

Richard Davy

Curriculum vitae

Personal information

First name, Surname:	Richard, Davy		
Date of birth:	08/Sep/1984	Sex:	M
Nationality:	Norwegian and British		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	ORCID: 0000-0001-9639-5980 Google Scholar: scholar.google.no/citations?user=v3d2ceIAAAAJ		
URL for personal website:	https://www.nersc.no/staff/richard-davy		

Education

Year	Faculty/department - University/institution - Country
2009	Ph.D. Physics, York University, Canada
2005	Master Astrophysics, St Andrews University, Scotland

Positions - current and previous

Year	Job title – Employer - Country
2020-	<i>Senior Researcher</i> , Nansen Environmental and Remote Sensing Center, Norway
2016-20	<i>Project manager/Researcher</i> , Nansen Environmental and Remote Sensing Center, Norway
2013-16	<i>Researcher</i> , Nansen Environmental and Remote Sensing Center, Norway
2011-13	<i>Post-doctoral Researcher</i> , Nansen Environmental and Remote Sensing Center, Norway
2009-10	<i>Research associate</i> , York University, Toronto, Canada

Project management experience

Year	Project owner - Project - Role – Funder (amount)
2019-24	Nansen Center - ARIA – <i>Principal Investigator</i> - Norwegian Research Council (9.3 mNOK)
2021	Nansen Center - NCKF – <i>Principal Investigator</i> - Danish Meteorological Institute (.5 mNOK)
2020-23	Nansen Center - EUREC4A-OA – <i>Principal Investigator</i> - Norwegian Research Council (5.7 mNOK)
2019-21	University in Bergen – History of Sea Ice – <i>Contributor</i> - Bjerknes Center (0.1 mNOK)
2019	Nansen Center – Fast Track Initiative – <i>Principal Investigator</i> - Bjerknes Center (0.2 mNOK)
2018-22	MetNO - KeyCLIM – <i>WP lead</i> - Norwegian Research Council (14 mNOK)
2017	Nansen Center - Fast Track Initiative – <i>Principal Investigator</i> , Bjerknes Center (0.2 mNOK)
2016-21	Danish Meteorological Institute – H2020 Blue-Action – <i>WP co-lead</i> – EU H2020 (6.4 mEUR)
2013-16	Nansen Center – BASIC – <i>WP lead</i> - Bjerknes Center (5 mNOK)

Supervision of students

Master's students	Ph.D. students	University/institution - Country
1	1	Mikhail Latonin, <i>PhD (to be completed 2022)</i> , St Petersburg University, Russia. Erik Kusch, <i>Masters (graduated 1st class)</i> , Biology department, University in Bergen, Norway.

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
2019 -	External examiner, MSci courses on Atmospheric dynamics (Prof. Spengler) and Environmental turbulence (Prof. Reuder), University of Bergen, Norway.
2019	Invited Lecturer, Summer school on modelling the Earth Climate system, St Petersburg, Russia.
2019	Member of organization committee for workshop, <i>Observing and modelling the Arctic environment (40 participants)</i> , NIERSC, St Petersburg, Russia.
2018	Nominated by Norwegian Research Council to be an IPCC author.
2018	Invited Lecturer, Summer school on Arctic climate processes, NERCI, India.
2018	Secured funding and led organization committee, <i>Workshop on evaluation of CMIP data (42 participants)</i> , Bjerknes center / University in Bergen, Norway.
2017 -	Associate board member, Nansen International and Environmental Research Centre, St. Petersburg, Russia.
2017 -	External examiner for 4 Masters theses, and 3 PhD theses at University in Bergen
2017 -	Member of Nansen Scientific Society
2015 -	Member of Pan-Eurasian Experiment research network
2014- 2015	Review panel member for Future Climate For Africa programme, Department for International Development and the National Research Council, United Kingdom.
2014	Norwegian representative and participant in European COST action.
2008-	Member of the American Geophysical Union
2007	Regular reviewer for numerous journals including <i>Nature (climate change; geophysics; Communications, Energy)</i> , <i>Boundary layer meteorology</i> , <i>Journal of Climate</i> , <i>Journal of Geophysical Research</i> , <i>Joule</i> , <i>International Journal of Climate</i> .
2006-09	Teaching (co-lecturer). Physics, Astronomy, Mathematics. York University, Canada.

Track record

Publications

I have had a total of **40** publications in peer-reviewed journals which have received **1581** citations (h-index = **19**, i10-index = **24**), **15** publications in conference proceedings, and **3** book chapters. The ten most recent or significant journal publications:

- Davy, R., & Kusch, E. (2021). Reconciling high resolution climate datasets using KrigR. *Environmental Research Letters*, 16(12), 124040.
- Kusch, E., & Davy, R. (2021). KrigR-A tool for downloading and statistically downscaling climate reanalysis data. *Environmental Research Letters*, 17, 024005.
- Davy R., and S. Outten, 2020, The Arctic surface climate in CMIP6: Status and Developments since CMIP5. *J. Climate*, **33** (18), 8047-8068.
- Yano, J. I., Ziemiański, M. Z., Cullen, M., Termonia, P., Onvlee, J., Bengtsson, L., ... & Wyszogrodzki, A. A. (2018). Scientific challenges of convective-scale numerical weather prediction. *Bulletin of the American Meteorological Society*, 99(4), 699-710.
- Davy R., I. Esau, A. Chernokulsky, S. Outten, and S. Zilitinkevich 2017, Diurnal asymmetry to the observed global warming, *Int. J. Climatology*, **37**, 1, 79-93.
- Esau, I., Miles, V. V., Davy, R., Miles, M. W., & Kurchatova, A. (2016). Trends in normalized difference vegetation index (NDVI) associated with urban development in northern West Siberia. *Atmospheric Chemistry and Physics*, 16(15), 9563-9577.
- Thorne, P. W., Donat, M. G., Dunn, R. J. H., Williams, C. N., Alexander, L. V., Caesar, J., ... & Rennie, J. J. (2016). Reassessing changes in diurnal temperature range: Intercomparison and evaluation of existing global data set estimates. *Journal of Geophysical Research: Atmospheres*, 121(10), 5138-5158.

- Davy R., and I. Esau, 2016, Differences in the efficacy of climate forcings explained by variations in atmospheric boundary layer depth. *Nature Comms.*, doi:10.1038/NCOMMS11690.
- Esau I., Davy R., and S. Outten, 2012, Complementary explanation of temperature response in the lower atmosphere. *Env. Res. Lett.*, **7**, 044026.
- Whiteway J. A., Komguem L., Dickinson C., Cook C., Illnicki M., Seabrook J., Popovici V., Duck T. J., Davy R., Taylor P. A., Pathak J., Fisher D., Carswell A. I., Daly M., Hipkin V., Zent A. P., Hecht M. H., Wood S. E., Tamppari L. K., Renno N., Moores J. E., Lemmon M. T., Daerden F. and Smith P. H., 2009, Mars Water-Ice Clouds and Precipitation, *Science*, **325** (5936), pp. 68-70.

FELLOWSHIPS AND AWARDS

- 2016 Best presentation, PEEEX 2016.
- 2015 Outstanding Young Scientist 2015: Atmospheric physics, European Geoscience Union
- 2001-2005 Bursary for excellence in Physics, Department of Physics, St Andrews University, United Kingdom

INVITED PRESENTATIONS

- Invited lecture and virtual visit, University of Albany, USA. 2022.
- Invited lecture, St Petersburg State University, Russia. 2019.
- Invited lecture, Summer school on modelling the Arctic climate, NIERSC, St Petersburg, 2019
- Invited lecture, Winter school on Arctic climate, NCPOR, India, 2018
- Invited lecture, Ecology department lecture series, Glasgow University, UK, 2017.
- Invited lecture, European Meteorological Society annual meeting, Austria, 2016.
- Invited lecture (Young Scientist Award), European Geosciences Union annual meeting 2015.

MAJOR COLLABORATIONS

- Prof. Igor Esau, Boundary layer dynamics and Arctic climate, University of Tromsø
- Dr Steffen Olsen, Arctic climate dynamics, Danish Meteorological Institute.
- Prof. Noel Keenlyside, Climate dynamics and prediction, University in Bergen
- Dr Shuting Yang, Atmospheric dynamics, Danish Meteorological Institute.
- Prof. Joachim Reuder, Boundary layer dynamics and wind energy, University in Bergen
- Prof. Peter Thorne, Surface coupling, Maynooth University, Ireland.
- Prof. Thomas Spengler, Atmospheric dynamics in the Arctic, University in Bergen
- Dr Petra Langebroek, Atmosphere – ice sheet coupling, NORCE
- Prof. Bert Holtslag, Boundary layer dynamics, Pres. European Meteorological Society.
- Prof. Edward Hanna, Greenland blocking and arctic climate, Lincoln University.
- Dr Einar Olason, Sea ice dynamics, Nansen Center.

PROJECT MANAGEMENT

- 2020-2023 *Work package leader, national coordinator and Research-theme leader.* JPI Climate and Ocean, EUREC4A-OA.
- 2020-2023 *Principal investigator.* Research council for Norway, ARIA.
- 2019-2023 *Work Package co-leader.* Research council for Norway, KeyCLIM.
- 2016-2018 *Project manager.* H2020 project, GAIA-CLIM.
- 2016-2018 *Work Package leader.* Centre for Climate Dynamics project, BASIC.

OUTREACH

Journalists: I have had numerous interviews for articles in the national and global press and have written contributions for popular outlets. A few examples include:

- [Arctic warming four times faster than global average](#), *National Public Radio (USA)*, 2022
- [One climate change wildfire risk lurks in the dark](#). *Scientific American*, Oct 2020.

- Nattetemperaturen påvirkes mest av global oppvarming. *Tønsbergs blad*, March 2016.
- [Nights are getting hotter: Scientist discover temperatures during the hours of darkness are rising faster than in the daytime.](#) *Daily Mail (UK)*, March 2016.

Schools: I am a science ambassador with the STEM program in the United Kingdom and have given more than 10 lectures at both primary and high schools. I have also given lectures on both astronomy and climate at the international school in Bergen since 2014.

Public: I have given public lectures with Q&A sessions on topics from astronomy and climate to remote communities in Scotland. I have also assisted with the forskningsdagene outreach program, presenting scientific concepts to school age and adult members of the public. I also make active use of various social media platforms: Twitter, Facebook, and Instagram, to share interesting results or other scientific material which I think will be of interest to a wide audience.