Position Details

Research Projects – CSOF4

THE FOLLOWING INFORMATION IS FOR APPLICANTS	
Advertised Job Title	Data Analyst / Telescope Operator - SKA-Low Telescope
Job Reference	100056
Tenure	Indefinite - Full-time, Part-time or Job-share
Salary Range	CSOF4 - AU$96,811 to AU$109,527 per annum, plus 15.4% superannuation
Location(s)	Perth, Western Australia
Relocation Assistance	Will be provided to the successful candidate if required
Applications are open to	All Candidates
Client Focus – Internal	0%
Client Focus – External	100%
Position reports to the	This position will report to the SKA-Low Senior Data Analyst / Telescope Operator.
Number of Direct Reports	0
Enquire about this job	To enquire about this job please reach out to the SKA-Low Senior Data Analyst / Telescope Operator, Lucy Grigoroff, on lucy.grigoroff@csiro.au for more information.
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.

The CSIRO Experience

As an employee of CSIRO, you will be eligible for the many benefits of working at Australia's National Science Agency. You can read more here:

1. Life at CSIRO
2. Personal Development & Learning
3. Generous Leave & Conditions
4. Work / Life Balance

Background

The SKA Observatory (SKAO) is a next-generation radio astronomy facility that will revolutionise our understanding of the Universe and the laws of fundamental physics. Enabled by cutting-edge technology, it promises to have a major impact on society, in science and beyond. As an intergovernmental organisation, the SKAO brings together sixteen countries around the world.

The SKAO has an international footprint and consists of the SKAO Global Headquarters in the UK, the SKAO's two telescopes at radio-quiet sites in South Africa and Australia, and associated facilities to support the operations of the telescopes.

Constructing and operating these telescopes will position the SKAO as the leading research infrastructure for radio astronomy globally, providing science capabilities to the international astronomical community for decades to come.

Australia will host the SKAO's low frequency telescope (SKA-Low) in remote Western Australia on Wajarri Yamaji Country.

The Traditional Owners and native title holders, the Wajarri Yamaji, have gifted CSIRO with the traditional name Inyarrimanha Ilgari Bundara for the CSIRO Murchison Radio-astronomy Observatory, home to the SKA-Low telescope. The traditional name means 'sharing sky and stars' in the Wajarri language.

In Australia, SKAO is collaborating with CSIRO to operate and support the construction of the SKA-Low Telescope. SKA-Low teams are operating out of:

- Inyarrimanha Ilgari Bundara, the CSIRO Murchison Radio-astronomy Observatory on Wajarri Yamaji Country.
- Our Engineering Operations Centre on Nhanhangardi, Naaguja, Wilynyu and Amangu Country in Geraldton.
- Our Science Operations Centre on Whadjuk Noongar Country in Perth.

Further Reading: Explore CSIRO and the SKA-Low Telescope Project

Role Overview

SKA-Low telescope operators will be fundamental to delivering the broad and ambitious science from one of the world's largest telescopes. These roles are a unique opportunity to join the science operations team at its onset. This role will evolve as the SKA-Low telescope is built:

- During the construction phase this role will be responsible for executing stable commissioning observations in collaboration with the Commissioning Team and the Assembly, Integration and Verification Team. Observing during this phase may take place outside of normal working hours.
- Once construction is complete, the SKA-Low Operator / Data Analyst will be responsible for the day-to-day observing of the SKA-Low telescope and provide analysis of the initial telescope data for quality assurance and science verification. Observing during this phase is expected to be 24/7 with the team working shift patterns.

Telescope control and data analysis will be undertaken from the Science Operations Centre in Perth.

This role may require a willingness and ability to travel to the telescope site and internationally when required, noting we work hard to accommodate personal arrangements.

CSIRO and the SKA Observatory value and respect difference, and we are committed to building an inclusive culture by creating an environment where you can balance a successful career with your

commitments and interests outside of work. We believe that you will do your best at work if you have a work / life balance. We are open to discussing flexible working opportunities with this role being offered on a full-time, part-time or job share basis. Please raise your preference in your application.

Duties and Key Result Areas

- Conduct, monitor and calibrate astronomical observations and use appropriate computing resources.
- Assist with system checks, maintenance handovers, observation configurations and setups.
- Undertake quality assurance of continuos, frequency-resolved (discrete), and time series radio frequency data obtained from early observations and existing data sets.
- Contribute to the design and documentation of operating procedures for SKAO.
- Support communication between engineering and technical staff and scientific stakeholders.
- Work collaboratively with colleagues, both within the Science Operations Team and across the multi-disciplinary roles of the broader SKAO.
- Adhere to the spirit and practice of SKAO's and CSIRO's Code of Conduct, Health, Safety and Environment procedures and policy, and Diversity initiatives.
- Other reasonable duties as directed.

Selection Criteria

CSIRO is an Equal Opportunity employer working hard to recruit world-class talent that represents the diversity across our society. As part of our commitment to equitable employment outcomes for under-represented groups, preference will be given to Indigenous Australian people, women, and people with a disability who meet the role criteria.

Essential

Under CSIRO policy only those who are able to demonstrate how they can meet the essential criteria may be appointed.

- An undergraduate degree or equivalent in science or computing, or relevant experience in a similar role.
- Aptitude to control and operate a scientific research facility including familiarity with monitoring, controlling, and scheduling.
- Appreciation of steps required for the acquisition and processing of scientific data.
- Aptitude to contribute to the definition and development of operational procedures, monitoring dashboards and documentation.
- Ability to work effectively as part of a multidisciplinary team.
- An awareness of equitable practices, including accessibility, to facilitate broad access to the Observatory.

Desirable

- Experience in data reduction pipelines and time series data.
- Familiarity with scientific equipment calibration techniques.

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

- The successful candidate will be required to gain a National Police Clearance or equivalent. This will be conducted by CSIRO, Talent Services, through our provider HireRight. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
- If the successful candidate is not an Australian Citizen or Permanent Resident, they may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test- https://ielts.com. au/).

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.

CSIRO and SKAO Values

Visit CSIRO Online and Space and Astronomy and SKAO online and SKAO Location for more information. In your application and at interview you will need to demonstrate behaviours aligned to our values of:

CSIRO	SKA Observatory
• People First • Further Together • Making it Real • Trusted	• Diversity and Inclusion • Excellence • Collaboration • Creativity and Innovation • Sustainability and Safety