

Contact Address: Department of Meteorology, University of Reading, Reading, RG6 6BB
 Job Title: Associate Professor in Monsoon Systems

Professional and Educational Qualifications

PhD Meteorology	University of Reading	2005
MPhys Physics (2.1)	University of Oxford	2002

Summary of Professional Expertise

Andy is an Associate Professor in Monsoon Systems funded jointly by the University of Reading's Academic Investment Programme and National Centre for Atmospheric Science (NCAS), based in the Department of Meteorology. His general interests are in monsoon variability, predictability and prediction including the interaction between monsoon systems and other elements of the climate system. He was Co-Chair of the GEWEX/CLIVAR Monsoons Panel, is an Associate Editor of the *Quarterly Journal of the Royal Meteorological Society*, and a Lead Author of the forthcoming *Working Group I Contribution to the Sixth Assessment Report of the IPCC*.

Employment History

2017	- present	Associate Professor in Monsoon Systems, University of Reading/NCAS
2014	- 2017	Lecturer in Monsoon Systems, University of Reading/NCAS
2011	- 2014	NERC Fellowship, University of Reading
2009	- 2011	Research Scientist, NCAS-Climate, University of Reading
2006	- 2008	Post-Doctoral Research Assistant, NCAS-Climate, University of Reading

Research Project Leadership

2019	- 2022	Emergence of climate hazards (EMERGENCE) NERC Highlight Topic. Co-Investigator: NE/S004890/1; £304K FEC
2018	- 2020	Portrayal of Chinese land-atmosphere interactions (PORCELAIN) Newton Fund/Met Office CSSP-China project. Co-Investigator: £108K to UoR
2018	- 2020	Process evaluation of regional Chinese hydrological and atmospheric natural climate extremes (PERCHANCE) Newton Fund/Met Office CSSP-China project. Co-Investigator: £600K
2017	- 2020	Robust spatial projections of real-world climate change (REAL projections) NERC Large Grant. Co-Investigator: NE/N018591/1; £768K FEC
2016	- 2019	Better understanding of Interregional Teleconnections for prediction in the Monsoon and Poles (BITMAP) Belmont Forum/JPI-Climate Collaborative Research Action. Principal Investigator: NE/P006795/1; €1132K of which £377K FEC to UoR
2015	- 2018	Interaction of Convective Organisation with Monsoon Precipitation: Atmosphere, Surface & Sea (INCOMPASS) NERC/Indian Ministry of Earth Sciences directed call. Principal Investigator: NE/L01386X/1; £1,369K FEC of which £552K FEC to UoR
2015	- 2018	Modelling physical and dynamical processes over the Tibetan Plateau and their regional effects over East Asia (MESETA) Newton Fund/Met Office CSSP-China WP4.1 project. Co-Investigator
2015	- 2018	Drivers of water cycle of the East Asian monsoon (DREAM) Newton Fund/Met Office CSSP-China WP3.1 project. Co-Investigator
2015	- 2019	Improving Model Processes for African Climate (IMPALA) DFID/NERC Future Climate for Africa (FCFA) project. Co-Investigator and WP1 lead: NE/M017222/1; £406K FEC
2014	- 2017	Improved Indo-UK capability for seamless forecasting of monsoon rainfall: from days to the season Indian Ministry of Earth Sciences National Monsoon Mission. Principal Investigator: \$298K to UoR
2014	- 2015	Predictability of regional climate and modes of variability

- Newton Fund/Met Office CSSP-China WP2.3 project. Principal Investigator: £62K to UoR
- 2014 - 2015 **High resolution modelling of the East Asian monsoon**
Newton Fund/Met Office CSSP-China WP3.3 project. Co-Investigator
- 2012 - 2016 **Hydrometeorological feedback and changes in water storage and fluxes in northern Indian basins (Hydroflux-India)**
NERC/Indian Ministry of Earth Sciences Changing Water Cycle (South Asia) directed call. Co-Investigator: NE/I022485/1; £206K FEC
- 2012 - 2015 **South Asian PRecipitation: a SEamless Assessment (SAPRISE)**
NERC/Indian Ministry of Earth Sciences Changing Water Cycle (South Asia) directed call. Co-Investigator: NE/I022469/1; £330K FEC
- 2011 - 2014 **The future of the Indian monsoon**
NERC Fellowship (sole investigator): NE/H015655/1; £330K FEC
- 2010 - 2013 **Modelling Monsoon Systems**
NERC/Met Office Joint Weather & Climate Research Programme. Principal Investigator: Agreement no. R8/H9/37; approximately £255K to UoR
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Awards

- LF Richardson Prize of the Royal Meteorological Society, 2009

Memberships of Committees and boards etc.

- Lead Author, Chapter 10: Linking global to regional climate change, *Working Group I Contribution to the Sixth Assessment Report of the IPCC*
- Associate Editor, Quarterly Journal of the Royal Meteorological Society, October 2014-present
- Co-Chair, WCRP GEWEX/CLIVAR Monsoons Panel (<http://www.clivar.org/clivar-panels/monsoons>), 2014-2018
- Member, WCRP CLIVAR Asian-Australian Monsoon Panel, 2009-2014 (<http://www.clivar.org/panels-and-working-groups/aamp>)
- Fellow of the Higher Education Academy, September 2016
- SEDA Certificate in Research Career Management, April 2009

Selected Publications (67 publications, 1600+ Web of Knowledge citations, *h*-index 20)

- The dynamic and thermodynamic structure of the monsoon over southern India: New observations from the INCOMPASS IOP. J. Fletcher, D. J. Parker, **A. G. Turner** *et al.* (2019). *QJRMS*, published online.
 - Representation of western disturbances in CMIP5 models. K. M. R. Hunt, **A. G. Turner** and L. C. Shaffrey (2019). *Journal of Climate*, **32**(7): 1997-2011.
 - Different Asian monsoon rainfall responses to idealised orography sensitivity experiments in the HadGEM3-GA6 and FGOALS-FAMIL global climate models. K.-C. Wong, S. Liu, **A. G. Turner** and R. K. Schiemann (2018). *Advances in Atmospheric Sciences*, **35**(8): 1049-1062.
 - Extreme daily rainfall in Pakistan and north India: scale-interactions, mechanisms, and precursors. K. M. R. Hunt, **A. G. Turner** and L. C. Shaffrey (2018). *Monthly Weather Review*, **146**: 1005-1022.
 - GMMIP (v1.0) contribution to CMIP6: Global Monsoons Model Inter-comparison Project. T. Zhou, **A. G. Turner**, J. Kinter, B. Wang, Y. Qian, X. Chen, B. Wu, B. Wang, B. Liu, L. Zou and B. He (2016). *Geoscientific Model Development*, **9**: 3589-3604.
 - The effect of horizontal resolution on Indian monsoon depressions in the Met Office NWP model. K. M. R. Hunt and **A. G. Turner** (2017). *QJRMS*, **143**: 1756-1771.
 - The Spatiotemporal Structure of Precipitation in Indian Monsoon Depressions. K. M. R. Hunt, **A. G. Turner** and D. E. Parker (2016). *QJRMS*, **142**: 3195-3210.
 - On the Structure and Dynamics of Indian Monsoon Depressions. K. M. R. Hunt, **A. G. Turner**, P. M. Inness, D. Parker and R. C. Levine (2016). *Monthly Weather Review*, **144**: 3391-3416.
 - The interaction of moist convection and mid-level dry air in the advance of the onset of the Indian monsoon. D. J. Parker, P. Willetts, C. Birch, **A. G. Turner** *et al.* (2016). *QJRMS*, **142**(699): 2256-2272.
- The Asian Summer Monsoon: An Intercomparison of CMIP5 vs. CMIP3 Simulations of the Late 20th Century. K. R. Sperber, H. Annamalai, **A. Turner** *et al.* (2013) *Clim. Dyn.*, **41**: 2711-2744.