



# A NEW OUTLOOK FOR YOUR CAREER

## Numerical Weather Prediction System Developer Executive Level 1

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<b>JOB REFERENCE NUMBER</b>	60010406
<b>CLASSIFICATION</b>	Executive Level 1 (Senior Professional Officer Grade C)
<b>GROUP</b>	Science & Innovation
<b>PROGRAM</b>	Research to Operations
<b>LOCATION</b>	Melbourne – other capital city office locations will be considered
<b>STATUS</b>	Ongoing
<b>WORKING HOURS</b>	Full time
<b>SALARY RANGE</b>	\$98,209 - \$110,623, plus an additional 15.4% superannuation
<b>CLOSING DATE</b>	11:30pm AEST/AEDT Sunday 29 <sup>th</sup> November 2020
<b>APPLICANTS</b>	Australian Citizenship – see <a href="#">Eligibility Requirements</a>
<b>CONTACT OFFICER</b>	Dr Yi Xiao Manager of Weather, Marine and Climate Models Phone: (03) 9669 4390 Email: <a href="mailto:yi.xiao@bom.gov.au">yi.xiao@bom.gov.au</a>

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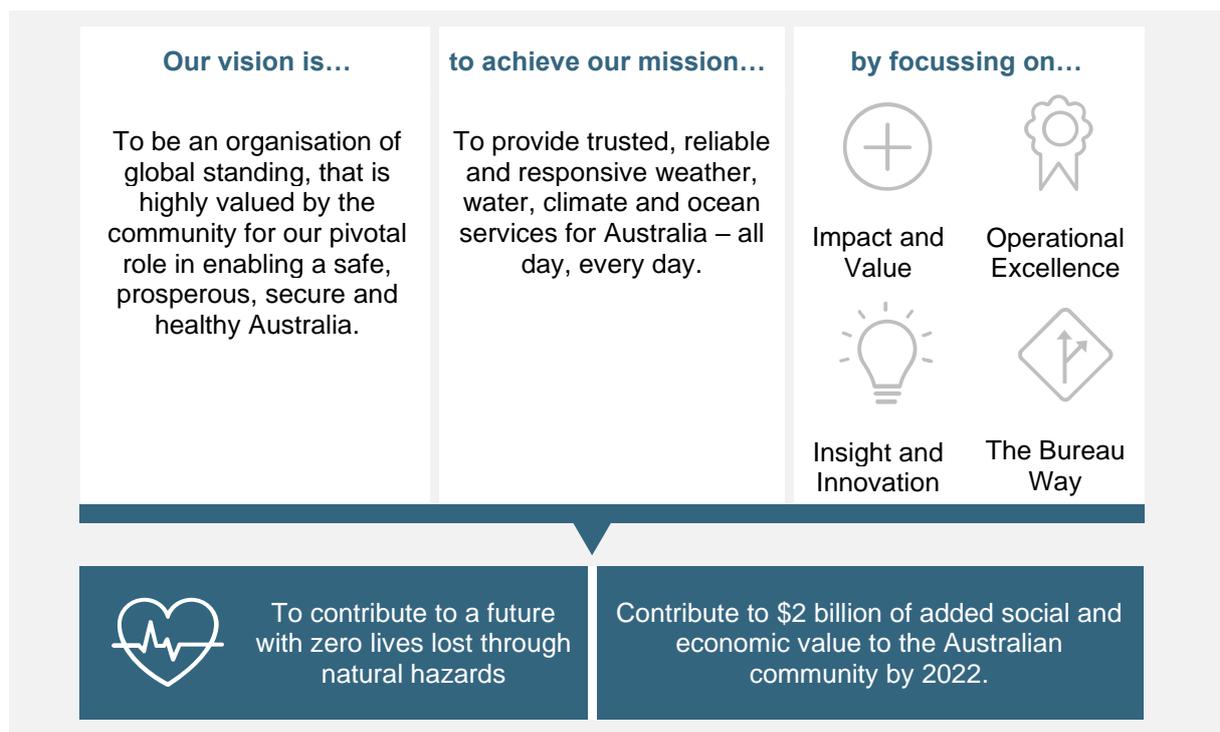
## ABOUT US

The Bureau of Meteorology is one of the few organisations that touches the lives of all Australians and all Australia, every day. The Bureau works across Australia and remote islands, providing services from the Antarctic to beyond the equator, and from the Indian Ocean to the Pacific.

We are Australia's national weather, climate and water agency, in the Agriculture, Water and Environment portfolio of the Australian Government, operating under the authority of the Meteorology Act 1955 and the Water Act 2007. We provide data, information, knowledge, insight and wisdom to help Australians prepare and respond to the realities of their natural environment, including droughts, floods, fires, storms, tsunamis and tropical cyclones.

Our products and services include observations, forecasts, analysis and advice covering Australia's atmosphere, water, oceans and space environments. We undertake focussed scientific research in support of our operations and services. Through regular forecasts, warnings, monitoring and advice, we provide one of Australia's most fundamental and widely used public services.

We have strong relationships with our customers, partners and stakeholders in Australia, including the Australian Community and the emergency services sectors, all-levels of Government, and focus sectors including aviation, agriculture, energy and resources, national security and water.





## WORKING AT THE BUREAU

The Bureau represents a dynamic and exciting opportunity. A role with the Bureau involves:

OUR WORK	OUR PEOPLE	OUR ENVIROMENT	OUR EXPIERIENCE
Purpose-driven impactful work that brings real benefit to the Australian Community, businesses and industry.	A deeply passionate and highly skilled workforce that continuously challenges the status quo to achieve greater impact and experiences for our colleagues and customers.	A world class organisation with excellent workplaces in great locations, access to cutting-edge technology and a safe and inclusive environment for everyone.	A commitment to professional development and growth, backed by clear career pathways and training opportunities, and complimented by a competitive remuneration package.

## POSITION OVERVIEW

The Weather, Marine and Climate Models team in Research to Operations (R2O) is responsible for transitioning research candidates to operations in four modelling areas: weather, marine, climate and dispersion. The main role of this team is to design and develop high quality operational numerical prediction systems so that the associated products can be effectively used by Bureau-wide operations and external users. The team also supports operational systems.

We are looking for an innovative operational system developer to join our team. The High Resolution Numerical Weather Prediction System Developer, under limited direction, is responsible for the operational design, development, and implementation of high resolution numerical weather prediction systems aimed at improving the meteorological analysis and prognosis operations. In addition, they will contribute to the maintenance and ongoing evaluation, monitoring and support of the systems.

The successful candidate will have highly developed professional skills, and will be experienced in working collaboratively in teams, as well as taking responsibility for critically important operational work. Specifically, the officer will have teamwork and leadership skills appropriate to the Executive Level 1 standard in the Australian Government Public Service's Integrated Leadership System.

Members of the team support shift-working staff in maintaining real-time operations. In an emergency this can require out-of-hours consultations.

## ROLE RESPONSIBILITIES

The responsibilities of the role include but are not limited to:

1. Complying with all Bureau work, health and safety policies and procedures, and taking reasonable care for your own health and safety and that of employees, contractors and visitors who may be affected by your conduct.
2. Collaborate with project teams to design, develop, document, trial and evaluate improved or new NWP systems in Bureau's High Performance Computing (HPC) environment, and deliver targeted outcomes at a high standard. This includes providing expert advice to project teams on operationalisation of numerical weather prediction (NWP) systems.



3. Engage and collaborate with key stakeholders, including R2O teams and other Programs of the Bureau, researchers, and operational meteorologists, to investigate the performance of operational high resolution NWP systems, and to identify opportunities, develop plans and deliver improvements for these systems.
4. Individually, or as a team member, contribute to resilient operations by providing proactive support to operational numerical models. These include identifying and solving complex problems, sharing knowledge with peers across different modelling areas, preparing documentation, and responding to operational issues. Out of hours work maybe required.
5. Contribute to high level planning in operationalisation of numerical modelling systems. Participate in co-operative projects with other professionals that maybe outside immediate responsibilities.
6. Liaise, engage and collaborate with different parts of organisation, contribute to develop improved work practices and processes.
7. Comply with all Bureau work, health and safety policies and procedures, and take reasonable care for your own health and safety and that of employees, contractors and visitors who may be affected by your conduct.

## SELECTION CRITERIA

The Bureau encourages applications from all suitably qualified candidates. Applications will be considered based on alignment with selection criteria, which have been matched to the APSC Work Level Standard and Integrated Leadership Systems for Executive Level 1 positions.

1. Demonstrated training in and application of science or mathematics. Excellent knowledge, or relevant experience, in numerical weather prediction.
2. Experience in high resolution numerical weather prediction modelling, ensemble forecasting and related techniques such as probabilistic forecasting, forecast uncertainties and probabilistic verifications. Familiarity with analysing, processing, and displaying large scientific datasets is essential.
3. Excellent problem solving skills. Experience in diagnosis and prioritisation of operational problems under pressure. A willingness to participate in an out of hours' support roster.
4. Excellent communication skills. As an individual or as part of a team, the ability to plan, prepare and implement upgrades to operational numerical weather prediction and related software systems. Experience in strategic planning, coordinating a small team and delivering relevant project outcomes in those areas would be an advantage.
5. Demonstrated experience in designing and developing operational numerical prediction systems, under the cylc scheduler in an HPC environment. Well-developed computing skills including scripting in a UNIX/Linux environment, code management and testing. Experience in scientific computing in HPC environment, and programming languages such as Python, C and/or FORTRAN are also important.
6. Initiative, judgement, perseverance, and an ability to work respectively in a team environment and to liaise effectively with internal and external stakeholders, research, and operations staff. An understanding of the elements of the Bureau's Social Commitment to Diversity & Inclusion, and a demonstrated commitment to apply them in practice.

### **Mandatory qualifications:**

A degree or diploma of an Australian educational institution, or a comparable overseas qualification, which is appropriate to the duties; OR other comparable qualifications, which are appropriate to the duties.



## MERIT POOL

The selection process will establish a merit pool that may be used to fill similar positions within 12 months.

## HOW TO APPLY

Applications can be lodged through [BOMCareers](#).

Your application will consist of resume, contact details for two referees and a '800-word pitch' that considers:

- position overview
- job responsibilities
- selection criteria
- relevant sections of the [Integrated Leadership System \(ILS\)](#) and [APS work level standards](#).

The Bureau is an equal opportunities employer. We will support applicants with disability through our [RecruitAbility Program](#) and will provide reasonable adjustments such as access, equipment and other practical support at relevant stages of the recruitment process.

We recognise the need for our workforce to reflect the community we serve and provide an inclusive environment that respects and values diversity and is described in our [Diversity and Inclusion Statement of Commitment](#). We strongly encourage qualified applicants from diverse backgrounds to apply.

The Bureau offers flexible working options, reasonable workplace adjustments and an Employee Assistance Program (EAP). Should you have any questions or experience any difficulties with applying online, please contact the Recruitment Team on [BOMCareers@bom.gov.au](mailto:BOMCareers@bom.gov.au)

## COVID-19 RESTRICTIONS

We understand there are unique and evolving challenges due to the current COVID-19 pandemic. The Bureau is responsive and making changes to ensure the safety of all candidates and our team.

Under the relevant legislation and guidance of the National Chief Medical Officer:

- Currently all interviews will be held via audio/video conference (across a range of platforms to accommodate personal requirements) unless otherwise advised.
- The successful candidate may be required to carry out the duties remotely for either a period or until otherwise advised.

## ADDITIONAL INFORMATION

To find out more about the employment conditions at the Bureau, please refer to the Bureau of Meteorology [Enterprise Agreement 2018](#).