# Position Details

## Research Scientist/Engineer- CSOF6

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| The following information is for applicants |
| Advertised Job Title | Earth Observation Scientist |
| Job Reference | 92489 |
| Tenure | Indefinite, Full-time |
| Salary Range | AU$121,455-$142,321 per annumplus up to 15.4% superannuation |
| Location(s) | Canberra preferred. |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * All Candidates
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| Position reports to the | Team leader, Landscape Observation |
| Client Focus – Internal | 60% |
| Client Focus – External | 40% |
| Number of Direct Reports | 1 |
| Enquire about this job | Matt Paget via email at matt.paget@csiro.au or phone +61 2 6246 5786 |
| 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. |
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**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 role of Research Scientist/Engineer staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Research Scientist/Engineer may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. The Research Scientist/Engineer will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

CSIRO Environment seeks knowledge and undertakes research to protect, manage and restore our natural environment. We use Earth observation (EO) data to help underpin and contribute to the monitoring and management of landscape, ecological, coastal and hydrologic processes from local to continental scales through time. Integrating EO analyses into environmental models requires a specialised understanding of the data to interpret it for different characteristics in each environmental domain.

We seek a person specialised in EO data analysis and with a research interest in applying different types of geospatial data to complex environmental problems. You will contribute to the integration of EO derived products into various environmental data and modelling workflows. You will work with domain experts in fields such as biodiversity and climate modelling, and flood and landscape change mapping.

### Duties and Key Result Areas

* Enhance the delivery of existing EO analyses, capabilities and data to internal and external partners.
* Develop novel or adapt existing methods and tools for integrating data from across environmental and ecological science domains.
* Lead and develop new EO-related science projects to achieve impact through national and international applications.
* Anticipate industry and/or community needs through client liaison and networking.
* Undertake feasibility studies, demonstrate a considerable degree of originality, creativity, and innovation in solving problems and introduce new directions and approaches.
* Communicate research results to clients and the scientific community through oral and written reports and journal publications and inform and transfer knowledge to non-scientific audiences as required.
* 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 a multi-disciplinary, regionally dispersed research team to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy and diversity initiatives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. A PhD (or an equivalent combination of qualifications and research experience) in a relevant Earth observation field such as optical, synthetic aperture radar, hyperspectral or lidar remote sensing.
2. Demonstrated python programming and image processing/GIS software skills, including workflow development and scripting.
3. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
4. Demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports.
5. Strong oral communication skills including ability to make scientific presentations to audiences with scientific and non-scientific background.
6. Demonstrated ability to work effectively in a multi-disciplinary team in order to meet deadlines and respond productively to changing requirements.

## **Desirable**

1. Research or application development in environmental process such as landscapes and ecology, biodiversity, hydrological systems, agricultural cycles, and climate impacts.
2. Experience with machine learning, statistical analysis or spatial modelling.
3. Experience with cloud-computing technologies for scientific data processing.

## **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:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.
* **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:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to, and manages, the increasing rate of organisational change by adjusting strategies, goal and priorities.

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.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO Environment](https://www.csiro.au/en/research/natural-environment) 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