POSITION DESCRIPTION

The University of Melbourne 
(logo)

School of Geography, Earth and Atmospheric Sciences

Faculty of Science

Research Fellow in Atmospheric Observations

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| Position No | 0055859 |
| Classification | Level A |
| Salary | Level A $75,289 - $102,163 p.a. (pro rata part time)  (PhD entry level $95,179) |
| Superannuation | Employer contribution of 17% |
| WORKING HOURS | Full-time or Part-time (>=0.5 FTE)  The Faculty of Science is strongly committed to supporting diversity and flexibility in the workplace.  Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position. |
| BASIS OF EMPLOYMENT | Fixed term for 2.5 years |
| Other Benefits | <https://about.unimelb.edu.au/careers/staff-benefits> |
| How to Apply | Online applications are preferred. Go to <http://about.unimelb.edu.au/careers>, select the relevant option (‘Current Opportunities’ or ‘Jobs available to current staff’), then find the position by title or number. |
| contact For enquiries only | Dr. Yi Huang Tel +61 3 8344 7009  Email yi.huang4@unimelb.edu.au  Please do not send your application to this contact |

For information about working for the University of Melbourne, visit our website:   
[about.unimelb.edu.au/careers](https://about.unimelb.edu.au/careers)

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

Position Summary

We seek a highly qualified and motivated candidate with experience in atmospheric science to undertake a postdoctoral position focused on cloud-aerosol-climate interactions over the Great Barrier Reef. The appointee will conduct observations of clouds and aerosols to understand their role in regulating the climate over the Great Barrier Reef, including their relationships to coral bleaching events. The applicant will undertake fieldwork, analyse field observations and satellite datasets. The role will also include performing and interpreting numerical simulations with the WRF model to support both field work planning and observational data analysis. Ability to work well under field conditions and within a team, with strong communication skills is essential. Applicants with prior experience in analysing large and complex datasets, including atmospheric remote sensing (ground-based and/or spaceborne) and high-resolution numerical modelling, will be highly regarded.

The position is located within The University of Melbourne’s School of Geography, Earth & Atmospheric Sciences. The appointee will be supervised by Dr. Yi Huang and A/Prof. Robyn Schofield, and also collaborate with researchers at Southern Cross University and Monash University. Candidates seeking flexible or part-time work arrangements are encouraged to apply.

Due to current border restrictions, applicants need to have the right to live and work in Australia.

# Key Responsibilities

* The position description should be read alongside [Academic Career Benchmarks and Indicators](file:///U:\Faculty\Human%20Resources\ZZ_New%20folder%20structure\Templates\Position%20Description%20templates\PD%20Templates%20Project%20VG\Level%20A\Academic%20Career%20Benchmarks%20and%20Indicators%202017.pdf).
* A level A academic is acquiring skills and building academic achievements (oriented towards the benchmarks).

## RESEARCH AND RESEARCH TRAINING

* Under the guidance and support of Senior Academic staff conduct internationally competitive research, resulting in publications in high impact journals on topics relevant to the project
* Undertake fieldwork over the Great Barrier Reef and conduct analysis of field data
* Analyse cloud, aerosol, and precipitation remote sensing (ground-based and spaceborne) datasets
* Select and analyse representative cases including undertaking high-resolution (WRF) numerical simulations
* Contribute to and publish academic papers and other scholarly outputs to a high academic standard in accordance with the research expectations of the University of Melbourne
* Actively participate in research seminars and conferences to disseminate research findings as opportunities arise
* Contribute to the preparation of research reports and proposals to internal or external funding bodies as relevant and appropriate.
* Assist in the co-supervision of research students under the guidance of Senior Academic Staff
* Engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships

## leadership and SERVICE

* Actively participate at School meetings and with guidance, contribute to planning activities or committee work to support capacity building in the School/discipline.
* Contribute to, or present research to the public to elevate public awareness of educational and scientific developments, and promote critical enquiry and public debate within the community where appropriate
* Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity

## other duties

* Perform other tasks as requested by the supervisor, as appropriate
* Actively participate in the University Professional Development Framework
* Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

# Selection Criteria

## Essential

* A PhD in atmospheric science or a related discipline.
* Demonstrated knowledge and experience in atmospheric science including clouds, aerosols, and their interactions
* Demonstrated experience in undertaking fieldwork, analysing large and complex datasets including remote sensing datasets
* A demonstrated capacity to publish in high quality peer-reviewed journals, with a strong publication record in relevant areas, commensurate with experience and opportunities.
* Excellent interpersonal skills and both written and oral communication skills in English.
* Excellent ability to work co-operatively and positively in a multi-disciplinary research-based team environment and liaise with people from diverse backgrounds.
* Demonstrated excellent organisational skills to meet deadlines and bring projects to a timely completion
* Potential or demonstrated capacity to engage with project partners and external stakeholders

## Desirable

* Prior experience or knowledge of tropical meteorology and mesoscale meteorology
* Demonstrated experience in analysing radar, lidar, UV/Vis spectral and/or satellite data
* Experience in performing and analysing numerical simulations using high-resolution atmospheric models
* Experience in using creative and innovative methods to analyse meteorological data, e.g., cluster analysis, machine learning, etc.

# Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University’s People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people’s age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

# Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<https://safety.unimelb.edu.au/people/community/responsibilities-of-personnel>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

# Other Information

## school of geography, earth and atmospheric sciences

<https://sgeas.unimelb.edu.au>

The School of Geography, Earth and Atmospheric Sciences investigates a broad range of sciences - from the geosciences, to meteorology and climate science, to the study of urban, built and natural environments and the societies they contribute to. The School operates a comprehensive programme of Tertiary Education at both undergraduate and postgraduate levels and undertakes extensive research programs of fundamental and applied significance.

The School is also involved in a number of major national initiatives, including the Australian Research Council’s Centre of Excellence for Climate Extremes (<http://www.climateextremes.org.au>), and has strong links with the Bureau of Meteorology and CSIRO. The appointee will benefit from the active research environment provided by the School.

## faculty of science

https://science.[unimelb](https://science.unimelb.edu.au).edu.au

Science at the University of Melbourne is the most highly ranked Faculty of Science in Australia. Science is defined by its research excellence in the physical and life sciences and is at the forefront of research addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

We have over 150 years of experience in pioneering scientific thinking and analysis, leading to outstanding teaching and learning and offer a curriculum based on highly relevant research, which empowers our STEM students and graduates to understand and address complexities that impact real world issues and the challenges of tomorrow.

We aspire to engage the broader community with the impact that Science has on our everyday lives. Through the strength of our internships and research project offerings, our students are provided opportunities to engage with industry partners to solve real-world issues.

The Faculty of Science has over 50,000 alumni and is one of the largest faculties in the University comprising six schools: BioSciences, Chemistry, Ecosystem and Forest Sciences, Mathematics and Statistics, Physics and the School of Geography, Earth and Atmospheric Sciences.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, the Indigenous Knowledge Institute, the Melbourne Energy Institute, the Office for Environmental Programs and home to numerous Centres.

Science manages more than $301 million of income per annum, with a staff base in the order of 250 FTE professional staff, and more than 662 FTE academic staff.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling over 10,800 undergraduate and 2,500 graduate students. The Faculty of Science is the custodial Faculty for the BSc (Bachelor of Science). The Faculty of Science is highly research focused, performing strongly in the Australian Research Council competitive grants schemes. The Faculty of Science is currently growing its competitiveness and standing in the National Health and Medical Research Council and health space.

The Faculty of Science provides community services and industry partnerships based on a solid foundation of research in the pure and applied sciences. The Faculty has an endowment of approximately $100 million. The annual income from the endowment supports more than 140 prizes, scholarships and research awards, and numerous academic positions.

## The University of Melbourne

Established in 1853, the University of Melbourne is a leading international university with a tradition of excel­lence in teaching and research. The main campus in Parkville is recognised as the hub of Australia’s premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at <http://about.unimelb.edu.au/careers>

## ADVANCING MELBOURNE

The University’s strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University’s commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.

We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.

We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.

We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne’s academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

## Governance

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at <https://about.unimelb.edu.au/strategy/governance>