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Department of Meteorology, University of Reading
National Centre for Atmospheric Science-Climate
Walker Institute, National Centre for Earth Observation

A reader in climate science specialising in Earth Observation, radiative processes and the global water cycle; numerous peer-reviewed publications and strong links with the Met Office and the Intergovernmental Panel on Climate Change.

Career Outline

2009-present: Reader in Climate Science, Department of Meteorology, University of Reading, UK
2005-2010: NERC Advanced Fellow, ESSC, University of Reading
2003-2005: Research Fellow, ESSC, University of Reading
1999: Visiting scientist, Geophysical Fluid Dynamics Laboratory, Princeton, NJ, USA
1998-2003: Research Scientist, Hadley Centre, Met Office
1995-1998: PhD, Meteorology Department, University of Reading (CASE award, Hadley Centre)

Current Professional activities

Contributing author and expert reviewer for Intergovernmental Panel on Climate Change
Met Office Improving Hydrological Predictions (IHP) program steering committee member
Environmental Research Letters, Co-organizer and Guest Editor for Special Focus Issue on Anticipated Changes in the Global Water Cycle, 2009/2010
Associate Editor, Journal of Climate, since 2008
Member of NERC Peer Review College, 2007-2010
Member of Geostationary Earth Radiation Budget International Science Team, since 1999
International Space Sciences Institute (Bern) workshop convenor 2010/11
Reviewer for numerous international scientific journals and funding agency grant proposals
Royal Meteorological Society/Institute of Physics convenor, Clouds/Earth's Energy Budget, 2011

Grants awarded

CALM NERC CMIP5 call PI (£103k)
HYDEF NERC CWC directed program (Imperial College) Co-I (£224k)
PAGODA NERC CWC directed program, PI 2010-2013 (£971k + £14k NCEO funding)
PREPARE NERC standard grant, PI, 2010-2013 (£318k)
FENNEC NERC consortium grant, Co-I, 2010-2013 (£370k)
HadIR/MW JWCRP PI with Met Office, 2009-2012
NERC Advanced Fellowship, 2005-2010 (£282k)
Royal Society Incoming Short Visits grant, 2008 (£3785)

Awards

2008, Outstanding reviewer, JGR-Atmospheres
2003, Reid award, NASA Langley Research Center (for authors of Wielicki et al. 2002)
1992-3, First Year prize and Cann prize for Environmental Science, University of East Anglia

Teaching and Outreach

Teaching: Science of Climate Change undergraduate module (MT2CC1A) and Climate Change MSc module (MTMG16), University of Reading; Climate Processes and Modelling PhD course, Sweden; Water Vapour in the Climate System, Summer School, Corsica; Earth System Spring School (NCAS/NCEO), Scarborough, UK; University of Oxford School of Continuing Education (Modules: Weather and Climate; Climate Change, Past, Present and Future); Climate Change, Randolph College (Reading).

PhD supervisor: Ross Maidment (Meteorology), Claire Barber (ESSC), Nicky Chalmers (Meteorology Department, 2011), Ruth Comer (ESSC, 2008, now Met Office)

PhD examiner: L. Read, Imperial College, 2004; N. Clerbaux, RMIB, 2008; R. Holley ESSC, 2009; T. Andrews, Leeds, 2010; A. Ipe, RMIB, 2011

Media/Policy: BBC radio 4 and world service, Guardian, Telegraph, Financial Times, Global Re-insurance, European Commission/Environment Policy

Outreach: Departmental/NCAS climate outreach coordinator; schools talks; Lloyds of London

Recent Selected Scientific Meetings

Seminars: “Exploiting observations to seek robust responses in global precipitation”, Met Office, 2010; “Current changes in the water cycle”, ETH Zurich (2010), Univ. Sussex (2010)

Invited Speaker: ISSI workshop on Earth’s Hydrological Cycle (2012), WAVACS water vapour workshop (2011), NCAS National meeting (2010), NCEO National Conference (2009, 2010), Royal Meteorological Society Conference (2009), AGU Chapman Conference on water vapour (2008), EGU conference, Surface Radiation Budget (2008); Met Office workshop on Improving Predictions of the Large-scale Hydrological Cycle (2008)

Convenor: AGU Fall meeting, Dynamic/Thermodynamic Controls of the Hydrological Cycle (2008)

Selected Relevant Publications

See <http://www.met.rdg.ac.uk/~sgs02rpa/publications.html> for full list.

Allan RP (2011) Regime-dependent changes in global precipitation, *Clim Dyn* 10.1007/s00382-011-1134-x.

Allan RP (2011) Human influence on rainfall, *Nature*, 470, 344-345

Allan RP, BJ Soden, VO John, W Ingram, P Good (2010) Current Changes in Tropical Precipitation, *Environmental Research Letters*, 5, 025205, doi:10.1088/1748-9326/5/2/025205

Haywood, JM, **RP Allan** and co-authors (2009) A Case Study of the Radiative Forcing of Persistent Contrails Evolving into Contrail-Induced Cirrus *J. Geophys. Res.*, 114,D24201, 10.1029/2009JD012650

Allan RP and BJ Soden (2008) Atmospheric Warming and the Amplification of Precipitation Extremes, *Science*, 321, (5895) p.1481-1484

Allan RP and BJ Soden (2007) Large discrepancy between observed and simulated precipitation trends in the ascending and descending branches of the tropical circulation, *Geophys. Res. Lett.* 34, L18705

Allan RP, A Slingo, SF Milton and MA Brooks (2007) Evaluation of the Met Office global forecast model using Geostationary Earth Radiation Budget (GERB) data, *Q. J. Roy. Meteorol. Soc.*, 133, 1993-2010

Bony S, R Colman, VM Kattsov, **RP Allan**, and co-authors (2006) How well do we understand and evaluate climate change feedback processes?, *J. Climate* 19, 3445-3482

Slingo A, TP Ackerman, **RP Allan** and co-authors (2006) Observations of the impact of a major Saharan dust storm on the Earth’s radiation balance, *Geophys. Res. Lett.*, 33, L24817

Allan RP (2006) Variability in clear-sky longwave radiative cooling of the atmosphere *J. Geophys. Res.*, 111, D22105

Uppala SM, and co-authors including **RP Allan** (2005) The ERA-40 Re-analysis, *Q. J. Roy. Meteorol. Soc.* 131, 2961-3012

Harries JE and co-authors including **RP Allan** (2005), The Geostationary Earth Radiation Budget (GERB) Experiment, *Bull. Amer. Meteorol. Soc.*, 86, 945-960.

Allan RP, A Slingo and MA Ringer (2002) Influence of dynamics on the changes in tropical cloud radiative forcing during the 1998 El Niño, *J. Climate*, 15, 1979-1986.

Wielicki BA, TM Wong, **RP Allan** and co-authors (2002) Evidence for Large Decadal Variability in the Tropical Mean Radiative Energy Budget, *Science* 295, 841-844