

2024-2025



**ACCESS-NRI:**  
AUSTRALIA'S CLIMATE SIMULATOR

# Highlights Report



# DIRECTOR'S OVERVIEW

A year ago, I wrote that we had established the foundations of ACCESS-NRI and begun the process of building and expanding our work. This year, our Highlights Report outlines the progress we have made in building capacity that will set us up for the coming years.

A couple of years ago, one of our Research Software Engineers remarked to me that if we do our job perfectly, then people in our community will forget how difficult computational climate and weather research really is. A clear example of this work is in the release pipeline we have developed over the last year or so. This pipeline allows us to build, test and deploy models (or other types of software) in a reliable and reproducible way. It has the distinguishing feature that many of the complex and time-intensive tasks are hidden from the user – a feature that you might consider both an advantage and a disadvantage! Ultimately, the goal of this work is that updates to code are simple, that the provenance of software (and data) is retained, and that researchers can be more productive; and our hope is that you'll be seeing the by-products of these efforts for years to come.

Some of our work is more visible to users. Over the last year we've gradually scaled up our provision of training, conda environments, data storage and data cataloguing that have had uptake across the community. We've started the process of releasing models that are being used in the community, collaborated with partners to build the models that will be used in the upcoming Coupled Model Intercomparison Project phase 7 (CMIP7) effort, and are working with the community to evaluate these models.

At ACCESS-NRI, we place a strong emphasis on our role in helping to build communities. Much of our work requires deep collaboration with researchers around the country – from CMIP7 model development with CSIRO to regional atmosphere-land modelling with the ARC Centre of Excellence for 21<sup>st</sup> Century Weather to ocean model development research infrastructure with the Consortium for Ocean-Sea Ice Modelling in Australia (COSIMA). This community-building role is typical for Research Infrastructure projects like ours, and in my view is one of the big attractions to working in the field.

One of the highlights for me this year has been watching our team grow, with new people joining and, just as importantly, our existing team members choosing to stay. We place a strong emphasis on creating and maintaining a positive and collaborative internal culture, and we're always looking for ways to improve it. Another milestone worth celebrating was the successful transition of all our Research Software Engineers to a dedicated "specialist" career stream. This transition was the result of considerable effort that now provides clear professional development pathways and recognises the vital contribution these roles make to our organisation's mission.



In the coming year, there are a number of challenges and opportunities – in particular, there is a new National Research Infrastructure Roadmap being developed. Furthermore, the National Digital Research Infrastructure strategy will come to fruition. I look forward to updating you on these initiatives in a year's time.

## Acknowledgements

*We acknowledge the Traditional Owners of the land on which our research infrastructure and community operate across Australia and pay our respects to Elders past and present. We recognise the thousands of years of accumulated knowledge and deep connection they have with all the Earth systems we simulate.*

*We would like to thank every organisation, community and individual that makes ACCESS-NRI possible, for their contributions and support.*



# OUR TEAM

Our people include our highly skilled workforce supporting the ACCESS models, data and tools; the climate and weather community, who use and co-develop the ACCESS modelling framework; and members of our Board and Scientific Advisory Committee, who help govern and advise us. During 2024–2025, 47 staff members and 4 internship students worked at ACCESS-NRI.

Throughout 2024, ACCESS-NRI welcomed three new teams: the Regional and Coastal Ocean Modelling team, led by Helen MacDonald; the Ice Sheet Modelling team, led by Mike Tetley; and the Software Transformation team, led by Micael Oliveira.



OUR PEOPLE IN NUMBERS

**47**  
ACCESS-NRI  
total staff

**10**  
new staff

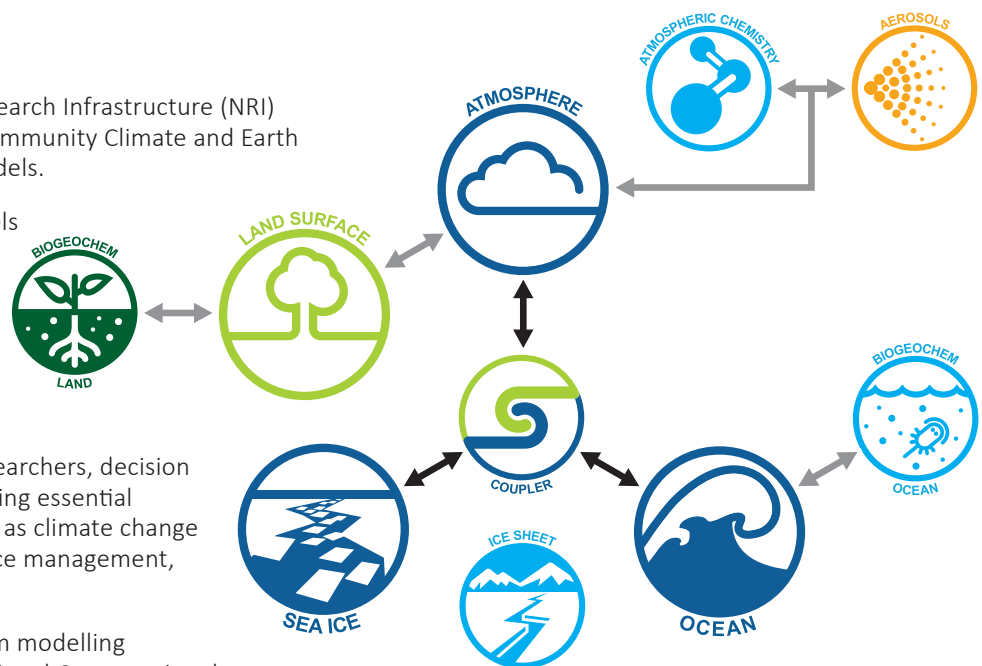
**37**  
Research  
Software  
Engineers

# WHAT IS ACCESS-NRI?

ACCESS-NRI is the National Research Infrastructure (NRI) that supports the Australian Community Climate and Earth System Simulator (ACCESS) models.

ACCESS-NRI develops the models and infrastructure for world-class computer simulations of climate, weather and Earth systems, specifically designed for Australia and the Southern Hemisphere. These simulations are powerful and indispensable tools for researchers, decision makers and policymakers, offering essential insights into diverse areas such as climate change adaptation, agriculture, resource management, and disaster response.

Our computational Earth system modelling framework is hosted at the National Computational Infrastructure (NCI) and enabled by the Australian Government through the National Collaborative Research Infrastructure Strategy (NCRIS) program.



## WHAT WE DO AND SUPPORT

- > **We work** with Australian researchers to maintain the ACCESS model – a framework of open-source climate and weather models using high-performance computers. These models underpin Australia's climate science capability – and our ability to inform Australia's climate adaptation strategies.
- > **We develop** the computing software expertise required to keep the ACCESS model running optimally, to future-proof it for upcoming computing technologies and make it accessible to all researchers.
- > **We connect** Australia's climate research communities to collaborate and use the models effectively to generate robust climate simulations for research, policy and decision-making purposes.
- > **We develop** high-quality climate prediction systems essential to Government agencies working to support Australians coping with and adapting to the increasing effects of climate change and high-impact weather events.
- > **We deliver** a unique Australian and Southern Hemisphere perspective that informs international science and improves the global picture of climate change and its future impacts.





# IMPACT WE ENABLE

BUILDING AND FUTURE-PROOFING AUSTRALIA'S SOVEREIGN CLIMATE RESEARCH CAPABILITY –  
ESSENTIAL TO SUPPORT NATIONAL RESILIENCE AND WELLBEING



DELIVERING CLIMATE SIMULATIONS SPECIFIC TO AUSTRALIAN  
AND SOUTHERN HEMISPHERE CONDITIONS



UNDERSTANDING HOW CHANGES TO ANTARCTIC OCEAN  
CURRENTS AND ICE DYNAMICS AFFECT GLOBAL SYSTEMS



UNDERSTANDING EL NIÑO AND LA NIÑA AND HOW THESE CLIMATE  
SYSTEMS AFFECT AUSTRALIA AND REGIONAL NEIGHBOURS



SIMULATING HIGH-IMPACT WEATHER – WIND, BUSHFIRE,  
FLOODS, HEATWAVES – TO INFORM EMERGENCY MANAGEMENT



SAFEGUARDING AUSTRALIA'S FUTURE – LONG-TERM PROJECTIONS TO INFORM CRITICAL DECISION  
MAKING ACROSS THE GOVERNMENT, AGRICULTURE, INSURANCE AND SECURITY SECTORS



STRENGTHENING GLOBAL EFFORTS TO SIMULATE CLIMATE OF  
THE PAST MILLENNIUM AND THE FUTURE



RECONSTRUCTING PAST CLIMATE – UNDERSTANDING HOW CLIMATE  
CHANGED IN THE PAST TO INFORM PREDICTIONS OF FUTURE CHANGE



One important impact on all the models released and supported by ACCESS-NRI is that it enables a much greater cohort of researchers to undertake modelling experiments, more easily.

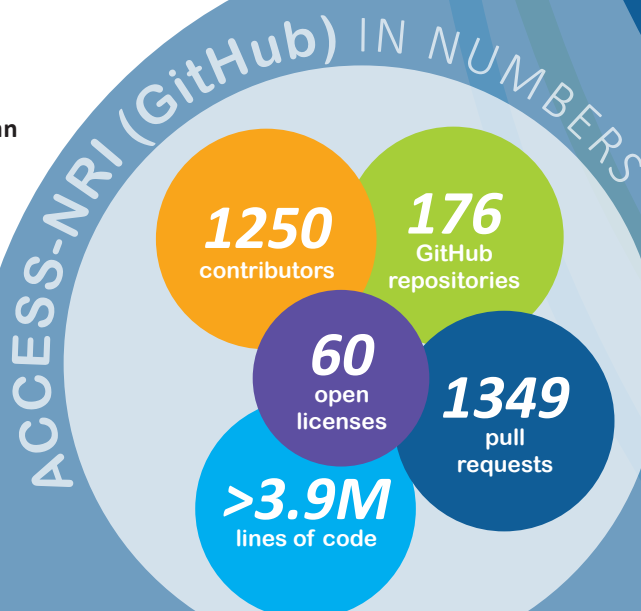
*"Ten or twenty years ago it used to take more than three months to set up and start a model to undertake modelling experiments. In contrast, two weeks ago, I was able to take some PhD students with no model experience and get them to run the regional model ACCES-rAM3 within a couple of hours."*

Dr Mathew Lipson,  
Senior Research Fellow for 21st Century Weather, UNSW Sydney

The ACCESS models are specially designed to run on the National Computing Infrastructure (NCI) platform available to the Australian research community.

*"You can't just take a model from the UK Met Office and run it immediately on a local computer, as all the background engineering is very particular to the computing system that it's run on. The ACCESS-NRI team has done all the fantastic background work of getting the model running and connecting all the pipes so researchers like me, can just pick it up and use the models on our own Australian computing platform and with all the ongoing support that comes with it."*

Dr Bethan White,  
Senior Research Fellow for 21st Century Weather,  
University of Melbourne



# HIGHLIGHTS OF THE YEAR

## The Australian Antarctic Division (AAD) joins ACCESS-NRI as strategic partner

The Australian Antarctic Division (AAD) has officially joined ACCESS-NRI as a partner organisation, strengthening Australia's climate, weather and Earth system modelling capabilities. The partnership reflects existing deep connections between the organisations. AAD researchers are users of ACCESS-NRI's models, tools and data and are active contributors to ACCESS-NRI's Cryosphere, Atmosphere, and COSIMA (ocean and sea-ice) Community Working Groups. In addition, ACCESS-NRI has AAD representatives on its Scientific Advisory Committee and Board.

This collaboration positions Australia at the forefront of Antarctic and Southern Ocean research, combining ACCESS-NRI's world-class modelling infrastructure with AAD's scientific expertise.

*"The ACCESS-NRI collaboration provides digital infrastructure and modelling capability that are important to the research being undertaken to advance our understanding of Antarctica, the Southern Ocean and the global climate system."*

**Dr Lenneke Jong, Australian Antarctic Division of the Department of Climate Change, Energy, the Environment and Water (DCCEEW)**



## 2024 ACCESS Community Workshop

The ACCESS Community Workshop was held on 3–5 September 2024 in Canberra and online. The 2024 ACCESS Community Workshop brought together 152 (116 in person, 36 virtual) ACCESS community members to the Shine Dome in Canberra for an inspiring and fruitful week of scientific and technical oral presentations, posters, and discussions.

The event achieved its aims which included:

- > showcasing innovative science and modelling approaches
- > learning about new components developed for ACCESS
- > sharing knowledge between Community Working Groups and foster new and existing community-wide collaborations.

The week kicked off with ACCESS User Training Day on 2 September. The workshop included 19 science and technical talks, 15 lightning presentations and 39 posters from the ACCESS community, as well as 5 invited keynote speakers. The workshop closed with the presentation of the best poster awards. The winners for this year were:

- > Best Student Poster and Best Overall: Jemma Jeffree (ANU)
- > 1st Place: Ben Schroeter (ACCESS-NRI)
- > 2nd Place: Farhan Rizwi et al. (CSIRO)
- > 3rd Place: Jasmeen Kaur (ACCESS-NRI).



[Read or download the full report of the workshop here](#) or scan QR code

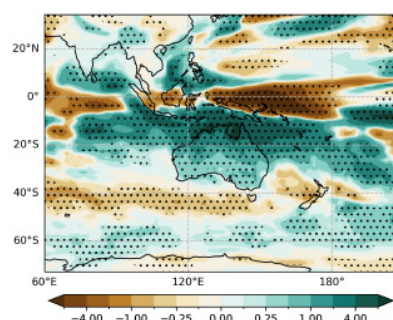
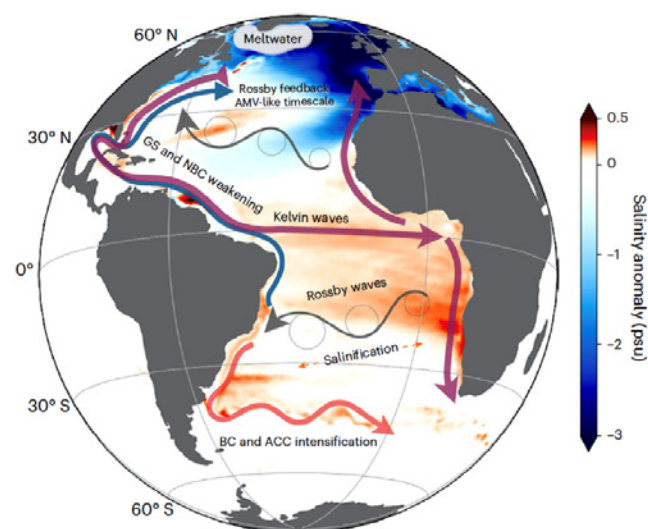


# ACCESS-NRI impact on the paleoclimate research community

The ACCESS Earth System Model version 1.5 (ACCESS-ESM1.5) is used by the paleoclimate community to understand the climate of the Earth from thousands to millions of years ago. Paleoclimates provide a unique perspective on climate change by allowing researchers to understand the feedbacks involved in climate change processes as well as testing climate models. This can ultimately help improve current climate models. The ACCESS-NRI team have now included more features in the new release of ACCESS-ESM1.5, making their work easier, faster and more precise.

*"These new features have been on the wish-list of the paleoclimate community for a long time. Making the model easier to use and enabling us to make the changes ourselves is incredibly useful as we can spend more time solving the questions instead of on solving the technical details."*

Dr David Hutchinson, UNSW Sydney



## A software time dial for the paleoclimate community

The ACCESS-NRI team has added a "time dial" into ACCESS-ESM1.5 that allows paleoclimate researchers to match the right value of Earth's orbit around the Sun during different past climates.

Paleoclimate researcher Dr Laurie Menviel, from the Australian Centre for Excellence in Antarctic Science (ACEAS) at UNSW Sydney, investigates glacial and interglacial cycles as well as abrupt climate changes linked to changes in the ocean's circulation.

"In the past, it was quite difficult for us to modify the Earth's orbital parameters in the model's code. Being able to modify these parameters ourselves has significant implications for our work, as they are one of the key drivers of the glacial-interglacial cycles, that were the dominant mode of natural climate variability of the last million years," she says.

## Menus that save paleoclimate researcher's time

The ACCESS-NRI team has added a "Menu" into the ACCESS-ESM1.5 that allows paleoclimate researchers to customise the model output by choosing presets of the variables they want to simulate, as well as the data they want to keep.

The paleoclimate community runs the model for thousands of years, producing incredible amounts of data. It can take approximately 2 months to run 1000 model years on supercomputers like Gadi at the National Computational Infrastructure (NCI). Dr David Hutchinson, a paleoclimate researcher from the UNSW Sydney, uses ACCESS-ESM1.5 to simulate the Miocene Climatic Optimum (15 million years ago). The Miocene is interesting to study because it was quite warm, with high CO<sub>2</sub> and low ice coverage, which makes it a good analogue for future climate change.

"We are very excited about this update of the model, as it will make our outputs more compact, easier to spin to an equilibrium and we don't have to rebuild the model each time we run a new simulation, which is very time consuming. These new menus have a handy quick switch to choose between different presets, as sometimes you want to save lots of variables and sometimes less, depending on the question," he says.



# COMMUNITY ENGAGEMENT HIGHLIGHTS

ACCESS-NRI maintains and supports open-source software and data for climate modelling. These are accessed through GitHub for code repositories and the National Computational Infrastructure (NCI) for data and supported software packages and workflows. The access and service models are designed to provide an independent approach for users while at the same time recognising additional support may be needed.

## TRAINING HIGHLIGHT: WCRP Global KM-scale Hackathon

The Australian node of the World Climate Research Program (WCRP) Global KM-Scale Hackathon took place in Canberra from May 12–16, alongside 9 other nodes spread across the Americas, Europe, and Asia. The Canberra event was run by the ARC Centre of Excellence for 21st Century Weather, with compute and storage support from ACCESS-NRI and NCI. The hackathon focused on using “storm resolving”, i.e. very high resolution, model output from two European-based models. ACCESS-NRI supported the event by providing the NCI project for compute and user-generated data storage, assisting with training on Git and GitHub, and providing in-person technical help during the week.

[Read more here](#)

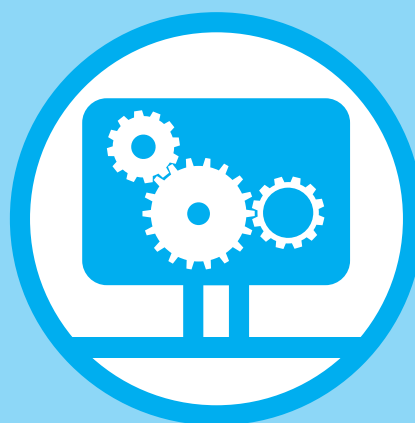
## AMOS 2024

The 31st annual Australian Meteorological and Oceanographic Society (AMOS) Conference took place in Cairns in June 2025. A significant number of AMOS conference presentations featured the use of ACCESS models and ACCESS-NRI was represented by Andy Hogg, Heidi Nettelbeck, Chermelle Engel, Charles Turner, Edward Yang, Paige Martin, Lachlan Whyborn, Jasmeen Kaur and Natalia Bateman. This year was our first time offering training workshops as part of the conference. We hosted two breakfast workshops to over 50 participants: “An overview of climate modelling, focused on Australia’s climate models” and “Working with Australia’s climate model output data: first steps for researchers”.



## Launch of the Machine Learning for Climate and Weather Community Working Group

In November 2024 ACCESS-NRI launched the new ACCESS Community Working Group, which replaces Forecasting and Prediction Working Group. The group’s ACCESS-NRI liaison is Micael Oliveira, Software Transformation Team Leader and its co-chairs are: Sanaa Hobeichi, Ryan Holmes, Vassili Kitsios and Tennessee Leeuwenburg. The main aims of this group is to create a platform for knowledge exchange where ACCESS-NRI, the National Computational Infrastructure (NCI), the climate community and machine learning experts share insights, data, and methodologies to accelerate progress in both fields and to ensure that the Australian community remains at the forefront of the use of machine learning and artificial intelligence in research and applications in weather and climate.





# Launch of the ACCESS-NRI PhD Internship Program

In 2024, ACCESS-NRI launched the trial phase of the PhD Internship Program, an initiative designed to provide PhD students with an immersive experience in the world of our infrastructure.

This program is crafted for students passionate about understanding the intricacies of climate models and interested in developing critical skills in scientific software development and high-performance computing. This trial phase was open only to Australian National University (ANU) students and four interns have completed their three or four months' work experience. This program will be extended to include other Australian universities when the full program launches in 2026.

*"This program offers PhD students a unique opportunity to experience what it means to be a Research Software Engineer. Interns join an ACCESS-NRI team, where they learn to develop scientific software collaboratively and work within the dynamic, hands-on environment of climate model development. Along the way, they gain deeper insight into climate models, build experience with advanced computational tools, and make meaningful contributions to Australia's climate research landscape."*

**Dr Paige Martin, User Training Team Leader at ACCESS-NRI and coordinator of the PhD Internship Program**



*"This experience exceeded my expectations on learning. I felt valued for the skills I have, and I felt I have abilities that were important and valuable to this project. My advice for future interns is to apply if you really want to get into the underbelly of the simulation and if you are interested in how you can participate in creating well written code. Also, I would like them to understand that, even though your project seems so small, it still has an incredible importance in the simulation."*

**Lindsey Oberhelman, ANU Research School of Astronomy & Astrophysics**



*"A nice skill I got from this experience is that it allowed me to participate in collaborative coding, contributing to some existing repositories and having several reviewers and working together with people. Prior to this experience, I was used to working on my own individual project, as in astrophysics there is not much collaborative coding going on. I think that was an extremely valuable experience. My favourite thing was the people, how welcoming everybody was and how willing everyone was to help me out. It was just such a welcoming culture."*

**Paula Boubel, ANU Research School of Astronomy & Astrophysics**



*"What the internship really gave me was an opportunity to explore stuff that I care about without pressure or anything needing to come from it. It's also great as a CV item or to develop skills working with climate models, and a lot of fun. It was fantastic at ACCESS-NRI to be able to go and dig into the internals of this python package I worked on, and understand more about the infrastructure that underpins climate science."*

**Jemma Jeffree, ANU Research School of Earth Sciences**



*"In my PhD project, I'm mainly focusing on ice shelf cavities (the ocean below ice shelves), which is a component of the future ACCESS-OM3 ocean models. So, it was a great opportunity to come to ACCESS-NRI and do an internship that linked my PhD research with ACCESS-NRI models. I had a pretty good idea going into the internship that it would be quite different from my normal research group in that there is such a diverse range of work that people do at ACCESS-NRI to support all the models and community. The culture at ACCESS-NRI was also super welcoming. That made it really easy to transition into working there during the internship."*

**Claire Yung, ANU Research School of Earth Sciences**



[Find more about our Forum](#)

# RELEASE HIGHLIGHTS

## Supercharging Australian climate science: Australia's Earth system model gets revamped for a clearer view of our future and past climate

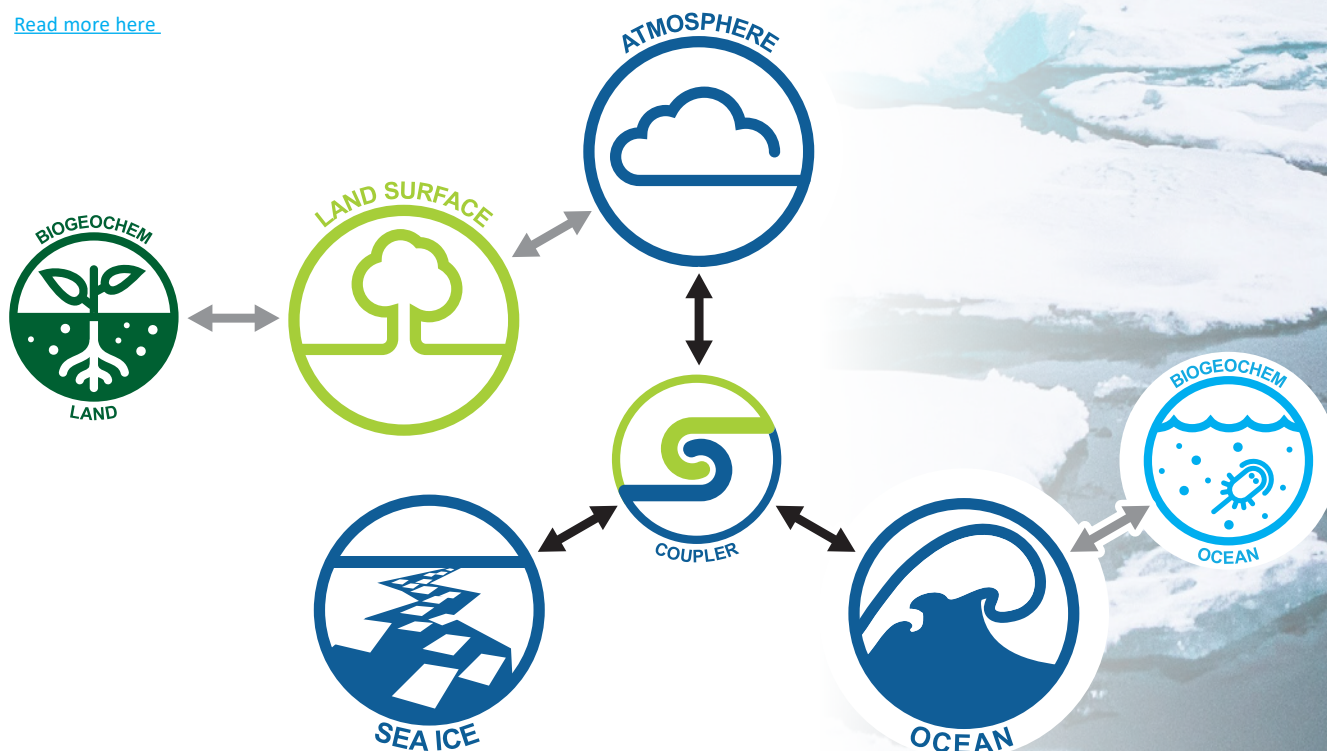
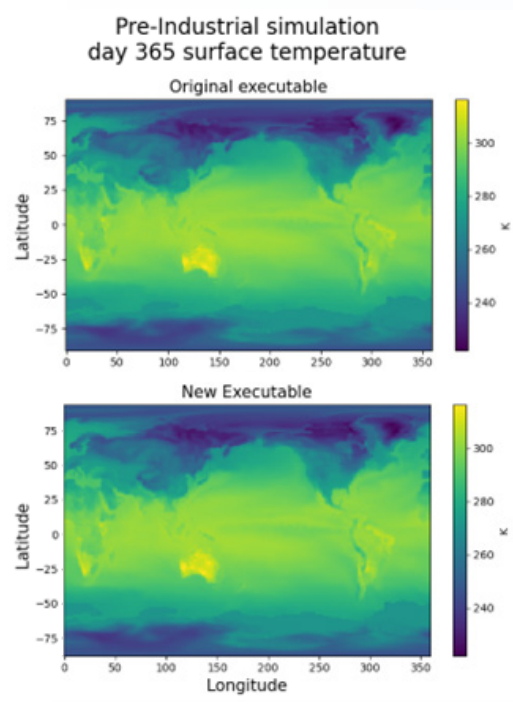
Just as astronomers use powerful telescopes to peer into the vast expanse of the universe, climate scientists use sophisticated climate models to gaze into the future and look back into the distant past, simulating the complex interactions that shape our planet's climate.

ACCESS-NRI upgraded the ACCESS Earth System Model version 1.5 (ACCESS-ESM1.5) to make it easier to use, ensuring reliable results and tailoring the code to the researcher's needs. Developed originally by CSIRO, this sophisticated model provides a virtual laboratory for exploring Earth's complex systems and has been heavily used by the research community for many areas, both globally and in Australia, as a tool for understanding and projecting climate change with a unique Australian focus.

*"The release of ACCESS-ESM1.5, as well as the training and technical support provided by the ACCESS-NRI has been a big game changer for the climate research community. It has allowed researchers to run the model themselves, and now we have a common approach on how to set up the model with different configurations. The infrastructure and the support that comes from the ACCESS-NRI enables everything that we do"*

Dr Tilo Ziehn, Principal Research Scientist, CSIRO

[Read more here](#)





## Release of ACCESS-rAM3: Seeing the details through the lens of a regional model

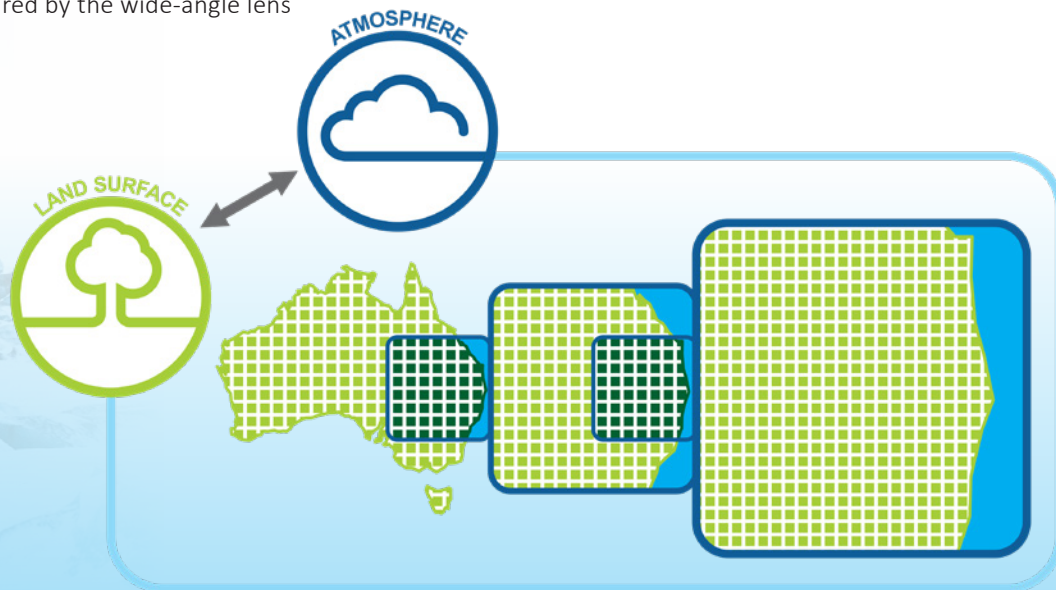
Regional models are game changers when it comes to simulating extreme weather events, and they're particularly important for unique landscapes like Australia. While global climate models capture the big picture across the planet, they miss local high-impact weather events such as bushfires and extreme storms or the effect of mountains over the local weather.

ACCESS-NRI has released the ACCESS Regional Atmospheric Model version 3 (ACCESS-rAM3), a fully supported regional model, created to understand and project weather with a unique Australian focus. This model includes atmosphere and land components, and it is an implementation of the UK Met Office's regional nesting suite. ACCESS-rAM3 enables researchers to understand extreme weather events like hurricanes, floods and droughts, which are not captured by the wide-angle lens of global climate models.

*"The value of ACCESS-rAM3 is that it is an adaptable regional model that allows researchers to run experiments and simulations robustly and relatively easily, at any resolution that we are interested in. I have used ACCESS-rAM3 to understand the effects of cities on the weather. We have run simulations over the greater Sydney region with and without cities, to assess what is the urban impact in the local weather, asking questions like what happens in a heat wave? Or what happens when a sea breeze is forming over a city?"*

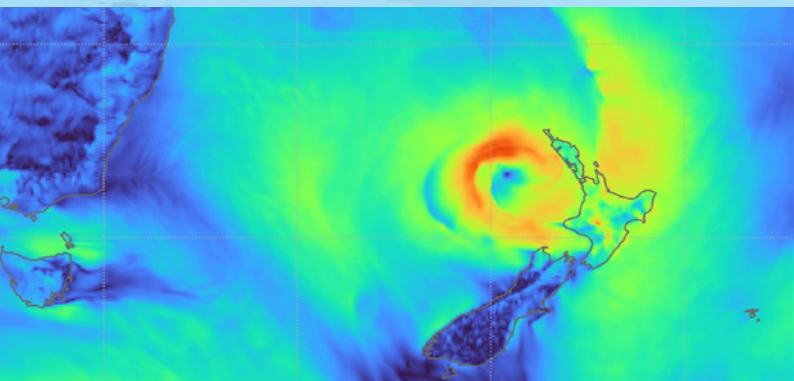
**Dr Mathew Lipson, Senior Research Fellow for 21st Century Weather, UNSW Sydney**

[Read more here](#)



*"This model allows researchers to ask questions about large scale processes at a very fine scale, like how the weather systems form along the entire East Coast of Australia and how do tropical and extratropical interactions happen. Without the fine scale resolution, we can't look at these processes."*

**Dr Bethan White, Senior Research Fellow for 21st Century Weather, University of Melbourne**



# PUBLIC ENGAGEMENT HIGHLIGHTS

## Art and science panel discussion: where creative practice meets climate and weather modelling

On 11 June, ACCESS-NRI Director Professor Andy Hogg participated in the panel discussion *Art, Science, Design: Aesthetic representation of weather and climate* which took place at ANU School of Art & Design. The event explored the growing field where creative practice meets scientific modelling, asking how aesthetic strategies can contribute to public understanding, environmental narratives, and speculative futures. It included presentations from visiting artist Leah Beeferman (Rhode Island School of Design) and Professor Andy Hogg, followed by a panel discussion facilitated by Dr Pia van Gelder (ANU School of Art & Design).

[Watch the video here](#)  
or scan QR code



## NYSF students discover the Power of Supercomputing with NCI and ACCESS-NRI!

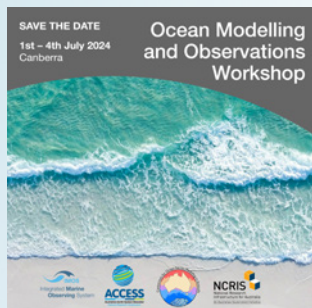
In January 2025, ACCESS-NRI participated with the National Computational Infrastructure (NCI) in the National Youth Science Forum (NYSF), welcoming 20 enthusiastic students to explore Gadi's cutting-edge technology and the importance ACCESS-NRI's cutting-edge climate modelling work. On top of a superb tour through the Gadi supercomputer by NCI staff, Lachlan Whyborn and Chris Bull from ACCESS-NRI presented on what ACCESS-NRI is, what we do and the impact we enable to address critical challenges like climate change. They also talked about their interesting career paths in science and research software engineering.





# NCRIS COLLABORATIONS ENGAGEMENT HIGHLIGHTS

## Ocean Modelling and Observations Workshop



From July 2–4, 2024, 110 ocean observers and modellers from all over Australia met in Canberra for a three-day workshop showcasing the latest research and development in coastal and ocean modelling. Participants submerged themselves in every aspect of ocean research, including topics as diverse as bluebottles' behaviour, pollution,

forecasting, machine learning, fisheries, remote sensing, ocean dynamics, Antarctic sea-ice loss and many more. This joint workshop of the Consortium for Ocean-Sea Ice Modelling in Australia (COSIMA) & Australian Coastal and Oceans Modelling & Observations (ACOMO), was organised by two national infrastructures that support research in ocean observations and modelling in Australia: The Integrated Marine Observing System (IMOS) and Australia's Climate Simulator, ACCESS-NRI, both enabled by the Australian Government's National Collaborative Research Infrastructure Strategy (NCRIS).

*"Respect for this country and this planet is what brings us all together to talk about the oceans as a collective. This joint workshop serves as a crucial platform for researchers in marine science, ocean modelling, and observations to address the massive challenges we are facing."*

**Dr Michelle Heupel, IMOS Executive Director**

*"We are linking two different research communities that look at the same problems from different perspectives. Feedback from models and observations improve both and we really need to integrate them. This joint workshop could be the platform where the crucial connections and collaborations between the two communities start to happen."*

**Professor Andy Hogg, ACCESS-NRI Director.**

## ACCESS-NRI participation in international conferences

Other international conferences where ACCESS-NRI staff participated this year included the European Geosciences Union (EGU) assembly held in Vienna, Austria in April 2025. With presentations from our Director, Andy Hogg, our Associate Director, Kelsey Druken, Model Evaluation and Diagnostics Team Leader Romain Beucher, and Data Management Leader Clare Richards.

The ACCESS-NRI team was represented by Paul Leopardi and Martin Dix at the Momentum User Workshop (UKMO) in the UK, and at the Seamless Global Modelling Workshop in the UK, where Chermelle Engel presented on regional modelling.

## ACCESS-NRI's partnership with the AAF incubator scheme

ACCESS-NRI is a partner in a Trust and Identity Framework incubator scheme with Australian Access Federation (AAF). ACCESS-NRI has enabled AAF authentication on its main community interface, the ACCESS-Hive Forum, which provides a trustworthy source of identity and institutional affiliation, as well as a convenient and easy method for our community to use the service we provide.

## NCRIS participation at eResearch Australasia 2024

ACCESS-NRI team participated as an exhibitor at eResearch Australasia, along with other NCRIS facilities including Atlas of Living Australia, AuScope, Australian Access Federation (AAF), Australian Research Data Commons (ARDC), National Computational Infrastructure (NCI), Pawsey and AURIN. Our Associate Director Dr Kelsey Druken, Felicity Chun from the Model Evaluation and Diagnostics team, and Jasmeen Kaur from the User Training team, gave presentations during the event. We also co-facilitated two Bird of Feather (BoF) events:

The BoF *Streamlining continuous integration/deployment of bespoke software environments and adhering to the FAIR principles and workflows* was facilitated and co-organised by Harshula Jayasuriya, Aidan Heerdegen, Paul Leopardi and Tommy Gatti (all ACCESS-NRI), Scott Wales (Bureau of Meteorology) and Rui Yang (NCI).

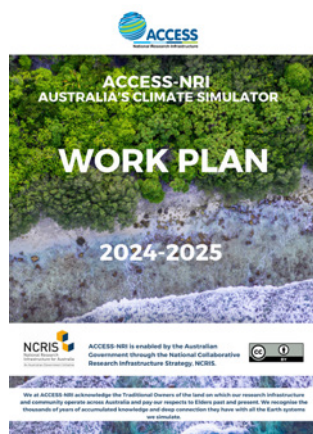
The BoF *Revealing the invisible: the challenge of measuring and communicating the impact of research infrastructures* was co-facilitated by Kelsey Druken and Natalia Bateman (ACCESS-NRI), Philomena Manifold (AuScope), Christina Hall (Australian BioCommons), Emma Joughin (AURIN), Kerry Mora (AAF), Jo Croucher (NCI) and Olivia Shanahan (ARDC).



# PLANNING OUR WORK

Our Work Plan is a document designed to show what ACCESS-NRI is working on that year, and how it may benefit the ACCESS Community. This plan is a result of our internal strategy process and staff retreat meeting. It includes input from the ACCESS Community Working Groups and our Scientific Advisory Committee. Our next year's Work Plan (2025–2026) has been released, and you can access it here.

[Read or download the ACCESS-NRI Workplan 2024–2025 here](#)  
or scan QR code



[Read or download the ACCESS-NRI Workplan 2025–2026 here](#)  
or scan QR code



Natalia Bateman,  
Andy Hogg,  
Kelsey Druken,  
Corey Hanrahan,  
and Paige Martin  
ACCESS-NRI

## Designer:

Carl Davies  
CMDphotographics

## Image credits:

Front cover:

Inner front cover:

Pages 1, 2, 4, 6:

Page 5 (left):

Page 5 (right):

Page 8:

Page 9:

Page 9 (bottom):

Page 10:

Page 12 (Earth) and back cover:

Inner back cover (background):

Harshula Jayasuriya, ACCESS-NRI

Adam Huttner-Koros, NCI

Harshula Jayasuriya, ACCESS-NRI

*Sea-surface salinity anomaly following a weakening of the Atlantic Meridional Overturning Circulation as simulated by the ACCESS-OM2-025 (Pontes & Menviel, 2024, Nature Geosciences)*

*Summer precipitation anomalies following a shutdown of the Atlantic Meridional Overturning Circulation as simulated by the ACCESS-ESM1.5 (Saini et al., 2025, Paleoclimatology & Paleoclimatology)*

*Pre-industrial simulation day 365 surface temperature as simulated by ACCESS-ESM1.5 (Spencer Wong, ACCESS-NRI)*

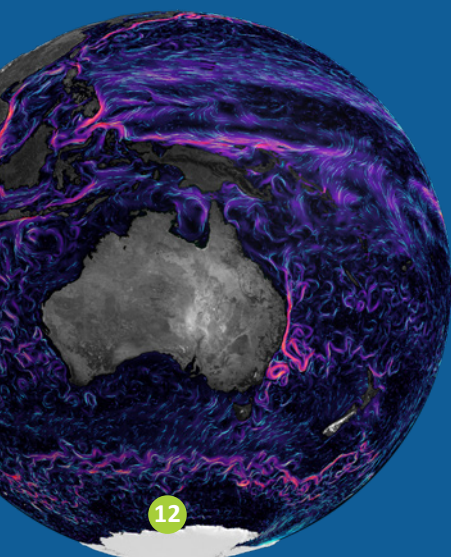
Representation of the ACCESS-RAM3 model (Carl Davies, CMDphotographics)

*10 m wind gusts for a cut-off cyclone forming over the Tasman Sea in Jan 2018 as simulated by ACCESS-rAM3 (Corey Robinson, 21st Century Weather, Chris Chambers, University of Melbourne, Chermelle Engel and Paul Leopardi, ACCESS-NRI)*

Natalia Bateman, ACCESS-NRI

Owen Kaluza, ACCESS-NRI

Joshyy, Unsplash





### Citing this publication

ACCESS-NRI Highlights Report 2024-2025, ACCESS-NRI Zenodo, 2025

DOI: <https://doi.org/10.5281/zenodo.17626552>



Except for the NCRIS and partner logos, or where otherwise noted, this document is licensed under the Creative Commons Attribution 4.0 International licence



To receive news and updates from ACCESS-NRI subscribe to our ACCESSStory newsletter using the QR code:

### More information:

[www.access-nri.org.au](http://www.access-nri.org.au)

E-mail: [access.nri@anu.edu.au](mailto:access.nri@anu.edu.au)





ACCESS-NRI:  
AUSTRALIA'S CLIMATE SIMULATOR



# Highlights Report

2024-2025

*ACCESS-NRI is enabled by the Australian Government through the National Collaborative Research Infrastructure Strategy (NCRIS), a program managed by the Department of Education.*

## Our partners:



Australian  
National  
University



MONASH  
University



UNSW  
SYDNEY

