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| Description: ANU_LOGO_mono black_FA.jpg | **Position Description** |

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| **College/Division:** | ANU College of Science |
| **Faculty/School/Centre:** | Research School for Earth Sciences |
| **Department/Unit:** | Earth Dynamics |
| **Position Title:** | Postdoctoral Fellow / Research Fellow |
| **Classification:** | Academic Level A or Academic Level B |
| **Position No:** | TBC |
| **Responsible to:** | Dr Paul Tregoning (RSES) |
| **Number of positions that report to this role:** | 0 |
| **Delegation(s) Assigned:** |  |

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| **PURPOSE STATEMENT:**  The ANU College of Science (CoS) comprises: the Research School of Astronomy and Astrophysics, the Research School of Biology, the Research School of Chemistry, the Research School of Earth Science, the Fenner School of Environment and Society, the Mathematical Sciences Institute, the Research School of Physics and Engineering, and the Centre for the Public Awareness of Science.  Staff and students within the ANU College of Science conduct research and delivers a research-led education program that encompasses the entire breadth of the sciences, supported by extensive international networks and by world-class facilities.  The College has a strong tradition of research excellence that has fostered distinguished Nobel Laureates and Kyoto Prize winners and that trains scientific leaders in disciplines in which the ANU is consistently ranked in the top twenty in the world.  The Research School of Earth Sciences is a leading centre of geodetic research in Australia. Researchers have a tradition of excellence in addressing the world’s most pressing climate and natural hazard issues, including global and sea level variations, changes in water resources, mass balance changes of polar ice sheets and seismic hazards in active tectonic regions.  This position is located in the Research School of Earth Sciences  Funding is available through a contract with Geoscience Australia to monitor and quantify changes in groundwater in the Great Artesian Basin aquifer system through the use of remotely sensed data of the Gravity Recovery and Climate Experiment (GRACE) mission. The researcher will be involved in analysing total water storage changes and investigating methods to extract groundwater signals from total water storage changes.  **POSITION DIMENSION AND RELATIONSHIPS:**  The Postdoctoral Fellow will be a member of Research School of Earth Sciences, accountable to the Head, Earth Dynamics 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 within 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/B the Postdoctoral Fellow/Research Fellow is expected to:   1. Undertake independent research in the area of satellite geodesy to generate new knowledge related to mass change and water resources across the Great Artesian Basin in northern Australia. 2. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. 3. Actively contribute to all aspects of the operation of the School. This may include representation through committee memberships. 4. Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public. 5. Maintain high academic standards in all education, research and administration endeavours. 6. 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. 7. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context. 8. Other duties as required that are consistent with the classification of the position.   **Skill Base**  **Academic Level A:**  A Level A academic will work with the support and guidance from more senior academic staff and is expected to develop their expertise in teaching and research with an increasing degree of autonomy. In research and/or scholarship and/or teaching a Level A academic will make some contribution through professional practice and expertise in conjunction with the activities of other staff, as appropriate to the discipline.  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 academic will normally undertake administration primarily relating to their activities at the institution.  **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. |

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| **SELECTION CRITERIA**  **Academic Level A:**   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. 2. Evidence of the ability to articulate and prosecute innovative research in areas of; analysis of Level-1B data from the GRACE/GRACE follow-On mission, satellite orbit modelling, assimilation of data from different sources, development of numerical models to represent geophysical processes on Earth. 3. An ability to supervise and graduate high-quality Honours/Masters research students. 4. The demonstrated ability to work as part of a team, contributing to team management and a demonstrated ability to meet deadlines. 5. 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. 6. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.   **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 of; analysis of Level-1B data from the GRACE/GRACE follow-On mission, satellite orbit modelling, assimilation of data from different sources, 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. | | | |
| **Delegate Signature:** |  | **Date:** | 15/10/2019 |
| Printed Name: | Dr Paul Tregoning | **Position:** | Senior Fellow |

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| **References:** |
| [Academic Minimum Standards](http://info.anu.edu.au/hr/Salaries_and_Conditions/Enterprise_Agreement/2010-2012/Schedule_4) |

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|  | **Pre-Employment Work Environment Report** |

# Position Details

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

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

1. 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.
2. This form is used to advise potential applicants of work environment hazards prior to application.
3. 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](https://policies.anu.edu.au/ppl/document/ANUP_000504)
4. Enrolment on relevant Work, Health and Safety (WHS) training courses should also be arranged – see [WHS Training & Induction](http://hr.anu.edu.au/staff-health-and-wellbeing/ohs/training-and-induction)
5. Consideration should be given as to whether ‘Regular’ hazards identified below should be listed as ‘Essential’ in the Selection Criteria

# Potential Hazards

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| 1. 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** |
| keyboarding |  |  |  |  | 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** |  |  |  |  | **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):** | | | | | | | | |

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| **Supervisor’s Signature:** |  | **Print Name:** | Dr Paul Tregoning | **Date:** | 15/10/2019 |