

JULES Annual Science Meeting 2026

Location: Sutcliffe Lecture Hall (GU01) Brian Hoskins Building,
Department of Meteorology, University of Reading

Agenda

Time	Speaker	Topic
Tuesday 8 September		
13:00	—	Arrival
13:15	—	Welcome & housekeeping
13:30–13:45	Boya Zhou	An eco-evolutionary optimality-based prognostic leaf area index model in the Joint UK Land Environment Simulator (JULES)
13:45–14:00	Wenyao Gan	Implementation of the sub-daily P model for C3 and C4 photosynthesis in JULES
14:00–14:15	Rémi Gaillard	From static to dynamic soil properties in JULES: implications for high-latitude simulations
14:15–14:30	Toby Marthews	The JULES Academy: a new approach to international JULES training
14:30–15:00	—	Coffee break
15:00–15:15	John Edwards	Deriving soil properties for JULES from SoilGrids2.0 in Met Office models
15:15–15:30	Gabriel Rooney	Update from Hydrology and Surface Processes Group
15:30–15:45	Toby Marthews	Discussion on JULES Training
15:45–16:00	Douglas Clark	JLMP announcement
16:00–17:00	—	Module updates
19:00 onwards	—	🍷 Conference dinner @ Cote Reading

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Time	Speaker	Topic
Wednesday 9 September		
08:30–09:00	—	Arrival and poster set-up
09:00–09:15	Hashmi Fatima	Improvement of Soil Moisture Forecasts using Indian Soil Moisture Network Observations
09:15–09:30	Ross Maidment	A new, long-term root zone soil moisture dataset for operational agricultural drought monitoring over Africa
09:30–09:45	David Livings	JULES in UniFHy
09:45–10:00	Jenna Thornton	Quality of regional coupled system against Cardington long-term observational dataset
10:00–10:15	Nic Gedney	Using 4D variational analysis to reduce uncertainty in simulating the Amazon Basin contemporary and future projected water budget
10:15–10:30	Rob Parker	Emulating JULES and Attributing the Drivers of Tropical Wetland Methane Emissions
10:30–10:45	Emma Littleton	JULES-PEAT: adapting a land surface model for temperate peatland representation
10:45–11:15	—	Coffee break & posters
11:15–11:30	Peter Cook	Modelling tropical forest responses to elevated CO ₂ in a nutrient-limited environment: JULES simulations at the Amazon FACE site
11:30–11:45	Oscar Kennedy-Blundell	RothC modelling of pyrogenic carbon in old growth Amazon forests
11:45–12:00	Toby Marthews	Standalone JULES simulation of rivers and inundation
12:00–12:15	Katie Blackford	Water Resource Management in JULES
12:15–12:30	Juliette Bernard	The Warming-Induced Emissions Model Intercomparison Project (WIEMIP): JULES-bgc configuration, planned outputs and preliminary results
12:30–12:45	Douglas Kelley	Wildfire Attribution and Projections in the State of Wildfires Reports
12:45–14:00	—	☪ Lunch & posters
14:00–14:15	Arthur Argles	TRENDY like historical simulations of JULES-RED with Land Use Change
14:15–14:30	Lirong You	Improving JULES drought performance through sequential calibration: testing plant hydraulics and transferability under intensified drought
14:30–14:45	Joseph Ovwemuvwose	Uncertainty in Land Carbon Fluxes Simulated by CMIP6 Models from Treatments of Crop Distributions and Photosynthetic Pathways
14:45–15:00	Yue Li	A Web-based Framework for Accessible Urban Land Surface Model Simulations
15:00–15:15	Sarah Shannon	A melt lake model for ice shelves
15:15–15:45	—	Coffee break & posters
15:45–17:00	—	Posters continue; JLMP and SciApps meetings for those involved; Meeting ends

Posters

Presenter	Title
Natalie Douglas	Improving the calibration of JULES stomatal conductance schemes using an enhanced LAVENDAR framework
Limeng (Simone) Zheng	Understanding wildfire performances in JULES simulations using eXplainable Artificial Intelligence
Ayesha Hussain	Using PRIME to Evaluate how BECCS is affected by CMIP7 Scenarios
Sonja Folwell	Improving fluvial wetland dynamics in JULES
Jeremy Emmett	JULES Modelling of Tropical Wetland Methane
Cristina Ruiz Villena	A machine-learning emulator of JULES for large-ensemble soil moisture projections in East Africa using PRIME
Anne Verhoef	Adsorption-explicit soil water retention and hydraulic conductivity formulations within a unified hydro-thermal framework for improved soil water-heat interactions in land surface models
Saraswati Dewi	Implementation of Heat Stress Parameterisation in Jules-crop
Giorgia Line	Modelling Phosphorus Limitation for AmazonFACE
Molly Macrae	Seaweed cultivation for climate change mitigation: what would the net effect on atmospheric composition and climate be?