Nicola Jane (Nikki) Brown

Sweden

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EDUCATION

Ph.D., Physical Oceanography, 2019, **University of Southampton**, U.K. Thesis Topic: "Thermohaline drivers of the Arctic Ocean circulation"

M.Sc. (Distinction), Oceanography, 2014, University of Southampton, U.K. Dissertation Topic: "The contribution of tidal cycles to extreme sea level events around the United Kingdom"

B.A. (Hons), Natural Sciences (Physical), 1989, University of Cambridge, Newnham College, U.K.

EMPLOYMENT

Climate researcher/ communicator, Climate modelling group Swedish Meteorological and Hydrological Institute 2023 - present

- User engagement and outreach in international and national climate modelling projects.
- Communication and dissemination of results from projects.

Researcher, Norwegian Meteorological Institute 2021 to 2022

- The Nansen Legacy: leader of the Impact and Legacy workstream, covering the synthesis and communication of research findings to decision makers, other researchers and the public, from a NOK 740 million national research project on the implications of climate change for the future sustainable management of the Barents Sea
- Developing tools for the analysis and visualisation of output from ocean models

Postdoctoral research fellow, University of Oslo 2019 to 2021

• Using model output and observational data from satellite altimeters and in situ current meters to investigate the drivers of short term variability in currents in the Nordic Seas

Guest researcher, Meteorological Institute, Stockholm University Aug - Nov 2016

• Short project hosted by Prof. Johan Nilsson to explore freshwater dynamics in the Arctic Ocean

Career break 2012 to 2013

 Travelling in Nepal. Advising Asha Nepal, a UK- and Kathmandu- based non-government organisation which supports abused women, on applications for grant funding.

UK Government Service

1994 to 2012

reaching Deputy Director (senior management) level Edinburgh, Brussels and London

- Secured support for Creative Scotland, the new arts development body, from the arts and culture sectors and the Scottish Parliament. Successfully oversaw the change management programme to transfer functions and staff to Creative Scotland from its predecessor bodies. Delivered the project within the transition budget of £3.3 million.
- Led the establishment of a new national transport agency for Scotland. Recruitment, induction and training for 40 new staff. Project managed the purchase and fit-out of accommodation and the transfer of work from one site to another, to time and to budget.
- Reformed the arrangements for distributing £7 billion of grant to local authorities to make them more transparent and responsive to authorities' needs and to allow them to plan more effectively.
- Oversaw the enactment and implementation of high profile legislation covering criminal law, alcohol licensing and the regulation of building societies.
- Worked with UK Government Departments and European Institutions to manage the flow of business to the Council of Ministers during the UK's 1998 Presidency of the Council.

UK Armed Forces

1989 to 1994

- As deputy commander of 80-strong communications unit responsible directly to the Ministry of Defence, successfully planned, launched and supported isolated detachments deployed around the world, making regular visits.
- Trained and deployed troop of 40 men and 17 vehicles for the first Gulf War to positions some miles from commanders, maintaining operational efficiency and morale for three months in a hostile environment.

SCIENTIFIC ARTICLES

Brown, N. J., J. Nilsson and P. Pemberton (2019). Arctic Ocean freshwater dynamics: transient response to increasing river runoff and precipitation. Journal of Geophysical Research: Oceans, DOI: 10.1029/2018JC014923

Brown, N. J., C. Mauritzen, C. Li, E. Madonna, P. E. Isachsen and J. H. LaCasce (2022). *Rapid resonse of the Norwegian Atlantic Slope Current to wind forcing*. Journal of Physical Oceanography, DOI: 10.1175/JPO-D-22-0014.1

Bacon, S., A. C. Naveira Garabato, Y. K. Aksenov, **N. J. Brown** and T. Tsubouchi (2022). *Arctic Ocean boundary exchanges: a review.* Oceanography, DOI: 10.5670/oceanog.2022.133

Brown, N. J., A. C. Naveira Garabato, S. Bacon, T. Tsubouchi, J. A. M. Green and A. J. G. Nurser. *An Arctic Ocean double overturning: the contrasting roles of heat and freshwater as drivers.* In preparation

OTHER PUBLICATIONS

Wiik, E., N. Brown, S. Bacon, J. Cantalou, G. Costigan, M. Edwards (2017). The rapidly changing Arctic environment: Implications for policy and decision makers from the NERC Arctic Research Programme 2011-16.

Outreach and service

- Presenter with Education through Expeditions, providing polar science activity days for primary schools.
- Presenter at Meet the Scientist sessions for secondary school children.
- Invited talks to community groups.
- Organiser of seminar series at the Norwegian Meteorological Institute and National Oceanography Centre Southampton.
- Reviewer for Nature: Scientific reports, Journal of Geophysical Research Oceans, Ocean Science.

SHORT COURSES

- Scientific computing at MET, 2022
- Popular science writing, 2021
- Introduction to scientific computing: week-long course run by the National Centre for Atmospheric Science, Leeds, 2016.
- Fluid dynamics of sustainability and the environment: two week summer school co-organised by the École Polytechnique and University of Cambridge, 2015.

Computer Skills

Python, MATLAB, netCDF, Linux/Unix, GitHub, LATEX.

FIELD EXPERIENCE

• RRS James Clark Ross, JR16005, 17 March - 8 May 2017 DynOPO project, Weddell Sea.

Responsible for CTD, processing of ADCP and underway data, deployment of Argo floats, operation of salinometer.

TEACHING EXPERIENCE

- Masters level
 - University of Southampton, Introduction to Physical Oceanography: Teaching assistant for problems classes.
 - Fieldwork: demonstration of CTD operation.
- ullet Undergraduate level
 - University of Southampton, Advanced mathematics for ocean and earth scientists: Teaching assistant for problems classes. Led optional extra tutorials.
 - Fieldwork: demonstration of practical water sampling techniques.

Language skills

English: native speaker Norwegian: intermediate Swedish: basic/intermediate

French: intermediate German: intermediate