





The meeting is supported by funding from NCAS and the NERC AEROS project

## NCAS Composition-Climate Interaction Meeting, 24-25 March 2011

# University of Leeds, School of Earth and Environment ORAL PROGRAMME

Presentations in italic are invited. Note that the length of presentations is 15, 20 or 25 mins

THURSDAY 24th March				
12.45	BUFFET LUNCH, School of Earth and Environment foyer			
1.45	Carslaw/Pyle Welcome and aims of the meeting			
Session 1: Biosphere interactions (Chair: Ken Carslaw)				
2.00	Gerd Folberth	Met Office	Multidirectional Biosphere-Atmosphere Feedbacks in HadGEM2	
2.25	Dom Spracklen	Leeds	Climate change, wildfire and air quality	
2.45	Allan Spessa	Reading	Simulating emissions from wildfires at global and regional scales: Where are we now and where do we go next?	
3.05	Kirsti Ashworth	Lancaster	Air quality and climate impacts of biofuel cultivation	
3.25	Stephen Arnold	Leeds	Impacts of climate-driven land cover changes on tropospheric ozone	
3.45	BREAK			
Session 2: Aerosol processes (Chair: Bill Collins)				
4.10	Philip Stier	Oxford	How reliable are global observational constraints on model-based assessments of indirect aerosol effects?	
4.35	Graham Mann	Leeds	Applications of the UKCA aerosol model	
4.55	Ellie Highwood	Reading	Taking aerosols from composition to climate	
5.10	John Marsham	Leeds	Meteorology of dust uplift in summertime West Africa: implications for climate and Earth system modelling	
5.25	Nicolas Bellouin	Met Office	Aerosol forcing in a GCM: Benefits of a sophisticated aerosol module	
5.50	POSTERS AND DRINKS (foyer area)			
7.00	DINNER (Buffet curry in foyer and coffee area)			
FRIDAY 25 <sup>th</sup> March  Session 3: Tropospheric chemistry (Chair: Peter Braesicke)				
9.15	Alex Archibald	Cambridge	Investigating the impacts of HOx recyling in the oxidation of isoprene:	
3,23	7.1.67.7.1.67.7.2.47.4	Camanage	Sensitivity studies of past, present and future atmosphere using the UKCA model	
9.40	Oliver Wild	Lancaster	Modelling future changes in surface ozone	
10.05	Roland Von Glasow	UEA	Process studies of chemistry-climate interactions	
10.20	Mat Evans	Leeds	Impacts of halogens on pre-industrial ozone	
10.35	Bill Collins	Met Office	UKCA in the HadGEM2 and HadGEM3 earth system models	
10.55	5 BREAK			
Session 4: Intercomparison studies (Chair: Oliver Wild)				
11.25	Martyn Chipperfield	Leeds	Composition-Climate Coupling in the Stratosphere: Recent Results from CCMVal Simulations	
11.50	Peter Braesicke	Cambridge	Chemistry-climate modelling with UM-UKCA: CCMVal-2 and beyond	
12.10	David Stevenson	Edinburgh	The CMIP5 ozone database 1850-2100: its construction and	
			corresponding tropospheric and stratospheric ozone radiative forcings	
Session 5: Discussion				
12.30	Luke Abraham	Cambridge	Getting started with UKCA	
			Discussion about UK composition-climate modelling	
1.15	CLOSE			

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#### **LIST OF POSTERS**

Posters will be up for the duration of the meeting. There is a poster session on Thursday at 5.50pm

Alan Gadian	Cloud Brightening		
Anja Schmidt	Modelling volcanic aerosol: from aerosol microphysical processes to Earth system impacts		
Carly Reddington	EUCAARI-AEROCOM aerosol model inter-comparison of boundary layer nucleation over Europe		
Howard Roscoe	The NERC-funded project PSCs in UKCA – project rationale and definition		
James Levine	The ice-core record of atmospheric methane: composition-climate interactions on glacial-interglacial timescales		
Jo Browse	Modelling the Arctic aerosol seasonal cycle: the importance of wet deposition		
John Marsham	Meteorology of dust uplift in summertime West Africa: implications for dust modelling		
John Methven	Global conservation in tracer advection models and potential to influence the burden of long-lived chemical species		
Kathryn	UKCA and the stratosphere: the eruption of Mt Pinatubo		
Emmerson			
Luke Abraham	Chemistry in the Unified Model: Climate-Chemistry Studies with UKCA		
Maria Russo	Representation of tropical deep convection in atmospheric models – Part 1:  Meteorology and comparison with satellite observations		
Martyn Chipperfield	Climate Change and Ozone Depletion from N₂O		
Paul Telford	Effects of climate-induced changes in isoprene emissions after the eruption of Mount Pinatubo		
Peter Knippertz	Towards an Improved Representation of Meteorological Processes in Models of Mineral Dust Emission		
Robert Thorpe	Evaluation of a year-long integration of AQUM-UKCA for a DEFRA model intercomparison		
Ruth Doherty	Present-day and future ozone-related health impacts in the UK		