

Corwin Wright

Centre for Climate Adaptation & Environmental Research
University of Bath
Claverton Down
Bath BA2 7AY
United Kingdom

Telephone: +44 7815 xxxxxx
c.wright@bath.ac.uk
<http://www.corwin.me.uk>
ORCID: 0000-0003-2496-953X

Curriculum Vitae

Employment

2013-date: University of Bath, Bath, UK

2023-date: Professor of Atmospheric Remote Sensing

2022-date: Co-Director, Centre for Climate Adaptation & Environmental Research

2017-date: Royal Society University Research Fellow

2019-2023: Senior Research Fellow

2017-2019: Research Fellow

2013-2017: Research Officer

2012-2013: National Center for Atmospheric Research, Boulder, CO, USA

2012-2013: Contract Researcher

2011-2012: Université de Bretagne Occidentale, Brest, France

2011-2012: Chercheur Postdoctoral

2010-2011: National Center for Atmospheric Research, Boulder, CO, USA

2010-2011: Postgraduate Scientist

Education

2006–2010: University of Oxford

DPhil (PhD) in Atmospheric Physics

Supervisor: Dr John J. Barnett (*deceased*)

Examiners: Prof David G. Andrews (*Oxford*) and Prof Robert S. Harwood (*Edinburgh*)

Thesis title: "*Detection of Stratospheric Gravity Waves Using HIRDLS Data*"

2005–2006: University of St. Andrews and Heriot-Watt University

MSc in Photonics and Optoelectronic Devices.

Industrial Placement: *CST Global Semiconductors, Ltd., Glasgow, UK*

Dissertation title: "*Characterisation of 1310nm Semiconductor Laser Diodes*"

2001–2005: University of Durham

MSci in Physics

Dissertation title: "*Atmospheric Turbulence Measurements Using SLODAR*"

Visiting Positions and Secondments

2024: Science for Emergencies Centre, UK Foreign Office, London, UK

2012–2018: Atmospheric, Oceanic and Planetary Physics, University of Oxford, Oxford, UK

2011–2015: National Center for Atmospheric Research, Boulder, Colorado, USA

2012–2013: Laboratoire de Physique des Océans, Brest, France

Research

Grants and Funding

Principal or Co-Investigator on **£9.1 million** of competitively-awarded research funding, of which

- **£3.2 million** as overall project lead *(including sub-awards to project Co-Is)*
- **£4.3 million** to fund my research group directly *(as either PI or Co-I)*

Cash awards greater than ~£50k, sorted by end date:

- 2022-26:** **Drivers and Impacts of Ionospheric Variability with EISCAT-3D (DRIIVE)**
Co-I
Funder: Natural Environment Research Council
Highlight Topic, £2523k^F [of which £376k^F to my group]
Investigators: 20, including AJ Kavanagh (PI) and CJ Wright
- 2022-25:** **Gravity Wave Impacts, from Short to Long Timescales**
Fellow
Funder: Royal Society
University Research Fellowship, £793k^F
- 2021-25:** **MesoS2D: Mesospheric sub-seasonal to decadal predictability**
Co-I
Funder: Natural Environment Research Council
Discovery Science Large Grant, £2516k^F [of which £462k^F to my group]
Investigator Team: AJ Kavanagh, DR Marsh, T Moffat-Griffin (PI), CJ Wright
- 2023-24:** **Investigation of PMSEs along the geomagnetic field direction**
Co-I
Instrument: European Ionospheric Scatter Radar (EISCAT)
36 hours instrument time, equivalent value £54k
Investigator Team: VL Narayanan (PI), A Kavanagh, CJ Wright
- 2020-23^C:** **An Airglow Imager for Halley Research Station, Antarctica**
PI
Funder: Royal Society
Research Enhancement Award, £57k
- 2019-23^C:** **Planetary and Gravity Waves as Drivers of Sudden Stratospheric Warmings (PEGASUS)**
PI
Funder: Natural Environment Research Council
New Investigator Grant, £791k^F [of which £475k^F to my group]
Investigators: JG Esler, DM Mitchell, NJ Mitchell, CJ Wright
- 2018-23^C:** **Satellite Exploration of the Quasi-Biennial Oscillation (SEQUOIA)**
PI
Funder: Royal Society
Research Grant, £98k
- 2017-23^C:** **Measuring and Tracking Atmospheric Disturbances Using Observations and Ray-Tracing (MATADOR)**
PI
Funder: Royal Society
Research Enhancement Award, £95k
- 2017-22:** **Gravity Waves as Drivers of the Global Atmospheric Circulation**
Fellow
Funder: Royal Society
University Research Fellowship, £570k^F
- 2017-2022:** **Atmospheric Waves in 3D, from the Surface to the Edge of Space**
Fellow
(declined)
Funder: Natural Environment Research Council
Independent Research Fellowship, £570k^F
Offered but declined due to incompatibility with Royal Society URF above.

(Table continues overleaf)

Grants and Funding (*continued*)

- 2017-21^C:** **The Drake Passage/Southern Ocean Wave Experiment (DRAGON-WEX)**
PI 20-21 *Funder:* Natural Environment Research Council
Co-I 17-20 *Discovery Science Grant, £618k^{CF} [of which £516k^{CF} to Bath (Mitchell/Wright)]*
Investigators: NJ Mitchell, T Moffat-Griffin, CJ Wright
- 2012-13:** **Scientific Exploitation of HIRDLS Data**
PI *Funder:* National Center for Atmospheric Research
Research Contract, US\$75k

Notes:

^C: Assigned time and/or budget increased by funder to adjust for Covid-19 pandemic.

^F: Full Economic Cost (FEC) budget model: 80% received from funder, balance funded by institution.

I gratefully acknowledge receipt of further funding (total ~£160k) from:

the American Geophysical Union	the National Centre for Earth Observation
the Engineering and Physical Sciences Research Council	the Natural Environment Research Council
the European Commission	Northwest Research Associates
the European Geosciences Union	the Royal Meteorological Society
the Global Challenges Research Fund	the Royal Society
the Great Western 4 Network	Trinity College Oxford
the Institute of Physics	the University of Bath
the International Space Science Institute	the World Climate Research Programme
	UK Research and Innovation

I am/was also a team member on the following non-UK grants, but do/did not draw funds from them other than travel and collaboration costs:

- 2023-26:** **Directly constraining gravity wave drag parameterizations in GEOS with AIRS observations using OSSE Methods**
Funder: NASA Weather and Atmospheric Dynamics Program
Investigators: LA Holt (PI), MJ Alexander, NP Hindley, L Hoffmann, C Kruse, CJ Wright
- 2018-23:** **Improved Climatology of Lower/ Middle Atmospheric Gravity Wave Activity at Mars**
Funder: NASA Research Opportunities in Space and Earth Science (ROSES)
Investigators: NG Heavens (PI), JL Bandfield, JM Battalio, CJ Wright

Supervision – Staff and Postgraduate Students

All PDRAs and PhD students I have supervised have been externally funded for their work, by a variety of sources including NERC, EPSRC, the Royal Society, and Marie Skłodowska-Curie actions.

I have been commended in writing by both Student Services and Human Resources for effectiveness and fairness in dealing with complex and unanticipated research student welfare & staff management situations. I also routinely receive the highest level of feedback on research student progress reports.

Research Staff:

Dates	Name	First Post-Group Position
Starting 2024	Haruka Okui [^]	
2023-date	Phoebe E Noble	
2022-date	Marwa Almowafy	
2022-2024	Subir Mandal*	
2022-2023	V Lakshmi Narayanan	Assistant Professor, Krea University
2017-2023	Neil P Hindley	NERC Independent Fellow, Bath Univ.
2019-2020	Oindrila Nath	Postdoctoral Scientist, IIT Delhi

Postgraduate Research Students:

In Progress:

Dates	Name	Degree / My Role	Notes
2023-date	Adam Hayes	PhD co-supervisor	Lead supervisor: Dr Lisa Kreusser
2022-date	Peter Berthelemy	PhD lead supervisor	
2021-date	Emily J Lear	PhD lead supervisor	
2020-date	Phoebe E Noble	PhD lead supervisor	
2019-date	Timothy P Banyard	PhD lead supervisor	Submitted, awaiting examination

Past:

Dates	Name	Degree / My Role	First Post-Group Position
2018-2023	Shaun M Dempsey	PhD lead supervisor	Consultant, Atkins UK
2018-2021	Jon A Perrett	MPhil lead supervisor	Regulatory Scientist, Civil Service
2017-2020	Karl A Bolmgren	PhD co-supervisor	Postdoctoral Scientist, KTH
2017-2020	Jon Bruno	PhD co-supervisor	GNSS Engineer, GMV
2018-2019	Nazmi Gendzh	PhD lead supervisor	Unknown
2015-2018	Chelsey A Cooper	EngD research mentor [#]	Data Engineer, Kubrick Group
2013-2016	Andrew C Moss	PhD research mentor [#]	IT Consultant, Dorset Software
2013-2016	Neil P Hindley	PhD research mentor [#]	Research Scientist, DSTL

Visiting Research Staff and Students:

Oct-Nov 2022:	Haruka Okui	(PhD student, University of Tokyo)
Jan-Feb 2022:	Colby Brabec	(PhD student, NWRA / University of Colorado)
Jul-Aug 2018:	Cornelia Strube	(PhD student, Forschungszentrum Julich)

Notes:

* Acting scientific supervisor during medical leave of lead supervisor – line-management (e.g. holiday, budget use) handled by home institution [British Antarctic Survey]

[#] Regulations at time prohibited formal supervision by fixed-term staff – my role was equivalent to co-supervisor at other institutions.

[^] Funded by a Japanese Society for the Promotion of Science Fellowship awarded to Okui.

Peer Review

Grants Reviewed for	Czechia:	Czech Science Foundation	
	Germany:	DFG	
	EU:	EASME, Horizon 2020	
	UK:	British Council, NERC, Royal Society	
	USA:	NASA, NSF	
Grant Panel Member for	EU:	EASME	(2018)
		Horizon 2020	(2020)
	UK:	British Council	(2015)
		NERC	(2023)
	USA:	NASA	(2021)
External Interview Panellist for	Lectureship in Climate Physics, Maynooth Univ.		(2023)
Peer Review College Member for	UKRI Talent*		(2021-date)
	NERC		(2020-date)

* previously named UKRI Future Leaders Fellowships Peer Review College, 2021-22

Manuscripts Reviewed for Advances in Space Research, Annales Geophysicæ, Annals of Geophysics, Atmosphere, Atmospheric Chemistry and Physics, Atmospheric Measurement Techniques, Earth and Space Science, Geophysical Research Letters, Icarus, Journal of the Atmospheric Sciences, Journal of Atmospheric and Solar-Terrestrial Physics, Journal of Geophysical Research: Atmospheres, Journal of Geophysical Research: Oceans, Nature Scientific Reports, npj Climate and Atmospheric Science, Ocean Modelling, Proceedings of the National Academy of Science, Quarterly Journal of the Royal Meteorological Society, Remote Sensing, Remote Sensing of the Environment, Weather and Climate Dynamics

Examination of Research Degrees

Date	Name	Degree / My Role	Institution
2022	Dr Byeong-Gwon Song	PhD Committee Member	Yonsei University, South Korea
<i>Title: "A study on winds and gravity waves in the mesosphere and lower thermosphere using meteor radar observations at King Sejong Station, Antarctica"</i>			

Media

Media writing about or interviewing/quoting me personally is marked in **bold**. Media about projects where I am Principal Investigator, lead author or direct PhD supervisor is *italicised*.

2022 Tonga Volcano

Press/Online: Over 70 media sources, including *CNet*, **Eos**, **The Independent**, **Nature**, and **The New York Times**

Radio/TV: **BBC Points West** and **The World**

2021 Sudden Stratospheric Warming

Press: >30 outlets, including *ABC*, *The Conversation*, *The Daily Mail*, *The Express*, *IFLScience*, *The Independent*, *India Post Times*, *Metro*, *Newsweek*, *RT*, and *RTE*.

Teaching

Supervision – Project Students

Final-Year Undergraduate Project Students:

2023-2024: Miles Redman
2022-2023: Dillon Cox, Joao de Oliveira Moreira de Jesus
2021-2022: Arthur Medforth, Kacper Radoszewski
2020-2021: Tom Johnson*
2019-2020: Jo Hones*, Nicolas Kirchmeyer*&
2018-2019: Ivan Liono, Jessica Walker&

Summer Students:

2022: Havin Celik, Niki Khoshkameh (funded by Nuffield Foundation)
2021: Wilf Parry*, James Wyatt* (funded by Nuffield Foundation)
2018: Lizzy Bejan, Kris Kosciuszko (funded by Nuffield Foundation)

Notes:

*Supervised remotely due to pandemic

& Won departmental project prizes

Non-Project Teaching and Examination

- 2024-date:** Lecturer, Design Skills, Department of Elec. Eng., Univ. of Bath
Tutor of record for programming section of a large composite module (~180 students), introducing object-oriented programming, complexity analysis, and related syntax, logic and concepts. Jointly responsible (with various colleagues) for delivery of the module, including lectures, exams and practicals, and management of a team of demonstrators.
- 2018-2023:** Lecturer, Introduction to Programming, Department of Elec. Eng., Univ. of Bath
Same material as above, delivered as an independent course before a major course restructuring. Positive student feedback (2018: 4.1/5; 2019: 4.1/5; 2020: 4.0/5; 2021: 4.5/5; 2022: 4.2/5), with number of students increasing over this period from ~100 to ~160.
(2020-2021: course delivered during Covid-19s pandemic via a mix of pre-recorded lectures, independent learning activities and live online discussions, combined with in-person laboratory practicals. Positive student feedback: 4.0/5)
- 2018-date:** Electronic and Electrical Engineering Admissions, University of Bath
Responsible for interviewing applicants with non-standard entry qualifications for first degrees (BEng/MEng) in the Department, including assessing academic commitment, adaptability to degree-level study, and mathematical/engineering ability.
- 2018-date:** Transfer of Status Examiner, Department of Mathematics, University of Bath
Transfer of Status Examiner, Department of Elec. Eng., University of Bath
Responsible for assessing performance of research students, in order to determine appropriateness of transfer from MPhil to PhD student status.
- 2017-2018:** Lecturer, Second Year Structured Programming, Department of Elec. Eng., Univ. of Bath
Supernumerary lecturer for second-year applied C course (~100 students). Provided input to laboratory design, supported practical work, and marked summative coursework.
- 2012–2013, 2007–2009:** Demonstrator, Third Year Atmospheric Physics Lab, University of Oxford
2007–2010: Demonstrator, Second Year Computational Physics Lab., University of Oxford
2006–2007: Demonstrator, First Year Optical Physics Lab., University of Oxford
Responsible for assisting with lab-based teaching to undergraduate students, including assisting understanding of experiments, troubleshooting, and marking.

Awards

2022: Nominee for Best Lecturer, Student Awards 2022, Bath Elec. Eng. Department

Community Service and Administration

National/International Research Leadership Positions

- 2022-date:** Co-Leader, SPARC Gravity Waves Activity
2022-date: Team Leader, ISSI International Team on Synthetic Gravity Wave Analyses
2019-2022: Chair, Royal Society Research Fellows' Network
2019-2021: Co-Leader, ISSI International Team on Orographic Gravity Waves

National/International Scientific Group Memberships

- 2022-date:** ISSI International Team: *Synthetic Gravity Wave Analyses* (Leader)
2020-date: Stratospheric Network for the Assessment of Predictability (SNAP)
2013-date: SPARC Reanalysis/Analysis Intercomparison Project (S-RIP)
2009-date: SPARC Gravity Waves Activity (Co-Leader 2022-date)
2021-2022: NASA Wave-induced Atmospheric Variability Enterprise Team
2019-2022: SouthTRAC
2018-2021: ISSI International Team: *Constraints on Orographic Gravity Waves* (Co-Leader)
2013-2016: High-Resolution Gravity Wave Modelling Group
2013-2016: South Georgia Wave Experiment Project Team
2006-2013: NASA-Aura Science Team
2010-2011: ISSI International Team: *Observational Constraints for Gravity Wave Parameterisations*

Conference Organisation

- February 2024:** Royal Society Meeting of Minds (~300 attendees, in-person)
May 2023: Royal Society Research Fellows' Conference (~60 attendees, in-person)
March 2023: SPARC QBOi Workshop, Oxford (~100 attendees, hybrid)
December 2022: AGU Fall Meeting Session Lead Convenor (~180 attendees, hybrid)
January 2022: Royal Society Research Fellows' Conference (~80 attendees, hybrid)
December 2021: AGU Fall Meeting Session Lead Convenor (~160 attendees, hybrid)
December 2020: AGU Fall Meeting Session Lead Convenor (~120 attendees, virtual)
December 2019: AGU Fall Meeting Session Lead Convenor (~120 attendees, in-person)

University Leadership Positions

As staff:

University of Bath:

- 2022-date:** Founding Co-Director, Centre for Climate Adaptation and Environmental Research
2020-date: Research Staff Coordinator, Electronic and Electrical Engineering
2017-2018: Chair, University Researcher Induction Working Group

As student:

University of Durham:

- 2005:** Acting JCR Chair, Collingwood College
2003-2005: Students' Union Elections Manager ("Senior Returning Officer")
2003-2005: University Athletic Union Website Manager
2003-2005: Collingwood JCR Website Manager
2002-2004: Archery Club Treasurer

University Committee Membership

As staff:

University of Bath:

2023-date: Electronic Engineering Athena Swan Team

2021-date: Research Data Storage Group

2021-date: NERC Strategic Advisory Panel

2021-date: Engineering Faculty REF Review Panel

2017-date: Department Research Committee

2014-2019: Research Staff Working Group

2017-2018: Researcher Induction Working Group

(Chair)

As student:

University of Durham:

2003-2005: Collingwood College Council (*i.e. main college management committee*)

2003-2005: University IT Strategy Committee

2003-2005: University Honorary Degrees Committee

2001-2005: Physics Department Board of Studies (*i.e. main department management committee*)

2001-2005: Physics Department Staff/Student Liaison Committee

Community Service Awards

2005: Honorary Life Membership, Durham Students' Union

2005: Honorary Life Membership, Collingwood College JCR

Publication Record

Summary

In Review:	5 (of which 4 lead-authored by group members)
Peer-Reviewed Journal Articles:	57 (of which 20 lead-authored by Wright, 14 by group members)
Technical Reports:	4
Published Datasets	4 (of which 1 lead-authored by Wright)
Proceedings Articles:	3
Other Published Works:	3 (of which 1 lead-authored by Wright)
Total:	76 (of which 22 lead-authored by Wright, 18 by group members)

Throughout this section * indicates a student or postdoctoral researcher supervised or co-supervised by Wright during the published work, and *shaded italics* indicates a special note (e.g. journal highlight)

In Review

5. Stratospheric gravity waves excited by Hurricane Joaquin in 2015: 3-D characteristics and the correlation with hurricane intensification

X Wu, L Hoffmann, CJ Wright, NP Hindley, MJ Alexander, S Kalisch, X Wang, B Chen, Y Wang, and D Lyu

Submitted to Atmospheric Chemistry and Physics, December 2023

4. Observations of mesospheric gravity waves generated by geomagnetic activity

VL Narayanan, CJ Wright, M Mlynczak, NP Hindley*, A Kavanagh, T Moffat-Griffin and PE Noble**

Submitted to Journal of Geophysical Research - Atmospheres, October 2023

3. Comparing gravity waves in a km-scale run of the IFS to AIRS satellite observations & ERA5

EJ Lear, CJ Wright, NP Hindley*, I Polichtchouk, and L Hoffmann*

Submitted to Journal of Geophysical Research - Atmospheres, September 2023

2. Seasonal and interannual variability of winds in the Antarctic mesosphere and lower thermosphere over Rothera during 2005-2021 in meteor radar observations and WACCM-X

PE Noble, NP Hindley*, CJ Wright, CY Cullens, S England, N Pedatella, NJ Mitchell and T Moffat-Griffin*

Submitted to Journal of Geophysical Research - Atmospheres, July 2023

1. Aeolus wind lidar observations of the 2019/2020 Quasi-Biennial Oscillation disruption with comparison to radiosondes and reanalysis

TP Banyard, CJ Wright, SM Osprey, NP Hindley*, G Halloran, L Coy, PA Newman and N Butchart*

Submitted to Atmospheric Chemistry and Physics, February 2023

Peer-Reviewed Journal Publications

57. Atmospheric Gravity Waves: Processes and Parameterization

U Achatz, MJ Alexander, E Becker, HY Chun, A Doernbrack, LA Holt, R Plougonven, I Polichtchouk, K Sato, A Sheshadri, CC Stephan, A van Niekerk and CJ Wright

Accepted for Journal of the Atmospheric Sciences, November 2023

56. Seasonal Variability of Gravity Wave Activity in Mars's Lower Atmosphere from MGS-*TES* Nadir Observations

A Pankine, NG Heavens, JM Battalio and CJ Wright

Icarus (2023), doi:10.1016/j.icarus.2023.115819

55. Observations of Typhoon-Generated Gravity Waves from the CIPS and AIRS instruments and comparison to the high-resolution ECMWF model

CY Cullens, B Thurairajah, S England, CE Randall, J Yue and CJ Wright

Journal of Geophysical Research – Atmospheres (2023), doi:10.1029/2022JD038170

54. A Comparison of Stratospheric Gravity Waves in a High-Resolution General Circulation Model with 3-D Satellite Observations

H Okui, CJ Wright, NP Hindley*, EJ Lear* and K Sato*

Journal of Geophysical Research – Atmospheres (2023), doi:10.1029/2023JD038795

Peer-Reviewed Journal Publications (continued)

53. A multiannual record of convective instability in Mars's middle atmosphere from the Mars Climate Sounder

NG Heavens, A Pankine, JM Battalio, [CJ Wright](#), DM Kass and A Kleinboehl
Planetary Science Journal (2023), doi:10.3847/PSJ/acd69d

52. Surface hazards following sudden stratospheric warming events

RJ Hall, DM Mitchell, WJM Seviour and [CJ Wright](#)
Environmental Research Letters (2023), doi:10.1088/1748-9326/acd0c3

51. Sensitivity of mountain wave drag estimates on a separation method

Z Procházková, CG Kruse, MJ Alexander, L Hoffmann, JT Bacmeister, L Holt, R Plougonven, [CJ Wright](#), K Sato, S Gisinger, M Ern, and P Šácha
Journal of the Atmospheric Sciences (2023), doi:10.1175/JAS-D-22-0151.1

50. Martian Gravity Waves Observed by the Thermal Emission Imaging System (THEMIS) During Northern Summer

JM Battalio, NG Heavens, A Pankine, [CJ Wright](#) and A Cowart
Journal of Geophysical Research – Planets (2023), doi:10.1029/2022JE007653

48. Using Sub-Limb Observations to Measure Gravity Waves Excited by Convection

[CJ Wright](#), J Ungermann, P Preusse and I Polichtchouk
npj Microgravity (2023), doi:10.1038/s41526-023-00259-2

47. Interannual variability in the 12-hour tide in the mesosphere and lower thermosphere in 15 years of meteor radar observations above Rothera (67°S, 68°W)

SM Dempsey, PE Noble*, T Moffat-Griffin, [CJ Wright](#) and N Mitchell*
Journal of Geophysical Research – Atmospheres (2022), doi:10.1029/2022JD036694

46. The horizontal wavelength spectrum of gravity wave activity in Mars's lower atmosphere: the perspective from MGS-TES nadir observations

NG Heavens, A Pankine, JM Battalio and [CJ Wright](#)
The Planetary Science Journal (2022), doi:10.3847/PSJ/ac8d62

45. Quantifying stratospheric biases and identifying their potential sources in subseasonal forecast systems

ZD Lawrence, M Abalos, B Ayarzagüena, D Barriopedro, AH Butler, N Calvo, A de la Cámara, A Charlton-Perez, DIV Domeisen, E Dunn-Sigouin, J García-Serrano, CI Garfinkel, NP Hindley, L Jia, M Jucker, AY Karpechko, H Kim, AL Lang, SH Lee, P Lin, M Osman, FM Palmeiro, J Perlwitz, I Polichtchouk, JH Richter, C Schwartz, S-W Son, I Statnaia, M Taguchi, NL Tyrrell, [CJ Wright](#) and RW-Y Wu*
Weather and Climate Dynamics (2022), doi:10.5194/wcd-3-977-2022

44. Radar observations of winds, waves and tides in the mesosphere and lower thermosphere over South Georgia island (54S, 36W) and comparison to WACCM simulations

NP Hindley, N Cobbett, DC Fritts, D Janches, NJ Mitchell, T Moffat-Griffin, AK Smith and [CJ Wright](#)*
Atmospheric Chemistry and Physics (2022), doi:10.5194/acp-22-9435-2022

43. Surface-to-space atmospheric waves from Hunga Tonga-Hunga Ha'apai eruption

[CJ Wright](#), NP Hindley, MJ Alexander, M Barlow, L Hoffmann, CN Mitchell, F Prata, M Bouillon, JA Carstens, C Clerbaux, SM Osprey, N Powell, CE Randall, and J Yue*
Nature (2022), doi:10.1038/s41586-022-05012-5

Significant media interest, from over 60 media sources, including the New York Times, BBC News, Eos, the Independent, the Daily Mail and The World.

42. On the derivation of zonal and meridional wind components from Aeolus horizontal line-of-sight wind

I Krisch, NP Hindley, O Reitebuch and [CJ Wright](#)*
Atmospheric Measurement Techniques (2022), doi:10.5194/amt-15-3465-2022

Peer-Reviewed Journal Publications (continued)

41. How well are Sudden Stratospheric Warming surface impacts captured in CMIP6 climate models?

RJ Hall, DM Mitchell, WJM Seviour and CJ Wright

Journal of Geophysical Research - Atmospheres (2022), doi:10.1029/2021JD035725

Selected by Editor as a JGR Highlight – see writeup in Eos magazine at [tinyurl.com/eos-ssw-highlight](https://www.tinyurl.com/eos-ssw-highlight).

40. Mars Climate Sounder observations of gravity wave activity throughout Mars's lower atmosphere

NG Heavens, A Pankine, JM Battalio, CJ Wright, DM Kass, A Kleinboehl, S Piqueux and JT Schofield
The Planetary Science Journal (2022), doi:10.3847/PSJ/ac51ce

39. Observed and Modelled Mountain Waves from the Surface to the Mesosphere Near the Drake Passage

CG Kruse, MJ Alexander, L Hoffmann, A van Niekerk, I Polichtchouk, JT Bacmeister, LA Holt, R Plougonven, P Šácha, CJ Wright, K Sato, R Shibuya, S Gisinger, M Ern, C Meyer and O Stein
Journal of the Atmospheric Sciences (2022), doi:10.1175/JAS-D-21-0252.1

38. Stratospheric Gravity Waves as a Proxy for Hurricane Intensification: A Case Study of Mesoscale Simulations for Hurricane Joaquin

X Wu, L Hoffmann, CJ Wright, NP Hindley, S Kalisch, MJ Alexander and Y Wang*

Geophysical Research Letters (2021), doi:10.1029/2021GL097010

37. Dynamical and Surface Impacts of the January 2021 Sudden Stratospheric Warming in Novel Aeolus Wind Observations, MLS and ERA5

CJ Wright, RJ Hall, TP Banyard, NP Hindley*, I Krisch, DM Mitchell and WJM Seviour*

Weather and Climate Dynamics (2021), doi:10.5194/wcd-2-1283-2021

36. Using Vertical Phase Differences to Better Resolve 3D Gravity Wave Structure

CJ Wright, NP Hindley, MJ Alexander, L Hoffmann and LA Holt*

Atmospheric Measurement Techniques (2021), doi:10.5194/amt-14-5873-2021

35. Prospect of Increased Disruption to the QBO in a Changing Climate

JA Anstey, TP Banyard, N Butchart, L Coy, PA Newman, SM Osprey and CJ Wright*

Geophysical Research Letters (2021), doi:10.1029/2021GL093058

Press release issued by European Space Agency describing Wright/Banyard/Osprey part of this work

34. Persistent Model Biases in CMIP6 Representations of Stratospheric Polar Vortex Variability

RJ Hall, DM Mitchell, WJM Seviour and CJ Wright

Journal of Geophysical Research - Atmospheres (2021), doi:10.1029/2021JD034759

33. Stratospheric gravity waves over the mountainous island of South Georgia: testing a high-resolution dynamical model with 3D satellite observations and radiosondes

NP Hindley, CJ Wright, AM Gadian, L Hoffmann, JK Hughes, DR Jackson, JC King, NJ Mitchell, T Moffat-Griffin, AC Moss*, SB Vosper and AN Ross*

Atmospheric Chemistry and Physics (2021), doi:10.5194/acp-21-7695-2021

32. Atmospheric Gravity Waves in Aeolus Wind Lidar Observations

TP Banyard, CJ Wright, NP Hindley*, G Halloran, I Krisch, B Kaifler, and L Hoffmann*

Geophysical Research Letters (2021), doi:10.1029/2021GL092756

31. Tracking the Stratosphere-Surface Impact of Sudden Stratospheric Warmings

RJ Hall, DM Mitchell, WJM Seviour and CJ Wright

Journal of Geophysical Research – Atmospheres (2020), doi:10.1029/2020JD033881

Press coverage from >30 outlets, including ABC, the Daily Mail, the Express, the Independent, Metro, Newsweek, and Russia Today

30. Determining gravity wave sources and propagation over the Southern Ocean by ray-tracing AIRS measurements

JA Perrett, CJ Wright, NP Hindley*, L Hoffmann, NJ Mitchell, P Preusse, C Strube and SD Eckermann*

Geophysical Research Letters (2020), doi:10.1029/2020GL088621

Peer-Reviewed Journal Publications (continued)

29. Winds and tides of the Antarctic mesosphere and lower thermosphere: One year of meteor-radar observations over Rothera (68°S, 68°W) and comparisons with WACCM and eCMAM

SM Dempsey, NP Hindley*, T Moffat-Griffin, CJ Wright, AK Smith, J Du and NJ Mitchell*

Journal of Atmospheric and Solar-Terrestrial Physics (2020), doi:10.1016/j.jastp.2020.105510

28. An 18-year climatology of directional stratospheric gravity wave momentum flux from 3-D satellite observations

NP Hindley, CJ Wright, L Hoffmann, T Moffat-Griffin and NJ Mitchell*

Geophysical Research Letters (2020), doi:10.1029/2020GL089557

27. Radiosonde Observations of a Wintertime Meridional Convergence of Gravity Waves Around 60°S in the Lower Stratosphere

T Moffat-Griffin, SR Colwell, CJ Wright, NP Hindley, and NJ Mitchell*

Geophysical Research Letters (2020), doi:10.1029/2020GL089740

26. Multi-Decadal Measurements of UTLS Gravity Waves Derived from Commercial Flight Data

*CJ Wright and TP Banyard**

Journal of Geophysical Research - Atmospheres (2020), doi:10.1029/2020JD033445

25. Gravity waves in the winter stratosphere over the Southern Ocean: high-resolution satellite observations and 3-D spectral analysis

NP Hindley, CJ Wright, ND Smith, L Hoffmann, LA Holt, MJ Alexander, T Moffat-Griffin, & NJ Mitchell*

Atmospheric Chemistry and Physics (2019), doi:10.5194/acp-19-15377-2019

49. Concentric Traveling Ionospheric Disturbances (CTID) Triggered by the 2022 Tonga Volcanic Eruption

L Liu, YJ Morton, PX Cheng, A Amores, CJ Wright and L Hoffmann

Journal of Geophysical Research – Space Physics (2023), doi:10.1029/2022JA030656

24. Quantifying the global impact of tropical cyclone-associated gravity waves using HIRDLS, MLS, SABER and IBTrACS

CJ Wright

Quarterly Journal of the Royal Meteorological Society (2019), doi:10.1002/qj.3602

In top 5% of downloaded papers for QJRMS for the period 2018-19

23. Comparison of equatorial wave activity in the tropical tropopause layer and stratosphere represented in reanalyses

YH Kim, G Kiladis, J Albers, J Dias, M Fujiwara, J Anstey, IS Song, CJ Wright, Y Kawatani, F Lott and C Yoo

Atmospheric Chemistry and Physics (2019), doi:10.5194/acp-19-10027-2019

22. Measurement of ionospheric total electron content using single frequency geostationary satellite observations

CA Cooper, CN Mitchell, CJ Wright, DR Jackson and B Witvliet*

Radio Science (2019), doi:10.1029/2018RS006575

Highlighted as a “top-cited paper” for Radio Science for the period 2019-21

21. How well do stratospheric reanalyses reproduce high-resolution satellite temperature measurements?

*CJ Wright and NP Hindley**

Atmospheric Chemistry and Physics (2018), doi:10.5194/acp-18-13703-2018

Selected by editor as an EGU Highlight Article

20. SG-WEX – a means for improved analysis of gravity waves and low-level wind impacts generated from mountainous islands

DR Jackson, A Gadian, L Hoffmann, J Hughes, J King, T Moffat-Griffin, AC Moss, AN Ross, SB Vosper, CJ Wright and NJ Mitchell*

Bulletin of the American Meteorological Society (2017), doi:10.1175/BAMS-D-16-0151.1

Peer-Reviewed Journal Publications (continued)

19. The South Georgia Wave Experiment (SG-WEX): Radiosonde observations of gravity waves in the lower stratosphere. Part 1: Energy density, momentum flux and wave propagation direction

T Moffat-Griffin, CJ Wright, AC Moss, JC King, SR Colwell and NJ Mitchell*
Quarterly Journal of the Royal Meteorological Society (2017), doi:10.1002/qj.3181

18. Climatology and Interannual Variability of Dynamic Variables in Multiple Reanalyses Evaluated by the SPARC Reanalysis Intercomparison Project (S-RIP)

C Long, M Fujiwara, S Davis, DM Mitchell and CJ Wright
Atmospheric Chemistry and Physics (2017), doi:10.5194/acp-17-14593-2017

17. Exploring gravity wave characteristics in 3-D using a novel S-transform technique: AIRS/Aqua measurements over the Southern Andes and Drake Passage

CJ Wright, NP Hindley, L Hoffmann, MJ Alexander and NJ Mitchell*
Atmospheric Chemistry and Physics (2017), doi:10.5194/acp-17-8553-2017
Selected by editor as an EGU Highlight Article

16. A two-dimensional Stockwell Transform method for gravity wave analysis of AIRS temperatures

NP Hindley, ND Smith, CJ Wright, AS Rees and NJ Mitchell*
Atmospheric Measurement Techniques (2016), doi:10.5194/amt-9-2545-2016

15. Does the Madden-Julian Oscillation Modulate Stratospheric Gravity Waves?

AC Moss, CJ Wright, and NJ Mitchell*
Geophysical Research Letters (2016), doi:10.1002/2016GL068498

14. Gravity wave momentum fluxes in the mesosphere over Ascension Island (8S, 14W) and the anomalous zonal winds of the Semi-Annual Oscillation in 2002

AC Moss, CJ Wright, RN Davis, and NJ Mitchell*
Annales Geophysicae (2016), doi:10.5194/angeo-34-323-2016

13. Multi-instrument gravity-wave measurements over Tierra del Fuego and the Drake Passage – Part 1: Potential energies and vertical wavelengths from AIRS, COSMIC, HIRDLS, MLS-Aura, SAAMER, SABER and radiosondes

CJ Wright, NP Hindley, AC Moss*, DC Fritts, D Janches and NJ Mitchell*
Atmospheric Measurement Techniques (2016), doi:10.5194/amt-9-877-2016
Selected by editor as an EGU Highlight Article

12. Combining AIRS and MLS Observations for Three-Dimensional Gravity Wave Measurement

CJ Wright, NP Hindley and NJ Mitchell*
Geophysical Research Letters (2016), doi:10.1002/2015GL067233
Profiled by NASA's Sensing Our Planet

11. The Southern Stratospheric Gravity Wave Hotspot: Individual Waves and Momentum Flux Estimates from COSMIC GPS-RO

NP Hindley, CJ Wright and NJ Mitchell*
Atmospheric Chemistry and Physics (2015), doi:10.5194/acp-15-7797-2015
Figures featured in Science magazine article
Associated poster received Outstanding Student Poster Award at AGU Fall Meeting 2014

10. Global distributions of overlapping gravity waves in HIRDLS data

CJ Wright, SM Osprey and JC Gille
Atmospheric Chemistry and Physics (2015), doi:10.5194/acp-15-8459-2015

9. Lee wave generation rates in the deep ocean

CJ Wright, RB Scott, P Ailliot and D Furnival
Geophysical Research Letters (2014), doi:10.1002/2013GL059087

8. Global observations of gravity wave intermittency and its impact on the observed momentum flux morphology

CJ Wright, SM Osprey and JC Gille
Journal of Geophysical Research – Atmospheres (2013), doi:10.1002/jgrd.50869

Peer-Reviewed Journal Publications (continued)

7. Detecting overlapping gravity waves using the S-Transform

CJ Wright and JC Gille

Geophysical Research Letters (2013), doi:10.1002/grl.50378

6. Global observations of ocean-bottom subinertial current dissipation

CJ Wright, RB Scott, D Furnival, P Ailliot and F Vermet

Journal of Physical Oceanography (2013), doi:10.1175/JPO-D-12-082.1

5. A one-year seasonal analysis of martian gravity waves using MCS Data

CJ Wright

Icarus (2012), doi:10.1016/j.icarus.2012.03.004

4. Bottom dissipation of subinertial currents at the Atlantic zonal boundaries

CJ Wright, RB Scott, BK Arbic and D Furnival

Journal of Geophysical Research - Oceans (2012), doi:10.1029/2011JC007702

3. HIRDLS observations of gravity wave momentum fluxes over the monsoon regions

CJ Wright and JC Gille

Journal of Geophysical Research – Atmospheres (2011), doi:10.1029/2011JD015725

2. Intercomparisons of HIRDLS, COSMIC and SABER for the detection of stratospheric gravity waves

CJ Wright, M Belmonte Rivas and JC Gille

Atmospheric Measurement Techniques (2011), doi:10.5194/amt-4-1581-2011

1. HIRDLS Measurements of gravity wave activity in the 2006 Arctic stratosphere

CJ Wright, SM Osprey, JJ Barnett, LJ Gray and JC Gille

Journal of Geophysical Research – Atmospheres (2010), doi:10.1029/2009JD011858

Major Technical Reports

4. SPARC Reanalysis Intercomparison Project, Chapter 9: The Quasi-Biennial Oscillation

J Anstey, L Gray, M Fujiwara, I Ivanciu, Y Kawatani, G Kiladis, YH Kim, P Martineau, V Schenzinger, S Tegtmeier, and CJ Wright (2022), doi:10.17874/800dee57d13

3. SPARC Reanalysis Intercomparison Project, Chapter 3: Climatology and Interannual Variability of Dynamical Variables

C Long, M Fujiwara, S Davis, D Mitchell and CJ Wright (2022), doi:10.17874/800dee57d13

2. High Resolution Dynamics Limb Sounder Data Description and Quality, Version 7

JC Gille, LJ Gray, C Cavanaugh, M Coffey, V Dean, C Halvorson, S Karol, R Khosravi, D Kinnison, S Massie, B Nardi, M Belmonte Rivas, L Smith, B Torpy, A Waterfall and CJ Wright (2013)

1. High Resolution Dynamics Limb Sounder Data Description and Quality, Version 6

JC Gille, LJ Gray, C Cavanaugh, KY Choi, M Coffey, C Craig, S Karol, C Hepplewhite, R Khosravi, D Kinnison, S Massie, B Nardi, M Belmonte Rivas, L Smith, A Waterfall and CJ Wright (2011)

Published Datasets

4. Data for Martian Gravity Waves Observed by the Thermal Emission Imaging System (THEMIS) during Northern Summer

JM Battalio, N Heavens, A Pankine, CJ Wright and A Cowart

Archived at Zenodo, doi: 10.5281/zenodo.7272081 (2022)

3. Pressure data used in 'Surface-to-space atmospheric waves from Hunga Tonga-Hunga Ha'apai eruption'

CJ Wright and F Prata

Archived at Zenodo, doi:10.5281/zenodo.6575810 (2022)

Published Datasets (continued)

2. SG-WEx: a collection of meteor radar observations, radiosondes and numerical modelling output over South Georgia

NJ Mitchell, AN Ross, T Moffat-Griffin, A Gadian, NP Hindley, JK Hughes, DR Jackson, JC King, AC Moss, SB Vosper and [CJ Wright](#)

Archived at CEDA, doi:10.5285/585b29ba4a054760ac4e53e7d95290b9 (2021)

1. Vaisala RS92 radiosonde data from King Edward Point (2015)

British Antarctic Survey, AC Moss and [CJ Wright](#)

Archived at CEDA, doi:10.5285/63623413734d48f78229223a02ea49fb (2015)

Conference Proceedings

3. Demonstrated Aeolus Benefits in Atmospheric Sciences

M Rennie, A Stoffelen, S Khaykin, SM Osprey, [CJ Wright](#), TP Banyard, AG Straume, O Reitebuch, I Krisch, T Parrinello, J von Bismarck and D Wernham*

IEEE International Geoscience & Remote Sensing, doi:10.1109/IGARSS47720.2021.9554267 (2022)

2. SLODAR as turbulence monitor for free space optical communications

GD Love, CN Dunlop, S Patrick, CD Saunter, RW Wilson, and [CJ Wright](#)

Proceedings of the SPIE, doi:10.1117/12.669279 (2006)

1. Horizontal turbulence measurements using SLODAR

GD Love, CN Dunlop, S Patrick, CD Saunter, RW Wilson, and [CJ Wright](#)

Proceedings of the SPIE, doi:10.1117/12.620599 (2005)

Other Published Works

3. Report on the SPARC Gravity Wave Symposium, Frankfurt, March 2022

R Plougonven, L Holt, [CJ Wright](#), U Achatz, MJ Alexander and K Sato

SPARC Newsletter No. 59 (July 2022)

2. Seeking New Quantitative Constraints on Orographic Gravity Wave Stress and Drag to Satisfy Emerging Needs in Seasonal-to-Subseasonal and Climate Prediction

MJ Alexander, JT Bacmeister, M Ern, S Gisinger, L Hoffmann, LA Holt, C Kruse, R Plougonven, I Polichtchouk, P Sacha, K Sato, R Shibuya, A van Niekerk, and [CJ Wright](#)

SPARC Newsletter No. 53 (July 2019)

1. Waves Explored With Balloons over South Georgia

[CJ Wright](#)

South Georgia Island Association Newsletter (July 2015)

Conference, Workshop and Seminar Presentations

Invited presentations and seminars are indicated in **bold**, keynote talks are **underlined bold**, and talks in home department at time of presentation are *italicised*. List only includes presentations where I was both lead author and presenter. Invitations I have been unable to accept due to other commitments are listed at the end of the section.

Forthcoming:

July 2024: 45th COSPAR Scientific Assembly, Busan, Korea (oral)
January 2024: **GW4+ Volcanology Workshop, Bristol, UK (oral, keynote)**

Past:

December 2023: AGU Fall Meeting, San Francisco, USA (oral)
December 2023: **Applied & Interdisciplinary Mathematics Seminar, Univ. of Bath, UK (oral)**
October 2023: **EGU Solar-Terrestrial ECR Campfire (oral, remote)**
October 2023: **NASA Goddard Fall Seminar, Maryland, USA (oral, remote)**
August 2023: **Charles University Gravity Wave Workshop, Prague, Czechia (oral)**
July 2023: **Asia-Oceania Geoscience Society Annual Meeting, Singapore (oral)**
July 2023: *Centre for Climate Adaptation and Environmental Research, Bath, UK (oral)*
June 2023: UK National Climate Dynamics Meeting, Birmingham, UK (oral)
May 2023: ESA Aeolus Science Conference, Rhodes, Greece (oral)
May 2023: Royal Society Research Fellow's Meeting, London, UK (oral)
March 2023: **David Andrews Memorial Conference, Oxford, UK (oral)**
March 2023: QBOi Workshop, Oxford, UK (poster)
March 2023: **Univ. of Birmingham SERENE Seminar, Birmingham, UK (oral)**
February 2023: **AOPP Departmental Seminar, Oxford, UK (oral)**
February 2023: Royal Society Meeting of Minds, London UK (oral, plenary speaker)
January 2023: **Imperial College Earth Observation Network Seminar, London, UK (oral)**
December 2022: AGU Fall Meeting, Chicago, USA (poster)
November 2022: *Electronic Engineering Seminar, Bath University, UK (oral)*
October 2022: SPARC General Assembly, Reading, UK (poster)
September 2022: Bath Research Computing Symposium, Bath, UK (oral)
September 2022: UK Earth Observation Conference, Leicester, UK (oral)
June 2022: **CEDAR, Austin, USA (3x oral - all invited, one Workshop Keynote)**
April 2022: **Royal Society Conference on Climate Change, London, UK (oral + poster)**
March 2022: SPARC Gravity Wave Symposium, Frankfurt, Germany (oral)
February 2022: **Canadian Division of Atmospheric and Space Physics (oral, remote)**
February 2022: Royal Society Research Fellow's Meeting, London, UK (oral)
January 2022: **American Meteorological Society, Houston, USA (oral, remote)**
December 2021: AGU Fall Meeting, New Orleans, USA (poster)
September 2021: International Space Science Institute, Bern, Switzerland (oral, remote)
April 2021: EGU General Assembly (vPico, remote)
April 2021: **Joint Met. Colloquium, Univs Frankfurt and Mainz, Germany (oral, remote)**
December 2020: AGU Fall Meeting (poster, remote)
October 2020: International Space Science Institute, Bern, Switzerland (oral, remote)
June 2020: UK National Climate Dynamics Workshop (poster, remote)
June 2020: **Atmosphere, Ice and Climate Seminar, BAS, Cambridge, UK (oral, remote)**
February 2020: **Oxford Earth Observation Conference, Oxford, UK (oral)**
December 2019: AGU Fall Meeting, San Francisco, USA (poster)
November 2019: Royal Society Research Fellow's Meeting, London, UK (oral)
November 2019: **Global Change Geosciences Seminar, Edinburgh, UK (oral)**
September 2019: NCEO Annual Conference, Nottingham, UK (poster)

Conference, Workshop and Seminar Presentations (continued)

July 2019:	RMetS/NCAS Atmospheric Science Conference, Birmingham, UK (poster)
July 2019:	Royal Society Meeting of Minds Conference, London, UK (oral)
May 2019:	ESA Living Planet Symposium, Milan, Italy (poster)
April 2019:	International Space Science Institute, Bern, Switzerland (oral)
January 2019:	SouthTRAC Meeting, DLR Oberpfaffenhofen, Germany (oral)
December 2018:	AGU Fall Meeting, Washington, DC, USA (poster)
November 2018:	ECMWF Seminar, Reading, UK (oral)
October 2018:	SPARC General Assembly, Kyoto, Japan (2x poster)
June 2018:	Eureka Physics Symposium, Bath, UK (poster)
June 2018:	Bath High-Performance Computing Symposium, Bath, UK (poster)
April 2018:	EGU General Assembly, Vienna, Austria (oral)
<i>February 2018:</i>	<i>Electronic Engineering Seminar, Bath University, UK (oral)</i>
February 2018:	BRIDGE Seminar, Bristol University, UK (oral)
February 2018:	Stratospheric Science Institute Seminar, Fz. Juelich, Germany (oral)
February 2018:	Atmosphere, Ice and Climate Seminar, BAS, Cambridge, UK (oral)
December 2017:	AGU Fall Meeting, Washington DC, USA (poster)
December 2017:	Atmosphere, Oceans and Climate Seminar, UEA, Norwich, UK (oral)
December 2017:	Joint RAS/RMetS Dynamical Coupling Meeting, London, UK (oral)
November 2017:	AOPP Departmental Seminar, Oxford, UK (oral)
October 2017:	Joint SRIP/SPARC DA Workshop, Reading, UK (oral)
October 2017:	SPARC Joint Workshop on Observations and Dynamics, Kyoto, Japan (oral)
July 2017:	National Climate Dynamics Workshop, Exeter, UK (oral)
September 2016:	Met Office Seminar, Exeter, UK (oral)
May 2016:	SPARC Gravity Wave Symposium, State College, Pennsylvania, USA (oral)
April 2016:	ANGWIN Meeting, Cambridge, UK (oral)
March 2015:	SG-WEX Project Meeting, Exeter, UK (oral)
December 2014:	AGU Fall Meeting, San Francisco, California, USA (2x oral, 1 invited)
December 2014:	Nonlinear Mathematics Seminar, Bath, UK (oral)
<i>December 2014:</i>	<i>Electronic Engineering Seminar, Bath, UK (oral)</i>
May 2014:	NCAS Early Career Forum, York, UK (oral)
March 2014:	SG-WEX Project Meeting, Cambridge, UK (oral)
March 2014:	Royal Meteorological Society UTLS meeting, Reading, UK (poster)
August 2012:	Aura Science Team, Pasadena, California, USA (poster)
<i>July 2012:</i>	<i>Laboratoire de Physique des Océans Seminar, Brest, France (oral)</i>
<i>January 2012:</i>	<i>Journées LPO, Landerneau, France (oral)</i>
April 2012:	EGU General Assembly, Vienna, Austria (oral)
<i>January 2012:</i>	<i>Laboratoire de Physique des Océans Seminar, Brest, France (oral)</i>
<i>May 2011:</i>	<i>NCAR Satellite Data Group, Boulder, Colorado, USA (oral)</i>
April 2011:	International Space Science Institute, Bern, Switzerland (oral)
April 2011:	EGU General Assembly, Vienna, Austria (poster)
February 2011:	Chapman Gravity Wave Conference, Honolulu, Hawaii, USA (poster)
September 2010:	NCEO Annual Science Meeting, Leicester, UK (oral)
September 2010:	Aura Science Team, Boulder, Colorado, USA (poster)
April 2010:	NCEO Atmospheric Composition Meeting, Cambridge, UK (oral)
February 2010:	International Space Science Institute, Bern, Switzerland (oral)
December 2009:	NCAS Conference, Bristol, UK (poster)
<i>September 2009:</i>	<i>AOPP Annual Retreat, Oxford, UK (oral)</i>
September 2009:	Aura Science Team, Columbia, Maryland, USA (poster)
April 2009:	EGU General Assembly, Vienna, Austria (poster)
March 2009:	Institute of Physics Environmental Physics Day, London, UK (oral)
<i>December 2008:</i>	<i>Trinity College Oxford Seminar, Oxford, UK (oral)</i>
November 2008:	NERC Science Communication Course, Swindon, UK (oral)
October 2008:	Aura Science Team, Leiden, The Netherlands (poster)

Conference, Workshop and Seminar Presentations (continued)

September 2008: AOPP Annual Retreat, Oxford, UK (oral)
September 2008: Royal Meteorological Society Student Conference, Manchester, UK (oral)
August 2008: International Conference of Physics Students, Krakow, Poland (oral)
June 2008: HIRDLS Science Team Meeting, Oxford, UK (oral)
June 2008: HIRDLS Core Team Meeting, Oxford, UK (oral)
April 2008: AOPP Departmental Seminar, Oxford, UK (oral)
January 2008: HIRDLS Science Team, Boulder, Colorado, USA (oral)
September 2007: AOPP Annual Retreat, Oxford, UK (oral)
September 2007: Royal Meteorological Society Student Conference, Edinburgh, UK (poster)

Invited but declined:

January 2023: American Meteorological Society, Denver, USA (oral)