



# Meteorology Research Away-Day Schedule

Monday 12<sup>th</sup> January 2026

Palmer Building , Whiteknights Campus

08:50-09:10	Arrival
09:10-09:20	<b>Welcome to the research day and house keeping</b>
09:20-10:45	<b>Talks</b>
10:45-11:30	Morning Break, tea/coffee
11:30-12:30	<b>Breakouts (5 in parallel)</b>
12:30-13:30	Lunch
13:30-14:00	<b>Plenary session led by Research Division Leads</b>
14:00-14:30	<b>Talks</b>
14:30-15:30	<b>Posters</b>
15:30-16:10	Afternoon Break, tea/coffee (posters continue)
16:10-17:10	<b>Talks</b>
17:10-17:20	<b>Short break</b>
17:20-17:30	60 <sup>th</sup> anniversary celebration begins

# Detailed Programme

08:50-09:10	Arrival	
09:10-09:20	<b>Welcome to the research day and house keeping</b>	
	Organizing Committee	
09:20-09:35	<b>Keynote 1</b>	
	Linda Hiron	Advancing meningitis early warning for Africa
09:35-09:55	<b>Short talks 1a</b>	
	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	<b>Short talks 1b</b>	
	Andy Turner	Overview of NCAS
	Paul	Predicting wind speed over the northern hemisphere up to a decade ahead
	Arthur Monerie	
	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	<b>Short talks 1c</b>	
	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

11:30-12:30	<b>Breakouts session (5 in parallel)</b>	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
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## Lunch

13:30-14:00	<b>Plenary session led by Research Division Leads</b>
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14:00-14:30	<b>Short talks 2</b>	
	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	<b>Posters</b>	See Page 5 for poster presenters

## Afternoon break, tea/coffee (posters continue)

16:10-16:25	<b>Keynote 2</b>	
	Humphrey Lean (Met Office)	Current state of the art and future strategy for hectometric prediction
16:25-16:45	<b>Short talks 3a</b>	
	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

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

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

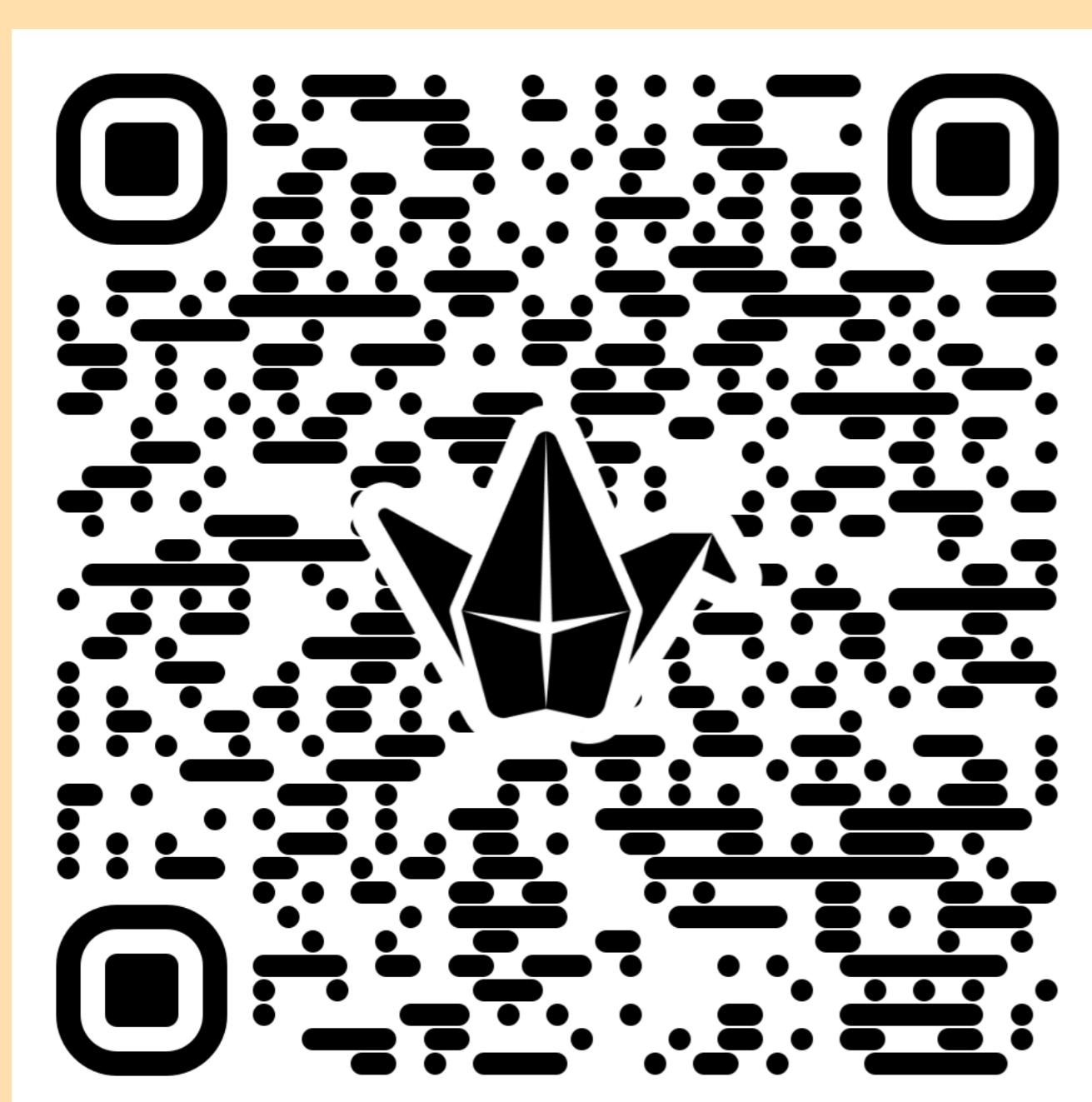
Andrea Dittus

Climate projections of Net Zero Futures

**Short break**

17:20-17:30 **60<sup>th</sup> anniversary celebration begins**

**Drinks Reception**



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

# Poster Presentations

## Section A – Cyclones, Storms, Waves

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

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

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

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

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

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

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

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

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