

Lecturer in Physical Oceanography (Marine Heatwaves) Level B

College/Division	College of Sciences and Engineering
School/Section	Institute for Marine and Antarctic Studies – Oceans and Cryosphere
Location	Hobart
Classification	Academic Level B
Term	3 years
Reporting line	Reports to Lead IMAS/UTAS Researcher in the Oceans and Coasts (Connecting across scales) Theme of the National Environmental Science Program (NESP) Climate Systems Hub

Position Summary

We are seeking to appoint a Lecturer in Physical Oceanography (Level B) with experience and/or expertise in marine heatwaves research. The appointee will be employed within the Institute for Marine and Antarctic Studies (IMAS), which is part of the College of Sciences and Engineering (COSE) at the University of Tasmania.

The University of Tasmania (UTAS) is building a vision of a place-based University with a mission to enhance the intellectual, economic, social and cultural future of Tasmania. From Tasmania, we 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.

IMAS is an internationally recognised centre of excellence for marine and Antarctic research and education. Our vision is to develop environmental understanding and facilitate sustainable development for the benefit of industry, governments and communities in Tasmania, Australia and the world. IMAS has three core areas of research focus, in fisheries and aquaculture, ecology and biodiversity, and oceans and cryosphere.

IMAS/UTAS is a funded partner organisation in the successful National Environmental Science Program Climate Systems Hub, funded until June 2027 by the Australian Government Department of Agriculture, Water and the Environment. UTAS is one of five (5) universities, joining with CSIRO and the Bureau of Meteorology to form the hub.

The Australian Government National Environmental Science Program (NESP) <u>Climate Systems</u> <u>Hub</u>, through our partner universities, is seeking postdoctoral researchers with a strong interest in addressing Australia's climate science challenges and climate adaptation needs. The hub was established in 2021 and will conduct research activity until 2026. The hub aims to help shape national climate resilience by building a climate research program with practical on-ground results, integrated across broader Australian risk and resilience capabilities. The hub provides an opportunity to further develop Australia's climate science capability while working directly with adaptation practitioners. It will drive and undertake coordinated climate change and adaptation research across all four of the new NESP hubs through the cross-cutting Climate Adaptation Initiative. This initiative will enable integrated adaptation research across the program to support evidence-based decision-making and improve Australia's climate resilience. Hub postdoctoral researchers will engage in co-design with federal, state and territory stakeholders that fosters development of project outputs and outcomes to meet Australian needs addressing climate science and adaptation challenges. Climate change is here now and environmental challenges will continue for the foreseeable future. Individual projects will be developed in conjunction with some of



Australia's leading climate researchers.

This academic position will comprise 50% research and 50% teaching+service contributions. The research component is funded by the NESP Climate Systems Hub to contribute to meeting contractual milestones in the Oceans and Coasts project. NESP research is co-designed with the Australian government to deliver pathway to impact for the benefit of sustainable goals and society. The appointee will work to progress understanding of marine heatwaves around Australia, marine heatwave projections under climate change, and their risks to ecology and society. The appointee will contribute to, and benefit from, being a part of the nation-wide NESP community, collaborating with senior and postdoctoral researchers in NESP and more broadly across IMAS/UTAS and partner programs. Through the teaching+service component of the position, the appointee will contribute to the IMAS Oceans and Cryosphere Centre's undergraduate and postgraduate training programs, assist with efficient Centre operation, and will gain broad experience in a full academic position. IMAS provides a supportive and enriching workplace for its staff and students through its strong commitment to equity, diversity and inclusion, and wellbeing initiatives.

The position will contribute to IMAS's ambition to further develop its reputation for world-class research in marine and Antarctic science. The successful candidate will undertake research in this highly interdisciplinary area, guided by co-design, building on existing strengths in IMAS in climate science, oceanography and biogeochemistry, new technologies and emerging datasets. The successful candidate is expected to explore opportunities and apply for relevant competitive research grants, publish their findings in high-profile international peer-reviewed journals and work with NESP knowledge brokers to better engage with, and communicate the findings to the Australian government, NESP stakeholders and the broader community.

The appointee will be encouraged to recruit and co-supervise higher-degree research students at IMAS in marine heatwaves research and collaborate with leading scientists and research organisations both domestically and internationally. IMAS has outstanding national and international connections, including CSIRO Oceans and Atmosphere, the Australian Antarctic Program Partnership (AAPP), the ARC Australian Centre for Excellence in Antarctic Science (ACEAS), ARC Centre of Excellence for Climate Extremes (CLEX), the NESP Marine and Coastal Hub, the Australian Antarctic Division, and the Consortium for Ocean-Sea Ice Modelling in Australia (COSIMA).

Across the University and IMAS's key external partners of CSIRO and the Australian Antarctic Division (AAD), Hobart's marine and Antarctic research community numbers ~1,000 staff. This critical mass and the strong collaboration across the University, CSIRO and AAD makes Hobart, and UTAS, a compelling destination for cutting edge marine and climate science in temperate and Antarctic environments. CSIRO has field-leading observational and modelling expertise spanning climate, carbon, cryosphere and ecosystems.

The appointee will contribute to the development and teaching of undergraduate and postgraduate units at UTAS on physical oceanography and climate science. Enthusiasm for service roles and developing leadership are encouraged.

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

- Make an effective and sustained contribution to the University in achieving its strategic objectives and fulfilling its operational responsibilities.
- Work within the NESP Climate Systems Hub Oceans and Coasts Project, guided by codesign with the Australian government, to progress understanding of marine heatwaves and future climate change projections, marine heatwave connections between the open ocean and coastal regions, and risks to ecology and society.
- Undertake high-quality research of national and increasingly of international standing, apply for external competitive and other funding, publish research findings and contribute to the successful supervision of Honours and research higher degree students, in order to meet and regularly exceed the University's research performance expectations for your appointment level.
- Undertake scholarly undergraduate and/or postgraduate coursework teaching of a high quality.
- Contribute to the coordination of IMAS teaching and postgraduate training through roles such as unit coordinator or graduate research coordinator.
- Work collaboratively with other staff at UTAS, in the NESP Climate Systems Hub, and with other NESP hubs and partner organisations.
- 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.
- With the support of the NESP 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.).
- Contribute to University service.
- Undertake other duties as assigned by the line manager.

What We're Looking For (success criteria)

- A PhD or equivalent in fluid dynamics, physical oceanography, atmospheric science, applied mathematics or an equivalent field.
- Demonstrable knowledge of climate processes, particularly atmosphere/ocean dynamics.
- Experience in analysing large datasets and/or model outputs to develop understanding of ocean or climate variability and related physical processes.
- A strong record in, and continuing commitment to, research that has achieved national and preferably international recognition and made innovative contributions to the field, demonstrated by a record of high-quality publications, presentations at conferences and applications for external competitive funding.
- Commitment to undertake research that will contribute to meeting contractual milestones in the NESP Climate Systems Hub, related to connecting offshore marine heatwaves to the coast and environmental and societal risk.
- Involvement in supervision of Honours or research higher degree (PhD) students.



- Demonstrated involvement in University-level teaching and learning.
- Contribution to effective and productive links locally or nationally within the discipline, profession, industry (where relevant) and wider community.
- Capacity to work effectively both independently and in a team, as well as with colleagues at other NESP Climate System Hub nodes and partner organisations.
- Willingness to engage with stakeholders outside academia (e.g., Government agencies, private businesses, NGOs, schools).
- Commitment to conduct research within the <u>governance framework</u> of the University of Tasmania, including academic integrity, equity and diversity principles and to contributing to an inclusive culture in the workplace.

Other position requirements

- Intrastate/ interstate/ international travel (when and where possible).
- Willingness to work in the field if requested to do so.
- 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.

