

Research Associate in Marine Heatwaves

College/Division	CoSE
School/Section	Institute for Marine and Antarctic Studies / Oceans and Cryosphere Centre
Location	Hobart
Classification	Level A or B
Reporting line	Reports to Lead Research for ARC Coe Climate Extremes (CLEX)

Position Summary

We are seeking to appoint a Research Associate or Research Fellow (Level A or Level B) in Marine Heatwaves in the <u>Institute for Marine and Antarctic Studies</u>, within the <u>College of Sciences and Engineering</u> at the University of Tasmania.

This position is fully funded by the Australian Research Council's Centre of Excellence for Climate Extremes (CLEX) and the incumbent will contribute to and benefit from being a part of the CLEX community. The Centre's research agenda encompasses interconnected research programs focused on Weather and Climate Interactions, Drought, Detection and Attribution of Extreme Events and Ocean Extremes. CLEX is a major seven-year initiative funded by the Australian Research Council. The Centre is led by UNSW Sydney and partners with Monash University, The University of Melbourne, The Australian National University and the University of Tasmania alongside a suite of national and international partner organisations. Climate extremes are the confluence of high impact weather and climate variability. 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 program and will collaborate with senior and postdoctoral researchers in that team and other CLEX programs. The position will also contribute to the CLEX Ocean Modelling team. 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. Additionally, CLEX will support the Research Associate in how best to engage beyond academia.

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.

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

- Work within the CLEX Ocean Extremes Program to develop frameworks to understand marine heatwave processes and predictability, with a focus on Lagrangian methods.
- Apply Lagrangian and Eulerian approaches to analyse ACCESS-OM eddy-resolving (0.1° resolution) global model simulations, as well as other models and observational data sets, to identify key marine heatwave processes and their predictability.
- Work collaboratively with staff at other CLEX nodes (Universities) and partner organisations, and visit when possible, to answer important questions around marine heatwave processes and



predictability.

- Contribute to the research excellence of CLEX and UTAS through the publication of research findings in high-impact international journals and co-supervision of higher degree research students.
- With the support of the Centre's Knowledge Brokerage Team, the successful candidate will communicate relevant aspects of the research undertaken to stakeholders outside academia (e.g. through briefing notes, briefings to government, presentations at industry conferences, etc.).
- Undertake other duties as assigned by the supervisor.

What We're Looking For (success criteria)

Level A

- A PhD or equivalent in fluid dynamics, physical oceanography, atmospheric science, applied mathematics or an equivalent field.
- Demonstrable knowledge of climate processes (atmosphere/ocean physics or dynamics)
- Experience in using and/or analysing climate or ocean models.
- Programming experience in python, MATLAB, or other high-level language.
- Willingness to engage with stakeholders outside academia (e.g. Government agencies, private businesses, NGOs, schools).
- Evidence of research that has produced high-quality publications and presentations at conferences.
- Capacity to work effectively both independently and in a team, as well as with colleagues at other CLEX nodes and partner organisations.
- Commitment to equity and diversity principles and to contributing to an inclusive culture in the workplace.

In addition to above, for Level B, the success criteria includes

- Demonstrated ability in successfully supervising postgraduate and honours students.
- Demonstrated ability to carry out independent research and develop innovative concepts and ideas to further advance scientific understanding.
- Evidence of success in securing research project funding.

Other position requirements

- Due to current travel restrictions and visa processing times, the successful applicant must have the rights to live and work in Australia.
- Regular interstate/international travel (travel restrictions permitting).
- Willingness to undertake a medical assessment based on meeting the inherent position requirements.

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 <u>Strategic Direction</u> 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

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.

