

WILLIAM J. M. SEVIOUR

Atmospheric Physics
Clarendon Laboratory
Parks Road
Oxford
UK
OX1 3PU

Web: www.atm.ox.ac.uk/user/seviour
Email: seviour@atm.ox.ac.uk
Tel: +44 (0)1865 272920

EDUCATION

University of Oxford

D.Phil. Atmospheric, Oceanic and Planetary Physics, 2011–present

CASE studentship with the Met Office Hadley Centre

Supervisors: Lesley Gray (University of Oxford)
Steven Hardiman (Met Office Hadley Centre)

Committee: Tim Palmer and Myles Allen

Thesis title: Variability of the polar stratosphere and its influence on surface weather and climate.

University of Cambridge

M.A. & M.Sci. Natural Sciences, 2011

Part III Experimental and Theoretical Physics II.1, 2011

Project: Water vapour and ozone in the Asian Summer Monsoon.

Supervisor: Peter Braesicke (Centre for Atmospheric Science)

Part II Experimental and Theoretical Physics, 2010

Part IB Physics, Mathematics, 2009

Part IA Physics, Chemistry, Materials and Mineral Science, Mathematics, 2008

EMPLOYMENT

Met Office Hadley Centre

Four month studentship in the Atmospheric Composition and Climate Group, 2010

Supervisors: Steven Hardiman and Neal Butchart

Project: Representation of the quasi-biennial oscillation and Brewer-Dobson circulation in reanalysis data.

PUBLICATIONS

In review

Seviour, W. J. M., S C. Hardiman, L. J. Gray, N. Butchart, C. MacLachlan and A. A. Scaife (2014). Skillful seasonal prediction of the Southern Annular Mode and Antarctic ozone, *J. Climate*.

Peer-reviewed

Seviour, W. J. M., D. M. Mitchell, and L. J. Gray (2013), A practical method to identify displaced and split stratospheric polar vortex events, *Geophys. Res. Lett.*, 40, 5268-5273 doi:10.1002/grl.50927

Seviour, W. J. M., N. Butchart and S. C. Hardiman (2012), The Brewer-Dobson circulation inferred from ERA-Interim, *Q. J. R. Meteorol. Soc.*, 138: 878-888. doi: 10.1002/qj.966

Non peer-reviewed

Butler, A. H., E. P. Gerber, D. M. Mitchell and W. J. M. Seviour (2014), New Efforts to Update the Standard Definition of Sudden Stratospheric Warmings, SPARC Newsletter, submitted.

Orbe, C. H. Garny and W. J. M. Seviour (2013), SPARC Workshop on the Brewer-Dobson Circulation, 25-29 June 2012, Grindelwald, Switzerland, SPARC Newsletter No. 40, January 2013.

CONFERENCE PRESENTATIONS

SPARC General Assembly, Queenstown, New Zealand, 2014, A practical method to identify stratospheric polar vortex displacements and splits (poster).

SPARC DynVar/SNAP Workshop, Reading, UK, 2013, A practical method to identify stratospheric polar vortex displacements and splits (poster).

Royal Meteorological Society student conference, Reading, UK, 2013, Seasonal forecasting of the Antarctic stratospheric vortex (talk).

Royal Meteorological Society student conference, Leeds, UK, 2012, Diagnosing stratospheric vortex splits and displacements (talk).

SPARC Workshop on the Brewer-Dobson circulation, Grindelwald Switzerland, 2012, The Brewer-Dobson circulation inferred from ERA-Interim (talk).

ACADEMIC ACTIVITIES

Royal Meteorological Society student conference organising committee, 2013

National Centre for Atmospheric Science Climate Modelling Summer School, University of Oxford, 2013

Reviewer for Journal of Geophysical Research.

BP Institute Masterclass in Energy Supply and Demand, University of Cambridge, 2010

TEACHING EXPERIENCE

Hertford College, University of Oxford

Tutor: Flows, Fluctuations and Complexity (3rd year undergraduate physics), 2012-2013

Outreach at UK schools: interactive talks on weather prediction, chaos and climate change, 2011-present

GRANTS

WCRP travel grant to attend SPARC General Assembly, 2014

Linacre College House Trust travel grant to attend SPARC General Assembly, 2014

Royal Meteorological Society legacies fund to attend student conference, 2013

Royal Meteorological Society legacies fund to attend student conference, 2012

WCRP travel grant to attend Workshop on the Brewer-Dobson circulation, 2012

COMPUTER LITERACY

Regular use of Python, IDL, and shell scripts. Knowledge of the use of the Met Office Unified Model on high performance computing facilities. Document preparation in LaTeX.