016-3461-4.

Oliver, E. C. J., M. Herzfeld and N. J. Holbrook (2016), *Modelling the shelf circulation off eastern Tasmania*, Continental Shelf Research, 130, pp. 14-33, doi: 10.1016/j.csr.2016.10.005.

Perkins-Kirkpatrick, S.E. et al. (incl. **E. C. J. Oliver**) (2016), *Natural hazards in Australia: heatwaves*, Climatic Change, 139 (1), pp. 101-114, doi: 10.1007/s10584-016-1650-0.

McKinnes, K. et al. (incl. **E. C. J. Oliver**) (2016), *Natural hazards in Australia: sea level and coastal extremes*, Climatic Change, 139 (1), pp. 69-83, doi: 10.1007/s10584-016-1647-8.

- Oliver, E. C. J. (2016)**, *Blind use of reanalysis data: Apparent trends in Madden-Julian Oscillation activity driven by observational changes*, *International Journal of Climatology*, 36, pp. 3458-3468, doi: 10.1002/joc.4568.
- Klotzbach, P. J., **E. C. J. Oliver**, R. Leeper and C. J. Schreck III (2016), *The relationship between the Madden-Julian Oscillation (MJO) and southeastern New England snowfall*, *Monthly Weather Review*, 144, pp. 1355-1362, doi: 10.1175/MWR-D-15-0434.1.
- Hobday, A. J., L. V. Alexander, S. E. Perkins, D. A. Smale, S. C. Straub, **E. C. J. Oliver**, J. Benthuyssen, M. T. Burrows, M. G. Donat, M. Feng, N. J. Holbrook, P. J. Moore, H. A. Scannell, A. S. Gupta and T. Wernberg (2016), *A hierarchical approach to defining marine heatwaves*, *Progress in Oceanography*, 141, pp. 227-238, doi: 10.1016/j.pocean.2015.12.014.
- Oliver, E. C. J.** and K. R. Thompson (2016), *Predictability of the Madden Julian Oscillation index: Seasonality and dependence on MJO phase*, *Climate Dynamics*, 46, pp. 159-176, doi: 10.1007/s00382-015-2576-3.
- Oliver, E. C. J.**, T.J. O'Kane and N. J. Holbrook (2015), *Projected changes to Tasman Sea eddies in a future climate*, *Journal of Geophysical Research*, 120, pp. 7150-7165, doi: 10.1002/2015JC010993.
- Klotzbach, P. K. and **E. C. J. Oliver** (2015), *Variations in Global Tropical Cyclone Activity and the Madden-Julian Oscillation Since the Mid-20th Century*, *Geophysical Research Letters*, 42, pp. 4199-4207, doi: 10.1002/2015GL063966.
- Klotzbach, P. K. and **E. C. J. Oliver** (2015), *Modulation of Atlantic Basin Tropical Cyclone Activity by the Madden-Julian Oscillation (MJO) from 1905-2011*, *Journal of Climate*, 28, pp. 204-217, doi: 10.1175/JCLI-D-14-00509.1.
- Oliver, E. C. J. (2015)**, *Multidecadal variations in the modulation of Alaska wintertime air temperature by the Madden-Julian Oscillation*, *Theoretical and Applied Climatology*, 121, pp. 1-11, doi: 10.1007/s00704-014-1215-y.
- O'Kane, T. J., R. J. Matear, M. A. Chamberlain, **E. C. J. Oliver**, and N. J. Holbrook (2014), *Storm tracks in the Southern Hemisphere subtropical oceans*, *Journal of Geophysical Research*, 119, pp. 6078-6100, doi: 10.1002/2014JC009990.
- Oliver, E. C. J.** and N. J. Holbrook (2014), *Extending our understanding of South Pacific gyre 'spin-up': Modeling the East Australian Current in a future climate*, *Journal of Geophysical Research*, 119, pp. 2788-2805, doi: 10.1002/2013JC009591.
- Oliver, E. C. J.**, S. J. Wotherspoon, M. A. Chamberlain and N. J. Holbrook (2014), *Projected Tasman Sea extremes in sea surface temperature through the 21st century*, *Journal of Climate*, 27 (5), pp. 1980-1998, doi: 10.1175/JCLI-D-13-00259.1.

Oliver, E. C. J., S. J. Wotherspoon and N. J. Holbrook (2014), *Estimating extremes from global ocean and climate models: A Bayesian hierarchical model approach*, Progress in Oceanography, 122, pp. 77-91, doi: 10.1016/j.pocean.2013.12.004.

Oliver, E. C. J. and N. J. Holbrook (2014), *A statistical method for improving continental shelf and nearshore marine climate predictions*, Journal of Atmospheric and Oceanic Technology, 31, pp. 216-232, doi: 10.1175/JTECH-D-13-00052.1.

Oliver, E. C. J. (2014), *Intraseasonal variability of sea level and circulation in the Gulf of Thailand: The role of the Madden-Julian Oscillation*, Climate Dynamics, 42 (1-2), pp. 401-416, doi: 10.1007/s00382-012-1595-6.

Oliver, E. C. J., J. Sheng, K. R. Thompson, and J. R. Urrego-Blanco (2012), *Extreme Surface and Near-Bottom Currents in the Northwest Atlantic*, Natural Hazards, 64 (2), pp. 1425-1446, doi: 10.1007/s11069-012-0303-5.

Oliver, E. C. J. and K. R. Thompson (2012), *A Reconstruction of Madden-Julian Oscillation Variability from 1905 to 2008*, Journal of Climate, 25 (6), pp. 1996-2019, doi: 10.1175/JCLI-D-11-00154.1.

Oliver, E. C. J. and K. R. Thompson (2011), *Sea level and circulation variability of the Gulf of Carpentaria: Influence of the Madden-Julian Oscillation and the adjacent deep ocean*, Journal Geophysical Research, 116, C02019, doi:10.1029/2010JC006596.

Oliver, E. C. J. and K. R. Thompson (2010), *Madden-Julian Oscillation and sea level: Local and remote forcing*, Journal Geophysical Research, 115, C01003, doi:10.1029/2009JC005337.

Invited peer-reviewed Journal Articles

Oliver, E. C. J., J. A. Benthuisen, S. Darmaraki, M. G. Donat, A. J. Hobday, N. J. Holbrook, R. W. Schlegel and A. Sen Gupta (2021), *Marine Heatwaves*, Annual Review of Marine Science, 13, pp. 313-342, doi: 10.1146/annurev-marine-032720-095144.

Journal Articles without peer review

Harrison, Emma J., R. Webb, S. Ziegler, **E. C. J. Oliver** (2022), *Close to Home - Co-producing Research Questions and Solutions to Coastal Erosion In Nunatsiavut*, Journal of Ocean Technology, 17(3), pp. 20-29.

Book chapters

Petriello, M A, Zurba M, Schmidt JO, Anthony K, Jacque N, Nochasak C, Winters J, Winters J, Bailey M, **Oliver E C J**, McCarney P, Bishop B, Bodwitch H, Cadman R, and McLaren M. (2023). *The power and precarity of knowledge co-production: A case study of SakKijânginnaniattut Nunatsiavut Sivunitsangit (the Sustainable Nunatsiavut Futures Project)*. In S Gómez, and V Köpsel (Eds).

Transdisciplinary Marine Research: Bridging Science and Society (pp. 127-148). Routledge. doi: 10.4324/9781003311171-9.

Holbrook, N. J., C. Claar, A. Hobday, K. McInnes, **E. C. J. Oliver**, A. Sen Gupta, M. Widlansky and X. Zhang (2020), *ENSO driven ocean extremes and their ecosystem impacts*. Chapter 18 (pp 409-428) In: *ENSO in a Changing Climate* (Eds. MJ McPhaden, A Santoso and W Cai), American Geophysical Union (AGU) [ISBN: 978-1-119-54812-6], doi: 10.1002/9781119548164.ch18.

Conference papers

Oliver, E. C. J. and K. R. Thompson (2012), *Impact of the MJO on the Gulf of Carpentaria during the monsoon*, Sixth CAWCR Workshop on Understanding and Prediction of Monsoon Weather and Climate, November 2012 (extended abstract).

Reports (not peer reviewed)

Oliver, E.C.J., V. Lago, N.J. Holbrook, S.D. Ling, C.N. Mundy and A.J. Hobday, *Eastern Tasmania Marine Heatwave Atlas*, Institute for Marine and Antarctic Studies, University of Tasmania. <http://metadata.imas.utas.edu.au/geonetwork/srv/eng/metadata.show?uuid=20188863-0af6-4032-98f8-def671cdaa58>, doi: 10.4226/77/587e97d9b2bf9.

Harris, T., P. Hope, **E. C. J. Oliver**, R. Smalley, J. Arblaster, N. J. Holbrook, N. Duke, K. Pearce, K. Braganza and N. Bindoff (2017), *Climate drivers of the 2015 Gulf of Carpentaria mangrove dieback*, National Environmental Science Programme (NESP) Earth Systems and Climate Change Hub Technical Report No. 2, NESP, Australia.

Oliver, E. C. J. (2014), *An evaluation of Australian continental shelf sea surface temperature estimates from Bluelink ReANalysis*, Institute for Marine and Antarctic Studies (IMAS) Technical Report, 2014/02.

Selected Conference Presentations

Supervised students, postdocs and research assistants underlined; Presenter in italics.

Anthony, K., M. Flynn, N. Jacque, P. McCarney, C. Nochasak, **E.C.J. Oliver**, J. Winters and J. Winters, *Presentation to Conversation: Using Land-Based Workshops to Communicate Research Results and Lived Experiences*, ArcticNet ASM, 4-9 December 2022, Toronto, Canada.

Harrison, E.J., R. Webb, S. E. Ziegler, M. Saunders, A. Normandeau, A. Limoges, C. Richards and **E. C. J. Oliver** (2022), *Close to Home: Co-producing Research Questions and Solutions to Coastal Erosion in Nunatsiavut, Northern Labrador*, ArcticNet ASM, 4-9 December 2022, Toronto, Canada.

Harrison, E.J., R. Webb, S. E. Ziegler, M. Saunders, A. Normandeau, A. Limoges, C. Richards and **E. C. J. Oliver** (2022), *Close to Home: Co-producing Research Questions and Solutions to Coastal*

Erosion in Nunatsiavut, Northern Labrador, AGU Fall Meeting, 13 December 2022, San Francisco, USA.

Boteler, C., M. Dowd, **E. C. J. Oliver**, E. T. Krainski and D. W. R. Wallace (2022). *Improved Estimation of Inorganic Carbon in the North Atlantic Ocean with State Space Models*. Joint Statistical Meeting, Aug 9 2022, Washington DC.

Bishop, B., E. Paquette, G. Ljubicic, N. Carter, **E. C. J. Oliver** & C. Aporta. *Inuit uses of weather, water, ice, and climate indicators to assess travel safety in a changing environment: a scoping review* [oral presentation]. ArcticNet ASM 2022, 5-8 December, 2022. Toronto, ON, Canada.

Bishop, B., **E. C. J. Oliver**, C. Aporta. (2022). *Participatory methods to bridge Inuit and oceanographic scientific knowledge in Nunatsiavut* [poster presentation]. ArcticNet ASM 2022, 5-8 December, 2022. Toronto, ON, Canada.

Petriello, M., M. Zurba, **E. C. J. Oliver**, M. Bailey, R. Cadman, B. Bishop, M. Wang, P. McCarney, M. Denniston, A. Metaxas, A. Bates, H. Bodwitch, J. Schmidt, K. Anthony, N. Jacque, J. Winters, M. McLaren, D. Cote, R. Rangeley and R. Sipler (2022). *Mental models as iterative tools to explore knowledge co-production systems*. Virtual presentation. North American Congress for Conservation Biology 2022, 20 July 2022, Reno, NV, USA.

Bishop, B., **E. C. J. Oliver**, M. Wang, K. Anthony, J. Winters, & C. Nochasak. *Mapping Nunatsiavummiut knowledge of the coastal ocean and sea ice: creating an ethical space for cross-cultural research* [oral presentation]. Labrador Research Forum [virtual], 9-12 May 2022.

Davies, T. and **E. C. J. Oliver**, *Using drifters to understand the dynamics of the Labrador Current System over the shelf*, CMOS 2022, June 2022.

Richaud, B., **E. C. J. Oliver**, K. Fennel and X. Hu, *Response of the upper Arctic Ocean to marine heatwaves for regionally differing ice-ocean regimes*, CMOS 2022, June 2022.

Lu, Y., X. Hu, H. Wei, **E. C. J. Oliver**, C. Richards and D. Brickman, *Improving ocean and sea-ice model hindcast simulations for Canada's Three Oceans: Present and ongoing work*, CMOS 2022, June 2022.

Renkl, C. and **E. C. J. Oliver** (2022). *Bias Correction and Spatiotemporal Scales for Downscaling Future Projections of Northwest Atlantic Circulation and Sea Ice*. Oral presentation at CMOS Congress 2022, June 3, 2022, virtual.

Renkl, C. and **E. C. J. Oliver** (2022). *Bias Correction and Spatiotemporal Scales for Downscaling Future Projections of Northwest Atlantic Circulation and Sea Ice*. Oral presentation at EGU General Assembly 2022, May 27, 2022, Vienna, Austria

Renkl, C. and **E. C. J. Oliver** (2022). *Bias Correction and Spatiotemporal Scales for Downscaling Future Projections of Northwest Atlantic Circulation and Sea Ice*. Poster presentation at Ocean Frontier 2022, May 18, 2022, Halifax NS, Canada.

Boteler, C., M. Dowd, and **E. C. J. Oliver**, *Consequences of seasonal biased data in estimating anthropogenic carbon in the NW Atlantic*. Oral Presentation, OSM 2022, February 2022, Online.

Wang, M. and **E. C. J. Oliver**, *Temporal and spatial variations of sea ice along the Labrador coast and shelf*. Oral Presentation, OSM 2022, February 2022, Online.

Richaud, B., K. Fennel, **E. C. J. Oliver**, M. DeGrandpre, T. Bourgeois, Y. Lu and X. Hu, *Sea ice melt accelerates Arctic Ocean carbon uptake: A model-based quantification*. Oral Presentation, OSM2022, February 2022, Online.

Wang, M. and **E. C. J. Oliver**. *Scientific and Inuit Knowledge of sea ice variations along the Labrador coast*. ArcticNet [virtual] ASM 2021, 6-10 December, 2021.

Bishop, B., E. Paquette, G. Ljubicic, N. Carter, **E. C. J. Oliver** and C. Aporta, *Inuit uses of weather, water, ice, and climate indicators to assess travel safety in a changing environment: Steps and tips in developing a scoping review protocol*. ArcticNet [virtual] ASM 2021, 6-10 December, 2021.

Oliver, E. C. J., B. Bishop, C. Aporta, J. Sheng and K. Ohashi, *Influence of climate variability and hydroelectric development on oceanography and sea ice in a subarctic fjord*, Oral, Canadian Meteorological and Oceanographic Society Congress, June, 2021.

Boteler, C., M. Dowd, **E. C. J. Oliver**, E. Krainski and D. W. R. Wallace, *Isolating Dissolved Inorganic Carbon's Sources of Temporal Variability in the Northwest Atlantic Ocean*, Oral, Canadian Meteorological and Oceanographic Society Congress, June, 2021.

Boteler, C., M. Dowd, **E. C. J. Oliver**, E. Krainski and D. W. R. Wallace, *Isolating Dissolved Inorganic Carbon's Sources of Temporal Variability in the Northwest Atlantic Ocean*, Oral, Statistics Society of Canada Annual Meeting, June, 2021.

Cavanagh, R. and **E. C. J. Oliver**, *Connecting Seasonal Extratropical Cyclone Variability with Predictor Fields using Self-Organizing Maps*, Oral, CMOS Annual Congress 2021, June, 2021

Bishop, B., **E. C. J. Oliver** and C. Aporta. *Bridging Inuit knowledge and oceanographic research in Nunatsiavut*, Oral, Canadian Meteorological and Oceanographic Society Congress, May-June 2021. Victoria, BC (Canada).

Hu, X., **E. C. J. Oliver** and Y. Lu, *A 30-year historical ocean and sea ice simulation with a medium-resolution model for Canada's 3 Oceans*, Oral, 2021 CMOS Congress, June, 2021.

Boteler, C., M. Dowd, **E. C. J. Oliver**, E. Krainski and D. W. R. Wallace, *Using State-Space Models to Estimate the Carbon Inventory in the Northwest Atlantic Ocean*, Oral, Canadian Meteorological and Oceanographic Society Congress, June, 2020.

Boteler, C., M. Dowd, **E. C. J. Oliver**, E. Krainski and D. W. R. Wallace, *Using State-Space Models to Estimate the Carbon Inventory in the Northwest Atlantic Ocean*, Oral, Oral, Canadian Statistics Student Conference, May, 2020.

Bishop, B., **E. C. J. Oliver** and C. Aporta. *Bridging knowledge systems to support oceanographic research in Nunatsiavut*, Oral, ArcticNet ASM, December, 2020. Ottawa, ON (Canada).

Oliver, E. C. J., B. Bishop, C. Aporta. J. Sheng and K. Ohashi, *Influence of climate variability and hydroelectric development on oceanography and sea ice in a subarctic fjord*, Oral, ArcticNet 2020, December, 2020.

Richaud B., K. Fennel, **E. C. J. Oliver**, M. DeGranpre, T. Bourgeois, Y. Lu and X. Hu, *Estimating the missing Arctic Ocean carbon uptake in numerical models*. Poster, ArcticNet 2020, December, 2020.

Schlegel, R. W., **E. C. J. Oliver** and K. Chen. *Primary Drivers of Marine Heatwaves in the Northwest Atlantic*. Oral. Ocean Sciences Meeting, February, 2020.

Oliver, E. C. J. et al. *Changes in marine heatwaves globally over the 20th and 21st centuries*. Oral, Ocean Sciences Meeting 2020, February, 2020

Schlegel, R. W., **E. C. J. Oliver** and K. Chen. *Primary Drivers of Marine Heatwaves in the Northwest Atlantic*, Poster, AGU Fall Meeting, December, 2020

Richaud B., K. Fennel, **E. C. J. Oliver**, M. DeGranpre, T. Bourgeois, Y. Lu and X. Hu, *Simulating the Sea Ice Carbon Pump in the Beaufort Gyre*. Poster, Ocean Sciences Meeting, February 2020

Bishop, B., C. Aporta, and **E. C. J. Oliver**. *Respecting ontology: Qualitative methods for documenting Inuit knowledge of Nunatsiavut coastal oceanography*, Poster, ArcticNet 2019, December 2019. Halifax, NS (Canada).

Sobral, F. and **E. C. J. Oliver**. *Towards a Regional Model for the Labrador Coast and Shelf*. Poster, OceanPredict'19, May 2019, Halifax, Canada.

Sobral, F. and **E. C. J. Oliver** *Towards a Regional Model for the Labrador Coast and Shelf*. Poster, ArcticNet ASM, December 2019, Halifax, Canada.

Schlegel, R. W. and **E. C. J. Oliver**. *Primary drivers of marine heatwaves in the Northwest Atlantic*. Oral, IUGG 2019, July 2019, Montreal, Canada.

Oliver, E. C. J., J. Benthuisen, N. Bindoff, A. J. Hobday, N. J. Holbrook, C. Mundy and S. E. Perkins-Kirkpatrick. *The unprecedented 2015/16 Tasman Sea marine heat wave*. Oral, Ocean Sciences Meeting, February 2018, Portland, Oregon

Invited Presentations and Seminars

Oliver, E. C. J. (June 2022), *Bridging knowledge systems: Scientific and Inuit knowledge of the ocean and sea ice*. 2022 CMOS Public Lecture.

Oliver, E. C. J. (March 2022), *Research on the coastal ocean in Nunatsiavut with science, Inuit Knowledge, and community engagement*. University of Victoria, Indigenous Scholars in Science Public Lecture.

Oliver, E. C. J. (March 2022), *Bridging knowledge systems: Scientific and Inuit knowledge of the ocean and sea ice*. 2022 CMOS & CNC-SCOR Tour Speaker.

Oliver, E. C. J., B. Bishop, C. Aporta, J. Sheng and K. Ohashi (May 2021), *Bridging knowledge systems: Inuit knowledge and oceanography of a subarctic fjord in Nunatsiavut*, Ocean Seminar Series, University of Liverpool, Liverpool, UK (virtual).

Oliver, E. C. J., M. G. Donat, M. T. Burrows, P. J. Moore, L. V. Alexander, J. A. Benthuisen, M. Feng, A. Sen Gupta, A. J. Hobday, N. J. Holbrook, S. E. Perkins-Kirkpatrick, H. A. Scannell, D. A. Smale, S. C. Straub, M. Thomsen, T. Wernberg, R. W. Schlegel and S. Darmaraki (November 2020), *Historical and future projected changes in marine heatwaves globally*, Ocean Circulation and Climate Dynamics Colloquium, GEOMAR, Kiel, Germany (virtual).

Oliver, E. C. J., M. G. Donat, M. T. Burrows, P. J. Moore, L. V. Alexander, J. A. Benthuisen, M. Feng, A. Sen Gupta, A. J. Hobday, N. J. Holbrook, S. E. Perkins-Kirkpatrick, H. A. Scannell, D. A. Smale, S. C. Straub, M. Thomsen and T. Wernberg (October 2019), *Historical and future projected changes in global marine heatwaves*, PICES 2019 Annual Meeting, Victoria, Canada.

Oliver, E. C. J., M. G. Donat, M. T. Burrows, P. J. Moore, L. V. Alexander, J. A. Benthuisen, M. Feng, A. Sen Gupta, A. J. Hobday, N. J. Holbrook, S. E. Perkins-Kirkpatrick, H. A. Scannell, D. A. Smale, S. C. Straub, M. Thomsen and T. Wernberg (July 2019), *Historical and future projected changes in global marine heatwaves*, 27th IUGG General Assembly, Montreal, Canada.

Workshops and Panels

Community-based Observing of coastal Nunatsiavut Ocean Circulation (CONOC) Inuit Knowledge Mapping and Interview Workshop, Postville, Nunatsiavut, November 2022, organizer.

Community-based Observing of coastal Nunatsiavut Ocean Circulation (CONOC) Inuit Knowledge Mapping and Interview Workshop, Nain, Nunatsiavut, October 2022, organizer and facilitator.

Community-based Observing of coastal Nunatsiavut Ocean Circulation (CONOC) Inuit Knowledge Mapping and Interview Workshop, Makkovik, Nunatsiavut, October 2022, organizer and facilitator.

Knowledge mobilization on the land: Evaluation of land-based workshops as adaptation to environmental change in Nunatsiavut, Andersen's cabin, near Rigolet, Nunatsiavut, October 2022, organiser, presenter, and participant.

Dalhousie Arctic Research Symposium, Dalhousie University, November 2019, panel member and presenter for session on "Community engagement" moderated by Dr. Vanessa Hiratsuka.

Climate Change Adaptation On The Land Workshop, Merkeratsuk's cabin, near Nain, Nunatsiavut, September 2019, presenter and participant.

Community-based Observing of coastal Nunatsiavut Ocean Circulation (CONOC) Inuit Knowledge Mapping and Interview Workshop, Hopedale, Nunatsiavut, June 2019, organizer and facilitator.

Community-based Observing of coastal Nunatsiavut Ocean Circulation (CONOC) Inuit Knowledge Mapping and Interview Workshop, Rigolet, Nunatsiavut, June 2019, organizer and facilitator.

Media and Press Appearances

These scientists are teaming up with Inuit communities to study climate change in Labrador, CBC News Newfoundland & Labrador, 16 April 2023
<https://www.cbc.ca/news/canada/newfoundland-labrador/sustainable-nunatsiavut-futures-labrador-coast-1.6806967>

The drivers and the implications of marine heatwaves, John Carey, PNAS, June 24 2022
<https://www.pnas.org/doi/10.1073/pnas.2209393119>

Bridging Local Knowledge and Scientific Monitoring in Coastal Nunatsiavut Communities, ECO MAGAZINE, June 21st 2022. http://digital.ecomagazine.com/publication/frame.php?i=749705&p=&pn=&ver=html5&view=articleBrowser&article_id=4287612

MARINE HEAT WAVES ARE BECOMING MORE COMMON AND INTENSE. WHAT CAN WE DO TO MINIMIZE HARM? Jen Monnier. ENSIA. August 11, 2020. <https://ensia.com/features/ocean-heat-waves-marine-ecosystems/>

Sciographies: Episode 12, with Prof. David Barclay. CKDU, Interview. October 18, 2019.
<https://www.dal.ca/news/2019/10/18/sciographies-q-a--eric-oliver--oceanographer.html>

Labrador Morning with Janice Goudie (CBC): Interview on community-engaged ocean monitoring research in Nunatsiavut. April 9, 2019.
<https://www.cbc.ca/listen/live-radio/1-31-labrador-morning/clip/15686413-from-hockey-to-ice-to-the-fishery-we-stick-with-water-topics>

Ocean warming is changing the relationship coastal communities have with the ocean. Oliver, E. C. J. The Conversation. September 10, 2019. <https://theconversation.com/ocean-warming-is-changing-the-relationship-coastal-communities-have-with-the-ocean-122599>

The Lobster Trap. Haley Ryan. The Toronto Star. June 10, 2019. <http://projects.thestar.com/climate-change-canada/nova-scotia/>

Ocean Heat Waves Are Threatening Marine Life. Kendra Pierre-Louis and Nadja Popovich. New York Times. March 4, 2019. <https://www.nytimes.com/2019/03/04/climate/marine-heat-waves.html>

Marine heatwaves are getting hotter, lasting longer and doing more damage. Oliver, Hobday, Smale, Holbrook, Wernberg. The Conversation. May 30, 2018. <https://theconversation.com/marine-heatwaves-are-getting-hotter-lasting-longer-and-doing-more-damage-95637>

Beware Marine Heat Waves! Radio Ecoshock. April 25, 2018. <https://www.ecoshock.org/2018/04/beware-marine-heat-waves.html>

Study finds marine heatwaves are becoming more frequent and intense. Allan Lynch. Canadian Geographic. April 20, 2018. <https://www.canadiangeographic.ca/article/study-finds-marine-heatwaves-are-becoming-more-frequent-and-intense>

Abnormally warm waters found off Nova Scotia. Ross Lord, Global National TV, April 13, 2018. <https://globalnews.ca/video/4146394/abnormally-warm-waters-found-off-nova-scotia>

Television interview, Steve Murphy. CTV Atlantic News at 6pm. April 12, 2018. <https://atlantic.ctvnews.ca/video?binId=1.1145507>

Heatwave rising: How increased ocean temperatures threaten marine life, habitats and more. Dal News, April 11, 2018. <https://www.dal.ca/news/2018/04/11/heatwave-rising--how-increased-ocean-temperatures-threatens-mari.html>

Ocean heat waves becoming more common, longer, new study finds. Frances Willick, CBC News, April 10, 2018. <http://www.cbc.ca/news/canada/nova-scotia/marine-heat-wave-ocean-hot-spot-study-1.4611794>

Marine heatwaves have become '34% more likely' over past century. Robert McSweeney, April 10, 2018. <https://www.carbonbrief.org/marine-heatwaves-have-become-34-more-likely-over-past-century>

Ocean Heat Waves Are on the Rise, Bleaching Coral Reefs and Disrupting Fisheries. Matt Smith, April 10, 2018. <https://www.seeker.com/climate/ocean-heat-waves-are-on-the-rise-bleaching-coral-reefs-and-disrupting-fisheries>

Marine heatwaves. Ocean temperatures rising: study. Ian Fairclough, Chronicle Herald. March 11, 2018.

Awards

President's Research Excellence Award for Emerging Investigators, Dalhousie University (2022), \$2000

Killam Prize, Faculty of Science, Dalhousie University (2022), \$2000

Australian Research Council Centre of Excellence for Climate System Science for best 2014 paper by an early career researcher (Oliver et al., 2014, J. Climate) (2014), AUD\$500.

The Tertia MC Hughes Memorial Graduate Student Prize (2012), Canadian Meteorological and Oceanographic Society, \$500. Awarded annually for top Canadian PhD thesis in oceanography.

Research Funding

Format: Lead PI, Title (Period), Funding Agency and Award Scheme, My Role, Amount awarded to PI Oliver (Total award), Use of Funds.

Limoges, A., *Nunatsiavut Coastal Interaction Project: recurring polynyas, benthic habitats and natural hazards (2022-2023)*, NSERC Ship Time Program, Collaborator.

Oliver, E.C.J., *Modelling the dynamics and predictability of the Arctic and Subarctic coastal oceans (2021-2024)*, Compute Canada, Resource Allocation Competition, Resources for Research Groups, P.I., \$19k/19k/\$12k equivalent (2021-2022/2022-2023/2023-2024). Access to high performance computing resources and storage at Compute Canada.

Oliver, E.C.J., *Community-based Observing of coastal Nunatsiavut Ocean Circulation (CONOC) Atlas (2020-2022)*, Marine Environmental Observation, Prediction and Response Network (MEOPAR), Knowledge Mobilization Fund, Co-P.I., \$37k. Funds for product design, printing, and shipping.

Oliver, E.C.J., *Knowledge Mobilization on the Land: Land-based workshops as climate change adaptation (Makkovik and Rigolet) (2020-2022)*, Crown-Indigenous Relations and Northern Affairs Canada, Climate Change Preparedness in the North, Co-P.I., \$82k. Funds for assistant salary support, travel, accommodations, printing, workshop costs, etc.

Metaxas, A., *Knowledge Co-production and Transdisciplinary Approaches for Sustainable Nunatsiavut Futures (2020-2026)*, Ocean Frontier Institute, Phase II, Co-P.I. (2020-) and Co-Lead (2022-), \$318k

(\$4,096k). Funds for ocean observing equipment, postdoc salary and graduate student stipends, travel, and publication costs.

Finkel, Z., *The Northwest Atlantic as a Climate Ocean: Projecting Future Changes in Productivity and the Biological Carbon Pump (2019-2026)*, Ocean Frontier Institute, Phase II, Co-P.I., \$178k (\$4,000k). Funds for postdoc salary and graduate student stipends, travel, and publication costs.

Oliver, E.C.J., *Coastal Labrador Ocean Modelling and Observing System (CLOMOS) (2019 – 2024)*, Canadian Foundation for Innovation, John R. Evans Leaders Fund, P.I., \$270k. Funds for high-performance computing infrastructure and ocean observing instruments.

Oliver, E.C.J., *Downscaling future oceanography projections in the Canadian Arctic and Subarctic (2019 – 2022)*, ArcticNet, Co-P.I., \$209k (\$225k). Postdoctoral fellow salary support, travel and publication fees.

Oliver, E.C.J., *Drivers, predictability and fisheries impacts of ocean temperature extremes (2019 – 2021)*, Marine Environmental Observation, Prediction and Response Network (MEOPAR), Early Career Faculty Grant, P.I., \$100k. Postdoctoral fellow salary support, travel and publication fees.

Bailey, M., *Identification of community priorities for marine planning in Nunatsiavut through collaborative qualitative analysis (2019 – 2020)*, Ocean Frontier Institute, Small Seed Funds, Collaborator, \$0 (\$25k).

Oliver, E.C.J., *Community-based Observing of coastal Nunatsiavut Ocean in Winter – Pilot (CONOW-P) (2019)*, Ocean Frontier Institute, Small Seed Funds, P.I., \$24.7k. Funds for a CTD, travel, student support, and support for community-based monitoring.

Oliver, E.C.J., *Coastal Oceanographic Monitoring for Nunatsiavut (COM-N) (2019 – 2020)*, Pure Ocean, Co-P.I., Euro 60,000. Funds for Voluntary Observing Ship equipment (“ferrybox”), testing, and install.

McCarney, P., *Community-Based Hazard Mapping of Polynyas and Ice Features, (2018 – 2022)*, Crown-Indigenous Relations and Northern Affairs Canada, Climate Change Preparedness in the North, Co-P.I., \$142k (\$706k). Student/Postdoctoral fellow salary support, travel and publication fees.

Ruehs, S., *Physical drivers of northwest Atlantic uptake and export of trace gases (2018 – 2020)*, Ocean Frontier Institute, International Postdoctoral Fellowship Program, Nominated supervisor, \$150k. Postdoctoral fellow salary support and travel.

Schlegel, R., *Ocean temperature extremes in the northwest Atlantic and Canadian Arctic Gateway (2018 – 2020)*, Ocean Frontier Institute, International Postdoctoral Fellowship Program, Nominated supervisor, \$150k. Postdoctoral fellow salary support and travel.

Kienast, M., *Climate and Ocean Dynamics informing Resource Management and Adaptation Policy (COD-REMAP) (2018 – 2021)*, NSERC Strategic Partnership Grants for Projects, Co-P.I., \$44k (\$685k). Student support and travel.

Oliver, E.C.J., *Community-based Observing of coastal Nunatsiavut Ocean Circulation (CONOC) (2018 – 2021)*, Crown-Indigenous Relations and Northern Affairs Canada, Indigenous Community-Based Climate Monitoring Program, P.I., \$355k. Funds for purchase of ocean drifters, travel, printing costs, workshop and summer school support, and student salary support.

Oliver, E.C.J., *Prediction and predictability of climate extremes (2018 – 2023)*, NSERC Discovery Grants Program (DG) & Discovery Launch Supplements for Early Career Researchers (DGEER), P.I., \$142.5k. Operating and student support funds.

Wallace, D., *Module B: Auditing the Northwest Atlantic Carbon Sink (2017 – 2022)*, Ocean Frontier Institute, Large Research Project, Co-P.I., \$92k (\$1,238k). Student support funds.

Bailey, M., *Module E: Ecosystem Indicators for Changing Oceans (2017 – 2022)*, Ocean Frontier Institute, Large Research Project, Co-P.I., \$69k (\$1,596k). Student support funds.

Sheng, J., *Module F: Cooperative Model Framework for the Northwest Atlantic and the Canadian Arctic Gateway (2017 – 2022)*, Ocean Frontier Institute, Large Research Project, Co-P.I., \$46k (\$753.5k). Student support funds.

Holbrook, N., *Decadal-scale predictability of ocean temperature extremes (2017 – 2019)*, National Environmental Science Program (Australia) Earth Systems and Climate Change Hub, Co-P.I., (AUD\$210k). Postdoctoral fellow salary support and travel.

Oliver, E.C.J., *Identifying historical marine heatwaves off eastern Tasmania (2016)*, University of Tasmania Research Enhancement Grant Scheme award, P.I., AUD\$14.25k. Research assistant salary support and workshop costs.

Professional Activities

Journal Editor

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|-----------|---|
| 2018-2020 | Guest Associate Editor, Global Change and the Future Ocean, Frontiers in Marine Science |
| 2018-2020 | Topic Editor for Research Topic "Advances in Understanding Marine Heatwaves and Their Impacts", Frontiers in Marine Science |

Conference Session Organization

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|----------|---|
| Oct/2018 | Ocean Frontier 2018: North Atlantic Opportunities, <i>Engaging Indigenous communities and coastal stakeholders to find effective solutions for cooperative ocean management</i> |
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Feb/2018 *and development*, St. Johns NL, Canada
Ocean Science Meeting 2018, *Advances in Understanding Marine Heat Waves and Their Impacts*, Portland OR, USA

Peer Review (Journals)

Atmosphere, Atmosphere-Ocean, Climate Dynamics, Deep Sea Research, Elementa, Environmental Research Letters, Frontiers in Marine Science, Geophysical Research Letters, Global and Planetary Change, Global Change Biology, International Journal of Climatology, Journal of Climate, Journal of Geophysical Research, Journal of Marine Systems, Journal of Physical Oceanography, Marine Geodesy, Monthly Weather Review, Nature, Nature Geoscience, Ocean Dynamics, Oceanography, Science.

Peer Review (Other)

2018 Chapter reviewer for IPCC Special Report on Ocean and Cryosphere

Funding Proposal Review

2022 NSERC Discovery Grants
2019 Mitacs Accelerate
2019 National Science Foundation
2018 Swiss National Supercomputing Centre
2018 CONICYT (Chilean national research funding agency)
2017 Australian Research Council

Institutional Activities

University level

2021-2022 Search Committee for Indigenous Research Facilitator, Office of Research Services, Dalhousie University
2017-2023 Indigenous Advisory Council, Dalhousie University

Faculty level

2021-2022 Search Committee, Scientific Director, Ocean Tracking Network
2019 Chair review committee, Department of Mathematics and Statistics, Faculty of Science

Departmental level (Oceanography)

2023 Equity Diversity, Inclusion and Accessibility Committee, Member
2022-2023 Tenure & Promotions Committee, Member
2022-2023 Curriculum Committee, Chair, and Undergraduate Advisor

Dr. Eric Oliver - Tenure Dossier

2021-2023 Space Committee, Member
2020-2021 Search Committee for Chair in Large Whale Conservation
2019 Graduate Curriculum Working Group
2018-2023 Undergrad Advisor for Physical Oceanography
2018 Search committee for Assistant Professor, Canada Research Chair Tier II
2017-2022 Curriculum Committee, Member
2017-2018 Search committee for Instructor

Departmental level (Physics)

2022-2023 Search Committee for Tenure Stream position in Physics and Atmospheric Science

Program and project level

2021-2023 Advisory Committee on Indigenous Engagement in Ocean Research, Ocean
Frontier Institute
2019-2021 Steering Committee, Indigenous Engagement Strategy, Ocean Frontier Institute