Climate Research Fellow in Natural Hazards Research/Climate Science

College/Division	College of Sciences & Engineering
School/Section	School of Geography, Planning, and Spatial Sciences, Climate Futures research group
Location	Hobart
Classification	Academic Level B
Reporting line	Director Climate Futures

Position Summary

The University of Tasmania is building a vision of a place-based University with a mission to enhance the intellectual, economic, social and culture future of Tasmania, and from Tasmania, contribute to the world in areas of distinctive advantage. The University recognises that achieving this vision is dependent on the people we employ as well as creating a people-centred University that is values-based, relational, diverse, and development-focused.

The Climate Futures research group in the School of Geography, Planning, and Spatial Sciences, a part of the College of Sciences and Engineering, is undertaking a project to deliver a natural hazards climate atlas for Tasmania. This project, funded by the Australian Government National Emergency Management Agency Disaster Ready Fund, will engage with a diverse range of stakeholders across Tasmanian state and local government, industry and community organisations to produce an atlas of the current and future climate of Tasmania that is relevant to the climate change impact assessment and adaptation needs of the community. We are seeking to appoint a **Climate Research Fellow (Level B) in Natural Hazards Research/Climate Science** to conduct research into weather and climate related natural hazards affecting Tasmania, analyse the outputs of regional climate models, and deliver research findings in formats accessible to stakeholders. This position is integral to our collaborative approach, working closely with industry and government stakeholders to produce targeted regional climate projections, investigate climate change processes and impacts, and identify adaptation options.

As a member of our research group, incumbents will contribute to research on assessing the impacts of climate change on human and natural systems, biodiversity, and natural hazards, such as bushfires, storms, temperature and rainfall extremes, and flooding. Key responsibilities include developing translational products for stakeholders and facilitating collaborative relationships across a diverse project portfolio.

Climate Futures is dedicated to delivering high-resolution climate projections derived from regional climate modelling for multiple emissions scenarios. Our work aligns with recommendations from the Royal Commission into National Natural Disaster Arrangements, the Tasmanian Disaster Resilience Strategy 2020–2025, and the Tasmanian Climate Change Action Plan 2023-25. We collaborate with government departments, interjurisdictional and Commonwealth agencies, universities, and science organizations, including the National Partnership for Climate Projections, the Cross Jurisdictional Community of Practice (Climate Science), and the Australian Climate Service. Our team benefits from in-house high-performance computing infrastructure and access to National Computational Infrastructure, supporting our research endeavours. Join us in making meaningful contributions to climate science and enhancing climate resilience for Tasmania and beyond.

We are an inclusive workplace committed to 'working from the strength that diversity brings' reflected in our Statement of Values. We are dedicated to attracting, retaining and developing our people and are committed to inclusive principles. We celebrate the range of diverse assets that gender identity, ethnicity, sexual orientation, disability, age and life course bring. Applications are encouraged from all sectors of the community. **Tell us how we can make this job work for you.**

What You'll Do

- Conduct research into weather and climate related natural hazards processes relevant to Tasmania and their projected changes under different future climate scenarios, including observational data analysis, modelling methods and statistical analysis.
- Engage with stakeholders and end users in Tasmanian government and industry on their exposure to weather and climate related natural hazards to guide research objectives.
- Translate research findings into accessible information tailored to end user climate change impact assessment and adaptation needs.
- Contribute to the development of scientific papers, technical reports, factsheets, and other interactive communication pieces.
- Contribute to the development and maintenance of productive and effective links inside the University and locally and nationally with the discipline, relevant interdisciplinary domains, profession, industry and/or wider community.
- Deliver research outcomes and contribute to project reporting tasks in a timely manner and to the required standard.
- Undertake high-quality research of national and increasingly of international standing and publish research findings in order to meet the University's research performance expectations for Level B. We expect more initiative and innovation from the incumbent in the Level B, particularly with respect to identifying research needs and developing solutions for stakeholders.
- Provide support for data management and computer system administration.
- Make an effective and sustained contribution to the University in achieving its strategic objectives and fulfilling its operational responsibilities.
- Undertake other duties as assigned by the supervisor.

What We're Looking For (success criteria)

- A PhD or equivalent in climate science, geospatial science, hydrology, mathematics, physics or similar.
- A good record of, and continuing commitment to, research that has achieved national recognition and made worthwhile contributions to their relevant field of expertise, demonstrated by a record of quality publications, presentations at conferences and preferably success in securing external competitive and other funding.
- A record of contributing to building and maintaining effective and productive links locally and nationally with the discipline, profession, industry (where relevant) and wider community.
- Professional experience relevant to the position.
- Demonstrated knowledge and contemporary technical expertise in quantitative climate science.
- Proficiency in mathematical and statistical methods for developing and implementing numerical models, analysing data, and interpreting results.
- Proficiency in programming in Python, R, Matlab or similar demonstrating software best practices including version control and documentation.
- Proficiency with GIS tools and methods.
- Ability to produce high quality visualisations of complex datasets and analytical outputs.
- Experience working in Linux environment.
- Proficiency in processing and analysis of large volume climate datasets with experience in netCDF including netCDF APIs and operating tools such as NCO and CDO.
- Experience in validation, bias-adjustment and statistical downscaling of regional climate model outputs.
- Experience in high performance computing (HPC) environments and parallel programming.
- Experience in developing and/or running regional and/or global climate models including dynamical downscaling methods.
- Track record of publication in high-quality peer reviewed journals and conferences in the targeted fields of expertise.
- Demonstrated ability to work in a team environment, to engage with multiple stakeholders and build collaborative networks.
- Demonstrated ability to manage and deliver projects on time and to the required standard.
- Demonstrated ability to conduct research of a high standard, present research at national and
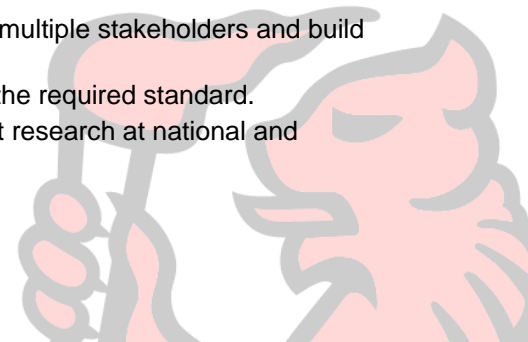
international conferences and publish in peer reviewed scientific journals.

- Demonstrated ability to work collaboratively in a research team and achieve collective as well as individual outcomes.
- A high level of written and oral science communication skills suited for science specialist and generalist user groups.

Other position requirements *(delete those not applicable)*

- Intrastate/ interstate/ international travel

University of Tasmania

The University of Tasmania is an institution with an enduring commitment to our state and community, and a strong global outlook. We are committed to enhancing the intellectual, economic, social and cultural future of Tasmania. Our Strategic Direction strongly reflects the University community's voice that our University must be place based but globally connected as well as regionally networked and designed to deliver quality access to higher education for the whole State.

We believe that from our unique position here in Tasmania we can impact the world through the contributions of our staff, students and graduates. We recognise that achieving this vision is dependent on the people we employ, as well as creating a university that is values-based, relational, diverse, and development-focused.

Check out more here:

https://www.utas.edu.au/jobs

https://www.utas.edu.au/careers/our-people-values-and-behaviours

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The intention of this position description is to highlight the most important aspects, rather than to limit the scope or accountabilities of this role. Duties above may be altered in accordance with the changing requirements of the position.