# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Space Weather Research Scientist |
| Job Reference | (to be entered by your Recruitment Consultant) |
| Tenure | 2 yearsFull-time, Part-time, or Job-share (min 20 hours per week) |
| Salary Range | AU$110,038 - AU$119,080 per annum (pro-rata for part-time)plus up to 15.4% superannuation |
| Location(s) | Perth (Kensington) or Sydney (Marsfield) |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents
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| Position reports to the | Space Research Group Lead |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Nick Carter via email at nick.carter@csiro.au or phone +61 467 964 895 |
| 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 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

Space weather research (the effects of solar activity on the environment near the Earth, including in orbit and ground infrastructure) is a new and developing capability within CSIRO in support of space research activities and the operational activities of its partners.

The successful candidate for this role will have the task of positioning CSIRO in the Australian and international space weather ecosystem by carrying out research in the field of heliophysics and articulating the impact of this research internally and externally. The initial term is required to investigate, define and consolidate the role of CSIRO nationally and internationally by collaborating with government and academic partners. At the end of the term, the value and impact proposition of this role should be clear and well-reasoned.

This role is within the CSIRO Space Program. In the role you will work with the Space Research Group Lead to help develop a program of activity that builds world-leading capability and drives cutting-edge research withinCSIRO. The Space Program seeks to achieve impact through novel mission-directed, multi‐disciplinary and collaborative science and engineering across Research Units in CSIRO and with external collaborators.

CSIRO’s space objectives are to:

1. Develop and manage national space facilities
2. Apply the opportunities of space to solve the greatest national challenges
3. Stimulate innovation by strengthening our role and capabilities in space science and space exploration.

Current CSIRO space activities span application areas including Earth observation, small satellite technologies, robotics, remote operations and resource utilisation, and space situational awareness. (for more information visit [www.csiro.au/space](http://www.csiro.au/space)). The portfolio of research within the Space Program will evolve over time on the basis of changing domain needs, strategy and performance.

### Duties and Key Result Areas

* Position CSIRO in the Australian and international space weather ecosystem by carrying out research in the field.
* Build national and international collaborations in space weather that leverage external expertise and facilities.
* Develop and execute radio astronomical telescope observing plans for interplanetary scintillation (IPS).
* Draw on professional expertise, knowledge of other disciplines and research experience to recognise opportunities for innovation and generate new theoretical perspectives by pursuing new ideas/approaches and networking with scientific colleagues across a range of disciplines.
* Grow the research capability within CSIRO by identifying and acting on opportunities for new post-doctoral research positions.
* Write and submit observing proposals to use ASKAP for IPS measurements.
* Develop data processing pipeline to bring aforementioned IPS measurements to science-ready data sets.
* Investigate data assimilation techniques for updating solar wind models using remote sensing measurements (e.g. IPS observables).
* Publish scientific results in refereed scientific journals and present at international space weather conferences.
* Develop grant proposals as appropriate opportunities arise.
* On occasion, contribute to other ATNF scientific or operations responsibilities.
* Participate in identification of further opportunities which arise from research and initiate new lines of research.
* Present results in a meaningful format, prepare reports for clients and/or write scientific papers for publication.
* 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 Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals.
* 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 field such as Heliophysics
2. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
3. A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, grant applications or inventorship on patent applications.
4. 5+ years in Heliophysics research, specifically including research related to interplanetary scintillation with ground-based telescopes

## **Desirable**

An understanding of the Australian and international space weather ecosystem including facilities, expertise and impact.

## **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 responses 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 change.

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 [Space and astronomy - CSIRO](https://www.csiro.au/en/research/technology-space/astronomy-space?start=0&count=12) 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