

Workshop on Atmospheric Blocking

6-8 April 2016, University of Reading

	Day 1 Weds 6th	Day 2 Thurs 7th	Day 3 Fri 8th
09:00		Session 1	Session 1
09:30			
10:00			
10:30	Arrival/Registration	Coffee	Coffee
11:00			
11:30	Session 1	Poster session (room 1L04)	Session 2
12:00			
12:30	Lunch	Lunch	Lunch
13:00			
13:30			
14:00	Session 2	Session 2	Session 3
14:30			
15:00	Coffee	Coffee	Coffee
15:30			
16:00	Session 3	Session 3	Discussion
16:30			
17:00			Close
17:30	Discussion	Discussion	
18:00			

Workshop Dinner
19:30

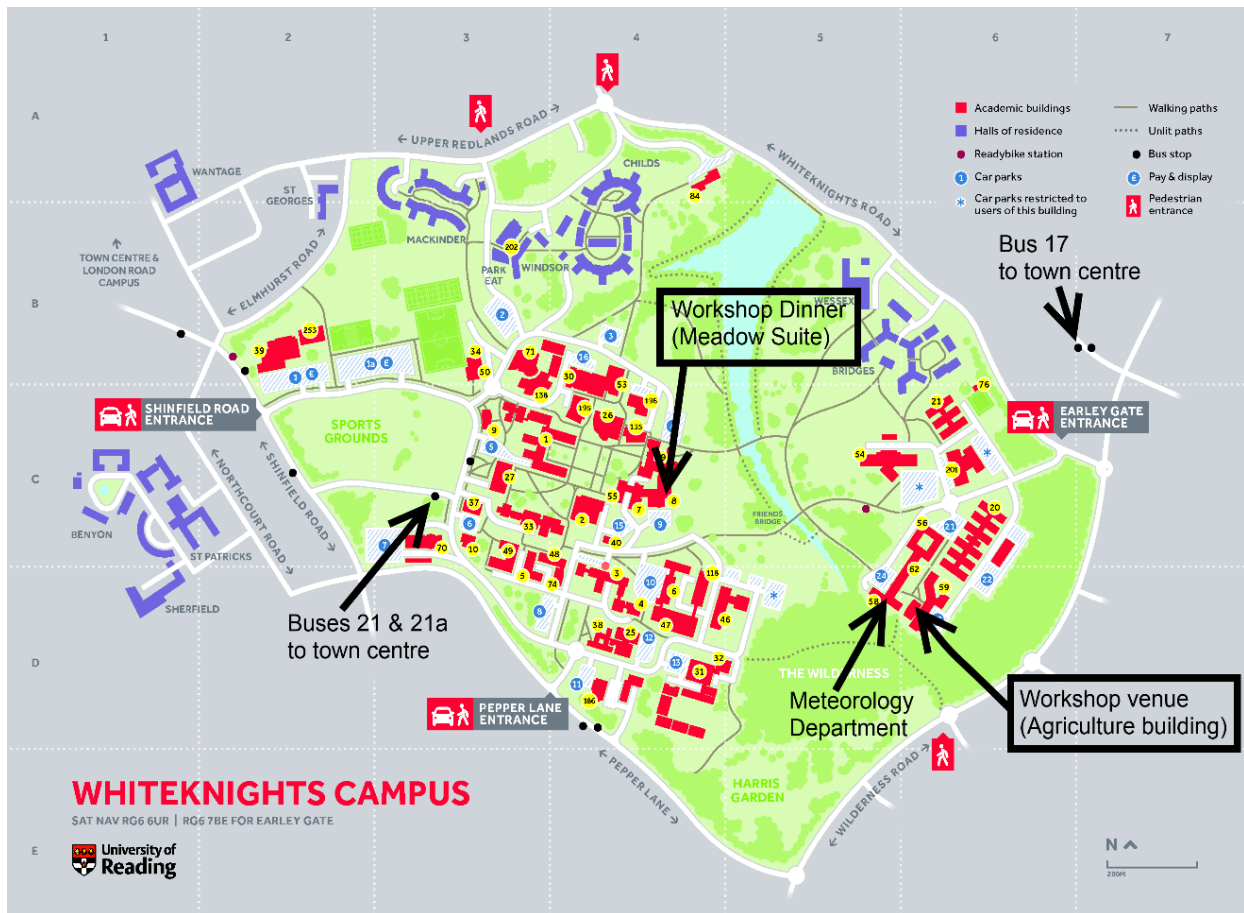


Information

Workshop venue: Nike Lecture Theatre
Agriculture Building
Whiteknights Campus
University of Reading, RG6 7BE

Getting to the University of Reading:
www.reading.ac.uk/about/visit-us.aspx

Map of Whiteknights Campus:



Day 1 (Weds 6 April):

Blocking diagnostics and its representation in reanalyses

10:30-11	Arrival/registration
11-12:45	Welcome
	<i>A review of some ideas on blocking</i> (30 MINS) Brian Hoskins (University of Reading & Imperial College)
	<i>Blocking detection and analysis with GPS radio occultation observations</i> Lucas Brunner (Wegener Center, University of Graz)
	<i>Persistent ridges related to near-stationary Rossby waves</i> John Methven (University of Reading)
	<i>Characterizing blocking episodes with local finite-amplitude wave activity: lifecycle and climatology</i> Clare Huang (University of Chicago)
	<i>Finite-amplitude local wave activity as a diagnostic of blocking events and persistent extreme weather</i> Patrick Martineau (Cornell University)
12:45-13:30	Lunch
13:30-15	<i>Thoughts on atmospheric blocking detection and its mechanisms</i> (30 MINS) Mischa Croci-Maspoli (MeteoSwiss)
	<i>Importance of latent heat release in ascending air streams for atmospheric blocking</i> Stephan Pfahl (ETH Zurich)
	<i>The role of individual synoptic-scale weather systems and cloud diabatic processes in the life cycle of European weather regimes</i> Christian Grams (ETH Zurich)
	<i>A unified nonlinear multi-scale interaction model for atmospheric blocking and NAO events</i> Dehai Luo (Institute of Atmospheric Physics, Chinese Academy of Sciences)
	<i>Dynamical analysis of blocking events: Spatial and temporal fluctuations of covariant Lyapunov vectors</i> Sebastian Schubert (University of Hamburg)
	15-15:30
15:30-17	<i>The connection between Northern Hemisphere heat waves and large-amplitude quasi-stationary Rossby wave packets</i> Georgios Fragkoulidis (Johannes Gutenberg University, Mainz)
	<i>On the dynamics of persistent states and their secular trends in the waveguides of the Southern Hemisphere troposphere</i> Terence O'Kane (CSIRO)
	<i>Long-term changes in blocking and persistent circulation states and their relation to extreme weather events</i> Christian Franzke (University of Hamburg)
	<i>Initiation of an extremely long-lived North Pacific, cold-season dipole-type block</i> Melissa Breen (University of Wisconsin-Madison)
	<i>The influence of the Madden-Julian Oscillation on Northern Hemisphere winter blocking</i> Stephanie Henderson (Colorado State University)
	<i>North Pacific blocking and high-latitude atmospheric rivers</i> Elizabeth Barnes (Colorado State University)
	17-18:30

Day 2 (Thurs 7 April): Recent trends and impacts of blocking

9-10:30	<i>Reevaluating the impact of atmospheric Blocking in precipitation and temperature distributions in Europe</i> (30 MINS) Ricardo Trigo (University of Lisbon)
	<i>Atmospheric blocking in the Southern Hemisphere – from the seasonal cycle to interannual and decadal variability</i> Caroline Ummenhofer (Woods Hole Oceanographic Institution)
	<i>Southern Ocean blocking: interannual variability and trends</i> James Renwick (Victoria University of Wellington)
	<i>Changes in the global character of blocking anticyclones in the first part of the 21st century</i> Anthony Lupo (University of Missouri)
	<i>Greenland Blocking Index 1851-2015: a regional climate change signal</i> Edward Hanna (University of Sheffield)
10:30-11	Coffee
11-12:30	Poster session
12:30-13:30	Lunch
13:30-15	<i>Present day and future trends in Northern Hemisphere blocking</i> (30 MINS) Etienne Dunn-Sigouin (Columbia University)
	<i>North Atlantic Blocking Variability and Role of the Atlantic Multidecadal Oscillation</i> Young-Oh Kwon (Woods Hole Oceanographic Institution)
	<i>The positive North Atlantic Oscillation with downstream blocking and Middle East snowstorms</i> Yao Yao (Institute of Atmospheric, Chinese Academy of Sciences)
	<i>Link between atmospheric blocking and South America rainfall in Austral summer</i> Regina Rodrigues (Federal University of Santa Catarina (Brazil) - University of Oxford)
	<i>The link between atmospheric blockings and Central European flood events – A case study</i> Sina Lenggenhager (University of Bern)
15-15:30	Coffee
15:30-16:45	<i>Tropospheric blocking, the stratospheric Aleutian high and distorted polar vortex, and cold-air outbreaks during the 2013-2014 winter season</i> Stephen Colucci (Cornell University)
	<i>Blocking precursors of Sudden Stratospheric Warmings</i> David Barriopedro (Universidad Complutense de Madrid / IGEO)
	<i>Testing of blocking precursors to stratospheric sudden warmings in an idealized model framework</i> Daniela Domeisen (GEOMAR Helmholtz Centre for Ocean Research)
	<i>Diagnosing Anthropogenic Contributions to Heavy Colorado Rains in September 2013</i> Pardeep Pall (Lawrence Berkeley National Laboratory)
	<i>The dynamics behind extreme event attribution: links to impacts</i> Dann Mitchell (ECI, Oxford University)
16:45-18:15	Discussion

Day 3 (Fri 8 April): Representation in models and response to forcing

9-10:30	<i>Diagnostics of the prediction and maintenance of Euro-Atlantic blocking</i> (30 MINS) Mark Rodwell (ECMWF)
	<i>Evaluation of European blocking across timescales</i> Keith Williams (UK Met Office)
	<i>The resolution sensitivity of northern hemisphere blocking in four 25-km atmospheric global circulation models</i> Reinhard Schiemann (NCAS Climate / University of Reading)
	<i>Model resolution, physics and atmosphere-ocean interaction – How do they influence atmospheric blocking?</i> Karstin Hartung (Stockholm University)
	<i>Evaluating and improving blocking in models</i> Tim Woollings (University of Oxford)
	10:30-11
11-12:30	<i>European blocking simulations in Global Climate Models: 20 years of improvements?</i> (30 MINS) Paolo Davini (LMD-ENS)
	<i>Atmospheric blocking and sources of forecast error in short-term prediction of drought in the UK</i> Tess Parker (University of Oxford)
	<i>Forecast variability of the blocking system over Russia in summer 2010 and its impact on surface conditions</i> Lisa-Ann Quandt (IMK-TRO, KIT)
	<i>The representation of wintertime jet variability in the North Atlantic by three seasonal forecasting systems: climatological biases, predictive skill and links to teleconnections and blocking</i> Panos Athanasiadis (CMCC, Bologna)
	<i>The influence of the Gulf Stream on wintertime European blocking</i> Christopher O'Reilly (University of Oxford)
	12:30-13:30
13:30-14:45	<i>Characteristics of atmospheric blockings in the Northern Hemisphere: Estimates of changes from CMIP5 ensemble simulations with different RCP scenarios for the 21st century</i> Aleksandr Timazhev (A.M. Obukhov IAP RAS)
	<i>Response of blocking frequency to the Arctic amplification in a primitive equation model</i> Seok-Woo Son (Seoul National University)
	<i>Blocking variability: relationship with Arctic Oscillation, Arctic Amplification, and synoptic eddies</i> Pedram Hassanzadeh (Harvard University)
	<i>Response of blocking to idealized climate-like thermal forcing: local finite amplitude wave activity as an objective diagnostic</i> D. Alex Burrows (Cornell University)
	<i>Effects of Arctic sea ice loss on northern hemisphere blocking highs</i> Blanca Ayarzaguen (University of Exeter)
	14:45-16:30
16:30	Close

Poster session (Thurs 7 April, 11am)
Room 1L04

<p><i>Association between blocking and extreme temperature and precipitation events in CMIP5 models</i> James Anstey and Jana Sillmann (CICERO)</p>
<p><i>Representation of blocking anticyclones in the new global model ICON and the role of horizontal resolution</i> Roman Attinger and Christian Grams (ETH Zurich)</p>
<p><i>Statistical analysis of the links between blocking and cyclones over the western North Atlantic</i> James Booth (City University of New York, City College)</p>
<p><i>Coupling of planetary-scale Rossby wave trains to local extremes in heat waves over Europe</i> Pila Bossmann (KITIMK-TRO, KIT Karlsruhe)</p>
<p><i>North Atlantic Oscillation, Jet and Blocking in CESM1 Large Ensemble Simulations</i> Alicia Camacho (Stony Brook University)</p>
<p><i>Southern hemisphere atmospheric blocking climatology: A comparison between PV/Theta and geopotential based indices in 2 dimensions</i> José Leandro Campos (University of Sao Paulo)</p>
<p><i>Representation of midlatitude atmospheric synoptic variability in global datasets: a spectral perspective</i> Alessandro Dell-Aquila (ENEA, SSPT_MET-CLIM)</p>
<p><i>The switching between zonal and blocked mid-latitude atmospheric circulation from a dynamical systems perspective</i> Davide Faranda (CNRS - LSCE - CEA Saclay)</p>
<p><i>The propagation of Rossby waves on a smooth potential vorticity front</i> Ben Harvey (NCAS / University of Reading)</p>
<p><i>The role of blocking highs in stratosphere–troposphere coupling</i> Tobias Haufschild (Max- Planck Institute for Meteorology)</p>
<p><i>Role of soil moisture vs. recent climate change for the 2010 heat wave in western Russia</i> Mathias Hauser (ETH Zurich)</p>
<p><i>Controls on blocking under climate change</i> Daniel Kennedy (University of Oxford)</p>
<p><i>How well do medium-range ensemble forecasts simulate atmospheric blocking events?</i> Mio Matsueda (University of Oxford/University of Tsukuba)</p>
<p><i>Links between central Greenland stable isotopes, blocking and extreme climate variability at decadal to multidecadal time scale</i> Norel Rimbu (Wegener Institute Helmholtz Centre for Polar and Marine Research)</p>
<p><i>Variability of 1000 hpa air temperature and its relation to blocking frequency</i> Iman Roustafard (University of Yazd)</p>
<p><i>Influence of La Nina on blocking over Europe: a summer and a winter perspective</i> Andrea Schneidereit (Leibniz-Institute of Atmospheric Physics)</p>
<p><i>Blocking of zonal flow and related droughts in Ukraine</i> Inna Semenova (Odessa State Environmental University)</p>
<p><i>Statistical Modelling of extreme winter temperatures in Europe with atmospheric blocking as covariate</i> Jana Sillmann (CICERO)</p>
<p><i>Understanding anomalous eddy vorticity forcing in North Atlantic Oscillation</i> Jie Song (Institute of Atmospheric Physics Chinese Academy of Sciences)</p>
<p><i>A mechanism and predictability study of Euro-Russian blocking in summer of 2010</i> Akira Yamazaki (JAMSTEC)</p>