

# JOB DESCRIPTION

<b>Vacancy reference:</b>	SRF28484 – R
<b>Post Title:</b>	Computational Scientist
<b>Grade:</b>	Grade 6
<b>School/Department:</b>	SMPCS, Meteorology
<b>Reports to:</b>	Rosalyn Hatcher
<b>Responsible for:</b>	None

## Purpose

NCAS-CMS provides computational modelling services to the UK Climate and Weather research communities, spanning all areas of the modelling workflow from computational resource allocation and management, to running complex climate simulations, to handling data storage and analysis. We develop software in-house and are responsible for installing and maintaining world-leading climate modelling systems on the UK's most powerful high-performance computers.

The post-holder will join the NCAS-CMS team to assist in supporting its core numerical-modelling services activity. The inward facing part of the role will involve support for CMS systems and software. The outward facing component of the role will entail troubleshooting a wide range of numerical modelling, workflow, and computational infrastructure problems to help deliver world-leading NCAS science. The role will involve supporting CMIP6 data management service

## Main duties and responsibilities

- Providing support for the modelling community
  - Software installation and data synchronization
  - Addressing specialist user queries
- Managing user services
  - Develop and maintain CMIP6 data management services
  - Maintaining and developing outward facing software systems
- Management of CMS internal infrastructure
  - Development of the CMS web presence
  - Working with CMS group members to generate web content

## Supervision received

- 1) Rosalyn Hatcher: for supervision in respect of in-depth CMS systems infrastructure
- 2) Grenville Lister: for line management and general guidance

## Supervision given

None

**Contact**

The post will require regular communication with staff within the University, NCAS, the Met Office, and at national HPC and data facilities (particularly ARCHER, NEXCS, and CEDA).

**Terms and conditions**

The post is full time for a fixed term up to 10 months.

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
Computational Scientist	SMPCS

Criteria	Essential	Desirable
<b>Skills Required</b>	<ul style="list-style-type: none"> <li>• Good organizational and communications skill</li> <li>• Python programming</li> <li>• Shell scripting</li> <li>• Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• FORTRAN/C++ programming</li> </ul>
<b>Attainment</b>	<ul style="list-style-type: none"> <li>• First degree with a strong numerical or computational component (or equivalent experience)</li> </ul>	<ul style="list-style-type: none"> <li>• Higher degree in computational/numerical modelling</li> </ul>
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>• Modern software development and software engineering practices</li> <li>• Configuration of complex software systems</li> </ul>	<ul style="list-style-type: none"> <li>• Object-oriented programming</li> <li>• High-performance computing</li> <li>• Numerical modelling</li> <li>• Climate data formats</li> </ul>
<b>Relevant Experience</b>	<ul style="list-style-type: none"> <li>• Organizing, presenting, and analyzing data</li> <li>• Working in a Linux/Unix environment</li> </ul>	<ul style="list-style-type: none"> <li>• Managing web content.</li> <li>• Uses of climate model data</li> <li>• Working with structured databases</li> </ul>
<b>Disposition</b>	<ul style="list-style-type: none"> <li>• Ability to work as part of a team and liaise with external collaborators</li> <li>• Willingness to help users and share knowledge</li> <li>• Desire to overcome technical challenges and improve existing systems</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to develop productive working relationships with other sites.</li> <li>•</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• Start soon</li> <li>• Occasional travel to attend meetings and conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Represent CMS at meetings and conferences</li> <li>•</li> </ul>

Completed by: Grenville Lister	Date:05/03/92019
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