



## Position Description

<b>College/Division:</b>	ANU College of Science
<b>Faculty/School/Centre:</b>	Research School of Earth Sciences
<b>Department/Unit:</b>	Institute for Water Futures
<b>Position Title:</b>	Research Fellow / Fellow
<b>Classification:</b>	Academic Level B or Academic Level C
<b>Position No:</b>	TBC
<b>Responsible to:</b>	Associate Professor Paul Tregoning (RSES) and Associate Professor Lorrae Van Kerkhoff
<b>Number of positions that report to this role:</b>	
<b>Delegation(s) Assigned:</b>	

### PURPOSE STATEMENT:

The Australian National University (ANU) made a major and on-going investment in water research through its National Institute Grant to establish the Institute for Water Futures (IWF). The IWF brings together researchers in 10 water-related positions from across sciences, social sciences, humanities and public policy within the ANU and has established research partnerships with state and federal water agencies, such as Commonwealth Scientific and Industrial Research Organisation (CSIRO), Murray Darling Basin Authority (MDBA), and other research organisations. The IWF mission is to support sustainable water futures and to identify transformative, innovative and robust strategies to resolve the water challenges of today and tomorrow.

This position is located in the Research School of Earth Sciences.

The Research Fellow/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 appointee's research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Research Fellow/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.

### POSITION DIMENSION AND RELATIONSHIPS:

The Research Fellow / Fellow will be a member of the Institute for Water Futures working within the Research School of Earth Sciences, accountable to Associate Professor Paul Tregoning and Director of the Institute of Water Futures, Associate Professor Lorrae Van Kerkhoff. The Research Fellow / 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 or Level C the Research Fellow / Fellow is expected to:

1. Undertake independent research in the area of assimilation of remote sensing data to generate new knowledge related to mass change and water resources on Earth 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. Contribute to the teaching activities of the School 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 students working on individual or group projects at undergraduate, honours and graduate-coursework levels. Supervise higher degree research students.
5. Supervise Postdoctoral Fellows and research support staff in your research area.

6. Actively contribute to all aspects of the operation of the School. This may include representation through committee memberships.
7. Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
8. Maintain high academic standards in all education, research and administration endeavours.
9. Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
10. Show a demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
11. Undertake other duties as required that are consistent with the classification of the position.

## **Skill Base**

### **Academic Level B:**

A Level B academic will undertake independent teaching and 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.

### **Academic Level C:**

A Level C academic will make a significant contribution to the discipline at the national level. In research and/or scholarship and/or teaching they will make original contributions, which expand knowledge or practice in their discipline.

A Level C academic will normally make a significant contribution to research and/or scholarship and/or teaching and administration activities of an organisational unit or an interdisciplinary area at undergraduate, honours and postgraduate level. The academic will normally play a major role or provide a significant degree of leadership in scholarly, research and/or professional activities relevant to the profession, discipline and/or community and may be required to perform the full academic responsibilities of and related administration for the coordination of a large award program or a number of smaller award programs of the institution.

## SELECTION CRITERIA

### Academic Level B:

1. A PhD in Geodesy or Geophysics or a related area, with a track record of independent research in the field of Geophysics as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations and by other measures such as awards, and invitations to present at conferences.
2. Evidence of the ability to articulate and prosecute innovative research in areas such as; analysis of data from space-gravity and/or soil moisture missions (GRACE/GRACE Follow-On, SMOS, SMAP etc), assimilation of observational data into complex Earth systems models, development of numerical models to represent geophysical processes on Earth and a vision for the activities they will undertake at the ANU.
3. A demonstrated ability and commitment to apply for competitive external funding to support individual and collaborative research activities.
4. Evidence of an ability and willingness to teach at all levels.
5. An ability to supervise and graduate high quality PhD/Masters research students.
6. The demonstrated ability to work as part of a team, contributing to team management and a demonstrated ability 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 academic 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 policies and a commitment to their application in a university context.

### Academic Level C:

9. A PhD in Geodesy or Geophysics or a related area, with a track record of independent research in the field of Geophysics as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations and by other measures such as awards, and invitations to present at conferences.
10. A track record of articulating and prosecuting innovative research in areas of; analysis of data from space-gravity and/or soil moisture missions (GRACE/GRACE Follow-On, SMOS, SMAP etc), assimilation of observational data into complex Earth systems models, development of numerical models to represent geophysical processes on Earth and a vision for the activities they will undertake at the ANU.
11. A record of winning bids for competitive external funding to support individual and collaborative research activities.
12. Evidence of effective teaching at all levels and of the ability to contribute to setting the education agenda of the School in the area of geodesy, climate change and water resources.
13. A track record of successfully supervising and graduating high quality PhD/Masters research students.
14. Demonstrated ability to lead and work as part of a team, significantly contributing to team management and a demonstrated ability to meet deadlines.
15. 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.
16. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

### Background Checking:

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.

<b>Delegate Signature:</b>		<b>Date:</b>	April 2020
Printed Name:	Professor Paul Tregoning	<b>Position:</b>	

### References:

[Academic Minimum Standards](#)

# Pre-Employment Work Environment Report

## Position Details

<b>College/Div/Centre</b>	College of Science	<b>Dept/School/Section</b>	Research School of Earth Sciences
<b>Position Title</b>	Research Fellow / Fellow	<b>Classification</b>	Academic Level B / C
<b>Position No.</b>	TBC	<b>Reference No.</b>	

*In accordance with the Work Health and Safety Act 2011 (Cth) the University has a duty to provide a safe workplace.*

- This form must be completed by the Supervisor of the advertised position and forwarded with the job requisition to Recruitment and Appointments Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment hazards 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 [Health Surveillance Procedure](#)
- Enrolment on relevant Work, Health and Safety (WHS) training courses should also be arranged – see [WHS Training & Induction](#)
- Consideration should be given as to whether 'Regular' hazards identified below should be listed as 'Essential' in the Selection Criteria

## Potential Hazards

<ul style="list-style-type: none"> <li>• Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a <b>regular</b> or <b>occasional</b> part of the duties.</li> </ul>					
<b>TASK</b>	<b>regular</b>	<b>occasional</b>	<b>TASK</b>	<b>regular</b>	<b>occasional</b>
keyboarding	<input checked="" type="checkbox"/>	<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"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
<b>NON-IONIZING RADIATION</b>			<b>IONIZING RADIATION</b>		
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"/>			
<b>CHEMICALS</b>			<b>BIOLOGICAL MATERIALS</b>		
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"/>
<b>OTHER POTENTIAL HAZARDS (please specify):</b>					

<b>Supervisor's Signature:</b>		<b>Print Name:</b>	Paul Tregoning	<b>Date:</b>	April 2020
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