

Curriculum vitae with track record (S. Moreau)

Role in the project

Project manager Work package leader
 Project partner Other (specify)

Personal information

First name, Surname:	Sebastien Moreau		
Date of birth:	14/12/1982	Sex:	Male
Nationality:	French		
Researcher unique identifier(s):	https://orcid.org/0000-0001-9446-812X		
URL for personal website:	http://sebastienmoreau.wixsite.com/sebastien-moreau https://www.researchgate.net/profile/Sebastien_Moreau2		

Education

Year	Faculty/department - University/institution - Country
2011 (dissertation defended)	Ph.D. Disputation date: 30.03.2011. Institut des sciences de la mer de Rimouski, Université du Québec à Rimouski, Canada
2006	Master - Océanographie et Environnement Marins, University Pierre et Marie Curie (Paris 6), France

Positions - current and previous

(Academic sector/research institutes/industrial sector/public sector/other)

Year	Job title – Employer - Country
2018-now	Senior Researcher Norwegian Polar Institute, Tromsø, Norway
2016-2018	Postdoctoral Research Scientist Institute for Marine and Antarctic Studies, University of Tasmania, Australia
2014-2016	Postdoctoral Research Scientist Fonds National de la Recherche Scientifique, Université catholique de Louvain, Belgium
2011-2013	Postdoctoral Research Scientist Earth and Life Institute, Université catholique de Louvain, Belgium

Career breaks

Year	Reason
2014	Paternal leave for 4 weeks

Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.)

Year	Project owner - Project - Role - Funder
2021-2023	One Ocean Expedition (NPI) – research project on the study of the Southern Ocean during the One Ocean Expedition in the Drake Passage –2021-2023 (1.2 MNOK)
2019-2021	Southern Ocean Biological Oceanography – research project on the study of biological Oceanography in the Southern Ocean – Norwegian Polar Institute – 2019 (157 KNOK), 2020 (0.8 MNOK), 2021 (1.1 MNOK)
2021-2025	Research Council of Norway (RCN) project number 325405, Bottom-sea ice Respiration and nutrient Exchanges Assessed for THE Arctic (BREATHE) - led by university I Tromsø (UiT) - 8 MNOK total (2 MNOK – NPI share)
2018 –2022	Research Council of Norway (RCN) project number 288370, SANOCLEAN Norway-South Africa collaboration project “Southern Ocean phytoplankton community characteristics, primary production, CO2 flux and the effects of climate change (SOPHY-CO2)”.
2019-2021	Aurora project – Ecofind – Ecosystem function and structure in the Subantarctic: the fine scale dimension – Work Package leader – Research Council of Norway
2017-2018	Sea ice biogeochemistry and its representation in global Earth system models - project lead – AFRAN Australian-French Association for Research and Innovation
2017-2018	Biogeochemistry in the Circumpolar Antarctic Current (ACC) – co-lead – Marine National Facility, Australia
2014-2016	Modelling the role of sea ice biogeochemistry on the carbon cycle – lead – FNRS, Belgium

Supervision of students

(Total number of students)

Master's students	Ph.D. students	University/institution - Country
8	3	Norwegian Polar Institute (Norway), Institute for Marine and Antarctic Studies, University of Tasmania (Australia), University of East Anglia (UK), Université catholique de Louvain (Belgium)

Other relevant professional experiences

(E.g. institutional responsibilities, organisation of scientific meetings, membership in academic societies, review boards, advisory boards, committees, major research or innovation collaborations, other commissions of trust in public or private sector)

Year	Description - Role
2021-now	Vice-Chair of the Southern Ocean Observing System (SOOS) Executive Committee (EXCOM)

2018-now	Steering Committee Member for the SCAR working group BEPSII: biogeochemical exchanges processes at the Sea Ice Interfaces
2021-2022	Associate editor for the special issue in Ocean Sciences, Biogeosciences and The Cryosphere. <i>“Weddell Sea and the ocean off Dronning Maud Land: unique oceanographic conditions shape circumpolar and global processes – a multi-disciplinary study”</i> .
2018-2021	Leader of the Regional Working Group: Weddell Sea – Dronning Maud Land for the Southern Ocean Observing System (SOOS)
2018-now	Norway National Representative for the Southern Ocean Observing System (SOOS)
2021	Organization of the annual BEPSII workshop. Co-organizer with the BEPSII Scientific Steering Committee. Poster session chair. Online
2020	Organization of the annual BEPSII workshop. Co-organizer with the BEPSII Scientific Steering Committee. Poster session chair. Online
2020	Organization of the 2 nd workshop for the SOOS regional working Group Weddell Sea-Droning Maud Land. Co-organizer: Markus Janout (AWI), Mario Hoppema (AWI), Sebastien Moreau (NPI), Laura de Steur (NPI). Online
2019	Organization of the 1 st workshop for the SOOS regional working Group Weddell Sea-Droning Maud Land. Co-organizer: Sebastien Moreau (NPI), Laura de Steur (NPI), Julian Gutt (AWI). Tromsø, Norway
2018	Organization of a workshop on the study of sea ice biogeochemistry and its representation in global Earth system models. Role: organiser; name: AFRAN workshop; number of participants: 9; Country: Switzerland
2015	Gordon Research Conference and Seminar, Tuscany, Italy, March 2015. Discussion leader.

Track record

- The total *number* of publications during the career: 38 + 1 book chapter
- H-index Google Scholar: 16
https://scholar.google.com/citations?user=M_bcahkAAAAJ&hl=en
- A *list* of up to *ten* publications in major national or international peer-reviewed journals, peer-reviewed conference proceedings, peer reviewed book chapters and/or monographs

1. Moreau S., P. Boyd, G. Strutton. Remote assessment of the fate of phytoplankton in the Southern Ocean sea ice zone. *Nature Communications*, 11: 3108 <https://doi.org/10.1038/s41467-020-16931-0>

2. Lannuzel D., L. Tedesco, M. van Leeuwe, K. Campbell, H. Flores, B. Delille, L. Miller, J. Stefels, P. Assmy, J. Bowman, K. Brown, G. Castellani, M. Chierici, O. Crabeck, E. Damm, B. Else, A. Fransson, F. Fripiat, N.-X. Geilfus, C. Jacques, E. Jones, H. Kaartokallio, M. Kotovitch, K. Meiners, S. Moreau, D. Nomura, I. Peeken, J.-M. Rintala, N. Steiner, J.-L. Tison, M. Vancoppenolle, F. Van der Linden, M. Vichi, P. Wongpan. The future of Arctic sea-ice biogeochemistry and ice-associated ecosystems. *Nature Climate change* <https://doi.org/10.1038/s41558-020-00940-4>

3. Moreau S., D. Lannuzel, J. Janssens, M. C. Arroyo, M. Corkill, E. Cougnon, C. Genovese, B. Legresy, A. Lenton, V. Puigcorbé, L. Ratnarajah, S. Rintoul, M. Roca-Martí, M. Rosenberg, E. H. Shadwick, A. Silvano, P. G.

Strutton, B. Tilbrook. 2019. Sea-ice meltwater and circumpolar deep water drive contrasting productivity in three Antarctic polynyas. *Journal of Geophysical Research: Oceans*

4. Moreau S., A. Della Penna, J. Llorc, R. Patel, C. Langlais, P. Boyd, R. J. Matear, H. Philips, B. Tilbrook, A. Lenton, P. G. Strutton. 2017. Eddy-induced carbon transport across the Antarctic Circumpolar Current. *Global Biogeochemical Cycles*, 31 (1-19)
5. Moreau S., Vancoppenolle M., Bopp L., Aumont O., Madec G., Delille B., Tison J.-L., Pierre-Yves Barriat and Goosse H. 2016. Assessment of the sea-ice carbon pump: Insights from a three-dimensional ocean-sea-ice biogeochemical model (NEMO-LIM-PISCES). *Elementa: Science of the Anthropocene* 4: 000122
6. Moreau S., Mostajir B., Bélanger S., Schloss I. R., Vancoppenolle M., Demers S. and Ferreyra G. A. 2015. Climate change enhances primary production in the western Antarctic Peninsula. *Global Change Biology* 21(6):2191-205
7. Moreau S., Vancoppenolle M., Delille B., Tison J.-L., Zhou J., Kotovitch M., Thomas D., Geilfus N.-X. and Goosse H. 2015. Drivers of inorganic carbon dynamics in first-year sea ice: A model study. *Journal of Geophysical Research: Oceans*, 120 (1): 471-495
8. Moreau S., Vancoppenolle M., Zhou J., Tison J.-L., Delille B. and Goosse H. 2014. Modeling argon dynamics in first-year sea ice. *Ocean Modelling*, 73: 1-18
9. M. Vancoppenolle, K. Meiners, C. Michel, L. Bopp, F. Brabant, G. Carnat, B. Delille, D. Lannuzel, G. Madec, S. Moreau, J.-L. Tison, P. van der Merwe. 2013. Role of sea ice in global biogeochemical cycles: emerging views and challenges. *Quaternary Science Review*, 79: 207-230
10. Schloss I. R., Abele D., Moreau S., Demers S., Bers V. A., González O. and Ferreyra G. A. 2012. Response of Potter Cove phytoplankton dynamics to long term climate trends. *Journal of Marine Systems*, 92: 53-66.

- Invited presentations in public conferences.

Moreau S. et al. Revisiting Polar Marine Biogeochemistry in the Ice-Covered Southern Ocean. Gordon Research Conference on Polar Marine Science, Ventura, Ca, USA, May 2023 (Keynote speaker)

Moreau S. Links between Southern Hemisphere Sea Ice and Polar Marine Biogeochemistry. PAGES Cycles of Sea Ice Dynamics in the Earth System (C-SIDE) workshop on “Developing Data and Modeling Capacity to Understand Past Changes in Sea Ice in the Southern Ocean”, October 2018, in Vancouver, Canada. (invited)

Moreau S. Primary production in the Southern Ocean. SOOS scientific Steering Committee, Hangzhou, China, May 2018 (invited).

Moreau S., A. Della Penna, J. Llorc, R. Patel, C. Langlais, P. Boyd, R. J. Matear, H. Philips, B. Tilbrook, A. Lenton, P. G. Strutton. Eddy-induced carbon transport across the Antarctic Circumpolar Current. Australian Academy of Science to the symposium “*Antarctic frontier: developing research in an extreme environment*”, September 2017 (invited).

Moreau S., Vancoppenolle M., Delille B., Kotovitch M., Tison J.-L., and Goosse H. The role of sea ice in the carbon cycle of Polar Seas: 1D to 3D modeling. Oral presentation given at the SOLAS conference, Kiel, Germany, September 2015 (invited).

Vancoppenolle M., Moreau S., L. Bopp, G. Madec, B. Delille, Tison J.-L., D. Lannuzel. Sea ice marine biogeochemical cycles: Large-scale processes. Oral presentation at the Goldschmidt Conference, Prague, Czech Republic, August 2015. (invited)

Tison J.-L., Moreau S., Vancoppenolle M., and Delille B. The Cryosphere Between the Cracks: Does It Matter? Oral presentation given at the Gordon Research Conference, Tuscany, Italy, March 2015. (invited)