



# Society Meetings from September 2017

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#RMetsMeetings

## NATIONAL MEETINGS



Registration is Required for ALL Meetings

 <p>Wednesday 20 September 2017</p> <p>2.00pm - 6.00pm</p> 	<p><b><u>Message Impossible? Communicating Weather Information in the Digital Age.</u></b></p> <p>The final link in the forecasting chain is communicating meteorological information, forecasts, and hazards to end-users. The communication link between scientists and end-users is essential to ensure adequate action is taken to protect lives and property. To explore the field of meteorological communication, speakers from multiple disciplines will focus their talks on a number of topics including how changing technology has affected the way we communicate weather, how different words or graphics can affect end-user actions, and how an end-user-focused approach can help build resilient communities.</p> <p>The meeting will also present the findings of a recent survey supported by the Met Office, in which members of the public were asked for their ideas on what weather forecasts might look like in the future, and what information they would like them to contain. Contributions are welcome up until the meeting – a video about the survey can be viewed here: <a href="https://youtu.be/C4t8P2eOaFM">https://youtu.be/C4t8P2eOaFM</a></p> <p>There will be a drinks reception following the meeting where delegates will have the opportunity to view all shortlisted images from the Royal Meteorological Society and the Royal Photographic Society's Weather Photographer of the Year 2017 competition. At the event, the overall Weather Photographer of the Year 2017, Young Weather Photographer of the Year 2017, and the runners up from each category will be announced and prizes awarded.</p>	<p>Imperial College London Blackett Lecture Theatre 1 Exhibition Road South Kensington London SW7 2BW</p> <p><b>Grantham Institute</b> Climate Change and the Environment <small>An Institute of Imperial College London</small></p> <p>Institute of Physics Environmental Physics Group</p> <p><b>Met Office</b></p> <p><b>University of Reading</b></p>
 <p>Wednesday 18 October 2017</p> <p>2.00pm - 6.00pm</p>	<p><b><u>The Meltdown: Abrupt Climate Change Since the Last Ice Age.</u></b></p> <p>This meeting will delve into climates of the recent geological past, from before instrumental records began and when global environmental conditions were different from today. We will address some of the mechanisms that have caused Earth's climate to vary substantially since the cold last glacial maximum (21 thousand years ago, when vast ice sheets covered much of the globe), culminating in the warm climate of the present.</p> <p>The meeting will focus on periods of rapid (decadal-centennial) environmental change, and will offer insights into the modelling and data tools that enable researchers to investigate these past climate states. We will also discuss how researching past climate states and addressing the drivers of past climate transitions could help us to better understand how the climate may evolve in the future.</p>	<p>University College London Lecture Theatre G22 Pearson Building Gower Street London WC1E 6BT</p> <p><b>UCL</b></p>
 <p>Thursday 19 October 2017</p> <p>9.30am - 11.30am</p> <p><b>Members Only Event</b></p>	<p><b><u>The Impacts of Vehicle Emissions and the Introduction of the Toxicity - Charge.</u></b></p> <p>Evidence on the health effects of diesel emissions, and the revelations that car manufacturers were fiddling their emissions tests, have shocked the public and politicians alike.</p> <p>However, suggestions to introduce a diesel scrappage scheme to compensate motorists received no mention in the Government's draft air quality plan, which was published in May. The uncertainty has been met with dismay by drivers and vehicle fleet owners who thought they were acting in the country's best interest by following government advice for climate change targets.</p> <p>On 23 October 2017, London joins a growing number of cities around the world taking action against rising air pollution, with the introduction of a £10 vehicle pollution charge for all but the cleanest models.</p> <p>Join the Royal Meteorological Society, Imperial College London, and the All-Party Parliamentary Climate Change Group, to hear experts answer questions on air pollution, health and the environment.</p> <p>This event is supported by the Grantham Institute – Climate Change and the Environment, at Imperial College London. This is a <b>members only event</b> aimed at advisers to ministers and policy makers in government departments, health and environment organisations. Places are very limited and will be allocated on a first come first served basis. Registration will open in early September 2017.</p>	<p>Portcullis House Houses of Parliament Westminster London SW1A 2LW</p> <p><b>Grantham Institute</b> Climate Change and the Environment <small>An Institute of Imperial College London</small></p> <p>All-Party Parliamentary <b>climatechange</b> Group</p>

 <p>Wednesday 15 November 2017</p> <p>2.00pm - 6.00pm</p> 	<p><b><u>Maritime Meteorology.</u></b></p> <p>Weather information for the marine environment is used for a very diverse range of activities which can be split, loosely, between leisure and professional activities. Maritime meteorology will concentrate on the professional uses of weather information. A variety of papers will be presented, some from providers and some from users of weather information. The topics addressed by the papers will include weather forecasting, the calculation of met ocean design criteria and the requirements of legal and insurance professionals.</p> <p>This is a joint meeting with the Royal Meteorological Society's History of Meteorology and Physical Oceanography Special Interest Group.</p>	<p>Trinity House Tower Hill London EC3N 4DH</p>  
 <p>Saturday 18 November 2017</p> <p>11.00am - 4.00pm</p>	<p><b><u>Rainbows and Weather Machines.</u></b></p> <p>The Tate Britain Gallery has recently acquired 'Salisbury Cathedral from the Meadows' by the artist John Constable. The Aspire programme led by the Tate has seen the painting tour the country and has looked to further research into the science and culture surrounding its significance. A number of essays were commissioned which have now been published on the Tate website. One of the essays re-examines the solar geometry of the rainbow in the painting and suggests that it represents a rainbow that could have occurred (in theory not in reality) on the day his best friend ArchDeacon John Fisher died. Indeed the rainbow rests on John Fisher's house in the Close of the Cathedral.</p> <p>This Saturday meeting, organised jointly by the Royal Meteorological Society and Tate Britain, takes Constable's rainbow as the starting point and then examines the role of the rainbow in art and poetry as well as looking at the latest rainbow science and how best to photograph a rainbow and other optical effects. The development of a 'rainbow app' will be explored and a number of contemporary artists will show a rainbow of their art.</p> <p>This is a joint meeting with the Royal Meteorological Society's Weather, Arts and Music (WAM) Special Interest Group.</p>	<p>Tate Britain Millbank London SW1P 4RG</p> 
 <p>Wednesday 6 December 2017</p> <p>2.00pm - 6.00pm</p> 	<p><b><u>Earth, Wind and Fire: The Interaction of Ecosystems on Weather and Climate.</u></b></p> <p>It has been known for decades that ecosystem processes influence the carbon and water cycle, with impacts on climate change prediction. However, there is increasing evidence that these same ecosystem processes can affect the evolution of the weather from days to weeks. Understanding the impacts on the short-time scale can also inform long-time scale response. Here we look to bring together our understanding of how the land interacts with weather and climate.</p> <p>Come along to our Christmas meeting and enjoy networking, mince pies and mulled wine.</p>	<p>Imperial College London Blackett Lecture Theatre 1 Exhibition Road South Kensington London SW7 2BW</p> 
 <p>Friday 8 December 2017</p> <p>10.30am - 3.30pm</p>	<p><b><u>Dynamical Coupling Throughout the Whole Terrestrial Atmosphere.</u></b></p> <p>It is becoming increasingly apparent that the lower, middle and upper atmosphere are more strongly coupled than was once thought to be the case and that atmospheric waves play a central role in this coupling. Generated by a variety of sources, these waves carry energy and momentum vertically, and are a principle driver of atmospheric circulation, transporting important chemical species through the atmosphere. In the lower atmosphere global scale waves (tides and planetary waves) are generated; smaller scale waves (such as gravity waves) are generated by weather systems, topographic flow and the polar vortex as well as by processes in the upper atmosphere (via space weather effects). There is growing evidence that space weather can have an effect on surface conditions in the Polar Regions yet the coupling mechanism is not fully understood. This meeting aims to bring together the lower, middle and upper atmosphere communities to explore these coupling effects and their impact on global circulation.</p>	<p>Royal Astronomical Society Burlington House Piccadilly London W1J 0BQ</p>  <p><b>Free to RAS and RMetS members   £15 (£5 for students) payable at the venue.</b></p>
 <p>Wednesday 17 January 2018</p> <p>Time TBC</p>	<p><b><u>Minimising Climate Risks.</u></b></p> <p>An update on key aspects of climate science since IPCC AR5 and its relevance to and implications for the global effort to address climate change post the 2015 UN Climate Change Conference (COP 21).</p>	<p>Lecture Theatre TBC Imperial College London South Kensington London SW7 2BW</p> 
 <p>Saturday 3 February 2018</p> <p>Time TBC</p>	<p><b><u>Understanding the Weather of 2017.</u></b></p> <p>This public meeting will review the high-impact weather events of 2017 and their underlying causes.</p>	<p>Met Office Conference Room 1 &amp; 2 FitzRoy Road Exeter EX1 3PB</p> 

 <p>Wednesday 14 February 2018</p> <p>2.00pm – 6.00pm</p> 	<p><b><u>The Indian Monsoon: Atmospheric Dynamics, Aerosol and the Ocean.</u></b></p> <p>The Indian Monsoon occurring between the months of May to September is the major source of rainfall for more than 800 million people. While the Indian Monsoon occurs every year, there are substantial year-to-year variations in its geographic structure, local onset dates, and the amount of rainfall the monsoon brings. It is important to understand the factors that lead to these variations to improve predictive capability for the Indian Monsoon and to enable adaptation planning by governments and communities. A major field campaign was held in India in May-July 2016 and took novel measurements of many components of the monsoon system, with an overall aim of improving our ability to forecast and to understand interactions between aerosols and the monsoon. Speakers at this meeting will discuss recent advances in understanding the Indian Monsoon system and its prediction using numerical models and observations, including new insights provided by the recent field campaign.</p>	<p>University of Leeds The Woodhouse Suite University House Cromer Terrace Leeds LS2 9JP</p>
 <p>Wednesday 21 March 2018</p> <p>2.00pm - 5.30pm</p> 	<p><b><u>Space, Satellites and Solutions: Essential Climate Variables and the Future of Climate Monitoring from Space.</u></b></p> <p>The Paris Agreement highlights the importance of good emissions monitoring. Satellites and space applications offer a solution for accurate and long-term climate change monitoring. This meeting will outline these solutions and then discuss new approaches in this area.</p> <p>The meeting will review Essential Climate Variables (or ECVs). ECVs were developed by the World Meteorological Organization to provide an empirical basis for understanding past, current, and possible future climate variability and change. Leading researchers will give presentations on how we make observations of the Earth's surface and how this can provide information on land cover, fires, human population and infrastructure, and the biomass and biological activity of vegetation. Satellite applications support emissions monitoring by producing high-resolution observations of the Earth's surface and atmosphere. Our panel will discuss new approaches to earth observation, future technology and highlight upcoming missions.</p>	<p>Imperial College London Blackett Lecture Theatre 1 Exhibition Road South Kensington London SW7 2BW</p> <p><b>Grantham Institute</b> Climate Change and the Environment <small>An Institute of Imperial College London</small></p> 
 <p>Wednesday 11 April 2018</p> <p>2.00pm - 6.00pm</p> 	<p><b><u>Risky Business: Assessing the Risks from Weather and Climate.</u></b></p> <p>Extreme weather events can have a significant impact on human health, property and local economies. The economic costs associated with such events are borne by local and national governments, private insurance, business, and individuals. In order to limit such costs it is necessary to understand what risks exist and provide reliable forecasts of when extreme weather related events may occur. Good communication between the forecasters, emergency planners and first responders is critical to limiting the impact of extreme weather events on local economies. Anticipated climate change may alter the frequency and severity of these risks requiring adaptation and new strategies for assessing and responding to extreme weather events. We present a series of talks on the types of risks that exist, the economic costs associated with extreme weather, ongoing efforts to forecast and communicate such risks to limit their impact and how climate change may require us to adapt our response to extreme weather events.</p>	<p>University of Bristol Old Council Chamber Wills Memorial Building Queens Road Bristol BS8 1TH</p> 
 <p>Saturday 21 April 2018</p> <p>10.30am - 4.30pm</p>	<p><b><u>The Micro-Climature of Heathrow.</u></b></p> <p>Heathrow Airport was established during the second world war so meteorological observations have been made there for over seventy years. During that time there has of course been climate change on the global scale and at smaller scales. For example, it is almost certain that the frequency of fog at Heathrow.</p> <p>The meeting will focus on the recent climate and there will be some emphasis on the meteorological parameters of most significance to aviation. Topics to be covered include temperature, wintry precipitation, wind, fog and sound propagation. A trip to the meteorological instrument enclosure is also planned.</p>	<p>Heathrow Airport Compass Centre Nelson Road Hounslow Middlesex TW6 2QE</p>
 <p>Monday 30 April 2018</p> <p>1.30pm - 5.00pm</p>	<p><b><u>Geophysical Fluid Dynamics with a Twist: In Honour of Professor Raymond Hide.</u></b></p> <p>This meeting is to celebrate the memory of Raymond Hide (CBE ScD FRS) who was President of the Royal Astronomical Society, 1983-1985, and of the Royal Meteorological Society, 1974-76. The meeting will cover fundamental areas of Astronomy, Geophysics, Meteorology and Oceanography, under the broader umbrella of "Geophysical Fluid Dynamics", to which Raymond contributed so greatly.</p> <p>Professor Hide had a unique approach to these areas, with a knack of drawing powerful inferences from, and connecting to reality, theoretical concepts. We intend to follow, and promote further, this spirit through the meeting with the help of speakers who have been inspired by Raymond's life and work: Prof Chris Hughes (University of Liverpool), Prof Andrew Jackson (ETH Zurich), Prof John Marshall (MIT), Prof Tim Palmer (Oxford University) and Prof Peter Read (Oxford University).</p> <p>There will be no registration charges for participating in this meeting. Interested students may apply for financial assistance with traveling expenses.</p>	<p>Royal Astronomical Society Burlington House Piccadilly London W1J 0BQ</p> 

## LOCAL CENTRE MEETINGS

NORTH EAST LOCAL CENTRE		
<p>Friday 13 October 2017</p> <p>7.45pm - 9.00pm</p>	<p><b><u>Turbulence Ahead! How Climate Change Affects Air Travel.</u></b> Dr Paul Williams FRMetS, University of Reading.</p> <p>The climate is changing, not just where we live at ground level, but also where we fly at 35,000 feet. Everybody knows that air travel contributes to climate change through its emissions. However, scientists have only recently become aware that climate change could have significant consequences for air travel. Rising sea levels and storm surges threaten coastal airports. Warmer air at ground level reduces the lift force and makes it more difficult for planes to take-off. More extreme weather may cause flight disruptions and delays. Clear-air turbulence is expected to become up to 40% stronger and twice as common. Transatlantic flights may take significantly longer because of changes to the jet stream, adding millions of dollars to airline fuel costs.</p>	<p>Williamson Library St. Chad's College North Bailey Durham DH1 3RQ</p>
<p>Thursday 23 November 2017</p> <p>5.15pm - 7.00pm</p>	<p><b><u>The Gordon Manley Lecture-Looking Back 70 Years to the UK's Winter of 1947: Was it Really so Severe?</u></b> Dr Michael Kendon, UK Met Office.</p> <p>Seventy years ago the UK experienced its snowiest winter since at least the mid-nineteenth century, when reliable records began. The result was six weeks of continuous snow cover across most of the UK, with level depths of up to 50cm even in lowland area, while temperatures at times fell to -15 to -20 °C. February 1947 remains the UK's coldest calendar month for at least 100 years. The snowfalls prevented movement of coal, on which the UK was almost entirely dependent for heating and electricity, leading to significant impacts and disruption at a time of austerity when the country was still recovering from the Second World War.</p> <p>This talk will compare the climatological features of the winter against other severe UK winters of the last 100 years, in the context of annual variability and long term trends. It will provide an overview of the work of the Met Office National Climate Information Centre and how we monitor the UK's climate.</p>	<p>Durham University The Ableby Lecture Theatre Geography Department Durham DH1 3DX</p>

SCOTTISH LOCAL CENTRE		
<p>Wednesday 6 October 2017</p> <p>7.00pm - 8.30pm</p>	<p><b><u>The Climatological Observing Link.</u></b> Dr Roger Brugge FRMetS, University of Reading.</p> <p>Tea and coffee available from 6.30pm</p>	<p>Inverness College UHI Inverness Campus IV2 5NA</p>
<p>Friday 10 October 2017</p> <p>6.00pm - 7.30pm</p>	<p><b><u>Atmospheric Aerosols and their Effect on Regional Climate: A Journey Around the World.</u></b> Prof Ellie Highwood FRMetS, University of Reading.</p> <p>Aerosols are one of the most powerful influences on regional climate. Not only do they act directly on radiation, the surface energy budget and the microphysics of clouds, but the spatial variability of these effects leads to changes in some of the most important dynamical features of the climate system. In this talk I will give examples from several years of work stretching across the globe.</p> <p>Tea and coffee available from 5.30pm.</p>	<p>The Institute of Geography University of Edinburgh Drummond Street Edinburgh EH8 9XP</p>
<p>Wednesday 15 November 2017</p> <p>7.00pm - 8.30pm</p>	<p><b><u>Floods and Climate Change.</u></b> Richard Brown, SEPA Dingwall.</p> <p>Tea and coffee available from 6.30pm.</p>	<p>Inverness College UHI Inverness Campus IV2 5NA</p>
<p>Friday 17 November 2017</p> <p>6.00pm - 7.30pm</p>	<p><b><u>Cloudy with a Chance of Pain.</u></b> Prof Will Dixon, University of Manchester.</p> <p>Tea and coffee available from 5.30pm.</p>	<p>The Institute of Geography University of Edinburgh Drummond Street Edinburgh EH8 9XP</p>
<p>Tuesday 12 December 2017</p> <p>6.00pm - 7.30pm</p>	<p><b><u>Photographing Weather.</u></b> Stephen Burt FRMetS, University of Reading.</p> <p>Good meteorological imagery is a subtle mix of science and art, experience and technology. The talk will outline the most important aspects, illustrated throughout with a varied selection of both still photography and time-lapse video.</p> <p>Tea and coffee available from 5.30pm.</p>	<p>The Institute of Geography University of Edinburgh Drummond Street Edinburgh EH8 9XP</p>
<p>Friday 19 January 2018</p> <p>6.00pm - 7.30pm</p>	<p><b><u>Post-Graduate Student Talks.</u></b> Details to be announced.</p>	<p>The Institute of Geography University of Edinburgh Drummond Street Edinburgh EH8 9XP</p>
<p>Tuesday 20 February 2018</p> <p>6.00pm - 7.30pm</p>	<p><b><u>The Decline Of Sea Bird Populations On The Isle Of May.</u></b> Prof Sarah Wanless FRSE, formerly CEH Edinburgh.</p>	<p>The Institute of Geography University of Edinburgh Drummond Street Edinburgh EH8 9XP</p>

<p>Tuesday 20 March 2018</p> <p>6.00pm – 7.30pm</p>	<p><b><u>Turbulence Ahead! How Climate Change Affects Air Travel.</u></b> Dr Paul Williams FRMetS, University of Reading.</p> <p>The climate is changing, not just where we live at ground level, but also where we fly at 35,000 feet. Everybody knows that air travel contributes to climate change through its emissions. However, scientists have only recently become aware that climate change could have significant consequences for air travel. Rising sea levels and storm surges threaten coastal airports. Warmer air at ground level reduces the lift force and makes it more difficult for planes to take-off. More extreme weather may cause flight disruptions and delays. Clear-air turbulence is expected to become up to 40% stronger and twice as common. Transatlantic flights may take significantly longer because of changes to the jet stream, adding millions of dollars to airline fuel costs.</p> <p>Tea and coffee available from 5.30pm.</p>	<p>The Institute of Geography University of Edinburgh Drummond Street Edinburgh EH8 9XP</p>
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**SOUTH EAST LOCAL CENTRE**

<p>Wednesday 4 October 2017</p> <p>7.00pm - 8.30pm</p>	<p><b><u>Microscale Wind Forecasting in the Mid-Atlantic: Lessons from the Americas Cup in Bermuda.</u></b> Jessica Sweeney, LandRover BAR Portsmouth.</p> <p>Tactical and configuration decisions for Americas Cup yacht racing depend on precise wind speeds at race time. In June 2017 the competition was held in Bermuda, an isolated low-lying rock in the subtropical Atlantic Ocean. The vast scale of the ocean weather contrasted to the small races' that were only 1.5 nautical miles long, lasting only 20 minutes. Forecasting wind speeds to within 2 knots up to 8 hours ahead is a challenge of scale and of timing; one that encourages an increasing focus on probabilistic tools to manage risk. This talk will describe the forecasting techniques used and some of the weather stories that emerged during the British campaign for the Cup.</p>	<p>University of Reading Sutcliffe Lecture Theatre (GU01) Department of Meteorology Earley Gate Reading RG6 7BE</p>
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<p>Wednesday 1 November 2017</p> <p>7.00pm - 8.30pm</p>	<p><b><u>Department of Meteorology Current PhD Students Annual Prize Winners.</u></b></p> <p><u>Jonathan Beverley - The Role of the Asian Summer Monsoon as a Driver of European Summer Climate Variability.</u> Variations in summer climate across Europe can have wide reaching and severe effects on both society and industry. Recent events such as the Central European heatwave of 2003 and flooding in the UK in 2007 have highlighted the need for more accurate long-range forecasts for the European summer.</p> <p>The focus of this talk will be on the role of the Asian Summer Monsoon (ASM) as a driver of European summer climate variability and its role as a potential source of predictability for the European summer. Initial results suggest a significant relationship between precipitation in the ASM region and the weather in Europe, with different regions experiencing differing effects at varying times of the monsoon season.</p> <p><u>Liz Cooper - Improving Flood Prediction Using Data Assimilation.</u> During a river flood event, mathematical models can be used to predict the behaviour of floodwater. Uncertainties linked to the models can lead to inaccurate forecasts of flood extents and water depths. We show how data assimilation can improve forecasts by updating model predictions based on observational information as a flood evolves.</p> <p>Our experiments focus on the role of the channel friction parameter in models of river flooding; we show that if we update only forecast water levels based on observations, improvement to the forecast is significant but short lived. Simultaneously updating the value of the channel friction parameter leads to a better forecast over a longer time.</p> <p><u>Tom Eldridge - The Temperature Humidity Infra-Red Radiometer: Exploring Paleo-satellite Data.</u> During the 1970s, the Temperature Humidity Infrared Radiometer (THIR) – an instrument flown on the Nimbus series of satellites – recorded observations of the temperature of the Earth's surface and of the distribution of water vapour in the atmosphere. In this presentation Tom introduces the THIR, discusses the various subtleties involved in preparing a paleo-satellite dataset, and demonstrates a few of the uses that have so far been found for the THIR data product.</p> <p><u>Christoph Kent - Representing Urban Surface Roughness and the Implications for the Vertical Profile of Wind Speed.</u> When modelling the wind speed profile above urban areas the aerodynamic roughness length (<math>Z_0</math>) and zero-plane displacement (<math>Z_d</math>) may be used to represent surface roughness. In this presentation, nine methods to determine <math>Z_0</math> and <math>Z_d</math> are compared for three study sites in central London, UK.</p> <p>There is considerable directional and inter-method variability in <math>Z_0</math> and <math>Z_d</math>. Wind speed profiles are estimated using <math>Z_0</math> and <math>Z_d</math> from each method and compared to wind speeds observed with Doppler lidar. It is demonstrated that recently developed methods to determine <math>Z_0</math> and <math>Z_d</math> which directly consider roughness element height variability produce wind speeds that best resemble observations.</p>	<p>University of Reading Sutcliffe Lecture Theatre (GU01) Department of Meteorology Earley Gate Reading RG6 7BE</p>
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<p>Wednesday 13 December 2017</p> <p>7.00pm - 8.30pm</p>	<p><b><u>Space Climate.</u></b> Prof Mathew Owens, University of Reading.</p> <p>Space weather, variability in the near-Earth space environment over minutes to days, can adversely affect space - and ground-based technologies and poses health risks to humans in space and on high-altitude flights. To predict how the space weather may vary in the future, we first need to understand how it has varied in the past. Reconstructing "space climate" further back in time necessitates relying on increasingly indirect proxies, from direct spacecraft measurements (~60 years), to geomagnetic measurements (~150 years), sunspot observations (400 years) and, finally, cosmogenic isotope records in ice sheets and tree trunks (~10,000 years). I'll review what these are, what exactly they tell us and how much they can be trusted. I'll also, possibly imprudently, speculate about the most likely scenario for solar activity over the coming decades.</p>	<p>University of Reading Sutcliffe Lecture Theatre (GU01) Department of Meteorology Earley Gate Reading RG6 7BE</p>
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<p>WELSH LOCAL CENTRE</p>		
<p>Thursday 26 October 2017</p> <p>7.00pm – 8.30pm</p>	<p><b><u>Getting Up Close and Personal with Personal Weather Stations.</u></b> Thomas Green, Cardiff University.</p> <p>Automatic or manual, Personal Weather Stations allow everyone to get up close to the observations that help record and forecast the weather. First experiences of weather observing maybe with something as simple as a barometer or thermometer that could be described as a very simple manual Personal Weather Station. In the era of the Internet Of Things it is now common for Personal Weather Stations to be connected to the Internet and for the data to be recorded digitally and uploaded to websites for everyone to view. This talk will first describe some of the available options for Personal Weather Stations, then discuss why it's all about location, location, location when siting your Personal Weather Station. Then discuss some of the technologies involved when automatically recording the data. This will include how it is possible to upload to the web 24 hours a day with low power computers such as Raspberry Pis, the use of software to enable this (e.g. Pywws, Weewx) and the possible providers of the service (e.g. Met Office WOW, WeatherUnderground). Finally, a demonstration of the presenters own weather station will be shown. By the end of this talk it is hoped members of the audience will want to discover their own weather in their back garden.</p> <p>Tea and coffee available from 6.30pm.</p>	<p>Lecture Theatre TBC Main Building Park Place Cardiff CF10 3AT</p> <p><b>£3.00 Admission charge payable at the venue.</b></p>

<p>WEST MIDLANDS LOCAL CENTRE</p>		
<p>Thursday 8 February 2018</p> <p>4.00pm - 5.30pm</p>	<p><b><u>Turbulence Ahead! How Climate Change Affects Air Travel.</u></b> Dr Paul Williams FRMetS, University of Reading.</p> <p>The climate is changing, not just where we live at ground level, but also where we fly at 35,000 feet. Everybody knows that air travel contributes to climate change through its emissions. However, scientists have only recently become aware that climate change could have significant consequences for air travel. Rising sea levels and storm surges threaten coastal airports. Warmer air at ground level reduces the lift force and makes it more difficult for planes to take-off. More extreme weather may cause flight disruptions and delays. Clear-air turbulence is expected to become up to 40% stronger and twice as common. Transatlantic flights may take significantly longer because of changes to the jet stream, adding millions of dollars to airline fuel costs. Come along to find out how climate change could affect your future flight.</p>	<p>University of Birmingham Geography Department Room 125 Birmingham B15 2TT</p>
<p>Thursday 22 March 2018</p> <p>4.00pm - 5.30pm</p>	<p><b><u>Can Less Precise Models Yield More Accurate Forecasts of Weather and Climate?</u></b> Dr Tobias Thornes, University of Oxford.</p> <p>Given that the climate is changing and extreme weather is becoming increasingly prevalent, the need for accurate forecasts of weather and climate is more pressing than ever. One of the key constraints on the quality of forecasts is the resolution and complexity of the numerical models used to inform them, which are themselves constrained by how much computer power is available and affordable to forecast centres. But much energy may be wasted by carrying out all calculations in standard 64-bit 'double-precision'. In this talk, a new method to increase the efficiency of forecasts by removing superfluous precision will be described. Results will be presented that provide evidence in favour of the hypothesis that quantities are less accurately known and therefore do not need to be represented as precisely at smaller spatial scales. If hardware capable of solving equations with less precision at smaller scales were to be deployed operationally, the computational cost savings could be considerable, and these savings could be reinvested to produce forecasts of greater resolution, complexity or ensemble size.</p>	<p>University of Birmingham Geography Department Room 125 Birmingham B15 2TT</p>

YORKSHIRE LOCAL CENTRE		
Friday 29 September 2017  7.00pm - 8.30pm	<b><u>60 Years of Climate and Weather in Upper Teesdale.</u></b> Ken Cook, Met Office Observer.  The talk will outline the climate of the Teesdale / Weardale watershed at Copley situated at an altitude of close to 300 m asl. The Met Office site and its annexe at Copley Lead Mill will be described together with reflections of 60 years of observing in the area.	University of Leeds Seminar Room School of Earth and Environment Leeds LS2 9YJ
Wednesday 1 November 2017  7.00pm - 8.30pm	<b><u>Fine-Scale Analysis of a Severe Hailstorm over Yorkshire using Home AWS Data and Conventional Observations.</u></b> Matt Clark, Met Office.  On 1 July 2015 severe hailstorms over northern England produced large hail falling over long swathes following the storm tracks. The talk will present how information from a dense network of automatic weather stations allowed a comparison with radar data and provided insights into the storm evolution and structure.	University of Leeds Seminar Room School of Earth and Environment Leeds LS2 9YJ
Wednesday 12 December 2017  7.00pm - 8.30pm	<b><u>A Lookback at the Weather of 2017 and Photo Competition Results.</u></b> John Goulding, Yorkshire Local Centre.  The talk will lookback at some of the noteworthy weather events from the past 12 months, both well-remembered as well as some more unusual items. In addition the results of the annual photo competition will be judged by the BBC weather presenter Keeley Donovan.	University of Leeds Seminar Room School of Earth and Environment Leeds LS2 9YJ
Wednesday 21 February 2018  7.00pm - 8.30pm	<b><u>Lancaster's Critical Infrastructure Collapse Following Intense Rainfall on 4/5 December 2015.</u></b> Emma Ferranti, University of Birmingham.  The talk will describe the impact of heavy rainfall that caused the flooding of Lancaster that brought transport to a halt, cut off mains power for 2 days, and left communication services paralysed. Implications for resilience in populous urban areas when faced with more extreme weather events will be discussed.	University of Leeds Seminar Room School of Earth and Environment Leeds LS2 9YJ

## FORTHCOMING SPECIAL INTEREST GROUP MEETINGS

ATMOSPHERIC CHEMISTRY GROUP		
Friday 21 March 2018  Time TBC	<b><u>Advances in Airborne Monitoring of Atmospheric Composition and Chemistry.</u></b> Talks and posters covering all areas of airborne monitoring of atmospheric composition and chemistry. The meeting will cover new instruments, new measurement and modelling techniques and different airborne platforms.	University of York Department of Chemistry Lecture Theatre TBC Heslington York YO10 5DD

ATMOSPHERIC ELECTRICITY GROUP		
Friday 10 November 2017  10.00am – 5.00pm	<b><u>Wilson Meeting (2017).</u></b> The annual Wilson meeting of the Atmospheric Electricity Group is concerned with a wide range of atmospheric electrical topics, including lightning, thunderstorms, cosmic rays, cluster ions, and the charging of aerosols, dusts, ash, droplets and ice crystals, using radiofrequency and electrostatic detection methods, surface electric field measurements and measurements of cloud electrical properties.  Registration is available via <a href="https://www.ctrwiae.org/registration">https://www.ctrwiae.org/registration</a> .	University of Bath Dept of Electronic Engineering Room 2E3.4 Bath BA2 7AY

METEOROLOGICAL OBSERVING SYSTEMS		
Thursday 19 October 2017  12.00pm – 4.00pm (TBC)	<b><u>Doing More for Less: Low-Cost Sensors.</u></b> Nowadays many meteorological sensors are available at incredibly low costs, empowering novel applications not previously viable. Low cost sensors lend themselves to being deployed in vast quantities at spatial resolutions unfeasible with pricier equipment. They are also ideal for Citizen Science projects, or for connecting to the ever-growing Internet of Things. As with any instrument, low cost sensors are susceptible to error and bias, it's therefore crucial we regularly evaluate whether their accuracy is fit for purpose. In this meeting a variety of speakers will showcase their novel designs and applications detailing the challenges and benefits of supplementing longstanding meteorological sensor networks with low cost instruments.	University of Birmingham Geography Department Earth and Environmental Sciences Building Room 125 Birmingham B15 2TT

## Contact Details for Special Interest Groups

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# WeatherLive

The ultimate day out for weather enthusiasts  
An opportunity to talk about the nation's favourite topic

This year the Royal Meteorological Society is working with the Royal Horticultural Society to discuss Gardening in a Changing Climate and with the Royal Photographic Society to find the next Weather Photographer of the Year. This event will also mark the anniversary of the 1987 storm.

**Saturday 4th November 2017 - Central Hall Westminster, London**

For more details and to register, please visit our website [www.rmets.org/weatherlive](http://www.rmets.org/weatherlive)

