



Position Details

Research Projects- CSOF4

THE FOLLOWING INFORMATION IS FOR APPLICANTS

Advertised Job Title	Satellite Oceanographer
Job Reference	82976
Tenure	Specified Term up to 31 st Dec 2023 Full-time
Salary Range	AU\$87,068 pa to AU\$98,504 (pro-rata for part-time) + up to 15.4% superannuation
Location(s)	Melbourne (preferred), Hobart (negotiable)
Relocation Assistance	Will be provided to the successful candidate if required
Applications are open to	Applications for this position are open to Australian/New Zealand Citizens, Australian Permanent Residents, and candidates already in Australia or New Zealand holding a visa with rights to work in Australia
Position reports to the	Team Leader
Client Focus – Internal	70%
Client Focus – External	30%
Number of Direct Reports	0
Enquire about this job	Contact Salman Saeed Khan (salmansaeed.khan@csiro.au)
How to apply	Apply online at https://jobs.csiro.au/ Internal applicants, please apply via Jobs Central If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220.

Acknowledgement of Country

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the area that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our vision towards reconciliation

Role Overview

Research Projects staff in CSIRO collaborates in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work.

The Satellite Oceanographer position is designed to support wind-wave and aligned ocean remote sensing research areas at CSIRO Oceans and Atmosphere. The role will assist Senior Research Scientists/Engineers in developing, maintaining, and extending wind, wave, and related satellite data streams from existing and emerging ocean remote sensing satellite platforms, independently and through collaboration, with a strategic view of exploiting next-generation ocean remote sensing satellites and ensuring Australia's connection to existing and future international projects. This will also include (but is not limited to) appropriate evaluation, quality assessment, calibration and validation, and dissemination of remotely sensing ocean wind, wave, and related products in standard formats.

The role will utilise these satellite data streams, in conjunction with numerical model outputs, in-situ measurements, and ancillary information to support scientific research addressing current challenges in the marine and coastal zones, including in the context of climate variability and change.

Duties and Key Result Areas:

- Develop, maintain, and advance ocean wind-wave and surface wind data streams derived from satellite observations, independently and through collaboration, to support scientific studies addressing issues in the marine and coastal zones.
- Initiate and/or contribute to the development of algorithms to extract sea-state information from satellite data streams, and undertake processing, calibration, and validation of these.
- Ensure timely delivery of satellite wind and wave products in a quality controlled and standard format.
- Exploit complementarities between satellite observations, numerical models, and in-situ observations to develop datasets characterising the ocean surface in the Australian region, and globally.
- Undertake client liaison with guidance from senior staff, be responsible for data collection and processing, and dissemination of data for existing and future projects in an independent manner.
- Identify new fields of application for data products to characterise the coupled ocean/atmosphere system.

- Contribute to the strategic development of data distributions tools and frameworks.
- Collaborate domestically and internationally to support Australia's connection to existing and future projects.
- Provide expert advice to external agencies, with guidance from senior staff, concerning physical aspects of the marine coastal environment.
- Produce high quality scientific and/or engineering papers suitable for publication in quality journals, prepare scientific reports and presentations and make significant contributions to the interpretation and communication of research or technological results at national and international conferences or stakeholder meetings.
- Work effectively as part of a multi-disciplinary, often regionally dispersed research team, to undertake independent scientific investigations and help define and satisfy objectives for small to medium research projects under the guidance of more Senior Research Scientists/Engineers to support CSIRO's scientific objectives.
- Under general direction participate in planning projects and accept responsibility for the scheduling and completion of major parts of projects.
- Provide coaching, on-the-job training to technical staff and potential University students to ensure experiments are established in accordance with research design.
- Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO's reputation.
- Adhere to the spirit and practice of CSIRO's Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
- Other duties as directed.

Selection Criteria

Essential

Under CSIRO policy only those who meet all essential criteria can be appointed.

1. Relevant Masters or PhD degree in areas of discipline such as physical oceanography, meteorology, physics, applied mathematics or engineering, or equivalent experience.
2. Demonstrated ability to work with and process satellite data, and/or integrate remotely sensed ocean data with ocean models.
3. Demonstrated proficiency in mathematics and statistics, and scientific programming in languages such as Python (preferred), MATLAB, R, and/or C. Willingness and ability to transition to Python (if needed) as the programming language of choice.
4. Ability to work effectively and respectfully, as part of a multi-disciplinary, regionally dispersed research team to achieve organisational goals.
5. Ability & willingness to incorporate novel ideas and creative approaches into scientific investigations.
6. Strong written and oral communication skills including the ability to publish research results, prepare reports and present the results of scientific investigations at national and international conferences and stakeholder meetings.

Desirable:

1. Experience in using and/or retrieving ocean surface wind, wave and/or surface current parameters from ocean remote sensing platforms, such as Synthetic Aperture Radar (SAR), Altimeter, Scatterometer, multispectral and/or emerging satellites.
2. Demonstrated ability to work with numerical wave models and in-situ wave data to address scientific questions, particularly focused on coastal and ocean processes in the context of climate variability and change.
3. Demonstrated skills in Linux/Unix-based shell scripting and experience of working in an HPC (high performance computing) environment.

Required Competencies:

- **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
- **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
- **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
- **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
- **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
- **Adaptability:** Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

Special Requirements

Appointment to this role may be subject to the provision of a national police check. The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

About CSIRO:

We solve the greatest challenges through innovative science and technology. To find out more visit us [online!](#)

CSIRO is a values-based organisation. In your application and at the interview you will need to demonstrate behaviours aligned to our values of:

- People First
- Further Together
- Making it Real
- Trusted

Find out more about CSIRO [Oceans and Atmosphere](#)