

Andrew Russell

PhD, MSc, BSc, FRMetS, ARCS
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Employment

2010-present Lecturer in Climate Change, Brunel University

Developing a climate dynamics research group and teaching climate science, climate in the media and sustainability. My research will focus on atmospheric circulation changes in the Antarctic Peninsula region and how these are manifested in ice core data and the severe storm environment.

2005-2010 Postdoctoral Research Associate, University of Manchester

Worked on the Convective Storm Initiation Project (CSIP) and Convective and Orographically-induced Precipitation Study (COPS) with Prof. Geraint Vaughan (Manchester) analysing the influence of upper-level features and stable layers on convection.

Education

2001-2005 PhD in Climate Dynamics, University of Birmingham and British Antarctic Survey

Supervisors: Prof. Glenn McGregor (Auckland) and Dr. Gareth Marshall (BAS)

Title: Southern Hemisphere atmospheric circulation impacts on Eastern Antarctic Peninsula precipitation

2000-2001 MSc in Mathematical Modelling of the Environment, University of East Anglia

1997-2000 BSc Physics, Imperial College, University of London

Professional Affiliations

Fellow of Royal Meteorological Society (FRMetS)
Associate of the Royal College of Science (ARCS)

Full Member of American Meteorological Society

Professional Responsibilities and Administration

Associate Editor of Atmospheric Science Letters

Reviewer for IJOC, ASL and Climate Research

Member of the RMetS National Meetings Committee

Recent Awards and Recognitions

Best Poster Prize at RMetS Conference 2007

NESTA FameLab 2009 Regional runner-up

Solicited poster presentation at EGU 2007

Perspectives 2009 poster competition finalist

Grants Awarded

2010 Researcher Co-I on NERC Standard Grant, TROSIAD (**£360000**)

2009 Aimhigher (widening participation) grant to set up Bolton MetNet with Bolton Council (**£3000**)

2009 Beacons for Public Engagement Manchester Science Festival Community Award (**£500**)

2008 Royal Society Outgoing Short Visits grant (**£750**) to visit Dr. Michael Sprenger at ETH Zurich

2008 RMetS local centre funding (**£1000** to be spent organising local centre meetings)

2008 RMetS Legacies Fund to attend NCCR Climate Summer School in Switzerland (**£400**)

2007 RMetS local centre funding (**£750** to be spent organising local centre meetings)

2006 NERC funding (**£1500**) and University Training Grant (**£500**) to attend GEFD summer school

2003 RMetS Legacies Fund to attend a conference in New Zealand (**£350**)

2003 AMS Conference Funding to attend a conference in New Zealand (**£1500**)

1997 The Dubris Award – an undergraduate scholarship (**£1000**)

Invited Seminars and Talks

- Institute of Physics KS4 Teacher's Conference, Manchester, June 2009
- Imperial College, London, June 2009
- GRADschool, Manchester, May 2009
- ETHZ, Zurich, August 2008

Peer Reviewed Publications

- Russell, A. and McGregor, G.R. (2010) "A review of southern hemisphere atmospheric circulation: impacts on Antarctic climate and reconstructions from Antarctic ice core data" *Climatic Change*, **99**, 155-192.
- Davis, J. C., Collier, C. G., Davies, F., Pearson, G. N., Burton, R. and Russell, A. (2009) "Doppler lidar observations of sensible heat flux and intercomparisons with a ground-based energy balance station and WRF model output" *Meteorologische Zeitschrift*, **18**, 155-162.
- Russell, A., Vaughan, G., Norton, E. G., Ricketts, H. M. A., Morcrette, C. J., Browning, K. A. and Blyth, A. M. (2009) "Convection forced by a descending dry layer and low-level moist convergence" *Tellus A*, **61**, 250-263.
- Russell, A., McGregor, G.R. and Marshall, G.J. (2008) "Eastern Antarctic Peninsula precipitation delivery mechanisms: process studies and back trajectory accuracy evaluation" *Atmospheric Science Letters*, **9**, 214-221.
- Russell, A., Vaughan, G., Norton, E. G., Morcrette, C. J., Browning, K. A. and Blyth, A. M. (2008) "Convective inhibition beneath an upper-level PV anomaly" *Quarterly Journal of the Royal Meteorological Society*, **134**, 371-383.
- Browning, K. A. and co-authors, including Russell, A. (2007) "The convective storm initiation project" *Bulletin of the American Meteorological Society*, **88**, 1939-1955.
- Morcrette, C. J., Lean, H., Browning, K. A., Nicol, J., Roberts, N., Clark, P. A., Russell, A. and Blyth, A. M. (2007) "Combination of Mesoscale and Synoptic Mechanisms for Triggering an Isolated Thunderstorm: Observational Case Study of CSIP IOP 1" *Monthly Weather Review*, **135**, 3728-3749.
- Russell A., McGregor G. R., and Marshall G. J. (2006) "340 years of atmospheric circulation characteristics reconstructed from an eastern Antarctic Peninsula ice core" *Geophysical Research Letters* **33**, L08702, doi:10.1029/2006GL025899.
- Russell A., McGregor G. R., and Marshall G. J. (2004) "An examination of the precipitation delivery mechanisms for Dolleman Island, eastern Antarctic Peninsula" *Tellus A*, **56**, 501-513.

Peer Reviewed Publications in Review

- Russell, A., Vaughan, G. and Norton, E. G. "Large scale potential vorticity anomalies and deep convection" *Quarterly Journal of the Royal Meteorological Society*
- Jones, H., Crosier, J., Choulaton, T. W., Russell, A., Coe, H., McFiggans, G., Irwin, M., Blyth, A. M., Gadian, A. and Mobbs, S. "In-situ aerosol measurements taken during the 2007 COPS field campaign over Germany at the Hornisgrinde super-site and on-board the FAAM BAe-146" *Quarterly Journal of the Royal Meteorological Society*.

Key Conferences and Scientific Project meetings attended

- International Conference on Alpine Meteorology, May 2009, Rastatt, Germany
- THORPEX-UK Research meeting, October 2008, Cambridge, UK
- International Conference on Clouds and Precipitation, July 2008, Cancun, Mexico
- EGU Assembly, April 2007, Vienna, Austria
- EGU Assembly, April 2006, Vienna, Austria
- Seventh International Conference on Southern Hemisphere Meteorology and Oceanography (7ICSHMO), March 2003, Wellington, New Zealand