

Research Associate, Level A/B Southern Ocean Physical Oceanography

College/Division College of Sciences and Engineering

School/Section Institute for Marine and Antarctic Studies: Oceans and Cryosphere

Location Hobart – Salamanca

Classification Academic Level A/B

Reports to Amelie Meyer & Pete Strutton: ARC Centre of Excellence for

Climate Extremes

Position Summary

We are seeking to appoint a 2 year postdoctoral research associate (level A or B) in the <u>Institute for Marine and Antarctic Studies (IMAS)</u>, as part of the <u>College of Sciences and Engineering (COSE)</u>.

This position is fully funded by the <u>Australian Research Council Centre of Excellence for Climate Extremes</u> (CLEX). The successful candidate will contribute to and benefit from being a part of the CLEX community. The CLEX interconnected research programs focus on Weather and Climate Interactions, Drought, Attribution and Risk and Ocean Extremes. The position will sit within the Ocean Extremes Research Program. CLEX is a major seven-year initiative funded by the Australian Research Council. The Centre is led by UNSW Sydney and partners with Monash, 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 with this position will focus on the latter. This position will be in collaboration with Research Fellows, Research Associates and collaborators from the CLEX Ocean Extremes research team and other CLEX programs. CLEX provides a supportive and enriching workplace for its staff and students through its strong commitment to equity, diversity and inclusion and wellbeing initiatives. CLEX will support the Research Associate in how best to engage beyond academia.

We seek a candidate with expertise and interest to explore the **impacts of Southern Ocean meanders on regional carbon and heat subduction**. Standing meanders are dynamical hotspots of the Antarctic Circumpolar Current system with enhance eddy activity, momentum transport, subduction, upwelling, and tracer transport. They are sites of increased interactions between surface and deep waters, impacting local air-sea interactions and biochemical cycles. This work can include but will not be limited to (1) trends in Southern Ocean meanders over the satellite record; (2) current and future meander trends in climate models (e.g., using ACCESS-OM2 with BGC); (3) impacts of meander trends on regional carbon and heat subduction rates; and (4) impacts of meander trends on nutrient fluxes. This position will commence in the first quarter of 2023 and is open to physical oceanographers used to working with large observational datasets or with high resolution global model outputs.

The University of Tasmania is building a vision of a place-based university with a mission to enhance the intellectual, economic, social, and cultural 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 in the CLEX Ocean Extremes Research Program to further our understanding of Southern Ocean dynamics and impacts on the climate system with an initial focus on standing meanders.
- Visit and work collaboratively with staff at other CLEX nodes (universities) and CLEX partner organisations to achieve key performance indicators of the ARC funding.
- Contribute to the research excellence of CLEX and UTAS, through publication in high-impact international journals and the co-supervision of higher degree research students.
- Communicate research to stakeholders outside academia, through briefing notes or meetings with government or industry with the support of the CLEX Knowledge Brokerage Team.
- Contribute to the CLEX culture through committee membership, early career researcher representation, and contributing to and leading workshops.
- Undertake other duties as assigned by the supervisor.

What we're looking for (selection criteria) Level A

- A PhD or equivalent in Physical Oceanography, Biogeochemistry, or an equivalent field.
- A strong understanding of Southern Ocean dynamics.
- Excellent written and oral communication skills including a track record of publishing in quality, peer reviewed journals, relative to opportunity.
- Demonstrate strong quantitative skills in the analysis and interpretation of complex ocean observational data or numerical simulations (e.g., using python, MATLAB, or similar programming languages).
- Demonstrated ability to work efficiently with minimum supervision and capacity to work well with colleagues at other CLEX nodes and partner organisations.
- Commitment to equity and diversity behaviours that contribute to an inclusive culture in the workplace.

Additionally for Level B

- Demonstrated ability to carry out independent research and develop innovative concepts to further advance scientific understanding.
- Demonstrated experience to engage with stakeholders outside academia (e.g., government, industry, and schools).
- Demonstrated ability in successfully supervising postgraduate students.

Other desirable criteria

• Willingness and ability to travel interstate and overseas.

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.

