

JOB DESCRIPTION

Vacancy reference:	SRF33079
Post Title:	Research Scientist in Decadal Climate Variability
Grade:	Grade 6
School/Department:	National Centre for Atmospheric Science / Department of Meteorology
Reports to:	Dr Jon Robson
Responsible for:	N/A

Purpose

Multi-decadal timescale variability in the subpolar North Atlantic Ocean has been linked to important impacts on climate elsewhere, including hurricane numbers, regional rainfall changes, and Arctic sea ice melt. However, there is considerable uncertainty about how – i.e. through what mechanisms – the subpolar North Atlantic affects the wider climate, and to what extent these influences are predictable.

The post-holder will analyse climate models and observations to improve our understanding of how changes in the subpolar North Atlantic can impact climate in other regions, and to understand the processes involved. They will investigate specific hypotheses using targeted model experiments, for example to understand how the influence of air-sea fluxes over the subpolar North Atlantic is communicated across the wider North Atlantic through oceanic and atmospheric teleconnections.

This position is funded by a UKRI-NERC grant, and is a collaboration between the National Centre for Atmospheric Science, the National Oceanography Centre, The University of Oxford, the National Center for Atmospheric Research (U.S.), and the U.K. Met Office.

Main duties and responsibilities

The post-holder will:

- Use CMIP6 simulations and observations to characterize and understand how multidecadal variability in the subpolar North Atlantic impacts on other regions, including the tropical North Atlantic and Arctic.
- Perform and analyse coupled model experiments to:
 - isolate how surface temperature anomalies in the subpolar North Atlantic affect atmospheric circulation.
 - understand how buoyancy forcing over the subpolar North Atlantic can drive changes across the wider North Atlantic basin.

The post-holder will also:

- Report on progress and results through appropriate methods, including papers for scientific journals and the presentation of results at conferences/workshops and program meetings.
- Maintain awareness of current progress in relevant research areas, to ensure that the research remains at the cutting edge.
- Collaborate with project partners.
- Contribute to the maintenance of an active scientific environment through group meetings, departmental seminars etc.

- Contribute to activities such as training, public engagement, knowledge exchange and policy advice, where appropriate.

Supervision received

The post-holder will report to and receive guidance and direction as required from Dr Jon Robson (project PI) and Prof. Rowan Sutton, usually once a week.

Supervision given

The post holder is not expected to supervise any staff. However, opportunities may arise to supervise undergraduate or postgraduate dissertation projects.

Contact

The post-holder will be based in the National Centre for Atmospheric Science (NCAS) within in the department of Meteorology. However, this is a collaborative project, and interaction, including through reciprocal visits, will be encouraged with the research partners.

Terms and conditions

Full time, fixed term position for up to 3 years from 1st September 2020 (or as soon as possible thereafter).

There are no specified hours of work, but you will be required to work such hours as are necessary to carry out the duties associated with the post. Overtime is not payable.

The post-holder will be expected to present results of work at national and international conferences, as well as participate in project meetings as required.

This document outlines the duties required for the time being of the post 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: July 2020

PERSON SPECIFICATION

Job Title	School/Department
Research Scientist in Decadal Climate Variability	National Centre for Atmospheric Science / Department of Meteorology

Criteria	Essential	Desirable
Skills Required	<ul style="list-style-type: none"> Strong scientific analytic ability and high capacity for problem solving Good oral and written communication skills Good programming skills (e.g. knowledge of Python or other appropriate data processing and visualization language such as R or IDL) 	
Attainment	<ul style="list-style-type: none"> Have, or shortly expect to receive, a PhD or equivalent in mathematical or physical sciences Publication record appropriate to experience 	<ul style="list-style-type: none"> A PhD in climate, ocean, or atmospheric science
Knowledge	<ul style="list-style-type: none"> A good understanding of the physical processes relating to the ocean, atmosphere, or climate 	<ul style="list-style-type: none"> Knowledge of large-scale ocean and climate dynamics, especially in the North Atlantic region
Relevant Experience	<ul style="list-style-type: none"> Research in relevant atmospheric, oceanic, or climate sciences Experience of analysing output from climate models or similar datasets (e.g. reanalysis). 	<ul style="list-style-type: none"> Demonstrated experience in performing numerical experiments with climate models
Disposition	<ul style="list-style-type: none"> Self-motivated, conscientious, and creative Ability to maintain productive collaborations Willingness to travel to national and international meetings and conferences. 	<ul style="list-style-type: none"> Previous collaborations across institutes

Completed by: Jon Robson	Date: 15/7/2020