Australian National University

Position Description

College/Division:	College of Science
Faculty/School/Centre:	Research School of Earth Sciences
Department/Unit:	Climate & Ocean Geoscience
Position Title:	Postdoctoral Fellow
Classification:	Academic Level A
Position No:	TBC
Responsible to:	Associate Director, Research, Prof Nerilie Abram
Number of positions that report to this role:	
Delegation(s) Assigned:	

PURPOSE STATEMENT:

This position is fully funded by the Australian Research Council's Centre of Excellence for Climate Extremes (CLEX) and the successful applicant will contribute to and benefit from being a part of the CLEX community. CLEX is a major seven-year initiative funded by the Australian Research Council. The Centre is led by UNSW Sydney and partners with Monash, The University of Melbourne, The Australian National University and The University of Tasmania alongside a suite of national and international partner organisations. The Centre's research agenda encompasses interconnected research programs focused on Weather and Climate Interactions, Attribution and Risk, Drought, Ocean Extremes and Coupled Modelling. Climate extremes are the confluence of high impact weather, climate variability and climate change. The Centre works to improve our understanding of the processes that trigger or enhance extremes and build this understanding into our modelling systems. The improved predictions of climate extremes will help Australia cope with extremes now and in the future.

This position sits within the CLEX Ocean Extremes research team and will collaborate with senior and postdoctoral researchers in that team and other CLEX programs. This position aims to conduct new research into the dynamics of extreme events in the ocean, including marine heatwaves, ocean biogeochemistry and/or the impact of ocean extremes on extremes over land, using a combination of observations and high-resolution models.

The ARC Centre of Excellence for Climate Extremes provides a supportive and enriching workplace for its staff and students through its strong commitment to equity, diversity and inclusion and wellbeing initiatives.

The Postdoctoral Fellow is expected to undertake work in all three areas of academic activity – research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the external funding conditions that support the appointment, the appointee's research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Postdoctoral Fellow may also be required to supervise or assist in the supervision of students as applicable. The staff member will contribute cooperatively to the overall intellectual life of the School, College and University.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Postdoctoral Fellow will be a member of Research School of Earth Sciences, accountable to the Associate Director, Research (Nerilie Abram) and Director of the School. The Postdoctoral Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships with the academic and professional School and College staff, students and honorary appointees, as well as with industry stakeholders. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and, where possible, international colleagues.

Role Statement:

In their role as an Academic Level A the Postdoctoral Fellow is expected to:

- Undertake independent research in the area of ocean extremes with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with

other researchers at a national and/or international level. This includes working as part of a team on an externally funded project subject to deadlines.

- Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.
- Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Assist with supervision of research students.
- Assist to supervise research support staff in your research area.
- Actively contribute to all aspects of the operation of CLEX and, where relevant, the School. This may include representation through committee memberships.
- Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public, including promoting research and teaching links across ANU in the areas of ocean and climate science
- Maintain high academic standards in all education, research and administration endeavours.
- Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
- Demonstrate an understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- Other duties as required that are consistent with the classification of the position.
- Comply with all ANU policies and procedures, and in particular those relating to workplace health and safety and equal opportunity

Skill Base:

A Level A academic will work with the support and guidance from more senior academic staff and is expected to develop their expertise in research with an increasing degree of autonomy..

A Level A academic will normally contribute to teaching at the institution, at a level appropriate to the skills and experience of the staff member, engage in scholarly, research and/or professional activities appropriate to their profession or discipline, and undertake administration primarily relating to their activities at the institution. The contribution to teaching of Level A academics will be primarily at undergraduate and graduate diploma level.

SELECTION CRITERIA:

- A PhD (or awarding of a PhD within six months of appointment commencement) in physical oceanography, climate science, paleoclimatology or other relevant field, such as physics or mathematics with independent research experience as evidenced by publications in peer-reviewed journals of a high international standard.
- Achievement in a research field related to ocean dynamics, circulation or biogeochemistry.
- Experience in analysing output from numerical models of the climate system, with high-level expertise in programming (e.g. Fortran, Python) and High Performance Computing.
- An ability for problem solving and for independent research.
- The ability to assist in the supervision of students working on research projects.
- The ability to work as part of a team and to meet deadlines.
- Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application 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:	August 2021
Printed Name:	Professor Nerilie Abram	Uni ID:	

References:

Academic Minimum Standards

Australian National University

Pre-Employment Work Environment Report

Position Details

College/Div/Centre	College of Science	**Dept/School/Section**	Research School of Earth Sciences
Position Title	Postdoctoral Fellow	**Classification**	Academic Level A
Position No.	TBC	**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	☒	☐	laboratory work	☐	☐
lifting, manual handling	☐	☐	work at heights	☐	☐
repetitive manual tasks	☐	☐	work in confined spaces	☐	☐
Organizing events	☐	☐	noise / vibration	☐	☐
fieldwork & travel	☐	☐	electricity	☐	☐
driving a vehicle	☐	☐			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	☐	☐	gamma, x-rays	☐	☐
ultraviolet	☐	☐	beta particles	☐	☐
infra red	☐	☐	nuclear particles	☐	☐
laser	☐	☐			
radio frequency	☐	☐			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	☐	☐	microbiological materials	☐	☐
allergens	☐	☐	potential biological allergens	☐	☐
cytotoxics	☐	☐	laboratory animals or insects	☐	☐
mutagens/teratogens/ carcinogens	☐	☐	clinical specimens, including blood	☐	☐
pesticides / herbicides	☐	☐	genetically-manipulated specimens	☐	☐
			immunisations	☐	☐

OTHER POTENTIAL HAZARDS (please specify):

Supervisor/Delegate Name:	*Professor Nerilie Abram*	Date:	*August 2021*

Australian National University

Position Description

College/Division:	College of Science
Faculty/School/Centre:	Research School of Earth Sciences
Department/Unit:	Climate & Ocean Geoscience
Position Title:	Research Fellow
Classification:	Academic Level B
Position No:	TBC
Responsible to:	Associate Director, Research (Nerilie Abram)
Number of positions that report to this role:	
Delegation(s) Assigned:	

PURPOSE STATEMENT:

This position is fully funded by the Australian Research Council's Centre of Excellence for Climate Extremes (CLEX) and the successful applicant will contribute to and benefit from being a part of the CLEX community. CLEX is a major seven-year initiative funded by the Australian Research Council. The Centre is led by UNSW Sydney and partners with Monash, The University of Melbourne, The Australian National University and The University of Tasmania alongside a suite of national and international partner organisations. The Centre's research agenda encompasses interconnected research programs focused on Weather and Climate Interactions, Attribution and Risk, Drought. Ocean Extremes and Coupled Modelling. Climate extremes are the confluence of high impact weather, climate variability and climate change. The Centre works to improve our understanding of the processes that trigger or enhance extremes and build this understanding into our modelling systems. The improved predictions of climate extremes will help Australia cope with extremes now and in the future.
This position sits within the CLEX Ocean Extremes research team and will collaborate with senior and postdoctoral researchers in that team and other CLEX programs. This position aims to conduct new research into the dynamics of extreme events in the ocean, including marine heatwaves, ocean biogeochemistry and/or the impact of ocean extremes on extremes over land, using a combination of observations and high-resolution models.

The ARC Centre of Excellence for Climate Extremes provides a supportive and enriching workplace for its staff and students through its strong commitment to equity, diversity and inclusion and wellbeing initiatives.

The Research Fellow is expected to undertake work in all three areas of academic activity – research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the conditions of the external funding, the appointee's research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Research Fellow may also be required to supervise or mentor less senior staff, and undertake leadership roles as applicable. The staff member will contribute cooperatively to the overall intellectual life of the School, College and University.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Research Fellow will be a member of Research School of Earth Sciences, accountable to the Associate Director, Research (Nerilie Abram) and Director of the School. The Research Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships with the academic and professional School and College staff, students and honorary appointees, as well as with industry stakeholders. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and, where possible, international colleagues.

Role Statement:

In their role as an Academic Level B the Research Fellow is expected to:

- Undertake independent research in the area of ocean extremes with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national and/or international level.
- Actively seek and secure external funding including the preparation and submission of research proposals to external funding bodies.

- Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Supervision of research students.
- Supervise Postdoctoral Fellows and research support staff in your research area.
- Actively contribute to all aspects of the operation of CLEX and, where relevant, the School. This may include representation through committee memberships, including promoting research and teaching links across ANU in the areas of ocean and climate science.
- Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
- Maintain high academic standards in all education, research and administration endeavours.
- Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
- Demonstrate an understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- Other duties as required that are consistent with the classification of the position.
- Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity

Skill Base:

A Level B academic will undertake independent research in their discipline or related area. In research and/or scholarship and/or teaching a Level B academic will make an independent contribution through professional practice and expertise and coordinate and/or lead the activities of other staff, as appropriate to the discipline.

A Level B academic will normally contribute to teaching at undergraduate, honours and postgraduate level, engage in independent scholarship and/or research and/or professional activities appropriate to their profession or discipline. The academic will normally undertake administration primarily relating to their activities at the institution and may be required to perform the full academic responsibilities of and related administration for the coordination of an award program of the institution.

SELECTION CRITERIA:

- A PhD in physical oceanography, climate science, paleoclimatology or other relevant field, such as physics or mathematics with significant research experience as evidenced by a record of well-cited publications in peer-reviewed journals, a record of developing and maintaining collaborations and by other measures such as awards, and invitations to present at conferences.
- Demonstrated achievement in a research field related to ocean dynamics, circulation or biogeochemistry
- Proven experience in analysing output from numerical models of the climate system, with high-level expertise in programming (e.g. Fortran, Python) and High Performance Computing.
- A demonstrated ability and commitment to apply for competitive external funding to support individual and collaborative research activities.
- Proven ability for problem solving and for independent research.
- Evidence of an ability and willingness to teach at all levels.
- The ability to supervise and graduate high quality PhD/Masters research students.
- The demonstrated ability to work as part of a team, contributing to team management and meeting deadlines for project elements.
- Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application 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:	August 2021
Printed Name:	Professor Nerilie Abram	Uni ID:	

References:

Academic Minimum Standards

Australian National University

Pre-Employment Work Environment Report

Position Details

College/Div/Centre	College of Science	**Dept/School/Section**	Research School of Earth Sciences
Position Title	Research Fellow	**Classification**	Academic Level B
Position No.	TBC	**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	☒	☐	laboratory work	☐	☐
lifting, manual handling	☐	☐	work at heights	☐	☐
repetitive manual tasks	☐	☐	work in confined spaces	☐	☐
Organizing events	☐	☐	noise / vibration	☐	☐
fieldwork & travel	☐	☐	electricity	☐	☐
driving a vehicle	☐	☐			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	☐	☐	gamma, x-rays	☐	☐
ultraviolet	☐	☐	beta particles	☐	☐
infra red	☐	☐	nuclear particles	☐	☐
laser	☐	☐			
radio frequency	☐	☐			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	☐	☐	microbiological materials	☐	☐
allergens	☐	☐	potential biological allergens	☐	☐
cytotoxics	☐	☐	laboratory animals or insects	☐	☐
mutagens/teratogens/ carcinogens	☐	☐	clinical specimens, including blood	☐	☐
pesticides / herbicides	☐	☐	genetically-manipulated specimens	☐	☐
			immunisations	☐	☐

OTHER POTENTIAL HAZARDS (please specify):

Supervisor/Delegate Name:	*Professor Nerilie Abram*	Date:	*August 2021*