Australian Government
Bureau of Meteorology

Job Details

Reference: 10377

Position Title: SENIOR PROFESSIONAL OFFICER GRADE C

Classification: Executive Level 1

Salary range: $83,187 - $89,828 per annum plus an additional 15.4% superannuation

Location: 700 Collins Street, Docklands 3008

Division: Research and Systems

Branch: Centre for Australian Weather and Climate Research

Section: Earth System Modelling Program

Status: Non-ongoing for specified task for up to 3 years

Applicants: **Australian citizenship – see Essential Applicant Information**
Whilst Australian Citizenship is not mandatory requirement, the successful will need to have necessary visa and work rights. Visa sponsorship is available to successful international appointees.

Applications close: Thursday, 18 February 2010

Advertisement

Under general direction of senior scientists, undertake research into the development and evaluation of ensemble prediction systems within the Australian Community Climate and Earth Systems Simulator (ACCESS) numerical assimilation and prediction systems. This work is to support the ongoing development and use of probabilistic prediction capabilities, thereby providing estimates of prediction uncertainty in Bureau forecasts.

Note:

- This non-ongoing employment opportunity for a specified task is for a period of 3 years, with a possibility the role will be readvertised for ongoing filling at the end of this period.

Duty Statement

Under broad policy control and direction,

1. Undertake research into the development of ensemble-based numerical weather prediction systems.

2. Collaborate closely with relevant staff of CAWCR and the National Meteorological and Oceanographic Centre on the usage of ensemble based prediction within Bureau operations and collaborate externally, principally with UK Met Office collaborators, on ensemble-based prediction science.

3. Prepare scientific papers and technical reports as well as other documentation, as required.

4. Ensure that plans, policies and practices in relation to the various elements of the Bureau's Social Justice Strategy are applied in the work area.

Duty representing highest function: 1

Immediate Supervisor:EXECUTIVE LEVEL 2 (SRS) (NO. 1624)

Job Profile

The appointee will be a member of the Atmospheric Modelling Team in the Earth System Modelling Program at the Centre for Australian Weather and Climate Research, will work jointly with other CAWCR scientists on the ongoing development and usage of ensemble prediction systems in the Bureau's short and medium range numerical weather prediction systems.

Bureau NWP systems are based on the Australian Community Climate and Earth System Simulator (ACCESS) data assimilation and atmospheric model system. The appointee's work will contribute to and include:

- research on and assessment of available options for generating ensemble initial condition perturbations.
- research into methods for generating forecast model perturbations to simulate uncertainty in the forecast model component of prediction systems.
- development of ensemble-based prediction systems for deployment into Bureau operational systems.
- development of a range of probabilistic products and diagnostics to support estimates of prediction uncertainty available from these ensemble systems.

Selection Criteria

Applicants must address the selection criteria. To assist you prepare your application, please read the information at General Information for Applicants and complete the Bureau of Meteorology Application Cover Form.

1. Significant knowledge of and experience in the development and use of numerical assimilation and weather prediction systems intended for operational deployment.

2. Knowledge and understanding of the current strategies of ensemble prediction in meteorology, together with a sound mathematical background.

3. Demonstrated significant capacity, initiative, and creativity in research in meteorology or numerical simulation thereof.

4. Significant experience and knowledge of scientific computing including advanced scientific software, the UNIX operating system, Fortran, and the efficient use of high performance computers.

5. Ability to communicate effectively and work harmoniously in a group environment, combined with the ability to also work effectively with minimal supervision.

6. Proven verbal and written communication skills.

7. A good understanding of the Bureau's Social Justice Strategy and a commitment to apply it in the workplace.

Mandatory Qualifications - A degree from an Australian institution, or a comparable overseas qualification, which is appropriate to the duties; OR other comparable qualifications, which are

appropriate to the duties.

Contact

If you would like to know more about The Centre for Australian Weather and Climate Research visit http://www.cawcr.gov.au or the Bureau of Meteorology visit http://www.bom.gov.au

Employment conditions for most Bureau employees are contained in the Bureau's Enterprise Agreement 2009-2010 which is available on the website at: The Bureau of Meteorology Enterprise Agreement 2009–2010

Please read the selection documentation and if you have any queries specific to this position please contact Dr Michael Naughton on 9669 4411.

Applications

Applications can be lodged personally at: The Recruitment Unit, 7th Floor, 700 Collins St, Docklands

By mail to: Recruitment Manager, Bureau of Meteorology, GPO Box 1289, Melbourne VIC 3001

By email to: jobs@bom.gov.au

All applicants are required to include a completed Bureau of Meteorology Application Cover Form, Resume or CV and a Statement addressing the Selection Criteria.

All applicants are advised to read **General Information for Applicants** available on this web site before submitting their application.

Should you experience any difficulties with accessing information please contact the Recruitment Unit by email at: jobs@bom.gov.au or by telephone on 03 9669 4260 / 03 9669 4583 / 03 9669 4333.