

JOB DESCRIPTION

Vacancy reference:	SRF28972
Post Title:	Scientific programmer
Grade:	Grade 6
School/Department:	SMPCS/Meteorology
Reports to:	Prof P J van Leeuwen
Responsible for:	n/a

Purpose

The post will be part of a team of scientists working on the European Research Council (ERC) Advanced Investigator Grant CUNDA, that will develop and combine causality and nonlinear data assimilation to infer cause and effect relation in the highly turbulent ocean area around South Africa. Specifically, the post will be responsible for assisting other team members with numerical expertise.

Main duties and responsibilities

The main responsibilities are:

- Assist with running the ocean models
- Assist with coupling ocean models and atmospheric models to the data-assimilation framework PDAF
- Assist with programming model-observation interfaces (observation operators) and other observations related coding work.
- Assist with developing efficient codes for causality measure tools.
- Be an active and productive member of a strong team aiming to deliver the best possible science
- Be part of high-quality papers in high-quality journals

Supervision received

Details of the post to whom this post reports together with a description of the nature of the supervision (e.g. general guidance, detailed supervision etc.).

Supervision given

The scientific programmer will be supervised by prof P.J. van Leeuwen via weekly personal meetings.

Contact

The scientific programmer will attend the weekly CUNDA team meetings and the weekly Data-Assimilation research Centre (DARC) meetings. He/she will work with world-class physical oceanographers in the UK and internationally. Furthermore, the he/she will work with members of the National Centre for Earth Observation NCEO.

Terms and conditions

Full time. Fixed term.

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:

16 June 2019

PERSON SPECIFICATION

Job Title	School/Department
Scientific programmer	SMPCS/Meteorology

Criteria	Essential	Desirable
Skills Required	<ul style="list-style-type: none"> • Fortran • UNIX • MPI • Python 	
Attainment	<ul style="list-style-type: none"> • PhD in quantitative science or mathematics 	
Knowledge	<ul style="list-style-type: none"> • High-performance computing 	<ul style="list-style-type: none"> • Ocean modelling • Data assimilation • Causality
Relevant Experience	<ul style="list-style-type: none"> • Strong experience record in relation to areas relevant to this post 	
Disposition	<ul style="list-style-type: none"> • Team worker • Highly motivated • Ability to work independently • Creative 	

Completed by: Peter Jan van Leeuwen	Date:16/05/2019
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