

### Australian National University

# **Position Description**

College/Division:	ANU College of Science (COS)
Faculty/School/Centre:	Research School of Earth Sciences (RSES)
Department/Unit:	Climate & Fluid Physics
Position Title:	Research Fellow
Classification:	Academic Level B
Position No:	
Responsible to:	Group Leader, Climate & Fluid Physics
Number of positions that report to this role:	
Delegation(s) Assigned:	

### PURPOSE STATEMENT:

The Climate & Fluid Physics group at the Research School of Earth Sciences conducts groundbreaking research into the dynamics and thermodynamics of the ocean, atmosphere, cryosphere and land surface. Our current research profile includes the fluid mechanics of basal melting of the Antarctic ice sheet, the development of Australia's next high-resolution global ocean-sea ice model (ACCESS-OM2) and thermodynamic approaches that integrate water cycle observations and modelling across land and ocean domains.

The Research Fellow will contributed to the research and research training within the Climate & Fluid Physics as well as research-led teaching within the Earth and Marine Science and/or Physics undergraduate programs.

### KEY ACCOUNTABILITY AREAS:

### **Position Dimension & Relationships:**

The Research Fellow will report directly to the Group Leader of the Climate & Fluid Physics group. They will work with academic and technical staff to (i) forge new research and capability areas, (ii) build a cohort of Australian and international research partners and (iii) contribute to the effective operation and successful enterprise of the Research School of Earth Sciences.

### Role Statement:

Under broad direction of the Group Leader, Climate & Fluid Physics, the Fellow will:

- 1. Undertake independent research in the area of Climate & Fluid Physics 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.
- 2. Actively seek and secure external funding including the preparation and submission of research proposals to external funding bodies.
- 3. Contribution to the teaching activities of the School in Climate & Fluid Physics and Earth Science at the undergraduate and graduate levels. This includes, but is not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations with students, acting as subject coordinators and the initiation and development of course/subject material.
- 4. Supervise and mentor students working on individual or group projects at undergraduate, honours, graduatecoursework levels.
- 5. Supervise less senior academic staff and research support staff in your research area.
- 6. Promote research and teaching links across ANU in the areas of fluids mechanics, ocean and climate science.
- 7. Actively contribute to all aspects of the operation of the School
- 8. Maintain high academic standards in all education, research and administrative endeavours
- 9. Comply with all ANU policies and procedures and in particular those relating to work health and safety and equal opportunity.
- 10. Undertake other duties as required, consistent with the classification of the position.

#### Skill Base

A Level B Academic will normally have completed a relevant doctoral qualification or have equivalent qualifications or research experience.

In addition he/she may be expected to have had post-doctoral research experience that has resulted in publications, conference papers, reports or professional or technical contributions that give evidence of research ability.

#### **SELECTION CRITERIA:**

- 1. A PhD in fluid mechanics, physical oceanography, climate science, geophysical fluid dynamics or other relevant field, such as physics or mathematics as evidenced by publications in peer-reviewed journals and presentations at conferences, a record of developing and maintaining collaborations and by other measures such as awards, invitations to give talks at leading conferences etc.
- 2. Evidence of the ability to articulate and prosecute innovative research in a field related to fluid mechanics of Earth Sciences and a vision for the activities they will undertake at the ANU.
- 3. An ability and commitment to win bids for competitive external funding to support individual and collaborative research activities.
- 4. The ability to supervise and graduate high quality PhD/Masters research students.
- 5. Ability and willingness to teach at all levels, including the adoption of new teaching technologies.
- 6. 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 environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- 7. The ability to work as part of a team and to deadlines and to coordinate some team activities.
- 8. A demonstrated understanding of equal opportunity principles and a commitment to their application in a university context.

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

References:	
General Staff Classification Descriptors	
Academic Minimum Standards	



## Pre-Employment Work Environment Report

Position Details						
College/Div/Centre	COS	Dept/School/Section	RSES			
Position Title	Research Fellow	Classification	Academic Level B			
Position No.		Reference No.				

## In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.

- This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment issues prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate see . http://info.anu.edu.au/hr/OHS/\_\_Health\_Surveillance\_Program/index.asp Enrolment on relevant OHS training courses should also be arranged see http://info.anu.edu.au/hr/Training\_and\_Development/OHS\_Training/index.asp
- '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 either as a <b>regular</b> or <b>occ</b>	e duties assoc <b>asional</b> part c	ciated with appo of the duties.	intment will result in exposure to any	of the following	potential hazards,
TASK	regular	occasional	TASK	regular	occasional
key boarding	$\boxtimes$		laboratory work		
lifting, manual handling			work at heights		
repetitive manual tasks			work in confined spaces		
catering / food preparation			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			<b>BIOLOGICAL MATERIALS</b>		
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's	Print Name:	Date:	
Signature:			



Australian National University

# **Position Description**

College/Division:	ANU College of Science (COS)
Faculty/School/Centre:	Research School of Earth Sciences (RSES)
Department/Unit:	Climate & Fluid Physics
Position Title:	Fellow
Classification:	Academic Level C
Position No:	
Responsible to:	Group Leader, Climate & Fluid Physics
Number of positions that report to this role:	
Delegation(s) Assigned:	

### PURPOSE STATEMENT:

The Climate & Fluid Physics group at the Research School of Earth Sciences conducts groundbreaking research into the dynamics and thermodynamics of the ocean, atmosphere, cryosphere and land surface. Our current research profile includes the fluid mechanics of basal melting of the Antarctic ice sheet, the development of Australia's next high-resolution global ocean-sea ice model (ACCESS-OM2) and thermodynamic approaches that integrate water cycle observations and modelling across land and ocean domains.

The Fellow will contributed to the research and research training within the Climate & Fluid Physics as well as research-led teaching within the Earth and Marine Science and/or Physics undergraduate programs.

### KEY ACCOUNTABILITY AREAS:

### **Position Dimension & Relationships:**

The Fellow will report directly to the Group Leader of the Climate & Fluid Physics group. They will work with academic and technical staff to (i) forge new research and capability areas, (ii) build a cohort of Australian and international research partners and (iii) contribute to the effective operation and successful enterprise of the Research School of Earth Sciences.

### Role Statement:

Under broad direction of the Group Leader, Climate & Fluid Physics, the Fellow will:

- 1. Undertake independent research in the area of Climate & Fluid Physics 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.
- 2. Actively seek and secure external funding including the preparation and submission of research proposals to external funding bodies.
- 3. Make a strong contribution to the teaching activities of the School in Climate & Fluid Physics and Earth System Science at the undergraduate and graduate levels. This includes, but is not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations with students, acting as subject coordinators and the initiation and development of course/subject material and actively lead overall curriculum development in the discipline.
- 4. Supervise and mentor students working on individual or group projects at undergraduate, honours, graduatecoursework levels.
- 5. Promote research and teaching links across ANU in the areas of fluids mechanics, ocean and climate science.
- 6. Lead, supervise and develop less senior academic staff and research support staff in your research area.
- 7. Proactively contribute to all aspects of the operation of the School and College. This may include representation through committee memberships.
- 8. Maintain and actively promote high academic standards in all education, research and administrative endeavours.

- 9. Comply with all ANU policies and procedures and in particular those relating to work health and safety and equal opportunity.
- 10. Undertake other duties as required, consistent with the classification of the position.

#### Skill Base

A Level C Academic will normally have a relevant doctoral qualification or equivalent accreditation and standing together with subsequent research experience.

A position at this level will require a demonstrated strong record of publications, conference papers, reports and/or professional and/or technical contributions in the relevant discipline area.

### **SELECTION CRITERIA:**

- 1. A PhD in fluid mechanics, physical oceanography, climate science, geophysical fluid dynamics or other relevant field, such as physics or mathematics; with a strong track record of independent research in the field of Earth Sciences as evidenced by cited publications in peer-reviewed journals and presentations at conferences, a record of developing and maintaining collaborations and by other measures such as awards, invitations to give talks at leading conferences etc.
- 2. A track record of articulating and prosecuting innovative research in the field of fluid mechanics of Earth system and a vision for the activities they will undertake at the ANU.
- 3. A record of winning bids for competitive external funding to support individual and collaborative research activities.
- 4. A track record of successfully supervising and graduating high quality PhD/Masters research students.
- 5. Evidence of effective teaching at all levels and the ability to contribute to setting the education agenda of the School in the area of Earth Sciences.
- 6. Demonstrated ability to lead and work as part of a team and to meet deadlines.
- 7. 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 environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- 8. A demonstrated understanding of equal opportunity principles and a commitment to their application in a university context.

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

References:
General Staff Classification Descriptors
Academic Minimum Standards



**Pre-Employment Work Environment Report** 

Position Details			
College/Div/Centre	COS	Dept/School/Section	RSES
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- '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	$\boxtimes$		laboratory work		
lifting, manual handling			work at heights		
repetitive manual tasks			work in confined spaces		
catering / food preparation			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			<b>BIOLOGICAL MATERIALS</b>		
hazardous substances			microbiological materials		
allergens			potential biological allergens		
cytotoxics			laboratory animals or insects		
mutagens/teratogens/			clinical specimens, including		
carcinogens			blood		
pesticides / herbicides			genetically-manipulated specimens		
			immunisations		
OTHER POTENTIAL HAZAR	DS (please s	pecify):	· ·		

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Supervisor's	Print Name:	Date:	
Signature:			