

JOB DESCRIPTION

Vacancy reference:	SRF32762
Post Title:	Research Scientist
Grade:	6
School/Department:	National Centre for Atmospheric Science, Department of Meteorology, School of Mathematical, Physical and Computational Sciences
Reports to:	Prof Jonathan Gregory (principal investigator and line manager)
Responsible for:	None

Purpose

To contribute to the “Couplet” project, which aims to set refined constraints on the processes, pattern and magnitude of future anthropogenic climate change, through developing and applying a new framework for analysing and understanding the forced and unforced variations of the coupled atmosphere–ocean climate system, both simulated and observed, taking into account the relationships among climate feedback, ocean heat uptake, and the spatiotemporal patterns of change. This work is funded by an advanced grant to the PI from the European Research Council. The post is full-time for three years.

Main duties and responsibilities

- Carry out research relevant to the project aims. This may include analysis of results from international climate model intercomparison projects and comparable observational datasets, complementary novel experimentation with climate models, and development of conceptual models and theories.
- Report on progress and results of this research through appropriate methods, including papers for submission to scientific journals, presentation of results at project meetings, conferences, workshops and to the public.
- Maintain awareness of current progress in relevant research areas, to ensure that the research remains at the cutting edge.
- Contribute to the maintenance of an active scientific environment in the Department through group meetings, seminars etc.

Supervision received

Prof Gregory will provide general guidance and specific scientific and technical direction as required through regular meetings.

Supervision given

There are no responsibilities for supervision of staff. There may be opportunities for MSc project supervision or co-supervision of PhD students,

Contact

The project team is sited in the National Centre for Atmospheric Science (NCAS) at Reading, where Prof Gregory is a senior scientist. There are two other postdoctoral research scientists working with the Prof Gregory on this project. There are close connections between some aspects of this project and two other projects (TICTOC and UKFAFMIP), in which Prof Gregory is also a PI with research staff at Reading, both projects being concerned with ocean heat uptake and both involving collaboration with Prof Laure Zanna of New York University and the University of Oxford and with other partners in this country and abroad. There are many research staff in NCAS and the Department of Meteorology who have interests related to this project, especially in climate modelling. Prof Gregory is also a Science Fellow at the Met Office Hadley Centre, where he works with colleagues on related topics in climate sensitivity. Regular meetings with these groups are anticipated, as well as participation in the community of researchers engaged in relevant international projects, such as CFMIP and FAFMIP.

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:

PERSON SPECIFICATION

Job Title	School/Department
Research Scientist	National Centre for Atmospheric Science, Department of Meteorology, SMPCS

Criteria	Essential	Desirable
Skills Required	<ul style="list-style-type: none"> Strong physical insight and analytical ability. Good facility with relevant statistical and mathematical methods. Good communication skills, both written and oral. Productive relationships with collaborators. Programming in Fortran and in a suitable language for data analysis. 	<ul style="list-style-type: none"> Programming in Linux shell. Designing and carrying out climate model experiments.
Attainment	<ul style="list-style-type: none"> PhD in physical or mathematical science. Publication record commensurate with experience. 	<ul style="list-style-type: none"> PhD in climate, ocean, atmospheric or Earth system science.
Knowledge	<ul style="list-style-type: none"> Knowledge of and interest in climate change science, especially atmospheric climate change and feedbacks or ocean climate change and heat uptake. Understanding of essential physics and dynamics of the atmosphere and ocean. 	<ul style="list-style-type: none"> Broad knowledge of climate science.
Relevant Experience	<ul style="list-style-type: none"> Research involving AOGCM or 3D atmosphere or ocean modelling. Computer programming. Analysis of large datasets. 	<ul style="list-style-type: none"> Use and development of AOGCMs.
Disposition	<ul style="list-style-type: none"> Motivated, conscientious and creative. Communicative. Collaborative. Willing to undertake visits. 	<ul style="list-style-type: none"> Enjoy working with others.
Completed by: Jonathan Gregory		Date: 3.6.20