



Meteorology Research Away-Day Schedule

Monday 12th January 2026

Palmer Building , Whiteknights Campus

08:50-09:10 Arrival

09:10-09:20 **Welcome to the research day and house keeping**

09:20-10:45 **Talks**

10:45-11:30 Morning Break, tea/coffee

11:30-12:30 **Breakouts (5 in parallel)**

12:30-13:30 Lunch

13:30-14:00 **Plenary session led by Research Division Leads**

14:00-14:30 **Talks**

14:30-15:30 **Posters**

15:30-16:10 Afternoon Break, tea/coffee (posters continue)

16:10-17:10 **Talks**

17:10-17:20 **Short break**

17:20-17:30 60th anniversary celebration begins

Drinks Reception

Detailed Programme

| | | |
|-------------|--|---|
| 08:50-09:10 | Arrival | |
| 09:10-09:20 | Welcome to the research day and house keeping Organizing Committee | |
| 09:20-09:35 | Keynote 1 | |
| | Linda Hiron | Advancing meningitis early warning for Africa |
| 09:35-09:55 | Short talks 1a | |
| | Laura Wilcox | An overview of early results from the Regional Aerosol Model Intercomparison Project |
| | Ambrogio Volonte | Identifying the diabatic processes driving the evolution of a sting jet: the case of storm Ciarán |
| | Fiona Spuler | Disentangling the joint influence of the Pacific and Indian oceans on the Greater Horn of Africa short rains using causal representation learning |
| | Anna Sommer | Accelerating spin up of high-resolution ocean models using deep ocean nudging |
| 10:00-10:20 | Short talks 1b | |
| | Andy Turner | Overview of NCAS |
| | Paul Arthur Monerie | Predicting wind speed over the northern hemisphere up to a decade ahead |
| | Hao Ye | Construct a homogenised stratospheric water vapour data record from satellite observations |
| | Andrea Rivosecchi | Evolution of temperature hot extremes following net zero CO2 emissions in UKESM 1.2 |
| 10:25-10:45 | Short talks 1c | |
| | Robin Smith | "Look what you've done! I'm melting!" or "The importance of ice sheets in Earth system modelling" |
| | Joana Medeiros | Aviation turbulence in a warmer world: From shear instability to EDR projections |
| | Rob Thompson | The first multi Doppler radar derived 3D wind fields in the UK |
| | Sarah Dance | Data assimilation and reanalysis making the most of observations and models |

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| 11:30–12:30 | Breakouts session (5 in parallel) | A. Up-skilling in AI tools B. Managing your stress bucket C. Creating neuroinclusive research environments D. Striving towards impact-relevant science E. The art of climate storytelling: Approaching the complex narrative of climate change |
| Lunch | | |
| 13:30–14:00 | Plenary session led by Research Division Leads | |
| 14:00–14:30 | Short talks 2 | |
| | Joy Singarayer | Rehabilitating pre-Hispanic dams in the Peruvian Andes to manage shifting hydroclimate risks |
| | Gaurav Madan | Understanding the uncertainty in simulated AMOC changes to historical greenhouse gas emissions in CMIP6 |
| | Laura Baker | A comparison of the UK's hot, dry summers of 2025 and 1976 |
| | Yiqing Liu | Advancing urban climate modelling: Integrating building energy modelling in SUEWS |
| | Caleb Miller | Measurements and modelling of electric charge in fog |
| 14:30–15:30 | Posters | See Page 5 for poster presenters |
| Afternoon break, tea/coffee (posters continue) | | |
| 16:10–16:25 | Keynote 2 | |
| | Humphrey Lean (Met Office) | Current state of the art and future strategy for hectometric prediction |
| 16:25–16:45 | Short talks 3a | |
| | Robert Lee | Does stratospheric skill guarantee tropospheric gains? Insights from the 2018 & 2019 SSWs? |
| | Danny Feltham | Changing state of the Arctic sea ice cover |
| | Jake Aylmer | Role of Arctic cyclones during very rapid sea ice loss events |
| | Helen Dacre | Atmospheric dispersion modelling |

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16:50-17:10 **Short talks 3b**

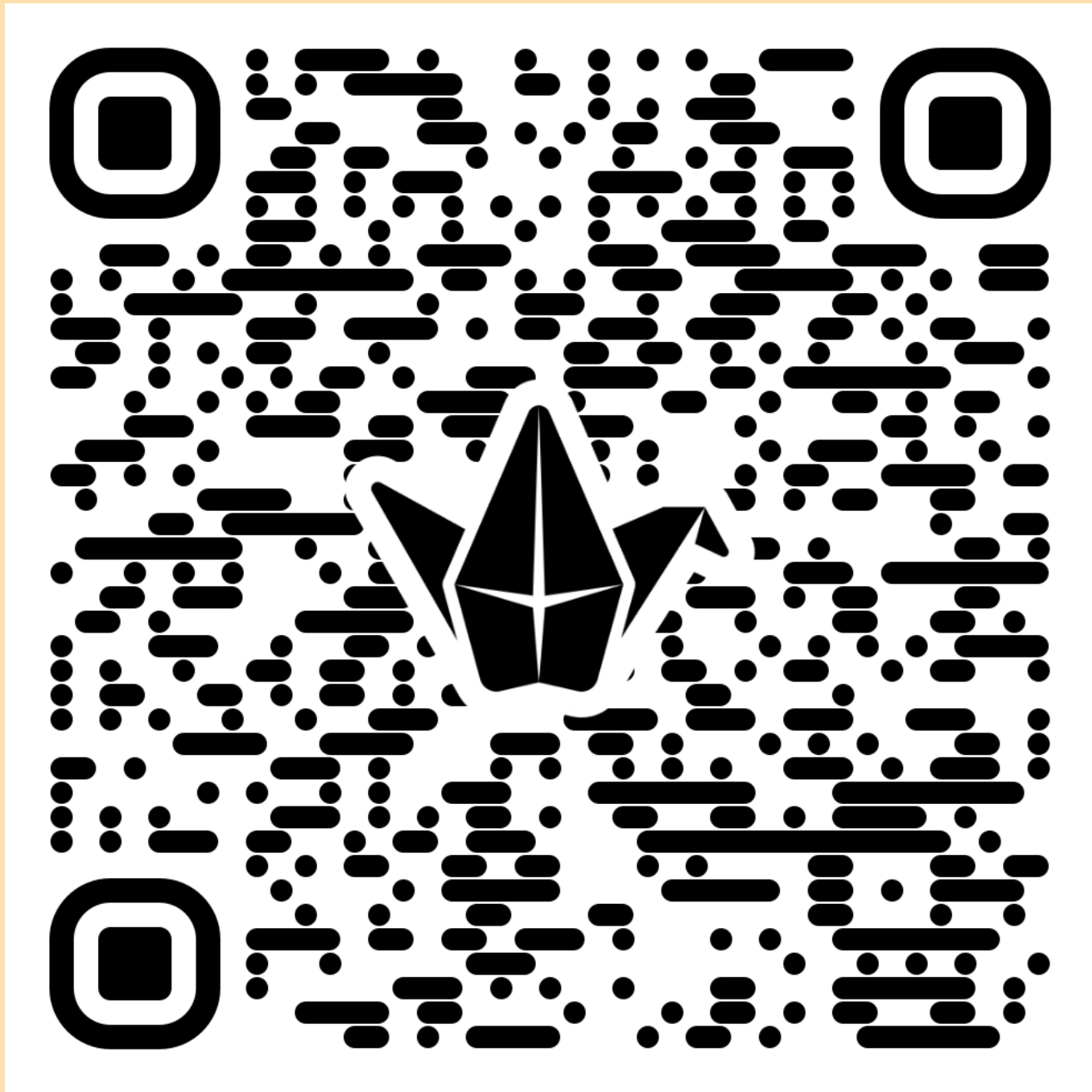
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| Jonny Williams | Physical, societal and 'human factor' impacts of climate change at European airports |
| Alfie Bull Green | Met Office urban scale ML modelling activities |
| Dan Shipley | ParaChute@Reading: Understanding convective turbulence at km to hm scales |
| Andrea Dittus | Climate projections of Net Zero Futures |

Short break

17:20-17:30 **60th anniversary celebration begins**

Drinks Reception

Live Interactive Q&A



<https://padlet.com/universityofreading/meteorology-research-away-day-2026-5u7u76308y4gd39e>

Poster Presentations

Section A – Cyclones, Storms, Waves

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| A1 | Elliot McKinnon-Gray | Upscale energy transfer in equatorial waves |
| A2 | Eliza Karlowska | Large-scale climate drivers and their effect on convective storms in Lake Victoria |
| A3 | Satoru Okajima | Curve it like jets: Storm-track dynamics through the curvature lens |
| A4 | Danqing Luo | Hazardous Mediterranean cyclones: Storm Daniel case study |
| A5 | Alex Baker | Tropical cyclones in km-scale global models |
| A6 | Leo Saffin | Tropical cyclones in the extratropics |
| A7 | Ipshita Dey | An overview of extratropical cyclones in eddy-rich ESMs |

Section B – Clouds, Turbulence, Urban / K-scale Modelling

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| B8 | Rosie Mammatt | Characterising secondary ice production regimes in midlatitude frontal clouds using radar Doppler spectra |
| B9 | Chun Hay Brian Lo | Comparing eddy dissipation rate retrievals between two radars |
| B10 | Natalie Harvey | The evaluation of boundary layer turbulence in high-resolution numerical weather prediction simulations using Doppler lidar |
| B11 | Nischal Sharma (presented by Natalie Harvey and Helen Dacre) | Turbulence and diurnal flow evaluation in the mountain boundary layer using TEAMx Observations |
| B12 | Hette Houtman | Missing drag in the Met UM |
| B13 | Cristian Vraciu | Explaining the convection and instability scalings with a predator-prey model |
| B14 | Omduth Coceal | Stochastic flow and dispersion in complex urban environments |
| B15 | Russell Glazer | Hectometric-scale modelling of the urban mixed layer evaluated with a dense LiDAR-ceilometer network |
| B16 | Adam Gainford | Assessing the value of clustering convection-permitting ensemble forecasts |

Section C – Climate effects / Carbon / Human impacts

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| C17 | Patrick McGuire | The International LAnd Model Benchmarking (ILAMB) analysis of the TRENDY MIP for the annual Global Carbon Budget |
| C18 | Dan Hodson | The North Atlantic subpolar gyre response to 20th century anthropogenic aerosols emissions |
| C19 | Matthew Paskin | Multi-scale modelling connecting physical and socio-economic spaces: Impact of human activities |
| C20 | Rhidian Thomas | Everyday weather in a warmer world |

Section D – Space weather

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| D21 | Christopher Scott | Revisiting long-term change in ionospheric F2-layer height over Stanley |
| D22 | Nathaniel Edward-Inatimi | Calibrating probabilistic solar-wind forecasts driven by the Wang-Sheeley-Arge model |
| D23 | Hripsime Mkrtchyan | Combining citizen science and AI for digitization of historical atmospheric electricity records |

Section E – Model advancements

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| E24 | Reinhard Schiemann | Poster 1: An overview of the PROMOTE project: Progressing Earth system modelling for tipping point early warning systems |
| E25 | Reinhard Schiemann | Poster 2: The CANARI HadGEM3 Large Ensemble: Production, design, and first applications |
| E26 | Alison Fowler | Bias correction for reanalyses |
| E27 | Yumeng Chen | Effects of assimilating phytoplankton carbon in marine ecosystem modelling |
| E28 | Amber te Winkel | AdHImEx: Adaptively, high-order implicit-explicit time stepping for advection |
| E29 | Sadie Bartholomew | Better software, better (meteorological) research |

Section F – Ice / Sea ice / Polar

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| F30 | Elizabeth Cooper | CRISP: Constraining reanalysis of sea ice by correcting seasonal feedbacks in the Polar regions |
| F31 | Sarah Shannon | Modelling melt lakes in Antarctica |
| F32 | Adam Bateson | Simulating the fragmentation of sea ice floes using discrete element methods |
| F33 | Nishit Jajodia | Ocean dynamics driving sea-ice melting |
| F34 | Dieu Hoang | Impacts of freshwater fluxes on ice shelves tipping points: a case study of Ross Ice Shelf in UKESM |
| F35 | Steve George | Ice sheets |
| F36 | Penny Coulthard | Stress and deformation characteristics of sea ice in continuum and discrete element models |

Section G – Composition, Radiation and Climate

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| G37 | Ajatshatru Balaji | Experimental investigation of non-spherical dust particle sedimentation in the atmosphere |
| G38 | Ginés Garnés Morales | Exploring the radiative effects of super-coarse dust from aircraft observations |
| G39 | Sai Amritha Kuttippurath | Assessing mineral dust effects on aircraft engine performance in the Middle East using ceilometer data |
| G40 | Tanusri Chakraborty | Impact of hydrogen on atmospheric composition and climate |

Section H – Energy sector

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| H41 | Ben Hutchins | Decadal predictions for the energy sector |
| H42 | Innocent Masukwedza | Large scale drivers of wind power potential in Kenya |

Section I – Research development

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| I43 | Ali Brown | Research development support for early career researchers |
| I44 | Fiona Mclachlan | Knowledge exchange at Reading |