# Position Details

## Research Projects- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Inward Heavy Data Specialist |
| Job Reference | 92517 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$105,806 - AU$114,500 per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Hobart (preferred)  Melbourne and Canberra (negotiable) |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents only |
| Position reports to the | Group Leader |
| Client Focus – Internal | 60% |
| Client Focus – External | 40% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Benoit Legresy via email at [Benoit.Legresy@csiro.au](mailto:Benoit.Legresy@csiro.au) or phone +61 3 6232 5081 |
| 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](mailto: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 areas 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](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

The Inward Heavy Data Specialist works within the Oceans Group and several teams across various Programs dealing with ocean analysis and modelling. The Inward Heavy Data Specialist is responsible for the management and preparation of datasets for scientific analysis and utilisation, and for the development of analysis tools.

The associated portfolio brings a range of activities, data flows and modelling that benefits the Environment challenges by:

* translating complex oceanography and atmospheric science into decision-ready information to secure Australia and the region.
* sustaining tools for economic, social, and environmental management and development in the marine space.

The activities rely on a suite of models that consume large-volume data which exceeds the petabyte scale. A significant effort in the Oceans Group goes to assembling and preparing these datasets for ingestion by various suites of modelling tools and analysis activities which deliver to customers through projects. These include the Bluelink partnership and other oceanography projects which contribute to and benefit from these datasets (e.g. IMOS, NESP, AAPP, Great Barrier Reef modelling suites and other regional projects involving high-resolution ocean modelling). This ensemble of ocean data is a critical resource which enables key existing ocean intelligence and ocean climate and earth system related studies.

This suite of data is fundamental to 4 Programs in the Environment Business unit for environmental prediction projects, monitoring activities, and science development.

The Inward Heavy Data Specialist contributes with other team members from the Environment Business Unit, by managing these large incoming datasets (observations, satellite data, global model outputs, reanalysis products) that enable the operational oceanography projects, and you will participate in these projects.

A strong focus of this position is on managing dataflows that feed into CSIRO Ocean modelling suites for a range of applications from operational ocean forecast systems to developing products and services that allow ocean and climate intelligence to be incorporated into decisions in various sectors across the Australian and the broader region.

The Inward Heavy Data Specialist also works with scientists and play a key role in developing large-scale data analytics for models to be operational and science developments to be effective. This will include supporting junior and senior scientists.

### Duties and Key Result Areas

* Operationally oversee acquisition of the datasets (in collaboration with other team members), ensuring they are kept up-to-date, complete, are properly indexed, catalogued, and maintained in standard formats, to be available via services that meet the needs of project users.
* Interact with project team members to ensure curation of datasets are fit for purpose, and the uptake for research and development is streamlined and effective.
* Liaise with internal stakeholders and interact with domestic and international data providers.
* By remaining active and current in the Data Management community and aware of the IT systems in CSIRO and related organisations, identify tools and best practices to bring to the management of these datasets and workflows for projects outcome.
* Develop relationships with current and potential partner institutions and agencies (NCI, ARDC and others) that enable improved efficiencies through sharing of the high-volume ocean data load.
* You will be required to acquire an Australian Government security clearance after commencement.
* 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.
* Work collaboratively as part of multi-disciplinary research projects, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. A relevant tertiary qualification or equivalent relevant work experience in data management and analysis.
2. Experience using, managing, and analysing large or complex datasets, such as in the climate/ocean sciences, from large-scale numerical models or from heavy data producing remote sensing or deployed instrumentation.
3. Demonstrated experience in scripting and programming languages such as Python, R, Perl, Fortran 90, C++ and Linux shell scripting in a collaborative environment using modern code management practices (e.g. version controlled repositories, using inline bug-tracking and documentation systems).
4. Experience using HPC (high-performance computing) resources to manage, analyse and/or generate large datasets, including the use of job scheduling tools such as PBS/Slurm.
5. Demonstrated written and verbal communication skills including the ability to document results and communicate effectively with colleagues and clients in order to meet projects goals and timelines.
6. Demonstrated ability to work effectively as part of a multi-disciplinary, regionally dispersed research delivery team, and carry out tasks autonomously in support of scientific research.

## **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 team 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:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **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:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **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 is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

* The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The successful candidate will be required to obtain and maintain a Baseline Australian Government security clearance after commencement.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) for more information.

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

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