



Position Description

College/Division:	Research and Innovation
Department/Unit:	ACCESS National Research Infrastructure (NRI)
Position Title:	Team Leader, Ocean Modelling Infrastructure
Classification:	ANU Senior Manager 1 (Specialist)
Responsible to:	Associate Director, Model Development
Number of positions that report to this role:	

PURPOSE STATEMENT:

ACCESS – The Australian Community Climate and Earth-Systems Simulator – is a collaborative venture between Government and the Australian research community to support development, maintenance and access to climate and weather models. ACCESS is being transformed into a national research infrastructure capability accessible by a broader community of users, enabled by Australian Government investment through the National Collaborative Research Infrastructure Strategy (NCRIS). Hosted at ANU, ACCESS-NRI (ACCESS National Research Infrastructure) is being established as a multi-party collaborative venture responding to the current and future needs of Australia’s scientific, Government and stakeholder community.

The Team Leader, Ocean Modelling Infrastructure, will oversee development of the ACCESS Ocean and Sea Ice models, manage the team of 4 software engineers and contribute to the leadership and strategic planning of the ACCESS-NRI. The successful candidate will mentor more junior staff, and will help to establish the future infrastructure and oceanic modelling environment for the benefit of the Australian research community.

This position provides a rare opportunity to work in a massively parallel high-performance scientific computing and big-data environment, applied to addressing some of the biggest challenges the world will face in the near future. The appointee will both contribute to and benefit from the expertise and support of the ACCESS community. ACCESS-NRI provides a supportive and enriching workplace for its staff and students through its strong commitment to equity, diversity and inclusion and wellbeing initiatives. Candidates that will add to the diversity of the ACCESS community are especially encouraged to apply.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

ACCESS-NRI is led by a Director, who will play a national and international role in promotion of the ACCESS modelling capability, contribute to the wider development of climate, earth system and weather modelling in Australia and provide technical and strategic leadership. There are two Associate Directors within the ACCESS-NRI facility, Associate Director, Model Development and Associate Director, Release Management.

The position of Team Leader, Ocean Modelling Infrastructure will lead a team within the Model Development portfolio, consisting of 4 software engineers and oversee the technical development of the ocean-sea ice component of the model infrastructure. In undertaking their work, the incumbent will work/ liaise with other members of the NRI facility and report to the Associate Director, Model Development.

Role Statement:

Under the broad direction of the Associate Director, Model Development, the Team Leader, Ocean Modelling Infrastructure will:

- Take a Leadership role in providing a high-quality research infrastructure facility for the users of ACCESS-NRI’s climate, earth system and weather modelling, including engaging with the other modelling groups within the NRI.

- Lead and oversee the technical development of the Ocean and Sea Ice components of the ACCESS model, including development of relevant documentation on techniques and services as both user material and specialised training.
- Develop, optimise and maintain Ocean-Sea Ice model code publishing and repositories that are integrated with national and relevant international computing environments. This includes metadata management, code and data formats, version control, unique identifiers, access controls through authorisation policies, license management, and model and data management plans.
- Liaise with the National Computational Infrastructure (NCI) to maintain and enhance the availability and usability of ACCESS model infrastructure.
- Manage the provision of user communication for the ACCESS NRI Ocean Modelling team, including web, other electronic forums, workshops and training.
- Contribute to new software, analysis and programming techniques that increase the ACCESS modelling capability on emerging high-performance Computing environments.
- Maintain currency with advances in Ocean-Sea Ice modelling, through literature, conferences, international working groups, and other means.
- Contribute to leadership within the ACCESS Model Development portfolio through direct engagement with stakeholder organisations and supervising, mentoring and guidance of staff within the team.
- Perform other duties, appropriate to this classification, as directed.
- Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity.

SELECTION CRITERIA:

1. Completion or progress towards postgraduate qualifications in a relevant field of science or software engineering with specialist experience in model development.
2. Well-developed skills in Ocean-Sea Ice modelling and a working knowledge of international scientific standards, modelling and data tools. Experience in climate modelling would be advantageous.
3. Demonstrated capability in model architecture and software, including code development, code repository management, porting and compiling models, and optimising code on parallel high-performance computing systems.
4. Demonstrated experience in supporting a high-quality service to users, analysing problems and resolving problems related to scientific requirements, monitoring the status of services, and proactively seeking service improvements to meet emerging areas of need.
5. Proven experience in working effectively and harmoniously to lead a team to achieve high quality outcomes, and excellent interpersonal and communication skills to relate effectively and provide guidance to a wide range of people.
6. A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of EO policies in a university context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the [Background Checking Procedure](#) which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:		Date:	April 2022
Printed Name:		Uni ID:	

References:

[General Staff Classification Descriptors](#)

[Academic Minimum Standards](#)



Pre-Employment Work Environment Report

Position Details

College/Div/Centre	Research & Innovation Portfolio	Dept/School/Section	Research Initiatives & Infrastructure
Position Title	Team Leader, Ocean Modelling infrastructure	Classification	
Position No.		Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see 'Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

- Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a **regular** or **occasional** part of the duties.

TASK	regular	occasional	TASK	regular	occasional
key boarding	Y	<input type="checkbox"/>	laboratory work	<input type="checkbox"/>	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input type="checkbox"/>	work at heights	<input type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	<input type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>
Organizing events	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	<input type="checkbox"/>	<input type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	<input type="checkbox"/>	<input type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
OTHER POTENTIAL HAZARDS (please specify): None					
Supervisor/Delegate Name:	I. McLaughlin		Date:	30 March 2022	