Corwin Wright

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Curriculum Vitae

Employment

2013-date: University of Bath, Bath, UK
- 2023-date: Professor of Atmospheric Remote Sensing
- 2025-2026: Director of Research, Dept. of Electronic and Electrical Engineering
- 2022-2026: Co-Director, Centre for Climate Adaptation & Environmental Research
- 2017-2026: 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 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

2024–2025: Research and Evidence Directorate, 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 **£14.9 million** of competitively-awarded research funding, of which

- **£5.7 million** as overall project lead *(including sub-awards to project Co-Is)*
- **£7.1 million** to fund my research group directly *(as either PI or Co-I)*

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

2026-30: **Seeing the Unseen**
PI
Funder: The Leverhulme Trust
Research Project Grant, £422k

2026-29: **Stratospheric Navigation and Gravity Wave Soaring for Enduring Atmospheric Platforms (STRAT-NAV)**
Co-I
Funder: Advanced Research and Innovation Agency
Enduring Atmospheric Platforms, £1752k [of which £175k to my group]

2024-27: **Flow Dynamics, Scale Interactions and Mountain Waves for TEAMx-UK (TEAMx-FLOW)**
Co-I
Funder: Natural Environment Research Council
Directed Programme, £586k^{F} [of which £140k^{F} to my group]
Investigators: A Orr (PI), NP Hindley, A Ross and CJ Wright

2022-27: **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

2022-26: **Gravity Wave Impacts, from Short to Long Timescales**
PI (Fellow)
Funder: Royal Society
University Research Fellowship, £793k^{F}

2021-26: **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

Grants and Funding *(continued)*

2017-23[C]**:** PI	**Measuring and Tracking Atmospheric Disturbances Using Observations and Ray-Tracing (MATADOR)** *Funder:* Royal Society Research Enhancement Award, £95k
2017-22: PI (Fellow)	**Gravity Waves as Drivers of the Global Atmospheric Circulation** *Funder:* Royal Society University Research Fellowship, £570k[F]
2017-2022: PI (Fellow) (declined)	**Atmospheric Waves in 3D, from the Surface to the Edge of Space** *Funder:* Natural Environment Research Council Independent Research Fellowship, £570k[F] *Offered but declined due to incompatibility with Royal Society URF above.*
2017-21[C]**:** PI 20-21 Co-I 17-20	**The Drake Passage/Southern Ocean Wave Experiment (DRAGON-WEX)** *Funder:* Natural Environment Research Council Discovery Science Grant, £618k[CF] [of which £516k[CF] to Bath (Mitchell/Wright)] *Investigators: NJ Mitchell, T Moffat-Griffin, CJ Wright*
2012-13: PI	**Scientific Exploitation of HIRDLS Data** *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 **Engineering and Physical Sciences Research Council**
the **European Commission**
the **European Geosciences Union**
the **European Space Agency**
the **Global Challenges Research Fund**
the **Great Western 4 Network**
the **Institute of Physics**
the **International Space Science Institute**
the **National Centre for Earth Observation**
the **Natural Environment Research Council**
Northwest Research Associates
the **Royal Meteorological Society**
the **Royal Society**
Trinity College Oxford
the **University of Bath**
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
2027-date	Mohamed Foudad (starts March)	
2026-date	Ben Boyde	
2024-date	Juliana M Jaen	
2023-2026	Phoebe E Noble	*Postdoctoral Scientist, Stockholm Univ.*
2022-2025	Marwa Almowafy	
2024-2025	Haruka Okui[^]	*Assistant Professor, Tokyo University*
2022-2024	Subir Mandal*	*[still in post at BAS]*
2022-2023	V Lakshmi Narayanan	*Assistant Professor, Krea University*
2017-2023	Neil P Hindley	*NERC Independent Fellow, Bath Univ.*
2019-2020	Oindrila P Nath	*Postdoctoral Scientist, IIT Delhi*

Postgraduate Research Students:

In Progress:

Dates	Name	Degree / My Role		Notes
2026-date	Isabelle Scott	*PhD*	*lead supervisor*	
2025-date	Lina Lucas	*PhD*	*co-supervisor*	Lead supervisor Neil Hindley
2023-date	Adam Hayes[%]	*PhD*	*lead supervisor*	

Past:

Dates	Name	*Degree / My Role*		First Post-Group Position
2022-2026	Peter G Berthelemy	*PhD*	*lead supervisor*	Research Scientist, SMHI
2021-2025	Emily J Lear	*PhD*	*lead supervisor*	Event Organiser, Oxfam
2020-2024	Phoebe E Noble	*PhD*	*lead supervisor*	Postdoc, U. Bath
2019-2024	Timothy P Banyard	*PhD*	*lead supervisor*	Postdoc, U. Manchester
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*	Postdoc, 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

Notes:
^ Funded by a Japanese Society for the Promotion of Science Fellowship awarded to Okui
** Acting supervisor during medical leave of lead supervisor*
[#] Regulations at time prohibited formal supervision by fixed-term staff; role equivalent to co-supervisor
[%] Took over as lead supervisor mid-PhD following departure of original supervisor (for Adam Hayes, Lisa Kreusser 2023-2025 and for Shaun Dempsey, Nick Mitchell 2018-2020)

Supervision – Staff and Postgraduate Students (continued)

Visiting Research Staff and Students:

2026-date:	Nathaniel Livesey	*(Visiting Senior Research Fellow)*
Aug-Dec 2025:	Dominika Hájková	*(PhD student, Charles University, Czech Republic)*
Oct-Nov 2022:	Haruka Okui	*(PhD student, University of Tokyo, Japan)*
Jan-Feb 2022:	Colby Brabec	*(PhD student, NWRA / University of Colorado, USA)*
Jul-Aug 2018:	Cornelia Strube	*(PhD student, Forschungszentrum Julich, Germany)*

Peer Review

Grants Reviewed for	**Czechia**:	Czech Science Foundation	
	Germany:	DFG	
	EU:	EASME, ERC, 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, 2025, 2026)*
	USA:	NASA	*(2021, 2023)*
External Interview Panellist for	Lectureship in Climate Physics, Maynooth Univ.		*(2023)*
Shortlisting Panellist for	NERC GW4+ DTP		*(2026)*
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 Advances in Modeling Earth Systems, 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
2026	Tianchu Lu	MPhil->PhD Transfer Examiner	Bath University, UK

Title: Characterising Storm-Time Ionospheric Dynamics Using All-Sky Imaging Techniques

2026	Mohamed Mossad	PhD External Examiner	Rostock Univ., Germany

Title: Gravity Wave Spectra, Variability, and Interactions in the Middle Atmosphere Using Doppler Lidar Observations

2025	Ross Castle	PhD External Examiner	Exeter University, UK

Title: Orographic Gravity Wave Drag and the Large Scale Atmospheric Circulation

2025	Rufus Creed	MPhil->PhD Transfer Examiner	Bath University, UK

Title: Ionospheric data assimilation using satellite observations

2024	Jonathan Coney	PhD External Examiner	Leeds University, UK

Title: Use of artificial intelligence to understand mountain weather and climate processes

2023	Joshua Brook-Lawson	MPhil->PhD Transfer Examiner	Bath University, UK

Title: Evaluating the effects of green and blue space mitigation strategies on the urban microclimate to predict city scale resilience to climate change.

2022	Byeong-Gwon Song	PhD Committee Member	Yonsei University, Korea

Title: "A study on winds and gravity waves in the mesosphere and lower thermosphere using meteor radar observations at King Sejong Station, Antarctica"

2019	Simon Ghillain	MPhil->PhD Transfer Examiner	Bath University, UK

Title: Lightning observed simultaneously by ASIM/ISS-LIS

2018	Matt Griffith	MPhil->PhD Transfer Examiner	Bath University, UK

Title: Raising the Roof: mesospheric gravity waves in models and observations

Media

Media writing about or interviewing/quoting me personally is marked in **bold**.

2026 UK Heat Waves and Bath STRIVE contribution

Radio interview: BBC Radio Somerset

2025 Long-Term Flow Shifts

Press/Online: outlets including the AMS, phys.org and multiple Italian-language outlets including *Corriere della Sera*.

2022 Tonga Volcano

Press/Online: *Over 70 media sources, including CNet,* ***Eos****,* ***The Independent, Nature****, and* ***The New York Times***
Radio/TV interviews: ***BBC Points West*****,** and ***The World***
TV documentary: ***"Volcano with Dara O'Briain", Channel 5, 2025***

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.*

Learned Societies

2019 - date: Royal Meteorological Society (**2025 - date** Fellow)
2020 - date: European Geosciences Union
2016 - date: American Geophysical Union

Teaching

Supervision – Project Students

Final-Year Undergraduate Project Students:

2024-2025: Matthew Goodfellow, Ishi Karsan, Shivam Popli, Archie Stokes
2024-2025: Clara Crommen^, Aman Shah
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:

2024: Matthew Baughen, Clara Crommen (*funded by the Royal Society)*
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:
^ *Student-initiated project*
* *Supervised remotely due to pandemic*
& *Won departmental project prizes*

Taught Course Delivery

2025-date: Spacecraft Systems Engineering, Department of Elec. Eng., Univ. of Bath
Tutor of record for (i) "Space Environment" section of a third-year specialist module (~60 students) introducing concepts of heliophysics, space weather, the Earth's atmosphere and planetary science and (ii) laboratory teaching for all components of the full course, i.e. space environment, space hardware, orbits and space communications.
Student feedback score: 2025/26: 4.5/5.0

2024-date: Design Skills, Department of Elec. Eng., Univ. of Bath
Tutor of record for programming section of a large composite first-year module (~180 students), introducing object-oriented programming, complexity analysis, and related syntax, logic and concepts.
Student feedback score: 2024/5: 4.0/5.0

2018-2023: Introduction to Programming, Department of Elec. Eng., Univ. of Bath
Same material as above, delivered as an independent course before a major course restructuring, with number of students increasing over this period from ~100 to ~160.
Student feedback scores: 2018/9: 4.1/5; 2019/20: 4.1/5; 2020/1: 4.0/5; 2021/2: 4.5/5; 2022/3: 4.2/5

(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. *Student feedback score: 4.0/5*)

2017-2018: 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.
No student feedback score received due to secondary role in teaching team.

Other Teaching Experience

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.

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

2026-date: Royal Society Policy Advisory Forum
2025-date: NASA Earth System Explorer *STRIVE* Science Team
2024-date: ESA EE12 Candidate *Keystone* Mission Advisory Group
2022-date: APARC Reanalysis/Analysis Intercomparison Project *(GW Section Lead)*
2020-date: Stratospheric Network for the Assessment of Predictability (SNAP)
2009-date: SPARC Gravity Waves Activity *(Co-Leader 2022-date)*
2023-2025: Hunga Tonga Assessment Group *(Chapter 6 Lead Author)*
2022-2025: ISSI International Team: *Synthetic Gravity Wave Analyses* *(Leader)*
2013-2022: SPARC Reanalysis/Analysis Intercomparison Project (S-RIP)
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

July 2027:	2nd International Symposium on the Whole Atmosphere (Sci. Org. Comm.)
July 2026:	COSPAR Middle Atmospheric Dynamics Co-Convenor
December 2025:	AGU Fall Meeting Session Lead Convenor (~120 attendees, in-person)
June 2025:	APARC Gravity Wave Symposium (~100 attendees, hybrid)
December 2024:	AGU Fall Meeting Session Lead Convenor (~120 attendees, in-person)
June 2024:	UK National Climate Dynamics Workshop (~100 attendees, in-person)
February 2024:	Royal Society Meeting of Minds (~300 attendees, in-person)
December 2023:	AGU Fall Meeting Session Lead Convenor (~120 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:
2022-2026: Founding Co-Director, Centre for Climate Adaptation and Environmental Research
2025-2026: Director of Research, Electronic and Electrical Engineering
2020-2025: 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

Committee Membership

As staff:

University of Bath:
2025-date: Electronic Engineering Departmental Executive
2025-date: Engineering Research and Knowledge Exchange Committee
2024-date: Engineering Faculty Promotion Support Group
2024-date: Engineering Faculty FLF Selection Team
2021-date: Engineering Faculty REF Review Panel
2017-date: Electronic Engineering Research Committee
2023-2024: Electronic Engineering Athena Swan Team *(team successfully applied for Bronze)*
2021-2024: NERC Strategic Advisory Panel
2021-2023: Research Data Storage Group
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

Civic:

Oxfordshire County Council:
2024-2025: Citizens' Assembly on Travel and Transport

Community Service Awards

2026: Nominee, Team Research Culture Award, Faculty of Engineering Annual Awards
2025: Nominee, Most Generous Leader Award, Faculty of Engineering Annual Awards
2024: Winner, Team Research Culture Award, Faculty of Engineering Annual Awards
2005: Honorary Life Membership, Durham Students' Union
2005: Honorary Life Membership, Collingwood College JCR

Publication Record

Summary

In Review:	**3** (of which **1** lead-authored by group members)
Peer-Reviewed Journal Articles:	**73** (of which **21** lead-authored by Wright, **24** by group members)
Major Technical Reports:	**8** (of which **1** lead-authored by Wright)
Published Datasets:	**4** (of which **1** lead-authored by Wright)
Proceedings Articles:	**3**
Other Published Works:	**5** (of which **2** lead-authored by Wright)
Total:	**96** (of which **25** lead-authored by Wright, **25** 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)

Note that most of my publications follow the geoscience convention of listing authors by individual contribution with equal contributions ordered alphabetically, i.e. there is no special significance to last-place authorship and I am usually early in the author list for papers published by my team.

In Review

3. The TEAMx Observational Campaign
M Lehner, C Acquistapace, M Arpagaus, TP Banyard, F Barbano, K Baumann-Stanzer, C Brun, WRL Cairns, C Chemel, HE Dacre, P di Girolamo, L di Liberto, G Doglioni, P Gasch, G Gerosa, L Giovannini, S Gisinger, A Gohm, J Handwerker, NP Hindley, S Kneifel, P Knippertz, M Kohler, M Kossmann, S Mobbs, A Orr, A Platis, I Renfrew, D Ricard, A Ross, H Saathoff, LM Schlagbauer, S Serafin, P Sheridan, I Stiperski, N Vendrame, H Vogelmann, J Vüllers, HC Ward, C Wastl, S Westerhuis, A Wieser, N Wildmann, G Zängl, D Zardi, the TOC Team [including CJ Wright], and MW Rotach
Submitted to the Journal of the European Meteorological Society, May 2026

2. Assessing model stratospheric gravity wave forecast accuracy against satellite observations using the SAL method
PG Berthelemy, CJ Wright, NP Hindley, L Hoffmann, H Okui and PN Noble**
Submitted to Geophysical Research Letters, March 2026

1. WRF simulations of stratospheric gravity waves from Typhoon Soudelor: sensitivity to microphysics, cumulus parameterization, and boundary layer schemes
Y-S Lu, L Hoffmann, X Wu, CJ Wright and NP Hindley
Submitted to Atmospheric Chemistry and Physics, March 2026

Peer-Reviewed Journal Publications

73. Driving the Mid-Latitude Ionosphere from Below: A Statistical Study Using LOFAR
AG Wood, M Mevius, RA Fallows, JM Jaen, GD Dorrian, B Boyde, K Beser, P Zucca, M Mancini, CJ Wright, NP Hindley, C Schmidt, J Urbář, M Bittner, M Bisi, L Blaszkiewicz, TD Carozzi, C Cesaroni, A Chuchra, J Chum, H Ciechowska, B Dabrowski, S Elvidge, P Flisek, B Forte, M Füllekrug, R Ghidoni, P Hannawald, R Johnson, K Kotulak, PK Knížová, M Kuiack, A Krankowski, L Küchelbacher, Š Mackovjak, B Matyjasiak, M Pożoga, T Phung, D Przepiórka, YG Rapoport, H Rothkaehl, L Spogli, J Šteinbergs, C Stolle, LTomasik, V Truhlík, R Wijers and S Wüst*
Accepted for Journal of Space Weather and Space Climate (2026)

72. Stratospheric gravity waves in three high-resolution models & AIRS satellite observations
PE Noble, H Okui*, MJ Alexander, M Ern, NP Hindley, L Hoffmann, L Holt, A van Niekerk, R Plougonven, I Polichtchouk, CC Stephan, M Bramberger, M Corcos, W Putnam, C Kruse, and CJ Wright*
Atmospheric Chemistry and Physics (2026), doi:10.5194/acp-26-7607-2026
Selected by Editor as an EGU Highlight Article

Peer-Reviewed Journal Publications (continued)

71. A long-term shift in flow regimes over the Antarctic Peninsula
MV Guarino, J Ridley, S Colwell, R Farneti, G Guiliani, H Hersbach, NP Hindley, J King, F Krucharski, I Polichtchouk, AM Tompkins, E Vignon and CJ Wright
Journal of Climate (2026), doi:10.1175/JCLI-D-25-0330.1

70. A Novel Identification Method for Stratospheric Gravity Waves in Nadir Viewing Satellite Observations
PG Berthelemy, CJ Wright, NP Hindley, PE Noble* and L Hoffmann*
Atmospheric Chemistry and Physics (2025) doi:10.5194/acp-25-17595-2025

69. The influence of climate variability on transatlantic flight times
CJ Wright, PE Noble, TP Banyard*, SJ Freeman and PD Williams*
Atmospheric Chemistry and Physics (2025), doi:10.5194/acp-25-18267-2025
Press coverage in Nature News

68. Stratospheric gravity waves in a post-limb sounder era: can GNSS-RO be used to extend the SABER QBO-driving record?
M Almowafy, CJ Wright and NP Hindley*
Atmospheric Measurement Techniques (2025), doi:10.5194/amt-18-6393-2025

67. Gravity Wave Variability in the Arctic Mesosphere in Relation with the Stratospheric Polar Vortex
S Mandal, T Moffat-Griffin, CJ Wright, P-D Pautet, M Taylor and T Nakamura*
Journal of Geophysical Research – Atmospheres (2025), doi:10.1029/2024JD043037

66. A Convolutional Neural Network for the Detection of Gravity Waves in Satellite Observations and Numerical Simulations
H Okui, CJ Wright, PG Berthelemy*, NP Hindley, L Hoffmann and AP Barnes*
Geophysical Research Letters (2025), doi:10.1029/2025GL115683

65. Mechanisms Linking Stratospheric Gravity Wave Activity to Hurricane Intensification: Insights from Hurricane Joaquin
X Wu, L Hoffmann, CJ Wright, NP Hindley, MJ Alexander, X Wang, B Chen, Y Wang, D Lyu, and M Li
Geophysical Research Letters (2025), doi:10.1029/2024GL113531

64. Observation of gravity waves generated by convection and the 'moving mountain' mechanism during Stratéole-2 campaigns and their impact on the QBO
M Corcos, M Bramberger, MJ Alexander, C Liu, A Hertzog and CJ Wright
Journal of Geophysical Research – Atmospheres (2025), doi:10.1029/2024JD041804

63. A process-based evaluation of biases in extratropical stratosphere-troposphere coupling in subseasonal forecast systems
CI Garfinkel, ZD Lawrence, AH Butler, E Dunn-Sigouin, I Statnaia, AY Karpechko, G Koren, M Abalos, B Ayarzaguena, DBarriopedro, N Calvo, A de la Cámara, A Charlton-Perez, J Cohen, DIV Domeisen, J García-Serrano, NP Hindley, M Jucker, H Kim, RW Lee, SH Lee, M Osman, FM Palmeiro, I Polichtchouk, J Rao, JH Richter, C Schwartz, S-W Son, M Taguchi, NL Tyrrell, CJ Wright, and R Wu
Weather and Climate Dynamics (2025), doi: 10.5194/wcd-6-171-2025

62. Exploring sources of gravity waves in the southern winter stratosphere through ray-tracing 3-D satellite observations
PE Noble, S Rhodes, NP Hindley, P Berthelemy*, T Moffat-Griffin, P Preusse, L Hoffmann and CJ Wright*
Journal of Geophysical Research – Atmospheres (2024), doi:10.1029/2024JD041294
Selected by NASA as an AIRS Mission Highlight

61. Comparing Gravity Waves in a Kilometre-Scale Run of the ECMWF IFS to AIRS Satellite Observations and ERA5
EJ Lear, CJ Wright, NP Hindley*, I Polichtchouk, and L Hoffmann*
Journal of Geophysical Research – Atmospheres (2024), doi:10.1029/2023JD040097

Peer-Reviewed Journal Publications (continued)

60. 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**
Journal of Geophysical Research – Space Physics (2024), doi:10.1029/2023JA032157

59. 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*
Atmospheric Chemistry and Physics (2024), doi:10.5194/acp-24-2465-2024

58. 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*
Journal of Geophysical Research - Atmospheres (2024), doi:10.1029/2023JD039789

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
Journal of the Atmospheric Sciences (2024), doi:10.1175/JAS-D-23-0210.1

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

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

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

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

Peer-Reviewed Journal Publications (continued)

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

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.

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

Peer-Reviewed Journal Publications (continued)

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

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

Peer-Reviewed Journal Publications (continued)

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

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

Peer-Reviewed Journal Publications (continued)

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

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

8. Keystone Earth Explorer 12 Candidate Mission: Report for Mission Assessment
E Iorfida, B Veihelmann, D Gerber, P Espy, M Garcia-Comas, J Gumbel, H-W Hübers, J Plane, L Spogli, CC Stephan, C von Savigny, W Ward, CJ Wright, PB Hansen, DM Marsh, J Dodd, N Bowles, A Dudhia, A Knizek, and F Wrana (2026), doi:10.5281/zenodo.20543287

7. STRIVE: Stratosphere Troposphere Response Using Infrared Vertically-Resolved Light Explorer Concept Study Report
L Jaeglé, MJ Alexander, C Bacon, C Baker, A Bourassa, P Cameron-Smith, P Colarco, M DeLand, Q Errera, G Frost, Q Fu, A Gettleman, JC Gille, T Hanisco, VL Harvey, NP Hindley, L Holt, D Kim, P Newman, L Oman, C Orbe, B Reed, R Stauffer, K Strong, G Taha, Q Tang, A Turner, J Wang, K Wargan, R Willcoxon, H Worden, CJ Wright and D Zawada (2025)

6. APARC Hunga Eruption Atmospheric Impacts Report: Executive Summary
Y Zhu, G Mann, W Randel, PA Newman, V Aquila, E Asher, TJ Aubry, EM Bednarz, A Bourassa, M Bramberger, AH Butler, S Carn, M Clyne, L Coy, E Gerber, P Inchin, AY Karpechko, S Khaykin, B Legras, H Liu, AC Maycock, O Morgenstern, FF Østerstrøm, I Quaglia, K Rosenlof, ML Santee, MR Schoeberl, G Stenchikov, K Stone, G Taha, C Thompson, OB Toon, K Tsigaridis, X Wang, K Wargan, DM Wilmouth, CJ Wright, W Yu, J Yue, and Z Zhuo (2025), doi:10.34734/FZJ-2025-05237

5. APARC Hunga Eruption Atmospheric Impacts Report, Chapter 6: Upper stratosphere to thermosphere effects and H2O transport in the deep Brewer-Dobson branch
CJ Wright, J Yue, NP Hindley, J Lei, L Millan, D Themens, S Wallis, W Yu, E Bednarz, E Fleming, R Li, D Plummer, S Tilmes, X Wang, J Zhang, Y Zhu and Z Zhuo (2025), doi:10.34734/FZJ-2025-05243

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)

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

5. Report on the FISAPS - Gravity Waves Symposium, Seoul, June 2025
A Podglajen, R Plougonven, H-Y Chun, CJ Wright, L Holt, and M Geller
SPARC Newsletter No. 67 (July 2026)

4. Seeing the Unseen
CJ Wright
Leverhulme Trust Newsletter (February 2026)

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 **<u>underlined bold</u>**, 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:

August 2026: 46th COSPAR Scientific Assembly, Florence, Italy (oral)
August 2026: Charles University Gravity Wave Symposium, Prague, Czechia (oral)

Past:

May 2026: EGU General Assembly, Vienna, Austria (oral)
April 2026: MATS Workshop, Stockholm (oral)
March 2026: AOPP Departmental Seminar, Oxford, UK (oral)
December 2025: AGU Fall Meeting, San Francisco, USA (oral)
July 2025: Charles University Gravity Wave Symposium, Prague, Czechia (oral)
<u>July 2025:</u> <u>GW4 AI, Climate, Adaptation and Net Zero Symp., Bath, UK (oral, keynote)</u>
June 2025: APARC GW Symposium, Seoul, Korea (1x oral, 1x poster)
May 2025: EGU General Assembly, Vienna, Austria (poster)
March 2025: QUOCA/SNAP/QBOi Meeting, Cambridge, UK (oral)
December 2024: AGU Fall Meeting, Washington DC, USA (1x eLightning, 1 x poster)
November 2024: Royal Society New Research Fellows Induction Day, London, UK (oral)
September 2024: Atmosphere, Oceans and Climate Seminar, UEA, Norwich, UK (oral)
August 2024: Charles University Gravity Wave Symposium, Prague, Czechia (oral)
July 2024: 45th COSPAR Scientific Assembly, Busan, Korea (2x oral, both invited)
June 2024: AMS Middle Atmosphere Meeting, Burlington, USA (oral)
June 2024: UK National Climate Dynamics Meeting, Bath, UK (oral)
June 2024: Royal Society Fellow's Network, London, UK (2x oral, one invited)
April 2024: CAER Research Seminar, Bath, UK (oral)
February 2024: CAER Fellowship Applications Course, Bath, UK (oral)
<u>January 2024:</u> <u>GW4 Volcanology Workshop, Bristol, UK (oral, keynote)</u>
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)

Conference, Workshop and Seminar Presentations (continued)

September 2022: UK Earth Observation Conference, Leicester, UK (oral)
June 2022: **CEDAR, Austin, USA (3x oral - all invited, one 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)
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)
February 2018: *Electronic Engineering Seminar, Bath University, UK (oral)*
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)**
December 2014: *Electronic Engineering Seminar, Bath, UK (oral)*
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)

Conference, Workshop and Seminar Presentations (continued)

July 2012:	*Laboratoire de Physique dés Océans Seminar, Brest, France (oral)*
January 2012:	*Journées LPO, Landerneau, France (oral)*
April 2012:	EGU General Assembly, Vienna, Austria (oral)
January 2012:	*Laboratoire de Physique dés Océans Seminar, Brest, France (oral)*
May 2011:	*NCAR Satellite Data Group, Boulder, Colorado, USA (oral)*
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)
September 2009:	*AOPP Annual Retreat, Oxford, UK (oral)*
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)
December 2008:	*Trinity College Oxford Seminar, Oxford, UK (oral)*
November 2008:	NERC Science Communication Course, Swindon, UK (oral)
October 2008:	Aura Science Team, Leiden, The Netherlands (poster)
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:

December 2026:	**AGU Fall Meeting, San Francisco, USA (oral)**
January 2023:	**American Meteorological Society, Denver, USA (oral)**