

Dr Corwin Wright

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Employment

2013-date: University of Bath, Bath, UK

2019-date: Senior Research Fellow (and Royal Society University Research Fellow)
Independent research position, equivalent to UK Senior Lecturer / US Associate Professor
2017-2019: Research Fellow (and Royal Society University Research Fellow)
Independent research position, equivalent to UK Lecturer / US Assistant Professor
2016-2017: Research Officer
Postdoctoral research position, studying travelling ionospheric disturbances
2013-2016: Research Officer
Postdoctoral research position, studying gravity waves over the Southern Ocean

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

2012-2013: Contract Researcher
Independent research position, primarily funded to study data from NASA's HIRDLS

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

2011-2012: Chercheur Postdoctoral
Postdoctoral research position, studying ocean-bottom current flows in observational data

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

2010-2011: Postgraduate Scientist
Postdoctoral research position, studying gravity waves using data from NASA's HIRDLS

Education

2006–2010: University of Oxford

DPhil (PhD) in Atmospheric Physics
Supervisor: Dr John J. Barnett (deceased)
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

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

Grants and Funding

Principal or Co-Investigator on **£7.6 million** of competitively-awarded research funding, of which:

- **£2.4 million** as overall Principal Investigator for project
- **£2.9 million** to fund my research group (*including as both PI and Co-I*)

Individual awards greater than ~£50k:

2022-2026: Co-I	Drivers and Impacts of Ionospheric Variability with EISCAT-3D (DRIIVE) <i>Funder:</i> Natural Environment Research Council Highlight Topic, <u>£2489k^F</u> [of which £369k ^F to my group] <i>Investigator Team:</i> 20 members, including AJ Kavanagh (PI) and <u>CJ Wright</u>
2021-2025: Co-I ^A	MesoS2D: Mesospheric sub-seasonal to decadal predictability <i>Funder:</i> Natural Environment Research Council Discovery Science Large Grant, <u>£2516k^F</u> [of which £455k ^F to my group] <i>Investigator Team:</i> AJ Kavanagh, DR Marsh, T Moffat-Griffin, <u>CJ Wright</u>
2020-2023^C: PI	An Airglow Imager for Halley Research Station, Antarctica <i>Funder:</i> Royal Society Research Enhancement Award, <u>£55k</u>
2019-2023^C: PI	Planetary and Gravity Waves as Drivers of Sudden Stratospheric Warmings (PEGASUS) <i>Funder:</i> Natural Environment Research Council New Investigator Grant, <u>£787k^F</u> [of which £380k ^F to my group] <i>Investigator Team:</i> JG Esler, DM Mitchell, NJ Mitchell, <u>CJ Wright</u>
2018-2023^C: PI	Satellite Exploration of the Quasi-Biennial Oscillation (SEQUOIA) <i>Funder:</i> Royal Society Research Grant, <u>£98k</u>
2017-2023^C: PI	Measuring and Tracking Atmospheric Disturbances Using Observations and Ray-Tracing (MATADOR) <i>Funder:</i> Royal Society Research Enhancement Award, <u>£95k</u>
2017-2021^C: PI 2020-21 Co-I 2017-20	The Drake Passage/Southern Ocean Wave Experiment (DRAGON-WEX) <i>Funder:</i> Natural Environment Research Council Discovery Science Grant, <u>£650k^C</u> [of which £542k ^{CF} to Bath (Mitchell/Wright)] <i>Investigator Team:</i> NJ Mitchell, T Moffat-Griffin, <u>CJ Wright</u>
2017-2022: Fellow	Gravity Waves as Drivers of the Global Atmospheric Circulation <i>Funder:</i> Royal Society University Research Fellowship, <u>£560k^F</u>
2017-2022: Fellow (declined)	Atmospheric Waves in 3D, from the Surface to the Edge of Space <i>Funder:</i> Natural Environment Research Council Independent Research Fellowship, <u>£570k^F</u> <i>Offered but declined due to incompatibility with Royal Society URF.</i>
2012-2013: PI	Scientific Exploitation of HIRDLS Data <i>Funder:</i> National Center for Atmospheric Research Research Contract, <u>US\$75k</u>

Notes:

^A: Acting PI during review phase, including attending panel interview

^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.

Grants and Funding (*continued*)

I gratefully acknowledge receipt of further grant, studentship and travel funding (total ~£160k) from:

the **American Geophysical Union**
the **Engineering and Physical Sciences Research Council**
the **European Commission**
the **European Geosciences Union**
the **Global Challenges Research Fund**
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 also a team member on the following non-UK grants, but do not draw funds from them:

2018-2022: Improved Climatology of Lower/Middle Atmospheric Gravity Wave Activity at Mars

Funder: NASA

Research Opportunities in Space and Earth Science (ROSES)

Investigator Team: NG Heavens, JL Bandfield, JM Battalio, CJ Wright

Research Community Activity

Grant Panel Member for	British Council	(UK)
	EASME	(EU)
	Horizon 2020	(EU)
	NASA	(USA)
Grants Reviewed for	British Council	(UK)
	DFG	(Germany)
	EASME	(EU)
	Horizon 2020	(EU)
	NASA	(USA)
	NSF	(USA)
Peer Review College Member for	NERC (2020-date)	
	UKRI Future Leaders Fellowships (2021-date)	
Lead Session Convener for	AGU Fall Meeting (2019, 2020, 2021)	

Journal Manuscripts Reviewed for *Advances in Space Research, Annales Geophysicæ, Annals of Geophysics, Atmosphere, Atmospheric Chemistry and Physics, Atmospheri/c 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*

International Working Group Memberships:

2021-date: NASA WAVE (*Wave-induced Atmospheric Variability Enterprise*) Team

2020-date: Stratospheric Network for the Assessment of Predictability (SNAP)

2013-date: SPARC Reanalysis/Analysis Intercomparison Project (S-RIP)

2010-date: SPARC Gravity Waves Activity

2018-2021: ISSI International Team: *Constraints on Orographic Gravity Waves (co-chair)*

2019-2020: SouthTRAC Gravity Wave Field Campaign

2013-2016: South Georgia Wave Experiment Project Team

2013-2016: High-Resolution Gravity Wave Modelling Group

2006-2013: NASA-Aura Science Team

2010-2011: ISSI International Team: *Observational Constraints for Gravity Wave Parameterisations*

Supervision – Staff and Research 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.

Postdoctoral Research Staff:

Dates	Name	Project(s)	First Post-Group Position
2022-date:	Dr V Lakshmi Narayanan	MesoS2D	
2017-date:	Dr Neil P Hindley	PEGASUS (2021-date) DRAGON-WEX (2017-21)	
2019-2020:	Dr Oindrila Nath	PEGASUS	Postdoctoral Scientist, IIT Delhi

Postgraduate Research Students:

In Progress:

Dates	Name	Degree / My Role	Notes
2021-date:	Emily J Lear	PhD lead supervisor	
2020-date:	Phoebe E Noble	PhD lead supervisor	
2019-date:	Tim P Banyard	PhD lead supervisor	
2018-date:	Shaun M Dempsey	PhD lead supervisor	
2018-date:	Anna J Clark	PhD co-supervisor	lead: Tracy Moffat-Griffin, BAS

Past:

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

Notes:

* Regulations at time prohibited formal supervision by fixed-term staff – my role was equivalent to that of a co-supervisor at other institutions. I was a member of the team which changed these regulations.

Undergraduate Project Students:

2021-2022:	Arthur Medforth, Kacper Radoszewski	(final-year projects, University of Bath)
2020-2021:	Tom Johnson	(final-year project, University of Bath)
2019-2020:	Jo Hones, Nicolas Kirchmeyer ^{&}	(final-year projects, University of Bath)
2018-2019:	Ivan Liono, Joshua Walker ^{&}	(final-year projects, University of Bath)

Notes:

[&] Won departmental project prizes.

Summer Students:

2021:	Wilf Parry, James Wyatt	(funded by Nuffield Foundation)
2018:	Lizzy Bejan, Kris Kosciuszko	(funded by Nuffield Foundation)

Teaching Experience

- 2018-date:** Lecturer, First Year Programming, Department of Elec. Eng., Univ. of Bath
Tutor of record for second half of course (~80-110 students), introducing object-oriented programming, complexity analysis, and related syntax, logic and concepts. Jointly responsible (with Dr Philip Shields) for all aspects of module delivery, including lectures, exams and practicals (including management of a team of demonstrators). Positive student feedback (2018/19: 4.1/5; 2019/20: 4.1/5).
(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. 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.

University and External Administrative Roles

As university staff:

- 2021-date:** Bath University Research Data Storage Group
2021-date: Bath University NERC Strategic Advisory Panel
2021-date: Bath Engineering Faculty REF Review Panel
2020-date: Bath Elec. Eng. Department Research Staff Coordinator
2019-date: Royal Society Research Fellows' Network (Chair)
2017-date: Bath Elec. Eng. Department Research Committee
2019-2021: ISSI International Team on Orographic Gravity Waves (Co-Chair)
2014-2019: Bath University Research Staff Working Group
2017-2018: Bath University Researcher Induction Working Group (Chair)

As student representative:

- 2003-2005:** Collingwood College Durham Council
2003-2005: Durham University IT Strategy Committee
2003-2005: Durham University Honorary Degrees Committee
2001-2005: Durham Physics Department Board of Studies (*i.e. Management Committee*)
2001-2005: Durham Physics Department Staff/Student Committee

Publication Record

Summary

In Review:	4 (of which 1 lead-authored by a supervisee)
Peer-Reviewed Journal Articles:	39 (of which 18 lead-authored by Wright, 11 by supervisees)
Major Technical Reports:	4
Conference Proceedings Articles:	2
Published Datasets	2
Other Published Works:	2 (of which 1 lead-authored by Wright)
Total:	53

Throughout this section * indicates a student or postdoctoral researcher supervised or co-supervised by Wright, and *shaded italics* indicates a special note related to the publication (e.g. journal highlight) For quantitative citation information, see <http://corwin.me.uk/cites>.

In Review

4. 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*, Submitted to Atmospheric Chemistry and Physics, November 2021

3. Estimation of zonal & meridional wind components from Aeolus horizontal line-of-sight wind

I Krisch, *NP Hindley**, *O Reitebuch* and *CJ Wright*, Submitted to Atmospheric Measurement Techniques, November 2021

2. 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* Submitted to The Planetary Science Journal, October 2021

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

RJ Hall, *DM Mitchell*, *WJM Seviour* and *CJ Wright* Submitted to Journal of Geophysical Research – Atmospheres, August 2021

Peer-Reviewed Journal Publications

39. 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* Accepted by Geophysical Research Letters (2021), in press

38. 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 Sacha*, *CJ Wright*, *K Sato*, *R Shibuya*, *S Gisinger*, *M Ern*, *C Meyer* and *O Stein* Accepted by Journal of the Atmospheric Sciences (2021), in press

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* Accepted by Weather and Climate Dynamics (2021), in press.

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

Peer-Reviewed Journal Publications (continued)

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

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 10% 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

Peer-Reviewed Journal Publications (continued)

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 platform 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

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

Peer-Reviewed Journal Publications (continued)

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

4. SPARC Reanalysis Intercomparison Project, Chapter 4: 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](#) (2021)

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](#) (2018)

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

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

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

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**. Talks in home department at time of presentation are *italicised*. List only includes presentations where I was lead author/presenter.

Forthcoming:

March 2022: SPARC Gravity Wave Symposium, Frankfurt, Germany (oral)
January 2022: **American Meteorological Society, Houston, USA (oral)**

Past:

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: ANGIN 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)

Conference, Workshop and Seminar Presentations (continued)

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)
July 2012:	Laboratoire de Physique des Océans Seminar, Brest, France (oral)
January 2012:	Journées LPO, Landernau, France (oral)
April 2012:	EGU General Assembly, Vienna, Austria (oral)
January 2012:	Laboratoire de Physique des 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)
<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)
<i>September 2008:</i>	<i>AOPP Annual Retreat, Oxford, UK (oral)</i>
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)
<i>April 2008:</i>	<i>AOPP Departmental Seminar, Oxford, UK (oral)</i>
January 2008:	HIRDLS Science Team, Boulder, Colorado, USA (oral)
<i>September 2007:</i>	<i>AOPP Annual Retreat, Oxford, UK (oral)</i>
September 2007:	Royal Meteorological Society Student Conference, Edinburgh, UK (poster)