

JOB DESCRIPTION

Vacancy reference:	SRF22794
Post Title:	Post-doctoral Research Scientist in Sub-seasonal Prediction for Africa
Grade:	6
School/Department:	NCAS, Department of Meteorology
Reports to:	Dr Linda Hirons (line manager) and Prof Steven Woolnough (PI)
Responsible for:	None

Purpose

As part of the major new Global Challenges Research Fund Project – “African Science for Weather Information and Forecasting Techniques (African-SIWFT)” an exciting opportunity has arisen for two post-doctoral scientists to carry out research on sub-seasonal predictability of African Weather and Climate in collaboration with scientists in the UK and Africa. The positions will be based in the National Centre for Atmospheric Science Tropical Research Group in the Department of Meteorology at the University of Reading.

Main duties and responsibilities

These posts are part of a Work Package on sub-seasonal to seasonal prediction to improve operational forecasting capability on these timescales for high impact and hazardous weather to support decision making in Africa. In collaboration with partners in the UK and Africa the post-holders will carry out research to identify the main drivers of sub-seasonal variability in weather and climate over East and West Africa; their representation in operational sub-seasonal prediction models; and develop and deliver training materials for scientists; forecasters and decision makers in Africa.

The post holders will:

- Carry out research on sub-seasonal to seasonal variability of African weather and climate using reanalysis and observational datasets; global weather and climate models and high resolution convection permitting simulations
- Evaluate the performance of operational sub-seasonal to seasonal prediction systems for African weather
- Report on research at scientific conferences, African-SWIFT project meetings, and in the peer-reviewed literature
- Develop and deliver training materials on sub-seasonal to seasonal prediction
- Collaborate with partners in the UK and Africa to deliver research and training objectives

Supervision received

The post-holders will be supervised by Dr Linda Hirons and Prof Steven Woolnough through regular weekly meetings.

Supervision given

There are no formal supervision responsibilities but there may be opportunities for co-supervision of visiting scientists within the project and MSc and PhD students.

Contact

The post-holders will collaborate with partners at the University of Leeds; Centre for Ecology and Hydrology; Met Office; and African partners in Regional and National Meteorological Services and Universities in Ghana, Kenya, Niger, Nigeria, and Senegal,

Collaboration will be through a mixture of teleconferencing and travel to partner institutes in both the UK and Africa. The post-holders will be expected to travel to Africa for research collaboration and to co-lead training workshops.

Terms and conditions

Fixed Term for 3 years with a possibility of extension. Full time, with the possibility for part-time working

This document outlines the duties required for the time being of the posts to indicate the level of responsibility. It is not a comprehensive or exhaustive list and the line manager may vary duties from time to time which do not change the general character of the job or the level of responsibility entailed.

Date assessed:

PERSON SPECIFICATION

Job Title	School/Department
Post-doctoral Research Scientist in Sub-seasonal Prediction for Africa	NCAS, Department of Meteorology

Criteria	Essential	Desirable
Skills Required	<ul style="list-style-type: none"> • Good scientific computing skills, including programming • Good written and oral communication skills • Good presentation skills • Scientific data analysis and interpretation 	
Attainment	<ul style="list-style-type: none"> • PhD in a Physical or Mathematical Science or equivalent research experience • Publication record appropriate to their experience 	
Knowledge	<ul style="list-style-type: none"> • Knowledge of Tropical Meteorology • Knowledge of operational Weather Prediction 	<ul style="list-style-type: none"> • Knowledge of African Climate Variability • Sub-seasonal to Seasonal Prediction
Relevant Experience	<ul style="list-style-type: none"> • Analysis of complex datasets • Experience of working in a team • Experience of presentations to expert and non-expert audiences 	<ul style="list-style-type: none"> • Experience collaborating with remote partners • Experience in the development or delivery of training materials • Working with sub-seasonal to seasonal prediction data
Disposition	<ul style="list-style-type: none"> • Ability to work independently and as part of a team • Willingness to travel to partner countries • Proactive in developing collaborations 	
Other		

Completed by: Steven Woolnough	Date: 20 th March 2018
--------------------------------	-----------------------------------