RESEARCH FELLOW

DEPARTMENT/UNIT: School of Earth, Atmosphere and Environment

FACULTY/DIVISION: Faculty of Science

CLASSIFICATION: Level A

DESIGNATED CAMPUS OR LOCATION: Clayton campus

ORGANISATIONAL CONTEXT

At Monash, work feels different. There’s a sense of belonging, from contributing to something groundbreaking – a place where great things happen. You know you’re part of something special and purposeful because, like Monash, your ambitions drive you to make change.

We have a clear purpose to deliver ground-breaking intensive research; a world-class education; a global ecosystem of enterprise – and we activate these to address some of the challenges of the age, Climate Change, Thriving Communities and Geopolitical Security.

We welcome and value difference and diversity. When you come to work, you can be yourself, be a change-maker and develop your career in exciting ways with curious, energetic, inspiring and committed people and teams driven to make an impact – just like you.

Together with our commitment to academic freedom, you will have access to quality research facilities, infrastructure, world class teaching spaces, and international collaboration opportunities.

We champion an inclusive workplace culture for our staff regardless of ethnicity or cultural background. We have also worked to improve gender equality for more than 30 years. Join the pursuit of our purpose to build a better future for ourselves and our communities – #ChangeIt with us.

The five Schools of the Faculty of Science offer a large and diverse range of disciplines in undergraduate and postgraduate courses. Ten Schools from other university faculties contribute to science teaching at all levels, allowing students to choose their studies from physical, biological, biomedical, behavioural, environmental, mathematical and computer sciences. The Faculty of Science has a strong research reputation. The faculty’s research spans the theoretical to the applied, contributes to new knowledge and technologies, and challenges how we interact with the world. To learn more about the Faculty of Science, please visit our website: www.monash.edu/science/.
This position is fully funded by the Australian Research Council Centre of Excellence for the Weather of the 21st Century. The incumbent will contribute to and benefit from being a part of a supportive and vibrant Centre community which offers unparalleled networking and professional development opportunities.

The Centre is a major seven-year initiative funded by the Australian Research Council. It is a consortium of 24 partners led by Monash University in partnership with The University of Melbourne, The University of New South Wales, The Australian National University, and the University of Tasmania.

The Centre’s team-based research is focused on how Australia’s weather is being reshaped by climate change. The Centre conducts blue-sky research with real-world applications for communities, industry and government. The research program is made up of six integrated Centre Projects: Weather System Dynamics; Climate Variability and Weather Systems; Weather Systems in a Warmer World; Weather Resources; High-Impact Weather; and Modelling Science.

This position forms an integral part of the Centre Project: Weather Systems in a Warmer World.

**POSITION PURPOSE**

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

The Research Fellow (Level A) will investigate key oceanic and atmospheric processes and feedbacks that underpin the formation of the spatial pattern of projected anthropogenically induced surface warming. This also includes understanding the current discrepancy between observations, which have shown a strengthening zonal SST gradient across the Pacific, and climate models, which largely display a weakening zonal SST gradient across the Pacific. The work is envisaged to utilise a combination of numerical model simulations with different model configurations to investigate the atmospheric and/or ocean dynamics by which these sea surface temperature patterns are formed along with their impacts on weather systems.

**Reporting Line:** The position reports to an Associate Professor within the Centre

**Supervisory Responsibilities:** Not applicable

**Financial Delegation:** Not applicable

**Budgetary Responsibilities:** Not applicable

**KEY RESPONSIBILITIES**

Specific duties required of a Level A research-only academic may include:

1. The conduct of research as a member of a team and the production of conference and seminar papers and publications from that research

2. Involvement in professional activities including attendance at conferences and seminars in the field of expertise

3. Administrative functions primarily connected with their area of research

4. Contribute to the oversight of honours and postgraduate student projects within the staff member’s area of research

5. Attendance at meetings associated with research or the work of the Centre to which the research is connected and/or at school and/or faculty meetings and/or membership of a limited number of committees
6. Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff

7. Other duties as directed from time to time

**KEY SELECTION CRITERIA**

**Education/Qualifications**

1. The appointee will have:
   - a doctoral qualification in Atmospheric, Oceanographic or Climate Science, or a closely related field.

**Knowledge and Skills**

2. Demonstrated experience designing, running and analysing numerical climate model experiments using individual model components (e.g., atmosphere only) or fully coupled models.

3. The ability to work both independently in a research environment and collegially as part of an interdisciplinary research team.

4. Demonstrated capacity to establish and achieve goals and self-direct research work in a semi-directed environment.

5. Advanced computer skills with experience using Python, Matlab, C, or other programming languages to analyse model and/or observational data.

6. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and scientific documents.

**OTHER JOB RELATED INFORMATION**

- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted
- Candidates are required to complete the Good Character and Reputation declaration prior to appointment

**GOVERNANCE**

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.