

The South African Weather Service (SAWS) is a Section 3(a) public entity under the Ministry of Environment, Forestry and Fisheries (DEFF) and is governed by a Board. The organisation is an authoritative voice for weather and climate-related services in South Africa and is a member of the World Meteorological Organisation (WMO) to fulfil a range of international obligations of the government. SAWS strives to be a Weather and Climate Centre of Excellence, providing innovative solutions to ensure a weather-smart region, sustainable development, and economic growth.

The South African Weather Service is therefore seeking to appoint an efficient and enthusiastic person to undertake the role of:

Scientist- Fire Weather Research

Salary: Negotiable

Centre : Research Unit, Centurion

2-Year Fixed Term Contract

(Ref: WS06/042024)

Job Summary

The principal scientific activity is developing, optimising, and implementing a new national operational fire weather index at the South African Weather Service to support the development of a new National Fire Danger Rating System (NFDRS). This position will provide an opportunity to gain hands-on experience in developing a new fire danger index while working alongside experienced scientists and researchers. The work will involve research and development efforts to understand, model, and predict fire weather conditions. This includes conducting in-depth meteorological and fire data analyses, refining various existing algorithms, multivariate data blending and models for calculating the fire weather index and collaborating with internal and external stakeholders to incorporate expertise and feedback. The scientist will contribute to translating scientific research into operational (R2O) tools by integrating the fire weather index algorithms into forecasting systems and developing protocols for its use.

Key Performance Areas

The candidate will be required to:

- Assist in researching and developing a new fire danger index under the guidance of senior scientists and project leads.
- Contribute to data collection, analysis, and interpretation to support formulating and validating fire danger index algorithms and models.
- Collaborate with the project team to conduct literature reviews, gather relevant research, and stay updated on advancements in fire weather science.
- Participate in pilot studies to assess the performance and accuracy of the fire danger index.
- Contribute to preparing technical reports, research papers, and presentations to communicate the findings and progress of the fire danger index development.
- Support the integration of meteorological, environmental, and geographical data into the development of the fire danger index.
- Engage in training and professional development to enhance skills and knowledge in fire weather research and scientific methodologies.

Minimum Requirements

Education and Experience

- An appropriate Honours degree (e.g., Atmospheric Science, Meteorology, Environmental Science, or a related field).
- 3 years of experience in atmospheric science meteorology, environmental Science, or a related field.
- Working knowledge of statistical analysis, data processing, and programming languages commonly used in atmospheric and environmental research (e.g., Python, R, Fortran).
- Demonstrated interest in fire weather research through coursework, projects, or internships related to fire danger assessment or wildfire behaviour.
- Experience with data collection and analysis in the context of environmental science, meteorology, or related fields.
- Familiarity with geographic information systems (GIS) and spatial analysis techniques concerning environmental data.

- Experience in presentation and reporting scientific outcomes.

Behavioural Competencies

- Excellent written and verbal communication skills, with the ability to work effectively in a collaborative team environment.
- Strong organisational skills and attention to detail, with the ability to contribute to multiple tasks and projects simultaneously.

Please Note:

Register as user on our website using this link: <https://www.weathersa.co.za/home/vacancies> to apply for the above position and upload your (Comprehensive CV with certified copies of qualifications).

Enquiries for the above-mentioned positions must be directed to: Ms Thembisa Bixa, at Tel. (012) 367 6091.

Closing Date: 06 May 2024

Preference will be given to People living with disabilities in line with SAWS EE targets. This is an EE position and preference will be given to females, Africans, Indians and Coloureds (AIC). Correspondence will be limited to short listed candidates only. Candidates who have not been contacted within 3 months after the closing date of this advertisement, please accept that your application was unsuccessful. The South African Weather Service is an equal opportunity employer.

Record Reference	HCM-ADVERT-
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